

CODE DATA	
<b>APPLICABLE CODES:</b>	ST. PAUL, MN
BUILDING: 2015 MINNESOTA STATE BUILDING CODE, CHAPTER 1305 WHICH INCORPORATES BY REFERENCE THE 2012 INTERNATIONAL BUILDING CODE WITH AMENDMENTS	
ACCESSIBILITY: 2015 MINNESOTA STATE BUILDING CODE, CHAPTER 1342, (MINNESOTA ACCESSIBILITY CODE) WHICH INCORPORATES BY REFERENCE CHAPTER 11 OF THE 2012 INTERNATIONAL BUILDING CODE AND ICC A117.1 WITH AMENDMENTS	
ST. PAUL ZONING CODE: CHAPTERS 60-69 OF THE CODE OF ORDINANCES OF THE CITY OF SAINT PAUL, MINNESOTA	
FIRE: 2007 MINNESOTA FIRE CODE, CHAPTER 7511 WHICH INCORPORATES BY REFERENCE THE 2006 INTERNATIONAL FIRE CODE WITH AMENDMENTS	
ENERGY: 2015 MINNESOTA STATE BUILDING CODE, CHAPTER 1323, (MINNESOTA COMMERCIAL ENERGY CODE) WHICH INCORPORATES BY REFERENCE THE 2004 ASHRAE STANDARDS 90.1 WITH AMENDMENTS	
MECHANICAL: 2015 MINNESOTA STATE BUILDING CODE, CHAPTER 1346 (MINNESOTA MECHANICAL/FUEL GAS CODE) WHICH INCORPORATES BY REFERENCE THE 2012 INTERNATIONAL MECHANICAL CODE WITH AMENDMENTS	
PLUMBING: 2007 MINNESOTA STATE BUILDING CODE, CHAPTER 4715 (2003 MINNESOTA PLUMBING CODE)	
ELECTRICAL: 2007 MINNESOTA STATE BUILDING CODE, CHAPTER 1315, WHICH INCORPORATES BY REFERENCE THE 2014 NATIONAL ELECTRICAL CODE	

CHAPTER 3: USE OF OCCUPANCY		
SECTION	USE GROUP/ CONST. TYPE	GENERAL DESCRIPTION
303	USE GROUP: A2 (MIXED USE, NON-SEPARATED OCCUPANCIES)	REPURPOSING OF EXISTING HISTORIC KEG AND CASE WAREHOUSE STRUCTURE FOR NEW OPEN AIR MARKETPLACE WITH FUTURE TENANT VENDORS
TABLE 503	CONSTRUCTION GROUP: TYPE III-B	

CHAPTER 5: GENERAL BUILDING LIMITATIONS		
BUILDING TO BE FULLY SPRINKLED THROUGHOUT IN ACCORDANCE WITH NFPA 13 - SPRINKLER SUBMITTAL TO BE DEFERRED		
SECTION		
503	At = BASIC ALLOWABLE AREA - BASED ON OCCUPANCY	At = 9,500 SQ. FT.
506	Is = ALLOWABLE AREA INCREASES - AUTOMATIC SPRINKLER SYSTEM If = ( F / P - 0.25 ) W / 30	Is = 2
	F = BUILDING PERIMETER WHICH FRONTS PUBLIC RIGHT AWAY 20 FEET MIN.	F = 603'-9 3/4"
	P = PERIMETER ENTIRE BUILDING	P = 603'-9 3/4"
	W - MIN. WIDTH OF PUBLIC OPEN SPACE	W = 60'-0"
	If - AREA INCREASE DUE TO FRONTAGE	If = 150.00%
	Aa = ACTUAL ALLOWABLE AREA	Aa = 42,750 SQ. FT.
	FIRST FLOOR EXISTING	21,953.3250 SQ. FT.
	SECOND FLOOR NEW	11,090.8667 SQ. FT.
	TOTAL	33,044.1917 SQ. FT.
	ALLOWABLE BUILDING HEIGHT	3 STORIES
	EXISTING BUILDING HEIGHT	1 STORY

CHAPTER 6: TYPES OF CONSTRUCTION	
FIRE RESISTIVE RATINGS OF STRUCTURAL ELEMENTS	FIRE RESIST. RATING
STRUCTURAL FRAME	0 HOURS
BEARING WALLS	EXTERIOR 2 HOURS INTERIOR 0 HOURS
NON-BEARING WALLS	EXTERIOR <5'-0", 1 HOUR; >30'-0", 0 HOURS
NON-BEARING WALLS AND PARTITIONS	INTERIOR 0 HOURS
FLOOR CONSTRUCTION AND SECONDARY MEMBERS	0 HOURS
ROOF CONSTRUCTION AND SECONDARY MEMBERS	0 HOURS
SHAFT ENCLOSURES	1 HOUR

CHAPTER 8: INTERIOR FINISHES	
INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY	
EXIT ENCLOSURES AND EXIT PASSAGEWAYS	B
CORRIDORS	B
ROOMS AND ENCLOSED SPACES	C

CHAPTER 9: FIRE PROTECTION SYSTEMS	
SPRINKLED AS REQUIRED PER 2015 MINNESOTA STATE BUILDING CODE SECTION 903.2.1.2	
COMMERCIAL COOKING AREA (COMMISSARY) SPRINKLED AS REQUIRED PER SECTION 903.2.11.5	
BUILDING TO BE SPRINKLED THROUGHOUT AS PER NFPA 13	

CHAPTER 10: GENERAL MEANS OF EGRESS			
OCCUPANCY	AREA	SF. PER OCC.	OCC. LOAD
A2	VESTIBULE #101	116	ACCESSORY 0 OCCUPANTS
	INTERIOR MARKETPLACE #102	15299	30 S.F. GROSS 510 OCCUPANTS
	HALL #103	117	ACCESSORY 0 OCCUPANTS
	FAMILY RESTROOM #104	50	ACCESSORY 0 OCCUPANTS
	MEN'S RESTROOM #105	239	ACCESSORY 0 OCCUPANTS
	MECHANICAL #106	412	300 S.F. GROSS 2 OCCUPANTS
	WOMEN'S RESTROOM #107	297	ACCESSORY 0 OCCUPANTS
	ELEVATOR EQUIPMENT ROOM #108	57	300 S.F. GROSS 1 OCCUPANT
	ELEVATOR LOBBY #109	50	15 S.F. NET 4 OCCUPANTS
	ELEVATOR #110	36	ACCESSORY 0 OCCUPANTS
	TENANT #111 (REST. - 40% K, 60% STG.)	3264	200 S.F. / 15 S.F. 138 OCCUPANTS
	VESTIBULE #112 (RESTAURANT)	76	ACCESSORY 0 OCCUPANTS
	STAIR #113	59	ACCESSORY 0 OCCUPANTS
	ENTRANCE #114	827	100 S.F. GROSS 9 OCCUPANTS
	ACCESSIBLE LIFT #115	32	ACCESSORY 0 OCCUPANTS
	VESTIBULE #116	99	ACCESSORY 0 OCCUPANTS
	TOTAL MAIN FLOOR OCCUPANT LOAD:		664 OCCUPANTS
	VENDOR #201	2036	100 S.F. GROSS 21 OCCUPANTS
	COMMISSARY #202	853	200 S.F. GROSS 5 OCCUPANTS
	COOLER #203	93	ACCESSORY 0 OCCUPANTS
	FREEZER #204	63	ACCESSORY 0 OCCUPANTS

ROOF ACCESS #205	90	300 S.F. GROSS	1 OCCUPANT
HALL #206	51	ACCESSORY	0 OCCUPANTS
MEN'S TOILET #207	51	ACCESSORY	0 OCCUPANTS
WOMEN'S TOILET #208	51	ACCESSORY	0 OCCUPANTS
ELEVATOR #209	36	ACCESSORY	0 OCCUPANTS
TENANT #210 (REST. - 15% K, 85% STG.)	2928	200 S.F. / 15 S.F.	169 OCCUPANTS
VENDOR #211	1607	100 S.F. GROSS	17 OCCUPANTS
VENDOR #212	1118	100 S.F. GROSS	12 OCCUPANTS
VENDOR #213	944	100 S.F. GROSS	10 OCCUPANTS
TOTAL SECOND FLOOR OCCUPANT LOAD:			235 OCCUPANTS
TOTAL INTERIOR OCCUPANT LOAD:			899 OCCUPANTS
OUTDOOR SEATING - PATIO			157 OCCUPANTS
OUTDOOR SEATING - RESTAURANT			97 OCCUPANTS
TOTAL EXTERIOR OCCUPANT LOAD:			254 OCCUPANTS
TOTAL PROPOSED OCCUPANT LOAD:			1,153 OCCUPANTS

EXIT REQUIREMENTS				
SECTION	REQUIREMENT	FACTOR	OCC. LOAD	PROPOSED WIDTH
1005.3	CAPACITY OF EGRESS COMPONENTS			
	STAIRS	0.3	235	5'-10 1/2"
	EXIT DOORS	0.2	899	14'-10 13/16"
1019.1	MINIMUM NUMBER OF EXITS FOR OCCUPANT LOAD	4 REQUIRED		5 PROPOSED
	MAXIMUM EXIT TRAVEL DISTANCE ALLOWED			250'-0"
	MAXIMUM EXIT TRAVEL DISTANCE PROVIDED			184'-8"
	MAXIMUM COMMON PATH OF TRAVEL ALLOWED			75'-0"

2012 INTERNATIONAL PLUMBING CODE					
TABLE 403.1 - MINIMUM NUMBER OF REQUIRED PLUMBING FACILITIES					
USE GROUP	PROPOSED OCCUPANT LOAD	REQUIRED FIXTURES	PROVIDED FIXTURES	REQUIRED LAVATORIES	PROVIDED LAVATORIES
A2 - ASSEMBLY	749 OCCUPANTS*	8 WC/ 2 U	10 WC/ 4 U	4	9
		SERVICE SINK		DRINKING FOUNTAINS	
* ASSUMED OCCUPANT LOAD SPLIT EQUALLY BETWEEN MEN AND WOMEN*		REQUIRED	PROVIDED	REQUIRED	PROVIDED
		1	2	2	2
*NOTE: OCCUPANT LOAD EXCLUDES FUTURE RESTAURANT TENANT SPACE DESIGN OCCUPANT LOAD (INCLUDING OUTDOOR SEATING AREA), WHICH WILL BE PROVIDED REQUIRED PLUMBING FIXTURES UPON FINAL TENANT BUILD-OUT					
TABLE 2902.1 FOOTNOTE K: IN EACH BATHROOM OR TOILET ROOM, URINALS SHALL NOT BE SUBSTITUTED FOR MORE THAN 67 PERCENT OF THE REQUIRED WATER CLOSETS					

SCOPE OF WORK	
REPURPOSING OF EXISTING HISTORIC KEG AND CASE WAREHOUSE STRUCTURE FOR NEW OPEN AIR MARKETPLACE WITH FUTURE TENANT VENDORS.	

PROJECT TEAM	
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<b>STRUCTURAL ENGINEER</b>	<b>M / E / P ENGINEER</b>
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<b>CITY INFORMATION</b>	
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# KEG & CASE MARKET

KEG & CASE MARKET 928 WEST 7TH STREET SAINT PAUL, MINNESOTA

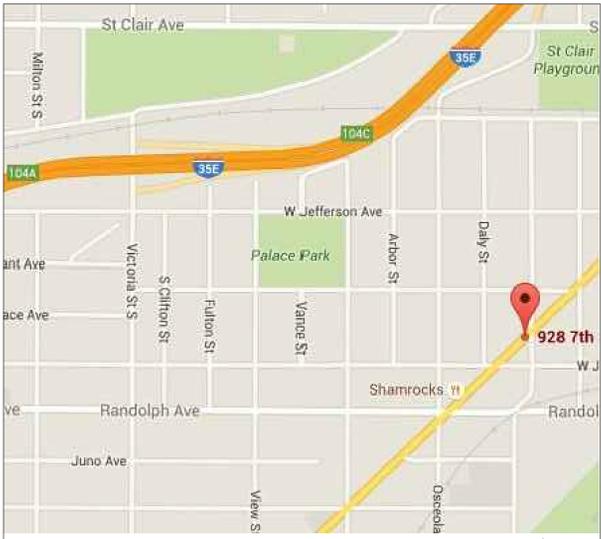
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HPG SUBMITTAL 04.07.2016	
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X CS1.1	GENERAL NOTES
X CS1.2	ACCESSIBILITY GUIDELINES
X LS1.0	LIFE SAFETY PLANS
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X C1-2	DEMOLITION PLAN
X C1-3	TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR)
X C2-1	SITE PLAN
X C3-1	GRADING & DRAINAGE PLAN
X C3-2	STORM WATER POLLUTION PREVENTION PLAN
X C3-3	STORM WATER POLLUTION PREVENTION PLAN
X C3-4	STORM WATER POLLUTION PREVENTION PLAN
X C4-1	UTILITY PLAN
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X H1.4	HISTORICAL PLAN OF EXISTING ELEVATIONS AND EXISTING GLASS BLOCK DETAILS (1937)
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X A1.2	MEZZANINE/ SECOND FLOOR CONSTRUCTION PLAN AND NOTES
X A1.3	ENLARGED RESTROOM AND KITCHEN AND NOTES
X A1.4	ENLARGED PLUMBING FIXTURE PLAN, FIXTURE & FINISH SCHEDULES
X A2.1	COMMON AREA AND VESTIBULES ENLARGED REFLECTED CEILING PLANS, CEILING LEGENDS & NOTES
X A2.2	MEZZANINE / SECOND FLOOR REFLECTED CEILING PLAN, CEILING LEGEND & NOTES
X A3.1	ROOF PLAN
X A4.1	SCHEDULES AND DOOR TYPES
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X S6	FRAMING DETAILS
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X S7	SCHEDULES AND DETAILS
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X P0.1	PLUMBING PLAN SITE
X P1.0	PLUMBING PLAN FIRST FLOOR
X P2.0	PLUMBING PLAN SECOND FLOOR

X P3.0	PLUMBING PLAN ROOF
X P4.0	PLUMBING SCHEDULES
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X P5.1	PLUMBING DETAILS AND RISERS
X FP1.0	FIRE PROTECTION PLAN FIRST FLOOR
X FP2.0	FIRE PROTECTION PLAN SECOND FLOOR
X M1.0	MECHANICAL PLAN FIRST FLOOR
X M2.0	MECHANICAL PLAN SECOND FLOOR
X M3.0	MECHANICAL PLAN ROOF
X M4.0	MECHANICAL SCHEDULES
X M5.0	MECHANICAL DETAILS
X M5.1	MECHANICAL DETAILS
X M5.2	MECHANICAL DETAILS
ELECTRICAL	
X E0.0	ELECTRICAL TITLE SHEET
X E0.1	ELECTRICAL SITE PLAN
X E1.0	ELECTRICAL FIRST FLOOR PLAN
X E1.1	ELECTRICAL FIRST FLOOR PLAN
X E1.2	ELECTRICAL DETAIL AND LIGHT SCHEDULE
X E2.0	ELECTRICAL SECOND FLOOR PLAN
X E2.1	ELECTRICAL SECOND FLOOR PLAN
X E3.0	ELECTRICAL RISER DIAGRAM
X E4.0	ELECTRICAL SCHEDULES
X E4.1	ELECTRICAL SCHEDULES
KITCHEN EQUIPMENT	
X FS1	EQUIPMENT PLAN
X FS2	ELECTRICAL REQUIREMENT PLAN
X FS3	PLUMBING REQUIREMENT PLAN
REVISION NUMBER	

ELECTRICAL	
X E0.0	ELECTRICAL TITLE SHEET
X E0.1	ELECTRICAL SITE PLAN
X E1.0	ELECTRICAL FIRST FLOOR PLAN
X E1.1	ELECTRICAL FIRST FLOOR PLAN
X E1.2	ELECTRICAL DETAIL AND LIGHT SCHEDULE
X E2.0	ELECTRICAL SECOND FLOOR PLAN
X E2.1	ELECTRICAL SECOND FLOOR PLAN
X E3.0	ELECTRICAL RISER DIAGRAM
X E4.0	ELECTRICAL SCHEDULES
X E4.1	ELECTRICAL SCHEDULES
KITCHEN EQUIPMENT	
X FS1	EQUIPMENT PLAN
X FS2	ELECTRICAL REQUIREMENT PLAN
X FS3	PLUMBING REQUIREMENT PLAN
REVISION NUMBER	

KITCHEN EQUIPMENT	
X FS1	EQUIPMENT PLAN
X FS2	ELECTRICAL REQUIREMENT PLAN
X FS3	PLUMBING REQUIREMENT PLAN
REVISION NUMBER	

ZONING CODE INFORMATION	
PID: 12282320137	
PARCEL AREA: 82,424.23 SQUARE FEET (1.89 ACRES)	
ZONING DISTRICT: T3 TRADITIONAL NEIGHBORHOOD DISTRICT	
CHAPTER 63 - GENERAL PROVISIONS & PERFORMANCE STANDARDS	
63.207	PARKING REQUIREMENTS BY USE - REFER TO SHEET C2-1 FOR PARKING INFORMATION
63.210(a)	BICYCLE PARKING REQUIRED [MIN (1) SECURE BICYCLE PARKING SPACE PER EVERY (20) MOTOR VEHICLE PARKING SPACES, DISREGARDING FRACTIONAL BICYCLE SPACES] 5
63.210(b)	SUBSTITUTION FOR REQUIRED MOTOR VEHICLE PARKING: UP TO (10) PERCENT OF MIN OFF-STREET PARKING REQUIREMENTS. (4) SPACES IN A SECURE BIKE RACK = (1) PARKING SPACE
63.2130	ACCESSIBLE PARKING SPACES REQUIRED (76-100 TOTAL PARKING SPACES IN LOT); 3 (1) IN EVERY (8) ACCESSIBLE SPACES, WITH A MIN OF (1), SHALL BE VAN ACCESSIBLE
CHAPTER 66 - ZONING DISTRICT USES, DENSITY AND DIMENSIONAL STANDARDS	
66.3420	PARKING REQUIREMENTS IN T3-T4 TRADITIONAL NEIGHBORHOOD DISTRICTS - REFER TO SHEET C2-1 FOR PARKING INFORMATION
6.342(a)	ON-STREET PARKING LOCATED ALONG PROPERTY FRONTAGE MAY BE USED TO MEET PARKING REQUIREMENTS.



VICINITY MAP	
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KEG & CASE MARKET  
928 W 7TH STREET  
ST. PAUL, MN 55102

SHEET TITLE:  
CODE DATA,  
PROJECT  
INFORMATION  
AND SHEET INDEX

PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
HISTORICAL 10.29.15  
HISTORICAL 03.08.16  
HPC SUBMIT 04.07.16



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I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of MINNESOTA  
signed:  
date: 03.08.16 reg. no. 45178

CS1.0

## GENERAL NOTES:

1. ARCHITECTURAL EXISTING CONDITIONS ARE BASED ON INFORMATION PROVIDED BY OWNER AND EXISTING CONDITION AS DETERMINED TO THE BEST ABILITY OF STUDIO M ARCHITECTS.
2. ALL WORK SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL CODES, ORDINANCES AND REQUIREMENTS.
3. ALL WORK, WHEN COMPLETED, SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT AND ACCESSIBILITY GUIDELINES.
4. FIELD VERIFY THAT ALL EXISTING DOORS, FRAMES AND HARDWARE TO REMAIN MEET CODE MINIMUM REQUIREMENTS.
5. IF EXISTING EXTERIOR THRESHOLDS TO REMAIN EXCEED THE REQUIRED ADA MAXIMUM HEIGHT OF 1/2", REMOVE AND REPLACE WITH ACCESSIBLE THRESHOLD WITH FLOOR LEVEL CHANGES AT ACCESSIBLE DOORWAYS TO BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
6. PROVIDE AND INSTALL ACCESSIBLE SIGNAGE (TOILETS, ETC.) AS REQUIRED BY LOCAL CODES, ORDINANCES AND LAWS.
7. THE INSTALLATION AND MODIFICATION OF THE FIRE SUPPRESSION SYSTEM SHALL COMPLY WITH BUILDING CODES AND N.F.P.A.
8. PROVIDE AND INSTALL FIRE EXTINGUISHERS AS DIRECTED BY LOCAL FIRE MARSHAL.
9. A KNOX BOX IS TO BE PURCHASED AND INSTALLED BY THE GENERAL CONTRACTOR. VERIFY WITH THE LOCAL AUTHORITY THIS REQUIREMENT AND COORDINATE LOCATION REQUIRED.
10. PROVIDE APPROVED FIRE STOPPING AT ALL PENETRATIONS OF ALL RATED WALL, FLOOR/CEILING AND ROOF ASSEMBLIES. FIRE STOPPING TO BE PROVIDED AND INSTALLED BY CONTRACTOR REGARDING PENETRATION.
11. ALL EXIT DOORS TO BE OPERABLE FROM THE INSIDE WITHOUT ANY SPECIAL KNOWLEDGE OR EFFORT. A READILY VISIBLE SIGN SHALL BE ADJACENT TO THE DOORWAY STATING, "THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS".
12. SAFETY GLAZING SHALL BE PROVIDED AT HAZARDOUS LOCATIONS, INCLUDING, BUT NOT LIMITED TO, GLAZING WITHIN 18" OF WALKING SURFACE, GLAZING IN DOORS AND WINDOWS ADJACENT TO DOORS.
13. DIMENSION NOTES:
  - A) ALL STRUCTURAL GRID DIMENSIONS ARE FROM CENTERLINE OF EXISTING STRUCTURAL COLUMNS, UNLESS NOTED OTHERWISE
  - B) ALL DIMENSIONS ARE TAKEN TO OUTSIDE FACE OF SHEATHING OF WALL ASSEMBLY UNLESS NOTED OTHERWISE.
  - C) "CLEAR" SHALL MEAN DIMENSION BETWEEN THE FACE OF THE FURTHEST PROTRUDING FINISH MATERIAL ON EACH SIDE OF OPENING.
14. DO NOT SCALE DRAWINGS. BIDDER (CONTRACTOR) SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT JOB SITE PRIOR TO START OF CONSTRUCTION. IF DISCREPANCIES ARE FOUND, WHETHER BUILT OR NOT, THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION BEFORE COMMENCING WORK.
15. THE STATED DIMENSIONS SHALL TAKE PRECEDENCE OVER GRAPHIC. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES.
16. IF ANY DISCREPANCIES OCCUR BETWEEN THE SPECIFICATIONS AND/OR DRAWINGS, THEY ARE UNINTENTIONAL. NOTIFY THE ARCHITECT IMMEDIATELY FOR CLARIFICATION AND RESOLUTION.
17. ANY DIMENSIONS, DETAILS, NOTES AND/OR SYMBOLS THAT APPLY TO ONE UNIT, APPLIES TO ALL UNITS LIKE SITUATION, UNLESS NOTED OTHERWISE.
18. GENERAL CONTRACTOR TO EXAMINE AND VERIFY ALL EXISTING CONDITIONS, WORK REQUIRED AND DIMENSIONS AT JOB SITE PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT OF ANY DISCREPANCIES.
19. VEHICULAR ACCESS MUST BE PROVIDED AND MAINTAINED SERVICEABLE THROUGHOUT CONSTRUCTION.
20. AT ALL TIMES, THE GENERAL CONTRACTOR SHALL CLOSELY SUPERVISE THE WORK OF ALL SUBCONTRACTORS AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS AND TECHNIQUES, INCLUDING SAFETY PROCEDURES AND FOR COORDINATING/SEQUENCING ALL TRADES.
21. GENERAL CONTRACTOR IS RESPONSIBLE TO VERIFY, COORDINATE AND COMPLY WITH ALL OWNER REQUIREMENTS FOR THE DEVELOPMENT, INCLUDING, BUT NOT LIMITED TO BARRICADES, STAGING, USE OF OWNER-MANDATED SUBCONTRACTORS, DEBRIS REMOVAL, RESTRICTED HOURS OF CONSTRUCTION, SECURITY, ETC.
22. GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS WHICH ARE OBVIOUS AND NECESSARY TO ENSURE QUALITY WORKMANSHIP AND INSTALLATION EVEN IF NOT SPECIFICALLY MENTIONED IN THE DRAWINGS, INCLUDING BUT NOT LIMITED TO BLOCKING AND BRACING.
23. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR HIS WORK AND THAT OF HIS SUBCONTRACTORS FOR LOSSES AND DAMAGES TO EQUIPMENT, EXISTING CONSTRUCTION, TOOLS AND MATERIALS USED IN CONJUNCTION WITH THE WORK FOR THE ACTS OF HIS EMPLOYEES AND ALL SUBCONTRACT WORKERS.
24. THE GENERAL CONTRACTOR SHALL ADHERE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS REGARDING JOB SAFETY.
25. THE GENERAL CONTRACTOR IS RESPONSIBLE TO CARRY WORKMEN'S COMPENSATION AS REQUIRED BY LAW AND/OR GOVERNING AUTHORITY.
26. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE SAFETY AND CARE OF ADJACENT PROPERTIES DURING CONSTRUCTION.
27. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A COMPLETE AS-BUILT SET OF CONSTRUCTION DRAWINGS AT THE JOB SITE AND TURNING THE AS-BUILT DRAWINGS OVER TO THE OWNER UPON COMPLETION OF THE PROJECT.
28. THE APPROVED PLANS (FOR CONSTRUCTION) SET SHALL BE KEPT ON SITE AT ALL TIMES, INCLUDING ALL ADDENDA, SUPPLEMENTAL INSTRUCTIONS, CHANGE ORDERS AND COPIES OF APPROVED SUBMITTALS.
29. REMOVE ALL COMBUSTIBLE RUBBISH DURING CONSTRUCTION FROM THE BUILDING CONTINUOUSLY AND DISPOSE OF IN A LEGAL MANNER.
30. VENDORS ARE RESPONSIBLE FOR DISPOSAL OF ALL SHIPPING/CRATING MATERIALS. VERIFY WITH GENERAL CONTRACTOR THE USE OF THE DUMPSTER ON SITE. ALL SUBCONTRACTORS MUST DISPOSE OF THEIR CONSTRUCTION DEBRIS. IF NOT COMPLETED, IT WILL BE COMPLETED AND BACK CHARGED FOR CLEANING. COORDINATE THE DISPOSAL WITH JOB SUPERINTENDENT.
31. AT THE TIME OF BUILDING COMPLETION, THE BUILDING IS TO BE THOROUGHLY CLEANED PRIOR TO BUILDING TURNOVER TO OWNER.
32. THE NEW EXTERIOR LANDINGS TO BE FLUSH WITH FINISHED FLOOR AND SLOPE AWAY FROM THE EXISTING FACE OF THE BUILDING TO PROVIDE POSITIVE DRAINAGE.
33. ALL PATCHING OF EXISTING SURFACES TO REMAIN ARE TO BE MADE TO MATCH EXISTING ADJACENT SURFACES UNLESS CONCEALED BY NEW CONSTRUCTION.
34. ALL INTERIOR WALLS TO TERMINATE AT UNDERSIDE OF FLOOR/CEILING ASSEMBLY ABOVE.
35. PROVIDE SOUND BATT INSULATION AT ALL INTERIOR PARTITION WALLS TO FLOOR/CEILING ASSEMBLY ABOVE AT LOCATIONS INDICATED ON PLAN.
36. USE 5/8" WATER RESISTANT GYPSUM BOARD INSIDE TOILETS TO 8'-0" MINIMUM ABOVE FINISHED FLOOR ELEVATION.
37. FOR THE PURPOSE OF THESE DOCUMENTS, TO "INSTALL" SHALL MEAN TO PROVIDE ALL FASTENERS, MISCELLANEOUS HARDWARE, BLOCKING, ELECTRICAL CONNECTIONS, PLUMBING CONNECTIONS AND ANY OTHER ITEMS REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION, UNLESS NOTED OTHERWISE.
38. GENERAL CONTRACTOR TO INSTALL METAL CORNER BEAD AT ALL OUTSIDE CORNERS OF GYPSUM BOARD SURFACES.
39. GENERAL CONTRACTOR TO COORDINATE AND INSTALL ALL WALL BLOCKING AND BACKING AS REQUIRED FOR ALL KITCHEN, DINING AND TOILET EQUIPMENT AND ACCESSORIES.
40. GENERAL CONTRACTOR TO COORDINATE, PROVIDE AND INSTALL ALL NECESSARY BLOCKING FOR ALL OWNER CONTRACTED SIGNAGE AND TABLE SUPPORTS.
41. CARPENTER TO PROVIDE ALL FURRED CHASES AND SOFFITS REQUIRED TO CONCEAL MECHANICAL DUCTS, PIPING AND ELECTRICAL WIRING. REFER TO AND COORDINATE WITH ENGINEERED CONSTRUCTION DOCUMENTS BY OTHERS TO VERIFY SIZE AND LOCATIONS REQUIRED.
42. COORDINATE WITH ARCHITECT TO DETERMINE FINISHED SIZE, HEIGHT, PROFILE AND FINISH MATERIAL.
43. VERIFY LOCATION, SIZE AND WALL THICKNESS REQUIRED TO RECESS MECHANICAL, PLUMBING AND ELECTRICAL ITEMS AND MAINTAIN FIRE RATING REQUIREMENTS OF THE WALL (IF REQUIRED) AT THESE BUILT-INS: UNIT HEATERS, CONNECTORS, ELECTRICAL PANELS, FIRE EXTINGUISHERS, CABINETS, DUCTS, PIPING AND ALL OTHER SUCH ITEMS REQUIRING RECESSES.
44. MECHANICAL AND ELECTRICAL CONTRACTORS SHALL FURNISH WHAT THEY REQUIRE FOR ANY CEILING AND/OR WALL ACCESS PANEL OTHERS SHALL INSTALL OR BUILD IN ALL SUCH ACCESS PANELS, UNLESS NOTED OTHERWISE.
45. FOR ALL AIR CONDITIONING, EXHAUST & SUPPLY FANS, HVAC & REFRIGERATION EQUIPMENT CURBS, GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL SUITABLE BLOCKING IN WALLS AND CEILING TO SUPPORT FIXTURES, EQUIPMENT AND CANOPIES.
46. FURNITURE, OFFICE EQUIPMENT AND OTHER MISCELLANEOUS EQUIPMENT MAY BE PROVIDED BY TENANT AND NOT INCLUDED IN THIS CONTRACT. GENERAL CONTRACTOR TO VERIFY EQUIPMENT EXTENTS AND LOCATION AND COORDINATE AS REQUIRED.
47. GENERAL CONTRACTOR SHALL SNAKE AND CLEAR ALL FLOOR DRAINS PRIOR TO TURN OVER. CLEANING SHALL INCLUDE, BUT NOT BE LIMITED TO, REMOVAL OF ANY/ALL GROUT FROM FLOOR DRAIN COVERS.
48. ALL GAS PIPING ON THE EXTERIOR, UNDER FLOOR AND BELOW EXISTING FLOOR/CEILING ASSEMBLY SHALL BE GALVANIZED.
49. USE ONLY NON-CORROSIVE FASTENERS ON ANY PRESSURE TREATED LUMBER.
50. PROVIDE AND INSTALL ESCUTOHEON PLATES AT ALL KITCHEN, AND TOILET WALL PENETRATIONS.
51. PROVIDE SHATTER SHIELDS FOR ALL LIGHTING ABOVE STORAGE AREAS.
52. WATER CLOSET FLUSH VALVE CONTROLS AND OPERATING MECHANISM CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST AND SHALL BE MOUNTED NO MORE THAN 44" ABOVE FINISHED FLOOR.
53. THE FORCE REQUIRED TO ACTIVATE WATER CLOSET FLUSH VALVE CONTROLS, FAUCETS AND OPERATING MECHANISM CONTROLS SHALL BE NO GREATER THAN 5 LBF.
54. GENERAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL ELECTRICAL CIRCUIT INCLUDING ALL CONDUIT, WIRE CONNECTIONS AND BREAKERS AT PANEL BOARD NECESSARY TO SERVE PROPOSED SIGNAGE. VERIFY EXTENTS WITH OWNER.
55. SIGNAGE CONTRACTOR TO PERMIT, SUPPLY AND INSTALL SIGNAGE SEPARATE FROM THIS CONSTRUCTION DOCUMENT PACKAGE. SIGNAGE CONTRACTOR TO VERIFY SIGNAGE COMPLIANCE WITH LOCAL CODES AND OBTAIN APPROVAL UNDER A SEPARATE PERMIT AND VERIFY LANDLORD APPROVALS AS REQUIRED.
56. REFER TO ENGINEERED CONSTRUCTION DOCUMENTS BY OTHERS FOR ADDITIONAL PERTINENT INFORMATION.

## DEMOLITION GENERAL NOTES:

1. DEMOLITION CONTRACTOR RESPONSIBLE FOR VERIFICATION OF ALL EXISTING MATERIALS AND CONSTRUCTION OF ALL FLOOR, WALL, CEILING AND ROOF ASSEMBLIES.
2. DEMOLITION CONTRACTOR TO SURVEY THE CONDITION OF THE BUILDING TO DETERMINE WHETHER REMOVING ANY ELEMENT MIGHT RESULT IN A STRUCTURAL DEFICIENCY OR UNPLANNED COLLAPSE OF ANY PORTION OF THE STRUCTURE OR ADJACENT STRUCTURES DURING SELECTIVE DEMOLITION. DO NOT DEMOLISH ANY LOAD BEARING WALLS OR CONSTRUCTION THAT WILL COMPROMISE THE STRUCTURAL INTEGRITY OF THE STRUCTURE. NOTIFY ARCHITECT OF ANY STRUCTURAL ISSUES ARISING FROM DEMOLITION.
3. CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY EXISTING CONDITIONS THAT ARE EXPOSED DURING CONSTRUCTION THAT MAY AFFECT OR INTERFERE WITH ANY NEW WORK.
4. SHOULD ANY UNUSUAL OR UNEXPECTED CONDITIONS BE ENCOUNTERED DURING THE COURSE OF SELECTIVE DEMOLITION, THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY.
5. PROVIDE TEMPORARY WEATHER PROTECTION, AS REQUIRED, DURING SELECTIVE DEMOLITION AND CONSTRUCTION PROCESS TO ENSURE THAT NO WATER DAMAGE OCCURS TO STRUCTURE, EQUIPMENT, EXTERIOR OR INTERIOR AREAS.
6. EXISTING CONSTRUCTION THAT IS TO REMAIN SHALL BE PROTECTED FROM DAMAGES REQUIRED DURING DEMOLITION OPERATIONS. ANY DAMAGE CAUSED BY THE DEMOLITION SHALL BE REPAIRED AT THE EXPENSE OF THE DEMOLITION CONTRACTOR.
7. EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM DURING SELECTIVE DEMOLITION.
8. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY BARRICADES AND PROTECTIVE WALKWAYS AT ALL POTENTIALLY HAZARDOUS AREAS TO PROTECT ALL INDIVIDUALS HEALTH, SAFETY AND WELFARE FOR THE DURATION OF THE PROJECT.
9. CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK, WHETHER INDICATED ON THE DRAWINGS OR NOT, WITH NEW CONSTRUCTION AS REQUIRED UNDER BASE BID AND/OR IN COMBINATION WITH ACCEPTED ALTERNATES.
10. CONTRACTOR SHALL MAINTAIN ALL FIRE RATED WALL, FLOOR/CEILING, ROOF/CEILING, COLUMN AND BEAM ASSEMBLIES, PATCH FIREPROOFING ENCLOSURES TO PROVIDE THE REQUIRED FIRE RATED CONSTRUCTION ASSEMBLY.
11. COMPLETELY REMOVE ALL WALLS, FLOOR FINISHES, CEILINGS, DOOR/WINDOWS AND FRAMES, ACCESSORIES, ETC. AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION. REFER TO DRAWINGS BY OTHERS FOR ADDITIONAL DEMOLITION REQUIREMENTS FOR MECHANICAL, ELECTRICAL, PLUMBING, SPECIAL SYSTEMS AND FIRE SPRINKLER SYSTEMS.
12. ANY EXISTING FINISHED SURFACES TO REMAIN THAT ARE AFFECTED BY SELECTIVE DEMOLITION SHALL BE PATCHED TO MATCH EXISTING ADJACENT SURFACES UNLESS CONCEALED BY NEW CONSTRUCTION.
13. DEMOLITION PROCESS INVOLVING EXCESSIVE NOISE SHALL BE COORDINATED WITH OWNER AND ADJACENT TENANTS SO AS NOT TO INTERFERE WITH SCHEDULES.
14. ALL DOORS AND HARDWARE TO REMAIN, UNLESS NOTED OTHERWISE IN THE DOOR AND FRAME SCHEDULE.
15. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMAL INTERFERENCE WITH ROADS, STREETS, WALKS AND OTHER ADJACENT OCCUPIED AND USED FACILITIES. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS. PROMPTLY DISPOSE OF ALL DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON SITE. LEGALLY TRANSPORT AND DISPOSE OF ALL DEMOLISHED MATERIALS.
16. EXISTING MATERIALS ARE TO BE REMOVED FROM THE SITE IN ACCORDANCE WITH ALL LOCAL, COUNTY, STATE AND FEDERAL REQUIREMENTS. ANY MATERIAL DETERMINED BY THE ENVIRONMENTAL ENGINEER TO BE HAZARDOUS SHALL BE REMOVED IN ACCORDANCE WITH THEIR RECOMMENDATIONS.
17. NO DEMOLITION MATERIALS SHALL BE DISPOSED OF ON SITE. ALL DEBRIS SHALL BE HAULED OFF SITE TO A RECYCLING AREA APPROVED BY THE LOCAL JURISDICTION FOR THE HANDLING OF DEMOLITION DEBRIS.
18. SHOULD ASBESTOS BE ENCOUNTERED, GENERAL CONTRACTOR SHALL CEASE WORK IMMEDIATELY AND NOTIFY OWNER AND ARCHITECT.
19. ASBESTOS ABATEMENT TO BE COORDINATED BY OWNER UNDER A SEPARATE CONTRACT.
20. SUBMIT WRITTEN REQUEST IN ADVANCE OF CUTTING OR ALTERING ELEMENTS WHICH AFFECT:
  - A) STRUCTURAL INTEGRITY OF ELEMENT
  - B) INTEGRITY OF WEATHER EXPOSED OR MOISTURE RESISTANT ELEMENTS
21. IF CUTTING AND/OR ALTERING ANY STRUCTURAL ELEMENT OF THE BUILDING IS NECESSARY, A STRUCTURAL ENGINEERS STAMP OF APPROVAL STATING THE PROPOSED WORK IS SATISFACTORY, SHALL BE SUBMITTED TO THE LANDLORD FOR APPROVAL.
22. SHORING AND BRACING OF EXISTING CONSTRUCTION BEFORE, DURING AND AFTER TO BE IN ACCORDANCE WITH LOCAL CODES AND PRACTICES.
23. UTILITY SERVICE SHALL NOT BE INTERRUPTED DURING NORMAL BUSINESS HOURS UNLESS THE OWNER IS NOTIFIED AND IS IN AGREEMENT. NOTIFICATION TO THE OWNER MUST BE MADE A MINIMUM OF 24 HOURS PRIOR TO THE INTERRUPTION.
24. ALL FIXTURES, CONTROLS, SIGNALS AND OTHER ITEMS WHICH ARE NOT TO BE DEMOLISHED AND ARE LOCATED ON SURFACES WHICH ARE TO RECEIVE A NEW FINISH MATERIAL SHALL BE CAREFULLY REMOVED AND REINSTALLED TO BE IN PLANE WITH THE NEW WALL SURFACE.
25. THE LANDLORD SHALL HAVE INITIAL RIGHT TO CLAIM ALL OF THE ITEMS INDICATED TO BE DEMOLISHED WHICH ARE NOT INDICATED TO BE REUSED AND/OR RELOCATED. ALL DEMOLISHED ITEMS NOT CLAIMED BY THE LANDLORD SHALL BE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF ALL UNCLAIMED ITEMS.
26. REFER TO MECHANICAL DRAWINGS FOR ALL MECHANICAL BEING REMOVED, RELOCATED OR ABANDONED. CUT AND PATCH ASSEMBLY AS REQUIRED FOR ALL NEW MECHANICAL. CAP ABANDONED MECHANICAL.
27. VERIFY ALL MODIFICATIONS OF HVAC AND PLUMBING WITH DOCUMENTS BY OTHERS.
28. REFER TO DOCUMENTS BY OTHERS FOR ALL PLUMBING BEING REMOVED, RELOCATED OR ABANDONED. CUT AND PATCH ASSEMBLY AS REQUIRED FOR ALL NEW PLUMBING. CAP ABANDONED PLUMBING.
29. REFER TO DOCUMENTS BY OTHERS FOR ALL ELECTRICAL BEING REMOVED, RELOCATED OR ABANDONED. CUT AND PATCH ASSEMBLY AS REQUIRED FOR ALL NEW ELECTRICAL.
30. REFER TO FIRE PROTECTION DRAWINGS BY OTHERS FOR ALL SPRINKLER LINES AND HEADS TO BE REMOVED, RELOCATED OR ABANDONED.
31. SHOW NO EXISTING FIRE PROOFING OR FIRE PROTECTION SYSTEMS BE DAMAGED OR REMOVED DURING SELECTIVE DEMOLITION. THE GENERAL CONTRACTOR SHALL REPAIR AND/OR REPLACE AS REQUIRED TO CONFORM WITH EXISTING OR GOVERNING CODES, WHICHEVER IS GREATER.
32. THOROUGHLY CLEAN BUILDING UPON COMPLETION OF SELECTIVE DEMOLITION.
33. TOTAL SCOPE OF DEMOLITION MAY NOT BE COVERED IN DEMOLITION PLAN. REVIEW ALL SHEETS IN THE CONSTRUCTION DOCUMENTS TO DETERMINE TOTAL SCOPE OF DEMOLITION.

## FIRE DEPARTMENT NOTES:

1. ALL LIFE-SAFETY SYSTEMS SHALL BE DESIGNED PER APPLICABLE FIRE PREVENTION CODE, ORDINANCE OR LAW.
2. BUILDING ADDRESS NUMBERS SHALL BE PROVIDED ON THE FRONT OF THE BUILDING AND SHALL BE VISIBLE AND LEGIBLE FROM THE PUBLIC RIGHT OF WAY, AND A MINIMUM OF 6" HIGH AND NUMBERS SHALL CONTRAST VISUALLY WITH THEIR BACKGROUND. ADDRESS NUMBERS SHALL BE PROVIDED BY THE CONTRACTOR.
3. POST "NO PARKING - FIRE LANE" SIGNS ALONG VEHICULAR ACCESS ROADS.
4. ENGINEERED AUTOMATIC FIRE SPRINKLER SYSTEM PLANS, CALCULATIONS AND SPECIFICATIONS SHALL BE DESIGNED BY AN APPROVED INSTALLER AND SUBMITTED TO THE LOCAL BUILDING DEPARTMENT PRIOR TO ANY WORK BEING COMPLETED TO THE SYSTEM.
5. ENGINEERED AUTOMATIC FIRE ALARM AND DETECTION SYSTEM PLANS, SPECIFICATIONS AND CALCULATIONS SHALL BE DESIGNED BY AN APPROVED INSTALLER AND SUBMITTED TO THE LOCAL BUILDING DEPARTMENT AND LOCAL FIRE AUTHORITY PRIOR TO ANY WORK BEING COMPLETED TO THE SYSTEM.
6. THE FIRE SPRINKLER SHALL BE SUPERVISED BY MONITORING METHOD AS REQUIRED BY THE APPLICABLE CODE, ORDINANCE OR LAW.
7. THE INSPECTION, HYDROSTATIC TESTING AND FLUSHING OF THE AUTOMATIC FIRE SPRINKLER SYSTEM AND/OR FIRE HYDRANTS SHALL BE WITNESSED BY THE PROPER FIRE DEPARTMENT REPRESENTATIVE AND NO UNDERGROUND PIPING SHALL BE COVERED OR HIDDEN FROM VIEW UNTIL THE PROPER FIRE DEPARTMENT REPRESENTATIVE HAS BEEN NOTIFIED AND GIVEN NO LESS THAN 48 HOURS IN WHICH TO INSPECT SUCH INSTALLATIONS.
8. COMPLETE PLANS AND SPECIFICATIONS FOR THE FIRE ALARM SYSTEMS: FIRE-EXTINGUISHING SYSTEMS, INCLUDING AUTOMATIC SPRINKLERS AND WET AND DRY STANDPIPES; HALON SYSTEMS AND OTHER SPECIAL TYPES OF AUTOMATIC FIRE-EXTINGUISHING SYSTEMS, AND OTHER FIRE-PROTECTION SYSTEMS AND APPURTENANCES THERE TO SHALL BE SUBMITTED TO FIRE AND LIFE-SAFETY FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
9. FIRE EXTINGUISHER REQUIREMENTS SHALL BE AS DETERMINED BY FIELD INSPECTION. PLACEMENT IS SUBJECT TO APPROVAL OF THE FIRE INSPECTOR AND THE CONTRACTOR SHALL SUPPLY AND INSTALL.
10. AN ALL WEATHER FIRE ACCESS ROAD SHALL BE IN PLACE BEFORE ANY COMBUSTIBLE MATERIALS ARE PLACED ON THE SITE.
11. FIRE APPARATUS ACCESS ROADS SHALL BE UNOBSTRUCTED. ACCESS GATES SHALL BE APPROVED PRIOR TO INSTALLATION AND SHALL BE IN COMPLIANCE WITH O.S.H.A. GUIDELINES.
12. EXIT DOORS SHALL SWING IN THE DIRECTION OF THE EXIT TRAVEL WHEN SERVING ANY HAZARDOUS AREA OR WHEN SERVING AN OCCUPANT LOAD OF 50 OR MORE.
13. WIDTH AND HEIGHT OF REQUIRED EXIT DOORWAYS TO COMPLY WITH BUILDING CODE.
14. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
15. PANIC HARDWARE SHALL BE PROVIDED FOR ALL EXIT DOORS FOR "A" OCCUPANCIES.
16. EXITS SHALL BE ILLUMINATED AT ANY TIME THE BUILDING IS OCCUPIED WITH LIGHTS HAVING AN INTENSITY OF NOT LESS THAN 11.0 LUX AT FLOOR LEVEL.
17. EXIT SIGNS TO BE PROVIDED AS REQUIRED BY APPLICABLE CODES, ORDINANCES OR LAW.
18. PROVIDE APPROVED EXITING ILLUMINATION AND ILLUMINATED EXIT SIGNS WHICH ARE POWERED FROM SEPARATE CIRCUITS AND COMPLY WITH BUILDING CODE.
19. OCCUPANT LOAD SIGN WITH MINIMUM ONE-INCH LETTERS AND NUMBERS SHALL BE POSTED NEAR MAIN EXIT.
20. FIRE DEPARTMENT FINAL INSPECTION REQUIRED.
21. COMMERCIAL DUMPSTERS OR CONTAINERS WITH A CAPACITY OF ONE AND A HALF CUBIC YARDS OR GREATER SHALL NOT BE STORED OR PLACED WITHIN FIVE FEET OF COMBUSTIBLE WALLS OR OPENINGS, UNLESS THESE AREAS ARE PROTECTED BY AN APPROVED AUTOMATIC FIRE SPRINKLER SYSTEM.
22. THE CENTER OF FIRE ALARM INITIATING DEVICES (BOXES) SHALL BE LOCATED ABOVE THE LEVEL OF THE FLOOR, WORKING PLATFORM, GROUND SURFACE OR SIDEWALK.

## HEALTH DEPARTMENT NOTES:

1. ALL EQUIPMENT AND INSTALLATION SHALL MEET NATIONAL SANITATION FOUNDATION (NSF) STANDARDS.
2. ALL SINKS AND LAVATORIES IN THE FOOD FACILITY WILL BE SUPPLIED WITH HOT (MINIMUM 120°F) AND COLD RUNNING WATER UNDER PRESSURE.
3. ALL LAVATORIES OR HAND SINKS TO HAVE A COMBINATION FAUCET OR PREMIXING FAUCET CAPABLE OF SUPPLYING WARM WATER FOR A MINIMUM OF 10 SECONDS.
4. PROVIDE SHATTER SHIELDS FOR ALL LIGHTS ABOVE FOOD PREPARATION WORK AND STORAGE AREAS.
5. PROVIDE WALL MOUNTED SINGLE SERVICE TOWEL AND SOAP DISPENSERS AT ALL HAND WASHING SINKS.
6. SOFT DRINK, ICE AND OTHER DISPENSERS TO BE PUSH BUTTON TYPE.
7. ALL QUARRY TILE BASE USED WILL HAVE A MINIMUM OF 3/8" COVED BASE.
8. QUARRY TILE FLOOR TO HAVE A SMOOTH SURFACE UNDER ALL EQUIPMENT. ALL WALKWAYS TO HAVE ABRASIVE TEXTURE.
9. ALL PLUMBING, ELECTRICAL AND GAS LINES SHALL BE CONCEALED WITHIN THE BUILDING STRUCTURE TO AS GREAT AN EXTENT AS POSSIBLE. ALL LINES THAT ARE NOT CONCEALED TO BE SECURED 5" OFF FLOOR AND 3/4" FROM WALLS USING STANDOFF BRACKETS.
10. ALL SHELVING OVER WET AREAS (SINK, MOP SINK, ETC.) SHALL BE METAL.
11. PROVIDE A 5" SPLASH BARRIER AT BOTH SIDES OF ALL HAND SINKS WHERE THERE IS LESS THAN 18" HORIZONTAL DISTANCE FROM WORKTABLES OR DRAINBOARDS.
12. A CONCRETE SLAB IS PROVIDED FOR TRASH, GARBAGE AND GREASE CONTAINER. IF WALLS ENCLOSE AREA, THE INTERIOR WALL SURFACES WILL BE SMOOTH, SEALED AND WASHABLE.
13. ALL FOOD RELATED AND UTENSIL RELATED EQUIPMENT SHALL MEET OR BE EQUIVALENT TO SANITATION STANDARDS ESTABLISHED BY AN AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) ACCREDITED PROGRAM.
14. ALL FLOOR MOUNTED EQUIPMENT WILL BE INSTALLED ON MINIMUM 6" SANITARY LEGS, CASTORS OR COMPLETELY SEALED IN POSITION ON A 4" HIGH CURB WITH CONTINUOUSLY COVED BASE. COUNTERTOP EQUIPMENT WILL BE ON 4" SANITARY LEGS OR SEALED TO THE COUNTER UNLESS READILY MOVEABLE.
15. TOILET ROOM DOORS MUST BE SELF-CLOSING AND TIGHT FITTING.
16. A MINIMUM OF 10 FOOT CANDLES (108 LUX) OF LIGHT MEASURED 30" OFF FLOOR IS PROVIDED IN ALL FOOD AND UTENSIL STORAGE ROOMS, REFRIGERATED STORAGE, TOILET ROOMS, ALCOHOLIC BEVERAGE PREPARATION AND UTENSIL CLEANING AREAS.
17. A MINIMUM OF 20 FOOT CANDLES (215 LUX) OF LIGHT MEASURED 30" OFF FLOOR IS PROVIDED IN ALL FOOD PREPARATION, MANUFACTURING, PACKING AREAS, PROCESSING AREAS AND ALL AREAS OF FOOD FACILITY DURING GENERAL CLEANUP ACTIVITIES.
18. THE DIMENSIONS OF ALL UTENSIL SINKS (SIZE OF COMPARTMENTS, DRAINBOARDS, LENGTH AND SIZE OF BACKSPASH), THE MINIMUM SIZE SINK COMPARTMENT SHALL BE 18" X 18" X 12" DEEP (OR 16" X 20" X 12" DEEP) WITH A MINIMUM OF 18" DRAINBOARD AT EACH END. IF AGAINST A WALL, IT MUST HAVE AN 8" INTEGRAL BACKSPASH. HOWEVER, IT MUST BE CAPABLE OF ACCOMMODATING THE LARGEST UTENSIL TO BE WASHED.
19. SINKS TO HAVE SPOUT(S) CAPABLE OF REACHING EACH COMPARTMENT.
20. CONDUITS, PLUMBING AND PIPING CANNOT BE INSTALLED ACROSS ANY AISLE WAY, TRAFFIC AREA OR DOOR OPENING.
21. MULTIPLE RUNS OR CLUSTERS OF CONDUIT OR PIPELINES SHALL BE FURRED IN OR ENCASED IN AN APPROVED SEALED ENCLOSURE.
22. FLOOR SINKS ARE TO BE INSTALLED FLUSH WITH THE FINISHED FLOOR SURFACE AND HAVE APPROPRIATE COVER GRATES.
23. FLOOR SINKS TO BE 50" EXPOSED WHEN NO ACCESS IS PROVIDED FOR CLEANING.
24. AN APPROVED BACKFLOW PREVENTER SHALL BE PROPERLY INSTALLED UPSTREAM OF ANY POTENTIAL HAZARD BETWEEN THE POTABLE WATER SUPPLY AND A SOURCE OF CONTAMINATION HOSE SHALL NOT BE ATTACHED TO A FAUCET OR HOSE BIBB UNLESS AN APPROVED BACKFLOW PREVENTER IS PROVIDED.
25. THE MOP SINK FAUCET WILL HAVE A THREADED OUTER LIP FOR HOSE ATTACHMENT AND AN APPROVED BACKFLOW PREVENTER DEVICE. NO CHEMICAL DISPENSING SYSTEMS OR SHUTOFF VALVES TO BE ATTACHED TO MOP SINK FAUCET OUTLET.
26. THE FLOOR SURFACE MUST BE SLOPED 1:50 (APPROXIMATELY 3/4" PER FOOT) TO THE FLOOR DRAINS OR A 4'-0" DIAMETER DEPRESSION THAT SLOPES APPROXIMATELY 1/8" PER FOOT MUST BE PROVIDED AROUND EACH FLOOR DRAIN.
27. EXHAUST A MINIMUM OF 12 AIR CHANGES PER HOUR VENTILATION TO ALL TOILET ROOMS, JANITOR CLOSETS WITH MOP SINKS AND INDOOR TRASH ROOMS.
28. COLD STORAGE ROOMS SHALL BE PROVIDED WITH A SECTION OF SHELVING INSTALLED TO HOLD SHALLOW COOL DOWN PANS - NOT TO EXCEED 4" IN HEIGHT. SPACE BETWEEN SHELVING TO BE AT LEAST 8" HIGH.
29. SHELVING SHALL BE AT LEAST 18" DEEP AND START A MINIMUM 6" OFF THE FLOOR SURFACE.
30. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL BACK FLOW PREVENTERS FOR ALL REQUIRED EQUIPMENT. COORDINATE AFFECTED EQUIPMENT WITH KITCHEN EQUIPMENT SUPPLIER.
31. KITCHEN EQUIPMENT SUPPLIER WILL PROVIDE AND THE PLUMBING CONTRACTOR SHALL INSTALL A GAS QUICK DISCONNECT FLEXIBLE HOSE FOR ALL REQUIRED EQUIPMENT. COORDINATE AFFECTED EQUIPMENT WITH KITCHEN EQUIPMENT SUPPLIER.
32. PLUMBING CONTRACTOR TO COORDINATE ALL FLOOR DRAINS AND LOCATIONS WITH KITCHEN EQUIPMENT SUPPLIER. ALL DRAINS ARE TO BE OF THE TYPE REQUIRED BY LOCAL CODE.
33. PLUMBING CONTRACTOR TO SUPPLY ALL VALVES, REGULATORS, TRAPS, TAIL PIECES AND OTHER MATERIAL REQUIRED TO MAKE FINAL CONNECTIONS. STOP VALVES SHALL BE PROVIDED AS REQUIRED IN ALL PIPING TO KITCHEN AND OTHER EQUIPMENT OR FIXTURES AHEAD OF OPERATING LEVEL HANDLES OR FAUCET.
34. PLUMBING CONTRACTOR TO PROVIDE ALL GAS FIRED EQUIPMENT WITH INDIVIDUAL MANUAL SHUT OFF VALVES.
35. EXPOSED HORIZONTAL PIPING MUST BE 6" ABOVE FINISHED FLOOR AND AT LEAST 1" OFF THE WALL. ALL EXPOSED PIPING TO BE CHROME PLATED.
36. THE OWNER AND SUPPLIER OF EACH EQUIPMENT.
37. FABRICATED EQUIPMENT CONTAINING A BREAKER PANEL (LOAD CENTER PANEL) SHALL BE PRE-WIRED BY FABRICATOR READY FOR FIELD CONNECTION TO ONE POINT BY ELECTRICAL CONTRACTOR. BREAKER PANELS SHALL HAVE GROUND FAULT PROTECTION.
38. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL SWITCHES, STARTERS, INTERLOCKS, CIRCUITS & PLUG SETS, DISCONNECTS, ETC. FOR ALL EQUIPMENT. ALL DISCONNECTS OR LOCK-OUT DEVICES, STARTERS, ETC. TO MEET N.E.C. AND O.S.H.A STANDARDS.
39. ALL RECEPTACLES SHALL BE GROUNDED AS PER N.E.C. AND O.S.H.A. STANDARDS. REFER TO ELECTRICAL DOCUMENTS FOR ADDITIONAL INFORMATION.
40. ALL ELECTRICAL REQUIREMENTS FOR FIRE PROTECTION SYSTEM TO BE WIRED THROUGH LIFE SAFETY SYSTEM BY ELECTRICAL CONTRACTOR.

KEG & CASE MARKET

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ST. PAUL, MN 55102

SHEET TITLE:  
GENERAL NOTES

PROJECT #: 1294

DRAWN BY: DAA CJG

CHECKED BY: AM

ISSUE: DATE:

HISTORICAL 10.29.15

HISTORICAL 03.08.16

HPC SUBMIT 04.07.16



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I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of: MINNESOTA

signed: \_\_\_\_\_  
date: 03.08.16 reg. no. 45178

CS1.1

# A.D.A.A.G. INTERIOR ACCESSIBILITY COMPONENTS

THIS TENANT SPACE IS REQUIRED TO BE ACCESSIBLE AS SET FORTH IN THE NATIONAL ACCESSIBILITY CODE AND MAINTAIN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF THE ACT AND ITS ACCESSIBILITY GUIDELINES (A.D.A.), (A.D.A.A.G.).

PATH OF TRAVEL	DOORS	STAIRS	RAMPS	RESTROOMS
<ol style="list-style-type: none"> <li>IN ACCORDANCE WITH 206.2.4, AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT ACCESSIBLE BUILDING OR FACILITY ENTRANCES WITH ALL ACCESSIBLE SPACES AND ELEMENTS WITHIN THE BUILDING OR FACILITY, WHICH ARE OTHERWISE CONNECTED BY A CIRCULATION PATH UNLESS EXEMPTED BY 206.2.3 EXCEPTIONS 1 THROUGH 7.</li> <li>THE RUNNING SLOPES OF WALKING SURFACES THAT ARE PART OF AN ACCESSIBLE ROUTE SHALL NOT BE STEEPER THAN 1:20 WITH A CROSS SLOPE THAT IS NOT STEEPER THAN 1:48.</li> <li>CHANGES IN LEVEL SHALL COMPLY WITH 303.</li> <li>THE CLEAR WIDTH OF WALKING SURFACES ON AN ACCESSIBLE ROUTE SHALL COMPLY WITH 403.5.1.</li> <li>THE CLEAR WIDTH AT TURNS ALONG AN ACCESSIBLE ROUTE SHALL COMPLY WITH 403.5.2.</li> <li>AN ACCESSIBLE ROUTE WITH A CLEAR WIDTH OF LESS THAN 80 INCHES SHALL PROVIDE PASSING SPACES AT INTERVALS OF 200 FEET IN ACCORDANCE WITH 403.5.3.</li> </ol>		<p>REACH RANGES, CONTROLS &amp; OPERATING MECHANISMS</p> <ol style="list-style-type: none"> <li>REACH RANGES SHALL COMPLY WITH 308.</li> <li>OPERABLE PARTS SHALL COMPLY WITH 309 AND SHALL BE PLACED WITHIN ONE OR MORE OF THE REACH RANGES SPECIFIED IN 308.</li> <li>OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAXIMUM.</li> </ol>		
<ol style="list-style-type: none"> <li>DOORS, DOORWAYS, AND GATES THAT ARE PART OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH 404.</li> <li>DOOR OPENINGS SHALL PROVIDE A CLEAR WIDTH OF 32 INCHES, UNLESS THE OPENING IS MORE THAN 24 INCHES DEEP, IN WHICH CASE THE CLEAR WIDTH OF THE OPENING SHALL BE 36 INCHES. FOR SWINGING DOORS, THE CLEAR WIDTH SHALL BE MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES.</li> <li>THERE SHALL BE NO PROJECTIONS INTO THE CLEAR OPENING LOWER THAN 34 INCHES. PROJECTIONS INTO THE CLEAR OPENING BETWEEN 34 INCHES AND 80 INCHES SHALL NOT EXCEED 4 INCHES.</li> <li>DOOR CLOSERS AND STOPS SHALL BE PERMITTED TO BE A MINIMUM OF 78 INCHES ABOVE THE FLOOR OR GROUND.</li> <li>MANEUVERING CLEARANCES AT DOORS AND GATES SHALL COMPLY WITH 404.2.4.</li> <li>FIRE DOORS SHALL HAVE A MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY.</li> <li>HINGED DOORS OTHER THAN FIRE DOORS SHALL HAVE AN OPENING FORCE OF 5 POUNDS MAXIMUM.</li> <li>SLIDING DOORS SHALL HAVE AN OPENING FORCE OF 5 POUNDS MAXIMUM.</li> <li>DOOR AND GATE SURFACES SHALL COMPLY WITH 404.2.10.</li> </ol>		<p>TABLE SEATING &amp; COUNTERS</p> <ol style="list-style-type: none"> <li>WHERE DINING SURFACES ARE PROVIDED FOR THE CONSUMPTION OF FOOD AND DRINK, AT LEAST 5 PERCENT OF THE SEATING SPACES AND STANDING SPACES AT THE DINING SURFACES SHALL COMPLY WITH 902. IN ADDITION, WHERE WORK SURFACES ARE PROVIDED FOR USE BY OTHER THAN EMPLOYEES, AT LEAST 5 PERCENT SHALL COMPLY WITH 902.</li> <li>DINING SURFACES AND WORK SURFACES REQUIRED TO COMPLY WITH 902.6 SHALL BE DISPersed THROUGHOUT THE SPACE OR FACILITY CONTAINING DINING SURFACES AND WORK SURFACES.</li> <li>DINING SURFACES AND WORK SURFACES SHALL COMPLY WITH 902.2 AND 903.3.</li> </ol>		
<ol style="list-style-type: none"> <li>STAIRS THAT ARE PART OF A MEANS OF EGRESS SHALL COMPLY WITH 504.</li> <li>ALL STEPS ON A FLIGHT OF ACCESSIBLE STAIRS SHALL HAVE UNIFORM RISER HEIGHTS AND UNIFORM TREAD DEPTHS. RISERS SHALL BE BETWEEN 4 INCHES AND 7 INCHES IN HEIGHT. TREADS SHALL BE 11 INCHES DEEP MINIMUM.</li> <li>OPEN RISERS ARE NOT PERMITTED.</li> <li>NOSINGS IN STEPS SHALL COMPLY WITH 504.5.</li> <li>STAIRWAY HANDRAILS SHALL COMPLY WITH 505.</li> </ol>		<p>SIGNAGE</p> <ol style="list-style-type: none"> <li>SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH 216 AND SHALL COMPLY WITH 703.</li> <li>SIGNS IDENTIFYING PERMANENT ROOMS AND SPACES SHALL COMPLY WITH 703.1, 703.2 THROUGH 703.5. WHERE PICTOGRAMS ARE PROVIDED AS DESIGNATIONS OF PERMANENT ROOMS AND SPACES, THE PICTOGRAMS SHALL COMPLY WITH 703.6 AND SHALL HAVE TEXT DESCRIPTORS COMPLYING WITH 703.2 AND 703.5.</li> <li>SIGNS THAT PROVIDE DIRECTION TO OR INFORMATION ABOUT SPACES AND FACILITIES SHALL COMPLY WITH 703.5.</li> <li>SIGNS FOR MEANS OF EGRESS SHALL COMPLY WITH 216.4.</li> <li>WHERE MORE THAN ONE CHECK-OUT AISLE IS PROVIDED, CHECK-OUT AISLES COMPLYING WITH 904.3 SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF ACCESSIBILITY COMPLYING WITH 703.7.2.1. WHERE CHECK-OUT AISLES ARE IDENTIFIED BY NUMBERS, LETTERS, OR FUNCTIONS, SIGNS IDENTIFYING CHECK-OUT AISLES COMPLYING WITH 904.3 SHALL BE LOCATED IN THE SAME LOCATION AS THE CHECK-OUT AISLE IDENTIFICATION.</li> </ol>		
<ol style="list-style-type: none"> <li>RAMPS ON ACCESSIBLE ROUTES SHALL COMPLY WITH 405.</li> <li>RAMP RUNS SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 1:12 WITH A CROSS SLOPE NOT STEEPER THAN 1:48.</li> <li>THE CLEAR WIDTH OF A RAMP RUN AND, WHERE HANDRAILS ARE PROVIDED, THE CLEAR WIDTH BETWEEN HANDRAILS SHALL BE 36 INCHES MINIMUM.</li> <li>THE RISE FOR ANY RAMP RUN SHALL BE 30 INCHES MAXIMUM.</li> <li>RAMPS SHALL HAVE LANDINGS AT THE TOP AND THE BOTTOM OF EACH RAMP RUN COMPLYING WITH 405.7.</li> <li>RAMPS WITH A RISE GRATER THAN 6 INCHES SHALL HAVE HANDRAILS COMPLYING WITH 505.</li> <li>EDGE PROTECTION COMPLYING WITH 405.9.1 OR 405.9.2, SHALL BE PROVIDED ON EACH SIDE OF RAMP RUNS AND EACH SIDE OF RAMP LANDINGS.</li> </ol>		<p>FOOD SERVICE LINES, TABLEWARE AREAS, &amp; CHECK-OUT AISLES</p> <ol style="list-style-type: none"> <li>WHERE CHECK-OUT AISLES ARE PROVIDED, CHECK-OUT AISLES COMPLYING WITH 904.3 SHALL BE PROVIDED IN ACCORDANCE WITH TABLE 227.2 AND SHALL BE DISPersed.</li> <li>WHERE PROVIDED, AT LEAST ONE OF EACH TYPE OF SALES COUNTER AND SERVICE COUNTER SHALL COMPLY WITH 904.4. WHERE COUNTERS ARE DISPersed THROUGHOUT THE BUILDING OR FACILITY, COUNTERS COMPLYING WITH 904.4 ALSO SHALL BE DISPersed.</li> <li>FOOD SERVICE LINES SHALL COMPLY WITH 904.5. WHERE SELF-SERVICE SHELVES ARE PROVIDED, AT LEAST 50 PERCENT, BUT NO FEWER THAN ONE, OF EACH TYPE PROVIDED SHALL COMPLY WITH 308.</li> <li>QUEUES AND WAITING LINES SERVICING COUNTERS OR CHECK-OUT AISLES REQUIRED TO COMPLY WITH 904.3 OR 904.4 SHALL COMPLY WITH 403.</li> <li>CHECK-OUT AISLES AND SALES AND SERVICE COUNTERS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF 904.</li> <li>ALL POINTS OF COUNTERS REQUIRED TO COMPLY WITH 904 SHALL BE LOCATED ADJACENT TO A WALKING SURFACE COMPLYING WITH 403.</li> </ol>		
<ol style="list-style-type: none"> <li>WHERE TOILET FACILITIES ARE PROVIDED, THEY SHALL COMPLY WITH 213. WHERE TOILET ROOMS ARE PROVIDED, EACH TOILET ROOM SHALL COMPLY WITH 603.</li> <li>WHERE TOILET COMPARTMENTS ARE PROVIDED, AT LEAST ONE TOILET COMPARTMENT SHALL COMPLY WITH 604.8.1. IN ADDITION TO THE COMPARTMENT REQUIRED TO COMPLY WITH 604.8.1, AT LEAST ONE COMPARTMENT SHALL COMPLY WITH 604.8.2 WHERE SIX OR MORE TOILET COMPARTMENTS ARE PROVIDED, OR WHERE THE COMBINATION OF URINALS AND WATER CLOSETS TOTALS SIX OR MORE FIXTURES.</li> <li>MIRRORS LOCATED ABOVE LAVATORIES OR COUNTERTOPS SHALL BE INSTALLED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES MAXIMUM ABOVE FINISH FLOOR OR GROUND. MIRRORS NOT LOCATED ABOVE LAVATORIES OR COUNTERTOPS SHALL BE INSTALLED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 35 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.</li> <li>COAT HOOKS SHALL BE LOCATED WITHIN ONE OF THE REACH RANGES SPECIFIED IN 308. SHELVES SHALL BE LOCATED 40 INCHES MINIMUM AND 48 INCHES MAXIMUM ABOVE THE FINISH FLOOR.</li> <li>WATER CLOSETS SHALL COMPLY WITH 604.2 THROUGH 604.8.</li> </ol>	<ol style="list-style-type: none"> <li>TOILET PAPER DISPENSERS SHALL COMPLY WITH 309.4 AND SHALL BE 7 INCHES MINIMUM AND 9 INCHES MAXIMUM IN FRONT OF THE WATER CLOSET MEASURED TO THE CENTERLINE OF THE DISPENSER. THE OUTLET OF THE DISPENSER SHALL BE 15 INCHES MINIMUM AND 48 INCHES MAXIMUM ABOVE THE FINISH FLOOR AND SHALL NOT BE LOCATED BEHIND GRAB BARS. DISPENSERS SHALL NOT BE OF A TYPE THAT CONTROLS DELIVERY OR THAT DOES NOT ALLOW CONTINUOUS PAPER FLOW.</li> <li>GRAB BARS SHALL BE PROVIDED AT WATER CLOSETS AND SHALL COMPLY WITH 609.</li> <li>URINALS SHALL COMPLY WITH 605 AND SHALL BE EITHER WALL-HUNG OR STALL TYPE URINALS.</li> <li>LAVATORIES SHALL COMPLY WITH 606. FAUCETS FOR LAVATORIES SHALL COMPLY WITH 606.4. EXPOSED PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE PROTECTED TO PREVENT AGAINST CONTACT.</li> </ol>			

KEG & CASE MARKET  
928 W 7TH STREET  
ST. PAUL, MN 55102

SHEET TITLE:  
ACCESSIBILITY  
GUIDELINES

PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
HISTORICAL 10.29.15  
HISTORICAL 03.08.16  
HPC SUBMIT 04.07.16



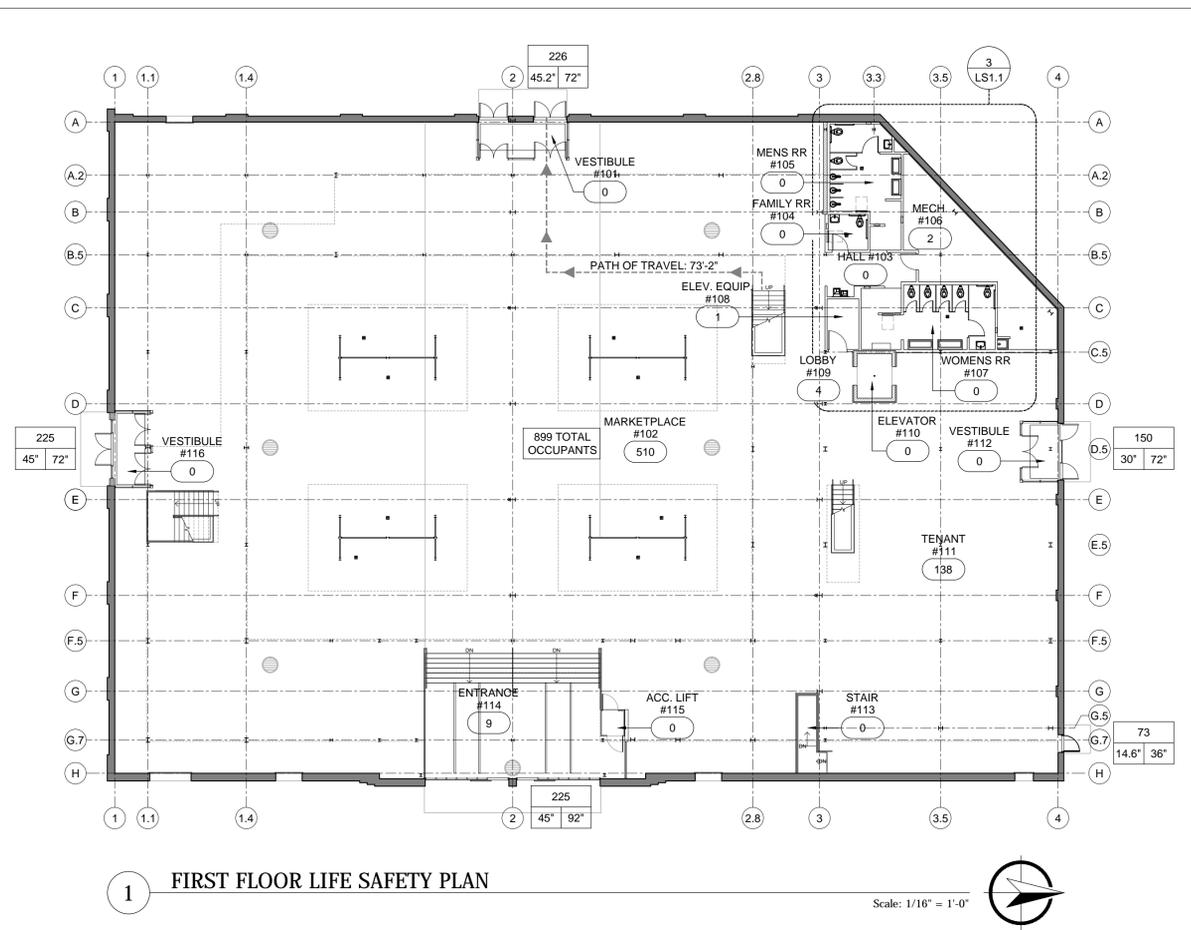
STUDIO M ARCHITECTS, INC.  
530 NORTH 3RD STREET, SUITE 230  
MINNEAPOLIS, MINNESOTA 55401  
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I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of MINNESOTA

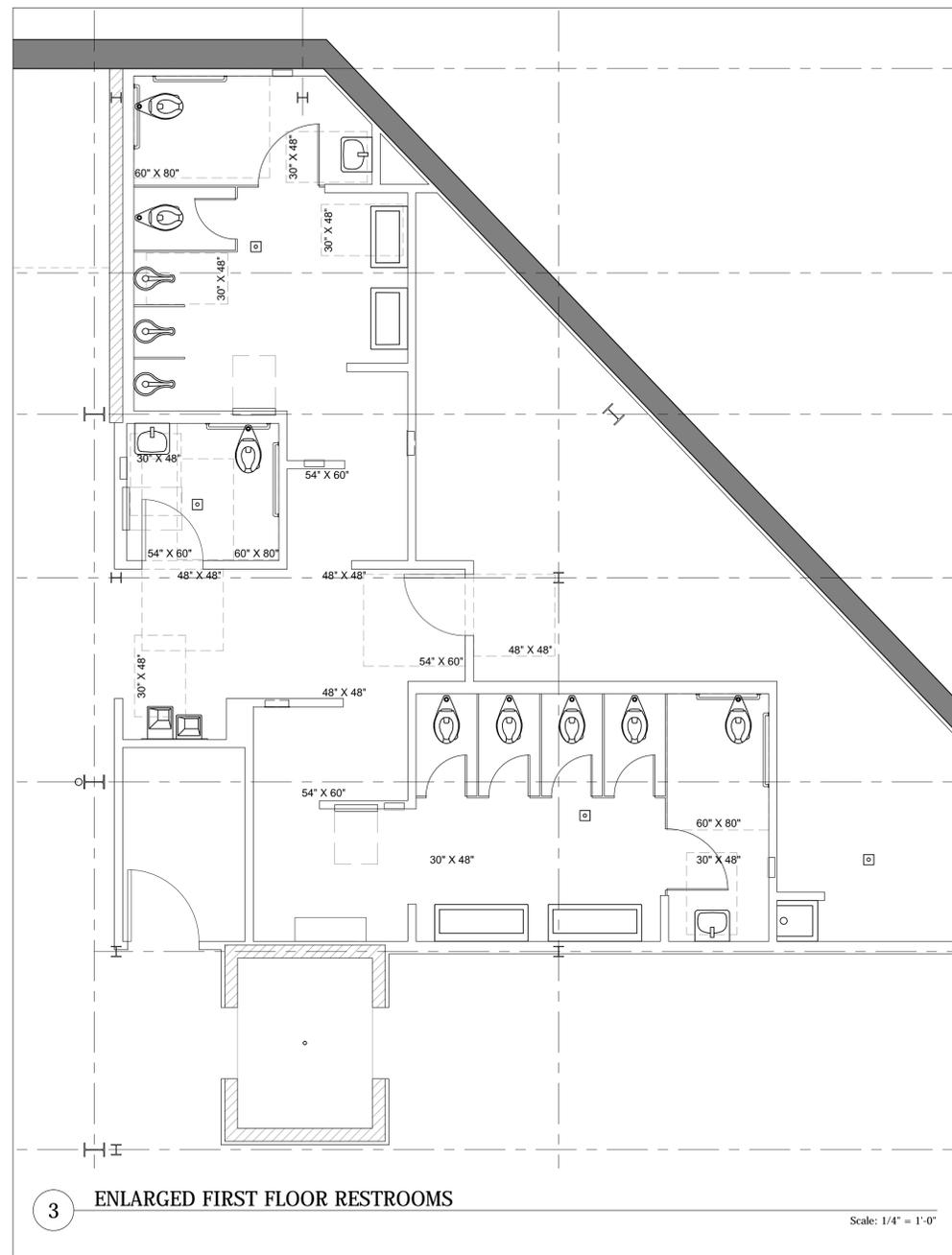
signed: \_\_\_\_\_  
date: 03.08.16 reg. no. 45178

CS1.2



1 FIRST FLOOR LIFE SAFETY PLAN

Scale: 1/16" = 1'-0"

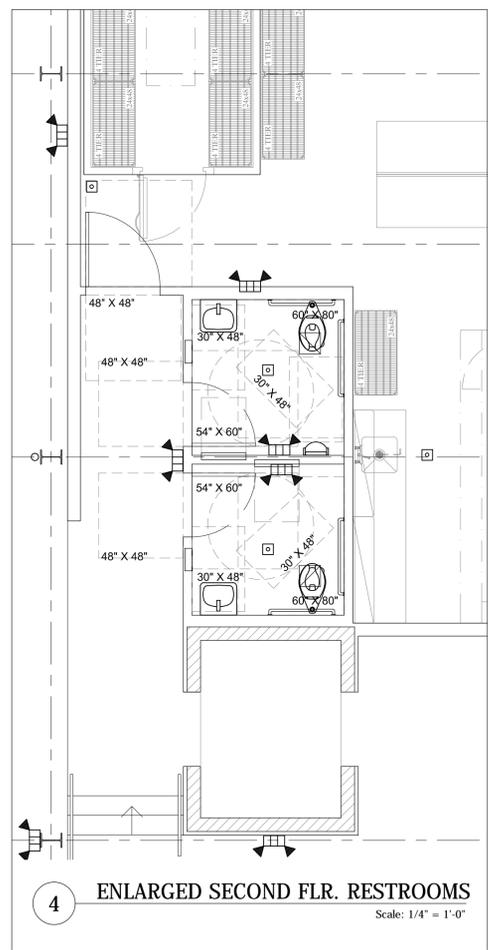


3 ENLARGED FIRST FLOOR RESTROOMS

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

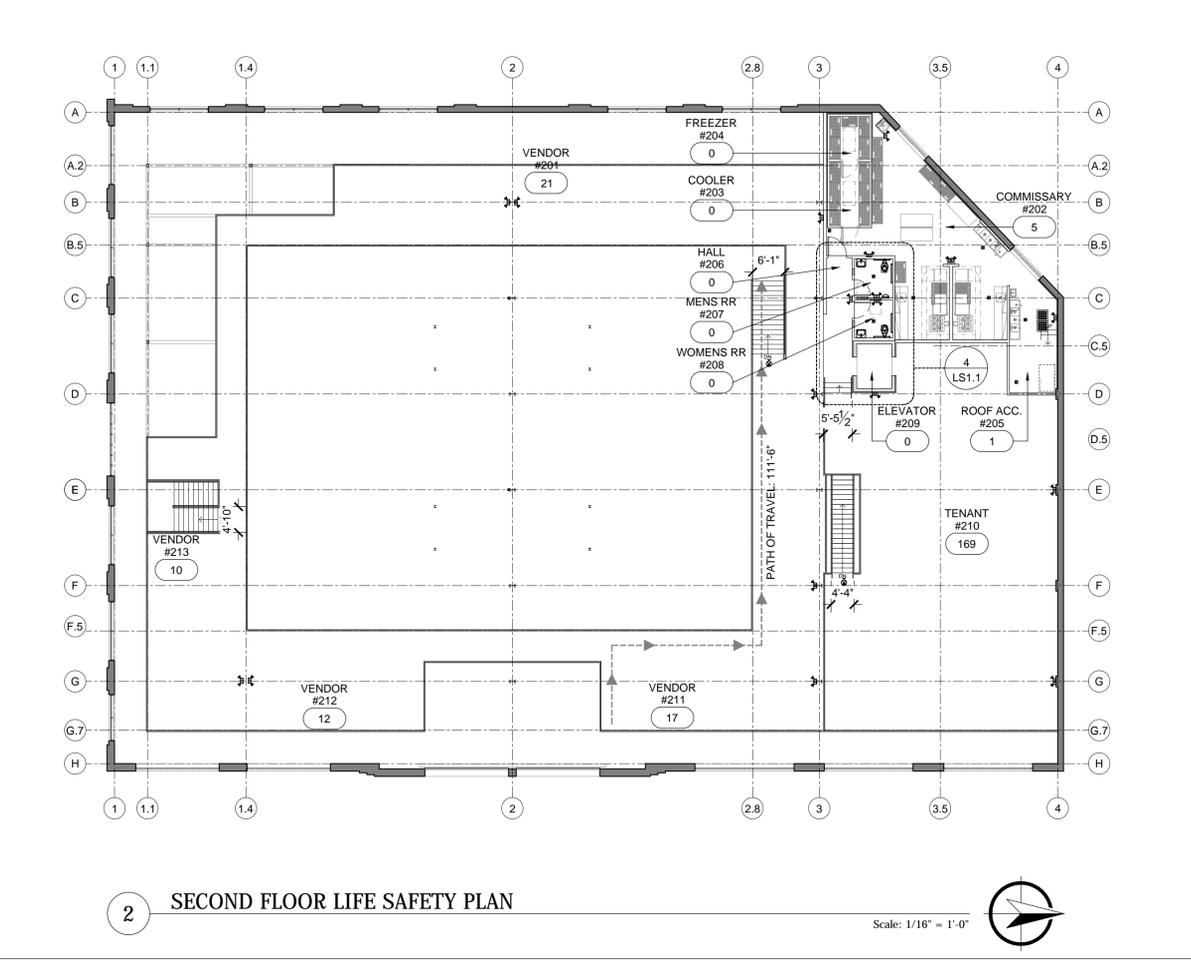
### SYMBOL LEGEND

ROOMNAME ROOMNAME	OCCUPANT LOAD
#	OCCUPANT LOAD PATH OF TRAVEL - NUMBER INDICATES COMBINED OCCUPANT LOAD ON PATH
#	OCCUPANT LOAD AT EGRESS
#	PROVIDED EGRESS WIDTH
#	REQUIRED EGRESS WIDTH
---	TRAVEL DISTANCE



4 ENLARGED SECOND FLR. RESTROOMS

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



2 SECOND FLOOR LIFE SAFETY PLAN

Scale: 1/16" = 1'-0"



KEG & CASE MARKET  
928 W 7TH STREET  
ST. PAUL, MN 55102

SHEET TITLE:  
LIFE SAFETY  
FLOOR PLANS

PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
HISTORICAL 10.29.15  
HISTORICAL 03.08.16  
HPC SUBMIT 04.07.16

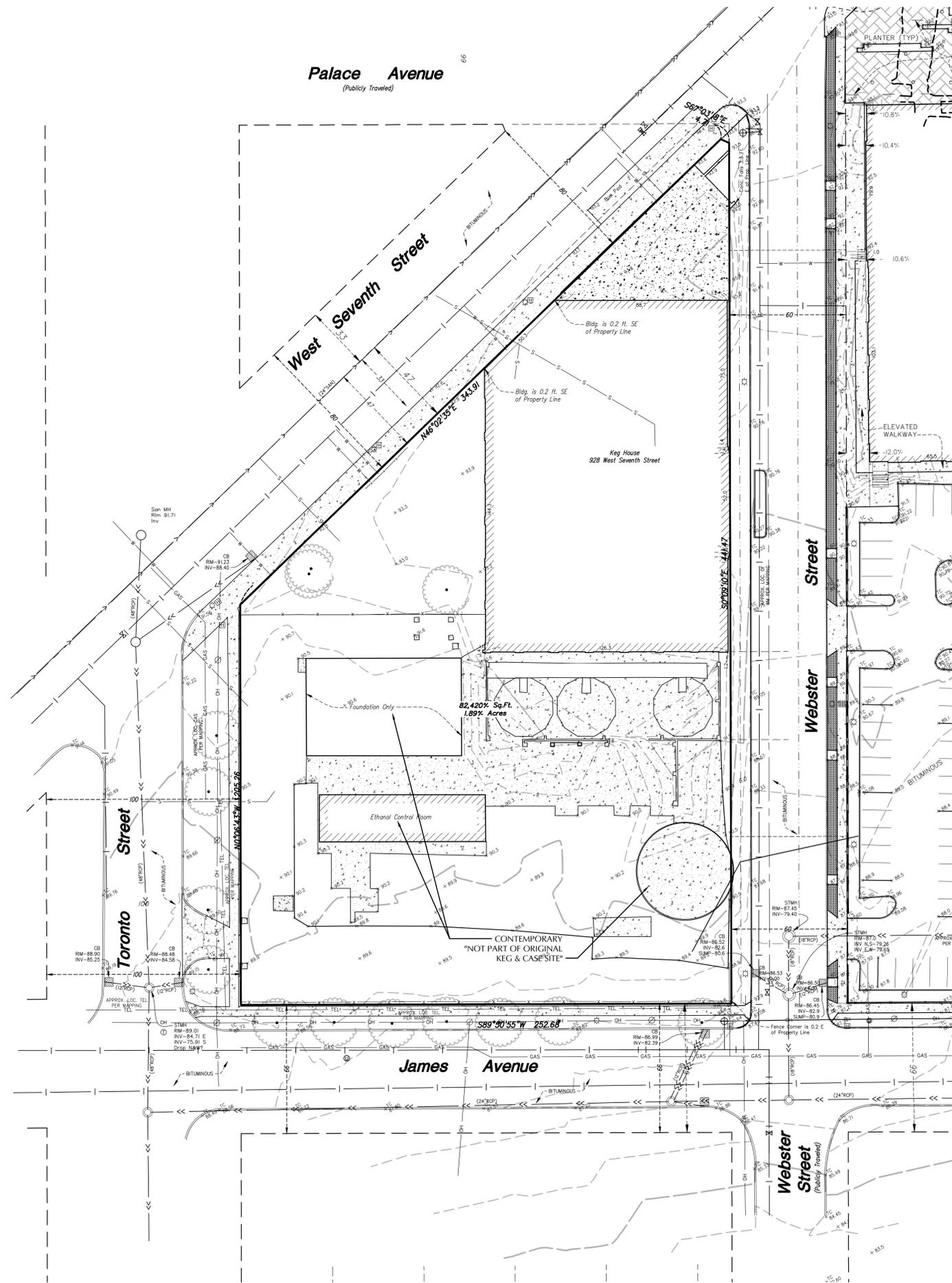


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I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of MINNESOTA

Signed: \_\_\_\_\_  
Date: 03.08.16 reg. no. 45178

LS1.1



SURVEY LEGEND					
BO	BOXELDER	☉	CATCH BASIN	—>—>	STORM SEWER
FR	MISC FRUIT	⊙	STORM MANHOLE	—>	SANITARY SEWER
OA	OAK	○	SANITARY MANHOLE	— —	WATERMAIN
PI	PINE	◇	HYDRANT	—S—	SANITARY SEWER SERVICE
SP	SPRUCE	⊗	GATE VALVE	—W—	WATER SERVICE
TR	TREE (GEN)	⊗	POWER POLE	—CTV—	UNDERGROUND CABLE TV
THSD	ELEV THRESHOLD	☆	LIGHT POLE	—ELE—	UNDERGROUND ELECTRIC
TC	TOP OF CURB	⊕	YARD LIGHT	—GAS—	UNDERGROUND GAS
TW	TOP OF RET. WALL	←	GUY WIRE	—TEL—	UNDERGROUND TELEPHONE
	CONIFEROUS TREE	⊗	SPOT ELEVATION	—OH—	OVERHEAD UTILITY
	DECIDUOUS TREE	⊗	CABLE TV PEDESTAL	—X—X—	CHAIN LINK FENCE
		⊗	ELECTRIC TRANSFORMER	⊗	TRAFFIC SIGNAL
		⊗	TELEPHONE PEDESTAL	⊗	CONCRETE CURB
		⊗	ELECTRIC MANHOLE	⊗	CONCRETE
		⊗	ELECTRIC METER	⊗	CONTOUR
		⊗	GAS METER	⊗	

**BENCHMARK:**  
 Top Nut Hydrant: Southwest corner  
 Erie Street & Jefferson Avenue.  
 Elevation = 87.93 feet  
 (City of St. Paul Datum)

**GENERAL NOTES**

- BACKGROUND INFORMATION IS BASED ON A FIELD SURVEY BY LOUCKS, PROPOSED WEBSTER ST & SCHMIDT ARTIST LOFTS, & SUPPLEMENTAL SURVEYING BY RECORD UTILITY DRAWINGS FROM THE CITY OF ST PAUL. LOUCKS ASSOCIATES DOES NOT GUARANTEE THE ACCURACY OF INFORMATION PROVIDED BY OTHERS.
- WE HAVE SHOWN BURIED STRUCTURES AND UTILITIES ON AND/OR SERVING THE SITE TO THE BEST OF OUR ABILITY, SUBJECT TO THE FOLLOWING RESTRICTIONS:
  - UTILITY OPERATORS DO NOT CONSISTENTLY RESPOND TO LOCATE REQUESTS THROUGH THE GOPHER STATE ONE CALL SERVICE FOR BOUNDARY PURPOSES SUCH AS THIS.
  - THOSE UTILITY OPERATORS THAT DO RESPOND, OFTEN WILL NOT LOCATE SERVICES FROM THEIR MAIN LINE TO THE CUSTOMER'S STRUCTURE OR FACILITY - THEY CONSIDER THOSE SEGMENTS PRIVATE INSTALLATIONS THAT ARE OUTSIDE THEIR JURISDICTION. IF A PRIVATE SERVICE TO AN ADJOINER'S SITE CROSSES THIS SITE OR A SERVICE TO THIS SITE CROSSES AN ADJOINER, IT MAY NOT BE LOCATED SINCE MOST OPERATORS WILL NOT MARK SUCH "PRIVATE" SERVICES.
  - SNOW AND ICE CONDITIONS DURING WINTER MONTHS MAY OBSCURE OTHERWISE VISIBLE EVIDENCE OF A BURIED STRUCTURE OR UTILITY.
  - MAPS PROVIDED BY OPERATORS, EITHER ALONG WITH A FIELD LOCATION OR IN LIEU OF SUCH A LOCATION, ARE VERY OFTEN INACCURATE OR INCONCLUSIVE.
  - THE SURFACE FEATURES AND ELEVATIONS SHOWN ON THIS DRAWING WERE LOCATED BY LOUCKS ASSOCIATES.
  - ALL OF THE UNDERGROUND UTILITY INFORMATION AND LOCATION SHOWN ON THIS PLAN WERE PREPARED FROM RECORD DRAWINGS OBTAINED FROM THE CLIENT AND THE CITY OF ST PAUL RECORDS.
- EXTREME CAUTION MUST BE EXERCISED BEFORE AN EXCAVATION TAKES PLACE ON OR NEAR THIS SITE. BEFORE DIGGING, YOU ARE REQUIRED BY LAW TO NOTIFY GOPHER STATE ONE CALL AT LEAST 48 HOURS IN ADVANCE AT 651/454-0002.
- THERE MAY BE OTHER UTILITIES ON THE SITE THAT ARE NOT SHOWN ON THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE THE UTILITIES. NOTIFY THE ENGINEER IF THERE ARE OTHER SERVICES FOUND.

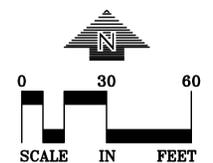
**WARNING**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



**CALL BEFORE YOU DIG!**  
**Gopher State One Call**  
 TWIN CITY AREA: 651-454-0002  
 TOLL FREE: 1-800-252-1166



**KEG & CASE MARKET**  
 928 W 7TH STREET  
 ST. PAUL, MN 55102

**LOUCKS**  
 PLANNING  
 CIVIL ENGINEERING  
 LAND SURVEYING  
 LANDSCAPE ARCHITECTURE  
 ENVIRONMENTAL  
 7200 Hennick Lane, Suite 300  
 Maple Grove, MN 55369  
 763.424.5505  
 www.loucksinc.com  
 LOUCKS PROJECT NO. 100720H

**SHEET TITLE:**  
 EXISTING  
 CONDITIONS

PROJECT #:	1294
DRAWN BY:	DRW
CHECKED BY:	CHK
ISSUE:	DATE:
DSI Pre-Submittal	7/24/15
Progress	10/14/15
HPCA Submittal	10/29/15
Pricing	01/04/16
DSI Submittal	03/15/16
HPC Submittal	04/07/16

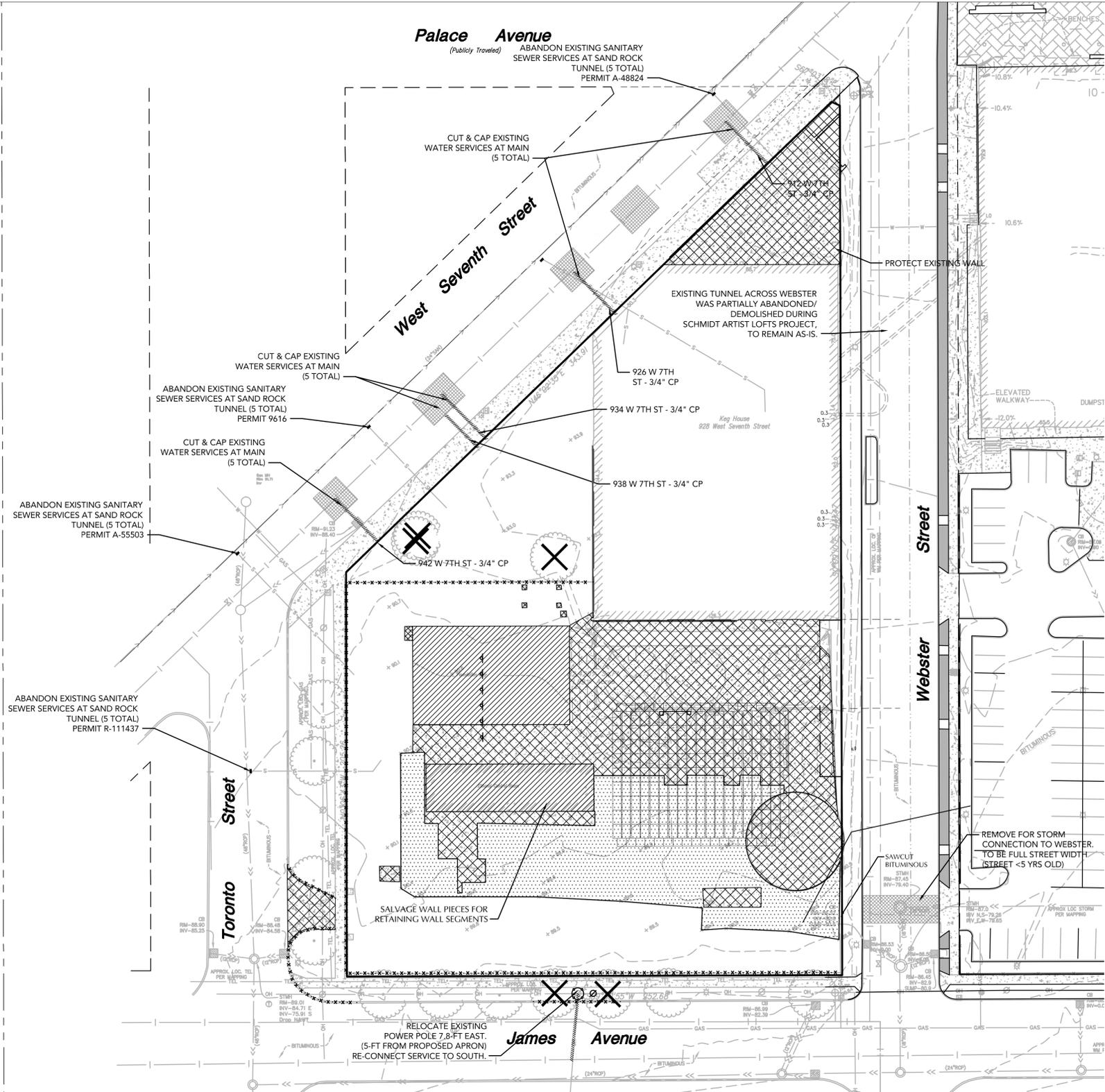


**STUDIO M ARCHITECTS, INC.**  
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 MINNEAPOLIS, MINNESOTA 55401  
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 WWW.STUDIOMARCHITECTS.NET

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 law of the state of Minnesota.

Signed: \_\_\_\_\_  
 Date: 4/07/16 reg. no. 24440

**C1-1**



**DEMOLITION NOTES**

- BACKGROUND INFORMATION IS BASED ON A COMPILATION OF AN ALTA/ACSM SURVEY & BOUNDARY TOPO SURVEY BY LOUCKS ASSOCIATES AND RECORD UTILITY DRAWINGS FROM THE CITY OF ST. PAUL. LOUCKS ASSOCIATES DOES NOT GUARANTEE THE ACCURACY OF INFORMATION PROVIDED BY OTHERS.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASE OF THIS PROJECT. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGES TO ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASE OF THIS PROJECT.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE APPROPRIATE MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARDS.
- IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- THE DUTY OF THE ENGINEER OR THE DEVELOPER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTORS PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTORS SAFETY MEASURES IN, OR NEAR THE CONSTRUCTION SITE.
- BEFORE BEGINNING CONSTRUCTION THE CONTRACTOR SHALL INSTALL A TEMPORARY ROCK ENTRANCE PAD AT ALL POINTS OF VEHICLE EXIT FROM THE PROJECT SITE. SAID ROCK ENTRANCE PAD SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT. SEE SHEET C3-2 FOR DETAILS.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE ESTABLISHED AROUND THE SITE PERIMETER AS SHOWN AND IN ACCORDANCE WITH NPDES PERMIT REQUIREMENTS, BEST MANAGEMENT PRACTICES, CITY REQUIREMENTS AND THE DETAILS SHOWN IN THE PROJECT PLANS.
- ALL CONSTRUCTION ACTIVITY INCLUDING STOCKPILING, STAGING & PARKING MUST TAKE PLACE ON-SITE.
- TEMPORARY STREET SIGNS, LIGHTING & ADDRESSES SHALL BE PROVIDED DURING CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN A CITY & COUNTY PERMIT FOR OBSTRUCTIONS AND WORK WITHIN RIGHT-OF-WAY. PERMIT IS REQUIRED PRIOR TO REMOVALS OR INSTALLATION.
- PROTECT EXISTING SITE FEATURES THAT ARE NOT NOTED FOR REMOVAL. IF DISCREPANCIES ARISE, NOTIFY ENGINEER IMMEDIATELY FOR RESOLUTION.
- WE HAVE SHOWN EXISTING SERVICES BASED ON CITY AS-BUILTS & A GOPHER ONE LOCATE. THERE MAY BE SERVICES THAT ARE NOT SHOWN.
- NO WORK TO BE DONE OUTSIDE OF CONSTRUCTION/SILT FENCE WITHOUT PRIOR AUTHORIZATION FROM ENGINEER.
- THE REMOVAL OF EXISTING SERVICES WITHIN THE CONSTRUCTION LIMITS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR AND UTILITY OWNER. ADDITIONAL SERVICES MAY EXIST THAT ARE NOT SHOWN.

**CITY OF ST. PAUL PERMIT REQUIREMENTS**

- ORDERING OBSTRUCTION AND EXCAVATION PERMITS: CONTACT PUBLIC WORKS RIGHT OF WAY SERVICE DESK AT (651) 266-6151. IT IS STRONGLY RECOMMENDED THAT CONTRACTORS CALL FOR COST ESTIMATES PRIOR TO BIDDING TO OBTAIN ACCURATE COST ESTIMATES.
- OBSTRUCTION PERMITS: THE CONTRACTOR MUST OBTAIN AN OBSTRUCTION PERMIT IF CONSTRUCTION (INCLUDING SILT FENCES) WILL BLOCK CITY STREETS, SIDEWALKS OR ALLEYS, OR IF DRIVING OVER CURBS.
- EXCAVATION PERMITS: ALL DIGGING IN THE PUBLIC RIGHT OF WAY REQUIRES AN EXCAVATION PERMIT. IF THE PROPOSED BUILDING IS CLOSE TO THE RIGHT OF WAY, AND EXCAVATING INTO THE RIGHT OF WAY IS NEEDED TO FACILITATE CONSTRUCTION, CONTACT THE UTILITY INSPECTOR.
- FAILURE TO SECURE PERMITS: FAILURE TO SECURE OBSTRUCTION PERMITS OR EXCAVATION PERMITS WILL RESULT IN A DOUBLE-PERMIT FEE AND OTHER FEES REQUIRED UNDER CITY OF ST. PAUL LEGISLATIVE CODES.
- REQUIREMENTS TO WORK IN THE PUBLIC RIGHT OF WAY: ALL UTILITIES AND CONTRACTORS WORKING IN THE PUBLIC RIGHT OF WAY MUST BE REGISTERED, INSURED AND BONDED, AS RECOGNIZED BY THE PUBLIC WORKS SERVICE DESK. (651-266-6151)

**CITY OF ST. PAUL NOTES**

- SIGNS REGULATING PARKING AND/OR TRAFFIC ON PRIVATE PROPERTY SHALL BE INSTALLED BY THE PROPERTY OWNER OR CONTRACTOR OUTSIDE OF THE PUBLIC RIGHT-OF-WAY. SIGNS APPROVED BY PUBLIC WORKS TRAFFIC ENGINEERING REGULATING PARKING AND/OR TRAFFIC IN THE PUBLIC RIGHT-OF-WAY FOR THIS DEVELOPMENT SHALL BE INSTALLED BY CITY FORCES AT THE EXPENSE OF THE DEVELOPMENT. CONTACT MIKE MILLER 651-266-9778 SIX WEEKS IN ADVANCE OF NEEDED SIGN(S).
- ALL WORK ON CURBS, DRIVEWAYS, AND SIDEWALKS WITHIN THE PUBLIC RIGHT OF WAY MUST BE DONE BY A LICENSED AND BONDED CONTRACTOR UNDER A PERMIT FROM PUBLIC WORKS SIDEWALK SECTION (651-266-6120). SIDEWALK GRADES MUST BE CARRIED ACROSS DRIVEWAYS.
- RESTORATION OF ASPHALT AND CONCRETE PAVEMENTS ARE PERFORMED BY THE PUBLIC WORKS STREET MAINTENANCE DIVISION. THE CONTRACTOR IS RESPONSIBLE FOR PAYMENT TO THE CITY FOR THE COST OF THESE RESTORATIONS. THE CONTRACTOR SHALL CONTACT PUBLIC WORKS STREET MAINTENANCE TO SET UP A WORK ORDER PRIOR TO BEGINNING ANY REMOVALS IN THE STREET AT 651-266-9700. PROCEDURES AND UNIT COSTS ARE FOUND IN STREET MAINTENANCE'S "GENERAL REQUIREMENTS - ALL RESTORATIONS" AND ARE AVAILABLE AT THE PERMIT OFFICE.
- THE CONTRACTOR SHALL CONTACT JOHN MCNAMARA AT 651-266-9780, GENERAL FOREMAN, LIGHTING - SIGNAL MAINTENANCE, IF REMOVAL OR RELOCATION OF EXISTING FACILITIES IS REQUIRED OR IN THE EVENT OF DAMAGE TO THE LIGHTING OR SIGNAL UTILITIES. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY (AND RELATED COSTS) FOR ANY DAMAGE OR RELOCATIONS.
- ACCESS TO SIGNAL CONTROLLER AND LIGHTING CABINETS MUST BE MAINTAINED AT ALL TIMES. IF FENCING IS REQUIRED FOR A JOB SITE, A KEY OR OTHER MEANS OF ACCESS MUST BE PROVIDED TO THE CITY OF ST. PAUL'S TRAFFIC OPERATIONS DEPARTMENT. CONTACT JOHN MCNAMARA AT 651-266-9780, GENERAL FOREMAN, LIGHTING - SIGNAL MAINTENANCE.
- CARE MUST BE TAKEN DURING CONSTRUCTION AND EXCAVATION TO PROTECT ANY SURVEY MONUMENTS AND/OR PROPERTY IRONS. CALL SAM GIBSON OF PUBLIC WORKS SURVEYING (651-266-4075) IF YOU HAVE ANY QUESTIONS.
- PIPE WORK INSIDE PROPERTY TO BE PERFORMED BY A PLUMBER LICENSED BY THE STATE OF MINNESOTA AND CERTIFIED BY THE CITY OF SAINT PAUL. PIPE WORK WITHIN THE PUBLIC RIGHT OF WAY TO BE PERFORMED BY SPRWS.
- ABANDONING EXISTING SEWER SERVICE OR MAKING NEW CONNECTIONS TO CITY SEWER MUST BE DONE TO CITY STANDARDS BY A LICENSED HOUSE DRAIN CONTRACTOR UNDER A PERMIT FROM PUBLIC WORKS SEWER SECTION (651-266-6234).
- INSPECTION CONTACT: THE DEVELOPER SHALL CONTACT THE RIGHT OF WAY INSPECTOR, BRENT GILLEN, AT 651-485-0419 (ONE WEEK PRIOR TO BEGINNING WORK) TO DISCUSS TRAFFIC CONTROL, PEDESTRIAN SAFETY AND COORDINATION OF ALL WORK IN THE PUBLIC RIGHT OF WAY. NOTE: IF ONE WEEK NOTICE IS NOT PROVIDED TO THE CITY, ANY RESULTING DELAYS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- SAFE WORK SITE REQUIREMENTS: THE CONTRACTOR SHALL PROVIDE A CONTINUOUS, ACCESSIBLE AND SAFE PEDESTRIAN WALKWAY THAT MEETS ADA AND MN MUTCD STANDARDS IF WORKING IN A SIDEWALK AREA. ALL TRAFFIC CONTROL AND TRAFFIC CONTROL DEVICES SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE MN MUTCD OR SUPPLEMENTS THEREOF.
- NO PRIVATE FACILITIES IN THE RIGHT OF WAY: THE DEVELOPER IS STRICTLY PROHIBITED FROM INSTALLING PRIVATE ELECTRICAL WIRING, CONDUIT, RECEPTACLES AND/OR LIGHTING IN THE CITY'S RIGHT OF WAY. THIS INCLUDES STUBBING CONDUIT OR CABLE INTO THE PUBLIC RIGHT OF WAY TO ACCOMMODATE UTILITY FEEDS TO THE SITE. COORDINATE WITH EACH UTILITY PRIOR TO CONSTRUCTION TO DETERMINE FEED POINTS INTO THE PROPERTY. UTILITIES ARE RESPONSIBLE FOR SECURING EXCAVATION PERMITS TO RUN THEIR SERVICE INTO A SITE, AND (WHERE REQUIRED) SUBMITTING PLANS FOR REVIEW BY THE PUBLIC WORKS UTILITY REVIEW COMMITTEE.
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- CONSTRUCTION MATERIALS AND EQUIPMENT SHALL NOT BE STORED ON THE PUBLIC BOULEVARD. CONSTRUCTION EQUIPMENT AND VEHICLES SHALL NOT BE OPERATED OR PARKED ON TURF BOULEVARDS.
- ROADWAY STRIPING IMPACTED BY THE WORK ZONE SHALL BE REPLACED IN-KIND AT NO COST TO THE CITY. IF THERE ARE QUESTIONS AS TO THE TYPE OF MATERIAL TO BE USED, CONTACT MIKE MILLER (651-266-9778) IN THE CITY'S TRAFFIC OPERATIONS SECTION. STRIPING RESTORATION SHALL BE COMPLETED IMMEDIATELY FOLLOWING FINAL PAVEMENT RESTORATION. IF THERE IS A DESIRE FOR THE CITY OF ST. PAUL PUBLIC WORKS DEPARTMENT TO COMPLETE THE PAVEMENT MARKING RESTORATION WORK, CONTACT MIKE MILLER OF PUBLIC WORKS TRAFFIC OPERATIONS FOR AN ESTIMATE. WHEN POSSIBLE, A MINIMUM OF FOUR WEEKS ADVANCE NOTICE OF ANY NEEDED STRIPING WORK IS PREFERRED. AT A MINIMUM, ONE WEEK'S ADVANCE NOTICE SHALL BE PROVIDED. IF ADVANCE NOTICE IS NOT PROVIDED, ANY ASSOCIATED PROJECT DELAYS, AND COSTS INCURRED RESULTING FROM SAID DELAYS, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE REMOVAL, PRUNING AND/OR PLANTING OF TREES ON THE PUBLIC BOULEVARD REQUIRES A PERMIT FROM THE CITY FORESTER (651-632-5129).

**ST. PAUL REGIONAL WATER SERVICE NOTES**

- ALL WATER MAIN CONNECTIONS TO BE INSTALLED BY SAINT PAUL REGIONAL WATER SERVICES.
- PIPE WORK INSIDE PROPERTY TO BE PERFORMED BY A PLUMBER LICENSED BY THE STATE OF MINNESOTA AND CERTIFIED BY THE CITY OF SAINT PAUL.
- MAINTAIN 18-INCH SEPARATION BETWEEN SEWER AND WATER LINES OR A 12-INCH SEPARATION WITH 4-INCH HIGH DENSITY INSULATION PER SPRWS STANDARD PLATE D-10.
- APPLICATION, PAYMENT FOR NEW WATER SERVICE CONNECTION, BILLING INFORMATION AND PROJECT DATA SHEET TO BE PROVIDED TO SPRWS BEFORE CONSTRUCTION OF NEW WATER SERVICE CONNECTION.
- WATER SERVICES TO BE INSTALLED ACCORDING TO SPRWS \*STANDARDS FOR THE INSTALLATION OF WATER MAINS.
- A FOUR-SIDED TRENCH BOX IS REQUIRED ON ALL EXCAVATIONS DEEPER THAN 5-FT WHERE UNDERGROUND WORK OR INSPECTION IS TO BE PERFORMED BY SPRWS. LADDERS ARE REQUIRED AND MUST EXTEND 3-FT ABOVE THE SURFACE OF THE TRENCH. SIDEWALKS, PAVEMENTS, DUCTS AND APPURTENANT STRUCTURES SHALL NOT BE UNDERMINED UNLESS A SUPPORT SYSTEM OR ANOTHER METHOD OF PROTECTION IS PROVIDED. TRENCHES IN EXCESS OF 20-FT IN DEPTH MUST BE SIGNED OFF BY A REGISTERED PROFESSIONAL ENGINEER. EXCAVATED MATERIAL MUST BE KEPT A MINIMUM OF 2-FT FROM THE EDGE OF THE TRENCH.
- PIPE MATERIAL FOR 6" DUCTILE IRON PIPE MUST BE CLASS 53.
- ALL UNUSED EXISTING WATER SERVICES TO BE CUT OFF BY SPRWS, EXCAVATION AND RESTORATION BY THE GENERAL CONTRACTOR.
- ALL WATER MAIN AND SERVICES TO BE INSTALLED ACCORDING TO \*SPRWS STANDARDS FOR INSTALLATION OF WATER MAINS, AND \*SPRWS WATER
- ALL EXISTING WATER SERVICES NOT BEING REUSED MUST BE CUT-OFF AND ABANDONED PER SPRWS CODE.
- ALL PIPEWORK INSIDE THE PROPERTY TO BE PERFORMED BY A PLUMBER LICENSED BY THE STATE OF MINNESOTA AND CERTIFIED BY THE CITY OF ST. PAUL. SPRWS WILL PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY ON AN ACTUAL COST BASIS.

**WARNING**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



**CALL BEFORE YOU DIG**  
**Gopher State One Call**  
 TWIN CITY AREA: 651-454-0002  
 TOLL FREE: 1-800-252-1166

**CITY OF ST. PAUL TRAFFIC & ROW NOTES**

WORK CONDUCTED ON STATE ROADWAYS, TRUNK HIGHWAYS OR RIGHT OF WAY MAY ALSO REQUIRE PERMITTING THROUGH MNDOT. MNDOT CONTACT IS JEFF DIERBERGER (651-234-7911). STATE AND CITY APPROVAL IS REQUIRED ON MNDOT ROADWAYS MAINTAINED BY THE CITY.

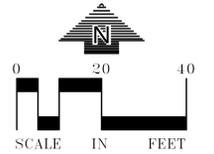
THE CONTRACTOR MUST ALSO CONTACT METRO TRANSIT, GREG TUVESON AT 612-418-1134, FORTY-EIGHT (48) HOURS IN ADVANCE, REGARDING TEMPORARILY MOVING THE BUS STOPS ON WEST SEVENTH STREET, IF LANE CLOSURES ARE REQUIRED.

**EXISTING SURVEY NOTES**

- BACKGROUND INFORMATION IS BASED ON A FIELD SURVEY BY LOUCKS, PROPOSED WEBSTER ST & SCHMIDT ARTIST LOFTS, & SUPPLEMENTAL SURVEYING BY RECORD UTILITY DRAWINGS FROM THE CITY OF ST. PAUL. LOUCKS ASSOCIATES DOES NOT GUARANTEE THE ACCURACY OF INFORMATION PROVIDED BY OTHERS.

**LEGEND**

- \*\*\*\*\* REMOVE EXISTING FENCE
- ////// REMOVE EXISTING UNDERGROUND UTILITIES
- XXXXXX REMOVE EXISTING CONCRETE
- REMOVE EXISTING LIGHT POLES
- ▨ REMOVE EXISTING BUILDINGS
- ▨ REMOVE EXISTING BITUMINOUS
- ✕ REMOVE EXISTING TREES SEE TREE INVENTORY FOR DETAILS



**KEG & CASE MARKET**  
 928 W 7TH STREET  
 ST. PAUL, MN 55102

**LOUCKS**  
 PLANNING  
 CIVIL ENGINEERING  
 LAND SURVEYING  
 LANDSCAPE ARCHITECTURE  
 ENVIRONMENTAL  
 7200 Hennick Lane, Suite 300  
 Maple Grove, MN 55369  
 763.424.5505  
 www.loucks.com  
 LOUCKS PROJECT NO. 1007204

**SHEET TITLE:**  
**DEMOLITION**  
**PLAN**

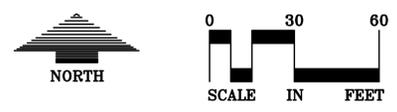
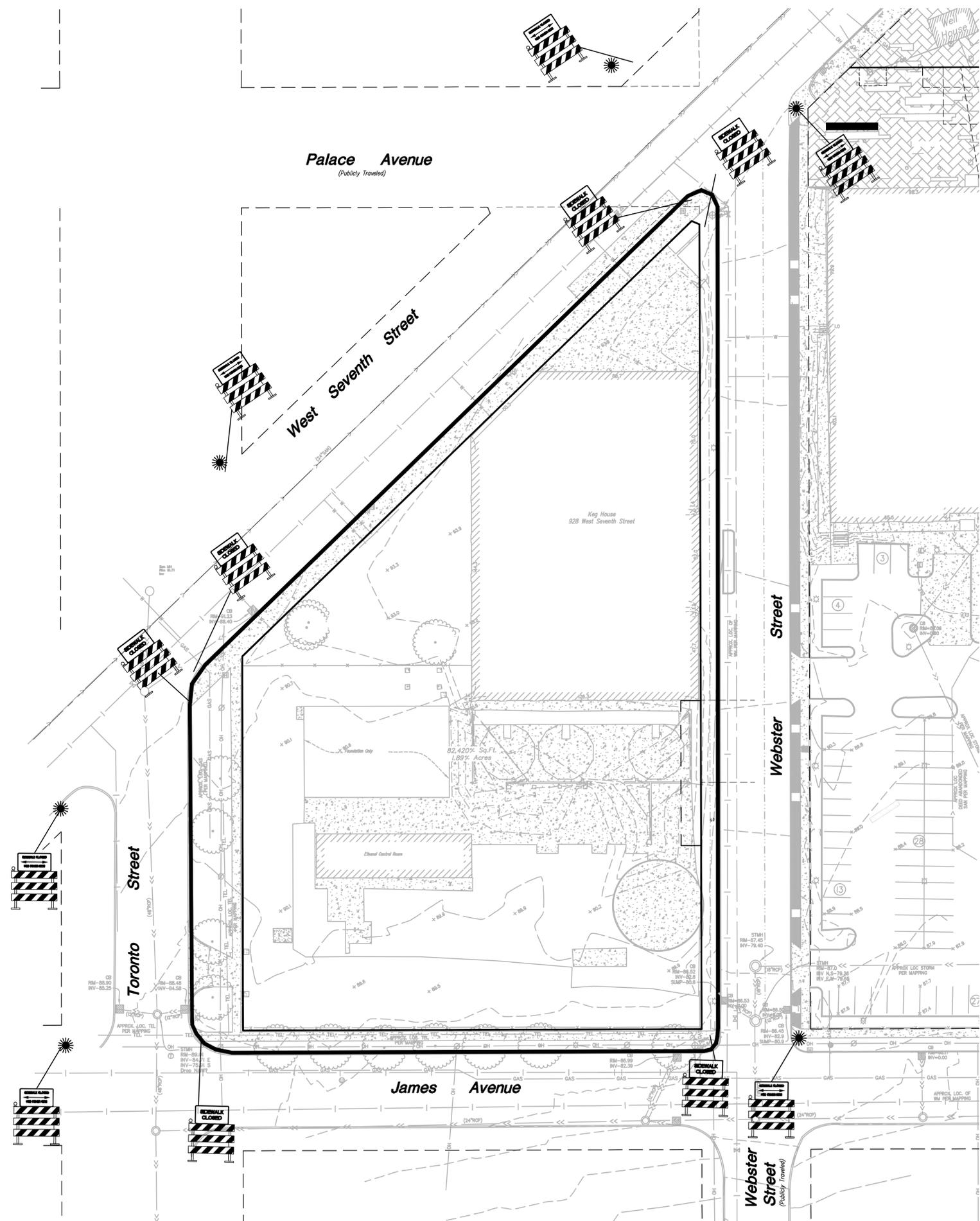
PROJECT #:	1294
DRAWN BY:	DRW
CHECKED BY:	CHK
ISSUE:	DAT
DSI Pre-Submittal	7/24/15
Progress	10/14/15
HPCA Submittal	10/29/15
Pricing	01/04/16
DSI Submittal	03/15/16
HPC Submittal	04/07/16



**STUDIO M ARCHITECTS, INC.**  
 530 NORTH 3RD STREET, SUITE 230  
 MINNEAPOLIS, MINNESOTA 55401  
 P. 612.264.4376  
 F. 612.264.4340  
 WWW.STUDIOMARCHITECTS.NET

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 law of the state of Minnesota.  
 signed: \_\_\_\_\_  
 date: 4/07/16 reg. no. 24440

**C1-2**



NOTE:  
CROSSWALK & PEDESTRIAN  
CLOSURES PER MMUTCD  
LAYOUT 6J-24a

KEG & CASE MARKET  
928 W 7TH STREET  
ST. PAUL, MN 55102

**LOUCKS**  
PLANNING  
CIVIL ENGINEERING  
LAND SURVEYING  
LANDSCAPE ARCHITECTURE  
ENVIRONMENTAL  
7200 Hennick Lane, Suite 300  
Maple Grove, MN 55369  
763.424.5555  
www.loucksinc.com  
LOUCKS PROJECT NO. 10072/04

SHEET TITLE:  
TEMPORARY  
PEDESTRIAN  
ACCESS ROUTE  
(TPAR)

PROJECT #:	1294
DRAWN BY:	DRW
CHECKED BY:	CHK
ISSUE:	DATE:
DSI Pre-Submittal	7/24/15
Progress	10/14/15
HPCA Submittal	10/29/15
Pricing	01/04/16
DSI Submittal	03/15/16
HPC Submittal	04/07/16



STUDIO M ARCHITECTS, INC.  
530 NORTH 3RD STREET, SUITE 230  
MINNEAPOLIS, MINNESOTA 55401  
P. 612.254.1375  
F. 612.244.1240  
WWW.STUDIOMARCHITECTS.NET

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 law of the state of Minnesota.

Signed: \_\_\_\_\_  
Date: 4/07/16 reg. no. 24440

C1-3

PROJECT #:	1294
DRAWN BY:	DRW
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**STUDIO M ARCHITECTS, INC.**  
 530 NORTH 3RD STREET, SUITE 230  
 MINNEAPOLIS, MINNESOTA 55401  
 P. 612.254.3272  
 F. 612.254.1240  
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 signed: \_\_\_\_\_  
 date: 4/07/16 reg. no. 24440

**SITE DATA**

AREA	
TOTAL SITE AREA:	82,420SF, 1.89 ACRES, 100%
IMPERVIOUS SURFACE AREA:	57,583SF, 1.32 ACRES, 69.9%
PERVIOUS SURFACE AREA:	24,837SF, 0.57 ACRES, 30.1%

<b>SETBACKS-PARKING</b>	
FRONT YARD:	7 FT
STREET SIDE SETBACK:	7 FT

<b>PARKING</b>	
REGULAR STALLS:	50 STALLS
COMPACT STALLS:	18 STALLS
ACCESSIBLE STALLS:	4 STALLS
TOTAL SURFACE STALLS:	72 STALLS

- SITE NOTES**
- BACKGROUND INFORMATION IS BASED ON A FIELD SURVEY BY LOUCKS, PROPOSED WEBSTER ST & SCHMIDT ARTIST LOFTS, & SUPPLEMENTAL SURVEYING BY RECORD UTILITY DRAWINGS FROM THE CITY OF ST. PAUL. LOUCKS ASSOCIATES DOES NOT GUARANTEE THE ACCURACY OF INFORMATION PROVIDED BY OTHERS.
  - MINNESOTA STATE STATUTE REQUIRES NOTIFICATION PER "GOPHER STATE ONE CALL" PRIOR TO COMMENCING ANY GRADING, EXCAVATION OR UNDERGROUND WORK.
  - CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM THE PLANS.
  - CONTRACTOR SHALL OBTAIN A CITY & COUNTY PERMIT FOR OBSTRUCTIONS AND WORK WITHIN RIGHT-OF-WAY. PERMIT IS REQUIRED PRIOR TO REMOVALS OR INSTALLATION.
  - ALL DIMENSIONS ARE SHOWN TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
  - PROVIDE A 3 FOOT TAPER AT ALL CURB TERMINI.
  - ALL PAVING, CONCRETE CURB, GUTTER AND SIDEWALK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN PER THE REQUIREMENTS OF THE CITY. SEE LANDSCAPE AND ARCHITECTURAL PLANS FOR ANY ADDITIONAL HARDSCAPE APPLICATIONS.
  - THE CITY DEPARTMENT OF ENGINEERING AND BUILDING INSPECTIONS DEPT. AND THE CONSTRUCTION ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY WORK WITHIN THE STREET RIGHT OF WAY (SIDEWALK, STREET OR DRIVEWAYS).
  - ANY SIGN OR FIXTURES REMOVED WITHIN THE RIGHT OF WAY OR AS PART OF THE SITE WORK SHALL BE REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY REQUIREMENTS. THE CONTRACTOR SHALL PRESERVE AND MAINTAIN ANY EXISTING STREET LIGHTS AND TRAFFIC SIGNS PER THE REQUIREMENTS OF THE CITY.
  - A SIGNIFICANT PORTION OF SITE IMPROVEMENTS NOT SHOWN ON THIS SHEET ARE DESCRIBED AND PROVIDED IN FURTHER DETAIL ON THE ARCHITECTURAL AND LANDSCAPE PLANS. THIS INCLUDES LANDSCAPING, LIGHTING AND OTHER FIXTURES.
  - B612 CONCRETE CURB AND GUTTER SHALL BE INSTALLED AT THE EDGE OF ALL COMMON DRIVES AND PARKING LOTS WITHIN THE SITE, UNLESS NOTED OTHERWISE.
  - ALL PARKING LOT PAVEMENT MARKINGS SHALL BE 4" WIDE WHITE PAINTED STRIPING.
  - DISABLED PARKING SIGNAGE & PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH ADA & MINNESOTA RULES 1341.0502.
  - CITY ENGINEERING STAFF MUST BE PRESENT TO INSPECT ALL CONCRETE FORMS IN PUBLIC RIGHT-OF-WAY PRIOR TO POUR. MINIMUM 24 HOUR NOTICE REQUIRED.
  - "NO PARKING FIRE LANE" SIGNS MUST BE INSTALLED AS INDICATED BY THE CITY FIRE CHIEF. VERIFY EXACT LOCATIONS AND NUMBER OF REQUIRED SIGNS WITH THE CITY FIRE CHIEF. SIGNAGE MUST BE INSTALLED PRIOR TO THE FINAL OCCUPANCY INSPECTION.

- CITY OF ST. PAUL PERMIT REQUIREMENTS**
- ORDERING OBSTRUCTION AND EXCAVATION PERMITS: CONTACT PUBLIC WORKS RIGHT OF WAY SERVICE DESK AT (651) 266-6151. IT IS STRONGLY RECOMMENDED THAT CONTRACTORS CALL FOR COST ESTIMATES PRIOR TO BIDDING TO OBTAIN ACCURATE COST ESTIMATES.
  - OBSTRUCTION PERMITS: THE CONTRACTOR MUST OBTAIN AN OBSTRUCTION PERMIT IF CONSTRUCTION (INCLUDING SILT FENCES) WILL BLOCK CITY STREETS, SIDEWALKS OR ALLEYS, OR IF DRIVING OVER CURBS.
  - EXCAVATION PERMITS: ALL DIGGING IN THE PUBLIC RIGHT OF WAY REQUIRES AN EXCAVATION PERMIT. IF THE PROPOSED BUILDING IS CLOSE TO THE RIGHT OF WAY, AND EXCAVATING INTO THE RIGHT OF WAY IS NEEDED TO FACILITATE CONSTRUCTION, CONTACT THE UTILITY INSPECTOR.
  - FAILURE TO SECURE PERMITS: FAILURE TO SECURE OBSTRUCTION PERMITS OR EXCAVATION PERMITS WILL RESULT IN A DOUBLE-PERMIT FEE AND OTHER FEES REQUIRED UNDER CITY OF ST. PAUL LEGISLATIVE CODES.
  - REQUIREMENTS TO WORK IN THE PUBLIC RIGHT OF WAY: ALL UTILITIES AND CONTRACTORS WORKING IN THE PUBLIC RIGHT OF WAY MUST TO BE REGISTERED, INSURED AND BONDED, AS RECOGNIZED BY THE PUBLIC WORKS SERVICE DESK. (651-266-6151)

- CITY OF ST. PAUL NOTES**
- SIGNS REGULATING PARKING AND/OR TRAFFIC ON PRIVATE PROPERTY SHALL BE INSTALLED BY THE PROPERTY OWNER OR CONTRACTOR OUTSIDE OF THE PUBLIC RIGHT-OF-WAY. SIGNS APPROVED BY PUBLIC WORKS TRAFFIC ENGINEERING REGULATING PARKING AND/OR TRAFFIC IN THE PUBLIC RIGHT-OF-WAY FOR THIS DEVELOPMENT SHALL BE INSTALLED BY CITY FORCES AT THE EXPENSE OF THE DEVELOPMENT. CONTACT MIKE MILLER 651-266-9778 SIX WEEKS IN ADVANCE OF NEEDED SIGNS.
  - ALL WORK ON CURBS, DRIVEWAYS, AND SIDEWALKS WITHIN THE PUBLIC RIGHT OF WAY MUST BE DONE BY A LICENSED AND BONDED CONTRACTOR UNDER A PERMIT FROM PUBLIC WORKS SIDEWALK SECTION (651-266-6120). SIDEWALK GRADES MUST BE CARRIED ACROSS DRIVEWAYS.
  - RESTORATION OF ASPHALT AND CONCRETE PAVEMENTS ARE PERFORMED BY THE PUBLIC WORKS STREET MAINTENANCE DIVISION. THE CONTRACTOR IS RESPONSIBLE FOR PAYMENT TO THE CITY FOR THE COST OF THESE RESTORATIONS. THE CONTRACTOR SHALL CONTACT PUBLIC WORKS STREET MAINTENANCE TO SET UP A WORK ORDER PRIOR TO BEGINNING ANY REMOVALS IN THE STREET AT 651-266-9700. PROCEDURES AND UNIT COSTS ARE FOUND IN STREET MAINTENANCE'S "GENERAL REQUIREMENTS - ALL RESTORATIONS" AND ARE AVAILABLE AT THE PERMIT OFFICE.
  - THE CONTRACTOR SHALL CONTACT JOHN MCNAMARA AT 651-266-9780, GENERAL FOREMAN, LIGHTING - SIGNAL MAINTENANCE, IF REMOVAL OR RELOCATION OF EXISTING FACILITIES IS REQUIRED OR IN THE EVENT OF DAMAGE TO THE LIGHTING OR SIGNAL UTILITIES. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY (AND RELATED COSTS) FOR ANY DAMAGE OR RELOCATIONS.
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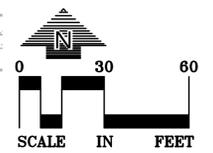
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**CIVIL LEGEND**

EXISTING		PROPOSED
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENCHMARK	
	SOL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
	WATER SERVICE	
	SANITARY SERVICE	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
	SPOT ELEVATION	
	CONTOURS	
	SANITARY SEWER	
	STORM SEWER	
	WATERMAIN	
	FORCEMAIN	
	DRANTILE	
	SILT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREE LINE	
	EASEMENT LINE	
	SETBACK LINE	
	FENCE LINE	
	UNDERGROUND TELE	
	UNDERGROUND GAS	
	OVERHEAD UTILITY	

**SITE PLAN LEGEND**

	BITUMINOUS PAVEMENT HEAVY DUTY
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	PERVIOUS PAVERS
	PAVERS
	WEBSTER BLVD PAVERS



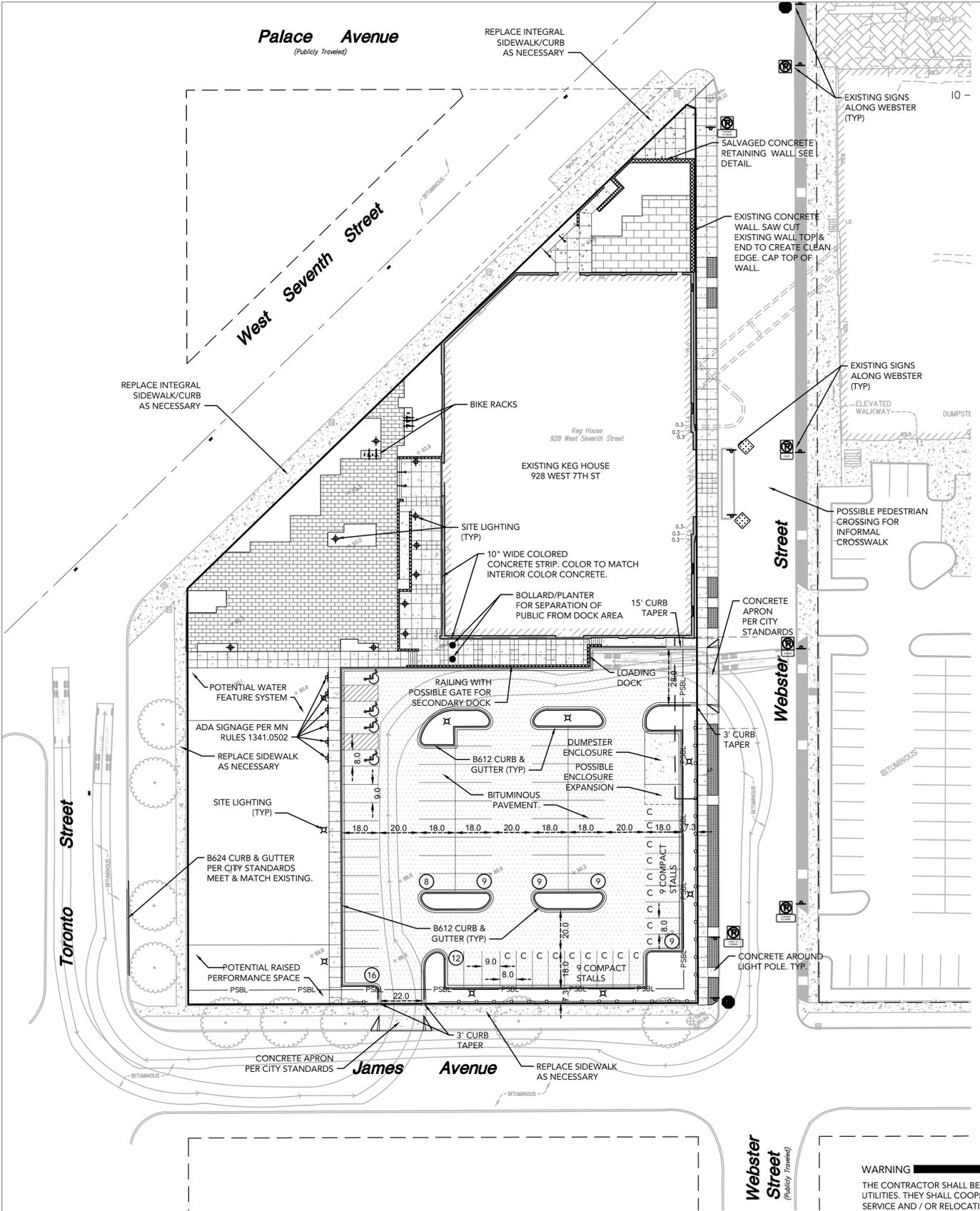
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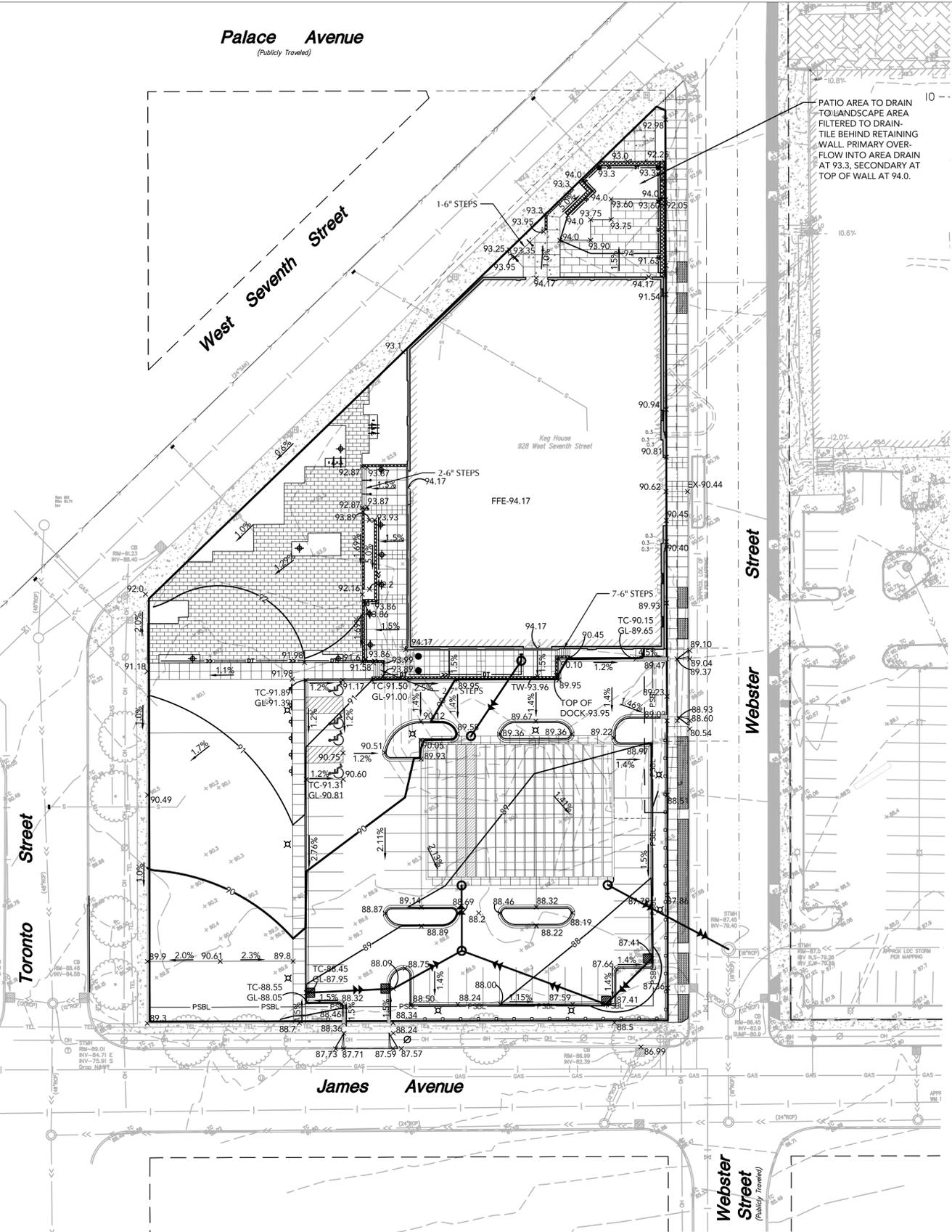
- EXISTING SURVEY NOTES**
- BACKGROUND INFORMATION IS BASED ON A FIELD SURVEY BY LOUCKS, PROPOSED WEBSTER ST & SCHMIDT ARTIST LOFTS, & SUPPLEMENTAL SURVEYING BY RECORD UTILITY DRAWINGS FROM THE CITY OF ST. PAUL. LOUCKS ASSOCIATES DOES NOT GUARANTEE THE ACCURACY OF INFORMATION PROVIDED BY OTHERS.



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**Palace Avenue**  
(Publicly Traveled)

**West Seventh Street**



PATIO AREA TO DRAIN TO LANDSCAPE AREA FILTERED TO DRAIN TILE BEHIND RETAINING WALL. PRIMARY OVERFLOW INTO AREA DRAIN AT 93.3, SECONDARY AT TOP OF WALL AT 94.0.

**GRADING NOTES**

- BACKGROUND INFORMATION IS BASED ON A FIELD SURVEY BY LOUCKS, PROPOSED WEBSTER ST & SCHMIDT ARTIST LOFTS, & SUPPLEMENTAL SURVEYING BY RECORD UTILITY DRAWINGS FROM THE CITY OF ST PAUL. LOUCKS ASSOCIATES DOES NOT GUARANTEE THE ACCURACY OF INFORMATION PROVIDED BY OTHERS.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF BUILDINGS, VESTIBULES, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, ENTRY LOCATIONS AND LOCATIONS OF DOWNSPOUTS.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASE OF THIS PROJECT. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGES TO ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASE OF THIS PROJECT.
- IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- BEFORE BEGINNING CONSTRUCTION THE CONTRACTOR SHALL INSTALL A TEMPORARY ROCK ENTRANCE PAD AT ALL POINTS OF VEHICLE EXIT FROM THE PROJECT SITE. SAID ROCK ENTRANCE PAD SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE ESTABLISHED AROUND THE ENTIRE SITE PERIMETER AND IN ACCORDANCE WITH NPDES PERMIT REQUIREMENTS, BEST MANAGEMENT PRACTICES, AND CITY REQUIREMENTS.
- ALL SPOT ELEVATIONS SHOWN REPRESENT FINISHED SURFACE OR GUTTER LINE ELEVATIONS UNLESS OTHERWISE NOTED.
- CONTRACTOR TO VERIFY EXISTING INFORMATION PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY PLAN DISCREPANCIES.
- EXISTING UTILITY LOCATIONS AS-PER CITY AS-BUILT PLANS AND FIELD SHOTS.
- SEE SWPPP FOR EROSION CONTROL INFORMATION.
- GENERAL CONTRACTOR MUST VERIFY ALL TIE IN GRADES.
- REFER TO GEOTECHNICAL REPORT FOR MORE INFORMATION.
- ADA ACCESSIBLE ROUTE SHALL HAVE A 5.0% MAXIMUM SLOPE IN THE DIRECTION OF TRAVEL AND A 2.0% MAXIMUM CROSS-SLOPE.
- ACCESSIBLE STALLS, ACCESS AISLES AND 60" TURNING CIRCLES SHALL HAVE A 2.0% MAXIMUM SLOPE IN ANY DIRECTION.

**ABBREVIATION LEGEND**

- FFE=FINISHED FLOOR ELEVATION
- TW=TOP OF RETAINING WALL
- GW=GROUND AT FACE OF RETAINING WALL
- HP=HIGH POINT
- LP=LOW POINT
- TC=TOP OF CURB
- GL=GUTTER LINE
- CITY OF ST. PAUL PERMIT REQUIREMENTS

- ORDERING OBSTRUCTION AND EXCAVATION PERMITS. CONTACT PUBLIC WORKS RIGHT OF WAY SERVICE DESK AT (651) 266-6151. IT IS STRONGLY RECOMMENDED THAT CONTRACTORS CALL FOR COST ESTIMATES PRIOR TO BIDDING TO OBTAIN ACCURATE COST ESTIMATES.
- OBSTRUCTION PERMITS. THE CONTRACTOR MUST OBTAIN AN OBSTRUCTION PERMIT IF CONSTRUCTION (INCLUDING SILT FENCES) WILL BLOCK CITY STREETS, SIDEWALKS OR ALLEYS, OR IF DRIVING OVER CURBS.
- EXCAVATION PERMITS. ALL DIGGING IN THE PUBLIC RIGHT OF WAY REQUIRES AN EXCAVATION PERMIT. IF THE PROPOSED BUILDING IS CLOSE TO THE RIGHT OF WAY, AND EXCAVATING INTO THE RIGHT OF WAY IS NEEDED TO FACILITATE CONSTRUCTION, CONTACT THE UTILITY INSPECTOR.
- FAILURE TO SECURE PERMITS. FAILURE TO SECURE OBSTRUCTION PERMITS OR EXCAVATION PERMITS WILL RESULT IN A DOUBLE-PERMIT FEE AND OTHER FEES REQUIRED UNDER CITY OF ST. PAUL LEGISLATIVE CODES.
- REQUIREMENTS TO WORK IN THE PUBLIC RIGHT OF WAY. ALL UTILITIES AND CONTRACTORS WORKING IN THE PUBLIC RIGHT OF WAY MUST TO BE REGISTERED, INSURED AND BONDED, AS RECOGNIZED BY THE PUBLIC WORKS SERVICE DESK. (651-266-6151)

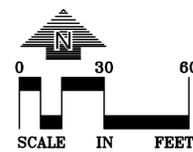
**CITY OF ST. PAUL NOTES**

- SIGNS REGULATING PARKING AND/OR TRAFFIC ON PRIVATE PROPERTY SHALL BE INSTALLED BY THE PROPERTY OWNER OR CONTRACTOR OUTSIDE OF THE PUBLIC RIGHT-OF-WAY. SIGNS APPROVED BY PUBLIC WORKS TRAFFIC ENGINEERING REGULATING PARKING AND/OR TRAFFIC IN THE PUBLIC RIGHT-OF-WAY FOR THIS DEVELOPMENT SHALL BE INSTALLED BY CITY FORCES AT THE EXPENSE OF THE DEVELOPMENT. CONTACT MIKE MILLER 651-266-9778 SIX WEEKS IN ADVANCE OF NEEDED SIGNS(S).
- ALL WORK ON CURBS, DRIVEWAYS, AND SIDEWALKS WITHIN THE PUBLIC RIGHT OF WAY MUST BE DONE BY A LICENSED AND BONDED CONTRACTOR UNDER A PERMIT FROM PUBLIC WORKS SIDEWALK SECTION (651-266-6120). SIDEWALK GRADES MUST BE CARRIED ACROSS DRIVEWAYS.
- RESTORATION OF ASPHALT AND CONCRETE PAVEMENTS ARE PERFORMED BY THE PUBLIC WORKS STREET MAINTENANCE DIVISION. THE CONTRACTOR IS RESPONSIBLE FOR PAYMENT TO THE CITY FOR THE COST OF THESE RESTORATIONS. THE CONTRACTOR SHALL CONTACT PUBLIC WORKS STREET MAINTENANCE TO SET UP A WORK ORDER PRIOR TO BEGINNING ANY REMOVALS IN THE STREET AT 651-266-9700. PROCEDURES AND UNIT COSTS ARE FOUND IN STREET MAINTENANCE'S "GENERAL REQUIREMENTS - ALL RESTORATIONS" AND ARE AVAILABLE AT THE PERMIT OFFICE.
- THE CONTRACTOR SHALL CONTACT JOHN MCNAMARA AT 651-266-9780, GENERAL FOREMAN, LIGHTING - SIGNAL MAINTENANCE, IF REMOVAL OR RELOCATION OF EXISTING FACILITIES IS REQUIRED OR IN THE EVENT OF DAMAGE TO THE LIGHTING OR SIGNAL UTILITIES. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY (AND RELATED COSTS) FOR ANY DAMAGE OR RELOCATIONS.
- ACCESS TO SIGNAL CONTROLLER AND LIGHTING CABINETS MUST BE MAINTAINED AT ALL TIMES. IF FENCING IS REQUIRED FOR A JOB SITE, A KEY OR OTHER MEANS OF ACCESS MUST BE PROVIDED TO THE CITY OF ST PAUL'S TRAFFIC OPERATIONS DEPARTMENT. CONTACT JOHN MCNAMARA AT 651-266-9780, GENERAL FOREMAN, LIGHTING - SIGNAL MAINTENANCE.
- CARE MUST BE TAKEN DURING CONSTRUCTION AND EXCAVATION TO PROTECT ANY SURVEY MONUMENTS AND/OR PROPERTY IRONS. CALL SAM GIBSON OF PUBLIC WORKS SURVEYING (651-266-6075) IF YOU HAVE ANY QUESTIONS.
- PIPE WORK INSIDE DRIVEWAYS TO BE PERFORMED BY A PLUMBER LICENSED BY THE STATE OF MINNESOTA AND CERTIFIED BY THE CITY OF SAINT PAUL. PIPE WORK WITHIN THE PUBLIC RIGHT OF WAY TO BE PERFORMED BY SPRINKLER.
- ABANDONING EXISTING SEWER SERVICE OR MAKING NEW CONNECTIONS TO CITY SEWER MUST BE DONE TO CITY STANDARDS BY A LICENSED HOUSE DRAIN CONTRACTOR UNDER A PERMIT FROM PUBLIC WORKS SEWER SECTION (651-266-6234).
- INSPECTION CONTACT: THE DEVELOPER SHALL CONTACT THE RIGHT OF WAY INSPECTOR, BRENT GILLEN, AT 651-485-0419 (ONE WEEK PRIOR TO BEGINNING WORK) TO DISCUSS TRAFFIC CONTROL, PEDESTRIAN SAFETY AND COORDINATION OF ALL WORK IN THE PUBLIC RIGHT OF WAY. NOTE: IF ONE WEEK NOTICE IS NOT PROVIDED TO THE CITY, ANY RESULTING DELAYS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- SAFE WORK SITE REQUIREMENTS: THE CONTRACTOR SHALL PROVIDE A CONTINUOUS, ACCESSIBLE AND SAFE PEDESTRIAN WALKWAY THAT MEETS ADA AND MN MUTCD STANDARDS IF WORKING IN A SIDEWALK AREA. ALL TRAFFIC CONTROL AND TRAFFIC CONTROL DEVICES SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE MN MUTCD OR SUPPLEMENTS THEREOF.
- NO PRIVATE FACILITIES IN THE RIGHT OF WAY. THE DEVELOPER IS STRICTLY PROHIBITED FROM INSTALLING PRIVATE ELECTRICAL WIRING, CONDUIT, RECEPTACLES AND/OR LIGHTING IN THE CITY'S RIGHT OF WAY. THIS INCLUDES STUBBING CONDUIT OR CABLE INTO THE PUBLIC RIGHT OF WAY TO ACCOMMODATE UTILITY FEEDS TO THE SITE. COORDINATE WITH EACH UTILITY PRIOR TO CONSTRUCTION TO DETERMINE FEED POINTS INTO THE PROPERTY. UTILITIES ARE RESPONSIBLE FOR SECURING EXCAVATION PERMITS TO RUN THEIR SERVICE INTO A SITE, AND (WHERE REQUIRED) SUBMITTING PLANS FOR REVIEW BY THE PUBLIC WORKS UTILITY REVIEW COMMITTEE.
- AN OBSTRUCTION PERMIT MUST BE OBTAINED FROM PUBLIC WORKS (651-266-6151) IF THERE WILL BE ANY EXCAVATION IN CITY R.O.W. OR IF TRUCKS/EQUIPMENT WILL BE DRIVING OVER CURBS OR IF CONSTRUCTION WILL BLOCK CITY STREETS, OR SIDEWALKS.
- CONSTRUCTION MATERIALS AND EQUIPMENT SHALL NOT BE STORED ON THE PUBLIC BOULEVARD. CONSTRUCTION EQUIPMENT AND VEHICLES SHALL NOT BE OPERATED OR PARKED ON TURF BOULEVARDS.
- ROADWAY STRIPING IMPACTED BY THE WORK ZONE SHALL BE REPLACED IN-KIND AT NO COST TO THE CITY. IF THERE ARE QUESTIONS AS TO THE TYPE OF MATERIAL TO BE USED, CONTACT MIKE MILLER (651-266-9778) IN THE CITY'S TRAFFIC OPERATIONS SECTION. STRIPING RESTORATION SHALL BE COMPLETED IMMEDIATELY FOLLOWING FINAL PAVEMENT RESTORATION. IF THERE IS A DESIRE FOR THE CITY OF ST. PAUL PUBLIC WORKS DEPARTMENT TO COMPLETE THE PAVEMENT MARKING RESTORATION WORK, CONTACT MIKE MILLER OF PUBLIC WORKS TRAFFIC OPERATIONS FOR AN ESTIMATE. WHEN POSSIBLE, A MINIMUM OF FOUR WEEKS ADVANCE NOTICE OF ANY NEEDED STRIPING WORK IS PREFERRED. AT A MINIMUM, ONE WEEK'S ADVANCE NOTICE SHALL BE PROVIDED. IF ADVANCE NOTICE IS NOT PROVIDED, ANY ASSOCIATED PROJECT DELAYS, AND COSTS INCURRED RESULTING FROM SAID DELAYS, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE REMOVAL, PRUNING AND/OR PLANTING OF TREES ON THE PUBLIC BOULEVARD REQUIRES A PERMIT FROM THE CITY FORESTER (651-632-5129).

**WARNING**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



**CALL BEFORE YOU DIG!**  
**Gopher State One Call**  
TWIN CITY AREA: 651-454-0002  
TOLL FREE: 1-800-252-1166

**CITY OF ST. PAUL TRAFFIC & ROW NOTES**

WORK CONDUCTED ON STATE ROADWAYS, TRUNK HIGHWAYS OR RIGHT OF WAY MAY ALSO REQUIRE PERMITTING THROUGH MNDOT. MNDOT CONTACT IS JEFF DIERBERGER (651-234-7911). STATE AND CITY APPROVAL IS REQUIRED ON MNDOT ROADWAYS MAINTAINED BY THE CITY.

THE CONTRACTOR MUST ALSO CONTACT METRO TRANSIT, GREG TUVESON AT 612-418-1134, FORTY-EIGHT (48) HOURS IN ADVANCE, REGARDING TEMPORARILY MOVING THE BUS STOPS ON SEVENTH STREET EAST BETWEEN BATES AVENUE AND MAPLE STREET, IF EASTBOUND OR WESTBOUND LANE CLOSURES ARE REQUIRED.

NOTE:  
SPOT ELEVATIONS AT CURB LINES INDICATE BASE OF CURB AND GUTTER LINE (I.E. FLOW LINE) ELEVATIONS UNLESS OTHERWISE NOTED.

NOTE:  
CATCH BASINS RIMS ARE 2 INCHES LOWER THAN FLOW LINE ELEVATION.

**LEGEND**

EXISTING		PROPOSED
	TOPOGRAPHIC CONTOUR	
	SPOT ELEVATION	
	DRAINAGE SLOPE	
	STORM SEWER	
	STORM MANHOLE	
	CATCH BASIN	
	SANITARY SEWER	
	WATERMAIN	
	BENCHMARK	
	EMERGENCY OVERFLOW	
	CONSTRUCTION LIMITS	
	ADA ACCESSIBLE ROUTE	

**KEG & CASE MARKET**  
928 W 7TH STREET  
ST. PAUL, MN 55102

**LOUCKS**  
PLANNING  
CIVIL ENGINEERING  
LAND SURVEYING  
LANDSCAPE ARCHITECTURE  
ENVIRONMENTAL  
7200 Hennick Lane, Suite 300  
Maple Grove, MN 55369  
763.424.5555  
www.loucks.com  
LOUCKS PROJECT NO. 1007204

**SHEET TITLE:**  
GRADING &  
DRAINAGE  
PLAN

PROJECT #:	1294
DRAWN BY:	DRW
CHECKED BY:	CHK
ISSUE:	DATE:
DSI Pre-Submittal	7/24/15
Progress	10/14/15
HPCA Submittal	10/29/15
Pricing	01/04/16
DSI Submittal	03/15/16
HPC Submittal	04/07/16



**STUDIO M ARCHITECTS, INC.**  
530 NORTH 3RD STREET, SUITE 230  
MINNEAPOLIS, MINNESOTA 55401  
P. 612.824.8378  
F. 612.844.1240  
WWW.STUDIOMARCHITECTS.NET

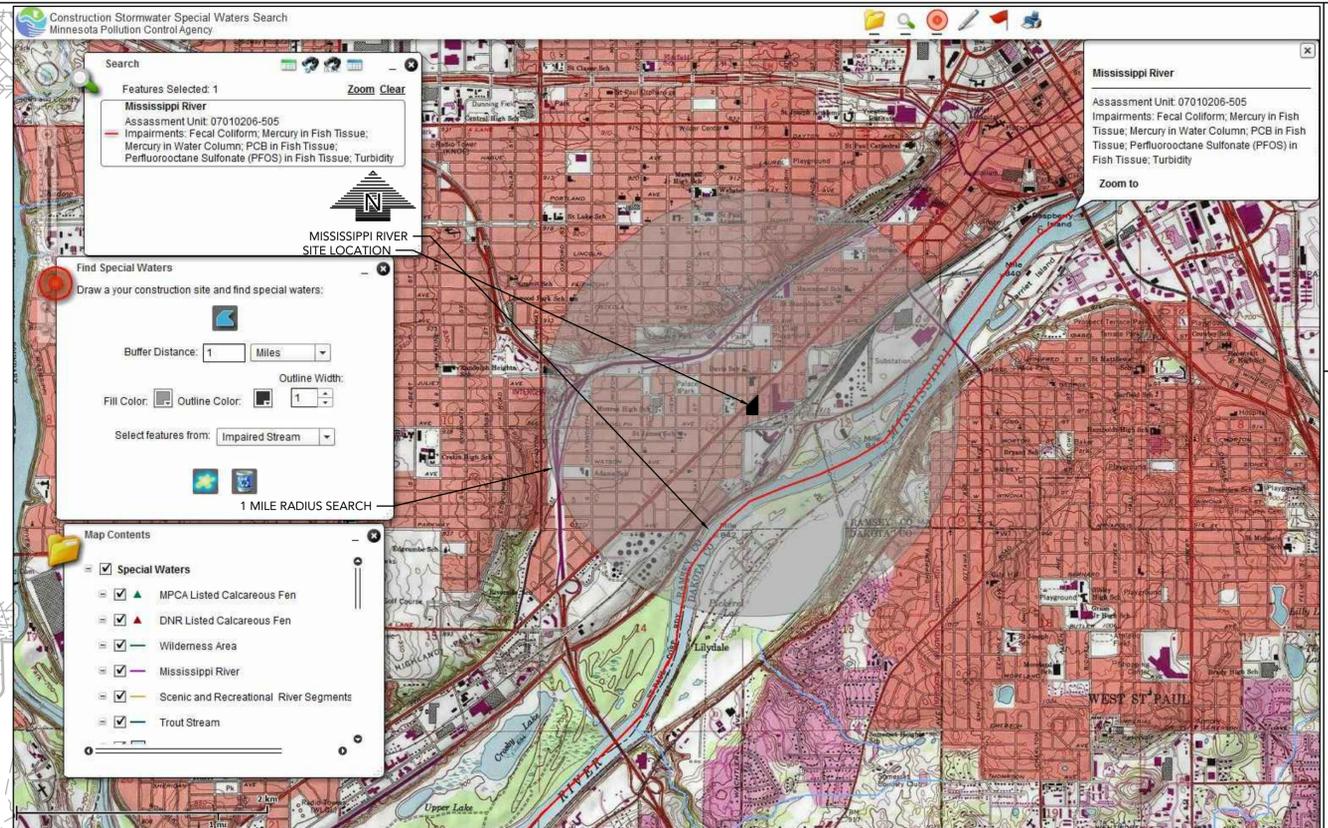
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the law of the state of Minnesota.

signed: \_\_\_\_\_  
date: 4/07/16 reg. no. 24440

**C3-1**

**NOTES**

1. INSTALLATION OF INFILTRATION/FILTRATION PRACTICES SHALL BE DONE DURING PERIODS OF DRY WEATHER AND COMPLETED BEFORE A RAINFALL EVENT. PLACEMENT OF ENGINEERED SOILS SHALL BE ON DRY NATIVE SOIL ONLY.
2. EXCAVATION OF INFILTRATION AREAS SHALL BE COMPLETED USING A BACKHOE WITH A TOOTHED BUCKET.
3. THE BOTTOM EXCAVATION SURFACE OF INFILTRATION/FILTRATION AREAS SHALL BE LEVEL WITHOUT DIPS OR SWALES.
4. ENGINEERED SOIL SHALL REMAIN UNCONTAMINATED (NOT MIXED WITH OTHER SOIL) BEFORE AND DURING INSTALLATION.
5. DURING CONSTRUCTION, STORMWATER MUST BE ROUTED AROUND INFILTRATION/FILTRATION AREAS UNTIL ALL CONSTRUCTION ACTIVITY HAS CEASED AND TRIBUTARY SURFACES ARE CLEANED OF SEDIMENT.



**KEG & CASE MARKET**  
928 W 7TH STREET  
ST. PAUL, MN 55102

**LOUCKS**  
PLANNING  
CIVIL ENGINEERING  
LAND SURVEYING  
LANDSCAPE ARCHITECTURE  
ENVIRONMENTAL  
7200 Hamlock Lane, Suite 300  
Maple Grove, MN 55369  
763.424.5505  
www.loucksinc.com  
LOUCKS PROJECT NO. 100720H

**SHEET TITLE:**  
STORM WATER  
POLLUTION  
PREVENTION PLAN  
(SWPPP) 1 OF 2

PROJECT #: 1294  
DRAWN BY: DRW  
CHECKED BY: CHK  
ISSUE: DATE:  
DSI Pre-Submittal 7/24/15  
Progress 10/14/15  
HPCA Submittal 10/29/15  
Pricing 01/04/16  
DSI Submittal 03/15/16  
HPC Submittal 04/07/16

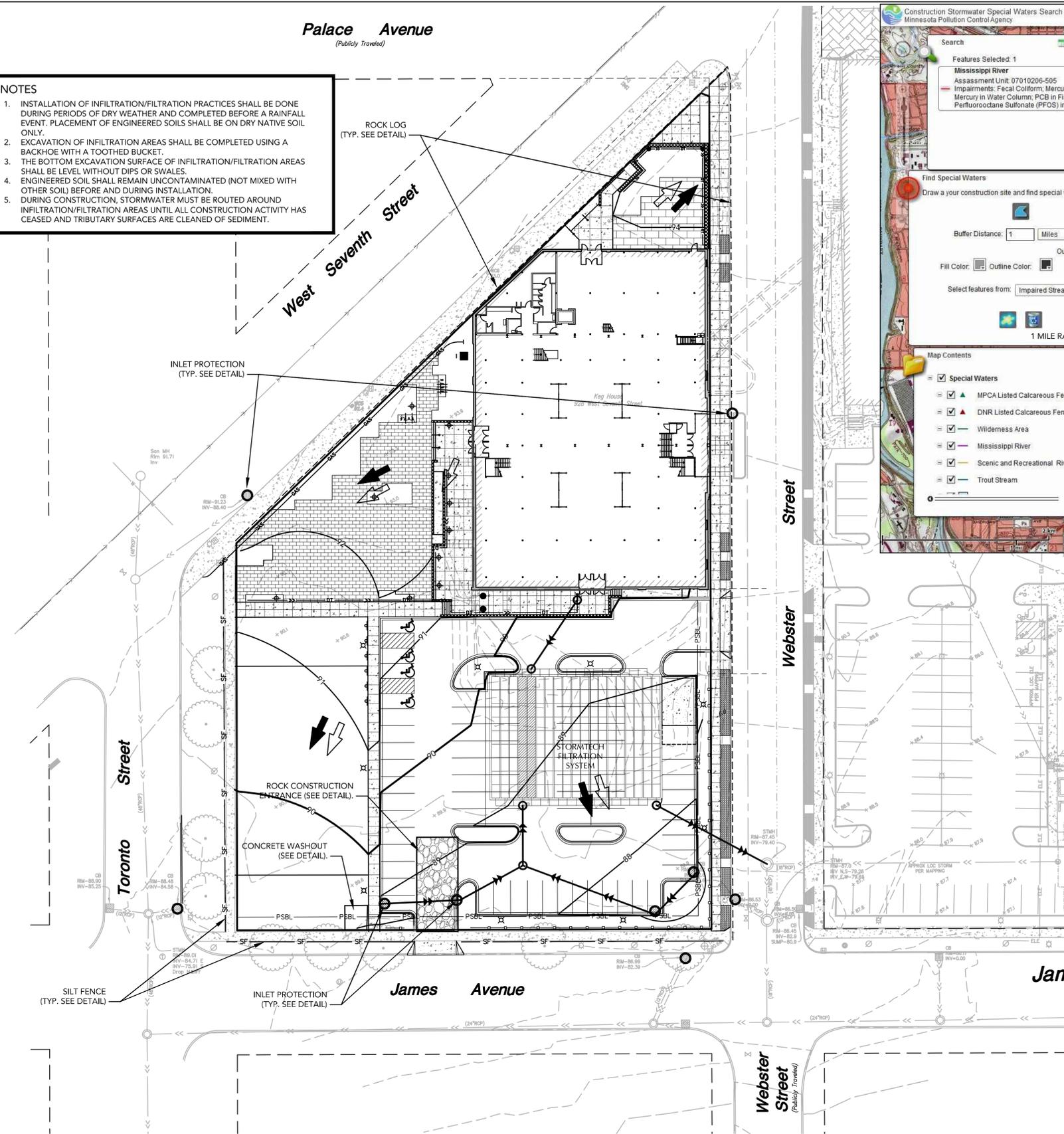


**STUDIO M ARCHITECTS, INC.**  
530 NORTH 3RD STREET, SUITE 230  
MINNEAPOLIS, MINNESOTA 55401  
P. 612.254.1372  
F. 612.254.1240  
WWW.STUDIOMARCHITECTS.NET

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 law of the state of Minnesota.

Signed: \_\_\_\_\_  
Date: 4/07/16 reg. no. 24440

**C3-2**



**PROJECT LOCATION**

COUNTY	SECTION	TOWNSHIP	RANGE	LATITUDE	LONGITUDE
RAMSEY	8	28N	22W	44.9312	-93.0775

**PERMANENT STORMWATER MANAGEMENT**

X	INFILTRATION
	STORMWATER HARVEST AND REUSE
X	FILTRATION
	WET SEDIMENTATION BASIN
	REGIONAL PONDING

**TYPICAL SUBSURFACE SOIL STRATUM**

STRATUM	DEPTH TO BASE OF STRATUM BELOW EXISTING GRADE	MATERIAL DESCRIPTION
1	0 TO 2 FEET	TOPSOIL
2	2 TO 10 FEET	FILL, SILTY SAND
3	TERMINATION DEPTH OF 10 TO 16/26 FEET	CLAYEY SAND

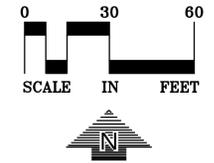
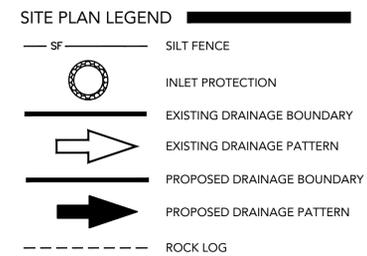
\*SEE GEOTECHNICAL REPORT AS PART OF SWPPP FOR ADDITIONAL SOILS INFORMATION

**RECEIVING WATERS**

NAME OF WATER BODY	TYPE OF WATER BODY	SPECIAL WATER	IMAIRED WATER	TYPE OF SPECIAL WATER
MISSISSIPPI RIVER	RIVER	NO	YES	

**ESTIMATED QUANTITIES**

DESCRIPTION	UNIT	QUANTITY
TEMPORARY ROCK CONSTRUCTION ENTRANCE	EA	1
PREFABRICATED CONCRETE WASHOUT	EA	1
SILT FENCE (STANDARD)	LF	450
ROCK LOG	LF	850
INLET PROTECTION	EA	9
TURF RESTORATION	AC	0.25



SWPPP NOTES

- PROJECT DESCRIPTION - THE NATURE OF THIS PROJECT WILL CONSIST OF REDEVELOPING THE BUILDING AND INSTALLING ASSOCIATED SURFACE IMPROVEMENTS, STORM SEWER UTILITIES AND STORM WATER MANAGEMENT DEVICES.
- SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES ARE AS FOLLOWS:
  - INSTALL VEHICLE TRACKING BMP & CONCRETE WASHOUT
  - INSTALL SILT FENCE & ROCK LOG AS SHOWN
  - STRIP AND STOCKPILE TOPSOIL
  - REMOVE SOILS, BUILDINGS, PAVEMENTS AND UTILITIES
  - INSTALL UTILITIES & STORM WATER MANAGEMENT DEVICES
  - INSTALL CURB, CONCRETE SLABS, WALKS & WALLS
  - INSTALL BITUMINOUS PARKING
  - INSTALL PAVERS & PERVIOUS PAVERS
  - FINAL GRADE SITE & REMOVE SEDIMENT FROM BASIN/INLETS
  - SEED AND MULCH
  - WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.
- SITE DATA:
 

AREA OF DISTURBANCE:	1.9 AC
PRE-CONSTRUCTION IMPERVIOUS AREA:	1.3 AC
POST-CONSTRUCTION IMPERVIOUS AREA:	1.4 AC

GENERAL SOIL TYPE: HSG B
- THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE IDENTIFIED WITH FLAGS, STAKES, SIGNS, SILT FENCE, ETC. BEFORE CONSTRUCTION BEGINS.
- ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN (7) OR MORE DAYS SHALL BE STABILIZED BY SEEDING OR SODDING (ONLY AVAILABLE PRIOR TO SEPTEMBER 15) OR BY MULCHING OR COVERING OR OTHER EQUIVALENT CONTROL MEASURE. AT A RATE OF 1.5 TIMES STANDARD SEEDING FINAL STABILIZATION TO BE DONE PER LANDSCAPE PLAN, SEE SHEET L1-1.
- ON SLOPES 3:1 OR GREATER MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES, SLOPE LENGTHS CAN NOT BE GREATER THAN 75 FEET.
 

 DENOTES SLOPES GREATER THAN 3:1. ALL 3:1 SLOPES TO BE STABILIZED WITH EROSION CONTROL BLANKET
- ALL STORM DRAINS AND INLETS MUST BE PROTECTED UNTIL ALL SOURCES OF POTENTIAL DISCHARGE ARE STABILIZED.
- TEMPORARY SOIL STOCKPILES MUST HAVE EFFECTIVE SEDIMENT CONTROL AND CAN NOT BE PLACED IN SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT AMOUNT OF SILT, CLAY, OR ORGANIC COMPOUNDS ARE EXEPTM EX: CLEAN AGGREGATE STOCK PILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES.
- SEDIMENT LADEN WATER MUST BE DISCHARGED TO A SEDIMENTATION BASIN WHENEVER POSSIBLE. IF NOT POSSIBLE, IT MUST BE TREATED WITH THE APPROPRIATE BMP'S.
- SOLID WASTE MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.
- THE WATERSHED DISTRICT OR THE CITY MAY HAVE REQUIREMENTS FOR INSPECTIONS OR AS-BUILT DRAWINGS VERIFYING PROPER CONSTRUCTION OF THE BMP'S.
- THE OWNER WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITTEE AND IS RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT. THE OPERATOR (CONTRACTOR) WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITTEE FOR PARTS I.B., PART II.C, PART II.B.F, PART V, PART IV AND APPLICABLE CONSTRUCTION ACTIVITY REQUIREMENTS FOUND IN APPENDIX A, PART C. OF THE NPDES PERMIT AND IS JOINTLY RESPONSIBLE WITH THE OWNER FOR COMPLIANCE WITH THOSE PORTIONS OF THE PERMIT.
- TERMINATION OF COVERAGE - PERMITTEE(S) WISHING TO TERMINATE COVERAGE MUST SUBMIT A NOTICE OF TERMINATION (NOT) TO THE MPCA. ALL PERMITTEE(S) MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ONE OR MORE OF THE FOLLOWING CONDITIONS HAVE BEEN MET:
  - FINAL STABILIZATION, PER NPDES PERMIT IV.G. HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE.
  - TRANSFER OF OWNERSHIP AS DESCRIBED IN THE PERMIT.
- INSPECTIONS
  - INITIAL INSPECTION FOLLOWING SILT FENCE INSTALLATION BY CITY REPRESENTATIVE IS REQUIRED.
  - EXPOSED SOIL AREAS: ONCE EVERY 7 DAYS AND WITHIN 24 HOURS FOLLOWING A 0.5" OVER 24 HOUR RAIN EVENT.
  - STABILIZED AREAS: ONCE EVERY 30 DAYS
  - FROZEN GROUND: AS SOON AS RUNOFF OCCURS OR PRIOR TO RESUMING CONSTRUCTION.
  - INSPECTION AND MAINTENANCE RECORDS MUST BE RETAINED FOR 3 YEARS AFTER FILING OF THE NOTICE OF TERMINATION AND MUST INCLUDE: DATE AND TIME OF ACTION, NAME OF PERSON(S) CONDUCTING WORK, FINDING OF INSPECTIONS AND RECOMMENDATIONS FOR CORRECTIVE ACTION, DATE AND AMOUNT OF RAINFALL EVENTS GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD.
- MINIMUM MAINTENANCE
  - SILT FENCE TO BE REPAIRED, REPLACED, SUPPLEMENTED WHEN NONFUNCTIONAL, OR 1/3 FULL; WITHIN 24 HOURS
  - SEDIMENT BASINS DRAINED AND SEDIMENT REMOVED WHEN REACHES 1/2 STORAGE VOLUME. REMOVAL MUST BE COMPLETE WITHIN 72 HOURS OF DISCOVERY.
  - SEDIMENT REMOVED FROM SURFACE WATERS WITHIN (7)SEVEN DAYS
  - CONSTRUCTION SITE EXITS INSPECTED, TRACKED SEDIMENT REMOVED WITH 24 HOURS.
  - PROVIDE COPIES OF EROSION INSPECTION RESULTS TO CITY ENGINEER FOR ALL EVENTS GREATER THAN 1/2" IN 24 HOURS
- THE SWPPP, INCLUDING ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION ACTIVITY BY THE

PERMITTEE(S) WHO HAVE OPERATIONAL CONTROL OF THE SITE.

- OWNER MUST KEEP RECORDS OF ALL PERMITS REQUIRED FOR THE PROJECT, THE SWPPP, ALL INSPECTIONS AND MAINTENANCE, PERMANENT OPERATION AND MAINTENANCE AGREEMENTS, AND REQUIRED CALCULATIONS FOR TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS. THESE RECORDS MUST BE RETAINED FOR THREE YEARS AFTER FILING NPDES NOTICE OF TERMINATION.
- SWPPP MUST BE AMENDED WHEN:
  - THERE IS A CHANGE IN DESIGN, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON DISCHARGE
  - INSPECTIONS INDICATE THAT THE SWPPP IS NOT EFFECTIVE AND DISCHARGE IS EXCEEDING WATER QUALITY STANDARDS.
  - THE BMP'S IN THE SWPPP ARE NOT CONTROLLING POLLUTANTS IN DISCHARGES OR IS NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THE PERMIT.
  - AT ANY TIME AFTER PERMIT COVERAGE IS EFFECTIVE, THE MPCA MAY DETERMINE THAT THE PROJECT'S STORMWATER DISCHARGES MAY CAUSE, HAVE REASONABLE POTENTIAL TO CAUSE, OR CONTRIBUTE TO NON-ATTAINMENT OF ANY APPLICABLE WATER QUALITY STANDARD, OR THAT THE SWPPP DOES NOT INCORPORATE THE APPLICABLE REQUIREMENTS IN PART III.A.8., (IMPAIRED WATERS AND TMDLS). IF A WATER QUALITY STANDARD CHANGES DURING THE TERM OF THIS PERMIT, THE MPCA WILL MAKE A DETERMINATION AS TO WHETHER A MODIFICATION OF THE SWPPP IS NECESSARY TO ADDRESS THE NEW STANDARD. IF THE MPCA MAKES SUCH DETERMINATION(S) OR ANY OF THE DETERMINATIONS IN PARTS III.B.1.-3., THE MPCA WILL NOTIFY THE PERMITTEE(S) IN WRITING. IN RESPONSE, THE PERMITTEE(S) MUST AMEND THE SWPPP TO ADDRESS THE IDENTIFIED CONCERNS AND SUBMIT INFORMATION REQUESTED BY THE MPCA, WHICH MAY INCLUDE AN INDIVIDUAL PERMIT APPLICATION. IF THE MPCA'S WRITTEN NOTIFICATION REQUIRES A RESPONSE, FAILURE TO RESPOND WITHIN THE SPECIFIED TIMEFRAME CONSTITUTES A PERMIT VIOLATION.
- CONCRETE WASHOUT
  - CONTRACTOR TO PROVIDE PREFABRICATED CONCRETE WASH-OUT CONTAINER WITH RAIN PROTECTION PER PLAN.
  - CONCRETE WASH-OUT TO BE IDENTIFIED WITH SIGNAGE STATING "CONCRETE WASHOUT AREA DO NOT OVERFILL".
  - CONCRETE WASHOUT WATER NEEDS TO BE PUMPED WITHIN 24 HOURS OF STANDING WATER IN WASHOUT AREA.
  - ALTERNATE: PORTABLE TRUCK MOUNTED PUMP RECOVERY SYSTEM, OR PORTABLE TRUCK MOUNTED PULL BEHIND WASH TANK.
- IN THE EVENT OF ENCOUNTERING A WELL OR SPRING DURING CONSTRUCTION CONTRACTOR TO CEASE CONSTRUCTION ACTIVITY AND NOTIFY ENGINEER.
- PIPE OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER.
- FINAL STABILIZATION
 

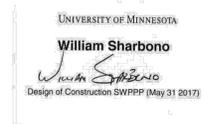
FINAL STABILIZATION REQUIRES THAT ALL SOIL DISTURBING ACTIVITIES HAVE BEEN COMPLETED AND THAT DISTURBED AREAS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH 70% OF THE EXPECTED FINAL DENSITY, AND THAT ALL PERMANENT PAVEMENTS HAVE BEEN INSTALLED. ALL TEMPORARY BMP'S SHALL BE REMOVED, DITCHES STABILIZED, AND SEDIMENT SHALL BE REMOVED FROM PERMANENT CONVEYANCES AND SEDIMENTATION BASINS IN ORDER TO RETURN THE POND TO DESIGN CAPACITY.
- TEMPORARY SEDIMENTATION BASINS
  - THE TEMPORARY SEDIMENTATION BASINS SHALL BE CONSTRUCTED AND MADE OPERATIONAL PRIOR TO DISTURBANCE OF 10 OR MORE ACRES DRAINING TO A COMMON LOCATION.
  - TEMPORARY SEDIMENTATION BASINS ARE REQUIRED PRIOR TO RUNOFF LEAVING THE CONSTRUCTION SITE OR ENTERING SURFACE WATERS WHEN 10 OR MORE ACRES OF DISTURBED SOILS DRAIN TO A COMMON LOCATION. THE BASIN MUST PROVIDE 3,600 CUBIC FEET OF STORAGE BELOW THE OUTLET PER ACRE DRAINED. IF HYDRAULIC CALCULATIONS ARE AVAILABLE, THE TEMPORARY SEDIMENTATION BASIN MUST PROVIDE A STORAGE VOLUME EQUIVALENT TO THE 2-YEAR, 24-HOUR STORM, BUT IN NO CASE LESS THAN 1800 CUBIC FEET PER ACRE DRAINED. THE TEMPORARY SEDIMENTATION BASIN MUST BE CONSTRUCTED AND MADE OPERATIONAL CONCURRENT WITH THE START OF SOIL DISTURBANCE UP GRADIENT OF THE POND. THE TEMPORARY SEDIMENTATION BASIN SHALL BE DESIGNED TO PREVENT SHORT CIRCUITING. THE OUTFALL SHALL BE DESIGNED TO REMOVE FLOATABLE DEBRIS, ALLOW FOR COMPLETE DRAWDOWN OF THE POND FOR MAINTENANCE ACTIVITIES, AND HAVE ENERGY DISSIPATION. THE EMERGENCY SPILLWAY SHALL BE STABILIZED.
  - TEMPORARY SEDIMENTATION BASINS SHALL BE SITUATED OUTSIDE OF SURFACE WATERS AND ANY REQUIRED BUFFER ZONE, AND MUST BE DESIGNED TO AVOID DRAINING WETLANDS, UNLESS THE IMPACT IS IN COMPLIANCE WITH THE REQUIREMENTS OF THIS PERMIT.
  - EXCESSIVE SEDIMENT-LADEN WATER THAT IS NOT PROPERLY FILTERED WILL NOT BE PERMITTED TO DISCHARGE FROM SIRE.
- DEWATERING AND BASIN DRAINING
  - TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINING SHALL BE DISCHARGED TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN ON THE PROJECT SITE UNLESS INFEASIBLE. THE TEMPORARY OR PERMANENT BASIN MAY DISCHARGE TO SURFACE WATERS IF THE BASIN WATER HAS BEEN VISUALLY CHECKED TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED IN THE BASIN AND THAT THE NUISANCE CONDITIONS WILL NOT RESULT FROM THE DISCHARGE. DISCHARGE POINTS SHALL BE ADEQUATELY PROTECTED FROM EROSION AND PROPER VELOCITY DISSIPATION PROVIDED.
  - ALL WATER FROM DEWATERING OR BASIN DRAINING ACTIVITIES MUST BE DISCHARGED IN A MANNER THAT DOES NOT CAUSE NUISANCE CONDITIONS, EROSION IN THE RECEIVING CHANNELS OR ON DOWN SLOPE PROPERTIES, OR INUNDATION IN WETLANDS CAUSING SIGNIFICANT ADVERSE IMPACTS TO THE WETLAND.
  - IF FILTERS WITH BACKWASH WATERS ARE USED, THE BACKWASH WATER SHALL BE HAULED AWAY FOR DISPOSAL, RETURNED TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATED INTO SITE IN A MANNER THAT DOES NOT CAUSE EROSION. BACKWASH WATER MAY BE DISCHARGED TO SANITARY SEWER IF PERMISSION IS GRANTED BY THE SANITARY SEWER AUTHORITY.
- POLLUTION PREVENTION
  - BUILDING PRODUCTS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS MUST BE UNDER COVER TO PREVENT DISCHARGE OR PROTECTED BY AN EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
  - PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPE MATERIALS MUST BE UNDER COVER.

- HAZARDOUS MATERIALS AND TOXIC WASTE MUST BE PROVIDED TO PREVENT VANDALISM.
  - SOLID WASTER MUST BE STORED, COLLECTED AND DISPOSED OF IN COMPLIANCE WITH MINN. R. CH 7035.
  - PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE DISPOSED OF PROPERLY IN ACCORDANCE WITH MINN. R. CH 7041.
  - DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED SHALL BE PREVENTED USING DRIP PANS OR ABSORBENTS. SUPPLIES SHALL BE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS AND THAT AN APPROPRIATE DISPOSAL METHOD MUST BE AVAILABLE FOR RECOVERED SPILLED MATERIALS.
- DESIGN CALCULATIONS
 

REGIONAL PONDING BY OTHERS.
  - GENERAL STORMWATER DISCHARGE REQUIREMENTS
 

ALL REQUIREMENTS LISTED IN PART III OF THE PERMIT FOR DESIGN OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM AND DISCHARGE HAVE BEEN INCLUDED IN PREPARATION OF THIS SWPPP. THESE INCLUDE BUT ARE NOT LIMITED TO:

    - THE EXPECTED AMOUNT, FREQUENCY, INTENSITY, AND DURATION PRECIPITATION.
    - THE NATURE OF STORMWATER RUNOFF AND RUN-ON AT THE SITE.
    - PEAK FLOW RATES AND STORMWATER VOLUMES TO MINIMIZE EROSION AT OUTLETS AND DOWNSTREAM CHANNEL AND STREAM BANK EROSION.
    - THE RANGE OF SOIL PARTICLE SIZES EXPECTED TO BE PRESENT ON THE SITE.
  - CONSTRUCTION OF FILTRATION BASINS
    - NO HEAVY TRAFFIC ON FILTRATION AREAS. CONSTRUCTION TO BE DONE WITH MINIMAL COMPACTION TO FILTRATION AREAS. IF COMPACTION IS ENCOUNTERED, BASIN SOILS FOR THE FIRST & MUST BE REMOVED & RELAID.
    - INFILTRATION SYSTEMS MUST NOT BE EXCAVATED TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAD BEEN CONSTRUCTED AND FULLY STABILIZED UNLESS RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS ARE PROVIDED (PART III.D.1.C.).
    - WHEN AN INFILTRATION SYSTEM IS EXCAVATED TO FINAL GRADE (OR WITHIN THREE (3) FEET OF FINAL GRADE), THE PERMITTEE(S) MUST EMPLOY RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS (E.G., DIVERSION BERMS) TO KEEP SEDIMENT AND RUNOFF COMPLETELY AWAY FROM THE INFILTRATION AREA. THE AREA MUST BE STAKED OFF AND MARKED SO THAT HEAVY CONSTRUCTION VEHICLES OR EQUIPMENT WILL NOT COMPACT THE SOIL IN THE PROPOSED INFILTRATION AREA.
    - TO PREVENT CLOGGING OF THE INFILTRATION OR FILTRATION SYSTEM, THE PERMITTEE(S) MUST USE A PRETREATMENT DEVICE SUCH AS A VEGETATED FILTER STRIP, SMALL SEDIMENTATION BASIN, OR WATER QUALITY INLET (E.G., GRIT CHAMBER) TO SETTLE PARTICULATES BEFORE THE STORMWATER DISCHARGES INTO THE INFILTRATION OF FILTRATION SYSTEM.
  - POST CONSTRUCTION - THE WATER QUALITY VOLUME THAT MUST BE RETAINED ON SITE BY THE PROJECT'S PERMANENT STORMWATER MANAGEMENT SYSTEM DESCRIBED IN PART III.D. SHALL BE ONE (1) INCH OF RUNOFF FROM THE NEW IMPERVIOUS SURFACES CRATED BY THE PROJECT. SEE PART III.D.1. FOR MORE INFORMATION ON INFILTRATION DESIGN, PROHIBITIONS AND APPROPRIATE SITE CONDITIONS.
  - RESPONSIBILITIES
    - THE OWNER MUST IDENTIFY A CONTRACTOR WHO WILL OVERSEE THE SWPPP IMPLEMENTATION AND THE PERSON RESPONSIBLE FOR INSPECTION AND MAINTENANCE.
    - THE OWNER MUST IDENTIFY THE A PERSON WHO WILL BE RESPONSIBLE FOR LONG TERM OPERATIONS AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM.
  - TRAINING REQUEMETS - THE PERMITTEE(S) SHALL ENSURE THE FOLLOWING INDIVIDUALS IDENTIFIED IN THIS PART: HAVE BEEN TRAINED IN ACCORDANCE WITH THIS PERMIT'S TRAINING REQUIREMENTS.
    - WHO MUST BE TRAINED:
      - INDIVIDUAL(S) PREPARING THE SWPPP FOR THE PROJECT
      - INDIVIDUAL(S) OVERSEEING IMPLEMENTATION OF, REVISING, AND AMENDING THE SWPPP AND INDIVIDUAL(S) PERFORMING INSPECTIONS AS REQUIRED IN PART IV.E. ONE OF THESE INDIVIDUAL(S) MUST BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE MPCA.
      - INDIVIDUAL(S) PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMP'S. AT LEAST ONE INDIVIDUAL ON A PROJECT MUST BE TRAINED IN THESE JOB DUTIES.
    - TRAINING CONTENT: - THE CONTENT AND EXTENT OF TRAINING MUST BE COMMENSURATE WITH THE INDIVIDUAL'S JOB DUTIES AND RESPONSIBILITIES WITH REGARD TO ACTIVITIES COVERED UNDER THIS PERMIT FOR THE PROJECT. AT LEAST ONE INDIVIDUAL PRESENT ON THE PERMITTED PROJECT SITE (OR AVAILABLE TO THE PROJECT SIRE IN 72 HOURS) MUST BE TRAINED IN THE JOB DUTIES DESCRIBED IN PART III.F.1.B. AND PART III.F.1.C.
    - THE PERMITTEE(S) SHALL ENSURE THAT THE INDIVIDUALS ARE TRAINED BY LOCAL, STATE, FEDERAL AGENCIES, PROFESSIONAL OR OTHER ENTITIES WITH EXPERTISE IN EROSION PREVENTION, SEDIMENT CONTROL, PERMANENT STORMWATER MANAGEMENT AND THE MINNESOTA NPDES/SDES CONSTRUCTION STORMWATER PERMIT. AN UPDATE REFRESHER-TRAINING MUST BE ATTENDED EVERY THREE (3) YEARS STARTING THREE (3) YEARS FROM THE ISSUANCE DATE OF THIS PERMIT.



33. LIST OF CONTACTS

TITLE	NAME	COMPANY	PHONE NUMBER
OWNER	CRAIG COHEN	KEG HOUSE LLC	(651) 485-1738
PROJECT MANAGER	MIKE ST MARTIN	LOUCKS	763-496-6713
SWPPP DESIGNER	BILL SHARBONO	LOUCKS	763-496-6760
CONTRACTOR	TBD	TBD	TBD
SITE MANAGER	TBD	TBD	TBD

\* MPCA 24HR. HAZARDOUS SPILL HOTLINE: 651-649-5457 OF 80420798

KEG & CASE MARKET  
928 W 7TH STREET  
ST. PAUL, MN 55102

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ENVIRONMENTAL  
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763.424.5505  
www.loucks.com  
LOUCKS PROJECT NO. 100720H

SHEET TITLE:  
STORM WATER  
POLLUTION  
PREVENTION PLAN  
(SWPPP) 2 OF 2

PROJECT #:	1294
DRAWN BY:	DRW
CHECKED BY:	CHK
ISSUE:	DATE
DSI Pre-Submittal	7/24/15
Progress	10/14/15
HPCA Submittal	10/29/15
Pricing	01/04/16
DSI Submittal	03/15/16
HPC Submittal	04/07/16



STUDIO M ARCHITECTS, INC.  
530 NORTH 3RD STREET, SUITE 230  
MINNEAPOLIS, MINNESOTA 55401  
P. 612.284.4376  
F. 612.284.41240  
WWW.STUDIOMARCHITECTS.NET

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 law of the state of Minnesota.

Signed: \_\_\_\_\_  
date: 4/07/16 ipa ipa 24440

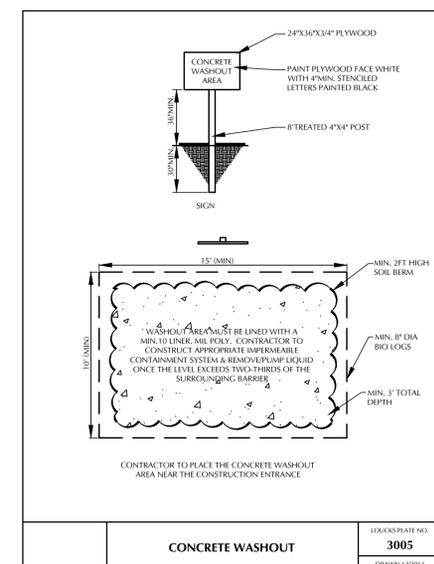
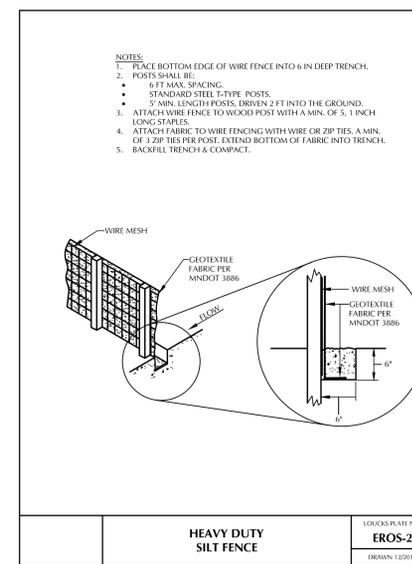
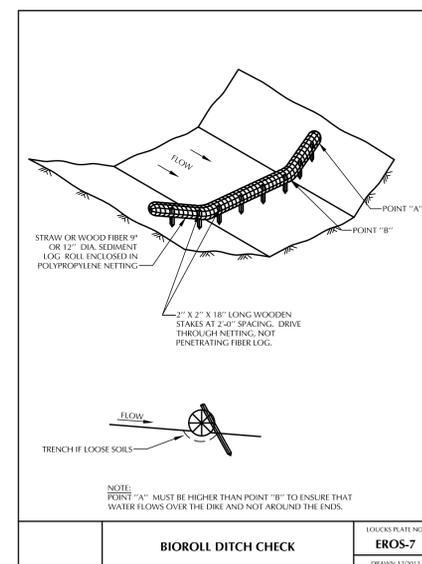
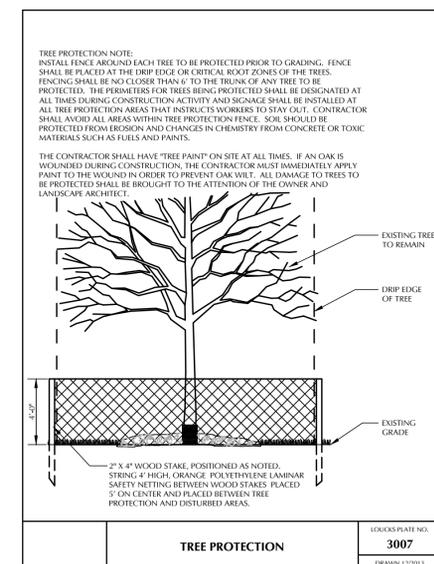
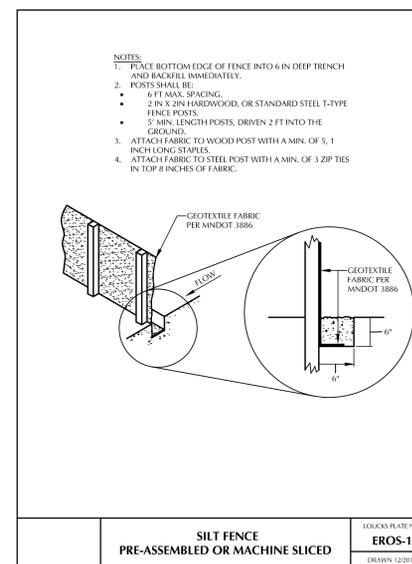
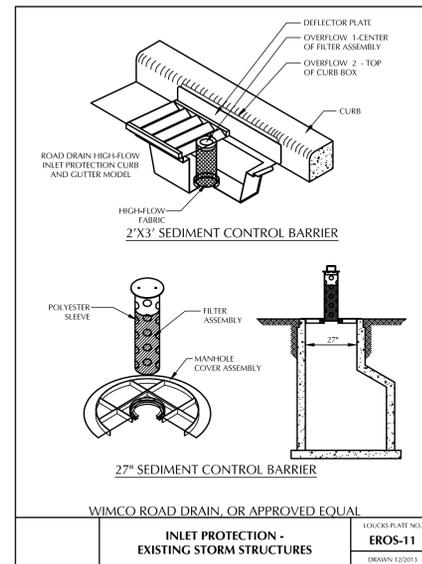
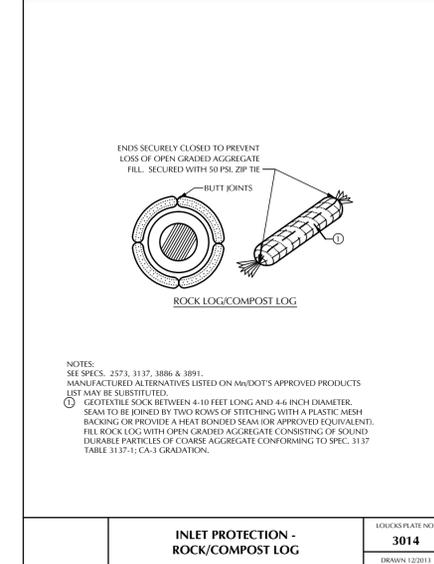
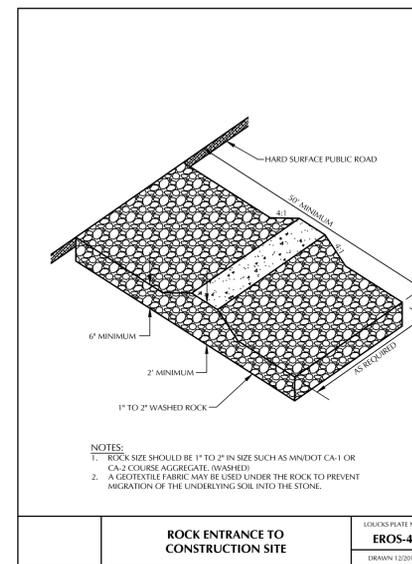
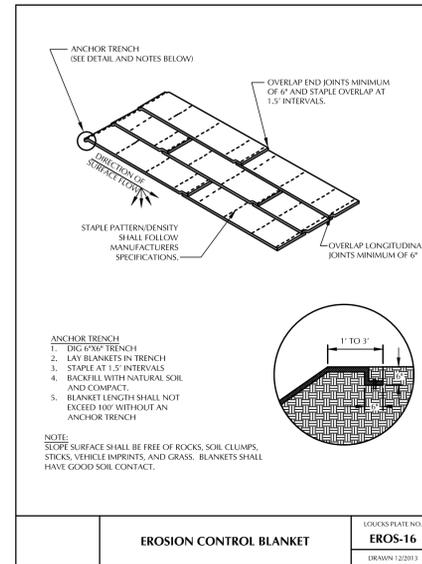
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### Inspection Activities-Infiltration System

Inspection Activity	Recommended Inspection Frequency	Outcomes/Actions
1. Visual inspection for debris and trash: inlets, sump manholes, filtration system and outlet structure	Monthly	Notify maintenance staff/Property Manager of need for debris removal
2. Visual inspection for erosion and undesirable vegetation around inlets, outlets and parking lot	Monthly	Notify maintenance staff/Property Manager of need to repair erosion damage/stabilize
3. Sediment accumulation in sump manholes and infiltration system	Every 6 months	Notify maintenance staff/Property Manager of need to remove sediment when depth exceeds 6 inches.
4. Inspect structural components of inlet structures and filtration system	Every 6 months	Notify maintenance staff/Property Manager of any observed structural damage, loose or missing bolts, blockage, etc...
5. Inspect ground surface above and adjacent to the underground system and around structures for sinkholes or other unusual depression areas,	Monthly	Notify maintenance staff/Property Manager of the presence of sinkholes
6. Dewatering	After Large storm events	Notify maintenance staff/Property Manager of the system's failure to drain within 72 hours of a storm event

### Maintenance Activities-Infiltration System

Maintenance Activity	Frequency	Procedure	Maintenance by
1. Trash and debris removal from sumps, inlets and outlets	As needed per inspection	Remove accumulated debris	Property owner or designated contractor
2. Erosion repair	As needed per inspection	Handwork	Property owner or designated contractor
3. Sediment removal from sumps and basin	Annually or as required when sediment exceeds 6 inches for sumps or 1/2 wet basin depth	Remove accumulated sediment through access MH, preferably vacuum.	Property owner or designated contractor
4. Clean/Fix structural components	As needed per inspection	Dependent on type of damage; Repair or replace components per manufacturer's recommendations	Property owner or designated contractor
5. Repair of structures	As needed per inspection	Follow manufacturer's recommendation	Property owner or designated contractor
6. Dewatering	As needed per inspection	Pump water to downstream storm sewer per manufacturer's recommendation. Inspect for possible causes.	Property owner or designated contractor



**KEG & CASE MARKET**  
 928 W 7TH STREET  
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 Maple Grove, MN 55369  
 763.424.5505  
 www.loucks.com  
 LOUCKS PROJECT NO. 100720H

**SHEET TITLE:**  
**STORM WATER POLLUTION PREVENTION PLAN (SWPPP) 3 OF 3**

**PROJECT #:** 1294  
**DRAWN BY:** DRW  
**CHECKED BY:** CHK  
**ISSUE:** DATE:  
 DSI Pre-Submittal 7/24/15  
 Progress 10/14/15  
 HPCA Submittal 10/29/15  
 Pricing 01/04/16  
 DSI Submittal 03/15/16  
 HPC Submittal 04/07/16



**STUDIO M ARCHITECTS, INC.**  
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 F. 612.254.1240  
 WWW.STUDIOMARCHITECTS.NET

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 law of the state of Minnesota.  
 signed: \_\_\_\_\_  
 date: 4/07/16 reg. no. 24440

**C3-4**

Palace Avenue  
(Publicly Traveled)

West Seventh Street

Webster Street

James Avenue



CALL BEFORE YOU DIG!

Gopher State One Call

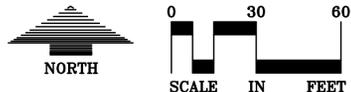
TWIN CITY AREA: 651-454-0002  
TOLL FREE: 1-800-252-1166

EXISTING	CIVIL LEGEND	PROPOSED
	SANITARY MANHOLE	
	STORM MANHOLE	
	CATCH BASIN	
	CULVERT	
	HYDRANT	
	GATE VALVE	
	POST INDICATOR VALVE	
	LIGHT POLE	
	POWER POLE	
	SIGN	
	BENDMARK	
	SOL BORINGS	
	WATER MANHOLE	
	TELEPHONE MANHOLE	
	UTILITY MANHOLE	
	ELECTRIC MANHOLE	
	WATER SERVICE	
	SANITARY SERVICE	
	HANDICAP PARKING	
	DIRECTION OF FLOW	
	SPOT ELEVATION	
	CONTOURS	
	SANITARY SEWER	
	STORM SEWER	
	WATERMAIN	
	FOREMAN	
	DRAIN TILE	
	SALT FENCE	
	CURB & GUTTER	
	RETAINING WALL	
	TREE LINE	
	EASEMENT LINE	
	SETBACK LINE	
	FENCE LINE	
	UNDERGROUND GAS	
	UNDERGROUND TELE	
	UNDERGROUND GAS	
	OVERHEAD UTILITY	

**WARNING:**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



**ST. PAUL REGIONAL WATER SERVICE NOTES**

- ALL WATER MAIN CONNECTIONS TO BE INSTALLED BY SAINT PAUL REGIONAL WATER SERVICES.
- PIPE WORK INSIDE PROPERTY TO BE PERFORMED BY A PLUMBER LICENSED BY THE STATE OF MINNESOTA AND CERTIFIED BY THE CITY OF SAINT PAUL.
- MAINTAIN 18-INCH SEPARATION BETWEEN SEWER AND WATER LINES OR A 12-INCH SEPARATION WITH 4-INCH HIGH DENSITY INSULATION PER SPRWS STANDARD PLATE D-10.
- APPLICATION, PAYMENT FOR NEW WATER SERVICE CONNECTION, BILLING INFORMATION AND PROJECT DATA SHEET TO BE PROVIDED TO SPRWS BEFORE CONSTRUCTION OF NEW WATER SERVICE CONNECTION.

**EXISTING SURVEY NOTES**

- BACKGROUND INFORMATION IS BASED ON A FIELD SURVEY BY LOUCKS, PROPOSED WEBSTER ST & SCHMIDT ARTIST LOFTS, & SUPPLEMENTAL SURVEYING BY RECORD UTILITY DRAWINGS FROM THE CITY OF ST. PAUL. LOUCKS ASSOCIATES DOES NOT GUARANTEE THE ACCURACY OF INFORMATION PROVIDED BY OTHERS.

**NOTE:**

- EXISTING SANITARY SEWER SERVICE TO SAND ROCK TUNNEL TO BE RECONSTRUCTED PER CITY STANDARDS.
- EXISTING WATER SERVICE TO BE RECONSTRUCTED PER CITY STANDARDS.

**UTILITY PLAN NOTES**

- ALL SANITARY SEWER, STORM SEWER AND WATERMAIN UTILITIES SHALL BE FURNISHED AND INSTALLED PER THE REQUIREMENTS OF THE SPECIFICATIONS, THE CITY AND THE STANDARD UTILITIES SPECIFICATION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM), 1999 EDITION.
  - SEE DETAIL SHEET AND THE CONTRACT SPECIFICATIONS FOR SPECIFIC UTILITY DETAILS.
  - ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. THE CITY DEPARTMENT OF ENGINEERING AND BUILDING INSPECTIONS DEPARTMENT AND THE CONSTRUCTION ENGINEER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, OR WORK IMPACTING PUBLIC UTILITIES.
  - THE CONTRACTOR SHALL NOTIFY GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION OR UNDERGROUND WORK.
  - THE CONTRACTOR SHALL FIELD ADJUST WATERMAIN TO AVOID CONFLICTS WITH SANITARY SEWER, STORM SEWER, AND SERVICES AS REQUIRED.
  - ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE ALL SIGNAGE, BARRICADES, FLASHERS AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT THE EXPRESSED AUTHORITY OF THE CITY.
  - ALL UTILITY PIPE BEDDING SHALL BE COMPACTED SAND OR FINE GRANULAR MATERIAL PER THE REQUIREMENTS OF THE CITY. ALL COMPACTION SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CEAM SPECIFICATION.
  - ADJUST ALL EXISTING STRUCTURES, BOTH PUBLIC AND PRIVATE TO THE PROPOSED GRADES WHERE DISTURBED AND COMPLY WITH ALL REQUIREMENTS OF THE UTILITY OWNERS. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.
  - MAINTAIN 8 FEET OF COVER OVER ALL WATERMANS AND SERVICES.
  - ALL UNUSED EXISTING WATER SERVICES TO BE CUT OFF BY SPRWS, EXCAVATION AND RESTORATION BY CONTRACTOR.
- | PROPOSED PIPE MATERIALS: |                |                    |  |
|--------------------------|----------------|--------------------|--|
| STORM SEWER              | DUAL WALL HDPE | 8" TO 12" DIAMETER |  |
| STORM SEWER              | RCP            | 12" DIAMETER       |  |
| WATER SERVICE            | DIPE CLASS 52  | 8" DIAMETER        |  |
| SANITARY SERVICE         | PVC SDR 26     | 8" DIAMETER        |  |
- A FOUR-SIDED TRENCH BOX IS REQUIRED ON ALL EXCAVATIONS DEEPER THAN 5' WHERE UNDERGROUND WORK OR INSPECTION IS TO BE PERFORMED BY SPRWS. LADDERS ARE REQUIRED AND EXTEND 3' ABOVE THE SURFACE OF THE TRENCH. SIDEWALKS, PAVEMENTS, DUCTS AND APPURTENANT STRUCTURES SHALL NOT BE UNDERMINED UNLESS A SUPPORT BY A REGISTERED PROFESSIONAL ENGINEER. EXCAVATED MATERIAL MUST BE KEPT A MINIMUM OF 2' FROM THE EDGE OF THE TRENCH.
  - REFER TO SPRWS "STANDARDS FOR THE INSTALLATION OF WATER MAINS" STANDARD PLATE D-11 FOR RESTRAINED PIPE REQUIREMENTS.

**CITY OF ST. PAUL NOTES**

- SIGNS REGULATING PARKING AND/OR TRAFFIC ON PRIVATE PROPERTY SHALL BE INSTALLED BY THE PROPERTY OWNER OR CONTRACTOR OUTSIDE OF THE PUBLIC RIGHT-OF-WAY. SIGNS APPROVED BY PUBLIC WORKS TRAFFIC ENGINEERING REGULATING PARKING AND/OR TRAFFIC IN THE PUBLIC RIGHT-OF-WAY FOR THIS DEVELOPMENT SHALL BE INSTALLED BY CITY FORCES AT THE EXPENSE OF THE DEVELOPMENT. CONTACT MIKE MILLER 651-266-9778 SIX WEEKS IN ADVANCE OF NEEDED SIGNIS.
- ALL WORK ON CURBS, DRIVEWAYS, AND SIDEWALKS WITHIN THE PUBLIC RIGHT OF WAY MUST BE DONE BY A LICENSED AND BONDED CONTRACTOR UNDER A PERMIT FROM PUBLIC WORKS SIDEWALK SECTION (651-266-6120). SIDEWALK GRADES MUST BE CARRIED ACROSS DRIVEWAYS.
- RESTORATION OF ASPHALT AND CONCRETE PAVEMENTS ARE PERFORMED BY THE PUBLIC WORKS STREET MAINTENANCE DIVISION. THE CONTRACTOR IS RESPONSIBLE FOR PAYMENT TO THE CITY FOR THE COST OF THESE RESTORATIONS. THE CONTRACTOR SHALL CONTACT PUBLIC WORKS STREET MAINTENANCE TO SET UP A WORK ORDER PRIOR TO BEGINNING ANY REMOVALS IN THE STREET AT 651-266-9700. PROCEDURES AND UNIT COSTS ARE FOUND IN STREET MAINTENANCE'S "GENERAL REQUIREMENTS - ALL RESTORATIONS" AND ARE AVAILABLE AT THE PERMIT OFFICE.
- THE CONTRACTOR SHALL CONTACT JOHN MCNAMARA AT 651-266-9780, GENERAL FOREMAN, LIGHTING - SIGNAL MAINTENANCE, IF REMOVAL OR RELOCATION OF EXISTING FACILITIES IS REQUIRED OR IN THE EVENT OF DAMAGE TO THE LIGHTING OR SIGNAL UTILITIES. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY (AND RELATED COSTS) FOR ANY DAMAGE OR RELOCATIONS.
- CARE MUST BE TAKEN DURING CONSTRUCTION AND EXCAVATION TO PROTECT ANY SURVEY MONUMENTS AND/OR PROPERTY IRONS. CALL SAM GIBSON OF PUBLIC WORKS SURVEYING (651-266-6075) IF YOU HAVE ANY QUESTIONS
- PIPE WORK INSIDE PROPERTY TO BE PERFORMED BY A PLUMBER LICENSED BY THE STATE OF MINNESOTA AND CERTIFIED BY THE CITY OF SAINT PAUL. PIPE WORK WITHIN THE PUBLIC RIGHT OF WAY TO BE PERFORMED BY SPRWS.
- ABANDONING EXISTING SEWER SERVICE OR MAKING NEW CONNECTIONS TO CITY SEWER MUST BE DONE TO CITY STANDARDS BY A LICENSED HOUSE DRAIN CONTRACTOR UNDER A PERMIT FROM PUBLIC WORKS SEWER SECTION (651-266-6234).
- INSPECTION CONTACT: THE DEVELOPER SHALL CONTACT THE RIGHT OF WAY INSPECTOR, BRENT GILLEN, AT 651-485-0419 (ONE WEEK PRIOR TO BEGINNING WORK) TO DISCUSS TRAFFIC CONTROL, PEDESTRIAN SAFETY AND COORDINATION OF ALL WORK IN THE PUBLIC RIGHT OF WAY. NOTE: IF ONE WEEK NOTICE IS NOT PROVIDED TO THE CITY, ANY RESULTING DELAYS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- SAFE WORK SITE REQUIREMENTS: THE CONTRACTOR SHALL PROVIDE A CONTINUOUS, ACCESSIBLE AND SAFE PEDESTRIAN WALKWAY THAT MEETS ADA AND MN MUTCD STANDARDS IF WORKING IN A SIDEWALK AREA. ALL TRAFFIC CONTROL AND TRAFFIC CONTROL DEVICES SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE MN MUTCD OR SUPPLEMENTS THEREOF.
- NO PRIVATE FACILITIES IN THE RIGHT OF WAY: THE DEVELOPER IS STRICTLY PROHIBITED FROM INSTALLING PRIVATE ELECTRICAL WIRING, CONDUIT, RECEPTACLES AND/OR LIGHTING IN THE CITY'S RIGHT OF WAY. THIS INCLUDES STUBBING CONDUIT OR CABLE INTO THE PUBLIC RIGHT OF WAY TO ACCOMMODATE UTILITY FEEDS TO THE SITE. COORDINATE WITH EACH UTILITY PRIOR TO CONSTRUCTION TO DETERMINE FEED POINTS INTO THE PROPERTY. UTILITIES ARE RESPONSIBLE FOR SECURING EXCAVATION PERMITS TO RUN THEIR SERVICE INTO A SITE, AND (WHERE REQUIRED) SUBMITTING PLANS FOR REVIEW BY THE PUBLIC WORKS UTILITY REVIEW COMMITTEE.
- AN OBSTRUCTION PERMIT MUST BE OBTAINED FROM PUBLIC WORKS (651-266-6151) IF THERE WILL BE ANY EXCAVATION IN CITY R.O.W. OR IF TRUCKS/EQUIPMENT WILL BE DRIVING OVER CURBS OR IF CONSTRUCTION WILL BLOCK CITY STREETS, OR SIDEWALKS.
- CONSTRUCTION MATERIALS AND EQUIPMENT SHALL NOT BE STORED ON THE PUBLIC BOULEVARD. CONSTRUCTION EQUIPMENT AND VEHICLES SHALL NOT BE OPERATED OR PARKED ON TURF BOULEVARDS.
- ROADWAY STRIPING IMPACTED BY THE WORK ZONE SHALL BE REPLACED IN-KIND AT NO COST TO THE CITY. IF THERE ARE QUESTIONS AS TO THE TYPE OF MATERIAL TO BE USED, CONTACT MIKE MILLER (651-266-9778) IN THE CITY'S TRAFFIC OPERATIONS SECTION. STRIPING RESTORATION SHALL BE COMPLETED IMMEDIATELY FOLLOWING FINAL PAVEMENT RESTORATION. IF THERE IS A DESIRE FOR THE CITY OF ST. PAUL PUBLIC WORKS DEPARTMENT TO COMPLETE THE PAVEMENT MARKING RESTORATION WORK, CONTACT MIKE MILLER OF PUBLIC WORKS TRAFFIC OPERATIONS FOR AN ESTIMATE. WHEN POSSIBLE, A MINIMUM OF FOUR WEEKS ADVANCE NOTICE OF ANY NEEDED STRIPING WORK IS PREFERRED. AT A MINIMUM, ONE WEEK'S ADVANCE NOTICE SHALL BE PROVIDED. IF ADVANCE NOTICE IS NOT PROVIDED, ANY ASSOCIATED PROJECT DELAYS, AND COSTS INCURRED RESULTING FROM SAID DELAYS, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE REMOVAL, PRUNING AND/OR PLANTING OF TREES ON THE PUBLIC BOULEVARD REQUIRES A PERMIT FROM THE CITY FORESTER (651-632-5129).

**CITY OF ST. PAUL PERMIT REQUIREMENTS**

- ORDERING OBSTRUCTION AND EXCAVATION PERMITS: CONTACT PUBLIC WORKS RIGHT OF WAY SERVICE DESK AT (651) 266-6151. IT IS STRONGLY RECOMMENDED THAT CONTRACTORS CALL FOR COST ESTIMATES PRIOR TO BIDDING TO OBTAIN ACCURATE COST ESTIMATES.
- OBSTRUCTION PERMITS: THE CONTRACTOR MUST OBTAIN AN OBSTRUCTION PERMIT IF CONSTRUCTION (INCLUDING SILT FENCES) WILL BLOCK CITY STREETS, SIDEWALKS OR ALLEYS, OR IF DRIVING OVER CURBS.
- EXCAVATION PERMITS: ALL DIGGING IN THE PUBLIC RIGHT OF WAY REQUIRES AN EXCAVATION PERMIT. IF THE PROPOSED BUILDING IS CLOSE TO THE RIGHT OF WAY, AND EXCAVATING INTO THE RIGHT OF WAY IS NEEDED TO FACILITATE CONSTRUCTION, CONTACT THE UTILITY INSPECTOR.
- FAILURE TO SECURE PERMITS: FAILURE TO SECURE OBSTRUCTION PERMITS OR EXCAVATION PERMITS WILL RESULT IN A DOUBLE-PERMIT FEE AND OTHER FEES REQUIRED UNDER CITY OF ST. PAUL LEGISLATIVE CODES.
- REQUIREMENTS TO WORK IN THE PUBLIC RIGHT OF WAY: ALL UTILITIES AND CONTRACTORS WORKING IN THE PUBLIC RIGHT OF WAY MUST TO BE REGISTERED, INSURED AND BONDED, AS RECOGNIZED BY THE PUBLIC WORKS SERVICE DESK. (651-266-6151)

KEG & CASE MARKET  
928 W 7TH STREET  
ST. PAUL, MN 55102

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ENVIRONMENTAL  
7200 Hennick Lane, Suite 303  
Maple Grove, MN 55369  
763.424.5505  
www.loucks.com  
LOUCKS PROJECT NO. 100720H

SHEET TITLE:  
UTILITY PLAN

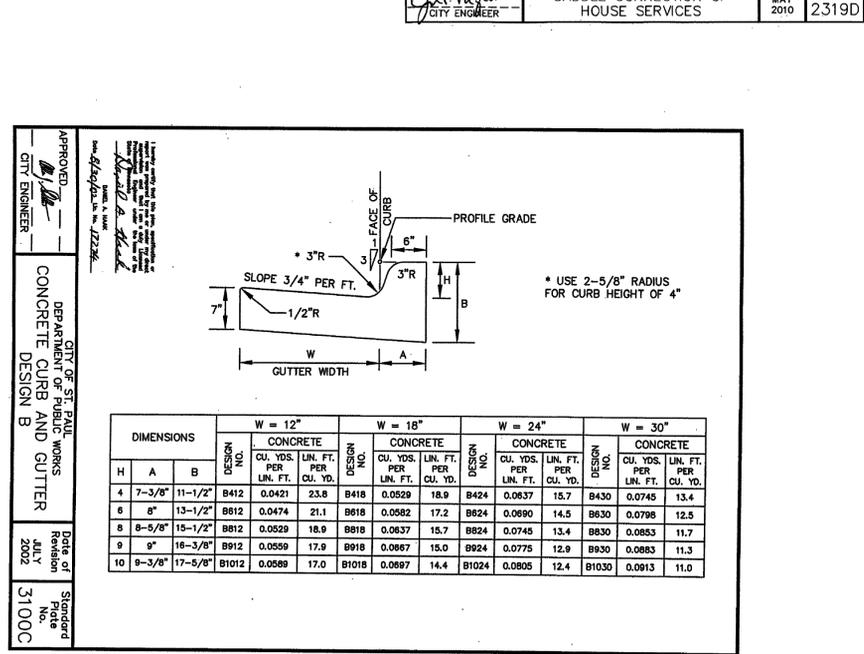
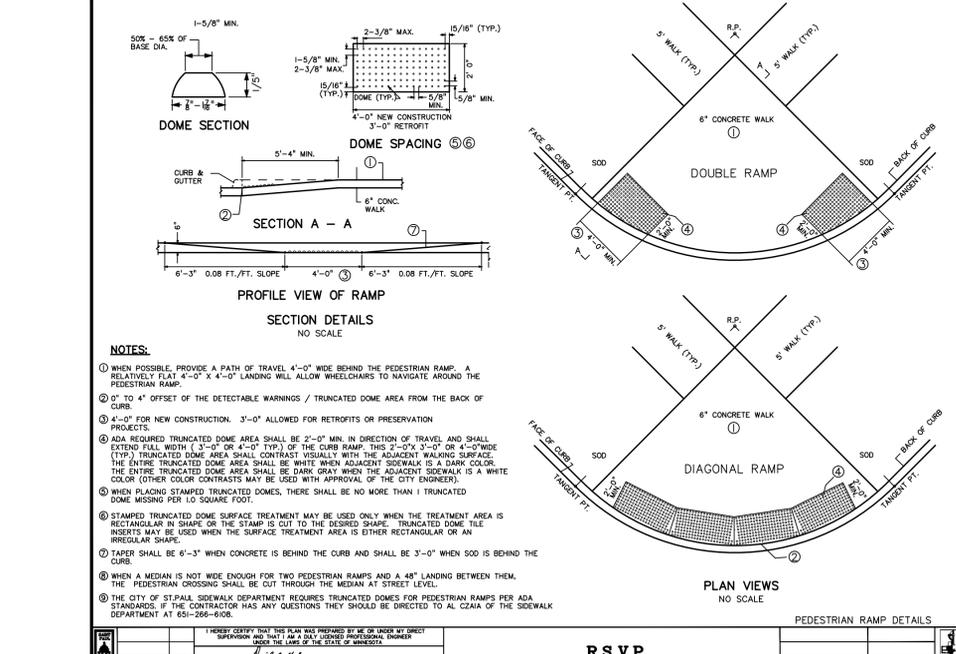
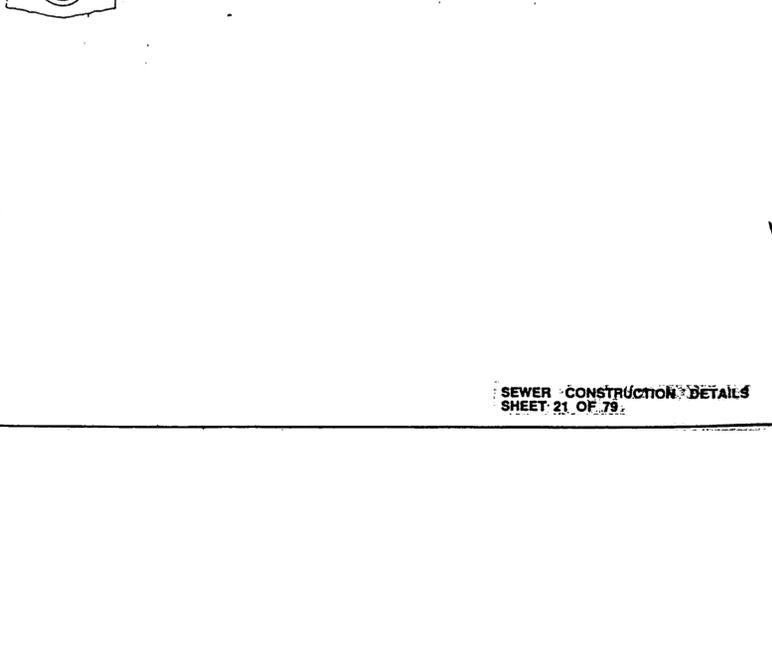
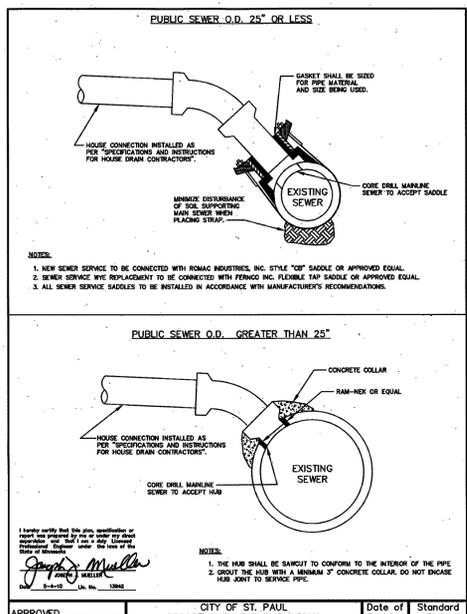
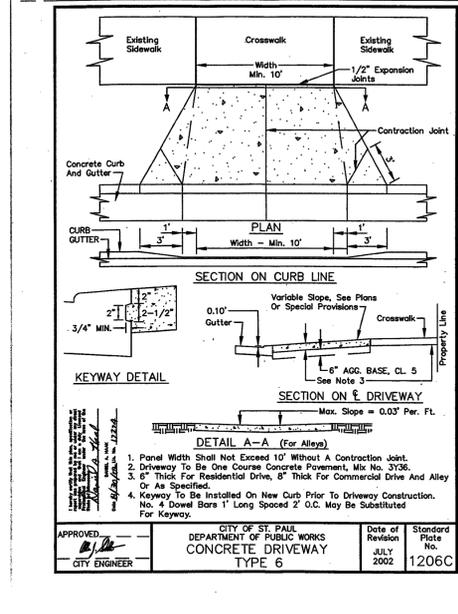
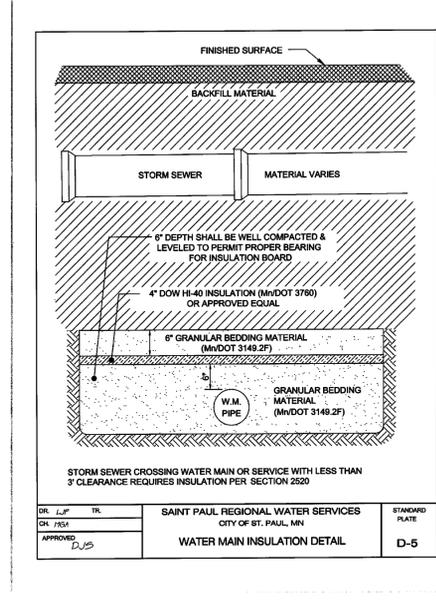
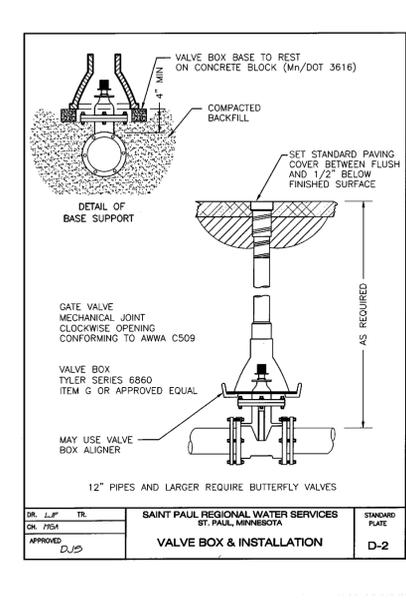
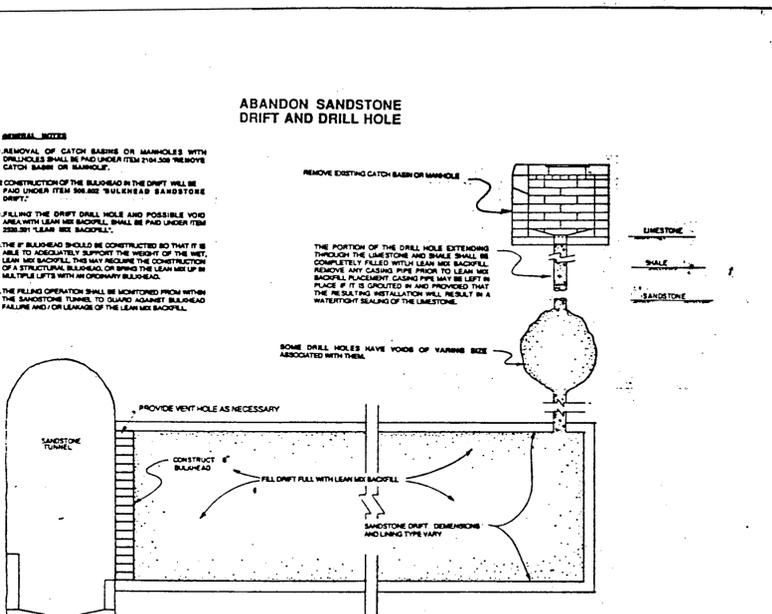
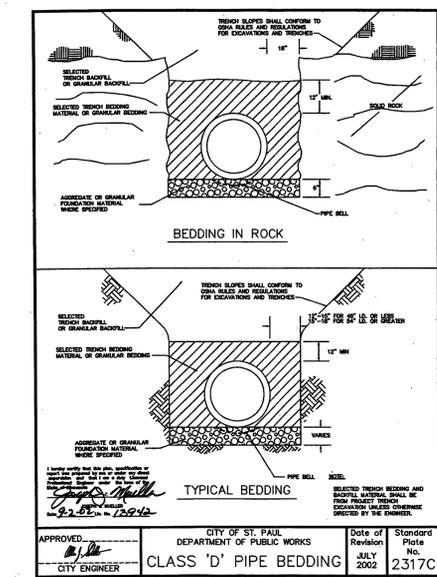
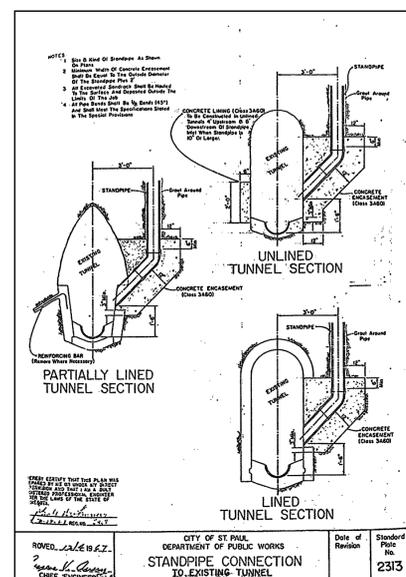
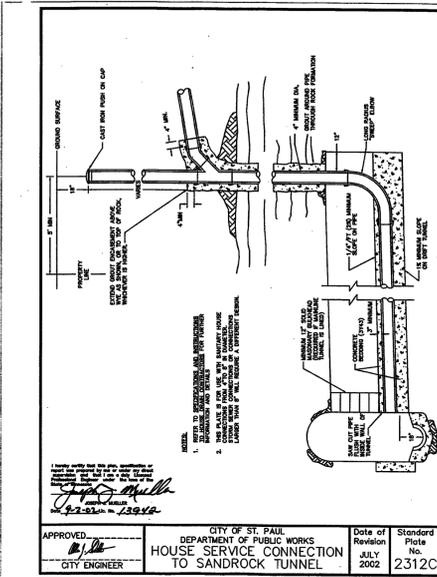
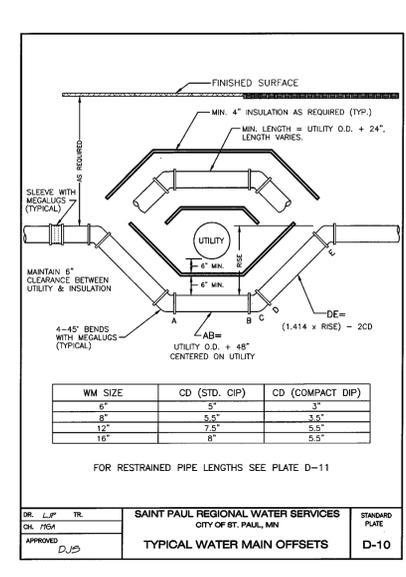
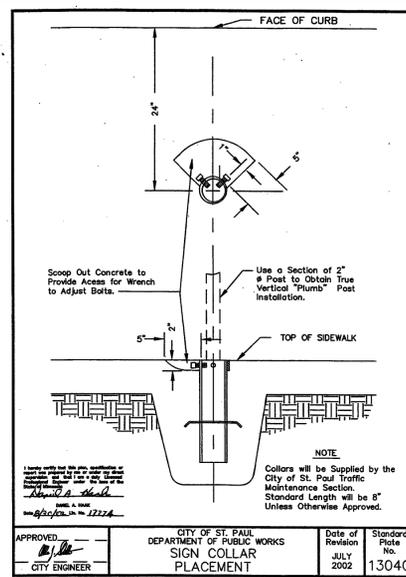
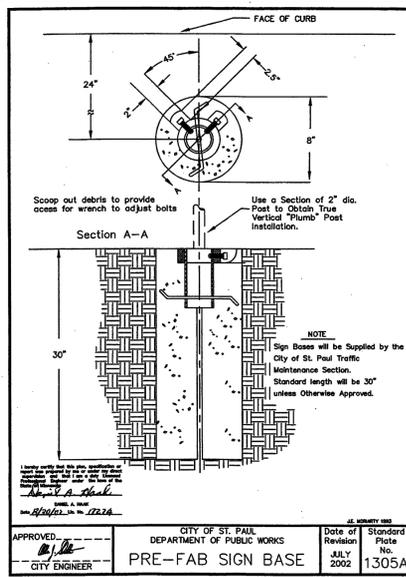
PROJECT #:	1294
DRAWN BY:	DRW
CHECKED BY:	CHK
ISSUE:	DATE:
DSI Pre-Submittal	7/24/15
Progress	10/14/15
HPCA Submittal	10/29/15
Pricing	01/04/16
DSI Submittal	03/15/16
HPC Submittal	04/07/16



**STUDIO M ARCHITECTS, INC.**  
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F. 612.284.1240  
WWW.STUDIOMARCHITECTS.NET

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 law of the state of Minnesota.  
Signed: \_\_\_\_\_  
Date: 4/07/16 reg. no. 24440

**C4-1**



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763.424.5505

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LOUCKS PROJECT NO. 100720H

SHEET TITLE: CIVIL DETAILS

PROJECT #:

DRAWN BY:

CHECKED BY:

ISSUE: DATE:

DSI Pre-Submittal 7/24/15

Progress 10/14/15

HPCA Submittal 10/29/15

Pricing 01/04/16

DSI Submittal 03/15/16

HPC Submittal 04/07/16



STUDIO M ARCHITECTS, INC.

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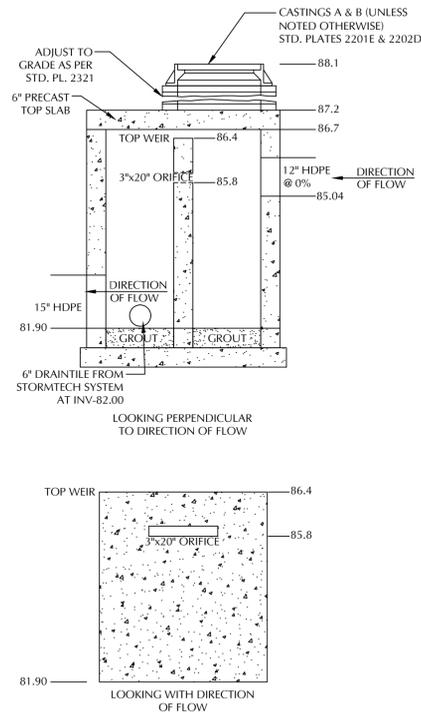
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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the law of the State of Minnesota.

signed: [Signature]

date: 07/16 reg. no. 24440

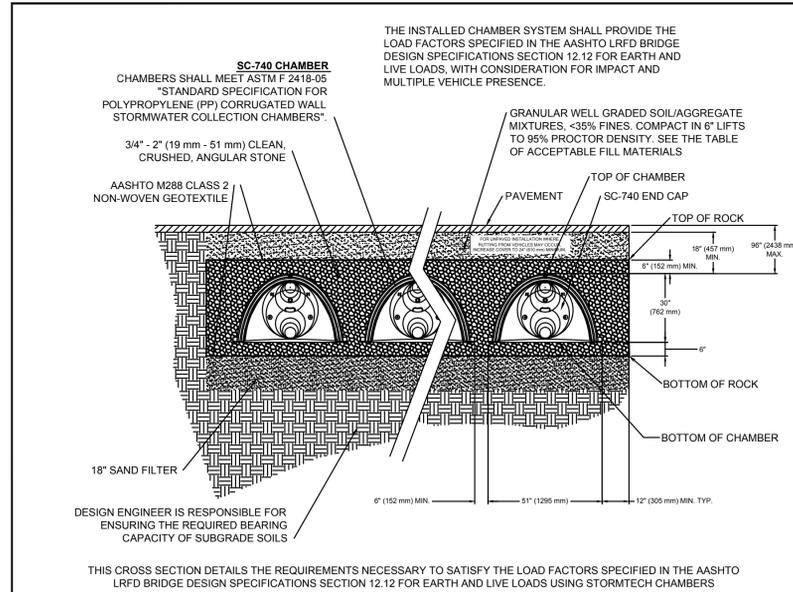
C8-1



- NOTES:
1. USE 48" DIAMETER PRECAST MANHOLE PER CITY STANDARDS.
  2. GROUT BOTTOM MANHOLE TO 6" PRECAST BOTTOM SLAB.
  3. STANDARD PIPE BEDDING REQUIRED ON BOTH INLET AND OUTLET PIPES.
  4. FINAL DESIGN OF STRUCTURE TO BE REVIEWED BY ENGINEER VIA SHOP DRAWING SUBMITTALS.

STORMTECH SYSTEM OUTLET CONTROL STRUCTURE (STMH 9)

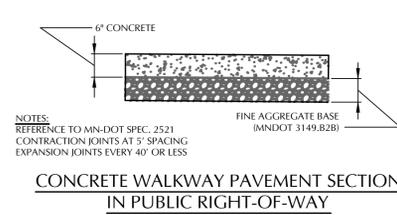
STORMTECH SYSTEMS TABLE						
STORMTECH CHAMBER	APPROXIMATE TOP OF BEDROCK ELEVATION	BASE OF 18" SAND ELEVATION	BASE ROCK ELEVATION	BASE CHAMBER ELEVATION	TOP CHAMBER ELEVATION	BOTTOM OF APPROXIMATE 1-FT PAVEMENT SECTION
SC-740	82	82.0	83.5	84.0	86.5	87.2



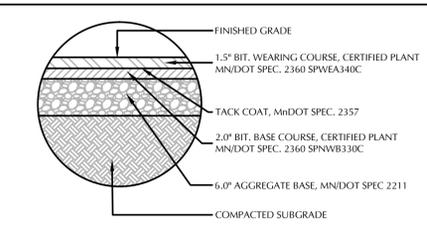
THIS CROSS SECTION DETAILS THE REQUIREMENTS NECESSARY TO SATISFY THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS USING STORMTECH CHAMBERS

STORMTECH STANDARD DETAIL REQUIREMENTS  
STORMTECH STANDARD DETAIL REQUIREMENTS FOR INSTALLATION AND/OR STANDARD DIMENSIONS OF STORMTECH PRODUCTS. STORMTECH DETAILS DO NOT SUPERSERVE ANY STATE OR LOCAL REGULATORY SPECIFICATIONS. IT IS THE RESPONSIBILITY OF THE CONSULTING ENGINEER TO ENSURE COMPLIANCE WITH ALL REGULATORY SPECIFICATIONS. STORMTECH HAS NOT AUTHORIZED, AND IS NOT RESPONSIBLE FOR ANY REPRESENTATION BY OTHERS TO STORMTECH STANDARD DETAIL REQUIREMENTS.

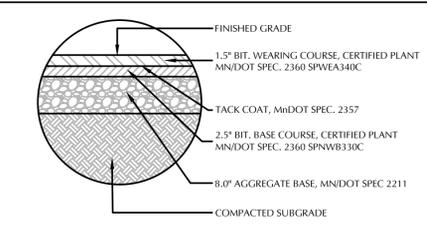
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DATE	11/7/08
DRAWN BY	JLB
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CONCRETE WALKWAY PAVEMENT SECTION IN PUBLIC RIGHT-OF-WAY

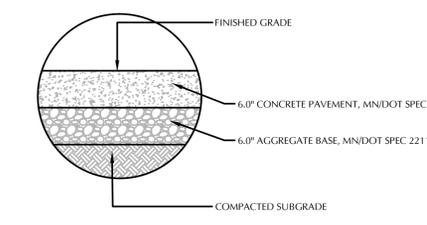


TYPICAL BITUMINOUS PAVEMENT SECTION - PARKING LOT STALLS

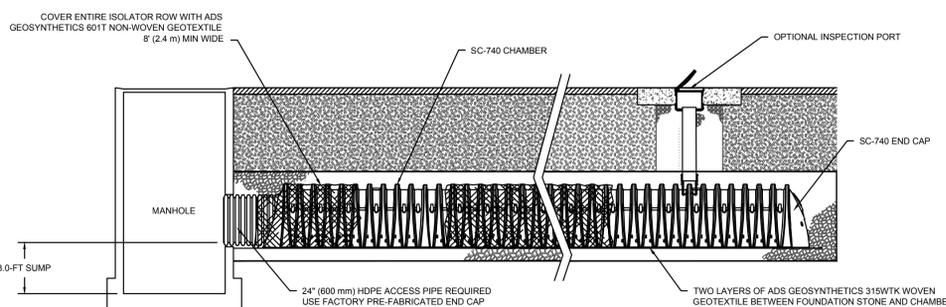


TYPICAL BITUMINOUS PAVEMENT SECTION - PARKING LOT DRIVE AISLES

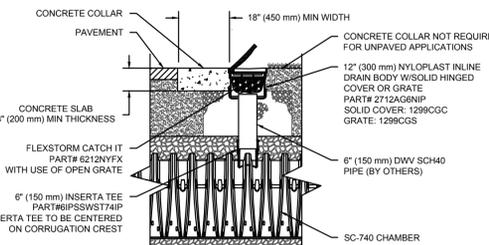
THERE IS NO GEOTECHNICAL REPORT TO RECOMMEND PAVEMENT SECTIONS - ALL SECTIONS MAY BE ADJUSTED BASED ON EXISTING SOIL CONDITIONS - CONTRACTOR TO REVIEW WITH CIVIL ENGINEER, ONCE THE SITE IS OPENED FOR EXISTING SOIL DETERMINATION.



CONCRETE PAVING SECTION



SC-740 ISOLATOR ROW DETAIL



SC-740 6" INSPECTION PORT DETAIL

- INSPECTION & MAINTENANCE**
- STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
  - B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
  - C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.
- NOTES**
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
  2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

REV	DATE	DESCRIPTION
1	11/18/14	ISOLATOR ROW DETAILS
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4	11/18/14	ISOLATOR ROW DETAILS
5	11/18/14	ISOLATOR ROW DETAILS
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100	11/18/14	ISOLATOR ROW DETAILS

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SHEET TITLE:  
CIVIL  
DETAILS

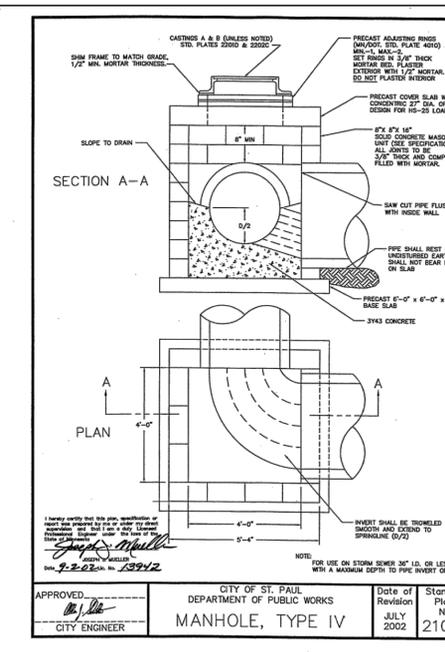
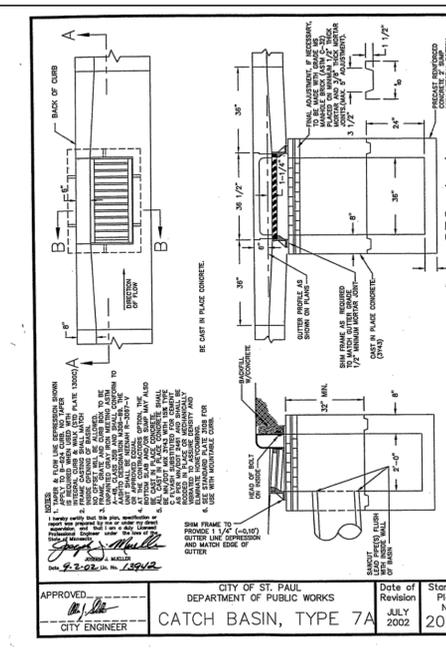
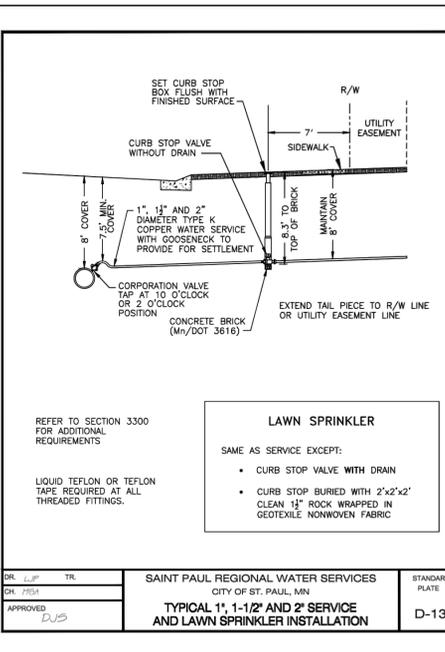
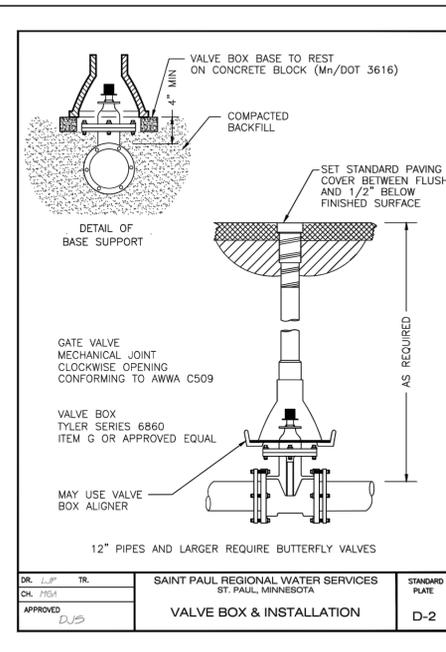
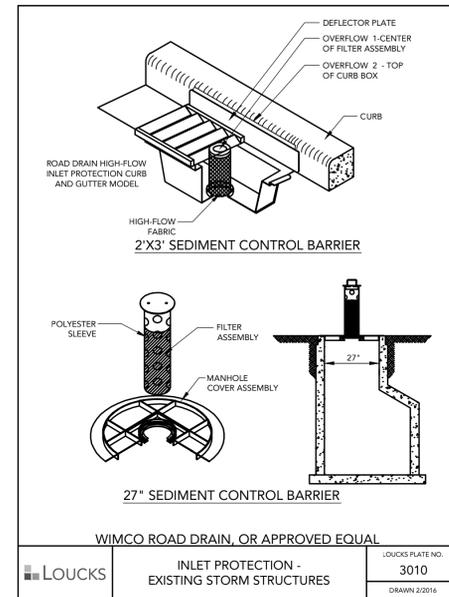
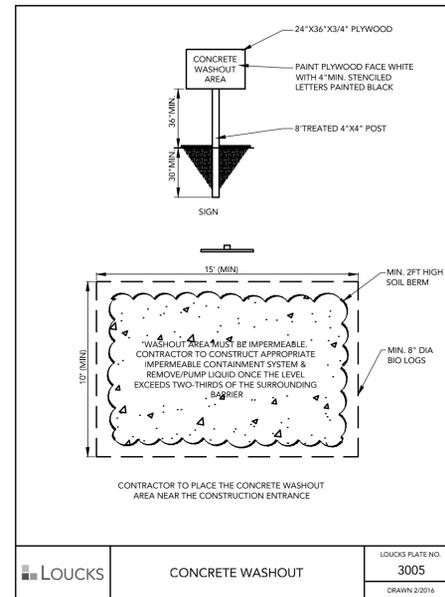
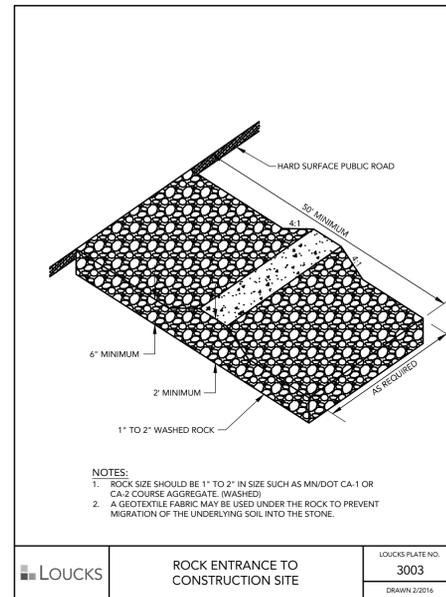
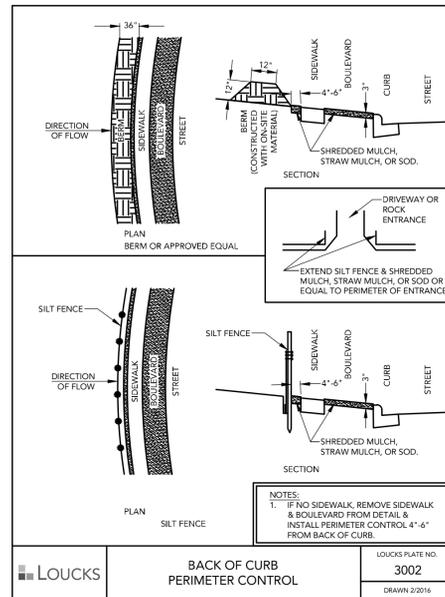
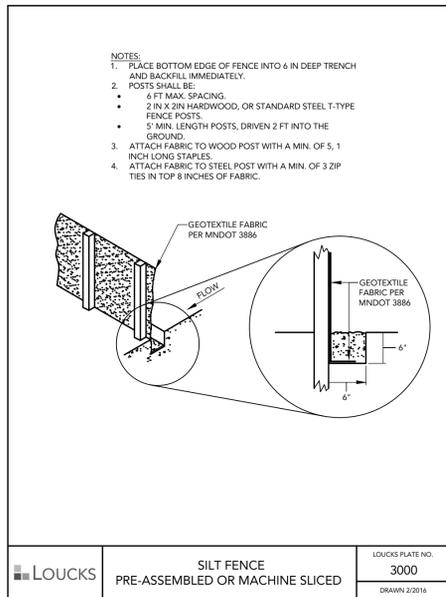
PROJECT #:  
DRAWN BY:  
CHECKED BY:  
ISSUE: DATE:  
DSI Pre-Submittal 7/24/15  
Progress 10/14/15  
HPCA Submittal 10/29/15  
Pricing 01/04/16  
DSI Submittal 03/15/16  
HPC Submittal 04/07/16

**STUDIO M ARCHITECTS, INC.**  
530 NORTH 3RD STREET, SUITE 230  
MINNEAPOLIS, MINNESOTA 55401  
P. 612.284.1376  
F. 612.284.1240  
WWW.STUDIOMARCHITECTS.NET

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 law of the state of Minnesota.

Signed: \_\_\_\_\_  
Date: 4/07/16 (sp. no. 24440)

**C8-2**



**KEG & CASE MARKET**  
928 W 7TH STREET  
ST. PAUL, MN 55102

**LOUCKS**  
PLANNING  
CIVIL ENGINEERING  
LAND SURVEYING  
LANDSCAPE ARCHITECTURE  
ENVIRONMENTAL

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Maple Grove, MN 55369  
763.424.5505  
www.loucksinc.com  
LOUCKS PROJECT NO. 10072/04

**SHEET TITLE:**  
CIVIL  
DETAILS

PROJECT #:  
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DSI Pre-Submittal 7/24/15  
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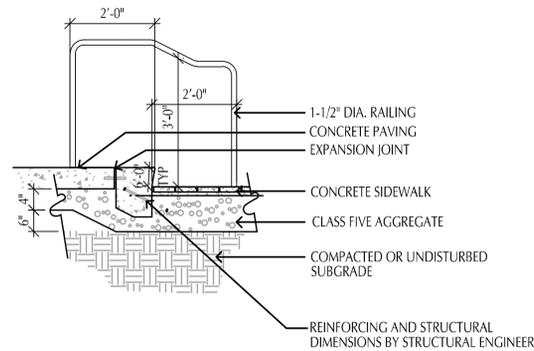


**STUDIO M ARCHITECTS, INC.**  
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MINNEAPOLIS, MINNESOTA 55401  
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signed: \_\_\_\_\_  
date: 4/07/16 reg. no. 24440

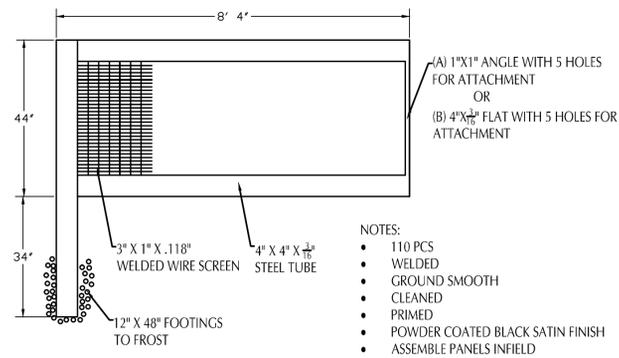
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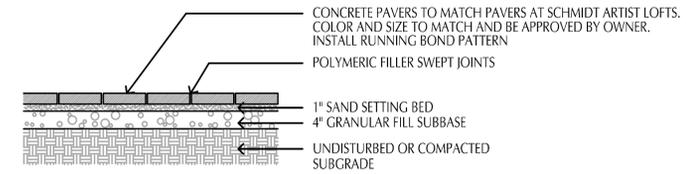
GENERAL NOTES:

CORE DRILL PAVING TO RECEIVE RAILINGS, EPOXY GROUT, AND CONCEAL WITH DECORATIVE PLATES.  
HANDRAIL TO BE 1-1/2" O.D. BRUSHED ALUMINUM.  
ALL RAILING MEASUREMENTS ARE TO CENTERLINE OF RAILINGS. SUBMIT SHOP DRAWING FOR HAND RAIL.

**1**  
C8-4 CONCRETE STAIRWAY  
SCALE: 1/2" = 1'-0"



**2**  
C8-4 ORNAMENTAL FENCE  
SCALE: 1/2" = 1'-0"



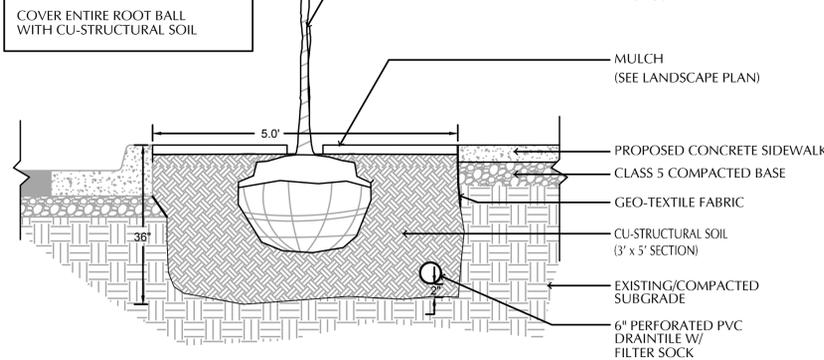
NOTE: EDGE RESTRAINT VARIES. USE FLEXIBLE EDGE RESTRAINT IN AREAS WHERE PAVERS DO NOT ABUT CONCRETE SURFACING.

**3**  
C8-4 UNIT PAVER DETAIL  
SCALE: 1/2" = 1'-0"

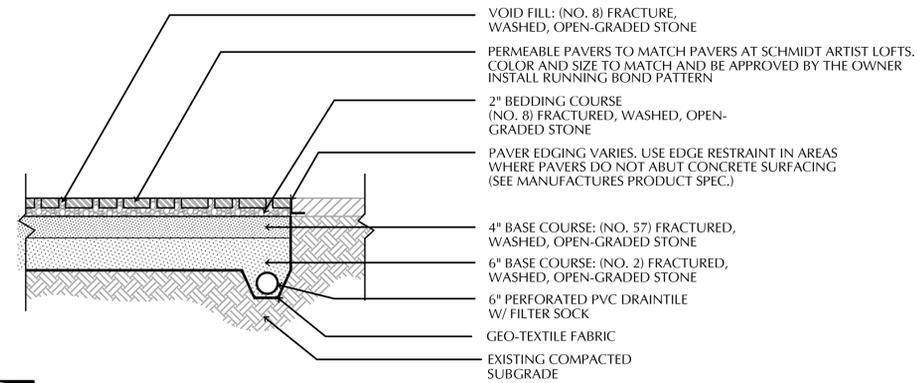


THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TREES IN A PLUMB POSITION THROUGH THE WARRANTY PERIOD. STAKING IS SUGGESTED, BUT NOT REQUIRED. ANY STAKING MUST CONFORM WITH PRACTICES AS DEFINED IN A.N.A. GUIDELINES FOR STANDARD PRACTICES  
PRUNE DAMAGED AND CROSSING BRANCHES AFTER PLANTING IS COMPLETE.  
REMOVE ALL FLAGGING AND LABELING FROM TREE.  
WATER TREE THOROUGHLY DURING PLANTING OPERATIONS. PLACE BACKFILL IN 8-12" LIFTS AND SATURATE SOIL WITH WATER. DO NOT COMPACT MORE THAN NECESSARY TO MAINTAIN PLUMB.  
REMOVE BURLAP AND ROPES FROM TOP 1/3RD OF ROOT BALL, CUT WIRE BASKET DOWN TO SECOND HORIZONTAL WIRE FROM BOTTOM AND DISPOSE OF OFF-SITE. EXPOSE ROOT FLARE AND SET AT GRADE

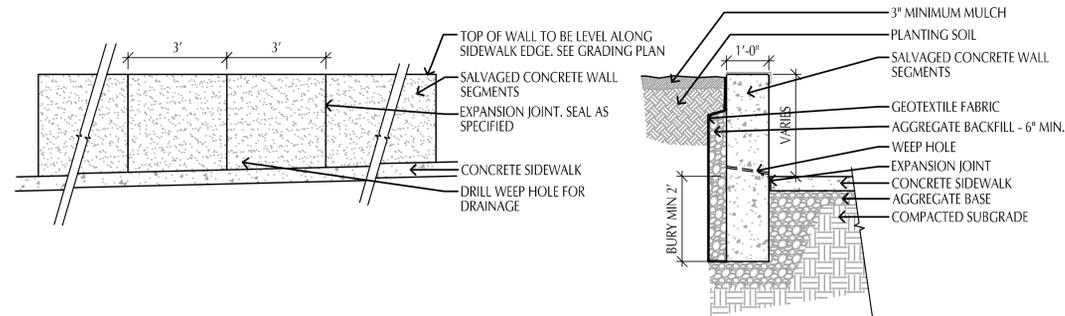
NOTE:  
ALL TREES WITHIN RIGHT OF WAY TO BE INSTALLED PER THIS DETAIL THAT INCLUDES STRUCTURAL SOIL.



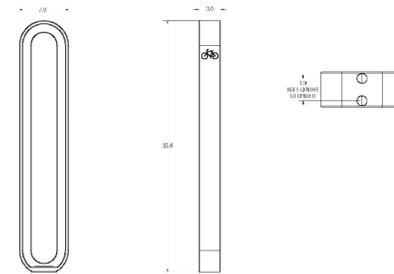
**4**  
C8-4 TREE PLANTING W/ STRUCTURAL SOIL  
SECTION SCALE: 1/2" = 1'-0"



**5**  
C8-4 PERMEABLE PAVEMENT DETAIL  
SECTION SCALE: 3/4" = 1'-0"



**6**  
C8-4 SALVAGED CONCRETE WALL  
SCALE: 1/2" = 1'-0"



CUSTOMER APPROVAL:

X \_\_\_\_\_  
DATE \_\_\_\_\_

**FORMS+SURFACES**  
DESIGNER/ARCHITECT  
530 NORTH 3RD STREET, SUITE 230  
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F. 612.254.1240  
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**7**  
C8-4 BIKE RACK

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763.424.5505  
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LOUCKS PROJECT NO. 100720H

SHEET TITLE:  
LANDSCAPE  
DETAILS

PROJECT #:	
DRAWN BY:	
CHECKED BY:	
ISSUE:	DATE:
DSI Pre-Submittal	7/24/15
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signed: \_\_\_\_\_  
date: 4/07/16 rev. no. 52050

C8-4

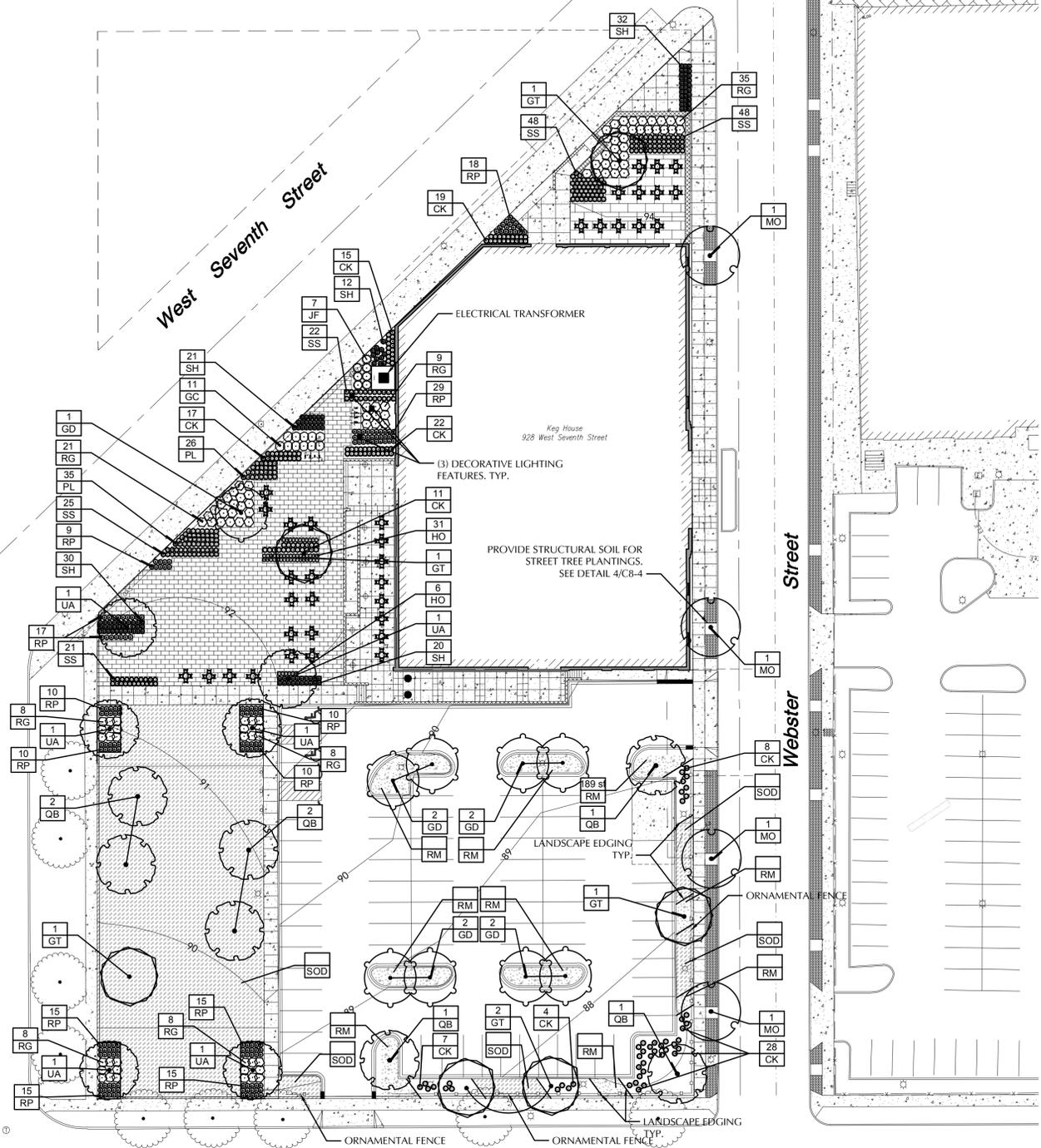
Palace Avenue  
(Publicly Traveled)

West Seventh Street

Toronto Street

James Avenue

Webster Street  
(Publicly Traveled)



PLANT SCHEDULE						
TREES						
TREES	QTY	COMMON NAME	BOTANICAL NAME	CONT	SIZE	
UA	6	Accolade Elm	Ulmus x 'Accolade'	B & B	2.5"Cal	
GD	9	Kentucky Coffee Tree	Gymnocladus dioica	B & B	2.5"Cal	
MO	4	Majestic Skies Pin Oak	Quercus ellipsoidalis 'Balskies'	B & B	2.5"Cal	
GT	6	Skyline Honey Locust	Gleditsia triacanthos 'Skyline'	B & B	2.5"Cal	
QB	7	Swamp White Oak	Quercus bicolor	B & B	2.5"Cal	
SHRUBS						
SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	MIN CONT	MIN SIZE	SPACING
GC	11	GLOSSY BLACK CHOKEBERRY	Aronia melanocarpa elata	5 gal	24" HGT	48" o.c.
RG	97	Gro-Low Fragrant Sumac	Rhus aromatica 'Gro-Low'	5 gal		48" o.c.
JF	7	Sea Green Juniper	Juniperus chinensis 'Sea Green'	5 gal		48" o.c.
ANNUALS/PERENNIALS						
ANNUALS/PERENNIALS	QTY	COMMON NAME	BOTANICAL NAME	MIN CONT	MIN SIZE	SPACING
RP	173	Coneflower	Rudbeckia fulgida 'Pot of Gold'	1 gal		24" o.c.
PL	61	Russian Sage	Perovskia x 'Little Spire'	1 gal		24" o.c.
HO	51	Stella de Oro Daylily	Hemerocallis x 'Stella de Oro'	1 gal		18" o.c.
GRASSES						
GRASSES	QTY	COMMON NAME	BOTANICAL NAME	MIN CONT	MIN SIZE	SPACING
CK	140	Feather Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'	1 gal		24" o.c.
SH	115	Prairie Dropseed	Sporobolus heterolepis	1 gal		24" o.c.
SS	164	The Blues Little Bluestem	Schizachyrium scoparium 'The Blues'	1 gal		24" o.c.
GROUND COVERS						
GROUND COVERS	CODE	COMMON NAME	BOTANICAL NAME			
	RM	ROCK MULCH GRAY TRAP ROCK - 3" DEPTH				
	SOD	TURF SOD				

GENERAL NOTES

CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID. INSPECT SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS RELATING TO THE NATURE AND SCOPE OF WORK.

VERIFY LAYOUT AND ANY DIMENSIONS SHOWN AND BRING TO THE ATTENTION OF THE LANDSCAPE ARCHITECT ANY DISCREPANCIES WHICH MAY COMPROMISE THE DESIGN AND/OR INTENT OF THE PROJECT'S LAYOUT.

ASSURE COMPLIANCE WITH ALL APPLICABLE CODES AND REGULATIONS GOVERNING THE WORK OR MATERIALS SUPPLIED.

CONTRACTOR SHALL PROTECT ALL EXISTING ROADS, CURBS/GUTTERS, TRAILS, TREES, LAWNS AND SITE ELEMENTS DURING PLANTING OPERATIONS. ANY DAMAGE TO SAME SHALL BE REPAIRED AT NO COST TO THE OWNER.

CONTRACTOR SHALL VERIFY ALIGNMENT AND LOCATION OF ALL UNDERGROUND AND ABOVE GRADE UTILITIES AND PROVIDE THE NECESSARY PROTECTION FOR SAME BEFORE CONSTRUCTION / MATERIAL INSTALLATION BEGINS (MINIMUM 10' - 0" CLEARANCE).

ALL UNDERGROUND UTILITIES SHALL BE LAID SO THAT TRENCHES DO NOT CUT THROUGH ROOT SYSTEMS OF ANY EXISTING TREES TO REMAIN.

EXISTING CONTOURS, TRAILS, VEGETATION, CURB/GUTTER AND OTHER EXISTING ELEMENTS BASED UPON INFORMATION SUPPLIED TO LANDSCAPE ARCHITECT BY OTHERS. CONTRACTOR SHALL VERIFY ANY AND ALL DISCREPANCIES PRIOR TO CONSTRUCTION AND NOTIFY LANDSCAPE ARCHITECT OF SAME.

THE ALIGNMENT AND GRADES OF THE PROPOSED WALKS, TRAILS AND/OR ROADWAYS ARE SUBJECT TO FIELD ADJUSTMENT REQUIRED TO CONFORM TO LOCALIZED TOPOGRAPHIC CONDITIONS AND TO MINIMIZE TREE REMOVAL AND GRADING. ANY CHANGE IN ALIGNMENT MUST BE APPROVED BY LANDSCAPE ARCHITECT.

PROVIDE IRRIGATION SYSTEM FOR ALL PLANTING BED AND SODDED AREAS. CONFIRM COMPLETE LIMITS OF IRRIGATION PRIOR TO SUPPLYING SHOP DRAWINGS.

LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN IRRIGATION LAYOUT PLAN AND SPECIFICATION AS A PART OF THE SCOPE OF WORK WHEN BIDDING. THESE SHALL BE APPROVED BY THE OWNER PRIOR TO ORDER AND/OR INSTALLATION. IT SHALL BE THE LANDSCAPE CONTRACTORS RESPONSIBILITY TO INSURE THAT ALL SODDED/SEEDED AND PLANTED AREAS ARE IRRIGATED PROPERLY, INCLUDING THOSE AREAS DIRECTLY AROUND AND ABUTTING BUILDING FOUNDATION.

THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER WITH A WATERING/LAWN IRRIGATION SCHEDULE APPROPRIATE TO THE PROJECT SITE CONDITIONS AND TO PLANT MATERIAL GROWTH REQUIREMENTS.

CONTRACTOR IS NOT TO SPRINKLE ACROSS PAVEMENT.

CONTRACTOR TO INCORPORATE RAIN SENSOR INTO IRRIGATION SYSTEM.

THE REMOVAL, PRUNING, AND/OR PLANTING OF TREES ON THE PUBLIC BOULEVARD REQUIRES A PERMIT FROM THE CITY FORESTER (651-632-5129)



Schizachyrium scoparium 'The Blues'



Juniperus chinensis 'Sea Green'



Calamagrostis x acutiflora 'Karl Foerster'



Rhus aromatica 'Gro-Low'



Sporobolus heterolepis



Rudbeckia fulgida 'Pot of Gold'



Hemerocallis x 'Stella de Oro'

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763.424.5505  
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LOUCKS PROJECT NO. 10072/04

SHEET TITLE:  
LANDSCAPE  
PLAN

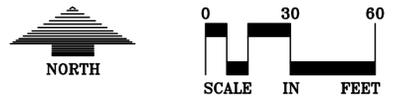
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DRAWN BY: DRW  
CHECKED BY: CHK  
ISSUE: DATE:  
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Progress 10/14/15  
HPCA Submittal 10/29/15  
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DSI Submittal 03/15/16  
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530 NORTH 3RD STREET, SUITE 230  
MINNEAPOLIS, MINNESOTA 55401  
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F. 612.844.1240  
WWW.STUDIOMARCHITECTS.NET

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 Landscape Architect under the law of the State of Minnesota.  
Signed: [Signature]  
Date: 4/07/16 reg. no. 52050

L1-1



CALL BEFORE YOU DIG!  
Gopher State One Call  
TWIN CITY AREA: 651-454-0002  
TOLL FREE: 1-800-252-1166

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND /OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

**LANDSCAPE INSTALLATION:**

COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATION WITH OTHER CONTRACTORS WORKING ON SITE.

NO PLANTING WILL BE INSTALLED UNTIL COMPLETE GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.

WHERE SOD/SEED ABUTS PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC.

SEED ALL AREAS DISTURBED DUE TO GRADING OTHER THAN THOSE AREAS NOTED TO RECEIVE SOD. SEED SHALL BE INSTALLED AND MULCHED AS PER MINDOT SPECS.

SOD ALL DESIGNATED AREAS DISTURBED DUE TO GRADING. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, THE SOD SHALL BE STAKED TO THE GROUND.

ALL PLANT MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERYMEN. UNLESS NOTED OTHERWISE, DECIDUOUS SHRUBS SHALL HAVE AT LEAST 5 CANES AT THE SPECIFIED SHRUB HEIGHT. ORNAMENTAL TREES SHALL HAVE NO V CROTCHES AND SHALL BEGIN BRANCHING NO LOWER THAN 3' ABOVE ROOT BALL. STREET AND BOULEVARD TREES SHALL BEGIN BRANCHING NO LOWER THAN 6' ABOVE FINISHED GRADE.

ANY CONIFEROUS TREE PREVIOUSLY PRUNED FOR CHRISTMAS TREE SALES SHALL NOT BE USED. ALL CONIFEROUS TREES SHALL BE FULL FORM, NATURAL TO THE SPECIES, WITHOUT TRUNING.

PLAN TAKES PRECEDENCE OVER PLANT SCHEDULE IF DISCREPANCIES IN QUANTITIES EXIST. SPECIFICATIONS TAKE PRECEDENCE OVER NOTES.

ALL PROPOSED PLANTS SHALL BE LOCATED AND STAKED AS SHOWN ON PLAN. LANDSCAPE ARCHITECT MUST APPROVE ALL STAKING OF PLANT MATERIAL PRIOR TO ANY AND ALL DIGGING.

NO PLANT MATERIAL SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL IS REQUESTED OF THE LANDSCAPE ARCHITECT BY THE LANDSCAPE CONTRACTOR PRIOR TO THE SUBMISSION OF A BID AND/OR QUOTATION.

ADJUSTMENTS IN LOCATION OF PROPOSED PLANT MATERIALS MAY BE NEEDED IN FIELD. SHOULD AN ADJUSTMENT BE ADVISED, THE LANDSCAPE ARCHITECT MUST BE NOTIFIED.

ALL PLANT MATERIALS SHALL BE FERTILIZED UPON INSTALLATION WITH DRIED BONE MEAL, OTHER APPROVED FERTILIZER MIXED IN WITH THE PLANTING SOIL PER THE MANUFACTURER'S INSTRUCTIONS OR MAY BE TREATED FOR SUMMER AND FALL INSTALLATION WITH AN APPLICATION OF GRANULAR 0-20-20 OF 12 OZ PER 2.5" CALIPER PER TREE AND 6 OZ PER SHRUB WITH AN ADDITIONAL APPLICATION OF 10-10-10 THE FOLLOWING SPRING IN THE TREE SAUCER.

ALL PLANTING AREAS RECEIVING GROUND COVER, PERENNIALS, ANNUALS, AND/OR VINES SHALL RECEIVE A MINIMUM OF 12" DEPTH OF PLANTING SOIL CONSISTING OF AT LEAST 45 PARTS TOPSOIL, 45 PARTS PEAT OR MANURE AND 10 PARTS SAND.

ALL PLANTS TO BE INSTALLED AS PER PLANTING DETAILS.

WRAPPING MATERIAL SHALL BE CORRUGATED PVC PIPING 1" GREATER IN CALIPER THAN THE TREE BEING PROTECTED OR QUALITY, HEAVY, WATERPROOF CREPE PAPER MANUFACTURED FOR THIS PURPOSE. WRAP ALL DECIDUOUS TREES PLANTED IN THE FALL PRIOR TO 12-1 AND REMOVE ALL WRAPPING AFTER 5-1.

BLACK METAL EDGER TO BE USED TO CONTAIN SHRUBS, PERENNIALS, AND ANNUALS WHERE BED MEETS SOD/SEED UNLESS NOTED OTHERWISE.

ALL SHRUB BED MASSINGS TO RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH AND FIBER MAT WEED BARRIER.

ALL TREES NOT IN PLANTING BEDS TO RECEIVE A 4" DIA. TREE RING WITH 4" DEEP SHREDDED HARDWOOD MULCH. NO MULCH IN DIRECT CONTACT WITH TREE TRUNK.

ALL ANNUAL AND PERENNIAL PLANTING BEDS TO RECEIVE 3" DEEP SHREDDED HARDWOOD MULCH WITH NO WEED BARRIER.

SPREAD GRANULAR PRE EMERGENT HERBICIDE (PREEN OR EQUAL) PER MANUFACTURERS RECOMMENDATIONS UNDER ALL MULCHED AREAS.

IF THE LANDSCAPE CONTRACTOR IS CONCERNED OR PERCEIVES ANY DEFICIENCIES IN THE PLANT SELECTIONS, SOIL CONDITIONS OR ANY OTHER SITE CONDITION WHICH MIGHT NEGATIVELY AFFECT PLANT ESTABLISHMENT, SURVIVAL OR GUARANTEE, HE MUST BRING THESE DEFICIENCIES TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO PROCUREMENT AND/OR INSTALLATION.

CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR THE OWNER ACCEPTANCE INSPECTION OF ALL LANDSCAPE AND SITE IMPROVEMENTS.

CONTRACTOR IS RESPONSIBLE FOR ON-GOING MAINTENANCE OF ALL NEWLY INSTALLED MATERIALS UNTIL TIME OF OWNER ACCEPTANCE. ANY ACTS OF VANDALISM OR DAMAGE WHICH MAY OCCUR PRIOR TO OWNER ACCEPTANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL PROVIDE THE OWNER WITH A MAINTENANCE PROGRAM INCLUDING, BUT NOT NECESSARILY LIMITED TO, PRUNING, FERTILIZATION AND DISEASE/PEST CONTROL.

CONTRACTOR SHALL GUARANTEE NEW PLANT MATERIAL THROUGH ONE CALENDAR YEAR FROM THE DATE OF OWNER ACCEPTANCE.

WARRANTY (ONE FULL GROWING SEASON) FOR LANDSCAPE MATERIALS SHALL BEGIN ON THE DATE OF ACCEPTANCE BY THE LANDSCAPE ARCHITECT AFTER THE COMPLETION OF PLANTING OF ALL LANDSCAPE MATERIALS. NO PARTIAL ACCEPTANCE WILL BE CONSIDERED.

REPRODUCIBLE AS-BUILT DRAWING(S) OF ALL LANDSCAPE INSTALLATION AND SITE IMPROVEMENTS UPON COMPLETION OF CONSTRUCTION INSTALLATION AND PRIOR TO PROJECT ACCEPTANCE.

UNLESS NOTED OTHERWISE THE APPROPRIATE DATES FOR SPRING PLANT MATERIAL INSTALLATION AND SEED/SOD PLACEMENT IS FROM THE TIME GROUND HAS THAWED TO JUNE 15.

FALL SODDING IS GENERALLY ACCEPTABLE FROM AUGUST 15 - NOVEMBER 1. FALL SEEDING FROM AUGUST 15 - SEPTEMBER 15; DORMANT SEEDING IN THE FALL SHALL NOT OCCUR PRIOR TO NOVEMBER 1. PLANTING OUTSIDE THESE DATES IS NOT RECOMMENDED. ANY ADJUSTMENT MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.

CONIFEROUS PLANTING MAY OCCUR FROM AUGUST 15 - OCTOBER 1 AND FALL DECIDUOUS PLANTING FROM THE FIRST FROST UNTIL NOVEMBER 15. PLANTING OUTSIDE THESE DATES IS NOT RECOMMENDED. ANY ADJUSTMENT MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.

PROTECT ALL EXISTING OAKS ON SITE SCHEDULED TO REMAIN. IF EXISTING OAKS ARE DAMAGED IN ANY MANNER, ABOVE OR BELOW GROUND IN THE ROOT SYSTEM, AN ASPHALTIC TREE PRUNING PAINT SHOULD BE APPLIED IMMEDIATELY AFTER WOUNDING. OAKS ARE NOT TO BE PRUNED, REMOVED OR TRANSPANTED BETWEEN APRIL 15 AND JULY 1. NOTIFY LANDSCAPE ARCHITECT IF THESE DATES ARE UNAVOIDABLE.

LANDSCAPE CONTRACTOR SHALL ESTABLISH TO HIS SATISFACTION THAT SOIL AND COMPACTION CONDITIONS ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AT AND AROUND THE BUILDING SITE.

**IRRIGATION NOTES:**

VERIFY EXISTING/PROPOSED IRRIGATION SYSTEM LAYOUT AND CONFIRM COMPLETE LIMITS OF IRRIGATION PRIOR TO SUPPLYING SHOP DRAWINGS.

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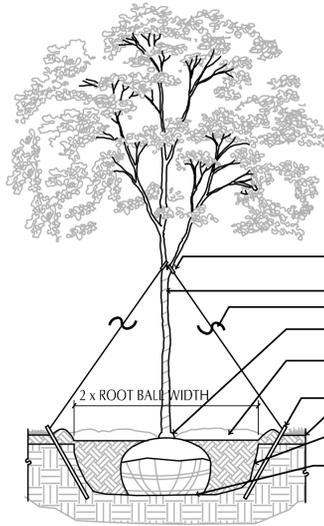
PROVIDE SIX (4) QUICK COUPLER LOCATIONS. COORDINATE LOCATIONS WITH OWNERS REPRESENTATIVE.

THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER WITH A WATERING/LAWN IRRIGATION SCHEDULE APPROPRIATE TO THE PROJECT SITE CONDITIONS AND TO PLANT MATERIAL GROWTH REQUIREMENTS.

CONTRACTOR IS NOT TO SPRINKLE ACROSS PAVEMENT.

CONTRACTOR TO INCORPORATE RAIN SENSOR INTO IRRIGATION SYSTEM.

PLANTINGS OUTSIDE THE LIMITS OF IRRIGATION ARE TO BE WATERED REGULARLY UNTIL PLANTING/SOD/SEED HAS BEEN ESTABLISHED.



THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TREES IN A PLUMB POSITION THROUGH THE WARRANTY PERIOD. STAKING IS SUGGESTED, BUT NOT REQUIRED. ANY STAKING MUST CONFORM WITH PRACTICES AS DEFINED IN A.N.A. GUIDELINES FOR STANDARD PRACTICES

PRUNE DAMAGED AND CROSSING BRANCHES AFTER PLANTING IS COMPLETE.

CUT BACK WIRE BASKET

REMOVE ALL FLAGGING AND LABELING FROM TREE.

WATER TREE THOROUGHLY DURING PLANTING OPERATIONS. PLACE BACKFILL IN 8-12" LIFTS AND SATURATE SOIL WITH WATER. DO NOT COMPACT MORE THAN NECESSARY TO MAINTAIN PLUMB.

16"x2" POLYPROPYLENE OR POLYETHYLENE STRAP

TREE WRAP TO FIRST BRANCH

SAFETY FLAGGING - ONE PER WIRE

ROOT FLARE EVEN WITH OR JUST ABOVE GRADE.

MULCH - 4" DEEP. NO MULCH IN CONTACT WITH TRUNK - SEE SPECS.

WOOD STAKE (OPTIONAL)

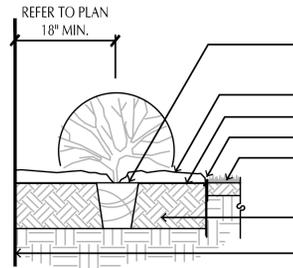
EDGE VARIES - SEE PLAN

SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING

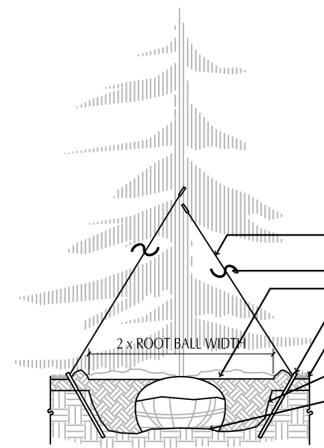
SET PLANT ON UNDISTURBED NATIVE SOIL

CONTRACTOR IS RESPONSIBLE FOR TESTING PERCOLATION RATES PRIOR TO PLANTING. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF POOR DRAINAGE EXISTS.

**1**  
L2-1  
DECIDUOUS TREE PLANTING DETAIL  
SCALE: 1/2" = 1'-0"  
Deciduous Tree.DWG



**3**  
L2-1  
SHRUB PLANTING DETAIL  
SCALE: 3/4" = 1'-0"



THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TREES IN A PLUMB POSITION THROUGH THE WARRANTY PERIOD. STAKING IS SUGGESTED, BUT NOT REQUIRED. ANY STAKING MUST CONFORM WITH PRACTICES AS DEFINED IN A.N.A. GUIDELINES FOR STANDARD PRACTICES

PRUNE ANY DAMAGED BRANCHES AFTER PLANTING IS COMPLETE.

REMOVE ALL FLAGGING AND LABELING FROM TREE.

WATER TREE THOROUGHLY DURING PLANTING OPERATIONS. PLACE BACKFILL IN 8-12" LIFTS AND SATURATE SOIL WITH WATER. DO NOT COMPACT MORE THAN NECESSARY TO MAINTAIN PLUMB.

16"x2" POLYPROPYLENE OR POLYETHYLENE STRAP

SAFETY FLAGGING - ONE PER WIRE

MULCH - 4" DEEP. PER SPECS. MULCH MUST NOT BE IN CONTACT WITH TRUNK.

WOOD STAKE (OPTIONAL)

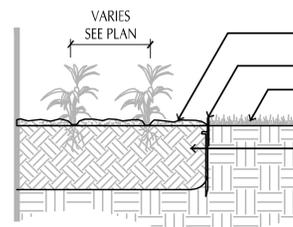
EDGE VARIES - SEE PLAN

SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING

ROOT BALL SET ON MOUNDED SUBGRADE

CONTRACTOR IS RESPONSIBLE FOR TESTING PERCOLATION RATES PRIOR TO PLANTING. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF POOR DRAINAGE EXISTS.

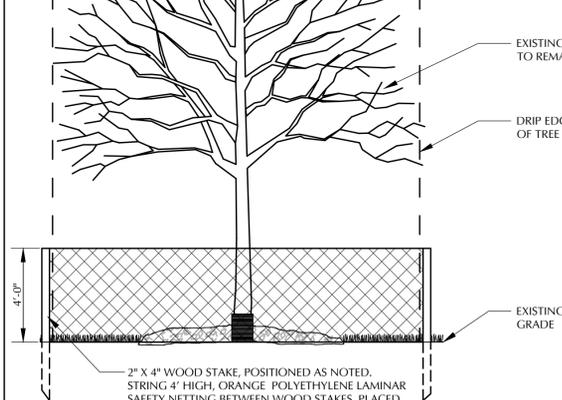
**2**  
L2-1  
CONIFEROUS TREE PLANTING DETAIL  
SCALE: 1/2" = 1'-0"  
Coniferous Tree.DWG



**4**  
L2-1  
PERENNIAL PLANTING  
SCALE: 3/4" = 1'-0"  
Perennial.Dwg

**TREE PROTECTION NOTE:**  
INSTALL FENCE AROUND EACH TREE TO BE PROTECTED PRIOR TO GRADING. FENCE SHALL BE PLACED AT THE DRIP EDGE OR CRITICAL ROOT ZONES OF THE TREES. FENCING SHALL BE NO CLOSER THAN 10' TO THE TRUNK OF ANY TREE TO BE PROTECTED. THE PERIMETERS FOR TREES BEING PROTECTED SHALL BE DESIGNATED AT ALL TIMES DURING CONSTRUCTION ACTIVITY AND SIGNAGE SHALL BE INSTALLED AT ALL TREE PROTECTION AREAS THAT INSTRUCTS WORKERS TO STAY OUT. CONTRACTOR SHALL AVOID ALL AREAS WITHIN TREE PROTECTION FENCE. SOIL SHOULD BE PROTECTED FROM EROSION AND CHANGES IN CHEMISTRY FROM CONCRETE OR TOXIC MATERIALS SUCH AS FUELS AND PAINTS.

THE CONTRACTOR SHALL HAVE "TREE PAINT" ON SITE AT ALL TIMES. IF AN OAK IS WOUNDED DURING CONSTRUCTION, THE CONTRACTOR MUST IMMEDIATELY APPLY PAINT TO THE WOUND IN ORDER TO PREVENT OAK WILT. ALL DAMAGE TO TREES TO BE PROTECTED SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND LANDSCAPE ARCHITECT.



2" X 4" WOOD STAKE, POSITIONED AS NOTED. STRING 4' HIGH, ORANGE POLYETHYLENE LAMINAR SAFETY NETTING BETWEEN WOOD STAKES. PLACED 5' ON CENTER AND PLACED BETWEEN TREE PROTECTION AND DISTURBED AREAS.

**TREE PROTECTION**  
LOUCKS PLATE NO. **EROS-8**  
DRAWN 12/2013

**KEG & CASE MARKET**  
928 W 7TH STREET  
ST. PAUL, MN 55102

**LOUCKS**  
PLANNING  
CIVIL ENGINEERING  
LAND SURVEYING  
LANDSCAPE ARCHITECTURE  
ENVIRONMENTAL

7200 Hennock Lane, Suite 300  
Maple Grove, MN 55369  
763.424.5505  
www.loucksinc.com

LOUCKS PROJECT NO. 100720H

**SHEET TITLE:**  
LANDSCAPE  
DETAILS

PROJECT #:

DRAWN BY:

CHECKED BY:

ISSUE: DATE:

DSI Pre-Submittal	7/24/15
Progress	10/14/15
HPCA Submittal	10/29/15
Pricing	01/04/16
DSI Submittal	03/15/16
HPC Submittal	04/07/16



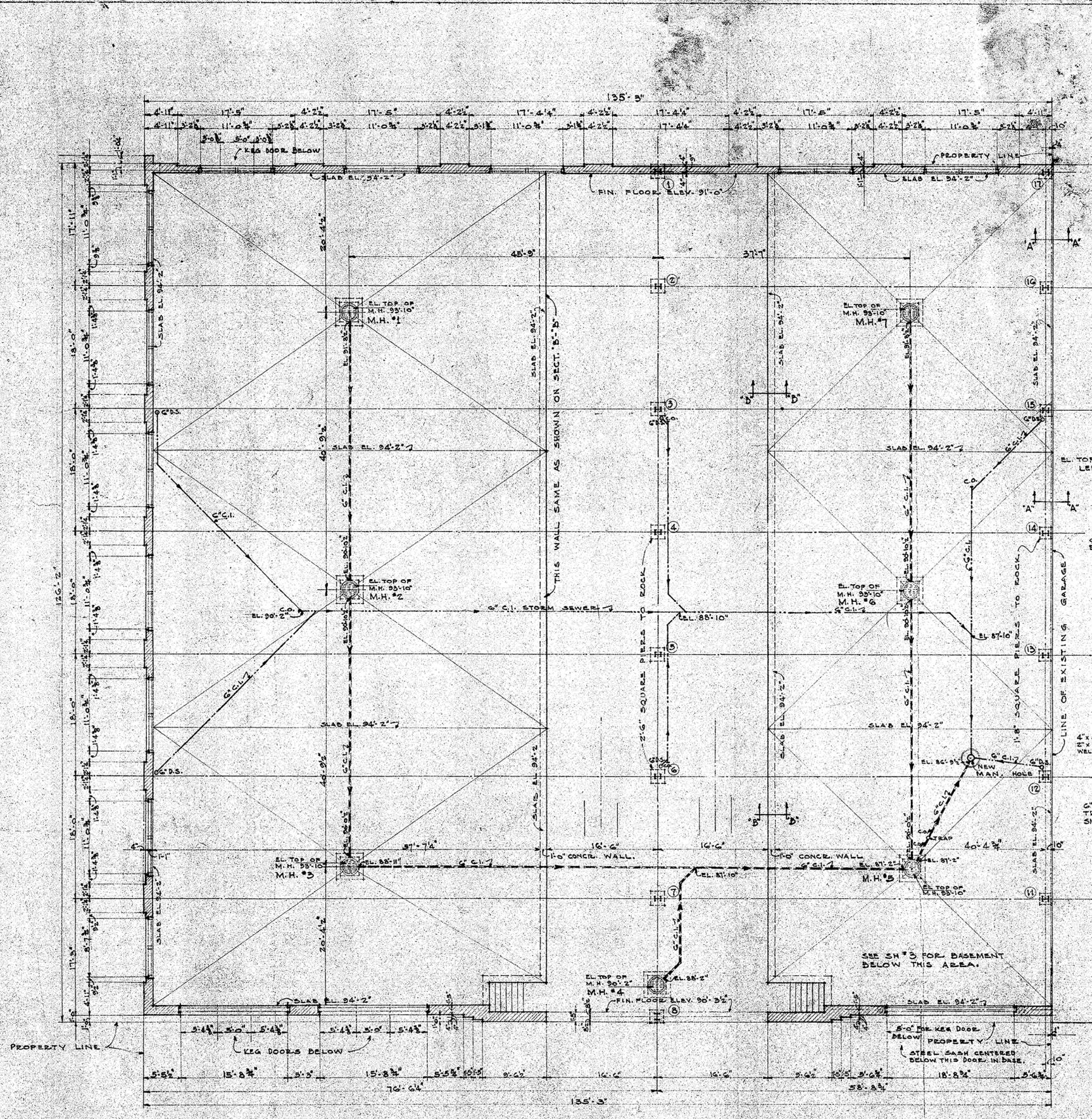
**STUDIO M ARCHITECTS, INC.**  
530 NORTH 3RD STREET, SUITE 230  
MINNEAPOLIS, MINNESOTA 55401

P. 612.824.8376  
F. 612.844.1240  
WWW.STUDIOMARCHITECTS.NET

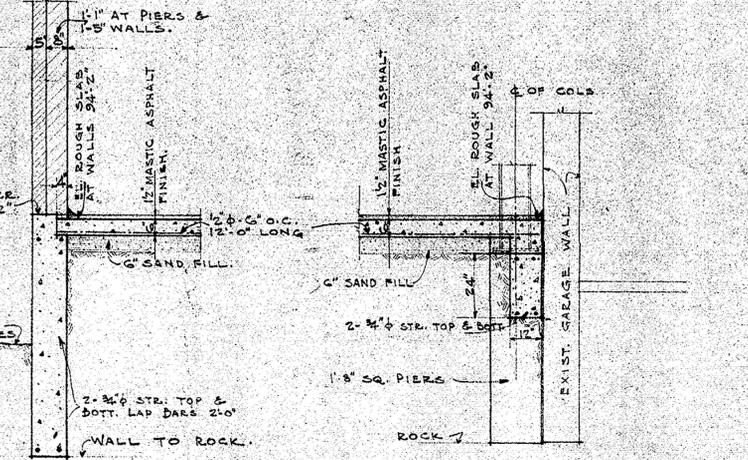
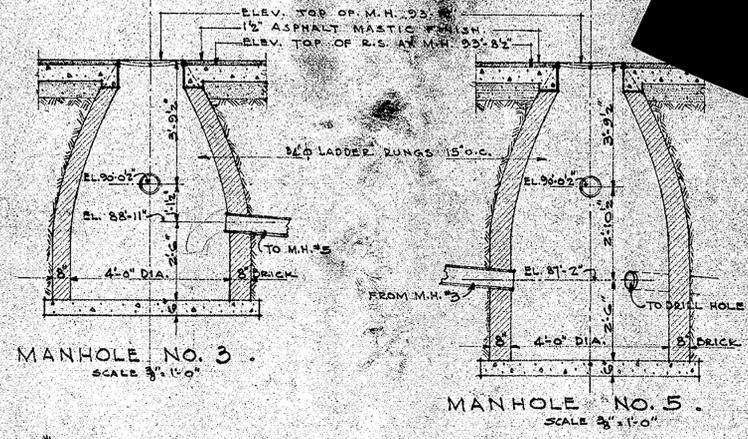
I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the law of the state of Minnesota

signed: \_\_\_\_\_  
date: 4/07/16 reg. no. 52050

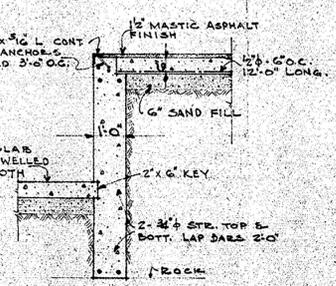
**L2-1**



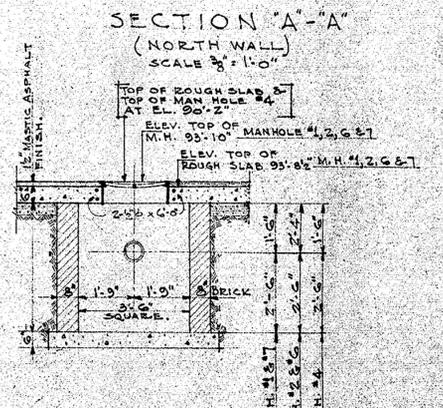
FOUNDATION & FIRST FLOOR PLAN.  
SCALE 1/8" = 1'-0"



TYPICAL WALL SECTION.  
(SOUTH, EAST & WEST WALL)  
SCALE 3/8" = 1'-0"



SECTION "D-D"  
SCALE 3/8" = 1'-0"



DETAIL OF MANHOLES 1, 2, 4, 6 & 7.  
NO SCALE.

ALL MANHOLE COVERS TO BE CONCAVE AS PER ST. PAUL FOUNDRY CO.'S FIGURE 42, WITH FRAME.  
ALL SEWER ELEV. GIVEN ON PLAN ARE TO CENTER OF PIPE.  
ALL SLABS ON FILL TO BE REINFORCED WITH 6x6 @ 36\"/>

KEG HOUSE FOR THE  
JACOB SCHMIDT BREWING CO.  
ST. PAUL, MINN.  
WALTER W. MAGEE COMPANY  
DESIGN & CONSTRUCTION  
ST. PAUL, MINN.

6-7-37  
6-12-37  
6-16-37

KEG & CASE MARKET  
928 W 7TH STREET  
ST. PAUL, MN 55102

SHEET TITLE:  
HISTORICAL  
PLAN OF  
FOUNDATION AND  
FIRST FLOOR PLAN  
(1937)

PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
HISTORICAL 10.29.15  
HISTORICAL 03.08.16



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architect under the law of  
the state of MINNESOTA

signed:  
date: 03.08.16 reg. no. 45178

H1.1



SHEET TITLE:  
 HISTORICAL  
 PLAN OF TUNNEL  
 TO KEG HOUSE TO  
 WASH HOUSE  
 (1937)

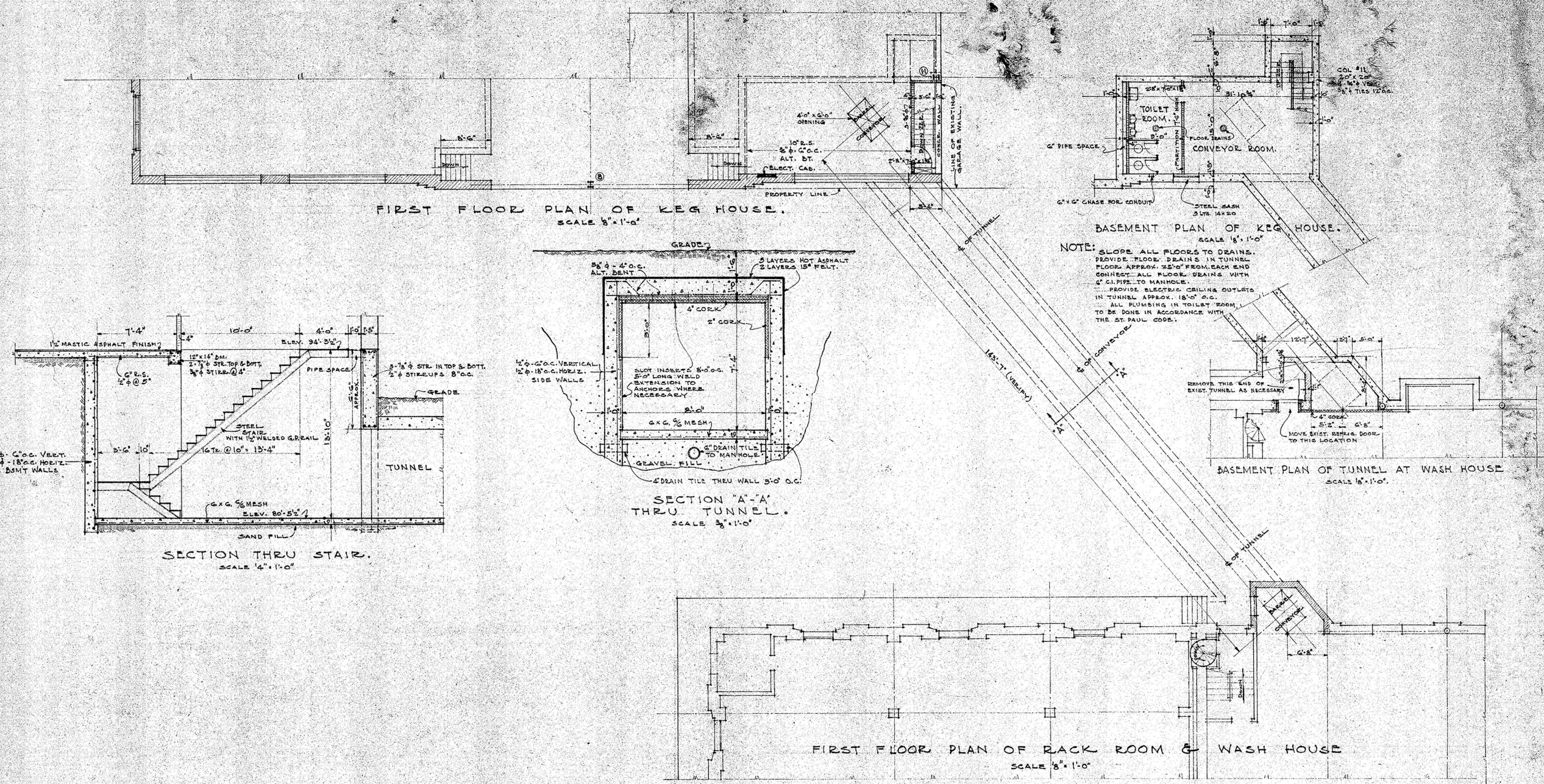
PROJECT #: 1294  
 DRAWN BY: DAA CJG  
 CHECKED BY: AM  
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 signed:  
 date: 03.08.16 reg. no. 45178



KEG HOUSE FOR THE  
 JACOB SCHMIDT BREWING CO.  
 WALTER ARNOLD BREWMASTER.  
 WALTER W. MAGEE COMPANY  
 DESIGN & CONSTRUCTION.  
 ST. PAUL, MINN.  
 6-14-37

SHEET TITLE:  
 HISTORICAL  
 PLAN OF EXISTING  
 ELEVATIONS AND  
 EXISTING GLASS  
 BLOCK  
 DETAILS (1937)

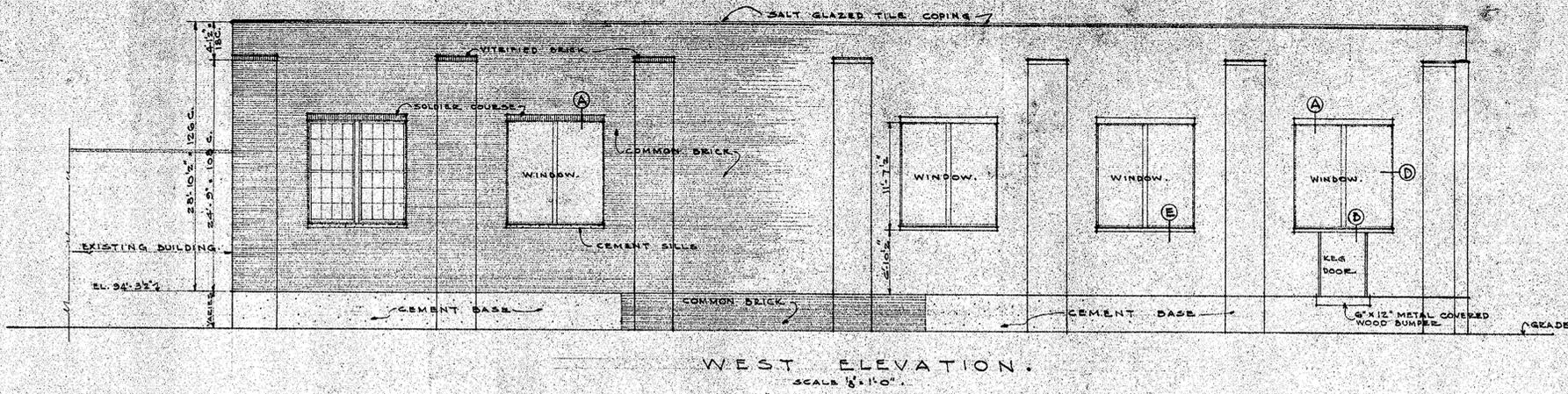
PROJECT #: 1294  
 DRAWN BY: DAA CJG  
 CHECKED BY: AM  
 ISSUE: DATE:  
 HISTORICAL 10.29.15  
 HISTORICAL 03.08.16



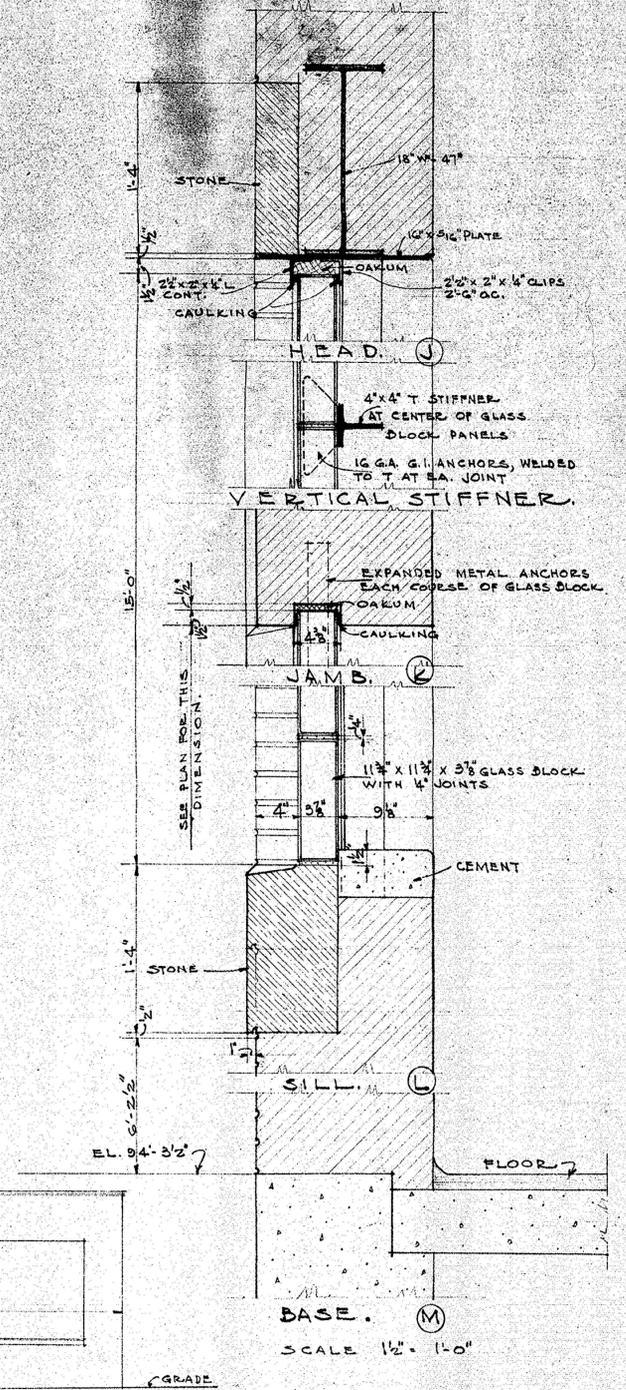
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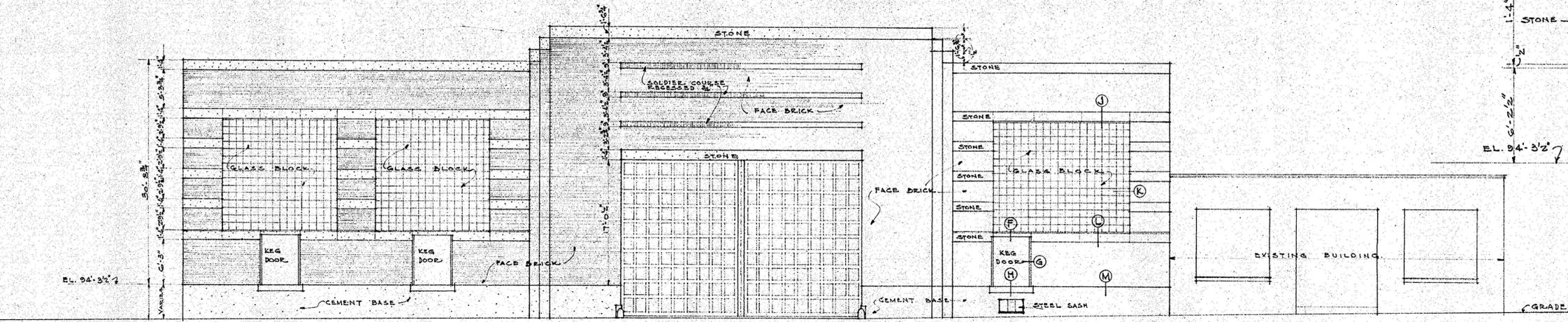
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 signed: \_\_\_\_\_  
 date: 03.08.16 reg. no. 45178



WEST ELEVATION.  
 SCALE 1/8" = 1'-0"

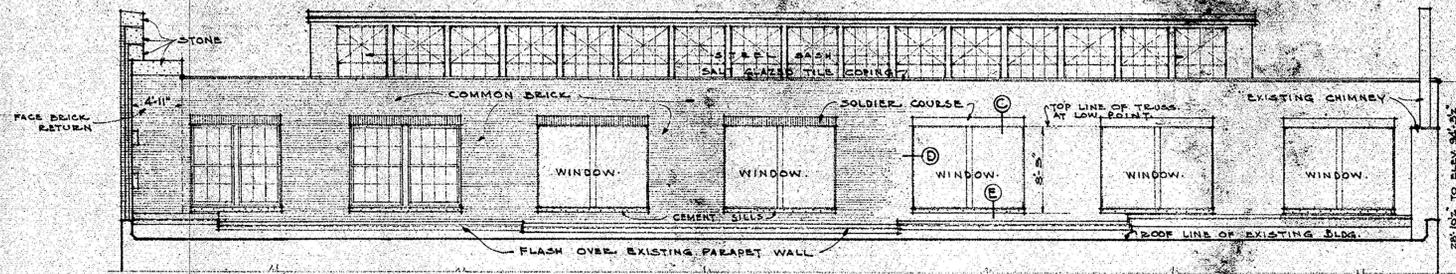


SCALE 1/2" = 1'-0"

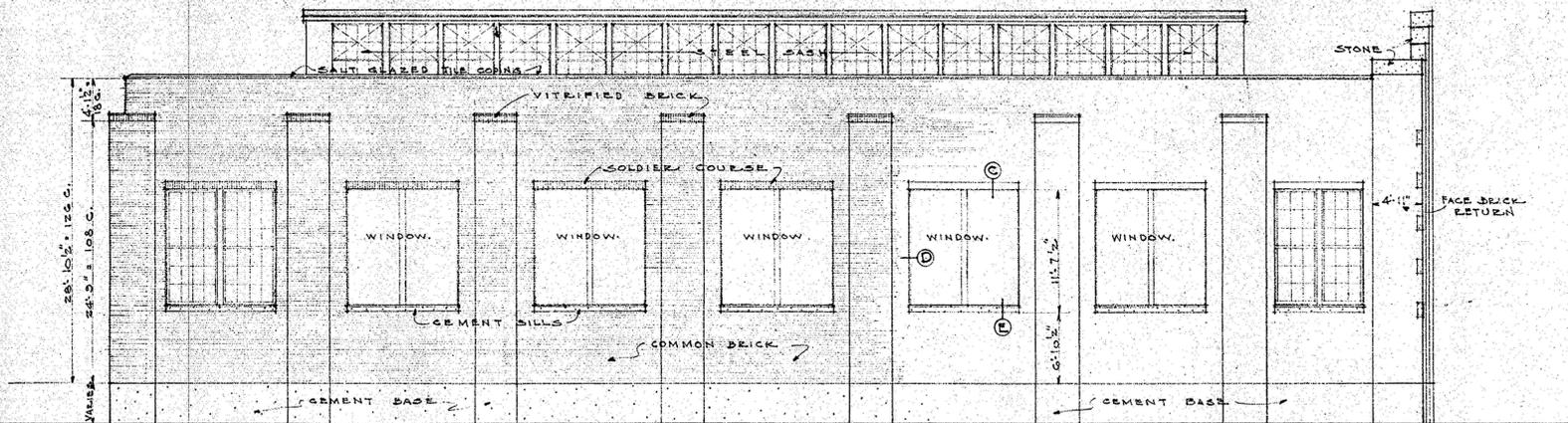


EAST ELEVATION.  
 SCALE 1/8" = 1'-0"

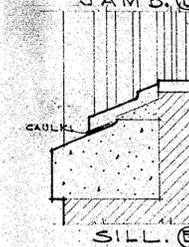
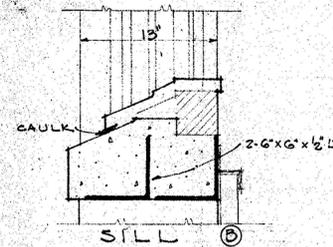
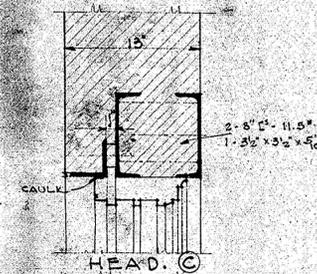
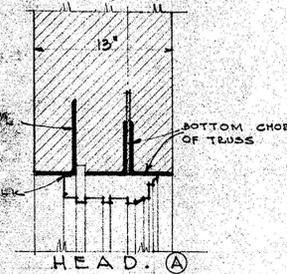
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 ST. PAUL MINN.  
 WALTER W. MAGEE COMPANY  
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 ST. PAUL 6-20-37



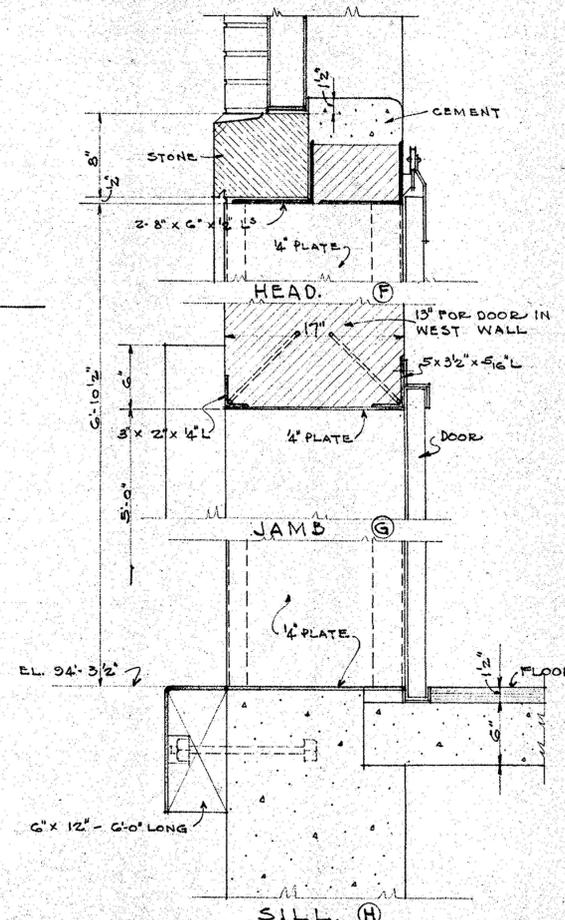
NORTH ELEVATION.  
SCALE 1/8" = 1'-0"



SOUTH ELEVATION.  
SCALE 1/8" = 1'-0"



HEAD OF KEG DOOR  
IN 13" WALL  
TYPICAL DETAILS OF WINDOWS.  
SCALE 1/2" = 1'-0"



KEG DOOR DETAILS.  
SCALE 1/2" = 1'-0"

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WALTER W. MAGEE COMPANY  
DESIGN & CONSTRUCTION.  
ST. PAUL MINN.  
6-20-37

KEG & CASE MARKET  
928 W 7TH STREET  
ST. PAUL, MN 55102

SHEET TITLE:  
HISTORICAL  
PLAN OF EXISTING  
ELEVATIONS AND  
EXISTING WINDOW  
AND KEG DOOR  
DETAILS(1937)

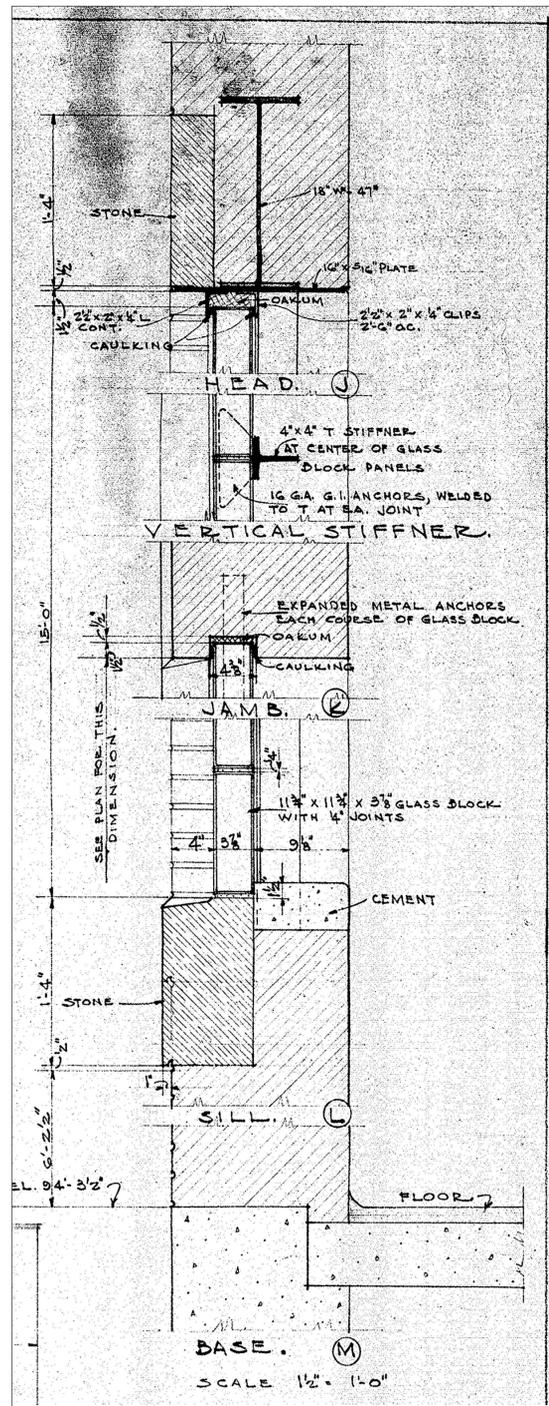
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ISSUE: DATE:  
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HISTORICAL 03.08.16



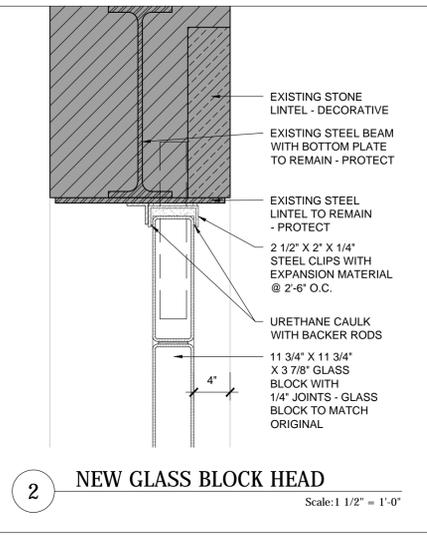
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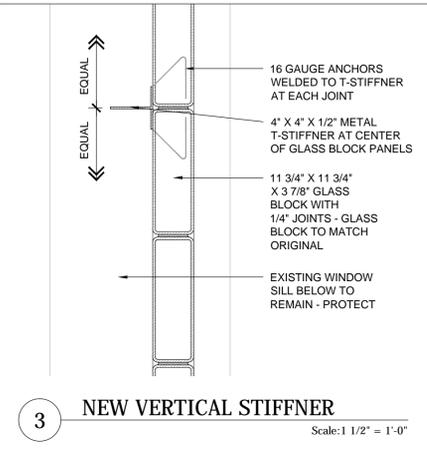
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signed:  
date: 03.08.16 reg. no. 45178



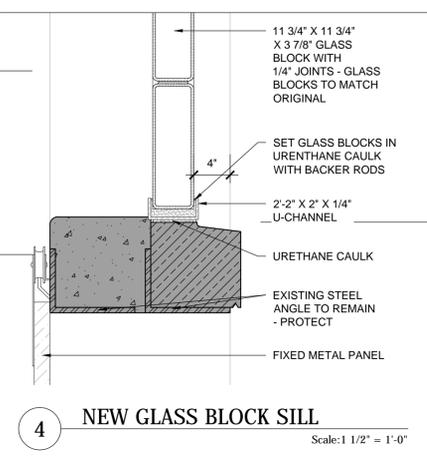
1 EXISTING 1937 GLASS BLOCK DETAILS  
Scale: 1 1/2" = 1'-0"



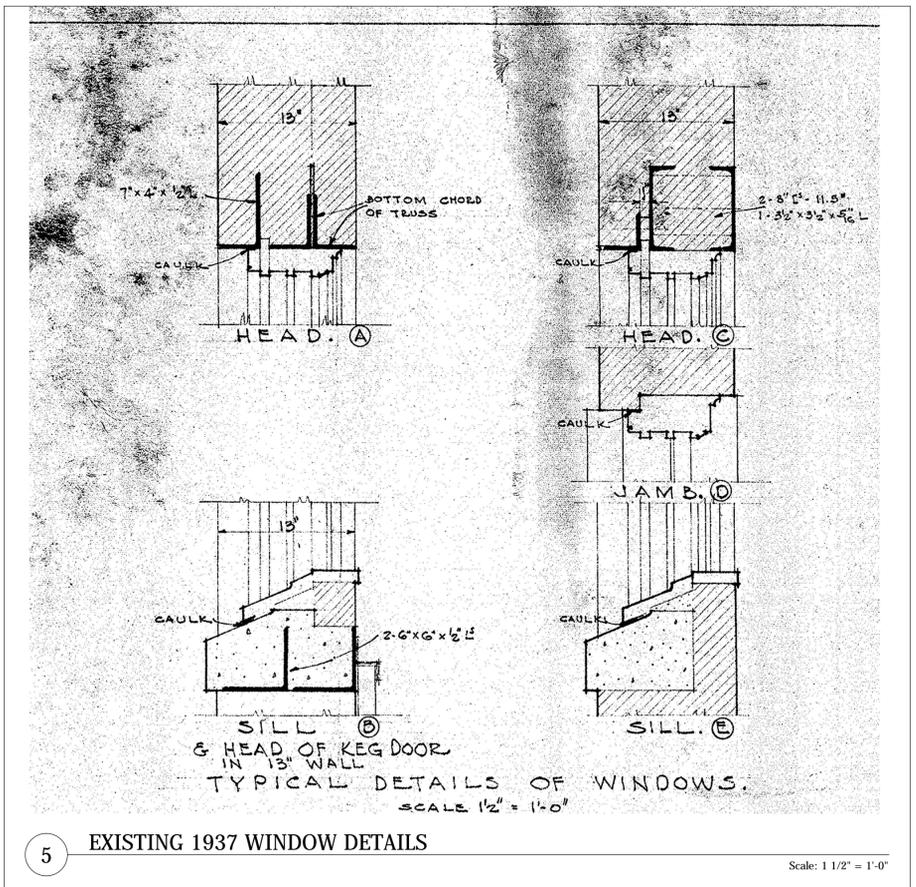
2 NEW GLASS BLOCK HEAD  
Scale: 1 1/2" = 1'-0"



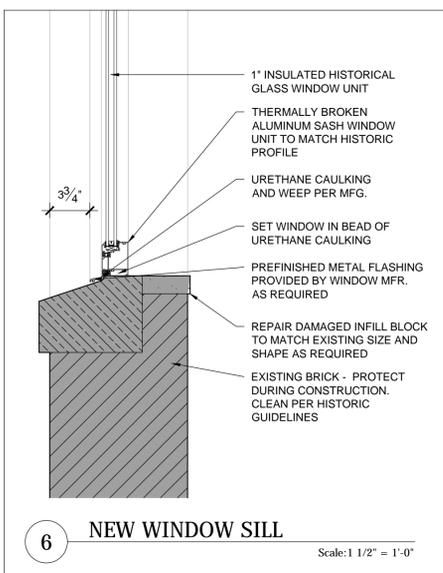
3 NEW VERTICAL STIFFENER  
Scale: 1 1/2" = 1'-0"



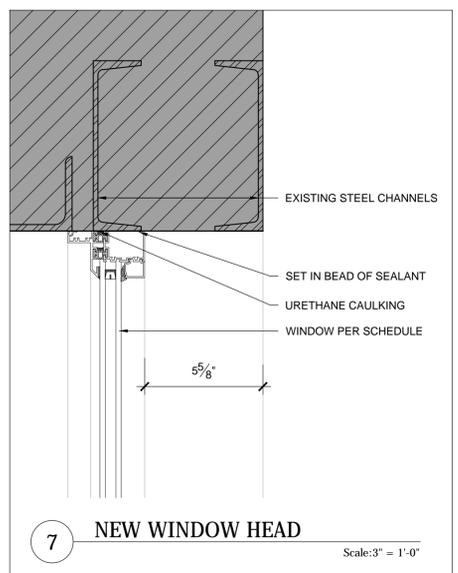
4 NEW GLASS BLOCK SILL  
Scale: 1 1/2" = 1'-0"



5 EXISTING 1937 WINDOW DETAILS  
Scale: 1 1/2" = 1'-0"



6 NEW WINDOW SILL  
Scale: 1 1/2" = 1'-0"



7 NEW WINDOW HEAD  
Scale: 3" = 1'-0"

KEG & CASE MARKET  
928 W 7TH STREET  
ST. PAUL, MN 55102

SHEET TITLE:  
SIDE BY SIDE OF  
HISTORIAL  
WINDOW HEAD,  
JAMB & SILL  
WITH NEW  
WINDOW HEAD,  
JAMB & SILL

PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
HISTORICAL 10.29.15  
HISTORICAL 03.08.16



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H1.6

### DEMOLITION LEGEND

-  EXISTING CONSTRUCTION AND STRUCTURAL ELEMENTS TO REMAIN. PATCH AND REPAIR SURFACES AFFECTED BY DEMOLITION AS REQUIRED FOR NEW FINISHES.
-  EXISTING CONSTRUCTION TO BE REMOVED.

### DEMOLITION KEYNOTES

- 1 COORDINATE SITE SELECTIVE DEMOLITION REQUIRED WITH EXTENTS AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 2 REMOVE EXISTING CONCRETE SIDEWALK AND PREPARE AREA FOR NEW CONSTRUCTION AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 3 REMOVE EXISTING CONCRETE SLAB AND PREPARE AREA FOR NEW CONSTRUCTION AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 4 SHADED WALLS INDICATE EXISTING WALLS TO REMAIN - PROTECT DURING CONSTRUCTION - ALL WALL FINISHES TO BE REMOVED AND SURFACE PREPARED TO ACCEPT NEW FINISH MATERIALS AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 5 VERIFY AND PROTECT ALL EXISTING FIRE RATED WALL ASSEMBLIES.
- 6 REMOVE EXISTING HOLLOW METAL DOOR - FRAME TO REMAIN - PROTECT DURING CONSTRUCTION.
- 7 REMOVE EXISTING CONTEMPORARY METAL INSULATED WALL PANELS AND FRP FINISH, OR OTHER FRAMING, INSULATION, ETC. TO EXPOSE EXISTING HISTORIC MASONRY - PREPARE TO ACCEPT NEW FINISH MATERIALS AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 8 REMOVE ALL EXISTING CONTEMPORARY CONDUIT, TERMINALS, FIXTURES, ETC. ATTACHED TO OR WITHIN PANELING TO BE REMOVED.
- 9 REMOVE ALL EXISTING ATTACHED/ ANCHORED ELEMENTS TO THE EXISTING WALL - WHEN REMOVING, USE THE METHOD LEAST LIKELY TO COMPROMISE DAMAGE OR DEGRADE THE EXISTING CONDITION.
- 10 EXISTING STRUCTURAL COLUMNS TO REMAIN - PROTECT DURING CONSTRUCTION.
- 11 REMOVE ALL CONDUIT, FIXTURES, ETC AFFIXED TO EXISTING STRUCTURAL COLUMN TO REMAIN
- 12 EXISTING ROOF DRAIN PIPE EXTENSION TO REMAIN - PROTECT DURING CONSTRUCTION.
- 13 REMOVE EXISTING CONTEMPORARY CONCRETE FLOOR SLAB AND COMPACTED FILL - PREPARE TO INSTALL NEW CONCRETE FLOOR SLAB AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 14 CAP AND SEAL ANY EXISTING UTILITIES TO BE ABANDONED BELOW THE NEW CONCRETE FLOOR SLAB LOCATION AS REQUIRED - REFER TO DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 15 EXISTING SANITARY CLEAN-OUTS TO BE ABANDONED TO BE CUT AND CAPPED BELOW THE PROPOSED NEW CONCRETE FLOOR SLAB ELEVATION - REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- 16 REMOVE EXISTING CONTEMPORARY CONCRETE MASONRY UNITY WALL ASSEMBLY.
- 17 PREPARE EXISTING ROOF ACCESS SHIPS LADDER TO BE REVISED/ ADJUSTED BASED ON NEW CONSTRUCTION AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 18 EXISTING DAMAGED GLASS BLOCK WINDOW SYSTEM TO BE REMOVED - REFER TO ELEVATIONS FOR LOCATION AND EXTENTS OF DEMOLITION.
- 19 EXISTING WINDOW SYSTEM TO BE REMOVED - REFER TO ELEVATIONS FOR LOCATIONS AND EXTENTS OF DEMOLITION.
- 20 EXISTING OPENING INFILL WALL ASSEMBLY TO BE REMOVED - REFER TO ELEVATIONS FOR LOCATIONS AND EXTENTS OF DEMOLITION.
- 21 COORDINATE SELECTIVE DEMOLITION OF EXISTING MECHANICAL EQUIPMENT WITH DRAWINGS BY OTHERS - PROTECT EXISTING EQUIPMENT TO REMAIN.
- 22 REMOVE ALL EXISTING CONTEMPORARY MECHANICAL EQUIPMENT, DUCTWORK, MOUNTING SUPPORTS, ETC - REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 23 REMOVE ALL EXISTING CONTEMPORARY EQUIPMENT ATTACHED TO EXISTING ROOF/ CEILING ASSEMBLY TO REMAIN - PROTECT EXISTING STRUCTURE.
- 24 COORDINATE SELECTIVE DEMOLITION OF EXISTING PLUMBING EQUIPMENT WITH DRAWINGS BY OTHERS - PROTECT EXISTING EQUIPMENT TO REMAIN.
- 25 COORDINATE SELECTIVE DEMOLITION OF EXISTING ELECTRICAL EQUIPMENT WITH DRAWINGS BY OTHERS - PROTECT EXISTING EQUIPMENT TO REMAIN.
- 26 REMOVE ALL EXISTING TEMPORARY LIGHTING AND CIRCUITRY - REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 27 REMOVE ALL EXISTING CONTEMPORARY ELECTRICAL EQUIPMENT, CONDUIT, FIXTURES, TERMINALS, MOUNTING SUPPORTS, ETC. - REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 28 REFER TO DRAWINGS BY OTHERS FOR SCOPE AND EXTENTS OF SELECTIVE DEMOLITION TO EXISTING FIRE SUPPRESSION SYSTEM.

SHEET TITLE:  
 DEMOLITION  
 FLOOR PLAN AND  
 NOTES

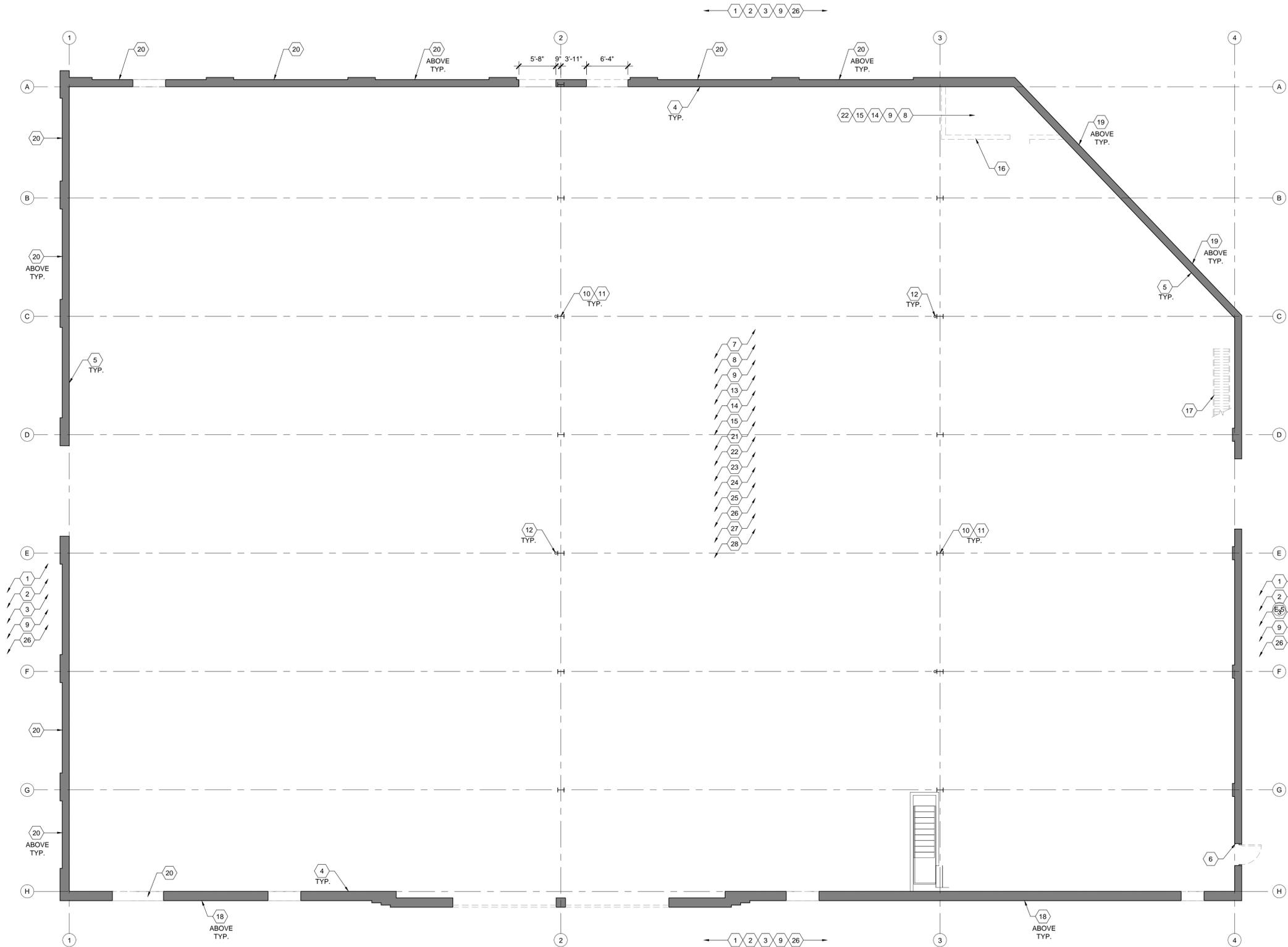
PROJECT #: 1294  
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 CHECKED BY: AM  
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 HPC SUBMIT 04.07.16



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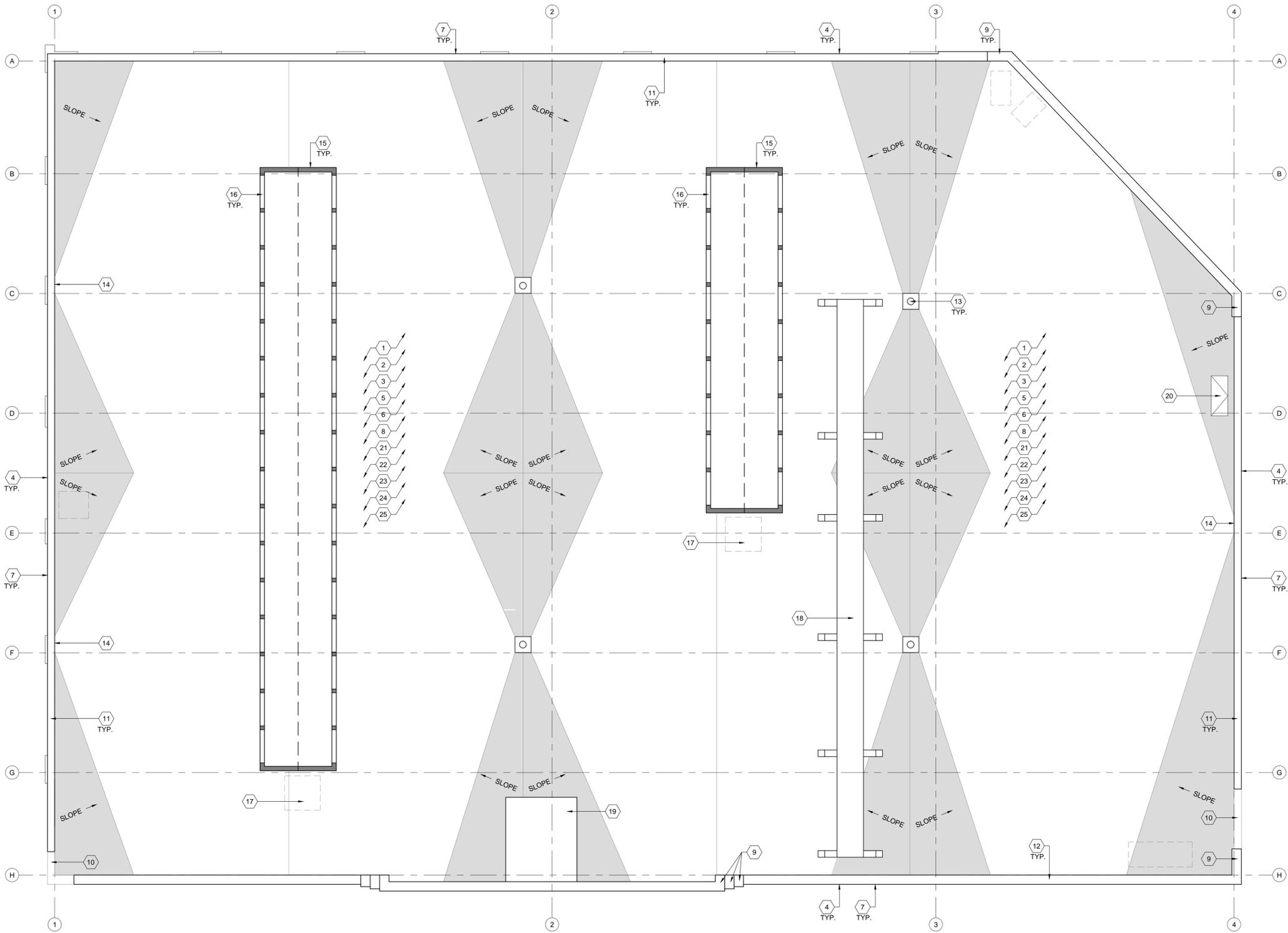
D1.1



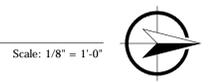
1 DEMOLITION FLOOR PLAN

Scale: 1/8" = 1'-0"





1 DEMOLITION ROOF PLAN



### DEMOLITION LEGEND

- EXISTING CONSTRUCTION AND STRUCTURAL ELEMENTS TO REMAIN, PATCH AND REPAIR SURFACES AFFECTED BY DEMOLITION AS REQUIRED FOR NEW FINISHES.
- EXISTING CONSTRUCTION TO BE REMOVED.

### DEMOLITION KEYNOTES

- 1 REMOVE EXISTING ROOFING, INSULATION AND FLASHING AS REQUIRED TO EXPOSE EXISTING ROOF DECKING TO REMAIN - PROTECT EXISTING DECKING.
- 2 GENERAL CONTRACTOR TO INSPECT, REPAIR AND REPLACE EXISTING WOOD DECKING AS REQUIRED TO MATCH ORIGINAL CONSTRUCTION.
- 3 GENERAL CONTRACTOR TO INSPECT, REPAIR AND REPLACE EXISTING WOOD ROOF PURLINS AS REQUIRED.
- 4 EXISTING EXTERIOR BRICK TO REMAIN - PROTECT - EXISTING BRICK TO BE REHABILITATED PER HISTORIC STANDARDS.
- 5 REMOVE ALL EXISTING ATTACHED/ ANCHORED ELEMENTS TO THE EXISTING WALL - WHEN REMOVING, USE THE METHOD LEASE LIKELY TO COMPROMISE, DAMAGE OR DEGRADE THE EXISTING CONDITION.
- 6 GENERAL CONTRACTOR TO PROTECT EXISTING PARAPET AND SUPPORTIVE MASONRY AS LOCATIONS MAY BE UNSTABLE - IF UNSTABLE LOCATIONS ARE DETERMINED DURING SELECTIVE DEMOLITION, CONTACT ARCHITECT AND STRUCTURAL ENGINEER IMMEDIATELY.
- 7 REFER TO PROPOSED EXTERIOR ELEVATIONS FOR EXTENTS OF BRICK/ STONE TUCKPOINTING WORK - PREPARE EXISTING BRICK/ STONE FOR WORK AS REQUIRED.
- 8 SALVAGE EXISTING REMOVED BRICK TO BE USED FOR PATCHING AND BLENDING INTO NEW CONSTRUCTION AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 9 PARAPET ELEVATION CHANGE - REFER TO EXTERIOR ELEVATIONS.
- 10 PREPARE EXISTING DAMAGED AND/ OR MISSING PARAPET CONSTRUCTION AS REQUIRED TO MATCH ORIGINAL CONSTRUCTION AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 11 GENERAL CONTRACTOR TO INSPECT, REPAIR AND REPLACE EXISTING SALT GLAZED TILE COPING AS PARAPET CAP AS REQUIRED.
- 12 SALVAGE AND REUSE EXISTING PRECAST CONCRETE PARAPET CAPS AS REQUIRED.
- 13 EXISTING INTERIOR ROOF DRAIN TO REMAIN - PROTECT DURING CONSTRUCTION.
- 14 PREPARE EXISTING THRU-WALL OVERFLOW SCUPPER OPENING IN ACCEPT NEW SCUPPER AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 15 EXISTING WOOD MONITOR STRUCTURE TO REMAIN - PROTECT - GENERAL CONTRACTOR TO INSPECT, REPAIR AND REPLACE EXISTING STRUCTURE AS REQUIRED.
- 16 REMOVE EXISTING GLASS IN EXISTING WOOD MONITORS IN PLACE - PROTECT - EXISTING TO RECEIVE NEW GLAZING.
- 17 REMOVE EXISTING CONTEMPORARY GALVANIZED METAL VENT PIPE STALK - REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 18 EXISTING STEEL FRAME BRIDGE AND SUPPORTS TO REMAIN - PROTECT.
- 19 EXISTING ROOF TOP MOUNTED SHED TO REMAIN - PROTECT - GENERAL CONTRACTOR TO INSPECT, REPAIR AND REPLACE EXISTING STRUCTURE AS REQUIRED.
- 20 EXISTING METAL ROOF HATCH TO REMAIN - PROTECT.
- 21 COORDINATE SELECTIVE DEMOLITION OF EXISTING MECHANICAL EQUIPMENT WITH DRAWINGS BY OTHERS - PROTECT EXISTING EQUIPMENT TO REMAIN.
- 22 COORDINATE SELECTIVE DEMOLITION OF EXISTING PLUMBING EQUIPMENT WITH DRAWINGS BY OTHERS - PROTECT EXISTING EQUIPMENT TO REMAIN.
- 23 COORDINATE SELECTIVE DEMOLITION OF EXISTING GAS EQUIPMENT WITH DRAWINGS BY OTHERS - PROTECT EXISTING EQUIPMENT TO REMAIN.
- 24 REMOVE ALL EXISTING CONTEMPORARY LIGHTING AND CIRCUITRY - REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 25 COORDINATE SELECTIVE DEMOLITION OF EXISTING ELECTRICAL EQUIPMENT WITH DRAWINGS BY OTHERS - PROTECT EXISTING EQUIPMENT TO REMAIN.

**KEG & CASE MARKET**  
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SHEET TITLE:  
 DEMOLITION ROOF  
 PLAN AND NOTES

PROJECT #: 1294  
 DRAWN BY: DAA CJG  
 CHECKED BY: AM  
 ISSUE: DATE:  
 HISTORICAL 10.29.15  
 HISTORICAL 03.08.16  
 HPC SUBMIT 04.07.16

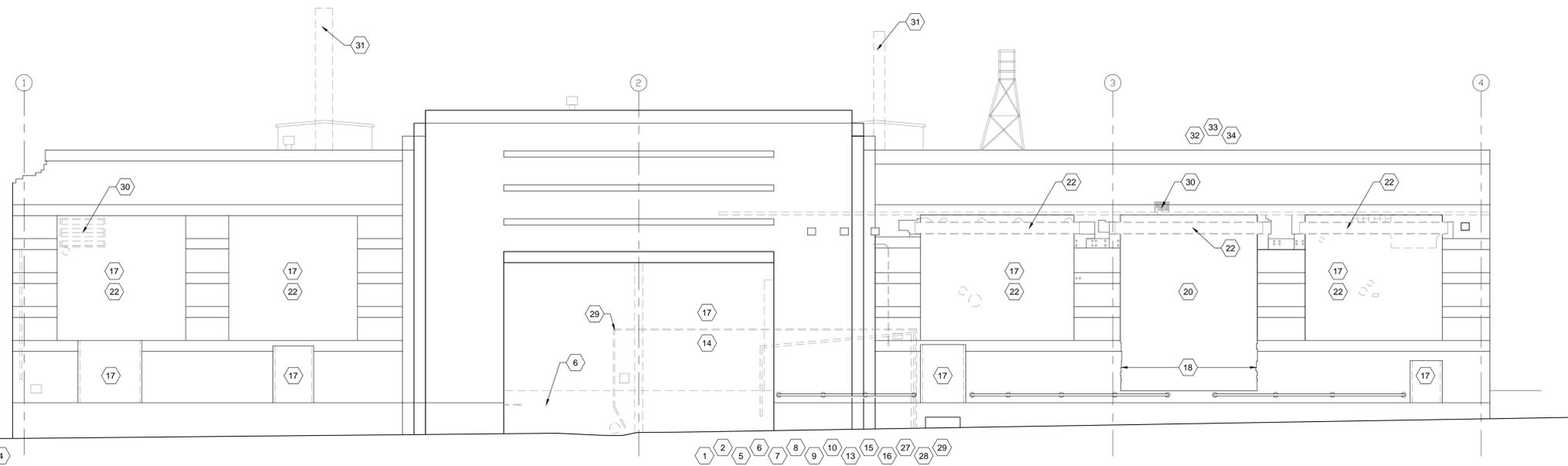
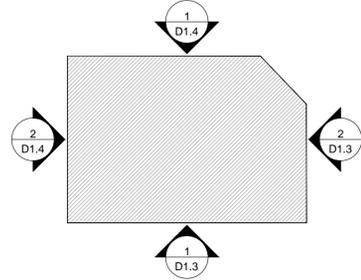


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I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of MINNESOTA  
 signed: \_\_\_\_\_  
 date: 03.08.16 reg. no. 45178

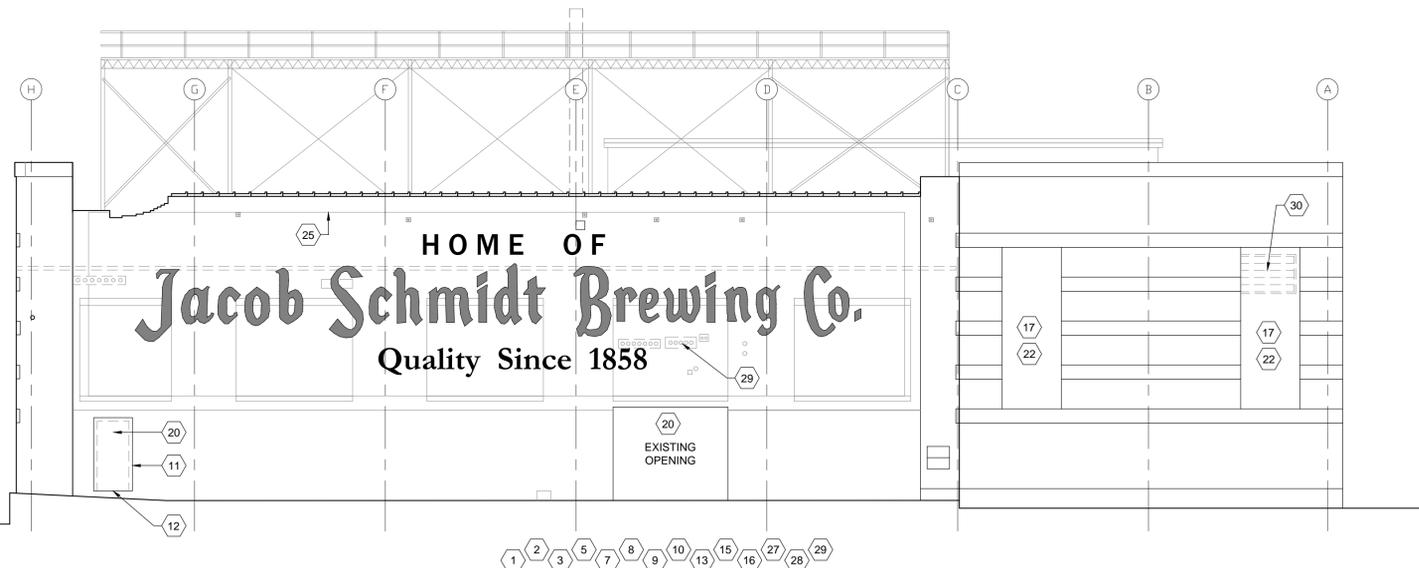
**D1.2**

KEY PLAN



1 EAST EXTERIOR ELEVATION

Scale: 1/8" = 1'-0"



2 NORTH EXTERIOR ELEVATION

Scale: 1/8" = 1'-0"

EXTERIOR DEMOLITION KEYNOTES

- 1 COORDINATE SITE SELECTIVE DEMOLITION REQUIRED WITH EXTENTS AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 2 REMOVE EXISTING CONCRETE SIDEWALK AND PREPARE AREA FOR NEW CONSTRUCTION AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 3 REMOVE EXISTING CONCRETE SLAB AND PREPARE AREA FOR NEW CONSTRUCTION AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 4 REMOVE EXISTING CONTEMPORARY FOUNDATION WALL ADJACENT.
- 5 REMOVE EXISTING CONTEMPORARY CONCRETE STAIRS - REFER TO CIVIL FOR ADDITIONAL INFORMATION.
- 6 REMOVE EXISTING CONTEMPORARY CONCRETE FLOOR SLAB AND COMPACTED FILL AS REQUIRED AND INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 7 REMOVE EXISTING CONTEMPORARY BELOW SLAB DRAIN PIPE BACK TO SOURCE.
- 8 SALVAGE EXISTING REMOVED BRICK TO BE USED FOR PATCHING AND BLENDING INTO NEW CONSTRUCTION AS INDICATED ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 9 REFER TO PROPOSED EXTERIOR ELEVATIONS FOR EXTENTS OF BRICK/ STONE TUCKPOINTING WORK - PREPARE EXISTING BRICK/ STONE FOR WORK AS REQUIRED.
- 10 REMOVE EXISTING MASONRY AS INDICATED TO PROVIDE NEW OPENING AS REQUIRED FOR CODE COMPLIANT EGRESS LOCATION - REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 11 REMOVE EXISTING HOLLOW METAL DOOR - FRAME TO REMAIN - PROTECT DURING CONSTRUCTION.
- 12 VERIFY EXISTING METAL THRESHOLD IS 1/2" MAXIMUM WITH SIDES THAT SLOPE 1:2 MAXIMUM.
- 13 REMOVE EXISTING CONTEMPORARY CURB - PROTECT WALL DURING CONSTRUCTION.
- 14 REMOVE EXISTING CONTEMPORARY CONCRETE STUCCO FINISH - PROTECT WALL DURING CONSTRUCTION.
- 15 REMOVE ALL EXISTING ATTACHED/ ANCHORED ELEMENTS TO THE EXISTING WALL - WHEN REMOVING, USE THE METHOD LEAST LIKELY TO COMPROMISE, DAMAGE OR DEGRADE THE EXISTING CONDITIONS.
- 16 REMOVE ALL EXISTING CONTEMPORARY PIPING ANCHORS, FASTENERS, ETC. REMAINING ON EXTERIOR FACE OF BUILDING - WHEN REMOVING, USE THE METHOD LEAST LIKELY TO COMPROMISE, DAMAGE OR DEGRADE THE EXISTING CONDITION.
- 17 REMOVE EXISTING CONTEMPORARY STUCCO INFILL WITHIN EXISTING OPENING.
- 18 REMOVE EXISTING CONTEMPORARY METAL ANGLE OPENING PROTECTION - PREPARE OPENING FOR NEW BRICK INFILL.
- 19 REMOVE EXISTING CONTEMPORARY BRICK/ CONCRETE MASONRY UNIT INFILL WITHIN EXISTING OPENING.
- 20 EXISTING WALL OPENING TO REMAIN - PREPARE TO ACCEPT NEW CONSTRUCTION AS INDICATES ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
- 21 REMOVE EXISTING OPENING INFILL WALL ASSEMBLY.
- 22 REMOVE EXISTING DAMAGED GLASS BLOCK WINDOW SYSTEM.
- 23 REMOVE EXISTING WINDOW SYSTEM.
- 24 REMOVE EXISTING CONTEMPORARY PAINTED MURAL - PROTECT EXISTING BRICK WALL ASSEMBLY.
- 25 REMOVE REMNANTS OF ATTACHED ROOF AND WALL STRUCTURE FROM BUILDING INCLUDING BUT NOT LIMITED TO EXISTING ROOF FLASHING, ROOF ADHESIVE, STRUCTURAL MEMBERS, ETC.
- 26 REMOVE EXISTING CONTEMPORARY STRUCTURAL STEEL BEAM - COORDINATE WITH STRUCTURAL DRAWINGS - REMOVE EXISTING CONTEMPORARY CONCRETE PATCH AND NON-MATCHING CONTEMPORARY MISMATCHED BRICK AT BEAM BEARING CONDITION - BOTH SIDES.
- 27 REMOVE ALL EXISTING CONTEMPORARY LIGHTING AND CIRCUITRY - REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
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KEG & CASE MARKET  
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SHEET TITLE:  
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DEMOLITION AND  
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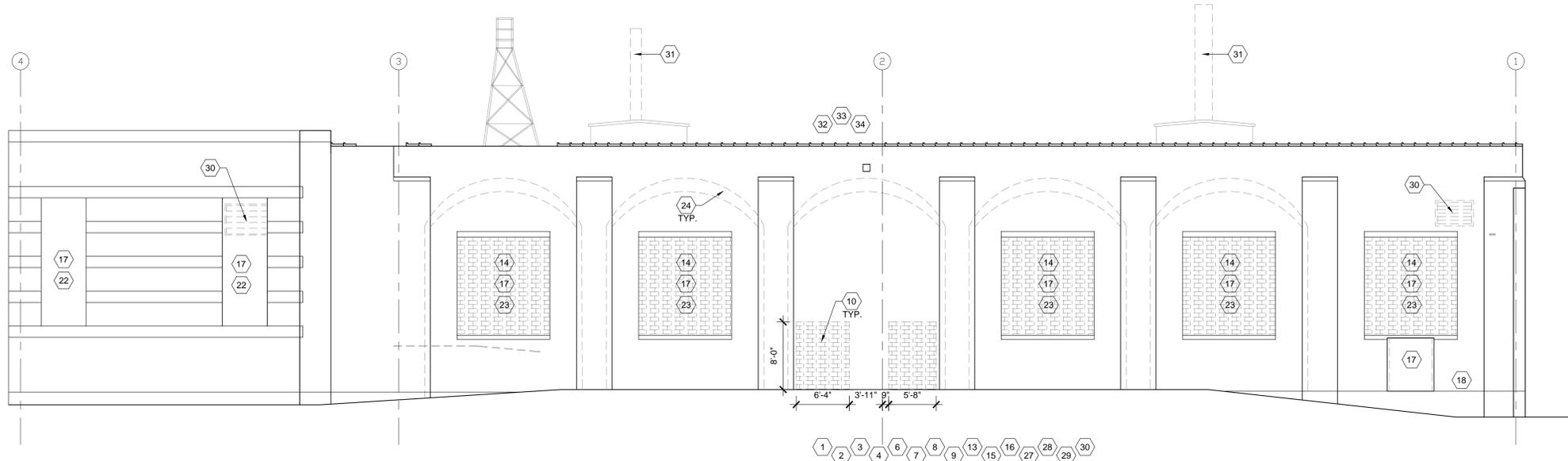
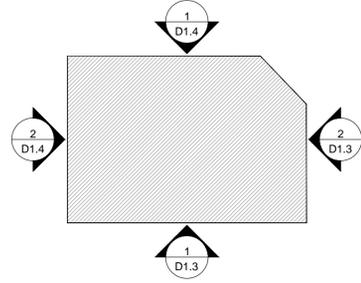


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I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of MINNESOTA  
signed: \_\_\_\_\_  
date: 03.08.16 reg. no. 45178

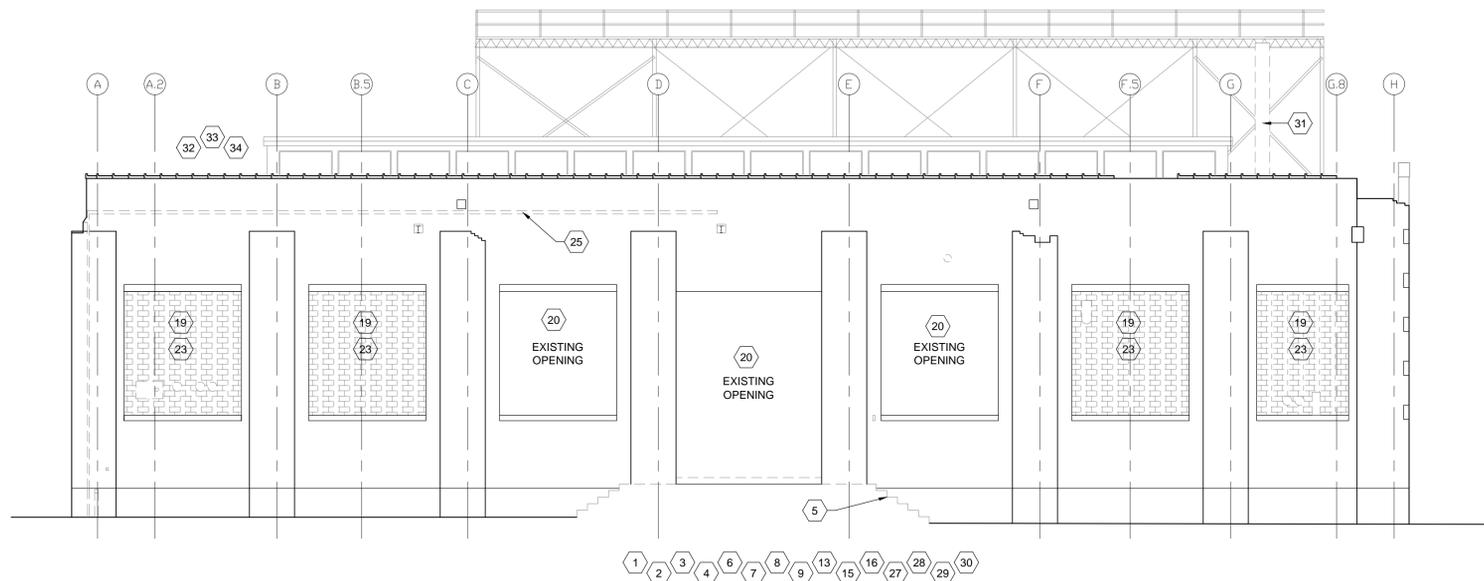
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# KEY PLAN



1 WEST EXTERIOR ELEVATION

Scale: 1/8" = 1'-0"



2 SOUTH EXTERIOR ELEVATION

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**ST. PAUL, MN 55102**

SHEET TITLE:  
**EXTERIOR**  
**DEMOLITION AND**  
**NOTES**

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**D1.4**

# CONSTRUCTION LEGEND

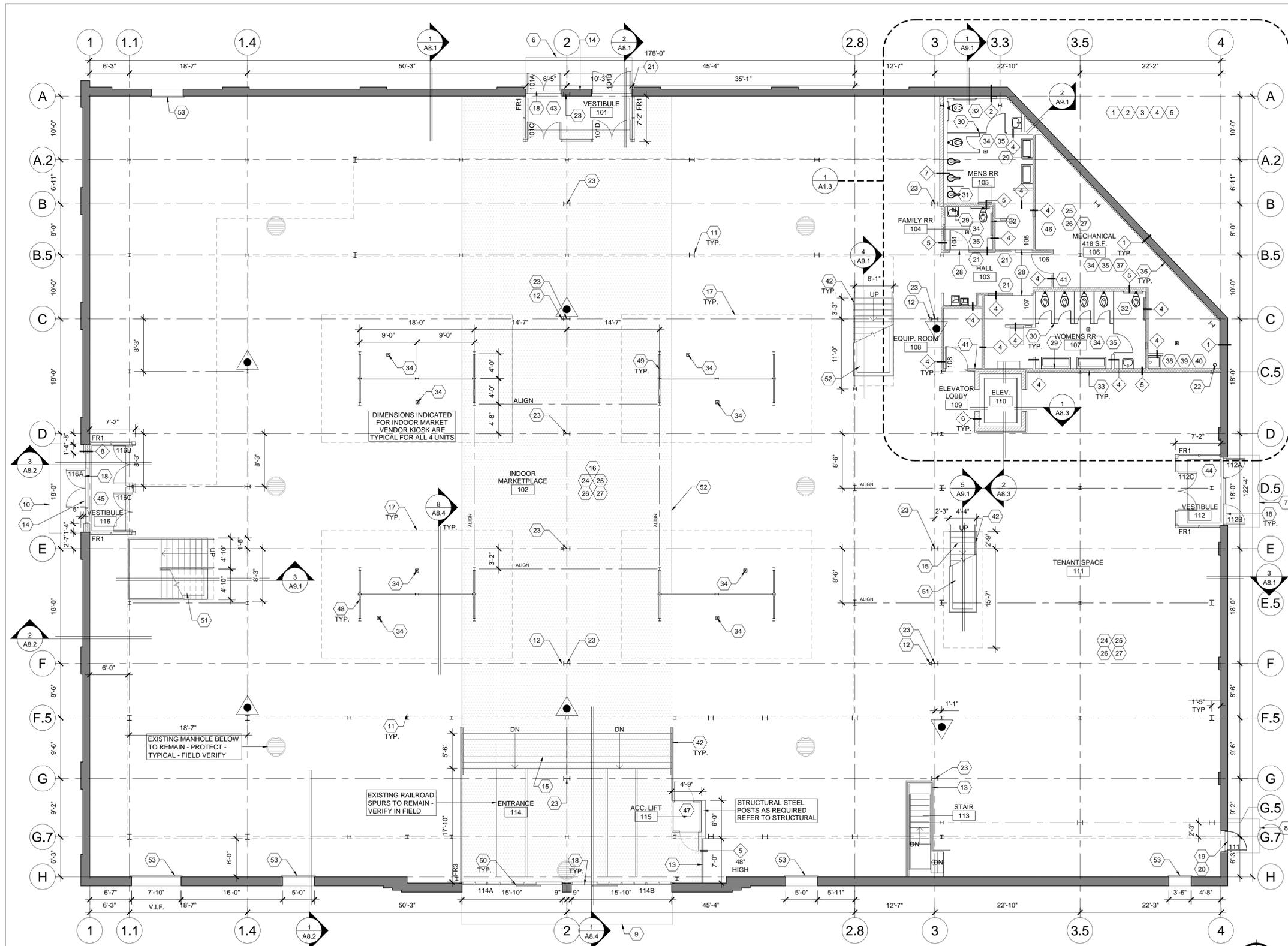
- EXISTING CONSTRUCTION AND STRUCTURAL ELEMENTS TO REMAIN, PATCH AND REPAIR SURFACES AFFECTED BY DEMOLITION AS REQUIRED FOR NEW FINISHES.
- NEW CONSTRUCTION, SEE SHEET FOR WALL TYPE DETAILS.
- EXISTING DOOR TO REMAIN.
- NEW DOOR AND FRAME.

# FIRE EXTINGUISHER NOTES

1. PROVIDE 'K' TYPE FIRE EXTINGUISHER IN KITCHEN AREAS, WITHIN 30'-0" OF TRAVEL FROM ANY POINT IN KITCHEN OR FOOD PREPARATION AREAS. VERIFY THE EXACT INSTALLATION LOCATIONS WITH THE LOCAL FIRE MARSHALL PRIOR TO INSTALLATION.
2. 5 LB. 'ABC' FIRE EXTINGUISHERS ARE REQUIRED WITHIN 75'-0" OF TRAVEL FROM ANY POINT IN PUBLIC AREA. THEY MUST BE MOUNTED CONSPICUOUSLY, PREFERABLY ALONG NORMAL TRAVEL PATHS AND EXIT WAYS. VERIFY THE EXACT INSTALLATION LOCATIONS WITH THE LOCAL FIRE MARSHALL PRIOR TO INSTALLATION.
3. THIS SYMBOL REPRESENTS LOCATION AND DIRECTION OF FIRE EXTINGUISHERS.

# CONSTRUCTION KEYNOTES

- 1 REFER TO CIVIL, ENGINEERING DRAWINGS BY OTHERS FOR SITE CONDITIONS.
- 2 REFER TO DRAWINGS BY OTHERS FOR LANDSCAPING INFORMATION.
- 3 REFER TO CIVIL, ENGINEERED DRAWINGS BY OTHERS FOR SITE UTILITY INFORMATION.
- 4 VERIFY EXISTING SITE CONDITIONS PROVIDE ADEQUATE POSITIVE DRAINAGE AWAY FROM EXISTING FACE OF BUILDING.
- 5 PROVIDE ADEQUATE POSITIVE DRAINAGE AWAY FROM EXISTING FACE OF BUILDING
- 6 16'-8" X 5'-0" CONCRETE STOOP WITH 6X6 W1.4 X W.14 W.W.M. - LOCATE STOOP FLUSH WITH NEW WALL OPENING - SLOPE AWAY FROM EXISTING FACE OF BUILDING AT 1/4" PER 12" TO PROVIDE ADEQUATE POSITIVE DRAINAGE - REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION
- 7 11'-4" X 5'-0" CONCRETE STOOP WITH 6X6 W1.4 X W.14 W.W.M. - LOCATE STOOP CENTERED IN OPENING - SLOPE AWAY FROM EXISTING FACE OF BUILDING AT 1/4" PER 12" TO PROVIDE ADEQUATE POSITIVE DRAINAGE - REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION
- 8 5'-4" X 5'-0" CONCRETE STOOP WITH 6X6 W1.4 X W.14 W.W.M. - LOCATE STOOP 2" FROM HINGE JAMB SIDE OF DOOR OPENING - SLOPE AWAY FROM EXISTING FACE OF BUILDING AT 1/4" PER 12" TO PROVIDE ADEQUATE POSITIVE DRAINAGE - REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION
- 9 33'-4" X 3'-6" CONCRETE STOOP WITH 6X6 W1.4 X W.14 W.W.M. - LOCATE STOOP CENTERED IN OPENING - LOCATE STOOP CENTERED IN OPENING - SLOPE AWAY FROM EXISTING FACE OF BUILDING AT 1/4" PER 12" TO PROVIDE ADEQUATE POSITIVE DRAINAGE - REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION
- 10 14'-0" X 5'-0" CONCRETE STOOP WITH 6X6 W1.4 X W.14 W.W.M. - SLOPE AWAY FROM EXISTING FACE OF BUILDING AT 1/4" PER 12" TO PROVIDE ADEQUATE POSITIVE DRAINAGE - REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION
- 11 STRUCTURAL STEEL COLUMN - REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 12 EXISTING ROOF DRAIN - REFER TO PLUMBING DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 13 42" HIGH METAL PIPE GUARDRAIL SYSTEM WITH TENSION CABLES.
- 14 BUILDING MOUNTED SIGNAGE LOCATION - REFER TO SIGNAGE DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION - ALL EXTERIOR SIGNAGE TO BE PROVIDED, PERMITTED, INSTALLED AND INSPECTED UNDER A SEPARATE PERMIT.
- 15 CAST-IN-PLACE CONCRETE STAIRS WITH LIGHT BROOM FINISH AT TREADS.
- 16 EXPANSION JOINT LOCATIONS - REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR FINAL LOCATIONS AND ADDITIONAL INFORMATION.
- 17 DASHED LINE INDICATES EXTENTS OF VENDOR KIOSK STRUCTURAL CANOPY ABOVE - REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 18 ALUMINUM THRESHOLD - 1/2" MAXIMUM RISE WITH BEVELED SIDES THAT SLOPE 1:12 MAXIMUM.
- 19 METAL THRESHOLD - 1/2" MAXIMUM RISE WITH BEVELED SIDES THAT SLOPE 1:12 MAXIMUM.
- 20 INSULATED HOLLOW METAL DOOR WITHIN EXISTING FRAME - PAINT TO MATCH EXISTING CAST STONE FINISH MATERIAL.
- 21 PROVIDE INTERNATIONAL SYMBOL OF ACCESSIBILITY AT THE ENTRANCE.
- 22 FIRE SPRINKLER RISER LOCATION - REFER TO PLUMBING AND FIRE PROTECTION DRAWINGS BY OTHERS FOR EXACT LOCATION AND ADDITIONAL INFORMATION.
- 23 EXISTING STRUCTURAL STEEL COLUMN TO REMAIN - PROTECT.
- 24 EXPOSED CONCRETE FLOOR SLAB - STAIN AND SEAL - PROTECT FINISH DURING COURSE OF CONSTRUCTION - REFER TO INTERIOR FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
- 25 PROVIDE SLAB ISOLATION JOINT MATERIAL SURROUNDING COLUMN BASE AT TOP OF SLAB TO BE TRIMMED TO TOP OF SLAB ELEVATION - COORDINATE WITH STRUCTURAL.
- 26 PROVIDE CONCRETE FLOOR SLAB CONTROL JOINTS AS DIRECTED BY STRUCTURAL ENGINEER.
- 27 ALL CONCRETE CONTROL / CONSTRUCTION JOINTS MUST BE CONTINUOUS AND NOT STAGGERED OR OFFSET.
- 28 TRANSITION STRIP BETWEEN SEALED CONCRETE TO TILE FLOORING.
- 29 POLISHED PLATE GLASS MIRROR.
- 30 TOILET PARTITION - REFER TO INTERIOR ELEVATIONS AND INTERIOR FINISH SCHEDULES FOR ADDITIONAL INFORMATION.
- 31 URINAL PARTITION - REFER TO INTERIOR ELEVATIONS AND INTERIOR FINISH SCHEDULES FOR ADDITIONAL INFORMATION.
- 32 ACCESSIBLE GRAB BARS AS REQUIRED.
- 33 THICKENED LINE INDICATES SOUND BATT INSULATION WITHIN WALL TYPE - REFER TO WALL TYPE SCHEDULE.
- 34 PROVIDE FLOOR DRAINS AS REQUIRED - REFER TO PLUMBING DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 35 SLOPE CONCRETE FLOOR SLAB 1/2" MINIMUM TOWARDS FLOOR DRAIN FOR A 60" DIAMETER CIRCLE TO PROVIDE ADEQUATE POSITIVE DRAINAGE - REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 36 FURR EXISTING CONCRETE MASONRY WALL TO BOTTOM OF FLOOR/CEILING ASSEMBLY.
- 37 COORDINATE ALL FLOOR/CEILING PENETRATIONS REQUIRED WITH DRAWINGS BY OTHERS - FIRESTOP PENETRATIONS AS REQUIRED.
- 38 SERVICE SINK WITH MIXING VALVE - REFER TO PLUMBING DRAWINGS BY OTHERS FOR SLAB REINFORCEMENT, CONNECTION DETAILS AND ADDITIONAL INFORMATION.
- 39 PROVIDE 5'-0" FRP WAINSCOT AT WALLS SURROUNDING SERVICE SINK.
- 40 WALL MOUNTED HOOKS AT MOP SINK FOR FLOOR MATS.
- 41 WALL MOUNTED 10# FIRE EXTINGUISHER - FIELD VERIFY FINAL LOCATION WITH LOCAL FIRE MARSHALL.
- 42 STAIR GUARDRAIL - REFER TO INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION.
- 43 16'-0" X 5'-4" RECESSED FLOOR MAT.
- 44 10'-0" X 5'-4" RECESSED FLOOR MAT.
- 45 13'-4" X 5'-4" RECESSED FLOOR MAT.
- 46 ELECTRICAL PANELS - REFER TO ELECTRICAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 47 ACCESSIBLE LIFT - REFER TO ELECTRICAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 48 TENANT VENDOR STRUCTURAL STEEL KIOSK - REFER TO STRUCTURAL DRAWINGS.
- 49 WATER HEATER - REFER TO PLUMBING DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 50 THERMALLY BROKEN ANODIZED ALUMINUM BREAKAWAY SLIDING DOOR SYSTEM WITH INSULATED GLAZING WITHIN EXISTING OPENING - FIELD VERIFY DIMENSION.
- 51 6" CONCRETE CURB FOR CANE DETECTION - WOOD PLANK BENCH AND PIPE SUPPORTS - SEE DETAILS.
- 52 HATCH INDICATES EXTENTS OF COLORED CONCRETE FLOOR INDICATING LOCATION OF ORIGINAL TRAIN DOOR RECESS.
- 53 REFURBISHED KEG DOORS TO MATCH ORIGINAL.



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1 FIRST FLOOR CONSTRUCTION PLAN

Scale: 1/8" = 1'-0"  
TRUE NORTH

KEG & CASE MARKET  
928 W 7TH STREET  
ST. PAUL, MN 55102

SHEET TITLE:  
FIRST FLOOR  
CONSTRUCTION  
PLAN AND NOTES

PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
HISTORICAL 10.29.15  
HISTORICAL 03.08.16  
HPC SUBMIT 04.07.16



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I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of MINNESOTA.  
Signed: \_\_\_\_\_  
Date: 03.08.16 reg. no. 45178

A1.1

**CONSTRUCTION LEGEND**

- EXISTING CONSTRUCTION AND STRUCTURAL ELEMENTS TO REMAIN, PATCH AND REPAIR SURFACES AFFECTED BY DEMOLITION AS REQUIRED FOR NEW FINISHES.
- NEW CONSTRUCTION, SEE SHEET FOR WALL TYPE DETAILS.
- EXISTING DOOR TO REMAIN.
- NEW DOOR AND FRAME.

**CONSTRUCTION KEYNOTES**

- 1 EXISTING ROOF DRAIN - REFER TO PLUMBING DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 2 42" HIGH METAL PIPE GUARDRAIL SYSTEM WITH TENSION CABLES.
- 3 BUILDING MOUNTED SIGNAGE LOCATION - REFER TO SIGNAGE DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION - ALL EXTERIOR SIGNAGE TO BE PROVIDED, PERMITTED, INSTALLED AND INSPECTED UNDER A SEPARATE PERMIT.
- 4 EXPANSION JOINT LOCATIONS - REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR FINAL LOCATIONS AND ADDITIONAL INFORMATION.
- 5 LINE OF NEW VENDOR KIOSK ROOF ASSEMBLY BELOW - REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 6 STRUCTURAL STEEL COLUMN - REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 7 PROVIDE INTERNATIONAL SYMBOL OF ACCESSIBILITY AT THE ENTRANCE.
- 8 EXISTING STRUCTURAL STEEL COLUMN TO REMAIN - PROTECT.
- 9 EXPOSED CONCRETE FLOOR SLAB - STAIN AND SEAL - PROTECT FINISH DURING COURSE OF CONSTRUCTION - REFER TO INTERIOR FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
- 10 PROVIDE SLAB ISOLATION JOINT MATERIAL SURROUNDING COLUMN BASE AT TOP OF SLAB TO BE TRIMMED TO TOP OF SLAB ELEVATION.
- 11 REFER TO STRUCTURAL ENGINEERING DRAWINGS FOR ADDITIONAL INFORMATION CONCERNING THE CONCRETE FLOOR SLAB DESIGN.
- 12 ALL CONCRETE CONTROL / CONSTRUCTION JOINTS MUST BE CONTINUOUS AND NOT STAGGERED OF OFFSET.
- 13 TRANSITION STRIP BETWEEN SEALED CONCRETE TO RESIN FLOORING.
- 14 POLISHED PLATE GLASS MIRROR.
- 15 ACCESSIBLE GRAB BARS AS REQUIRED.
- 16 THICKENED LINE INDICATES SOUND BATT INSULATION WITHIN WALL TYPE - REFER TO WALL TYPE SCHEDULE.
- 17 KITCHEN EQUIPMENT INDICATED FOR REFERENCES PURPOSES ONLY - REFER TO KITCHEN EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION.
- 18 PROVIDE FLOOR DRAINS AS REQUIRED - REFER TO PLUMBING DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 19 FLOOR DRAIN TO PROVIDE ADEQUATE POSITIVE DRAINAGE - FLOOR TO BE INSTALLED WITHOUT A SLOPE - REFER TO PLUMBING DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 20 FURR EXISTING CONCRETE MASONRY WALL TO BOTTOM OF FLOOR/CEILING ASSEMBLY.
- 21 STAINLESS STEEL WALL END CAPS TO 6'-9" A.F.F. ELEVATION.
- 22 COORDINATE ALL FLOOR/CEILING PENETRATIONS REQUIRED WITH DRAWINGS BY OTHERS - FIRESTOP PENETRATIONS AS REQUIRED.
- 23 3/4" CONTINUOUS PLYWOOD BACKING FOR SHELF MOUNTING - INSTALL 4'-0" X 8'-0" PLYWOOD SHEATHING AT 42" A.F.F. ELEVATION AT ALL SHELVING AREAS - COORDINATE LOCATIONS WITH KITCHEN EQUIPMENT DRAWINGS BY OTHERS.
- 24 SERVICE SINK WITH MIXING VALVE - REFER TO PLUMBING DRAWINGS BY OTHERS FOR SLAB REINFORCEMENT, CONNECTION DETAILS AND ADDITIONAL INFORMATION.
- 25 PROVIDE 5'-0" FRP WAINSCOT AT WALLS SURROUNDING SERVICE SINK.
- 26 WALL MOUNTED HOOKS AT MOP SINK FOR FLOOR MATS.
- 27 WALL MOUNTED 10# FIRE EXTINGUISHER - FIELD VERIFY FINAL LOCATION WITH LOCAL FIRE MARSHALL.
- 28 STAIR GUARDRAIL - REFER TO INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION.
- 29 THERMALLY BROKEN ANODIZED INDUSTRIAL METAL SASH HISTORICAL WINDOW SYSTEM WITH 1" INSULATED GLAZING WITHIN EXISTING OPENING - FIELD VERIFY OPENING DIMENSION.
- 30 NEW GLASS BLOCK WINDOW SYSTEM WITH STRUCTURAL STIFFENER WITHIN EXISTING OPENING TO MATCH ORIGINAL - FIELD VERIFY OPENING DIMENSION.
- 31 PREPARE EXISTING ROOF ACCESS SHIPS LADDER TO BE REWORKED/ ADJUSTED BASED ON NEW CONSTRUCTION WITH A MAX RISE/RUN AS REQUIRED BY BUILDING CODE.
- 32 PROVIDE CEMENT BOARD AT ALL STAINLESS AND NON-COMBUSTIBLE LOCATIONS.
- 33 HOT WATER HEATER LOCATION - REFER TO PLUMBING SHEETS.

SHEET TITLE:  
 MEZZANINE/  
 SECOND FLOOR  
 CONSTRUCTION  
 PLAN AND NOTES

PROJECT #: 1294  
 DRAWN BY: DAA CJG  
 CHECKED BY: AM  
 ISSUE: DATE:  
 HISTORICAL 10.29.15  
 HISTORICAL 03.08.16  
 HPC SUBMIT 04.07.16



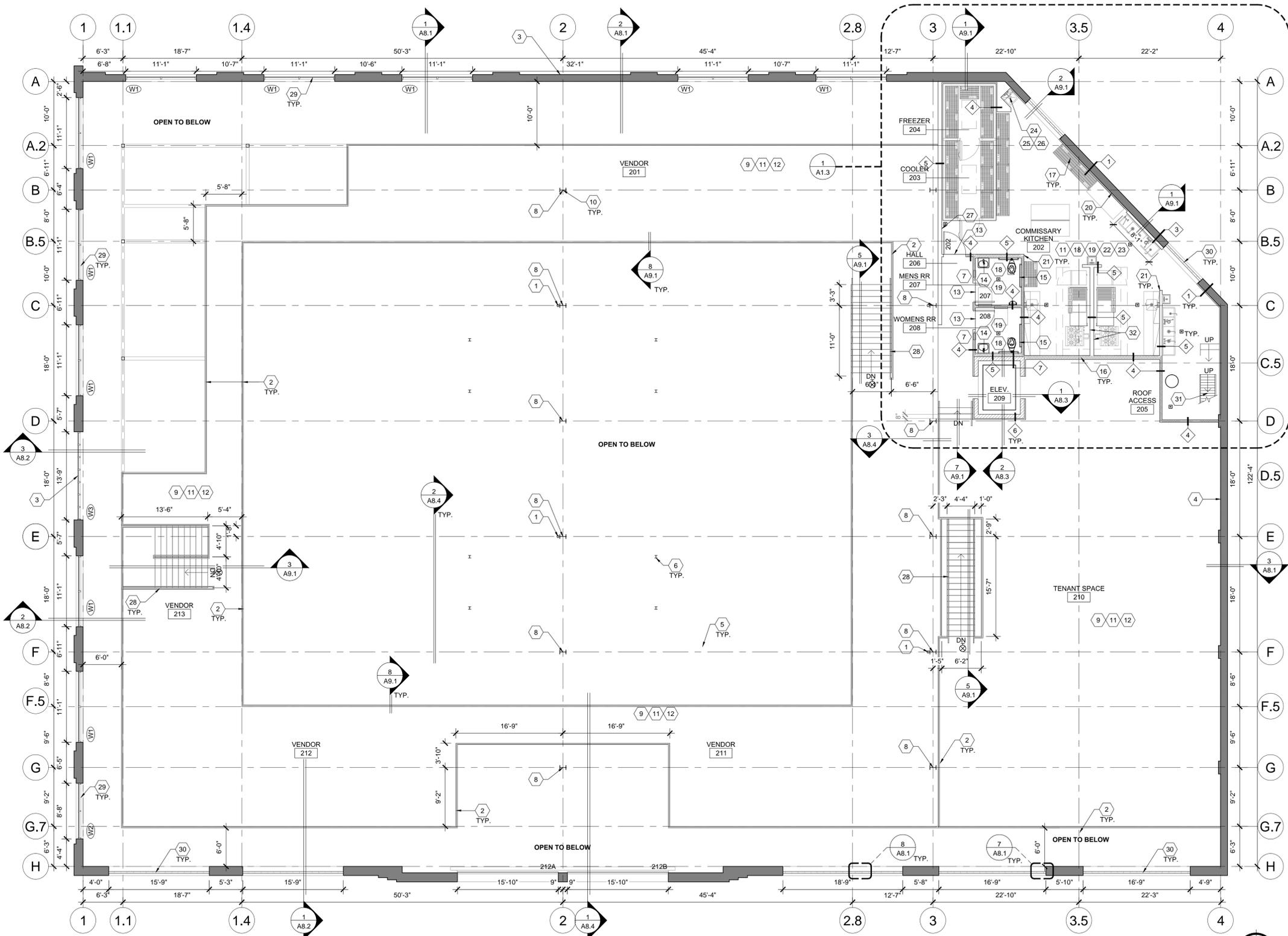
STUDIO M ARCHITECTS, INC.  
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I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of MINNESOTA.  
 signed:  
 date: 03.08.16 reg. no. 45178

**FIRE EXTINGUISHER NOTES**

1. PROVIDE 'K' TYPE FIRE EXTINGUISHER IN KITCHEN AREAS, WITHIN 30'-0" OF TRAVEL FROM ANY POINT IN KITCHEN OR FOOD PREPARATION AREAS. VERIFY THE EXACT INSTALLATION LOCATIONS WITH THE LOCAL FIRE MARSHALL PRIOR TO INSTALLATION.
2. 5 LB. 'ABC' FIRE EXTINGUISHERS ARE REQUIRED WITHIN 75'-0" OF TRAVEL FROM ANY POINT IN PUBLIC AREA. THEY MUST BE MOUNTED CONSPICUOUSLY, PREFERABLY ALONG NORMAL TRAVEL PATHS AND EXIT WAYS. VERIFY THE EXACT INSTALLATION LOCATIONS WITH THE LOCAL FIRE MARSHALL PRIOR TO INSTALLATION.



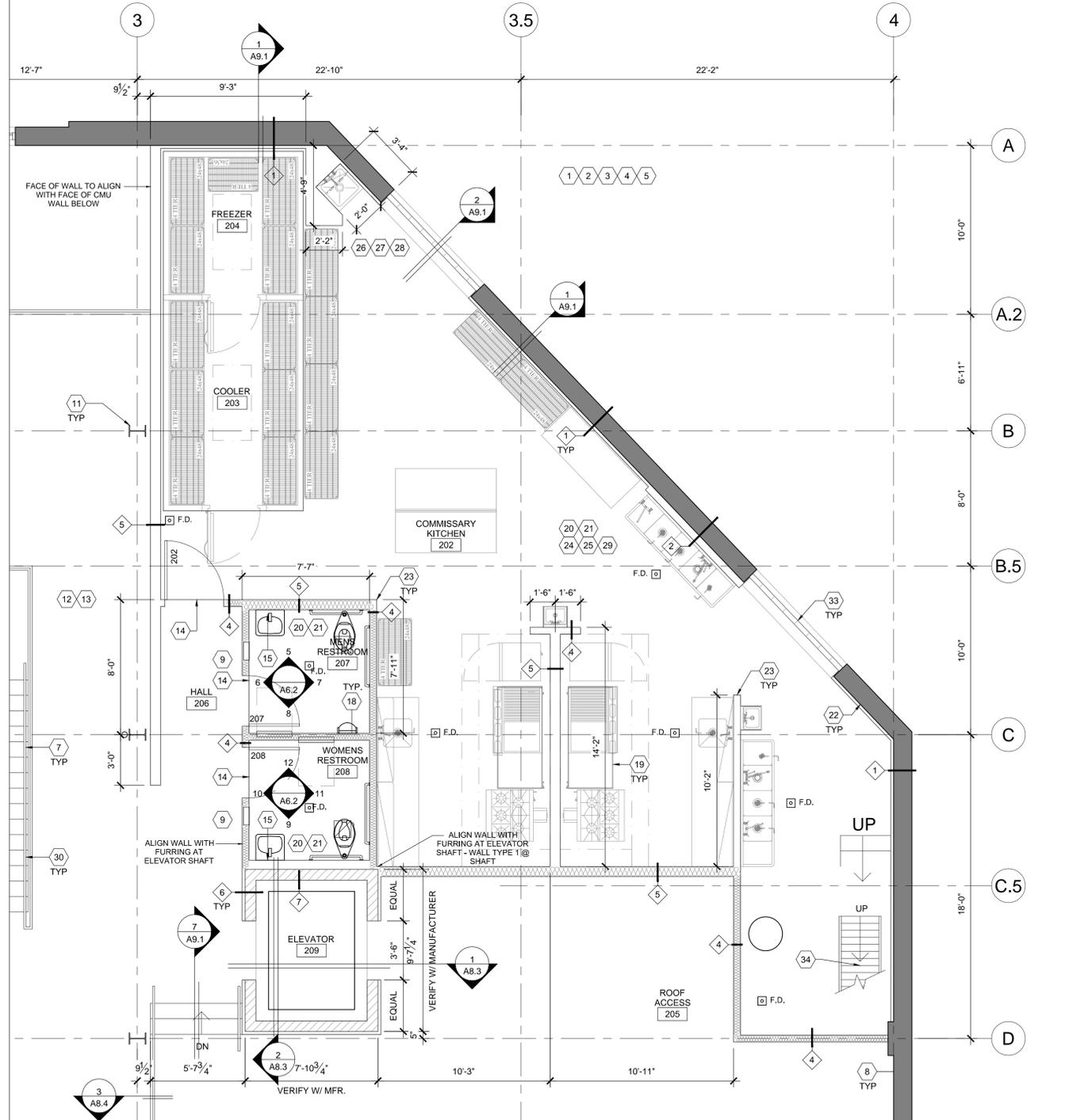
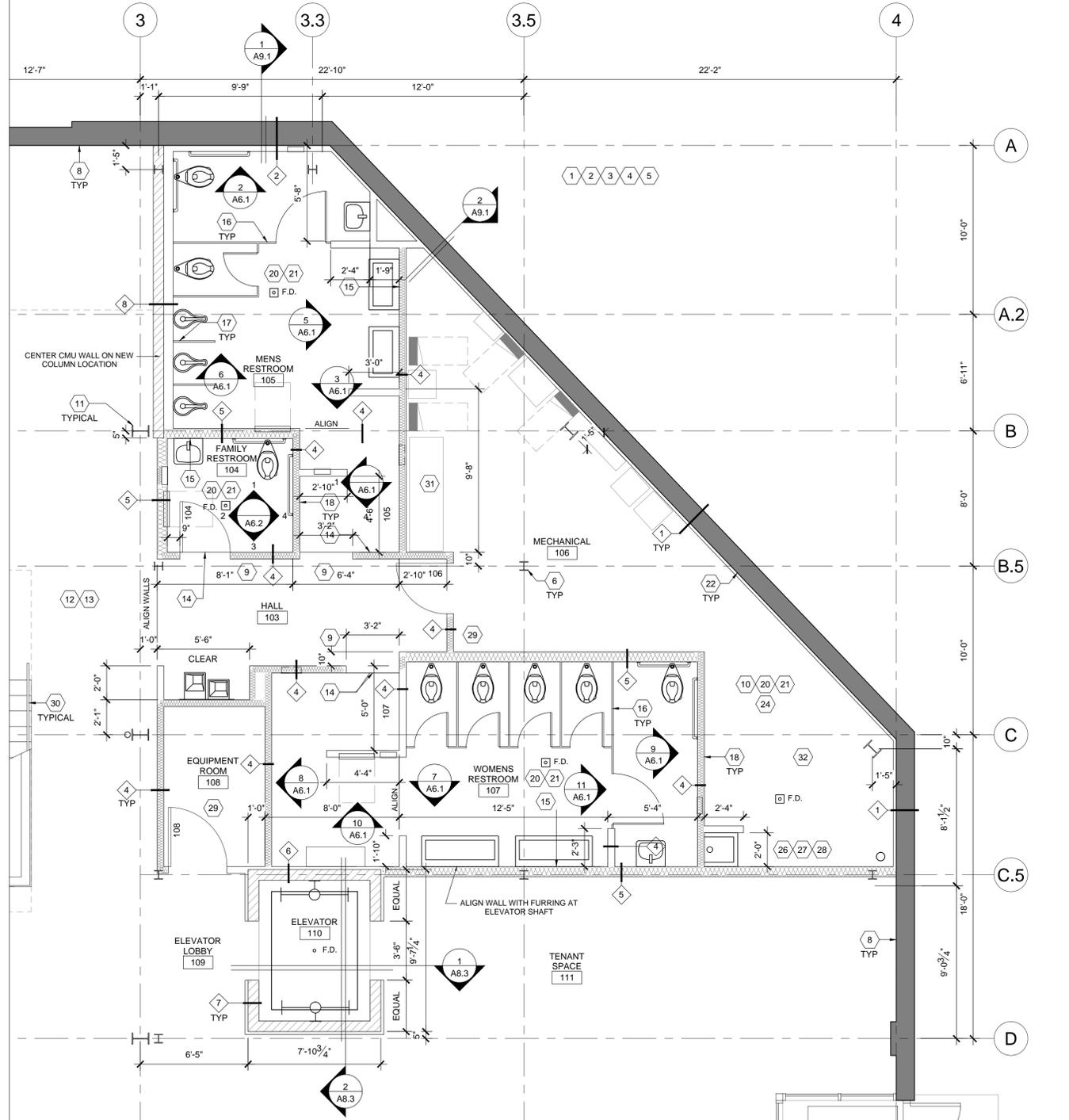
1 SECOND FLOOR CONSTRUCTION PLAN  
 Scale: 1/8" = 1'-0"

### CONSTRUCTION LEGEND

- EXISTING CONSTRUCTION AND STRUCTURAL ELEMENTS TO REMAIN. PATCH AND REPAIR SURFACES AFFECTED BY DEMOLITION AS REQUIRED FOR NEW FINISHES.
- NEW CONSTRUCTION, SEE SHEET FOR WALL TYPE DETAILS.
- EXISTING DOOR TO REMAIN.
- NEW DOOR AND FRAME.
- NEW PLUMBING FIXTURE INDICATOR - SEE SCHEDULE

### CONSTRUCTION KEYNOTES

- |   |   |  |   |
|---|---|--|---|
| <ul style="list-style-type: none"> <li>1 REFER TO CIVIL, ENGINEERING DRAWINGS BY OTHERS FOR SITE CONDITIONS.</li> <li>2 REFER TO DRAWINGS BY OTHERS FOR LANDSCAPING INFORMATION.</li> <li>3 REFER TO CIVIL, ENGINEERED DRAWINGS BY OTHERS FOR SITE UTILITY INFORMATION.</li> <li>4 VERIFY EXISTING SITE CONDITIONS PROVIDE ADEQUATE POSITIVE DRAINAGE AWAY FROM EXISTING FACE OF BUILDING.</li> <li>5 PROVIDE ADEQUATE POSITIVE DRAINAGE AWAY FROM EXISTING FACE OF BUILDING.</li> <li>6 STRUCTURAL STEEL COLUMN - REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.</li> <li>7 42" HIGH METAL PIPE GUARDRAIL SYSTEM WITH TENSION CABLES.</li> <li>8 EXPANSION JOINT LOCATIONS - REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR FINAL LOCATIONS AND ADDITIONAL INFORMATION.</li> </ul> | <ul style="list-style-type: none"> <li>9 PROVIDE INTERNATIONAL SYMBOL OF ACCESSIBILITY AT THE ENTRANCE.</li> <li>10 FIRE SPRINKLER RISER LOCATION - REFER TO PLUMBING AND FIRE PROTECTION DRAWINGS BY OTHERS FOR EXACT LOCATION AND ADDITIONAL INFORMATION.</li> <li>11 EXISTING STRUCTURAL STEEL COLUMN TO REMAIN - PROTECT.</li> <li>12 EXPOSED CONCRETE FLOOR SLAB - STAIN AND SEAL - PROTECT FINISH DURING COURSE OF CONSTRUCTION - REFER TO INTERIOR FINISH SCHEDULE FOR ADDITIONAL INFORMATION. PROVIDE SLAB ISOLATION JOINT MATERIAL SURROUNDING COLUMN BASE AT TOP OF SLAB TO BE TRIMMED TO TOP OF SLAB ELEVATION. PROVIDE CONCRETE FLOOR SLAB CONTROL JOINTS AS DIRECTED BY STRUCTURAL ENGINEER.</li> <li>13 ALL CONCRETE CONTROL / CONSTRUCTION JOINTS MUST BE CONTINUOUS AND NOT STAGGERED OR OFFSET.</li> <li>14 TRANSITION STRIP BETWEEN SEALED CONCRETE TO TILE FLOORING.</li> <li>15 POLISHED PLATE GLASS MIRROR.</li> </ul> | <ul style="list-style-type: none"> <li>16 TOILET PARTITION - REFER TO INTERIOR ELEVATIONS AND INTERIOR FINISH SCHEDULES FOR ADDITIONAL INFORMATION.</li> <li>17 URINAL PARTITION - REFER TO INTERIOR ELEVATIONS AND INTERIOR FINISH SCHEDULES FOR ADDITIONAL INFORMATION. ACCESSIBLE GRAB BARS AS REQUIRED.</li> <li>18 HATCH INDICATES SOUND BATT INSULATION WITHIN WALL TYPE - REFER TO WALL TYPE SCHEDULE.</li> <li>19 KITCHEN EQUIPMENT INDICATED FOR REFERENCE PURPOSES ONLY - REFER TO KITCHEN EQUIPMENT DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.</li> <li>20 PROVIDE FLOOR DRAINS AS REQUIRED - REFER TO PLUMBING DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.</li> <li>21 SLOPE CONCRETE FLOOR SLAB TOWARDS FLOOR DRAIN TO PROVIDE ADEQUATE POSITIVE DRAINAGE - REFER TO STRUCTURAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.</li> <li>22 FURR EXISTING CONCRETE MASONRY WALL TO BOTTOM OF FLOOR/CEILING ASSEMBLY.</li> <li>23 STAINLESS STEEL WALL END CAPS TO 6'-8" A.F.F. ELEVATION.</li> <li>24 COORDINATE ALL FLOOR/CEILING PENETRATIONS REQUIRED WITH DRAWINGS BY OTHERS - FIRESTOP PENETRATIONS AS REQUIRED.</li> <li>25 3/4" CONTINUOUS PLYWOOD BACKING FOR SHELF MOUNTING - INSTALL 4'-0" X 8'-0" PLYWOOD SHEATHING AT 42" A.F.F. ELEVATION AT ALL SHELVING AREAS - COORDINATE LOCATIONS WITH KITCHEN EQUIPMENT DRAWINGS BY OTHERS.</li> <li>26 SERVICE SINK WITH MIXING VALVE - REFER TO PLUMBING DRAWINGS BY OTHERS FOR SLAB REINFORCEMENT, CONNECTION DETAILS AND ADDITIONAL INFORMATION.</li> <li>27 PROVIDE 5'-0" FRP WAINSCOT AT WALLS SURROUNDING SERVICE SINK.</li> <li>28 WALL MOUNTED HOOKS AT MOP SINK FOR FLOOR MATS.</li> </ul> | <ul style="list-style-type: none"> <li>29 WALL MOUNTED 10# FIRE EXTINGUISHER - FIELD VERIFY FINAL LOCATION WITH LOCAL FIRE MARSHALL.</li> <li>30 STAIR GUARDRAIL - REFER TO INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION.</li> <li>31 ELECTRICAL PANELS - REFER TO ELECTRICAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.</li> <li>32 WATER HEATER - REFER TO PLUMBING DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.</li> <li>33 NEW GLASS BLOCK WINDOW SYSTEM WITHIN EXISTING OPENING TO MATCH ORIGINAL - FIELD VERIFY OPENING DIMENSION.</li> <li>34 PREPARE EXISTING ROOF ACCESS SHIPS LADDER TO BE REVISED/ ADJUSTED BASED ON NEW CONSTRUCTION WITH A MAX RISE/RUN AS REQUIRED BY BUILDING CODE.</li> </ul> |
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1 ENLARGED FIRST FLOOR COMMON AREA

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



2 ENLARGED SECOND FLOOR COMMON AREA

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



SHEET TITLE:  
ENLARGED  
RESTROOMS AND  
KITCHEN AREA  
AND NOTES

PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
HISTORICAL 10.29.15  
HISTORICAL 03.08.16  
HPC SUBMIT 04.07.16



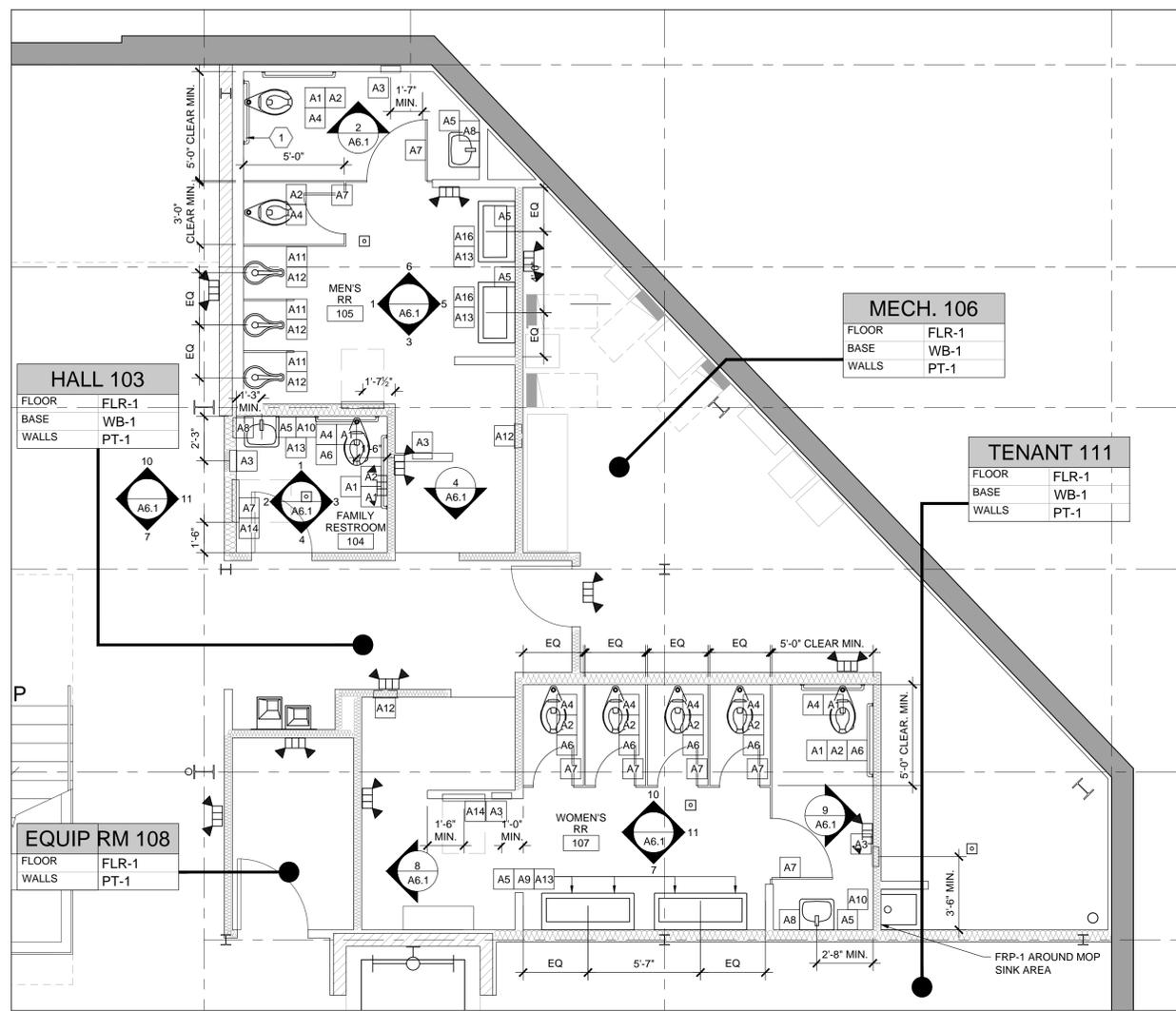
STUDIO M ARCHITECTS, INC.  
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I hereby certify that this plan  
specification or report was prepared  
by me or under my direct supervision  
and that I am a duly registered  
architect under the law of  
the state of MINNESOTA  
signed:  
date: 03.08.16 reg. no. 45178

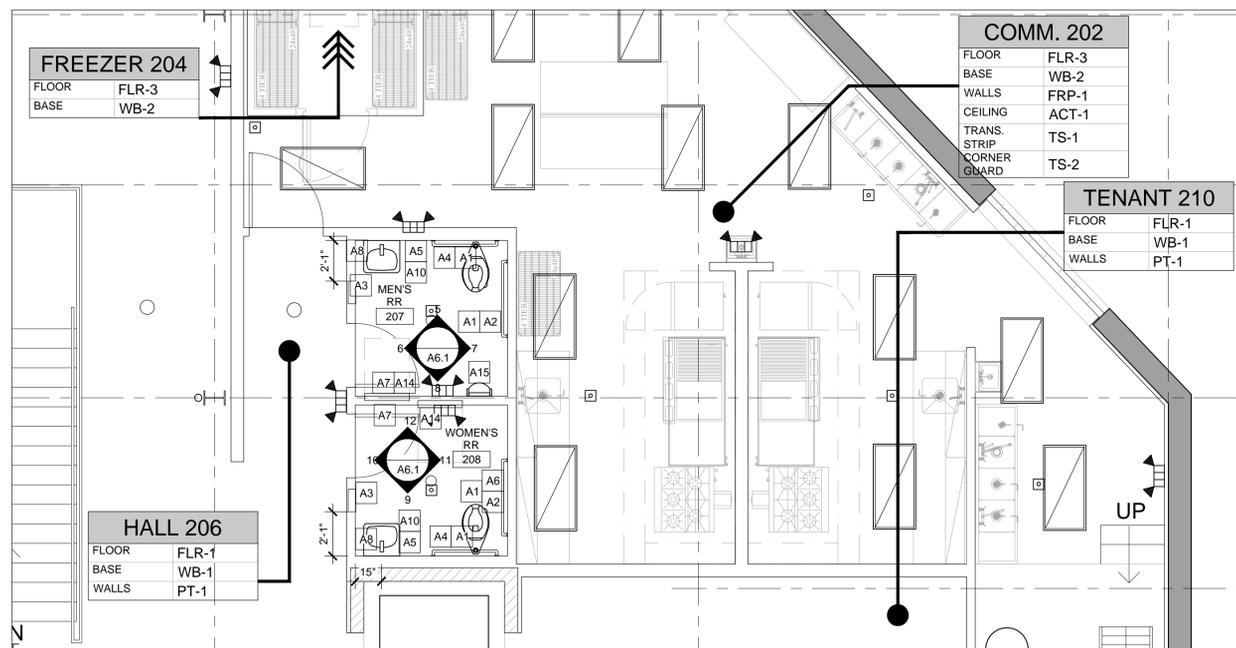
A1.3

KEG & CASE MARKET  
928 W 7TH STREET  
ST. PAUL, MN 55102



1 ENLARGED FIRST FLOOR COMMON AREA

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



2 ENLARGED SECOND FLOOR COMMON AREA

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

KEG & CASE - TOILET & RESTROOM ACCESSORIES SCHEDULE

REF. #	DESCRIPTION	MANUFACTURER	MODEL	FINISH	MOUNTING	CONTACT	REMARKS
A1	18" VERTICAL GRAB BAR @ SIDE 42" HORIZONTAL GRAB BAR @ SIDE 36" HORIZONTAL GRAB BAR @ BACK	BOBRICK	SERIES B-5806	SATIN	SURFACE		AT ADA TOILET
A2	TOILET TISSUE DISPENSER	BOBRICK	B-2890	SATIN	SURFACE		
A3	ADA RECESSED HIGH VELOCITY HAND DRYER	ASI	WG641033	STAINLESS	RECESSED	GLOBAL INDUSTRIES	
A4	TOILET - ADA ELONGATED BOWL	KOHLER	HIGHLINE - K-4405-0	WHITE	FLOOR		USE KOHLER-LUSTER K-4570-SA-0 SEAT USE WITH A4 TOILET
A4a	BATTERY POWERED, SENSOR ACTIVATED DUAL FLUSHOMETER	SLOAN	ECOS - 811-1.6/1.1	CHROME			
A5	WALL MOUNTED SOAP DISPENSER	BOBRICK	B-2112	SATIN	SURFACE		
A6	SANITARY NAPKIN DISPOSAL	BOBRICK	CONTURA SERIES B-270	SATIN	SURFACE		WOMEN'S W.C. ONLY
A7	COAT HOOK WITH BUMPER	BOBRICK	B-212	SATIN			
A8	FIXED POSITION TILT MIRROR	BOBRICK	B-293 1836	STAINLESS	SURFACE		
A9	55" RESIN & STAINLESS TROUGH SINK	NEO-METRO	EBB 9112-WM-MC-FLR-5573-CTR	17-1605 TPX	WALL		USE A13
A10	18.25" D X 20.5" W ADA SINK	AMERICAN STANDARD	LUCERNE-0356.421	WHITE	WALL MOUNTED	215-513-9400	ADA SINK (USE A10a)
A10a	SOLAR POWERED SENSOR ACTIVATED ELECTRIC FAUCET	SLOAN	SOLIAS EAF-275	CHROME	SINGLE		
A11	VINTAGE URINAL	RICHMOND RADIATOR COMPANY	9782	WHITE	FLOOR MOUNTED	BLACK DOG SALVAGE	
A11a	BATTERY POWERED, SENSOR ACTIVATED DUAL FLUSHOMETER	SLOAN	ECOS - 811-1.6/1.1	CHROME			USE WITH A11 URINAL
A12	RECESSED TOWEL DISPENSER & TRASH RECEPTACLE	BOBRICK	CLASSIC SERIES B-369	POLISHED CHROME	DECK		USE WITH A11
A13	DECK MOUNTED - LOW	SLOAN	BASYX EFX-300-X10-00X-CP	STAINLESS	RECESSED		
A14	VERTICAL RECESSED BABY CHANGING STATION	KOALA	KB111-SSRE				
A15	WALL MOUNTED URINAL (USE A15a FLUSH VALVE)	TOTO	UT447E#01		COTTON	WALL	0.5GPF LOW CONSUMPTION WASHOUT
A15a	ECOPOWER FLUSH VALVE (USE WITH A16)	TOTO	TEU1LN12#CP		SS	WALL	
A16	36" RESIN & STAINLESS TROUGH SINK	NEO-METRO	EBB 9110-WM-MC-FLR-S-3673-LH-FBO	14-6324 TPX	WALL		USE A13
A16a	36" RESIN & STAINLESS TROUGH SINK	NEO-METRO	EBB 9110-WM-MC-FLR-S-3673-RH-FBO	14-6324 TPX	WALL		USE A13
A17	TOILET PARTITION	SCRANTON PRODUCTS	HINY HIDERS	ORANGE PEEL	FLOOR	MIKE JANSSSEN 414-208-9871	CUSTOM TO MTL-1
A17a	URINAL PARTITIONS	SCRANTON PRODUCTS	HINY HIDERS	ORANGE PEEL	FLOOR	MIKE JANSSSEN 414-208-9871	CUSTOM TO MTL-1

KEG & CASE FINISH SCHEDULE

REF. NAME	DESCRIPTION	MANUFACTURER	STYLE NAME	STYLE NUMBER	COLOR NAME	CONTACT	NOTES
<b>EXTERIOR</b>							
BRK	NOTE: WHERE BRICK INFILL IS REQUIRED FOR AREAS GREATER THAN 2 SQUARE FEET, PROVIDE INFILL WITH BRICK, STONE OR CONCRTE THAT MATCHES THE EXISTING ORIGINAL MATERIAL IN SIZE, SHAPE, COLOR TECTURE AND PROFILE						
MTR	NOTE: MATCH EXISTING MORTAR TYPE, COLOR AND DENSITY IN ALL REPAIR WORK LOCATIONS.						
<b>INTERIOR</b>							
<b>CEILING TILES</b>							
ACT-1	2X4 VINYL ROCK - SQ EDGE - WHITE	USG	CLEAN ROOM PLUS	CLIMAPLUS 100	B - DXW		
<b>PAINT &amp; WALL FINISHES</b>							
WC-1	MEN'S ROOM - TYPE II WALLCOVERING	SOURCE ONE STACY GARCIA	FERN	SFR-04	CREAM		PROVIDE SAMPLES BEFORE ORDERING
WC-2	WOMEN'S ROOM - TYPE II WALLCOVERING	SOURCE ONE STACY GARCIA	FERN	SFR-04	CREAM		PROVIDE SAMPLES BEFORE ORDERING
WC-3	WOMEN'S ROOM - HAND PAINTED MURAL - TYPE II						PROVIDED BY OWNER
WC-4	MEN'S ROOM - HAND PAINTED MURAL - TYPE II						PROVIDED BY OWNER
MTL-1	METALLIC PAINT COLOR	PRISMATIC POWDERS	METALLIC	PMB 1842	SPEEDWAY BLACK		NOTE 5
FRP-1	CLASS C FIRE RATED - PEBBLED FINISH	CRANE COMPOSITES	GLASBORD	CGI	85 WHITE		
ST-1	DOOR STAIN	SHERWIN WILLIAMS		SW3129-P	ARMOIRE HICKORY		
PT-1	GENERAL PAINT - MATTE	BENJAMIN MOORE		1557	SILVER SONG		
PT-2	TRIM AND DOOR GENERAL PAINT - MATTE	BENJAMIN MOORE		1482	SABRE GRAY		
PT-3	CEILING GENERAL PAINT - EGGSHELL	SHERWIN WILLIAMS		SW7056	RESERVED WHITE		
PT-4	GENERAL PAINT - MATTE	BENJAMIN MOORE		OC-66	SNOW WHITE		MONITOR FRAME
<b>GLASS</b>							
GL-1	25" X 18" X 3/8" CERAMIC FRIT GLASS PANELS	VITROLITE			NEW JADE	TIMOTHY DUNN - 314.645.4317	NOTE 2 & 4
GL-2	25" X 18" X 3/8" CERAMIC FRIT GLASS PANELS	VITROLITE			NEW ORCHID	TIMOTHY DUNN - 314.645.4317	NOTE 1 & 4
GL-3	25" X 4" X 1/2" CERAMIC FRIT GLASS TRIM	VITROLITE			BLACK	TIMOTHY DUNN - 314.645.4317	
GL-4	25" X 6" X 1/2" CERAMIC FRIT GLASS TRIM	VITROLITE			BLACK	TIMOTHY DUNN - 314.645.4317	
GL-5	CUSTOM CUT .25 MIRROR	VITROLITE			BLACK	TIMOTHY DUNN - 314.645.4317	
<b>GROUT</b>							
GT-1	CUSTOM MATCH TO GL-1				NEW JADE	TIMOTHY DUNN - 314.645.4317	NOTE 3
GT-2	CUSTOM MATCH TO GL-2				NEW ORCHID	TIMOTHY DUNN - 314.645.4317	NOTE 3
GT-3	CUSTOM MATCH TO GL-3	VITROLITE			BLACK	TIMOTHY DUNN - 314.645.4317	
GT-4	EPOXY GROUT - MINIMAL GROUT LINE	BOSTIK	TRU-COLOR	H195	SHADOW		
<b>FLOORING</b>							
FLR-1	SEALED CONCRETE	AMERIPOLISH	X-LINK WB SURFACE SEALER		MATTE CLEAR	800.592.9320	
FLR-2	CONCRETE DYE	AMERIPOLISH			GRAY		USE WITH FLR-1
FLR-3	66SAM 6X6 QUARRY TILE (USE GT-4)	AMERICAN OLEAN		Q06	FAWN GRAY	REED GILKEY - 612-226-8883	ELEVATOR FLOORING - SEE SPECIFICATIONS
FLR-4	VINYL SHEET FLOORING	ARMSTRONG FLOORING	ACCOLADE PLUS	5A503151	SAND GREY		
<b>TRANSITION STRIP &amp; CORNER GUARD</b>							
TS-1	1/4" TRIM AT WALL CAPS AND EDGES AT TILE	SCHLUTER	QUADEC-K	Q60AE	SATIN ALUMN	BY GC	
TS-2	15 mm COVE BASE IN RESTROOMS	SCHLUTER	DILEX-AHKA		SATIN ALUMN	BY GC	
TS-3	6 MM CORNER GUARD	SCHLUTER	QUADEC	Q60E	STAINLESS STEEL	BY GC	
<b>WALL BASE</b>							
WB-1	4" VINYL WALL BASE - 1/8" STANDARD TOE	ROPPE	VINYL TYPE TV		123 CHARCOAL		
WB-2	66SAM 6X6 QUARRY TILE (USE GT-4)	AMERICAN OLEAN	QUARRY TILE	Q06	FAWN GRAY	REED GILKEY - 612-226-8883	ONLY ON GYP. BD SURFACES
<b>FINISH NOTES</b>							
NOTE 1	CUSTOM COLORED GLASS PANEL TO MATCH VITROLITE - ORCHID SAMPLE A						
NOTE 2	CUSTOM COLORED GLASS PANEL TO MATCH VITROLITE - JADE SAMPLE C						
NOTE 3	CUSTOM COLORED GROUT TO MATCH GLASS PANEL						
NOTE 4	POLISH EXPOSED EDGE OF TRIM PIECE						
NOTE 5	CUSTOM COLOR FOR POWDER COATED TOILET PARTITIONS						
NOTE 6	HOLLOW METAL FRAMES/DOORS TO BE PAINTED WITH AN ALKYD SATIN ENAMEL FINISH						

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SHEET TITLE:  
ENLARGED  
PLUMBING  
FIXTURE PLAN,  
FIXTURE AND  
FINISH  
SCHEDULES

PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
HISTORICAL 10.29.15  
HISTORICAL 03.08.16  
HPC SUBMIT 04.07.16

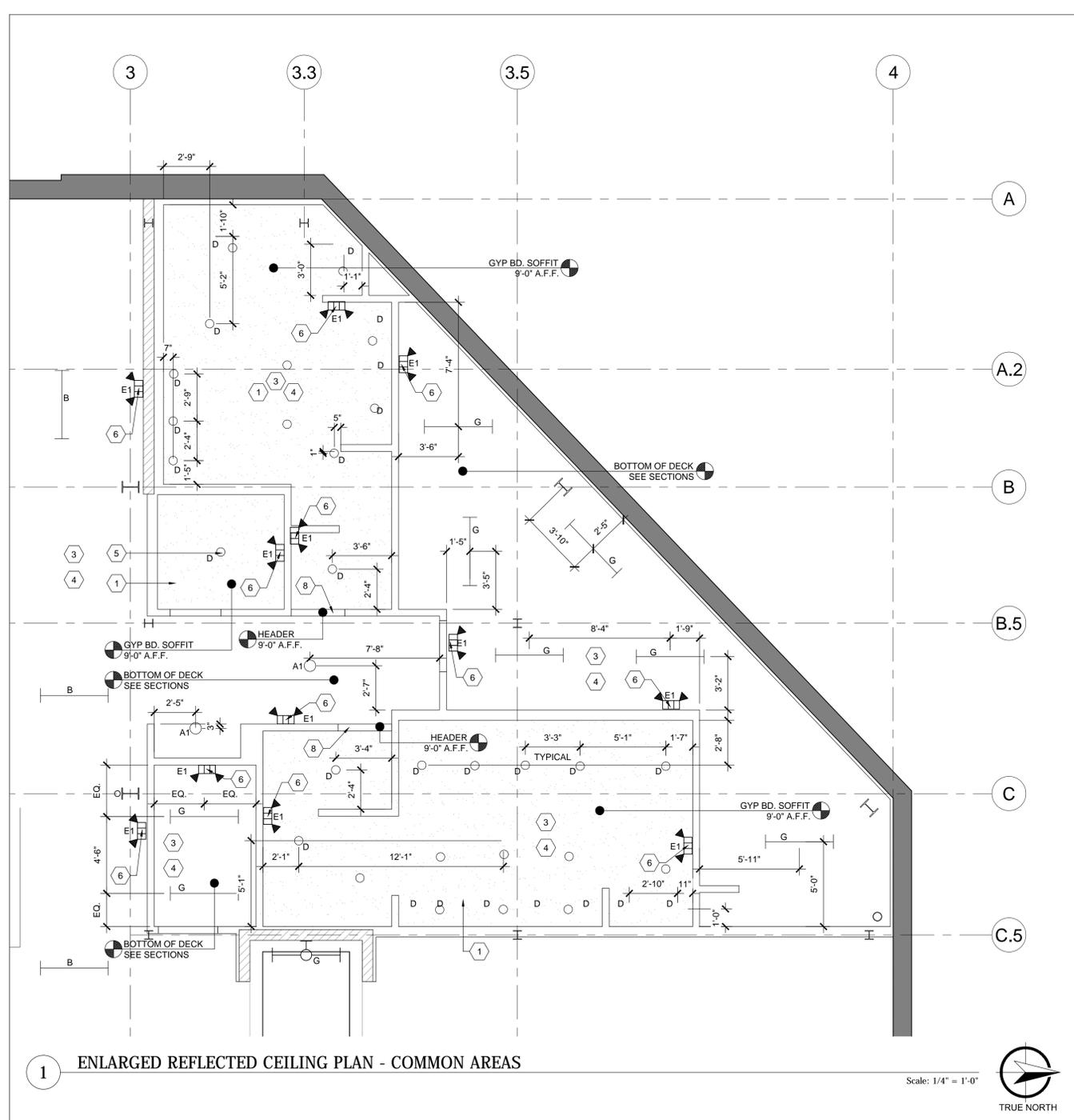


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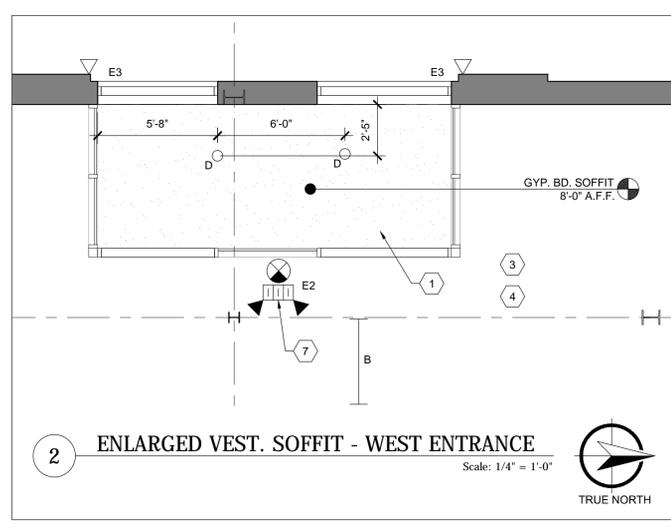
I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of MINNESOTA  
signed:  
date: 03.08.16 reg. no. 45178

A1.4



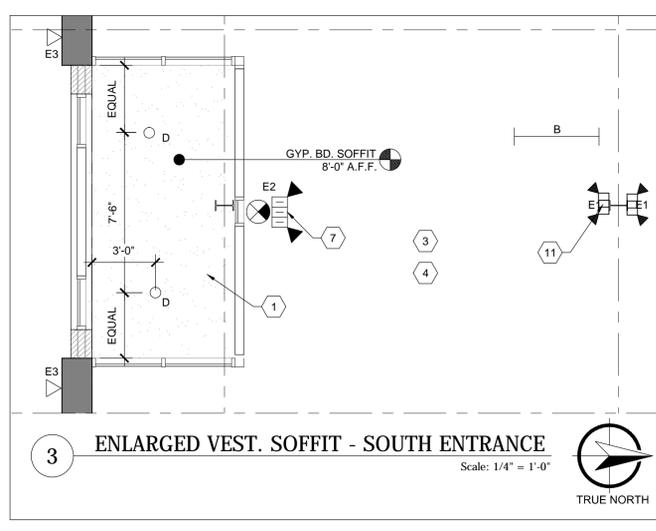
1 ENLARGED REFLECTED CEILING PLAN - COMMON AREAS

Scale: 1/4" = 1'-0"  
TRUE NORTH



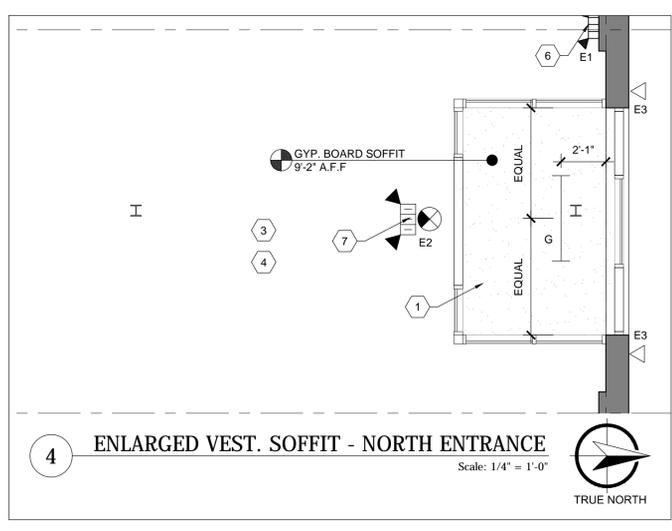
2 ENLARGED VEST. SOFFIT - WEST ENTRANCE

Scale: 1/4" = 1'-0"  
TRUE NORTH



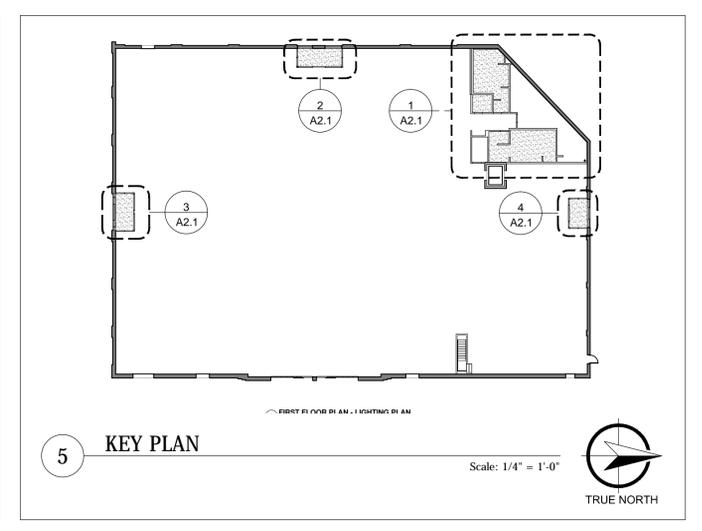
3 ENLARGED VEST. SOFFIT - SOUTH ENTRANCE

Scale: 1/4" = 1'-0"  
TRUE NORTH



4 ENLARGED VEST. SOFFIT - NORTH ENTRANCE

Scale: 1/4" = 1'-0"  
TRUE NORTH



5 KEY PLAN

Scale: 1/4" = 1'-0"  
TRUE NORTH

**CEILING PLAN NOTES**

- 1 GYPSUM BOARD CEILING - REFER TO FINISH SCHEDULE FOR PAINT SELECTION.
- 2 COORDINATE ALL NEW FLOOR/CEILING ASSEMBLY PENETRATIONS REQUIRED WITH DRAWINGS BY OTHERS - FIRESTOP ALL PENETRATIONS AS REQUIRED.
- 3 GENERAL CONTRACTOR TO COORDINATE ALL LIGHTING LOCATIONS WITH ELECTRICAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 4 GENERAL CONTRACTOR TO COORDINATE ALL MECHANICAL LOCATIONS WITH MECHANICAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 5 CENTER LIGHT FIXTURE WITHIN ROOM.
- 6 ILLUMINATED EXIT SIGNAGE AS REQUIRED BY CODE - REFER TO ELECTRICAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- 7 EMERGENCY EXIT LIGHT - GENERAL CONTRACTOR TO COORDINATE WITH OWNER ON SPECIFIC LOCATIONS.
- 8 OPEN DOORWAY WRAPPED IN STAINLESS STEEL - GENERAL CONTRACTOR TO PROVIDE STAINLESS STEEL.

**CEILING GENERAL NOTES**

1. CENTER ALL FIXTURES IN CEILING TILES AND FIELD VERIFY GRID LAYOUT FOR PROPER FIXTURE LAYOUT (TO MATCH DRAWINGS).
2. ALIGN ALL FIXTURES IN BOTH DIRECTIONS (LAY OUT GRIDS SO THAT ALIGNMENTS ARE CONSISTENT).
3. ALL ACCESS PANELS IN GYP. BD. CEILINGS TO BE COORDINATED WITH ARCHITECT.
4. ELECTRICAL CONTRACTOR TO VERIFY ALL LOCATIONS OF WALL MOUNTED J-BOXES WITH OWNER PRIOR TO INSTALLATION.
5. GENERAL CONTRACTOR TO PAINT ALL GYP. BOARD CEILINGS AND UNDERSIDE OF EXPOSED DECKING.
6. SUBMIT ALL LIGHT FIXTURE CUT-SHEETS TO ARCHITECT FOR APPROVAL.
7. PROVIDE SHIELDED LIGHT FIXTURES OVER FOOD PREPARATIONS SERVICE, FOOD STORAGE AND UTENSIL WASHING AREAS.
8. CAULK ALL CEILINGS TO WALL WITH PAINTABLE CAULK.
9. SHOP PAINT ALL DIFFUSERS TO MATCH THE COLOR OF THE SURROUNDING SURFACE. NOTIFY ARCHITECT IMMEDIATELY IF ANY ARE IN QUESTION. ALL DIFFUSERS IN LAY-IN CEILING AREA AND DRYWALL CEILING AREA OF KITCHEN ARE TO BE STANDARD WHITE ALUMINUM.
10. FOR ALL FINISH INFORMATION - REFER TO FINISH SCHEDULE AND PLAN.
11. PAINT ALL TRIM RINGS TO MATCH ADJACENT CEILING FINISH - TYPICAL.
12. GENERAL CONTRACTOR TO PROVIDE EMERGENCY EGRESS LIGHTING AT EACH DOOR ALONG TRAVEL PATHS AS REQUIRED BY CODE.
13. ALL EXIT SIGNS LOCATED ABOVE DOORS SHALL BE CENTERED ON DOORWAY UNLESS NOTED OTHERWISE.
14. EMERGENCY LIGHTING TO PROVIDE IFC AVERAGE ALONG PATH OF EGRESS AT FLOOR AREA.
15. FOR ALL MECHANICAL (i.e. DUCTWORK, UNISTRUT) AND ALL ELECTRICAL (i.e. CONDUIT, UNISTRUT) SHALL BE PAINTED TO MATCH THE PAINTED FINISH OF THE METAL DECK OR ROOF DECK WITH SPECIFIC PAINT COLOR AS LISTED IN FINISH SCHEDULE ON A1.4.

**CEILING PLAN LEGEND**

- EXISTING CONSTRUCTION AND STRUCTURAL ELEMENTS TO REMAIN. PATCH AND REPAIR SURFACES AFFECTED BY DEMOLITION AS REQUIRED FOR NEW FINISHES.
- NEW CONSTRUCTION
- HEADER FOR EXISTING DOOR TO REMAIN. SEE DOOR SCHEDULE FOR HARDWARE MODIFICATIONS.
- HEADER FOR NEW DOOR AND FRAME.
- THIS MARKER IS TO INDICATE CEILING HEIGHTS

**REFLECTED CEILING SYMBOLS**

A		LED HIGH BAY - MOUNT AT 22'-0" A.F.F.
A1		LED HIGH BAY - MOUNT AT 10'-0" A.F.F.
B		4'-0" LED LIGHT STRIP FIXTURE - MOUNT AT 10'-0" A.F.F.
C		NOT USED
D		6" LED SHALLOW LENS DOWN LIGHT
E		EXIT LIGHT
E1		EMERGENCY BATTERY PACK
E2		EXIT / EMERGENCY COMBO
E3		REMOTE HEAD
F		2 X 4 RECESSED LED LENSED TROFFER
G		4'-0" INDUSTRIAL STRIP WITH WIRE GUARD
H		4'-0" 2 LAMP STRIP FLOURESCENT
I		SUPPLY DIFFUSERS
J		EXHAUST FAN
K		RETURN DIFFUSERS

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ST. PAUL, MN 55102

SHEET TITLE:  
COMMON AREA  
AND VESTIBULES  
ENLARGED  
REFLECTED  
CEILING PLANS,  
CEILING LEGENDS  
& NOTES

PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
HISTORICAL 10.29.15  
HISTORICAL 03.08.16  
HPC SUBMIT 04.07.16



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I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of MINNESOTA

Signed:  
Date: 03.08.16 reg. no. 45178

A2.1

## REFLECTED CEILING GENERAL NOTES

- CENTER ALL FIXTURES IN CEILING TILES AND FIELD VERIFY GRID LAYOUT FOR PROPER FIXTURE LAYOUT (TO MATCH DRAWINGS).
- ALIGN ALL FIXTURES IN BOTH DIRECTIONS (LAY OUT GRIDS SO THAT ALIGNMENTS ARE CONSISTENT).
- ALL ACCESS PANELS IN GYP BD. CEILINGS TO BE COORDINATED WITH ARCHITECT
- ELECTRICAL CONTRACTOR TO VERIFY ALL LOCATIONS OF WALL MOUNTED J-BOXES WITH OWNER PRIOR TO INSTALLATION.
- GENERAL CONTRACTOR TO PAINT ALL GYP. BOARD CEILINGS.
- SUBMIT ALL LIGHT FIXTURE CUT-SHEETS TO ARCHITECT FOR APPROVAL.
- PROVIDE SHIELDED LIGHT FIXTURES OVER FOOD PREPARATIONS SERVICE, FOOD STORAGE AND UTENSIL WASHING AREAS.
- CAULK ALL CEILINGS TO WALL WITH PAINTABLE CAULK.
- SHOP PAINT ALL DIFFUSERS TO MATCH THE COLOR OF THE SURROUNDING SURFACE. NOTIFY ARCHITECT IMMEDIATELY IF ANY ARE IN QUESTION. ALL DIFFUSERS IN LAY-IN CEILING AREA AND DRYWALL CEILING AREA OF KITCHEN ARE TO BE STANDARD WHITE ALUMINUM.
- FOR ALL FINISH INFORMATION - REFER TO FINISH SCHEDULE AND PLAN.
- PAINT ALL TRIM RINGS TO MATCH ADJACENT CEILING FINISH - TYPICAL.
- GENERAL CONTRACTOR TO PROVIDE EMERGENCY EGRESS LIGHTING AT EACH DOOR ALONG TRAVEL PATH AS REQUIRED BY CODE.
- ALL EXIT SIGNS LOCATED ABOVE DOORS SHALL BE CENTERED ON DOORWAY UNLESS NOTED OTHERWISE.
- EMERGENCY LIGHTING TO PROVIDE IFC AVERAGE ALONG PATH OF EGRESS AT FLOOR AREA.
- FOR ALL MECHANICAL (ie: DUCTWORK, UNISTRUT) AND ALL ELECTRICAL (ie: CONDUIT, UNISTRUT) SHALL BE PAINTED TO MATCH THE PAINTED FINISH OF THE METAL DECK OR ROOF DECK WITH SPECIFIC PAINT COLOR AS LISTED IN FINISH SCHEDULE ON A1.4.

## CEILING PLAN LEGEND

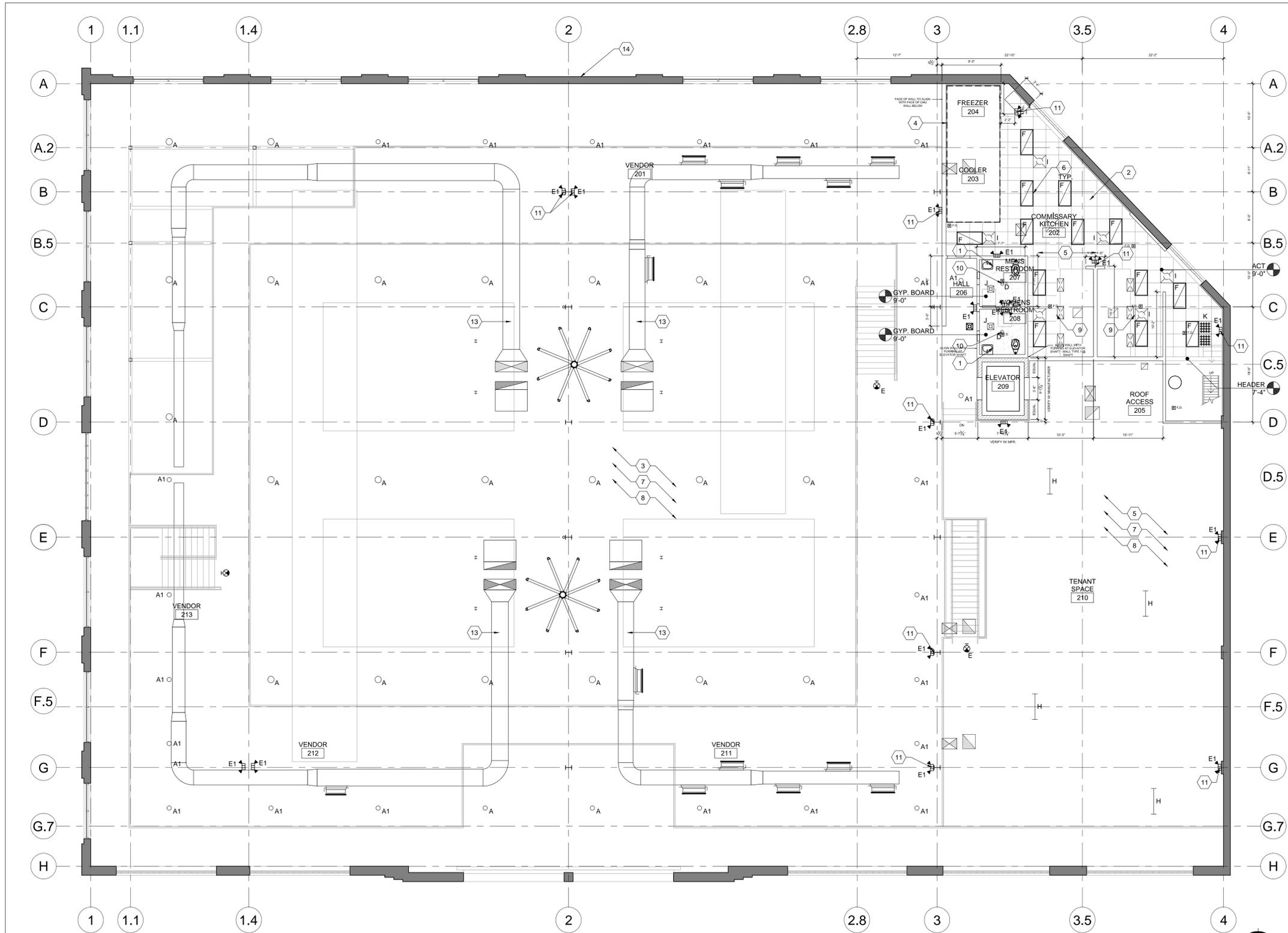
- EXISTING CONSTRUCTION AND STRUCTURAL ELEMENTS TO REMAIN. PATCH AND REPAIR SURFACES AFFECTED BY DEMOLITION AS REQUIRED FOR NEW FINISHES.
- NEW CONSTRUCTION
- HEADER FOR EXISTING DOOR TO REMAIN. SEE DOOR SCHEDULE FOR HARDWARE MODIFICATIONS.
- HEADER FOR NEW DOOR AND FRAME.
- THIS MARKER IS TO INDICATE CEILING HEIGHTS

## REFLECTED CEILING SYMBOLS

A	○	LED HIGH BAY - MOUNT AT 22'-0" A.F.F.
A1	○	LED HIGH BAY - MOUNT AT 10'-0" A.F.F.
B	— —	4'-0" LED LIGHT STRIP FIXTURE - MOUNT AT 10'-0" A.F.F.
C		NOT USED
D	○	6" LED SHALLOW LENS DOWN LIGHT
E	⊗	EXIT LIGHT
E1	⊕	EMERGENCY BATTERY PACK
E2	⊕	EXIT / EMERGENCY COMBO
E3	▽	REMOTE HEAD
F	▭	2 X 4 RECESSED LED LENSED TROFFER
G	— —	4'-0" INDUSTRIAL STRIP WITH WIRE GUARD
H	— —	4'-0" 2 LAMP STRIP FLOURESCENT
I	⊗	SUPPLY DIFFUSERS
J	⊗	EXHAUST FAN
K	▭	RETURN DIFFUSERS

## REFLECTED CEILING KEYNOTES

- GYP. BOARD CEILING - REFER TO FINISH SCHEDULE FOR PAINT SELECTION.
- WASHABLE SUSPENDED VINYL FACED ACOUSTIC BOARD CEILING TILE AND GRID.
- EXISTING EXPOSED WOOD DECKING - REPLACE / REPAIR ANY DECKING AS REQUIRED.
- DASHED LINE INDICATES EXENTS OF COOLER/FREEZER UNITS.
- COORDINATE ALL NEW FLOOR/CEILING ASSEMBLY PENETRATIONS WITH DRAWINGS BY OTHERS - FIRESTOP ALL PENETRATIONS AS REQUIRED.
- USE SHATTERPROOF LENS IN ALL FOOD PREP AREAS.
- GENERAL CONTRACTOR TO COORDINATE ALL LIGHTING LOCATIONS WITH ELECTRICAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- GENERAL CONTRACTOR TO COORDINATE ALL MECHANICAL LOCATIONS WITH MECHANICAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- PROVIDE STAINLESS STEEL ENCLOSURE PANEL BETWEEN PERIMETER OF HOOD AND ALL SURROUNDING SUSPENDED CEILING SYSTEM.
- CENTER LIGHT FIXTURE WITHIN ROOM.
- ILLUMINATED EXIT SIGNAGE AS REQUIRED BY CODE - REFER TO ELECTRICAL DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.
- EMERGENCY EXIT LIGHT - GENERAL CONTRACTOR TO COORDINATE WITH OWNER ON SPECIFIC LOCATIONS.
- NEW DUCTWORK - REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- BUILDING MOUNTED SIGNAGE LOCATION - GENERAL CONTRACTOR TO COORDINATE WITH SIGNAGE VENDOR AND ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL ELECTRICAL CIRCUIT INCLUDING ALL CONDUIT, WIRE, CONNECTIONS AND BREAKERS AT PANEL BOARD NECESSARY TO SERVE PROPOSED SIGNAGE - REFER TO SIGNAGE DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION.



1 SECOND FLOOR REFLECTED CEILING PLAN

1 SECOND FLOOR PLAN - LIGHTING PLAN  
SCALE: 1/8" = 1'-0"

Scale: 1/8" = 1'-0"



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SHEET TITLE:  
REFLECTED  
CEILING PLAN,  
CEILING LEGEND  
& NOTES

PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
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I hereby certify that this plan  
specification or report was prepared  
by me or under my direct supervision  
and that I am a duly registered  
architect under the law of  
the state of MINNESOTA  
signed:  
date: 03.08.16 reg. no. 45178

A2.2

ROOF PLAN NOTES

- GENERAL CONTRACTOR TO ENSURE THAT EXHAUST FANS ARE AT LEAST 10'-0" MINIMUM AWAY FROM ANY AIR INTAKES AND THAT ANY AIR INTAKES ARE AT LEAST 10'-0" MINIMUM AWAY FROM ANY EXHAUST LOCATIONS.
- GENERAL CONTRACTOR TO INSPECT EXISTING ROOF AND ROOF STRUCTURE FOR DAMAGE. GENERAL CONTRACTOR TO REPAIR AND REPLACE ANY ROOFING, COPING, FLASHING, ROOF DECKING, ROOF STRUCTURE, ETC. AS REQUIRED BASED ON INSPECTION.
- GENERAL CONTRACTOR TO INSTALL NEW METAL COUNTER FLASHING AT PERIMETER OF ENTIRE BUILDING.
- ALL ROOF PENETRATIONS FOR MINOR VENTS AND SIMILAR ITEMS MAY NOT BE INDICATED ON THIS ROOF PLAN. ALL ITEMS ARE INDICATED FOR REFERENCE PURPOSES ONLY. REFER TO ENGINEERED DRAWINGS BY OTHERS FOR ADDITIONAL ROOF PENETRATIONS REQUIRING FLASHING INSTALLATION.
- ALL ROOFING WORK, INCLUDING FLASHING AND COUNTER-FLASHING, SHALL BE PROVIDED BY THE ROOFING CONTRACTOR SO AS TO OBTAIN OR MAINTAIN ALL ROOFING WARRANTIES.
- LOCATIONS OF ALL ROOF PENETRATIONS TO BE VERIFIED WITH APPROPRIATE SUB-CONTRACTOR.
- COORDINATE EXACT LOCATIONS OF ALL ROOF-TOP MOUNTED MECHANICAL CURBS WITH BOTH MECHANICAL AND STRUCTURAL ENGINEER PRIOR TO COMMENCING WORK.
- PROVIDE ROOF CRICKETS/DIVERTERS AT ALL EXHAUST FANS AND MECHANICAL ROOF CURBS TO ENSURE/MAINTAIN POSITIVE AND EFFICIENT ROOF DRAINAGE.
- GENERAL CONTRACTOR TO KEEP ROOF CLEAN OF ALL DEBRIS DURING CONSTRUCTION. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL FRAMING INFORMATION AT ALL ROOF OPENINGS.

ROOF PLAN KEYNOTES

- GENERAL CONTRACTOR TO INSPECT, REPAIR AND REPLACE EXISTING WOOD ROOF PURLINS AS REQUIRED.
- GENERAL CONTRACTOR TO INSPECT, REPAIR AND REPLACE EXISTING WOOD ROOF DECKING AS REQUIRED.
- INFILL EXISTING WOOD DECKING AT ALL EXISTING ROOF PENETRATIONS. ALL PENETRATIONS TO BE ABANDONED.
- GENERAL CONTRACTOR TO INSPECT, REPAIR AND REPLACE EXISTING SALT GLAZED TILE COPING AT PARAPET CAP AS REQUIRED.
- GENERAL CONTRACTOR TO PROTECT EXISTING PARAPET AND SUPPORTIVE MASONRY AS LOCATIONS MAY BE UNSTABLE - IF UNSTABLE LOCATIONS ARE DETERMINED DURING CONSTRUCTION, CONTACT ARCHITECT AND STRUCTURAL ENGINEER IMMEDIATELY.
- REBUILD PARAPET AND MISSING EXISTING PRECAST CONCRETE PARAPET CAPS IN KIND - COORDINATE LOCATIONS AND EXTENTS WITH EXTERIOR ELEVATIONS.
- SALVAGE AND REVISE EXISTING PRECAST CONCRETE PARAPET CAPS AS REQUIRED.
- 60 MIL FULLY ADHERED EPOXY ROOFING MEMBRANE.
- INSTALL (3) LAYERS OF RIGID INSULATION ON EXISTING WOOD ROOF DECK AS REQUIRED TO ME R-23 AVERAGE MINIMUM.
- SHADED AREAS ON ROOF PLAN INDICATE TAPERED INSULATION ABOVE BASE THICKNESS.
- NUMBER INDICATES TOTAL THICKNESS OF RIGID ROOFING INSULATION ABOVE BASE ELEVATION OF EXISTING ROOF SHEATHING.
- PROVIDE CRICKET OF BUILT-UP RIGID INSULATION AT ALL ROOF-TOP MOUNTED EQUIPMENT - SLOPE AT 1/2" PER 12" TO ENSURE POSITIVE DRAINAGE.
- PROVIDE ROOF-TOP MOUNTED WALKWAY PADS TO ALL ROOF-TOP MOUNTED MECHANICAL EQUIPMENT - VERIFY LOCATION PRIOR TO INSTALLATION.
- PARAPET ELEVATION CHANGE - REFER TO EXTERIOR ELEVATIONS.
- INSTALL NEW PREFINISHED METAL COUNTER FLASHING AT INTERIOR FACE OF ENTIRE PERIMETER OF PARAPET.
- WRAP E.P.D.M MEMBRANE UP PARAPET TO REGLET AND TERMINATION BAR.
- INSTALL NEW PREFINISHED METAL OVERFLOW SCUPPER WITHIN EXISTING EXTERIOR WALL OPENING.
- EXISTING INTERIOR ROOF DRAIN TO REMAIN - PROTECT DURING CONSTRUCTION.
- EXISTING METAL ROOF HATCH TO REMAIN - PROTECT DURING CONSTRUCTION.
- INSTALL NEW CURB, CANT AND FLASHING AT EXISTING METAL ROOF HATCH AS PER ROOFING MANUFACTURERS RECOMMENDATIONS.
- EXISTING WOOD MONITOR STRUCTURE TO REMAIN - PROTECT DURING CONSTRUCTION - GENERAL CONTRACTOR TO INSPECT, REPAIR AND REPLACE EXISTING STRUCTURE AS REQUIRED.
- INSTALL WOOD FASCIA AT PERIMETER OF MONITOR ROOFS AS REQUIRED TO ACCEPT NEW ROOF INSULATION - PAINT.
- REGLAZE EXISTING MONITOR WINDOWS IN PLACE - PROVIDE 1" INSULATED GLAZING - REPLACE ALL UNITS.
- EXISTING WOOD ROOF-TOP MOUNTED SHED TO REMAIN - PROTECT DURING CONSTRUCTION.
- EXISTING STEEL FRAMED BRIDGE AND SUPPORTS TO REMAIN - PROTECT DURING CONSTRUCTION.
- INSTALL NEW FLASHING AT EXISTING STEEL BRIDGE SUPPORTS AS PER ROOFING MANUFACTURERS RECOMMENDATIONS.
- ALL ROOF-TOP MOUNTED MECHANICAL UNITS TO BE ON PREFINISHED METAL CURB WITH TREATED WOOD NAILER - REFER TO MECHANICAL DRAWINGS FOR NUMBERS, SIZE, HEIGHT, WEIGHT AND LOCATION OF ALL EQUIPMENT.
- PROVIDE STRUCTURAL FRAMING AT ALL NEW ROOF PENETRATIONS / OPENINGS AS REQUIRED - REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- FIELD VERIFY EXACT LOCATIONS OF ALL ROOF-TOP MOUNTED MECHANICAL EQUIPMENT AND CURBS WITH STRUCTURAL ENGINEER PRIOR TO COMMENCING WORK.
- INSTALL INTEGRAL PREFINISHED PRE-MOUNTED PIPE FLASHING AT ALL ROOF VENT PENETRATIONS.
- REFER TO ENGINEERED DRAWINGS BY OTHERS FOR ADDITIONAL ROOF PENETRATIONS, REQUIRING FLASHING.
- LOCATIONS OF ALL ROOF PENETRATIONS TO BE VERIFIED WITH APPROPRIATE SUB-CONTRACTOR.
- ALL ROOF PENETRATIONS, INCLUDING MINOR ROOF VENTS AND SIMILAR ITEMS, MAY NOT BE INDICATED ON PLAN - CONTRACTOR TO VERIFY AND COORDINATE SCOPE SO AS TO INDICATE ALL ROOFING AND FLASHING WORK SO AS TO OBTAIN AND/OR MAINTAIN NEW ROOFING WARRANTIES.
- CLEAN ROOF OF ALL CONSTRUCTION DEBRIS AT PROJECT COMPLETION.
- ALL ROOFING DETAILS, INCLUDING FLASHING, CANTS, BLOCKING, ROOF PENETRATIONS AND EXPANSION JOINTS ARE TO BE INSTALLED PER ROOFING MANUFACTURERS DETAILS, STANDARDS AND RECOMMENDATIONS.

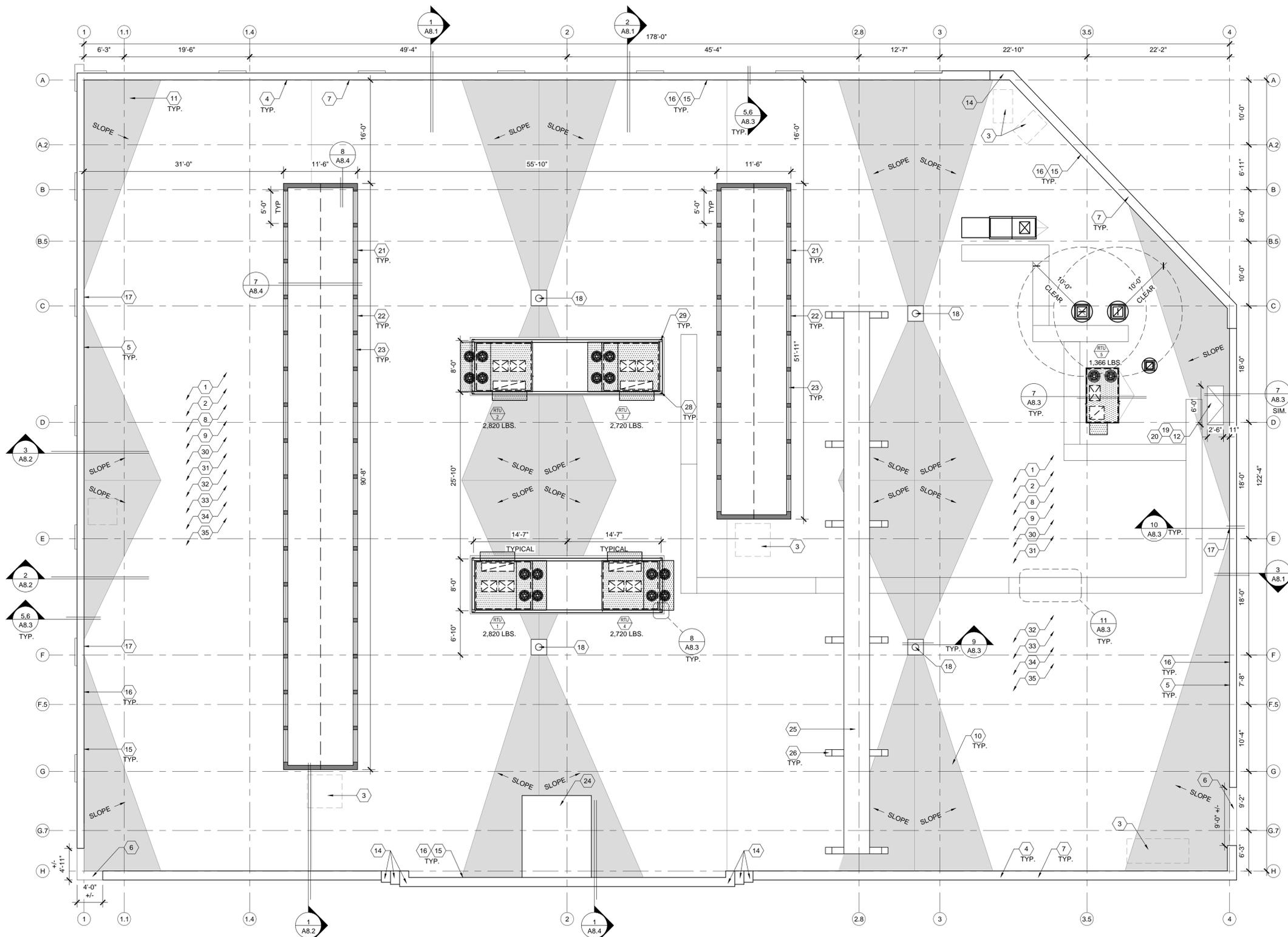
SHEET TITLE:  
 ROOF PLAN AND  
 NOTES

PROJECT #: 1294  
 DRAWN BY: DAA CJG  
 CHECKED BY: AM  
 ISSUE: DATE:  
 HISTORICAL 10.29.15  
 HISTORICAL 03.08.16  
 HPC SUBMIT 04.07.16



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I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of MINNESOTA  
 signed: \_\_\_\_\_  
 date: 03.08.16 reg. no. 45178



1 ROOF PLAN

Scale: 1/8" = 1'-0"



## DOOR SCHEDULE

DR #	ROOM NAME	DOOR SIZE	DOOR			FRAME			HARDWARE	REMARKS
			TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH		
101A	VESTIBULE	(2) 2'-8" X 7'-10"	A	ALUMINUM	---	6	ALUMINUM	---	2	THERMALLY BROKEN ALUM DR AND FRAME
101B	VESTIBULE	(2) 3'-0" X 7'-10"	A	ALUMINUM	---	5	ALUMINUM	---	2	THERMALLY BROKEN ALUM DR AND FRAME
101C	VESTIBULE	(2) 2'-8" X 7'-10"	A	ALUMINUM	---	7	ALUMINUM	---	8	THERMALLY BROKEN ALUM DR AND FRAME
101D	VESTIBULE	(2) 3'-0" X 7'-10"	A	ALUMINUM	---	7	ALUMINUM	---	8	THERMALLY BROKEN ALUM DR AND FRAME
104	FAMILY	3'-0" X 7'-0"	C	WOOD	PT-4	2	H.M.	PT-2	4	
105	MEN'S RESTROOM	3'-0" X 7'-0"	---	---	---	1	SS	---	---	STAINLESS STEEL FRAME TO BE COORDINATED WITH GENERAL CONTRACTOR
106	MECHANICAL	3'-6" X 7'-0"	B	H.M.	PT-2	2	H.M.	PT-2	7	
107	WOMEN'S RESTROOM	3'-0" X 7'-0"	---	---	---	1	SS	---	---	STAINLESS STEEL FRAME TO BE COORDINATED WITH GENERAL CONTRACTOR
108	ELEVATOR EQUIPMENT	3'-0" X 7'-0"	B	H.M.	PT-2	2	H.M.	PT-2	7	
111	TENANT	3'-0" X 6'-8"	B	INSUL H.M.	PT-2	1	INSUL H.M.	PT-2	1	INSULATED HM DOOR AND FRAME
112A	VESTIBULE	3'-0" X 7'-0"	A	ALUMINUM	---	3	ALUMINUM	---	2	THERMALLY BROKEN ALUM DR AND FRAME
112B	VESTIBULE	3'-0" X 7'-0"	A	ALUMINUM	---	3	ALUMINUM	---	2	THERMALLY BROKEN ALUM DR AND FRAME
112C	VESTIBULE	(2) 3'-0" X 7'-0"	A	ALUMINUM	---	4	ALUMINUM	---	8	
114A	ENTRANCE	3'-10" X 8'-2"	D	ALUMINUM	---	10	ALUMINUM	---	3	
114B	ENTRANCE	3'-10" X 8'-2"	D	ALUMINUM	---	10	ALUMINUM	---	3	
116A	VESTIBULE	(2) 3'-0" X 7'-10"	A	ALUMINUM	---	8	ALUMINUM	---	2	THERMALLY BROKEN ALUM DR AND FRAME
116B	VESTIBULE	(2) 3'-0" X 7'-10"	A	ALUMINUM	---	8	ALUMINUM	---	2	THERMALLY BROKEN ALUM DR AND FRAME
116C	VESTIBULE	(2) 3'-0" X 7'-10"	A	ALUMINUM	---	9	ALUMINUM	---	8	
202	COMMISSARY	3'-6" X 7'-0"	B	H.M.	PT-2	2	H.M.	PT-2	6	
207	MENS RESTROOM	3'-0" X 7'-0"	C	WOOD	PT-4	2	H.M.	PT-2	4	
208	WOMENS RESTROOM	3'-0" X 7'-0"	C	WOOD	PT-4	2	H.M.	PT-2	4	
212A	OVERHEAD DOOR	15'-10" X 12'-7"	---	ALUMINUM	---	---	ALUMINUM	---	---	INSULATED GLAZING WITHIN
212B	OVERHEAD DOOR	15'-10" X 12'-7"	---	ALUMINUM	---	---	ALUMINUM	---	---	INSULATED GLAZING WITHIN

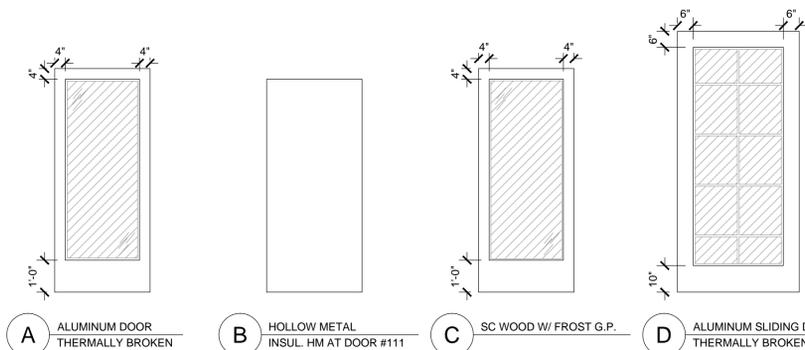
### DOOR SCHEDULE NOTES:

- ALL EXIT DOORS SHALL BE OPERABLE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
- ALL THRESHOLDS SHALL NOT EXCEED 1/2" IN HEIGHT AND SHALL HAVE BEVELED SIDE (1:2 SLOPE MAXIMUM) WHEN THE HEIGHT IS GREATER THAN 1/4"
- THE BOTTOM 10" OF ALL DOORS SHALL HAVE A SMOOTH, UNINTERRUPTED SURFACES.
- ALL DOORS TO MEET "BARRIER-FREE" STANDARDS AS REQUIRED BY CODE, INCLUDING LEVER HANDLES - REFER TO "BARRIER-FREE STANDARDS" ON AC101 FOR ADDITIONAL INFORMATION.
- ALL ALUMINUM DOORS AND FRAMES TO BE THERMALLY BROKEN.
- ALL PANIC HARDWARE TO BE MOUNTED 30" TO 40" ABOVE FINISHED FLOOR AND UNLATCHING FORCE SHALL NOT EXCEED 15 LBS. IN THE DIRECTION OF TRAVEL.
- COORDINATE ALL EGRESS HARDWARE WITH FIRE ALARM CONTRACTOR.
- PROVIDE 1/4" THINK IDENTIFICATION SYMBOL SIGNS (A 12" TRIANGLE FOR MEN AND A 12" DIAMETER CIRCLE FOR WOMEN CENTERED AT A HEIGHT OF 60" ABOVE FINISHED FLOOR WITH BRAILLE). SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE. MOUNTING LOCATIONS SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3' OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF THE DOOR.
- NO THUMB LATCHES OR KEVED CYLINDER DEAD BOLTS ALLOWED ON ANY DOORS UNLESS OPERATED BY A SINGLE ACTION WITH A LEVER.

## HARDWARE GROUPS

GROUP 1:	GROUP 3:	GROUP 6:
2 PAIR BUTTS	BY DOOR MANUFACTURER	CONTINUOUS HINGE
CLOSER		CLOSER
STOP	GROUP 4:	WALL STOP
DRIP CAP	2 PAIR BUTTS	LOCKSET
THRESHOLD	VACANCY SYMBOL	KICKPLATE
SWEEP	PRIVACY LOCKSET	SMOKE SEALS
WEATHERSTRIPPING	SMOKE SEALS	
EXIT DEVICE	CLOSER	GROUP 7:
PULL HANDLE	STOP	2 PAIR BUTTS
	KICK PLATE (BOTH SIDES)	FLOOR STOP
		STOREROOM LOCKSET
GROUP 2: (PAIR)	GROUP 5:	SMOKE SEALS
2 PAIR BUTTS	2 PAIR BUTTS	CLOSER
SET FLUSH BOLTS	CLOSER	KICKPLATE
STOP	FLOOR STOP	
DRIP CAP	PUSH PLATE	GROUP 8: (PAIR)
THRESHOLD	PULL HANDLE	2 PAIR BUTTS
SWEEP	KICKPLATE	CLOSER
WEATHERSTRIPPING	SMOKE SEALS	STOP
EXIT DEVICE	SILENCER	PULL HANDLE
PULL HANDLE		PUSH PLATE
		SMOKE SEALS

## DOOR TYPES



**NOTE**  
INDICATES GLAZING TO BE TEMPERED

## ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOORS			WALLS		CEILING			REMARKS
		MATERIAL	FINISH	BASE	MATERIAL	FINISH	MATERIAL	HEIGHT	FINISH	
101	VESTIBULE	CONC.	SEAL	---	EXIST	---	GYP. BD.	8'-0"	PT-3	
102	INDOOR MARKET	CONC.	SEAL	---	EXIST	---	EXIST	EXIST	---	
103	HALL	CONC.	SEAL	---	GYP. BD.	PT-1	OPEN	---	---	
104	FAMILY RESTROOM	CONC.	SEAL	---	REFER TO INTERIOR ELEVATIONS FOR INFORMATION	---	GYP. BD.	9'-0"	PT-3	
105	MENS RESTROOM	CONC.	SEAL	---	REFER TO INTERIOR ELEVATIONS FOR INFORMATION	---	GYP. BD.	9'-0"	PT-3	
106	MECHANICAL	CONC.	SEAL	---	GYP. BD.	PT-1	OPEN	---	---	
107	WOMENS RESTROOM	CONC.	SEAL	---	REFER TO INTERIOR ELEVATIONS FOR INFORMATION	---	GYP. BD.	9'-0"	PT-3	
108	ELEVATOR EQUIPMENT	CONC.	SEAL	---	GYP. BD.	PT-1	OPEN	---	---	
109	ELEVATOR LOBBY	CONC.	SEAL	---	GYP. BD.	PT-1	OPEN	---	---	
110	ELEVATOR	---	---	---	---	---	---	---	---	
111	TENANT SPACE	CONC.	SEAL	---	EXIST	---	OPEN	---	---	
112	VESTIBULE	CONC.	SEAL	---	EXIST	---	GYP. BD.	8'-0"	PT-3	
113	STAIR	CONC.	SEAL	---	---	---	OPEN	---	---	
114	ENTRANCE	CONC.	SEAL	---	---	---	OPEN	---	---	
115	ACCESSIBLE LIFT	CONC.	SEAL	---	---	---	OPEN	---	---	
116	VESTIBULE	CONC.	SEAL	---	EXIST	---	GYP. BD.	8'-0"	PT-3	
201	VENDOR	CONC.	SEAL	---	EXIST	---	EXIST	EXIST	---	
202	COMMISSARY	CONC.	FLR-3	RESIN	GYP. BD.	FRP-1 / S.S.	VINYL GYP. BD.	9'-0"	---	
203	COOLER	CONC.	---	---	---	---	---	---	---	FLOOR BY MANUFACTURER
204	FREEZER	CONC.	---	---	---	---	---	---	---	FLOOR BY MANUFACTURER
205	ROOF ACCESS	CONC.	FLR-2	RESIN	GYP. BD.	FRP-1	OPEN ACT-1	9'-0"	---	
206	HALL	CONC.	SEAL	---	GYP. BD.	PT-1	---	---	---	
207	MENS RESTROOM	CONC.	SEAL	---	REFER TO INTERIOR ELEVATIONS FOR INFORMATION	---	GYP. BD.	9'-0"	PT-3	
208	WOMENS RESTROOM	CONC.	SEAL	---	REFER TO INTERIOR ELEVATIONS FOR INFORMATION	---	GYP. BD.	9'-0"	PT-3	
209	ELEVATOR	---	---	---	---	---	---	---	---	FINISHES BY ELEVATOR SUPPLIER
210	TENANT SPACE	CONC.	SEAL	---	EXIST	---	EXIST	EXIST	---	
211	VENDOR	CONC.	SEAL	---	EXIST	---	EXIST	EXIST	---	
212	VENDOR	CONC.	SEAL	---	EXIST	---	EXIST	EXIST	---	
213	VENDOR	CONC.	SEAL	---	EXIST	---	EXIST	EXIST	---	

### ROOM FINISH SCHEDULE NOTES:

- REFER TO INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION.
- REFER TO INTERIOR FINISH DRAWINGS FOR ADDITIONAL INFORMATION.
- GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- REMOVAL OF EXCESS GROUT WILL BE DONE WITH WATER. THE USE OF SULFURIC OR MURIATIC ACID IS PROHIBITED. IF ACIDS ARE USED, THE INSTALLER WILL BE REQUIRED TO REMOVE THE ACID AND RESTORE THE GROUT AT THEIR EXPENSE.
- PROVIDE WATER RESISTANT GYPSUM BOARD AT ALL INTERIOR RESTROOM WALLS FROM FLOOR TO CEILING - CEMENT BOARD AT ALL TILE LOCATIONS.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR ALL CEILING HEIGHTS.
- ALL KITCHEN SPACES SHALL HAVE A WASHABLE VINYL FACED GYPSUM BOARD ACCESSIBLE CEILING TILE SURFACE (WHITE).

### FINISH SCHEDULE FLOOR COVERING NOTES:

- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A CLEAN AND CLEAR FLOOR FREE OF HOLES AND/OR DEPRESSIONS AND ACCEPTABLE FOR INSTALLATION OF ALL FLOOR COVERINGS AND UNDERLAYMENTS. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT AND OWNER.
- INSTALLER SHALL BE RESPONSIBLE FOR QUANTITY TAKEOFF, SUPPLYING, RECEIVING, WAREHOUSING AND INSPECTING ALL FLOOR COVERINGS AND UNDERLAYMENTS PRIOR TO FABRICATION AND/OR INSTALLATION. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE GENERAL CONTRACTOR.
- PRIOR TO INSTALLATION OF ANY FLOOR COVERING, CHECK SURFACE MATERIAL TO ENSURE ITS STRUCTURAL INTEGRITY, ABSOLUTE DRYNESS AND THOROUGHLY CLEAN. REMOVE ALL TRACES OF DIRT, DUST, LOOSE FIBERS, OIL, GREASE, ETC.
- ALL TILE TO BE INSTALLED PER TILE COUNCIL OF AMERICAN STANDARDS.
- WALL TILE AND THRESHOLD GROUT JOINTS TO ALIGN WITH TILE FLOOR GROUT JOINTS.

### FINISH SCHEDULE PAINT NOTES:

- ALL SURFACES RECEIVING PAINT TO BE PROPERLY PREPARED AND READY TO RECEIVE PAINT IN ACCORDANCE WITH MANUFACTURED PRINTED INSTRUCTIONS. WALLS TO BE FINISHED ( MIN. 3 COATS, SANDED AND PRIMED). ALL SURFACES SHALL BE CLEAN, FREE OF DUST, GREASE, OILS OR ANY FOREIGN SUBSTANCES THAT WILL INTERFERE WITH PAINTS.
- HOLES, CRACKS AND OTHER IMPERFECTIONS SHALL BE SUITABLY PATCHED AND FILLED WITH A COMPOUND RECOMMENDED BY THE MANUFACTURER OF THE PAINT AND THEN PRIMED, SURFACES SHALL BE BROUGHT TO TRUE, EVEN SURFACES PRIOR TO PAINTING.
- ADEQUATE NUMBER OF PRIMER AND FINISH COATS TO BE APPLIED FOR COMPLETE COVERAGE.
- APPLY PAINT IN ACCORDANCE WITH THE MANUFACTURERS DIRECTION. USE APPLICATIONS AND TECHNIQUES BEST SUITED FOR THE TYPE OF MATERIAL BEING APPLIED. APPLY EACH MATERIAL AT NOT LESS THAN THE MANUFACTURERS RECOMMENDED SPREADING RATE. MATCH APPROVED SAMPLES FOR COLOR, TEXTURE AND COVERAGE.
- ALL METAL DOOR JAMBS TO BE PAINTED SEMI-GLOSS TO MATCH SAMPLE PROVIDED.
- PAINTED/STAINED WOOD SURFACES TO BE CLEANED OF ALL DIRT, OIL OR OTHER FOREIGN SUBSTANCES WITH SCRAPERS, MINERAL SPIRITS AND SANDPAPER AS REQUIRED. SANDPAPER SMOOTH THOSE FINISHED SURFACES EXPOSED VIEW, AND DUST OFF, SCRAPE AND CLEAN KNOTS AND APPLY A THIN COAT OF CLEAR SHELLAC BEFORE APPLICATION OF THE PRIME COAT. AFTER PRIMING FILL ALL HOLES WITH PUTTY OR PLASTIC WOOD FILLER, SANDPAPER SMOOTH WHEN DRY.
- REMOVE ALL MISAPPLIED PAINT FROM ADJACENT SURFACES. DISPOSE OF EXCESS MATERIALS OFF JOB SITE.
- ALL FINISHES TO MEET NFPA 101, LIFE SAFETY CODE 263.3 - INTERIOR FINISHES.
- PAINT SUBSTITUTIONS ARE NOT ALLOWED.
- SUBMIT TWO (2) SETS OF 8 1/2" X 11" BRUSH OUTS OR DRAW DOWNS OF ALL PAINT COLORS AND FINISHES FOR APPROVAL PRIOR TO APPLICATION.
- ADDITIONAL PAINT SHALL BE PROVIDED FOR FUTURE OWNER USE - 3 GALLONS MINIMUM EACH COLOR.

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SHEET TITLE:  
SCHEDULES AND  
DOOR TYPES

PROJECT #: 1294

DRAWN BY: DAA CJG

CHECKED BY: AM

ISSUE: DATE:

HISTORICAL 10.29.15

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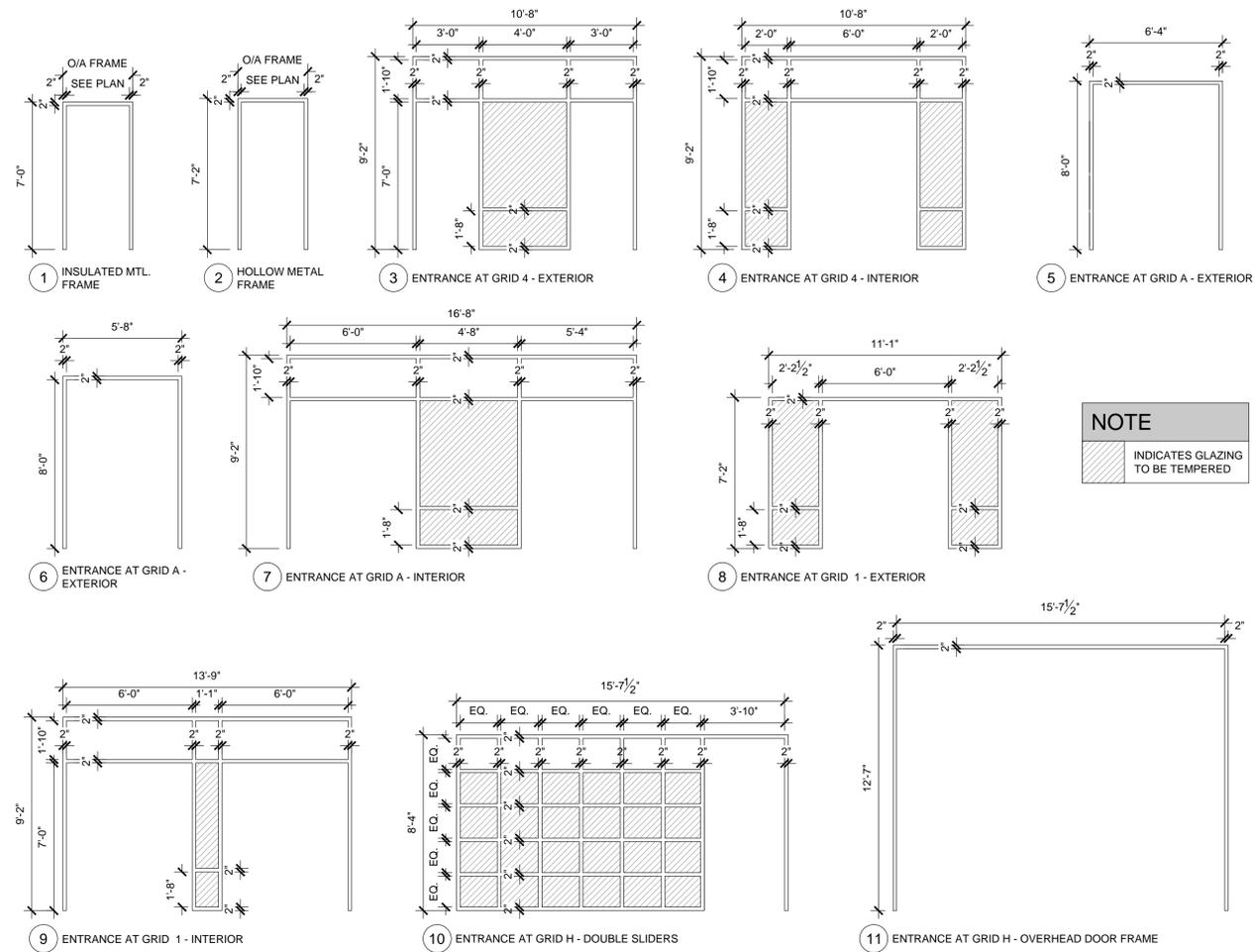
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signed: \_\_\_\_\_  
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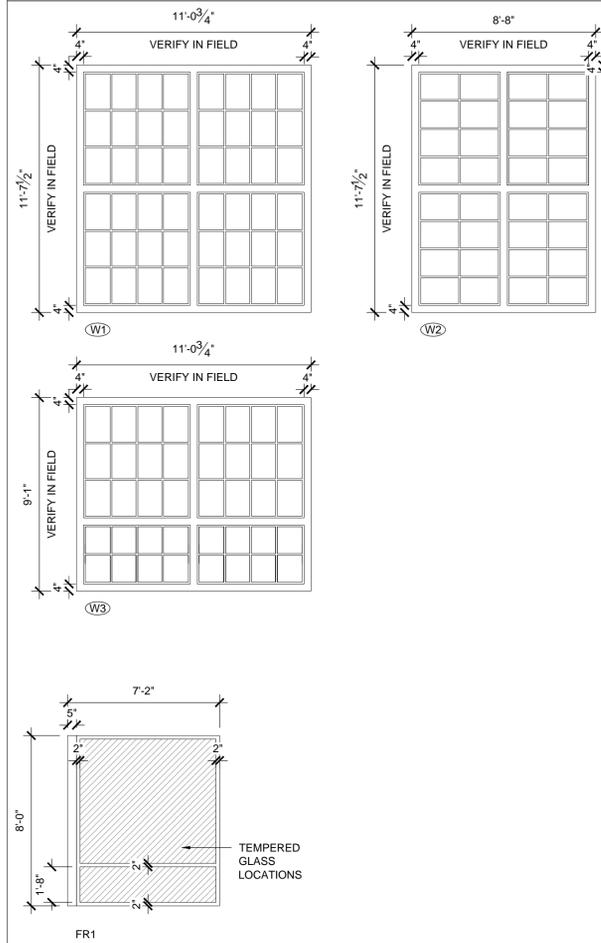
A4.1

## DOOR FRAMES



**NOTE**  
INDICATES GLAZING TO BE TEMPERED

## WINDOW AND FRAME TYPES



## WALL TYPE SCHEDULE

1		EXISTING CONSTRUCTION TO REMAIN - PROTECT FIELD VERIFY EXISTING MATERIAL, THICKNESS AND FIRE RESISTIVE RATING 1 1/2" STEEL STUDS AT 24" O.C. 1 1/2" RIGID INSULATION - TAPE SEAMS - R75 MIN. 5/8" TYPE "X" GYPSUM BOARD
2		EXISTING CONSTRUCTION TO REMAIN - PROTECT FIELD VERIFY EXISTING MATERIAL, THICKNESS AND FIRE RESISTIVE RATING 3 5/8" STEEL STUDS AT 24" O.C. (2) 1 1/2" RIGID INSULATION - TAPE SEAMS - R75 MIN. 5/8" TYPE "X" MOISTURE RESISTANT GYPSUM BOARD FRT PLYWOOD BACKING AS REQUIRED
3		EXISTING CONSTRUCTION TO REMAIN - PROTECT FIELD VERIFY EXISTING MATERIAL, THICKNESS AND FIRE RESISTIVE RATING 6" STEEL STUDS AT 24" O.C. 1 1/2" RIGID INSULATION - TAPE SEAMS - R75 MIN. 5/8" TYPE "X" GYPSUM BOARD
4		5/8" TYPE "X" GYPSUM BOARD 3 5/8" STEEL STUDS AT 24" O.C. 5/8" TYPE "X" GYPSUM BOARD REFER TO FLOOR PLAN FOR WALL ASSEMBLY LOCATIONS REQUIRING 3 1/2" SOUND BATT INSULATION 5/8" WATER RESISTANT GYPSUM BOARD REQUIRED AT INTERIOR OF ALL TOILET ROOMS 5/8" CEMENT BOARD AT ALL TILE AND GLASS LOCATIONS
5		5/8" TYPE "X" GYPSUM BOARD 6" STEEL STUDS AT 24" O.C. 5/8" TYPE "X" GYPSUM BOARD REFER TO FLOOR PLAN FOR WALL ASSEMBLY LOCATIONS REQUIRING 6" SOUND BATT INSULATION WATER RESISTANT GYPSUM BOARD REQUIRED AT INTERIOR OF ALL TOILET ROOMS
6		8" CONCRETE MASONRY UNIT REFER TO STRUCTURAL FOR HORIZONTAL AND VERTICAL REINFORCING 1 1/2" STEEL STUDS AT 24" O.C. 5/8" TYPE "X" GYPSUM BOARD
7		8" CONCRETE MASONRY UNIT REFER TO STRUCTURAL FOR HORIZONTAL AND VERTICAL REINFORCING 6" STEEL STUDS AT 24" O.C. 5/8" WATER RESISTANT GYPSUM BOARD 5/8" CEMENT BOARD AT ALL TILE AND GLASS TILE LOCATIONS
8		4" FACE BRICK TO MATCH EXISTING

## WINDOW SCHEDULE

ROOM #	ROOM NAME	TYPE MARK	WINDOW TYPE	MANUFACTURER	MATERIAL	FINISH	GROUT COLOR	REMARKS
201	VENDOR	W1	SERIES 964 - HISTORIC FIXED	ST. CLOUD WINDOW	ALUMINUM	DARK BRONZE	--	
201	VENDOR	W1	SERIES 964 - HISTORIC FIXED	ST. CLOUD WINDOW	ALUMINUM	DARK BRONZE	--	
201	VENDOR	W1	SERIES 964 - HISTORIC FIXED	ST. CLOUD WINDOW	ALUMINUM	DARK BRONZE	--	
201	VENDOR	W1	SERIES 964 - HISTORIC FIXED	ST. CLOUD WINDOW	ALUMINUM	DARK BRONZE	--	
201	VENDOR	W1	SERIES 964 - HISTORIC FIXED	ST. CLOUD WINDOW	ALUMINUM	DARK BRONZE	--	
202	COMMISSARY KITCHEN	--			GLASS BLOCK	--		
202	COMMISSARY KITCHEN	--			GLASS BLOCK	--		
210	TENANT SPACE	--			GLASS BLOCK	--		
210	TENANT SPACE	--			GLASS BLOCK	--		
211	VENDOR	--			GLASS BLOCK	--		
212	VENDOR	--			GLASS BLOCK	--		
212	VENDOR	--			GLASS BLOCK	--		
212	VENDOR	W2	SERIES 964 - HISTORIC FIXED	ST. CLOUD WINDOW	ALUMINUM	DARK BRONZE	--	
212	VENDOR	W1	SERIES 964 - HISTORIC FIXED	ST. CLOUD WINDOW	ALUMINUM	DARK BRONZE	--	
213	VENDOR	W1	SERIES 964 - HISTORIC FIXED	ST. CLOUD WINDOW	ALUMINUM	DARK BRONZE	--	
213	VENDOR	W3	SERIES 964 - HISTORIC FIXED	ST. CLOUD WINDOW	ALUMINUM	DARK BRONZE	--	
213	VENDOR	W1	SERIES 964 - HISTORIC FIXED	ST. CLOUD WINDOW	ALUMINUM	DARK BRONZE	--	
213	VENDOR	W1	SERIES 964 - HISTORIC FIXED	ST. CLOUD WINDOW	ALUMINUM	DARK BRONZE	--	
213	VENDOR	W1	SERIES 964 - HISTORIC FIXED	ST. CLOUD WINDOW	ALUMINUM	DARK BRONZE	--	

KEG & CASE MARKET  
928 W 7TH STREET  
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TYPES

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I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of MINNESOTA  
signed: \_\_\_\_\_  
date: 03.08.16 reg. no. 45178

A4.2



SHEET TITLE:  
 INTERIOR  
 ELEVATIONS

PROJECT #: 1294  
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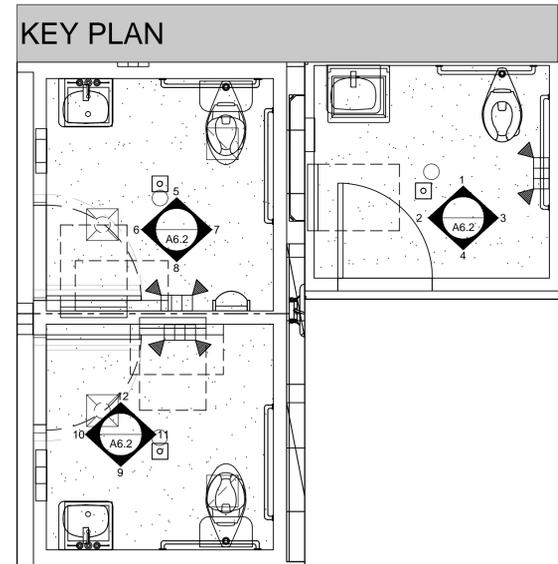
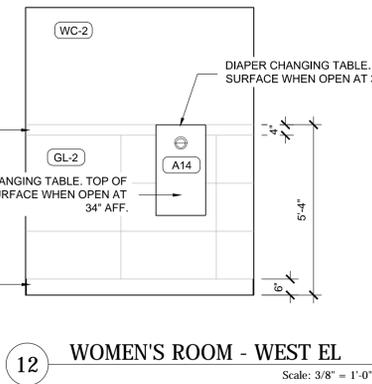
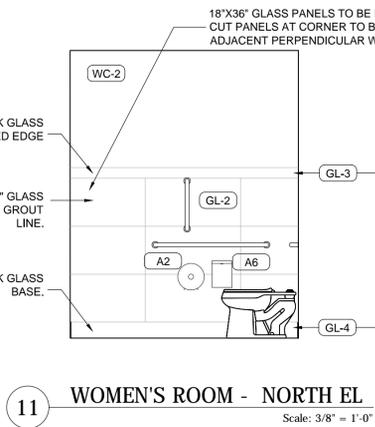
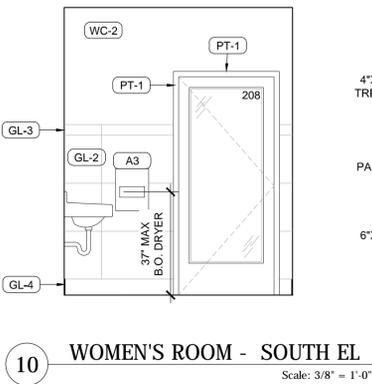
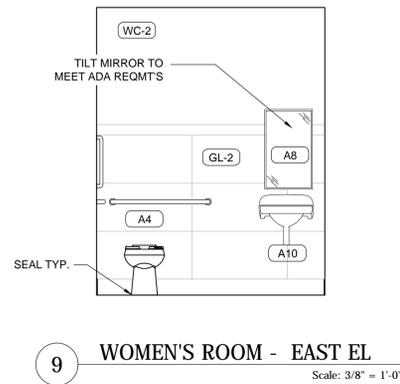
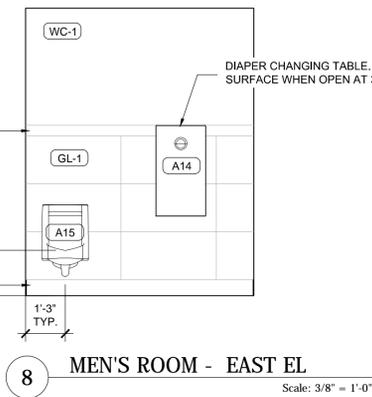
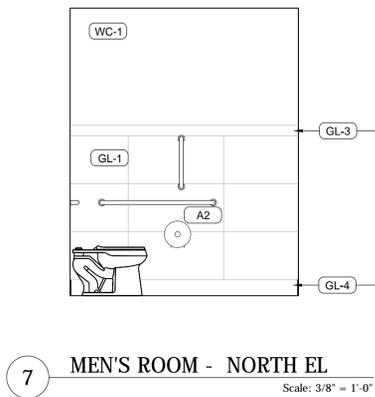
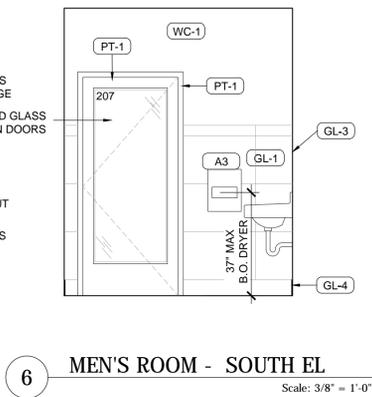
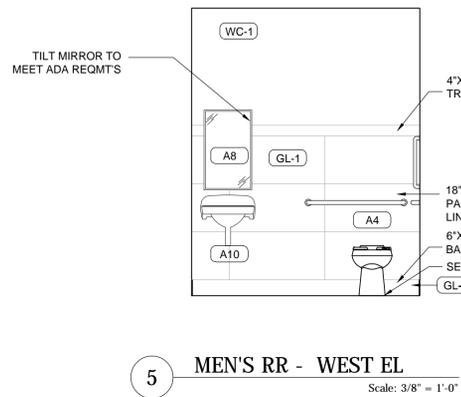
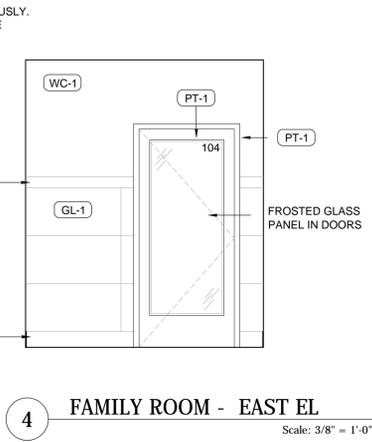
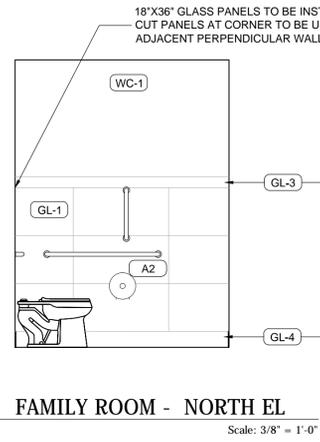
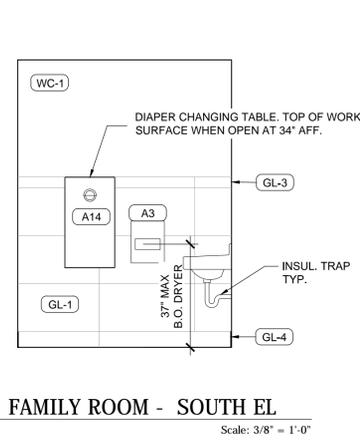
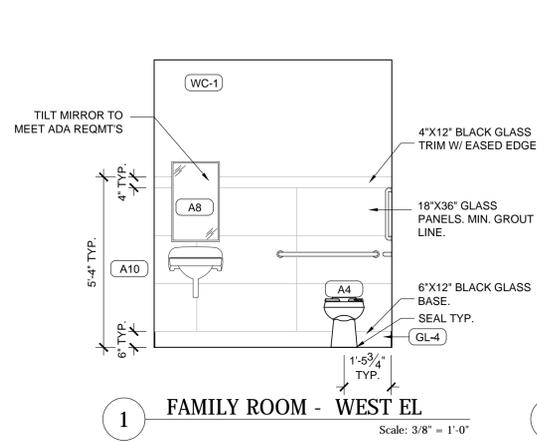


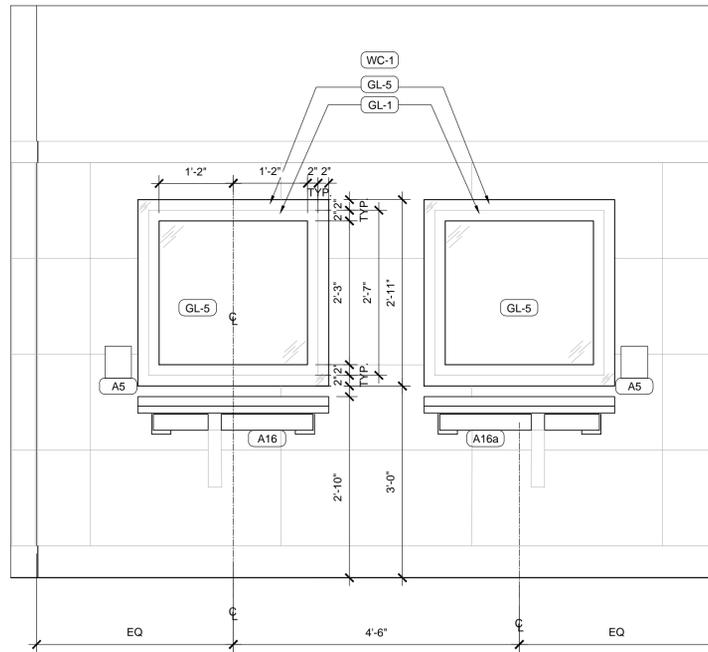
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 by me or under my direct supervision  
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 signed: \_\_\_\_\_  
 date: 03.08.16 reg. no. 45178

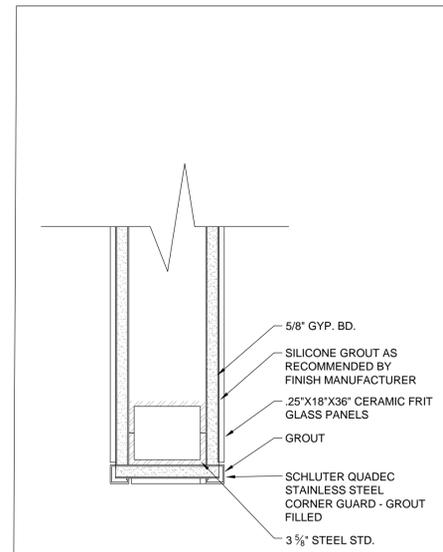
A6.2

NOTE: ALL ADA COMPLIANCE MOUNTING  
 ELEVATIONS TO REFER TO CS1.2



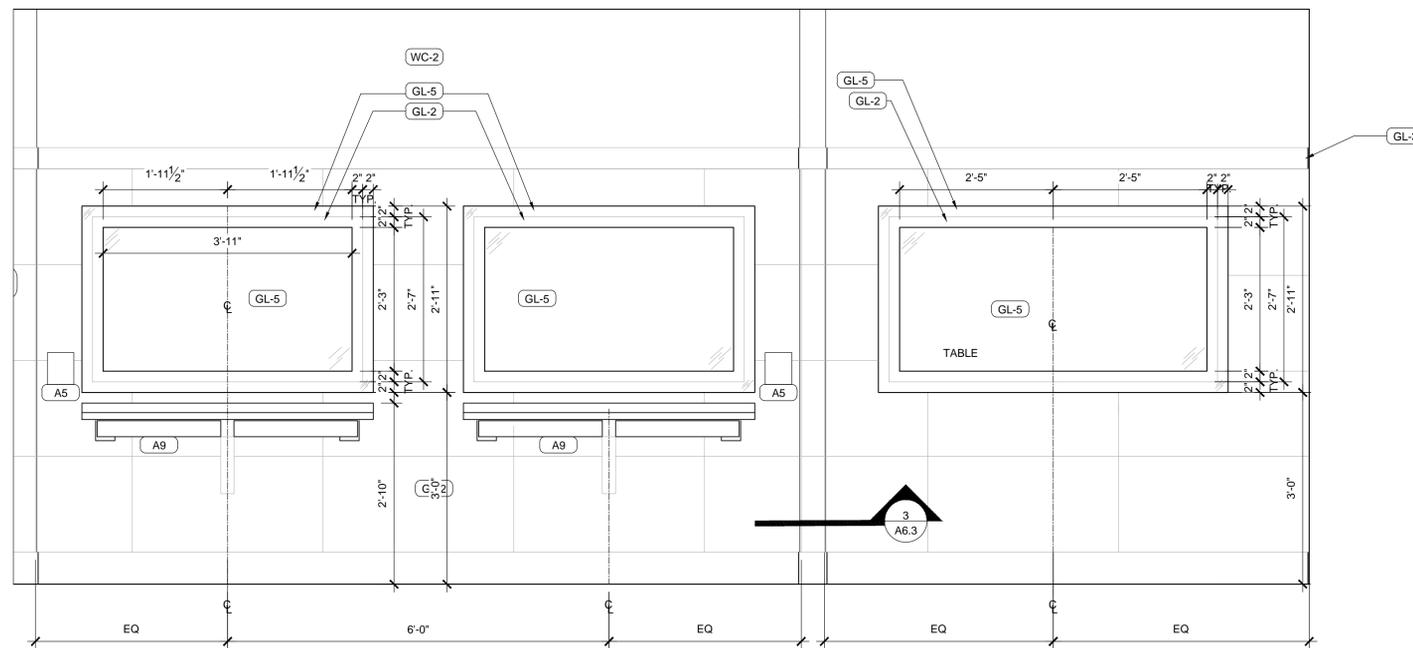


1 ENLARGED MEN'S ROOM NORTH DETAIL  
Scale: 3/4" = 1'-0"



3 SECOND FLOOR CONNECTION  
Scale: 3" = 1'-0"

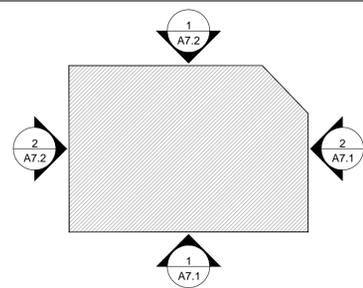
NOTE: MIRROR AND GLASS PANELS (GL-5 & GL-2)  
TO BE INSET FLUSH WITH FINISH WALL  
MATERIAL.



2 ENLARGED WOMEN'S ROOM EAST EL.  
Scale: 3/4" = 1'-0"



KEY PLAN

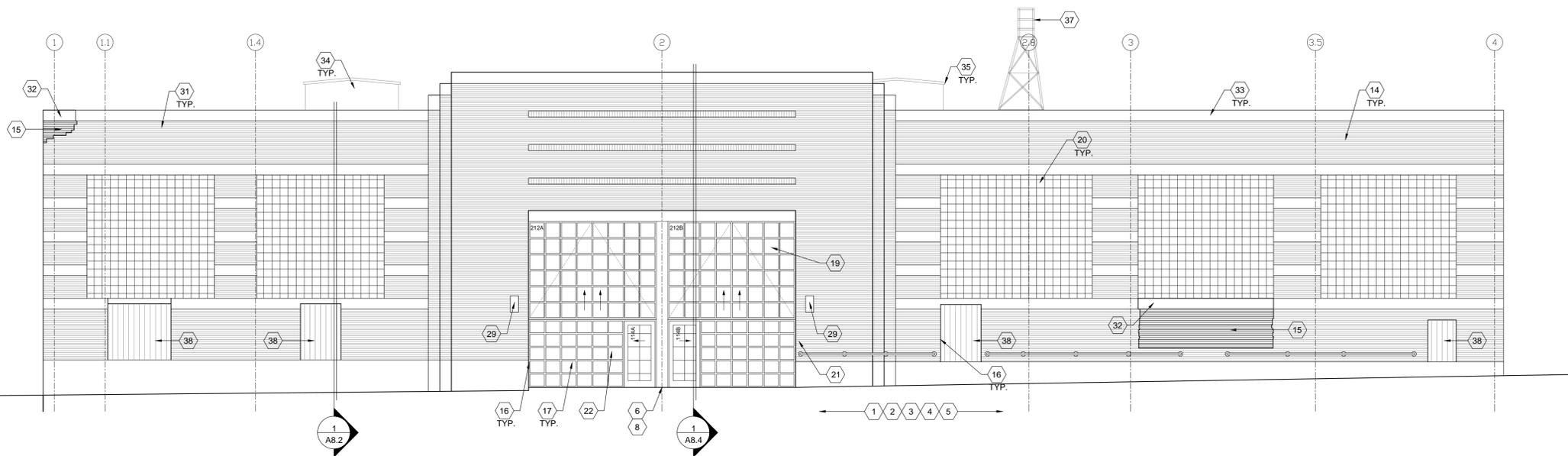


EXTERIOR ELEVATION NOTES

- ALL WORK TO BE COMPLETED TO MEET SECRETARY OF INTERIOR STANDARDS FOR REHABILITATION AND THE PRESERVATIONS PROGRAM AND DESIGN REVIEW GUIDELINES OF THE JACOB SCHMIDT BREWING COMPANY HISTORIC DISTRICT.
- PROVIDE NEW DOORS AT OPENINGS WHERE INDICATED. ALL EXISTING DOORS HAVE BEEN REMOVED OR COVERED OVER WITH CONTEMPORARY CONSTRUCTION.
- REMOVE ALL EXISTING CONTEMPORARY PIPING ANCHORS, FASTENERS, ETC. REMAINING ON THE EXISTING EXTERIOR WALL ASSEMBLY FROM PREVIOUS USE AS AN ETHANOL PLANT.
- MATCH EXISTING MORTAR TYPE, COLOR AND DENSITY IN ALL REPAIR WORK LOCATIONS.
- AT EXISTING HOLES IN EXISTING MASONRY WALLS TO REMAIN LESS THAN 2" IN DIAMETER ARE TO BE PATCHED WITH MORTAR TO MATCH ADJACENT MORTAR.
- WHERE HOLES IN EXISTING MASONRY WALLS TO REMAIN ARE GREATER THAN 2" IN DIAMETER BUT LESS THAN 2 SQUARE FEET, PATCH WITH BRICK OF SIMILAR TYPE TO MATCH EXISTING HISTORIC BRICK.
- WHERE BRICK INFILL IS REQUIRED FOR AREAS GREATER THAN 2 SQUARE FEET, PROVIDE INFILL WITH BRICK, STONE OR CONCRETE THAT MATCHES THE EXISTING ORIGINAL MATERIAL IN SIZE, SHAPE, COLOR TEXTURE AND PROFILE.
- EXTENTS OF TUCKPOINTING:
  - RESTORATION CLEANING OF ALL EXISTING BRICK AND STONE.
  - TUCKPOINTING OF TOP 4'-6" OF EXISTING BUILDING - 100%.
  - TUCKPOINTING OF 10% OF THE BALANCE OF THE EXISTING WALL.
  - BRICK REPLACEMENT ALLOWANCE OF \$220 EACH.
  - SALT GLAZED TILE REPLACEMENT ALLOWANCE OF \$20 EACH.
  - REMOVAL OF EXISTING PAINT AS COORDINATED/ INDICATED IN DEMOLITION AND PROPOSED EXTERIOR ELEVATIONS.
- EXTERIOR OF BUILDING IS TO BE CLEANED AFTER ALL EXTERIOR RESTORATION, REPOINTING AND OPENING MODIFICATIONS ARE COMPLETED USING THE GENTLEST MEANS POSSIBLE WITH LOW WATER PRESSURE UNDER 300 PSI. TESTING WILL BE DONE TO ENSURE THAT NO HARM IS DONE TO THE HISTORIC BRICK.
- THE EXISTING CONTEMPORARY CONCRETE FLOOR SLAB IN BUILDING IS APPROXIMATELY 12" TO 20" HIGHER THAN THE PROPOSED FINISHED FLOOR ELEVATION THAT MATCHES THE ORIGINAL HISTORIC SLAB ELEVATION. NOTE THE EXISTING INTERIOR FLOOR SLAB ELEVATION IS INDICATED WITH A DASHED LINE ON THE ELEVATIONS FOR REFERENCE PURPOSES ONLY - FIELD VERIFY ACTUAL CONDITIONS AND LOCATION.

EXTERIOR ELEVATION KEYNOTES

- REFER TO CIVIL ENGINEERING DRAWINGS FOR SITE CONDITIONS.
- REFER TO LANDSCAPE DRAWINGS FOR LANDSCAPING INFORMATION.
- REFER TO CIVIL ENGINEERING DRAWINGS FOR SITE UTILITY INFORMATION.
- VERIFY EXISTING SITE CONDITIONS. PROVIDE ADEQUATE POSITIVE DRAINAGE AWAY FROM EXISTING FACE OF BUILDING.
- PROVIDE/ ENSURE ADEQUATE POSITIVE DRAINAGE AWAY FROM FACE OF EXISTING BUILDING - REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
- NEW STRUCTURALLY REINFORCED CONCRETE STOOP WITH 6X6 W1.4 X W1.4 W.W.M - SLOPE AWAY FROM EXISTING FACE OF BUILDING AT 1/4" PER 12" TO PROVIDE/ ENSURE POSITIVE DRAINAGE - REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- EXPOSED CONCRETE FLOOR SLAB - PROTECT FINISH DURING COURSE OF CONSTRUCTION - REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
- PROVIDE CONCRETE FLOOR SLAB CONTROL JOINTS AS DIRECTED BY STRUCTURAL ENGINEER - REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- CAST-IN-PLACE CONCRETE RETAINING WALL - REFER TO STRUCTURAL AND CIVIL DRAWINGS FOR REINFORCING AND ADDITIONAL INFORMATION.
- 4" CONCRETE RAMP WITH 6X6 W1.4 X W1.4 W.W.M - SLOPE NO GREATER THAN 1:12 TO MEET ACCESSIBILITY REQUIREMENTS - REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
- CAST-IN-PLACE CONCRETE STAIRS - 7" MAXIMUM RISER HEIGHT AND 11" MINIMUM EXPOSED TREAD DEPTH - REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
- STEEL HANDRAIL SYSTEM - POWDER COAT
- 42" HIGH STEEL GUARDRAIL SYSTEM WITH AIRLINE CABLE - POWDER COAT
- EXISTING EXTERIOR BRICK TO REMAIN - PROTECT - BRICK TO BE REHABILITATED PER HISTORIC STANDARDS - TUCKPOINTING AS REQUIRED.
- NEW BRICK INFILL TO MATCH EXISTING - BRICK AND MORTAR TO MATCH ORIGINAL MATERIAL IN SIZE, SHAPE, TEXTURE, PROFILE AND DENSITY.
- EXISTING METAL EDGE PROTECTION TO REMAIN - PROTECT - PAINT.
- THERMALLY BROKEN ANODIZED ALUMINUM STOREFRONT SYSTEM WITH 1" INSULATED GLAZING.
- ALUMINUM THRESHOLD - 1/2" MAXIMUM RISE WITH BEVELED SIDES THAT SLOPE 1:2 MAXIMUM.
- THERMALLY BROKEN ALUMINUM OVERHEAD GARAGE DOOR.
- GLASS BLOCK WINDOW SYSTEM TO MATCH ORIGINAL.
- PROVIDE INTERNATIONAL SYMBOL OF ACCESSIBILITY AT MAIN ENTRANCE.
- ADDRESS NUMBER, SIZE AND LOCATION TO BE CONFIRMED ON SITE WITH LOCAL BUILDING OFFICIAL PRIOR TO MANUFACTURING AND INSTALLATION.
- BUILDING - MOUNTED SIGNAGE LOCATION - REFER TO SIGNAGE DRAWINGS BY OTHERS FOR ADDITIONAL INFORMATION - ALL EXTERIOR SIGNAGE TO BE PROVIDED, PERMITTED, INSTALLED AND INSPECTED UNDER A SEPARATE PERMIT - COORDINATE ELECTRICAL REQUIREMENTS BETWEEN SIGNAGE VENDOR AND ELECTRICAL DRAWINGS.
- GENERAL CONTRACTOR TO COORDINATE WITH SIGNAGE VENDOR AND ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL ELECTRICAL CIRCUIT INCLUDING ALL CONDUIT, WIRE, CONNECTIONS AND BREAKERS AT PANELBOARD NECESSARY TO SERVE PROPOSED SIGNAGE.
- GAS METER AND PIPING - PAINT - REFER/ COORDINATE WITH MECHANICAL DRAWINGS.
- EXISTING PAINT MURAL TO REMAIN - PROTECT DURING CONSTRUCTION.
- PREFINISHED METAL OVERFLOW SCUPPERS WITHIN EXISTING OPENINGS.
- HOSE-BIBB - REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- ALL EXTERIOR MOUNTED LIGHT FIXTURES TO BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR - REFER TO ELECTRICAL DRAWINGS FOR TYPE, NUMBER AND LOCATIONS OF ALL UNITS.
- GENERAL CONTRACTOR TO INSPECT, REPAIR AND REPLACE EXISTING SALT GLAZED TILE COPING AT PARAPET CAP AS REQUIRED.
- GENERAL CONTRACTOR TO PROTECT EXISTING PARAPET AND SUPPORTIVE MASONRY AS LOCATIONS MAY BE UNSTABLE - IF UNSTABLE LOCATIONS ARE DETERMINED DURING CONSTRUCTION, CONTACT ARCHITECT AND STRUCTURAL ENGINEER IMMEDIATELY.
- REBUILD PARAPET AND MISSING EXISTING PRECAST CONCRETE CAPS IN KIND.
- SALVAGE AND REUSE EXISTING PRECAST CONCRETE PARAPET CAPS AS REQUIRED FOR REPAIR.
- EXISTING WOOD MONITOR STRUCTURE TO REMAIN - PROTECT - GENERAL CONTRACTOR TO INSPECT, REPAIR AND REPLACE EXISTING STRUCTURE AS REQUIRED - PAINT.
- INSTALLED WOOD FASCIA AT PERIMETER OF MONITOR ROOF AS REQUIRED TO ACCEPT NEW ROOF INSULATION - PAINT.
- REGLAZE EXISTING MONITOR WINDOWS IN PLACE - PROVIDE 1" INSULATED GLAZING.
- EXISTING STEEL FRAME BRIDGE AND SUPPORTS TO REMAIN - PROTECT DURING CONSTRUCTION - PAINT.
- NEW 2X12 FIXED METAL PLANK KEG DOOR TO MATCH ORIGINAL PER HISTORIC STANDARDS.



1 EAST EXTERIOR ELEVATION

Scale: 1/8" = 1'-0"



2 NORTH EXTERIOR ELEVATION

Scale: 1/8" = 1'-0"

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SHEET TITLE:  
EXTERIOR  
ELEVATIONS AND  
NOTES

PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
HISTORICAL 10.29.15  
HISTORICAL 03.08.16  
HPC SUBMIT 04.07.16



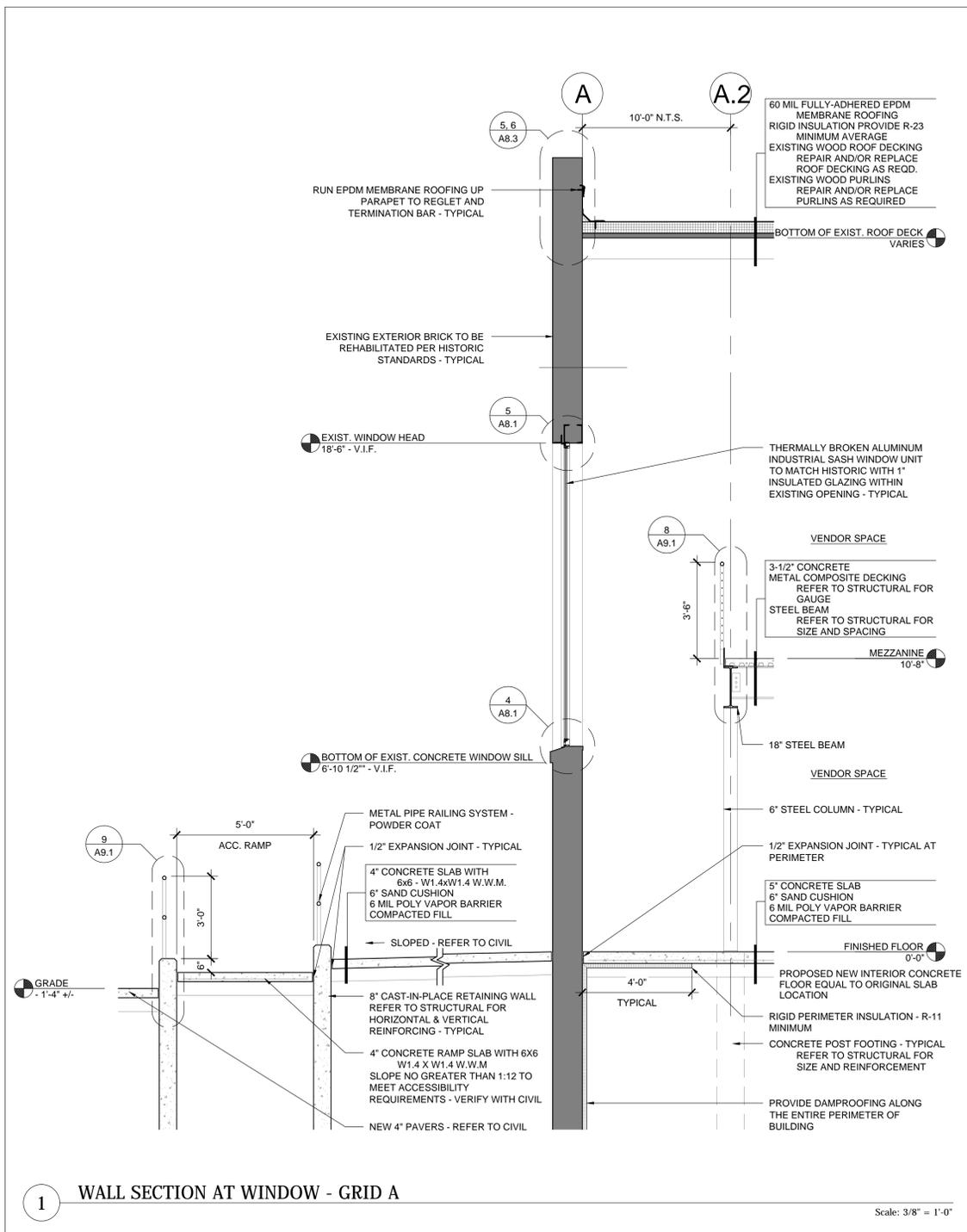
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signed: \_\_\_\_\_  
date: 03.08.16 reg. no. 45178

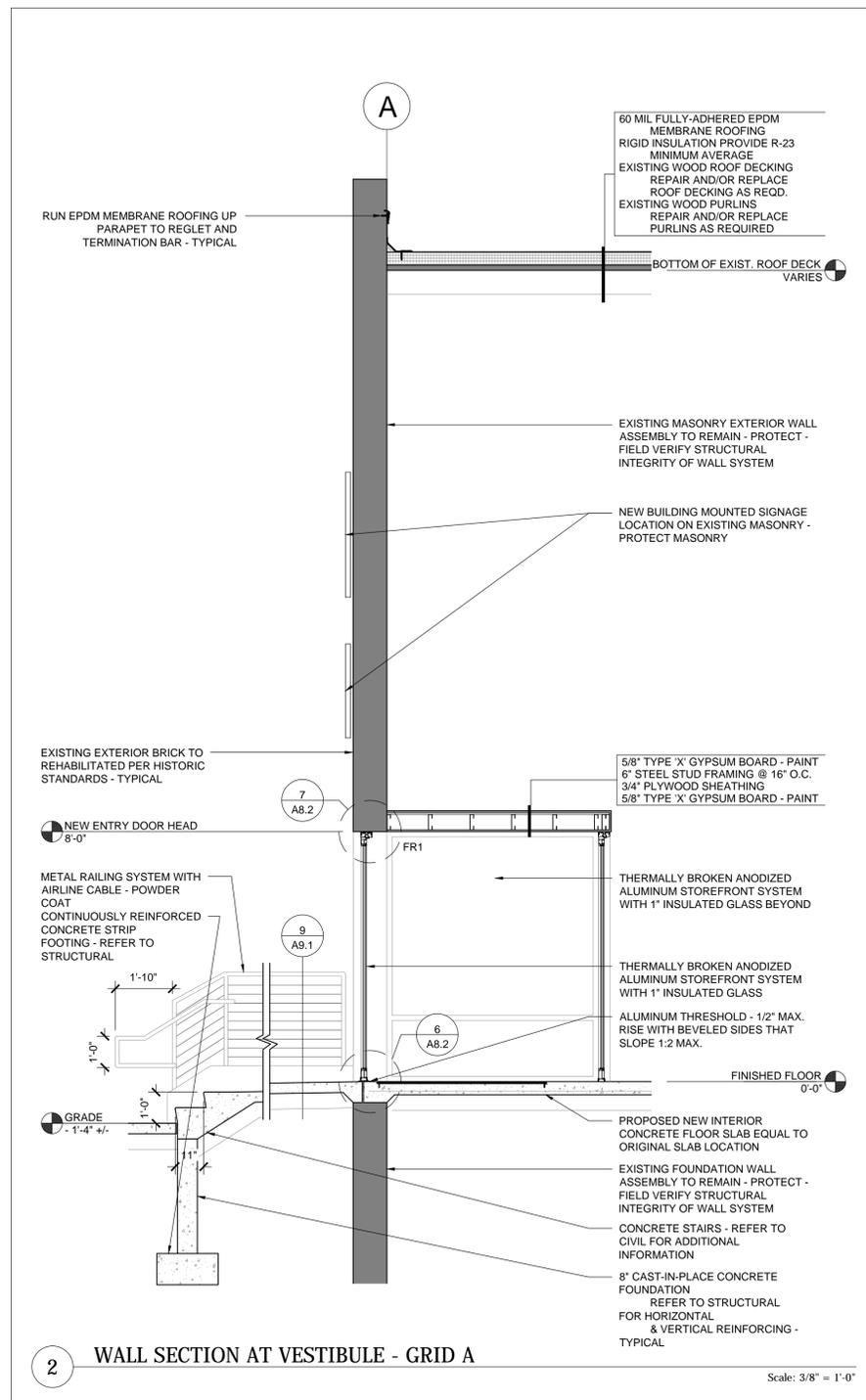
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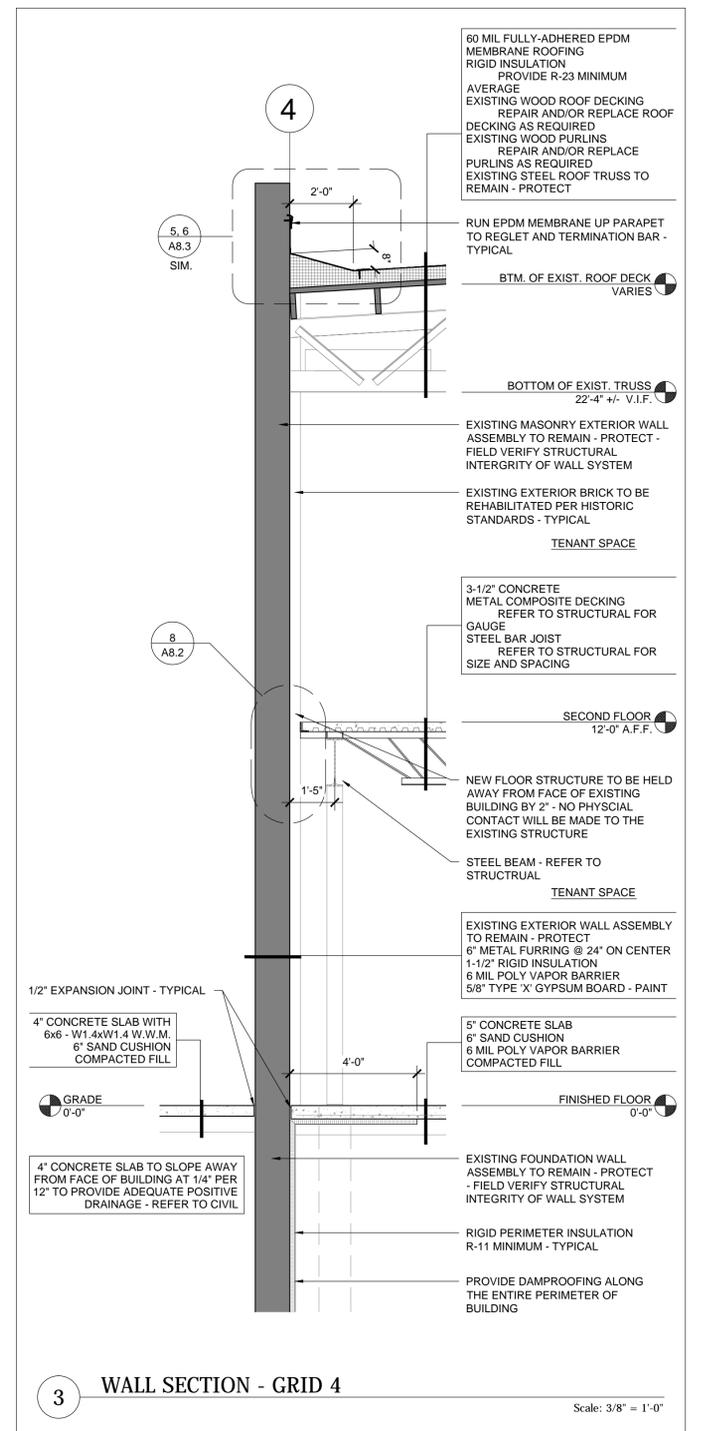
1 WALL SECTION AT WINDOW - GRID A

Scale: 3/8" = 1'-0"



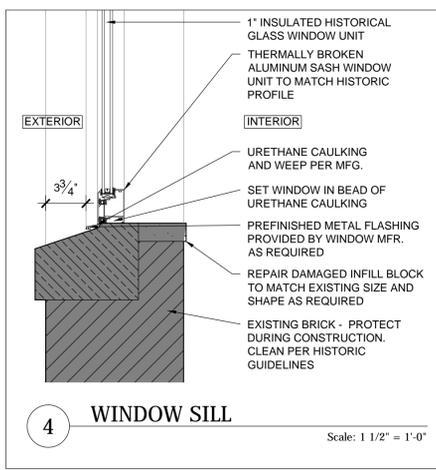
2 WALL SECTION AT VESTIBULE - GRID A

Scale: 3/8" = 1'-0"



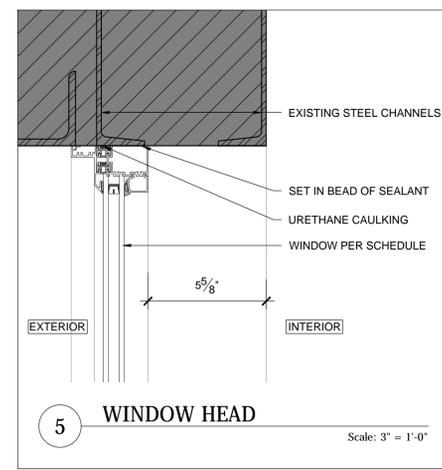
3 WALL SECTION - GRID 4

Scale: 3/8" = 1'-0"



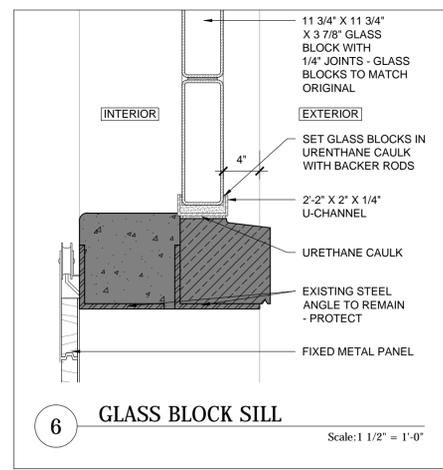
4 WINDOW SILL

Scale: 1 1/2" = 1'-0"



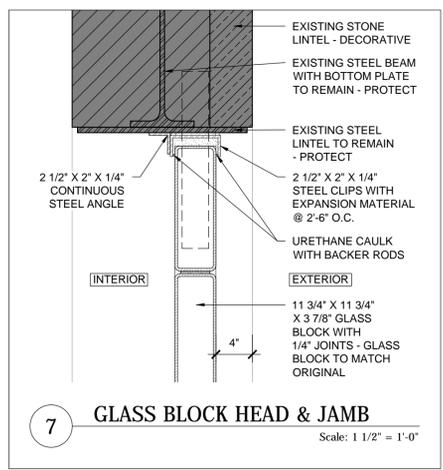
5 WINDOW HEAD

Scale: 3" = 1'-0"



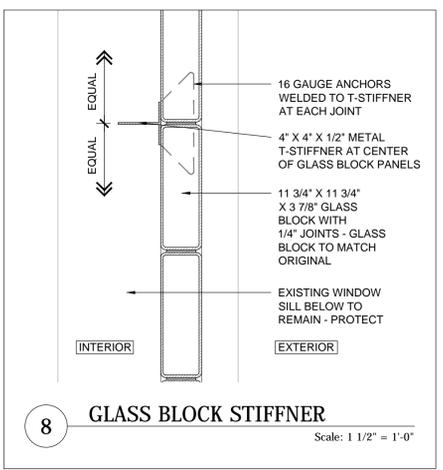
6 GLASS BLOCK SILL

Scale: 1 1/2" = 1'-0"



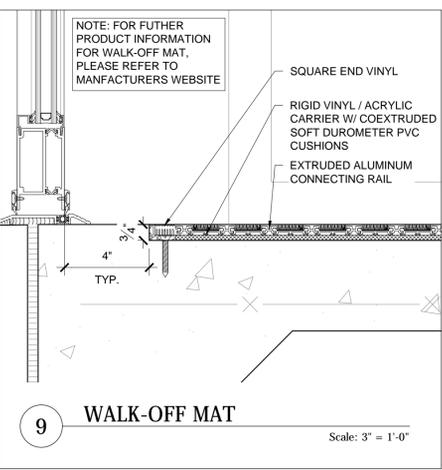
7 GLASS BLOCK HEAD & JAMB

Scale: 1 1/2" = 1'-0"



8 GLASS BLOCK STIFFNER

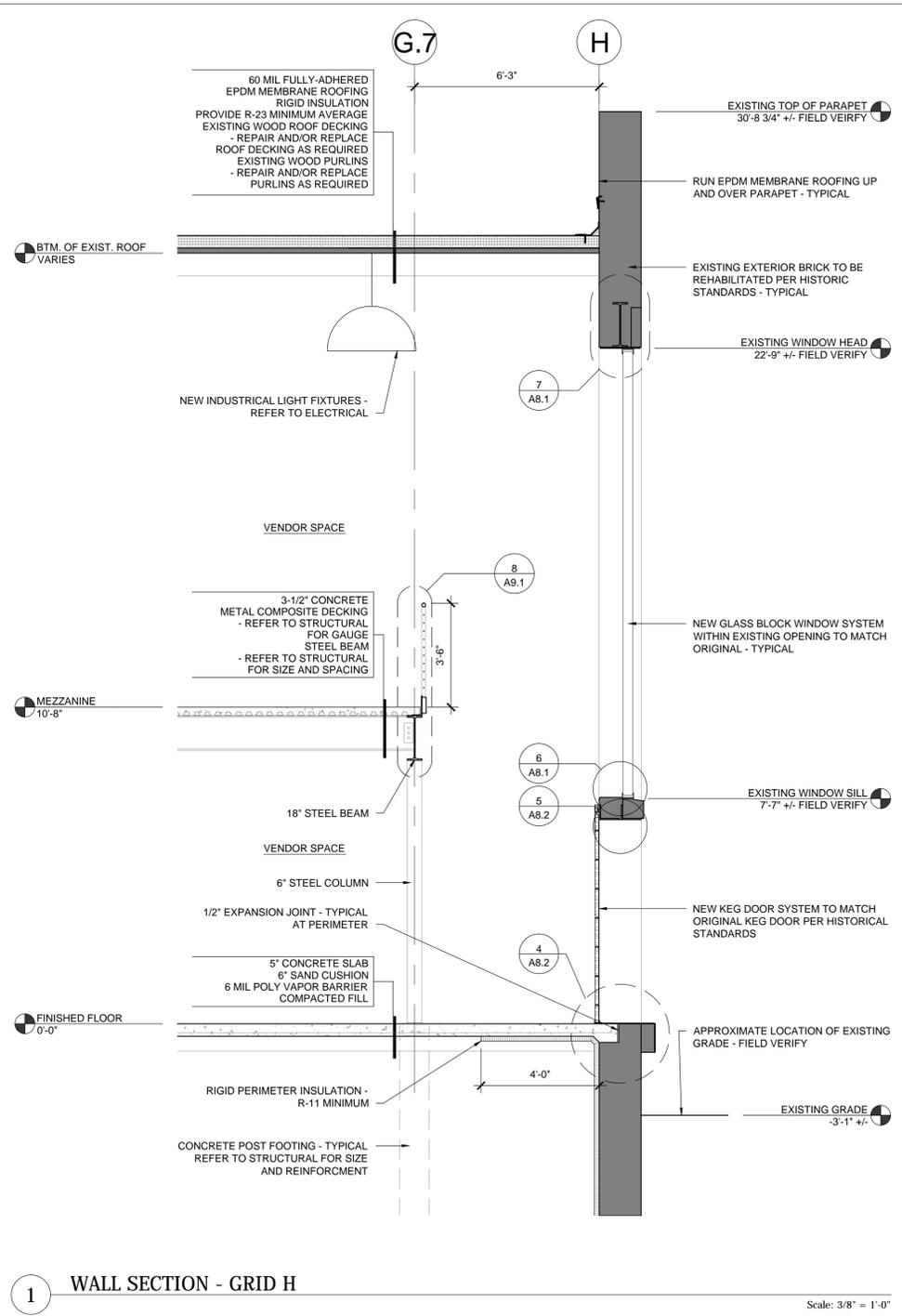
Scale: 1 1/2" = 1'-0"



9 WALK-OFF MAT

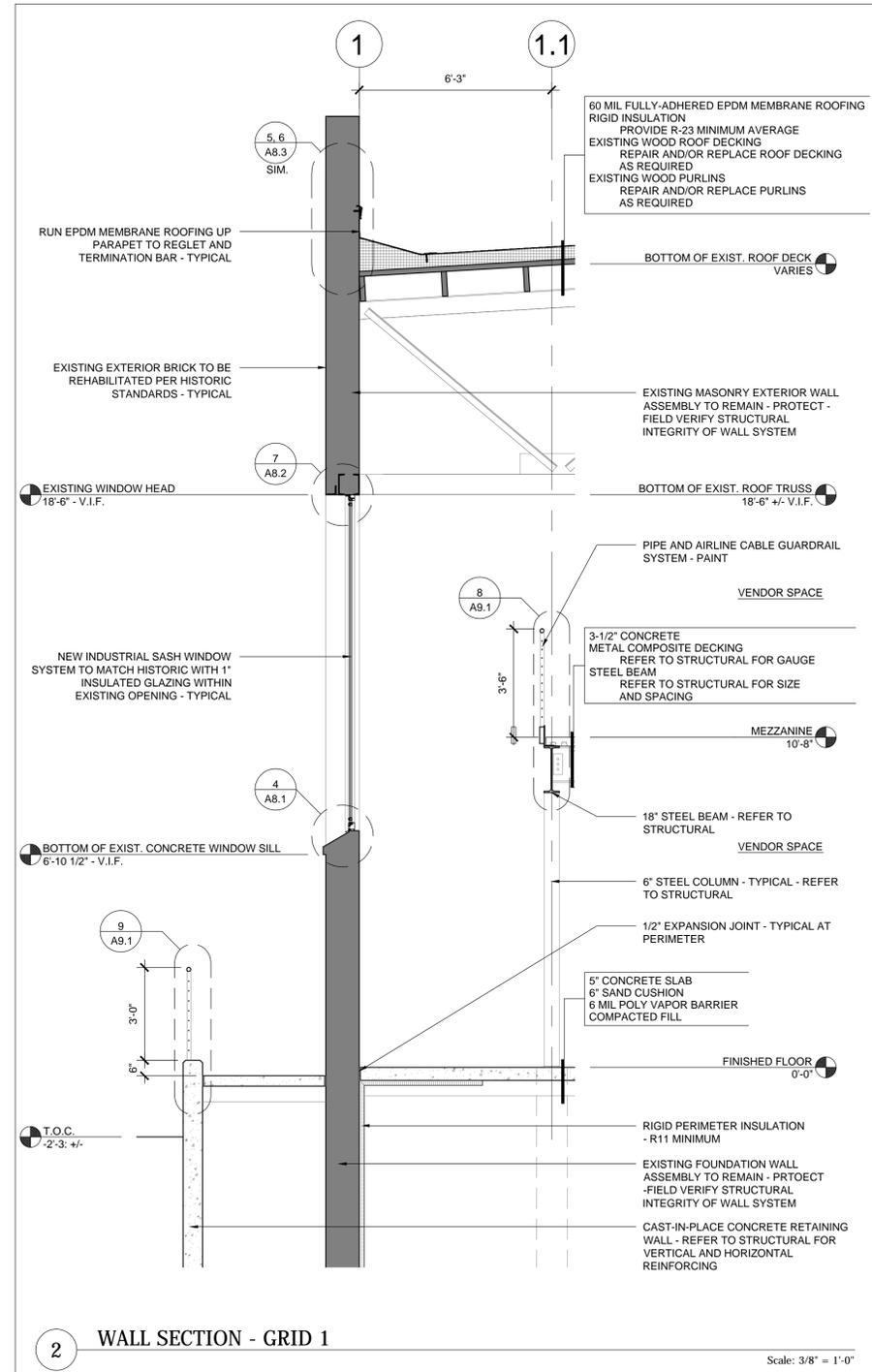
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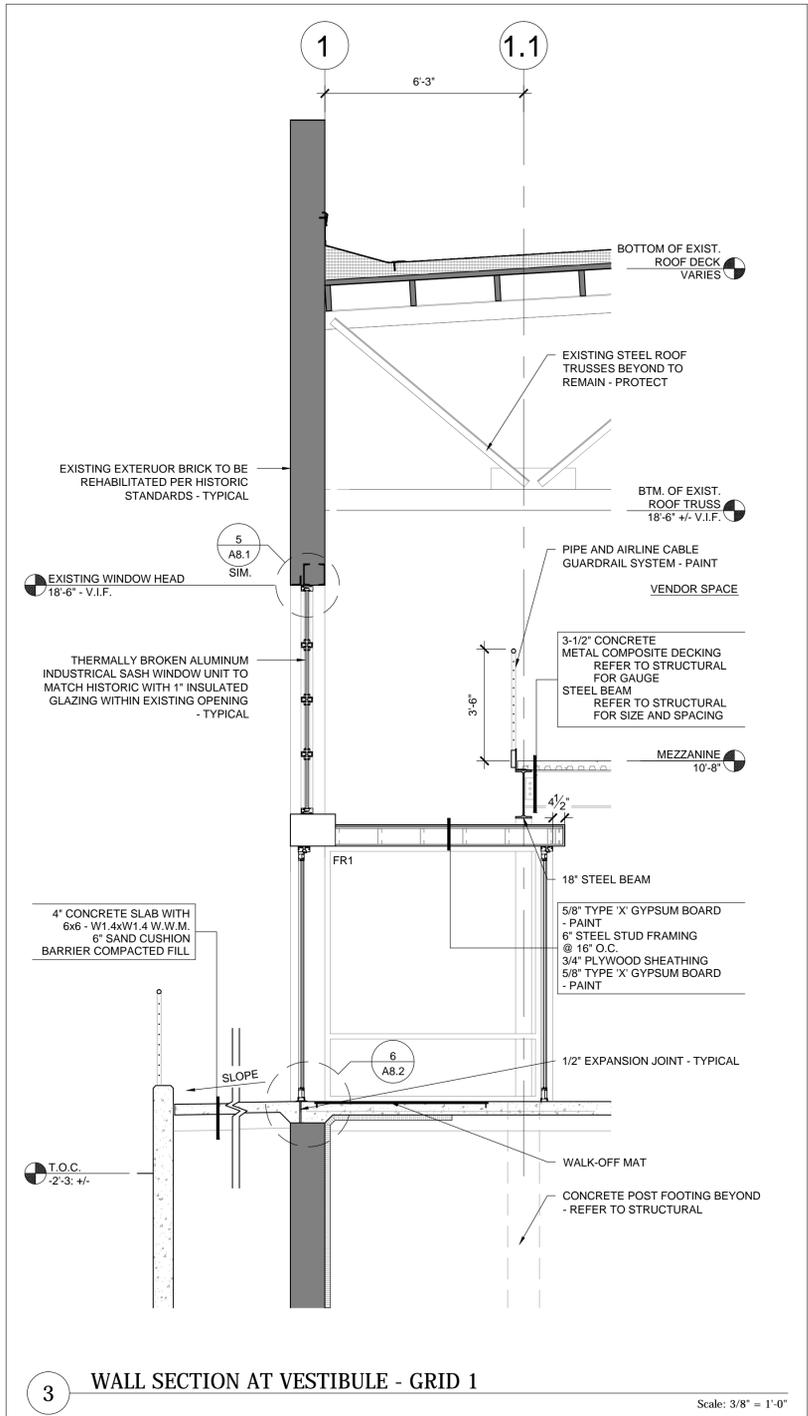
1 WALL SECTION - GRID H

Scale: 3/8" = 1'-0"



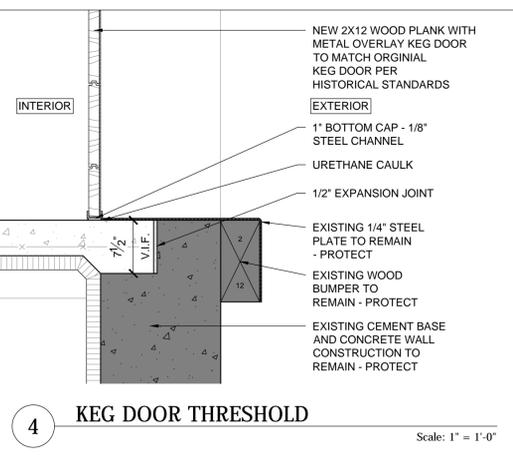
2 WALL SECTION - GRID 1

Scale: 3/8" = 1'-0"



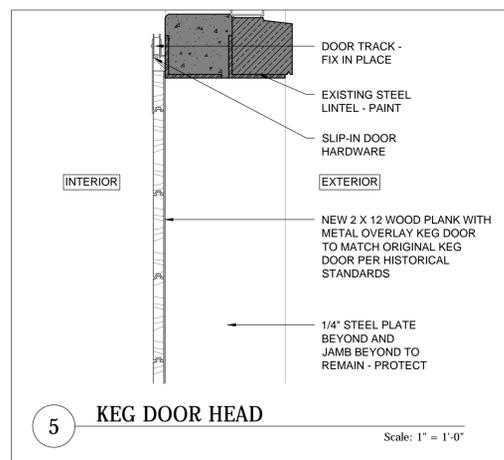
3 WALL SECTION AT VESTIBULE - GRID 1

Scale: 3/8" = 1'-0"



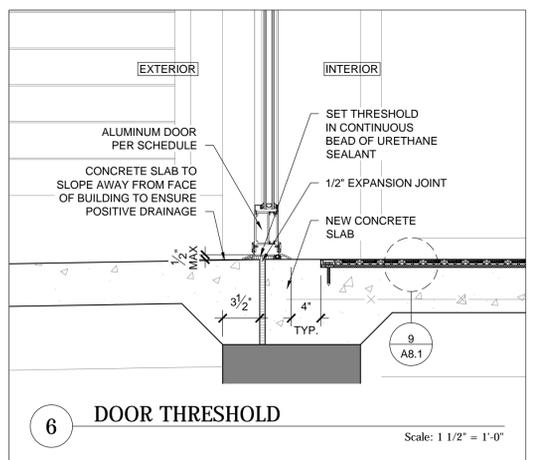
4 KEG DOOR THRESHOLD

Scale: 1" = 1'-0"



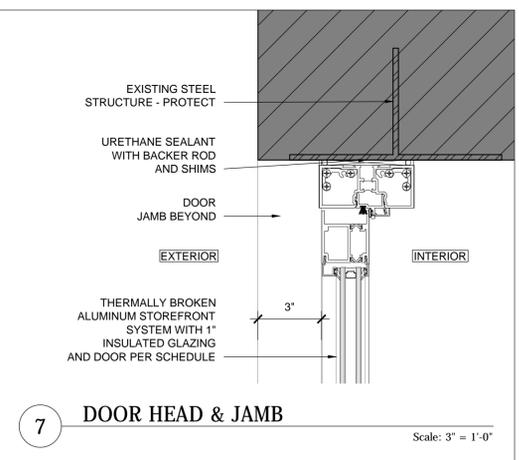
5 KEG DOOR HEAD

Scale: 1" = 1'-0"



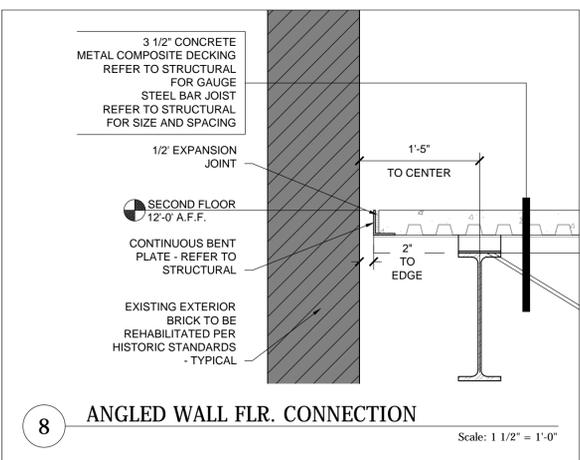
6 DOOR THRESHOLD

Scale: 1 1/2" = 1'-0"



7 DOOR HEAD & JAMB

Scale: 3" = 1'-0"



8 ANGLED WALL FLR. CONNECTION

Scale: 1 1/2" = 1'-0"

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SHEET TITLE:  
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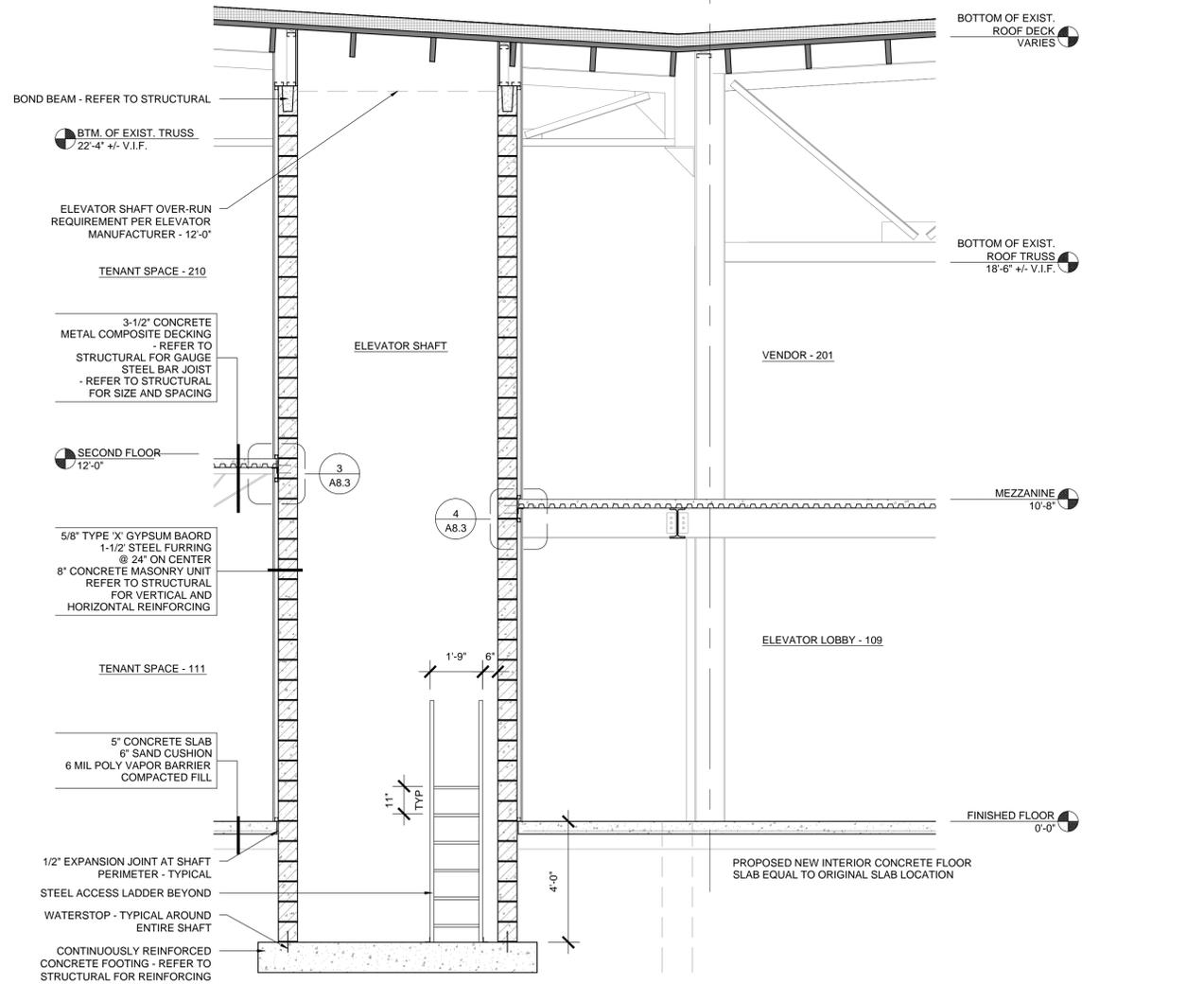
PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
HISTORICAL 10.29.15  
HISTORICAL 03.08.16  
HPC SUBMIT 04.07.16



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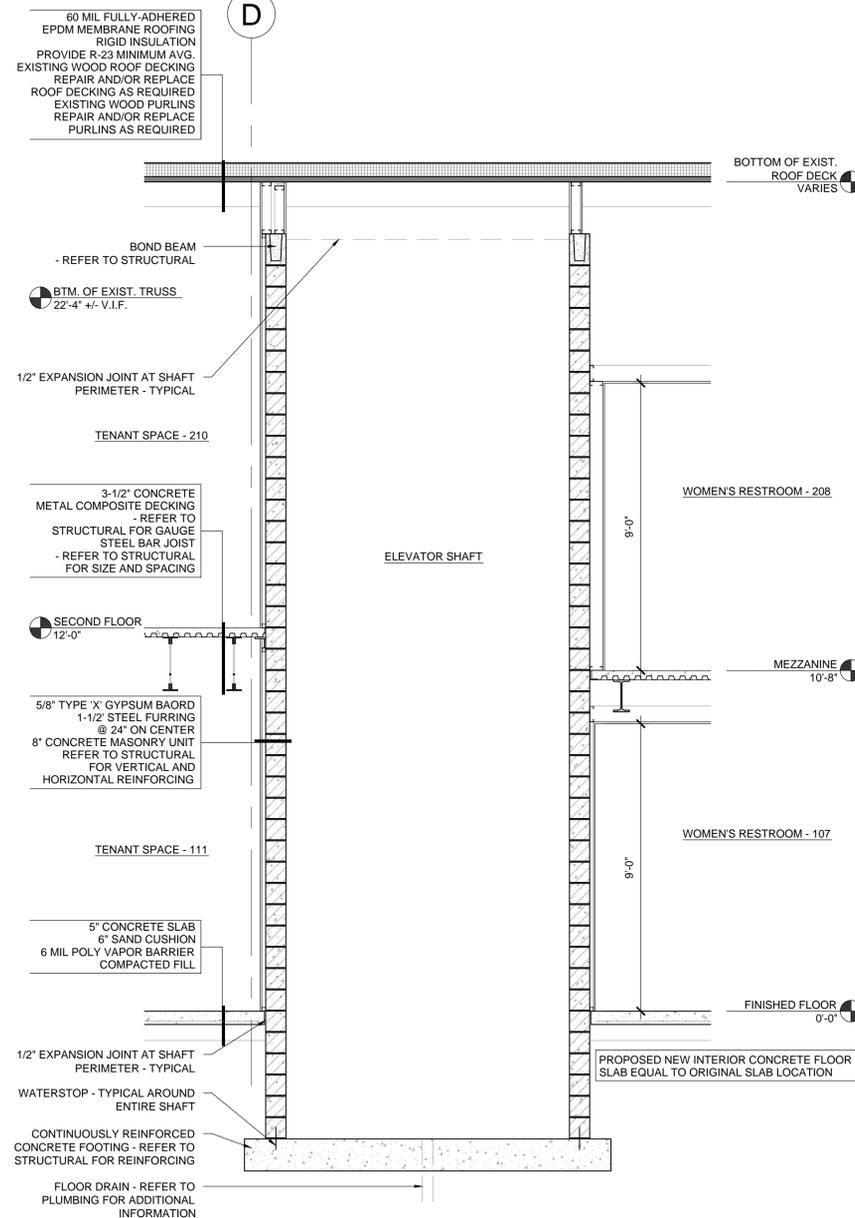
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by me or under my direct supervision  
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architect under the law of  
the state of MINNESOTA  
signed:  
date: 03.08.16 reg. no. 45178

A8.2



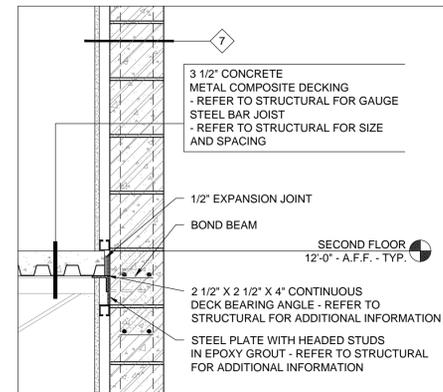
1 WALL SECTION - ELEVATOR

Scale: 3/8" = 1'-0"



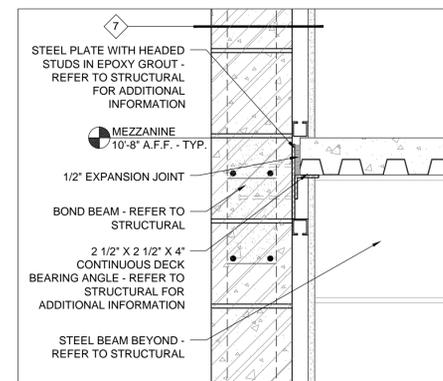
2 ELEVATOR SHAFT SECTION

Scale: 3/8" = 1'-0"



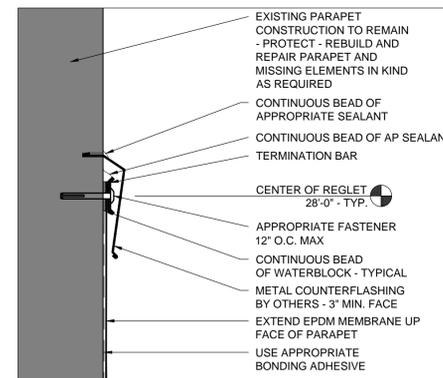
3 SECOND FLOOR CONNECTION

Scale: 1" = 1'-0"



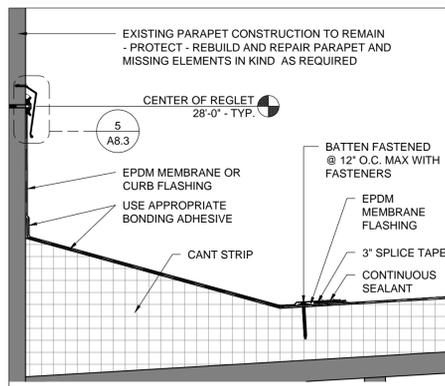
4 MEZZANINE FLOOR CONNECTION

Scale: 1 1/2" = 1'-0"



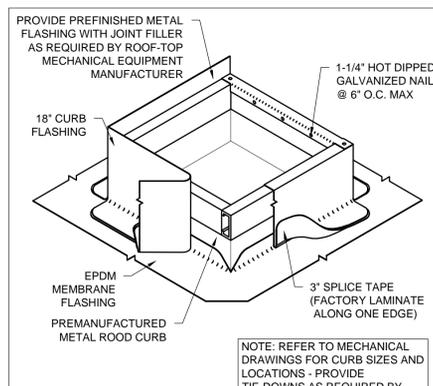
5 ROOF TERMINATION W/ REGLET

Scale: 1" = 1'-0"



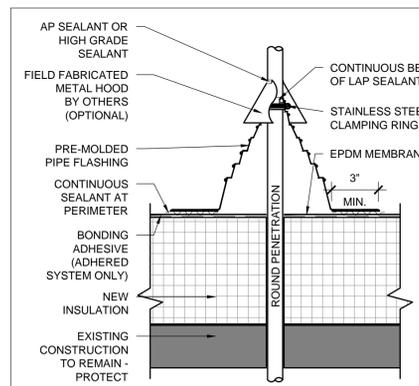
6 PARAPET WITH CANT STRIP

Scale: 1 1/2" = 1'-0"



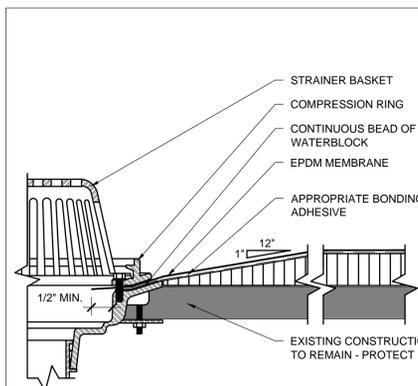
7 ROOF CURB

Scale: 3" = 1'-0"



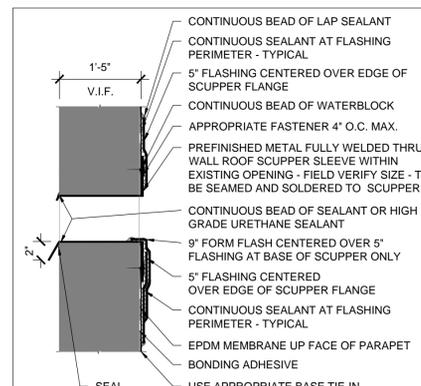
8 PIPE FLASHING

Scale: 3" = 1'-0"



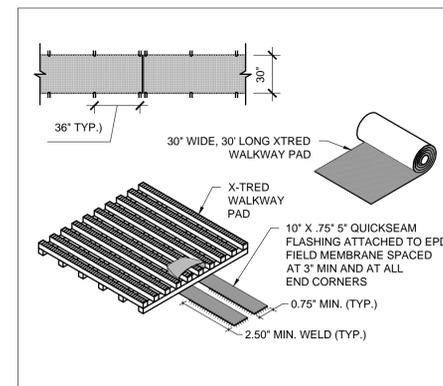
9 ROOF DRAIN

Scale: 3" = 1'-0"



10 OVERFLOW SCUPPER

Scale: 3" = 1'-0"



11 WALKWAY PAD

Scale: 3" = 1'-0"

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SHEET TITLE:  
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PROJECT #: 1294

DRAWN BY: DAA CJG

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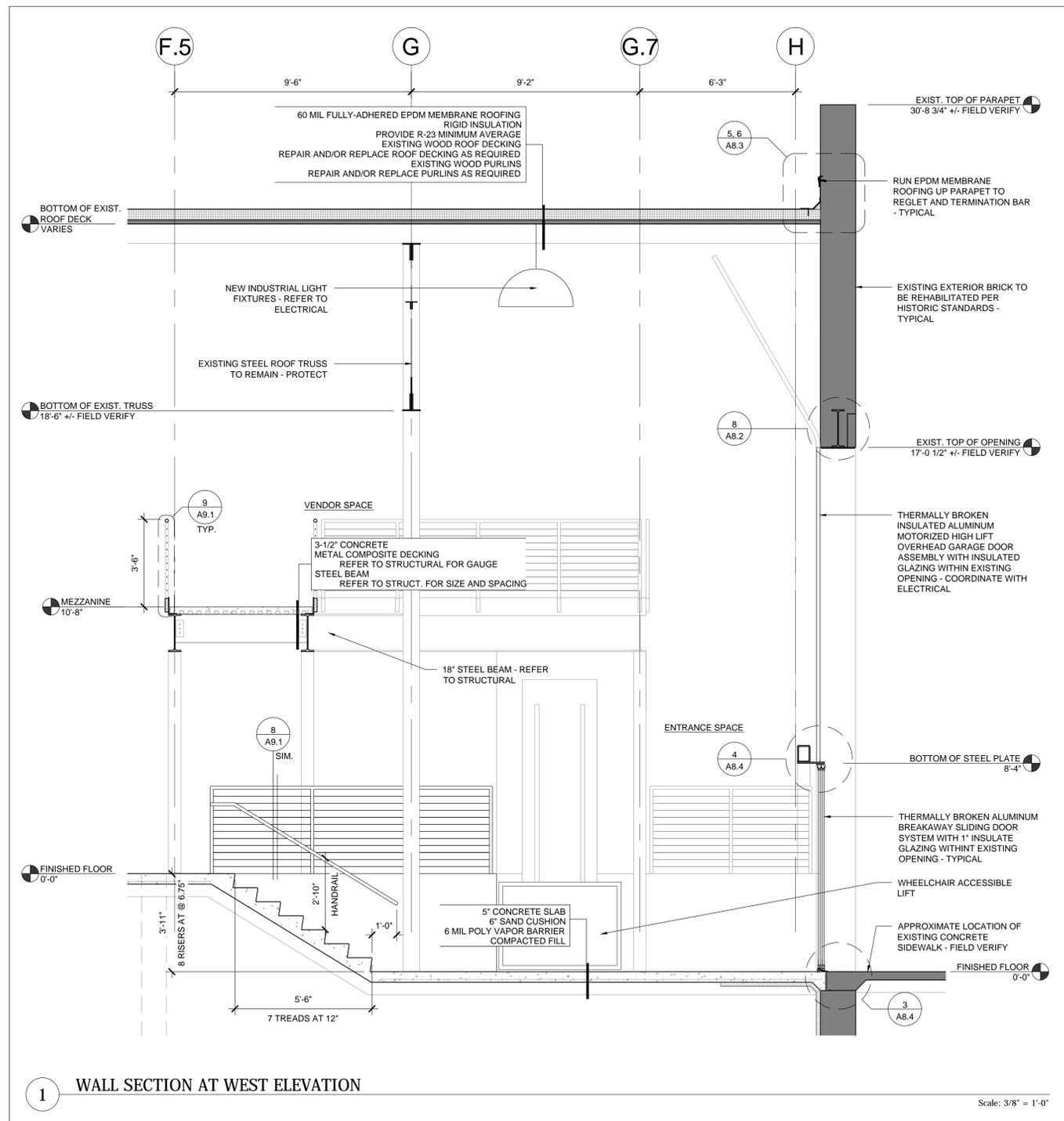
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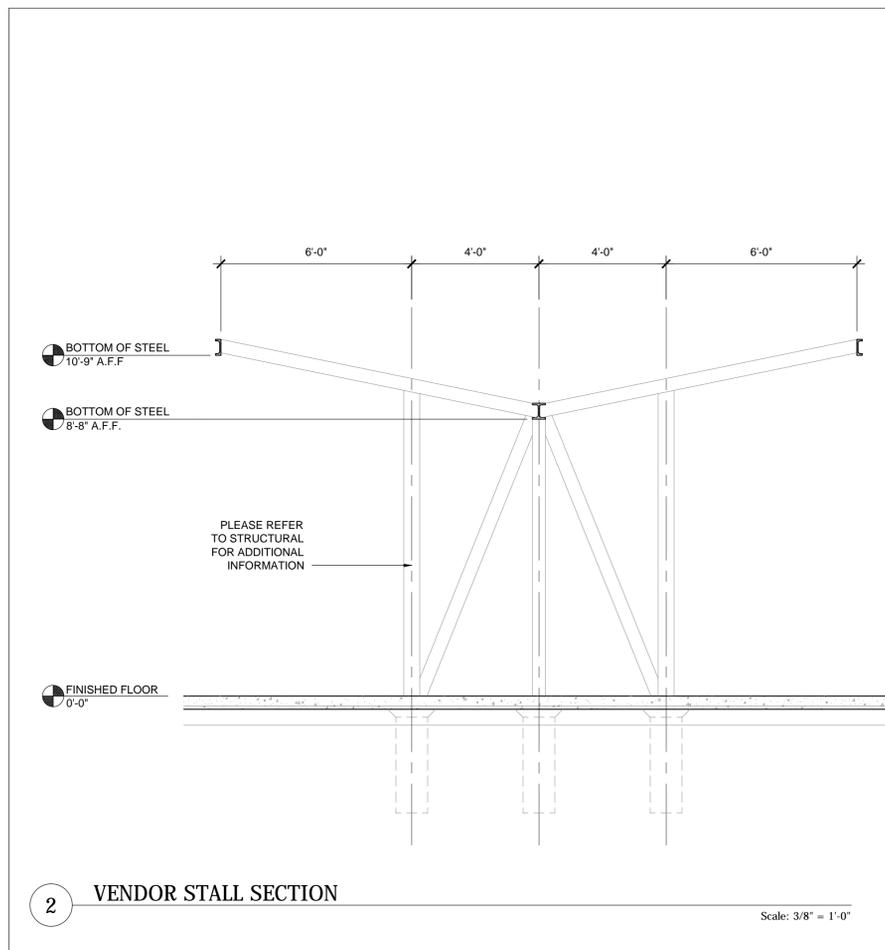
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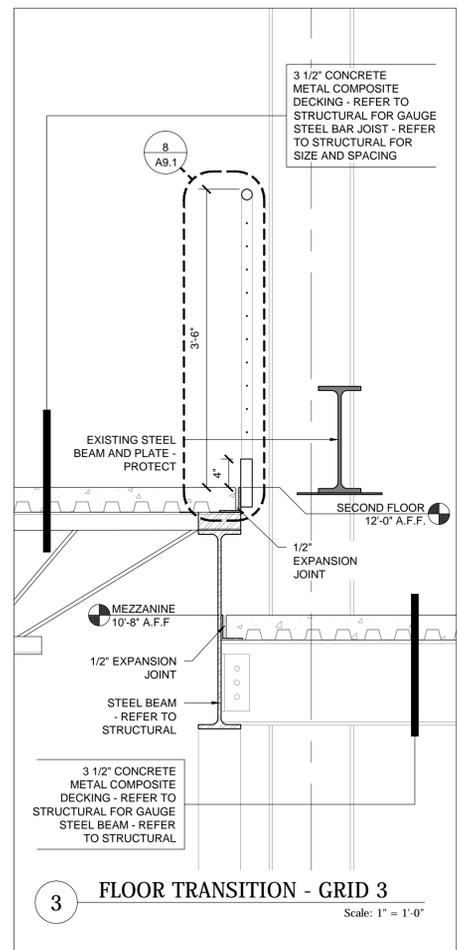
1 WALL SECTION AT WEST ELEVATION

Scale: 3/8" = 1'-0"



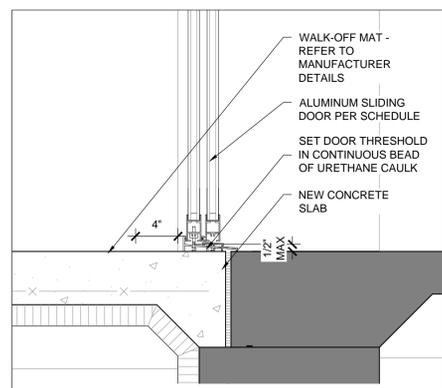
2 VENDOR STALL SECTION

Scale: 3/8" = 1'-0"



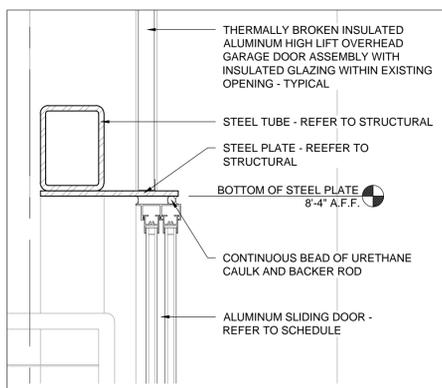
3 FLOOR TRANSITION - GRID 3

Scale: 1" = 1'-0"



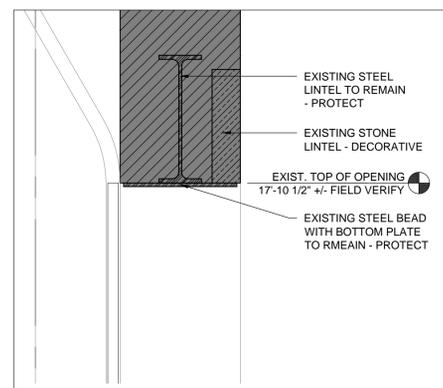
4 DOOR THRESHOLD AT GRID H

Scale: 1 1/2" = 1'-0"



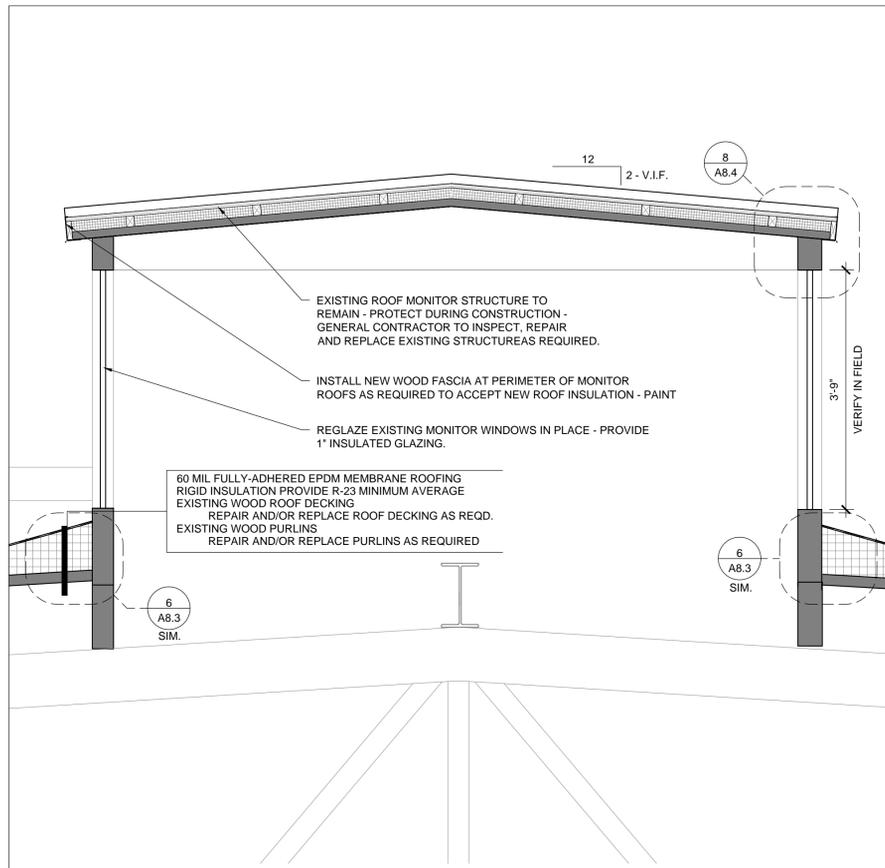
5 BEAM AT ENTRANCE - GRID H

Scale: 1 1/2" = 1'-0"



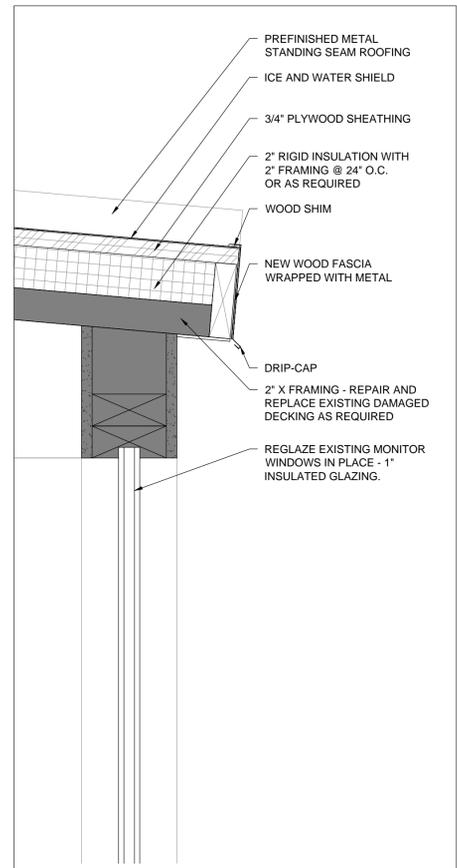
6 DOOR HEAD @ OVHD. DOOR

Scale: 1 1/2" = 1'-0"



7 ROOF MONITOR

Scale: 0/0" = 1'-0"



8 ROOF MONITOR ROOFING DETAIL

Scale: 3" = 1'-0"

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SHEET TITLE:  
SECTION AND  
DETAILS

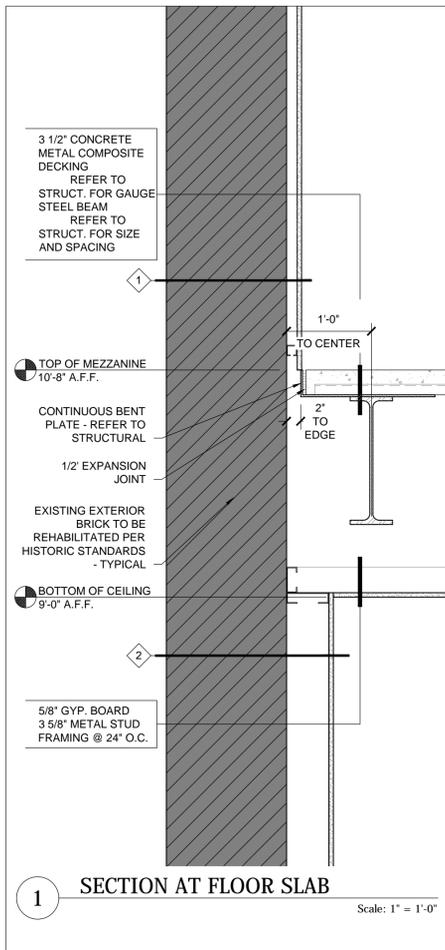
PROJECT #: 1294  
DRAWN BY: DAA CJG  
CHECKED BY: AM  
ISSUE: DATE:  
HISTORICAL 10.29.15  
HISTORICAL 03.08.16  
HPC SUBMIT 04.07.16



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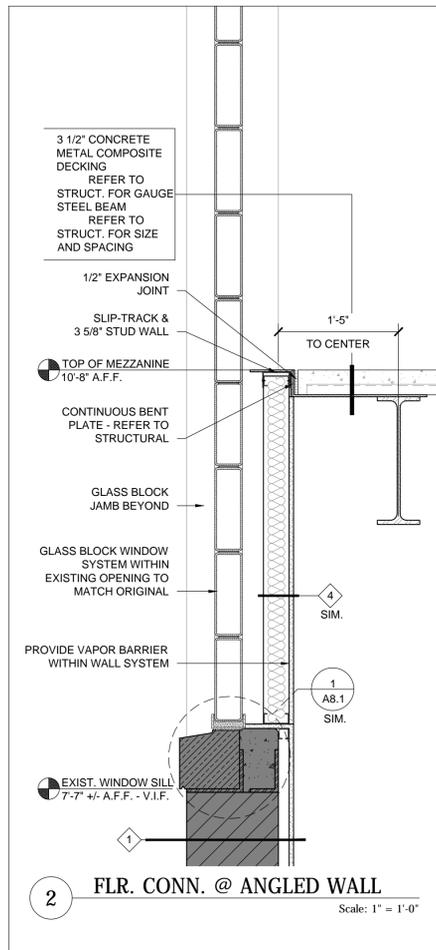
I hereby certify that this plan specification or report was prepared by me or under my direct supervision and that I am a duly registered architect under the law of the state of MINNESOTA  
signed:  
date: 03.08.16 reg. no. 45178

A8.4



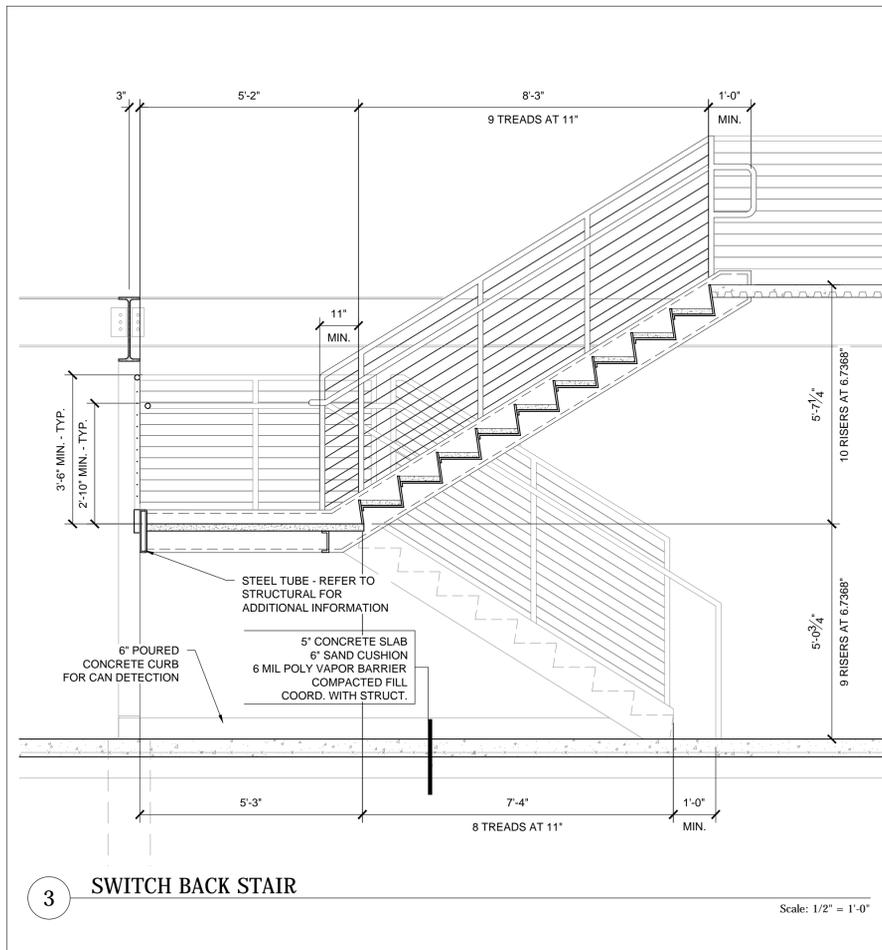
1 SECTION AT FLOOR SLAB

Scale: 1" = 1'-0"



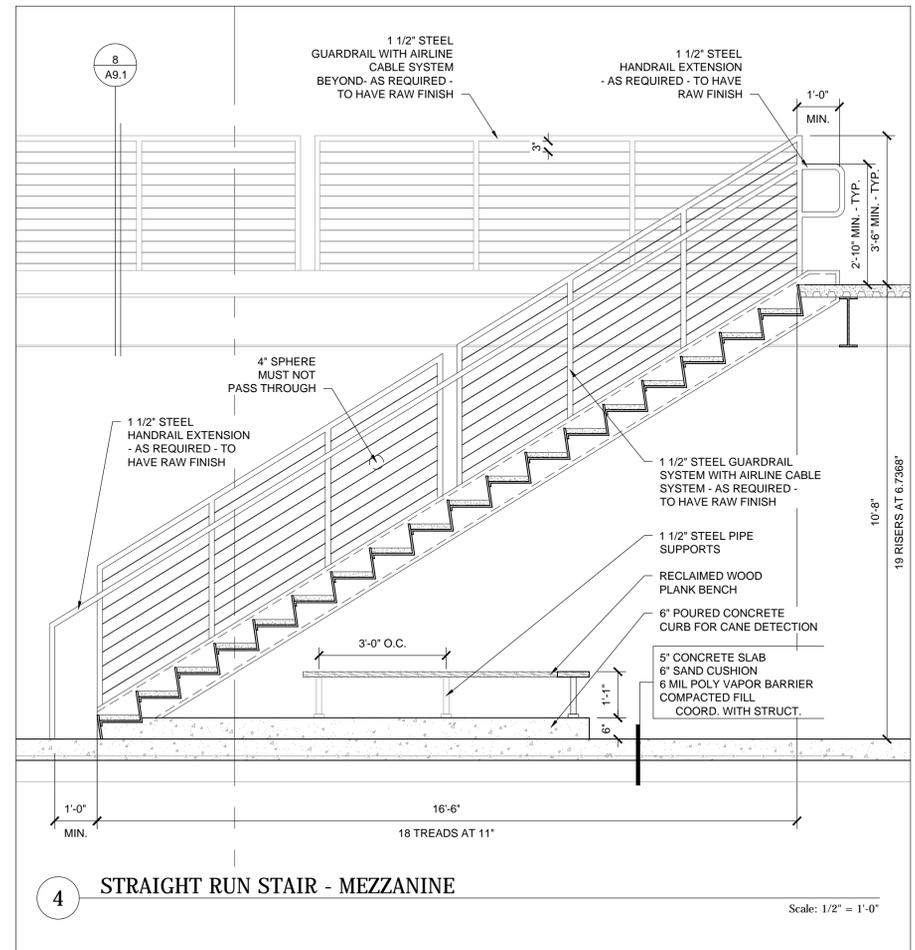
2 FLR. CONN. @ ANGLED WALL

Scale: 1" = 1'-0"



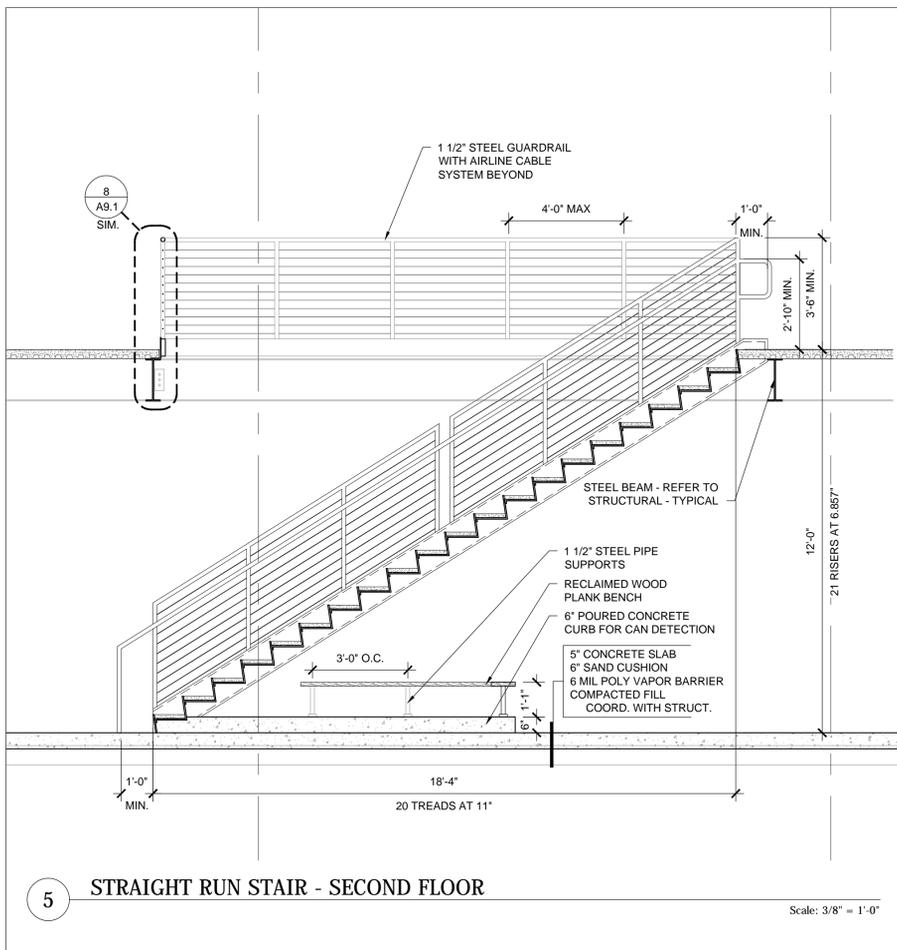
3 SWITCH BACK STAIR

Scale: 1/2" = 1'-0"



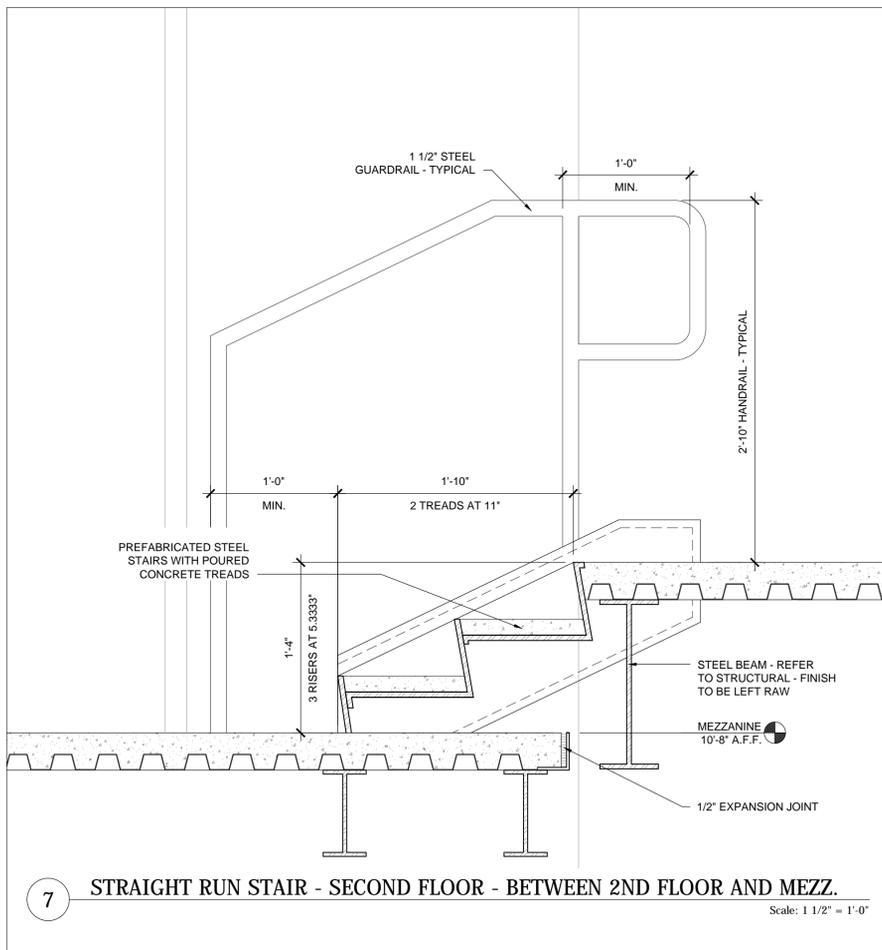
4 STRAIGHT RUN STAIR - MEZZANINE

Scale: 1/2" = 1'-0"



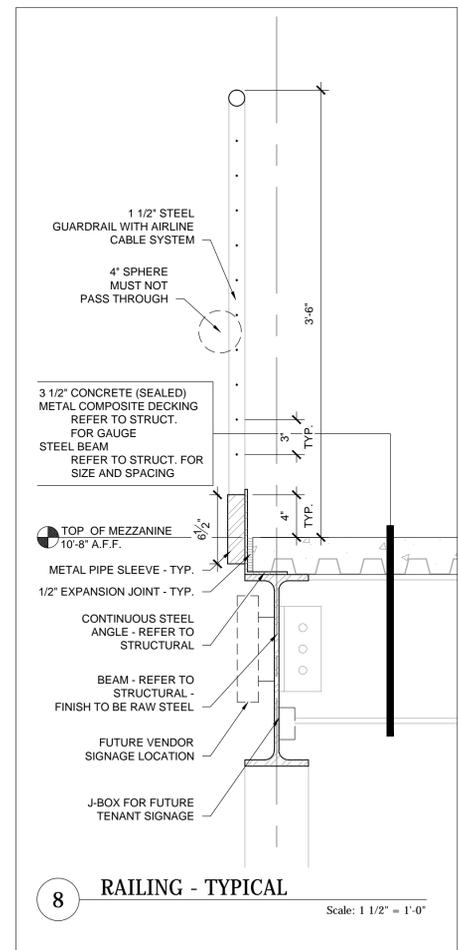
5 STRAIGHT RUN STAIR - SECOND FLOOR

Scale: 3/8" = 1'-0"



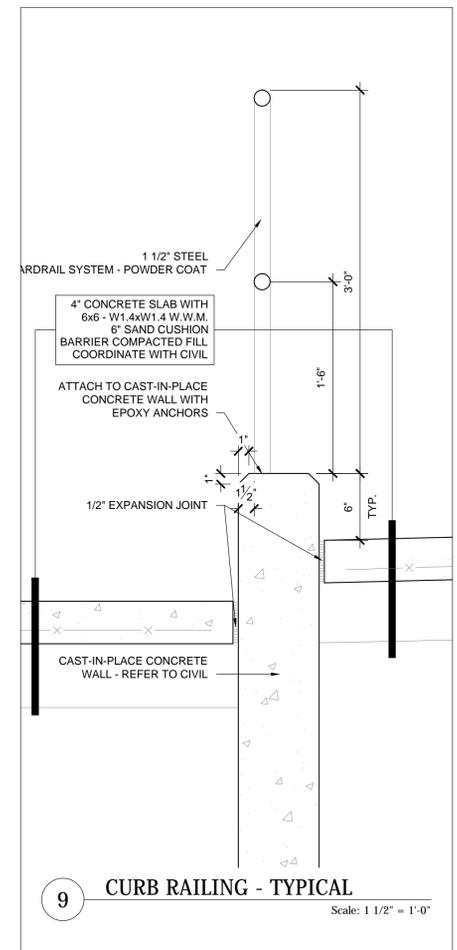
7 STRAIGHT RUN STAIR - SECOND FLOOR - BETWEEN 2ND FLOOR AND MEZZ.

Scale: 1 1/2" = 1'-0"



8 RAILING - TYPICAL

Scale: 1 1/2" = 1'-0"



9 CURB RAILING - TYPICAL

Scale: 1 1/2" = 1'-0"



GENERAL STRUCTURAL NOTES

1. BUILDING CODES USED FOR DESIGN:
  - a. MINNESOTA BUILDING CODE, 2015 EDITION (IBC 2012)
2. DESIGN LOADS:
  - a. WIND LOAD CRITERIA  
METHOD USED: ASCE 7-10  
BASIC WIND SPEED  
  
WIND LOAD RISK CATEGORY  
WIND LOAD EXPOSURE  
WIND TOPOGRAPHIC FACTOR  
INTERNAL PRESSURE COEFFICIENT  
  
WIND LOAD CRITERIA  
GROUND SNOW LOAD  
  
SNOW LOAD IMPORTANCE FACTOR  
SNOW LOAD EXPOSURE FACTOR  
SLOPED ROOF/FLAT ROOF FACTOR  
ROOF THERMAL FACTOR  
ROOF SNOW LOAD  
  
MSC LIVE LOADS:  
PUBLIC AREAS, CORRIDORS AND STAIRS  
100 PSF  
VENDOR AND KITCHEN ELEVATED FLOOR (LIGHT STORAGE)  
125 PSF  
TENANT SPACE ELEVATED FLOOR (DINING ROOMS AND RESTAURANTS)  
100 PSF
  - b. SNOW LOAD CRITERIA  
GROUND SNOW LOAD  
  
SNOW LOAD IMPORTANCE FACTOR  
SNOW LOAD EXPOSURE FACTOR  
SLOPED ROOF/FLAT ROOF FACTOR  
ROOF THERMAL FACTOR  
ROOF SNOW LOAD  
  
MSC LIVE LOADS:  
PUBLIC AREAS, CORRIDORS AND STAIRS  
100 PSF  
VENDOR AND KITCHEN ELEVATED FLOOR (LIGHT STORAGE)  
125 PSF  
TENANT SPACE ELEVATED FLOOR (DINING ROOMS AND RESTAURANTS)  
100 PSF

9. REINFORCED MASONRY
  - a. HOLLOW LOAD BEARING MASONRY UNITS SHALL CONFORM TO ASTM C90 TYPE I. IN ADDITION TO THE REQUIREMENTS OF THE QUALITY CONTROL STANDARDS OF THE CONCRETE MASONRY ASSOCIATION, MINIMUM COMPRESSIVE STRENGTH OF BLOCK UNITS = 2000 PSI (BASED ON NET AREA). MINIMUM FACE SHELL THICKNESS TO BE 1 1/2" FOR 8" BLOCK, 1 3/8" FOR 10" BLOCK, AND 1 1/2" FOR 12" BLOCK.
  - b. MASONRY UNITS SHALL HAVE BEEN CURED FOR NOT LESS THAN 28 DAYS WHEN PLACED IN THE STRUCTURE.
  - c. THE USE OF ADMIXTURES WILL NOT BE PERMITTED IN THE GROUT OF MORTAR UNLESS SUBSTANTIATING DATA IS SUBMITTED TO AND APPROVED BY THE STRUCTURAL ENGINEER OR THE ARCHITECTS.
  - d. GROUT OF VERTICALLY REINFORCED MASONRY WALLS AND BOND BEAMS SHALL BE PROPORTIONED AS FOLLOWS: 1 PORTLAND CEMENT, 2 1/2 FINE AGGREGATE, 2 PEA GRAVEL, Fc = 3000 PSI AT 28 DAYS. GROUT SLUMP SHALL BE TO 10".
  - e. ALL MASONRY WALLS SHALL HAVE HORIZONTAL REINFORCING CONSISTING OF GALVANIZED STEEL CHAIR WALLS OR EQUIVALENT CLEAR SPANS EXCEED 7'-0". CLEAR DOUBLE SPANS EXCEED 6'-11" AND CLEAR SINGLE SPANS EXCEED 7'-2". FURNISH, DELIVER AND INSTALL ALL DECK UNITS. ITEMS REQUIRED TO SUPPORT DECK AT COLUMNS, SIDE AND END CLOSURES, AND OTHER ITEMS SPECIFIED.
  - f. DOWELS AS SHOWN SHALL MATCH SIZE AND NUMBER OF REINFORCING UNLESS OTHERWISE NOTED. HOOK INTO FOOTING AND LAP WITH STEEL.
  - g. MORTAR SHALL BE TYPE M OR S. MASONRY CEMENT IS NOT PERMITTED. SPEC. MIX MORTAR IS ACCEPTABLE.
  - h. SEE ARCHITECTURAL PLANS FOR LOCATION AND DETAIL OF VERTICAL CONTROL JOINTS IF REQUIRED.
  - i. MAXIMUM SPACING FOR CONTROL JOINTS IN BLOCK WALLS SHALL NOT EXCEED 24'-0" O.C.
  - j. ALL STEEL BEAMS BEARING ON MASONRY SHALL BE WELDED TO BEARING PLATE AND HAVE 2 CORES MINIMUM FILLED WITH GROUT DIRECTLY BELOW THE BEARING POINT EXCEPT AS NOTED ON THE PLANS.
  - k. BOND BEAMS 8" OR SMALLER USE 1 - #5 CONT., BOND BEAMS 10" OR LARGER, USE 2 - #5 CONT., UNLESS NOTED OTHERWISE.
  - l. ALL REINFORCING SHALL BE TYPE #4 OR #5 STRIP FOOTING OR THICKENED SLAB WITH (2) #5 BAR CONTINUOUS UNDER ALL MASONRY WALLS, UNLESS NOTED OTHERWISE.
  - m. REINFORCEMENT SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY WIRE POSITIONERS OR OTHER SUITABLE DEVICES AT INTERVALS NOT EXCEEDING 200 BAR DIAMETERS.
  - n. REINFORCEMENT SHALL BE PLACED PRIOR TO GROUT. GROUT SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION DURING PLACEMENT AND RECONSOLIDATED BY MECHANICAL VIBRATION TO MINIMIZE VOIDS DUE TO WATER LOSS.
  - o. COMPLIANCE WITH UNIT STRENGTH METHOD.
  - p. ALL REINFORCING SHALL BE PLACED BELOW GRADE SHALL UTILIZE "OPEN-CORE" BLOCK UNITS UNLESS STANDARD UNITS ARE APPROVED BY THE ENGINEER.
  - q. COLD-WEATHER REQUIREMENTS: DO NOT USE FROZEN MATERIALS MIXED OR COATED WITH ICE OR FROST. DO NOT BUILD ON FROZEN SUBSTRATES. REMOVE AND REPLACE UNIT MASONRY DAMAGED BY FROST OR BY FROZEN CONDITIONS. COMPLY WITH COLD-WEATHER CONSTRUCTION REQUIREMENTS CONTAINED IN ACI 308.1, ASCE 6/16/83 602. COLD WEATHER CLEANING: USE LIQUID CLEANING METHODS ONLY WHEN AIR TEMPERATURE IS 40 DEGS F AND ABOVE AND WILL REMAIN SO UNTIL MASONRY HAS DRIED, BUT NOT LESS THAN 7 DAYS AFTER COMPLETING CLEANING.
  - r. COLD-WEATHER REQUIREMENTS: PROTECT UNIT MASONRY WORK WHEN TEMPERATURE AND HUMIDITY CONDITIONS PRODUCE EXCESSIVE EVAPORATION OF WATER FROM MORTAR AND GROUT. PROVIDE ARTIFICIAL SHADE AND WIND BREAKS AND USE COOLED MATERIALS AS REQUIRED. WHEN AMBIENT TEMPERATURE EXCEEDS 100 DEGREES F OR 90 DEGS F WITH A WIND VELOCITY GREATER THAN 8 MPH, DO NOT SPREAD MORTAR BEDS MORE THAN 48 INCHES AHEAD OF MASONRY. SET MASONRY UNITS WITHIN ONE MINUTE OF SPREADING MORTAR.

3. DESIGN STRESSES:
  - a. CONCRETE:
 

STRENGTH @ 28 DAYS	TYPE MIX	LOCATION
4000 PSI	STANDARD WEIGHT	INTERIOR SLABS
4500 PSI	STANDARD WEIGHT	INTERIOR PIERS & WALLS
4500 PSI	STD. WT. AIR-ENTRAINED	EXTERIOR SLABS & WALLS
4500 PSI	STANDARD WEIGHT	FOOTINGS
4000 PSI	STANDARD WEIGHT	ELEVATED SLABS
  - b. MASONRY PRISM STRENGTH
  - c. MASONRY UNITS
  - d. MASONRY GROUT
  - e. NON-SHRINK GROUT
  - f. REINFORCEMENT
  - g. STRUCTURAL STEEL:
 

WIDE FLANGE SHAPES	ALL OTHER SHAPES
Fy = 50,000 PSI ASTM A992	Fy = 36,000 PSI ASTM A36
Fy = 36,000 PSI ASTM A36	Fy = 46,000 PSI ASTM A500 GRADE B
Fy = 36,000 PSI ASTM A36	Fy = 35,000 PSI ASTM A53 GRADE B
Fu = 70,000 PSI	Fu = 120,000 PSI ASTM A325
Fu = 70,000 PSI	Fu = 68,000 PSI ASTM F1554 GRADE 36
ASTM A185	Fu = 70,000 PSI
  - h. STRUCTURAL TUBING
  - i. STANDARD STEEL PIPE
  - j. PLATES
  - k. BOLTS
  - l. ANCHOR BOLTS
  - m. WELD ELECTRODE
  - n. WELDED WIRE FABRIC

4. CONCRETE COVERAGE FOR REINFORCEMENT:
  - a. FOOTINGS: 3" FROM BOTTOM
  - b. FOUNDATION WALLS: 2" EXTERIOR FACE, 1" INTERIOR FACE
  - c. COLUMNS: 1 1/2" TO TIES
  - d. EXPOSED EXTERIOR CONCRETE: 2"
  - e. SLAB ON GRADE: 1" FROM TOP MM. (CTR. REINF. IN SLAB THICKNESS)
5. MASONRY COVERAGE FOR REINFORCEMENT:
  - a. WALLS: 3/8"

6. FOUNDATIONS:
  - a. ALL SHALLOW SPREAD FOOTINGS NOT FOUND TO BEDROCK SHALL BEAR ON NATURAL UNDISTURBED SOIL OR ON COMPACTED GRANULAR FILL. ALL FOOTINGS ARE DESIGNED USING AN ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF. THE SOILS ENGINEER SHALL CONFIRM THESE BEARING VALUES AT THE TIME OF EXCAVATION.
  - b. GRANULAR FILL SHALL BE COMPACTED TO 98% STANDARD DENSITY (ASTM D698).
  - c. IF SOIL AT BOTTOM OF FOOTINGS IS OF QUESTIONABLE BEARING VALUE, THE ARCHITECT'S OFFICE SHALL BE NOTIFIED AT ONCE.
  - d. IN LIEU OF SOIL BORINGS, CONCRETE PIERS BEARING ON BEDROCK HAVE BEEN DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 10,000 PSF. IT WILL BE THE RESPONSIBILITY OF OTHERS TO VERIFY THIS BEARING CAPACITY. TO ENSURE THAT DAMAGING DIFFERENTIAL SETTLEMENT WILL NOT OCCUR, THE GEOTECHNICAL ENGINEER RECOMMENDS TESTING OF APPROXIMATELY 10% OF THE PIER LOCATIONS AT THE TIME OF EXCAVATION FOR BEARING CAPACITY WALLS.
  - e. WALL FOOTING ELEVATION CHANGES SHALL BE STEPPED AT A RATIO OF 1 (VERTICAL) TO 2 (HORIZONTAL). MAXIMUM VERTICAL STEP SHALL BE 1'-4" UNLESS OTHERWISE NOTED.
  - f. ALL EXTERIOR WALL FOOTINGS SHALL HAVE A MINIMUM SOIL COVER OF 3'-6" MEASURED FROM BOTTOM OF FOOTING UNLESS OTHERWISE NOTED.
  - g. PROVIDE A 6" SAND CUSHION AND POLY VAPOR BARRIER BENEATH ALL SLABS ON GRADE. COMPACT SAND WITH MECHANICAL EQUIPMENT TO 4" TO 3/4" OF CORRECT ELEVATIONS. THE VAPOR BARRIER SHALL BE PLACED DIRECTLY BENEATH THE SLAB. THE SLAB SHALL BE MOIST CURED TO PREVENT CURLING.
  - h. BASE FILL (SAND CUSHION) FOR SLABS ON GRADE SHALL BE REASONABLY WELL GRADED SAND (SW OR SP) CLEAN AND FREE OF ORGANIC MATERIAL WITH NOT MORE THAN 5% BY WEIGHT, PASSING A NO. 200 SIEVE AND LESS THAN 40% BY WEIGHT, PASSING THE #40 SIEVE. COARSE AGGREGATE SHALL NOT EXCEED 1/2".
  - i. THE CONCRETE SLAB ON GRADE JOINT LAYOUT ON THE DRAWINGS IS DESIGNED TO ECONOMICALLY LIMIT SHRINKAGE CRACKS. HOWEVER, SOME HAIRLINE CRACKING IS STILL A POSSIBILITY, BUT SHOULD NOT INHIBIT THE SERVICEABILITY OF THE SLAB.
  - j. PERFORM SAW CUTTING OF JOINTS WITHIN 4 TO 12 HOURS OF HARDENING - AS SOON AS SURFACE IS HARD ENOUGH SO THAT IT WILL NOT BE DAMAGED BY THE SAW BLADE.

7. REINFORCING STEEL:
  - a. THE REINFORCING STEEL CONTRACTOR SHALL FABRICATE ALL REINFORCEMENT AND FURNISH ALL ACCESSORIES, CHAIRS, SPACER BARS AND SUPPORTS NECESSARY TO SECURE THE REINFORCEMENT UNLESS SHOWN OTHERWISE ON THE PLANS AND/OR DETAILS.
  - b. CONCRETE REINFORCEMENT SHALL BE PLACED ACCORDING TO THE CRS' RECOMMENDED PRACTICE FOR PLACING REINFORCING BARS.
  - c. COMPRESSION AND TENSION LAP SPICES FOR CAST-IN-PLACE CONCRETE SHALL BE 38 BAR DIAMETER MINIMUM UNLESS OTHERWISE NOTED.
  - d. TENSION LAP SPICES FOR REINFORCED MASONRY SHALL BE 48 BAR DIAMETERS MINIMUM FOR #5 BARS OR SMALLER AND 64 BAR DIAMETERS MINIMUM FOR #6 BARS OR LARGER, UNLESS OTHERWISE NOTED.
  - e. HORIZONTAL REINFORCING STEEL IN FOOTINGS AND CONCRETE WALLS SHALL BE CONTINUOUS AROUND CORNERS.
  - f. ALL LAPS IN WWF SHOULD BE ONE MESH PLUS TWO INCHES AT SPICES.
  - g. TOP BARS SHALL BE HOOKED AT END SPICES.
  - h. REINFORCING BARS MAY NOT BE WELDED WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER. ONLY ASTM A606 REINFORCEMENT MAY BE WELDED.

8. CONCRETE:
  - a. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301.
  - b. COMPLY WITH ACI 304 FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE.
  - c. COMPLY WITH ACI 308 FOR HOT WEATHER CONCRETING.
  - d. COMPLY WITH ACI 308 FOR COLD WEATHER CONCRETING.
  - e. UNLESS SPECIFIED OTHERWISE, CONCRETE MUST REACH THE FOLLOWING PERCENTAGES OF ITS 28 DAY COMPRESSIVE STRENGTH (fc) BEFORE FORMS MAY BE REMOVED:
 

WALLS, COLUMNS AND BEAM SIDES	40 PERCENT
JOIST PANS AND BEAM BOTTOMS	70 PERCENT
FLOOR SYSTEMS	80 PERCENT

10. DIMENSION LUMBER:
  - a. DIMENSION LUMBER TO BE NORTHERN SPF NO. 2 (OR BETTER) FOR JOISTS & BEAMS AND NORTHERN SPF STUD GRADE (OR BETTER) FOR STUDS AND PLATES.
  - b. ALL MEMBER SIZES GIVEN ON PLAN ARE NOMINAL DIMENSIONS.
  - c. WOOD UNTELS SHALL HAVE A FULL 3" LENGTH OF BEARING AT EACH END UNLESS OTHERWISE NOTED.
  - d. ALL WALLING SHALL CONFORM TO IBC TABLE 2304.9.1 "FASTENING SCHEDULE" UNLESS OTHERWISE NOTED ON PLANS.
  - e. SPACING OF BRIDGING FOR FLOOR AND ROOF JOISTS SHALL NOT EXCEED 8' OR 6 TIMES THE NOMINAL JOIST DEPTH (WHICHEVER IS GREATER).
  - f. DOUBLE PARALLEL PARTITIONS.
  - g. ALL WOOD CONNECTORS SHALL BE BY "USP LUMBER CONNECTORS" OR "SIMPSON STRONG-TIE". ALL JOISTS AND BEAMS NOT BEARING ON A SUPPORTING MEMBER SHALL BE FRAMED WITH AN APPROPRIATE WOOD CONNECTOR.
  - h. WOOD STUD BEARING WALLS SHALL HAVE AT LEAST ONE 8" COURSE OF CONCRETE BLOCK BETWEEN THE BOTTOM OF THE SILL PLATE AND THE TOP OF THE FOOTING.
  - i. WOOD JOISTS SHALL BEAR ON THE FULL WIDTH OF SUPPORTING MEMBERS (STUD WALLS, BEAMS, ETC.) UNLESS NOTED OTHERWISE.
  - j. PROVIDE SOLID BLOCKING BELOW ALL JAMB TRIMMER OR PIPER STUDS (TYPICAL AT ALL FLOORS).
  - k. ALL FOUNDATION PLATES, SILLS AND SLEEPERS ON CONCRETE SLAB, WHICH IS IN DIRECT CONTACT WITH EARTH, AND SILLS WHICH REST ON CONCRETE OR MASONRY FOUNDATION WALLS, SHALL BE TREATED WOOD.
  - l. FOR ALL WOOD TREATED WITH PRESERVATIVES OTHER THAN CCA, CONNECTORS AND FASTENERS MUST BE COATED WITH ONE OF THE FOLLOWING:
    - i. BATCH POST-HOT DIPPED GALVANIZED PER ASTM A123 FOR CONNECTORS AND ASTM 153 FOR FASTENERS.
    - ii. MECHANICALLY GALVANIZED PER ASTM 695, CLASS 55 OR GREATER.
    - iii. TRIPLE ZINC D193-HDS PER ASTM A653 OR EQUIV.

11. STRUCTURAL STEEL:
  - a. FABRICATION & ERECTION OF STRUCTURAL STEEL MEMBERS ARE TO BE IN ACCORDANCE WITH AISC CODE OF STANDARD PRACTICE.
  - b. ALL CONNECTIONS SHALL BE BOLTED OR WELDED. BOLTED CONNECTIONS SHALL HAVE A MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE ON THE PLANS.
  - c. ALL WELDING SHALL BE BY QUALIFIED WELDERS AND SHALL CONFORM TO THE STANDARDS OF THE AMERICAN WELDING SOCIETY, D1-1 STRUCTURAL WELDING CODE - STEEL. WELDING OF GALVANIZED PARTS IS NOT PERMITTED.
  - d. ELECTRODES FOR ALL FIELD AND SHOP WELDING SHALL CONFORM TO MATCHING FILLER METAL REQUIREMENTS OF AWS D11.1.
  - e. FIELD CONNECTIONS ARE TO BE BOLTED. USE 1/2" DIAM. HIGH STRENGTH BOLTS AND NUTS (A325) UNLESS SHOWN OTHERWISE ON PLANS.
  - f. STEEL COLUMN BASE PLATES SHALL BE SIZE SHOWN ON PLAN WITH (F1554 GRADE 36) ANCHOR BOLTS AND 1 1/2" NON-SHRINK GROUT FOR UNIFORM BEARING.
  - g. UNLESS OTHERWISE NOTED, STRUCTURAL STEEL SUPPLIERS TO FURNISH 3 1/2" X 3 1/2" X 1/4" SHOP WELDED ANGLE FRAMES AT ALL ROOF OPENINGS UNLESS NOTED OTHERWISE ON THE PLANS. VERIFY SIZE AND LOCATION WITH MECHANICAL CONTRACTOR.
  - h. ALL INTERIOR STRUCTURAL STEEL AND MISCELLANEOUS METALS SHALL BE PRIME PAINTED WITH ONE COAT OF THE SPECIFIED PRIMER OR EQUAL. TOUCH UP ALL DISTURBED AREAS AFTER ERECTION, CUTS, HOLES (OPENINGS), ETC. REQUIRED IN STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES SHALL NOT BE ALLOWED, EXCEPT BY WRITTEN PERMISSION FROM THE ARCHITECT.
  - i. ALL EXTERIOR STRUCTURAL STEEL, MISCELLANEOUS METALS, BAR GRATING AND HARDWARE SHALL BE HOT-DIPPED GALVANIZED IN CONFORMANCE WITH ASTM A153 AND ASTM A152.
  - j. WELDING OF GALVANIZED MATERIALS IS NOT ALLOWED. REMOVE GALVANIZING BEFORE FIELD WELDING. WELDS SHALL BE SPRAYED WITH ZINC RICH PAINT.
  - k. GROUT UNDER BEAM BEARING PLATES AND COLUMN BASE PLATES SHALL BE "NON-SHRINK" AND SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 10,000 PSI.
  - l. EXISTING STEEL FRAMING TO BE WELDED TO, SHALL HAVE PAINT, RUST, OIL AND OTHER CONTAMINANTS REMOVED TO BASE MATERIAL WITHIN 2" OF WELDED AREA.

12. STEEL JOISTS:
  - a. ALL STEEL JOISTS SHALL CONFORM TO THE REQUIREMENTS OF THE STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS. JOIST FABRICATOR SHALL BE MEMBER OF THE SJI OR SHALL SUBMIT COMPLETE CALCULATIONS AND/OR LOAD TEST DATA CONFORMING TO SJI LOAD TEST TABLES.
  - b. BRIDGING FOR "K" SERIES STEEL JOISTS SHALL BE CONTINUOUS 5/8" DIAMETER OR EQUAL AT TOP AND BOTTOM OF JOISTS IN LENGTHS TO PERMIT LAPPING AT JOIST PANEL POINTS FOR WELDING. WELD BRIDGING TO CHORDS. SPACING OF BRIDGING IS PER SJI RECOMMENDATIONS.
  - c. PROVIDE FULL AREA OF BOTTOM CHORD FOR JOISTS FRAMING INTO COLUMNS.
  - d. PROVIDE BOTTOM CHORD CEILING EXTENSIONS AS SHOWN ON ARCHITECTURAL DRAWINGS OR AS NOTED OTHERWISE.
  - e. HEADER ANGLES FOR STEEL JOISTS SHALL BE DESIGNED AND FURNISHED BY THE JOIST FABRICATOR AS NOTED ON THE DRAWINGS.
  - f. ALL "K" SERIES JOISTS SUPPORTED BY MASONRY OR CONCRETE ARE TO BEAR ON 6" X 6" X 1/2" BEARING PLATES WITH (2) 1/2" DIAMETER STUDS 5 INCHES LONG, UNLESS NOTED OTHERWISE.

13. STEEL NON-COMPOSITE (FORM) DECK:
  - a. GALVANIZED STEEL - ASTM A653-94 GRADE 80 OR HIGHER WITH G60 COATING. DECK GAUGE, THICKNESS AND TYPE TO BE AS SHOWN ON PLANS.
  - b. INSTALLATION: 2" MINIMUM END LAP. STAGGER SPICES AND USE TRIPLE SPANS WHERE POSSIBLE. MAKE JOINTS OVER SUPPORTING MEMBERS ONLY.
  - c. ATTACHMENT: USE WELDERS EXPERIENCED IN THIN METAL WELDING. TEST PRACTICE WELDS USING PRY-OFF TEST.
  - d. WELDS: WELD DECK SHEETS TO SUPPORTING MEMBERS IMMEDIATELY AFTER SUPERSTRESS WELD PATTERN TO BE AS SHOWN ON THE PLANS. WELDS SHALL HAVE AN EFFECTIVE FUSION DIAMETER OF 5/8". SIDELAPS TO BE FASTENED AS SHOWN ON THE PLANS.

14. STEEL COMPOSITE DECK:
  - a. ALL COMPOSITE STRUCTURAL FLOORS, EXCEPT AS NOTED OTHERWISE, SHALL BE 1 1/2" INCH METAL DECK GALVANIZED, BOND DECK ACTING COMPOSITELY WITH REGULAR WEIGHT CONCRETE.
  - b. THICKNESS OF CONCRETE ABOVE THE 1 1/2" INCH METAL DECK SHALL BE 2 INCHES.
  - c. ANY OPENINGS OR HOLES LARGER THAN 12" NOT SHOWN ON THE PLANS WILL NOT BE PERMITTED UNLESS REVIEWED BY THE ARCHITECT/ENGINEER.
  - d. BE COGNIZANT OF ALLOWABLE CONSTRUCTION LIVE LOADS AND PLAN CONCRETE PLACING OPERATIONS ACCORDINGLY SO AS NOT TO OVERSTRESS OR DAMAGE THE COMPOSITE DECK.
  - e. CONTRACTOR SHALL VERIFY WITH DECK MANUFACTURER THAT HIS PARTICULAR CONCRETE PLACING OPERATION IS COMPATIBLE WITH THE TYPE, GAUGE, SPAN AND LENGTH OF THE FLOOR DECK AS FURNISHED.
  - f. THE USE OF DECK AS WORK PLATFORMS AND/OR FORMWORK IS THE CONTRACTOR'S RESPONSIBILITY. PROVIDE PROPER ATTACHMENT, SHORING, AND PROTECTION TO PREVENT DAMAGE TO THE DECK. A HEAVY GAUGE MAY BE SUBSTITUTED, IF REQUIRED, FOR USE AS A WORK PLATFORM BUT WITHOUT ADDITIONAL COST.
  - g. DECK SHALL BE SHORED WHERE CLEAR SPANS EXCEED 7'-0". CLEAR DOUBLE SPANS EXCEED 6'-11" AND CLEAR SINGLE SPANS EXCEED 7'-2". FURNISH, DELIVER AND INSTALL ALL DECK UNITS. ITEMS REQUIRED TO SUPPORT DECK AT COLUMNS, SIDE AND END CLOSURES, AND OTHER ITEMS SPECIFIED.
  - h. GALVANIZED FINISH: ASTM C55-80 CLASS 50 MINIMUM.
  - i. CLOSURES: 18 GA. GALVANIZED UNLESS NOTED OTHERWISE ON PLANS.
  - j. ATTACHMENT: COMPLY WITH THE FOLLOWING REQUIREMENTS AND AS SHOWN ON PLANS:
    - i. WELDING: 5/8" DIAMETER PUDDLE WELD OR EQUIVALENT
    - ii. INTERIOR SUPPORTS AND BEAMS: MAXIMUM SPACING OF STUDS OR WELDS IS 12"
    - iii. EXTERIOR SUPPORTS AND BEAMS:
      1. DECK PARALLEL: WELDS AT 2'
      2. DECK PERPENDICULAR: WELDS AT EACH RIB
    - iv. SIDELAP FASTENERS: AS SHOWN ON PLANS
    - v. MECHANICAL FASTENERS: SUBMIT TEST DATA, DESIGN CALCULATIONS, OR DESIGN CHARTS FOR OBTAINING APPROVAL.
  - k. INFORMATION ON THE SHOP DRAWINGS SHALL INCLUDE:
    - i. TYPE, SIZE, LOCATION, AND GAUGE OF DECK UNITS
    - ii. LAYOUT, USE TRIPLE OR MORE SPAN CONDITION TYPICAL WHERE POSSIBLE
    - iii. JOINT LOCATIONS, CLOSURES
  - l. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR STORAGE AND HANDLING.
  - m. TOUCH-UP FINISH: TOUCH-UP SURFACES THAT WILL NOT BE COVERED WITH CONCRETE WITH MATERIAL TO MATCH FACTORY FINISH.

15. DELEGATED DESIGN - METAL FABRICATIONS:
  - a. METAL STAIRS, HANDRAIL, AND LADDERS SHALL BE DESIGNED BY THE METAL FABRICATOR / SUPPLIER AND BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MINNESOTA.
  - b. METAL FABRICATIONS SHALL BE DESIGNED TO RESIST SELF-WEIGHT AND THE MORE STRINGENT OF:
    - i. SUPERIMPOSED DEAD AND LIVE LOADS AS SHOWN WITHIN THE STRUCTURAL NOTES OR AS SHOWN ON PLAN.
    - ii. LOADS SET FORTH BY THE GOVERNING BUILDING CODE.
    - iii. MAXIMUM LIVE LOAD DEFLECTION SHALL BE LENGTH/360. DEFLECTION SHALL BE BASED ON STRUCTURAL SECTION ALONE.
  - c. DESIGN CALCULATIONS OF THE METAL FABRICATIONS SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MINNESOTA SHALL BE SUBMITTED TO THE ARCHITECT / ENGINEER FOR REVIEW.
  - d. SHOP DRAWINGS OF METAL FABRICATIONS NOTED ABOVE SHALL BE SUBMITTED FOR REVIEW.

16. BACKFILLING:
  - a. NO BACKFILLING AND COMPACTING OF EARTH SHALL BE PERMITTED AGAINST FOUNDATION WALLS UNTIL SUPPORTING FLOOR SYSTEMS HAVE BEEN PLACED AND HAVE REACHED 75% OF THEIR DESIGN STRENGTH OR UNLESS ADEQUATE BRACING SUBMITTED FOR REVIEW IS PROVIDED.
  - b. BOTH SIDES OF FOUNDATION WALLS SHALL BE BACKFILLED SIMULTANEOUSLY SO AS TO PREVENT OVERTURNING OR LATERAL MOVEMENT OF WALLS.

17. CONSTRUCTION AND CONTROL JOINTS IN CONCRETE:
  - a. CONSTRUCTION JOINTS SHALL BE MADE AS DETAILED ON THE DRAWINGS.
  - b. MAXIMUM SPACING FOR CONTROL JOINTS SHALL BE 15'-0".
  - c. A 15'-0" MAXIMUM SPACING OF CONTROL JOINTS MAY NOT ENSURE COMPLETE CONTROL OF SHRINKAGE CRACKS. A CLOSER SPACING MAY BE USED BY REQUEST OF OWNER IF MORE COMPLETE SHRINKAGE CRACK CONTROL IS DESIRED. CONTRACTOR TO VERIFY WITH HIS OWNER.
  - d. CONSTRUCTION JOINTS IN CONCRETE FOUNDATION WALLS SHALL BE LOCATED SO NO SINGLE POUR IS LONGER THAN 50 FEET.

18. DRILLED ANCHORS:
  - a. ALL EXPANSION BOLTS SHALL BE HILTI "Kwik-BOLTS", SIMPSON "WEDGE-ALL" OR RAISED RIB HEAD "THRUBOLT", UNLESS NOTED OTHERWISE ON THE DRAWINGS.
  - b. ADHESIVE ANCHORAGE FOR DRILLED REBAR DOWELS SHALL BE HILTI "HT HY 200 ADHESIVE" OR SIMPSON "EPOXY-TIE" OR SIMPSON "ACRYLIC-TIE", UNLESS NOTED OTHERWISE ON THE DRAWINGS.

19. CONSTRUCTION PROCEDURE:
  - a. THE STRUCTURE SHALL BE ADEQUATELY BRACED AND SHORED DURING ERECTION AGAINST WIND AND ERECTION LOADS. STRUCTURAL MEMBERS ARE DESIGNED FOR "IN PLACE" LOADS.
  - b. COMPLY WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL LAWS, INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ADOPTED PURSUANT THERETO. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE NOTED, THEY DO NOT INDICATE THE MEANS OR METHOD OF CONSTRUCTION. PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKMEN OR OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO: BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, SHORING FOR CRANES AND GIN POLES, ETC.
  - c. ENGAGE PROPERLY QUALIFIED PERSONS TO DETERMINE WHERE AND HOW TEMPORARY PRECAUTIONARY MEASURES SHALL BE USED AND INSPECT SAME IN THE FIELD. OBSERVATION VISITS TO THE SITE BY ENGINEER'S FIELD REPRESENTATIVE SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
  - d. SUPERVISE AND DIRECT THE WORK SO AS TO MAINTAIN SOLE RESPONSIBILITY FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. AS A PART OF THIS RESPONSIBILITY, RETAIN THE SERVICES OF A LICENSED STRUCTURAL ENGINEER TO DESIGN AND SUPERVISE ANY SCAFFOLDING FOR WORKMEN, AND ALL SHORING OF FORMS AND ELEMENTS OF THE CONSTRUCTION.

20. MISCELLANEOUS:
  - a. PLACEMENT OF ANCHOR BOLT, PIPE SLEEVES, PADS AND OPENINGS FOR EQUIPMENT SHALL BE COORDINATED BETWEEN THE GENERAL CONTRACTOR AND THE OTHER SUBCONTRACTORS.
  - b. ALL CORE DRILLING SHALL BE DONE UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. NO REINFORCING SHALL BE CUT. VERIFY LOCATION OF REINFORCING BEFORE CORE DRILLING. THERE SHALL NOT BE ANY CORE DRILLING THROUGH BEAMS OR COLUMNS. MAXIMUM CORE HOLE THROUGH SLABS SHALL BE PIPE DIAMETER PLUS 1".

21. COORDINATION WITH ARCHITECTURAL DRAWINGS:
  - a. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. WHERE DISCREPANCIES OCCUR, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ARCHITECT PRIOR TO CONSTRUCTION.

22. NEW WORK IN CONJUNCTION WITH EXISTING CONSTRUCTION:
  - a. THE CONTRACTOR SHALL VERIFY, BY FIELD CHECK, ALL SIZES, DIMENSIONS, ELEVATIONS, LOCATIONS, ETC. OF ELEMENTS OF THE EXISTING CONSTRUCTION WHICH ARE RELATIVE TO THE NEW CONSTRUCTION.
  - b. ALL DIMENSIONS INVOLVING NEW WORK TYING INTO OR GOVERNED BY EXISTING CONSTRUCTION SHALL BE FIELD CHECKED BY THE CONTRACTOR AND FURNISHED TO THE SUBCONTRACTOR PRIOR TO FABRICATION OF ANY WORK. THE VERIFIED DIMENSIONS SHALL APPEAR AND BE NOTED AS SUCH ON THE FIRST SHOP DRAWING SUBMITTED.
  - c. THE ENGINEER HAS MADE ASSUMPTIONS CONCERNING THE SOUNDNESS OF THE EXISTING BUILDINGS AND THESE ASSUMPTIONS ARE THAT THIS BUILDING WAS DESIGNED AND CONSTRUCTED IN CONFORMANCE WITH GOOD DESIGN AND CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL TAKE EXTRAORDINARY PRECAUTIONS CONCERNING PRESERVATION OF THE BUILDING DURING DEMOLITION AND NEW CONSTRUCTION WORK. FURTHER, HE SHALL AGREE TO ASSUME ALL RESPONSIBILITY FOR THE PRESERVATION OF THIS PROPERTY.
  - d. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES BETWEEN CONSTRUCTION DOCUMENTS AND ACTUAL FIELD CONDITIONS.
  - e. ALL HOLES THROUGH EXISTING CONCRETE OR MASONRY CONSTRUCTION SHALL BE CORE DRILLED OR SAW CUT. NEW OPENINGS MUST BE MADE WITH ENGINEER'S APPROVAL.
  - f. CUTTING OF EXISTING STRUCTURAL STEEL IS PROHIBITED WITHOUT APPROVAL FROM THE ENGINEER.

23. SHOP DRAWINGS:
  - a. SHOP DRAWINGS, UNLESS OTHERWISE NOTED, SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION.
  - b. SHOP DRAWINGS SHALL BE PREPARED UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER, AND INCLUDE COMPLETE DETAILS, SCHEDULES, PROCEDURES AND DIAGRAMS FOR FABRICATION AND ASSEMBLY OF STRUCTURAL MEMBERS.
  - c. FABRICATORS SHALL DRAW THEIR OWN ERECTION PLANS, COPYING THE STRUCTURAL PLANS AND USING THEM AS ERECTION DRAWINGS IS NOT ACCEPTABLE.
  - d. PRIOR TO SUBMITTAL, THE CONTRACTOR SHALL REVIEW THE SHOP DRAWINGS AND MAKE ANY CORRECTIONS REQUIRED. THE CONTRACTOR SHALL STAMP AND SIGN THE DRAWINGS AS EVIDENCE THAT HE HAS REVIEWED THEM.
  - e. SHOP DRAWINGS SHALL BE FURNISHED FOR ALL STRUCTURAL COMPONENTS.
  - f. TURN AROUND TIME FOR SHOP DRAWINGS SHALL BE TWO WEEKS FROM DATE RECEIVED IN THE ENGINEER'S OFFICE.

24. SPECIAL INSPECTIONS:
  - a. SPECIAL INSPECTIONS SHALL BE PROVIDED IN ACCORDANCE WITH IBC SECTION 1704. AS OUTLINED BELOW. THE SPECIAL INSPECTOR SHALL BE PROVIDED BY THE OWNER. HE SHALL BE FULLY KNOWLEDGEABLE OF IBC SPECIAL INSPECTION REQUIREMENTS AND SHALL DEMONSTRATE COMPETENCE TO THE SATISFACTION OF THE BUILDING OFFICIAL (IBC 1704.1). THE CONTRACTOR SHALL CONTACT THE SPECIAL INSPECTOR DURING APPROPRIATE PHASES OF CONSTRUCTION SO THAT INSPECTIONS CAN BE MADE IN A TIMELY MANNER. THE SPECIAL INSPECTOR SHALL SUBMIT WRITTEN INSPECTION REPORTS TO THE ENGINEER OR RECORDS OFFICE WITHIN 3 WORKING DAYS OF EACH INSPECTION. ANY PROBLEMS BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR. THE FOLLOWING ITEMS WILL REQUIRE SPECIAL INSPECTION:
    - i. STEEL (PER CHAPTER N, IBC 360-10, SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS)
      - i. QUALITY CONTROL / QUALITY ASSURANCE REQUIREMENTS ARE TO COMPLY WITH THE REQUIREMENTS OF IBC 360-10 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, CHAPTER N.
      - ii. SPECIAL INSPECTIONS ARE NOT REQUIRED FOR WORK DONE IN AN APPROVED FABRICATING SHOP. THE STEEL FABRICATOR MUST BE REGISTERED AND APPROVED BY THE BUILDING OFFICIAL TO SUPPORT THE WORK WITHOUT SPECIAL INSPECTIONS.
      - iii. HIGH STRENGTH BOLTING (IACS 360-10, TABLES N5.6-1, N5.6-2, N5.6-3). PERIODIC INSPECTIONS ARE REQUIRED FOR BEARING-TYPE CONNECTIONS.
      - iv. FIELD WELDING: CONTINUOUS INSPECTIONS ARE REQUIRED FOR COMPLETE AND PARTIAL PENETRATION GROOVE WELDS, MULTI-PASS FILLET WELDS AND SINGLE-PASS FILLET WELDS GREATER THAN 5/16". PERIODIC INSPECTIONS ARE REQUIRED FOR FLOOR AND ROOF DECK WELDS AND SINGLE-PASS FILLET WELDS SMALLER THAN OR EQUAL TO 5/16". CORRECT WELD FILLER MATERIAL SHALL BE VERIFIED IN ALL CASES.
      - v. STEEL ERECTION: PERIODIC INSPECTIONS SHALL BE MADE TO VERIFY COMPLIANCE WITH THE DESIGN DRAWINGS.
      - vi. MATERIALS: THE STEEL MANUFACTURERS CERTIFIED MILL TEST REPORTS SHALL BE SUBMITTED TO THE SPECIAL INSPECTOR OR TO THE ENGINEER OF RECORD.
    - ii. REINFORCEMENT: REINFORCING STEEL SHALL BE INSPECTED ON A PERIODIC BASIS. WELDING OF REINFORCEMENT SHALL BE CONTINUOUSLY INSPECTED, ONLY ASTM A606 REINFORCEMENT MAY BE WELDED.
    - iii. SAMPLING AND TESTING: CONTINUOUS INSPECTIONS SHALL BE PROVIDED DURING SLUMP TESTS, AIR CONTENT TESTS AND WHEN DETERMINING THE TEMPERATURE OF FRESH CONCRETE AT THE TIME OF MAKING SPECIMENS FOR STRENGTH TESTS.
    - iv. CONCRETE PLACEMENT: CONTINUOUS INSPECTION REQUIRED.
    - v. COLD AND HOT WEATHER CONCRETING: PERIODIC INSPECTION OF COMPLIANCE IS REQUIRED, IF APPLICABLE.
    - vi. BEGINNING OF CONSTRUCTION: PERIODIC INSPECTION SHALL BE MADE OF MORTAR PROPORTIONS, CONSTRUCTION OF MORTAR JOINTS AND REINFORCEMENT LOCATION AND CONNECTIONS.
    - vii. ONGOING CONSTRUCTION: PERIODIC INSPECTION SHALL BE PROVIDED TO VERIFY SIZE AND LOCATION OF STRUCTURAL ELEMENTS, SIZE AND LOCATION OF ANCHORS, SIZE AND TYPE OF REINFORCEMENT AND COMPLIANCE WITH HOT OR COLD WEATHER REQUIREMENTS.
    - viii. GROUTING: PERIODIC INSPECTION SHALL BE PROVIDED TO VERIFY THAT THE GROUT SPACE IS PROPERLY POSITIONED AND SITE PREPARED GROUT IS PROPERLY PROPORTIONED. CONTINUOUS INSPECTION IS REQUIRED OF GROUT PLACEMENT.
    - ix. TEST SPECIMENS: CONTINUOUS INSPECTION SHALL BE MADE DURING PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS AND PRISMS.
    - x. THE SPECIAL INSPECTOR SHALL DETERMINE COMPLIANCE WITH THE SOILS REPORT FOR SITE PREPARATION, FILL PLACEMENT AND ERECTION TESTS.

- b. CONCRETE:
  - i. REINFORCEMENT: REINFORCING STEEL SHALL BE INSPECTED ON A PERIODIC BASIS. WELDING OF REINFORCEMENT SHALL BE CONTINUOUSLY INSPECTED, ONLY ASTM A606 REINFORCEMENT MAY BE WELDED.
  - ii. SAMPLING AND TESTING: CONTINUOUS INSPECTIONS SHALL BE PROVIDED DURING SLUMP TESTS, AIR CONTENT TESTS AND WHEN DETERMINING THE TEMPERATURE OF FRESH CONCRETE AT THE TIME OF MAKING SPECIMENS FOR STRENGTH TESTS.
  - iii. CONCRETE PLACEMENT: CONTINUOUS INSPECTION REQUIRED.
  - iv. COLD AND HOT WEATHER CONCRETING: PERIODIC INSPECTION OF COMPLIANCE IS REQUIRED, IF APPLICABLE.
  - v. BEGINNING OF CONSTRUCTION: PERIODIC INSPECTION SHALL BE MADE OF MORTAR PROPORTIONS, CONSTRUCTION OF MORTAR JOINTS AND REINFORCEMENT LOCATION AND CONNECTIONS.
  - vi. ONGOING CONSTRUCTION: PERIODIC INSPECTION SHALL BE PROVIDED TO VERIFY SIZE AND LOCATION OF STRUCTURAL ELEMENTS, SIZE AND LOCATION OF ANCHORS, SIZE AND TYPE OF REINFORCEMENT AND COMPLIANCE WITH HOT OR COLD WEATHER REQUIREMENTS.
  - vii. GROUTING: PERIODIC INSPECTION SHALL BE PROVIDED TO VERIFY THAT THE GROUT SPACE IS PROPERLY POSITIONED AND SITE PREPARED GROUT IS PROPERLY PROPORTIONED. CONTINUOUS INSPECTION IS REQUIRED OF GROUT PLACEMENT.
  - viii. TEST SPECIMENS: CONTINUOUS INSPECTION SHALL BE MADE DURING PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS AND PRISMS.
  - ix. THE SPECIAL INSPECTOR SHALL DETERMINE COMPLIANCE WITH THE SOILS REPORT FOR SITE PREPARATION, FILL PLACEMENT AND ERECTION TESTS.

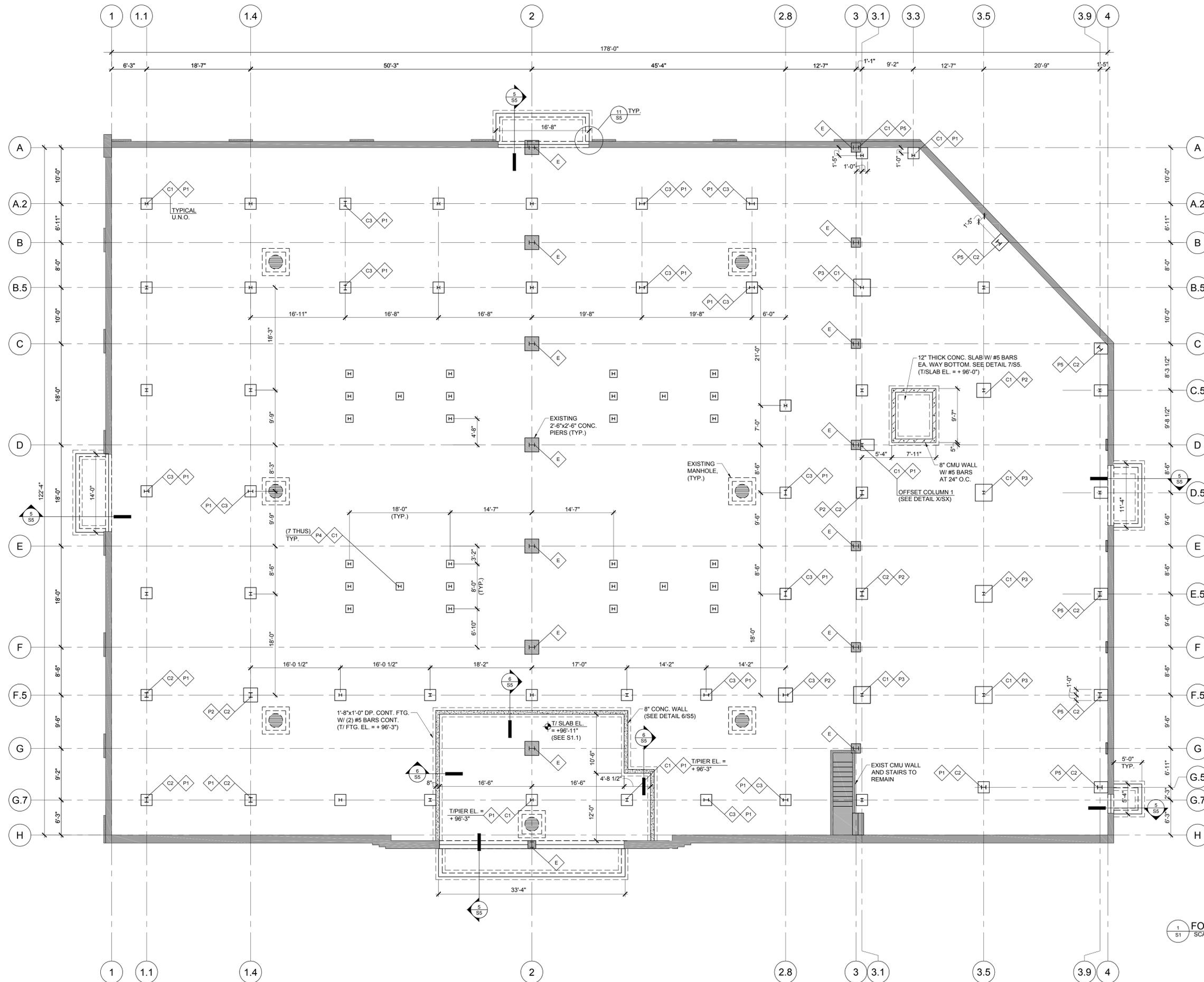
- c. MASONRY:
  - i. BEGINNING OF CONSTRUCTION: PERIODIC INSPECTION SHALL BE MADE OF MORTAR PROPORTIONS, CONSTRUCTION OF MORTAR JOINTS AND REINFORCEMENT LOCATION AND CONNECTIONS.
  - ii. ONGOING CONSTRUCTION: PERIODIC INSPECTION SHALL BE PROVIDED TO VERIFY SIZE AND LOCATION OF STRUCTURAL ELEMENTS, SIZE AND LOCATION OF ANCHORS, SIZE AND TYPE OF REINFORCEMENT AND COMPLIANCE WITH HOT OR COLD WEATHER REQUIREMENTS.
  - iii. GROUTING: PERIODIC INSPECTION SHALL BE PROVIDED TO VERIFY THAT THE GROUT SPACE IS PROPERLY POSITIONED AND SITE PREPARED GROUT IS PROPERLY PROPORTIONED. CONTINUOUS INSPECTION IS REQUIRED OF GROUT PLACEMENT.
  - iv. TEST SPECIMENS: CONTINUOUS INSPECTION SHALL BE MADE DURING PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS AND PRISMS.
  - v. THE SPECIAL INSPECTOR SHALL DETERMINE COMPLIANCE WITH THE SOILS REPORT FOR SITE PREPARATION, FILL PLACEMENT AND ERECTION TESTS.

25. TESTING REQUIREMENTS:
  - a. CONCRETE:
    - i. SAMPLE FOR STRENGTH TESTS OF EACH CLASS OF CONCRETE PLACED EACH DAY SHALL BE TAKEN NOT LESS THAN ONE DAY, NOR LESS THAN ONCE FOR EACH 150 CUBIC YARDS OF CONCRETE, NOR LESS THAN ONCE FOR EACH 8000 SQUARE FEET OF SURFACE AREA FOR SLABS OR WALLS. A MINIMUM OF FIVE STRENGTH TESTS SHOULD BE MADE FOR A GIVEN PROJECT.
    - ii. MASONRY - UNIT STRENGTH METHOD
    - iii. MASONRY UNITS SHALL BE SAMPLED AND TESTED ACCORDING TO ASTM C140.
    - iv. GROUT SHALL BE SAMPLED AND TESTED ACCORDING TO ASTM C1019.

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- PLAN NOTES:
- SEE SHEET S1.1 FOR CONCRETE SLAB ON GRADE AND CONTROL JOINT/CONSTRUCTION JOINT PLAN.
  - TOP OF SLAB ELEVATION = 100'-0" UNLESS NOTED OTHERWISE. SEE CIVIL DRAWINGS FOR DATUM ELEVATION.
  - TYPICAL TOP OF PIER ELEVATION = +99'-4" (U.N.O.).
  - (P) DENOTES NEW CONCRETE PIER SEE DETAIL 2/S7 FOR SCHEDULE.
  - (C) DENOTES NEW STEEL COLUMN SEE DETAIL 1/S7 FOR SCHEDULE.
  - (E) DENOTES EXISTING COLUMN AND PIER.
  - CONCRETE PIERS TO EXTEND DOWN AND BE FOUNDED ON BEDROCK BELOW. CONTRACTOR TO VERIFY BEDROCK ELEVATIONS.



FOUNDATION PLAN  
SCALE: 1/8" = 1'-0"

NOT FOR CONSTRUCTION

S1



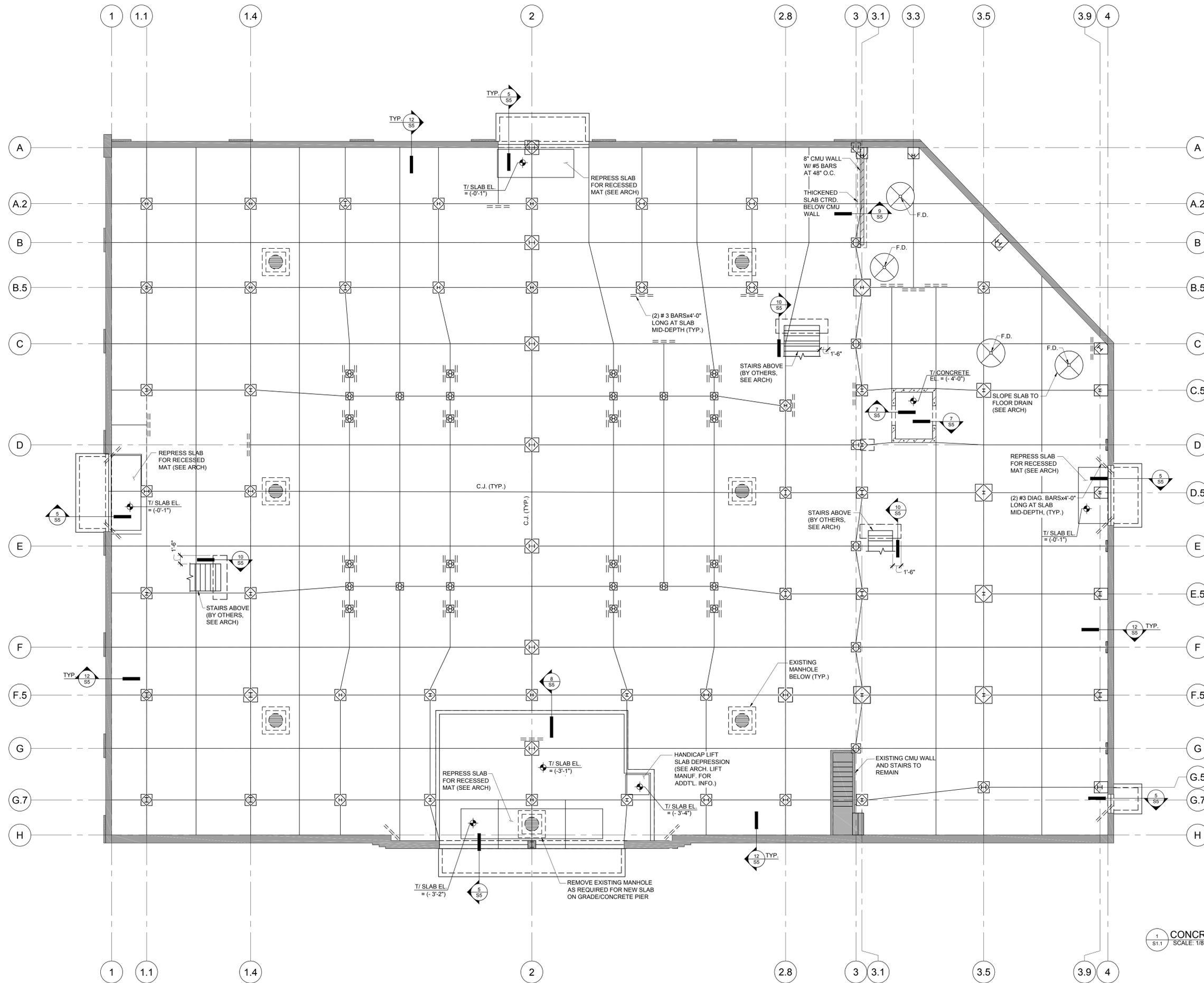
PLAN NOTES:  
1. SEE DETAILS 1/S5 AND 2/S5 FOR TYP.  
CONTROL/CONSTRUCTION JOINT (C.J.) DETAILS.

2. TOP OF SLAB ELEVATION = 100'-0" TYPICAL UNLESS NOTED  
OTHERWISE. SEE CIVIL DRAWINGS FOR DATUM ELEVATION.

3. TYPICAL SLAB ON GRADE TO BE 5" THICK WITH #3 BARS AT  
18" O.C. EA. WAY UNLESS NOTED OTHERWISE. CENTER BARS  
IN SLAB THICKNESS (TYP.)

4. "(-3'-1") DENOTES TOP OF SLAB ELEVATION CHANGE FROM  
ELEVATION = 100'-0".

5. TYPICAL CONCRETE SLAB ON GRADE ISOLATION JOINT AT  
COLUMNS. SEE DETAIL 3/S5.



1  
S1.1 CONCRETE SLAB ON GRADE PLAN  
SCALE: 1/8" = 1'-0"

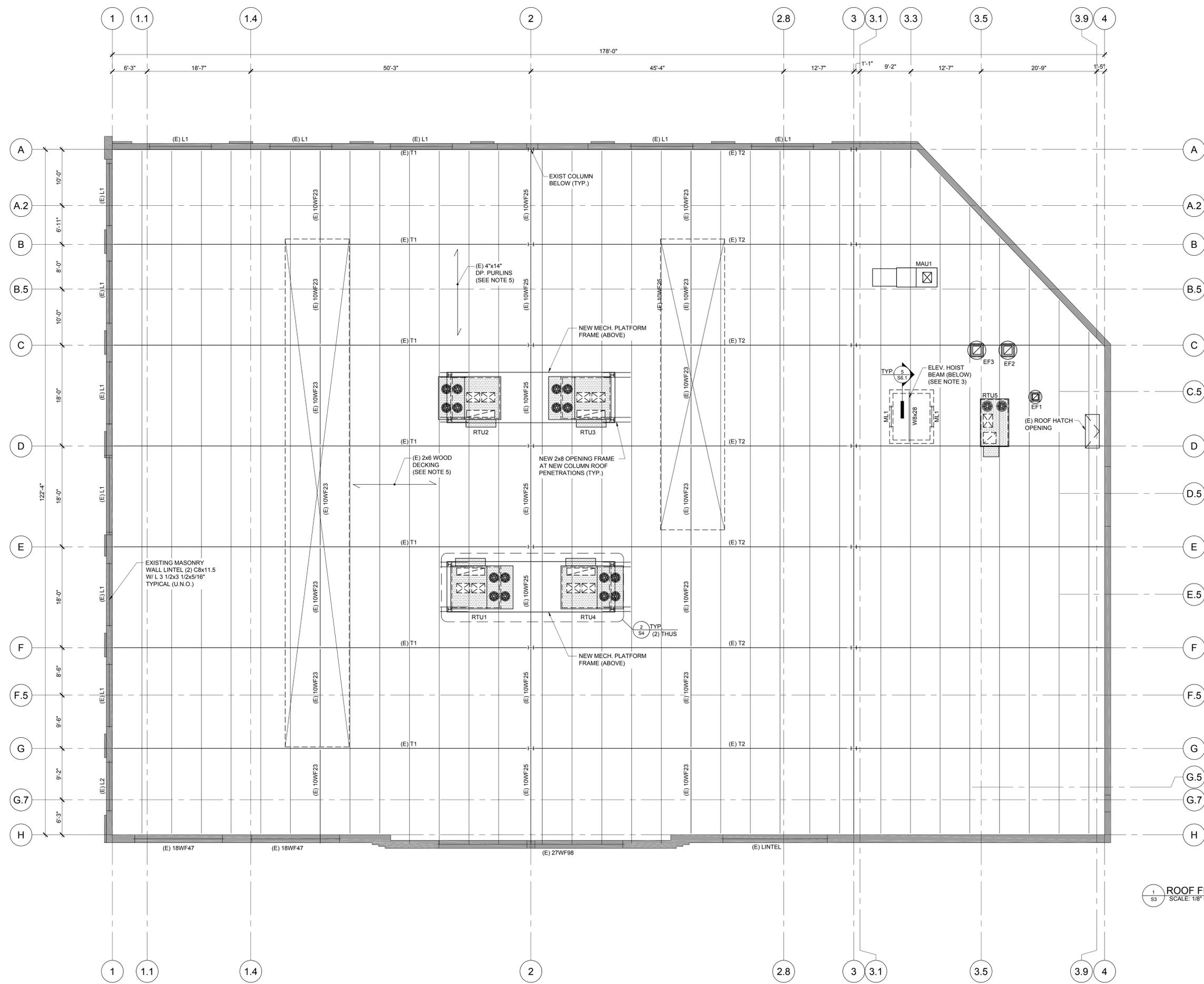
NOT FOR CONSTRUCTION

S1.1





- PLAN NOTES:  
1. "E" DENOTES EXISTING ON PLAN.  
2. "T1" DENOTES EXISTING TRUSS.  
3. LOCATE ELEVATOR HOIST BEAM PER ELEVATOR MANUFACTURER REQUIREMENTS.  
4. "ML1" DENOTES MASONRY LINTEL BEAM. SEE SCHEDULE SHEET S7.  
5. CONTRACTOR TO REPLACE EXISTING WOOD FRAMING MEMBERS AND WOOD DECKING THAT HAS ROTTED AND DETERIORATED. CONTRACTOR TO USE MATCHING WOOD FRAMING MEMBERS WITH REGARDS TO SIZE, SHAPE AND SPECIES OF WOOD FRAMING TO MATCH EXISTING.



1  
S3 ROOF FRAMING PLAN  
SCALE: 1/8" = 1'-0"



NOT FOR CONSTRUCTION

SHEET TITLE:  
ENLARGED PLANS,  
ELEVATIONS AND  
DETAILS

PROJECT #: 151093

DRAWN BY: MS

CHECKED BY: TM

ISSUE: DATE:

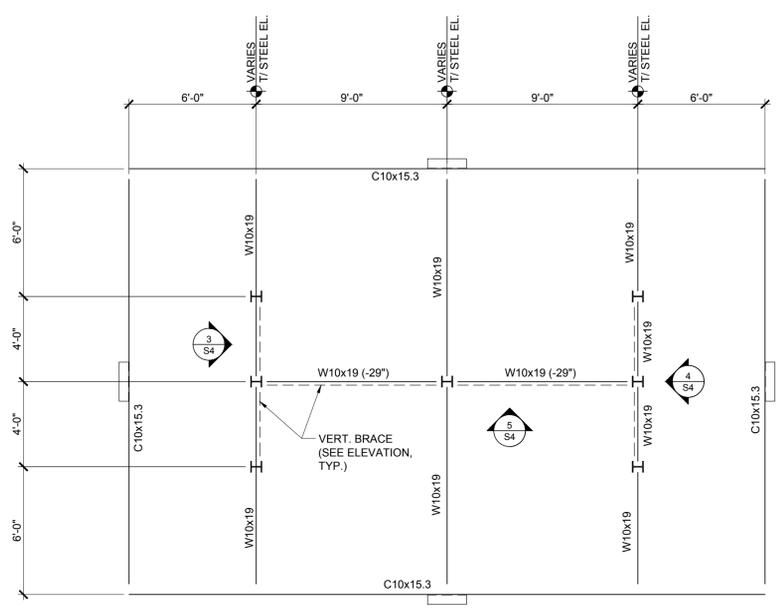
PROGRESS 10.14.15

PROGRESS 10.23.15

HPCA SUB. 10.29.15

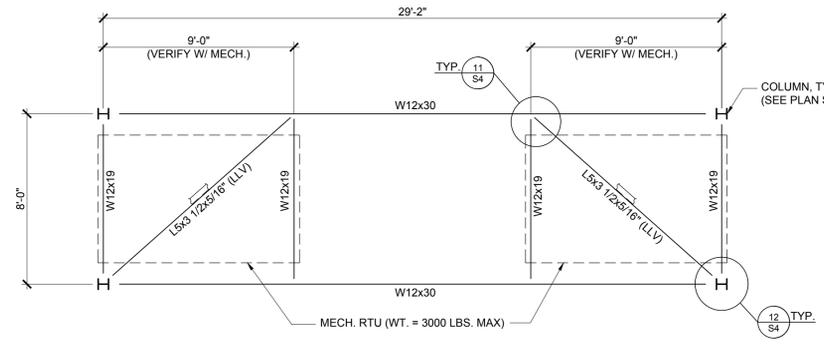
PRICING 01.04.16

HPC SUB. 04.07.16



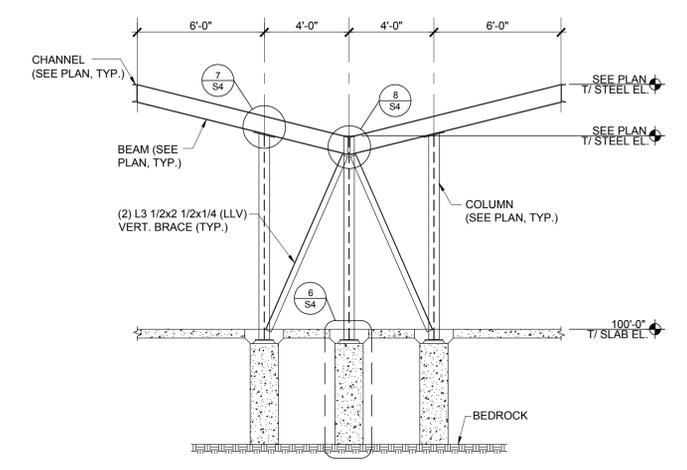
**1** VENDOR KIOSK FRAMING PLAN  
SCALE: 1/4" = 1'-0"

PLAN NOTES:  
1. TOP OF STEEL ELEVATION = +111'-6" TYP. (U.N.O.)  
2. (-29") DENOTES TOP OF STEEL ELEVATION FROM +111'-6".

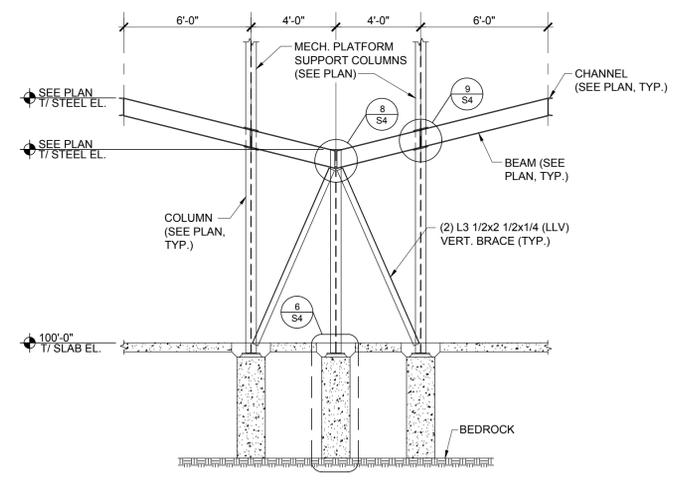


**2** MECHANICAL PLATFORM FRAMING PLAN  
SCALE: 1/4" = 1'-0"

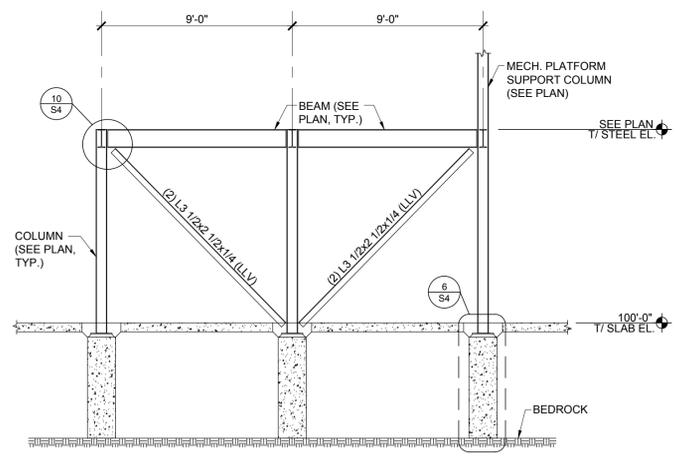
PLAN NOTES:  
1. TOP OF STEEL ELEVATION = +1'-8" ABOVE TOP OF ROOF ELEVATION.  
CONTRACTOR TO FIELD VERIFY.



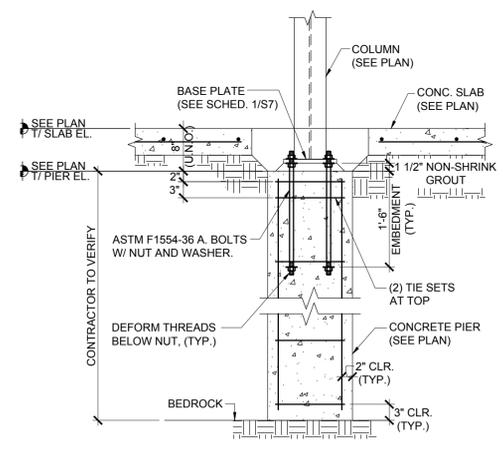
**3** ELEVATION  
SCALE: 1/4" = 1'-0"



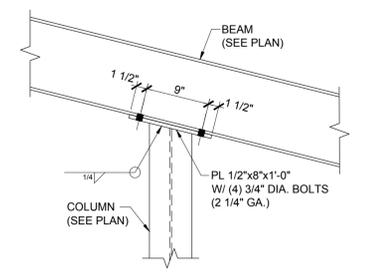
**4** ELEVATION  
SCALE: 1/4" = 1'-0"



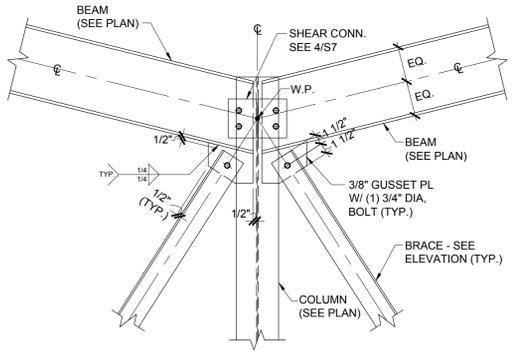
**5** ELEVATION  
SCALE: 1/4" = 1'-0"



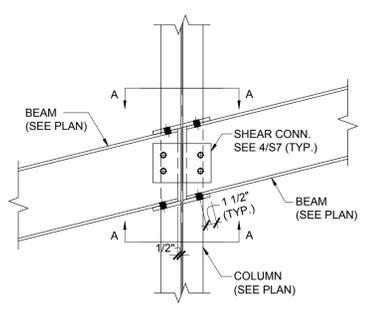
**6** DETAIL  
NO SCALE



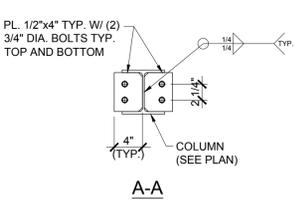
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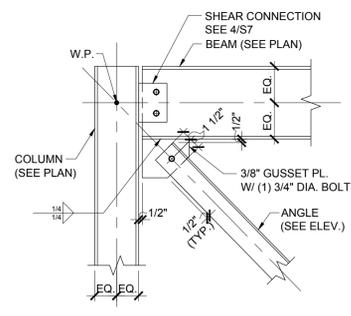
**8** DETAIL  
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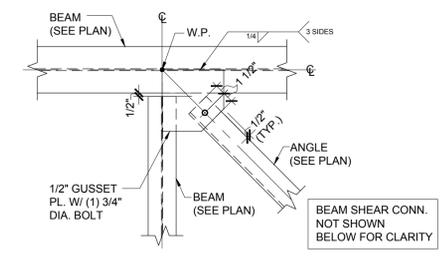
**9** DETAIL  
NO SCALE



**10** DETAIL  
NO SCALE



**11** PLAN VIEW DETAIL  
NO SCALE

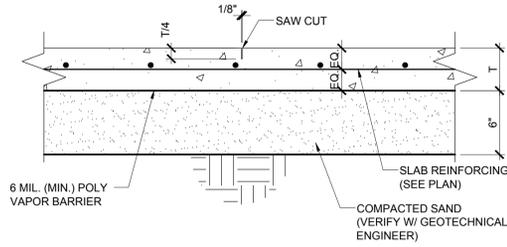


**12** PLAN VIEW DETAIL  
NO SCALE

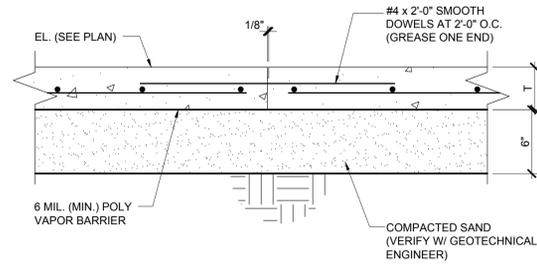
NOT FOR CONSTRUCTION

S4

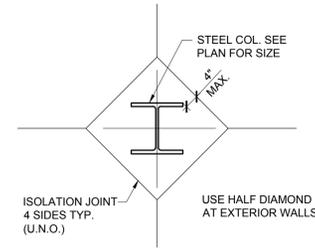
NOTE: SAW CUTTING SHALL BE DONE AS SOON AS THE CONCRETE HAS HARDENED SUFFICIENTLY TO PERMIT CUTTING WITHOUT CHIPPING, SPALLING OR TEARING BUT NOT MORE THAN 8 HOURS AFTER POURING.



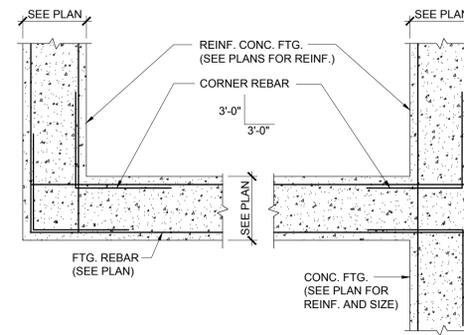
1 TYP. CONTROL JOINT DETAIL  
S5 NO SCALE



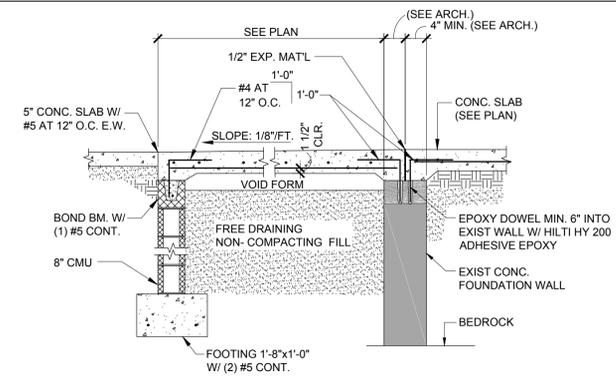
2 TYP. CONSTRUCTION JOINT DETAIL  
S5 NO SCALE



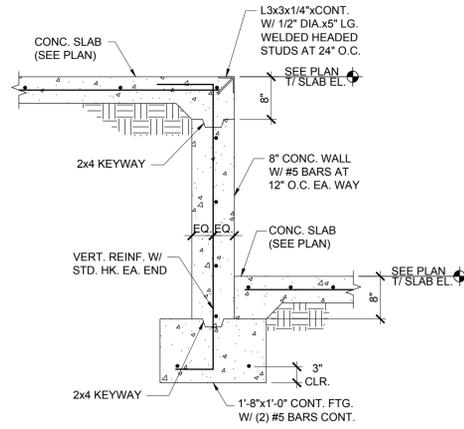
3 DETAIL  
S5 NO SCALE



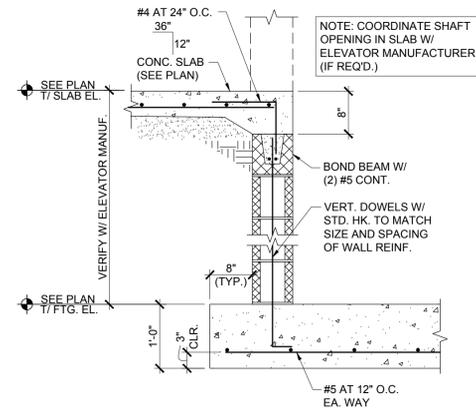
4 DETAIL  
S5 NO SCALE



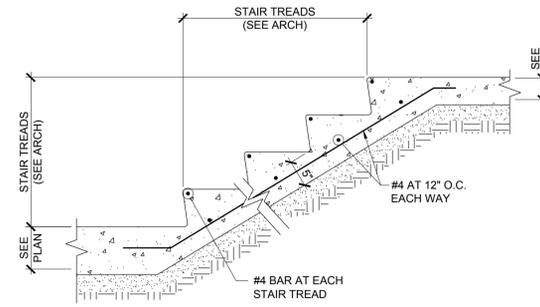
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S5 NO SCALE



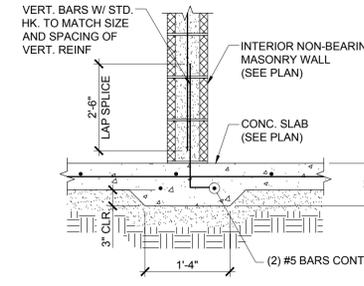
6 DETAIL  
S5 NO SCALE



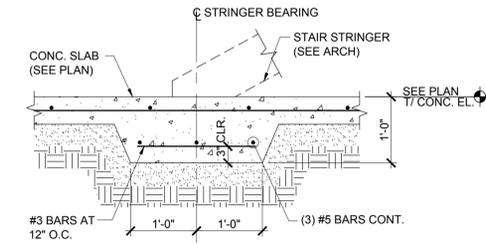
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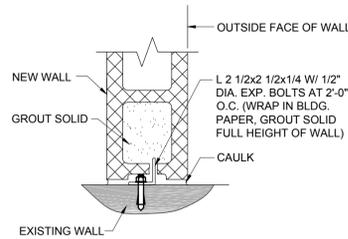
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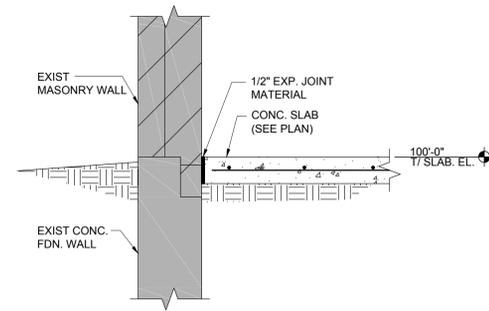
9 DETAIL  
S5 NO SCALE



10 DETAIL  
S5 NO SCALE



11 DETAIL  
S5 NO SCALE



12 DETAIL  
S5 NO SCALE

KEG & CASE MARKET

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**HERZOG**  
ENGINEERING LLC  
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SHEET TITLE:  
FOUNDATION DETAILS

PROJECT #: 151093  
DRAWN BY: MS  
CHECKED BY: TM  
ISSUE: DATE:  
PROGRESS 10.14.15  
PROGRESS 10.23.15  
HPCA SUB. 10.29.15  
PRICING 01.04.16  
HPC SUB. 04.07.16



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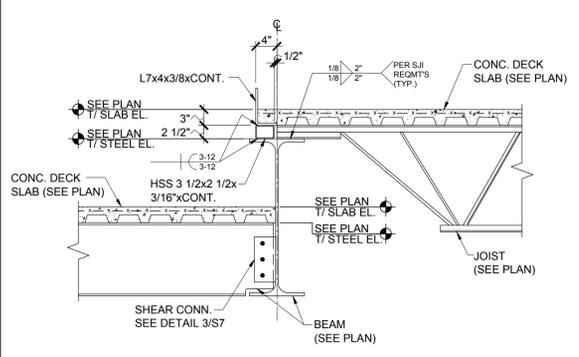


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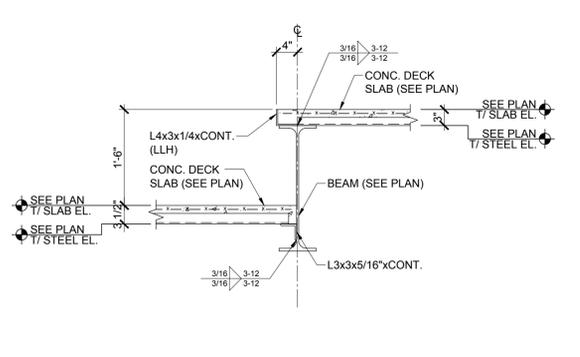
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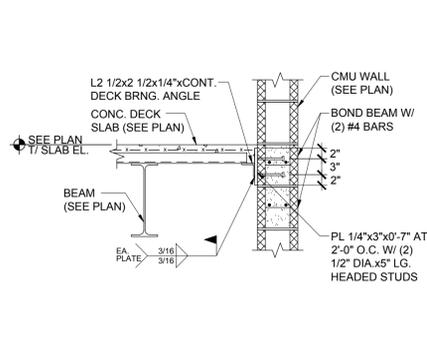
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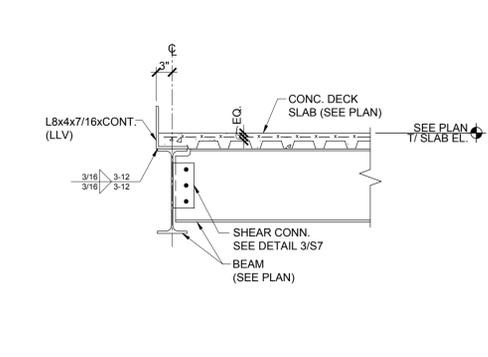
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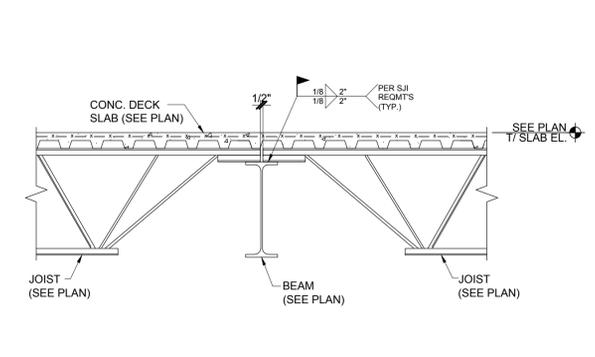
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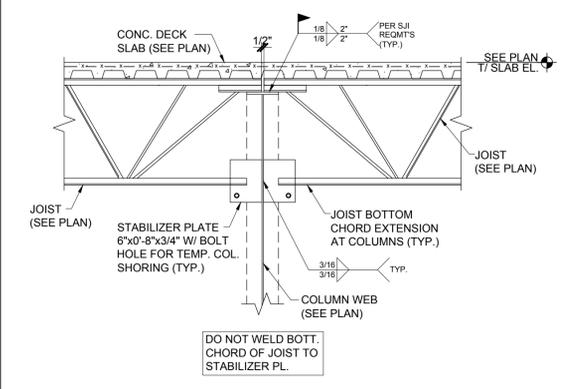
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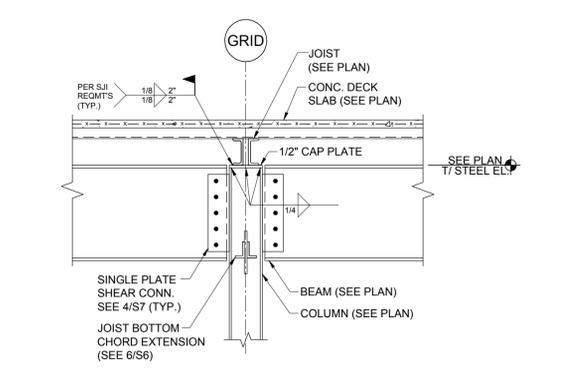
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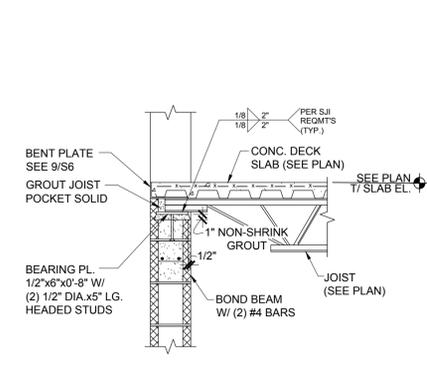
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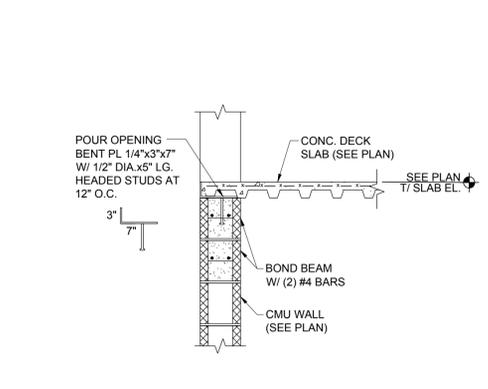
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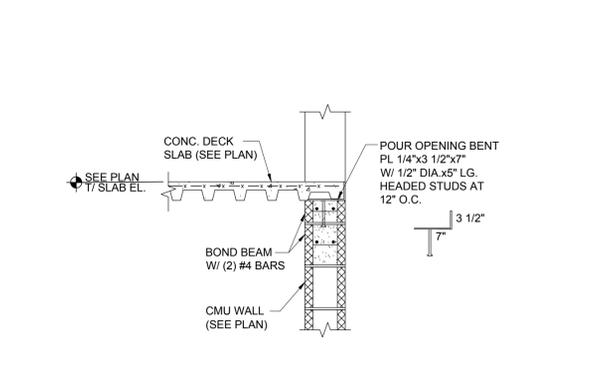
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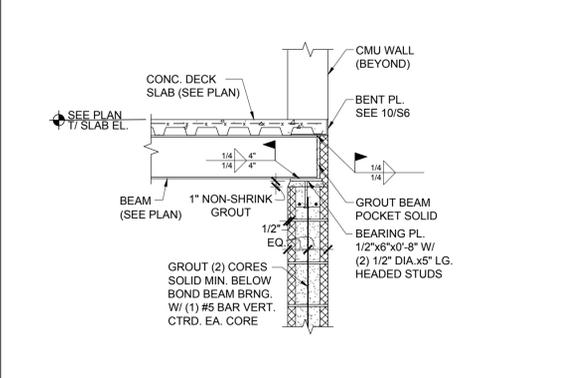
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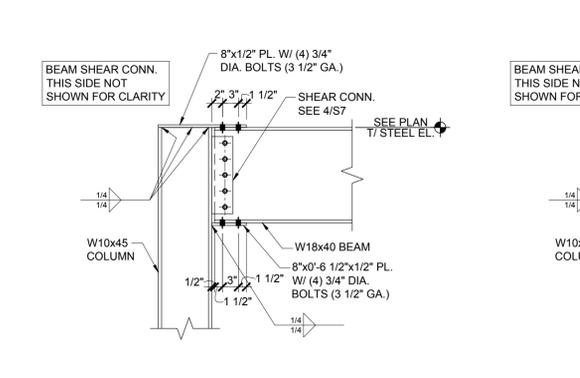
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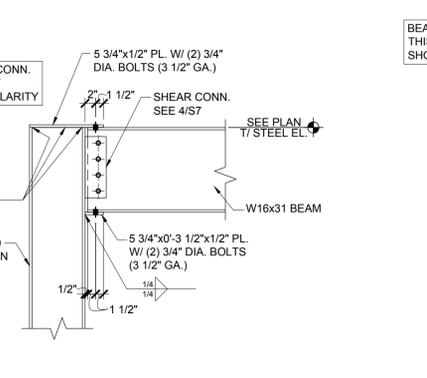
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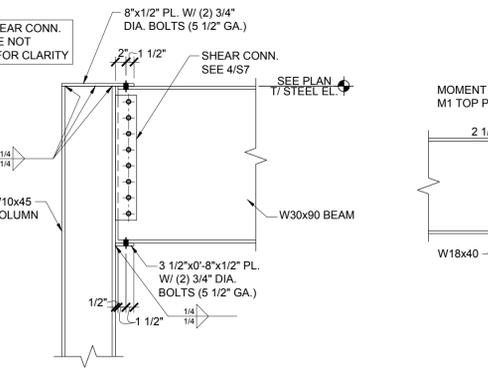
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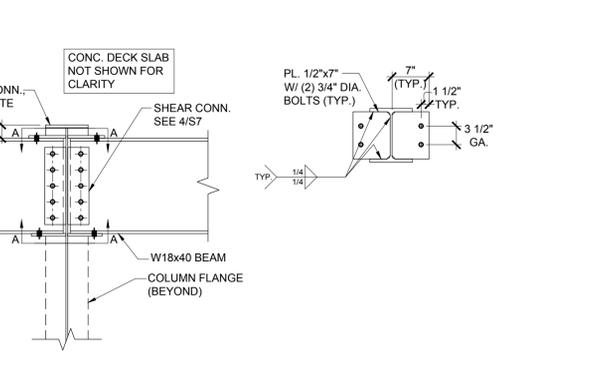
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(18 THUS)



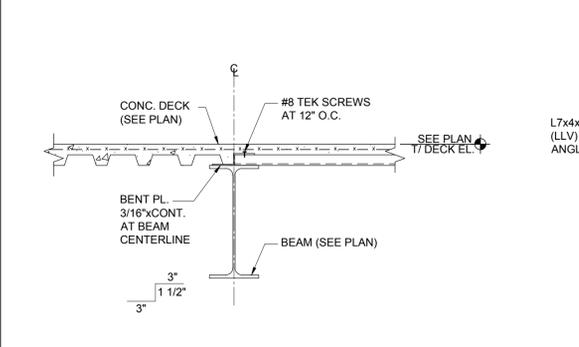
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(6 THUS)



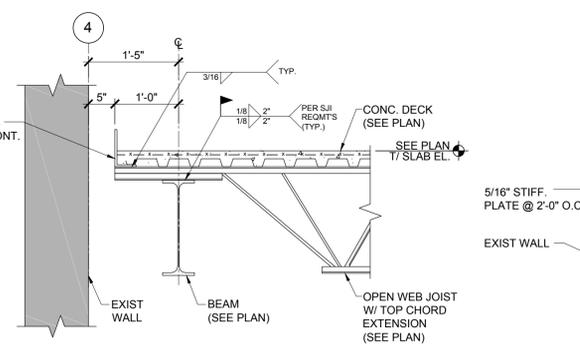
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DETAIL - MOMENT CONNECTION (M3)  
(2 THUS)



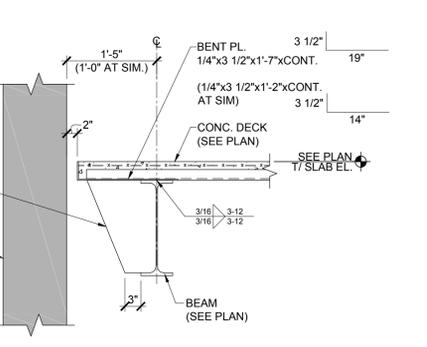
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DETAIL - MOMENT CONNECTION (M4)  
(4 THUS)



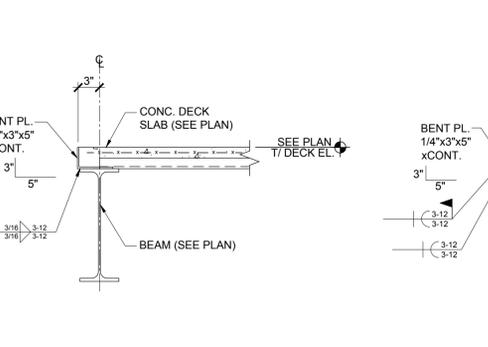
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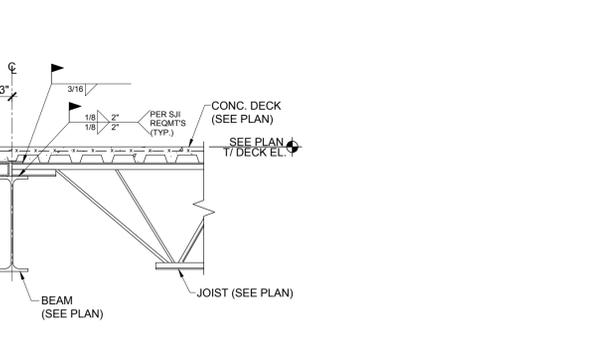
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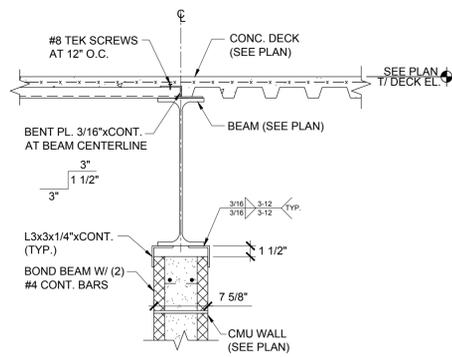
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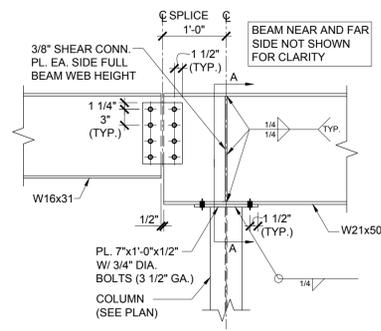
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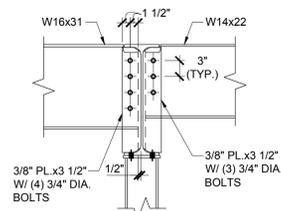
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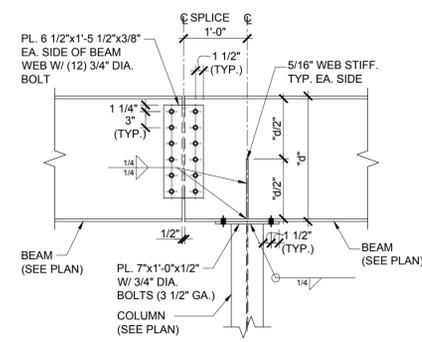
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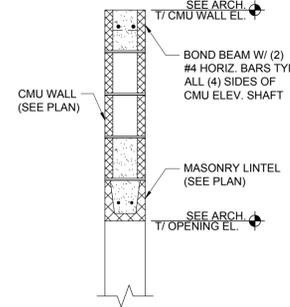
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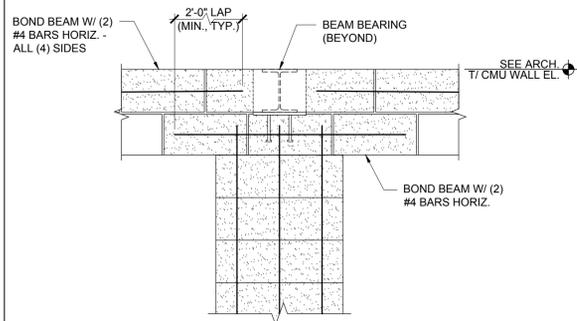
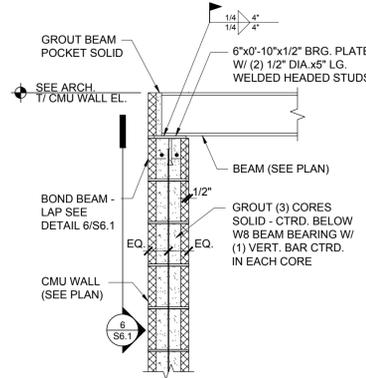
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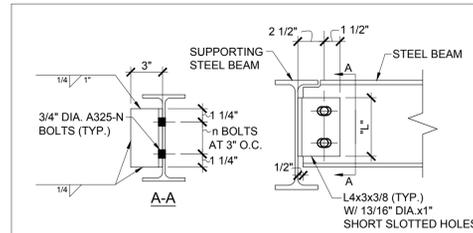
COLUMN SCHEDULE				
MARK	COL/POST SIZE	BASE PLATE	ANCHOR BOLTS	REMARKS
C1	W6x20	BP1	(4) 3/4" DIA.	SEE DETAIL 5/S7
C2	W10x45	BP2	(4) 3/4" DIA.	SEE DETAIL 5/S7
C3	W10x30	BP3	(4) 3/4" DIA.	SEE DETAIL 5/S7
E	EXISTING COLUMN	-	-	-

CONCRETE PIER SCHEDULE		
MARK	SIZE	VERTICAL BAR REINFCMENT
P1	2'-0"x2'-0" SQ.	(12) #6 BARS
P2	2'-6"x2'-6" SQ.	(16) #6 BARS
P3	3'-0"x3'-0" SQ.	(20) #6 BARS
P4	1'-4"x1'-4" SQ.	(8) #6 BARS
P5	2'-0"x2'-5" RECT.	(14) #6 BARS

NOTES:  
1. SEE DETAIL 6/S7 FOR CONCRETE PIER TIE REINFORCING REQUIREMENTS.

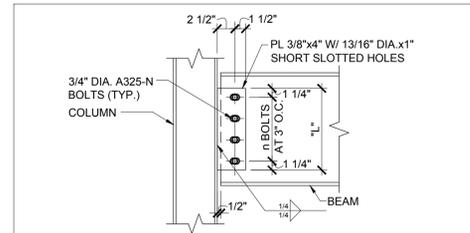
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2 CONCRETE PIER SCHEDULE  
NO SCALE



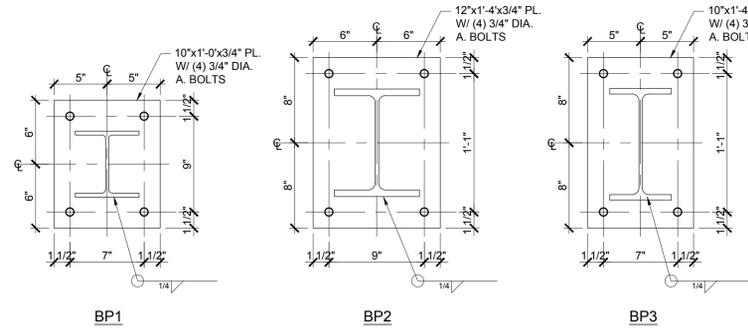
SINGLE ANGLE BEAM CONNECTION SCHEDULE			
BEAM SIZE	n (NO. ROWS OF BOLTS)	ANGLE LENGTH "L"	CONN. CAPACITY (Rn/Ω)
W8, W10	2	0'-5 1/2"	21.2k
W12, W14	3	0'-8 1/2"	31.8k
W16	4	0'-11 1/2"	42.4k

3 BEAM TO BEAM SINGLE ANGLE CONN. SCHEDULE  
NO SCALE

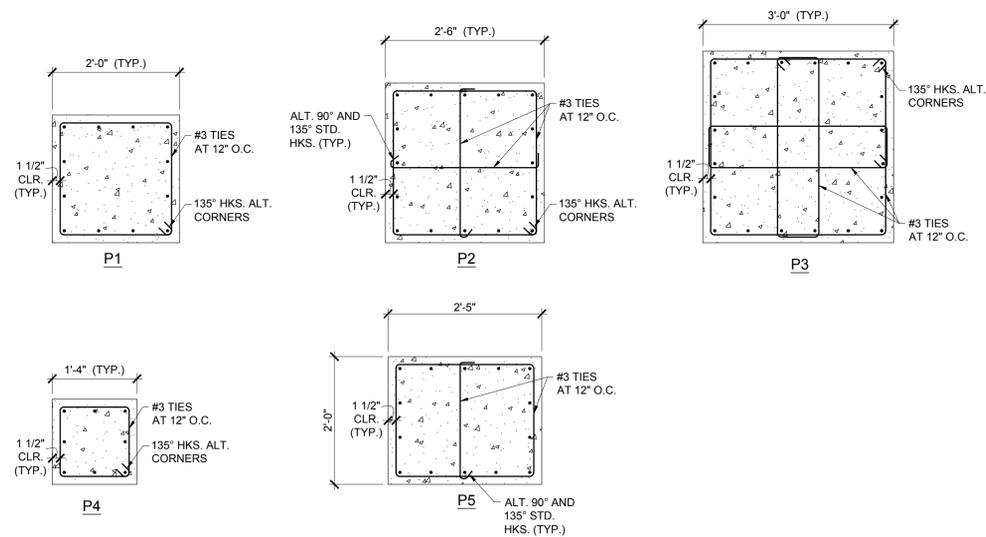


SINGLE PLATE BEAM CONNECTION SCHEDULE			
BEAM SIZE	n (NO. ROWS OF BOLTS)	ANGLE LENGTH "L"	CONN. CAPACITY (Rn/Ω)
W8, W10	2	0'-5 1/2"	21.2k
W12, W14	3	0'-8 1/2"	31.8k
W16	4	0'-11 1/2"	42.4k
W18, W21	5	1'-2 1/2"	53.0k
W24	6	1'-5 1/2"	63.6k
W30	8	1'-11 1/2"	84.8k

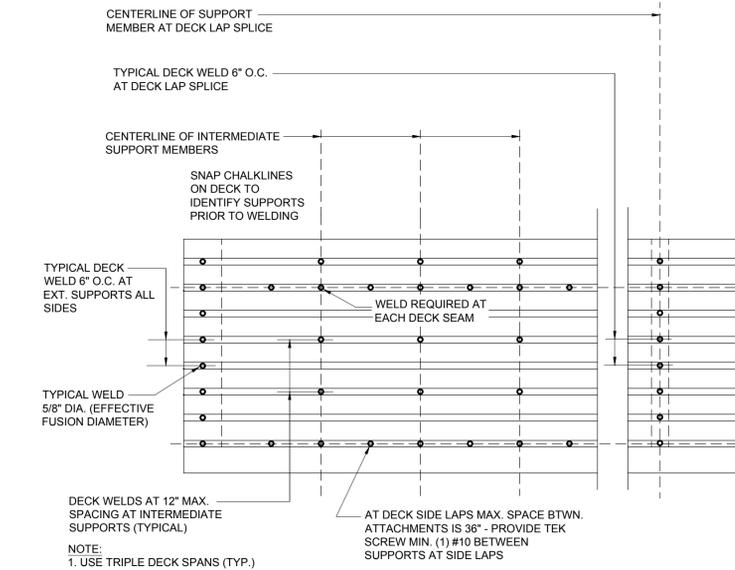
4 BEAM TO COLUMN SHEAR PLATE CONN. SCHEDULE  
NO SCALE



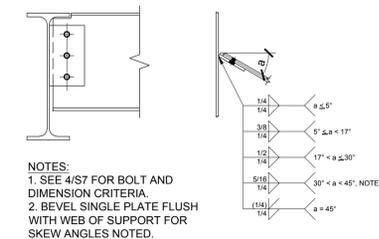
5 BASE PLATE DETAILS  
NO SCALE



6 PIER DETAILS  
NO SCALE



7 METAL DECK WELDING DETAIL  
NO SCALE



NOTES:  
1. SEE 4/S7 FOR BOLT AND DIMENSION CRITERIA.  
2. BEVEL SINGLE PLATE FLUSH WITH WEB OF SUPPORT FOR SKEW ANGLES NOTED.

8 SKEWED SINGLE PLATE CONNECTION DETAIL  
NO SCALE



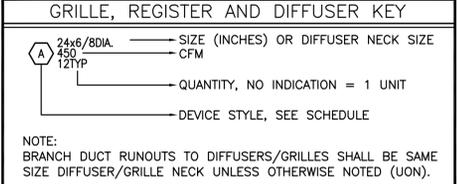
## GENERAL NOTES

- Work to be accomplished on these Drawings and the accompanying specifications includes the furnishing of all labor, materials, equipment, and services necessary for the proper completion of all mechanical work.
- Before submitting a proposal on the work contemplated on these drawings and accompanying specifications, each bidder shall examine the site, check as to the means of making connections to services, and shall become familiar with all the existing conditions and limitations. Mechanical equipment and systems shown as existing on the plans have been based on existing drawings. No extras will be allowed because of the contractor's misunderstanding as to the amount of work involved or his lack of knowledge of any site conditions which may affect his work. Any apparent variance of the plan or specification from existing conditions at the site shall be called to the attention of the Engineer during the bid period so clarification can be made by addendum.
- Existence of any wires, conduits, pipes, ducts, or other facilities are shown in a general way only. It will be the duty of the contractor to visit the site and make exact determination of the existence of any such facilities prior to the submission of his bid. It is understood that he will be responsible for making the exact determination of the location and condition of such facilities.
- All required fees, permits, and inspections shall be obtained and/or arranged for by the contractor under the section of the Specifications for which they are required.
- Regular inspections shall be arranged by the contractor as required by any and all regulations. All charges from regulating agencies for inspections of installations or review of plans and Specifications shall be paid by the contractor.
- Certificate of Final Inspection. Under each applicable section of the Specifications, contractor shall, upon completion of the work under that section, furnish a Certificate of Final Inspection to the Engineer from the inspection department having jurisdiction.
- All materials and workmanship shall comply with all current and applicable codes, specifications, ordinances, laws, regulations, industry standards, and utility company regulations.
- In case of difference among building codes, specifications, state laws, local ordinances, industry standards, and utility company regulations and the Contract Documents, the most stringent shall govern. Contractor shall promptly notify the Engineer in writing of any such difference.
- All applicable federal, state, and local laws and ordinances shall be adhered to throughout the construction project.
- Non-Compliance. Should the contractor perform any work that does not comply with the requirements of the applicable building codes, state laws, local ordinances, industry standards, and utility company regulations, he shall bear all costs arising to correct the deficiencies.
- Contractor shall initiate, maintain, and supervise all safety pre-cautions required for his work, including regulations of the Occupational Safety and Health Administration (OSHA).
- Drawings are to scale as noted, but the contractor shall refer to Architectural and Structural Drawings for exact location of partitions, walls, beams, shafts, equipment, etc.
- Each trade shall obtain drawings and specifications of all other trades and coordinate his work with all other trades.
- Drawings show the general arrangement of ductwork, piping, equipment, and appurtenances and shall be followed as closely as actual building construction and work of other trades will permit. Mechanical work shall conform to the requirements shown on all of the drawings. Architectural and Structural Drawings shall take precedence over Mechanical Drawings. Because of the small scale of the Mechanical Drawings, it is not possible to indicate all offsets, fittings, and accessories that may be required.
- Discrepancies discovered before or after work has started shall be brought to the attention of the Engineer immediately, and the Engineer reserves the right to require minor changes in the work of any contractor to eliminate such discrepancies with no change in contract cost.
- Plans and specifications are complementary, and what is called for in either one shall be as binding as if called for in both.
- Where a disagreement exists between the plans and specifications, the item or arrangement of better quality, greater quality, or higher cost shall be included in the bid.
- Access panels shall be furnished by the trade requiring them and delivered to the general contractor for installation.
- All materials and equipment shall be stored in such a place and in such a manner that a minimum of congestion will result. The placing of such materials and equipment shall be subject to the approval of the owner.
- Contractor shall thoroughly examine the existing building with regard to what temporary measures he must take in order to permit the owner to occupy specific areas of the building during the various construction phases. refer to architectural specification section for construction sequencing schedule. in general, systems must remain in use in those designated areas to permit the owner to function in a pre-construction manner.
- Each contractor shall coordinate work with other trades in the installation of equipment, piping, conduit, and ductwork.
- HVAC/sheet-metal contractor shall initiate the coordination process by providing reproducible plan drawings showing ductwork and equipment.
- Drawings will be forwarded to the piping contractor and electrical contractor for inclusion of their systems work.
- Contractors shall solve all coordination conflicts among themselves when possible. engineer will arbitrate when necessary, and his judgment will stand, with no additional cost to the owner.
- Normal use of the facility shall not be disturbed, except within the immediate construction area. all walks, driveways, and entrances shall be kept clear and free of all contractor's equipment, material, and debris at all times.
- Access panels shall be as manufactured by milcor, or approved equal, and of type the is compatible with construction and finish of the wall and/or ceiling
- Each trade shall perform all cutting and patching necessary in order to perform the work, unless such work has been delegated to the general contractor/another trade. however, special permission shall be obtained from the engineer before cutting structural members or finished materials. all patching shall be performed in such manner as to leave no visible trace and to return the part affected to the condition of undisturbed work. patching work shall be performed by persons experienced, skilled, and licensed for the particular type of work involved. inferior work will not be accepted. all holes in masonry shall be drilled with rotary drills. impact tools shall not be used.
- Each trade shall bear the expense of all cutting, patching, repairing, or replacing of the work of other trades required because of his fault, error, or tardiness of because of any damage done by him.
- Each trade shall provide all holes and openings required for his work, unless such holes and openings are shown to be provided on the architectural or structural drawings.
- Each trade shall remove existing work that is shown, specified, or obviously necessary for completion of his work. owner shall have the option of retaining any item or material removed under this contract. items or materials not retained by owner shall become the property of the trade and shall be removed from the premises.
- Each trade shall periodically clear away all debris, surplus materials, etc., resulting from his work or operations, leaving the job and the equipment furnished under any or all contracts in a clean condition.
- Each trade shall test the equipment provided and/or installed under the specification and shall demonstrate its proper operation to the owner's operating engineer.
- Each trade shall furnish, without additional expense to the owner, the services of competent instructors, who will give full instruction in the care, adjustment, and operation and maintenance of all parts of the equipment to the owner's permanent employees who are to have charge of the equipment.
- Each subcontractor shall be responsible for tested & rated fire stop systems for all thru-penetration of walls, floors & roof assemblies resulting from piping & other work under his contract. refer to specification section for fire stopping for requirements.
- All wood nailers and other lumber which is installed in contact with metal, concrete, or masonry shall be pressure treated against decay (unless otherwise noted).
- Provide only products from manufacturers with local representation that can provide complete coverage, service, parts and labor of their products in a timely manner.
- Material exposed within return air plenum ceilings shall comply with IMC section 602.2.1 with Minnesota Amendments.
- HVAC contractor shall line the inside of all return/relief/exhaust plenum boxes per specifications. If no lining is required, hvac contractor shall paint the inside flat black.
- All duct sizes are internal dimensions. Contractor shall increase sheet metal size if duct receives internal liner. See specifications for insulation requirements.
- Duct roof penetration sizes to rooftop units are same as duct main, unless noted otherwise. Transition to unit connection sizes within roof curbs.
- Locations of orifices/L-vents for fabric ducts are oriented when facing the direction of airflow.
- HVAC equipment shall be no closer to roof edge than 10'-6" at all times.
- Maintain a minimum of 15'-0" horizontal distance from any intake to exhaust outlet.
- Coordinate underground piping with general contractor to ensure proper footing depth clearance.
- Plans do not include all offsets for coordination with duct, lighting, and structural systems. Provide allowances for required offsets.
- Provide all materials and equipment and perform all labor required to install complete and operable plumbing system as indicated on the drawings, as specified, and as required by code.
- Run 3" and larger sanitary waste, storm drain, and all vent piping at 1/8" per foot slope unless noted otherwise; and less than 3" was piping at 1/4" per foot slope. Horizontal vent piping shall be graded to drain back to the waste pipe by gravity.
- Elevations shown are to the invert of all piping based on architectural finished floor elevation (FFE) of 100'-0", unless noted otherwise.
- Adjust sewer inverts to keep bottom of pipes in line where pipe sizes change.
- Provide shutoff valves in all water piping system branches in which branch piping serves two or more fixtures (not shown for clarity) and where shown on plan and risers.
- Install piping so that all valves, strainers, unions, traps, flanges, and other accessories requiring access are accessible.
- Unions and/or flanges shall be installed at each piece of equipment, in bypasses, and in long runs (over 100') to permit disassembly for alteration and repairs.
- All valves shall be adjusted for smooth and easy operation.
- All valves (except control valves) and strainers shall be full size of pipe before reducing size to make connections to equipment and controls.
- Provide cleanouts in sanitary and storm drainage systems at the ends of runs, at changes in direction, near the base of stacks, every 100' in 4" and larger horizontal runs, every 50' in 3" and smaller horizontal runs, where noted on plans, and where required by code.
- All valves shall be installed so that the valve remains in service when equipment or piping on equipment side of valve is removed.
- All piping work shall be coordinated with all trades involved. Offsets in piping around obstructions shall be provided at no additional cost to the owner.
- See plumbing risers for sizing not shown on plan sheets (for clarity) and see plumbing fixture schedule for fixture connections and runout sizes.
- Contractor to ensure that cleanouts (FCO, WCO, CO) locations do not rest below or behind casework. Maintain accessibility for servicing.
- Plumbing contractor is responsible for all removing, cutting, patching, and replacement of all building structure, surfaces, and finishes required to complete work stated in the contract documents.
- Plumbing contractor to coordinate counter openings for new sinks/lavs with general contractor prior to ordering materials.
- Pipes shown spread apart on plans for clarity. Contractor to install pipes tight together.
- All underground domestic water piping shall be seamless Type 'K' copper piping with no joints. See specifications.
- Gas piping supports to be every 5 feet.
- See architectural roof plan for roof slope and scupper sizes/locations.
- Roof drains are sized based on 4" 100 year rainfall data within 2015 Minnesota Plumbing Code.
- Reduced pressure zone backflow preventer (RPZ) shall be installed at an elevation between 3'-0" AFF and 6'-0" AFF and labeled indicating equipment served. RPZ's shall be inspected and tested annually or at a rate per local codes.
- Piping material for sanitary waste, plumbing vents, and storm sewer shall be cast iron where piping runs through a return-air plenum. Reference 2015 International Mechanical Code, Section 602, with Minnesota Amendments.
- Fire caulk all floor penetrations and where piping penetrates rated walls.

## MECHANICAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	ISO	ISOLATOR (ISOLATION)
AP	ACCESS PANEL	LAT	LEAVING AIR TEMPERATURE
BFP	BACK FLOW PREVENTER	LF	LINEAR FEET
BHP	BRAKE HORSEPOWER	LVR	LOUVER
BLW	BELOW	LWT	LEAVING WATER TEMPERATURE
BWV	BACK WATER VALVE	MAU	MAKE-UP AIR UNIT
CD	CONDENSATE DRAIN	MEZZ	MEZZANINE
CHW	CIRCULATING HOT WATER	MXA	MIXED AIR
CLG	CEILING	N	NECK
CO	CLEANOUT	NC	NORMALLY CLOSED
CONN	CONNECTION	NO	NORMALLY OPEN
CONSTR	CONSTRUCTION	OA	OUTSIDE AIR
CONT	CONTINUOUS OR CONTINUED	OPNG	OPENING
CU	CONDENSING UNIT	OPR	OPERATING
CW	COLD WATER	PD	PRESSURE DROP
DF	DRINKING FOUNTAIN	PG	PRESSURE GAUGE
DIFF	DIFFUSER	PLBG	PLUMBING
DMPR	DAMPER	PRV	POWER ROOF VENTILATOR
DN	DOWN	RA	RETURN AIR
EA	EXHAUST AIR	RADN	RADIATION
EAT	ENTERING AIR TEMPERATURE	RD	ROOF DRAIN
EF	EXHAUST FAN	RECIRC	RECIRCULATE
EHC	ELECTRIC HEATING COIL	RF	RETURN FAN
EL	ELEVATION	RHC	REHEAT COIL
ESP	EXTERNAL STATIC PRESSURE	RPZ-BFP	REDUCED PRESS. ZONE B.F. PREVENTER
EUH	ELECTRIC UNIT HEATER	RWL	RAINWATER LEADER
EW	ELECTRIC WATER COOLER	SA	SUPPLY AIR
EWH	ELECTRIC WATER HEATER	SAN	SANITARY
EXH	EXHAUST	SCW	SOFTENED COLD WATER
FCO	FLOOR CLEANOUT	SD	STORM DRAIN
FCU	FAN COIL UNIT	SF	SUPPLY FAN
FD	FLOOR DRAIN	SL	STORM LEADER
FDC	FIRE DEPARTMENT CONNECTION	SLV	SLEEVE
FHC	FIRE HOSE CABINET	SP	STATIC PRESSURE
FILT	FILTER	SP	SUMP PUMP
FIXT	FIXTURE	SPKLR	SPRINKLER
FP	FIRE PROTECTION	STM	STEAM
FPM	FEET PER MINUTE	STR	STORM
FSV	FIRE SERVICE VALVE	SU	SUPPLY UNIT
FSW	FLOW SWITCH	SW	SANITARY WASTE
G	GAS	T	THERMOSTAT
GPH	GALLONS PER HOUR	TRANS	TRANSFER
GW	GREASE WASTE	TSP	TOTAL STATIC PRESSURE
HB	HOSE BIBB	UG	UNDERGROUND
HDCP	HANDICAPPED	UH	UNIT HEATER
HSTAT	HUMIDISTAT	V	VENT
HTG	HEATING	VD	VOLUME DAMPER
HW	HOT WATER	VTR	VENT THRU ROOF
ID	INDIRECT DRAIN	WG	WATER GAUGE
INSUL	INSULATION	WH	WALL HYDRANT
INV EL	INVERT ELEVATION	WPD	WATER PRESSURE DROP
IRR	IRRIGATION WATER		

ALL FLEX DUCT MUST BE INSTALLED PER THE ADC (AIR DIFFUSION COUNCIL) INSTALLATION STANDARDS (MOST CURRENT EDITION), INCLUDING A BEND RADIUS OF ONE DUCT DIAMETER OR GREATER, PROPERLY SEALED AND SECURED WITH 2 INCH BEADED COLLARS, PROPERLY SUPPORTED AND FULLY EXTENDED DUCT. FAN CALCULATIONS FOR THIS PROJECT WERE SIZED FOR 4 FOOT MAXIMUM FLEX DUCT INSTALLED PER THE ADC INSTALLATION STANDARDS. FLEX DUCT SHOWN ON PLANS IS FOR SCHEMATIC PURPOSES ONLY AND SHALL IN NO INSTANCE EXCEED 4 FOOT.



## MECHANICAL SYMBOL LEGEND

— CW —	DOMESTIC COLD WATER (CW)		WATER HAMMER ARRESTER WITH		DRAIN VALVE		LINEAR DIFFUSER
— H —	DOMESTIC HARD COLD WATER (CW)		ELBOW UP (PIPE)		CONNECT TO EXISTING		FLEX DUCT
— 120° F —	TEMPERED DOMESTIC HOT WATER (120° F)		ELBOW DOWN (PIPE)		SIAMESE FIRE DEPT. CONNECTION		ROOF (PRV) EXHAUST FAN
— 140° F —	DOMESTIC HOT WATER (140° F)		TEE UP		SUPPLY, RETURN AND EXHAUST AIR		CABINET UNIT HEATER
— CHW —	RECIRCULATION HOT WATER (CHW)		TEE-OFF THE BOTTOM / DOWN		MOTORIZED DAMPER		VAV BOX WITH COIL
— SW —	SANITARY WASTE UNDERGROUND		CLEANOUT FLOOR / CEILING CLEANOUT		FIRE/SMOKE DAMPER		SUPPLY DUCT ELBOW WITH TURNING VANES
— CW —	GREASE WASTE UNDERGROUND		PIPE CAP		SMOKE DAMPER		EXHAUST REGISTER
— SW —	SANITARY WASTE ABOVE GROUND		CHECK VALVE		FIRE DAMPER		VOLUME DAMPER (MANUAL)
— V —	VENT		STOP & WASTE VALVE		EXHAUST REGISTER		CEILING SUPPLY DIFFUSER
	VENT THRU ROOF		CIRCUIT BALANCING VALVE		RETURN AIR GRILLE/REGISTER		STANDARD OR LINED DUCT (SUPPLY, RETURN, EXHAUST). DUCT IS LABELED TO INDICATE INTERNAL DUCT DIMENSION. SEE SPECIFICATION FOR INSULATION.
	NATURAL GAS		PRESSURE REDUCING VALVE		RETURN AIR GRILLE/REGISTER WITH SOUND BOOT.		STANDARD ROUND TAKEOFF (CONICAL BELL MOUTH) WITH VOLUME DAMPER
— CD —	CONDENSATE DRAIN PIPING		PRESSURE RELIEF VALVE		GAS PRESSURE REGULATOR		WALL HYDRANT
	THERMOSTAT		BALL VALVE		IN-LINE PUMP		HOSE BIBB
	SPACE TEMPERATURE SENSOR		CONTROL VALVE (TWO-WAY)		FLOOR DRAIN		THERMOMETER
	HUMIDISTAT		FLOW DIRECTION		FLOOR SINK		FLOW SWITCH
	CARBON DIOXIDE SENSOR		PIPE UNION		BREAK IN MATERIAL FOR VISUAL PURPOSES		DOUBLE WALL (SUPPLY, RETURN, EXHAUST). DUCT IS LABELED TO INDICATE INTERNAL DUCT DIMENSION.
	TEMPERATURE GAUGE						
N.O.	NORMALLY OPEN						
N.C.	NORMALLY CLOSED						
VFD	VARIABLE FREQUENCY DRIVES						

## MECHANICAL DRAWING SHEET INDEX

M0.0	MECHANICAL TITLE SHEET
P0.1	PLUMBING PLAN - SITE
P1.0	PLUMBING PLAN - FIRST FLOOR
P2.0	PLUMBING PLAN - SECOND FLOOR
P3.0	PLUMBING PLAN - ROOF
P4.0	PLUMBING SCHEDULES
P5.0	PLUMBING DETAILS
P5.1	PLUMBING DETAILS AND RISERS
FP1.0	FIRE PROTECTION PLAN - FIRST FLOOR
FP2.0	FIRE PROTECTION PLAN - SECOND FLOOR
M1.0	MECHANICAL PLAN - FIRST FLOOR
M2.0	MECHANICAL PLAN - SECOND FLOOR
M3.0	MECHANICAL PLAN - ROOF
M4.0	MECHANICAL SCHEDULES
M5.0	MECHANICAL DETAILS
M5.1	MECHANICAL DETAILS
M5.2	MECHANICAL DETAILS

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SHEET TITLE:  
**MECHANICAL**  
**TITLE SHEET**

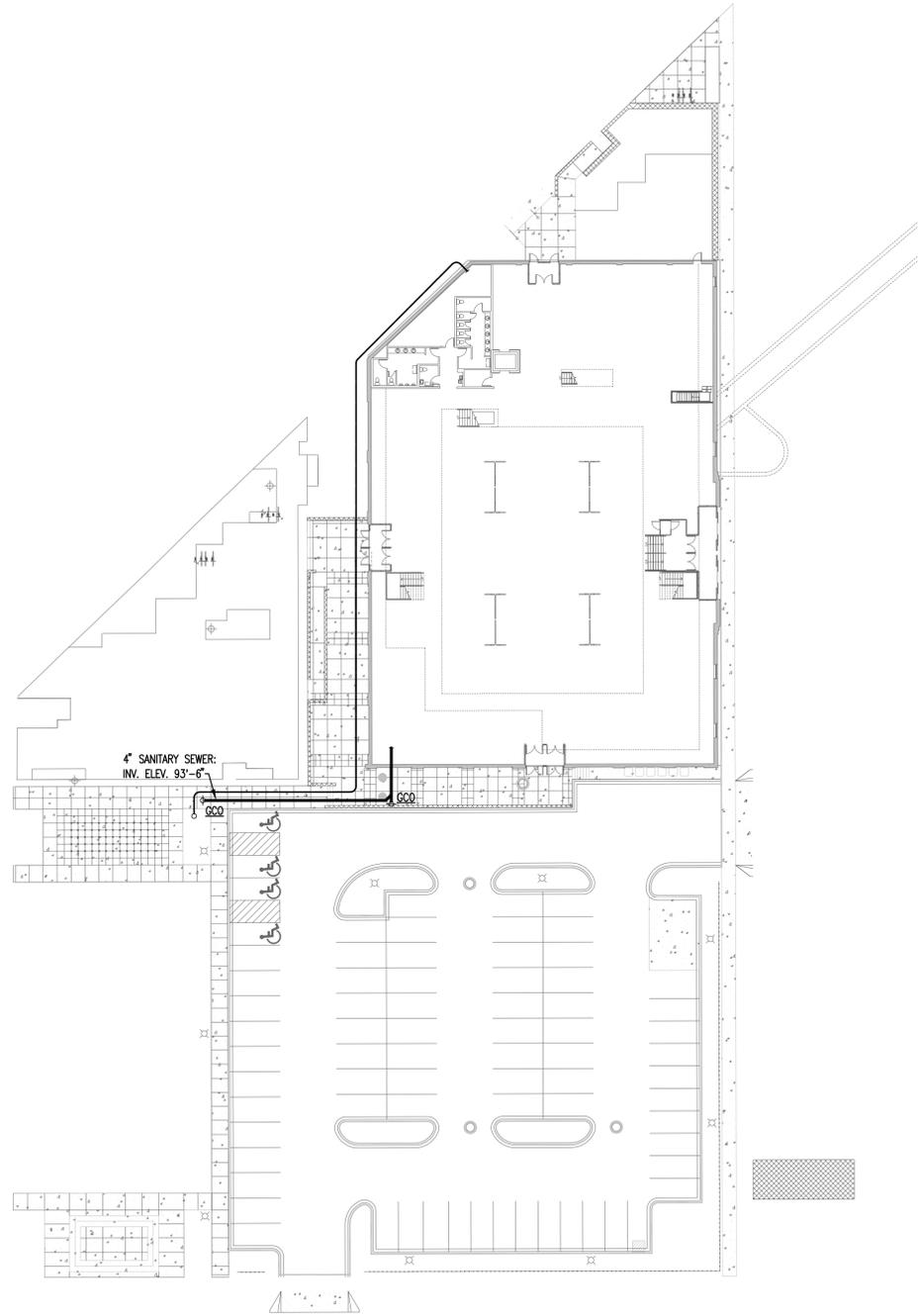
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**MO.0**



**1 PLUMBING PLAN - SITE**  
1" = 30'-0"

**GENERAL NOTES**

A. REFER TO SHEET P1.0 FOR GENERAL NOTES.

**PLUMBING KEYNOTES** 

1. 1" DOMESTIC COLD WATER FROM BUILDING TO WATER FEATURE. REFER TO CIVIL PLANS.

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SHEET TITLE:

**PLUMBING PLAN  
SITE**

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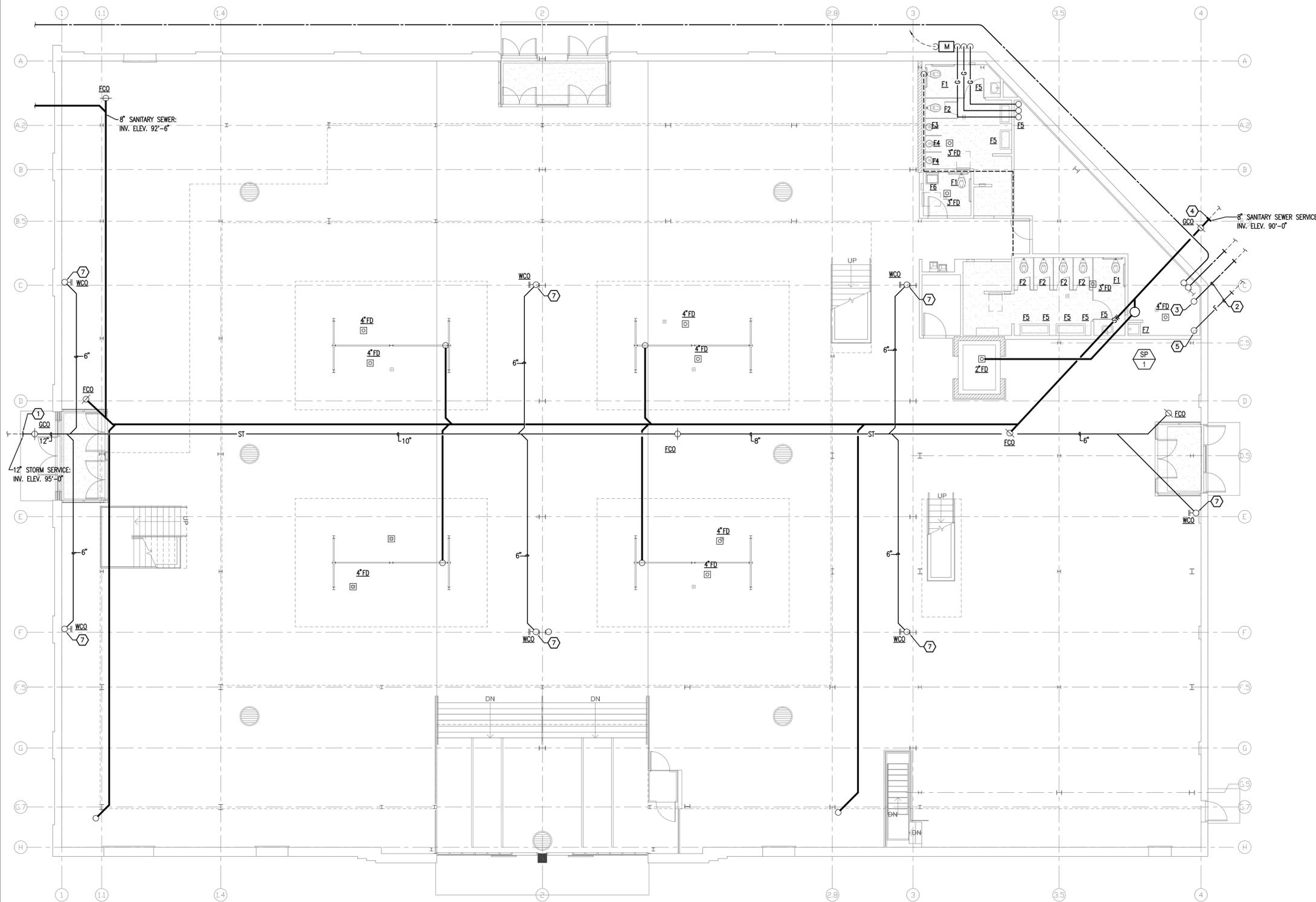
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**P0.1**



**1 PLUMBING PLAN - FIRST FLOOR**  
1/8" = 1'-0"

**GENERAL NOTES**

- A. CONCRETE CUTS SHALL BE STRAIGHT AND CLEAN. REPLACE SLAB WITH CONCRETE FLUSH AND SMOOTH WITH ADJACENT.
- B. WASTE & VENT PIPING BELOW GRADE AND THRU FLOOR SHALL BE 2" MINIMUM.
- C. FIELD VERIFY SIZE, LOCATION & INVERT ELEVATION OF EXISTING SANITARY SEWER.
- D. PITCH ALL UNDERFLOOR SANITARY WASTE PIPING 4" AND GREATER AT 1/8" PER FOOT. ALL OTHER BELOW GRADE PIPING SLOPED AT 1/4" PER FOOT.
- E. CLEANOUTS MUST BE INSTALLED WHERE SHOWN ON PLANS AND ADDITIONAL CLEANOUTS WHERE REQUIRED BY CODE.
- F. PLUMBING CONTRACTOR SHALL PROVIDE CROSS CONNECTION CONTROL PER MN PLUMBING CODE 803.
- G. COORDINATE ROUTING OF WATER, VENT, WASTE AND STORM PIPING WITH STRUCTURE, CEILING ELEVATION, ELECTRICAL SWITCHGEAR, DUCTWORK, LIGHTS, SPRINKLER PIPING AND ALL OTHER TRADES.
- H. MATERIAL EXPOSED WITHIN RETURN AIR PLENUM CEILINGS SHALL COMPLY WITH IMC SECTION 602.2.
- I. PLUMBING SUBCONTRACTOR SHALL BE RESPONSIBLE FOR TESTED & RATED FIRE STOP SYSTEMS FOR ALL THRU-PENETRATION OF WALLS, FLOORS & ROOF ASSEMBLIES RESULTING FROM PIPING & OTHER WORK UNDER HIS CONTRACT. REFER TO FIRESTOPPING SPEC SECTION FOR REQUIREMENTS.
- J. ALL INSTALLATIONS, EQUIPMENT AND MATERIAL SHALL COMPLY WITH ALL APPLICABLE CODE REQUIREMENTS.

**PLUMBING KEYNOTES**

- 1. CONNECT 1/2" RWL TO RCP STUB 5' FROM BUILDING AND EXTEND AS SHOWN INTO BUILDING. FIELD COORDINATE WITH FOOTINGS (SEE STRUCTURAL PLANS). COORDINATE WITH CIVIL PLANS FOR STUB LOCATIONS.
- 2. 4" DOMESTIC AND 6" FIRE PROTECTION SERVICES BY SITE UTILITY CONTRACTOR. SEE CIVIL PLANS FOR STUB LOCATION. SEE STRUCTURAL FOR SLEEVE LOCATIONS THRU FOUNDATION.
- 3. 4" DOMESTIC WATER SERVICE BY SITE UTILITY CONTR. UP THRU FLOOR WITH BLIND FLANGE CONNECTION FOR PLUMBING CONTR. CONNECTION. SEE STRUCTURAL FOR SLEEVE LOCATIONS THRU FOUNDATION.
- 4. CONNECT 8" SANITARY SEWER TO STUB 5' FROM BUILDING AND EXTEND AS SHOWN INTO BUILDING. FIELD COORDINATE WITH FOOTINGS (SEE STRUCTURAL PLANS). COORDINATE WITH CIVIL PLANS FOR STUB LOCATIONS.
- 5. 6" FIRE PROTECTION SERVICE BY SITE UTILITY CONTR. UP THRU FLOOR WITH BLIND FLANGE CONNECTION FOR SPRINKLER CONTR. CONNECTION. SEE STRUCTURAL FOR SLEEVE LOCATIONS THRU FOUNDATION.
- 6. NEW GAS SERVICE, METER(S) BY LOCAL UTILITY. 2.0 PSI OUTLET PRESSURE WITH TOTAL CONNECTED LOAD OF 5,000 MBH.
- 7. 6" RAINWATER LEADER UP TIGHT TO COLUMN/WALL WITH WALL CLEANOUT AT 18" AFF, SEE SHEET P2.0 FOR CONTINUATION.

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SHEET TITLE:

**PLUMBING PLAN  
FIRST FLOOR**

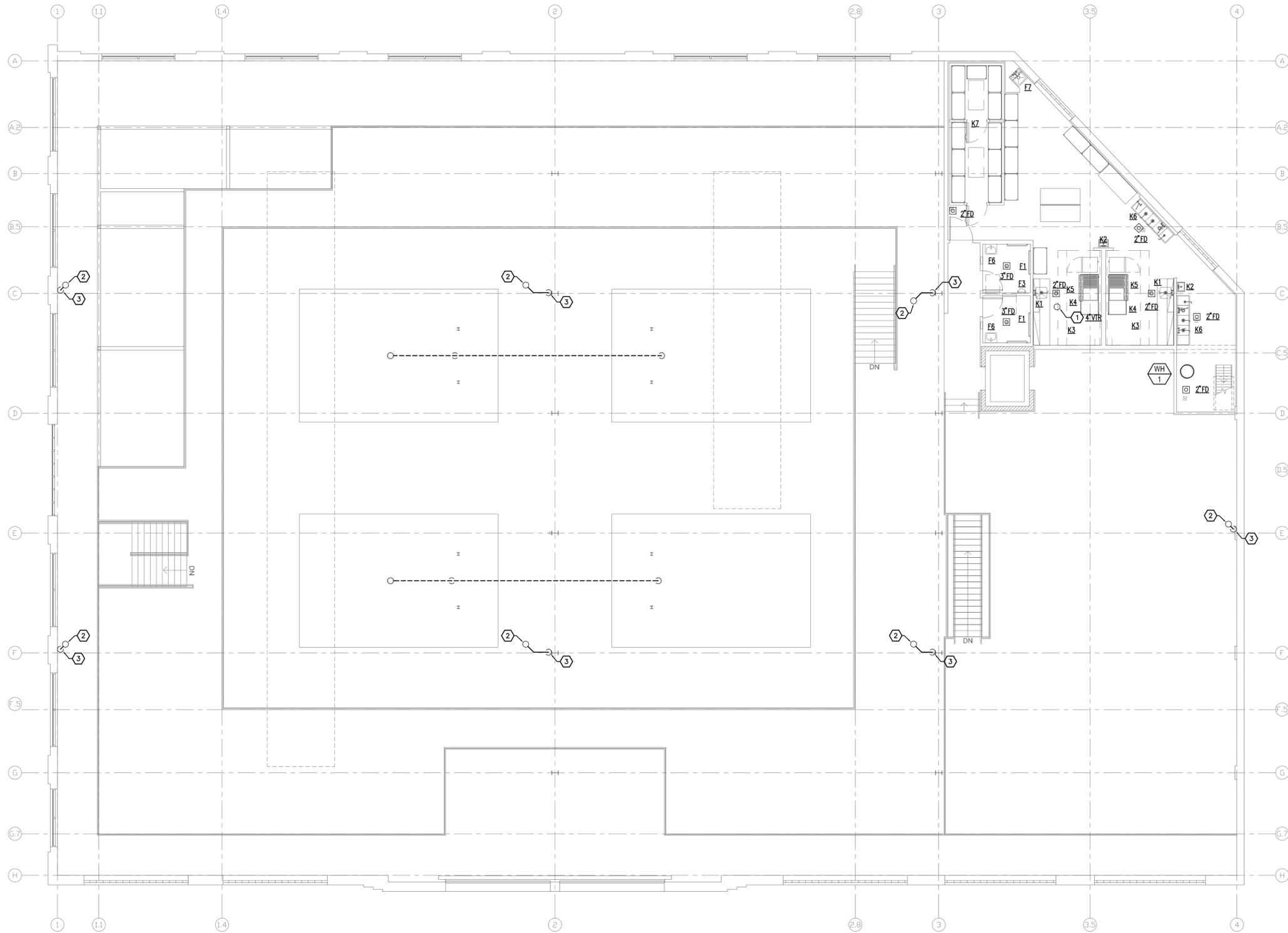
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**P1.0**



## GENERAL NOTES

A. REFER TO SHEET P1.0 FOR GENERAL NOTES.

## PLUMBING KEYNOTES

- 4" VENT THRU ROOF, SEE SHEET P3.0 FOR CONTINUATION. FIELD VERIFY LOCATION WITH INTAKE OF RTU TO INSURE 10' SEPARATION MINIMUM.
- 6" RAINWATER LEADER UP TO ROOF DRAIN, SEE SHEET P3.0 FOR CONTINUATION.
- 6" RAINWATER LEADER UP TIGHT TO COLUMN/WALL, SEE SHEET P1.0 FOR CONTINUATION.

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SHEET TITLE:

**PLUMBING PLAN  
SECOND FLOOR**

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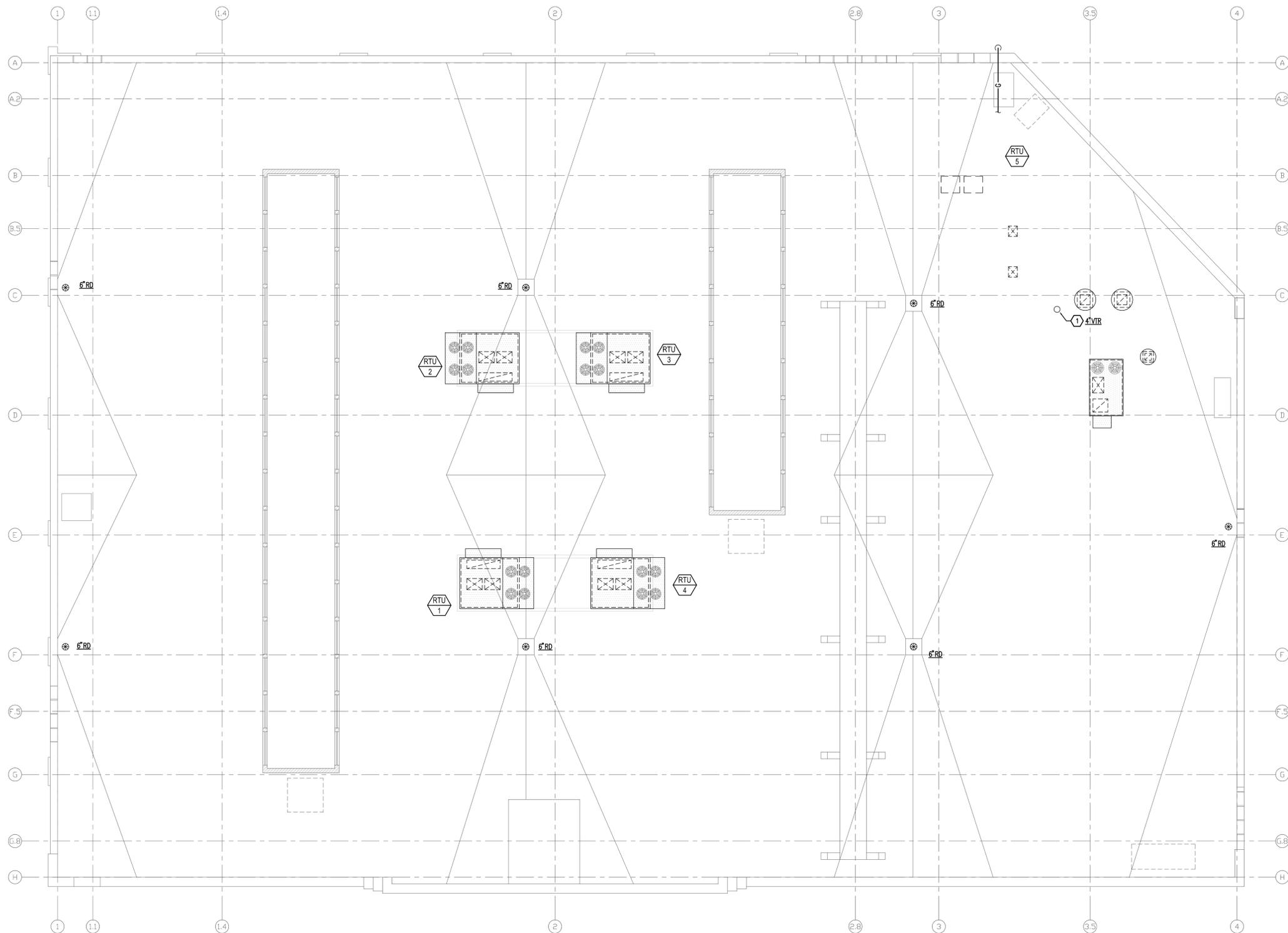
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**P2.0**



### GENERAL NOTES

A. REFER TO SHEET P1.0 FOR GENERAL NOTES.

### PLUMBING KEYNOTES

1. 4" VENT THRU ROOF. SEE SHEET P2.0 FOR CONTINUATION. FIELD VERIFY LOCATION WITH INTAKE OF RTU TO INSURE 10' SEPARATION MINIMUM.

**1 PLUMBING PLAN - ROOF**  
1/8" = 1'-0"

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SHEET TITLE:  
**PLUMBING PLAN  
ROOF**

PROJECT #: 3765.0000  
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**P3.0**

PLUMBING PUMP SCHEDULE														
MARK	LOCATION	SERVES	MANUFACTURER	MODEL	PUMP TYPE	GPM	PUMP HEAD (FT WG)	MOTOR DATA				BASIN (DxH)	VFD	MECH NOTES
								HP	V	PH	RPM			
SP#1	MECHANICAL	ELEV SHAFT	ZOELLER	151	SUMP	8	25	1/3	120	1	-	24"x36"	NO	1, 2

**MECHANICAL NOTES:**

- SEE DETAIL FOR ACCESSORIES.
- PUMP WITH INTEGRAL FLOAT OPERATED MECHANICAL SWITCH, NO EXTERNAL CONTROL REQUIRED.

KITCHEN EQUIPMENT SCHEDULE										ALL EQUIPMENT FURNISHED BY K.E.C. INSTALLED BY PLUMBING CONTR.		
#	FIXTURE	LOCAL CONNECTIONS				GAS	PLUMBING NOTES					
		WASTE	VENT	C.W.	H.W.							
K1	PREP SINK W/ FAUCET	2"	1-1/2"	1/2"	110F 140F	-	1,2					
K2	HAND SINK W/ FAUCET	2"	1-1/2"	1/2"	1/2"	-	1,6					
K3	RANGE	-	-	-	-	3/4"	1,3,7,8					
K4	GRIDDLE	-	-	-	-	3/4"	1,3,7,8					
K5	CHARBROILER	-	-	-	-	3/4"	1,3,7,8					
K6	4-COMP SINK W/ FAUCETS	2"	1-1/2"	(2)3/4"	-	(2)3/4"	1,4,9					
K7	FREEZER/COOLER EVAPORATOR COIL	3/4"ID	-	-	-	-	1,5					

**PLUMBING NOTES:**

- FURNISHED BY KITCHEN EQUIPMENT CONTRACTOR, PLUMBING CONTRACTOR TO MAKE FINAL CONNECTIONS. VERIFY ALL ROUGH-IN HEIGHTS & LOCATIONS. SEE FOOD SERVICE PLANS.
- DIRECT CONNECT WITH TELLTALE DRAIN.
- PROVIDE GAS SUPPLY LINE TO EACH APPLIANCE WITH DIRT LEG, SHUTOFF VALVE AND QUICK DISCONNECT. SEE DETAIL ON SHEET PS.1.
- DIRECT CONNECT WITH TELLTALE DRAIN. 4 COMPARTMENT SINK TO DRAIN THRU GREASE TRAP.
- PIPE INDIRECT WASTE FROM EVAPORATOR COIL TO FLOOR DRAIN TERMINATE WITH AIR GAP.
- 110 DEGREE HOT WATER TO ALL HAND SINKS.
- PROVIDE 7" PRESSURE REGULATOR IN GAS LINE TO KITCHEN EQUIPMENT. VENT REGULATOR TO ATMOSPHERE AS REQUIRED.
- FURNISH AND INSTALL ANSUL SOLENOID SHUTOFF VALVE IN GAS LINE TO EQUIPMENT LOCATED BELOW TYPE I HOOD WITH MANUAL RESET BELOW THE CEILING IN ACCESSIBLE LOCATION.
- FIXTURE TO DRAIN TO GREASE WASTE.

WATER HEATER SCHEDULE												
MARK	LOCATION	MANUFACTURER	TYPE	MODEL #	TANK CAPACITY (GAL)	HEATER DATA						MECH NOTES
						RECOVERY (GPH)	EWI (°F)	LWT (°F)	KW INPUT	V	PH	
WH#1	KITCHEN	AO SMITH	ELEC TANK	DRE-52-12	50	180	40	140	12	480	3	ALL

**MECHANICAL NOTES:**

- MOUNT ON WALL PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
- PROVIDE ASME APPROVED TEMPERATURE AND PRESSURE RELIEF VALVE. EXTEND TO FLOOR DRAIN. TERMINATE WITH AIR GAP.
- FURNISH AND INSTALL AMTROL THERM-X-TROL MODEL #ST-12 EXPANSION TANK ON WATER HEATER.

PLUMBING FIXTURE SCHEDULE									
MARK	FIXTURE	LOCAL CONNECTIONS				HEIGHT	FINISH	MECH NOTES	
		WASTE	VENT	C.W.	H.W.				
F1	WATER CLOSET, FLOOR-MOUNTED, SENSOR FLUSH-VALVE, ADA	4"	2"	1-1/4"	-	18"	WHITE	5	
F2	WATER CLOSET, FLOOR-MOUNTED, SENSOR FLUSH-VALVE	4"	2"	1-1/4"	-	15"	WHITE	-	
F3	URINAL, WALL-MOUNTED, SENSOR FLUSH VALVE, ADA	2"	1-1/2"	1"	-	17"	WHITE	5	
F4	URINAL, WALL-MOUNTED, SENSOR FLUSH VALVE	2"	1-1/2"	1"	-	22"	WHITE	-	
F5	LAVATORY, COUNTER-MOUNTED, SINGLE LEVER, ADA	1-1/2"	1-1/2"	1/2"	1/2"	CTR	WHITE	1,4,5	
F6	LAVATORY, WALL-MOUNTED, SINGLE LEVER, ADA	1-1/2"	1-1/2"	1/2"	1/2"	35"	WHITE	4,5	
F7	JANITOR'S SINK, FLOOR-MOUNTED	2"	1-1/2"	1/2"	1/2"	FLR, 48" FAUCET ROUGH-IN	-	2	
F8	ELEC WATER COOLER, DUAL HEIGHT, ADA	1-1/2"	1-1/2"	1/2"	-	33" SPOUT, 27" TO BOTTOM	STAINLESS STEEL	3,5	
F9	HOSE BIBB	-	-	3/4"	-	18"	STAINLESS STEEL	-	
F10	ROOF HYDRANT	1-1/2"	1-1/2"	1/2"	-	33" TO BOTTOM	STAINLESS STEEL	-	
F11	INTERIOR WALL HYDRANT	4"	2"	-	-	FLR	-	-	
F12	EXTERIOR WALL HYDRANT	1-1/2"	1-1/2"	1/2"	1/2"	CTR	STAINLESS STEEL	-	

**MECHANICAL NOTES:**

- REFER TO ARCH PLANS FOR COUNTER.
- VALVE AT 48" WITH 4" HOSE. FAUCET WITH INTEGRAL CHECKS STOPS.
- PROVIDE APRON FOR ADA COMPLIANCE. SEE SPEC FOR MODEL.
- TRAP AND SUPPLY WRAP.
- ADA APPROVED.

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**SHEET TITLE:**

**PLUMBING SCHEDULES**

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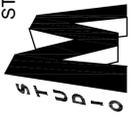


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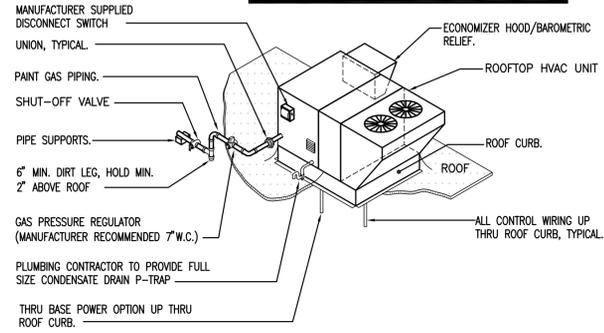


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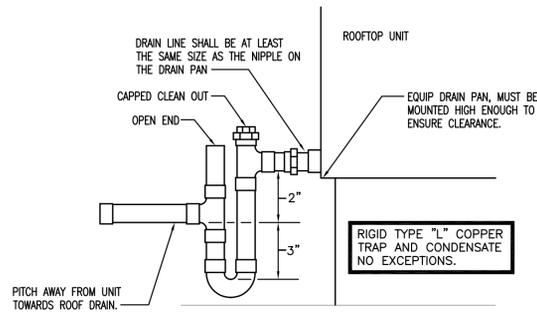
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Date 04/08/2016 Reg. No. \_\_\_\_\_

**P4.0**

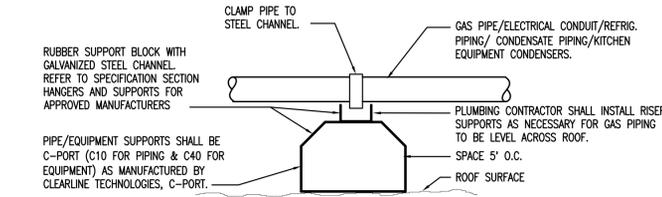
PLUMBING CONTR. TO MAKE NECESSARY FIELD REVISIONS TO MAKE ALL EQUIPMENT ACCESSIBLE ACCORDING TO MANUFACTURERS RECOMMENDATIONS. ALL MAINTENANCE ACCESSES & ALL SERVICE DOORS MUST BE MAINTAINED AND OPEN COMPLETELY FOR SERVICING. NO EXCEPTIONS.



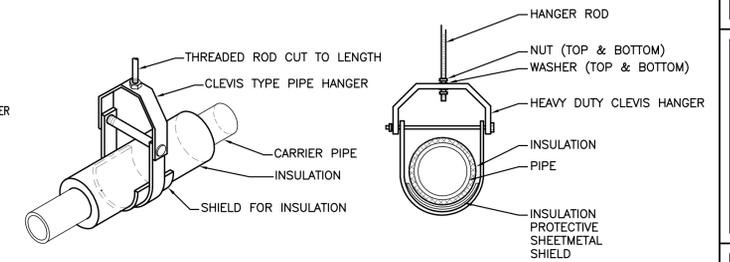
**1 ROOFTOP UNIT PIPING DETAIL**  
NO SCALE



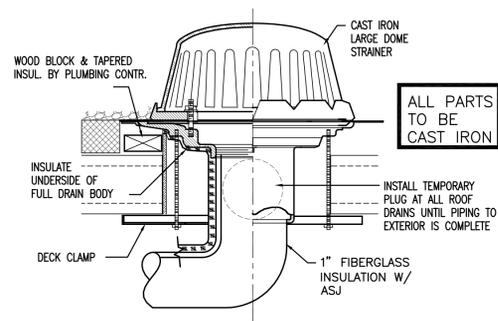
**2 CONDENSATE DRAIN P-TRAP DETAIL**  
NO SCALE



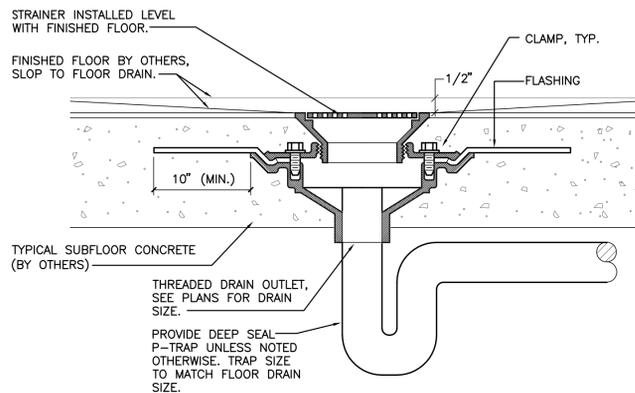
**3 ROOF PIPE/EQUIPMENT SUPPORT DETAIL**  
NO SCALE



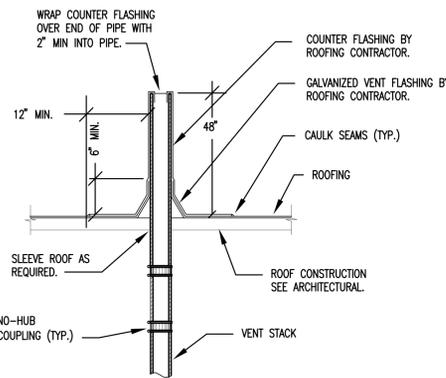
**4 PIPE HANGER DETAIL**  
NO SCALE



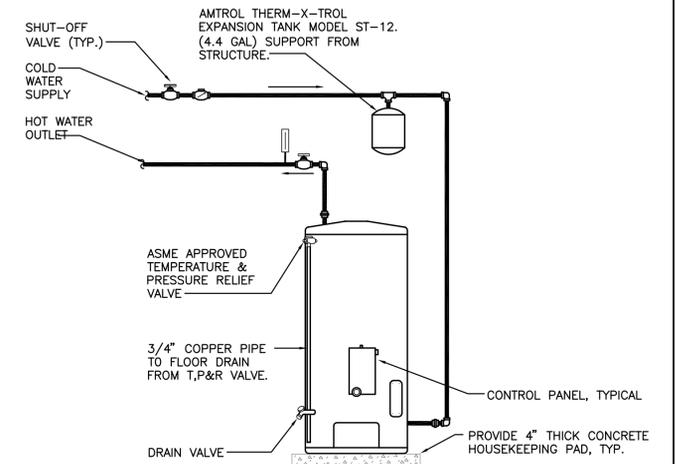
**5 ROOF DRAIN DETAIL**  
NONE



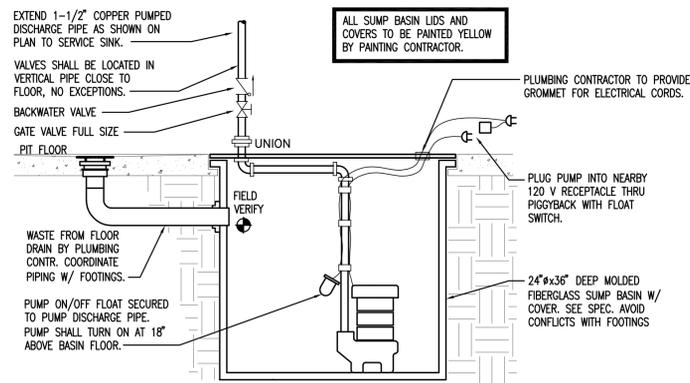
**6 FLOOR DRAIN DETAIL**  
NONE



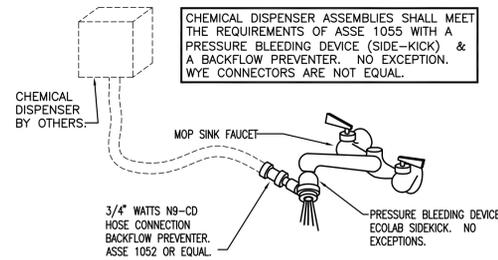
**7 PIPE VENT THROUGH ROOF DETAIL**  
NO SCALE



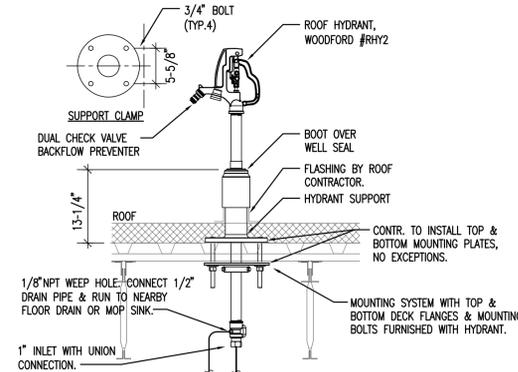
**8 HOT WATER HEATER DETAIL**  
NO SCALE



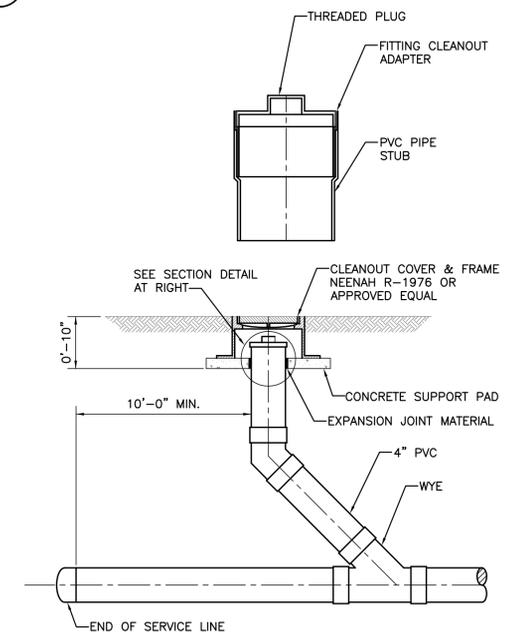
**9 ELEVATOR SUMP PUMP DETAIL**  
NONE



**10 CHEM DISPENSER VACUUM BREAKER DETAIL**  
NO SCALE



**11 ROOF HYDRANT DETAIL**  
NONE



**12 EXTERIOR GRADE CLEANOUT DETAIL**  
NO SCALE

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SHEET TITLE:

**PLUMBING  
DETAILS**

PROJECT #: 3765.0000  
DRAWN BY: MTC  
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ISSUE: DATE:  
IPCBA SUBMITTAL 04.07.16



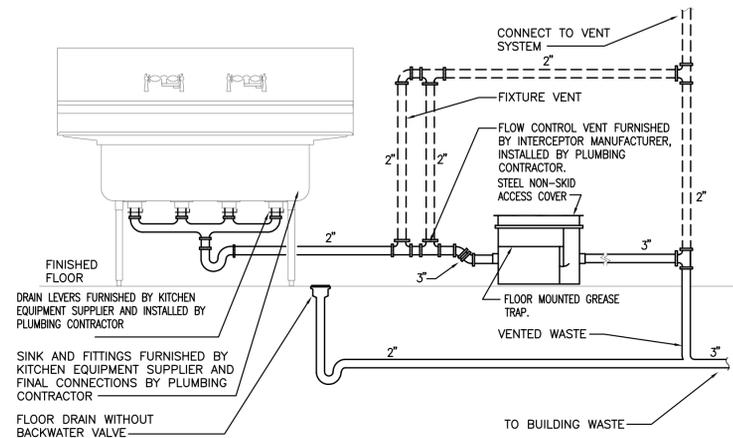
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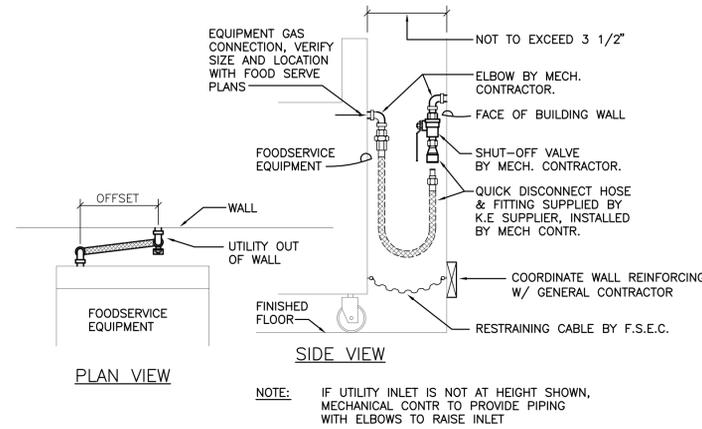
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Name \_\_\_\_\_  
Date 04/08/2016 Reg. No. \_\_\_\_\_

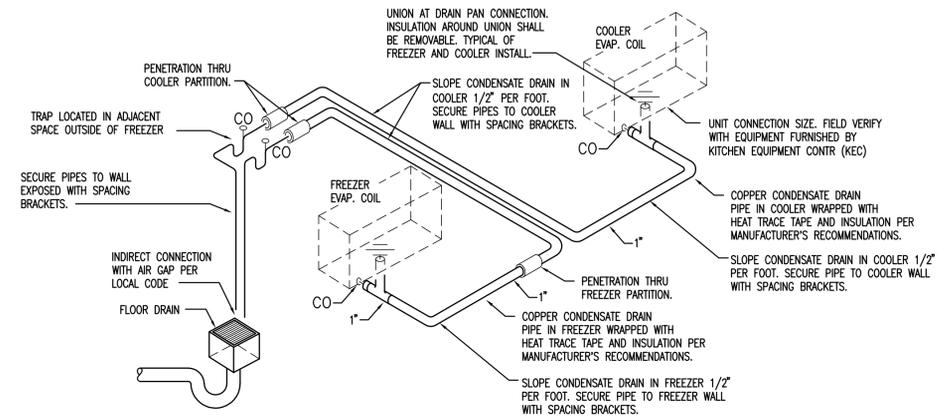
**P5.0**



**1 4-COMPARTMENT SINK DETAIL WITH GREASE TRAP**  
NONE



**2 GAS PIPING DETAIL AT KITCHEN EQUIPMENT**  
NO SCALE



**3 EVAP. CONDENSATE DRAIN**  
NONE

**4 WATER RISER**  
NONE

**5 WASTE AND VENT RISER**  
NONE

**6 GAS RISER**  
NONE

**7 STORM RISER**  
NONE

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SHEET TITLE:  
**PLUMBING  
DETAILS AND  
RISERS**

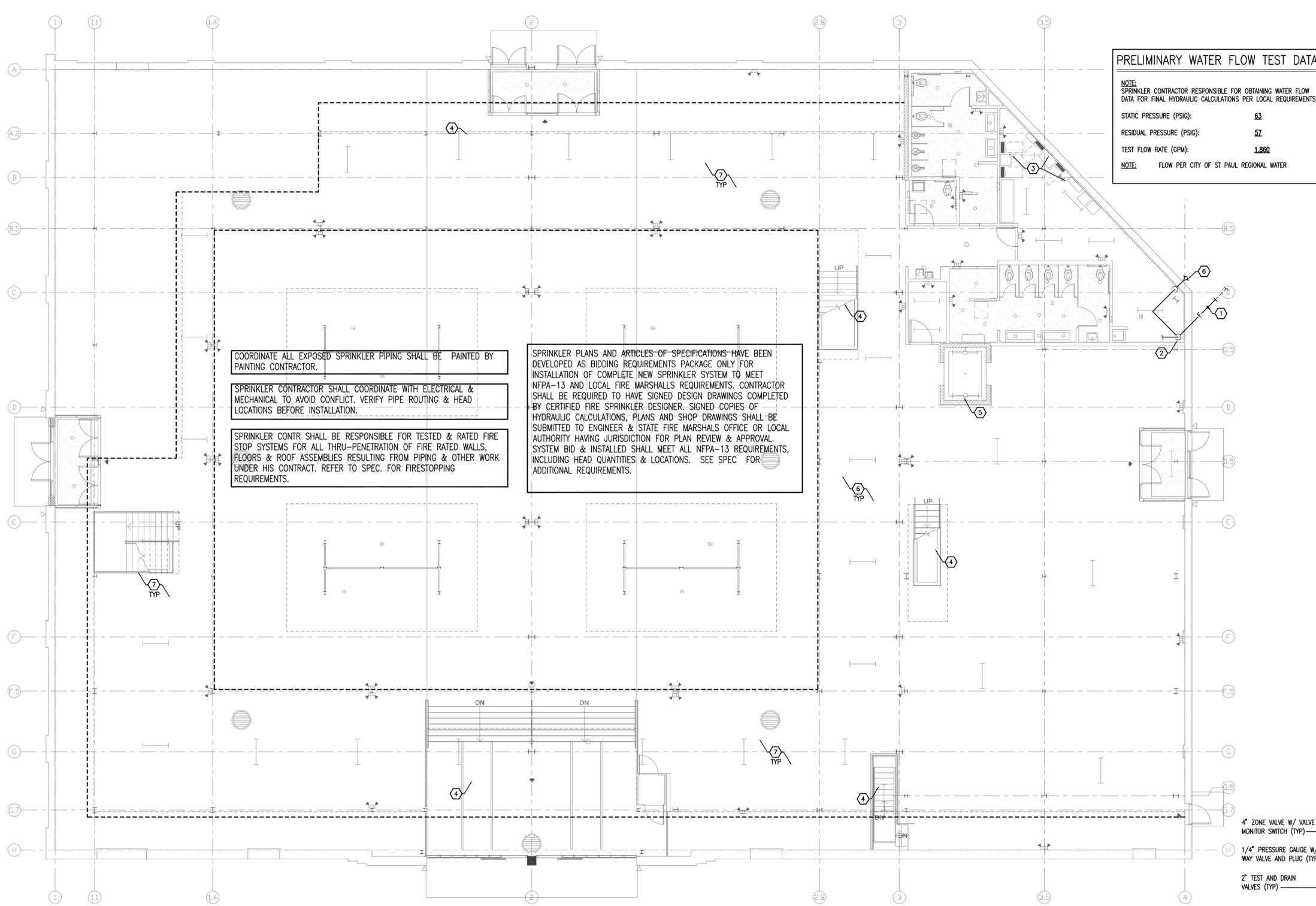
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Signature: *Matthew W. Eults*  
Name: MATTHEW W. EULTS  
Date: 04/08/2016 Reg. No.: 49887

**P5.1**



PRELIMINARY WATER FLOW TEST DATA	
NOTE:	SPRINKLER CONTRACTOR RESPONSIBLE FOR OBTAINING WATER FLOW DATA FOR FINAL HYDRAULIC CALCULATIONS PER LOCAL REQUIREMENTS.
STATIC PRESSURE (PSIG):	53
RESIDUAL PRESSURE (PSIG):	52
TEST FLOW RATE (GPM):	1,860
NOTE:	FLOW PER CITY OF ST PAUL REGIONAL WATER

COORDINATE ALL EXPOSED SPRINKLER PIPING SHALL BE PAINTED BY PAINTING CONTRACTOR.

SPRINKLER CONTRACTOR SHALL COORDINATE WITH ELECTRICAL & MECHANICAL TO AVOID CONFLICT. VERIFY PIPE ROUTING & HEAD LOCATIONS BEFORE INSTALLATION.

SPRINKLER CONTR SHALL BE RESPONSIBLE FOR TESTED & RATED FIRE STOP SYSTEMS FOR ALL THRU-PENETRATION OF FIRE RATED WALLS, FLOORS & ROOF ASSEMBLIES RESULTING FROM PIPING & OTHER WORK UNDER HIS CONTRACT. REFER TO SPEC. FOR FIRESTOPPING REQUIREMENTS.

SPRINKLER PLANS AND ARTICLES OF SPECIFICATIONS HAVE BEEN DEVELOPED AS BIDDING REQUIREMENTS PACKAGE ONLY FOR INSTALLATION OF COMPLETE NEW SPRINKLER SYSTEM TO MEET NFPA-13 AND LOCAL FIRE MARSHALS REQUIREMENTS. CONTRACTOR SHALL BE REQUIRED TO HAVE SIGNED DESIGN DRAWINGS COMPLETED BY CERTIFIED FIRE SPRINKLER DESIGNER. SIGNED COPIES OF HYDRAULIC CALCULATIONS, PLANS AND SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEER & STATE FIRE MARSHALS OFFICE OR LOCAL AUTHORITY HAVING JURISDICTION FOR PLAN REVIEW & APPROVAL. SYSTEM BID & INSTALLED SHALL MEET ALL NFPA-13 REQUIREMENTS, INCLUDING HEAD QUANTITIES & LOCATIONS. SEE SPEC FOR ADDITIONAL REQUIREMENTS.

**FIRE PROTECTION NOTES**

- A. SPRINKLER HEADS MUST BE CENTERED IN CEILING TILE.
- B. SEE SPECIFICATIONS FOR HEAD STYLES.
- C. ALL HEADS ARE QUICK RESPONSE.
- D. FIRE PROTECTION DESIGNER SHALL ROUTE SPRINKLER PIPING TO MINIMIZE DRAIN LOCATION. DRAINS ARE NOT ALLOWED ON THE FRONT FACE OF THE BUILDING. DRAINS MUST BE LOCATED ON THE REAR FACE OF THE BUILDING. NO EXCEPTIONS.
- E. SPRINKLER CONTRACTOR SHALL COORDINATE WITH ELECTRICAL & MECHANICAL TO AVOID CONFLICT. VERIFY PIPE ROUTING & HEAD LOCATIONS BEFORE INSTALLATION. LOCATIONS OF LIGHT FIXTURES TAKE PRECEDENCE OVER SPRINKLER HEADS AND SPRINKLER PIPING. HEADS INSTALLED IN FIXTURE LOCATIONS OR SPRINKLER PIPING INTERFERING WITH FIXTURE LOCATIONS WILL BE RELOCATED AT SPRINKLER CONTRACTORS EXPENSE.
- F. SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR TESTED & RATED FIRE STOP SYSTEMS FOR ALL THRU-PENETRATION OF FIRE RATED WALLS, FLOORS & ROOF ASSEMBLIES RESULTING FROM PIPING & OTHER WORK UNDER HIS CONTRACT.
- G. COORDINATE ALL EXPOSED SPRINKLER PIPING SHALL BE PAINTED BY PAINTING CONTRACTOR. COLOR TO BE WHITE.
- H. SPRINKLER HEADS LOCATED IN SOFFITS AND DROPPED CEILING TILE SHALL BE CONCEALED WITH COVERS. COVER COLOR TO BE WHITE. VERIFY FINAL COLOR WITH ARCHITECT. CONTRACTOR SHALL PERFORM CALCULATIONS AND LOCATE HEADS WHERE REQUIRED. COORDINATE WITH ARCHITECTURAL CEILING PLANS FOR SOFFIT ELEVATIONS; SOFFIT ELEVATIONS MAY DIFFER FROM LAY-IN CEILING ELEVATION.
- I. SPRINKLER PLANS AND ARTICLES OF SPECIFICATIONS HAVE BEEN DEVELOPED AS A BIDDING REQUIREMENTS PACKAGE ONLY FOR INSTALLATION OF COMPLETE NEW SPRINKLER SYSTEM TO MEET NFPA-13 AND LOCAL FIRE MARSHALS REQUIREMENTS. CONTRACTOR SHALL BE REQUIRED TO HAVE SIGNED DESIGN DRAWINGS COMPLETED BY CERTIFIED FIRE SPRINKLER DESIGNER. SIGNED COPIES OF HYDRAULIC CALCULATIONS, PLANS AND SHOP DRAWINGS SHALL BE SUBMITTED TO STATE FIRE MARSHALS OFFICE OR LOCAL AUTHORITY HAVING JURISDICTION FOR PLAN REVIEW & APPROVAL. STATE FIRE MARSHALS OFFICE OR LOCAL AUTHORITY HAVING JURISDICTION APPROVED HYDRAULIC CALCULATIONS, PLANS AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW & APPROVAL. IF APPROVAL IS NOT RECEIVED BY BOTH THE ENGINEER & STATE FIRE MARSHALS OFFICE OR LOCAL AUTHORITY HAVING JURISDICTION FOR PLAN REVIEW & APPROVAL BEFORE SPRINKLER PIPING IS FABRICATED ANY CHANGE TO THE PIPING FABRICATION IS AT THE COST OF THE SPRINKLER CONTRACTOR. SYSTEM BID & INSTALLED SHALL MEET ALL NFPA-13 REQUIREMENTS, INCLUDING HEAD QUANTITIES & LOCATIONS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- J. INSPECTION TEST CONNECTIONS ARE NOT ALLOWED ON THE FRONT FACE OF THE BUILDING OR AT PATIOS AND/OR SIDEWALKS. INSPECTION TEST CONNECTIONS MUST BE LOCATED ON THE REAR FACE OF THE BUILDING. NO EXCEPTIONS.

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SHEET TITLE:  
**FIRE PROTECTION PLAN  
FIRST FLOOR**

PROJECT #: 3765.0000  
DRAWN BY: MTC  
CHECKED BY: MTC  
ISSUE: DATE:  
I/PCA SUBMITTAL 04.07.16

**FIRE PROTECTION KEYNOTES**

- 1. 6" FIRE PROTECTION SERVICES BY SITE UTILITY CONTRACTOR. SEE CIVIL PLANS FOR STUB LOCATION. SEE STRUCTURAL FOR SLEEVE LOCATIONS THRU FOUNDATION.
- 2. 6" FIRE PROTECTION SERVICE BY SITE UTILITY CONTR. UP THRU FLOOR WITH BLIND FLANGE CONNECTION FOR SPRINKLER CONTR. CONNECTION. SEE STRUCTURAL FOR SLEEVE LOCATIONS THRU FOUNDATION.
- 3. NO PIPING SHALL RUN OVER THE TOP OF ELECTRIC SWITCHGEAR.
- 4. FULL SPRINKLER COVERAGE BELOW STAIRS.
- 5. DROP TO SIDEWALL SPRINKLER HEAD WITH MONITOR SWITCH AT 24" ABOVE BOTTOM OF ELEVATOR SHAFT IF REQUIRED BY LOCAL OFFICIAL.
- 6. FIRE DEPARTMENT CONNECTION. SEE CIVIL PLANS FOR EXACT LOCATION. VERIFY EXACT REQUIREMENTS WITH LOCAL FIRE DEPARTMENT.
- 7. FULL SPRINKLER COVERAGE BELOW MEZZANINE.

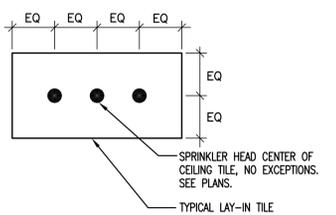


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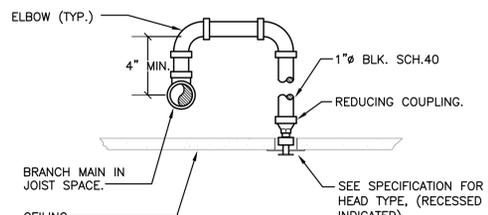
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**FP1.0**

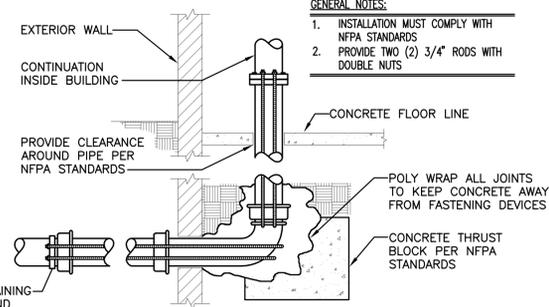
**1 FIRE PROTECTION PLAN - FIRST FLOOR**  
1/8" = 1'-0"



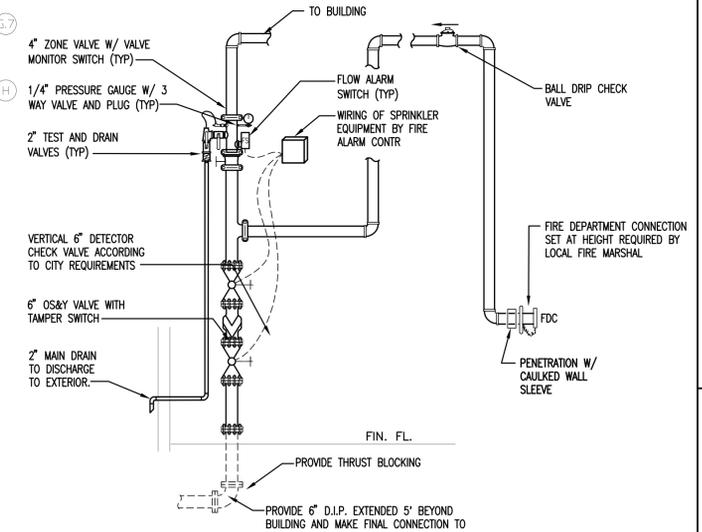
**3 TILE SPRK HEAD DETAIL**  
NONE



**2 SPRINKLER HEAD DETAIL**  
NO SCALE

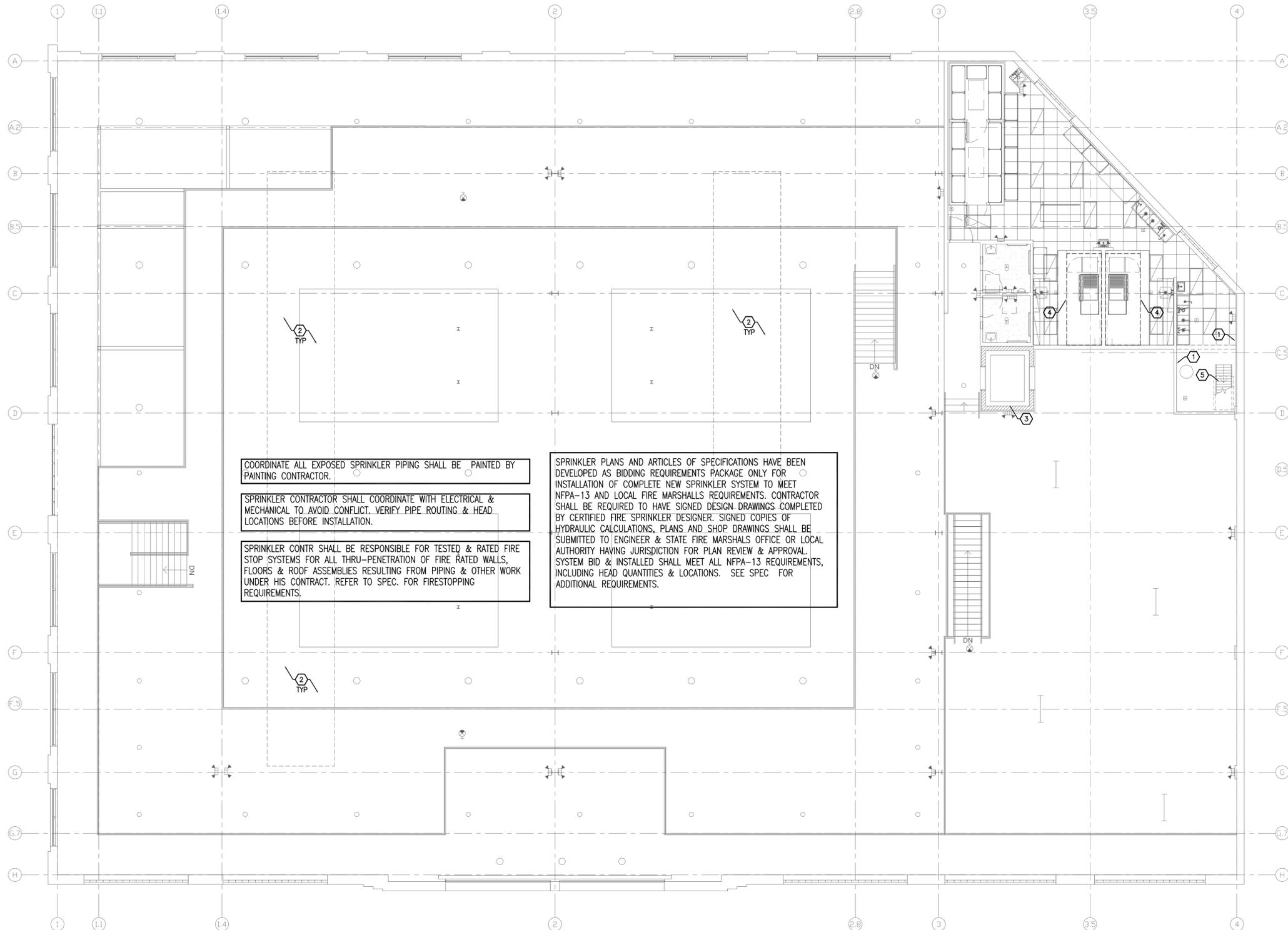


**3 FIRE SERVICE LINE WATER EXTENSION**  
NO SCALE



**4 FIRE SERVICE VALVE ASSEMBLY**  
NO SCALE

- GENERAL NOTES:**
- 1. INSTALLATION MUST COMPLY WITH NFPA STANDARDS
  - 2. PROVIDE TWO (2) 3/4" RODS WITH DOUBLE NUTS



COORDINATE ALL EXPOSED SPRINKLER PIPING SHALL BE PAINTED BY PAINTING CONTRACTOR.

SPRINKLER CONTRACTOR SHALL COORDINATE WITH ELECTRICAL & MECHANICAL TO AVOID CONFLICT. VERIFY PIPE ROUTING & HEAD LOCATIONS BEFORE INSTALLATION.

SPRINKLER CONTR SHALL BE RESPONSIBLE FOR TESTED & RATED FIRE STOP SYSTEMS FOR ALL THRU-PENETRATION OF FIRE RATED WALLS, FLOORS & ROOF ASSEMBLIES RESULTING FROM PIPING & OTHER WORK UNDER HIS CONTRACT. REFER TO SPEC. FOR FIRESTOPPING REQUIREMENTS.

SPRINKLER PLANS AND ARTICLES OF SPECIFICATIONS HAVE BEEN DEVELOPED AS BIDDING REQUIREMENTS PACKAGE ONLY FOR INSTALLATION OF COMPLETE NEW SPRINKLER SYSTEM TO MEET NFPA-13 AND LOCAL FIRE MARSHALS REQUIREMENTS. CONTRACTOR SHALL BE REQUIRED TO HAVE SIGNED DESIGN DRAWINGS COMPLETED BY CERTIFIED FIRE SPRINKLER DESIGNER. SIGNED COPIES OF HYDRAULIC CALCULATIONS, PLANS AND SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEER & STATE FIRE MARSHALS OFFICE OR LOCAL AUTHORITY HAVING JURISDICTION FOR PLAN REVIEW & APPROVAL. SYSTEM BID & INSTALLED SHALL MEET ALL NFPA-13 REQUIREMENTS, INCLUDING HEAD QUANTITIES & LOCATIONS. SEE SPEC FOR ADDITIONAL REQUIREMENTS.

**1 FIRE PROTECTION PLAN - SECOND FLOOR**  
1/8" = 1'-0"

**FIRE PROTECTION NOTES**

A. REFER TO SHEET FP1.0 FOR FIRE PROTECTION NOTES.

**FIRE PROTECTION KEYNOTES**

1. NO PIPING SHALL RUN OVER THE TOP OF ELECTRIC SWITCHGEAR.
2. FULL SPRINKLER COVERAGE IN CLERESTORY.
3. SPRINKLER HEAD IN TOP OF ELEVATOR SHAFT WITH MONITOR SWITCH IF REQUIRED BY LOCAL FIRE MARSHAL.
4. UL 300 WET CHEMICAL FIRE SUPPRESSION SYSTEM IN HOOD WITH CABINET BELOW CEILING AND MANUAL PULL STATION. COORDINATE FINAL LOCATIONS WITH LOCAL FIRE MARSHAL.
5. FULL SPRINKLER COVERAGE BELOW STAIRS.

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SHEET TITLE:

**FIRE PROTECTION PLAN  
SECOND FLOOR**

PROJECT #: 3765.0000  
DRAWN BY: MTC  
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ISSUE: DATE:  
IPCBA SUBMITTAL 04.07.16



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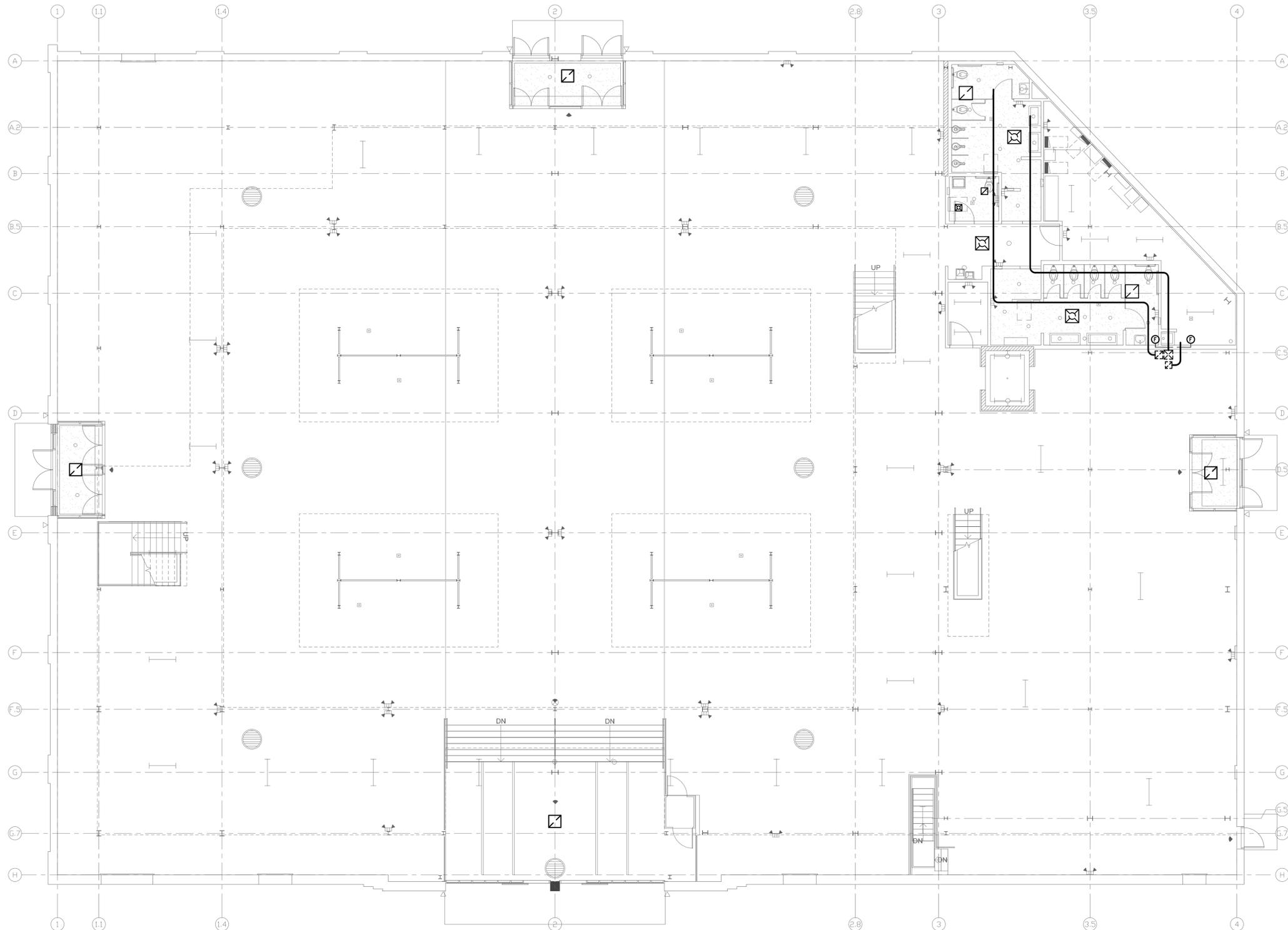
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**FP2.0**



**1 HVAC PLAN - FIRST FLOOR**  
1/8" = 1'-0"

**GENERAL NOTES**

- A. CONCRETE CUTS SHALL BE STRAIGHT AND CLEAN. REPLACE SLAB WITH CONCRETE FLUSH AND SMOOTH WITH ADJACENT.
- G. HVAC CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE ROUTING OF DUCTWORK WITH WATER, VENT, WASTE & STORM PIPING STRUCTURE, CEILING ELEVATION, ELECTRICAL SWITCHGEAR AND PANEL BOARDS, LIGHTS, SPRINKLER PIPING AND ALL OTHER TRADES.
- F. REFER TO ELECTRICAL LIGHTING SHEETS AND ARCHITECTURAL REFLECTIVE CEILING PLANS FOR LIGHT FIXTURE LOCATIONS.
- G. HVAC CONTRACTOR TO PROVIDE ALL NECESSARY OFFSETS REQUIRED TO COORDINATE WITH STRUCTURE AND OTHER TRADE AT NO ADDITIONAL COST TO OWNER. PLANS MAY NOT INDICATE ALL OFFSETS.
- H. ALL INSTALLATIONS, EQUIPMENT AND MATERIAL SHALL COMPLY WITH ALL APPLICABLE LANDLORD REQUIREMENTS.
- I. MATERIAL EXPOSED WITHIN RETURN AIR PLENUM CEILINGS SHALL COMPLY WITH IMC MECHANICAL CODE SECTION 602.2.
- J. HVAC SUBCONTRACTOR SHALL BE RESPONSIBLE FOR TESTED & RATED FIRE STOP SYSTEMS FOR ALL THRU-PENETRATION OF WALLS, FLOORS & ROOF ASSEMBLIES RESULTING FROM PIPING & OTHER WORK UNDER HIS CONTRACT. REFER TO FIRESTOPPING SPEC SECTION FOR REQUIREMENTS.
- K. SEAL DUCT SEALER PER SMACNA REQUIREMENTS AS INDICATED IN SPECIFICATIONS.

**HVAC KEYNOTES**

- 1. DUCT UP THRU FLOOR WITH FIRE DAMPER.

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SHEET TITLE:  
**MECHANICAL PLAN  
FIRST FLOOR**

PROJECT #: 3765.0000  
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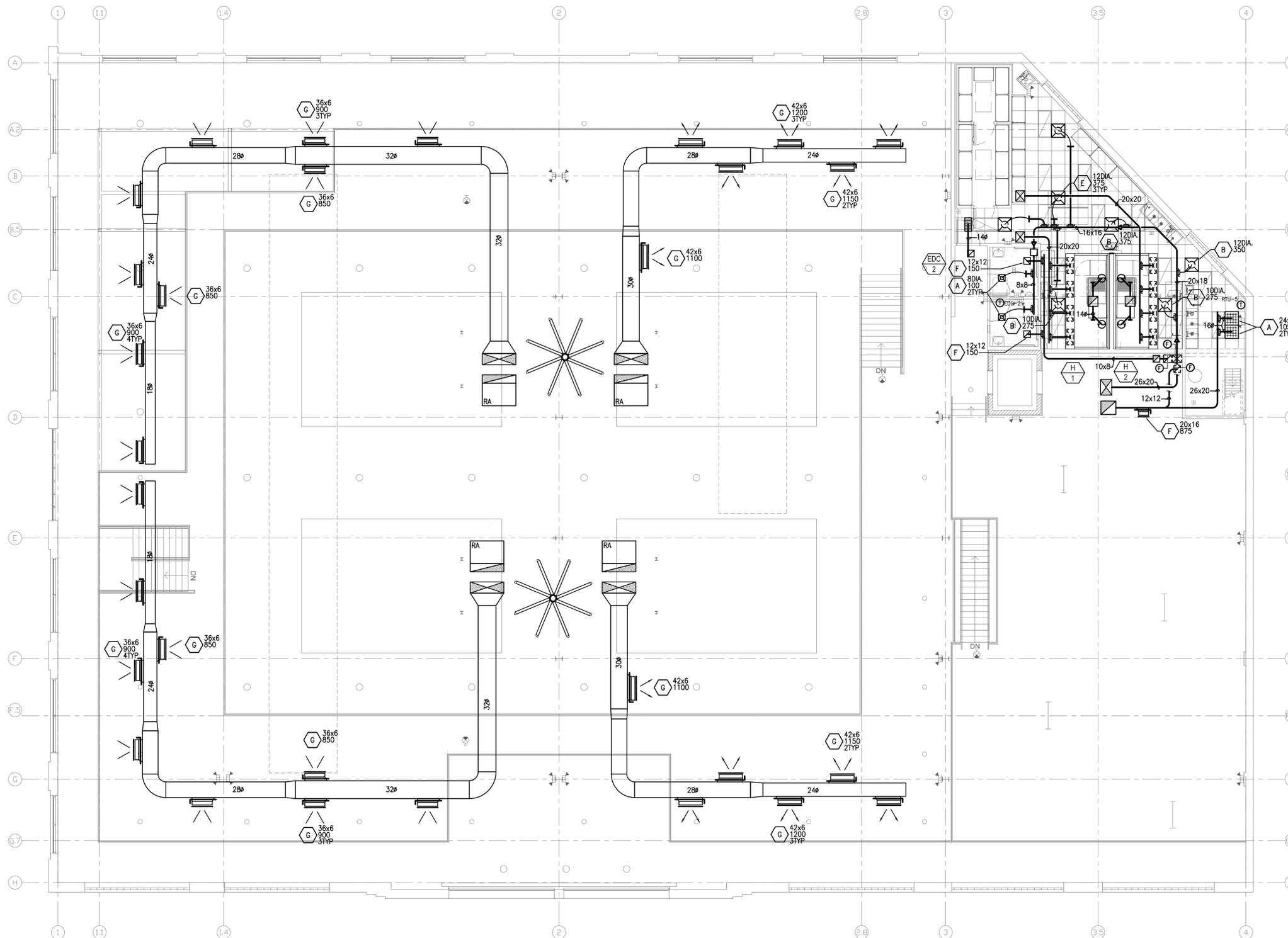
**M1.0**

## GENERAL NOTES

A. REFER TO SHEET M1.0 FOR GENERAL NOTES.

## HVAC KEYNOTES

- SUPPORT FAN FROM STRUCTURE PER MANUFACTURER'S INSTALLATION DETAILS. PROVIDE FACTORY VFD CONTROLLER WITH SUMMER/WINTER OVERRIDE AT 48" AFF.
- DUCT DOWN THRU FLOOR WITH FIRE DAMPER, SEE DETAIL 5/M5.0. PROVIDE ACCESS DOOR FOR FIRE DAMPER.
- PROVIDE TYPE I KITCHEN HOOD EXHAUST DUCT, 16 GAUGE WELDED STEEL. SLOPE DUCTWORK AND PROVIDE CLEANOUTS AS REQUIRED BY CODE AND LOCAL AUTHORITY.
- HVAC CONTRACTOR SHALL INSTALL NEW HOOD OVER KITCHEN EQUIPMENT PER NFPA 96 AND LOCAL AUTHORITY HAVING JURISDICTION, FURNISHED BY KITCHEN EQUIPMENT CONTRACTOR. BALANCE TO INDICATED CFM. REFER TO FOOD SERVICE DOCUMENTS FOR HOOD DETAIL.
- ADJUST DIFFUSER TO DISCHARGE AWAY FROM HOOD.
- EXTEND 12" FRESH AIR DUCT TO PLENUM SUPPLY HOOD. INSTALL 12" CONTINENTAL FAN MANUFACTURING IRIS DAMPER MODEL IR-12 (NO EXCEPTIONS) WITH AIRFLOW MEASUREMENT TAPS AND NEOPRENE GASKET. HVAC CONTRACTOR SHALL INSTALL REDUCER/INCREASER AT IRIS DAMPER FOR CONNECTION TO DUCTWORK. BALANCE TO 750 CFM EACH.
- PROVIDE EXHAUST DUCT (SERVING TYPE I HOOD) WITH 2 LAYERS OF 3M FIRE BARRIER DUCT WRAP 615+ FROM HOOD TO EXHAUST FAN AS REQUIRED BY CODE (NFPA 96 AND IBC AND ASTM E 2335). INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE DUCT CLEANOUTS (WITH GASKET) AS REQUIRED BY CODE (MC 510.3).
- NEW DUCT SMOKE DETECTOR PER LOCAL JURISDICTION REQUIREMENTS. FURNISH AND INSTALL REMOTE TEST KEYED SWITCH WITH AUDIBLE AND VISUAL INDICATORS IN APPROVED LOCATION. VERIFY REQUIREMENTS WITH AHJ PRIOR TO BID.
- CONNECTION TO DUCTWORK WITH CONICAL BELL MOUTH SPIN-IN TAKE-OFF WITH VOLUME DAMPER, BALANCE TO CFM INDICATED, TYPICAL.
- INSTALL UPBLAST EXHAUST FAN WITH GREASE TRAP AND VENTED ROOF CURB WITH HINGE SERVING TYPE I GREASE HOOD IN KITCHEN PER DETAIL 6/M5.0. POSITION FAN TO ENSURE GREASE IS SLOPED TO THE COLLECTOR BOX. FIELD VERIFY LOCATION WITH ROOFTOP UNIT FRESH AIR INTAKE TO MAINTAIN A MINIMUM OF 10' SEPARATION PER LOCAL CODE. FAN AND ACCESSORIES FURNISHED BY KITCHEN EQUIPMENT CONTRACTOR.
- ADJUST DISCHARGE AIR PATTERN NOT TO INTERFERE WITH HANGING LIGHTS. PAINT COLOR DETERMINED BY ARCHITECT.
- TERMINATE FULL SIZE RETURN AIR DUCT WITH 90 DEG. TIGHT TO STRUCTURE IN JOIST SPACE. PROVIDE 1/2" WIRE MESH OVER OPENING.
- INTERNALLY INSULATE ALL EXPOSED DUCTWORK WITH 1-1/2" R-6 LINER, TYPICAL.
- PROVIDE DUCT MOUNTED HUMIDITY SENSOR HONEYWELL MODEL #H7625 IN RETURN AIR DUCT. WIRE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. VERIFY COMPATIBILITY WITH LANDLORDS REQUIREMENTS AND/OR EQUIPMENT PRIOR TO INSTALLATION.
- FURNISH AND INSTALL NEW HONEYWELL COMMERCIAL PROGRAMMABLE THERMOSTAT MODEL #T7350 7-DAY PROGRAMMABLE THERMOSTAT WITH CONTROL FOR UP TO 3-STAGES OF HEATING, 3-STAGES OF COOLING. CONTRACTOR TO INSTALL AT 48" AFF AND WIRE TO EQUIPMENT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL PROGRAM THERMOSTAT SET POINTS. COORDINATE SETTINGS WITH OWNER.
- FURNISH AND INSTALL ELECTRIC DUCT HEATER WITH BUILT-IN ELECTRONIC SCR PROPORTIONAL CONTROLLER AND PROGRAMMABLE THERMOSTAT.
- DO NOT ROUTE PIPING AND/OR DUCTWORK OVER ELECTRICAL SWITCHGEAR. FIELD VERIFY PRIOR TO INSTALLATION.
- ROUTE DUCTWORK THRU OPEN WEB TRUSSES. COORDINATE ROUTING IN FIELD. PROVIDE OFFSETS AND TRANSITIONS AS REQUIRED.
- ADJUST DISCHARGE AIR PATTERN NOT TO INTERFERE WITH HANGING LIGHTS. PAINT COLOR DETERMINED BY ARCHITECT.



**1 HVAC PLAN - SECOND FLOOR**  
1/8" = 1'-0"

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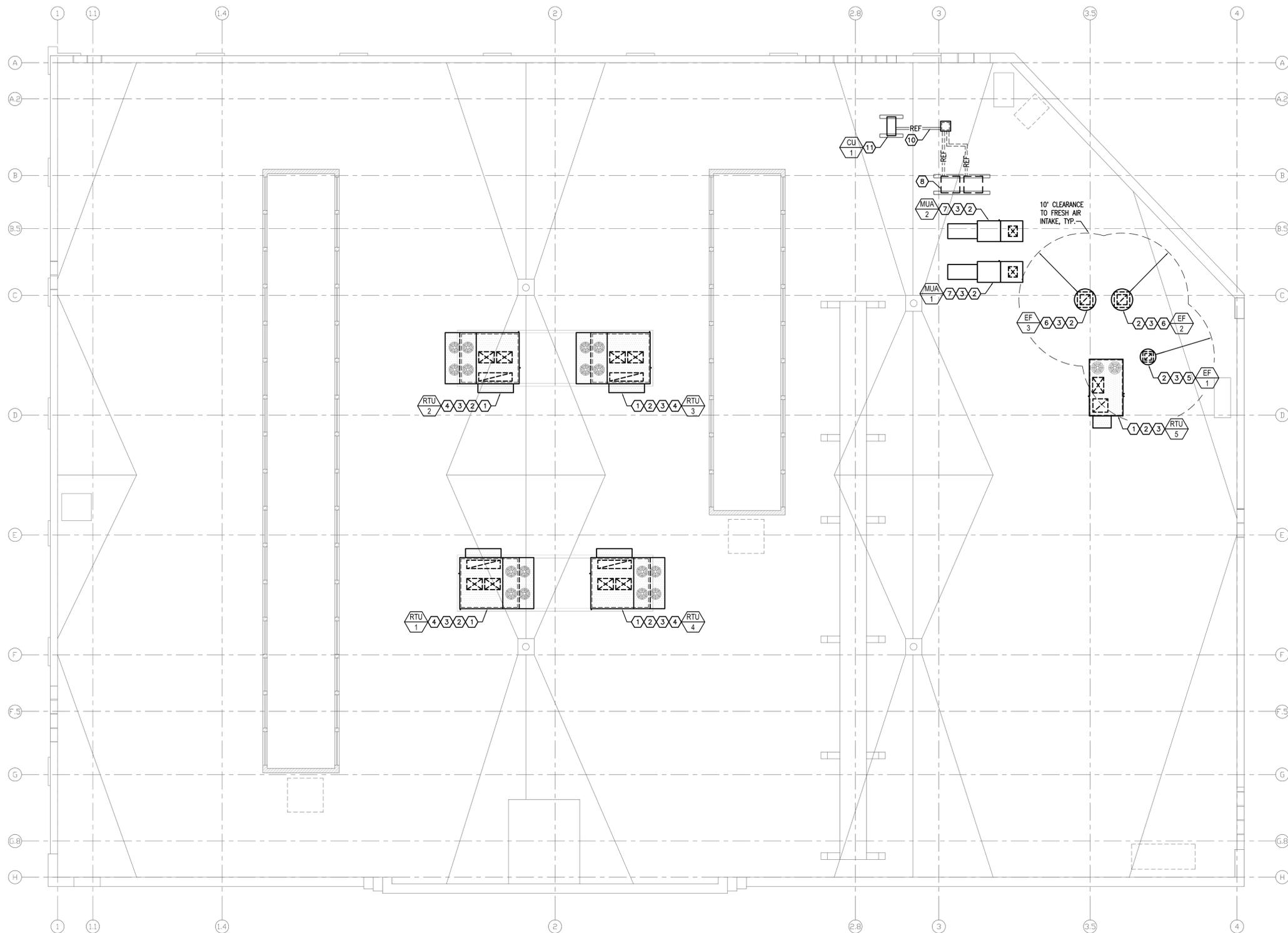
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**M2.0**



## GENERAL NOTES

A. REFER TO SHEET M1.0 FOR GENERAL NOTES.

## HVAC KEYNOTES

- FURNISH AND INSTALL NEW ROOFTOP UNIT WITH FULLY INSULATED DOWNFLOW ROOF CURB. REVISE DUCTWORK AS NECESSARY FOR ACTUAL FIELD CONDITIONS. FIELD VERIFY PRIOR TO BID. COORDINATE WITH ROOFING CONTRACTOR.
- INSTALL ROOF CURB PER DETAILS 2/M5.0 AND 3/M5.0.
- SEE EQUIPMENT SCHEDULES ON SHEET M4.0 FOR EQUIPMENT INFORMATION. REFER TO PLUMBING SHEETS FOR EQUIPMENT CONNECTIONS.
- MOUNT ROOFTOP UNIT ON STRUCTURAL PLATFORM, REFER TO STRUCTURAL PLANS FOR DETAILS.
- FURNISH AND INSTALL NEW EXHAUST FAN WITH BACKDRAFT DAMPER ON FULLY INSULATED ROOF CURB PER LANDLORD REQUIREMENTS. INTERLOCK WITH TOILET ROOM LIGHTS. FIELD VERIFY LOCATION WITH INTAKE OF ROOFTOP UNIT TO INSURE A MINIMUM OF 10' SEPARATION. COORDINATE ALL ROOF PENETRATIONS WITH LANDLORD APPROVED ROOFING CONTRACTOR.
- INSTALL UPBLAST EXHAUST FAN WITH GREASE TRAP AND VENTED ROOF CURB WITH HINGE SERVING TYPE 1 GREASE HOOD IN KITCHEN PER DETAIL 3/M2.0. POSITION FAN TO ENSURE GREASE IS SLOPED TO THE COLLECTOR BOX. FIELD VERIFY LOCATION WITH ROOFTOP UNIT FRESH AIR INTAKE TO MAINTAIN A MINIMUM OF 10' SEPARATION PER LOCAL CODE. FAN AND ACCESSORIES FURNISHED BY KITCHEN EQUIPMENT CONTRACTOR.
- INSTALL NEW MAKE-UP AIR UNIT WITH DOWNFLOW ROOF CURB FURNISHED BY KITCHEN EQUIPMENT CONTRACTOR. INSTALL NEW UNIT ON NEW ROOF CURB. GENERAL CONTRACTOR TO PROVIDE OPENINGS AND STRUCTURAL SUPPORTS AS NECESSARY. FIELD VERIFY EXACT SIZE AND DIMENSIONS WITH FIELD CONDITIONS PRIOR TO BID. COORDINATE MAKEUP AIR UNIT PLACEMENT WITH STRUCTURE. FIELD VERIFY PRIOR TO BID. COORDINATE WITH ROOFING CONTRACTOR.
- INSTALL NEW AIR COOLED ROOFTOP COMPRESSORS PROVIDED BY KITCHEN EQUIPMENT CONTRACTOR. MOUNT ON ROOF WITH TWO (2) SLEEPERS (DURA BLOCK DB SERIES) PER LANDLORD REQUIREMENTS. SEE DETAIL 3/P2.1 COORDINATE ALL ROOF REQUIREMENTS WITH ROOFING CONTRACTOR. REFER TO KITCHEN EQUIPMENT PLANS FOR ADDITIONAL INFORMATION.
- FURNISH AND INSTALL WEATHER TIGHT PIPE BOX DOHOUSE FOR KITCHEN EQUIPMENT REFRIGERANT PIPING, SEE 2/M4.0.
- NEW REFRIGERANT PIPING WITH MANIFOLDS, VALVES, TRAPS, AND DRYERS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS WITH 1/2" ARMAFLEX INSULATION AND ALUMINUM JACKET ON ALL PIPING LOCATED OUTDOORS.
- FURNISH AND INSTALL REMOTE CONDENSING UNIT ON ROOF, MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES. SECURE TO TWO (2) 4" SLEEPERS (DURABLOCK DB SERIES).

**1 HVAC PLAN - ROOF**  
1/8" = 1'-0"

928 7TH ST W  
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55102



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SHEET TITLE:  
**MECHANICAL PLAN  
ROOF**

PROJECT #: 3765.0000  
DRAWN BY: MTC  
CHECKED BY: MTC  
ISSUE: DATE:  
UPCA SUBMITTAL 04.07.16



STUDIO M ARCHITECTS, INC.  
500 N. 3RD STREET, SUITE 200  
MINNEAPOLIS, MN 55401



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 \_\_\_\_\_  
Date 04/08/2016 Reg. No. \_\_\_\_\_

**M3.0**

MAKE-UP AIR UNIT SCHEDULE																					
MARK	LOCATION	MANUFACTURE	MODEL #	NOMINAL TONS	REFRIG TYPE	SEER/EER	SUPPLY FAN DATA				COOLING CAPACITY			HEATING CAPACITY		ELECTRICAL DATA			MECH NOTES	MARK	
							SUPPLY CFM	FRESH AIR CFM	ESP (IN)	FAN RPM	HP	EAT DB/WB (°F)	LAT DB/WB (°F)	TOTAL (MBH)	INPUT (MBH)	OUTPUT (MBH)	VOLTAGE	PH			FLA
MUA#1	ROOF	CAPTIVE AIRE	A2-D500-G15	-	-	-	3000	3000	0.8	900	3	-	-	-	446.1	410.4	208	3	8.7	ALL	MUA#1
MUA#2	ROOF	CAPTIVE AIRE	A2-D500-G15	-	-	-	3000	3000	0.8	900	3	-	-	-	446.1	410.4	208	3	8.7	ALL	MUA#2

- MECHANICAL NOTES:
1. LOUVERED INLET WEATHERHOOD WITH BIRD SCREEN AND V-BANK FILTER SECTION FOR 2" TA FILTERS.
  2. 20" DOWNFLOW DISCHARGE ROOF CURB.
  3. PROVIDE GFCI SERVICE OUTLET.
  4. FURNISHED WITH INTEGRAL DISCONNECT.
  5. FURNISHED BY KEC, INSTALLED BY MECHANICAL CONTRACTOR.
  6. MOTORIZED BACKDRAFT DAMPER.
  7. VARIABLE FREQUENCY DRIVE - REFER TO HOOD PLANS FOR CONTROL SEQUENCE.

EXHAUST HOOD SCHEDULE														
MARK	DESCRIPTION	MANUFACTURER	EXHAUST HOOD					SUPPLY PLENUM					NOTES	
			MODEL #	COOKING TEMP DEG F	SIZE (LxW) IN	EXHAUST CFM	SP IN	FAN	MODEL #	SIZE (LxW) IN	SUPPLY CFM	SP IN		FAN
H#1	NEW TYPE I	CAPTIVE AIRE	6030ND-2	600	171x63	3,800	0.86	EF#3	PSP-F	171x16	3,000	0.21	MUA#1	ALL
H#2	NEW TYPE I	CAPTIVE AIRE	6030ND-2	600	171x63	3,800	0.86	EF#2	PSP-F	171x16	3,000	0.21	MUA#2	ALL

- NOTES
1. VARIABLE SPEED CONTROLLER - REFER TO HOOD PLANS FOR SEQUENCE.
  2. 304 SS CONSTRUCTION WITH FULLY WELDED SEAMS GROUND TO A NO. 3 FINISH.
  3. 3" STAND-OFF FOR WALL MOUNTED CANOPY INSTALLATION IN ACCORDANCE WITH NFPA 96.
  4. ANSUL FIRE SUPPRESSION SYSTEM IN ACCORDANCE WITH LOCAL AUTHORITY HAVING JURISDICTION.
  5. GREASE FILTERS WITH GREASE DRAIN AND GREASE COLLECTION RECEPTOR.
  6. FURNISHED BY KEC, INSTALLED BY MECHANICAL CONTRACTOR.

GRILLE, REGISTER, DIFFUSER SCHEDULE								
MARK	MANUFACTURER	LOCATION	AIR	TYPE	STYLE	SIZE	FINISH	NOTES
A	PRICE	CEILING	SUPPLY	DIFFUSER	SPD	12x12	WHITE	1,2,4
B	PRICE	CEILING	SUPPLY	DIFFUSER	APDN	24x24	WHITE	1,3
C	PRICE	CEILING	RETURN	EGG CRATE	80	ON DRAWING	WHITE	
D	PRICE	DUCT	SUPPLY	REGISTER	5200	ON DRAWING	NOTE 5	1,5
E	PRICE	CEILING	SUPPLY	DIFFUSER	ASCD	24x24	WHITE	1,2,4
F	PRICE	CEILING	EXHAUST	GRILLE	535D	ON DRAWING	WHITE	1,2,5
G	PRICE	DUCT	SUPPLY	REGISTER	HCD	ON DRAWING	NOTE 5	1,2,5

- NOTES
1. NECK SIZE INDICATED ON FLOOR PLANS.
  2. VERIFY WITH ARCHITECTURAL PLANS THE FRAME TYPE PLASTER OR LAY-IN FRAME.
  3. PERFORATED FACE WITH ADJUSTABLE PATTERN CONTROLLERS.
  4. PROVIDE YOUNG REGULATOR 270-275ML DAMPER CONTROLLER WITH ACCESSORIES AND 5020-CC DAMPER FOR INACCESSIBLE HARD LID CEILINGS.
  5. COORDINATE FINISH/COLOR WITH ARCHITECT AS NOTED ON PLANS.

SPLIT SYSTEM COOLING UNIT SCHEDULE																	
INDOOR FAN COIL							OUTDOOR CONDENSING UNIT										
MARK	MANUFACTURER	MODEL #	LOCATION	CAP (MBH)	SEER	SUPPLY (CFM)	ELECTRICAL DATA			MARK	MODEL #	LOCATION	ELECTRICAL DATA			MECH NOTES	
							V	PH	MCA				V	PH	MCA		MOP
AC#1	MITSUBISHI	PKA-A18HA4	ELEV EQUIP L03	18.0	15.3	425	208	1	1.0	CU#1	PUY-A18NH44	ROOF	208	1	13.0	20.0	ALL

- MECHANICAL NOTES:
1. HVAC CONTRACTOR SHALL PROVIDE SYSTEM ACCORDING TO MANUFACTURERS PIPING INSTRUCTIONS, WHICH INCLUDES ALL REQUIRED EQUIPMENT TO INSTALL THE SYSTEM. ROUTE REFRIGERANT LINE TO UNIT ACCORDING TO MANUFACTURERS PIPING INSTRUCTIONS, INCLUDING PIPING OF SOLENOID VALVES. REFRIGERATION PIPING SHALL HAVE 1" ARMALFLEX INSULATION WITH ALUMINUM JACKET ON ALL REFRIGERANT PIPING LOCATED OUTDOORS.
  2. PROVIDE HARD WIRED PROGRAMMABLE THERMOSTAT, #PAR-21MAU.
  3. LOW AMB KIT FOR COOLING OPERATION ON OUTDOOR CONDENSING UNIT.
  4. INSTALL CONDENSING UNIT WITH RUBBER SUPPORT BLOCKS PER DETAIL, MAINTAIN MANUFACTURER REQUIRED CLEARANCES.

PACKAGED GAS/ELEC ROOFTOP UNIT SCHEDULE																			
MARK	MANUF.	MODEL #	NOMINAL TONS	SUPPLY FAN DATA				COOLING CAPACITY			HEATING CAPACITY		ELECTRICAL DATA			MECH NOTES			
				SUPPLY CFM	FRESH AIR CFM	ESP (IN)	FAN RPM	HP	EAT DB/WB (°F)	LAT DB/WB (°F)	TOTAL (MBH)	INPUT (MBH)	OUTPUT (MBH)	VOLTAGE	PH		SYSTEM MCA	SYSTEM MOCP AMPS	WEIGHT (LBS)
RTU#1	LENNOX	LGH240	20.0	8000	1450	1.0	1100	7.5	80/67	57/55	240.0	312/480	249.6/384	460	3	54	60	2820	1-12
RTU#2	LENNOX	LGH240	20.0	8000	1450	1.0	1100	7.5	80/67	57/55	240.0	312/480	249.6/384	460	3	54	60	2820	1-12
RTU#3	LENNOX	LGH210	17.5	7000	1250	1.0	1000	7.5	80/67	57/55	210.0	312/480	249.6/384	460	3	48	50	2720	1-12
RTU#4	LENNOX	LGH210	17.5	7000	1250	1.0	1000	7.5	80/67	57/55	210.0	312/480	249.6/384	460	3	48	50	2720	1-12
RTU#5	LENNOX	LHG120	10.0	4000	500	1.0	1000	3.0	80/67	57/55	120.0	117/180	115.2/144	460	3	26	30	1366	1-2,4-10,13,14

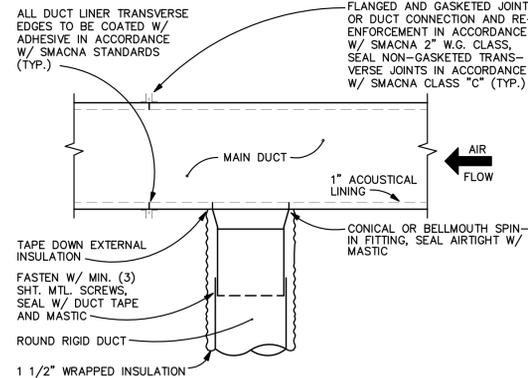
- MECHANICAL NOTES:
1. 2" PLEATED merv 7 STD FILTER.
  2. SINGLE ENTHALPY ECONOMIZER.
  3. PROVIDE POWERED EXHAUST SYSTEM.
  4. UNIT DISCONNECT FACTORY INSTALLED.
  5. FACTORY INSTALLED GFCI.
  6. FURNISHED AND INSTALLED BY MECH CONTRACTOR.
  7. HAIL GUARD.
  8. THRU BASE POWER.
  9. FULLY INSULATED DOWNFLOW ROOF CURB.
  10. RETURN AIR SMOKE DETECTOR FACTORY INSTALLED, WIRED BY ELECTRICAL CONTRACTOR FIRE ALARM SYSTEM.
  11. HOT GAS REHEAT WITH DUCT HUMIDITY SENSOR.
  12. PROGRAMMABLE STAND ALONE THERMOSTAT WITH REMOTE TEMPERATURE SENSOR & DUCT HUMIDITY SENSOR.
  13. PROGRAMMABLE STAND ALONE THERMOSTAT.
  14. BAROMETRIC RELIEF DAMPER.

FAN SCHEDULE										
MARK	LOCATION	MANUFACTURER	MODEL #	FAN			MOTOR			NOTES
				CFM	EXTERNAL SP (IN WG)	RPM	DRIVE TYPE	HP	VOLTS	
EF#1	ROOF - TOILETS	GREENHECK	G-133-VG	1,300	0.80	1,350	DIRECT	1/2	120V/1PH	1,2,3,4
EF#2	ROOF - HOOD H-2	CAPTIVE AIRE	DU180HFA	3,800	2.00	900	DIRECT	3	208V/3PH	5,6,7,8,9,10,11
EF#3	ROOF - HOOD H-1	CAPTIVE AIRE	DU180HFA	3,800	2.00	900	DIRECT	3	208V/3PH	5,6,7,8,9,10,11
F#1	MARKET	BIG ASS FAN	12FT ESSENCE	-	-	75	DIRECT	350 W	120V/1PH	12,13,14
F#2	MARKET	BIG ASS FAN	12FT ESSENCE	-	-	75	DIRECT	350 W	120V/1PH	12,13,14

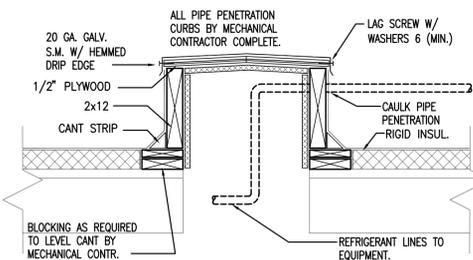
- NOTES
1. 12" PERINSULATED ROOF CURB.
  2. PROVIDE WITH GRAVITY BACKDRAFT DAMPER.
  3. FACTORY INSTALLED DISCONNECT SWITCH.
  4. INTERLOCKED WITH TOILET ROOM LIGHTS.
  5. FACTORY FURNISHED WITH INTEGRAL DISCONNECT SWITCH.
  6. MOUNTED ON VENTED ROOF CURB.
  7. DISCHARGE OF FAN TO BE A MINIMUM OF 40' ABOVE THE ROOF IN ACCORDANCE WITH NFPA 96.
  8. UL-782 LISTED FOR CLASS 1 GREASE REMOVAL, GREASE TRAP, EXTERIOR RATED DISCONNECT SWITCH.
  9. HINGED FAN/CURB FOR SERVICING/CLEANING IN ACCORDANCE WITH NFPA 96.
  10. FURNISHED BY KEC, INSTALLED BY MECHANICAL CONTRACTOR.
  11. VARIABLE SPEED DIRECT DRIVE - REFER TO HOOD PLANS FOR CONTROL SEQUENCE.
  12. SMART SENSE FACTORY VFD CONTROLS WITH SUMMER/WINTER OVERRIDE WITH LOCKABLE MENU AND REMOTE SENSOR.
  13. COORDINATE COLOR/GRAPHICS WITH ARCHITECT.
  14. 3FT EXTENSION WITH GUIDE WIRE. SUPPORT FROM STRUCTURE PER MANUFACTURERS INSTALLATION DETAILS.

ELECTRIC HEATER SCHEDULE										
MARK	SERVES	MANUFACTURER	MODEL #	AIRFLOW (CFM)	SIZE (IN)	ELECTRIC HEAT COIL DATA			MECH NOTES	
						KW	STAGE	V PH		
EDC#1	1ST FL TOILETS	NEPTRONIC	DF-C100	1400	16x14	13.0	SCR	460	3	2,5,6,7
EDC#2	1ST FL TOILETS	NEPTRONIC	DF-C100	300	8x8	3.0	SCR	460	3	2,5,6,7
EH#1	MECHANICAL	QMARK	MUH-05	-	-	5.0	-	277	1	1,3,7
EH#2	EAST VESTIBULE	QMARK	CDF-557	-	-	5.0	-	277	1	1,4,7
EH#3	WEST VESTIBULE	QMARK	CDF-557	-	-	5.0	-	277	1	1,4,7
EH#4	SOUTH VESTIBULE	QMARK	CDF-547	-	-	4.0	-	277	1	1,4,7
EH#5	NORTH VESTIBULE	QMARK	CDF-547	-	-	4.0	-	277	1	1,4,7

- MECHANICAL NOTES:
1. PROVIDE THERMOSTAT MOUNTED INTEGRAL TO UNIT.
  2. SCR PROPORTIONAL CONTROLLER FOR ELECTRIC REHEAT.
  3. PROVIDE MOUNTING BRACKET WITH UNIT.
  4. RECESSED MOUNTED HEATER FLUSH WITH CEILING.
  5. PROVIDE AIRFLOW SWITCH, HIGH LIMIT CUT-OFF, CONTROL TRANSFORMER, SCR PROPORTIONAL CONTROLLER, BUILT-IN DISCONNECT SWITCH.
  6. PROVIDE TRO2 PROGRAMMABLE THERMOSTAT WITH LOCKABLE MENU.
  7. REFER TO ELECTRICAL PLANS FOR ELECTRICAL REQUIREMENTS.



**1 ROUND DUCT TAKE-OFF DETAIL**  
NO SCALE



**2 ROOF PIPE PENETRATION CURB DETAIL**  
NO SCALE

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SHEET TITLE:

**MECHANICAL SCHEDULES**

PROJECT #: 3765.0000

DRAWN BY: MTC

CHECKED BY: MTC

ISSUE: DATE:

IPCA SUBMITTAL 04.07.16



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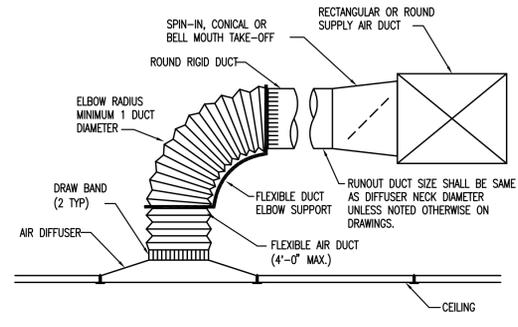


I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

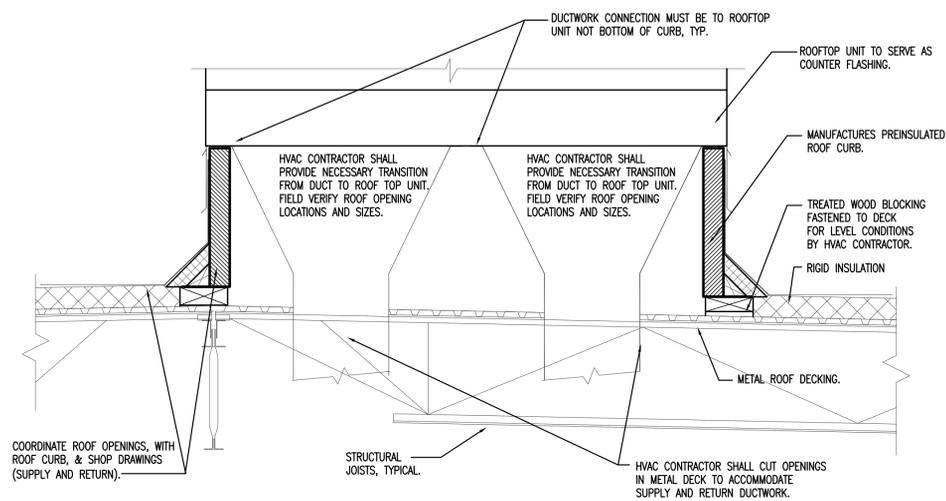
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Name \_\_\_\_\_  
Date 04/08/2016 Reg. No. \_\_\_\_\_

**M4.0**

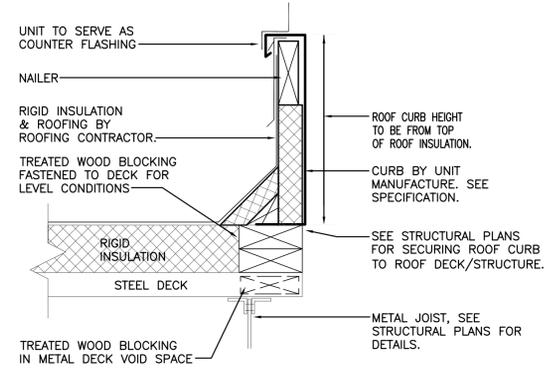
ALL FLEX DUCT MUST BE INSTALLED PER THE ADC (AIR DIFFUSION COUNCIL) INSTALLATION STANDARDS (MOST CURRENT EDITION), INCLUDING A BEND RADIUS OF ONE DUCT DIAMETER OR GREATER, PROPERLY SEALED AND SECURED WITH 2 INCH BEADED COLLARS, PROPERLY SUPPORTED AND FULLY EXTENDED DUCT. FAN CALCULATIONS FOR THIS PROJECT WERE SIZED FOR 4 FOOT MAXIMUM FLEX DUCT INSTALLED PER THE ADC INSTALLATION STANDARDS. FLEX DUCT SHOWN ON PLANS IS FOR SCHEMATIC PURPOSES ONLY AND SHALL IN NO INSTANCE EXCEED 4 FOOT.



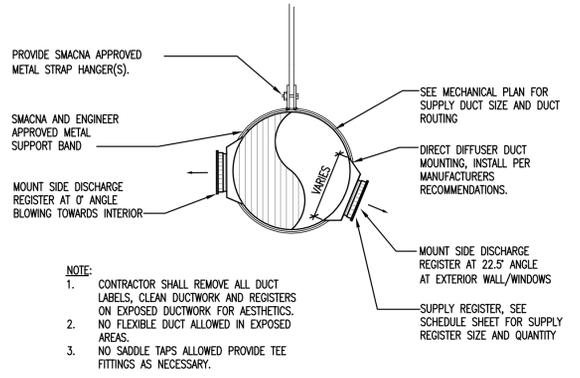
**1 LAY-IN DIFFUSER DETAIL**  
SCALE: NONE



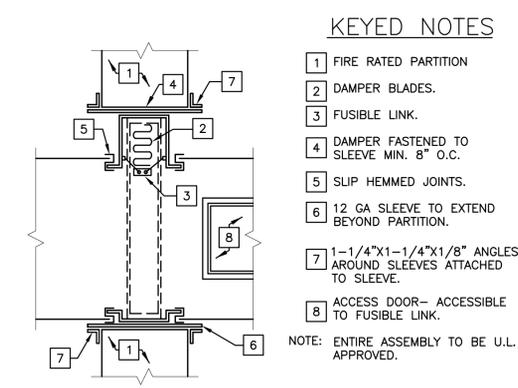
**2 ROOFTOP UNIT CURB DETAIL**  
SCALE: NONE



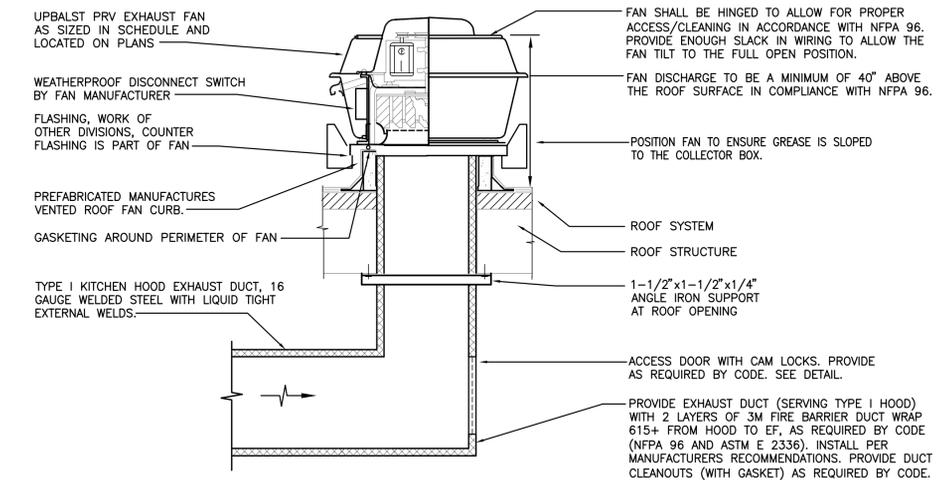
**3 ROOF CURB DETAIL**  
SCALE: NONE



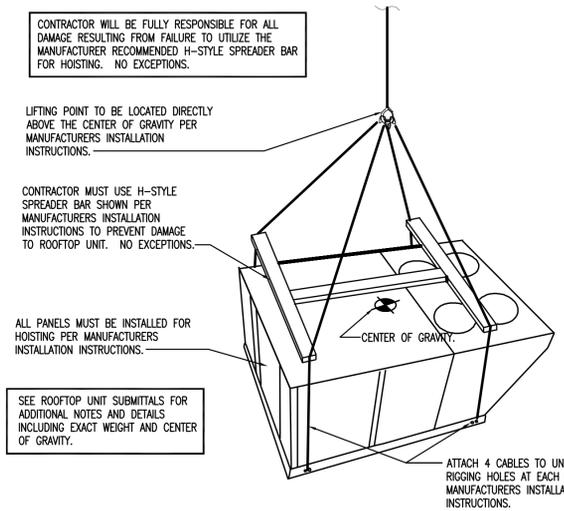
**4 SURFACE MOUNT SUPPLY AIR GRILLE DETAIL**  
NO SCALE



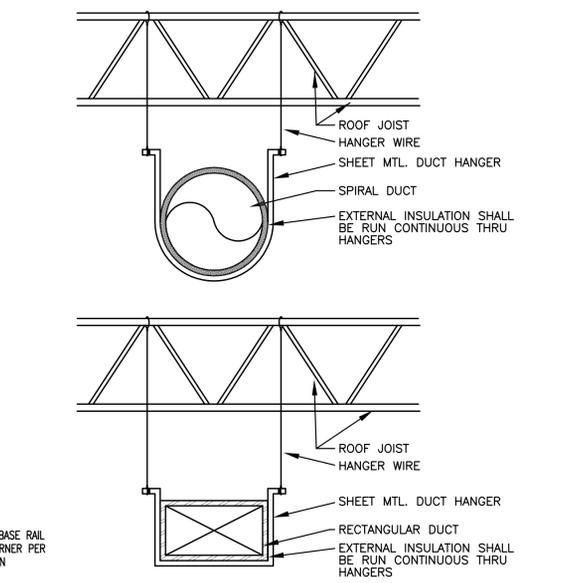
**5 FIRE DAMPER DETAIL**  
NO SCALE



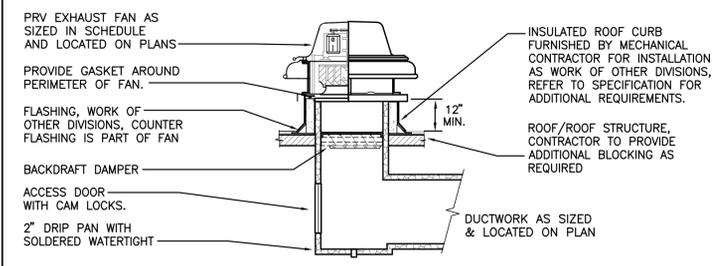
**6 KITCHEN UPBLAST EXHAUST FAN DETAIL**  
NO SCALE



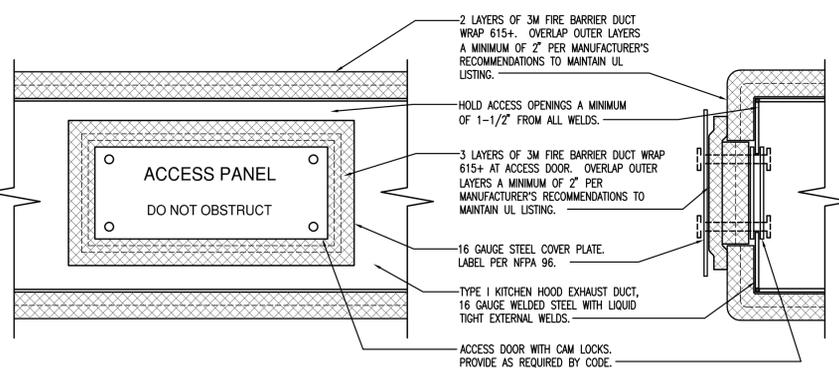
**7 ROOFTOP UNIT HOISTING DETAIL**  
NO SCALE



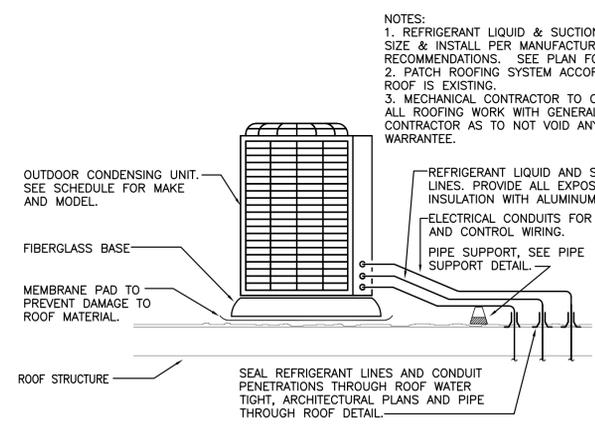
**8 DUCT HANGING DETAILS**  
NO SCALE



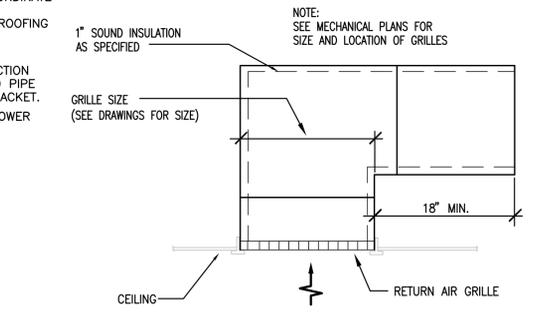
**9 POWER ROOF VENTILATOR DETAIL**  
NO SCALE



**10 GREASE DUCT ACCESS DOOR DETAIL**  
NO SCALE



**11 ROOF MOUNTED CONDENSING UNIT**  
NO SCALE



**12 RETURN GRILLE DETAIL**  
NO SCALE

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SHEET TITLE:

**MECHANICAL  
DETAILS**

PROJECT #: 3765.0000  
DRAWN BY: MTC  
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UPCA SUBMITTAL 04.07.16



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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 \_\_\_\_\_  
Date: 04/08/2016 Reg. No. \_\_\_\_\_

**M5.0**

**HOOD INFORMATION - Job#2597551**

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	TOTAL EXH. CFM	EXHAUST PLENUM RISER(S)					TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG.	
						WIDTH	LENG.	DIA.	CFM	S.P.			END TO END	ROW
1		6030 ND-2-PSP-F	13' 9.00"	600 Deg.	3800	14"	1900	-0.863"			3000	430 SS Where Exposed	ALONE	ALONE
2		6030 ND-2-PSP-F	13' 9.00"	600 Deg.	3800	14"	1900	-0.863"			3000	430 SS Where Exposed	ALONE	ALONE

**HOOD INFORMATION**

HOOD NO.	TAG	FILTER(S)					LIGHT(S)				UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WGT
		TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 9 MICRONS	QTY.	TYPE	WIRE GUARD	LOCATION	FIRE SYSTEM TYPE	SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY		
1		Captrate Solo Filter	10	20"	16"	93% See Filter Spec.	7	L55 Series E26	NO					YES	866 LBS	
2		Captrate Solo Filter	10	20"	16"	93% See Filter Spec.	7	L55 Series E26	NO					YES	866 LBS	

**HOOD OPTIONS**

HOOD NO.	TAG	OPTION
1		BACKSPLASH 75.00" High X 171.00" Long X 3.00" Wide Insulated 430 SS Vertical LEFT END STANDOFF 3" Wide 60" Long Insulated LEFT SIDESPLASH 75.00" High X 60.00" Long X 3.00" Wide Insulated 430 SS Vertical RIGHT SIDESPLASH 75.00" High X 12.00" Long X 3.00" Wide Insulated 430 SS Vertical RIGHT END STANDOFF (FINISHED) 3" Wide 60" Long Insulated BACK STANDOFF (FLAT) 3" Wide 171" Long STRUCTURAL FRONT PANEL INSULATION FOR BACK OF HOOD
2		BACKSPLASH 75.00" High X 171.00" Long X 3.00" Wide Insulated 430 SS Vertical RIGHT END STANDOFF 3" Wide 60" Long Insulated LEFT SIDESPLASH 75.00" High X 12.00" Long X 3.00" Wide Insulated 430 SS Vertical RIGHT SIDESPLASH 75.00" High X 60.00" Long X 3.00" Wide Insulated 430 SS Vertical LEFT END STANDOFF (FINISHED) 3" Wide 60" Long Insulated BACK STANDOFF (FLAT) 3" Wide 171" Long STRUCTURAL FRONT PANEL INSULATION FOR BACK OF HOOD

**FAN ACCESSORIES**

FAN UNIT NO.	TAG	EXHAUST				SUPPLY		
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	EF-1	YES						
2	EF-2	YES						
3	MUA-1						YES	
4	MUA-2						YES	

**EXHAUST FAN INFORMATION - Job#2597551**

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES
1	EF-1	DU180HFA	3800	2.000	1593	3.000	2.1060	3	208	9.5	113	26
2	EF-2	DU180HFA	3800	2.000	1593	3.000	2.1060	3	208	9.5	113	26

**MUA FAN INFORMATION - Job#2597551**

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES	BURNER EFFICIENCY(%)
3	MUA-1	A2-D.500-G15	G15-PB	A2-D.500	3800	0.500	868	3.000	1.7880	3	208	8.7	825	14.5	92
4	MUA-2	A2-D.500-G15	G15-PB	A2-D.500	3800	0.500	868	3.000	1.7880	3	208	8.7	825	14.5	92

**GAS FIRED MAKE-UP AIR UNIT(S)**

FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
3	MUA-1	446087	410400	100 deg F	7 in. w.c. - 14 in. w.c.	Natural
4	MUA-2	446087	410400	100 deg F	7 in. w.c. - 14 in. w.c.	Natural

**FAN OPTIONS**

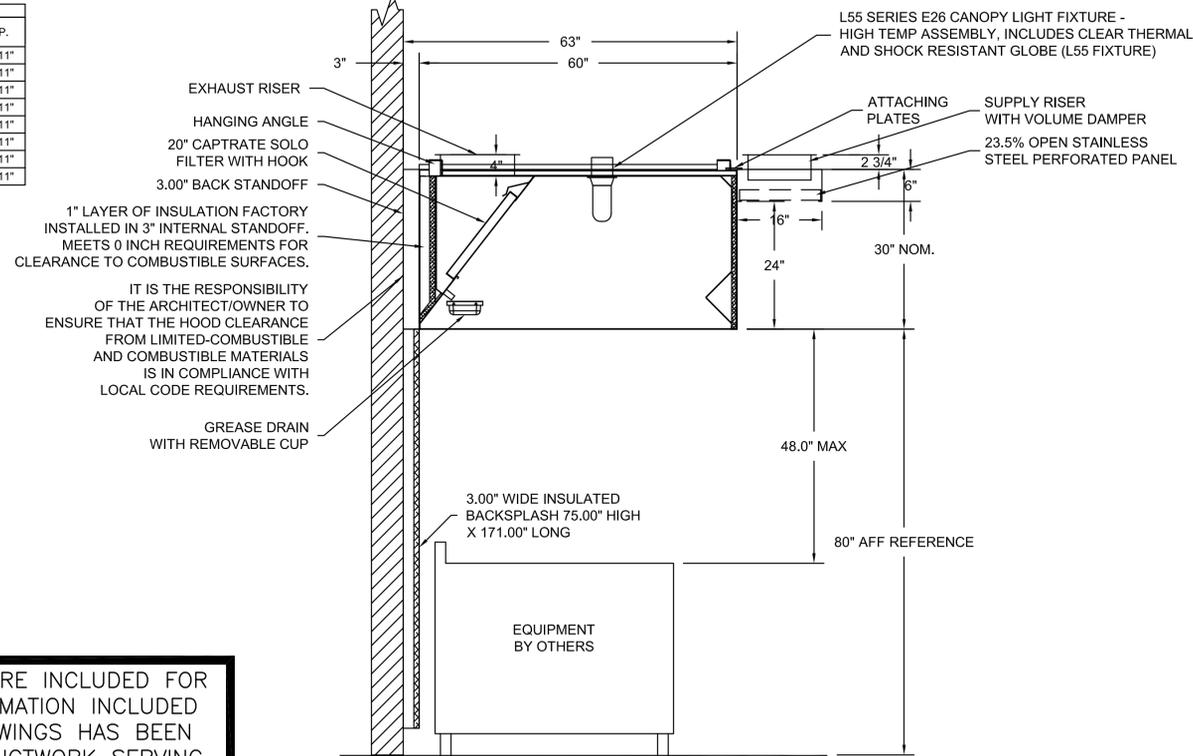
FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	EF-1	1 - Grease Box 1 - Upblast Fan Wheel Access Port
2	EF-2	1 - Grease Box 1 - Upblast Fan Wheel Access Port
3	MUA-1	1 - AC Interlock Relay - 24VAC Coil 1 - Motorized Backdraft Damper for A2-D Housing 1 - Low Fire Start 1 - Inlet Pressure Gauge, 0-35" 1 - Manifold Pressure Gauge, -5 to 15" wc 1 - Separate 120V Wiring Package (Required and used only for DCV or Prewire with VFD) - Three Phase Only 1 - Size 2 Direct Fired Heater Low CFM Profile Package. Used on Heaters under 2500 cfm. 1 - Freezestat (10)
4	MUA-2	1 - AC Interlock Relay - 24VAC Coil 1 - Motorized Backdraft Damper for A2-D Housing 1 - Low Fire Start 1 - Inlet Pressure Gauge, 0-35" 1 - Manifold Pressure Gauge, -5 to 15" wc 1 - Separate 120V Wiring Package (Required and used only for DCV or Prewire with VFD) - Three Phase Only 1 - Size 2 Direct Fired Heater Low CFM Profile Package. Used on Heaters under 2500 cfm. 1 - Freezestat (10)

**CURB ASSEMBLIES**

NO.	ON FAN	WEIGHT	ITEM	SIZE
1	# 1	34 LBS	Curb	26.500"W x 26.500"L x 26.000"H Vented Hinged
2	# 2	34 LBS	Curb	26.500"W x 26.500"L x 26.000"H Vented Hinged
3	# 3	88 LBS	Curb	31.000"W x 79.000"L x 24.000"H Insulated
4	# 4	88 LBS	Curb	31.000"W x 79.000"L x 24.000"H Insulated

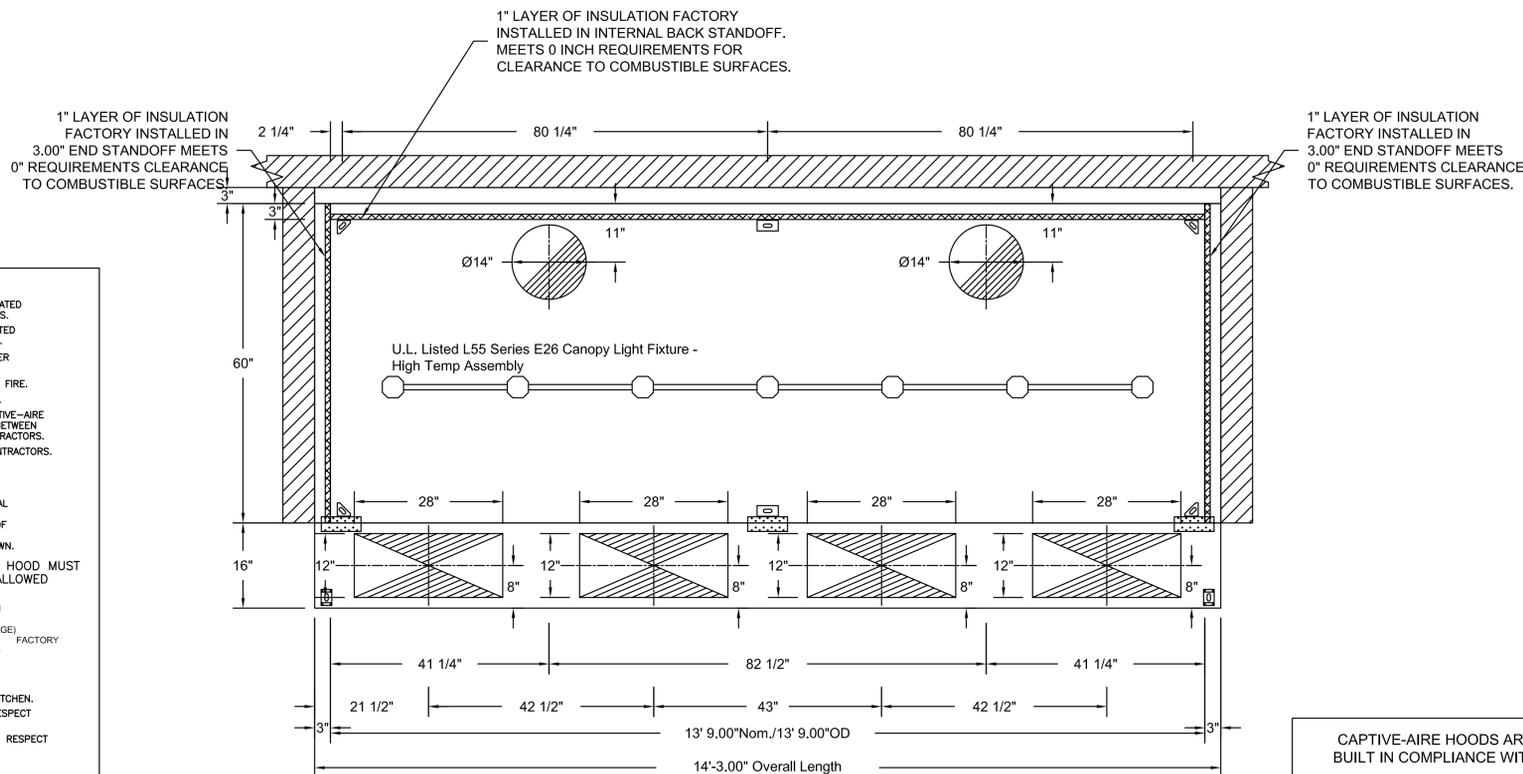
**PERFORATED SUPPLY PLENUM(S)**

HOOD NO.	TAG	POS.	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)			
							WIDTH	LENG.	DIA.	CFM
1		Front	171"	16"	6"	MUA	12"	28"	750	0.211"
2		Front	171"	16"	6"	MUA	12"	28"	750	0.211"



CAPTIVEAIRE DRAWINGS ARE INCLUDED FOR REFERENCE ONLY. INFORMATION INCLUDED IN THE CAPTIVEAIRE DRAWINGS HAS BEEN USED TO DESIGN THE DUCTWORK SERVING EQUIPMENT FURNISHED BY CAPTIVEAIRE.

SECTION VIEW - MODEL 6030ND-2-PSP-F HOODS - #1, #2



PLAN VIEW - Hood #1, Hood #2 13' 9.00" LONG 6030ND-2-PSP-F  
NOTE: Additional hanging angles provided for hoods 12' and longer.

**GENERAL NOTES**

**INSTALLATION**  
ALL ELECTRICAL "FIELD" CONNECTIONS AND RELATED INTERCONNECTIONS BY ELECTRICAL CONTRACTORS.  
ALL PLUMBING "FIELD" CONNECTIONS AND RELATED INTERCONNECTIONS BY PLUMBING CONTRACTORS.  
ALL CONNECTIONS FROM CAPTIVE-AIRE DUCT PER MECHANICAL CONTRACTORS' PLANS.  
COOKING EQUIPMENT TO SHUTOFF IN EVENT OF FIRE.  
EXHAUST FANS TO TURN ON IN EVENT OF FIRE.  
ALL LIGHTS FIXTURE SHOWN INSTALLED BY CAPTIVE-AIRE ARE FACTORY PREWIRED. INTERCONNECTIONS BETWEEN HOODS AND TO SWITCHES BY ELECTRICAL CONTRACTORS.  
LAMPS FOR LIGHT FIXTURES BY INSTALLING CONTRACTORS.  
SEISMIC RESTRAINTS ARE RESPONSIBILITY OF INSTALLING CONTRACTOR.  
INSTALLING CONTRACTORS ASSUME ALL RELATED RESPONSIBILITY FOR VERIFICATION OF DIMENSIONAL DATA CONTAINED ON THESE DOCUMENTS FOR ACCURACY, INTEGRATION, AND ADMINISTRATION OF CODE REQUIREMENTS IN EFFECT PRIOR TO ANY RELEASE FOR PRODUCTION OF EQUIPMENT SHOWN.  
ALL WALLS THAT COME WITHIN 18" OF HOOD MUST BE METAL STUDS. WOOD STUDS NOT ALLOWED.  
GREASE DUCTS SERVING TYPE I HOODS SHALL BE CONSTRUCTED OF STEEL NOT LESS THAN 0.065 INCH (1.6MM) (NO. 16 GAGE) IN THICKNESS OR STAINLESS STEEL NOT LESS THAN 0.044 INCH (1.1MM) (NO. 18 GAGE) IN THICKNESS. EXCEPTION LISTED & LABELED.  
BUILT KITCHEN GREASE DUCTS SHALL BE INSTALLED IN ACCORDANCE WITH IMC SECTION 304.1

**BALANCE**  
KITCHEN HOODS MUST BE BALANCED WITH KITCHEN. KITCHEN SHALL BE SLIGHT NEGATIVE WITH RESPECT TO DINING AREA.  
RESTAURANT SHALL BE SLIGHT POSITIVE WITH RESPECT TO AMBIENT PRESSURE.

**ADDITIONAL**  
WRITTEN HOOD DIMENSIONS HAVE PRECEDENCE OVER SCALE.  
SIGNED AND "APPROVED" COPIES OF THIS DOCUMENT MUST BE RECEIVED BY THE FACTORY PRIOR TO COMMENCEMENT OF FABRICATION.

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SHEET TITLE:  
**MECHANICAL  
DETAILS**

PROJECT #: 3765.0000  
DRAWN BY: MTC  
CHECKED BY: MTC  
ISSUE: DATE:  
IPCIA SUBMITTAL 04.07.16



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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.  
FOR REFERENCE ONLY  
Signature: \_\_\_\_\_  
Date: 04/08/2016 Reg. No. \_\_\_\_\_

**M5.1**

COMPLETE INSTALLATION OPERATION & MAINTENANCE MANUALS CAN BE DOWNLOADED FROM CAPTIVEAIRE'S WEBSITE: [www.captiveaire.com](http://www.captiveaire.com)

These products and others are available for demonstration at our Minneapolis, MN display center  
FOR QUESTIONS OR FURTHER INFORMATION, CONTACT CAPTIVEAIRE - REGION 75 - VENPRO OFFICE  
PHONE 877-881-7582 OR FAX 919-747-5666  
REG75@CAPTIVEAIRE.COM



JOB Keg & Case	
LOCATION SAINT PAUL, MN.	
DATE 3/21/2016	JOB # 2597551
DWG # 32116KEG_AC	DRAWN BY AMC-75
REV.	SCALE NTS



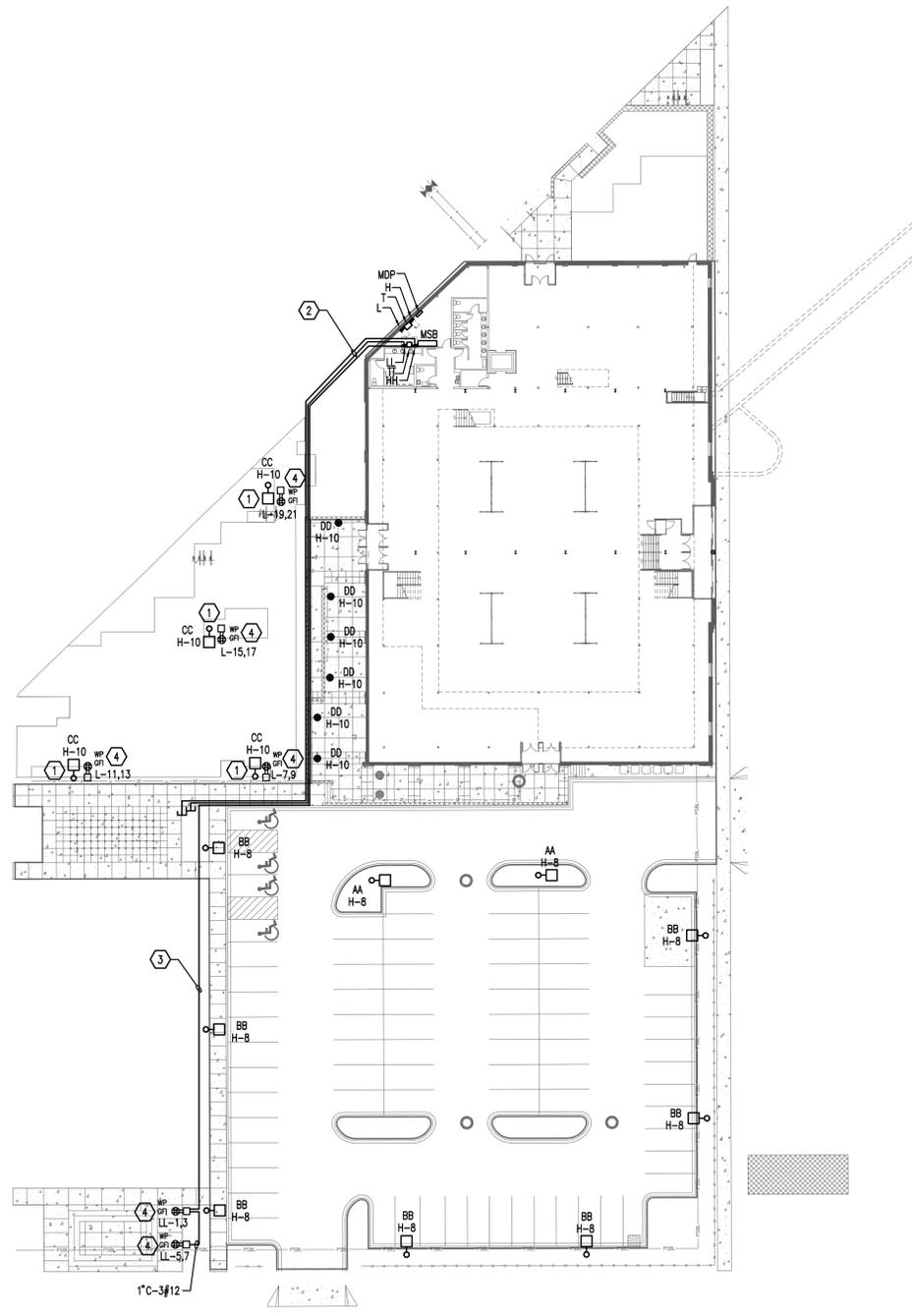


# GENERAL NOTES

A. SEE E0.0 FOR GENERAL NOTES.

## KEY NOTES

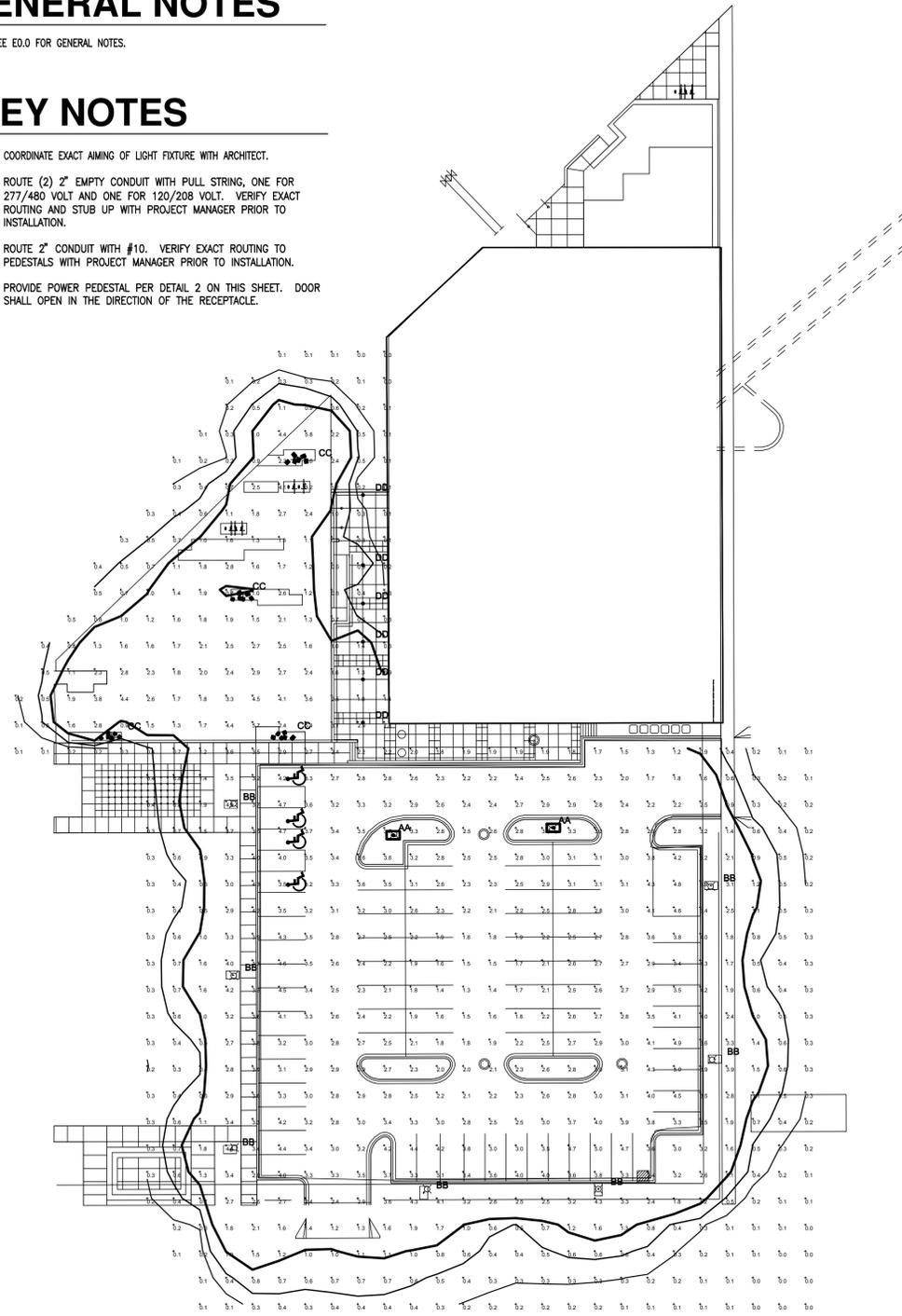
- 1 COORDINATE EXACT AIMING OF LIGHT FIXTURE WITH ARCHITECT.
- 2 ROUTE (2) 2" EMPTY CONDUIT WITH PULL STRING, ONE FOR 277/480 VOLT AND ONE FOR 120/208 VOLT. VERIFY EXACT ROUTING AND STUB UP WITH PROJECT MANAGER PRIOR TO INSTALLATION.
- 3 ROUTE 2" CONDUIT WITH #10. VERIFY EXACT ROUTING TO PEDESTALS WITH PROJECT MANAGER PRIOR TO INSTALLATION.
- 4 PROVIDE POWER PEDESTAL PER DETAIL 2 ON THIS SHEET. DOOR SHALL OPEN IN THE DIRECTION OF THE RECEPTACLE.



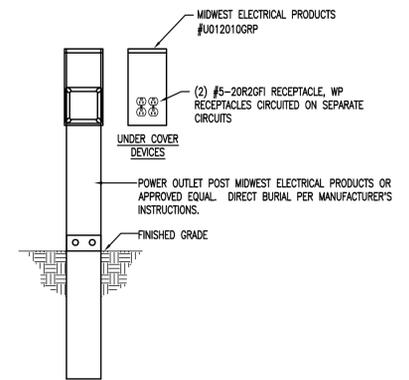
1 SITE PLAN  
SCALE: 1"=30'-0"

LIGHT FIXTURE SCHEDULE									
FXLT. TYPE	DESCRIPTION	VOLTAGE	LAMPS TYPE	QTY/ FXLT.	VA/ FXLT.	MANUFACTURER	CATALOG NUMBER	NOTES	
AA	RECESSED SQUARE LED MOUNTED ON 30" TYPICAL SQUARE STEEL POLE. POLE MOUNTED AREA MUST BE CORROSION RESISTANT ALUMINUM OR DNO CAPS. EXTRUDED ALUMINUM ARE WITH INTERNAL BOLT. FINISH SHALL BE BLACK TYPE V SQUARE WIDE DISTRIBUTION. LIGHT SQUARE, 700 MA DRIC CURRENT.	277	LED 3000K	1	136	NOBAMA-EDISON	GLEW-RE-04-LED-E1-360-36 NO EQUAL	1	
BB	RECESSED SQUARE LED MOUNTED ON 30" TYPICAL SQUARE STEEL POLE. POLE MOUNTED AREA MUST BE CORROSION RESISTANT ALUMINUM OR DNO CAPS. EXTRUDED ALUMINUM ARE WITH INTERNAL BOLT. FINISH SHALL BE BLACK TYPE V SQUARE WIDE DISTRIBUTION. LIGHT SQUARE, 700 MA DRIC CURRENT.	277	LED 3000K	1	136	NOBAMA-EDISON	GLEW-RE-04-LED-E1-360-36 NO EQUAL	1	
CC	15 FT. POLE WITH 5 FIXTURES PER POLE. STRAIGHT SQUARE STEEL POLE.	277	LED 3000K	5	40	LANDSCAPE FIXING	AME 151183 DSC 50X 101 D2 NO EQUAL	1	
DD	RECLARD FLOOR WASHLIGHT. CROSS SHAPED ALUMINUM CYLINDRICAL HOUSING CORROSION-RESISTANT CAST ALUMINUM DOUBLE POWER-COATED MET LOCATION, DUST-PROOF.	277	LED 3000K	1	10	ERCO	WOPKLL 3333A00-033 NO EQUAL	1	

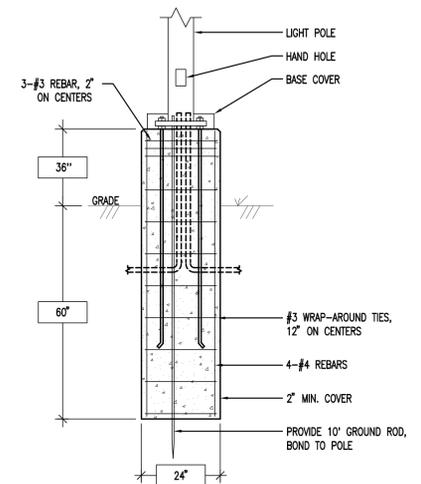
FIXTURE NOTES  
1. COORDINATE FINISH AND COLOR WITH ARCHITECT PRIOR TO ORDERING.



2 PHOTOMETRIC PLAN  
SCALE: 1"=30'-0"



2 ELECTRICAL POWER PEDESTAL  
NO SCALE



3 POLE BASE DETAIL  
NO SCALE

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SHEET TITLE:  
ELECTRICAL  
SITE PLAN

PROJECT #: 3765.0000  
DRAWN BY: KO  
CHECKED BY: MWF  
ISSUE: DATE:  
IPECA SUBMITTAL 04.07.16

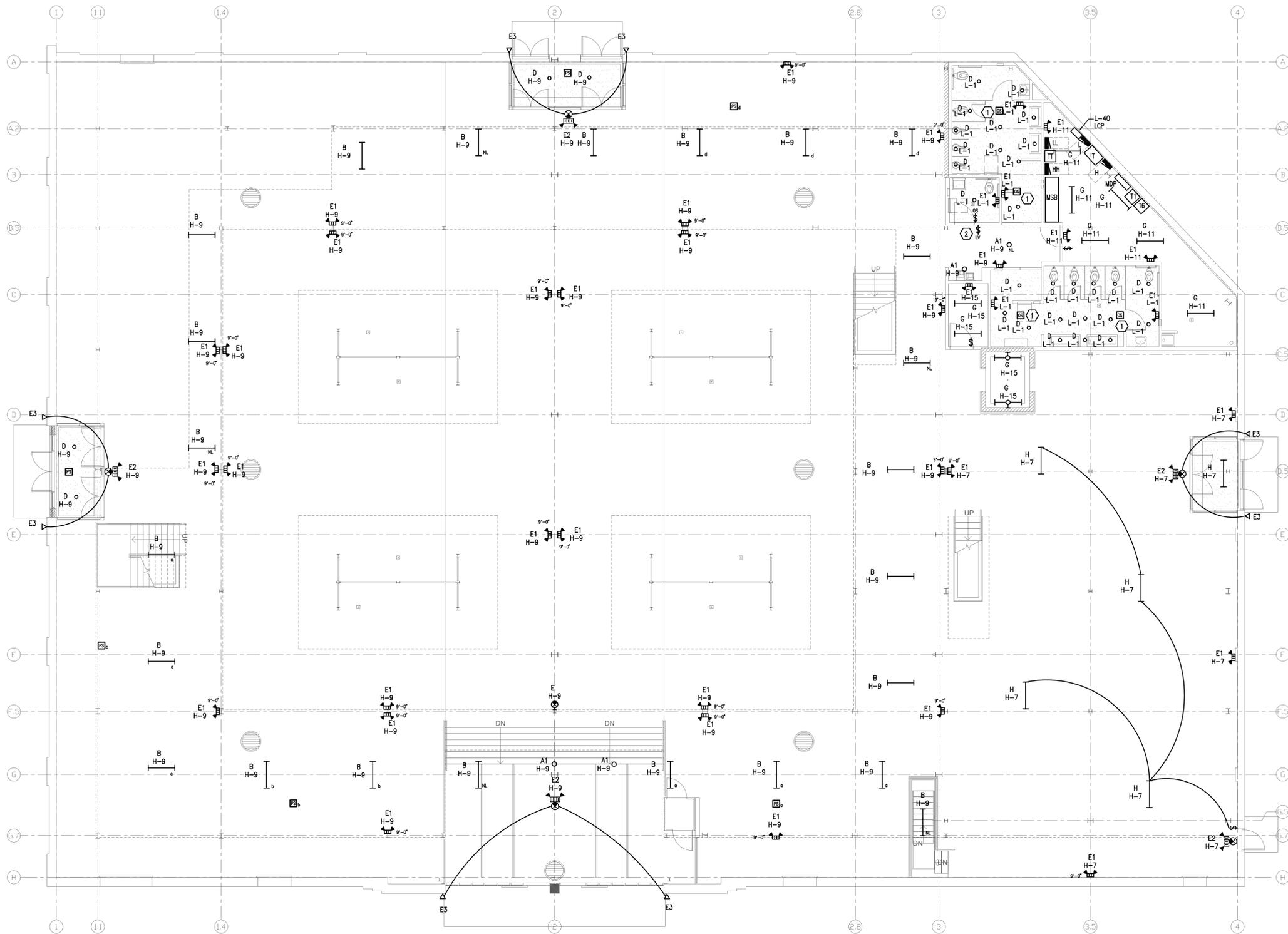


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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: *Matthew W. Fuels*  
Name: MATTHEW W. FUELS  
Date: 04/08/2016 Reg No. 49887

E0.1



**1** FIRST FLOOR PLAN - LIGHTING PLAN  
SCALE: 1/8" = 1'-0"

**GENERAL NOTES**

A. SEE E0.0 FOR GENERAL NOTES.

**KEY NOTES**

- ① PROVIDE MOTION SENSOR SWITCH WITH ULTRASONIC TO CONTROL LIGHTING IN THIS ROOM. COORDINATE WITH MANUFACTURER'S WIRING DIAGRAMS. LOCATE DEVICE PER MANUFACTURER'S RECOMMENDATION.
- ② PROVIDE A LOW VOLTAGE SWITCH. SEE LIGHTING CONTROL DETAILS ON SHEET E1.2.

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SHEET TITLE:  
FIRST FLOOR  
LIGHTING  
PLAN

PROJECT #: 3765.0000  
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ISSUE: DATE:  
IPCA SUBMITTAL 04.07.16



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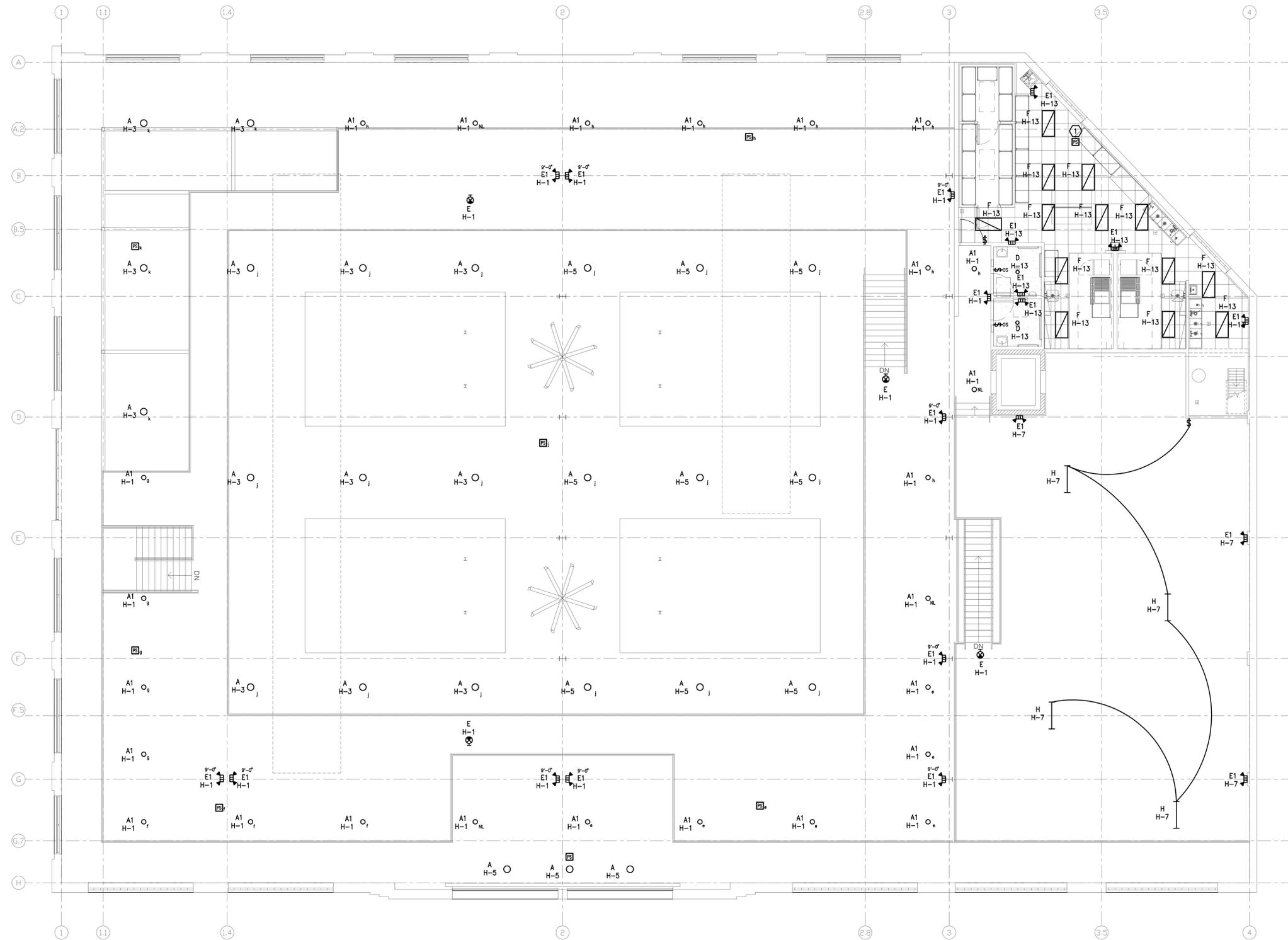
**E1.0**

## GENERAL NOTES

A SEE E0.0 FOR GENERAL NOTES.

## KEY NOTES

① PHOTOCELL ON ROOF FACING NORTH. CONNECT TO LIGHTING CONTROL PANEL ON FIRST FLOOR. PROVIDE 3/4" CONDUIT FOR CABLING.



**1 SECOND FLOOR PLAN - LIGHTING PLAN**  
SCALE: 1/8" = 1'-0"

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SHEET TITLE:  
SECOND  
FLOOR  
LIGHTING  
PLAN

PROJECT #: 3765.0000  
DRAWN BY: KO  
CHECKED BY: MWF  
ISSUE: DATE:  
NPCA SUBMITTAL 04.07.16



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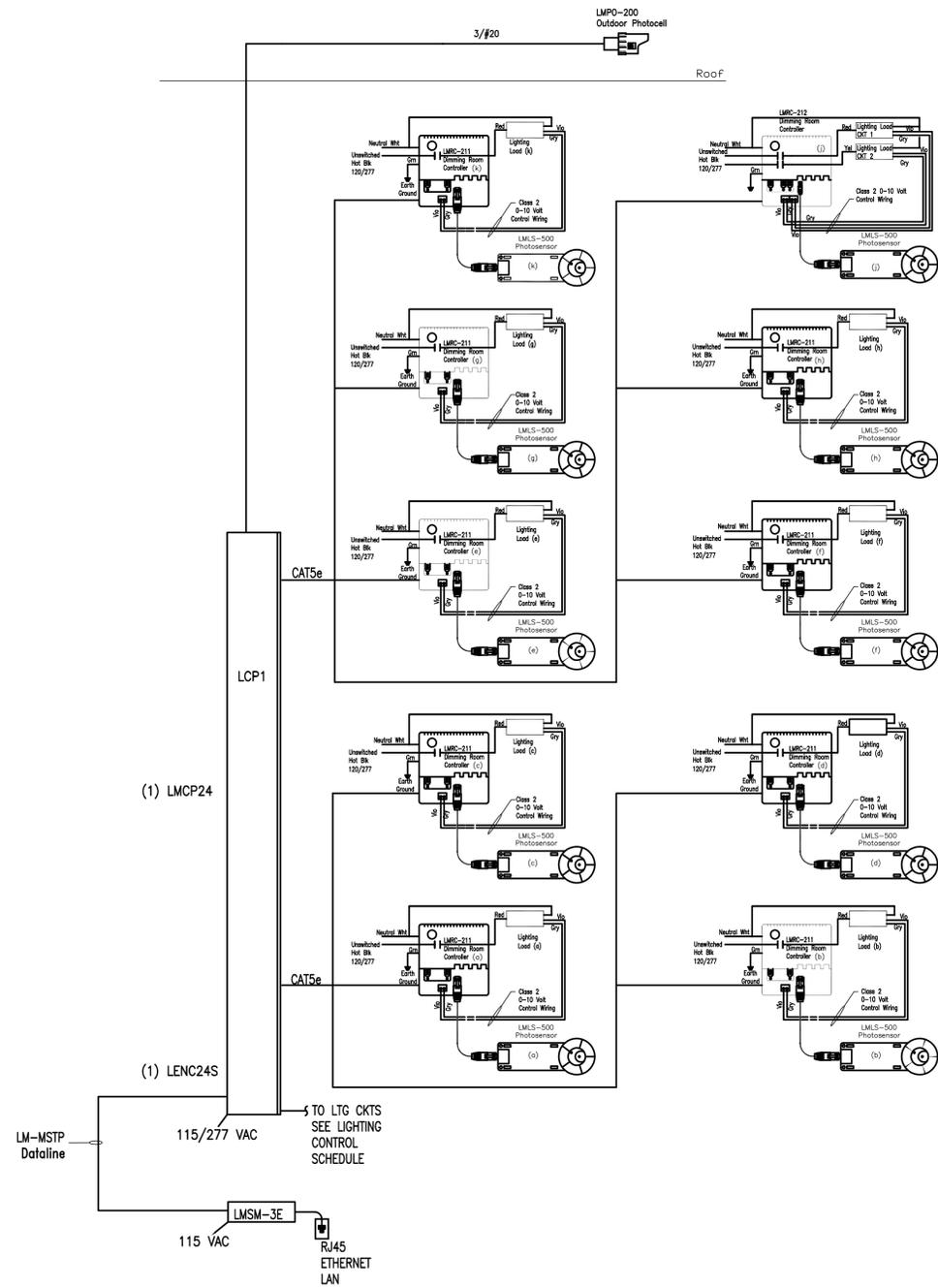
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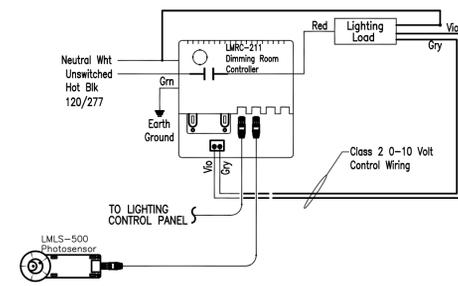
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Date: 04/08/2016 Reg. No. 49887

**E1.1**



**1 LIGHTING CONTROL RISER**  
SCALE: NO SCALE



**2 VESTIBULE LIGHTING CONTROLS**  
SCALE: NO SCALE

FXLT. TYPE	DESCRIPTION	VOLTAGE	LAMPS		VA/ FXLT.	MANUFACTURER	CATALOG NUMBER	NOTES
			TYPE	QTY/ FXLT.				
A	LED HIGH BAY MOUNT AT 22'-0" HT	277	LED 4100K	1	150	SPECORADE	HEX-150W-277V-12000K(4000K)	2
A1	LED HIGH BAY MOUNT AT 10'-0" HT	277	LED 4100K	1	100	SPECORADE	HEXAG-100-4000K	2
B	4" LED STRIP FIXTURE DIE FORMED ORS CHANNEL, 0-10V DIMMING HIGH REFLECTIVE BAYED WHITE ENAMEL FINISH SEM-FROST LENS WITH NARROW DISTRIBUTION MOUNT AT 10'-0" HT	277	LED 3000K	1	41	METALUX	4KLED-104-46SL-UN-UNV-LAS-001-U	
C	NOT USED	-	-	-	-	-	-	
D	6" LED SHALLOW LENS DOWN LIGHT GALVANNEED STEEL FRAME AND ADJUSTABLE BAR HANGER. INTERNAL LENS, ONE PIECE ALUMINUM 0-10V DIMMING	UNV	LED 4000K	1	12	HALO	PO1000D10-F0M56A0-61VC	
E	EXIT THERMOPLASTIC, STENCIL RED LETTER WHITE HOUSING	UNV	LED	1	2	LITHONIA SURE-LITE	LOW LED SERIES	
E1	THERMOPLASTIC EMERGENCY BATTERY PACK BATTERY TYPE WITH THIN EMERGENCY LED HEADS	UNV	LED	2	1.5	LITHONIA SURE-LITE	ELM2 LED	
E2	THERMOPLASTIC EXIT/EMERGENCY COMBO CAPACITY FOR REMOTE EMERGENCY HEADS	UNV	LED	2	1.5	LITHONIA SURE-LITE	UXM-LED-W-R-HORD	
E3	REMOTE HEAD	UNV	WITH LANT	1	10.8	LITHONIA SURE-LITE	ELA APRR - DB - FWD	
F	2 x 4 RECESS LED LENSED TRIFLER POSITIVE SPRING LOCKED STEEL LATCHES WITH BAYED WHITE ENAMEL FINISH DIE FORMED, FLAT STEEL DOOR WITH FROST #12 PATTERN ACRYLIC PRISMATIC LENS	277	LED 4000K	1	43	METALUX	24R-104-48-F1-UN-1840-119/150	
G	4" INDUSTRIAL STRIP WITH WIRE GUARD, BAYED WHITE ENAMEL FINISH SURFACE OR SUSPENSION MOUNTING 0-10V DIMMING	277	LED 4000K	1	35	METALUX	4-LED-104-S-R-WC-UN-1840	
H	4" 2 LAMP STRIP FLUORESCENT	277	(2)F32T8	2	52	METALUX	SF-232-UNV	

FIXTURE NOTES:  
1. COORDINATE FINISH AND PENDANT LENGTH WITH ARCHITECT PRIOR TO ORDERING.  
2. BOTTOM OF FIXTURE TO BE MOUNTED AT 22'-4"

LIGHTING CONTROL PANEL				
LCP-1				
RELAY #	PANEL / CKT NO.	CONTROL DESCRIPTION	AREA	NOTES
1	H-8	PHOTOCELL / SCHEDULE	EXTERIOR PARKING LOT POLES	?
2	H-10	PHOTOCELL / SCHEDULE	EXTERIOR PLAZA	
3	H-9	SCHEDULE	FIRST FLOOR COMMON AREAS	
4	H-1	SCHEDULE	SECOND FLOOR COMMON AREAS	
5				
6				
7				
8				

NOTES:  
1. OBTAIN SCHEDULES FROM OWNER AND PROGRAM SYSTEM. ALL CONTROL PROGRAMMING SHALL BE BY CONTRACTOR AS DIRECTED BY THE OWNER.

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SHEET TITLE:  
ELECTRICAL DETAIL AND  
LIGHT SCHEDULE

PROJECT #: 3765.0000  
DRAWN BY: KO  
CHECKED BY: MWF  
ISSUE: DATE:  
UPCA SUBMITTAL 04.07.16



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**E1.2**









KITCHEN EQUIPMENT CONNECTION SCHEDULE									
ITEM NUMBER	DESCRIPTION	VOLTS / PHASE	KW	AMPS	HP	CIRCUIT NUMBER	CIRCUIT BREAKER	FEEDER PH-G-C	NOTES
E1	WALK-IN COOLER	120/1	--	20	--	L1A-2	20/1	12-12-1/2"	3
E1	WALK-IN FREEZER	120/1	--	20	--	L1A-1	20/1	12-12-1/2"	3
E2A	COOLER COMPRESSOR	208/1	--	6.8	--	L1A-4,6	20/2	12-12-1/2"	
E2B	COOLER COMPRESSOR	120/1	--	1.8	--	L1A-8	20/1	12-12-1/2"	
E3A	FREEZER COMPRESSOR	208/1	--	10.2	--	L1A-3,5	20/2	12-12-1/2"	
E3B	FREEZER COMPRESSOR	120/1	--	6.6	--	L1A-7	20/1	12-12-1/2"	
E17	EXHAUST HOOD (LIGHTS)	120/1	--	20	--	L1A-29	20/1	12-12-1/2"	1
E17	EXHAUST HOOD (LIGHTS)	120/1	--	20	--	L1A-30	20/1	12-12-1/2"	1
E23	REFRIGERATED EQUIPMENT STAND	120/1	--	4.3	--	L1A-11	20/1	12-12-1/2"	2
E23	REFRIGERATED EQUIPMENT STAND	120/1	--	4.3	--	L1A-12	20/1	12-12-1/2"	2
E24	CONNECTION OVEN	120/1	--	8	--	L1A-15	20/1	12-12-1/2"	2
E24	CONNECTION OVEN	120/1	--	8	--	L1A-16	20/1	12-12-1/2"	2
E24	CONNECTION OVEN	120/1	--	8	--	L1A-19	20/1	12-12-1/2"	2
E24	CONNECTION OVEN	120/1	--	8	--	L1A-20	20/1	12-12-1/2"	2

GENERAL NOTES:  
A. SEE FOODSERVICE ELECTRICAL PLANS FOR ROUGH-IN LOCATIONS AND ADDITIONAL INFORMATION.  
B. ALL 120V 15A OR 20A RECEPTACLES IN THE KITCHEN AREAS SHALL BE GFCI PROTECTED PER NEC.

SPECIFIC NOTES:  
1. COORDINATE ALL REQUIREMENT, LOCATION AND CONTROL WITH CAPTIVE/DRYING DRAWINGS AND SPECIFICATIONS PRIOR TO INSTALLATION AND FINAL ELECTRICAL CONNECTION.  
2. PROVIDE SHUNT TRIP CIRCUIT BREAKER.  
3. EC TO EXTEND AND CONNECT TO PRE-MOUNTED SWITCHES, LIGHTS, DOOR ALARM, AND HEATER. VERIFY REQUIREMENTS WITH MANUFACTURER.

MOTOR SCHEDULE																							
MOTOR NUMBER	EQUIPMENT	LOCATION	KW	HP	MCA	VOLTAGE	PHASE	STARTER			DISCONNECT FUSW		CONTROL DEVICE	FURNISHED BY	WIRED BY	DEVICES TO BE INTERLOCKED	FURNISHED BY	WIRED BY	CIRCUIT NUMBER	CIRCUIT BREAKER	FEEDER PH-G-C	NOTES	MOTOR NUMBER
								TYPE	SIZE	LOC	BY	BY											
RTU-1	ROOF TOP UNIT	ROOF	--	57	460	3	--	--	--	MECH	60	ELEC	--	MECH	ELEC	--	MECH	ELEC	MOP-1	60	3-10-1 1/4"	--	RTU-1
RTU-2	ROOF TOP UNIT	ROOF	--	57	460	3	--	--	--	MECH	60	ELEC	--	MECH	ELEC	--	MECH	ELEC	MOP-3	60	3-10-1 1/4"	--	RTU-2
RTU-3	ROOF TOP UNIT	ROOF	--	48	460	3	--	--	--	MECH	60	ELEC	--	MECH	ELEC	--	MECH	ELEC	MOP-2	50	3-10-1 1/4"	--	RTU-3
RTU-4	ROOF TOP UNIT	ROOF	--	48	460	3	--	--	--	MECH	60	ELEC	--	MECH	ELEC	--	MECH	ELEC	MOP-4	50	3-10-1 1/4"	--	RTU-4
RTU-5	ROOF TOP UNIT	ROOF	--	26	460	3	--	--	--	MECH	30	ELEC	--	MECH	ELEC	--	MECH	ELEC	H-13.5	30	10-10-1"	--	RTU-5
F-1	FAN	CEILING	--	10	120	1	--	--	--	MECH	--	ELEC	--	MECH	ELEC	--	MECH	ELEC	L-23	20	12-12-1"	--	F-1
F-2	FAN	CEILING	--	10	120	1	--	--	--	MECH	--	ELEC	--	MECH	ELEC	--	MECH	ELEC	L-25	20	12-12-1"	--	F-2
EF-1	EXHAUST FAN	ROOF - TOILETS	--	1/2	--	120	1	--	--	MECH	30	ELEC	--	MECH	ELEC	--	MECH	ELEC	L-27	20	12-12-1"	--	EF-1
EF-2	EXHAUST FAN	ROOF - HOOD H2	--	3	--	208	3	--	--	MECH	30	ELEC	--	MECH	ELEC	H-2	MECH	ELEC	L1B-2,4,6	30	10-10-1"	--	EF-2
EF-3	EXHAUST FAN	ROOF - HOOD H1	--	3	--	208	3	--	--	MECH	30	ELEC	--	MECH	ELEC	H-1	MECH	ELEC	L1B-1,3,5	30	10-10-1"	--	EF-3
WH-1	WATER HEATER	UPPER KITCHEN AREA	12	--	--	480	3	--	--	MECH	30	ELEC	--	MECH	ELEC	--	MECH	ELEC	H-19,21,23	30	10-10-1"	--	WH-1
AC-1	AIR CONDITIONER	ELEVATOR EQUIP ROOM	--	1	208	1	--	--	--	MECH	30	ELEC	--	MECH	ELEC	--	MECH	ELEC	L-29,31	20	12-12-1"	--	AC-1
CU-1	CONDENSING UNIT	ROOF	--	13	208	1	--	--	--	MECH	30	ELEC	--	MECH	ELEC	--	MECH	ELEC	L-33,35	20	12-12-1"	--	CU-1
ELEVATOR	ELEVATOR CONTROLLER	ELEVATOR MACHINE ROOM	--	20	--	460	3	SOLID STATE	--	WFR	60/45	ELEC	--	--	--	--	--	--	MOP-14	45	6-10-1"	--	ELEVATOR
LIFT	LIFT	STAR AREA	--	--	--	120	1	--	--	WFR	30	ELEC	--	--	--	--	--	--	L-20	30	10-10-1"	1	LIFT
MUA-1	MAKE UP AIR	ROOF	--	3	--	208	3	--	--	MECH	30	ELEC	--	MECH	ELEC	EF-3	MECH	ELEC	L1B-7,8,11	30	10-10-1"	--	MUA-1
MUA-2	MAKE UP AIR	ROOF	--	3	--	208	3	--	--	MECH	30	ELEC	--	MECH	ELEC	EF-2	MECH	ELEC	L1B-8,10,12	30	10-10-1"	--	MUA-2
EDC-1	ELECTRIC HEATER	TOILETS	15	--	--	480	3	--	--	MECH	30	ELEC	--	MECH	ELEC	--	MECH	ELEC	H-37,39,41	40	8-10-1"	--	EDC-1
EH-1	ELECTRIC HEATER	MECHANICAL	5	--	--	277	1	--	--	MECH	30	ELEC	--	MECH	ELEC	--	MECH	ELEC	H-12	30	10-10-1"	--	EH-1
EH-2	ELECTRIC HEATER	EAST VESTIBULE	5	--	--	277	1	--	--	MECH	30	ELEC	--	MECH	ELEC	--	MECH	ELEC	H-14	30	10-10-1"	--	EH-2
EH-3	ELECTRIC HEATER	WEST VESTIBULE	5	--	--	277	1	--	--	MECH	30	ELEC	--	MECH	ELEC	--	MECH	ELEC	H-16	30	10-10-1"	--	EH-3
EH-4	ELECTRIC HEATER	SOUTH VESTIBULE	4	--	--	277	1	--	--	MECH	30	ELEC	--	MECH	ELEC	--	MECH	ELEC	H-18	30	10-10-1"	--	EH-4
EH-5	ELECTRIC HEATER	NORTH VESTIBULE	4	--	--	277	1	--	--	MECH	30	ELEC	--	MECH	ELEC	--	MECH	ELEC	H-20	30	10-10-1"	--	EH-5
H1	EXHAUST HOOD	KITCHEN AREA	--	--	--	--	--	--	--	MECH	--	ELEC	--	MECH	ELEC	EF-3/MUA-1	MECH	ELEC					H1
H2	EXHAUST HOOD	KITCHEN AREA	--	--	--	--	--	--	--	MECH	--	ELEC	--	MECH	ELEC	EF-2/MUA-2	MECH	ELEC					H2
SP-1	SUMP PUMP	MECHANICAL ROOM	--	1/3	120	1	--	--	--	MECH	--	ELEC	--	MECH	ELEC	--	MECH	ELEC	L-38	20	12-12-1"	--	SP-1

ABBREVIATIONS:  
HSA - HAND/OFF/AUTOMATIC, TT - THERMAL TOGGLE, BCE - BUILDING CONTROLLER ENCLOSURE, CPI - CAROLINA PRODUCTS INC.

GENERAL NOTES:  
1. ELECTRICAL CONTRACTOR TO PROVIDE A SIEMENS TYPE GF321N DISCONNECT SWITCH. COORDINATE ALL REQUIREMENTS WITH LIFT SUPPLIER PRIOR TO INSTALLATION AND ROUGH-IN.

PANEL SCHEDULE									
PANEL: LL		LOCATION: MECH		VOLTS: 208 / 120		PH: 3		W: 4	
AMP MAIN BRKR: 100	AMP MLC:	SCCR: 10,000	MOUNT: SURFACE	FED FROM: HH					
CIRCUIT DESCRIPTION	LOAD VA	CKT BKR	PH	CIR #	P	CKT BKR	LOAD VA	CIRCUIT DESCRIPTION	
PEDESTAL RECEPTACLE	180	1	A	2			SPACE		
PEDESTAL RECEPTACLE	180	2	B	4			SPACE		
PEDESTAL RECEPTACLE	180	3	C	6			SPACE		
PEDESTAL RECEPTACLE	180	4	A	8			SPACE		
SPARE	20	1	B	10			SPACE		
SPARE	20	1	C	12			SPACE		
SPARE	20	1	A	14			SPACE		
SPARE	15	1	B	16			SPACE		
SPARE	17	1	C	18			SPACE		
SPARE	18	1	A	20			SPACE		
SPARE	21	1	B	22			SPACE		
SPARE	23	1	C	24			SPACE		
SPARE	25	1	A	26			SPACE		
SPARE	27	1	B	28			SPACE		
SPARE	29	1	C	30			SPACE		
SPARE	31	1	A	32			SPACE		
SPARE	33	1	B	34			SPACE		
SPARE	35	1	C	36			SPACE		
SPARE	37	1	A	38			SPACE		
SPARE	39	1	B	40			SPACE		
SPARE	41	1	C	42			SPACE		

LOAD SUMMARY: CONNECTED FEEDER / SERVICE CALCULATION

PRIMARY FEEDER INPUT DATA: Motor (FLA): 480 Volts, Avail. Fault (def): 0 Amps, Feeder Size: #14 AWG, Feeder Length (L): 25 Ft., Parallel Sets: 1, Power Factor %: 90%, Feeder/Load Amps: 125, "C" Value: 7483 Cu, "Volt Drop" Value: 288

SECONDARY FEEDER INPUT DATA: V-I Secondary: 208 Volts, Transformer KVA: 7.5 KVA, Transformer 2%: 0.008, Avail. Fault (def): 0 Amps, Feeder Size: #14 AWG, Feeder Length (L): 25 Ft., Parallel Sets: 1, Power Factor %: 90%, Feeder/Load Amps: 125, "C" Value: 16673 Cu, "Volt Drop" Value: 127

CONNECTED LOAD PER PHASE: A: 0 KVA, B: 0 KVA, C: 0 KVA

VOLTAGE DROP CALCULATIONS: Prim Vdrop = 0.84 Volts, Sec Vdrop = 0.71 Volts

RMS BOLTED 3 PHASE SHORT CIRCUIT CURRENT CALCULATIONS: Icc (Mtr Secondary) = 0 Amps, Icc (At Panel) = 0 Amps, Icc (w/ motor contrib.) = 0 Amps

PANEL SCHEDULE									
PANEL: HH		LOCATION: MECH 106		VOLTS: 480 / 277		PH: 3		W: 4	
AMP MAIN BRKR: 200	AMP MLC:	SCCR: 14,000	MOUNT: SURFACE	FED FROM: MSB					
CIRCUIT DESCRIPTION	LOAD VA	CKT BKR	PH	CIR #	P	CKT BKR	LOAD VA	CIRCUIT DESCRIPTION	
SPACE				1	A	2	--	8884	
SPACE				3	B	4	3	80	7348
SPACE				5	C	6	--	7412	
SPACE				7	A	8	--		
SPACE				9	B	10	--		
SPACE				11	C	12	--		
SPACE				13	A	14	--		
SPACE				15	B	16	--		
SPACE				17	C	18	--		
SPACE				19	A	20	--		
SPACE				21	B	22	--		
SPACE				23	C	24	--		
SPACE				25	A	26	--		
SPACE				27	B	28	--		
SPACE				29	C	30	--		
SPACE				31	A	32	--		
SPACE				33	B	34	--		
SPACE				35	C	36	--		
SPACE				37	A	38	--		
SPACE				39	B	40	--		
SPACE				41	C	42	--		

LOAD SUMMARY: CONNECTED FEEDER / SERVICE CALCULATION

PRIMARY FEEDER INPUT DATA: Motor (FLA): 480 Volts, Avail. Fault (def): 0 Amps, Feeder Size: #14 AWG, Feeder Length (L): 200 Ft., Parallel Sets: 1, Power Factor %: 90%, Feeder/Load Amps: 200, "C" Value: 13923 Cu, "Volt Drop" Value: 151

SECONDARY FEEDER INPUT DATA: V-I Secondary: 480 Volts, Transformer KVA: 7.5 KVA, Transformer 2%: 0.008, Avail. Fault (def): 0 Amps, Feeder Size: #14 AWG, Feeder Length (L): 200 Ft., Parallel Sets: 1, Power Factor %: 90%, Feeder/Load Amps: 200, "C" Value: 13923 Cu, "Volt Drop" Value: 151

CONNECTED LOAD PER PHASE: A: 9 KVA, B: 7 KVA, C: 7 KVA

VOLTAGE DROP CALCULATIONS: Prim Vdrop = 6.04 Volts, Sec Vdrop = 1.35 Volts

RMS BOLTED 3 PHASE SHORT CIRCUIT CURRENT CALCULATIONS: Icc (Mtr Secondary) = 0 Amps, Icc (At Panel) = 0 Amps, Icc (w/ motor contrib.) = 0 Amps

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**Interior Lighting Compliance Certificate**

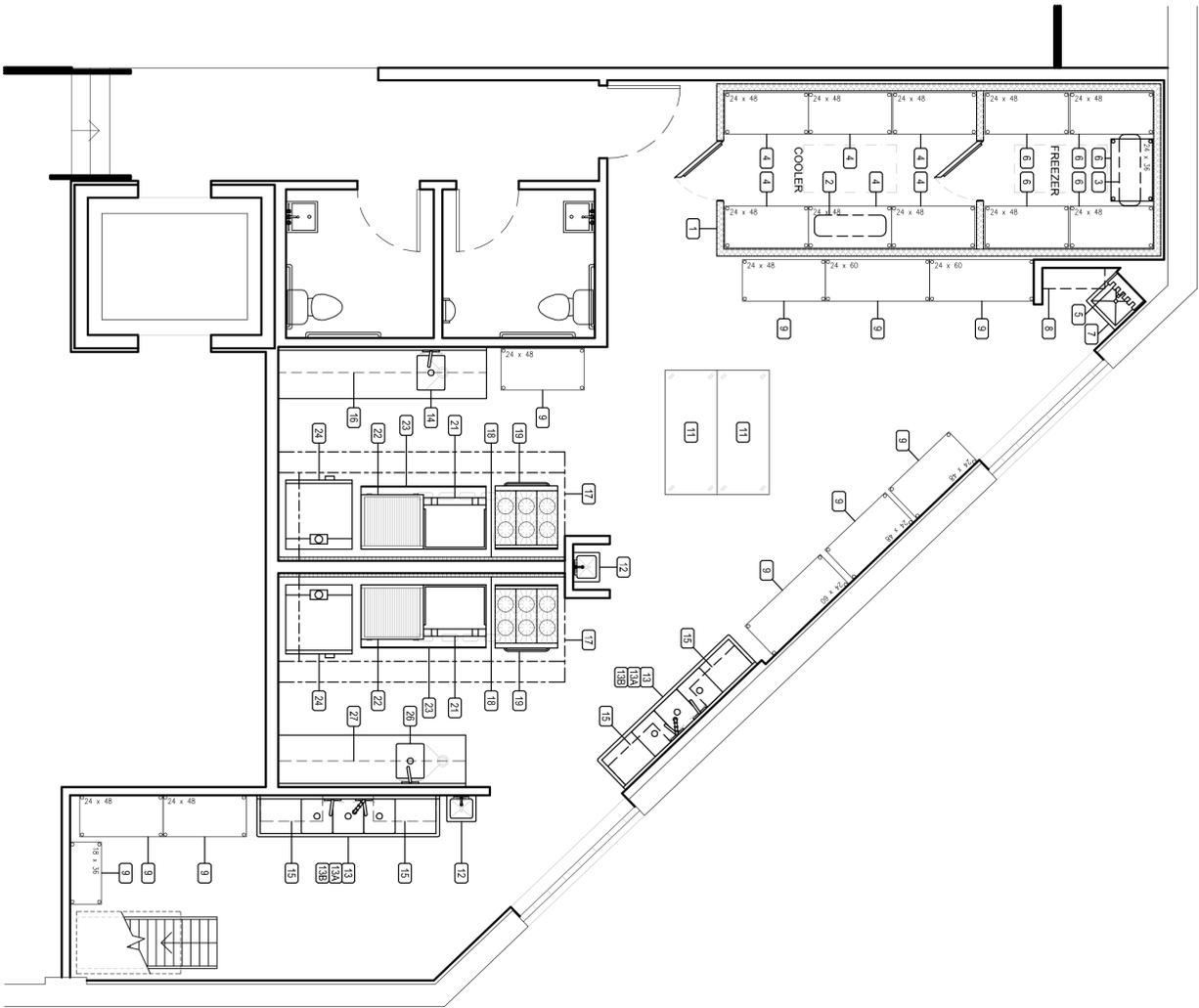
Project Information: 2012 IECC, New Construction, Designer/Contractor: [Redacted]

Additional Efficiency Package: High efficiency HVAC Systems that do not meet the performance requirement will be identified in the mechanical equipment schedule sheet.

Area Category	Floor Area (sq ft)	Allowed Watts (ft² X C)	Actual Watts (ft² X D)
1 Retail	29415	7.28	46761

Proposed Interior Lighting Power

Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	A	B	C	D	E
	Lamp	# of	Fixture	Watt.	(C X E)
1 Retail	LED 1-A High Bay Other	1	29	150	3700
	LED 2-A High Bay Other	1	29	150	2900
	LED 3-B 4' x 4' x 4' Other	1	24	41	984
	LED 4-C 4' x 4' x 4' Other	1	20	41	820
	LED 5-F 4' x 4' x 4' Other	1	13	43	609
	LED 6-G 4' x 4' x 4' Other	1	7	40	280
	Linear Fluorescent 1 ft.				



RESTAURANT EQUIPMENT PLAN  
SCALE 1/4"=1'-0"

NUM	QTY	DESCRIPTION	REMARKS
1	1	WALK-IN COOLER/FREEZER	
2	1	COOLER REFRIGERATION SYSTEM	
3	1	FREEZER REFRIGERATION SYSTEM	
4	6	COOLER SHELVING UNITS	
5	1	MOP HANGER	
6	5	FREEZER SHELVING UNITS	
7	1	MOP SINK	
8	1	WALL-MOUNT OVERSHELF	
9	1	SHELVING UNITS	
10	1	SPARE NUMBER	
11	2	WORK TABLES	
12	2	HAND SINKS	
13	2	3-COMPARTMENT SINKS	
13A	2	PRE-RINSE FAUCETS	
13B	6	LEVER CONTROL DRAINS	
14	1	WORK TABLE WITH SINK	
14A	1	PRE-RINSE FAUCET	
14B	1	LEVER CONTROL DRAIN	
15	4	WALL-MOUNT OVERSHELVES	
16	1	WALL-MOUNT OVERSHELF	
17	2	EXHAUST HOODS	
18	2	WALL PANELS	
19	2	6 BURNER RANGES	
20	2	SPARE NUMBER	
21	2	GRIDDLES	
22	2	CHARBROILERS	
23	2	REFRIGERATED EQUIPMENT STANDS	
24	2	DOUBLE CONNECTION OVENS	
25	2	SPARE NUMBER	
26	1	WORK TABLE WITH SINK	
26A	1	PRE-RINSE FAUCET	
26B	1	LEVER CONTROL DRAIN	
27	1	WALL-MOUNT OVERSHELF	

NO.	DATE	REVISIONS

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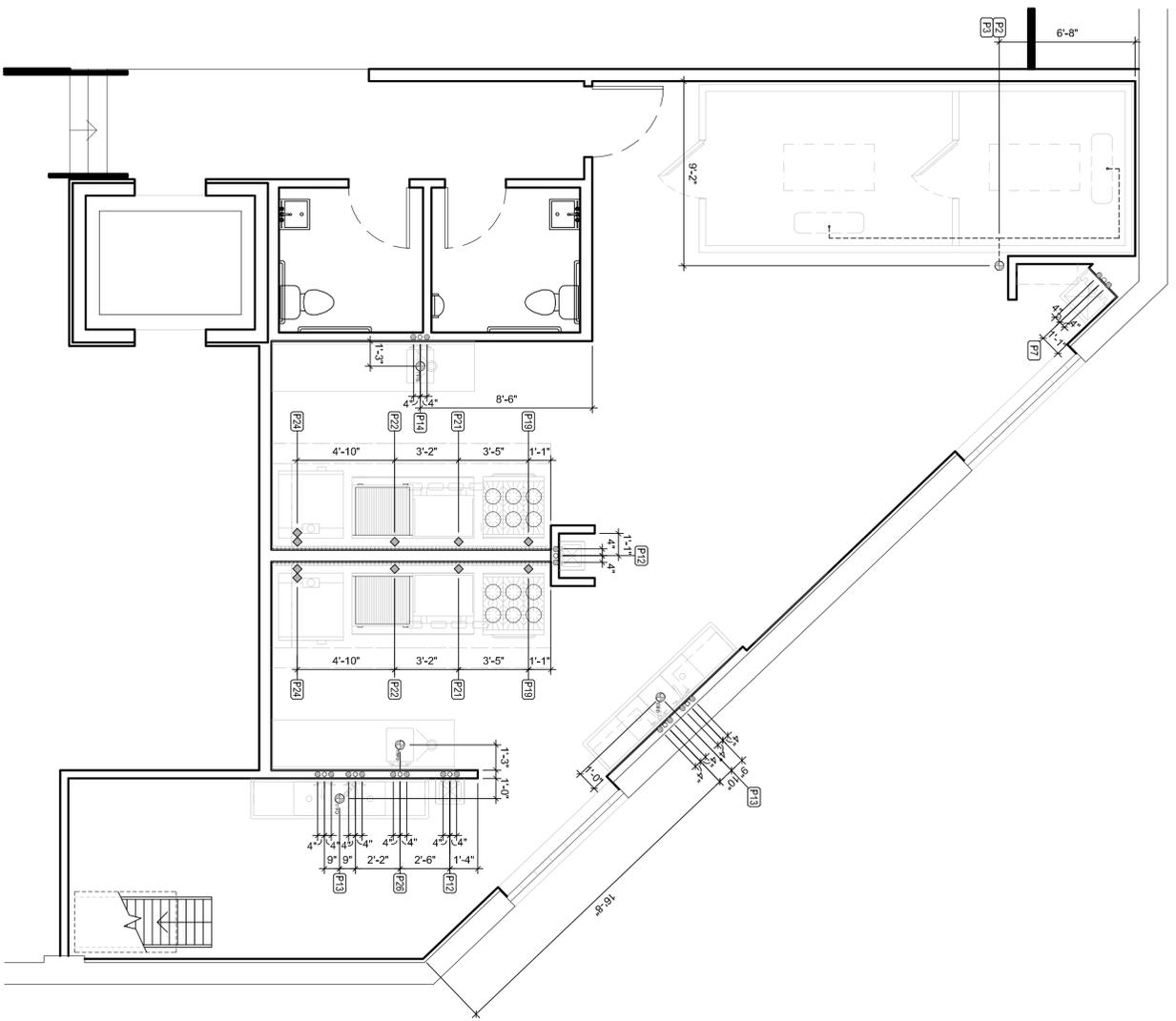
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**EQUIPMENT PLAN**

Sales: WILSON F.  
Scale: 1/4" = 1'-0"  
Release Date: 02/04/16  
Last Update:  
Drawn By: HOCKENBERGS

SHEET NUMBER  
**FS-1**



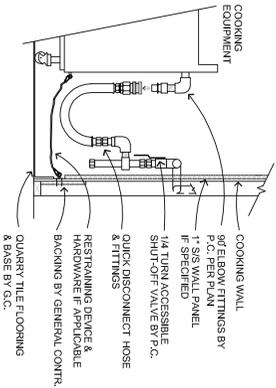


PLUMBING ROUGH IN PLAN  
SCALE 1/4"=1'-0"

PLUMBING ROUGH-IN SCHEDULE												
PLUMBING			GAS									
ITEM NUMBER	DESCRIPTION	COLD WATER SIZE	HOT WATER SIZE	WATER STUB HEIGHT	DIRECT WASTE SIZE	DIRECT WASTE HEIGHT	INDIRECT WASTE SIZE	FLOOR DRAIN TYPE	GAS SIZE	MBTU / HR	GAS STUB HEIGHT	REMARKS
P2	1 COOLER EVAPORATOR						3/4"	FD				PC TO EXTEND INDIRECT WASTE TO FLOOR DRAIN
P3	1 FREEZER EVAPORATOR						3/4"	FD				PC TO EXTEND INDIRECT WASTE TO FLOOR DRAIN
PT	1 MOP SINK	1/2"	1/2"	2'-6"	2"	4"						PC TO CONNECT WATER SUPPLY AND DIRECT WASTE
P12	2 HAND SINKS	1/2"	1/2"	2'-0"	1'-11/2"	1'-6"						PC TO CONNECT WATER SUPPLY AND DIRECT WASTE
P13	2 3-COMPARTMENT SINKS	3/4"	3/4"	2'-0"			2"	TTFD				PC TO CONNECT WATER SUPPLY AND DIRECT WASTE
P14	1 WORK TABLE WITH SINK	1/2"	1/2"	1'-6"								PC TO CONNECT WATER SUPPLY AND DIRECT WASTE
P16	2 SPINNER RANGES								3/4"	215.0	2'-0"	GAS SUPPLY WITH QUICK DISCONNECT
P21	2 COUNTER TOP GRIDDLES								3/4"	81.0	2'-0"	GAS SUPPLY WITH QUICK DISCONNECT
P22	2 CHARBROILERS								3/4"	87.0	2'-0"	GAS SUPPLY WITH QUICK DISCONNECT
P24	2 DOUBLE CONNECTION OVENS								2-1/2"	4-1/2"	4-1/2"	REQUIRES TWO QUICK DISCONNECTS
P26	1 WORK TABLE WITH SINK	1/2"	1/2"	1'-6"			2"	TTFD		50.0	1'-0"	PC TO CONNECT WATER SUPPLY AND DIRECT WASTE

PLUMBING SYMBOLS	
HW	HOT WATER & COLD WATER SUPPLY
DW	DIRECT WASTE CONNECTION
FD	FLOOR DRAIN
TTFD	TELURITE FLOOR DRAIN
FDD	FLOOR DRAIN WITH DRAINEL
FDS	FLOOR DRAIN WITH SLOPE
FS	FLOOR SINK WITH HALF GRATE
FS	FLOOR SINK WITH FULL GRATE
GS	GAS SUPPLY LINE STUD
REF	REFRESHMENT LINES (SUPPLY & SUCTON)
BEV	BEVERAGE CONDUIT
FC	FIELD CONNECTION
IW	INDIRECT WASTE
PC	PLUMBING CONTRACTOR
AFF	ABOVE FINISHED FLOOR

NOTE:  
ALL CONNECTIONS SHOWN ON WALLS ARE TO BE CONCEALED IN WALL CAVITY UNLESS NOTED OTHERWISE.



QUICK DISCONNECT DETAIL  
NO SCALE

PLUMBING NOTES

- ALL CONNECTIONS SHOWN ARE RELATIVE TO FOOD FACILITIES EQUIPMENT ONLY. SEE ARCHITECT'S PLANS FOR ANY ADDITIONAL PLUMBING REQUIREMENTS AND ROUGH-IN HEIGHTS.
- THIS PLAN IS INTENDED TO SHOW EQUIPMENT PLUMBING REQUIREMENTS AND ROUGH-IN HEIGHTS.
- GENERAL WATER PRESSURE IN KITCHEN AREA IS NOT TO EXCEED 80 PSI. PLUMBING CONTRACTOR SHALL FINISH AND INSTALL PRESSURE REDUCING VALVES, FLOW CONTROLS, BACKFLOW PREVENTER, WATER HAMMER RELIEF VALVES, AND WATER CONNECTIONS AS REQUIRED PER LOCAL CODES.
- NOTE: BOOSTER(PUMP/MACHINE) REQUIRE FLOW PRESSURE OF (20-25 PSI) OR AS SPECIFIED BY MANUFACTURER FOR PROPER INSTALLATION.
- PLUMBING CONTRACTOR SHALL PROVIDE ALL ROUGH-IN AND FINAL CONNECTIONS TO ALL FOOD FACILITIES EQUIPMENT. VERIFY TIGHT CONNECTIONS AND REQUIREMENTS BE IN ACCORDANCE WITH NATIONAL, STATE AND LOCAL CODES AS REQUIRED.
- KITCHEN EQUIPMENT CONTRACTOR SHALL PROVIDE ALL RIGGING AND EQUIPMENT CONNECTIONS TO ALL FOOD FACILITIES EQUIPMENT. VERIFY TIGHT CONNECTIONS PER FACETS WITH THE NECESSARY COMPONENTS TO MAKE FINAL CONNECTIONS PER LOCAL CODES.
- WHEN ROUGH-IN IS OUT OF WALL, THIS INDICATES CONCEALED LINES. DO NOT RUN ANY EXPOSED LINES WHERE POSSIBLE.
- ALL DIMENSIONS ARE TAKEN FROM FINISHED FLOORS, FINISHED WALLS OR COLUMN CENTER LINES.
- GENERAL GAS PRESSURE IN KITCHEN IS TO BE VERIFIED BY THE PLUMBING CONTRACTOR. THE PLUMBING CONTRACTOR IS REQUIRED TO FINISH AND INSTALL GAS PRESSURE REDUCING VALVES FOR ALL FOODSERVICE EQUIPMENT AS APPLICABLE. FOR GAS PRESSURES INDICATED BY MANUFACTURERS SPECIFIED GAS SHUT-OFF VALVES AT POINT OF CONNECTION WITH EQUIPMENT.
- FIRE PROTECTION SYSTEM CONTRACTOR SHALL REQUIRE A GAS SHUT-OFF VALVE AND INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 96/PART 96B AND ALL OTHER NATIONAL, STATE AND LOCAL CODES WHERE APPLICABLE.
- PLUMBING CONTRACTOR SHALL FINISH AND INSTALL GREASE TRAPS AS REQUIRED, OUTSIDE THE BUILDING WHERE POSSIBLE, OTHERWISE BELOW OR FLUSH WITH FLOOR, VERIFY LOCATION(S) WITH KITCHEN EQUIPMENT CONTRACTOR.
- ANY AND ALL EXPOSED PIPING OR FITTINGS TO BE STAINLESS STEEL, CHROME PLATED OR ENCLOSED IN A STAINLESS STEEL CONCEALED MOUNTED CHASE, OR AS SPECIFIED BY KITCHEN EQUIPMENT CONTRACTOR.
- PLUMBING CONTRACTOR SHALL PROVIDE ALL STEAM AND CONDENSATE PIPING, AND SHALL INCLUDE PRESSURE REDUCING VALVES, STEAM TRAPS, SAFETY VALVES, INSTALLATION AND PER CODES APPLICABLE.
- WATER AND GAS SUPPLY TO FOODSERVICE EQUIPMENT IS TO BE REQUEST DOWN FROM CEILING AND ENCLOSED IN WALLS AND COUNTERTOPS UNLESS OTHERWISE NOTED.
- PLUMBING CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL FLOOR EQUIPMENT AND PROVIDE ALL NECESSARY CONNECTIONS TO ALL FLOOR EQUIPMENT. DO NOT INSTALL FLOOR DRAINS UNDER EQUIPMENT FEET OR CASTERS.
- SEE KITCHEN EQUIPMENT SCHEDULE FOR ITEM QUANTITIES AND REQUIREMENTS.

REVISIONS

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**PLUMBING REQUIREMENT PLAN**

SHEET NUMBER  
**FS-3**

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