# Elgin Sports Complex Expansion

475 SPORTS WAY UNIT A & UNIT B, ELGIN, IL 60123



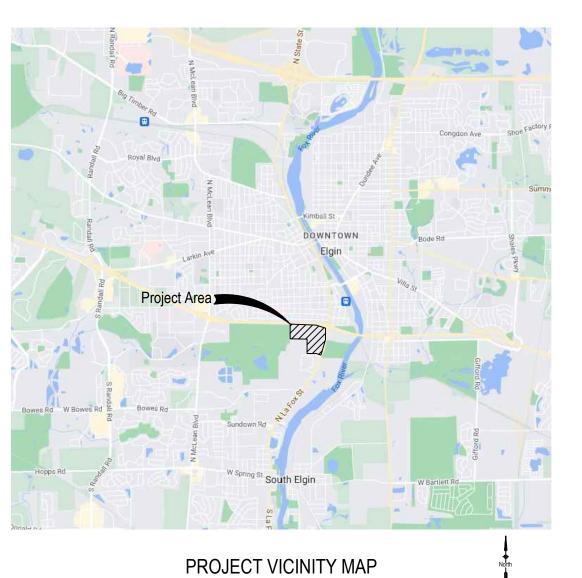


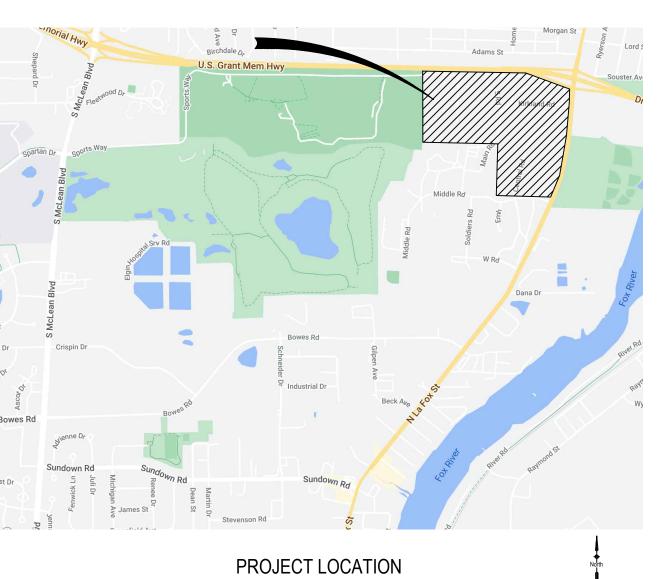
# SMITHGROUP

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ISSUED FOR:

Issue for BID

NOT FOR CONSTRUCTION

VOLUME NUMBER: VOLUME 2 OF 2

ISSUE DATE: APRIL 11, 2024

SMITHGROUP PROJECT NUMBER: 14106 BID NUMBER: 24-032



**ISSUED FOR:** 

## Issue for BID

NOT FOR CONSTRUCTION

**VOLUME NUMBER:** 

VOLUME 2 OF 2

**ISSUE DATE:** 

APRIL 11, 2024

	SMITHGROUP PROJECT NUMBER:	E201	CONCESSIONS LEVEL 1 LIGHTING PLAN
	14106	E202	MAINTENANCE LEVEL 1 LIGHTING PLAN
		E301	CONCESSIONS LEVEL 1 POWER PLAN
Shoot Nu	ıml Sheet Title	E302	CONCESSIONS ROOF POWER PLAN
G-002	COVER SHEET	E303	MAINTENANCE LEVEL 1 POWER PLAN
G-101	SHEET INDEX, GRAPHIC STANDARDS, AND ABBREVIATIONS	E601	ELECTRICAL RISER DIAGRAMS
G-101	GENERAL NOTES	E701	ELECTRICAL SCHEDULES
G-102	GENERAL NOTES	=.0. EM201	CONCESSIONS LEVEL 1 ELECTRICAL-MECHANICAL PLAN
G-301	CODE AND LIFE SAFETY PLAN - CONCESSIONS	EM202	CONCESSIONS ROOF ELECTRICAL-MECHANICAL PLAN
G-302	CODE AND LIFE SAFETY PLAN - MAITNENANCE	EM203	MAINTENANCE LEVEL 1 ELECTRICAL-MECHANICAL PLAN
G-401	ACCESSIBILITY DIAGRAMS, NOTES, AND TYPICAL MOUNTING HEIGHTS	FA001	FIRE ALARM DATA SHEET
A-001	ARCHITECTURAL SITE PLAN	FA201	CONCESSIONS LEVEL 1 FIRE ALARM PLAN
A-101	CONSTRUCTION PLANS - CONCESSIONS	FA202	MAINTENANCE LEVEL 1 FIRE ALARM PLAN
A-102	FINISH PLAN & REFLECTED CEILING PLAN - CONCESSIONS	FA301	PARTIAL FIRE ALARM RISER DIAGRAM - SUPERMISORY
A-111	CONSTRUCTION PLANS - MAINTENANCE	M001	MECHANICAL DATA SHEET
A-112	FINISH PLAN & REFLECTED CEILING PLAN - MAINTENANCE	M201	CONCESSIONS LEVEL 1 MECHANICAL PLAN
A-201	EXTERIOR ELEVATIONS - CONCESSIONS	M202	CONCESSIONS ROOF MECHANICAL PLAN
A-202	EXTERIOR ELEVATIONS - MAINTENANCE	M203	MAINTENANCE LEVEL 1 MECHANICAL PLAN
A-211	INTERIOR ELEVATIONS	M204	MAINTENANCE ROOF MECHANICAL PLAN
A-301	BUILDING SECTIONS	M301	CONCESSIONS BUILDING MECHANICAL ELEVATIONS
A-311	WALL SECTIONS	M302	MAINTENANCE BUILDING MECHANICAL ELEVATIONS
A-501	TYPICAL ASSEMBLIES	M401	MECHANICAL DETAILS
A-511	PLAN DETAILS	M402	MECHANICAL DETAILS
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A-531	OPENING DETAILS - CONCESSIONS	M501	MECHANICAL RISER DIAGRAM
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A-611	OPENINGS SCHEDULES & TYPES	M604	MECHANICAL SCHEDULES
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A-632	EQUIPMENT PLAN AND SCHEDULE	P201	CONCESSIONS UNDERGROUND PLUMBING PLAN
S-001	GENERAL NOTES AND ABBREMATIONS	P202	MAINTENANCE UNDERGROUND PLUMBING PLAN
S-002	LOAD SCHEDULE, PROJECT PARAMETERS, & LEGEND	P301	CONCESSIONS LEVEL 1 PLUMBING PLAN
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S-110	CONCESSIONS BUILDING FOUNDATION PLAN	P401	CONCESSIONS BUILDING- ROOF PLAN
S-111	CONCESSIONS BUILDING BUILDING ROOF PLANS	P402	MAINTENANCE BUILDING- ROOF PLAN
S-120	MAINTENANCE BUILDING FOUNDATION PLAN	P501	PLUMBING RISER DIAGRAMS
S-301	FOUNDATIONS SECTIONS	P502	PLUMBING RISER DIAGRAMS
S-401	SUPERSTRUCTURE SECTIONS	P601	PLUMBING SCHEDULES
S-501	TYPICAL DETAILS	P701	PLUMBING DETAILS
S-502	TYPICAL DETAILS	P702	PLUMBING DETAILS
S-601	SCHEDULES	P703	PLUMBING DETAILS

E001

ELECTRICAL DATA SHEET



VOLUME 1 OF 2



## **SMITHGROUP**

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ISSUE FOR BID	1	04/11/2024
SEALS AND SIGNATURES		
SEALES AND SIGNATIONES		

KEY PLA

INDEX OF DRAWINGS

SCALE
PROJECT NUMBER

J.U.L.I.E.

CALL 1-800-892-0123

48 Hours (2 working days) Before You Dig.

G-002

TYPICAL ABBREVIATIONS GRAPHIC STANDARDS PER FURN FURNITURE LEGEND - DRAWING SYMBOLS FVC FIRE VALVE CABINET ABOVE ACOUST ACOUSTICAL REF LABEL ROOM NAME ACOUSTICAL 101— ROOM NUMBER GALVANIZED CEILING TILE GALV ROOM INFORMATION AREA DRAIN **GENERAL** GC CONTRACTOR AMERICANS WITH DRAWING NUMBER 000 **ELEVATION MARKERS** DISABILITIES ACT GEN GENERAL DOOR TAG ADD ADDENDUM GLASS **ADHESIVE** GR GRADE X1S0 SHEET NUMBER -PARTITION TYPE ABOVE FINISH GRTG GRATING FLOOR GYP GYPSUM ALTERNATE **BUILDING SECTION** REVISION NUMBER ALUM ALUMINUM HANDICAPPED HC ANOD ANDODIZED HD HAND APPROX APPROXIMATE HDF HIGH DENSITY KEYNOTE TAG ARCH ARCHITECT **FIBERBOARD** ARCHITECTURAL HARDWARE ASPHALT HOLLOW METAL WALL SECTION / DETAIL KEYNOTE TAG - DEMO AUTO AUTOMATIC HNDRL HANDRAIL AVG **AVERAGE** HORIZONTAL \_\_\_\_ WORKPOINT HIGH POINT BOTTOM OF HOUR BOARD HEIGHT CALLOUT / DETAIL BITUMINOUS HEATING, BLDG VENTILATION, AND BUILDING 0 SIM -----AIR CONDITIONING BLKG BLOCKING BEAM HYD HYDRANT BOD BASIS OF DESIGN BOT BOTTOM INSIDE DIAMETER INCH BRG BEARING BRKT INCL INCLUDE BRACKET LEGEND - TYPICAL MATERIAL PATTERNS INFORMATION INFO BSMT BASEMENT INSTL INSTALL, BOLT INSTALLATION BTWN BETWEEN INSUL INSULATION, BYND BEYOND INSULATE, INSULATED CAB CABINET INTERIOR CB CASING BEAD CEM CEMENT  $^{/}$  BATT INSULATION GRANULAR FILL JANITOR CFMF COLD FORMED JOIST METAL FRAMING JOINT CORNER GUARD LAMINATE, ACOUSTIC CEILING CRUSHED GRAVEL CH CHANNEL LAMINATED CONTROL JOINT CJ CL CENTER LINE LAVATORY SPRAY FOAM CLG CEILING INSULATION / LANDING LDG INSULATION CLKG CAULKING MINERAL WOO LINEAR FOOT. CLO CLOSET LINEAR FEET CLR CLEAR LEFT HAND GYPSUM BOARD CLT CROSS LAMINATED LIC LICENSE, LICENSED TIMBER LOW POINT CMU CONCRETE LIGHTING MASONRY UNIT LEVEL, LAMINATED COL COLUMN LEGEND - REFLECTED CEILING PLAN LEGEND - DEMOLITION PLAN VENEER LUMBER CONN CONNECTION LOUVER CONST CONSTRUCTION LUXURY VINYL TILE CORR CORRIDOR CSK COUNTER SUNK MACH EXISTING CONSTRUCTION MACHINE, CT CERAMIC TILE ACT-1 ACOUSTIC CEILING TILE X'-X" HEIGHT AFF, SEE RCP MACHINED MAXIMUM CONSTRUCTION DOUBLE METAL COMPOSITE DEG DEGREES MATERIAL GYP-1 GYP BOARD CEILING DRINKING MEDIUM DENSITY X'-X" HEIGHT AFF, SEE RCP ASSEMBLY FOUNTAIN FIBERBOARD DIAMETER MEDIUM DENSITY DIFF DIFFUSER OVERLAY WD-1 WOOD CEILING X'-X" HEIGHT AFF, SEE RCP MECHANICAL MECH DIM DIMENSION DISP MEMBRANE DISPENSER AREA NOT IN CONTRACT DIST MEZZ MEZZANINE DISTANCE MANUFACURER DIV MFR DIVISION MINIMUM DN DOWN MISCELLANEOUS DOOR DR MO MASONRY DS DOWNSPOUT LEGEND - CONSTRUCTION PLAN LEGEND - FINISH PLAN OPENING DTL DETAIL MARBLE DWG DRAWING MSNRY MASONRY DWL DOWEL MTG MEETING NEW CONSTRUCTION METAL MTL EACH WALL AND BASE FINISH MULL MULLION **EXPANSION JOINT EXISTING CONSTRUCTION ELEVATION** NFC NOT FOR ELEC ELECTRICAL NEW DOOR ASSEMBLY CONSTRUCTION FLOOR FINISH ELEV **ELEVATOR** NOT IN CONTRACT ENCL ENCLOSE, NO NUMBER ENCLOSED, NOM NOMINAL **ENCLOSURE** FLOOR FINISH DIRECTION NTS NOT TO SCALE ENTR ENTRANCE ELECTRICAL PANEL EQ EQUAL, **EQUIVALENT** OC ON CENTER FLOOR TRANSITION EQUIP EQUIPMENT OUTSIDE DIAMETER ETC ET CETERA OFF OFFICE AREA NOT IN CONTRACT ELECTRIC WATER OH OVERHANG COOLER EXIST EXISTING OPP OPPOSITE EXP EXPOSE, EXPOSED GENERAL WALL TYPE OSB ORIENTED STRAND EXPR EXPIRES, FIRE RATING **EXPIRATION** OVHD OVERHEAD PARTITION TAG EXTERIOR (REFER TO WALL TYPES)

- WALL SIZE

SOUND ATTENUATION

04/11/2024

2313-01

SHEET NUMBER

G-101

EXTR EXTRUDE,

FDN

FLR

EXTRUDED

FACE OF

FLOOR DRAIN

FOUNDATION

EXTINGUISHER

CABINET

FIRE HOSE

FIRE HOSE CABINET

**FIXTURE** 

FLOOR

FIREPROOF, FIREPROOFED.

FOOT, FEET

FIREPROOFING

FLSH FLASH, FLASHING

FR FIRE RATED

FIRE EXTINGUSHER

FINISH, FINISHED

PERF PERFORATED

PLAS PLASTER

PLYWD PLYWOOD

POL POLISH

PR PAIR

PRCST PRECAST

PTN PARTITION

RAD RADIUS

PREFAB PREFABRICATED

PREFIN PREFINISHED

PLATE

PLAM PLASTIC LAMINATE

OWNER:

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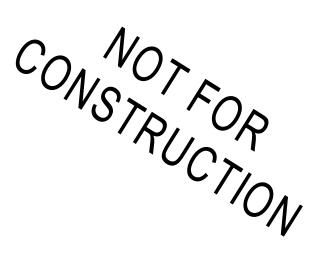
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625 W ADAMS ST, 19TH FLOOR CHICAGO, IL 60661 312.620.3668

SSUED FOR	REV	DATE
		04/44/0004

SEALS AND SIGNATURES



**GENERAL NOTES** 

2313-01

PROJECT REQUIREMENTS

#### A. SCOPE OF WORK

- 1. THE WORK UNDER CONTRACT CONSISTS OF, BUT IS NOT LIMITED TO, THE DEMOLITION AND CONSTRUCTION NEEDED TO COMPLETE THE SCOPE INDICATED IN THE CONTRACT DOCUMENTS.
- 2. THE WORK WILL BE PERFORMED IN [A SINGLE PHASE UNDER A SINGLE CONTRACT]. 3. DURING CONSTRUCTION THE AREA OF WORK WILL BE IOCCUPIED / UNOCCUPIEDI.
- 4. DURING CONSTRUCTION ADJACENT SPACES [AND FLOORS ABOVE AND/OR BELOW] WILL BE [OCCUPIED / UNOCCUPIED].
- 5. THE DRAWINGS ILLUSTRATE THE SCOPE OF WORK UNDER CONTRACT. ADDITIONAL WORK BEYOND WHAT IS ILLUSTRATED MAY BE REQUIRED TO ADDRESS EXISTING/UNFORSEEN CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK PERFORMED WITHIN AND OUTSIDE THE 'LIMIT OF WORK' NECESSARY TO COMPLETE THE CONTRACT SCOPE.
- 6. THESE CONDITIONS APPLY TO ALL DRAWINGS IN THIS SET AND ALL WORK PERFORMED, AND SHALL EXTEND TO ANY CHANGES, EXTRAS, OR ADDITIONS, AGREED TO DURING THE COURSE OF THIS WORK. 7. THE CONTRACTOR SHALL VISIT THE SITE AND BE KNOWLEDGEABLE OF EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL INVESTIGATE, VERIFY, AND BE RESPONSIBLE FOR ALL DIMENSIONS AND FIELD CONDITIONS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF OF ANY DISCREPANCIES, OMISSIONS AND/OR CONFLICTS BEFORE PROCEEDING WITH ANY AFFECTED WORK.

#### B. COORDINATION

- 1. CONTRACTOR SHALL COORDINATE WORK AND PHASING OF WORK WITH VENDORS AND CONTRACTORS INCLUDING, BUT NOT LIMITED TO, SECURITY, TELEPHONE/DATA, AND FURNITURE VENDORS.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING CONTRACT DOCUMENTS, FIELD CONDITIONS, AND DIMENSIONS FOR ACCURACY AND CONFIRMING THAT THE WORK CAN BE COMPLETED AS SHOWN BEFORE ORDERING MATERIALS, BEGINNING FABRICATION, OR STARTING CONSTRUCTION.
- 3. IF THERE ARE ANY QUESTIONS OR OTHER COORDINATION ISSUES, CONTRACTOR SHALL SUBMIT THESE IN WRITING TO THE ARCHITECT AND OBTAINING WRITTEN CLARIFICATION FROM THE ARCHITECT OR PROJECT ENGINEER BEFORE PROCEEDING WITH THE WORK IN QUESTION OR ANY RELATED WORK.
- 4. THE DIMENSIONS AND WORK NOTED ON THESE DRAWINGS ARE FOR DESIGN INTENT. 5. MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION ITEMS INDICATED IN THE ARCHITECTURAL DOCUMENTS ARE FOR REFERENCE AND COORDINATION ONLY. UNLESS OTHERWISE NOTED, REFER TO ENGINEERING DOCUMENTS FOR ADDITIONAL INFORMATION. IF THE INSTALLATION OF ELECTRICAL, MECHANICAL, PLUMBING, OR FIRE PROTECTION WORK INTERFERES WITH THE DESIGN INTENT, THE ARCHITECT SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH CONSTRUCTION. THE DIMENSIONS AND LOCATIONS ON THE ARCHITECTURAL DOCUMENTS SHALL GOVERN THE PLACEMENT OF ELECTRICAL,
- MECHANICAL, OR PLUMBING DEVICES WHERE INDICATED. 6. IF LIGHTING, PLUMBING, AND/OR OTHER ACCESSORY SPECIFICATIONS SHOWN IN THE ARCHITECTURAL DOCUMENTS CONFLICT WITH THOSE SHOWN IN THE ENGINEERING DOCUMENTS, THE ARCHITECT SHALL
- BE NOTIFIED IN WRITING AND WRITTEN RESOLUTION OBTAINED FROM THE ARCHITECT OR PROJECT 7. COORDINATE INSTALLATION OF ALL COMPONENTS TO PROVIDE ALL REQUIRED CLEARANCES FOR
- OPERATION, MAINTENANCE, SERVICE, AND REPAIR. 8. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL ASPECTS OF THE WORK STATED
- OR IMPLIED, SO THAT NO WORK SHALL BE LEFT UNFINISHED OR INCOMPLETE.

#### C. EXISTING CONDITIONS

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE WHICH MAY OCCUR TO EXISTING CONDITIONS AND/OR COMPLETED WORK DURING THE COURSE OF THE WORK.
- 2. THROUGHOUT THE COURSE OF THE WORK THE CONTRACTOR SHALL FULLY PROTECT ALL EXISTING CONDITIONS TO REMAIN. 3. WHERE EXISTING CONSTRUCTION IS DISTURBED AND WHERE NEW CONSTRUCTION ABUTS EXISTING WORK AND THE FINISH SURFACES APPEAR TO ALIGN, SURFACES SHALL BE CONSTRUCTED WITHOUT A VISIBLE JOINT, U.N.O.: THESE AREAS SHALL BE CUT, PATCHED, AND FILLED AS REQUIRED TO MAINTAIN A
- SMOOTH, EVEN TRANSITION BETWEEN MATERIALS. PROVIDE A CONSTRUCTION JOINT WHERE NEW WORK ABUTS EXISTING STRUCTURE. 4. THE CONTRACTOR SHALL PROVIDE, INSTALL, AND MAINTAIN TEMPORARY DUST AND SOUND BARRIERS
- TO ALL ADJACENT AREAS DURING THE CONSTRUCTION PROCESS. LOCATIONS SHALL BE COORDINATED 5. [U.N.O., PROVIDE DUST AND SOUND BARRIERS AT ANY ADJACENT OCCUPIED SPACES, OPENINGS TO
- PUBLIC CORRIDORS, ELEVATOR LOBBIES, AND OTHER LOCATIONS AS REQUIRED. 6. WHEN A TEMPORARY BARRIER SEPARATES EXTERIOR AND INTERIOR CONDITIONS, BARRIER SHALL MEET OR EXCEED THE THERMAL PERFORMANCE OF THE EXISTING AND/OR ADJACENT EXTERIOR

#### . NEW CONSTRUCTION

- 1. AS REQUIRED TO MAINTAIN FIRE RATING, PROVIDE FIRE-RETARDANT BLOCKING OR REINFORCEMENT AT RATED PARTITIONS AND CEILINGS AS NEEDED TO ANCHOR AND SUPPORT ANY MILLWORK, FINISHES,
- FIXTURES, EQUIPMENT, FURNITURE, HARDWARE, GRAB BARS, OR OTHER ITEMS. 2. THE CONTRACTOR SHALL PROVIDE ALL SUPPLEMENTAL MATERIAL REQUIRED TO PROPERLY INSTALL, SUPPORT, AND BRACE ALL COMPONENTS OF THE WORK.
- 3. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL ENGINEERING AS REQUIRED FOR MISCELLANEOUS FRAMING WORK WHERE SPECIFIC MEMBER SIZES AND DETAILS ARE NOT PROVIDED IN THE DOCUMENTS.
- 4. DURING HANDLING AND INSTALLATION, CLEAN AND PROTECT IN-PROGRESS CONSTRUCTION AND ADJOINING MATERIALS. APPLY PROTECTIVE COVERING WHERE REQUIRED TO ENSURE PROTECTION FROM DAMAGE OR DETERIORATION. 5. ALL FASTENERS AND ATTACHMENTS IN PUBLIC AREAS SHALL BE FULLY CONCEALED FROM VIEW, U.N.O.
- 6. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO PREVENT MOLECULAR BREAKDOWN AND/OR GALVANIC ACTION. 7. ALL MATERIALS SHALL BE NEW, UNUSED AND OF A QUALITY CONSISTENT WITH THE OVERALL WORK, U.N.O., AND SHALL MEET THE REQUIREMENTS OF THE SPECIFICATIONS.
- 8. ALL WORK SHALL BE PLUMB LEVEL, SQUARE, TRUE, AND IN PROPER ALIGNMENT AND SHALL CONFORM TO ALL INDUSTRY, TRADE, AND REFERENCE STANDARDS, MANUFACTURERS' RECOMMENDATIONS, THE BUILDING MANAGEMENT'S REQUIREMENTS FOR QUALITY OF MATERIALS AND WORKMANSHIP, AND SHALL MEET THE REQUIREMENTS OF THE SPECIFICATIONS AND CONTRACT DOCUMENTS. IF AS OBSERVED BY THE ARCHITECT THE WORK IS NOT INSTALLED TO PROPER AND ACCEPTABLE TOLERANCES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTIONS OF SUCH WORK AT NO EXPENSE TO THE
- OWNER AND WITH MINIMUM IMPACT TO THE PROJECT SCHEDULE. 9. CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES TO FACILITATE EFFICIENT, ORDERLY, COMPLETE AND OPERATIONAL INSTALLATION OF EACH PART OF THE WORK. COORDINATE
- INTERDEPENDENT ACTIVITIES AS NECESSARY FOR PROPER INSTALLATION AND OPERATION. 10. REMOVE DEBRIS AS WORK PROGRESSES. KEEP THE PREMISES BROOM CLEAN AND ACCESSIBLE AT THE END OF EACH DAY; EACH TRADE TO COMPLY. 11. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION-RELATED TRASH REMOVAL DURING
- THE COURSE OF THE WORK. 12. SITE SHALL BE FULLY CLEANED AT THE END OF THE PROJECT, REMOVE ALL CONSTRUCTION DEBRIS. DIRT, DUST, OIL, STAINS, SCUFF MARKS PENCIL/INK MARKS, ADHESIVE RESIDUE, PAINT OVER-SPRAY OR DRIPS, FINGERPRINTS, LABELS, AND ANY OTHER MARKS FROM EXPOSED FINISHED SURFACES, INCLUDING GLAZING.

#### B. CONTRACT DOCUMENTATION

- 1. THE CONTRACT DOCUMENTS ARE DEFINED AS: THE CONTRACT (OR AGREEMENT) BETWEEN THE OWNER AND CONTRACTOR, DRAWINGS, SPECIFICATIONS, ADDENDA, BULLETINS, AND APPROVED MINOR
- 2. ADDENDA ARE DEFINED AS CHANGES PRIOR TO THE EXECUTION OF THE CONTRACT FOR CONSTRUCTION. BULLETINS ARE DEFINED AS CHANGES SUBSEQUENT TO THE EXECUTION OF THE CONTRACT. MINOR MODIFICATIONS ARE INTERPRETATIONS AND CLARIFICATIONS NOT INVOLVING A CHANGE IN TIME OR COST.
- 3. DRAWINGS ARE PROVIDED ONLY AS A DIAGRAMMATIC REPRESENTATION OF EXISTING CONDITIONS; ALL EXISTING CONDITIONS SHALL BE VERIFIED IN FIELD. 4. THE INTENT OF THE CONTRACT DOCUMENTS, DRAWINGS, AND SPECIFICATIONS IS TO INCLUDE ALL
- ITEMS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE PROJECT BY THE CONTRACTOR AND SUB-CONTRACTORS. THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS. THE DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY: WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY ALL. THE CONTRACTOR SHALL REPOR CONFLICTS AND DISCREPANCIES WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS TO THE ARCHITECT [AND OWNER] IN WRITING, AND OBTAIN WRITTEN CLARIFICATION PRIOR TO BIDDING, ORDERING, OR IMPLEMENTING ANY RELATED WORK.
- 5. SCALES AS STATED HEREIN ARE VALID IN THE ORIGINAL DRAWINGS ONLY, DO NOT SCALE DRAWINGS FOR DETERMINATION OF QUANTITIES, LENGTH, FIT OF MATERIALS, ETC.: PRINTED DIMENSIONS SHALL GOVERN. DETAILS SHALL GOVERN PLANS AND ELEVATIONS. LARGER SCALE DETAILS SHALL GOVERN SMALLER SCALE DETAILS. WRITTEN SPECIFICATIONS SHALL GOVERN OVERALL
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DIMENSIONS AS INDICATED ON THE DRAWINGS. WHERE HOLD DIMENSIONS CANNOT BE MAINTAINED THE ARCHITECT SHALL BE NOTIFIED AND RESOLUTION OBTAINED BEFORE PROCEEDING WITH ANY AFFECTED WORK.

#### F. SAFETY / BUILDING CODES

- EXECUTE WORK IN STRICT ACCORDANCE WITH ANY AND ALL APPLICABLE LOCAL. STATE, AND FEDERAL CODES, STANDARDS, AND ORDINANCES. WHERE REQUIREMENTS DIFFER, THE MORE STRINGENT SHALL
- 2. COMPLY WITH ANY AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS PERTAINING TO SAFETY OF PERSONS, PROPERTY, AND ENVIRONMENTAL PROTECTION.
- THE CONTRACTOR SHALL COMPLY WITH THE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY BEARING UPON THE PERFORMANCE OF THE WORK.
- 4. THE ARCHITECT HAS NO KNOWLEDGE OF AND SHALL NOT BE HELD LIABLE FOR ANY HAZARDOUS MATERIALS ON THE JOB SITE. IF HAZARDOUS MATERIALS ARE DISCOVERED DURING DEMOLITION OR CONSTRUCTION, ISOLATE THE AFFECTED AREA AND NOTIFY THE ARCHITECT AND OWNER. AWAIT
- FURTHER INSTRUCTIONS BEFORE PROCEEDING WITH ANY AFFECTED WORK. PROVIDE AND MAINTAIN FIRE PROTECTION, BARRICADES, LIGHTING, AND GUARDRAILS AS REQUIRED BY APPLICABLE CODES AND REGULATIONS TO PROTECT OCCUPANTS OF THE BUILDING. 6. AS REQUIRED, PROVIDE AND MAINTAIN SAFE EXIT PATHS FOR OCCUPANTS THROUGH DEMOLITION OR CONSTRUCTION AREAS. PROVIDE TEMPORARY DOORS, EXIT SIGNAGE, AND ILLUMINATION TO MAINTAIN
- EXIT PATHS. DO NOT OBSTRUCT THE EXIT PATH WITH CONSTRUCTION MATERIALS OR DEBRIS. 7. EXISTING FIRE DEPARTMENT CONNECTIONS. HOSE CABINETS. FIRE EXTINGUISHERS. AND FIRE HOSE RACKS TO REMAIN; U.N.O. COORDINATE WITH ENGINEERING DRAWINGS FOR RELOCATION OF ANY
- 8. COMPLY WITH FIREPROOFING AND FIRE RESISTANCE RATING FOR CONSTRUCTION TYPE AS REQUIRED BY APPLICABLE CODES AND REGULATIONS.
- NEW AND EXISTING PENETRATIONS THROUGH FIRE-RATED ASSEMBLIES BY DUCTS, CONDUITS, PIPING, ETC. AND SPACES BETWEEN SLAB EDGE. WINDOW WALL, AND ANY CONSTRUCTION VOIDS (EXCEPT WHEN COMPLETELY ENCLOSED BY FIRE RATED CONSTRUCTION) SHALL BE SEALED OFF AND FILLED WITH APPROVED FIRE STOPPING MATERIAL TO MAINTAIN THE REQUIRED FIRE RATING AND PREVENT PASSAGE OF SMOKE. 10. FIRE-RATED PARTITIONS SHALL BE CONTINUOUS FROM TOP OF FLOOR ASSEMBLY BELOW TO THE
- UNDERSIDE OF FLOOR SLAB OR ROOF DECK ASSEMBLY ABOVE. 11. OBTAIN WRITTEN APPROVAL FROM THE AUTHORITIES HAVING JURISTICTION FOR SPRINKLERS AND/OR FIRE SUPPRESSION SYSTEMS AS REQUIRED. THIS INCLUDES, BUT IS NOT LIMITED TO, TEMPORARY MEASURES DURING CONSTRUCTION. ANY SUCH MEASURES SHALL BE PROVIDED FOR WITHIN THE WORK UNDER CONTRACT WITH NO ADDITIONAL COST TO THE OWNER.

#### G. CONTRACTOR PROVISIONS

EXISTING FIRE DEPARTMENT CONNECTIONS.

- 1. THE CONTRACTOR IS RESPONSIBLE FOR DISTRIBUTION OF DOCUMENTS TO ALL TRADES. 2. THE CONTRACTOR, UPON AWARDING SUBCONTRACTS, SHALL SUBMIT TO THE ARCHITECT AND OWNER A LIST OF ALL SCOPE ITEMS, A DELIVERY SCHEDULE, AND SUBMITTAL SCHEDULE
- 3. THE CONTRACTOR IS RESPONSIBLE FOR ORDERING PRODUCTS AND MATERIALS, AND FOR ALL LEAD TIMES. CONTRACTOR SHALL PROMPTLY NOTIFY THE ARCHITECT AND OWNER OF ANY LONG LEAD TIMES
- WHICH MAY IMPACT THE CONSTRUCTION SCHEDULE. 4. THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT, OWNER, AND BUILDING MANAGEMENT (AS REQUIRED), A GRAPHIC CONSTRUCTION SCHEDULE INDICATING SEQUENCING AND COORDINATION OF
- ALL TRADES THROUGHOUT CONSTRUCTION FROM START TO FINISH. 5. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND LICENSES, SECURE ALL INSPECTIONS, GIVE ALL NECESSARY NOTICES, AND COMPLY WITH ALL APPLICABLE, LAWS, ORDINANCES AND REGULATIONS PERTAINING TO THE PROJECT. FEES AND OTHER EXPENDITURES INCURRED ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED UNDER CONTRACT WITHOUT ADDITIONAL COST TO THE OWNER.
- . WHERE SPECIAL COORDINATION IS NECESSARY, CONTRACTOR SHALL DISTRIBUTE MEMORANDA OUTLINING SPECIFIC REQUIREMENTS FOR EACH PARTY INVOLVED. 7. DO NOT PROCEED WITH WORK REQUIRING COMPENSATION BEYOND THE CONTRACT AMOUNT WITHOUT
- FIRST OBTAINING AUTHORIZATION FROM THE OWNER BY CHANGE ORDER. FAILURE TO OBTAIN AN APPROVED CHANGE ORDER MAY INVALIDATE CLAIMS FOR ADDITIONAL COMPENSATION. 3. ANY SUBSTITUTIONS. REVISIONS OR ADDITIONS PROPOSED BY THE CONTRACTOR. OWNER. OR ANY OF THEIR AGENTS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL. ANY SUBSTITUTION MUST BE APPROVED BY THE ARCHITECT PRIOR TO IMPLEMENTATION. THERE SHALL BE NO SUBSTITUTION OF MATERIALS WHERE THE MANUFACTURER IS SPECIFIED. WHERE THE TERM "OR EQUAL" IS USED, THE ARCHITECT OR PROJECT ENGINEER (AT THE ARCHITECT'S DISCRETION) SHALL DETERMINE EQUALITY OF
- 9. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION, FABRICATION, AND INSTALLATION EMPLOYED BY THE CONTRACTOR AND THEIR SUBCONTRACTORS. 10. ALL SUBMITTALS, INCLUDING SHOP DRAWINGS AND SAMPLES, SHALL BE PROVIDED FOR THE ARCHITECT'S REVIEW AND APPROVAL PRIOR TO THE FABRICATION, CONSTRUCTION, OR INSTALLATION
- OF ANY RELATED WORK. DO NOT PROCEED WITH RELATED WORK UNTIL THE SUBMITTAL IS APPROVED WITHIN THE SPECIFIED REVIEW TIMELINE.
- 11. ALL SHOP DRAWINGS SHALL BE ORIGINAL DRAWINGS PREPARED BY THE CONTRACTOR, SUBCONTRACTOR, MANUFACTURER, DISTRIBUTOR, OR OTHERS. ANY SHOP DRAWING USING A COPY, OR
- PARTIAL COPY, OF THE ARCHITECT'S DRAWINGS SHALL BE REJECTED. 12. EACH SHOP DRAWING SHALL ADEQUATELY ILLUSTRATE COMPLIANCE WITH THE DESIGN INTENT FOR THAT PORTION OF THE WORK.

13. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS FOR ELECTRICAL, MECHANICAL, PLUMBING AND

#### FIRE ALARM SYSTEMS.

REPAIR AFFECTED AREAS TO PREVIOUS CONDITION.

- H. BUILDING REQUIREMENTS 1. AS REQUIRED, THE CONTRACTOR SHALL OBTAIN AND COMPLY WITH ALL BUILDING MANAGEMENT RULES AND REGULATIONS, INCLUDING BUT NOT LIMTED TO, DOCK PROCEDURES, NOISE RESTRICTIONS, AND ELEVATOR ACCESS REQUIREMENTS. ELEVATOR ACCESS EXPENSE SHALL BE BORN BY THE
- CONTRACTOR, UNLESS OTHERWISE AGREED UPON BY BUILDING MANAGEMENT AND OWNER. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE BUILDING MANAGEMENT PERTAINING TO USE OF THE BUILDING ENTRANCES, WORKING HOURS, ACCESS TO ADJACENT SPACES, SECURITY, OWNERSHIP OF SALVAGED ITEMS, AND OTHER ITEMS DEEMED TO BE OF MUTUAL INTEREST.
- 3. KEEP DRIVEWAYS AND ENTRANCES SERVING THE PREMISES CLEAR AND AVAILABLE TO THE BUILDING MANAGEMENT, TENANTS, AND VENDORS AT ALL TIMES. DO NOT USE THESE AREAS FOR PARKING OR STORAGE OF MATERIALS. SCHEDULE DELIVERIES TO MINIMIZE SPACE AND TIME REQUIREMENTS FOR STORAGE OF MATERIALS AND EQUIPMENT ON SITE. 4. ANY WORK THAT IN THE OPINION OF A TENANT, BUILDING MANAGER, OWNER, OR OWNER'S REPRESENTATIVE CONSTITUTES A HAZARD TO BUILDING OPERATIONS, WHETHER IT BE NOISE, DUST,
- ODOR, OR ANYTHING ELSE AFFECTING OPERATIONS SHALL, UPON OWNER REQUEST, CEASE IMMEDIATELY UNTIL THE SITUATION IS RESOLVED. NO ADDITIONAL COMPENSATION BEYOND THE CONTRACT AMOUNT WILL BE PAID FOR PERIODS WHEN THE WORK IS STOPPED FOR ANY OF THE ABOVE REASONS. 5. ALL WORK DEEMED DISRUPTIVE BECAUSE OF NOISE, DUST, ODORS, ETC. AFFECTING DAYTIME BUILDING
- OPERATIONS SHALL UPON OWNER REQUEST CEASE IMMEDIATELY AND BE PERFORMED AT NIGHT. THE HOURS FOR NIGHT WORK WILL BE DETERMINED ON A CASE-BY-CASE BASIS AND BE APPROVED BY THE OWNER OR OWNER'S REPRESENTATIVE. NO ADDITIONAL COMPENSATION WILL BE PAID OR CONSIDERED IF WORK IS STOPPED FOR ANY OF THE ABOVE REASONS. THE CONTRACTOR WILL COORDINATE WITH THE BUILDING MANAGEMENT THE USE OF DESIGNATED
- TOILET FACILITIES WITH IN THE BUILDING FOR USE BY THE CONTRACTOR'S PERSONNEL. USE OF EXISTING TOILETS WITHIN THE BUILDING, OTHER THAN THOSE DESIGNATED BY THE BUILDING MANAGEMENT, WILL NOT BE PERMITTED. THE CONTRACTOR SHALL TAKE RESPONSIBILITY FOR AND PROTECT THE TOILET FACILITIES PROVIDING REGULAR MAINTENANCE AND STOCKING ALL NECESSARY
- 7. AVOID ANY INTERRUPTION OF SERVICES (ELECTRICAL, SIGNAL, MECHANICAL, FIRE PROTECTION, LIFE SAFETY, PLUMBING, ETC.) TO OCCUPIED AREAS OF THE BUILDING DURING CONSTRUCTION. IF SERVICE INTERRUPTION IS UNAVOIDABLE, CONTRACTOR SHALL NOTIFY AND OBTAIN APPROVAL FROM OWNER/LANDLORD AND AFFECTED TENANT(S) AT LEAST 48 HOURS BEFORE PROCEEDING WITH SUCH

8. THE CONTRACTOR SHALL COORDINATE WITH BUILDING MANAGEMENT AND THIER STRUCTURAL

ENGINEER THE REVIEW AND APPROVAL OF ANY FLOOR CORING OR SLAB CUTS PRIOR TO PROCEEDING WITH THE WORK. CONTRACTOR SHALL VERIFY ACCESS TO AFFECTED SLAB LOCATION(S) AT ADJOINING

SPACES ABOVE OR BELOW, AND SHALL INCLUDE IN CONTRACT ANY WORK AS NEEDED TO ACCESS AND

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REV DATE

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ISSUE FOR BID SEALS AND SIGNATURES

OWNER: CONSTRUCTION **CEILINGS FINISHES** A. DIMENSIONS / LAYOUT GENERAL CEILING NOTES A. ALL NEW LAMPS TO BE FROM A SINGLE SUPPLIER, U.N.O. 1. ALL WALLS ARE TO BE PAINTED [P-1] WALL BASE TO BE [B-1] AND CARPET TO BE [CP-1] UON. THE CITY IN THE SUBURB B. CONTRACTOR TO USE ARCHITECTURAL REFLECTED CEILING PLANS AS BASIS OF DESIGN AND LIGHT 2. ALL HAT SHELVES WITHIN COAT CLOSETS TO BE [PL-1] FIXTURE COUNT STYLE & LOCATION. B. DOORS AND FRAMES SCHEDULED TO BE PAINTED SHALL BE PAINTED WITH A SEMI-GLOSS FINISH UON. REFER TO FINISH PLANS FOR DOOR AND FRAME PAINT COLORS. UNLESS OTHERWISE NOTED, DOORS

A. DIMENSIONS / LAYOUT

- 1. DO NOT SCALE PLANS. SHOULD INFORMATION BE MISSING, OR IF DISCREPANCIES SHOULD ARISE. CONTACT THE ARCHITECT FOR CLARIFICATION PRIOR TO CONSTRUCTION.
- 2. ALL VERTICAL DIMENSIONS ARE NOTED FROM TOP OF FINISHED FLOOR (A.F.F.) 3. ALL NEW PARTITIONS ARE DIMENSIONED FINISH FACE TO FINISH FACE UNLESS NOTED OTHERWISE. ALL ALIGNMENT INDICATIONS ARE FROM FINISHED SURFACES, UNLESS OTHERWISE NOTED.
- 4. CENTERLINE OF NEW WALL PARTITIONS SHALL ALIGN W/ CENTERLINE OF PERIMETER COLUMNS AND WINDOW MULLIONS TYPICAL UNLESS NOTED OTHERWISE OR ALIGNED WITH AN EXISTING
- 5. THE CONTRACTOR SHALL PROVIDE AND COORDINATE A 'CHALK LINE' PARTITION LAYOUT FOR THE ARCHITECT AND OWNER TO APPROVE PRIOR TO THE INSTALLATION OF PARTITION FRAMING.

B. PARTITIONS

- 1. SEE A-600 SERIES SHEETS FOR PROJECT-SPECIFIC PARTITION TYPES. 2. NEW INFILL AT EXISTING PARTITIONS SHALL MATCH EXISTING ADJACENT CONSTRUCTION, THICKNESS,
- ACOUSTIC PERFORMANCE, AND FIRE RATING, U.N.O. 3. WHERE THERE IS NO CEILING SYSTEM, EXTEND EXISTING OR PROVIDE NEW BUILDING-STANDARD PERIMETER PARTITIONS AND/OR SOFFITS, AS REQURIED, TO THE UNDERSIDE OF THE STRUCTURE
- 4. WHEN A WALL PARTITION OR MILLWORK INTERFACES WITH A WINDOW ASSEMBLY, EQUIPMENT UNIT, OR OTHER PENETRATION, PROVIDE ACOUSTICAL INSULATION AS REQUIRED AND A CONTINUOUS,
- COMPRESSED CLOSED CELL GASKET TO CREATE A CONTINUOUS ACOUSTIC AND THERMAL SEAL. 5. ISOLATE PARTITION FRAMING AND WALL FURRING WHERE IT ABUTS STRUCTURE, EXCEPT AT FLOOR, TO PREVENT TRANSFER OF LOADING IMPOSED BY STRUCTURAL MOVEMENT. INSTALL SLIP-TYPE JOINTS AT HEAD OF ASSEMBLIES THAT AVOID AXIAL LOADING OF ASSEMBLY AND LATERALLY SUPPORT ASSEMBLY.
- USE DEEP-LEG DEFLECTION TRACK WHERE REQUIRED. 6. THE CONTRACTOR IS RESPONSIBLE FOR THE BRACING OF PARTITIONS AT ALL DOOR AND WINDOW
- 7. WALL PARTITIONS SHALL USE CEMENT BACKERBOARD WHERE WALL TILE IS TO BE INSTALLED AND WATER RESISTANT GYPSUM BOARD AT ALL OTHER PLUMBING WALLS, U.N.O. 8. PREP ALL WALL PARTITIONS TO RECEIVE WALL-COVERING WITH A LEVEL '4' FINISH. REFER TO FINISH
- PLANS AND SCHEDULE FOR SPECIALTY WALL COVERINGS REQUIRING LEVEL '5' FINISH. 9. PROVIDE GYPSUM BOARD CONTROL JOINTS AT WALLS AND DRYWALL CEILINGS PER ASTM C840 (SPANS LARGER THAN 30'). REVIEW AND COORDINATE LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.

C. COORDINATION WITH EXISTING SYSTEMS

- 1. IPERIMETER WALL TO REMAIN AS INDICATED. SEE PLANS. NEW DRYWALL WORK AT EXISTING PERIMETER TO BE INCLUDED IN DRYWALL BID]. [PROVIDE NEW DRYWALL AT PERIMETER AS INDICATED]. 2. CONTRACTOR TO VERIFY THAT ALL EXISTING WALLS REQUIRED TO BE FIRE-RATED WERE
- CONSTRUCTED AS FIRE-RATED ASSEMBLIES; CONTRACTOR SHALL MODIFY AS NEEDED TO ARCHIEVE AND/OR MAINTAIN REQUIRED FIRE-RATING. . REPAIR REPLACE OR CORRECT FINISHES OF ALL EXISTING EXTERIOR WINDOW SYSTEMS, DOOR ASSEMBLIES, ICONVECTOR COVERSITELECTRIC BASE BOARDSI AND ETC. TO A LIKE NEW CONDITION WHETHER DAMAGE IS EXISTING OR A RESULT OF DEMOLITION AND/OR CONSTRUCTION ACTIVITIES.
- SURFACES SHALL BE CONTINUOUSLY FLUSH AND SMOOTH FREE OF DEFECTS OPENINGS PAINT DRIPS 4. THE CONTRACTOR SHALL PATCH, REPAIR, AND PREPARE SURFACES OF ALL EXISTING WALLS, COLUMN ENCLOSURES, GYPSUM BOARD CEILINGS AND SOFFITS AS REQUIRED PRIOR TO APPLYING NEW FINISH. PATCH AND REPAIR SURFACES DUE TO THE REMOVAL OF EXISTING WALL COVERING/PAPER, TEXTURED FINISHES, SIGNAGE, OUTLETS, AND OTHER DEVICES. AND FILL VOIDS IN WALL SURFACES. SURFACES
- SHALL BE CONTINUOUSLY FLUSH AND SMOOTH, FREE OF DEFECTS, OPENINGS, PAINT DRIPS, ETC. ALL EXISTING EXPOSED CONCRETE WALLS [AND COLUMNS] SHALL BE FURRED-OUT WITH GYPSUM BOARD WALL PARTITIONS AS TO MINIMALLY ENCLOSE AS REQUIRED OR INDICATED ON THE DRAWINGS FOR THE INSTALLATION OF CONDUIT, JUNCTION BOXES, PLUMBING, FIRE PROTECTION, CABINETRY, TOILET ACCESSORIES, ETC. EXCEPT WHERE WALL PARTITIONS AND COLUMN ENCLOSURES ARE REQUIRED TO ALIGN OR ARE DIMENSIONED OTHERWISE. JALL EXISTING CONCRETE COLUMNS TO BE EXPOSED AND SEALED, U.N.O. SURFACES SHALL BE FREE FROM DEBRIS, PAINT, WRITING, OR OTHER MARKINGS PRIOR TO FINISHING.1

D. COORDINATION WITH OTHER TRADES

- 1. ALL NEW ROOMS AND SPACES THAT ARE SEPARATED FROM THE RETURN AIR PLENUM BY FULL HEIGHT PARTITIONS ARE TO [HAVE NEW TRANSFER AIR DUCTS.][HOLD THE GYPSUM BOARD SIX INCHES (6") BELOW THE SLAB ABOVE.I: UNLESS OTHERWISE NOTED, HVAC CONTRACTOR TO TEST RETURN AIR FLOW AT NEW AND RECONFIGURED ROOMS, AND INCLUDE RESULTS ON HVAC TEST & BALANCING REPORT. REFER TO ENGINEERING DRAWINGS FOR TRANSFER DUCT AND FIRE DAMPER LOCATIONS TO
- BE COORDINATED WITH BUILDINGS RETURN AIR. 2. PROVIDE POWER AND PLUMBING CONNECTIONS TO APPLIANCES AS SCHEDULED ON [POWER / DATA PLAN A130-XX.] COORDINATE WITH MEP DRAWINGS.
- 3. THE ARCHITECTURAL DIMENSIONS SHALL GOVERN THE PLACEMENT OF ELECTRICAL, MECHANICAL OR PLUMBING DEVICES WHERE INDICATED. 4. CONTRACTOR TO REVIEW REQUIRED CLEARANCES FOR NEW/EXISTING VERTICAL CONDUIT AND
- INTERSTITIAL SPACE. 5. FIRE EXTINGUISHER AND/OR HOSE VALVE CABINETS ARE SHOWN ON ARCHITECTURAL PLANS FOR REFERENCE AND COORDINATION ONLY. REFER TO ENGINEERING DRAWINGS FOR SPECIFICATIONS AND

PLUMBING RISERS TO INSURE THAT THESE UTILITIES ARE FULLY CONCEALED WITHIN THE PARTITION OR

- ADDITIONAL INFORMATION. 6. VERIFY ALL FINAL EQUIPMENT SPECIFICATIONS WITH TENANT PRIOR TO ORDERING APPLIANCES OR
- FABRICATING MILLWORK. 7. GENERAL CONTRACTOR TO COORDINATE WORK AND PHASING OF WORK WITH CLIENT'S FURNITURE, TELEPHONE, EQUIPMENT, AND DATA VENDORS.

E. FLOORING / SLAB

- 1. AS REQUIRED, GC TO X-RAY FLOOR SLAB PRIOR TO CORING AND FOLLOW ALL BUILDING REGULATIONS AND REQUIREMENTS FOR CORES. GC TO VERIFY ACCESS TO THE FLOOR UNDERNEATH AND INCLUDE ANY REMEDIAL WORK AND TIME REQUIRED TO ACCESS AND WORK ON THE SPACE BELOW. 2. FILL UNUSED FLOOR CORES OR SLEEVES WITH SIMILAR MATERIAL OR FIRE STOPPING TO MATCH
- ADJACENT CONDITIONS. MAINTAIN THE FIRE RATING OF ANY AFFECTED ASSEMBLY. 3. CONTRACTOR SHALL SURVEY FLOOR ELEVATIONS TO DETERMINE THE SCOPE OF FLOOR LEVELING AND REMEDIAL REPAIR WORK. GENERAL CONTRACTOR SHALL INCLUDE IN THE SCOPE OF WORK ALL COSTS
- THAT ARE ASSOCIATED WITH FLOOR LEVELING AND REMEDIAL REPAIR WORK. 4. ALL FLOORS SHALL BE LEVEL AND FREE OF IRREGULARITIES TO ASSURE ONE CONSTANT HEIGHT SO THAT DOOR FRAMES. WHEN SET, ARE ALL AT A CONSISTENT DIMENSION FROM THE CEILING WITH NO GAPS BETWEEN THE BOTTOM OF THE DOOR FRAME AT THE SLAB AFTER CARPETING OR OTHER FLOOR FINISHES ARE INSTALLED. ANY CHANGES IN THE FLOOR HEIGHT SHALL BE RAISED AND TROWELED TO CREATE A GRADUAL RAMP LIKE EFFECT. ALL MODIFICATION TO THE FLOOR SHALL BE MADE WITH A HIGH QUALITY, NON-CRUMBLING LATEX BASE FLASHING COMPOUND.
- 5. PATCH THE FLOOR SLAB AS REQUIRED TO ENSURE A SMOOTH EVEN SURFACE TO ACCOMMODATE NEW FLOORING FINISHES AT ALL NON-RAISED FLOOR AREAS.

MILLWORK

1. FOLLOW ARCHITECTURAL WOODWORK INSTITUTE'S QUALITY STANDARDS (BEST/HIGHEST GRADE SHALL GOVERN THE WORK). REFER THE ARCHITECTURAL WOODWORK QUALITY STANDARD ILLUSTRATED MANUAL, MOST CURRENT EDITION.

G. BLOCKING / MOUNTING

1. PROVIDE FIRE TREATED WOOD BLOCKING OR 16 GAUGE SHEET METAL PANELS IN WALL CAVITY AS REQUIRED TO ANCHOR MILLWORK, FIXTURES, FURNITURE PRODUCTS, LIGHTING, COAT RODS/HOOKS, WALL-MOUNTED TV/MONITORS, SHELVING PANEL STANDARDS, WALL MOUNTED CLOSERS, GRAB BARS, MARKER/TACK BOARDS, ETC. REFER TO FURNITURE PLAN FOR ANY WALL-MOUNTED FURNITURE AND POWER/DATA PLANS FOR EQUIPMENT LOCATIONS.

H. SALVAGE / RELOCATION

1. RELOCATED DOORS ARE GENERALLY A COMPLETE RELOCATED DOOR ASSEMBLY INCLUDING DOOR, FRAME AND HARDWARE. COORDINATE THE REINSTALLATION OF SALVAGED DOOR ASSEMBLIES AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION. WHERE THE FRAME CANNOT BE REUSED IN THE DESIRED LOCATION, THE NEW DOOR FRAME AND HARDWARE IS TO MATCH THE EXISTING. REFER TO THE DOOR AND HARDWARE SCHEDULE FOR ADDITIONAL INFORMATION.

SALVAGE / RELOCATION / NEW ITEMS

- 1. ALL LIGHT FIXTURES ARE NEW, UNLESS OTHERWISE NOTED. CLEAN AND RELAMP ALL LIGHT FIXTURES TO REMAIN
- 2. ALL SUSPENDED ACOUSTICAL CEILING [GRID] [AND PANELS] ARE [EXISTING TO REMAIN] [NEW] UON. [REPLACE DAMAGED AND/OR MISSING CEILING PANELS AS REQUIRED.] ÄLIGN NEW FIXT. WITH ADJ. FIXT., DEVICES, OR SPRINKLER HEADS IN Å RUN/ ROW OF FIXT., DEVICES OR SPRINKLER HEADS, UON.
- 4. [REPLACE ALL DAMAGED ACOUSTICAL CEILING TILE WITH BUILDING STOCK OR NEW TO MATCH EXISTING AS REQUIRED. EXISTING CEILING GRID TO REMAIN]. [REWORK CEILING GRID AS REQUIRED FOR NEW WORK. NEW CEILING GRID AND TILE TO MATCH EXISTING. REFER TO FLOOR PLAN AND PARTITION TYPES FOR INFORMATION.]

**FINISHES** 

2. ALL EXPOSED OPEN CEILINGS AND EXPOSED FULL HEIGHT EXISTING/NEW GYP. BD. WALL PARTITIONS ARE TO BE CLEANED AND PREPPED TO RECEIVE NEW PAINT/FINISHES; REFER TO FINISH PLAN FOR GYPSUM BOARD CEILING PAINT. 3. ALL MECHANICAL DUCTS, SPRINKLER PIPES AND ELECTRICAL CONDUITS TO BE PAINTED [P-XX] WHEN LOCATED IN OPEN CEILINGS. UON.

. PROVIDE LEVEL 5 FINISH @ ALL GYP.BD. CEILINGS ABOVE A LIGHT COVE.

. LAYOUT

 CENTER ALL CEILING MOUNTED LIGHT FIXTURES, LIFE SAFETY DEVICES, AND SPEAKERS IN THE CENTER OF THE CEILING TILES IN BOTH DIRECTIONS UON.

. LIGHT CONTROLS

- 1. ALL LIGHT SWITCHES TO BE MOUNTED AT 40" AFF UON. [CONFIRM HGT. MEETS LOCAL CODE] GANG SWITCHES TOGETHER WITHIN SAME COVER PLATE IF/WHEN POSSIBLE. SWITCHES SHOWN FOR LOCATION REFERENCE ONLY. ENGINEERS TO DETERMINE APPROPRIATE NUMBER OF REQUIRED SWITCHES ALL NEW ROOMS ARE TO RECEIVE INDIVIDUAL LIGHT SWITCHES, UON. [LIGHTS TO BE CONTROLLED VIA
- WALL MOUNTED LIGHT SWITCH/ MOTION SENSORS]. REFER TO ENGINEERING DWGS. ANY MOTION SENSORS SHOWN ADJACENT TO DOORWAYS SHALL BE INSTALLED AS REQ'D AWAY FROM DOORWAY TO INSURE OPERATION OF DOOR WILL NOT IMPEDE THE OPERATION OF MOTION SENSORS. 3. WHEN MULTIPLE SWITCHES ARE LOCATED ADJACENT TO EACH OTHER, GANG THEM TOGETHER WITHIN A SINGLE COVER PLATE.
- 4. ILIGHTS IN OPEN AREAS TO BE CONTROLLED VIA CEILING MOUNTED MOTION/OCCUPANCY SENSORSI ILIGHTS IN OPEN AREAS TO BE CONTROL VIA GANGED SWITCHES AT ENTRY. REFER TO PLAN FOR LOCATIONS]. REFER TO ENGINEERING DWGS FOR SPECIFICATIONS [AND LOCATIONS OF SENSORS]. 5. REFER TO ENGINEERING DWGS FOR DIMMING AND MASTER OVERRIDE CONTROLS. REFER TO
- ARCHITECTURAL RCP FOR LOCATIONS. 6. UON, LIGHT SWITCH COVER PLATE FINISH SHALL BE PAINTED TO MATCH ADJACENT WALL COLOR IN SEMI-GLOSS FINISH. SUBMIT COLOR OPTIONS FOR SWITCH DEVISE TO ARCHITECT PRIOR TO
- 7. UON, LIGHT SWITCH COVER PLATE FOR DEVICES MOUNTED ON FABRIC WRAPPED PANELS, MILLWORK, WALL TILED SURFACES OR SPECIALTY SURFACES TO BE STAINLESS STEEL WITH A GRAY DEVICE INSERT. 8. VERTICALLY STACK LIGHT SWITCHES THERMOSTATS AND VISUAL STROBES. REFER TO STANDARD MOUNTING HEIGHT ELEVATIONS.

CODE / LIFE SAFETY

- 1. ALL SPRINKLER HEADS TO BE RECESSED/CAPPED STYLE AND WHITE AT ACT CEILINGS WHEN ALLOWED
- BY CODE. 2. COORDINATE FINISH AT SPRINKLER HEAD COVERS WHEN LOCATED AT DRYWALL AND SPECIALTY CEILINGS WITH ARCHITECT PRIOR TO INSTALLATION.
- 3. FOR EXISTING BUILDING SERVICES/ USER SWITCHES RELOCATION, SEE ENGINEERING DRAWINGS. 4. EXIT SIGNAGE IS TO COMPLY WITH LOCAL CODE. HOUSING TO BE RECESSED INTO CEILING AND GLASS TO BE FRAME-LESS.

G. COORDINATION WITH EXISTING SYSTEMS

1. ISOLATE CEILING ASSEMBLIES WHERE THEY ABUT OR ARE PENETRATED BY BUILDING STRUCTURE TO PREVENT TRANSFER OF LOADING IMPOSED BY STRUCTURAL MOVEMENT. 2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL CEILING HEIGHTS. IF A DISCREPANCY ARISES IT IS THE RESPONSIBILITY OF CONTRACTOR TO CONTACT ARCHITECT BEFORE THE COMMENCEMENT OF ANY

. COORDINATION WITH OTHER TRADES

- 1. MECHANICAL AND ELECTRICAL DEVICES INDICATED ON ARCHITECTURAL DRAWINGS ARE FOR REFERENCE AND COORDINATION PURPOSES ONLY. UNLESS OTHERWISE NOTED, REFER TO ENGINEERING DRAWINGS FOR ADDITIONAL INFORMATION. LOCATIONS ON ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER LOCATIONS INDICATED ON THE ENGINEERING DOCUMENTS.
- . LOCATION OF ALL FIRE SPEAKER/STROBE AND THERMOSTATS TO BE ACCEPTED BY ARCHITECT PRIOR TO INSTALLATION. DO NOT INSTALL ON PANELED FEATURE WALLS OR BEHIND FURNITURE PANELS. COORDINATE WITH ARCHITECT AND FURNITURE INSTALLER PRIOR TO INSTALLATION. 3. REFER TO THE ENGINEER'S DOCUMENTS FOR COORDINATION OF NEW AND RELOCATED FIRE PROTECTION, HVAC, COMMUNICATION, PAGING, AND CEILING DEVICES.
- 4. REFER TO ENGINEERING DRAWINGS, DEMOLITION PLANS, CONSTRUCTION PLANS, POWER AND COMMUNICATION PLANS AND FINISH PLANS FOR OTHER WORK THAT MAY OCCUR AT THESE AREAS. 5. GENERAL CONTRACTOR TO CLEAN/WIPE DUST FROM TOPS OF EXPOSED MECHANICAL DUCTS AND
- LIGHT FIXTURES PRIOR TO FURNITURE INSTALLATION. 6. IF FURNITURE OR FINISHES HAVE BEEN INSTALLED PRIOR TO CEILING/LIGHT FIXTURE WORK, ALL FURNITURE/FINISHES & MILLWORK SHALL BE PROTECTED FROM DUST, DEBRIS AND DAMAGE DURING

8. REFER TO ENGINEERING DWGS FOR EXIT SIGN LOCATIONS AND EMERGENCY LIGHT LAYOUT.

- 7. REFER TO FINISH LEGEND FOR SPECIFICATIONS ON WINDOW SHADES. COORDINATE POWER REQUIREMENTS WITH ENGINEERING DWGS.
- 9. COORDINATE LOCATIONS AND TYPES OF ACCESS COVERS WITH ARCHITECT PRIOR TO INSTALLATION.

- AND FRAMES ARE TO BE PAINTED TO MATCH ADJACENT WALL SURFACE. 4. ALL EXISTING AND NEW GYP. BD. CEILINGS TO BE PAINTED [P-XX] IN A FLAT FINISH, UON.
- 5. ALL PAINT TO BE EGGSHELL FINISH, UON. FOR DARKER PAINTS, TINT PRIMER TO APPROXIMATE SHADE 6. ALL METAL SURFACES TO BE PRIMED ACCORDING TO MANUFACTURER'S STANDARDS AND RECEIVE A SEMI GLOSS FINISH UON AND BE PAINTED TO MATCH ADJACENT SURFACE.

CODE / LIFE SAFETY

1. ALL FINISHES TO MEET LOCAL CODE REQUIREMENTS. REFER TO LIFE SAFETY PLAN. . TRANSITIONS

3. ALL FLOORING TRANSITIONS TO OCCUR AT CENTERLINE OF DOOR.

 PROVIDE 1/4" STAINLESS STEEL TRANSITION STRIP AT ALL CARPET TO STONE/TILE TRANSITIONS. 2. PROVIDE VINYL REDUCER STRIP AT ALL RES. / VINYL FLOORING TO CARPET TRANSITIONS. COLOR TO MATCH RES. / VINYL FLOORING. SUBMIT COLOR SAMPLE TO ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.

. BASE

- 1. INSTALL STRAIGHT BASE OVER CARPETING AND COVE BASE OVER HARD SURFACE FLOORING AS REQ'D. 2. ALL WOOD BASE TO BE SOLID WOOD (NOT VENEER) AND GRAIN TO MATCH GRAINING OF ADJACENT
- WOOD PANELS, UON. 3. ALL SEAMS IN LACQUER AND PAINTED WOOD BASE TO BE FILLED, SANDED AND FINISHED TO MATCH ADJACENT FINISH.
- 4. ALL RES. BASE TO BE ROLLED GOODS. RES. BASE SHALL BE FURNISHED FROM A CONTINUOUS ROLL AND INSTALLED WITH NO JOINTS. IF LENGTH TO BE INSTALLED IS GREATER THAN THE LENGTH OF THE LARGEST ROLL, PLACE JOINTS EQUIDISTANT FROM EACH END.

E. CARPET

1. MAINTAIN UNIFORMITY OF CARPET DIRECTION AND LAY OF PILE THROUGHOUT PROJECT AREA. REFER TO DIRECTIONAL ARROW FOR DIRECTION OF CARPET PATTERN. 2. FLOORING CONTRACTOR TO PROVIDE A CARPET SEAMING DIAGRAM TO ARCHITECT FOR REVIEW PRIOR TO CUTTING OR INSTALLATION.

. STONE / TILE

- 1. ALL GROUT SPECS, WIDTH AND COLOR TO BE APPROVED BY ARCHITECT PRIOR TO INSTALLATION. ALL GROUT TO BE EFFLORESCENCE FREE.
- 2. PROVIDE EXPANSION JOINTS AS PER TCNA/EJ-171 LATEST YEAR. COORD, LOC, AND COLOR OF EXPANSION JOINTS WITH ARCHITECT PRIOR TO INSTALLATION. 3. PROVIDE CRACK ISOLATION MEMBRANE PER ANSI 118.12/10 AS MANUFACTURED BY MAPEL MAPELASTIC AQUADEFENSE OR APPROVED EQUAL
- 4. PROVIDE UNSANDED GROUT AT ALL POLISHED STONE/TILE AND GLASS TILES. 5. ALL STONE/TILE (TOP AND BOTTOM), WALL AND FLOOR GROUT FINISHES TO BE SEALED PER MANUFACTURER'S SPECIFICATIONS.

S. SUSTAINABILITY

1. ACOUSTICAL SUBSTRATE FOR FABRIC WRAPPED PANELS TO BE RECYCLED COTTON. 2. ALL ADHESIVES AND PAINT FINISHES TO COMPLY WITH LOW VOC STANDARDS.

SPEC AND ENGINEERING DOCUMENTS FOR POWER REQUIREMENTS.]

3. ALL VENEERS TO BE FSC CERTIFIED, UON. 4. LACQUER PAINT FINISH: LOW VOC PAINT WITH VOC'S GENERALLY NOT EXCEEDING 50 G/L AND MEETING GREEN SEAL STANDARDS GS-11 AND SCAQMD RULE 1113. 5. CLEAR SEALED WOOD PANELS (SEE NOTE ABOVE). ALL PANELS ARE TO CONTAIN NO ADDED UREA-

FORMALDEHIDE RESINS.

- I. ATTIC STOCK
- 1. PROVIDE [3-5%] ATTIC STOCK FOR ALL MATERIALS & [3-5%] FOR CARPET CONFIRM WITH OWNER. 2. GC TO STRIP, REPAIR, AND REPAINT ALL PERIMETER CONVECTOR UNITS IN SEMI GLOSS TO MATCH ADJACENT WALL FINISH. . WINDOW TREATMENT: [EXISTING WINDOW BLINDS TO REMAIN. FIX AND REPAIR AS REQUIRED] [NEW WINDOW BLINDS TO MATCH BUILDING STANDARD] [NEW WINDOWS BLINDS REFER TO SCHEDULE FOR

ISSUED FOR

**GENERAL NOTES** 

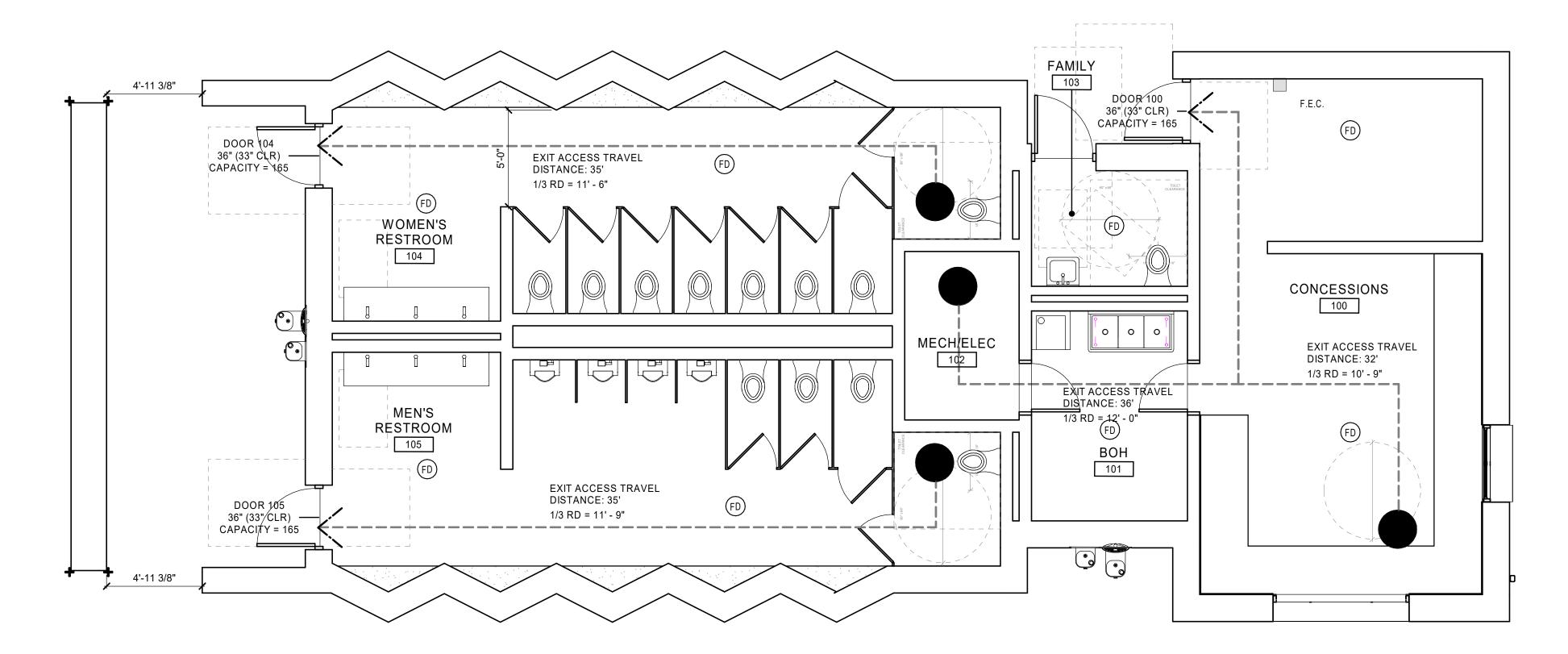
SHEET NUMBER

2313-01 PROJECT NUMBER

AREA OF WORK: 4145 SF Code Reference Item Subject Ordinance Requirement Actual N/A Location / Sheet No. Elgin Zoning Ordinance Requirements Zoning District / Planned Development 7-17-0100 Planned Community Facility Planned Community Facility Permit Application Existing Zoning Use(s) 17-17-0100 Planned Community Facility No Change Permit Application Proposed Zoning Use(s) Elgin Landmark Designation recorded deed restriction zoning map, Ch. 16-4 Lakefront Protection Distric zoning map, Ch. 17-7 Zoning Overlay District zoning map, 17-3-0500 Pedestrian Street \_ot Area Floor Area Ratio (FAR varies by district 17-17-0305, varies by district Total Floor Area 7-17-0311, varies by district 7-17-0306, varies by district Front Setback 17-17-0308, varies by district Combined Side Setbacks 17-17-0307, varies by district Rear Setback 17-2-0307, 17-4-0410 Rear Yard / On-site Open Space varies by district Number of Dwelling Units Number of Efficiency Units (include varies by district Number of Off-street Parking Spaces 7-10-0200 EVSE-ready Parking Spaces (include Number of Off-street Loading Spaces Landscape Ordinance Compliance 17-2-0500 Townhouse Development Standards Planned Development Standards Open Space Impact Fee Worksheet Ch. 16-18 Affordable Requirements Ordinance 17-13-1302-B Survey folder in ProjectDox Plat of Survey 2021 International Building Code Requirements Proposed Occupancy Classification(s) 14B-3-302.1 A-5: Assembly Existing Occupancy Classification(s) 14R-3-302.6, Ch. 14B-3 B.03.02 B.04.01 Special Occupancy Conditions Ch. 14B-4 B.05.01 Grade Plane 14B-2-203.2 B.05.02 14B-2-203.3, 14B-5-504.3 Building Height in Feet Above Grade B.05.03 Number of Stories Above Grade Plane Mezzanine / Equipment Platform B.05.04 14B-5-505 B.05.05 Building Area 14B-2-203.4, 14B-5-506 B.05.06 14B-5-506.1.3 Number of Basements Excluded from 14B-5-506.3 Frontage Increase B.05.08 Mixed Occupancy Strategy 14B-5-508 B.05.09 Accessory Occupancies 14B-5-508.2 B.05.10 Incidental Uses 14B-5-509 Refer to Code/Egress Plan Sheet G30 14B-6-602 Construction Classification Table 14B-6-601, 14B-7-704 Rating – Primary Structural Frame Rating – Exterior Bearing Walls Tables 14B-6-601, 14B-6-602 Rating – Interior Bearing Walls Table 14B-6-601 Rating – Exterior Nonbearing Walls Table 14B-6-602 Rating – Floor Construction Rating - Roof Construction Table 14B-6-601 Combustible Material, Type I-IV 14B-6-603, 14B-6-604 Fire-retardant-treated wood in nonbearing paritions Fire-retardant-treated wood in nonbearing paritions Construction of 1 hr or less; Thermal and acoustical insulation of 1 hr or less; Thermal and acoustical insulation with flame-spread of 25 or less; Wood doors and with flame-spread of 25 or less; Wood doors and frames; Trim per 14B-8-806; Finish Flooring per frames; Trim per 14B-8-806; Finish Flooring per 14B-8-805; Blocking in exterior walls or interior 14B-8-805; Blocking in exterior walls or interior walls of 1 hr or less; Nailing or furring strips per walls of 1 hr or less; Nailing or furring strips per B.06.03 Basement Construction B.07.01 Exterior Wall Rating Tables 14B-6-601, 14B-6-602 B.07.02 Exterior Wall Projections 14B-7-705.2 14B-7-705.8 B.07.03 Exterior Wall Openings 14B-7-705.11 B.07.04 Exterior Wall Parapets 14B-7-706.4 B.07.05 Fire Wall Rating 14B-7-706.8, 14B-7-716.1 B.07.06 Fire Wall Openings B.07.07 | Wall/Floor Rating – Occupancy 14B-7-707.3.9, 14B-7-711.2.4.1 Separation B.07.08 Wall/Floor Rating – Fire Area Separation 14B-7-707.3.10, 14B-7-711.2.4.2 B.07.09 Wall/Floor Rating – Control Area 14B-4-414.2.4. 14B-7-707.3.8 B.07.10 Wall/Floor Rating – Incidental Uses 14B-7-707.3.7. 14B-7-711.2.4.5 Telecommunications Room over 50 sf - 2 hr Sheet A010-26 Wall/Floor- Unit Separation 14B-4-420, 14B-7-711.2.4.3 B.07.12 Wall/Floor – Corridor 14B-7-708, 14B-10-1020.1 No rating required in sprinklered buildings B.07.13 Smoke Barrier 14B-7-709 B.07.14 Vertical Openings 14B-7-712 14B-7-713.4 B.07.15 Shaft Enclosure – Rating B.07.16 Shaft Enclosure – Continuity 14B-7-713.5 B.07.17 Shaft Enclosure – Openings 14B-7-713.7, 14B-7-713.8 Penetrations B.07.18 Penetration of Rated Construction 14B-7-714 Refer to General Notes & MEP/FP Drawings Refer to General Notes & MEP/FP Drawings 14B-7-716 B.07.19 Opening Protectives Fire barriers & shaft enclosures with 2 hr ratings = Refer to Door Schedule Sheet A651 14B-7-717 Duct and Air Transfer Openings Mechanical Drawings Refer to Code General Notes Fireblocking / Draftstopping Refer to Code General Notes Sheet A010-26 Interior Finish: Rooms / Spaces Sheet A010-26 Table 14B-8-803.1 Refer to Interior Materials Compliance Notes Refer to Interior Material Compliance Notes Interior Finish: Corridors / Exit Access Table 14B-8-803.1 Refer to Interior Materials Compliance Notes Refer to Interior Material Compliance Notes Sheet A010-26 Interior Finish: Exit / Exit Discharge B.08.03 Table 14B-8-803.13 B.08.04 Interior Floor Finish (Fibrous) 14B-8-803.4.2 Refer to Interior Materials Compliance Notes Refer to Interior Material Compliance Notes Sheet A010-26 B.09.02 Automatic Sprinkler System 14B-9-903.2 Building is fully sprinklered Fire Protection Drawings B.09.03 Alternative Automatic Extinguishing 14B-9-904.2 B.09.04 14B-9-905.3 Standpipe System Refer to Code/Egress Plan & Floor Plan Sheet A010-26, Sheet A100-26 B.09.05 Portable Fire Extinguishers 14B-9-906.1 Sheet FP3.26 B.09.06 | Fire Alarm System Electrical / Fire Alarm Drawings 14B-9-907.2 B.09.07 Single- and Multiple-station Smoke 14B-9-907.2.10 14B-9-907.5.2.3 Visible Alarm Notification Electrical / Fire Alarm Drawings B.09.09 Smoke Control System 14B-9-909 14B-9-910.2 B.09.10 Smoke and Heat Removal Fire Department Connection 14B-9-912.2, 14B-9-912.4 B.09.11 14B-9-913.2.1 Fire Pump Room Rating Signage for Shaftway / Equipment Room 14B-9-914 B.09.13 14B-9-915 B.09.14 Carbon Monoxide Detection 14B-9-919.1 B.09.15 City Fire Alarm Box 14B-10-1004.1 Occupant Load Calculations Shown Sheet A010-26 B.10.02 Egress Capacity Calculations Shown Sheet A010-26 Common Path of Egress Travel Distance Table 14B-10-1006.2 Sheet A010-26 Single Exit Condition Allowed B.10.04 14B-10-1006.3.3 B.10.05 Exit and Exit Access Separation 14B-10-1007.1 Refer to Code/Egress Plan 1/3rd of maximum diagonal distance for Sheet A010-26 sprinklered buildings B.10.06 Accessible Means of Egress 14B-10-1009 Sheet A010-26 Accessible Means of Access Required Compliant B.10.07 Two-way Communication 14B-10-1009.8 B.10.08 Roof Access 14B-10-1011.12 B.10.09 Exit Signs 14B-10-1013 Electrical Drawings B.10.10 Handrail / Guard Details 14B-10-1014, 14B-10-1015 B.10.11 Exit Access Travel Distance 14B-10-1017.2 Sheet A010-26 14B-10-1029 B.10.12 Assembly Seating Requirements 14B-12-1202. B.12.01 Natural Ventilation B.12.02 Natural Light 14B-12-1204.2 Court / Yard Minimum Dimensions 14B-12-1205 B.12.04 Minimum Ceiling Height 14B-12-1207.2 7'-6" minimum A120-26 B.12.05 Minimum Room Area 14B-12-1207.3 B.14.01 Exterior Wall Coverings – Combustibility 14B-14-1405.1 B.15.01 Roof Fire Classification 14B-15-1505.1 B.15.02 Rooftop Structure Height 14B-15-1510, 14B-15-151 B.15.03 Rooftop Structure Area 14B-15-1513.1.1 B.15.04 Rooftop Structure Materials 14B-15-1513.3 B.15.05 Roof Covering Solar Reflectance 14B-15-1515.2 B.27.01 Electrical Room Fire Resistance Rating Table 14B-5-509, Title 14E B.27.02 Electrical Room Number of Exits 14B-10-1006.2.2.7 B.28.01 Mechanical Room Fire-resistance Rating Table 14B-5-509 B.28.01 Mechanical Room Number of Exits 14B-10-1006.2.2 B.30.01 Elevator Cabs Per Hoistway B.30.02 Elevator Cab Dimensions 14B-30-3002.4 B.30.03 Standby Power for Elevator 14B-10-1009.4.1 B.30.04 Elevator Machine Room Rating 14B-30-3005.4

**BUILDING CODE SUMMARY** 

BUILDING CODE SUMMARY - IBC SCOPE STATEMENT: NEW CONSTRUCTION OF (1) CONCESSIONS AND RESTROOM BUILDING AND (1) MAINTENANCE BUILDING TO SUPPORT NEW SPORTS COMPLEX. SCOPE STATEMENT: NEW CONSTRUCTION OF (1) CONCESSIONS AND RESTROOM BUILDING AND (1) MAINTENANCE BUILDING TO SUPPORT NEW SPORTS COMPLEX. AREA OF WORK: 4145 SF CHAPTER 3 - USE & OCCUPANCY CLASSIFICATION **CHAPTER 6 - TYPES OF CONSTRUCTION** A/ ASSEMBLY 4145 SF TYPE OF CONSTRUCTION PROPOSED. TYPE II-B B/ BUSINESS.. XXX SF BUILDING ELEMENTS XXX SF STRUCTURAL FRAME E/ EDUCATION. ETC (SEE SECTION 302) EXTERIOR BEARING WALLS 0 HR INTERIOR BEARING WALLS.. 0 HR MOST RESTRICTIVE. 5 NET/ XXXXX **EXTERIOR NON-BEARING WALLS** 0 HR (ACCESSORY OR MIXED) OCCUPANCY X/ XXXXX INTERIOR NON-BEARING WALLS 0 HR ROOF. 0 HR CHAPTER 5 - GENERAL BUILDING HEIGHTS & AREAS EXTERIOR WALLS BASED ON FIRE SEPERATION BASED ON MOST RESTRICTIVE OCCUPANCY GROUP X/XXXXX 0 HR TABLE 503 **BUILDING HEIGHT** SOUTH. 0 HR ALLOWABLE HEIGHT XXX FT WEST.. 0 HR SPRINKLER INCREASE TOTAL **CHAPTER 7 - FIRE AND SMOKE PROTECTION FEATURES** FIRE RESISTANCE RATING REQUIREMENTS FOR PROPOSED HEIGHT XXX FT ELEVATOR LOBBY.. SHAFT ENCLOSURES NUMBER OF STORIES TABLE 504.4 ALLOWABLE NUMBER. NA STORY SPRINKLER INCREASE. TOTAL CHAPTER 9 - FIRE PROTECTION SYSTEMS PROPOSED NUMBER 1 STORY **TABLE 506.2 BUILDING AREA** ALLOWABLE AREA.. NA SF **CHAPTER 10 - MEANS OF EGRESS** (SPRINKLER INCREASE) REFER TO EGRESS PLANS PROPOSED AREA.. 4145 SF



EGRESS PLAN - CONCESSIONS BUILDING

INTERIOR MATERIAL COMPLIANCE

MATERIALS USED FOR INTERIOR WALL AND CEILING FINISHES WITHIN THE TENANT SPACE CONFORM TO CHAPTER 8 OF THE IBC. ALL MATERIALS CONFORM TO CLASS C; WITH A FLAME SPREAD INDEX OF 76-200 AND A SMOKE-DEVELOPED INDEX OF 0-450.

MATERIALS USED FOR INTERIOR WALL AND CEILING FINISHES WITHIN INTERIOR EXIT STAIRWAYS, INTERIOR EXIT RAMPS AND EXIT PASSAGEWAYS CONFORM TO CHAPTER 8 OF THE IBC. ALL MATERIALS CONFORM TO CLASS B; WITH A FLAME SPREAD INDEX OF 26-75 AND A SMOKE-DEVELOPED INDEX OF

MATERIALS USED FOR WALL AND CEILING FINISHES AT CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND EXIT ACCESS RAMPS CONFORM TO CHAPTER 8 OF THE IBC. GROUP B, ALL MATERIALS CONFORM TO CLASS C; WITH A FLAME SPREAD INDEX OF 76-200 AND A SMOKE-DEVELOPED INDEX OF 0-450. GROUP A, ALL MATERIALS CONFORM TO CLASS B; WITH A FLAME SPREAD INDEX OF 26-75 AND A SMOKE-DEVELOPED INDEX OF 0-450.

MATERIALS USED FOR INTERIOR FLOOR FINISH COMPLIE WITH THE DOC FF-1 "PILL TEST" OR ASTM D 2859.

EGRESS DESIGN APPROACH EGRESS PLAN LEGEND 75 SPORTS WAY IS A NON SPRINKLERED BUILDING WITH AN EMERGENCY ALARM COMMUNICATION SYSTEM MAX. TRAVEL DISTANCE (PER TABLE 1017.2) LOAD CAPACITY IBC **FACTOR** OCCUPANT **SPACE** (SF/OCCUPANT) LOAD FUNCTION OF SPACE AREA (SF) CONCESSIONS 1,057 SF ASSEMBLY AREA

ss			EGRES	S ELEMEN	NT CAPACITY IBO	<u> </u>	[2015 INTERNATIONAL BUILDING CODE] 2009 - A117.1 AMERICAN NATIONAL STANDARDS INSTITUTE [2018 STATE OF ILLINOIS ACCESSIBILITY CODE,] 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN[2012 NFPA 101]  1.02 WOOD BLOCKING AND FRAMING IS FIRE RETARDANT TREATED WOOD.
	EXIT DOORS VERTICAL EXITS)	DOOR ID  100 104 105 108 GRAND TOTAL	ROOM CONCESSIONS WOMEN'S RESTROOM MEN'S RESTROOM FAMILY	DOOR WIDTH 33" 33" 33" 33"	0.2 0.2 0.2 0.2 0.2	OCCUPANT LOAD SERVED  165 165 165 165 660	<ul> <li>1.03 DOORS THAT LEAD TO REQUIRED EXITS ARE OPERABLE ON THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.</li> <li>1.04 REFER TO THE MECHANICAL ENGINEERING DRAWINGS FOR VENTILATION SCHEDULE.</li> <li>1.05 REFER TO THE ENGINEERING DRAWINGS FOR FIRE EXTINGUISHER INFORMATION AND LOCATIONS.</li> <li>1.06 REFER TO ELECTRICAL ENGINEERING DRAWINGS FOR EXIT SIGN, EMERGENCY LIGHTING AND VISUAL ALARM SIGNAL APPLIANCE (VASA) INFORMATION AND LOCATIONS.</li> <li>1.08 NEW EXIT SIGNS, EXIT LIGHTING AND VISUAL ALARM SIGNAL APPLIANCE</li> </ul>
	EXIT STAIRS (	STAIR ID	ESS PER DOOR OCCUPANTS CAN STAIR WIDTI		CAPACITY FACTOR	OCCUPANT LOAD SERVED	ARE ON BASE BUILDING EMERGENCY LIGHTING CIRCUIT PROVIDING EMERGENCY GENERATOR POWERED ELECTRICAL BACK-UP ASSURING CONTINUED ILLUMINATION  1.09 ALL GLAZED DOORS AND ANY GLAZED PANEL MORE THAN EIGHTEEN INCHES IN WIDTH IMMEDIATELY ADJACENT TO ANY DOOR WHEREIN THE OF SUCH GLAZED PANEL IS LESS THAN 24 INCHES ABOVE THE FLOOR SIBE CONSIDERED HAZARDOUS LOCATIONS AND SHALL BE GLAZED WITH SAFETY GLAZING MATERIALS. GLAZED DOORS SHALL INCLUDE AMONG OTHERS, THE FOLLOWING: SLIDING GLASS DOORS, STORM DOORS, SHOWER DOORS AND BATHTUB ENCLOSURES.
	ALLOWED EGRESS PER STAIR OCCUPANTS CAPACITY  CALCULATED LOAD (53P) AND ACTUAL LOAD (XXXP) ARE LESS THAN MAX ALLOWED CAPACITY BY STAIRS AND DOORS AT (660P)					1.12 APPLY ALL INTERIOR WALL AND CEILING FINISHES TO A NONCOMBUSTIE BASE OR TO FURRING OR NAILING STRIPS NOT EXCEEDING ONE AND TH QUARTER INCHES IN NOMINAL THICKNESS APPLIED OVER A NONCOMBUSTIBLE BASE WITH ALL SPACES BEHIND THE MATERIAL FILLE WITH NONCOMBUSTIBLE MATERIAL OR FIRESTOPPED AT INTERVALS NO EXCEEDING EIGHT SQUARE FEET IN AREA. [PER IBC SECTION 803.15.1.]	

\_\_\_\_ REMOTENESS BEGINING OR END POINT OF EGRESS TRAVEL POINT AT WHICH A CHOICE OF 2 EXITS BECOMES AVAILABLE **NEW CONSTRUCTION EXISTING CONSTRUCTION** FIRE EXTINGUISHER CABINET FIRE EXTINGUISHER

**GENERAL NOTES** 01 WORK IS TO BE IN ACCORDANCE WITH THE FOLLOWING BUILDING CODES:

PATH OF TRAVEL

[2015 INTERNATIONAL BUILDING CODE] 2009 - A117.1 AMERICAN NATIONAL STANDARDS INSTITUTE [2018 STATE OF ILLINOIS ACCESSIBILITY CODE,] 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN[2012 NFPA 101]

- WOOD BLOCKING AND FRAMING IS FIRE RETARDANT TREATED WOOD. DOORS THAT LEAD TO REQUIRED EXITS ARE OPERABLE ON THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.
- REFER TO THE MECHANICAL ENGINEERING DRAWINGS FOR VENTILATION SCHEDULE. REFER TO THE ENGINEERING DRAWINGS FOR FIRE EXTINGUISHER INFORMATION AND LOCATIONS.
- REFER TO ELECTRICAL ENGINEERING DRAWINGS FOR EXIT SIGN. EMERGENCY LIGHTING AND VISUAL ALARM SIGNAL APPLIANCE (VASA) INFORMATION AND LOCATIONS. NEW EXIT SIGNS, EXIT LIGHTING AND VISUAL ALARM SIGNAL APPLIANCES
- ARE ON BASE BUILDING EMERGENCY LIGHTING CIRCUIT PROVIDING EMERGENCY GENERATOR POWERED ELECTRICAL BACK-UP ASSURING CONTINUED ILLUMINATION ALL GLAZED DOORS AND ANY GLAZED PANEL MORE THAN EIGHTEEN INCHES IN WIDTH IMMEDIATELY ADJACENT TO ANY DOOR WHEREIN THE SILL OF SUCH GLAZED PANEL IS LESS THAN 24 INCHES ABOVE THE FLOOR SHALL BE CONSIDERED HAZARDOUS LOCATIONS AND SHALL BE GLAZED WITH
- APPLY ALL INTERIOR WALL AND CEILING FINISHES TO A NONCOMBUSTIBLE BASE OR TO FURRING OR NAILING STRIPS NOT EXCEEDING ONE AND THREE QUARTER INCHES IN NOMINAL THICKNESS APPLIED OVER A NONCOMBUSTIBLE BASE WITH ALL SPACES BEHIND THE MATERIAL FILLED WITH NONCOMBUSTIBLE MATERIAL OR FIRESTOPPED AT INTERVALS NOT EXCEEDING EIGHT SQUARE FEET IN AREA. [PER IBC SECTION 803.15.1.]

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CODE AND LIFE SAFETY PLAN - CONCESSIONS

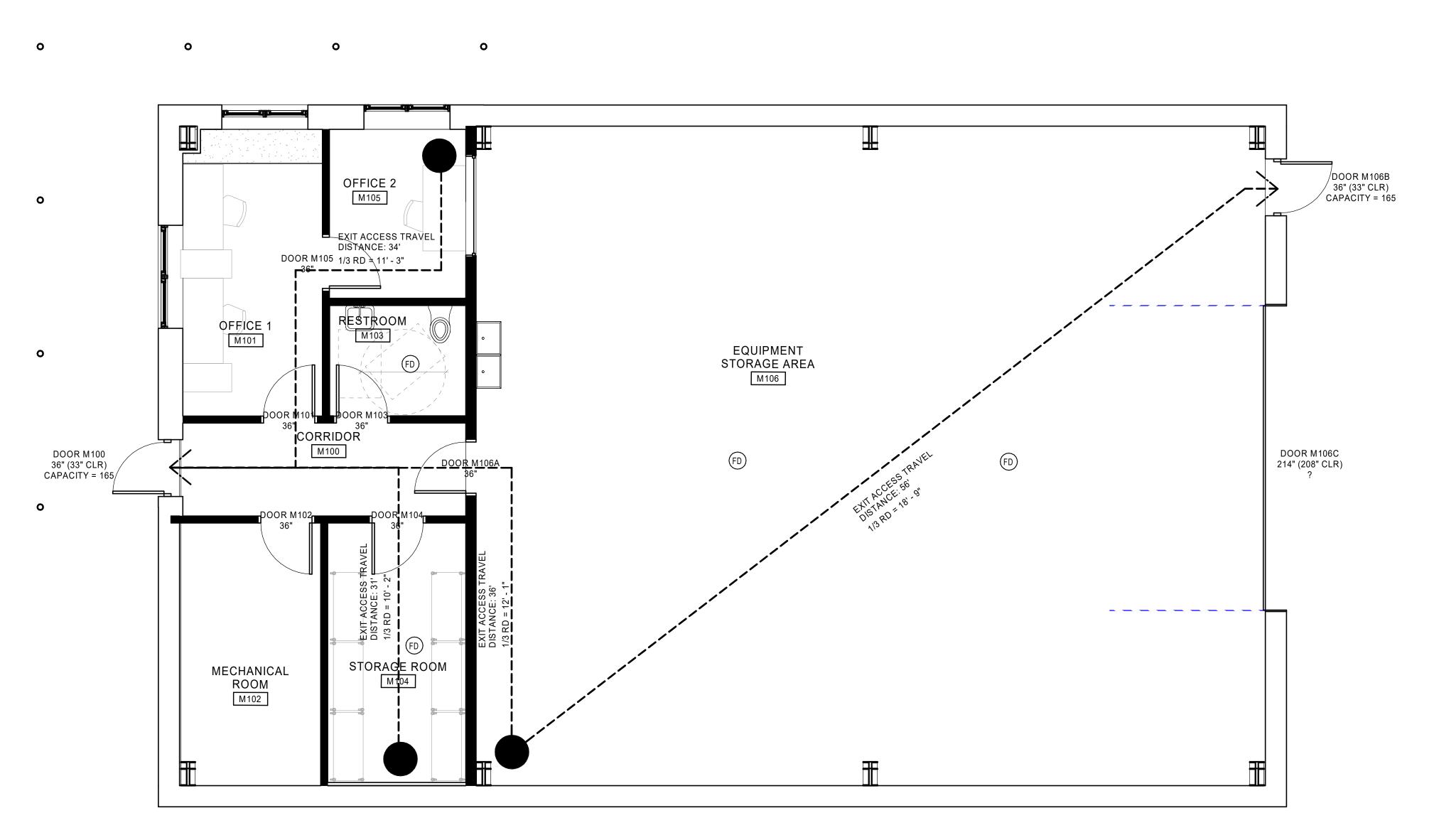
PROJECT NUMBER

2313-01

SHEET NUMBER

B.31.01 Fence Height and Materials

14B-31-3114, (also zoning reqs.)





EGRESS DESIGN APPROACH	EGRESS PLAN LEGEND	GENERAL NOTES
AX. COMMON PATH OF TRAVEL (PER TABLE 1006.2.1):  MAX. DEAD-END (PER 1020.5):  BTORAGE = 20 FT  MAX. TRAVEL DISTANCE (PER TABLE 1017.2):  BTORAGE = 300 FT   EGRESS ELEMENT CAPACITY IBC  DOOR	PATH OF TRAVEL REMOTENESS  BEGINING OR END POINT OF EGRESS TRAVEL POINT AT WHICH A CHOICE OF 2 EXITS BECOMES AVAILABLE NEW CONSTRUCTION EXISTING CONSTRUCTION FIRE EXTINGUISHER CABINET	<ol> <li>WORK IS TO BE IN ACCORDANCE WITH THE FOLLOWING BUILDING CODE [2015 INTERNATIONAL BUILDING CODE]         2009 - A117.1 AMERICAN NATIONAL STANDARDS INSTITUTE         [2018 STATE OF ILLINOIS ACCESSIBILITY CODE,] 2010 ADA STANDARDS FACCESSIBLE DESIGN[2012 NFPA 101]</li> <li>WOOD BLOCKING AND FRAMING IS FIRE RETARDANT TREATED WOOD.</li> <li>DOORS THAT LEAD TO REQUIRED EXITS ARE OPERABLE ON THE EGRESSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.</li> <li>REFER TO THE MECHANICAL ENGINEERING DRAWINGS FOR VENTILATION SCHEDULE.</li> <li>REFER TO THE ENGINEERING DRAWINGS FOR FIRE EXTINGUISHER INFORMATION AND LOCATIONS.</li> <li>REFER TO ELECTRICAL ENGINEERING DRAWINGS FOR EXIT SIGN,</li> </ol>
DOOR ID ROOM WIDTH CAPACITY FACTOR OCCUPANT LOAD SERVED    M100	FE FIRE EXTINGUISHER	EMERGENCY LIGHTING AND VISUAL ALARM SIGNAL APPLIANCE (VASA) INFORMATION AND LOCATIONS.  1.08 NEW EXIT SIGNS, EXIT LIGHTING AND VISUAL ALARM SIGNAL APPLIANCE ARE ON BASE BUILDING EMERGENCY LIGHTING CIRCUIT PROVIDING EMERGENCY GENERATOR POWERED ELECTRICAL BACK-UP ASSURING CONTINUED ILLUMINATION  1.09 ALL GLAZED DOORS AND ANY GLAZED PANEL MORE THAN EIGHTEEN INCHES IN WIDTH IMMEDIATELY ADJACENT TO ANY DOOR WHEREIN THE OF SUCH GLAZED PANEL IS LESS THAN 24 INCHES ABOVE THE FLOOR S BE CONSIDERED HAZARDOUS LOCATIONS AND SHALL BE GLAZED WITH SAFETY GLAZING MATERIALS. GLAZED DOORS SHALL INCLUDE AMONG OTHERS, THE FOLLOWING: SLIDING GLASS DOORS, STORM DOORS, SHOWER DOORS AND BATHTUB ENCLOSURES.  1.12 APPLY ALL INTERIOR WALL AND CEILING FINISHES TO A NONCOMBUSTII BASE OR TO FURRING OR NAILING STRIPS NOT EXCEEDING ONE AND TO QUARTER INCHES IN NOMINAL THICKNESS APPLIED OVER A NONCOMBUSTIBLE BASE WITH ALL SPACES BEHIND THE MATERIAL FILL WITH NONCOMBUSTIBLE MATERIAL OR FIRESTOPPED AT INTERVALS NO EXCEEDING EIGHT SQUARE FEET IN AREA. [PER IBC SECTION 803.15.1.]

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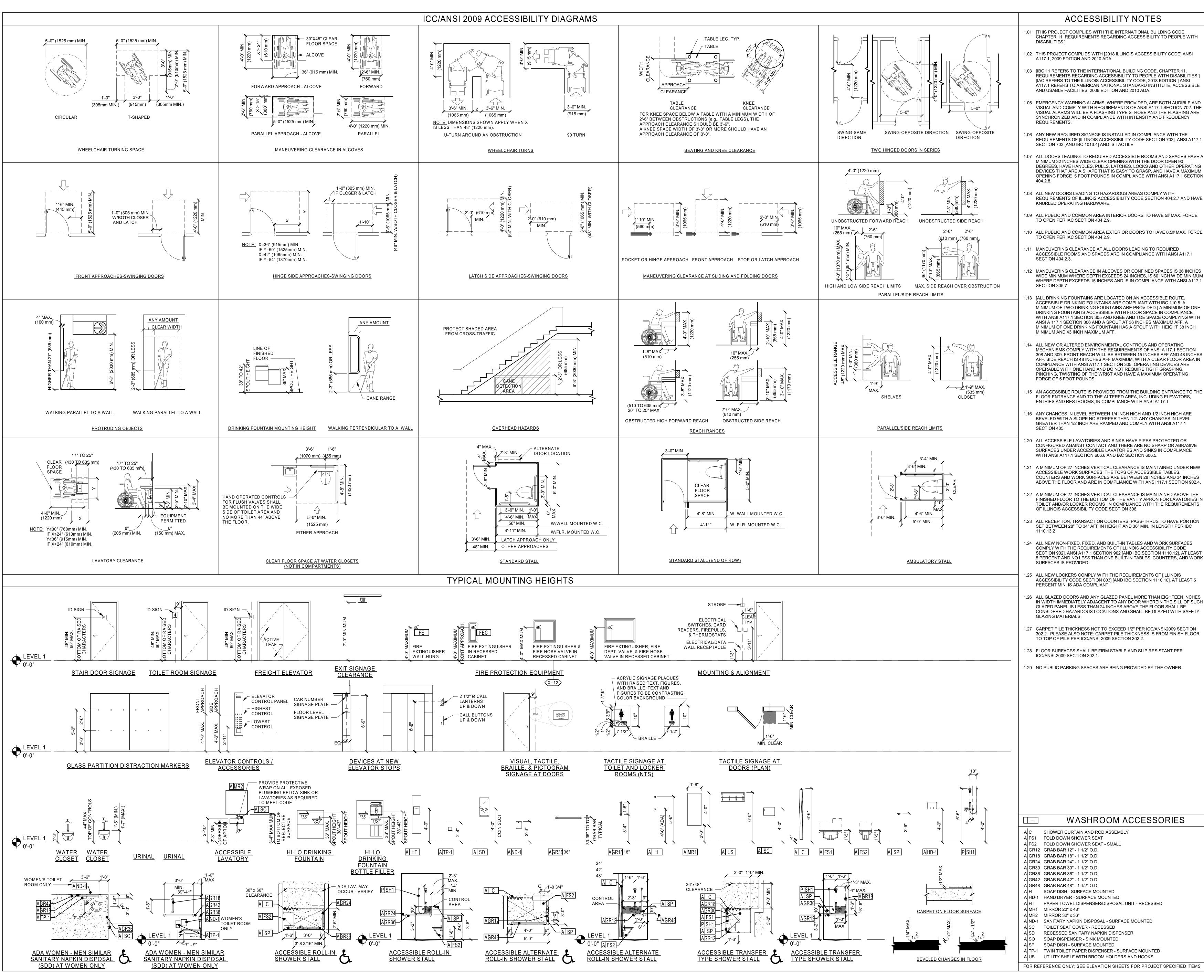
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SEALS AND SIGNATURES

CODE AND LIFE SAFETY PLAN - MAINTENANCE

2313-01

PROJECT NUMBER G-302 SHEET NUMBER



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I.16 ANY CHANGES IN LEVEL BETWEEN 1/4 INCH HIGH AND 1/2 INCH HIGH ARE BEVELED WITH A SLOPE NO STEEPER THAN 1:2. ANY CHANGES IN LEVEL GREATER THAN 1/2 INCH ARE RAMPED AND COMPLY WITH ANSI A117.1

1.20 ALL ACCESSIBLE LAVATORIES AND SINKS HAVE PIPES PROTECTED OR CONFIGURED AGAINST CONTACT AND THERE ARE NO SHARP OR ABRASIVE SURFACES UNDER ACCESSIBLE LAVATORIES AND SINKS IN COMPLIANCE

WITH ANSI A117.1 SECTION 606.6 AND IAC SECTION 606.5. I.21 A MINIMUM OF 27 INCHES VERTICAL CLEARANCE IS MAINTAINED UNDER NEW ACCESSIBLE WORK SURFACES. THE TOPS OF ACCESSIBLE TABLES,

I.22 A MINIMUM OF 27 INCHES VERTICAL CLEARANCE IS MAINTAINED ABOVE THE FINISHED FLOOR TO THE BOTTOM OF THE VANITY APRON FOR LAVATORIES IN TOILET AND/OR LOCKER ROOMS IN COMPLIANCE WITH THE REQUIREMENTS

I.23 ALL RECEPTION, TRANSACTION COUNTERS, PASS-THRUS TO HAVE PORTION SET BETWEEN 28" TO 34" AFF IN HEIGHT AND 36" MIN. IN LENGTH PER IBC

I.24 ALL NEW NON-FIXED, FIXED, AND BUILT-IN TABLES AND WORK SURFACES COMPLY WITH THE REQUIREMENTS OF [ILLINOIS ACCESSIBILITY CODE SECTION 902], ANSI A117.1 SECTION 902 [AND IBC SECTION 1110.12]. AT LEAST 5 PERCENT AND NO LESS THAN ONE BUILT-IN TABLES, COUNTERS, AND WORK

1.25 ALL NEW LOCKERS COMPLY WITH THE REQUIREMENTS OF [ILLINOIS ACCESSIBILITY CODE SECTION 803] [AND IBC SECTION 1110.10]. AT LEAST 5

I.26 ALL GLAZED DOORS AND ANY GLAZED PANEL MORE THAN EIGHTEEN INCHES IN WIDTH IMMEDIATELY ADJACENT TO ANY DOOR WHEREIN THE SILL OF SUCH GLAZED PANEL IS LESS THAN 24 INCHES ABOVE THE FLOOR SHALL BE CONSIDERED HAZARDOUS LOCATIONS AND SHALL BE GLAZED WITH SAFETY

1.27 CARPET PILE THICKNESS NOT TO EXCEED 1/2" PER ICC/ANSI-2009 SECTION 302.2. PLEASE ALSO NOTE: CARPET PILE THICKNESS IS FROM FINISH FLOOR

1.29 NO PUBLIC PARKING SPACES ARE BEING PROVIDED BY THE OWNER.

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SEALS AND SIGNATURES

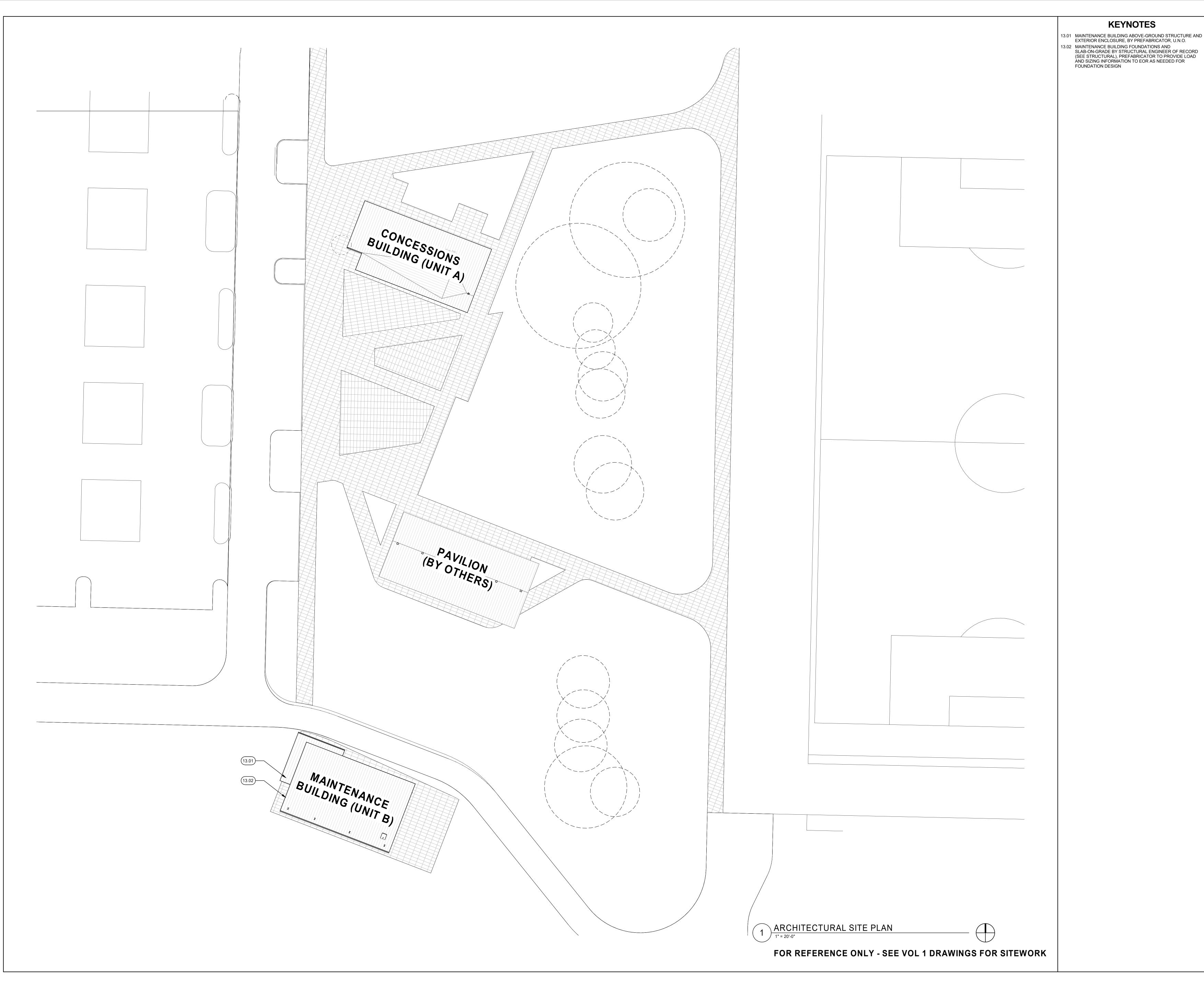
ACCESSIBILITY DIAGRAMS, NOTES, AND TYPICAL MOUNTING HEIGHTS

PROJECT NUMBER

SHEET NUMBER

G-401

2313-01



ELGIN SPORTS COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

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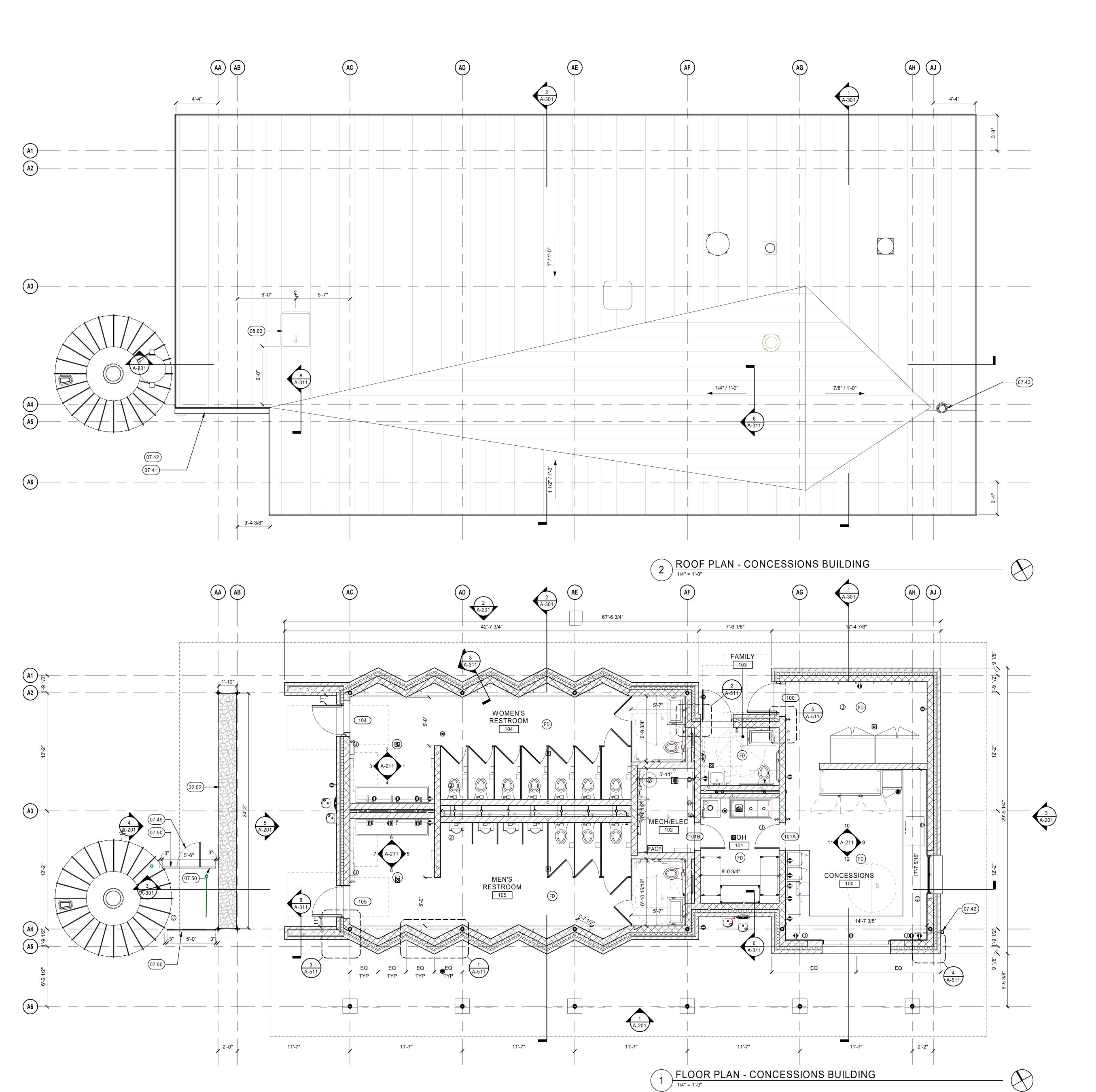
SEALS AND SIGNATURES

ARCHITECTURAL SITE PLAN

2313-01

PROJECT NUMBER A-001

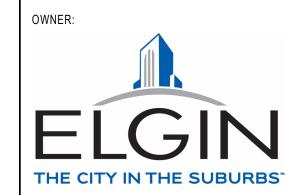
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- 07.41 (EMT-1) PREFINISHED ALUM GUTTER 07.42 (EMT-1) PREFINISHED ALUM DOWNSPOUT
- 07.43 ROOF DRAIN, COORD LOCATION WITH DOWNSPOUT AND IN-GROUND STORM DRAIN BELOW 07.49 LOCKABLE, STEEL-FRAMED GATE W/ PERFORATED CORRUGATED STAINLESS STEEL, MATCHING ADJACENT
- SCREENING PANEL (AS SPECIFIED, DIVISION 07). GATE TO E +/- 30" WIDE (MIN) TO ALLOW ACCESS TO PIPE AREA. 07.50 PERFORATED CORRUGATED STAINLESS STEEL SCREENING PANEL (AS SPECIFIED, DIVISION 07) WITH CONTINUOUS FINISHED EDGE PROFILE ALL SIDES, ON SUPPORTING STEEL FRAMING (SEE STRUCTURAL). PANEL HEIGHT TO ALIGN WITH ADJACENT CISTERN EAVE, (+/- 7'-2" VIF). 3" (MAX) GAP AT PANEL SIDES, 4" GAP AT BOTTOM.
- 1 AINEL SIDES, 4 GAP AT BUITOM.
  108.02 36" X 30" COMMERICAL-GRADE LOCKABLE ALUMINUM ROOF ACCESS HATCH (NIVSTROM, OR FO.) ACCESS HATCH (NYSTROM, OR EQ.)
- 32.02 GABION WALL (MANUFACTURER, TYPE, MATERIAL FINISH, ETC.), APPROXIMATE OVERALL DIMENSIONS AS INDICATED, VERIFY WITH ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO FABRICATION; SEE STRUCTURAL DRAWINGS FOR SUPPORTING COLUMNS AND FOUNDATIONS

## ELGIN SPORTS COMPLEX

**EXPANSION** 475 SPORTS WAY ELGIN, ILLINOIS 60123



## **SMITHGROUP**

35 EAST WACKER SUITE 900 CHICAGO, IL 60601 312.641.0770 www.smithgroup.com

# ARCHITECT OF RECORD:

314 W INSTITUTE PLACE, SUITE 1E CHICAGO, IL 60610 312.944.9600 www.hpzs.com

## | Silman Structural | Solutions | Solution

TYLIN | SILMAN STRUCTURAL SOLUTIONS 200 S WACKER DR, SUITE 1400 CHICAGO, IL 60606 312.682.6300



G. SEE STRUCTURAL SHEETS FOR CONCRETE FOUNDATION. DIMENSIONS. CONCRETE DIMENSIONS SHOW ON ARCHITECTURAL PLANS ARE FOR REFERENCE ONLY. H. DIMENSIONS ARE TO FINISH FACE, U.N.O. . DOORS NOT DIMENSIONED ARE CENTERED IN THEIR WALL OR THEIR R.O. IS 3 3/8" FROM THE NEAREST WALL FRAMING (I.E. THE FINISH JAMB CASING IS PLACED AS FAR INTO THE CORNER AS POSSIBLE WHILE STILL REMAINING WHOLE).

. JOISTS AND BEAMS AS SHOWN ARE IN FRAMING PLATFORM

SHEET NOTES

A. SEE G-SERIES SHEETS FOR GRAPHIC STANDARDS, TYPICAL. B. ABBREVIATIONS, GENERAL NOTES, LIFE-SAFETY AND

ACCESSIBLITY REQUIRMENTS.
C. SEE SHEET G-103 FOR CEILING-SPECIFIC GENERAL NOTES. D. SEE SHEET G-103 FOR FINISH-SPECIFIC GENERAL NOTES.

E. SEE SHEET A-631 FOR MATERIAL, FINISH, AND FIXUTURE

F. SEE SHEET A-632 FOR EQUIPMENT INFORMATION.

SCHEDULES.

ABOVE, UNLESS NOTED OTHERWISE. SEE STRUCTURAL SHEETS FOR STRUCTURAL MEMBER SIZING. K. ALL FURNITURE AND EQUIPMENT PROVIDED BY OWNER. SHOWN FOR LOCATION/SIZE REFERENCE ONLY. . EXTERIOR MATERIALS TO COMPLY WITH THE CITY OF ELGIN'S PLANNING AND ZONING REQUIREMENTS.

625 W ADAMS ST, 19TH FLOOR CHICAGO, IL 60661 312.620.3668 REV DATE

SEALS AND SIGNATURES

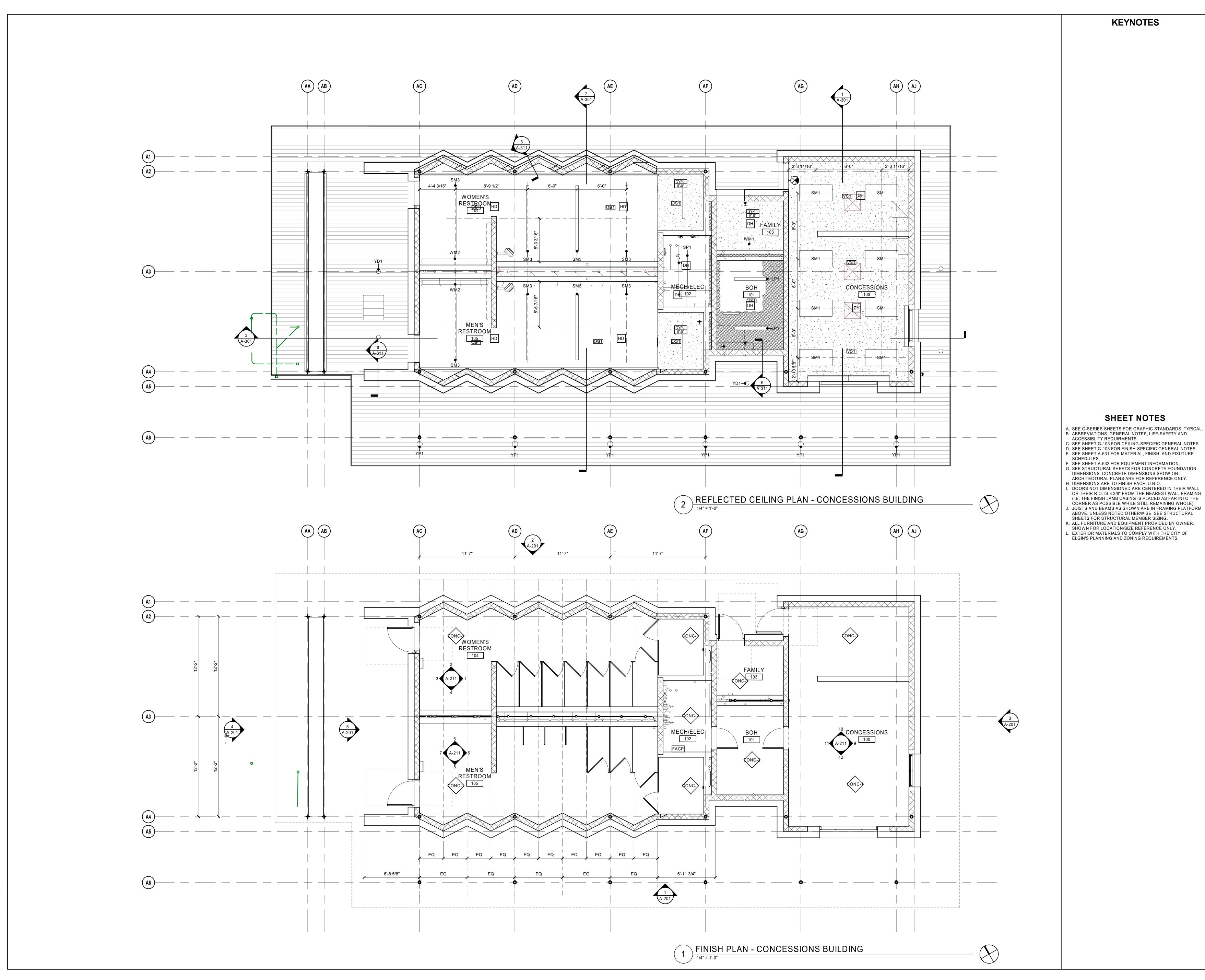
ISSUE FOR BID

CONSTRUCTION PLANS -CONCESSIONS

2313-01

A-101 SHEET NUMBER

PROJECT NUMBER



SHEET NOTES

ELGIN SPORTS COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2



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> REV DATE ISSUE FOR BID

SEALS AND SIGNATURES

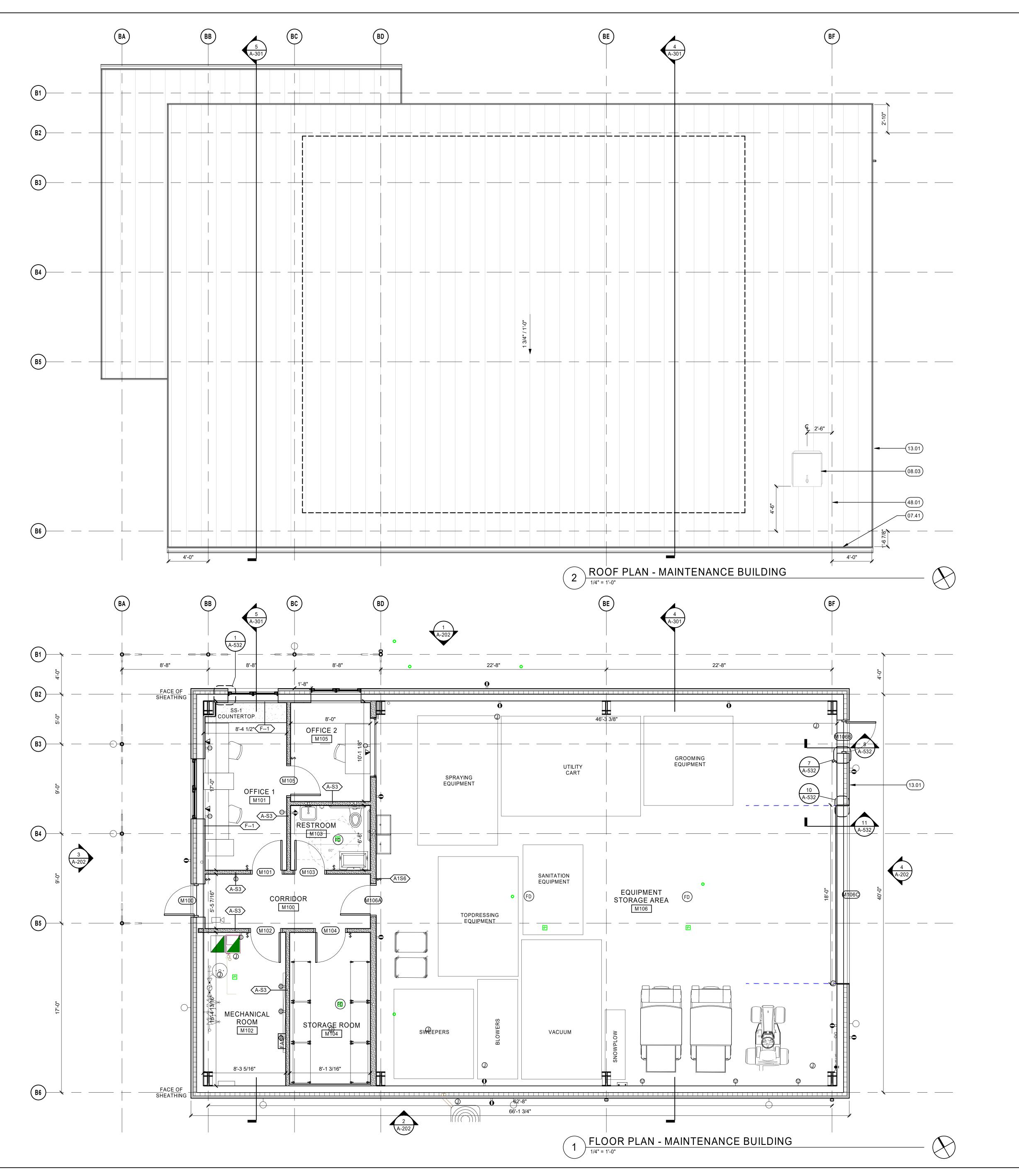
FINISH PLAN & REFLECTED CEILING PLAN - CONCESSIONS

PROJECT NUMBER

SHEET NUMBER

A-102

2313-01



- 07.41 (EMT-1) PREFINISHED ALUM GUTTER
  08.03 36" X 30" COMMERICAL-GRADE, THERMALLY-BROKEN,
  LOCKABLE ALUMINUM ROOF ACCESS HATCH (NYSTROM,
- THERMALMAX OR EQ.)

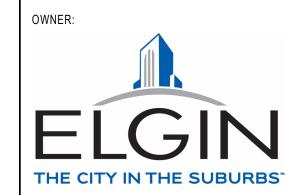
  13.01 MAINTENANCE BUILDING ABOVE-GROUND STRUCTURE AND EXTERIOR ENCLOSURE, BY PREFABRICATOR, U.N.O.
- EXTERIOR ENCLOSURE, BY PREFABRICATOR, U.N.O.

  48.01 AREA RESERVED FOR ROOF-MOUNTED PV ARRAY (BY OTHERS, NIC), NO OTHER ROOF MOUNTED EQUIPMENT OR PENETRATIONS IN THIS AREA

ELGIN SPORTS
COMPLEX
EXPANSION
475 SPORTS WAY

VOLUME 2 OF 2

ELGIN, ILLINOIS 60123



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# **IPZS**

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## | Silman Structural | Solutions | Solution

STRUCTURAL ENGINEER: TYLIN | SILMAN STRUCTURAL SOLUTIONS 200 S WACKER DR, SUITE 1400 CHICAGO, IL 60606 312.682.6300



F. SEE SHEET A-632 FOR EQUIPMENT INFORMATION.
G. SEE STRUCTURAL SHEETS FOR CONCRETE FOUNDATION.
DIMENSIONS. CONCRETE DIMENSIONS SHOW ON
ARCHITECTURAL PLANS ARE FOR REFERENCE ONLY.
H. DIMENSIONS ARE TO FINISH FACE, U.N.O.
I. DOORS NOT DIMENSIONED ARE CENTERED IN THEIR WALL
OR THEIR R.O. IS 3 3/8" FROM THE NEAREST WALL FRAMING

(I.E. THE FINISH JAMB CASING IS PLACED AS FAR INTO THE CORNER AS POSSIBLE WHILE STILL REMAINING WHOLE).

J. JOISTS AND BEAMS AS SHOWN ARE IN FRAMING PLATFORM ABOVE, UNLESS NOTED OTHERWISE. SEE STRUCTURAL SHEETS FOR STRUCTURAL MEMBER SIZING.

K. ALL FURNITURE AND EQUIPMENT PROVIDED BY OWNER. SHOWN FOR LOCATION/SIZE REFERENCE ONLY.

L. EXTERIOR MATERIALS TO COMPLY WITH THE CITY OF

ELGIN'S PLANNING AND ZONING REQUIREMENTS.

SHEET NOTES

A. SEE G-SERIES SHEETS FOR GRAPHIC STANDARDS, TYPICAL. B. ABBREVIATIONS, GENERAL NOTES, LIFE-SAFETY AND

ACCESSIBLITY REQUIRMENTS.

C. SEE SHEET G-103 FOR CEILING-SPECIFIC GENERAL NOTES.

D. SEE SHEET G-103 FOR FINISH-SPECIFIC GENERAL NOTES.

E. SEE SHEET A-631 FOR MATERIAL, FINISH, AND FIXUTURE

SCHEDULES.

ISSUE FOR BID 1 04/11/20

REV DATE

SEALS AND SIGNATURES

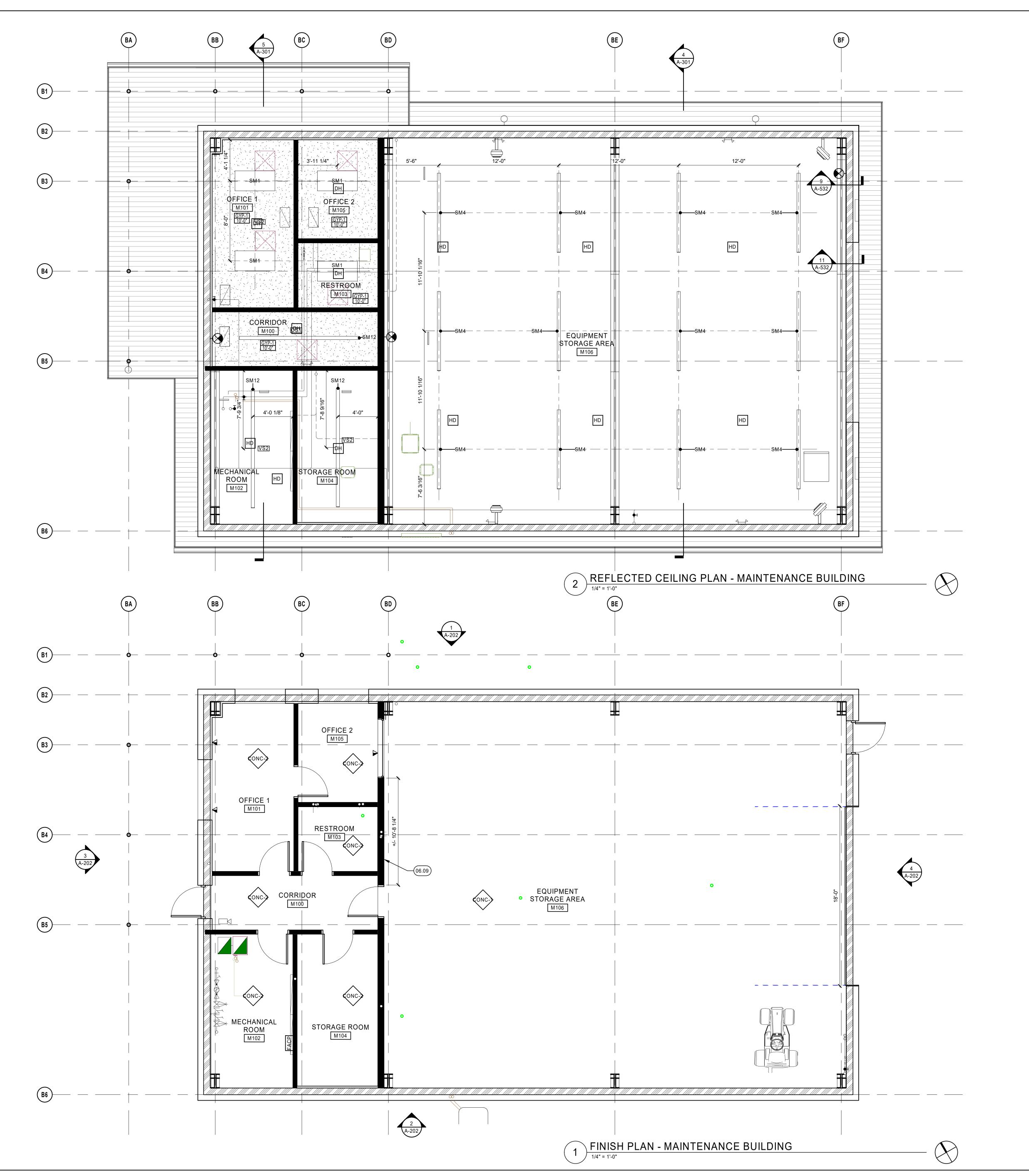
CONSTRUCTION

CONSTRUCTION PLANS MAINTENANCE

PROJECT NUMBER

2313-01

A-111
SHEET NUMBER



06.09 FRP WALL PANELING (AS SPECIFIED, DIV 06) AT SERVICE SINK LOCATION ~7'-0" HIGH TO ALIGN W/ ADJACENT DOOR AND WINDOW FRAMES, COORDINATE W/ PLUMBING.

SHEET NOTES

A. SEE G-SERIES SHEETS FOR GRAPHIC STANDARDS, TYPICAL. B. ABBREVIATIONS, GENERAL NOTES, LIFE-SAFETY AND

ACCESSIBLITY REQUIRMENTS.
C. SEE SHEET G-103 FOR CEILING-SPECIFIC GENERAL NOTES.

D. SEE SHEET G-103 FOR FINISH-SPECIFIC GENERAL NOTES.

G. SEE STRUCTURAL SHEETS FOR CONCRETE FOUNDATION.

. DOORS NOT DIMENSIONED ARE CENTERED IN THEIR WALL OR THEIR R.O. IS 3 3/8" FROM THE NEAREST WALL FRAMING

(I.E. THE FINISH JAMB CASING IS PLACED AS FAR INTO THE CORNER AS POSSIBLE WHILE STILL REMAINING WHOLE).

JOISTS AND BEAMS AS SHOWN ARE IN FRAMING PLATFORM ABOVE, UNLESS NOTED OTHERWISE. SEE STRUCTURAL

 K. ALL FURNITURE AND EQUIPMENT PROVIDED BY OWNER. SHOWN FOR LOCATION/SIZE REFERENCE ONLY.
 L. EXTERIOR MATERIALS TO COMPLY WITH THE CITY OF ELGIN'S PLANNING AND ZONING REQUIREMENTS.

ARCHITECTURAL PLANS ARE FOR REFERENCE ONLY.

E. SEE SHEET A-631 FOR MATERIAL, FINISH, AND FIXUTURE

F. SEE SHEET A-632 FOR EQUIPMENT INFORMATION.

DIMENSIONS. CONCRETE DIMENSIONS SHOW ON

H. DIMENSIONS ARE TO FINISH FACE, U.N.O.

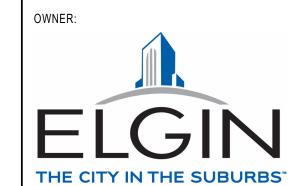
SHEETS FOR STRUCTURAL MEMBER SIZING.

SCHEDULES.

ELGIN SPORTS
COMPLEX
EXPANSION
475 SPORTS WAY

VOLUME 2 OF 2

ELGIN, ILLINOIS 60123



## **SMITHGROUP**

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# **HPZS**

ARCHITECT OF RECORD:
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312.944.9600
www.hpzs.com

## Silman Structural Solutions

STRUCTURAL ENGINEER: TYLIN | SILMAN STRUCTURAL SOLUTIONS 200 S WACKER DR, SUITE 1400 CHICAGO, IL 60606 312.682.6300

Allen+Shariff
MEP Engineering | Project Management
MEP ENGINEER:

MEP ENGINEER:
ALLEN + SHARIFF
625 W ADAMS ST, 19TH FLOOR
CHICAGO, IL 60661
312.620.3668

REV DATE

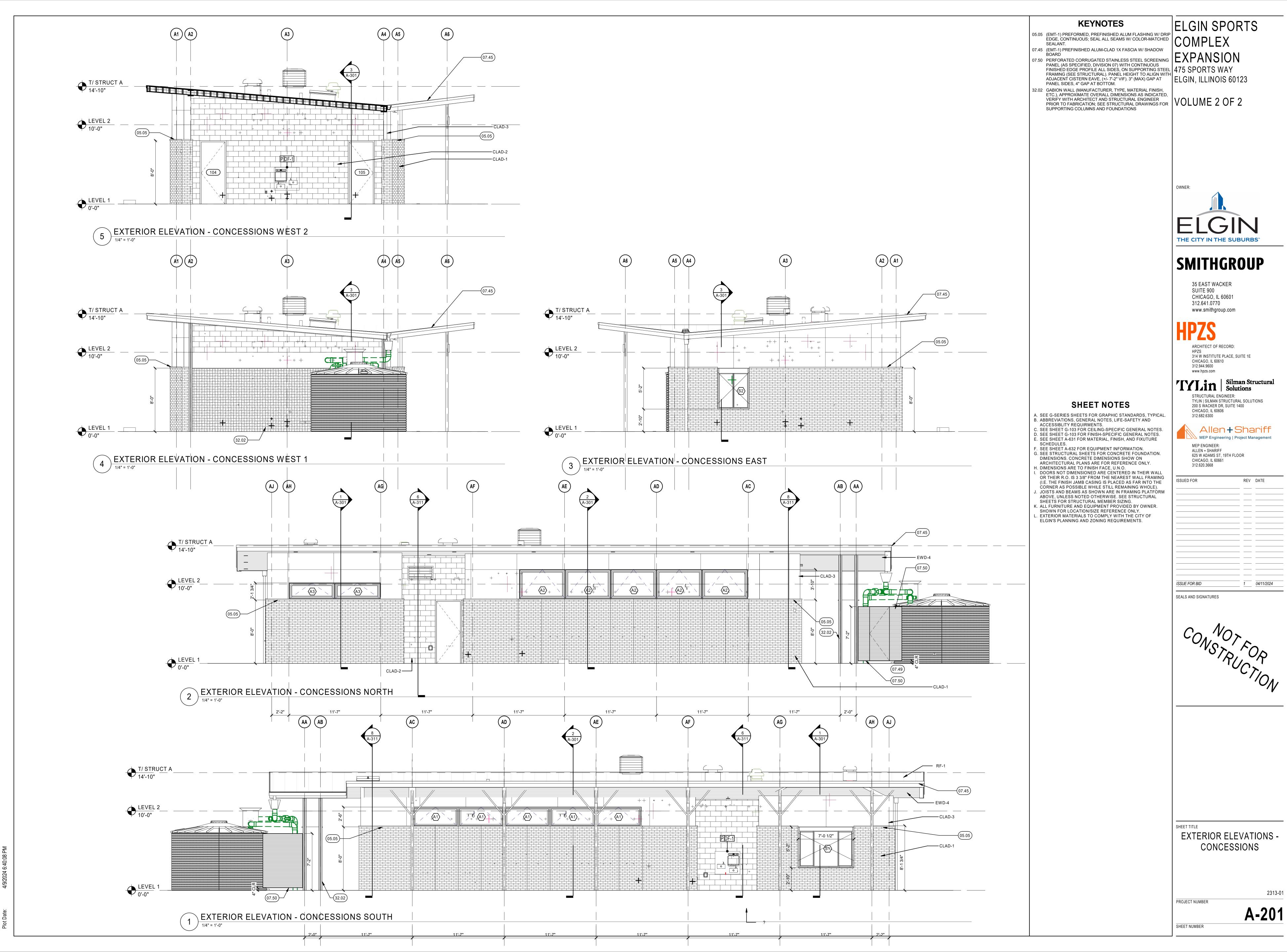
CONSTRUCTION

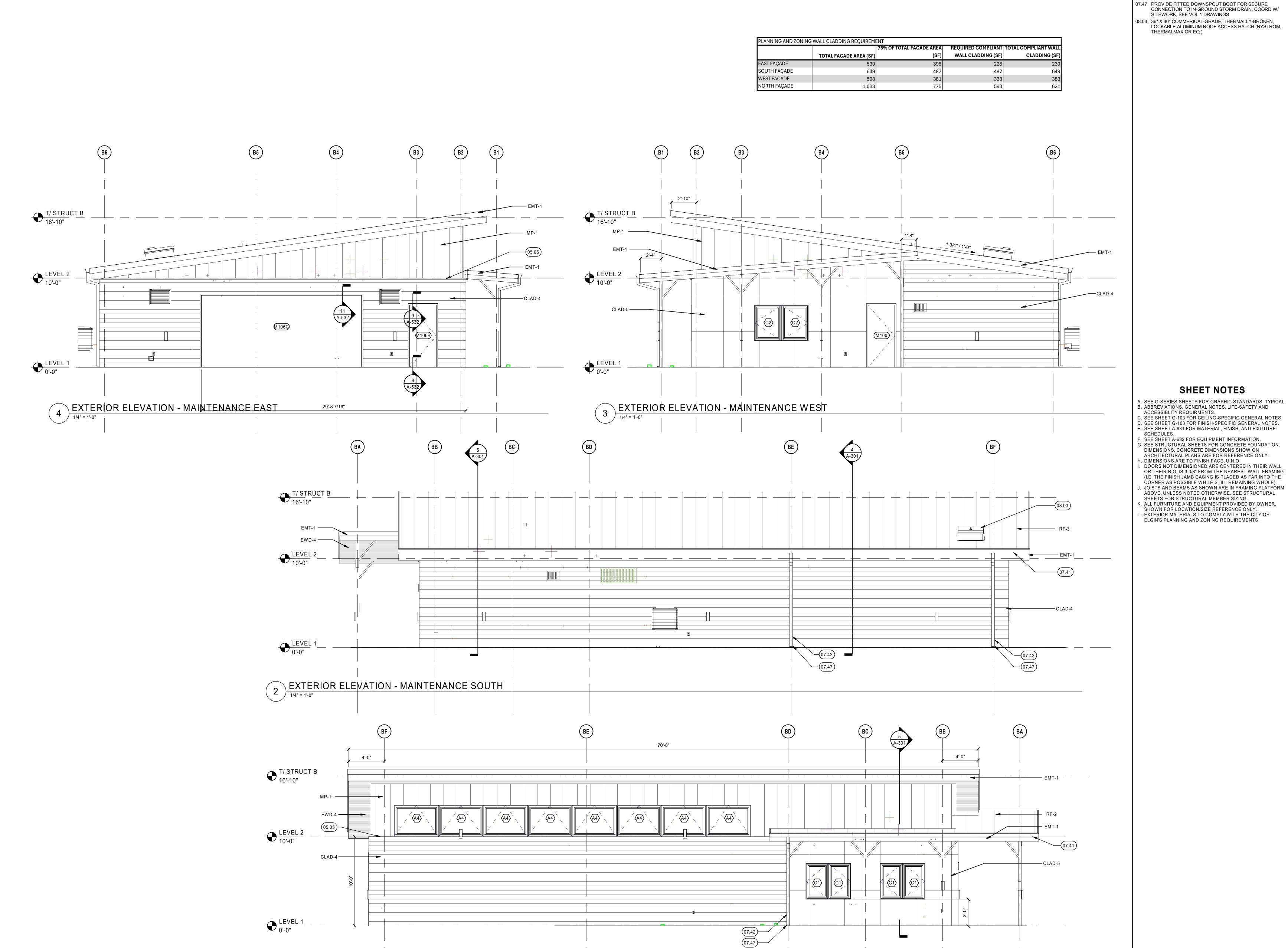
FINISH PLAN & REFLECTED CEILING PLAN - MAINTENANCE

PROJECT NUMBER

**A-112**SHEET NUMBER

2313-01





8'-8"

8'-8"

8'-8"

1 EXTERIOR ELEVATION - MAINTENANCE NORTH

#### **KEYNOTES**

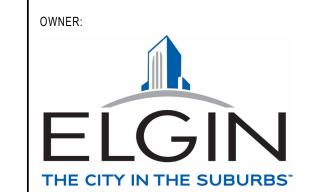
- 05.05 (EMT-1) PREFORMED, PREFINISHED ALUM FLASHING W/ DRI EDGE, CONTINUOUS; SEAL ALL SEAMS W/ COLOR-MATCHED
- 07.41 (EMT-1) PREFINISHED ALUM GUTTER
- 07.42 (EMT-1) PREFINISHED ALUM DOWNSPOUT
- 07.47 PROVIDE FITTED DOWNSPOUT BOOT FOR SECURE CONNECTION TO IN-GROUND STORM DRAIN, COORD W/ SITEWORK, SEE VOL 1 DRAWINGS
- 08.03 36" X 30" COMMERICAL-GRADE, THERMALLY-BROKEN, LOCKABLE ALUMINUM ROOF ACCESS HATCH (NYSTROM, THERMALMAX OR EQ.)

SHEET NOTES

# ELGIN SPORTS

**EXPANSION** 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2



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ISSUED FOR REV DATE ISSUE FOR BID

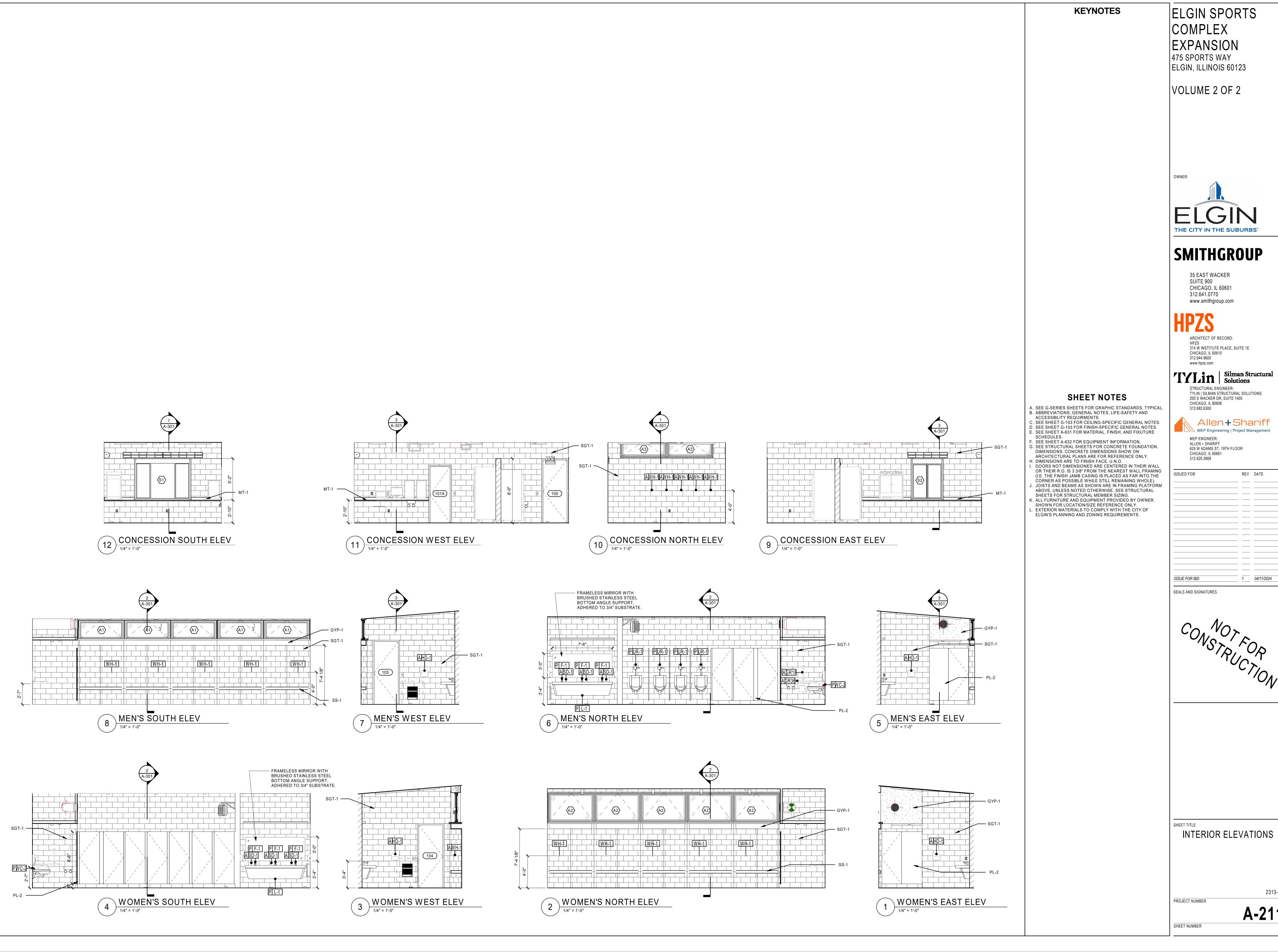
SEALS AND SIGNATURES

EXTERIOR ELEVATIONS -MAINTENANCE

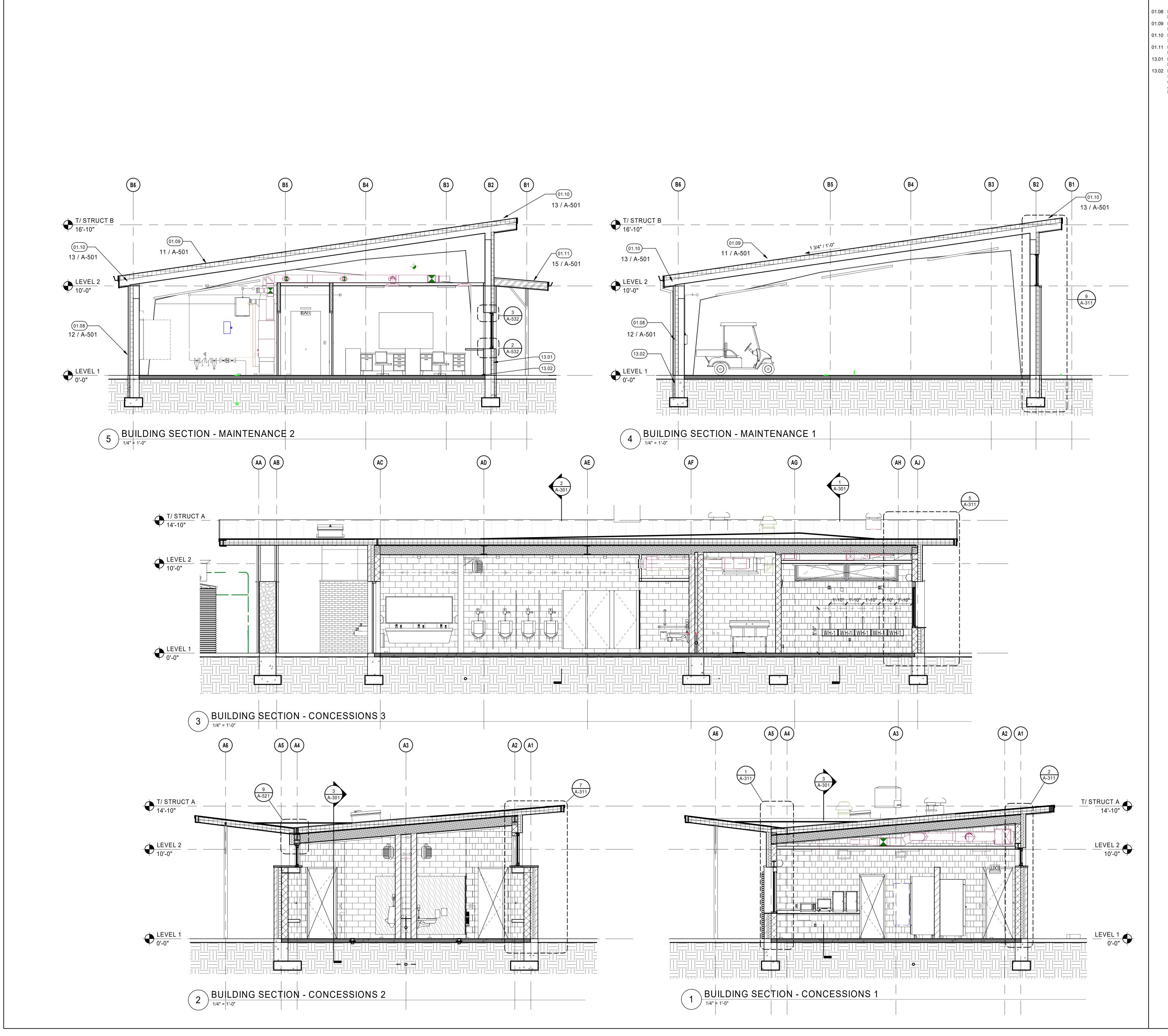
2313-01

A-202 SHEET NUMBER

PROJECT NUMBER



2313-01 A-211



- 01.08 EXTERIOR ASSEMBLY WALL W/ RAINSCREEN @ MAINTENANCE, SEE REFERENCED VIEW.
- 01.09 EXTERIOR ASSEMBLY ROOF @ MAINTENANCE, SEE REFERENCED VIEW.

  01.10 EXTERIOR ASSEMBLY ROOF OVERHANG @ MAINTENANCE
- 01.10 EXTERIOR ASSEMBLY ROOF OVERHANG @ MAINTENANCE, SEE REFERENCED VIEW.

  01.11 EXTERIOR ASSEMBLY ROOF @ MAINTENANCE PORCH, SEE REFERENCED VIEW.

  475 SPORTS WAY
- 13.01 MAINTENANCE BUILDING ABOVE-GROUND STRUCTURE AND EXTERIOR ENCLOSURE, BY PREFABRICATOR, U.N.O. 475 SPORTS WAY

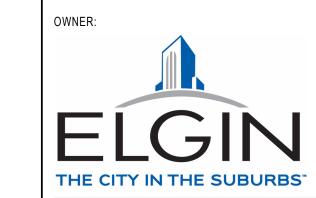
  LOGIC PORCH, SEE 475 SPORTS WAY

  ELGIN, ILLINOIS 60123
- EXTERIOR ENCLOSURE, BY PREFABRICATOR, U.N.O.

  13.02 MAINTENANCE BUILDING FOUNDATIONS AND
  SLAB-ON-GRADE BY STRUCTURAL ENGINEER OF RECORD
  (SEE STRUCTURAL), PREFABRICATOR TO PROVIDE LOAD
  AND SIZING INFORMATION TO EOR AS NEEDED FOR
  FOUNDATION DESIGN

ELGIN SPORTS COMPLEX EXPANSION

VOLUME 2 OF 2



## **SMITHGROUP**

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# **HPZS**

ARCHITECT OF RECORD: HPZS 314 W INSTITUTE PLACE, SUITE 1E CHICAGO, IL 60610 312.944.9600 www.hpzs.com

# Silman Structural Solutions STRUCTURAL ENGINEER: TYLIN I SILMAN STRUCTURAL SOLUTIONS

STRUCTURAL ENGINEER:
TYLIN | SILMAN STRUCTURAL SOLUTIONS
200 S WACKER DR, SUITE 1400
CHICAGO, IL 60606
312.682.6300



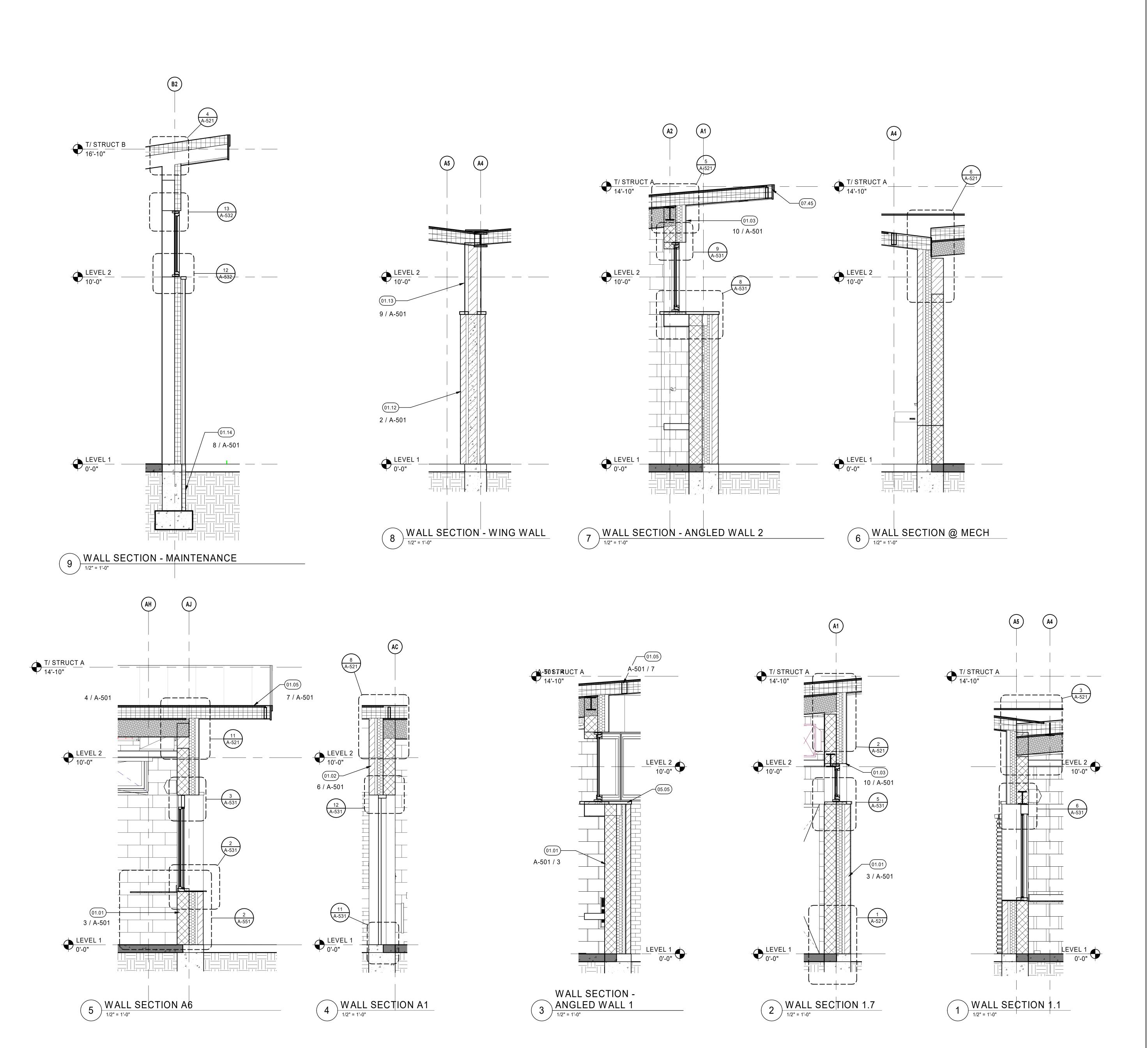
CONSTRUCTION

BUILDING SECTIONS

2313-01

**A-301**SHEET NUMBER

PROJECT NUMBER



- 01.01 EXTERIOR ASSEMBLY WALL W/ FACE BRICK @ CONCESSIONS, SEE REFERENCED VIEW. 01.02 EXTERIOR ASSEMBLY - WALL W/ GLAZED TILE @
- CONCESSIONS, SEE REFERENCED VIEW. 01.03 EXTERIOR ASSEMBLY - WALL W/ RAINSCREEN @
- CONCESSIONS, SEE REFERENCED VIEW.
- 01.04 EXTERIOR ASSEMBLY ROOF @ CONCESSIONS, SEE REFERENCED VIEW. 01.05 EXTERIOR ASSEMBLY - ROOF OVERHANG @ CONCESSIONS
- SEE REFERENCED VIEW. 01.12 EXTERIOR ASSEMBLY - WING WALL W/ FACE BRICK @
- CONCESSIONS, SEE REFERENCE VIEW. 01.13 EXTERIOR ASSEMBLY - WING WALL W/ RAINSCREEN @
- CONCESSIONS, SEE REFERENCED VIEW.
- 01.14 EXTERIOR ASSEMBLY FOUNDATION WALL @ MAINTENANCE, SEE REFERENCED VIEW. 05.05 (EMT-1) PREFORMED, PREFINISHED ALUM FLASHING W/ DRIP
- EDGE, CONTINUOUS; SEAL ALL SEAMS W/ COLOR-MATCHED 07.45 (EMT-1) PREFINISHED ALUM-CLAD 1X FASCIA W/ SHADOW BOARD

VOLUME 2 OF 2

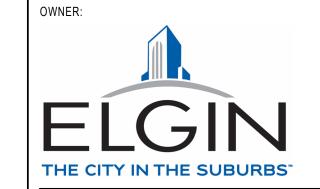
COMPLEX

EXPANSION

ELGIN, ILLINOIS 60123

475 SPORTS WAY

ELGIN SPORTS



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# ARCHITECT OF RECORD:

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## III | Silman Structural Solutions

STRUCTURAL ENGINEER:
TYLIN | SILMAN STRUCTURAL SOLUTIONS
200 S WACKER DR, SUITE 1400
CHICAGO, IL 60606
312.682.6300



MEP ENGINEER: ALLEN + SHARIFF 625 W ADAMS ST, 19TH FLOOR CHICAGO, IL 60661 312.620.3668

SSUE FOR BID	1	04/11/2024
•		·

REV DATE

SEALS AND SIGNATURES

ISSUED FOR

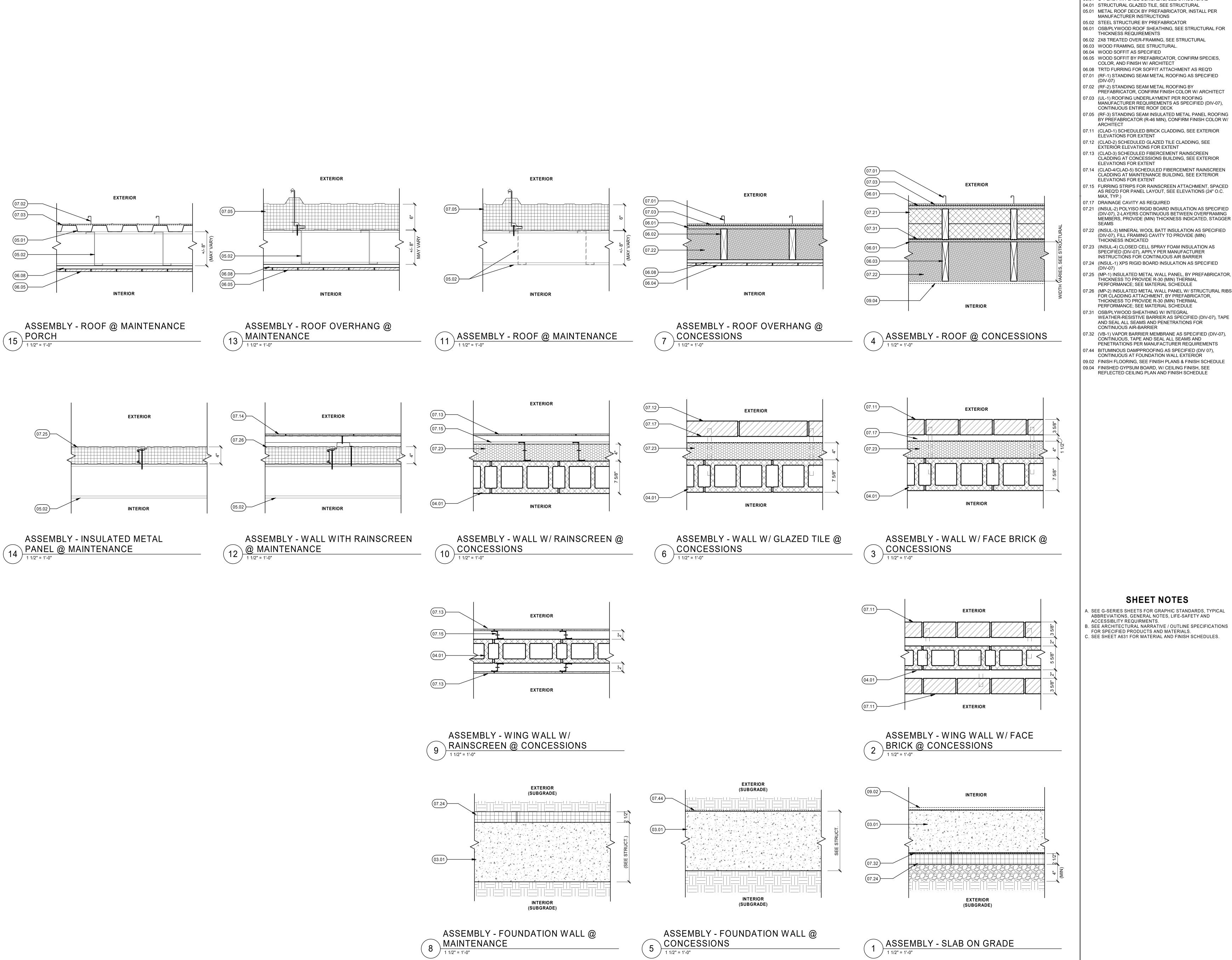


SHEET TITLE WALL SECTIONS

2313-01

A-311 SHEET NUMBER

PROJECT NUMBER



- 03.01 C-1 CAST IN PLACE CONCRETE, SEE STRUCTURAL 04.01 STRUCTURAL GLAZED TILE, SEE STRUCTURAL 05.01 METAL ROOF DECK BY PREFABRICATOR, INSTALL PER
- MANUFACTURER INSTRUCTIONS 05.02 STEEL STRUCTURE BY PREFABRICATOR
- 06.01 OSB/PLYWOOD ROOF SHEATHING, SEE STRUCTURAL FOR
- 06.02 2X8 TREATED OVER-FRAMING, SEE STRUCTURAL
- 06.03 WOOD FRAMING, SEE STRUCTURAL.
- COLOR, AND FINISH W/ ARCHITECT 06.08 TRTD FURRING FOR SOFFIT ATTACHMENT AS REQ'D
- 07.01 (RF-1) STANDING SEAM METAL ROOFING AS SPECIFIED
- PREFABRICATOR, CONFIRM FINISH COLOR W/ ARCHITECT 07.03 (UL-1) ROOFING UNDERLAYMENT PER ROOFING
- CONTINUOUS ENTIRE ROOF DECK 07.05 (RF-3) STANDING SEAM INSULATED METAL PANEL ROOFING
- BY PREFABRICATOR (R-46 MIN), CONFIRM FINISH COLOR W/ 07.11 (CLAD-1) SCHEDULED BRICK CLADDING, SEE EXTERIOR
- 07.12 (CLAD-2) SCHEDULED GLAZED TILE CLADDING, SEE EXTERIÓR ELEVATIONS FOR EXTENT
- CLADDING AT CONCESSIONS BUILDING, SEE EXTERIOR 07.14 (CLAD-4/CLAD-5) SCHEDULED FIBERCEMENT RAINSCREEN
- CLADDING AT MAINTENANCE BUILDING, SEE EXTERIOR
- AS REQ'D FOR PANEL LAYOUT, SEE ELEVATIONS (24" O.C.
- 07.21 (INSUL-2) POLYISO RIGID BOARD INSULATION AS SPECIFIED (DIV-07), 2-LAYERS CONTINUOUS BETWEEN OVERFRAMING MEMBERS, PROVIDE (MIN) THICKNESS INDICATED, STAGGER
- 07.22 (INSUL-3) MINERAL WOOL BATT INSULATION AS SPECIFIED (DIV-07), FILL FRAMING CAVITY TO PROVIDE (MIN)
- 07.23 (INSUL-4) CLOSED CELL SPRAY FOAM INSULATION AS SPECIFIÉD (DIV-07), APPLY PER MANUFACTURER
- 07.24 (INSUL-1) XPS RIGID BOARD INSULATION AS SPECIFIED
- THICKNESS TO PROVIDE R-30 (MIN) THERMAL PERFORMANCE; SEE MATERIAL SCHEDULE 07.26 (MP-2) INSULATED METAL WALL PANEL W/ STRUCTURAL RIBS
- FOR CLADDING ATTACHMENT, BY PREFABRICATOR, THICKNESS TO PROVIDE R-30 (MIN) THERMAL PERFORMANCE; SEE MATERIAL SCHEDULE
- WEATHER-RESISTIVE BARRIER AS SPECIFIED (DIV-07), TAPE AND SEAL ALL SEAMS AND PENETRATIONS FOR
- 07.32 (VB-1) VAPOR BARRIER MEMBRANE AS SPECIFIED (DIV-07), CONTINUOUS, TAPE AND SEAL ALL SEAMS AND PENETRATIONS PER MANUFACTURER REQUIREMENTS
- 07.44 BITUMINOUS DAMPPROOFING AS SPECIFIED (DIV 07),
- CONTINUOUS AT FOUNDATION WALL EXTERIOR 09.02 FINISH FLOORING, SEE FINISH PLANS & FINISH SCHEDULE
- 09.04 FINISHED GYPSUM BOARD, W/ CEILING FINISH, SEE REFLECTED CEILING PLAN AND FINISH SCHEDULE

# COMPLEX

**EXPANSION** 475 SPORTS WAY ELGIN, ILLINOIS 60123

ELGIN SPORTS

VOLUME 2 OF 2



## **SMITHGROUP**

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www.hpzs.com

ARCHITECT OF RECORD: 314 W INSTITUTE PLACE, SUITE 1E CHICAGO, IL 60610 312.944.9600

III | Silman Structural Solutions

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MEP Engineering | Project Management MEP ENGINEER: ALLEN + SHARIFF 625 W ADAMS ST, 19TH FLOOR

CHICAGO, IL 60661

312.620.3668 ISSUED FOR REV DATE

SEALS AND SIGNATURES

ISSUE FOR BID

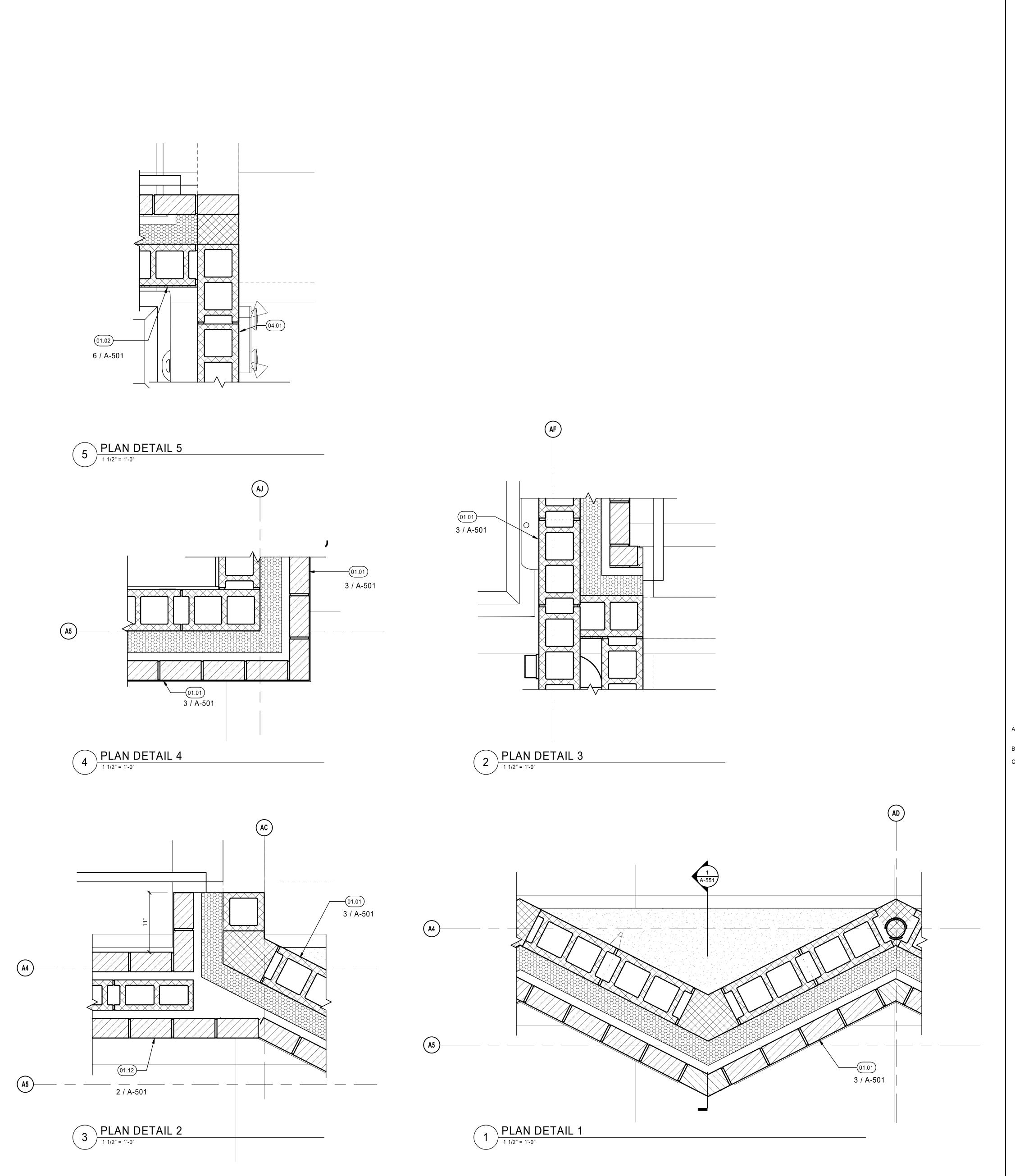
A. SEE G-SERIES SHEETS FOR GRAPHIC STANDARDS, TYPICAL ABBREVIATIONS, GENERAL NOTES, LIFE-SAFETY AND

FOR SPECIFIED PRODUCTS AND MATERIALS. C. SEE SHEET A631 FOR MATERIAL AND FINISH SCHEDULES.

TYPICAL ASSEMBLIES

2313-01

PROJECT NUMBER A-501 SHEET NUMBER

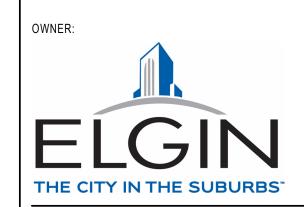


- 01.01 EXTERIOR ASSEMBLY WALL W/ FACE BRICK @ CONCESSIONS, SEE REFERENCED VIEW. 01.02 EXTERIOR ASSEMBLY - WALL W/ GLAZED TILE @
- CONCESSIONS, SEE REFERENCED VIEW. 01.12 EXTERIOR ASSEMBLY - WING WALL W/ FACE BRICK @
- CONCESSIONS, SEE REFERENCE VIEW. 04.01 STRUCTURAL GLAZED TILE, SEE STRUCTURAL

## **ELGIN SPORTS** COMPLEX EXPANSION 475 SPORTS WAY

VOLUME 2 OF 2

ELGIN, ILLINOIS 60123



## **SMITHGROUP**

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STRUCTURAL ENGINEER:
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312.682.6300



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ISSUE FOR BID	1	04/11/2024

#### SHEET NOTES SEALS AND SIGNATURES

- A. SEE G-SERIES SHEETS FOR GRAPHIC STANDARDS, TYPICAL ABBREVIATIONS, GENERAL NOTES, LIFE-SAFETY AND ACCESSIBLITY REQUIRMENTS.

  B. SEE ARCHITECTURAL NARRATIVE / OUTLINE SPECIFICATIONS FOR SPECIFIED PRODUCTS AND MATERIALS.

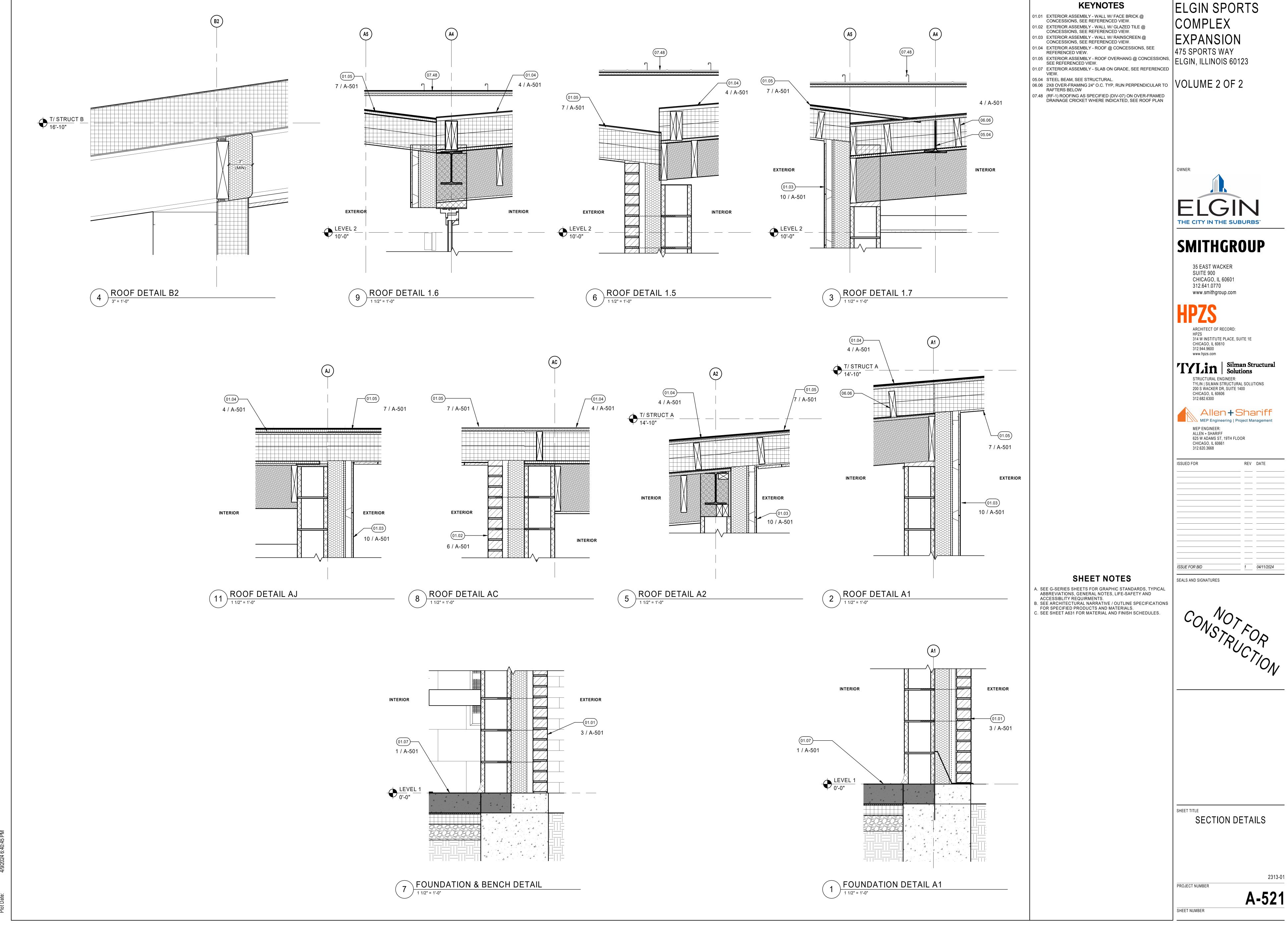
  C. SEE SHEET A631 FOR MATERIAL AND FINISH SCHEDULES.

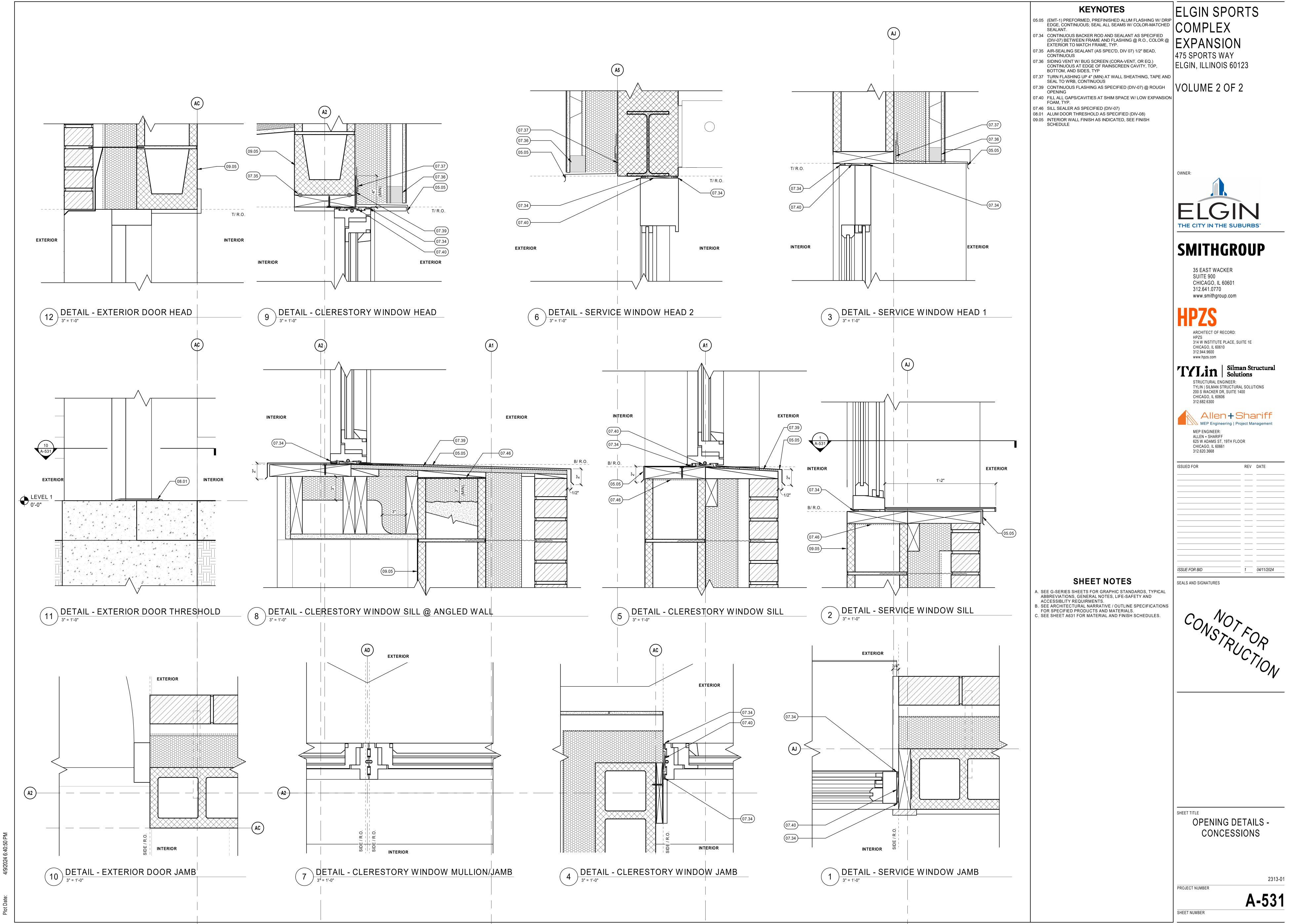


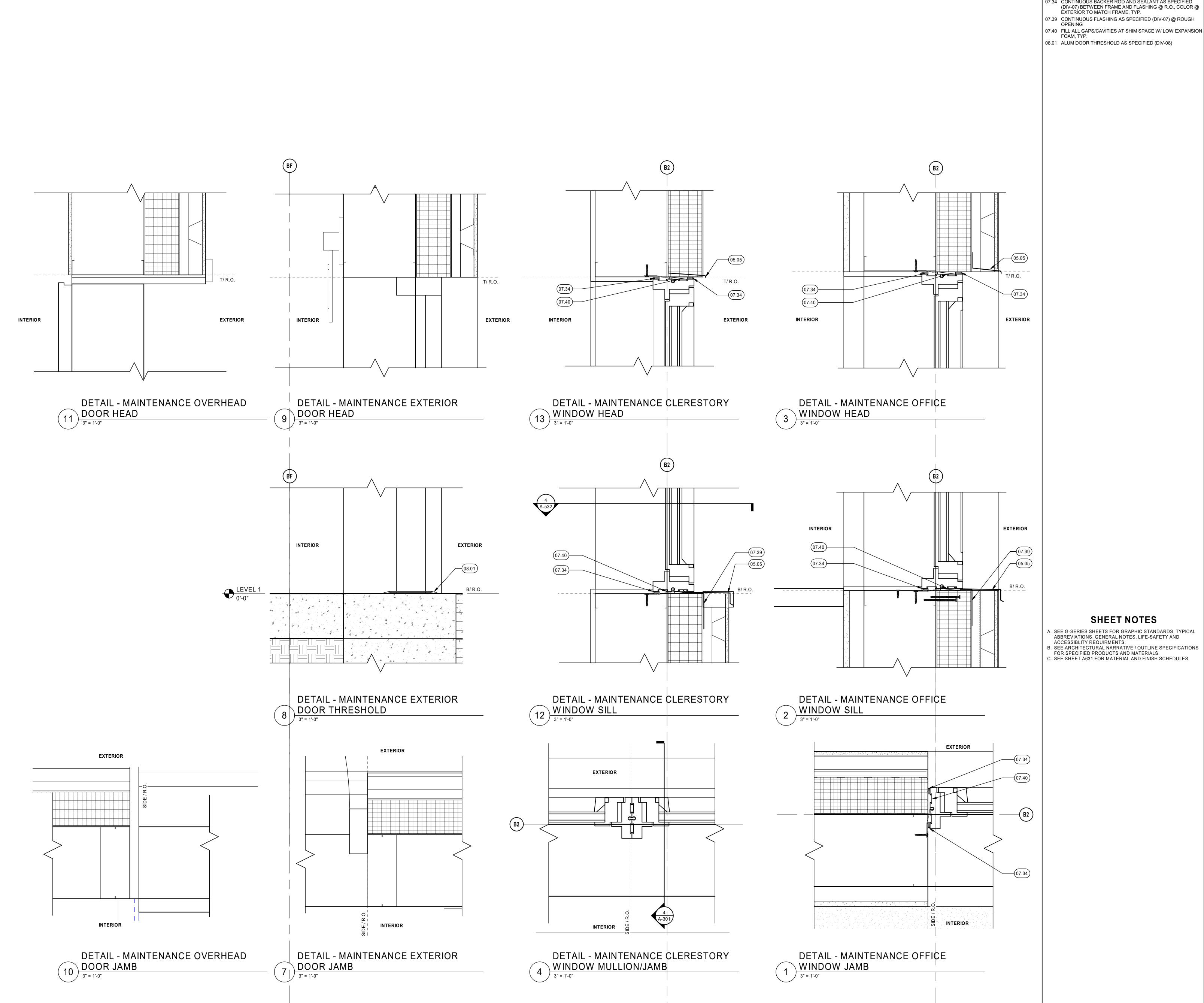
PLAN DETAILS

2313-01 PROJECT NUMBER

A-511 SHEET NUMBER







- 05.05 (EMT-1) PREFORMED, PREFINISHED ALUM FLASHING W/ DRIF EDGE, CONTINUOUS; SEAL ALL SEAMS W/ COLOR-MATCHED SEALANT.
- 07.39 CONTINUOUS FLASHING AS SPECIFIED (DIV-07) @ ROUGH
- 07.40 FILL ALL GAPS/CAVITIES AT SHIM SPACE W/ LOW EXPANSION
- 08.01 ALUM DOOR THRESHOLD AS SPECIFIED (DIV-08)

ELGIN SPORTS SEALANT.

107.34 CONTINUOUS BACKER ROD AND SEALANT AS SPECIFIED (DIV-07) BETWEEN FRAME AND FLASHING @ R.O., COLOR @ EXPANSION 475 SPORTS WAY

VOLUME 2 OF 2

ELGIN, ILLINOIS 60123

OWNER:

## **SMITHGROUP**

35 EAST WACKER SUITE 900 CHICAGO, IL 60601 312.641.0770 www.smithgroup.com

ARCHITECT OF RECORD: 314 W INSTITUTE PLACE, SUITE 1E CHICAGO, IL 60610 312.944.9600 www.hpzs.com

## III | Silman Structural Solutions

STRUCTURAL ENGINEER: TYLIN | SILMAN STRUCTURAL SOLUTIONS 200 S WACKER DR, SUITE 1400 CHICAGO, IL 60606 312.682.6300



ISSUED FOR REV DATE

#### SEALS AND SIGNATURES

ISSUE FOR BID

OPENING DETAILS -MAINTENANCE

2313-01

PROJECT NUMBER A-532 SHEET NUMBER

**GENERAL NOTES** REFER TO ACCESSIBILITY CODE AND TYPICAL MOUNTING HEIGHTS FOR INSTALLATION HEIGHTS AND LOCATIONS. 1.01 1.02 REFER TO [G-401] FOR TYPICAL MOUNTING HEIGHTS AND ACCESSIBILITY CLEARANCES AND NOTES. 1.03 COORDINATE ALL MILLWORK CLEARANCES WITH EQUIPMENT SIZES. 1.05 REFER TO ELEVATIONS FOR ALL FINISHES. 1.06 REFER TO ELEVATIONS FOR BACKSPLASH LOCATIONS AND SIZES. 1.07 PROVIDE SIDE SPLASH AT COUNTERS WITH SCHEDULED BACKSPLASHES. REFER TO PLUMBING SCHEDULE [A631, P] FOR SINK AND FAUCET SPECIFICATIONS. 1.08 1.09 PROVIDE SCRIBE STRIPS AND INTERNAL CABINET DOOR STOPS AT CABINETS LOCATED AGAINST SIDE WALLS OR SIDE MILLWORK TO INSURE THAT CABINET HANDLE DOES NOT HIT AND DAMAGE ADJACENT WALL. 1.10 MILLWORK CABINET INTERIOR TO BE [WHITE] MELAMINE AT PLASTIC LAMINATE CABINETS IN PANTRIES AND STORAGE/ COPY / MAIL 1.11 MILLWORK CABINET INTERIOR TO BE [BLACK] MELAMINE AT WOOD VENEER CABINETS. REFER TO ENLARGED DETAILS FOR COUNTERTOP AND BACKSPLASH CONSTRUCTION. 1.14 WHEN STACKING HOMOGENEOUS MATERIALS TO ACHIEVE A SPECIFIED THICKNESS, SEAM MUST NOT BE VISIBLE AND COLOR, PATTERN AND TEXTURE MUST MATCH BETWEEN COUNTERTOP AND VERTICAL EDGE.

# 

2 CONCESSION COUNTER SECTION DETAIL
1 1/2" = 1'-0"

1 RESTROOM BUILT-IN BENCH SECTION DETAIL
1 1/2" = 1'-0"

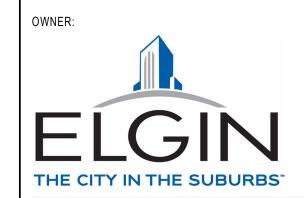
LEVEL 1 0'-0"

#### **KEYNOTES**

06.07 SALVAGED WOOD BENCH OVER METAL STIFFNER PLATE. PROVIDE CONCEALED BRACKETS AND IN-WALL BLOCKING AS REQUIRED. 09.02 FINISH FLOORING, SEE FINISH PLANS & FINISH SCHEDULE 09.05 INTERIOR WALL FINISH AS INDICATED, SEE FINISH SCHEDULE

ELGIN SPORTS EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2



## **SMITHGROUP**

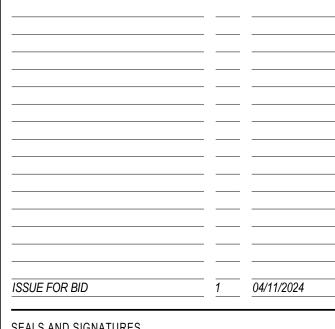
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CHICAGO, IL 60661 312.620.3668 ISSUED FOR REV DATE



SEALS AND SIGNATURES

SHEET NOTES

A. SEE G-SERIES SHEETS FOR GRAPHIC STANDARDS, TYPICAL ABBREVIATIONS, GENERAL NOTES, LIFE-SAFETY AND

B. SEE ARCHITECTURAL NARRATIVE / OUTLINE SPECIFICATIONS FOR SPECIFIED PRODUCTS AND MATERIALS.

C. SEE SHEET A631 FOR MATERIAL AND FINISH SCHEDULES.

ACCESSIBLITY REQUIRMENTS.

FINISH & MILLWORK DETAILS

2313-01

PROJECT NUMBER

VOLUME 2 OF 2

**SMITHGROUP** 

35 EAST WACKER SUITE 900

CHICAGO, IL 60601

www.smithgroup.com

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SEALS AND SIGNATURES

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MEP Engineering | Project Management

REV DATE

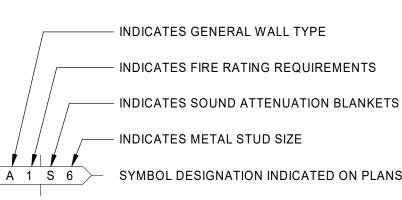
200 S WACKER DR, SUITE 1400

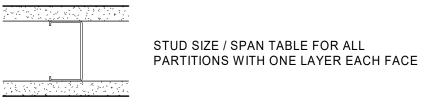
625 W ADAMS ST, 19TH FLOOR

312.641.0770

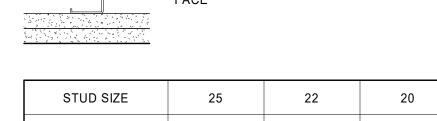
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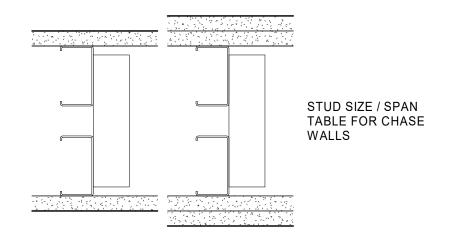


STUD SIZE	25	22	20
SPAN @ L/240	16'-0"	17'-3"	17'-11"
SPAN @ L/360	14'-0"	15'-0"	15'-7"



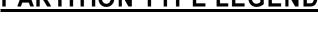
SPAN @ L/300	14 -9	15-9	17-0
<u>///////</u>			
		PAN TABLE FOR URRED WITH OI	

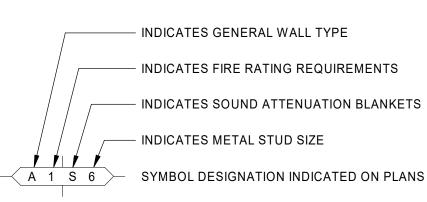
		Γ	
STUD SIZE	25	22	20
SPAN @ L/240	14'-6"	16'-0"	17'-3"
SPAN @ L/360	12'-9"	14'-0"	15'-0"



STUD SIZE	25	22	
SPAN @ L/240	22'-9"	23'-6"	
SPAN @ L/360	19'-9"	21'-3"	

- B. TABLES SHOWN ABOVE ASSUME STANDARD STUD PROFILES AND L/360 DEFLECTION CRITERIA FOR NON-COMPOSITE WALLS.
- MINIMUM. TABLES ABOVE ASSUME 16" O.C. D. DO NOT SCREW DRYWALL TO SLOTTED TRACK. GAUGE IS ACCEPTABLE IN ACCORDANCE WITH PROJECT PERFORMANCE REQUIREMENTS AND PROJECT SPECIFIC SPANS. LIMITING HEIGHTS. TESTS AND RATINGS TO BE PERFORMED IN REFERENCED BY 2009 INTERNATIONAL BUILDING CODE (IBC) AISI
- AISI S100-12 AS REFERENCED BY 2015 IBC. F. IF SPANS EXCEED LIMITS AS LISTED ABOVE USE METHODS LISTED
- FOR ALL PARTITIONS FACED WITH TILE OR STONE. OTHERWISE USE

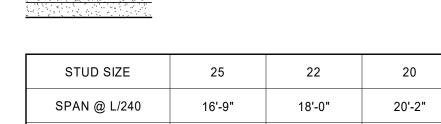




#### **SPAN TABLES**

STUD SIZE / SPAN TABLE FOR ALL PARTITIONS WITH ONE LAYER EACH FA

STUD SIZE	25	22	20
SPAN @ L/240	16'-0"	17'-3"	17'-11"
SPAN @ L/360	14'-0"	15'-0"	15'-7"



<u>///////</u>	
	STUD SIZE / SPAN TABLE FOR ALL PARTITIONS FURRED WITH ONE LAYER

		STUD SIZE / SPAN TABLE FOR CHASE WALLS

- E. USE OF EMBOSSED STUDS TO INCREASE SPAN OR DECREASE STUD REFER TO MANUFACTURER DATA FOR SYSTEM SPECIFIC TESTED ACCORDANCE WITH NORTH AMERICAN SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, AISI S100-07 AS S100-07 WITH SUPPLIMENT S2-10 AS REFERENCED BY 2012 IBC AND
- ABOVE IN CONJUNCTION WITH MANUFACTURER DATA TO SIZE STUDS TO MEET APPLICABLE BUILDING CODE REQUIREMENTS. G. STUD GUAGE TO BE DETERMINED BY CONTRACTOR UTILIZING THE SPAN TABLES PRESENTED HEREIN. IF SPAN/GUAGE EXCEEDS TABLE

STUD SIZE / SPAN TABLE FOR ALL PARTITIONS WITH ONE LAYER EAG

STUD SIZE	25	22	20
SPAN @ L/240	16'-0"	17'-3"	17'-11"
SPAN @ L/360	14'-0"	15'-0"	15'-7"



STUD SIZE	25	22	20
SPAN @ L/240	16'-9"	18'-0"	20'-2"
SPAN @ L/360	14'-9"	15'-9"	17'-8"

<u>///////</u>	
	STUD SIZE / SPAN TABLE FOR ALL PARTITIONS FURRED WITH ONE LAYE

STUD SIZE	25	22	20
SPAN @ L/240	14'-6"	16'-0"	17'-3"
SPAN @ L/360	12'-9"	14'-0"	15'-0"

	STUD SIZE / SPAN TABLE FOR CHASE WALLS

STUD SIZE	25	22	
SPAN @ L/240	22'-9"	23'-6"	
SPAN @ L/360	19'-9"	21'-3"	
•			

#### SHEET NOTES

- A. PARTITIONS ARE METAL STUD FRAMED, U.N.O.
- VALUES, VERIFY GUAGE REQUIREMENTS WITH ARCHITECT. USE L/360

2313-01 PROJECT NUMBER A-601

PARTITION TYPES

PARTITION - MASONRY (RATED)

- UNDERSIDE OF DECK

- SEE STRUCT. DWGS FOR

- COMPRESSIBLE FILLER

- WALL REINFORCING AS

- CMU (SEE SCHEDULE

NCMA TEK 7-1C

UL U906

NCMA TEK 7-1C

UL U904

UL U901

BELOW FOR SIZE)

SPECIFIED

SEE SCHEDULE (X)

TYPE CMU FIRE PARTITION RATING DESIGN WIDTH (X)

M14 4" 1 HR 3-5/8" NCMA TEK 7-1C

5-5/8"

5-5/8"

7-5/8"

7-5/8"

7-5/8"

M16 6" 1 HR

M26 6" 2 HR

M28 8" 2 HR

M38 8" 3 HR

M48 8" 4 HR

W/ FIRE RESISTIVE JOINT

- FINISHED CEILING (SEE RCP)

BRACE DETAIL

SYSTEM

\ PARTITION - MASONRY (NON-RATED)

- UNDERSIDE OF DECK

BRACE DETAIL

- SEE STRUCT. DWGS FOR

COMPRESSIBLE FILLER

WALL REINFORCING AS

- CMU (SEE SCHEDULE

N/A

N/A

N/A

BELOW FOR SIZE)

SPECIFIED

X SEE SCHEDULE (X)

5-5/8"

7-5/8"

9-5/8"

11-5/8"

TYPE CMU FIRE PARTITION WIDTH (X) RATING DESIGN

M-4 4" --- 3-5/8"

M-8 8"

M-10 10"

M-12 12"

W/ ACOUSTICAL SEALANT

FINISHED CEILING (SEE RCP)



UNDERSIDE OF DECK

DEFLECTION TRACK

- WHERE NO DROPPED

EXTEND GYP. BD. TO

CONSTRUCTION ABOVE

ACOUSTICAL SEALANT

 BRACE FRAMING TO SUBSTRATE NOT TO

EXCEED 8'-0" O.C.

- STEEL STUD FRAMING (SEE SCHEDULE BELOW)

SEE PLAN FOR DIMENSION

LINE OF NEW OR EXISTING

PARTITION OR SUBSTRATE

N/A

- (1) LAYER OF 5/8" GWB

- ACOUSTICAL SEALANT

FINISHED FLOOR

X SEE SCHEDULE (X)

TYPE STUD PARTITION SOUND SIZE WIDTH (X) ATTN BATT

F--1 1-5/8" 2-1/4" NONE

F--2 2-1/2" 3-1/8" NONE

F--3 3-5/8" 4-1/4" NONE

FINISHED CEILING (SEE RCP)

CEILING OCCURS

AND PROVIDE

ABOVE



- UNDERSIDE OF DECK

- EXTEND INSULATION 2'-0"

EACH SIDE OF PARITION

—— 3" THICK SOUND ATTENUATION

- SOUND ATTENUATION BATT (SEE SCHEDULE BELOW)

STEEL STUD FRAMING

X SEE SCHEDULE (X)

TYPE STUD PARTITION SOUND SIZE WIDTH (X) ATTN BATT

A--2 2-1/2" 3-3/4" NONE

A-S2 2-1/2" 3-3/4" 3" MIN

A--3 3-5/8" 4-7/8" NONE

A-S3 3-5/8" 4-7/8" 3" MIN

A-S4 4" 5-1/4" 3" MIN

A--4 4" 5-1/4"

(SEE SCHEDULE BELOW)

N/A

N/A

N/A

N/A

N/A

BLANKETS ABOVE PARTITIONS

SCHEDULED TO RECEIVE BLANKETS

ABOVE

CENTERLINE



UNDERSIDE OF DECK

- FIRE RESISTIVE JOINT

- FINISHED CEILING (SEE RCP)

 SOUND ATTENUATION BATT (SEE SCHEDULE BELOW)

- STEEL STUD FRAMING

- ACOUSTICAL SEALANT

- FINISHED FLOOR

X SEE SCHEDULE (X)

NONE

NONE

TYPE STUD PARTITION SOUND SIZE WIDTH (X) ATTN BATT

A1-3 3-5/8" 4-7/8" NONE

A1S3 3-5/8" 4-7/8" 3" MIN

A1S4 4" 5-1/4" 3" MIN

A1S6 6" 7-1/4" 3" MIN

A1-4 4" 5-1/4"

A1-6 6" 7-1/4"

(SEE SCHEDULE BELOW)

— (1) LAYER OF 5/8" TYPE "X" GWB AT EACH SIDE

N/A

N/A

N/A

N/A

N/A

UL DESIGN: U465

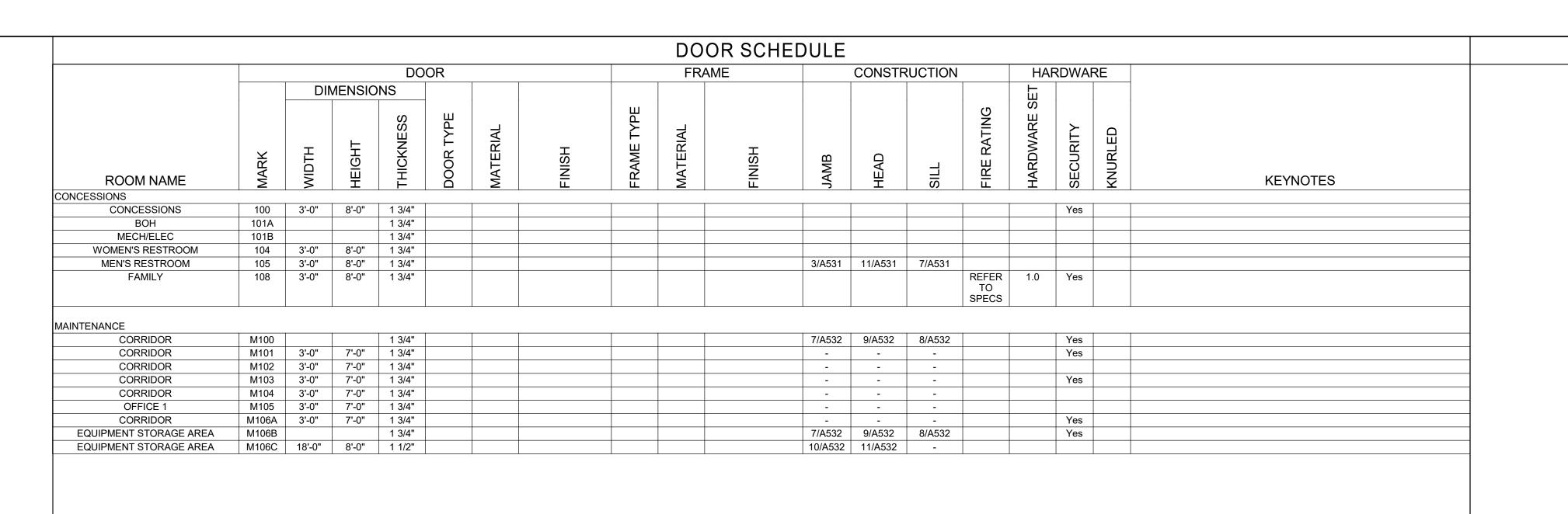
— DEFLECTION TRACK

ABOVE

SYSTEM

SHEET NUMBER

SHEET TITLE



			DOOR AND FRAME GENERA	۱L
REFERI	ENCE LOCATIONS  REFER TO SHEET [A001] FOR DRAWING SYMBOLS LEGEND AND	2.08	FOR GLASS DOORS BETWEEN 10'-0" TO 12'-0" HIGH USE 5/8" THICK TEMPERED GLASS.	2
	[A002] FOR PROJECT GÉNERAL NOTES.	2.09	GENERAL CONTRACTOR TO VERIFY DOOR SWING.	2
1.02	REFER TO SHEET [A003] FOR TYPICAL MOUNTING HEIGHTS.		SERVICE SORTION OF STATE OF VERMINE SERVICES.	_
1.03	REFER TO SHEET [A701] FOR PARTITION TYPE DETAILS.	2.10	DOORS FROM 7'-6" TO 10'-0" TO RECEIVE 2 PAIRS OF HINGES U.O.N	2
1.04	REFER TO SHEET [A651] FOR DOOR ASSEMBLY INFORMATION AND	2.11	CONTRACTOR TO SUBMIT CUTS OF ALL HARDWARE TO ARCHITECT FOR APPROVAL PRIOR TO ORDERING.	2
DOOP /	AND HARDWARE	2.12	PROVIDE RUBBER SILENCER PADS ON ALL DOOR BUCKS.	2
2.01	ALL LOCKS TO BE KEYED AND MASTERED TO BUILDING KEY SYSTEM. TWO INDIVIDUAL KEYS TO BE SUPPLIED TO OWNER.	2.13	ALL HARDWARE TO BE INSTALLED ACCORDING TO THE STANDARDS OF MANUFACTURERS.	2
2.02	ALL KEYING TO BE COMPATIBLE WITH BUILDING STANDARD CYLINDER/ KEYING SYSTEM AND COORDINATED WITH BUILDING. BLDG STANDARD CYLINDER IS [6 PIN.]	2.14	ALL LOCKSET/LATCHSET LEVERS, KNOBS, OR PULLS TO [BE 3'-2" A.F.F. TO CENTERLINE, U.O.N.] [MATCH EXISTING]	2
2.03	ALL EXISTING TO REMAIN HOLLOW METAL CORE DOORS AND FRAMES TO BE PAINTED SEMI-GLOSS TO MATCH ADJACENT WALL FINISH U.N.O.	2.15	ALL FIRE RATED DOORS SHALL BE LABELED ACCORDINGLY AS REQUIRED BY CODE.	2
2.04	ALL HOLLOW METAL FRAMES TO BE WELDED. PROVIDE CAULK SEALANT AT ALL DOOR AND FRAME/WALL CONDITIONS.	2.16	ALL DOUBLE DOORS TO HAVE RH ACTIVE, UNLESS OTHERWISE NOTED.	2
2.05	ALL DOOR AND FRAMES TO BE NEW, U.O.N	2.17	THE GENERAL CONTRACTOR SHALL INSTALL DOORS COMPLETE WITH ALL HARDWARE FITTINGS AND ACCESSORIES AS REQUIRED FOR SPECIFIC INSTALLATION. FURNISH ANY SPECIAL	2
2.06	ALL NEW ELECTRONIC HARDWARE TO BE TIED INTO BASE BLDG FIRE COMMAND STATION.		ITEMS REQUIRED FOR CODE COMPLIANCE AT SPECIAL DOOR LOCATIONS.	2
2.07	GC TO VERIFY FUNCTION OF ANY EXISTING PANIC HARDWARE TO BE IN OPERATIONAL CONDITION.	2.18	THE GENERAL CONTRACTOR SHALL EXAMINE THE DRAWINGS, SCHEDULE AND SPECIFICATIONS AND FURNISH PROPER HARDWARE FOR ALL OPENINGS WHETHER LISTED OR NOT.	

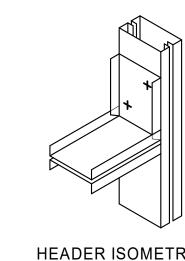
	THICK TEMPERED GLASS.	
)	GENERAL CONTRACTOR TO VERIFY DOOR SWING.	
)	DOORS FROM 7'-6" TO 10'-0" TO RECEIVE 2 PAIRS OF HINGES U.O.N	
I	CONTRACTOR TO SUBMIT CUTS OF ALL HARDWARE TO ARCHITECT FOR APPROVAL PRIOR TO ORDERING.	
2	PROVIDE RUBBER SILENCER PADS ON ALL DOOR BUCKS.	
3	ALL HARDWARE TO BE INSTALLED ACCORDING TO THE STANDARDS OF MANUFACTURERS.	
ļ	ALL LOCKSET/LATCHSET LEVERS, KNOBS, OR PULLS TO [BE 3'-2" A.F.F. TO CENTERLINE, U.O.N.] [MATCH EXISTING]	
5	ALL FIRE RATED DOORS SHALL BE LABELED ACCORDINGLY AS REQUIRED BY CODE.	
3	ALL DOUBLE DOORS TO HAVE RH ACTIVE, UNLESS OTHERWISE NOTED.	
7	THE GENERAL CONTRACTOR SHALL INSTALL DOORS COMPLETE WITH ALL HARDWARE FITTINGS AND ACCESSORIES AS REQUIRED FOR SPECIFIC INSTALLATION. FURNISH ANY SPECIAL ITEMS REQUIRED FOR CODE COMPLIANCE AT SPECIAL DOOR LOCATIONS.	
3	THE GENERAL CONTRACTOR SHALL EXAMINE THE DRAWINGS, SCHEDULE AND SPECIFICATIONS AND FURNISH PROPER HARDWARE FOR ALL OPENINGS WHETHER LISTED OR NOT. COMPLETE SHOP DRAWINGS TO BE PROVIDED TO ARCHITECT FOR APPROVAL PRIOR TO PURCHASE.	

DOORS FROM 7'-6" TO 10'-0" TO RECEIVE 2 PAIRS OF HINGES U.O.N
CONTRACTOR TO SUBMIT CUTS OF ALL HARDWARE TO ARCHITECT FOR APPROVAL PRIOR TO ORDERING.
PROVIDE RUBBER SILENCER PADS ON ALL DOOR BUCKS.
ALL HARDWARE TO BE INSTALLED ACCORDING TO THE STANDARDS OF MANUFACTURERS.
ALL LOCKSET/LATCHSET LEVERS, KNOBS, OR PULLS TO [BE 3'-2" A.F.F. TO CENTERLINE, U.O.N.] [MATCH EXISTING]
ALL FIRE RATED DOORS SHALL BE LABELED ACCORDINGLY AS REQUIRED BY CODE.
ALL DOUBLE DOORS TO HAVE RH ACTIVE, UNLESS OTHERWISE NOTED.
THE GENERAL CONTRACTOR SHALL INSTALL DOORS COMPLETE WITH ALL HARDWARE FITTINGS AND ACCESSORIES AS REQUIRED FOR SPECIFIC INSTALLATION. FURNISH ANY SPECIAL ITEMS REQUIRED FOR CODE COMPLIANCE AT SPECIAL DOOR LOCATIONS.
THE GENERAL CONTRACTOR SHALL EXAMINE THE DRAWINGS, SCHEDULE AND SPECIFICATIONS AND FURNISH PROPER HARDWARE FOR ALL OPENINGS WHETHER LISTED OR NOT. COMPLETE SHOP DRAWINGS TO BE PROVIDED TO ARCHITECT FOR APPROVAL PRIOR TO PURCHASE.

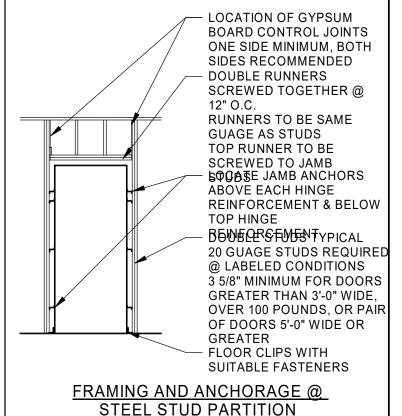
IERAL	. NOTE	S
	2.19	CORE ALL DOORS AS REQUIRED TO RECEIVE ELECTRIC HARDWARE.
	2.20	PAIR OF DOORS TO RECEIVED SPECIFIED HARDWARE ON EALEAF U.O.N.
S	2.21	ALL DOORS WITH CLOSERS TO RECEIVE BALL BEARING HING
	2.22	ALL FIRE RATED DOORS TO RECEIVE BALL BEARING HINGES
	2.23	ALL DOORS WITH ELECTRIC LOCKS TO RECEIVE AN ELECTRI HINGE.
	2.24	ALL PAIR OF DOORS WITH ELECTRIC STRIKES TO RECEIVE A ELECTRIC HINGE ON INACTIVE DOOR.
3'-2"	2.25	GENERAL CONTRACTOR TO SUPPLY ALL LOCKS AND PREPAIDOORS TO RECEIVE SECURITY DEVICES.
AS	2.26	SECURITY VENDOR TO TERMINATE THE WIRING TO THE ELECTRONIC HARDWARE.
/ISE	2.27	WIRING TO BE SPECIFIED BY SECURITY VENDOR AND WILL B RUN AND SUPPLIED BY CONSTRUCTION MANAGER.
LETE	2.28	SECURITY VENDOR TO COORDINATE ALL SECURITY DEVICES WITH BUILDING SYSTEM.
DR	2.29	REFER TO SECURITY DRAWINGS FOR ELECTRONIC HARDWA AND SECURITY COMPONENTS

	WINDOW SCHEDULE														
			SILL			HEAD	SILL	HEAD	JAMB			GLASS			
TAG	COUNT	OPERATION	HEIGHT	HEIGHT	WIDTH	HEIGHT	DETAIL	DETAIL	DETAIL	MANUFACTURER	MODEL	TYPE	FINISH	REMARKS	
CONCESSIONS											•	-			
A1	5	AWNING	8'-0"	2'-6"	5'-9"	10'-6"	7/A531	8/A531	6/A531	CASCADIA		VG-3			
A2	5	AWNING	8'-1 3/4"	3'-8 1/4"	5'-9"	11'-10"	7/A531	8/A531	6/A531	CASCADIA		VG-3			
A3	2	AWNING	8'-1 3/4"	2'-0"	5'-9"	10'-1 3/4"	7/A531	8/A531	6/A531	CASCADIA		VG-3			
S1	1	SLIDING	2'-10"	5'-1 1/2"	7'-0"	7'-11 1/2"	2/A531	5/A531	1/A531	READY ACCESS	650		CUST	TOM SIZE	
S2	1	SLIDING	2'-10"	5'-1 1/2"	3'-11 1/2"	7'-11 1/2"	2/A531	3/A531	1/A531	READY ACCESS	275LPSC		CUST	TOM SIZE	
MAINTENANCE															
A4	8	AWNING	10'-0 1/4"	3'-6"	5'-0"	13'-6 1/4"	5/A532	6/A532	4/A532	CASCADIA		VG-3			
C1	4	CASEMENT	3'-0"	4'-0"	2'-6"	7'-0"	2/A532	3/A532	1/A532	CASCADIA		VG-3			
C2	2	CASEMENT	3'-0"	4'-0"	3'-0"	7'-0"	2/A532	3/A532	1/A532	CASCADIA		VG-3			
C3	6	CASEMENT		4'-0"	<varies></varies>		2/A532	3/A532	1/A532	CASCADIA					
F1	1	FIXED	3'-0"	4'-0"	6'-0"	7'-0"	-	-	-				FIXED	D LITE BETWEEN OFFICE AND GARAGE	
											,				

HARDWARE SETS FRAME ASSEMBLY



**HEADER ISOMETRIC** 



FRAMING AND ANCHORAGE @ STEEL STUD PARTITION

FRAME TYPES

DOOR TYPES

ELGIN SPORTS COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

**KEYNOTES** 

VOLUME 2 OF 2



## **SMITHGROUP**

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# III | Silman Structural Solutions

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ISSUED FOR REV DATE

SEALS AND SIGNATURES

ISSUE FOR BID

OPENINGS SCHEDULES & **TYPES** 

2313-01 PROJECT NUMBER

A-611 SHEET NUMBER

REFLECTED CEILING LIGHTING SCHEDULE PERFORMANCE FIXTURE FINISHES CONTACT INSTALLATION COLOR LUMEN OPTIC INTEGRATED INTEGRAL AIR HOUSING/ PHONE METHOD HEIGHT LAMP TEMP OUTPUT /DISTRIBUTION DIMMING TRIM LENS CORD/STEM SPECIALTY WET/DAMP SENSOR RETURN MARK NAME **EMAIL** NUMBER REMARKS MANUFACTURER MODEL DESCRIPTION SIZE OR EQUAL

PORCELAIN TILE

ELGIN SPORTS COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2

NOTES:

REF TO SHEET E701

LAMP TEMPERATURE: [MATCH EXISTING] [3500K]
TRIM: GC TO COORDINATE ALL RECESSED FIXTURE TRIMS WITH CEILING TYPE
BALLASTS: GC/ ELECTRICAL SUB TO COORDINATE ALL BALLASTS WITH SPECIFIED DIMMING AND/OR LIGHTING CONTROL SYSTEMS
MOUNTING: GC TO PROVIDE ADDITIONAL CEILING GRID TEES AND MAINS AS REQUIRED FOR LOCATION OF FIXTURE AS SHOWN IN PLANS
VOLTAGE: REFER TO ENGINEERING DOCUMENTS
CHICAGO PLENUM: ALL FIXTURES WHEN INSTALLED WITHIN THE CITY OF CHICAGO TO COMPLY WITH CHICAGO PLENUM REQUIREMENTS.
SUSPENDED FIXTURE INSTALLATION HEIGHT: INSTALLATION HEIGHT FOR SUSPENDED FIXTURES TO BE MEASURED TO [BOTTOM OF FIXTURE] UON

								ROOM FINISH	SCHEDULE							
		CI	EILING	FL	.OOR	В	ASE				W	ALLS				
ROOM NUMBER	ROOM NAME	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	NC	RTH	SO	UTH	E	AST	WE	ST	COMMENTS
		IWATERIAL	FINISH	IVIATERIAL	FINISH	IVIATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	
CONCESSIONS																
100	CONCESSIONS	PER RCP	P-1	CONC	CONC-1	PER SCHEDULE	PER SCHEDULE	SGT-1	GLAZED	SGT-1	GLAZED	SGT-1	GLAZED	SGT-1	GLAZED	
101	ВОН	PER RCP	P-1	CONC	CONC-2	PER SCHEDULE	PER SCHEDULE	SGT-1	GLAZED	SGT-1	GLAZED	SGT-1	GLAZED	SGT-1	GLAZED	
102	MECH/ELEC	PER RCP	P-1	CONC	CONC-2	PER SCHEDULE	PER SCHEDULE	SGT-1	EXPOSED	SGT-1	GLAZED	SGT-1	GLAZED	SGT-1	GLAZED	
103	FAMILY	PER RCP	P-1	CONC	CONC-1	PER SCHEDULE	PER SCHEDULE	SGT-1	GLAZED	SGT-1	GLAZED	SGT-1	GLAZED	SGT-1	GLAZED	
104	WOMEN'S RESTROOM	PER RCP	P-1	CONC	CONC-1	PER SCHEDULE	PER SCHEDULE	SGT-1	GLAZED	SGT-1	GLAZED	SGT-1	GLAZED	SGT-1	GLAZED	
105	MEN'S RESTROOM	PER RCP	P-1	CONC	CONC-1	PER SCHEDULE	PER SCHEDULE	SGT-1	GLAZED	SGT-1	GLAZED	SGT-1	GLAZED	SGT-1	GLAZED	
MAINTENANCE																
M100	CORRIDOR	PER RCP	P-1	CONC	CONC-2	B-1	PER SCHEDULE	GYP-1	P-1	SGT-1	P-1	GYP-1	P-1	GYP-1	P-1	
M101	OFFICE 1	PER RCP	P-1	CONC	CONC-2	B-1	PER SCHEDULE	GYP-1	P-1	GYP-1	P-1	GYP-1	P-1	GYP-1	P-1	
M102	MECHANICAL ROOM	PER RCP	P-1	CONC	CONC-2	B-1	PER SCHEDULE	GYP-1	P-1	EXPOSED	EXPOSED	GYP-1	P-1	EXPOSED	EXPOSED	
M103	RESTROOM	PER RCP	P-1	CONC	CONC-1	B-1	PER SCHEDULE	GYP-1	P-1	GYP-1	P-1	GYP-1	P-1	GYP-1	P-1	
M104	STORAGE ROOM	PER RCP	P-1	CONC	CONC-2	B-1	PER SCHEDULE	GYP-1	P-1	EXPOSED	EXPOSED	GYP-1	P-1	GYP-1	P-1	
M105	OFFICE 2	PER RCP	P-1	CONC	CONC-2	B-1	PER SCHEDULE	GYP-1	P-1	GYP-1	P-1	GYP-1	P-1	GYP-1	P-1	
M106	EQUIPMENT STORAGE AREA	PER RCP	EXPOSED	CONC	CONC-1	B-1	PER SCHEDULE	EXPOSED	EXPOSED	EXPOSED	EXPOSED	EXPOSED	EXPOSED	GYP-1	P-1	FRP PANELLING @ SERVICE SINK, SEE

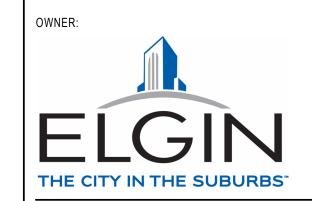
			IVIA I ERIAL	AND FINISH SCHED	ULE	
TAG	DESCRIPTION	MANUFACTURER	MODEL / SERIES	PRODUCT / CODE	COLOR / FINISH	COMMENTS
CONC-2	CAST-IN-PLACE CONCRETE					SURFACE DENSIFIER, SEALED FINISH
3 CONCRE	ETE					
CONC-1	CAST-IN-PLACE CONCRETE					EPOXY FINISH
04 MASONF	RY					
CLAD-1	BRICK VENEER	GLEN-GERY			NAPA VALLEY SMOOTH IRONSPOT	-
CLAD-2	GLAZED TILE RAINSCREEN	ELGIN BUTLER		4W SERIES	SPICY WHITE	
SGT-1	STRUCTRAL GLAZED TILE	ELGIN BUTLER		4W SERIES	SPICY WHITE	PROVIDE COVE BASES, BULLNOSE CORNER SHAPES AT ALL LOCATIONS
05 METALS						-1
EMT-1	BRAKE METAL, FLASHING, AND TRIM	LINETEC			BLACK ANO-305 AE	REFER TO DRAWINGS FOR PROFILE AND DIMENSIONS
EMT-5	ROOF ACCESSS HATCH	NYSTROM				
MT-1	STAINLESS STEEL	-	-			COMMERCIAL STAINLESS STEEL COUNTER
STL-1	STRUCTURAL STEEL, SEE STRUCTURAL					-
06 WOODS	, PLASTICS, COMPOSITES					
CLAD-3	FIBERCEMENT RAINSCREEN CLADDING	EQUITONE	NATURA		N074	
CLAD-4	FIBERCEMENT RAINSCREEN CLADDING	EQUITONE	NATURA		N359	
CLAD-5	FIBERCEMENT RAINSCREEN CLADDING	EQUITONE	LUNARA		LA60	
EWD-4	3" WOOD SOFFIT	MONTANA TIMBER PRODUCTS	TONGUE AND GROOVE/ 6"		YELLOWSTONE / WIREBRUSHED	CONCEALED FASTENERS
EWD-5	PLYWOOD SHEATHING	COLUMBIA FOREST	PUREBOND			
EWD-7	OSB ROOF SHEATHING W/ INTEGRATED WRB	HUBER ENGINEERED WOODS	ZIP SYSTEM SHEATHING	TBD		SPECIFIED THICKNESS IS AVAILABLE IN RED/BROWN ZIP PANELS ON
PL-2	TOILET PARTITIONS	BRADLEY CORPORATION	EURO STYLE RESTROOM PARTITIONS	PHENOLIC LT - FLOAT SERIES	MANHATTEN 12204	
SS-1	SOLID SURFACE	CORIAN	SOLID SURFACE		SUEDE	PROVIDE EASED EDGE
07 THERMA	AL AND MOISTURE PROTECTION					
GYP-1	GYPSUM BOARD	-				-
INSUL-1	EXTRUDED POLYSTYRENE INSULATION					-
INSUL-2	RIGID INSULATION, POLYISOCYANURATE					-
INSUL-3	MINERAL WOOL BATT INSULATION	ROCKWOOL	COMFORTBATT			WALL AND ROOF CAVITIES WHERE INDICATED; R-23 AT WALLS, R=35 (MIN) AT ROOFS; ACOUSTICT BATT WHERE INDICATED
INSUL-4	CLOSED CELL SPRAY FOAM INSULATION	NATURAL POLYMERS, OR EQ.	ULTRA-PURE, OR EQ.			LOW-GWP HFO BLOWING AGENT; PROVIDE THICKNESS REQUIRED FOR CONTINUOUS AIR BARRIER
INSUL-5	RIGID INSULATION, THERMOSET PHENOLIC CORE	KINGSPAN, OR EQ.				INTEGRAL INSULATION AT INSULATED WALL AND ROOF PANELS, AS SCHEDULED
MP-1	INSULATED METAL PANEL	KINGSPAN, OR EQ.	KARRIER, OR EQ.	4" CORE (INSUL-5)	(KINGSPAN) GRIZZLE GRAY - REVIEW COLOR SAMPLES W/ ARCHITECT PRIOR TO FABRICATION	BY PREFABRICATOR; PROVIDE R-30 (MIN) THERMAL PERFORMANCE
MP-2	INSULATED METAL PANEL	KINGSPAN, OR EQ.	KARRIER, OR EQ., VERTICAL FLAT RAIL	4" CORE (INSUL-5)	(KINGSPAN) GRIZZLE GRAY - REVIEW COLOR SAMPLES W/ ARCHITECT PRIOR TO FABRICATION	BY PREFABRICATOR; PROVIDE R-30 (MIN) THERMAL PERFORMANCE
RF-1	STANDING SEAM METAL ROOFING	AEP SPAN			MATCH (KINGSPAN) PEPPERCORN - REVIEW COLOR SAMPLES W/ ARCHITECT PRIOR TO FABRICATION	PRODUCT MUST BE ALLOWED BY MANUFACTURER TO BE INSTALLED ON PITCHES AS LOW AS 1/4":12" FOR INSTALLATION AT LOW-SLOPE LOCATIONS, INCLUDING DRAINAGE CRICKETS WHERE INDICATED
RF-2	STANDING SEAM METAL ROOFING	TBD			MATCH (KINGSPAN) PEPPERCORN - REVIEW COLOR SAMPLES W/ ARCHITECT PRIOR TO FABRICATION	BY PREFABRICATOR; MUST BE ALLOWED BY MANUFACTURER TO BE INSTALLED ON PITCHES AS LOW AS 1":12"
RF-3	STANDING SEAM INSULATED PANEL ROOFING	KINGSPAN, OR EQ.	KINGSEAM, OR EQ.	6" CORE (INSUL-5)	(KINGSPAN) PEPPERCORN - REVIEW COLOR SAMPLES W/ ARCHITECT PRIOR TO FABRICATION	BY PREFABRICATOR; PROVIDE R-46 (MIN) THERMAL PERFORMANCE
	ROOFING UNDERLAYMENT	AEP SPAN	UNDERLAYMENT HT			

1104033

WHITE

AREA 51

MILE STONE



## **SMITHGROUP**

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TYLIN | SILMAN STRUCTURAL SOLUTIONS 200 S WACKER DR, SUITE 1400 CHICAGO, IL 60606 312.682.6300

MEP ENGINEER: ALLEN + SHARIFF 625 W ADAMS ST, 19TH FLOOR CHICAGO, IL 60661 312.620.3668

ISSUED FOR REV DATE \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ ISSUE FOR BID

SEALS AND SIGNATURES

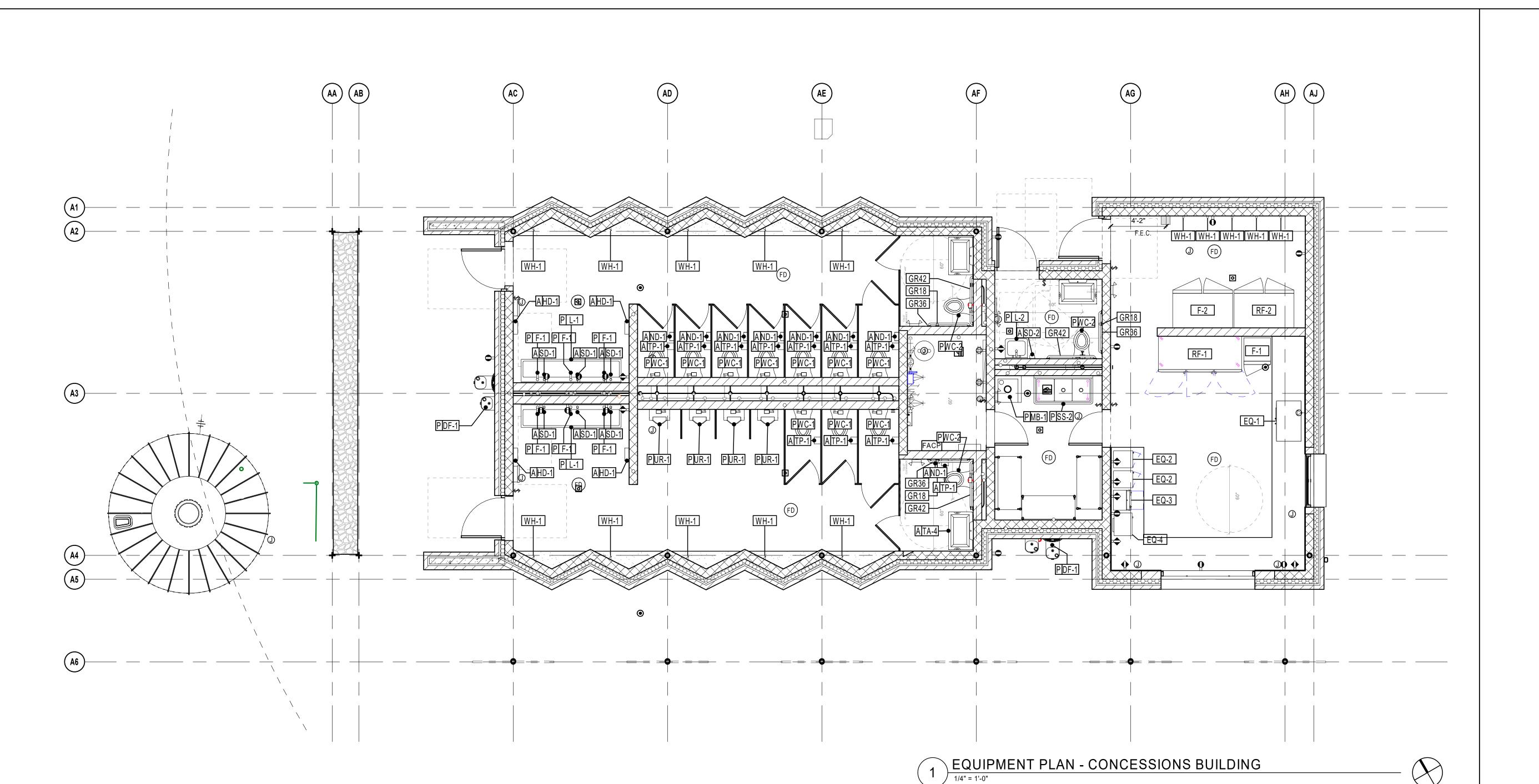
40" WAINSCOT AT MAINTENANCE RESTROOM

MATERIAL, FINISH, & FIXTURE SCHEDULES

2313-01

PROJECT NUMBER A-631

SHEET NUMBER



						EQUIPME	ENT SCH	EDULE				
TAG	DESCRIPTION	MANUFACTURER	MODEL	SERIES F	INISH	ELECTRICAL	PLUMBING	FURNISH	INSTALL	MOUNTING	LOCATION	COMMENTS
CONCESSION	EQUIPMENT	1										
EQ-1	POPCORN MAKER					Yes	No	OWNER	OWNER		CONCESSIONS	
EQ-2	PRETZEL WARMER	NEMCO	6403			Yes	No	OWNER	OWNER		CONCESSIONS	
EQ-3	HOT DOG STEAMERS	STAR MANUFACTURING	70SSA			Yes	No	OWNER	OWNER		CONCESSIONS	
EQ-4	MICROWAVE OVEN	Vollrath	40830			Yes	No	OWNER	OWNER		CONCESSIONS	
F-1	MERCHANDISE FREEZER					Yes	No	OWNER	OWNER		CONCESSIONS	
F-2	REACH-IN FREEZER					Yes	No	OWNER	OWNER		CONCESSIONS	
RF-1	MERCHANDISE REFRIGERATOR	Victory	LSF72-5-G			Yes	No	OWNER	OWNER		CONCESSIONS	
RF-2	REACH-IN REFRIGERATOR					Yes	No	OWNER	OWNER		CONCESSIONS	
GR18 GR36 GR42	GRAB BAR 18"  GRAB BAR 36"  GRAB BAR 42"					No No No	No No No	GC GC GC	GC GC GC	SURFACE MOUNTED SURFACE MOUNTED SURFACE MOUNTED	RESTROOMS RESTROOMS RESTROOMS	
HD-1	HAND DRYER	Bradley Corporation	2902-2873			Yes	No	GC	GC	SURFACE MOUNTED	RESTROOMS	
ND-1	SANITARY NAPKIN DISPOSAL	Bradiey corporation	2002 2010		AINLESS STEEL	No	No	GC	GC	SURFACE MOUNTED	RESTROOMS	
SD-1	Touchless Deck Mounted Soap Dispenser -Verge Metro Series 6-3300, Paired with Metro Series S53-3300 Faucet		Verge Metro Series 6-33000			Yes	No	GC	GC	SURFACE MOUNTED	RESTROOMS	Touchless Deck Mounted Soap Dispenser -Verge Metro Series 6-3300, Paired with Metro Series S53-3300 Faucet
SD-2	SOAP DISPENSER	American Specialties Inc.	0347 GoJo ADX-12, or equal			No	No	GC	GC	SURFACE MOUNTED	RESTROOMS	Soap Dispenser - Surface Mount - Push Button Valve
TA-4	BABY CHANGING STATION	FOUNDATIONS	T9FB2311699			No	No	GC	GC	SURFACE MOUNTED	RESTROOMS	
TP-1	TOILET PAPER DISPENSER							OWNER	GC	SURFACE MOUNTED	RESTROOMS	
WH-1	Robe hook	KOHLER Co.	K-24757-CP			No	No	GC	GC	SURFACE MOUNTED	CONCESSIONS/ RESTROOMS	

					PLUMBIN	G FIXTURI	= SCHEI	JULE				
TAG	DESCRIPTION	MANUFACTURER	MODEL	SERIES	COMMENTS	ELECTRICAL	PLUMBING	FURNISH	INSTALL	MOUNTING	LOCATION	REMARKS
UMBING FI	KTURE			•								
DF-1	DRINKING FOUNTAIN AND WATER BOTTLE FILLER	HALSEY TAYLOR	HTHB-HRFSEBP-1				Yes	GC	GC	WALL HUNG	CONCESSIONS	
F-1			Verge Metro Series S53-3300				Yes	GC	GC	SURFACE MOUNTED	CONCESSIONS	
FD	FLOOR DRAIN						Yes	GC	GC	FLOOR		
L-1	Verge™ Wash Basin System – LVA Series, Three Station	Bradley Corporation	LVAD3				Yes	GC	GC	WALL HUNG		
L-2	LAVATORY; WALL HUNG, ADA	KOHLER	K-2045				Yes	GC	GC	WALL HUNG		
MB-1	MOP BASIN	FIAT	MSB2424				Yes	GC	GC	FLOOR	CONCESSIONS	
SS-1	SINK - STAINLESS STEEL DOUBLE COMPARTMENT	ELKAY	E2C16X20-0X	LK94TS08T6H			Yes	GC	GC	FLOOR	MAINTENANCE	
SS-2	18 GAUGE STAINLESS STEEL THREE COMPARTMENT SINK	ELKAY	3C12X16-0X	LK940TS08T6H			Yes	GC	GC	FLOOR		
UR-1	Stanwell™ Lite urinal with rear spud	Kohler	K-4972-ER				Yes	GC	GC	WALL HUNG		
WC-1	TOILET	KOHLER	K-4325		<varies></varies>		Yes	GC	GC	WALL HUNG	CONCESSIONS	
WC-2	TOILET	KOHLER	K-4325		<varies></varies>		Yes	GC	GC	WALL HUNG	CONCESSIONS	

ELGIN SPORTS COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2



## **SMITHGROUP**

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# III | Silman Structural Solutions

STRUCTURAL ENGINEER:
TYLIN | SILMAN STRUCTURAL SOLUTIONS
200 S WACKER DR, SUITE 1400
CHICAGO, IL 60606
312.682.6300



SSUED FOR	REV	DATE
SSUE FOR BID	1	04/11/2024

SEALS AND SIGNATURES



**EQUIPMENT PLAN AND** SCHEDULE

PROJECT NUMBER

2313-01

A-632 SHEET NUMBER

#### **GENERAL NOTES**

SUPPLEMENT

- 1. ALL STRUCTURAL WORK SHALL BE COORDINATED WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND SHALL CONFORM TO THE PROJECT SPECIFICATIONS, INCLUDING THE 2015 INTERNATIONAL BUILDING CODE AS ADOPTED BY THE CITY OF ELGIN, IL. THE FOLLOWING STANDARDS WERE USED AS SPECIFIED IN THE GOVERNING BUILDING CODE:
- a. ASCE 7-10 MINIMUM DESIGN LOADS (AND ASSOCIATED CRITERIA) FOR BUILDINGS AND OTHER
- b. ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE c. TMS 402/602-13 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES d. NDS-2015 NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION WITH 20XX
- e. AISC 360-13 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, BRACING, AND SHEETING AND SHALL MAKE SAFE ALL FLOORS, ROOFS, WALLS, AND ADJACENT PROPERTY AS PROJECT CONDITIONS REQUIRE. SHORING AND SHEETING SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE PROJECT JURISDICTION, HIRED BY THE CONTRACTOR, WHO SHALL SUBMIT SHOP DRAWINGS AND
- CALCULATIONS FOR THE OWNER'S REVIEW. 3. THE CONTRACT DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY. THESE NOTES HIGHLIGHT RATHER THAN REPLACE THE SPECIFICATIONS CONTAINED IN THE PROJECT MANUAL.

#### **FOUNDATIONS**

- 1. BUILDING FOUNDATIONS SHALL BEAR ON UNDISTURBED SOIL HAVING A MINIMUM BEARING CAPACITY OF 3000 PSF AS SPECIFIED BY THE GEOTECHNICAL CONSULTANT, GSG CONSULTANTS, INC.IN THEIR REPORT DATED DECEMBER 19, 2023. ADEQUACY OF BEARING STRATUM SHALL BE VERIFIED IN FIELD PRIOR TO PLACING CONCRETE. ALL NECESSARY ADJUSTMENTS TO THE BOTTOM OF FOOTINGS TO BE REVIEWED AND APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
- 2. DO NOT PLACE BACKFILL AGAINST BASEMENT WALLS UNTIL ALL FLOORS BRACING THESE WALLS ARE IN PLACE AND HAVE ATTAINED THEIR 28-DAY STRENGTH. 3. ALL EXTERIOR FOOTINGS SHALL BE PLACED A MINIMUM OF 3'- 6" BELOW FINAL GRADE.
- 4. CONCRETE SHALL BE POURED IN DRY EXCAVATIONS. CONTRACTOR SHALL NOTE SOIL AND WATER CONDITIONS AS SHOWN BY BORINGS INCLUDED IN THE REFERENCED GEOTECHNICAL SUBSURFACE INVESTIGATION REPORT(S) AND DEPTHS OF FOOTING AS SHOWN ON FOUNDATION PLANS.

#### **CONCRETE**

- 1. ALL CONCRETE WORK SHALL CONFORM TO THE FOLLOWING GOVERNING STANDARDS: A. AMERICAN CONCRETE INSTITUTE (ACI) "BUILDING CODE REQUIREMENTS FOR CONCRETE" (ACI 318) B. ACI COLLECTION, LATEST EDITION
- C. CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE" 2. ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF
- 4,000 PSI AT 28 DAYS, UNLESS OTHERWISE NOTED. 3. CONTRACTOR SHALL SUBMIT A PROJECT-SPECIFIC SIGNED AND SEALED CONCRETE MIX DESIGN FOR EACH CONCRETE TYPE SPECIFIED IN THE CONTRACT DOCUMENTS. WHERE 033000 SPECIFICATIONS HAVE BEEN INCLUDED IN THE CONTRACT DOCUMENTS, REFER TO THAT SPECIFICATION SECTION FOR BALANCE OF MIX DESIGN REQUIREMENTS (AGGREGATES, ADMIXTURES, W/C RATIO, AIR CONTENT, ETC.) 4. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60 OR A775 EPOXY COATED WHEN CALLED OUT ON PLAN. REINFORCING STEEL SHALL BE DETAILED ACCORDING TO THE ACI
- 5. REINFORCING STEEL TO BE WELDED TO CONFORM TO ASTM A706 GRADE 60. 6. WELDED WIRE REINFORCEMENT (W.W.R.) SHALL CONFORM TO ASTM A1064, WITH A MINIMUM YIELD STRENGTH OF 65,000 PSI.
- 7. COORDINATE SIZE AND LOCATION OF ALL OPENINGS AND PIPE SLEEVES WITH ALL OTHER DISCIPLINES. MINIMUM CONCRETE BETWEEN SLEEVES SHALL BE 6". 8. GENERAL CONTRACTOR SHALL PROVIDE COORDINATED MEP TRADE SUBMITTALS FOR DESIGN TEAM
- REVIEW OF PENETRATIONS. ALL TRADES SHALL BE OVERLAID INTO ONE SUBMITTAL TO CAPTURE AND EVALUATE ALL PENETRATIONS THROUGH SLABS AND WALLS TOGETHER. 9. ALL GROUT SHALL BE NONSHRINK WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI. 10. MINIMUM CONCRETE COVER FOR REINFORCING STEEL IN CAST-IN-PLACE NON-PRESTRESSED MEMBERS
- SHALL BE AS FOLLOWS: A. ALL CONCRETE CAST AGAINST AND PERMANENTLY IN CONTACT WITH GROUND: 3" B. ALL CONCRETE EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
- a. 2" (#6 THROUGH #18 BARS)
- b. 1-1/2" (#5 BAR. W31 OR D31 WIRE. AND SMALLER) C. NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
- a. SLABS, JOISTS, AND WALLS:

"DETAILS AND DETAILING OF REINFORCEMENT" (ACI 315).

- 1-1/2" (#14 THROUGH #18 BARS) 3/4" (#11 BAR AND SMALLER)
- b. BEAMS, COLUMNS, PEDESTALS, AND TENSION TIES (STIRRUPS, TIES, SPIRALS, HOOPS, AND PRIMARY REINFORCEMENT): 1-1/2" 11. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL. NO
- CONCRETE WORK SHALL COMMENCE WITHOUT APPROVED SHOP DRAWING 12. CLEAN AND ROUGHEN TO 1/4" AMPLITUDE ALL EXISTING CONCRETE SURFACES TO RECEIVE NEW CONCRETE PRIOR TO PLACEMENT.
- 13. SEE OTHER DRAWINGS IN THIS PROJECT FOR SIZE AND LOCATIONS OF EQUIPMENT PADS, INSERTS, AND EMBED ITEMS.
- 14. REINFORCING DOWELS, WATER STOPS, AND OTHER EMBED ITEMS SHALL BE INSTALLED AND SECURED PRIOR TO CONCRETE PLACEMENT. "WET-SETTING" OF EMBEDDED ITEMS IS NOT PERMITTED.
- 15. CONDUIT EMBEDDED IN CONCRETE SHALL FOLLOW THE GUIDELINES IN THE TYPICAL DETAILS. THE CONTRACTOR SHALL NOT VIOLATE THESE GUIDELINES WITHOUT WRITTEN APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD. CONTRACTOR TO PROVIDE SHOP DRAWINGS SHOWING LAYOUT OF ALL EMBEDDED CONDUIT FOR APPROVAL BY ENGINEER OF RECORD BEFORE PLACEMENT.

#### CONCRETE BLOCK 1. ALL CONCRETE BLOCK WORK SHALL CONFORM TO THE "NATIONAL CONCRETE MASONRY ASSOCIATION

TEK MANUAL FOR THE DESIGN AND CONSTRUCTION OF CONCRETE MASONRY", LATEST EDITION, AND "ACI 530-BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES". 2. CONCRETE BLOCK SHALL BE OF LIGHTWEIGHT AGGREGATE AND CONFORM TO THE FOLLOWING STANDARDS: HOLLOW BLOCK: ASTM C90.

NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNIT (PSI)	NET AREA COMPRESSIVE STRENGTH OF MASONRY ASSEMBLY, F'm (PSI) USING TYPE S MORTAR
2000	2000
3250	2500
3900	2750
4500	3000

- UNLESS OTHERWISE NOTED ON PLANS AND/OR ELEVATIONS, CONCRETE BLOCK UNIT STRENGTH SHALI BE 2000 PSI MIN. (NOTE: CONCRETE BLOCK WITH UNIT STRENGTH HIGHER THAN 2000 PSI GENERALLY REQUIRES LONGER DELIVERY LEAD TIMES.)
- 3. ALL MORTAR SHALL BE ASTM C270, TYPE S. 4. ALL GROUT FOR FILLING CELLS SHALL BE ASTM C 476 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI BUT NOT LESS THAN THE COMPRESSIVE STRENGTH OF THE MASONRY ASSEMBLY, F'm. WHERE
- GROUT CELLS DO NOT EXCEED 4" IN DIAMETER FINE GROUT SHALL BE USED. 5. ALL BLOCK DIMENSIONS INDICATED ON STRUCTURAL PLANS ARE NOMINAL DIMENSIONS. DESIGN OF WALL
- REINFORCING ASSUMES CONCRETE MASONRY UNITS THAT ARE 16" LONG AND HAVE TWO CORES/CELLS, RESULTING IN A NOMINAL BAR SPACING OF 8" ON CENTER.
- 6. ALL CONCRETE BLOCK BELOW GRADE SHALL BE FILLED SOLID WITH GROUT. 7. CONCRETE BLOCK BELOW BEAM OR TRUSS BEARING POINTS SHALL BE FILLED SOLID FOR A MINIMUM OF
- TWO COURSES IN DEPTH AND A MINIMUM OF 32" IN WIDTH, UNLESS NOTED OTHERWISE.
- 8. INSTALL STANDARD WEIGHT LADDER-TYPE JOINT REINFORCEMENT AT 16" ON CENTER (SPACED
- 9. UNLESS NOTED OTHERWISE ALL MASONRY WALLS SHALL BE REINFORCED WITH #4@48" ON CENTER VERTICAL. GROUT ALL REINFORCED CELLS SOLID. PROVIDE DOWELS TO MATCH VERTICAL REINFORCING
- 10. PROVIDE CONTINUOUS BOND BEAM WITH 2-#5 CONTINUOUS MINIMUM AT TOPMOST COURSE OF EACH FLOOR LEVEL AND AT ALL TOP OF PARAPET CONDITIONS, TYPICAL THROUGHOUT.

#### GLAZED STRUCTURAL MASONRY

- 1. ALL STRUCTURAL GLAZED MASONRY TILE WORK SHALL CONFORM TO "ACI 530-BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES".
- 2. STRUCTURAL GLAZED TILE MASONRY SHALL BE CERAMIC GLAZED AS MANUFACTURED BY ELGIN BUTLER COMPANY (OR APPROVED EQUAL) AND SHALL CONFORM TO THE FOLLOWING STANDARDS: HOLLOW BLOCK - ASTM C-126, GRADE S, TYPE I & II. THE NET AREA COMPRESSIVE STRENGTH OF MASONRY ASSEMBLY. F'm. SHALL BE 2000 PSI MIN.
- . ALL MORTAR SHALL BE ASTM C270, TYPE S. 4. ALL GROUT FOR FILLING CELLS SHALL BE ASTM C 476 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI BUT NOT LESS THAN THE COMPRESSIVE STRENGTH OF THE MASONRY ASSEMBLY. F'm. WHERE
- GROUT CELLS DO NOT EXCEED 4" IN DIAMETER FINE GROUT SHALL BE USED. 5. ALL GLAZED MASONRY TILE DIMENSIONS INDICATED ON STRUCTURAL PLANS ARE NOMINAL DIMENSIONS. DESIGN OF WALL REINFORCING ASSUMES GLAZED MASONRY TILE UNITS THAT ARE 16" LONG (NOMINALLY)
- AND HAVE TWO CORES/CELLS, RESULTING IN A NOMINAL BAR SPACING OF 8" ON CENTER. 6. GLAZED MASONRY TILE SHALL NOT BE IN CONTACT WITH EARTH IN FINAL BUILT CONDITION.
- 7. GLAZED MASONRY TILE BELOW BEAM OR TRUSS BEARING POINTS SHALL BE FILLED SOLID FOR A MINIMUM OF TWO COURSES IN DEPTH AND A MINIMUM OF 32" IN WIDTH, UNLESS NOTED OTHERWISE. 8. INSTALL STANDARD WEIGHT LADDER-TYPE JOINT REINFORCEMENT AT 16" ON CENTER (SPACED
- 9. UNLESS NOTED OTHERWISE ALL GLAZED MASONRY TILE WALLS SHALL BE REINFORCED WITH #4@48" ON CENTER VERTICAL. GROUT ALL REINFORCED CELLS SOLID. PROVIDE DOWELS TO MATCH VERTICAL
- REINFORCING AT FOUNDATION. 10. PROVIDE CONTINUOUS BOND BEAM WITH 2-#5 CONTINUOUS MINIMUM AT TOPMOST COURSE OF EACH FLOOR LEVEL AND AT ALL TOP OF PARAPET CONDITIONS, TYPICAL THROUGHOUT.
- 11. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW AND APPROVAL. NO CONCRETE BLOCK WORK SHALL COMMENCE WITHOUT APPROVED SHOP DRAWINGS.

#### STRUCTURAL STEEL

- 1. ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE FOLLOWING GOVERNING STANDARDS:
- A. AISC 360 "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS". B. AISC 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"
- AMERICAN WELDING SOCIETY (AWS D1.1) "STRUCTURAL WELDING CODE STEEL" D. RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC) "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS".
- A. WIDE FLANGE BEAMS, COLUMNS, AND STRUCTURAL TEES: ASTM A992. HOLLOW STRUCTURAL SECTIONS: ASTM A500, GRADE C.

2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS:

- . STRUCTURAL PIPE SECTIONS: ASTM A53, GRADE B. D. CHANNELS, ANGLES, AND PLATES: ASTM A36 UNLESS OTHERWISE NOTED. E. BOLTED CONNECTIONS SHALL BE PER ASTM F3125. GRADES ARE TO BE SELECTED AS FOLLOWS:
- a. STANDARD BEAM TO BEAM/GIRDER: ASTM F3125, GRADES A325, F1852, A490 OR F2280 BOLTS IN SNUG-TIGHTENED JOINTS (3/4" DIAMETER MINIMUM WITH HARDENED WASHERS). BEAM/GIRDER TO COLUMN CONNECTIONS, COLUMN SPLICES AND BOLTS EXPERIENCING TENSION LOADS (UNLESS OVERSIZED OR SLOTTED HOLES ARE USED, IN WHICH CASE SLIP-CRITICAL JOINTS SHALL BE USED): ASTM F3125. GRADES A325. F1852. A490 OR F2280 BOLTS IN PRETENSIONED JOINTS (3/4" DIAMETER MINIMUM WITH HARDENED WASHERS).
- MOMENT CONNECTIONS AND BRACED FRAME CONNECTIONS: ASTM F3125, GRADES A325, F1852, A490 OR F2280 BOLTS IN SLIP CRITICAL JOINTS (3/4" DIAMETER MINIMUM WITH HARDENED WASHERS). FAYING SURFACES SHALL BE CLASS A UNLESS OTHERWISE NOTED.
- d. PER AISC 341. ALL BOLTS SHALL BE INSTALLED AS PRETENSIONED HIGH STRENGTH BOLTS AND MEET THE REQUIREMENTS FOR SURFACE PREPARATION FOR SLIP CRITICAL CONNECTIONS WITH CLASS A SLIP COEFFICIENT OR HIGHER. THE AVAILABLE SHEAR STRENGTH OF BOLTED JOINTS USING STANDARD HOLES SHALL BE CALCULATED AS THAT FOR BEARING TYPE JOINTS. F. ANCHOR RODS: ASTM F1554, GRADE 36.
- 3. STEEL CONNECTIONS SHALL BE STANDARD AISC FRAMED BEAM CONNECTIONS, AND SHALL BE SELECTED OR COMPLETED BY AN EXPERIENCED STEEL DETAILER, DESIGNED BY A LICENSED ENGINEER WORKING FOR THE FABRICATOR. WHO SHALL PROVIDE CALCULATIONS. UTILIZING LRFD LOADS AND PROCEDURES. UNLESS OTHERWISE NOTED ON PLAN, PROVIDE CONNECTIONS BASED ON MINIMUM SHEAR CAPACITY REQUIREMENTS IN THE FOLLOWING TABLE WHICH ARE BASED ON AISC SINGLE SHEAR TAB

THIS TABLE IS BASED ON SINGLE-SHEAR TAB CONNECTIONS. ASSUMING 5/16" A36 SINGLE-PLATE, 3/4" DIA. A325-N BOLTS

MINIMUM SHEAR CAPACITY REQUIREMENTS							
BEAM DEPTH (NOMINAL)	MIN. SHEAR CAPACITY ASD (Kips)	MIN. SHEAR CAPACITY LRFD (Kips)	MIN. NUMBER OF BOLT ROWS				
8", 10"	16	24	2				
12", 14"	28	42	3				

- B. REINFORCING IS TO BE PROVIDED AT CONNECTIONS WHERE CUTS REDUCE THE SHEAR OR MOMENT CAPACITY BELOW THAT REQUIRED TO SUSTAIN THE REACTION. FLANGES AND WEBS ARE TO BE REINFORCED WHERE THE LOCAL CAPACITY TO SUSTAIN CONNECTION LOADS ARE INADEQUATE. CUTS OR COPES MAY PREVENT MINIMUM NUMBER OF BOLT ROWS SHOWN ABOVE FROM BEING ACHIEVED, WHICH IS ACCEPTABLE PENDING WRITTEN APPROVAL AND CONFIRMATION THAT MINIMUM SHEAR CAPACITY HAS BEEN MET.
- C. CONNECTIONS SHALL BE DESIGNED FOR SHEAR AND ECCENTRICITY, CONSIDERING THAT THE CONNECTIONS ARE AN EXTENSION OF THE BEAMS AND GIRDERS. 4. MINIMUM WELD SIZE IS 1/4" FILLET UNLESS NOTED OTHERWISE.
- 5. ALL BEAMS EXCEPT CANTILEVER BEAMS SHALL BE FABRICATED AND INSTALLED WITH NATURAL CAMBER UP. CANTILEVER BEAMS SHALL BE FABRICATED AND INSTALLED SO THAT NATURAL CAMBER RAISES CANTILEVER END.
- 6. FIELD CUTTING OR BURNING OF STEEL IS PROHIBITED EXCEPT WITH THE EXPRESS WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD (IN WHICH CASE ALL BURNING OF STEEL MUST CONFORM TO THE THERMAL CUTTING REQUIREMENTS OF AISC AND AWS).
- 7. WELDING SHALL BE PERFORMED BY CERTIFIED, AWS-QUALIFIED WELDERS. WELDING ELECTRODES FOR CARBON STEEL SHALL BE AWS 5.1, CLASS E70XX.
- 8. ALL EXTERIOR EXPOSED STEEL AND STEEL SUPPORTING EXTERIOR SHALL BE HOT DIPPED GALVANIZED HOT DIP GALVANIZING SHALL CONFORM TO ASTM A123, REPAIR SCRATCHES OR ABRADED GALVANIZED SURFACE WITH ZINC RICH PAINT.
- 9. LINTELS SHALL BE INSTALLED OVER ALL OPENINGS IN MASONRY WALLS AS FOLLOWS:

MASONRY OPENING	LINTEL
4' - 0" OR LESS	L4x3-1/2x5/16 LLV
4' - 1" TO 7' - 0"	L6x3-1/2x5/16 LLV

A. 3-1/2" LEGS ARE HORIZONTAL.

- B. PROVIDE ONE ANGLE FOR EACH 4" OF WALL THICKNESS.
- C. PROVIDE L5x5x5/16 ANGLES FOR 6" THICK WALLS AND PARTITIONS WITH OPENINGS UP TO 6' 0". PROVIDE MINIMUM 6" BEARING AT EACH END.
- E. LINTELS OVER 6' 4" SHALL BE FIREPROOFED 10. SHOP AND ERECTION DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW
- AND APPROVAL, NO FABRICATION OF STEEL SHALL COMMENCE WITHOUT APPROVED SHOP DRAWINGS. 11. SHOP DRAWING SUBMITTALS SHALL FOLLOW THE FOLLOWING SEQUENCE (WITH EACH NOT BEING SUBMITTED UNTIL THE PREVIOUS ONE IS APPROVED):
- A. ERECTION PLANS B. PIECE DETAILS AND PIECE-SPECIFIC CONNECTION CALCULATIONS
- 12. PROVIDE MECHANICALLY GALVANIZED BOLTS FOR EXTERIOR APPLICATIONS. 13. ALL STEEL COLUMN SPLICES AND STEEL CONNECTIONS MUST MEET THE REQUIREMENTS OF SECTION
- 1615/1616 OF IBC 2015/2018. 14. ALL EXTERIOR STEEL FRAMING TO BE SANDBLASTED AFTER GALVANIZATION TO ALLOW FOR EXTERIOR PAINT APPLICATION.

#### FRAMING LUMBER

- 1. ALL FRAMING LUMBER WORK SHALL CONFORM TO THE FOLLOWING GOVERNING STANDARDS: A. AMERICAN WOOD COUNCIL "WOOD FRAME CONSTRUCTION MANUAL FOR ONE- AND TWO-FAMILY
- B. AMERICAN WOOD COUNCIL "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", "NDS SUPPLEMENT: DESIGN VALUES FOR WOOD CONSTRUCTION", AND "SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC"
- 2. FRAMING LUMBER SHALL HAVE EACH PIECE GRADE STAMPED, SHALL BE SURFACED DRY (EXCEPT STUDS, WHICH SHALL BE KILN DRIED) AND SHALL CONFORM TO THE FOLLOWING SPECIES AND GRADES: A. RAFTERS AND JOISTS: DOUGLAS FIR-LARCH #2, B. BEAMS, GIRDERS AND HEADERS: DOUGLAS FIR-LARCH #1
- C. STUDS AND PLATES: DOUGLAS FIR-LARCH STUD GRADE. 3. TIMBER LUMBER SHALL CONFORM TO THE FOLLOWING SPECIES AND GRADES:

A. POST AND TIMBER: DOUGLAS FIR-LARCH #1

- B. BEAMS AND STRINGERS: DOUGLAS FIR-LARCH #1 4. PRESERVATIVE-TREATED WOOD: PROVIDE TREATED LUMBER COMPLYING WITH ACQ-D (CARBONATE). COPPER AZOLE (CA-B), OR SODIUM BORATE (SBX (DOT) WITH NaS10/2) AT ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY, OR AS OTHERWISE INDICATED ON ARCHITECTURAL OR STRUCTURAL
- DRAWINGS. ACZA TREATMENT IS NOT PERMITTED. TREATED LUMBER AND/OR PLYWOOD SHALL BEAR THE LABEL OF AN ACCREDITED AGENCY SHOWING 0.40 PCF RETENTION. WHERE LUMBER AND/OR PLYWOOD IS CUT OR DRILLED AFTER TREATMENT, THE TREATED SURFACE SHALL BE FIELD-TREATED WITH COPPER NAPTHENATE (THE CONCENTRATION OF WHICH SHALL CONTAIN A MINIMUM OF 2% COPPER METAL) BY REPEATED BRUSHING. DIPPING. OR SOAKING UNTIL THE WOOD ABSORBS NO MORE PRESERVATIVE. REFER TO NOTES 2 AND 3 FOR SPECIES AND GRADE OF TIMBER, UNLESS OTHERWISE
- ALL WOOD FRAMING INCLUDING DETAILS FOR BRIDGING, BLOCKING, FIRE STOPPING, ETC., SHALL CONFORM TO THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND ITS SUPPLEMENTS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE NFPA "MANUAL FOR HOUSE
- FRAMING" OR THE GOVERNING LOCAL/STATE BUILDING CODE. 6. FASTENING SHALL BE IN ACCORDANCE WITH THE MOST RESTRICTIVE OF THE GOVERNING LOCAL/STATE BUILDING CODE AND THE MANUFACTURER'S RECOMMENDED FASTENING SCHEDULES.
- 7. ALL FLUSH FRAMED CONNECTIONS SHALL BE MADE WITH APPROVED GALVANIZED STEEL JOIST OR BEAM HANGERS, MINIMUM 18 GAUGE, INSTALLED ACCORDING TO MANUFACTURER'S
- 8. WHERE FRAMING LUMBER IS FLUSH FRAMED TO MICROLLAM, STEEL OR FLITCH-PLATE GIRDER, SET THESE GIRDERS 1/2" CLEAR (MIN.) BELOW TOP OF FRAMING LUMBER, TO ALLOW FOR SHRINKAGE. 9. STUD BEARING WALLS ARE TO BE 2x4 @ 16" ON CENTER AT THE INTERIOR AND 2x6 @ 16" ON CENTER AT THE EXTERIOR, UNLESS NOTED OTHERWISE ON PLAN.
- 10. ALL RAFTERS AND JOISTS SHALL ALIGN DIRECTLY WITH STUDS BELOW. WHERE REQUIRED, INSTALL ADDITIONAL STUDS. 11. LAP ALL PLATES AT CORNERS AND AT INTERSECTION OF PARTITIONS.
- 12. STAGGER ALL TOP AND BOTTOM PLATE SPLICES A MINIMUM OF 32 INCHES. 13. USE DOUBLE STUDS @ ENDS OF WALL AND ENDS OF WALL OPENINGS. 14. AT THE ENDS OF ALL BEAMS, HEADERS AND GIRDERS PROVIDE A BUILT UP OR SOLID POST WHOSE WIDTH IS AT LEAST EQUAL TO THE WIDTH OF THE MEMBER IT IS SUPPORTING AND WHOSE DEPTH IS 4" (NOMINAL) AT INTERIOR WALLS AND 6" (NOMINAL) AT EXTERIOR WALLS, UNLESS OTHERWISE NOTED.
- 15. USE DOUBLE TRIMMERS AND HEADERS AT ALL FLOOR OPENINGS WHERE BEAMS ARE NOT DESIGNATED. PROVIDE CROSS BRIDGING AT A MAXIMUM OF 8'-0" ON CENTER. 17. BUILT UP BEAMS LESS THAN 8" DEEP SHALL BE SPIKED TOGETHER WITH (2) 16d NAILS @16" ON CENTER. BUILT UP BEAMS GREATER THAN 8" DEEP SHALL BE SPIKED TOGETHER WITH (3) 16d NAILS @16" ON
- 18. WHERE THERE IS NO PLYWOOD WALL SHEATHING, PROVIDE DIAGONALS AT ALL EXTERIOR CORNERS OF STUD WALLS AT EACH FLOOR. (1x4 BRACES LET INTO STUDS AND NAILED AT EACH STUD CROSSING WITH (2) 10d NAILS.)
- 19. WHERE CANTILEVERED BEAMS ARE INDICATED, THE FAR CONNECTOR SHALL BE CAPABLE OF RESISTING AN UPLIFT OF 1000 LBS. MINIMUM, UNLESS NOTED OTHERWISE.
- 20. NO NEW OR EXISTING JOISTS SHALL BE CUT OR NOTCHED WITHOUT APPROVAL. 21. FOR HEADERS NOT CALLED OUT ON PLAN:

WOOD HEADER SCHEDULE										
DOLLOU ODENINO MIDTH	HEA	DER								
ROUGH OPENING WIDTH	2x4 WALL	2x6 WALL								
LESS THAN 3'-0"	(2) 2x6	(3) 2x8								
3'-1" TO 4'-0"	(2) 2x8	(3) 2x8								
4'-1" TO 6'-0"	(2) 2x10	(3) 2x10								
6'-1" TO 8'-0"	(2) 2x12	(3) 2x12								
OVER 8'-0"	SEE PLANS	SEE PLANS								

- PROVIDE (1) JACK STUD FOR SPANS LESS THAN 4'-0".
- PROVIDE (2) JACK STUDS FOR SPANS FROM 4'-1" TO 8'-0". PROVIDE (3) JACK STUDS FOR SPANS OVER 8'-0".
- 22. ALL LIGHT-GAUGE HANGERS SUPPORTING PRESERVATIVE TREATED WOOD SHALL MEET OR EXCEED G185 (1.85 OZ OF ZINC PER SQUARE FOOT). ALTERNATIVELY, STAINLESS STEEL CONNECTIONS MAY BE USED. FASTENERS SHALL MATCH THE HANGER FINISH AND MATERIAL
- 23. WHERE JOIST ORIENTATION IS PARALLEL TO EXTERIOR STUD OR FOUNDATION WALLS, PROVIDE FULL-SECTION BLOCKING FOR 3 BAYS @ 4'-0" ON CENTER MAXIMUM WHERE SHEATHING IS NOT CONTINUOUSLY FASTENED TO TOP OR BOTTOM OF JOIST. PROVIDE 18 GA x 1-1/2" x 1'-0" (MINIMUM) FLAT TENSION STRAP BETWEEN ALIGNED BLOCKING MEMBERS.
- 24. ALL SILL PLATES SHALL BE PRESSURE TREATED AND ANCHORED TO FOUNDATION WALLS WITH 1/2" DIAMETER HEADED ANCHOR BOLTS (ASTM F1554) @ 4'-0" ON CENTER AND WITHIN 12" OF ALL SILL PLATES SPLICES. (MINIMUM 7" EMBED.)

#### **WOOD STRUCTURAL PANEL SHEATHING**

- 1. PROVIDE STRUCTURAL 1 PLYWOOD SHEATHING WITH BOND CLASSIFICATIONS APPROPRIATE TO THE END USE: "EXTERIOR" (PERMANENT EXPOSURE), OR "EXPOSURE 1" (CONSTRUCTION EXPOSURE ONLY) 2. FLOOR SHEATHING: NOM. 3/4" THICK T&G PLYWOOD (48/24 SPAN RATING), APA STURD-I-FLOOR, OR ADVANTECH SUBFLOOR.
- 3. ROOF SHEATHING (STANDARD): NOM. 5/8" THICK T&G PLYWOOD (48/24 SPAN RATING). 4. ROOF SHEATHING (UNDER SLATE OR CLAY TILE): NOM. 3/4" THICK T&G PLYWOOD (48/24 SPAN RATING). 5. WALL SHEATHING (STANDARD: NOM. 1/2" THICK PLYWOOD (32/16 SPAN RATING). 6. WALL SHEATHING (BEHIND SLATE, CLAY TILE, OR MASONRY VENEER): NOM. 3/4" THICK PLYWOOD (48/24
- 7. USE PLY CLIPS OR OTHER EDGE SUPPORT AS REQUIRED FOR PLYWOOD SHEATHING. 3. LEAVE 1/16" SPACE AT ALL PLYWOOD PANEL END JOINTS AND 1/8" SPACE AT ALL PANEL EDGE JOINTS. 9. UNLESS NOTED OTHERWISE, WALL SHEATHING SHALL BE FASTENED TO FRAMING WITH 8d COMMON
- NAILS @ 4" ON CENTER AT EACH SHEET PERIMETER AND 12" ON CENTER ELSEWHERE. PROVIDE 2x6 BLOCKING AT ALL FREE EDGES. 10. UNLESS NOTED OTHERWISE, ROOF SHEATHING SHALL BE FASTENED TO FRAMING WITH 8d COMMON NAILS @ 6" ON CENTER AT EACH SHEET PERIMETER AND 12" ON CENTER ELSEWHERE.
- 11. ALL FLOOR SHEATHING SHALL BE GLUED AND SCREWED TO FLOOR JOISTS USING AN APA APPROVED ADHESIVE AND #8 SCREWS @ 6" ON CENTER AT EACH SHEET PERIMETER AND 12" ON CENTER ELSEWHERE, UNLESS NOTED OTHERWISE.

#### **SPECIAL INSPECTIONS (IBC)**

- A. INSPECTIONS REQUIRED BY THE LOCAL JURISDICTION SHALL BE PERFORMED BY A TESTING AGENCY PROVIDED BY THE OWNER FOR THE FOLLOWING ITEMS:
- A. INSPECTION OF FABRICATORS (IBC 1704.2.5) B. STEEL CONSTRUCTION (IBC 1705.2)
- a. STRUCTURAL STEEL (IBC 1705.2.1 1. STRUCTURAL STEEL WELDING (AISC 360, AWS D1.1)

CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS.

- 2. HIGH STRENGTH BOLTS (AISC 360) C. CONCRETE CONSTRUCTION (IBC 1705.3, TABLE 1705.3)
- a. MATERIALS TESTS (IBC 1705.3.2, TABLE 1705.3) D. MASONRY CONSTRUCTION (IBC 1705.4, ACI 530 AND ACI 530.1 LEVEL B QUALITY ASSURANCE)
- WOOD CONSTRUCTION (IBC 1705.5)

DEPARTMENT.

SOILS (IBC 1705.6, TABLE 1705.6) G. FABRICATED ITEMS (IBC 1705.10) B. STRUCTURAL OBSERVATIONS REQUIRED BY THE LOCAL JURISDICTION AND IBC 1704.5 SHALL BE PERFORMED BY A REGISTERED DESIGN PROFESSIONAL PROVIDED BY THE OWNER. STRUCTURAL OBSERVATIONS SHALL BE THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM FOR GENERAL

1. TESTING AGENCY FOR THE INSPECTIONS SHALL FILE ALL APPROPRIATE FORMS WITH THE BUILDING

#### <u>STAN</u>

ELEC.

ELEV.

E.O.

E.O.R.

EQ.

E.S.

E.W.

EXP.

EXT.

FDN.

FLR.

FIN.

EMBED.

STANDARD ABBREVIATIONS							
ADD'L ADDITIONAL NO. NUMBER							
ADJ. ADJACENT N.S. NEAR SIDE							
A/E DESIGN TEAM OF RECORD N.T.S. NOT TO SCALE							
ALT. ALTERNATE N.W. NORMAL WEIGHT							
ANCH. ANCHOR O.C. ON CENTER							
APPROX. APPROXIMATE/APPROXIMATELY O.D. OUTSIDE DIAMETE	R						
ARCH. ARCHITECT/ARCHITECTURAL O.F. OUTSIDE FACE							
BLDG. BUILDING OPENING							
BM. BEAM OPP. OPPOSITE							
B.O. BOTTOM OF PC. PIECE							
BOT. BOTTOM P/C PRECAST							
BRG. BEARING PED. PEDESTAL							
BSMT. BASEMENT PERP. PERPENDICULAR							
CANT. CANTILEVER PL. PLATE							
CFS COLD FORMED STEEL PLF POUNDS PER LINE.	AR FOOT						
C.I.P. CAST IN PLACE PREFAB. PREFABRICATED							
C.J. CONTRACTION JOINT PSF POUNDS PER SQU	ARF FOOT						
CLG. CEILING PSI POUNDS PER SQU							
CLR. CLEAR P-T POST-TENSIONED CMU CONCRETE MASONRY UNIT REINF. REINFORCE(D)/REI COL COLUMN REQUIRED	NFORCEMENT						
COL. COLUMN REQUIRED							
COMP. COMPOSITE REV. REVISION							
CONC. CONCRETE SCHED. SCHEDULE							
CONST. CONSTRUCTION SECT. SECTION							
CONST. CONSTRUCTION SECT. SECTION CONT. CONTINUOUS S.I.F. STEP IN FOOTING							
COORD. COORDINATE/COORDINATION SLBB SHORT LEGS BACK	K-TO-BACK						
CONTR. CONTRACTOR SIM. SIMILAR							
COTR CONTRACT OFFICER'S S.O.G. SLAB ON GRADE							
TECHNICAL REPRESENTATIVE SPEC. SPECIFICATION							
CTR. CENTER SQ. SQUARE							
DBL. DOUBLE S.S. STAINLESS STEEL							
DEMO DEMOLITION/DEMOLISH STD. STANDARD							
DIA. DIAMETER STIFF. STIFFENER							
DIAG. DIAGONAL STL. STEEL							
DIM. DIMENSION S.W. SHORT WAY							
D.L. DEAD LOAD SYM. SYMMETRIC							
DN. DOWN T&B TOP&BOTTOM							
DTL. DETAIL TEMP. TEMPORARY/TEMP	PERATURE						
DWG(S) DRAWING(S) THK. THICK(NESS)							
DWL. DOWEL T.O. TOP OF							
EA. EACH TR. TRANSFER							
E.F. EACH FACE TYP. TYPICAL							
E.J. EXPANSION JOINT U.N.O. UNLESS NOTED 01	IHERWISE						

VERTICAL VERT. WITH W/ W.P **WORK POINT** W.W.R. WELDED WIRE REINFORCEMENT NUMBER/SIZE DIAMETER

**FACH WAY EXPANSION EXTERIOR FOUNDATION** FINISH FLOOR FRAMIN( FAR SIDE FFFT

**ELEVATION** 

**ELECTRICAL** 

**ELEVATOR** 

EDGE OF

**EQUAL** 

**ENGINEER** 

EACH SIDE

ENGINEER OF RECORD

**EMBEDMENT** 

F.S. FTG. **FOOTING** GAGE GALV. GALVANIZED **GRADE BEAM** HDR. HEADER HGR. HANGER HORIZ. HORIZONTAL

H.P. HIGH POINT HEIGHT **HVAC** HEATING, VENTILATION, 8 AIR CONDITIONING **INSIDE DIAMETER** INSIDE FACE ISOLATION JOIN INFORMATION INTERIOR

JOINT KIP LB. POUND LIVE LOAD LONG LEGS BACK-TO-BACK LLBB LONG LEG HORIZONTAL LLH LONG LEG VERTICAL LOW POINT

L.W. LIGHTWEIGHT LONG WAY L.W. MAS. MASONRY MAX. MAXIMUM MECH. MECHANICAL MECH., ELECT., PLUMBING, & FIRE

PROTECTION MFR. MANUFACTURER MINIMUM MIN. MISC. MISCELLANEOUS M.O. MASONRY OPENING MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS

NEAR FACE

NOT IN CONTRACT

**ELGIN SPORTS** COMPLEX ELGIN, ILLINOIS 6012

OWNER:

35 EAST WACKER SUITE 900 CHICAGO, IL 60601 312.641.0770 www.smithgroup.com

ARCHITECT OF RECORD: 314 W INSTITUTE PLACE, SUITE 1E CHICAGO, IL 60610 312.944.9600 www.hpzs.com

#### TYLIN I SILMAN STRUCTURAL SOLUTIONS 200 S WACKER DR. SUITE 1400 CHICAGO, IL 60606



MEP ENGINEER: ALLEN + SHARIFF 625 W ADAMS ST, 19TH FLOOR CHICAGO, IL 60661 312.620.3668

ISSUED FOR

ISSUE FOR BID

SEALS AND SIGNATURES

\_\_\_\_ \_\_\_\_ \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_

REV DATE

**GENERAL NOTES AND** 

**ABBREVIATIONS** 

PROJECT NUMBER

**S-001** 

SHEET NUMBER

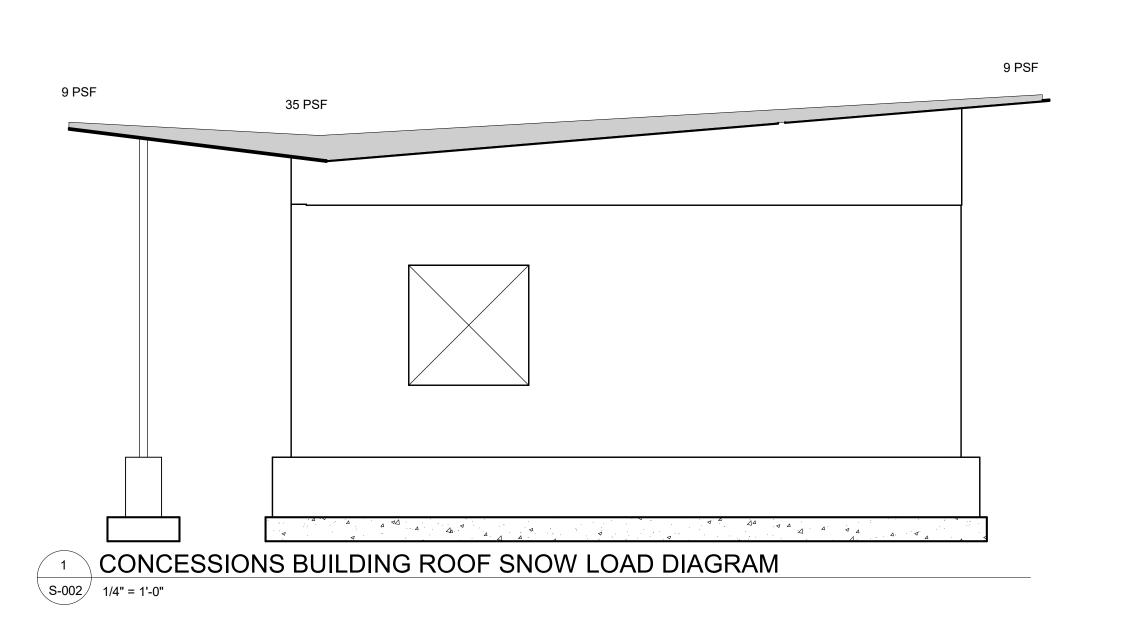
# S\_\_\_\_\_ FRAMING ELEVATION / WALL ELEVATION 0 COLUMN LINE KEYNOTE REVISION

BOTTOM OF FOOTING ELEVATION RELATIVE TO DATUM TOP OF FRAMING ELEVATION RELATIVE TO DATUM <##' - ##"> TOP OF PIER ELEVATION RELATIVE TO DATUM {##' - ##"} BOTTOM OF BASE PLATE ELEVATION RELATIVE TO DATUM (##' - ##") STEEL BEAM BEARING PLATE, SEE SCHEDULE & DETAILS CBP\_\_ STEEL COLUMN BASE PLATE, SEE SCHEDULE & DETAILS CONCRETE SPREAD FOOTING, SEE SCHEDULE & DETAILS CONCRETE GRADE BEAM, SEE SCHEDULE & DETAILS GB\_\_ MW\_\_\_ MASONRY WALL, SEE SCHEDULE & DETAILS CONCRETE OR MASONRY PIER, SEE SCHEDULE & DETAILS

PC\_\_ CONCRETE PILE CAP, SEE SCHEDULE & DETAILS CONCRETE SLAB OR CONCRETE SLAB ON METAL DECK, SEE SCHEDULE & DETAILS s\_\_ SW\_\_ CONCRETE OR MASONRY SHEAR WALL, SEE SCHEDULE & DETAILS CONCRETE WALL, SEE SCHEDULE & DETAILS W\_\_\_ WF\_\_ WALL FOOTING, SEE SCHEDULE & DETAILS

LOADING SCHEDULE							
LOADS	PSF	CONCESSIONS	BATHROOMS	MECHANICAL	WOOD JOIST ROOF		
STRUCTURE SELF WEIGHT							
5" CONCRETE SLAB ON GRADE	63	63	63	63			
WOOD JOISTS	8				8		
SUPERIMPOSED DEAD LOAD							
FLOOR FINSH - STONE (3/4")	3	3	3				
SOLAR PANELS	5				5		
CEILING/MEP	10				10		
3/4" WOOD SHEATHING	3				3		
WATERPROOF MEMBRANE	2				2		
PARTITIONS	15	15	15				
LIVE LOADS							
PUBLIC OCCUPANCY	100	100					
RESIDENTIAL	40		40				
MECHANICAL	60			60			
UNOCCUPIED ROOF	20				20		
VALLEY SNOW LOAD*	35				35		
TOTAL DEAD LOAD		81	81	63	28		
SUPERIMPOSED DEAD LOAD		18	18	0	20		
LIVE/SNOW LOAD		100	40	60	35		
TOTAL LOAD		181	121	123	63		

\*SEE CONCESSIONS BUILDING ROOF SNOW LOAD DIAGRAM FOR ADDITIONAL INFORMATION



DESIGN PARAMETER TABLE						
GOVERNING CODE:		IBC 2018				
RISK CATEGORY:		II				
LIVE LOAD:						
20 PSF		ROOF				
100 PSF		LOBBY & FIRST FLOOR CORRIDOR				
SNOW LOAD:						
25	Pg	GROUND SNOW LOAD				
20	Pf	FLAT-ROOF SNOW LOAD				
1	Ce	SNOW EXPOSURE FACTOR				
1	Is	SNOW LOAD IMPORTANCE FACTOR				
1	Ct	THERMAL FACTOR				
1	Cs	SLOPE FACTOR				
35 PSF	Pd	LOAD AT ROOF VALLEY				
WIND LOAD:						
115 MPH	Vult	ULTIMATE DESIGN WIND SPEED				
89 MPH	Vasd	NOMINAL DESIGN WIND SPEED				
С		WIND EXPOSURE CATEGORY				
0.18	GCPi	INTERNAL PRESSURE COEFFICIENT				
31 PSF		C&C VELOCITY PRESSURE AT MEAN ROOF HEIGHT				
25.75 KIPS	V	DESIGN BASE SHEAR				
SEISMIC DESIGN:						
1	I	SEISMIC IMPORTANCE FACTOR				
0.146	Ss	SHORT PERIOD SPECTRAL RESPONSE ACCELERATION				
0.062	S1	1-SECOND PERIOD SPECTRAL RESPONSE ACCELERATION				
D		SITE CLASS				
0.151	S(ds)	5-% DAMPED SPECTRAL RESPONSE COEFFICIENT AT SHORT PERIODS				
0.085	S(d1)	5-% DAMPED SPECTRAL RESPONSE COEFFICIENT AT 1-SECOND PERIODS				
В		SEISMIC DESIGN CATEGORY				
ORDINARY REINFORCED MASC	NRY SHEAR WALLS	BASIC SEISMIC FORCE RESISTING SYSTEM				
8.5 KIPS	V	DESIGN BASE SHEAR				
0.078	Cs	SEISMIC RESPONSE COEFFICIENT				
2	R	RESPONSE MODIFICATION FACTOR				
EQUIVALENT STATIC FORCE	1	ANALYSIS PROCEDURE				

ELGIN SPORTS COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2

OWNER: THE CITY IN THE SUBURBS"

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## Silman Structural Solutions

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\_\_\_\_\_ \_\_\_\_\_ 1 04/11/2024 ISSUE FOR BID SEALS AND SIGNATURES

REV DATE

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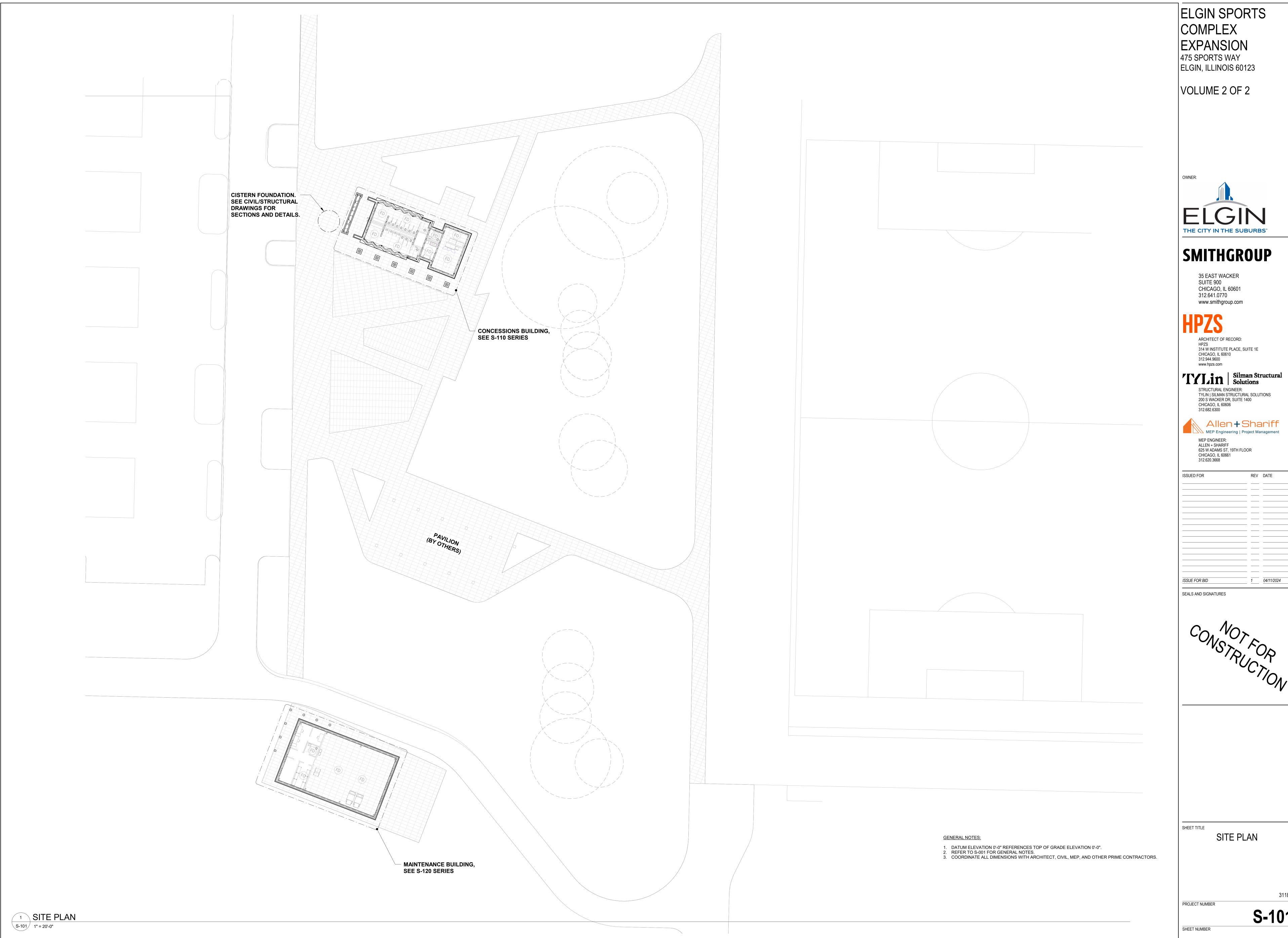
LOAD SCHEDULE, PROJECT PARAMETERS, & LEGEND

PROJECT NUMBER

SHEET NUMBER

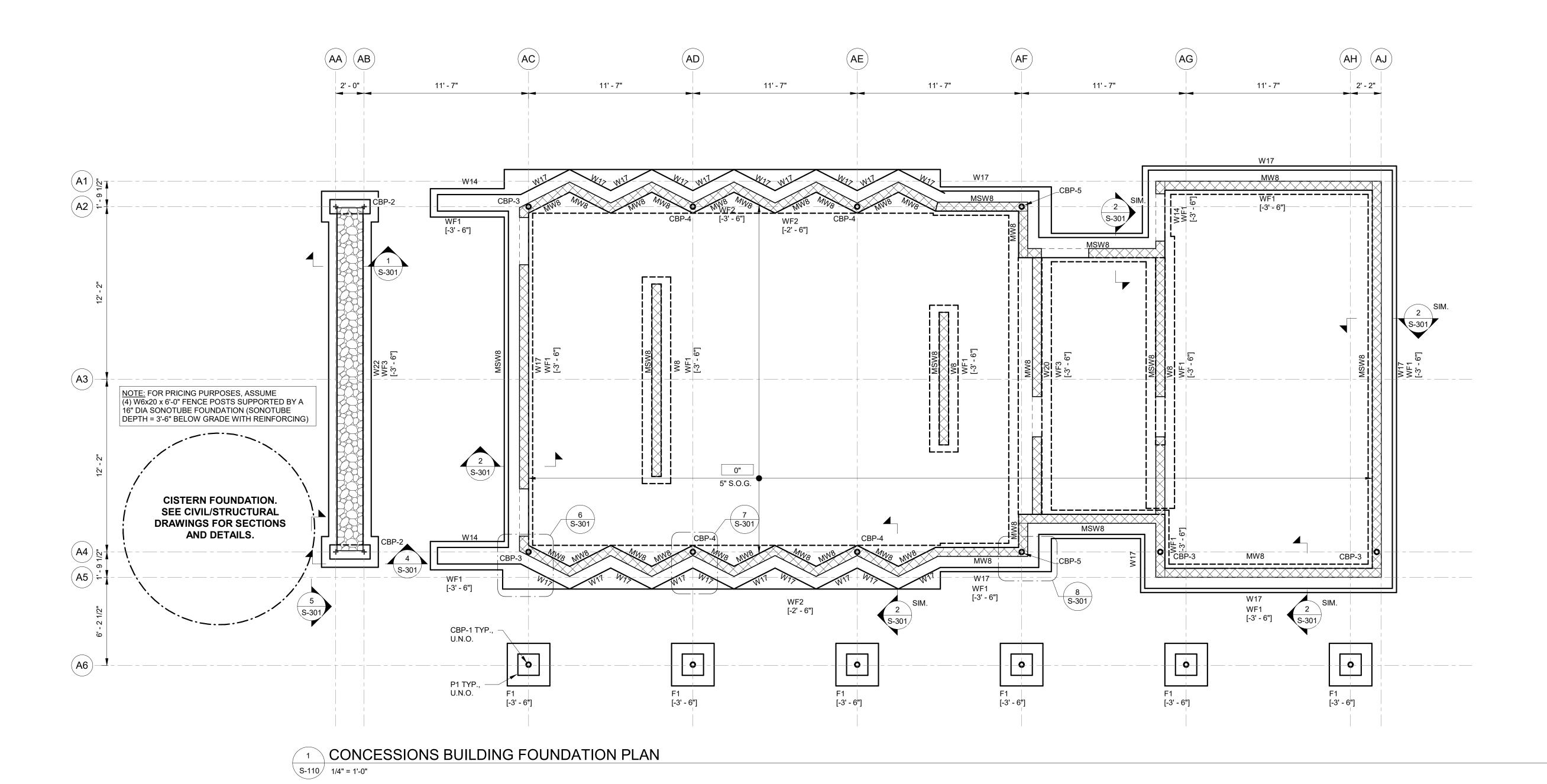
**S-002** 

31184



OR BID	1	04/11/2024	
ND SIGNATURES			
IND SIGNATURES			

S-101



**GENERAL NOTES:** 

DATUM ELEVATION 0'-0" REFERENCES TOP OF GRADE ELEVATION 0'-0".
 TOP OF FOOTING ELEVATIONS IS [-2'-6"] BELOW DATUM UNLESS NOTED THUS [X'-X"].

3. REFER TO S-001 FOR GENREL NOTES. 4. COORDINATE ALL DIMENSIONS WITH ARCHITECT, CIVIL, MEP AND OTHER PRIME CONTRACTORS.

COORDINATE ALL SLAB OPENINGS, SLOPES, SLEEVES, DEPRESSIONS, EDGE DIMENSIONS AND CURBS WITH ARCHITECT, CIVIL, MEP AND OTHER PRIME CONTRACTORS.

**ELGIN SPORTS** COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

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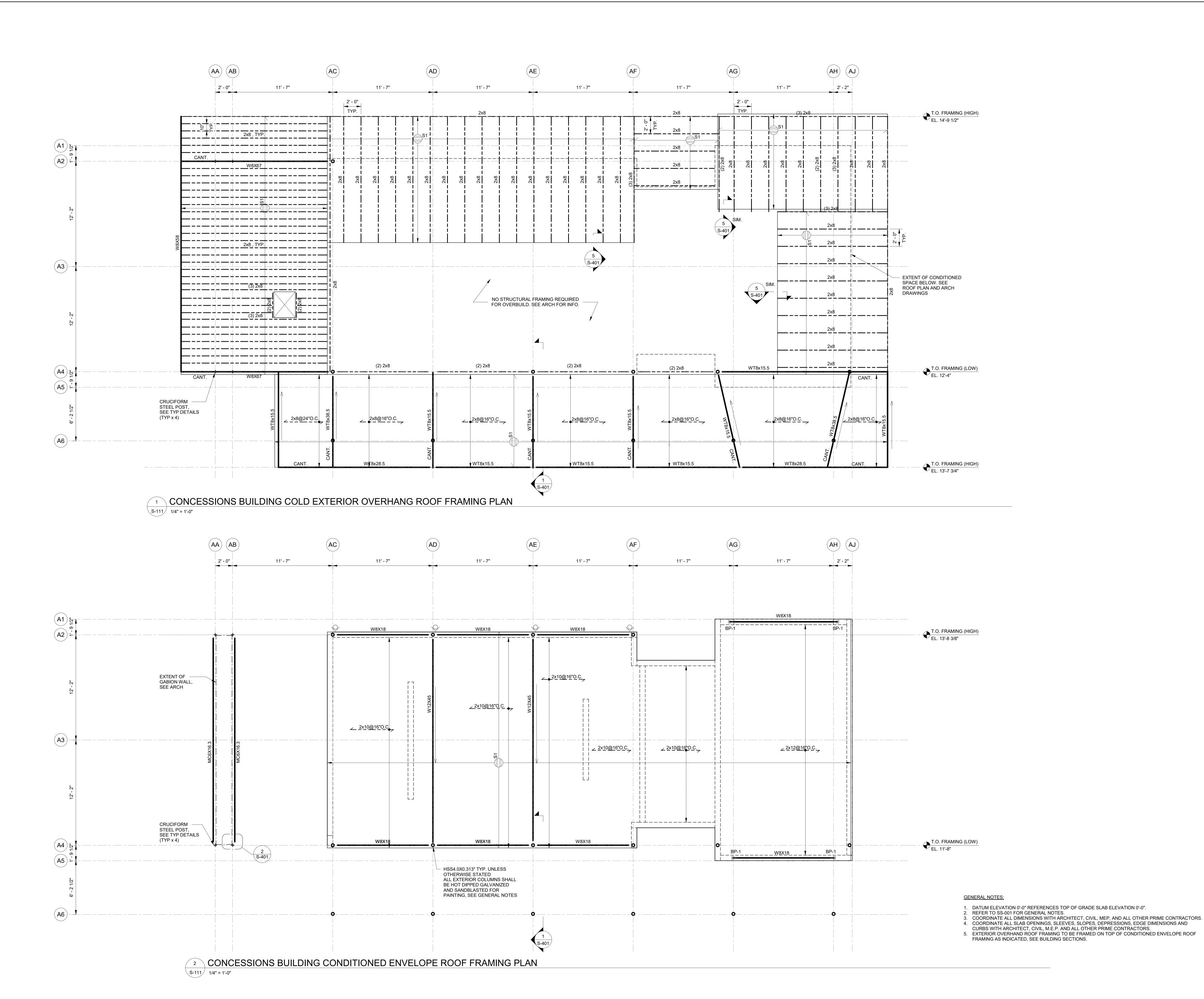
ISSUED FOR REV DATE 1 04/11/2024 ISSUE FOR BID SEALS AND SIGNATURES

SHEET TITLE CONCESSIONS BUILDING FOUNDATION PLAN

31184

PROJECT NUMBER

SHEET NUMBER



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STRUCTURAL ENGINEER:
TYLIN | SILMAN STRUCTURAL SOLUTIONS
200 S WACKER DR, SUITE 1400
CHICAGO, IL 60606

312.682.6300



CONSTRUCTION

CONCESSIONS BUILDING
BUILDING ROOF PLANS

31

PROJECT NUMBER

SHEET NUMBER

Plot Date:

1 MAINTENANCE FOUNDATION PLAN
S-120 1/4" = 1'-0"

GENERAL NOTES:

- DATUM ELEVATION 0'-0" REFERENCES TOP OF GRADE ELEVATION 0'-0".
   TOP OF FOOTING ELEVATIONS IS [-2'-6"] BELOW DATUM UNLESS NOTED THUS [X'-X"].
- REFER TO S-001 FOR GENREL NOTES.
   COORDINATE ALL DIMENSIONS WITH ARCHITECT, CIVIL, MEP AND OTHER PRIME CONTRACTORS.
   COORDINATE ALL SLAB OPENINGS, SLOPES, SLEEVES, DEPRESSIONS, EDGE DIMENSIONS AND CURBS WITH ARCHITECT, CIVIL, MEP AND OTHER PRIME CONTRACTORS.

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Silman Structural Solutions

STRUCTURAL ENGINEER:
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ISSUED FOR

REV DATE

DA

CONSTRUCTION

MAINTENANCE BUILDING FOUNDATION PLAN

31184

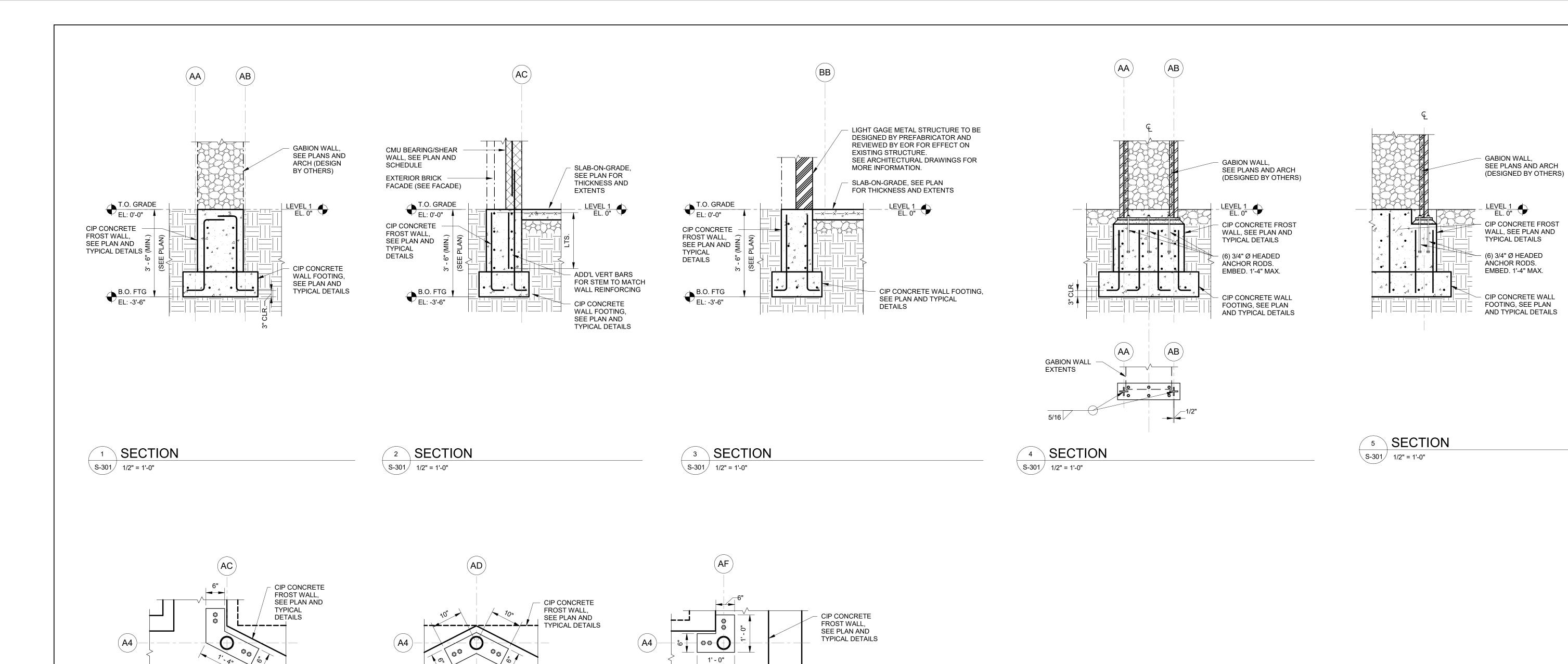
PROJECT NUMBER

S\_126

SHEET NUMBER

1 0000

Plot Date:



CIP CONCRETE

WALL FOOTING, SEE PLAN AND TYPICAL DETAILS

8 PLAN DETAIL

(A5)-

7 PLAN DETAIL

CIP CONCRETE WALL FOOTING, SEE PLAN AND TYPICAL DETAILS

- CIP CONCRETE WALL FOOTING, SEE PLAN AND TYPICAL DETAILS



PROJECT NUMBER

SHEET NUMBER

**S-301** 

REV DATE

**ELGIN SPORTS** 

COMPLEX

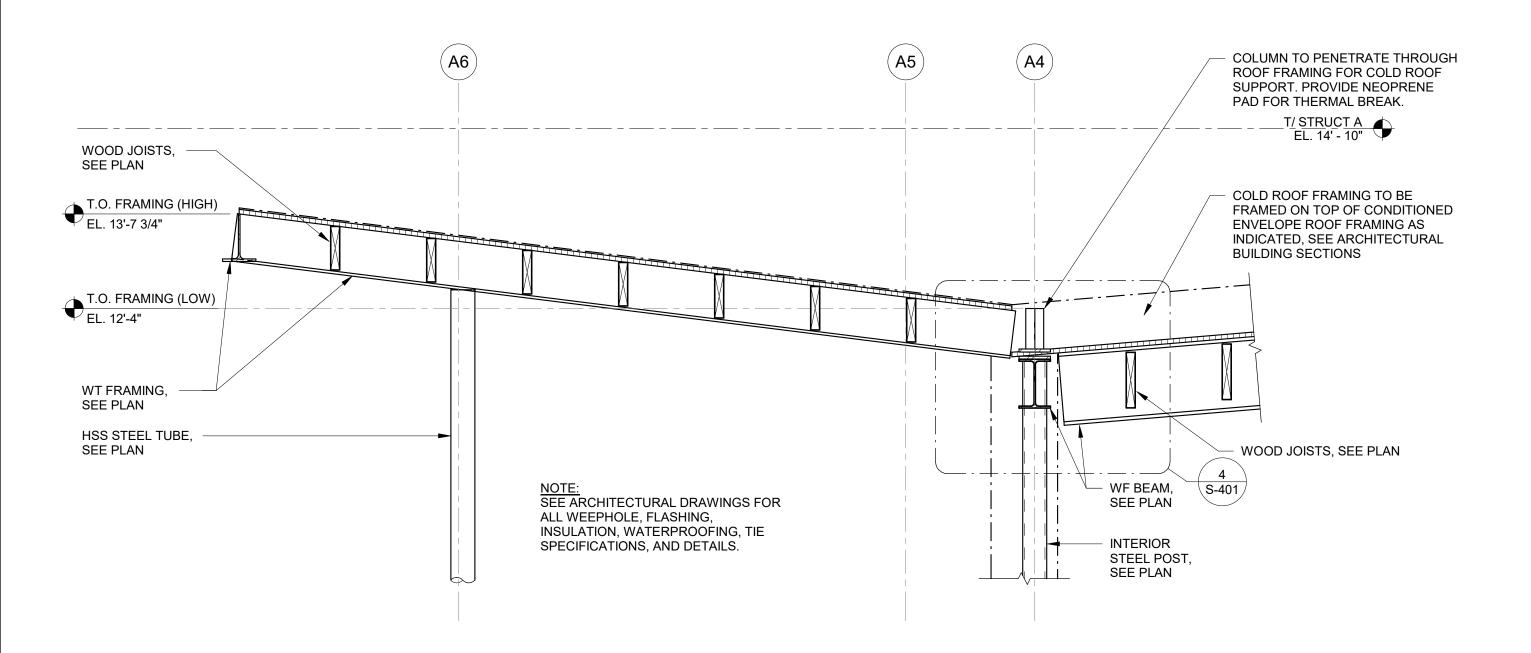
EXPANSION

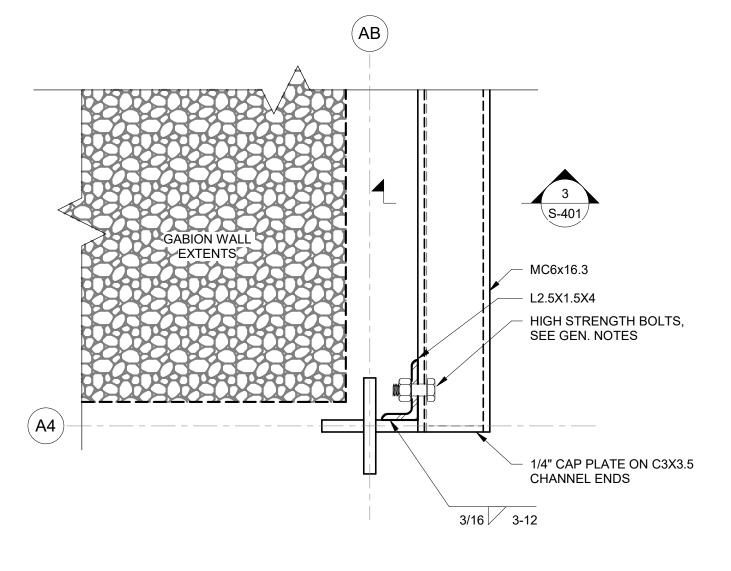
475 SPORTS WAY

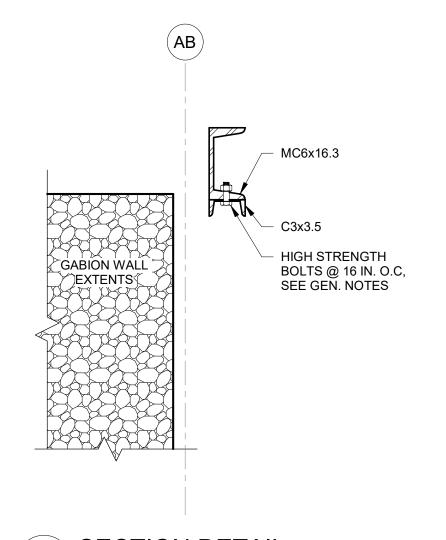
(A5)-

6 PLAN DETAIL

S-301 3/4" = 1'-0"

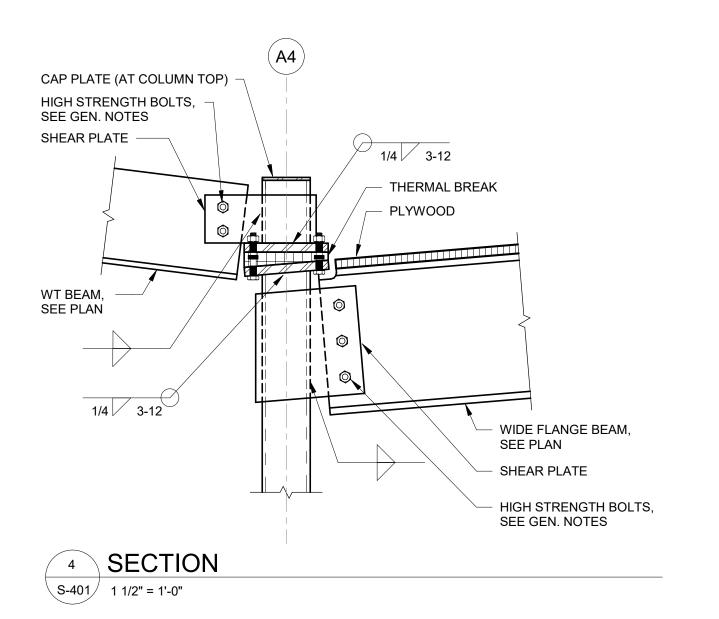






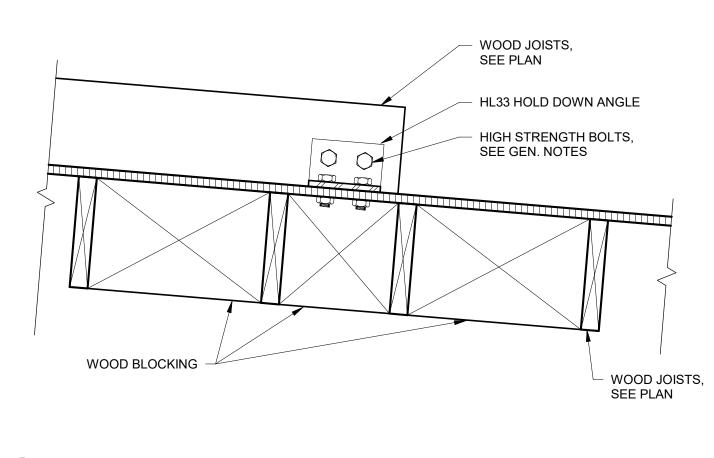
<sup>2</sup> PLAN DETAIL S-401 3" = 1'-0"

**3** SECTION DETAIL S-401 1 1/2" = 1'-0"



SECTION AT SOUTH ROOF OVERHANG

S-401 3/4" = 1'-0"



5 SECTION DETAIL S-401 1 1/2" = 1'-0"

**EXPANSION** 475 SPORTS WAY ELGIN, ILLINOIS 60123 VOLUME 2 OF 2

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SUPERSTRUCTURE SECTIONS

PROJECT NUMBER **S-401** 

SHEET NUMBER

Silman Structural Solutions TYLIN | SILMAN STRUCTURAL SOLUTIONS 200 S WACKER DR, SUITE 1400 CHICAGO, IL 60606 312.682.6300 MEP Engineering | Project Management

ADDITIONAL REINFORCEMENT

AT ALL RE- ENTRANT CORNERS

**SLAB ON GRADE** 

TYPICAL SLAB ON GRADE

N.T.S.

**SLAB-ON-GRADE & WALL INTERFACE** 

IN BOTH DIRECTIONS AT SPECIFIED INTERVALS IN A TIMELY MANNER. 2. SAWED CONTRACTION JOINTS SHALL BE LOCATED AT A MAXIMUM SPACING IN INCHES OF 36 TIMES THE SLAB THICKNESS. JOINTS SHALL BE SAWED NO LATER THAN 24

1. SLAB ON GRADE SHALL BE PLACED IN ALTERNATING STRIPS

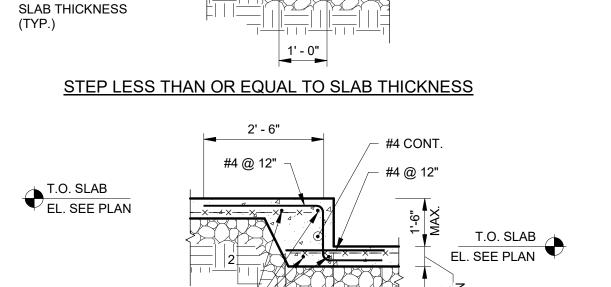
WHERE EACH SINGLE STRIP DOES NO EXCEED 36 TIMES

SLAB THICKNESS WIDTH IN INCHES. ALTERNATIVELY, LARGE

**BLOCK PLACEMENTS WITH INTERIOR CONTRACTION JOINTS** 

ARE ACCEPTABLE IF THE CONTRACTION JOINTS ARE MADE

HOURS AFTER CONCRETE IS PLACED. 3. GRAVEL OR CRUSHED STONE BASE SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE



STEP GREATER THAN SLAB THICKNESS

T.O. SLAB
EL. SEE PLAN

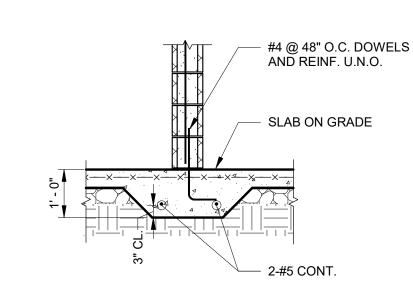
TYPICAL STEP IN SLAB ON GRADE N.T.S.

2-#4 TOP &

BOT. CONT

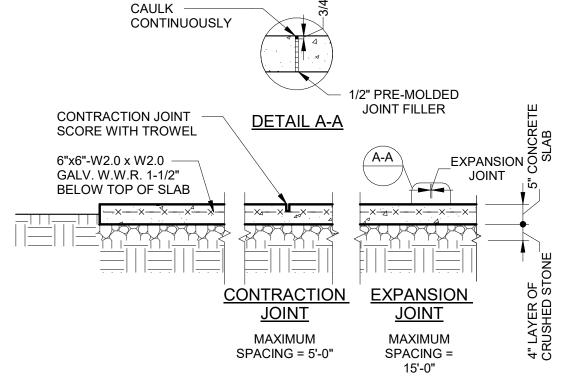
T.O. SLAB
EL. SEE PLAN

SEE PLAN FOR



NOTE: SEE TYPICAL SLAB ON GRADE DETAIL FOR ADDITIONAL INFORMATION

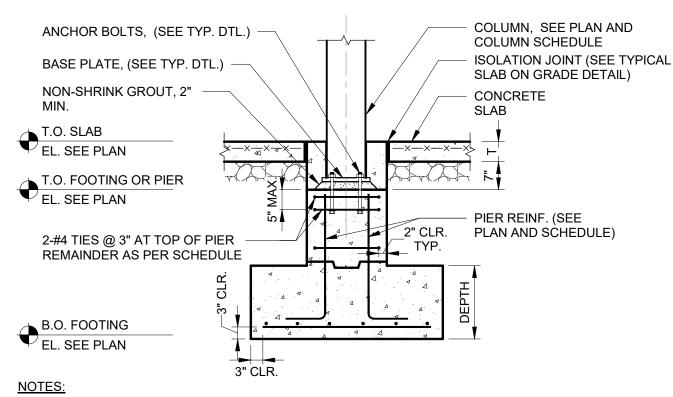
TYPICAL SUPPORT FOR MASONRY PARTITIONS AT SLAB ON GRADE N.T.S.



- 1. UNDISTURBED SOIL OR FILL COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT REMOVE ORGANIC
- 2. BROOM FINISH UNLESS NOTED OTHERWISE

#### TYPICAL EXTERIOR PAVING

N.T.S.

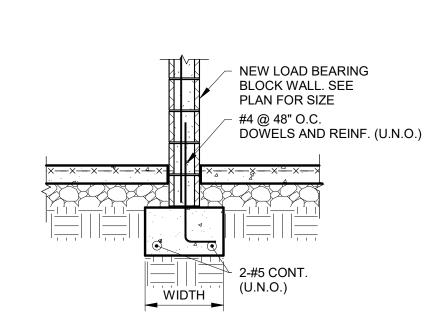


PIER SIZE TO BE 3" LARGER THAN COLUMN BASE PLATE ALL AROUND U.O.N. ON PLAN. SEE PLAN AND FOOTING SCHEDULE FOR FOOTING SIZE AND REINFORCING. 3. IF PIER HEIGHT IS LESS THAN 2'-6", EXTEND COLUMN DOWELS INTO FOOTING. SEE

COLUMN SCHEDULE FOR SIZE AND REINFORCING.

4. T = SLAB THICKNESS - SEE PLANS. 5. FOR TIES AND ADDITIONAL INFORMATION SEE "TYPICAL DETAIL CONCRETE COLUMN".

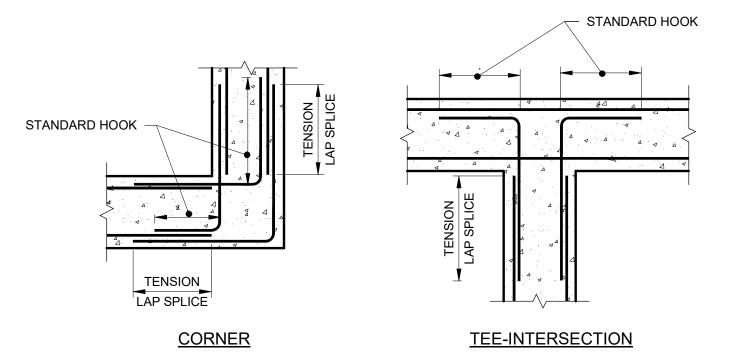
#### TYPICAL PIER & FOOTING AT STEEL COLUMN N.T.S.



WITH A MINIMUM BEARING CAPACITY AS SPECIFIED IN THE

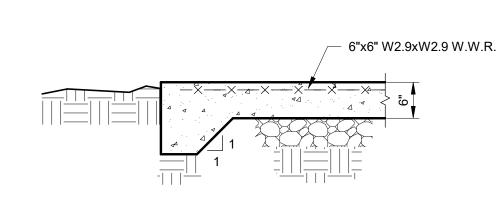
NOTES: FOOTINGS SHALL BEAR ON FIRM UNDISTURBED SOIL

TYPICAL WALL FOOTING FOR LOAD BEARING INTERIOR BLOCK AT NEW SLAB N.T.S.



NOTE: FOR TENSION LAP SPLICE LENGTH AND DEVELOPMENT LENGTH SEE TABLE.

TYPICAL HORIZONTAL REINFORCEMENT AT CORNERS & JUNCTIONS OF WALLS AND BEAMS

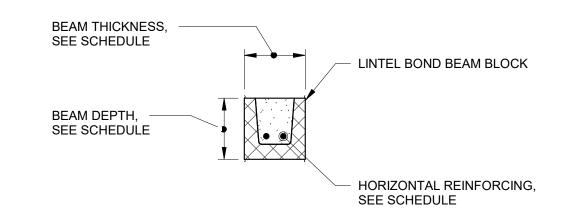


O.C. HY-200 ADHESIVE OR APPROVED EQUAL.

NOTES: 1. FOR SIZE AND LOCATION SEE ARCHITECTURAL AND MECHANICAL

CONCRETE FOR PADS SHALL BE NORMAL WEIGHT WITH f'c = 4000 PSI THREADED RODS TO BE 3/8" Ø A-36 STEEL IN EXPANSION INSERTS @ 18"

### TYPICAL EQUIPMENT PAD ON GRADE (EXTERIOR)



CMU BOND BEAM SCHEDULE								
LENGTH	BEAM THICKNESS	BEAM DEPTH	HORIZONTAL REINF.	SHEAR REINF.				
0'-0" - 4'-0"	7 5/8"	7 5/8" (1 COURSE HIGH)	2-#5					

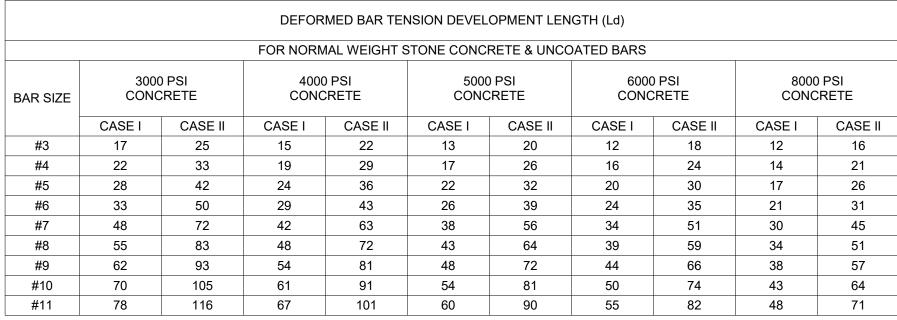
ALL CMU BOND BEAM BEAMS TO BE GROUTED SOLID FOR FULL LENGTH OF BEAM. ALL CMU BOND BEAM TO HAVE MIN. 7 5/8" BEARING ON EACH END.

HORIZONTAL REINFORCING. ALL OTHER (NON-SPANNING) BOND BEAMS TO BE SINGLE COURSE WITH 2-#4 HORIZONTAL VERTICAL PLACEMENT OF HORIZONTAL REINFORCEMENT IN ALL BOND BEAMS SHALL BE 3"

FROM THE BOTTOM OF THE BEAM TO CENTER OF BAR, U.N.O. LINTEL REINFORCEMENT SHALL BE SUPPORTED BY WIRE CHAIRS. CLEAR DISTANCE BETWEEN PARALLEL BARS SHALL NOT BE LESS THAN THE NOMINAL

### TYPICAL CMU BOND BEAM LINTEL N.T.S.

DIAMETER OF THE BARS OR 1", WHICHEVER IS GREATER.

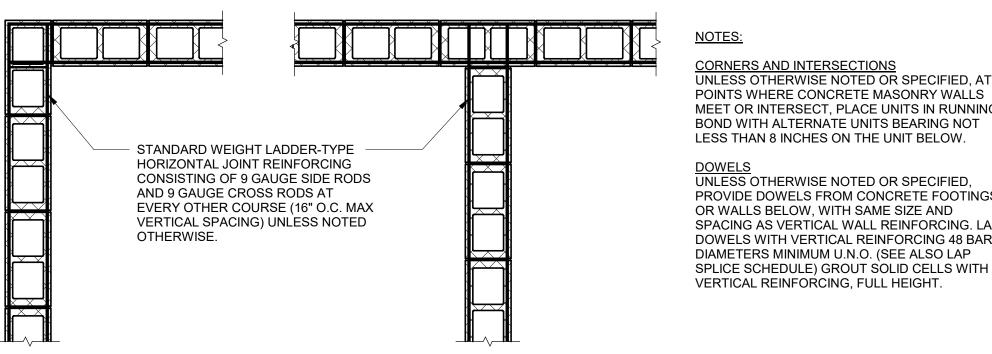


**DEFORMED TENSION BAR NOTES:** 

- 1. FOR HORIZONTAL REINFORCEMENT WITH 12 INCH OR MORE FRESH CONCRETE CAST BELOW IT, TENSION DEVELOPMENT LENGTH/ TENSION LAP SPLICE LENGTH SHALL BE 1.3x THE VALUES GIVEN. 2. FOR REINFORCEMENT IN LIGHTWEIGHT CONCRETE, TENSION DEVELOPMENT LENGTH/TENSION LAP LENGTH SHALL BE 1.3x THE VALUES GIVEN.
- 3. FOR EPOXY-COATED BARS: A. WHERE CONCRETE COVER IS LESS THAN 3x BAR DIAMETER, OR CLEAR SPACING IS LESS THAN 6x BAR DIAMETER, TENSION DEVELOPMENT LENGTH/ TENSION LAP SPLICE LENGTH SHALL BE 1.5x THE VALUES GIVEN.
- B. WHERE CONCRETE COVER IS EQUAL TO OR GREATER THAN 3x BAR DIAMETER AND CLEAR SPACING IS GREATER THAN 6x BAR DIAMETER, TENSION DEVELOPMENT LENGTH/ TENSION LAP SPLICE LENGTH SHALL BE 1.2x THE VALUES GIVEN.
- 4. CASE I APPLIES WHEN EITHER OF THE FOLLOWING SETS OF CONDITIONS ARE MET: A. ALL THREE OF THESE: a. CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED IS NOT LESS THAN DB AND
- b. CLEAR COVER IS NOT LESS THAN DB AND c. STIRRUPS OR TIES ARE PROVIDED THROUGHOUT THE DEVELOPMENT LENGTH AND THE QUANTITY IS NOT LESS THAN THE
- CODE MINIMUM. B. OR BOTH OF THESE:
- a. CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED IS NOT LESS THAN 2DB AND b. CLEAR COVER IS NOT LESS THAN DB. CASE II APPLIES TO ALL OTHER CONDITIONS NOT DESCRIBED IN CASE I

DEFORMED BAR TENSION LAP SPLICE - CLASS B											
FOR NORMAL WEIGHT STONE CONCRETE & UNCOATED BARS											
BAR SIZE		PSI RETE	4000 PSI 5000 PSI CONCRETE			PSI RETE	8000 PSI CONCRETE				
	CASE I	CASE II	CASE I	CASE II	CASE I	CASE II	CASE I	CASE II	CASE I	CASE II	
#3	22	33	19	28	17	25	16	23	14	20	
#4	29	43	25	37	23	34	21	31	18	27	
#5	36	54	31	47	28	42	26	38	22	33	
#6	43	65	37	56	34	50	31	46	27	40	
#7	63	94	54	81	49	73	45	67	39	58	
#8	72	107	62	93	56	83	51	76	44	66	
#9	81	121	70	105	63	94	57	86	50	74	
#10	91	136	79	118	71	106	64	96	56	84	
#11	101	151	87	131	78	117	71	107	62	93	

	DEFORMED BAR COMPRESSION DEVELOPMENT LENGTH (Ldc)				DEFORMED BAR COMPRESSION LAP SPLICE							
	FOR NORMAL WEIGHT STONE CONCRETE & UNCOATED BARS				FOR NORMAL WEIGHT STONE CONCRETE & UNCOATED BARS							
BAR SIZE	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE	6000 PSI CONCRETE	8000 PSI CONCRETE		BAR SIZE	3000 PSI CONCRETE	4000 PSI CONCRETE	5000 PSI CONCRETE	6000 PSI CONCRETE	8000 PSI CONCRETE
#3	9	8	8	8	8		#3	12	12	12	12	12
#4	11	10	9	9	9		#4	15	15	15	15	15
#5	14	12	12	12	12		#5	19	19	19	19	19
#6	17	15	14	14	14		#6	23	23	23	23	23
#7	20	17	16	16	16		#7	27	27	27	27	27
#8	22	19	18	18	18		#8	30	30	30	30	30
#9	25	22	21	21	21		#9	34	34	34	34	34
#10	28	25	23	23	23		#10	39	39	39	39	39
#11	31	27	26	26	26		#11	43	43	43	43	43



68"

67"

64"

MEET OR INTERSECT, PLACE UNITS IN RUNNING BOND WITH ALTERNATE UNITS BEARING NOT LESS THAN 8 INCHES ON THE UNIT BELOW. UNLESS OTHERWISE NOTED OR SPECIFIED, PROVIDE DOWELS FROM CONCRETE FOOTINGS OR WALLS BELOW, WITH SAME SIZE AND SPACING AS VERTICAL WALL REINFORCING. LAP DOWELS WITH VERTICAL REINFORCING 48 BAR DIAMETERS MINIMUM U.N.O. (SEE ALSO LAP SPLICE SCHEDULE) GROUT SOLID CELLS WITH VERTICAL REINFORCING, FULL HEIGHT.

#### TYPICAL REINFORCING DETAILS FOR MASONRY WALL CONSTRUCTION

N.T.S.

DEFORMED BAR TENSION/COMPRESSION DEVELOPMENT LENGTH (Ld) AND LAP SPLICE LENGTH FOR 60 KSI UNCOATED BARS fm=1500 PSI | fm=2000 PSI | fm=2500 PSI | fm=2750 PSI | fm=3000 PSI 12" 12" 12" 12" 13" 12" 12" 12" 17" 16" 18" 18" 20" 32" 31" 38" 34" 42" 52" 47" 44" 72" 65"

71"

. FOR EPOXY-COATED BARS, THE DEVELOPMENT LENGTH/LAP SPLICE LENGTH SHALL BE 1.5X THE VALUE GIVEN ABOVE. LAP SPLICE & DEVELOPMENT LENGTHS FOR REBAR IN CMU

79"

82"

DEFORMED BAR TENSION/COMPRESSION DEVELOPMENT LENGTH (Ld) AND LAP SPLICE LENGTH FOR 60 KSI UNCOATED BARS									
BAR SIZE	f'm=1500 PSI	f'm=2000 PSI	f'm=2500 PSI	f'm=2750 PSI	f'm=3000 PSI				
#3	12"	12"	12"	12"	12"				
#4	15"	13"	12"	12"	12"				
#5	23"	20"	18"	17"	16"				
#6	43"	38"	34"	32"	31"				
#7	60"	52"	47"	44"	42"				
#8	92"	79"	71"	68"	65"				
#9	119"	103"	92"	88"	84"				

1. FOR EPOXY-COATED BARS, THE DEVELOPMENT LENGTH/LAP SPLICE LENGTH SHALL BE 1.5X THE VALUE GIVEN ABOVE. LAP SPLICE & DEVELOPMENT LENGTHS FOR REBAR IN CMU

DEFORMED BAR TENSION/COMPRESSION DEVELOPMENT LENGTH (Ld) AND LAP SPLICE LENGTH FOR 60 KSI UNCOATED BARS								
BAR SIZE	f'm=1500 PSI	f'm=2000 PSI	f'm=2500 PSI	f'm=3000 PSI				
#3	16"	15"	15"	15"				
#4	21"	20"	20"	20"				
#5	26"	25"	25"	25"				
#6	43"	38"	34"	31"				
#7	60"	52"	47"	42"				
#8	72"	72"	71"	65"				
#9	82"	79"	71"	64"				

NOTES:

1. FOR EPOXY-COATED BARS, THE DEVELOPMENT LENGTH/LAP SPLICE LENGTH SHALL BE 1.5X THE VALUE GIVEN ABOVE. LAP SPLICE & DEVELOPMENT LENGTHS FOR REBAR IN CMU

	BAR TENSION/C LAP SPLICE LE			
BAR SIZE	f'm=1500 PSI	f'm=2000 PSI	f'm=2500 PSI	f'm=30
#3	27"	27"	27"	2
#4	36"	36"	36"	36
#5	45"	45"	45"	4
#6	54"	54"	54"	54
#7	63"	63"	63"	63
#8	92"	79"	72"	72
#9	119"	103"	92"	84

NOTES:

1. FOR EPOXY-COATED BARS, THE DEVELOPMENT LENGTH/LAP SPLICE LENGTH SHALL BE 1.5X THE VALUE GIVEN ABOVE.

#11 68" LAP SPLICE & DEVELOPMENT LENGTHS FOR REBAR IN CMU

SLAB	ANCHOR TOP OF CMU WALL TO UND W/ 3/16" GALV. STEEL U SHAPED CLIF THICKNESS x 8" LONG @ SPACING TO ALIGN WITH VERTICAL WALL REINFO H & B OR EQUAL) W/ 2-3/8" Ø EXPANS UNDERSIDE OF SLAB. PROVIDE COMBETWEEN TOP OF BLOCK & CLIP	P 3"x BY WALL O MATCH AND PRCING (PTA 422 BY SION BOLTS TO	
SEE SCHEDULE?	2x (2) #5 ADDITIONAL EACH SIDE OF OPENING TYP.  WALL OPENING  T.O. SLAB  REINF. AND DOWELS PER TABLE	SEE SCHEDULE	2x (2) #5 ADDITIONAL EACH SIDE OF OPENING TYP.  WALL OPENING  T.O. SLAB  REINF. AND DOWELS PER TABLE
	NOTE BROWER INTELS AS BESTUR	ED 01/ED 14/411	

NOTE: PROVIDE LINTELS AS REQUIRED OVER WALL

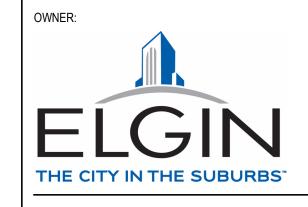
INTERIOR WALLS								
NOMINAL CMU THICKNESS	VERTICAL REBAR	HORIZONTAL REBAR	MAXIMUM HEIGHT (FT)	DOWELS				
6"	#4 @ 48"	9 GAGE LADDER REINFORCING @ 16" O.C.	23'-6"	SAME AS VERTICAL BARS				
8"	#4 @ 48"	9 GAGE LADDER REINFORCING @ 16" O.C.	27'-7"	SAME AS VERTICAL BARS				

EXTERIOR WALLS								
NOMINAL CMU THICKNESS	VERTICAL REBAR	HORIZONTAL REBAR	MAXIMUM HEIGHT (FT)	DOWELS				
6"	#5 @ 24"	9 GAGE LADDER REINFORCING @ 16" O.C.	14'-6"	SAME AS VERTICAL BAR				
8"	#5 @ 24"	9 GAGE LADDER REINFORCING @ 16" O.C.	18'-8"	SAME AS VERTICAL BAR				
8"	#5 @ 16"	9 GAGE LADDER REINFORCING @ 16" O.C.	21'-0"	SAME AS VERTICAL BARS				

TYPICAL REINFORCING FOR NON-BEARING MASONRY WALLS (ELEVATION) N.T.S.

DEFORMED BAR TENSION/COMPRESSION DEVELOPMENT LENGTH (Ld) AND LAP SPLICE LENGTH FOR 60 KSI UNCOATED BARS						
BAR SIZE FOR ALL MASONRY f'm						
#3	18"					
#4	24"					
#5	30"					
#6	36"					
#7	42"					
#8	48"					
#9	55"					
#10	61"					
	0011					

LAP SPLICE & DEVELOPMENT LENGTHS FOR REBAR IN CMU



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VOLUME 2 OF 2

## **SMITHGROUP**

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312.620.3668

ALLEN + SHARIFF 625 W ADAMS ST, 19TH FLOOR CHICAGO, IL 60661

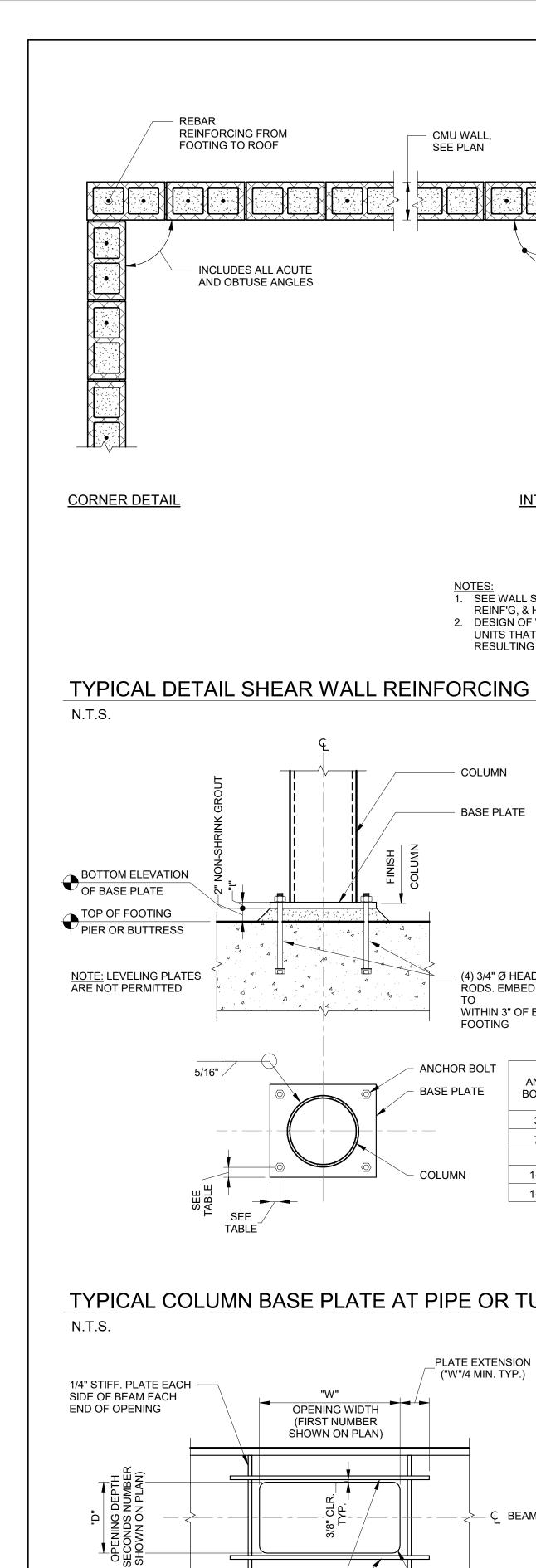
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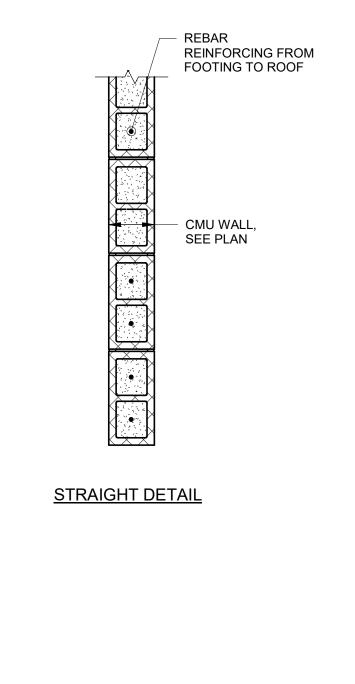
SEALS AND SIGNATURES



TYPICAL DETAILS

PROJECT NUMBER **S-501** 





SHEAR PLATE

STEEL BEAM

HIGH STRENGTH BOLTS,

SEE GEN. NOTES

- HSS STEEL COLUMN

**BEAM TO HSS COLUMN** 

CAP PLATE (AT

COLUMN TOP)

FOR CAPACITY,

EXTEND PLATE

THROUGH

COLUMN

NOTES:

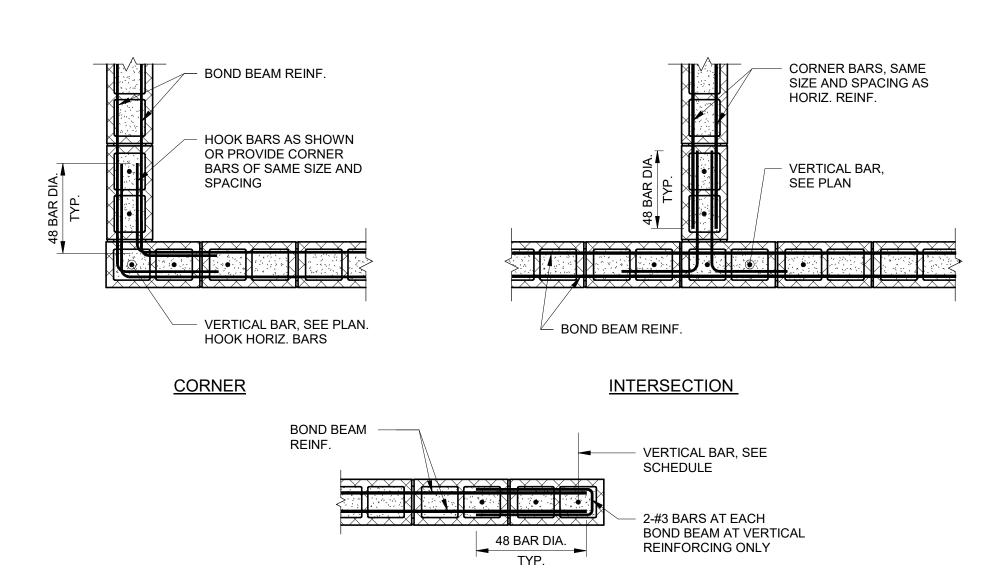
**EDGE DISTANCE** 

FROM CENTER LINE

OF BOLT HOLE

2-1/2"

2-1/2"



- DOUBLE ANGLES

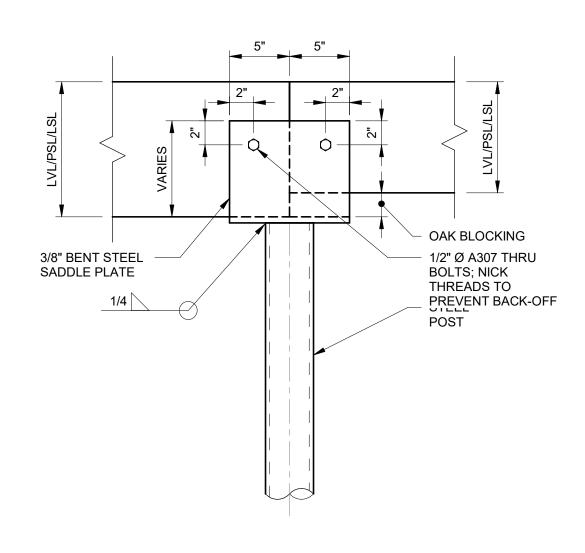
HIGH STRENGTH BOLTS,

SEE GEN. NOTES

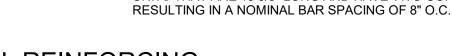
WF STEEL COLUMN

**BEAM TO WF COLUMN WEB** 

STEEL BEAM



TYPICAL LVL/PSL/LSL GIRDER CONNECTION TO SINGLE-LIFT POST N.T.S.



- COLUMN

**BASE PLATE** 

- (4) 3/4" Ø HEADED ANCHOR RÓDS. EMBED. 1'-4" MAX. OR

WITHIN 3" OF BOTTOM OF

**BOLT SIZE** 

3/4" Ø

7/8" Ø

1" Ø

1-1/4" Ø

1-1/2" Ø

FOOTING

**INTERSECTION DETAIL** 

NOTES:

1. SEE WALL SCHEDULE, SXXX, FOR WALL TYPE, fm, VERTICAL

UNITS THAT ARE 15 5/8" LONG AND HAVE TWO CORES/CELLS

HOLE Ø IN

BASE PL

1-5/16" Ø

1-9/16" Ø

1-7/8" Ø

2-1/8" Ø

2-3/8" Ø

2. DESIGN OF WALL REINF'G ASSUMES CONCRETE MASONRY

REINF'G, & HORIZONTAL JOINT REINFORCING, TYP.

- CMU WALL,

SEE PLAN

REBAR REINFORCING FROM

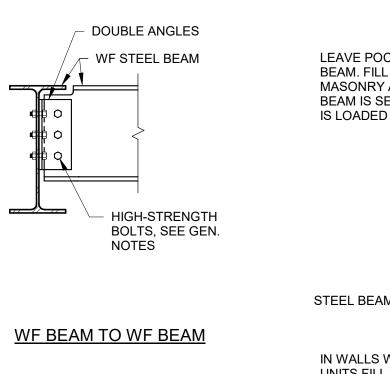
**INCLUDES ALL ACUTE** 

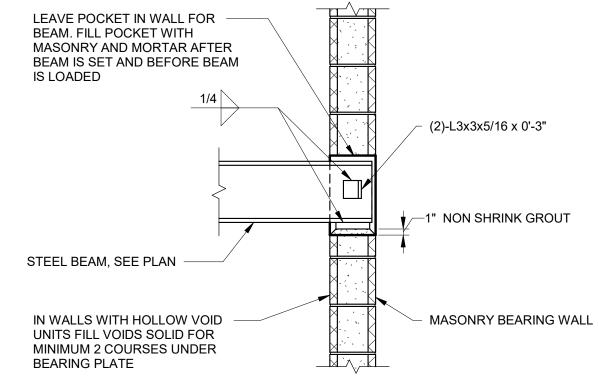
AND OBTUSE ANGLES

FOOTING TO ROOF

TYPICAL DETAIL END AND JAMB VERTICAL BARS AT BOND BEAM

N.T.S.





TYPICAL COLUMN BASE PLATE AT PIPE OR TUBE COLUMN

TYPICAL BEAM WEB PENETRATION

AND ELSEWHERE IN THE CONTRACT DOCUMENTS 2. THE CONTRACTOR SHALL DETAIL THE PROJECT CONNECTIONS FOR THE LOADS AS INDICATED IN THE CONTRACT DOCUMENTS, PER AISC GUIDELINES. THE SCHEMATIC DETAILS ABOVE ARE NOT 3. PROVIDE FULL DEPTH CONNECTIONS AT ALL PERIMETER BEAM CONNECTIONS AND AT BEAM CONNECTIONS TO PERIMETER BEAMS, UNLESS OTHERWISE NOTED

**BEAM TO WF COLUMN FLANGE** 

DOUBLE ANGLES

HIGH STRENGTH

BOLTS, SEE GEN.

NOTES

1. CONNECTION DETAILS SHOWN ABOVE ARE SCHEMATIC ONLY. THE CONTRACTOR MAY SUBMIT ALTERNATE DETAILS FROM THOSE SHOWN ABOVE, BUT IN ANY CASE THE CONTRACTOR IS RESPONSIBLE

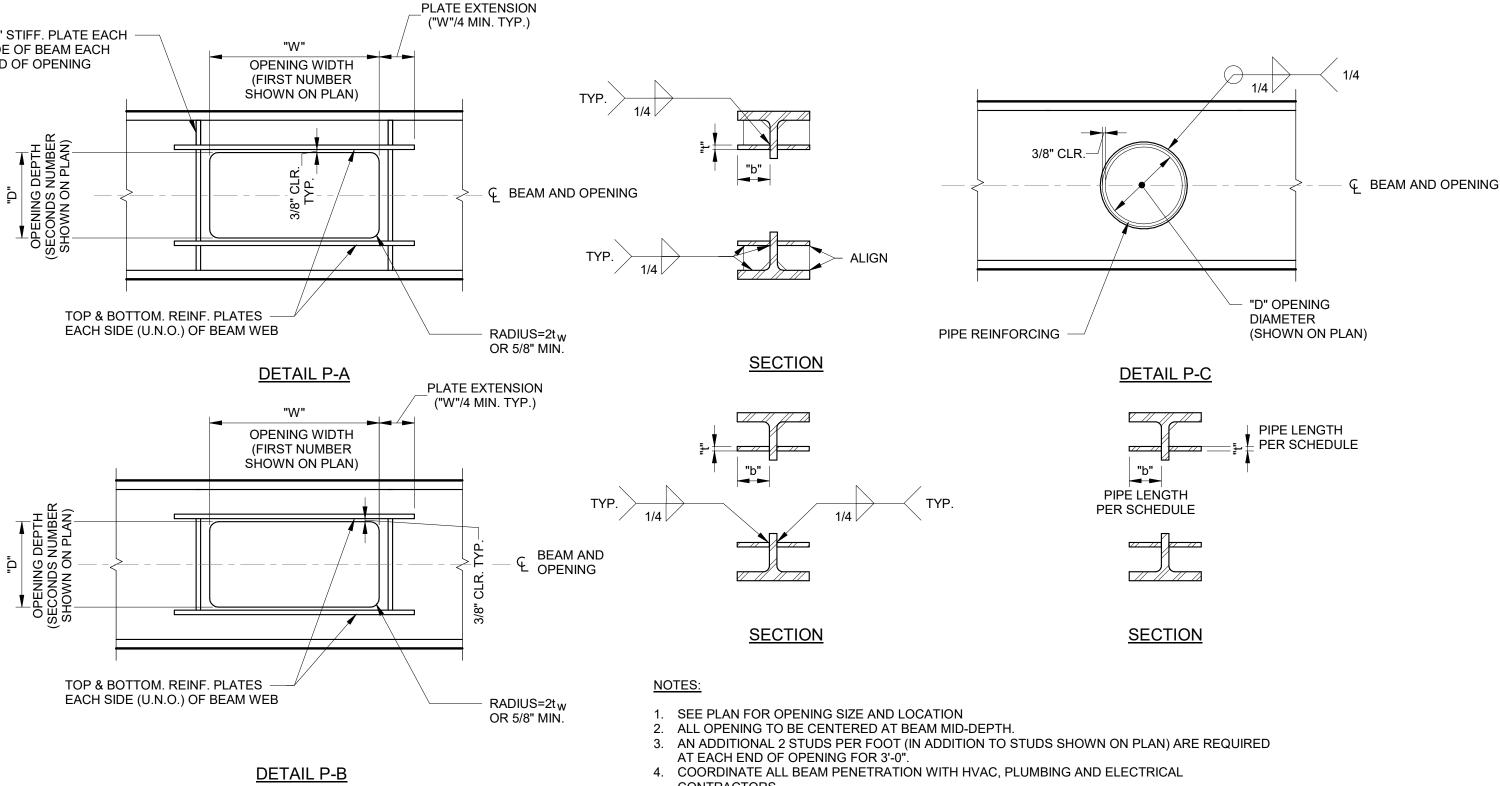
NOTE:

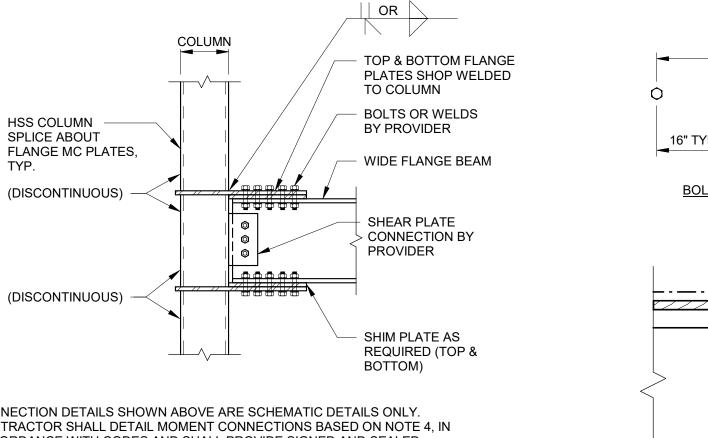
WF STEEL COLUMN

STEEL BEAM

TYPICAL SUGGESTED SHEAR CONNECTIONS AT GRAVITY LOADS ONLY

TYPICAL BEAM BEARING ON NEW MASONRY WALL

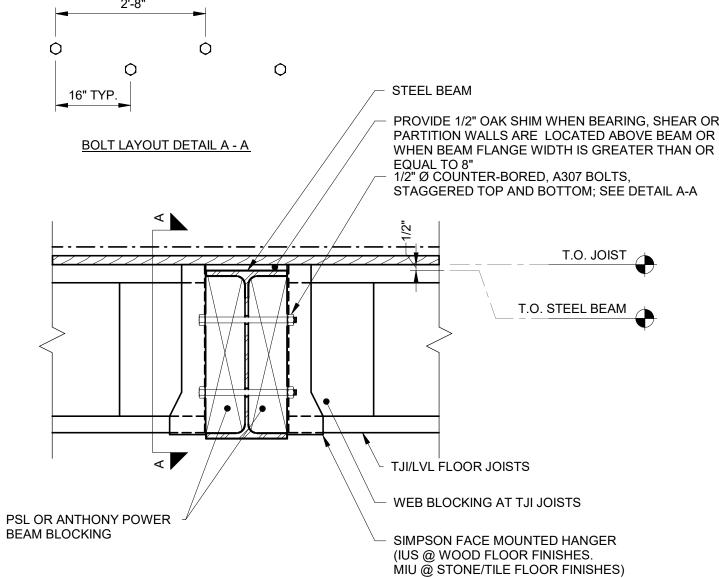




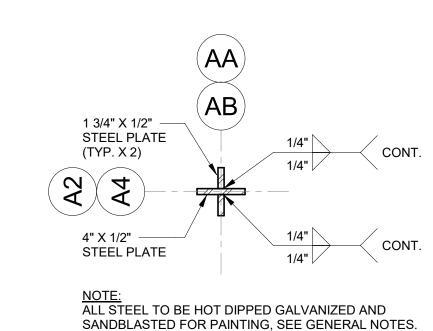
1. CONNECTION DETAILS SHOWN ABOVE ARE SCHEMATIC DETAILS ONLY. CONTRACTOR SHALL DETAIL MOMENT CONNECTIONS BASED ON NOTE 4. IN ACCORDANCE WITH CODES AND SHALL PROVIDE SIGNED AND SEALED CALCULATIONS FOR FULL CONNECTIONS PRIOR TO SUBMITTAL OF SHOP . ALL BOLTS TO BE HIGH-STRENGTH, SLIP CRITICAL.

. PROVIDE BOLTED CONNECTION IN WEB FOR BEAM REACTION PER GENERAL 4. PROVIDE PRETENSIONED BOLTS FOR STRUCTURES OVER 125' IN HEIGHT. 5. DESIGN MOMENT CONNECTION FOR FULL PLASTIC CAPACITY OF BEAM.

TYPICAL HSS COLUMN MOMENT CONNECTION (THRU PLATE) N.T.S.



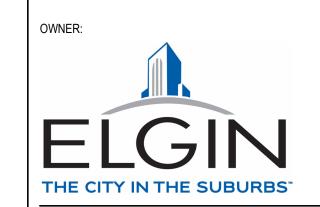
TYPICAL WOOD JOISTS TO STEEL BEAM (FACE MOUNTED)



TYPICAL CRUCIFORM POST AT GABION WALL N.T.S.

ELGIN SPORTS COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2



## **SMITHGROUP**

35 EAST WACKER SUITE 900 CHICAGO, IL 60601 312.641.0770

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ARCHITECT OF RECORD: 314 W INSTITUTE PLACE, SUITE 1E CHICAGO, IL 60610 312.944.9600 www.hpzs.com

Silman Structural Solutions TYLIN | SILMAN STRUCTURAL SOLUTIONS 200 S WACKER DR, SUITE 1400 CHICAGO, IL 60606



CHICAGO, IL 60661

312.620.3668

ISSUED FOR REV DATE ISSUE FOR BID

SEALS AND SIGNATURES



TYPICAL DETAILS

PROJECT NUMBER

**S-502** 

N.T.S.

	MASONRY/STRUCTURAL GLAZED BLOCK SHEAR WALL SCHEDULE									
		REINFOF	RCEMENT	NET AREA COMPRESSIVE						
				STRENGTH OF						
MARK	WIDTH	VERTICAL	HORIZONTAL	ASSEMBLY, F'm (PSI)	REMARKS					
MSW8	7 5/8"	#4@32" O.C.	#3@16" O.C.	2000	SEE GEN NOTES FOR STRUCTURAL GLAZED BLOCK					

		SLAB/DECK SCHEDULE
MARK	TOTAL DEPTH	COMPOSITION/REINFORCEMENT
S1	3/4"	3/4" PLYWOOD SHEATHING, SEE GENERAL NOTES

CONCRETE WALL FOOTING SCHEDULE								
	SIZE		REINFOF					
MARK	WIDTH	DEPTH	LONG WAY	SHORT WAY	REMARKS			
WF1	2' - 0"	1' - 0"	#5@12 O.C.	#5@12 O.C.				
WF2	3' - 1"	1' - 0"	#5@12 O.C.	#5@12 O.C.				
WF3	3' - 0"	1' - 0"	#5@12 O.C.	#5@12 O.C.				

COLUMN FOOTING SCHEDULE								
	SIZE				REINFOR			
				BOTTOM		TO	OP .	
MARK	LENGTH	WIDTH	THICKNESS	LONG WAY	SHORT WAY	LONG WAY	SHORT WAY	REMARKS
F1	3' - 0"	3' - 0"	1' - 0"	(4) #4	(4) #4	Х	X	

SONOTUBE FOUNDATION SCHEDULE								
			REINFOR	REINFORCEMENT				
MARK	DIAMETER	THICKNESS	VERTICAL	TIES	EMBEDMENT	REMARKS		
S1	16"	3' - 6"	(4) #7	#3 @ 6"	N/A	SONOTUBE FOUNDATION, CYLINDRICAL IN SHAPE		

CONCRETE WALL SCHEDULE								
	REINFORCEMENT							
MARK	WIDTH	VERTICAL	HORIZONTAL	REMARKS				
W8	8"	#4 @ 12 IN.	#4 @ 12 IN.					
W14	14"	#5 @ 12 IN.	#5 @ 10 IN.					
W15	15"	#5 @ 12 IN.	#5 @ 10 IN.					
W17	17"	#5 @ 12 IN.	#5 @ 8 IN					
W20	20"	#5 @ 10 IN	#5 @ 6 IN					
W22	22"	#5 @ 10 IN.	#5 @ 6 IN.					

	COLUMN BASE PLATE TYPE SCHEDULE									
	SI	ZE								
MARK	WIDTH	LENGTH	THICKNESS	GRADE	BOLTS	REMARKS				
CBP-1	16"	16"	3/4"	A36	3/4"					
CBP-2	30"	8"	1 1/8"	A36	3/4"					
CBP-3	16"	6"	1/2"	A36	3/4"	BASE PLATE IS KINKED IN THE MIDDLE TO ACCOMODATE NON-LINEAR WALL, REFER TO SECTION 6 S-301 FOR MORE INFORMATION				
CBP-4	20"	6"	1/2"	A36	3/4"	4" BASE PLATE IS KINKED IN THE MIDDLE TO ACCOMODATE NON-LINEAR WALL, REFER TO SECTION 7 S-301 FOR MORE INFORMATION				
CBP-5			CORNER BASE PLATE TO ACCOMODATE CORNER WALL CONDITION, REFER TO SECTION 8 S-301 FOR MORE INFORMATION							

BEAM BEARING PLATE SCHEDULE								
		SIZE						
MARK	LENGTH	WIDTH	THICKNESS	CAPACITY	REMARKS			
BP-1	6"	8"	1/2"	23 KIPS				

PIER SCHEDULE							
	SI	ZE					
			VERTICAL		DOWL		
MARK	WIDTH	LENGTH	BARS	CLOSED TIES	EMBEDMENT	REMARKS	
P1	18"	18"	(4) #9	#3 @ 18 IN.	(4) #9		

**ELGIN SPORTS** COMPLEX **EXPANSION** 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2



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# III | Silman Structural Solutions

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ISSUED FOR REV DATE \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_ \_\_\_\_\_ 1 04/11/2024 ISSUE FOR BID

SEALS AND SIGNATURES



SCHEDULES

PROJECT NUMBER **S-601** 

		ı r
EL A	ECTRICAL ABBREVIATIONS  AMPERE	
AFF AFG	ABOVE FINISHED FLOOR ABOVE FINISHED GRADE	_
AHU	AIR HANDLING UNIT	-
AIC ATS	AMPERE INTERRUPTING CURRENT AUTOMATIC TRANSFER SWITCH	
AV	AUDIO/VISUAL	
BFG C	BELOW FINISHED GRADE  CONDUIT	
CATV CB	CABLE ANTENNA TELEVISION CIRCUIT BREAKER	_
CCTV	CLOSED CIRCUIT TELEVISION	-
CFL CKT	COMPACT FLUORESCENT CIRCUIT	
EBU EC	EMERGENCT BATTERY UNIT EMPTY CONDUIT	
EC	ELECTRICAL CONTRACTOR	
ECB EF	ENCLOSED CIRCUIT BREAKER  EXHAUST FAN	
ERU EQUIP	ENERGY RECOVERY UNIT EQUIPMENT	
ETR	EXISTING TO REMAIN	
EWC EWH	ELECTRIC WATER COOLER ELECTRIC WATER HEATER	_
EX	EXISTING	
FLA FPC	FULL LOAD AMPS FIRE PROTECTION CONTRACTOR	
FPVAV	FAN POWERED VARIABLE AIR VOLUME	
GC	GENERAL CONTRACTOR	
GFCI GND	GROUND FAULT CIRCUIT INTERRUPTER GROUND	
HID	HIGH INTENSITY DISCHARGE	•
HP HVAC	HORSE POWER/HEAT PUMP HEATING, VENTILATING, AND AIR	
IG	ISOLATED GROUND	
JB KVA	JUNCTION BOX KILO-VOLT AMPERE	_
KW	KILO-WATT	-
LC LTG	LIGHTING CONTACTOR LIGHTING	
MAU	MAKE UP AIR UNIT	
MCA MC	MINIMUM CIRCUIT AMPACITY MECHANICAL CONTRACTOR	
MC MCB	METAL CLAD  MAIN CIRCUIT BREAKER	_
MFR	MANUFACTURER	_
MLO MOCP	MAIN LUGS ONLY MAXIMUM OVERCURRENT PROTECTION	-
MTD NEC	MOUNTED  NATIONAL ELECTRICAL CODE	
NF	NON-FUSED	
NIC NL	NOT IN CONTRACT NIGHT LIGHT	
NTS OC	NOT TO SCALE	
OFCI	ON CENTER OWNER FURNISHED CONTRACTOR	
Р	POLE POLE	
PC PCP	PLUMBING CONTRACTOR PUMP CONTROL PANEL	
PF	POWER FACTOR	_
PL PNL	PROPERTY LINE PANEL	
PNLBD Ø	PANELBOARD PHASE	
PRI	PRIMARY	
RECP RL	RECEPTACLE RELOCATE EXISTING	
RTU SE	ROOF TOP UNIT SERVICE ENTRANCE	
SEC	SECONDARY	
TBB TR	TELEPHONE BACKBOARD TAMPER RESISTANT	
TRT	TRIPLE TUBE FLUORESCENT LAMP	
TVSS TYP	TRANSIENT VOLTAGE SURGE SUPPRESSER TYPICAL	
UON V	UNLESS OTHERWISE NOTED VOLTS	
VAC	VOLTS ALTERNATING CURRENT	
VAV VDC	VARIABLE AIR VOLUME VOLTS DIRECT CURRENT	
VFD W	VARIABLE REQUENCY DRIVE WATTS/WIRE	
WG	WATTS/WIRE WIRE GUARD	
WP	WEATHERPROOF TRANSFORMER	

$^{\perp}$	OINOLE RECERTACLE COA 400V 40NAEE LION
Ф	SINGLE RECEPTACLE, 20A, 120V, 18"AFF, UON.
<u>Ф</u> 	DUPLEX RECEPTACLE, 20A, 120V, 18"AFF, UON.  DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTING TYPE, 20A,
Ф	120V, 18"AFF, UON.
<b>—</b>	DUPLEX RECEPTACLE WITH ADDITIONAL ISOLATED GROUND WIRE, 20A, 120V, 18"AFF, UON.
<b></b>	DUPLEX RECEPTACLE, 20A, 120V, 40"AFF OR 4" ABOVE COUNTER TOP OR IN CASEWORK, AS APPLICABLE), OR IN CASEWORK, AS APPLICABLE, UON
<b>♦</b>	DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTING TYPE, 20A, 120V, 40" AFF TO 4" ABOVE COUNTER TOP OR IN CASEWORK (AS APPLICABLE), OR IN CASEWORK, AS APPLICABLE, UON.
<del> </del>	QUADRUPLEX RECEPTACLES IN COMMON BOX, 20A, 120V, 18"AFF, UON.
<b>Ф</b> <sup>WP</sup>	DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTING TYPE, 20A, 120V, WITH COOPER MODEL WIU-1D (OR EQUAL) "WHILE-IN-USE" WEATHERPROOF COVER, 18"AFG UON.
	ELECTRIC WATER COOLER CONNECTION, PROVIDE 20A, 120V GROUND FAULT INTERRUPTING TYPE DUPLEX RECEPTACLE.
<b>∯</b> EWC	COORDINATE WITH EWC MANUFACTURER'S ROUGH-IN REQUIREMENTS. RECEPTACLE SHALL BE ACCESSIBLE THROUGH REMOVAL OF EWC COVER.
Ф	DUPLEX RECEPTACLE, 20A, 120V, 18"AFF, UON. TOP RECEPTACLE SHALL BE CONNECTED TO LOCAL SWITCH.
Φ	FLOORBOX WITH DUPLEX RECEPTACLE. COORDINATE EXACT
	LOCATION IN FIELD WITH IN-FLOOR DISTRIBUTION SYSTEM. FLOORBOX WITH DUPLEX RECEPTACLE AND TELE/DATA.
Φ <b>7</b>	COORDINATE EXACT LOCATION IN FIELD WITH IN-FLOOR DISTRIBUTION SYSTEM.
<b>(4)</b>	RECESSED FLUSH MOUNTED MULTIPLE SERVICE POKE THROUGH FOR POWER, TELE/DATA, AND AV (WHERE INDICATED). CONFIRM REQUIRED TELE/DATA AND AV DEVICES WITH CLIENT'S VENDOR AND AV DRAWINGS. PROVIDE (1)3/4"C FOR POWER AND (1)1-1/2"C FOR TELE/DATA TO ABOVE ACCESSIBLE CEILING WITHIN THE SAME CONFERENCE FINISH TO BE VERIFIED BY ARCHITECT ——CABLE TELEVISION OUTLET WITH DUPLEX RECEPTACLE, EQUAL TO ARCHITECT ——CABLE TELEVISION OUTLET WITH DUPLEX RECEPTACLE.
<b>√</b> II∧ ф	ARLINGTON TVBS505 BOX. PROVIDE DUPLEX RECEPTACLE AND 3/4 WITH PULL STRING STUBBED ABOVE ACCESSIBLE CEILING AND TERMINATED WITH BUSHING.
•	FLOOR BOX. REFER TO FLOOR BOX SCHEDULE SHEET EX.X FOR DETAILS.
	SURFACE METAL RACEWAY WITH 20A, 120V SINGLE RECEPTACLES MOUNTED AT 12" ON CENTER. MOUNT 1" ABOVE
	COUNTERTOP BACKSPLASH.  SPECIAL RECEPTACLE. NEMA CONFIGURATION AS NOTED.
$\bigcirc$	MOUNT 18"AFF UON.
(J) [J]	JUNCTION BOX - ABOVE CEILINGS OR FLUSH IN WALLS.
MGB	MAIN GROUND BAR
TMGB	TELECOM MAIN GROUND BAR
[GB]	GROUND BAR
	DISCONNECT SWITCH - SIZE AS INDICATED ON PLANS 30/2/20/3R — NEMA RATING (IF OTHER THAN 1) FUSE SIZE (AMPS), N.F. INDICATES NON-FUSED No. OF POLES SIZE (AMPS)
S <sub>M</sub>	HORSEPOWER RATED MOTOR SWITCH
/)/	MOTOR CONNECTION.
(FF) (WF)	COMBINATION MOTOR STARTER AND DISCONNECT SWITCH, MOUNT WITHIN SITE OF MOTOR 5'-0"AFF, MAXIMUM, UON.  FLEXIBLE FURNITURE CONNECTION, 6"AFF UON. PROVIDE (1) JUNCTION BOX FOR CONNECTION OF POWER CIRCUITRY (CIRCUIT AS INDICATED ON DRAWINGS) AND PROVIDE (1) JUNCTION BOX WITH 1"C STUBBED ABOVE ACCESSIBLE CEILING FOR TELEPHONE AND DATA CONNECTIONS. PROVIDE POWER AND CONDUIT CONNECTIONS TO FURNITURE. COORDINATE FURNITURE WIRING REQUIREMENTS AND CONNECTIONS WITH FURNITURE EQUIPMENT PROVIDER. PROVIDE LIQUID-TIGHT RACEWAY CONNECTION FROM
(PP)	JUNCTION BOX TO FURNITURE PARTITION.  POWER POLE
(ĈR)	DROP CORD/REEL, 20A, 120V, MOUNTED TO CEILING WITH (3)
	SINGLE RECEPTACLES AT CORD END.  EMON DMON METER. REFER TO POWER PLAN FOR ADDITIONAL INFORMATION.
_VFD_	VARIABLE FREQUENCY DRIVE (FURNISHED WITH ASSOCIATED MECHANICAL EQUIPMENT, INSTALLED BY EC), WITH INTEGRAL DISCONNECT SWITCH.
[SPD]	SURGE PROTECTIVE DEVICE
	ELECTRICAL METER. MOUNT 54" AFF (MINIMUM).
	ELECTRICAL PANELBOARD
	EMERGENCY POWER ELECTRICAL PANELBOARD
$\square$	DRY-TYPE TRANSFORMER
<u>√</u>	ELECTRICAL CIRCUIT RUN IN CONDUIT AND CIRCUIT HOMERUN TO PANELBOARD (PANEL AND CIRCUIT DESIGNATION AS INDICATED). AS A MINIMUM CONDITION, EACH SINGLE PHASE CIRCUIT SHALL HAVE 1 #12 PHASE CONDUCTOR, 1 #12 NEUTRAL CONDUCTOR, AN 1 #12 GROUNDING CONDUCTOR IN 3/4" CONDUIT. PROVIDE ADDITIONAL PHASE CONDUCTORS AS REQUIRED FOR "MULTIPLE PHASED" ELECTRICAL LOADS. PROVIDE ADDITIONAL "SWITCH LEG CONDUCTORS TO PROVIDE THE LIGHT FIXTURE CONTROL INDICATED. MULTIPLE SINGLE PHASE CONDUCTORS SHALL BE GROUPED TOGETHER IN A COMMON CONDUIT IN ACCORDANCE WITH THE NEC AND AT THE CONTRACTOR'S DISCRETION. NEUTRA

	LIGHTING
	LIGHTING
	LIGHTING FIXTURE.
• •	LIGHTING FIXTURE ON EMERGENCY CIRCUIT. SUBSCRIPT "NL" WHERE USED, INDICATES NIGHT LIGHT CONNECTED AHEAD OF LIGHTING CONTROLS. TYPICAL ALL FIXTURE TYPES.
0	DOWNLIGHT FIXTURE.
•	PENDANT LIGHTING FIXTURE.
0>	WALL WASH LIGHTING FIXTURE. SHADED AREA INDICATES LIGHT THROW DIRECTION.
•	DOWNLIGHT FIXTURE ON EMERGENCY CIRCUIT. SUBSCRIPT "NL" WHERE USED, INDICATES NIGHT LIGHT CONNECTED AHEAD OF LIGHTING CONTROLS.
<u>Q</u>	WALL MOUNTED LIGHTING FIXTURE.
•	WALL MOUNTED LIGHTING FIXTURE ON EMERGENCY CIRCUIT. SUBSCRIPT "NL" WHERE USED, INDICATES NIGHT LIGHT CONNECTED AHEAD OF LIGHTING CONTROLS.
$\nabla$ $\nabla$ $\nabla$	TRACK LIGHTING FIXTURE. INDICATES AN INDIVIDUAL FIXTURE ON THE TRACK.
<b>←</b> □	AREA SITE LIGHTING FIXTURE.
Υ	EMERGENCY LIGHTING REMOTE UNIT.
	EMERGENCY BATTERY LIGHTING UNIT, CONNECT AHEAD OF
**	EXIT LIGHTING FIXTURE WITH DIRECTIONAL ARROWS AS INDICATED ON DRAWINGS. CONNECT TO DEDICATED
	EMERGENCY BRANCH CIRCUIT. SHADED AREA DENOTES LIGHTED FACE.  SINGLE POLE SWITCH, 20A, 120/277V, 44"AFF UON. SUBSCRIPT "a"
Sa	INDICATES ASSOCIATED FIXTURES TO BE CONTROLLED.
	SINGLE POLE SWITCH WITH PILOT LIGHT, 20A, 120/277V, 44" AFF
S <sub>Pa</sub>	UON. SUBSCRIPT "a" INDICATES ASSOCIATED FIXTURES TO BE CONTROLLED.
S <sub>3a</sub>	THREE-WAY SWITCH, 20A, 120/277V, 44"AFF UON. SUBSCRIPT "a" INDICATES ASSOCIATED FIXTURES TO BE CONTROLLED.
S <sub>Da</sub>	DIMMER SWITCH, 44" AFF UON. SUBSCRIPT "a", WHERE USED, INDICATES ASSOCIATED FIXTURES TO BE CONTROLLED.
S <sub>OC</sub>	WALL SWITCH OCCUPANCY SENSOR, 44" AFF UON.
S <sub>VS</sub>	WALL SWITCH VACANCY SENSOR, 44" AFF UON.
S <sub>LV1a</sub>	LOW VOLTAGE SWITCH, 44" AFF UON. SUBSCRIPT "1" INDICATES LOW VOLTAGE SWITCH DESIGNATION. SUBSCRIPT "a" INDICATES LOW VOLTAGE BUTTON DESIGNATION.
[O#]	OCCUPANCY SENSOR. "#" DENOTES OCCUPANCY SENSOR TYPE. SUBSCRIPT "a", WHERE USED, INDICATES ASSOCIATED FIXTURES TO BE CONTROLLED.
[V#]	VACANCY SENSOR. "#" DENOTES VACANCY SENSOR TYPE. SUBSCRIPT "a", WHERE USED, INDICATES ASSOCIATED FIXTURES TO BE CONTROLLED.
LC	BUILDING SYSTEM LIGHTING CONTACTOR.
TC	ELECTRONIC TIME CLOCK FOR LIGHTING CONTROL. PROVIDE INTERMATIC ET70000C SERIES OR APPROVED EQUAL.
(PC)	PHOTOCELL FOR EXTERIOR LIGHTING CONTROL. MOUNT ON
PP	nLIGHT POWER PACK MODEL nPP16.
DP	nLIGHT DIMMING POWER PACK MODEL nPP16D.
EP EP	nLIGHT EMERGENCY DIMMING POWER PACK MODEL nPP16D-ER.
BR	nLIGHT NETWORK BRIDGE MODEL nBRG8.
G	nLIGHT NETWORK GATEWAY MODEL nGWY2.
	nLIGHT NETWORK GATEWAY MODEL NGWY2-GFX FOR MASTER
G <sub>M</sub>	CONTROL.
(DS)	DAYLIGHT SENSOR.
	LIGHTING FIXTURE KEY
	1. LETTER "A" DENOTES FIXTURE TYPE. REFER TO LIGHTING FIXTURE SCHEDULE.
AO LP-B-3a	2. SUBSCRIPT "LP-B" INDICATES NAME OF PANELBOARD FROM WHICH FIXTURE IS FED. ASSOCIATED NUMBER "3" INDICATES CIRCUIT NUMBER IN PANELBOARD FROM WHICH FIXTURE IS FED. ASSOCIATED LETTER "a", WHERE USED, INDICATES LIGHTING
	FIXTURE CONTROL DEVICE DESIGNATION.  LINEWEIGHTS
	NEW
	EXISTING
	REMOVE EXISTING
	COMMUNICATIONS
	TA BOX, 4"X4"X2 1/4"D BOX WITH SINGLE GANG PLASTER
	AFF, UON, WITH 3/4"C WITH PULL STRING STUBBED ACCESSIBLE CEILING AND TERMINATED WITH PLASTIC

#### **GENERAL ELECTRICAL NOTES:**

GENERAL: UNLESS SPECIFICALLY INDICATED OTHERWISE, ALL WORK SHOWN ON THE ELECTRICAL DRAWINGS IS NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.

**DEMOLITION:** SEE "ELECTRICAL GENERAL DEMOLITION NOTES FOR ADDITIONAL DEMOLITION REQUIREMENTS.

COORDINATION: COORDINATE AND COOPERATE WITH ALL TRADES ON THE PROJECT.

RECORD DRAWINGS: SECURE AN EXTRA SET OF ELECTRICAL DRAWINGS TO BE KEPT ON SITE AND MARK DAILY, THE DRAWINGS IN RED AS THE PROJECT PROGRESSES IN ORDER TO KEEP AN ACCURATE RECORD OF ALL DEVIATIONS BETWEEN THE WORK SHOWN ON THE DRAWINGS AND THE WORK WHICH IS ACTUALLY INSTALLED. THESE MARKED DRAWINGS SHALL REFLECT ANY AND ALL CHANGES AND REVISIONS TO THE ORIGINAL DESIGN WHICH EXISTS IN THE COMPLETED WORK. DELIVER THE MARKED DRAWINGS TO THE ARCHITECT OR ENGINEER AT PROJECT CLOSE-OUT.

TESTS: TEST ALL WIRING FOR CONTINUITY AND GROUNDS BEFORE CONNECTING ANY FIXTURES OR DEVICES. PERFORM INSULATION RESISTANCE TESTS ON ALL WIRING #8 OR LARGER TO ENSURE THAT ALL PORTIONS ARE FREE FROM SHORT-CIRCUITS AND GROUNDS.

INSPECTIONS: ARRANGE ALL NECESSARY INSPECTIONS. DELIVER ALL REQUIRED INSPECTION CERTIFICATES TO THE OWNER.

**GROUNDING:** PROVIDE GROUNDING IN ACCORDANCE WITH THE NEC FOR THE ELECTRICAL SYSTEM, INCLUDING EQUIPMENT FRAMES CONDUITS, SWITCHES, CONTROLLERS, WIRE-WAYS, NEUTRAL CONDUCTORS AND OTHER EQUIPMENT. PROVIDE A GROUNDING CONDUCTOR IN ALL CIRCUITS.

LABELS: PROVIDE LABELS FOR ALL PANELBOARDS, CABINETS, SAFETY SWITCHES, MOTOR-DISCONNECT SWITCHES, AND MOTOR CONTROLLERS. LABELS SHALL BE MACHINE ENGRAVED, LAMINATED PLASTIC.

J-BOX LABELING: LABEL ALL JUNCTION BOXES WITH PERMANENT MARKER IDENTIFYING CIRCUIT NUMBER AND PANELBOARD OF CIRCUITS WITHIN.

PANEL DIRECTORY: PROVIDE TYPEWRITTEN PANELBOARD DIRECTORY CARD IN EACH PANELBOARD, INCLUDING EXISTING PANELBOARDS MODIFIED FOR THIS PROJECT, WITH CIRCUIT LOAD INFORMATION AND ROOM NUMBER CLEARLY IDENTIFIED. USE ACTUAL ROOM NUMBERS IN THE BUILDING, NOT THE ROOM NUMBERS SHOWN ON THE CONTRACT DRAWINGS, AS THEY ARE OFTEN DIFFERENT.

MOTOR COORDINATION: MOTORS, MOTOR STARTERS, CONTROLLERS, INTEGRAL DISCONNECT SWITCHES, AND CONTACTORS SHALL BE PROVIDED WITH THEIR RESPECTIVE PIECES OF EQUIPMENT BY THE EQUIPMENT SUPPLIER. COMMUNICATE WITH THE TRADES PROVIDING THE EQUIPMENT, VERIFYING ALL REQUIREMENTS. PROVIDE ALL ELECTRICAL CONNECTIONS REQUIRED THEREIN AND INSTALL MOTOR STARTERS.

MOTOR DISCONNECTS: ALL MOTORS SHALL HAVE DISCONNECTING MEANS.

MOTOR FUSE PROTECTION: WHERE FUSE PROTECTION IS SPECIFICALLY REQUIRED BY THE EQUIPMENT MANUFACTURER, PROVIDE FUSIBLE SWITCHES IN LIEU OF NON-FUSIBLE SWITCHES OR FUSIBLE ENCLOSED CIRCUIT BREAKERS OR OTHER DEVICES INDICATED.

CONNECTION DETAILS: SECURE APPROVED SHOP DRAWINGS SHOWING WIRING DIAGRAMS, ROUGH-IN AND HOOK UP DETAILS FOR EQUIPMENT WHICH MUST BE CONNECTED ELECTRICALLY.

EQUIPMENT DETAILS: MECHANICAL EQUIPMENT WILL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. THE LOCATIONS SHOWN ON THE ELECTRICAL DRAWINGS ARE APPROXIMATE. COORDINATE WITH THE MECHANICAL CONTRACTOR TO DETERMINE THE EXACT LOCATION OF EACH PIECE OF EQUIPMENT AND DETERMINE THE EXACT ROUGH-IN AND CONNECTION REQUIREMENTS.

STARTER MOUNTING: WHERE AN INDIVIDUALLY MOUNTED SAFETY SWITCH, STARTER OR CIRCUIT BREAKER IS SHOWN ADJACENT TO ITS RESPECTIVE LOAD AND NOT MOUNTED ON A WALL, PROVIDE ALL SUPPORTS, BRACKETS, ANCHORING, ETC. NECESSARY TO PROPERLY SUPPORT THE DEVICE.

LIGHTING ARRANGEMENT: ARRANGE LIGHTING FIXTURES IN ACCORDANCE WITH THE ARCHITECTURAL REFLECTED CEILING PLANS.

LIGHTING COORDINATION: COORDINATE LIGHTING FIXTURES WITH GRILLES, DIFFUSERS, SPRINKLER HEADS, ACCESS PANELS, ETC.

MATERIAL COORDINATION: VERIFY CEILING AND WALL CONSTRUCTION AND MATERIAL PRIOR TO ORDERING LIGHT FIXTURES OR OTHER DEVICES TO ENSURE PROPER FIXTURES OR DEVICES ARE FURNISHED TO MATCH CONSTRUCTION.

MOUNTING HEIGHTS: MOUNTING HEIGHTS INDICATED ARE FROM THE FINISHED FLOOR TO THE CENTERLINE OF THE WIRING DEVICE UNLESS OTHERWISE NOTED. MOUNTING HEIGHTS OF LIGHTING FIXTURES AND FIRE

ALARM DEVICES ARE TO THE BOTTOM OF THE FIXTURE OR DEVICE UNLESS OTHERWISE NOTED. <u>DEVICE LOCATIONS:</u> COORDINATE LOCATIONS OF SWITCHES, RECEPTACLES, AND TELE/DATA OUTLETS WITH OTHER WALL MOUNTED DEVICES SUCH AS THERMOSTATS AND CONTROL STATIONS. DO NOT MOUNT

EWC RECEPTACLES: RECEPTACLES FOR ELECTRIC WATER COOLERS (EWC) SHALL BE INSTALLED OUT OF VIEW AND BEHIND THE EWC ENCLOSURE. VERIFY THE MOUNTING HEIGHT WITH THE EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.

WIRING DEVICES BACK TO BACK.

OUTLET BOXES.

<u>DEVICE COORDINATION:</u> THOROUGHLY REVIEW AND COORDINATE ALL CASEWORK, DOOR SWINGS, AND CABINET DRAWINGS AND ARCHITECTURAL ELEVATIONS WITH DEVICE LOCATIONS PRIOR TO ROUGH-IN OF

BARRIERS: WHERE A MULTIPLE GANG BOX HAS CIRCUITS OF DIFFERENT VOLTAGES OR SYSTEMS WHICH ARE REQUIRED TO BE SEPARATED, PROVIDE THE CODE-REQUIRED SEPARATION, USING A FULL HEIGHT AND

DEPTH BARRIER PLATE. FIRE PROOFING: FOR ANY WALL OR FLOOR PENETRATIONS THROUGH FIRE RATED STRUCTURES, PROVIDE

FIRE-PROOFING TO SEAL ALL THE PENETRATIONS AFTER THE CONDUIT HAS BEEN INSTALLED. FIRE PROOFING FOR PENETRATIONS SHALL BE UL APPROVED PER THE THE PENETRATION MADE IN ORDER TO MAINTAIN FIRE RATED INTEGRITY OF THE STRUCTURE.

CLEAN UP: ON PROJECT CLOSE-OUT, CLEAN ALL ELECTRICAL DEVICES, LIGHTING FIXTURES, LAMPS AND LENSES, AND REMOVE ALL PAINT SPATTERS FROM DEVICES, FIXTURES, AND PLATES. REPLACE ALL INOPERATIVE LAMPS.

OWNER FURNISHED EQUIPMENT: CONTRACTOR SHALL OBTAIN CUT SHEETS, INSTALLATION DATA, AND

ROUGH-IN REQUIREMENTS FOR OWNER FURNISHED, CONTRACTOR INSTALLED EQUIPMENT AND COORDINATE ROUGH-IN AND POWER REQUIREMENTS WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY ASSOCIATED WORK.

CONDUIT ROUTING: ALL CONDUIT RUN OVERHEAD SHALL BE RUN AT THE BOTTOM OF THE FLOOR, ROOF STRUCTURE, OR LOWEST CHORD OF JOIST SPACE (AS APPLICABLE) ABOVE IN ORDER TO AVOID CONFLICTS WITH OTHER TRADES.

WIRING DEVICES: ALL RECEPTACLES AND SWITCHES SHALL BE LABELED WITH CLEAR PLASTIC LAMINATED LABEL WITH BLACK TEXT, NOTING PANELBOARD DESIGNATION AND CIRCUIT NUMBER FROM WHICH IT IS FED.

**EQUIPMENT DEMONSTRATION:** PROVIDE A DEMONSTRATION OF THE OPERATION OF ALL ELECTRICAL COMPONENTS.

CEILING AND MECHANICAL ROOM PLENUM: ALL WIRING THAT WILL NOT BE RUN IN METAL CONDUIT SHALL BE

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**Electrical Data Sheet** 

2313-01 E001

TELE/DATA BOX, 4"X4"X2 1/4"D BOX WITH SINGLE GANG PLASTER RING 40"AFF OR 4" ABOVE COUNTER TOP OR BACKSPLASH (WHICHEVER IS HIGHER) OR IN CASEWORK AS APPLICABLE, UON, WITH 3/4"C WITH PULL STRING STUBBED ABOVE ACCESSIBLE CEILING AND TERMINATED WITH PLASTIC BUSHING. PROVIDE A 4"X4"X2 1/4"D JUNCTION BOX MOUNTED SECURELY WAP TO BUILDING STRUCTURE FOR WIRELESS ACCESS POINT. PROVIDE A 1" CONDUIT CONCEALED ABOVE CEILING FROM JUNCTION BOX TO ELECTRICAL ROOM AND TERMINATED WITH PLASTIC BUSHING. VERIFY LOCATION WITH TENANT PRIOR TO

PROVIDE A 4"X4"X2 1/4"D JUNCTION BOX MOUNTED SECURELY TO BUILDING STRUCTURE FOR SECURITY CAMERA. PROVIDE A 1' CONDUIT CONCEALED ABOVE CEILING FROM JUNCTION BOX TO ELECTRICAL ROOM AND TERMINATED WITH PLASTIC BUSHING. VERIFY LOCATION WITH TENANT PRIOR TO ROUGH-IN

TELEPHONE PLYWOOD BACKBOARD 3/4"x8'x4'. FIRE RETARDANT.

BOTTOM AT 0'-4" AFF.

XFMR TRANSFORMER

SHEET NUMBER

PROJECT NUMBER

#### **LIGHTING GENERAL NOTES:**

- 2. PROVIDE EXPANSION FITTINGS AS REQUIRED AT ALL EXPANSION JOINTS. COORDINATE WITH ARCHITECTURAL DRAWINGS.
- 3. WHERE EXPOSED, BRANCH CIRCUITS SHALL BE RUN IN EMT CONDUIT ROUTED PARALLEL AND PERPENDICULAR TO BUILDING STRUCTURE. WHERE CONCEALED WITHIN WALLS OR ABOVE CEILING. EXPOSED CONDUIT SHALL BE PAINTED
- 4. REFER TO ARCHITECTURAL DRAWINGS FOR
- 5. EXIT SIGNS AND BATTERY PACKS SHALL BE CIRCUITED TO AN UNSWITCHED HOT LEG OF THE CIRCUIT SERVING THE SPACE AHEAD OF LOCAL CONTROLS.
- BE VERIFIED BY THE MANUFACTURER FOR PRODUCTS SUBMITTED AS EQUALS.
- SHOWN ON THESE DRAWINGS. PROVIDE INTENT SHOWN ON DRAWINGS.

#### LIGHTING KEY NOTES: (#)

- 1. PROVIDE A 12 CIRCUIT LIGHTING RELAY CONTROL PANEL 'LCPC' WITH DIGITAL TIMECLOCK. NLIGHT MANUFACTURER. CAT. #ARP INTENC16 NLT 4FCR MVOLT 2VB SC SM DTC. PROVIDE 120 VOLT POWER
- 2. PROVIDE LED WET LISTED TAPE LIGHTING CONCEALED IN STRUCTURAL STEEL CHANNEL SYSTEM. TAP STRUCTURAL CHANNEL SYSTEM FOR SCREWS TO SECURE LIGHTING FIXTURE ALUMINUM CHANNEL TO STRUCTURAL STEEL CHANNEL. PROVIDE 1" SCHEDULE 80 PVC RACEWAY IN GABION WALL SYSTEM FOR ROUTING OF LOW VOLTAGE WIRING. COORDINATE LOCATION AND MOUNTING WITH ARCHITECT/STRUCTURAL ENGINEER PRIOR TO ROUGH-IN.

- 1. FIRE STOP ALL FIRE RATED FLOORS, CEILINGS, AND WALLS AS REQUIRED BY CODE. PENETRATIONS INTO OR THROUGH FIRE RESISTANCE RATED WALLS SHALL COMPLY WITH IBC CHAPTER 7.
- PER THE ARCHITECTURAL DRAWINGS.
- CEILING TYPES AND EXACT LIGHTING FIXTURE LOCATIONS AND DIMENSIONAL INFORMATION.
- 6. OCCUPANCY / VACANCY SENSORS HAVE BEEN LOCATED PER THE RECOMMENDED SPACING OF THE BASIS OF DESIGN PRODUCTS. THE EXACT LOCATIONS AND QUANTITY OF SENSORS SHALL
- 7. CONTROL ZONE RELAY POWER PACKS ARE NOT COMPATIBLE POWER PACKS TO MEET DESIGN

- FOR THE PANEL.

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Concessions Level 1 Lighting

2313-01 PROJECT NUMBER

E201 SHEET NUMBER

#### **LIGHTING GENERAL NOTES:**

- 1. FIRE STOP ALL FIRE RATED FLOORS, CEILINGS, AND WALLS AS REQUIRED BY CODE. PENETRATIONS INTO OR THROUGH FIRE RESISTANCE RATED WALLS SHALL COMPLY WITH IBC CHAPTER 7.
- 2. PROVIDE EXPANSION FITTINGS AS REQUIRED AT ALL EXPANSION JOINTS. COORDINATE WITH ARCHITECTURAL DRAWINGS.
- . WHERE EXPOSED, BRANCH CIRCUITS SHALL BE RUN IN EMT CONDUIT ROUTED PARALLEL AND PERPENDICULAR TO BUILDING STRUCTURE. WHERE CONCEALED WITHIN WALLS OR ABOVE CEILING. EXPOSED CONDUIT SHALL BE PAINTED PER THE ARCHITECTURAL DRAWINGS.
- 4. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES AND EXACT LIGHTING FIXTURE LOCATIONS AND DIMENSIONAL INFORMATION.
- 5. EXIT SIGNS AND BATTERY PACKS SHALL BE CIRCUITED TO AN UNSWITCHED HOT LEG OF THE CIRCUIT SERVING THE SPACE AHEAD OF LOCAL CONTROLS.
- 6. OCCUPANCY / VACANCY SENSORS HAVE BEEN LOCATED PER THE RECOMMENDED SPACING OF THE BASIS OF DESIGN PRODUCTS. THE EXACT LOCATIONS AND QUANTITY OF SENSORS SHALL BE VERIFIED BY THE MANUFACTURER FOR PRODUCTS SUBMITTED AS EQUALS.

#### LIGHTING KEY NOTES: (#)

1. PROVIDE A 12 CIRCUIT LIGHTING RELAY CONTROL PANEL 'LCPM' WITH DIGITAL
TIMECLOCK. NLIGHT MANUFACTURER. CAT. #ARP INTENC16 NLT 4FCR MVOLT 2VB SC SM DTC. PROVIDE 120 VOLT POWER FOR THE PANEL. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL PROGRAMMING PER TENANT'S REQUIREMENTS.

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Maintenance Level 1 Lighting

2313-01

E202

E202 1/4" = 1'-0"

#### **POWER GENERAL NOTES:**

- FIRE STOP ALL FIRE RATED FLOORS, CEILINGS, AND WALLS AS REQUIRED BY CODE. PENETRATIONS INTO OR THROUGH FIRE RESISTANCE RATED WALLS SHALL COMPLY WITH IBC CHAPTER 7.
- PROVIDE EXPANSION FITTINGS AS REQUIRED AT ALL EXPANSION JOINTS. COORDINATE WITH ARCHITECTURAL DRAWINGS.
- 3. WHERE EXPOSED, BRANCH CIRCUITS SHALL BE RUN IN EMT CONDUIT ROUTED PARALLEL AND PERPENDICULAR TO BUILDING STRUCTURE. WHERE CONCEALED WITHIN WALLS OR ABOVE CEILING. EXPOSED CONDUIT SHALL BE PAINTED PER THE ARCHITECTURAL DRAWINGS.
- 4. COORDINATE EXACT LOCATIONS OF MECHANICAL EQUIPMENT WITH DIVISION 23. UNLESS NOTED OTHERWISE, MECHANICAL EQUIPMENT DISCONNECTS AND VARIABLE FREQUENCY DRIVES SHALL BE FURNISHED BY DIVISION 23, INSTALLED AND WIRED BY EC. THESE DISCONNECTS HAVE NOT BEEN SHOWN ON THIS PLAN.
- 5. COORDINATE EXACT LOCATIONS OF PLUMBING EQUIPMENT WITH DIVISION 22. UNLESS NOTED OTHERWISE, PLUMBING EQUIPMENT DISCONNECTS SHALL BE FURNISHED, INSTALLED, AND WIRED BY EC.
- 6. EC SHALL NOT HAVE MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A CONDUIT WITHOUT DERATING AMPACITIES PER THE NEC.
- 7. WHERE DEVICES ARE INCLUDED AND DIMENSIONED ON THE ARCHITECTURAL DRAWINGS, THOSE LOCATIONS SHALL GOVERN. WHERE DEVICES ARE OMITTED FROM THE ARCHITECTURAL DRAWINGS, INSTALL IN ACCORDANCE WITH THIS PLAN AND THE DEFAULT LOCATIONS IN THE ELECTRICAL SPECIFICATIONS. ALL DEVICES SHALL BE INSTALLED PER ADA. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO VERIFY EXACT DEVICE LOCATIONS. WHERE DEVICES ARE INSTALLED IN THE FIELD AND DIFFER FROM DESIGN DOCUMENT DIMENSIONS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT DEVICE LOCATIONS TO MATCH CONSTRUCTION DOCUMENTS, AT NO COST TO THE OWNER.

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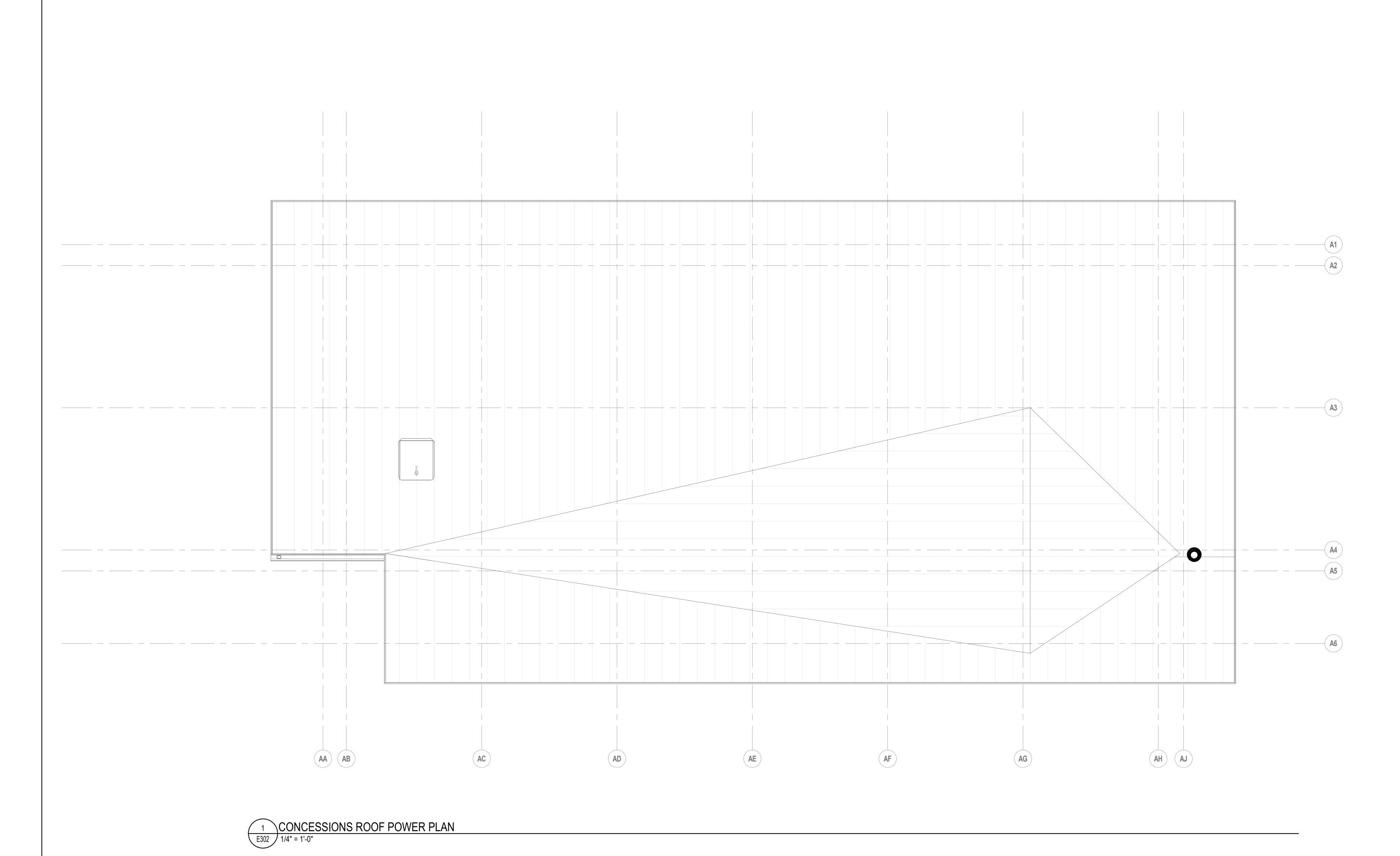
Concessions Level 1 Power

2313-01

E301

PROJECT NUMBER

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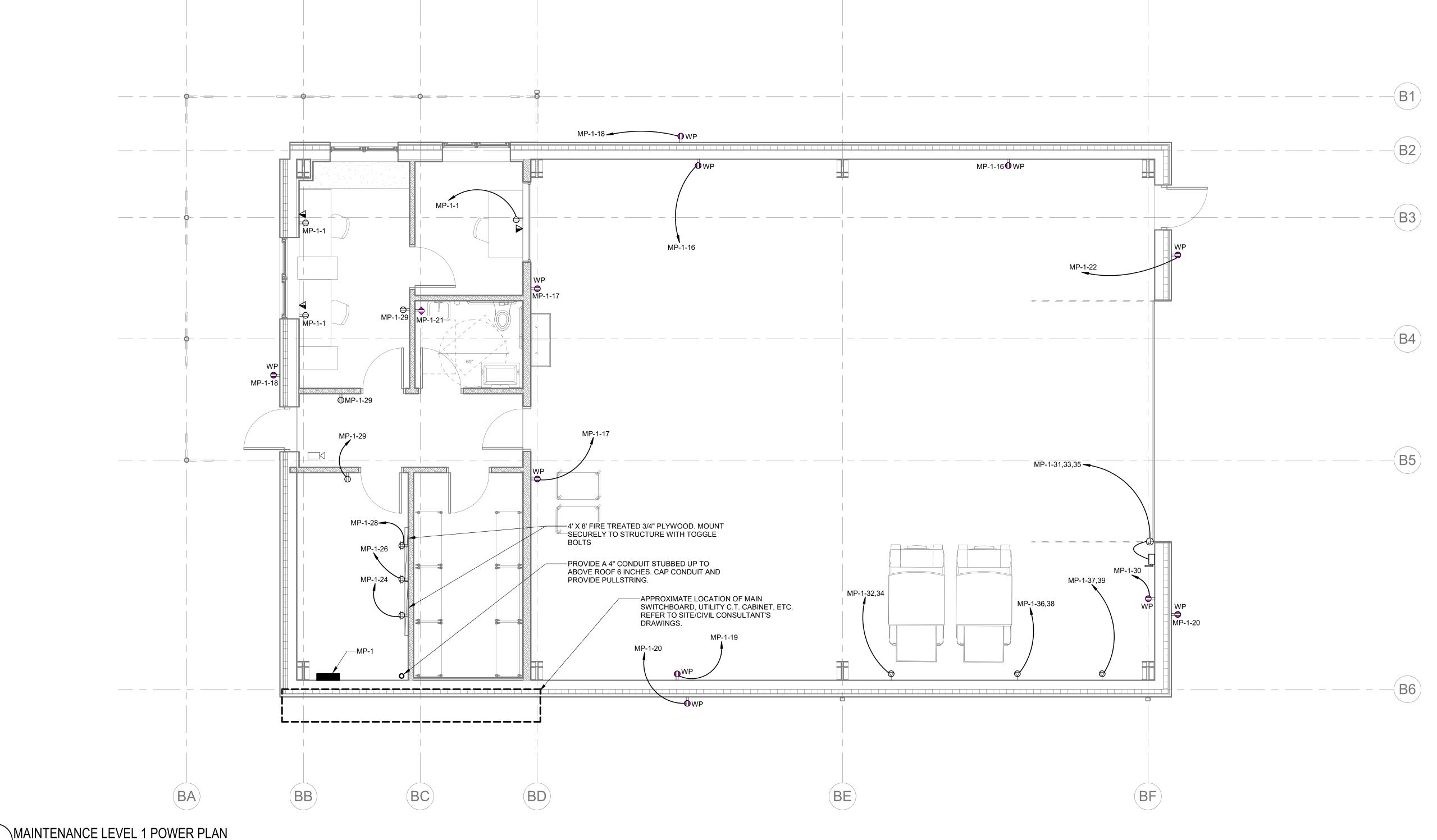
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E302 SHEET NUMBER

PROJECT NUMBER

E303 1/4" = 1'-0"





#### **POWER GENERAL NOTES:**

- FIRE STOP ALL FIRE RATED FLOORS, CEILINGS, AND WALLS AS REQUIRED BY CODE. PENETRATIONS INTO OR THROUGH FIRE RESISTANCE RATED WALLS SHALL COMPLY WITH IBC CHAPTER 7.
- PROVIDE EXPANSION FITTINGS AS REQUIRED AT ALL EXPANSION JOINTS. COORDINATE WITH ARCHITECTURAL DRAWINGS.
- 3. WHERE EXPOSED, BRANCH CIRCUITS SHALL BE RUN IN EMT CONDUIT ROUTED PARALLEL AND PERPENDICULAR TO BUILDING STRUCTURE. WHERE CONCEALED WITHIN WALLS OR ABOVE CEILING. EXPOSED CONDUIT SHALL BE PAINTED PER THE ARCHITECTURAL DRAWINGS.
- 4. COORDINATE EXACT LOCATIONS OF MECHANICAL EQUIPMENT WITH DIVISION 23. UNLESS NOTED OTHERWISE, MECHANICAL EQUIPMENT DISCONNECTS AND VARIABLE FREQUENCY DRIVES SHALL BE FURNISHED BY DIVISION 23, INSTALLED AND WIRED BY EC. THESE DISCONNECTS HAVE NOT BEEN SHOWN ON THIS PLAN.
- 5. COORDINATE EXACT LOCATIONS OF PLUMBING EQUIPMENT WITH DIVISION 22. UNLESS NOTED OTHERWISE, PLUMBING EQUIPMENT DISCONNECTS SHALL BE FURNISHED, INSTALLED, AND WIRED BY EC.
- 6. EC SHALL NOT HAVE MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A CONDUIT WITHOUT DERATING AMPACITIES PER THE NEC.
- 7. WHERE DEVICES ARE INCLUDED AND DIMENSIONED ON THE ARCHITECTURAL DRAWINGS, THOSE LOCATIONS SHALL GOVERN. WHERE DEVICES ARE OMITTED FROM THE ARCHITECTURAL DRAWINGS, INSTALL IN ACCORDANCE WITH THIS PLAN AND THE DEFAULT LOCATIONS IN THE ELECTRICAL SPECIFICATIONS. ALL DEVICES SHALL BE INSTALLED PER ADA. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO VERIFY EXACT DEVICE LOCATIONS. WHERE DEVICES ARE INSTALLED IN THE FIELD AND DIFFER FROM DESIGN DOCUMENT DIMENSIONS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT DEVICE LOCATIONS TO MATCH CONSTRUCTION DOCUMENTS, AT NO COST TO THE OWNER.

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Maintenance Level 1 Power

2313-01
PROJECT NUMBER **E303** 

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### **GENERAL NOTES**

- 1. THE RISER DIAGRAM IS DIAGRAMMATIC IN NATURE AND IS INTENDED TO SHOW SYSTEM CONNECTIVITY AND FEEDER SIZES. REFER TO POWER PLANS FOR EQUIPMENT LAYOUTS AND LOCATIONS. ELECTRICAL CONTRACTOR SHALL VERIFY THAT THE SUBMITTED EQUIPMENT DIMENSIONS FIT WITHIN THE CORRESPONDING ELECTRICAL SPACE(S). ALL EQUIPMENT CLEARANCES AND MOUNTING HEIGHTS REQUIRED BY THE NEC SHALL BE MAINTAINED.
- 2. ELECTRICAL CONTRACTOR SHALL COORDINATE SITE WORK WITH CIVIL SITE PLANS, WHERE APPLICABLE, AND EXISTING SITE CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK.
- 3. UNDERGROUND CONDUIT SHALL BE RMC WITH RMC ELBOWS. WHERE APPROVED BY **[THE OWNER]**, SCHEDULE 80 PVC WITH RMC OR FIBERGLASS ELBOWS MAY BE SUBMITTED AS A VALUE ENGINEERING OPTION. UNDERGROUND FEEDER(S) SHALL BE CONCRETE ENCASED WHERE ROUTED UNDER PARKING LOTS OR DRIVE LANES. ELECTRICAL CONTRACTOR SHALL TRENCH AND BACKFILL FOR ALL UNDERGROUND PATHWAYS. UNDERGROUND CONDUIT SHALL BE A MINIMUM OF 36" BFG.
- 4. EXPOSED EXTERIOR CONDUIT SHALL BE RMC. WHERE APPROVED BY [THE OWNER], SCHEDULE 80 PVC MAY BE SUBMITTED AS A VALUE ENGINEERING OPTION. ALL EXTERIOR BUILDING MOUNTED CONDUIT SHALL BE PAINTED PER THE ARCHITECT'S SPECIFICATIONS.
- 5. ELECTRICAL CONTRACTOR SHALL PROVIDE CONCRETE PADS FOR ALL ELECTRICAL EQUIPMENT REQUIRING A HOUSEKEEPING PAD. THIS INCLUDES GENERATORS, TRANSFORMERS, SWITCHBOARDS, LARGE DISTRIBUTION PANELS, ETC. ALL PADS SHALL BE PROVIDED PER THE EQUIPMENT SPECIFICATIONS.
- 6. PROVIDE PULL BOXES WHERE REQUIRED PER NEC FOR CONDUIT BENDS.
- 7. THE BASIS OF DESIGN MATERIAL FOR ALL EQUIPMENT BUSES IS COPPER.
- 8. IF POWER IS TO BE PROVIDED BY EITHER BUILDING TO SOCCER FIELD SCOREBOARDS (QTY:1 NEW AND 2 FUTURE PROVISIONS) IN LIEU OF BEING POWERED BY SITE POWER, AN E-MON D-MON CLASS 2000 SINGLE PHASE 120/240V 200A DEMAND SUBMETER SHALL BE PROVIDED FOR MONITORING OF SCOREBOARD ENERGY USAGE. PROVIDE NEMA 4X POLYCARBONATE ENCLOSURE AND MOUNTING FLANGES.

#### MATERIAL NOTES:

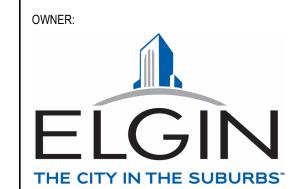
THE BASIS OF DESIGN BUSSING MATERIAL FOR ALL DISTRIBUTION PANELS, PANELBOARDS, LOAD CENTERS, AND ELECTRICAL EQUIPMENT SHALL BE **COPPER**.

THE BASIS OF DESIGN MATERIAL FOR ALL FEEDERS SHALL BE COPPER. ALUMINUM MAY BE PROPOSED AS A VALUE ENGINEERING ITEM FOR APPROVAL BY THE ENGINEER AND OWNER. PLEASE NOTE THAT IF PURSUED, THIS V.E. MAY <u>NOT</u> BE APPLIED TO THE FOLLOWING FEEDERS: 1. AMPACITY OF LESS THAN 100-AMPS



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Electrical Riser Diagrams

2313-01 PROJECT NUMBER E601

			LIGHT FIXTURE	SCHEDULE		LIGHT FIXTURE SCHEDULE						
TYPE	TYPE FIXTURE DESCRIPTION		MODEL	LAMP	` '	DRIVER/ BALLAST	INPUT WATTS	VOLTAGE	MOUNTING	NOTES		
1176	FIXTURE DESCRIPTION	MANUFACTURER	MODEL	LAMP#	LAMP TYPE	DRIVER/ BALLASI	INPUT WATTS	VOLTAGE	MOONTING	NOTES		
EMB1	THERMOPLASTIC EMERGENCY BATTERY LIGHTING UNIT WITH (2) LED LIGHTING HEADS.	LITHONIA	ELM6L UVOLT LTP SDRT	Lamp			0 W	120 V	SURFACE			
EX1	UNIVERSAL MOUNTED WHITE THERMOPLASTICE LED EXIT SIGN WITH NICKEL CADMIUM BATTERY	LITHONIA	LQM S W 3 X MVOLT EL N SD	LED		NA	4 W	120 V		REFER TO PLANS FOR SINGLE OR DOUBLE FACE AND CHEVRON REQUIREMENTS.		
LP1	4'-0" SURFACE LED FIXTURE	STARTEK	HYDROD 4 1000 SD 35K 80 PXX SM(E) U 1C	LED			36 W	120 V	SURFACE			
SM1	SURFACE MOUNTED LED FLAT PANEL	ILP INC	VPAN24 44L SM	LED			39 W	120 V	SURFACE	PROVIDE 0-10VOLT LUMINARY CABLING TO CONTROL AND DIM LIGHTING FIXTURE.		
SM2	4'-0" SURFACE LED FIXTURE	STARTEK	HYDROD 4 750 SD 35K 80 PXX SM(E) U 1C	LED			36 W	120 V	SURFACE	PROVIDE 0-10VOLT LUMINARY CABLING TO CONTROL AND DIM LIGHTING FIXTURE.		
SM3	8'-0" SURFACE LED FIXTURE	STARTEK	HYDROD 8 1000 SD 35K 80 PXX SM(E) U 1C	LED			67 W	120 V	SURFACE			
SM4	8'-0" SURFACE LED FIXTURE	NULITE	INT 8 CFR 100 L35 U SSL HE	LED			80 W	120 V	SURFACE			
SM12	12'-0" SURFACE LED FIXTURE	STARTEK	HYDROD 12 1000 SD 35K 80 PXX SM(E) U 1C	LED			100 W	120 V	SURFACE			
SP1	4' LED STRIP FIXTURE	LITHONIA	ZL1D L48 5000LM FST MVOLT 35K 80CRI ZACV M100	LED			41 W	120 V				
WM1	4'-0" WALL MOUNTED LED FIXTURE	STARTEK	HYDROD 4 750 SD 35K 80 PXX WM U 1C	LED			36 W	120 V	SURFACE	PROVIDE 0-10VOLT LUMINARY CABLING TO CONTROL AND DIM LIGHTING FIXTURE.		
WM2	8'-0" WALL MOUNTED LED FIXTURE	STARTEK	HYDROD 8 750 SD 35K 80 PXX WM U 1C	LED			67 W	120 V	SURFACE	PROVIDE 0-10VOLT LUMINARY CABLING TO CONTROL AND DIM LIGHTING FIXTURE.		
YD1	6" RECEESSED WET LISTED LED LIGHTING FIXTURE WITH 3000 LUMEN OUTPUT	GOTHAM	EVO6 30/30 AR LD MD MVOLT GZ10	LED	0		22 W	120 V	RECESSED	PROVIDE 0-10VOLT LUMINARY CABLING TO CONTROL AND DIM LIGHTING FIXTURE.		
YP1	SURFACE MOUNTED CYLINDER WITH UP FLOODLIGHT OPTICS AND SPIKE DOWNLIGHT OPTICS	LUMINIS	SY602 SERIES	LED			50 W	120 V	SURFACE	PROVIDE 0-10VOLT LUMINARY CABLING TO CONTROL AND DIM LIGHTING FIXTURE.		
YR1	24'-0" LENGHT OF WET LISTED LED TAPE LIGHT WITH EXTRUDED ALUMINUM CHANNEL AND LENS.PROVIDE REMOTE MOUNTED TRANSFORMER INSIDE OF BUILDING WITH FULL ACCESS TO DRIVER. RUN #10AWG LOW VOLTAGE WIRING FROM DRIVER TO FIXTURE.	ECOSENSE	L09 E 120 09 30 90 CV24 ASYM	LED			53 W	120 V	IN CHANNEL	PROVIDE 0-10VOLT LUMINARY CABLING TO CONTROL AND DIM LIGHTING FIXTURE.		
YW1	SURFACE MOUNTED LED WALL PAK LIGHTING FIXTURE.	LITHONIA	WDGE2 LED P4 30K 80CRI VW SRM	LED			35 W	120 V	SURFACE			

	LIGHTING CONTROL PANEL "LCPC" SCHEDULE							
RELAY	RELAY DESCRIPTION	RELAY TYPE	VOLTAGE	CIRCUIT	CONTROL NOTES			
LCPC-1	BATHROOM LIGHTING	ON/OFF	120 V	CP-1-47	TIMECLOCK WITH MANUAL OVERRIDE			
LCPC-2	EXTERIOR LIGHTING	ON/OFF	120 V	CP-1-49	TIMECLOCK WITH MANUAL OVERRIDE			
LCPC-3	EXTERIOR GABION WALL SYSTEM	ON/OFF	120 V	CP-1-50	TIMECLOCK WITH MANUAL OVERRIDE			

	LIGHTING CONTROL PANEL "LCPM" SCHEDULE						
RELAY	RELAY DESCRIPTION	RELAY TYPE	VOLTAGE	CIRCUIT	CONTROL NOTES		
LCPM-1	INTERIOR LIGHTING	ON/OFF	120 V	MP-1-23	TIMECLOCK WITH MANUAL OVERRIDE		
LCPM-2	EXTERIOR LIGHTING	ON/OFF	120 V	MP-1-27	TIMECLOCK WITH MANUAL OVERRIDE		
LCPM-3	CORRIDOR LIGHTING	ON/OFF	120 V	MP-1-25	TIMECLOCK WITH MANUAL OVERRIDE		

Location: MECH/ELEC 102 Supply From: Mounting: Surface Enclosure: Type 1				Volts: 120/208 Wye Phases: 3 Wires: 4								A.I.C. Rating: 65KAIC  Mains Type: MCB  Mains Rating: 400 A  MCB Rating: 300 A				
СКТ	Circuit Description Notes	Wire Size	Trip	Pole	Α (	VA)	В (	VA)	C (	VA)	Pole	Trip	Wire Size	Notes	Circuit Description	СКТ
1	BATHROOM RECEPTACLE	2#12, 1#12G - 3/4"C	20 A	1	180	1200					1	20 A	2#12, 1#12G - 3/4"C		FREEZER	2
3	FREEZER	2#12, 1#12G - 3/4"C	20 A	1			1200	1000			1	20 A	2#12, 1#12G - 3/4"C		FREEZER	4
5	COOLER	2#12, 1#12G - 3/4"C	20 A	1					1400	1500	1	20 A	2#12, 1#12G - 3/4"C		DEDICATED RECEPTACLE	6
7	DEDICATED RECEPTACLE	2#12, 1#12G - 3/4"C	20 A	1	1500	1500					1	20 A	2#12, 1#12G - 3/4"C		DEDICATED RECEPTACLE	8
9	MICROWAVE	2#12, 1#12G - 3/4"C	20 A	1			1500	1200			1	20 A	2#12, 1#12G - 3/4"C		DEDICATED RECEPTACLE	10
11	DEDICATED RECEPTACLE	2#12, 1#12G - 3/4"C	20 A	1					1200	360	1	20 A	2#12, 1#12G - 3/4"C		GENERAL RECEPTACLES	12
13	DEDICACTED RECEPTACLE	2#12, 1#12G - 3/4"C	20 A	1	1200	1485						00.4	0.11.10 1.11.10 0.11.110		DODGODILIMITED.	14
15	EXTERIOR RECEPTACLE	2#12, 1#12G - 3/4"C	20 A	1			180	1485			2	20 A	3#12, 1#12G - 3/4"C		POPCORN MAKER	16
17	EXTERIOR RECEPTACLE	2#12, 1#12G - 3/4"C	20 A	1					180	1000		00.4	0.1140 4.11400 0.14110		EVAUL O	18
19	ELILLO.	0//40 4//400 0/4//0	00.4		1500	1000					2	20 A	3#12, 1#12G - 3/4"C		EWH-2	20
21	EUH-2	3#12, 1#12G - 3/4"C	20 A	2			1500	1000				20.4	2442 44420 2/410		EVAUL O	22
23	EIIII 4	2442 44420 2/440	20. 4						1500	1000	2	20 A	3#12, 1#12G - 3/4"C		EWH-3	24
25	EUH-1	3#12, 1#12G - 3/4"C	20 A	2	1500	1000						20.4	2442 44420 2/410		EVALL 4	26
27	AC-1	2#12, 1#12G - 3/4"C	20 A	1			450	1000			2	20 A	3#12, 1#12G - 3/4"C		EWH-1	28
29	AC-3	2#12, 1#12G - 3/4"C	20 A	1					450	3450		45.0	240 44400 2/410		HRV-1	30
31	ALUL 4	3#4, 1#10G - 1"C	60 A	2	4250	3450					2	45 A 3#6, 1#10G - 3/4"C	IIIV-1	32		
33	AHU-1	3#4, 1#10G - 1 C	60 A	2			4250	3000								34
35	HP-1	3#8, 1#10G - 3/4"C	35 A	2					2700	3000	3	35 A 3#8, 1#10G - 3/4"C		EWH-1	36	
37	HP-1	3#6, 1#10G - 3/4 C	35 A	2	2700	3000										38
39	DEDICATED QUAD RECEPT	2#12, 1#12G - 3/4"C	20 A	1			360	450			1	20 A	2#12, 1#12G - 3/4"C		AC-2	40
41	DEDICATED QUAD RECEPT	2#12, 1#12G - 3/4"C	20 A	1					360	180	1	20 A	2#12, 1#12G - 3/4"C		RESTROOM RECEPT	42
43	EXTERIOR RECEPT/DATA	2#12, 1#12G - 3/4"C	20 A	1	360	180					1	20 A	2#12, 1#12G - 3/4"C		RESTROOM RECEPT	44
45	EXTERIOR ROOF	2#12, 1#12G - 3/4"C	20 A	1			180	461			1	20 A	2#12, 1#12G - 3/4"C		LIGHTING	46
47	LIGHTING	2#12, 1#12G - 3/4"C	20 A	1					742	540	1	20 A	2#12, 1#12G - 3/4"C		GENERAL RECEPTACLES	48
49	misc	2#12, 1#12G - 3/4"C	20 A	1	630	106					1	20 A	2#10, 1#!0G - 3/4"C		LIGHTING	50
51	MISC	2#12, 1#12G - 3/4"C	20 A	1			500	0			1	20 A			Spare	52
53	sink lavs	2#12, 1#12G - 3/4"C	20 A	1					1080	0	1	20 A			Spare	54
55	Spare		20 A	1	0	0					1	20 A			Spare	56
57	Spare		20 A	1			0	0			1	20 A			Spare	58
59	Spare		20 A	1					0	0	1	20 A			Spare	60
		Total Co		Load: Amps:	2674	1 VA	1971 18	6 VA 6 A	2064	2 VA						
lotes	<b>::</b>															

Location: MECHANICAL ROOM M102 Supply From: Mounting: Surface Enclosure: Type 1				Volts: 120/208 Wye Phases: 3 Wires: 4							A.I.C. Rating: 65KAIC  Mains Type: MLO  Mains Rating: 225 A					
KT	Circuit Description Notes	Wire Size	Trip	Pole	Α (	VA)	В (	VA)	C (	VA)	Pole	Trip	Wire Size	Notes	Circuit Description	СК
1	OFFICE RECEPTACLES	2#12, 1#12G - 3/4"C	20 A	1	540	1750					2	25 A	3#10, 1#10G - 3/4"C		HP-2	2
5	AHU-2	3#6, 1#10G - 3/4"C	50 A	2			3900	1750	3900	2500			<u> </u>			6
	EUH-4	3#8, 1#10G - 3/4"C	35 A	2	2500	2500	2500	3750			2	35 A	3#8, 1#10G - 3/4"C		EUH-3	8
1	EUH-6	3#6, 1#10G - 3/4"C	50 A	2			2500	3/50	3750	3750	2	50 A	3#6, 1#10G - 3/4"C		EUH-5	12
3		0110, 111100 014 0	3071		3750	0					1	20 A	2#12, 1#12G - 3/4"C		EF-5	14
	EF-4	2#12, 1#12G - 3/4"C	20 A	1			0	360			1	20 A	2#12, 1#12G - 3/4"C		GENERAL RECEPTACLES	1
	GENERAL RECEPTACLES	2#12, 1#12G - 3/4"C	20 A	1					360	360	1	20 A	2#12, 1#12G - 3/4"C		EXTERIOR RECEPTACLES	1
9	DEDICATED RECEPT.	2#12, 1#12G - 3/4"C	20 A	1	180	360					1	20 A	2#12, 1#12G - 3/4"C		EXTERIOR RECEPTACLES	2
	REC	2#12, 1#12G - 3/4"C	20 A	1			180	180			1	20 A	2#12, 1#12G - 3/4"C		EXTERIOR RECEPTACLE	2
3	LTG	2#12, 1#12G - 3/4"C	20 A	1					960	360	1	20 A	2#12, 1#12G - 3/4"C		DEDICATED QUAD RECEPT.	2
5	LTG	2#12, 1#12G - 3/4"C	20 A	1	456	360					1	20 A	2#12, 1#12G - 3/4"C		DEDICATED QUAD RECEPT.	2
7	Other	2#12, 1#12G - 3/4"C	20 A	1			630	360			1	20 A	2#12, 1#12G - 3/4"C		DEDICATED QUAD RECEPT.	2
9	GENERAL RECEPTACLES	2#12, 1#12G - 3/4"C	20 A	1					540	180	1	20 A	2#12, 1#12G - 3/4"C		DEDICATED RECEPTACLE	3
1					600	3600					2	40 A	3#8, 1#10G - 1"C		EV CHARGER	3
3	GARAGE DOOR	3#12, 1#12G - 3/4"C	20 A	3			600	3600			4	40 A	3#6, 1#10G - 1 C		EV CHARGER	3
5									600	3600	2	40 A	3#8, 1#10G - 1"C		EV CHARGER	3
7	EV CHARGER	3#8, 1#10G - 1"C	40 A	2	3600	3600					4	40 A	3#6, 1#10G - 1 C		EV CHARGER	3
9	EV CHARGER	3#6, 1#10G - 1 C	40 A				3600	0			1	20 A	-		Spare	4
1									1500	0	1	20 A	-		Spare	4:
.3	EWH-2	3#12, 1#12G - 3/4"C	20 A	3	1500	0					1	20 A	-		Spare	4
.5							1500	0			1	20 A			Spare	4
.7	Spare		20 A	1					0	0	1	20 A			Spare	4
.9	Spare		20 A	1	0	0					1	20 A			Spare	5
	Spare		20 A	1			0	0			1	20 A			Spare	5
	Spare		20 A	1					0	0	1	20 A			Spare	5
	Spare		20 A	1	0	0					1	20 A			Spare	5
	Spare		20 A	1			0	0			1	20 A			Spare	58
	Spare		20 A	1					0	0	1	20 A			Spare	60
	•			Load:	2529	6 VA	2291	0 VA	2236	50 VA		1		1	1 .	
		Total Cor						6 A	1		_					
							.0									

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A+S Project #: 2381015 ISSUED FOR REV DATE

ISSUE FOR BID	04/11/2024

SEALS AND SIGNATURES



**Electrical Schedules** 

2313-01 PROJECT NUMBER E701 SHEET NUMBER

#### **ELECTRICAL-MECHANICAL GENERAL NOTES:**

- FIRE STOP ALL FIRE RATED FLOORS, CEILINGS, AND WALLS AS REQUIRED BY CODE. PENETRATIONS INTO OR THROUGH FIRE RESISTANCE RATED WALLS SHALL COMPLY WITH IBC CHAPTER 7.
- PROVIDE EXPANSION FITTINGS AS REQUIRED AT ALL EXPANSION JOINTS. COORDINATE WITH ARCHITECTURAL DRAWINGS.
- 3. WHERE EXPOSED, BRANCH CIRCUITS SHALL BE RUN IN EMT CONDUIT ROUTED PARALLEL AND PERPENDICULAR TO BUILDING STRUCTURE. WHERE CONCEALED WITHIN WALLS OR ABOVE CEILING. EXPOSED CONDUIT SHALL BE PAINTED PER THE ARCHITECTURAL DRAWINGS.
- 4. COORDINATE EXACT LOCATIONS OF MECHANICAL EQUIPMENT WITH DIVISION 23. UNLESS NOTED OTHERWISE, MECHANICAL EQUIPMENT DISCONNECTS AND VARIABLE FREQUENCY DRIVES SHALL BE FURNISHED BY DIVISION 23, INSTALLED AND WIRED BY EC. THESE DISCONNECTS HAVE NOT BEEN SHOWN ON THIS PLAN.
- 5. COORDINATE EXACT LOCATIONS OF PLUMBING EQUIPMENT WITH DIVISION 22. UNLESS NOTED OTHERWISE, PLUMBING EQUIPMENT DISCONNECTS SHALL BE FURNISHED, INSTALLED, AND WIRED BY EC.
- 6. EC SHALL NOT HAVE MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A CONDUIT WITHOUT DERATING AMPACITIES PER THE NEC.
- 7. WHERE DEVICES ARE INCLUDED AND DIMENSIONED ON THE ARCHITECTURAL DRAWINGS, THOSE LOCATIONS SHALL GOVERN. WHERE DEVICES ARE OMITTED FROM THE ARCHITECTURAL DRAWINGS, INSTALL IN ACCORDANCE WITH THIS PLAN AND THE DEFAULT LOCATIONS IN THE ELECTRICAL SPECIFICATIONS. ALL DEVICES SHALL BE INSTALLED PER ADA. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO VERIFY EXACT DEVICE LOCATIONS. WHERE DEVICES ARE INSTALLED IN THE FIELD AND DIFFER FROM DESIGN DOCUMENT DIMENSIONS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT DEVICE LOCATIONS TO MATCH CONSTRUCTION DOCUMENTS, AT NO COST TO THE OWNER.

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A+S Project #: 2381015

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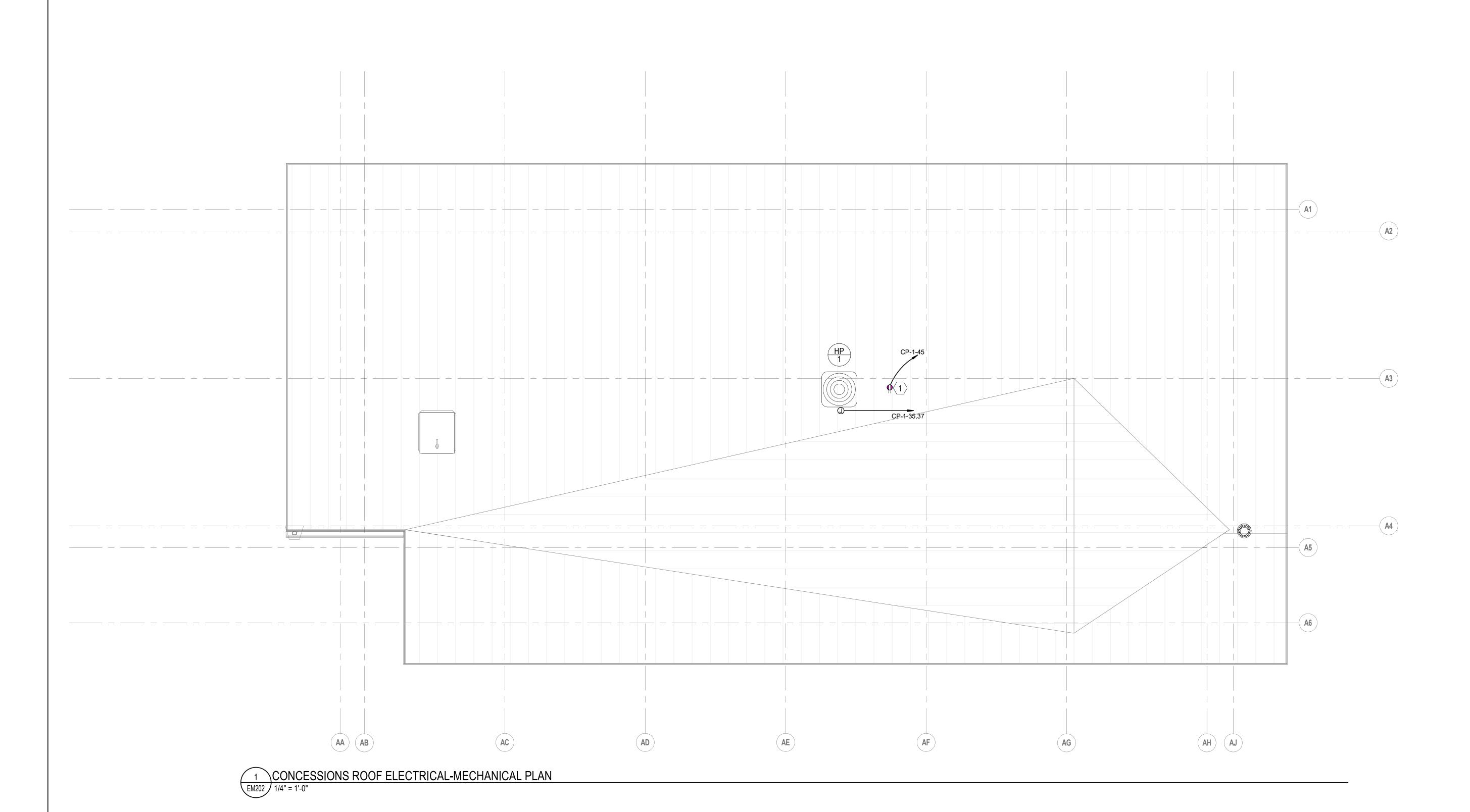
SHEET TITLE

Concessions Level 1
Electrical-Mechanical Plan

PROJECT NUMBER

EM201
SHEET NUMBER

t Date:



#### ELECTRICAL-MECHANICAL GENERAL NOTES:

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- 4. COORDINATE EXACT LOCATIONS OF MECHANICAL EQUIPMENT WITH DIVISION 23. UNLESS NOTED OTHERWISE, MECHANICAL EQUIPMENT DISCONNECTS AND VARIABLE FREQUENCY DRIVES SHALL BE FURNISHED BY DIVISION 23, INSTALLED AND WIRED BY EC. THESE DISCONNECTS HAVE NOT BEEN SHOWN ON THIS PLAN.
- 5. COORDINATE EXACT LOCATIONS OF PLUMBING EQUIPMENT WITH DIVISION 22. UNLESS NOTED OTHERWISE, PLUMBING EQUIPMENT DISCONNECTS SHALL BE FURNISHED, INSTALLED, AND WIRED BY EC.
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### ELECTRICAL-MECHANICAL KEY NOTES: (#)

 GFI IN A WEATHERPROOF WHILE-IN-USE COVER MOUNTED ON ROOF TO SERVICEMECHANICAL EQUIPMENT. ELGIN SPORTS
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Allen + Shariff

MEP Engineering | Project Management

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SEALS AND SIGNATURES



EET TITLE

Concessions Roof Electrical-Mechanical Plan

2313-01

**EM202** 

ate.

SHEET NUMBER

PROJECT NUMBER

MAINTENANCE LEVEL 1 ELECTRICAL-MECHANICAL PLAN

EM203 1/4" = 1'-0"

#### **ELECTRICAL-MECHANICAL GENERAL NOTES:**

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A+S Project #: 2381015

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SEALS AND SIGNATURES



SHEET TITLE

Maintenance Level 1
Electrical-Mechanical Plan

PROJECT NUMBER

EM203

ate:

	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL, SURFACE MOUNTED, TOP 5'-9" AFF.
FAAP	FIRE ALARM ANNUNCIATOR PANEL, RECESSED, TOP 5'-0" AFF.
NACP	FIRE ALARM NOTIFICATION APPLIANCE CIRCUIT EXTENDER PANEL, SURFACE MOUNTED, TOP, 5'-9" AFF.
FATP	FIRE ALARM TRANSPONDER PANEL, SURFACE MOUNTED, TOP 5'-9" AFF.
F	FIRE ALARM MANUAL PULL STATION, 44"AFF TO ACTUATING ARM, UON.
SD	ADDRESSABLE FIRE ALARM SYSTEM PHOTO-ELECTRIC SMOKE DETECTOR, CEILING MOUNTED.
DD	DUCT MOUNTED ADDRESSABLE FIRE ALARM SYSTEM PHOTO-ELECTRIC SMOKE DETECTOR.
HD	ADDRESSABLE FIRE ALARM SYSTEM HEAT DETECTOR, FIXED TEMPERATURE/RATE OF RISE TYPE. CEILING MOUNTED.
IM	FIRE ALARM SYSTEM ADDRESSABLE INPUT MONITOR MODULE.
MM	FIRE ALARM SYSTEM MONITOR MODULE.
CM	FIRE ALARM SYSTEM CONTROL MODULE.
RT	FIRE ALARM SYSTEM ADDRESSABLE REMOTE TEST SWITCH.
<u></u>	FIRE ALARM VISUAL (STROBE) APPLIANCE, MOUNT 80"AFF, OR 6" BELOW FINISHED CEILING, WHICHEVER IS LOWER, UON. SUBSCRIPT INDICATES MINIMUM CANDELA RATING, WHERE GREATER THAN 15.
Q	FIRE ALARM SYSTEM VISUAL (STROBE) APPLIANCE, WALL MOUNTED AT 80" AFF TO BOTTOM OF LENS, OR 6" BELOW FINISHED CEILING, WHICHEVER IS LOWER, UON. SUBSCRIPT INDICATES MINIMUM CANDELA RATING.
AV 30	FIRE ALARM AUDIO/VISUAL (HORN/SPEAKER) APPLIANCE, 80"AFF, OR 6" BELOW FINISHED CEILING, WHICHEVER IS LOWER, UON. SUBSCRIPT INDICATES MINIMUM CANDELA RATING, WHERE GREATER THAN 15.
₩	FIRE ALARM SYSTEM HORN/SPEAKER, WALL MOUNTED AT 80" AFF TO BOTTOM OF LENS, OR 6" BELOW FINISHED CEILING, WHICHEVER IS LOWER, UON. SUBSCRIPT INDICATES MINIMUM CANDELA RATING. SUBSCRIPT "WP" INDICATES WEATHERPROOF DEVICE.
$\bigcirc$	FIRE ALARM SYSTEM SPEAKER, CEILING MOUNTED, RECESSED.
A	FIRE ALARM SYSTEM SPEAKER, WALL MOUNTED 80" AFF, OR 6" BELOW FINISHED CEILING, WHICHEVER IS LOWER, UON.
TS	SPRINKLER SYSTEM SUPERVISORY VALVE TAMPER SWITCH CONNECTION.
FS	SPRINKLER SYSTEM SUPERVISORY FLOW SWITCH CONNECTION.
PS	SPRINKLER SYSTEM PRESSURE SWITCH CONNECTION.
DH	FIRE ALARM MAGNETIC DOOR HOLDER CONNECTION POWERED THROUGH FIRE ALARM SYSTEM. COORDINATE MOUNTING HEIGHT WITH ASSOCIATED DOOR MOUNTED DEVICE.
OB	SPRINKLER SYSTEM BELL ALARM APPLIANCE, WEATHERPROOF. MOUNT 80" AFG.
PIV	POST INDICATOR VALVE CONNECTION, COORDINATE EXACT LOCATION WITH SITE DRAWINGS.
MFSD	SMOKE DAMPER CONNECTION, 120V.
$\nabla$	FIREMAN TELEPHONE OUTLET, 46"AFF, UON.

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# Silman Structural Solutions STRUCTURAL ENGINEER:

TYLIN | SILMAN STRUCTURAL SOLUTIONS 200 S WACKER DR, SUITE 1400 CHICAGO, IL 60606 312.682.6300



CHICAGO, IL 60661
312.620.3668'
A+S Project #: 2381015

ISSUED FOR REV DATE

ISSUE FOR BID	04/11/2024
SEALS AND SIGNATURES	
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FIRE ALARM DEFERRED
SUBMITTAL REQUIREMENTS:

THE FIRE ALARM DRAWINGS ARE FOR DESIGN INTENT ONLY. THE AUTHORITY HAVING JURISDICTION MAY REQUIRE SIGNED/SEALED SHOP DRAWINGS FROM THE FIRE ALARM SYSTEM MANUFACTURER FOR PERMITTING. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE BID THE COST FOR AN INDEPENDENT THIRD-PARTY PROFESSIONAL ENGINEER TO SIGN, DATE, AND SEAL ALL FIRE ALARM DOCUMENTS REQUIRED FOR PERMITTING. THE STAMPED FIRE ALARM SHOP DRAWINGS SHALL INCLUDE FLOOR PLANS, RISER DIAGRAM(S), BATTERY AND VOLTAGE DROP CALCULATIONS, DEVICE ADDRESSES/ZONES, CONDUCTOR TYPES AND SIZES, PRIMARY AND SECONDARY POWER SUPPLIES, AND ALL ADDITIONAL COMPONENTS REQUIRED FOR A CODE-COMPLIANT FIRE ALARM SYSTEM INSTALLATION.

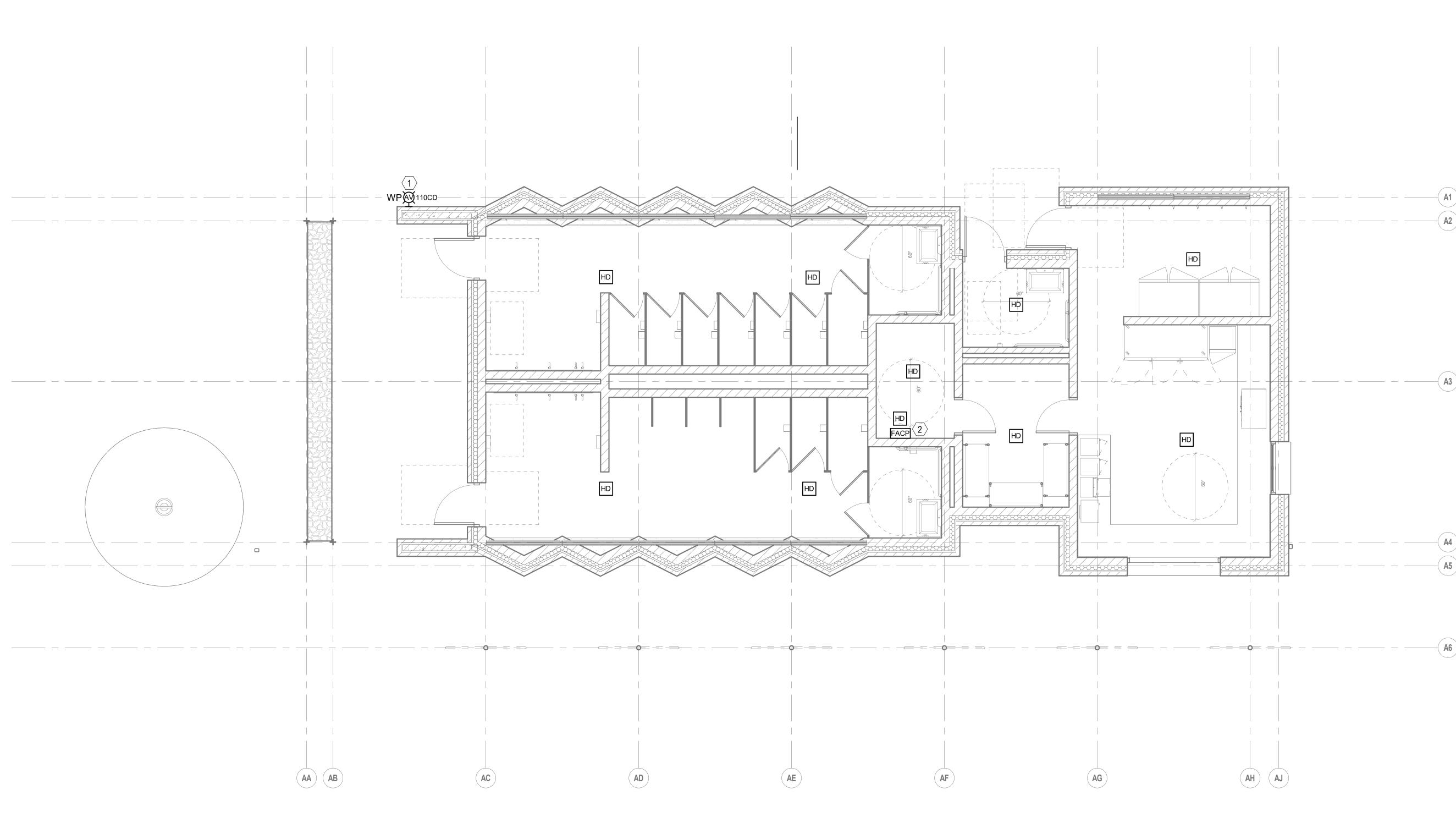
SHEET TITLE

Fire Alarm Data Sheet

PROJECT NUMBER

FA001

2313-01



1 CONCESSIONS LEVEL 1 FIRE ALARM PLAN
FA201 1/4" = 1'-0"

#### FIRE ALARM GENERAL NOTES:

- REFER TO PARTIAL FIRE ALARM RISER DIAGRAM <u>2/FA301</u> FOR GENERAL FIRE ALARM SYSTEM NOTES.
- FIRE STOP ALL FIRE RATED FLOORS, CEILINGS, AND WALLS AS REQUIRED BY CODE. PENETRATIONS INTO OR THROUGH FIRE RESISTANCE RATED WALLS SHALL COMPLY WITH IBC CHAPTER 7.
- PROVIDE EXPANSION FITTINGS AS REQUIRED AT ALL EXPANSION JOINTS. COORDINATE WITH ARCHITECTURAL DRAWINGS.
- 4. WHERE EXPOSED, BRANCH CIRCUITS SHALL BE RUN IN EMT CONDUIT ROUTED PARALLEL AND PERPENDICULAR TO BUILDING STRUCTURE. WHERE CONCEALED WITHIN WALLS OR ABOVE CEILING. EXPOSED CONDUIT SHALL BE PAINTED PER THE ARCHITECTURAL DRAWINGS.
- 5. THE COLOR OF FIRE ALARM NOTIFICATION DEVICES SHALL BE VERIFIED WITH ARCHITECT PRIOR TO PROCUREMENT.
- 6. THE EXACT LOCATION OF ALL DEVICES AND ASSOCIATED EQUIPMENT SHALL BE LOCATED PER NFPA, ADA, AND ALL OTHER CODES HAVING JURISDICTION.

#### FIRE ALARM KEY NOTES: (#)

- COORDINATE LOCATION OF EXTERIOR FIRE ALARM HORN STROBE WITH FIRE DEPARTMENT PRIOR TO ROUGH-IN.
- PROVIDE FIRE ALARM SUPERVISORY SYSTEM FOR THIS BUILDING. REFER TO DETAIL FOR FURTHER INFORMATION.

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SHEET TITLE

Concessions Level 1 Fire Alarm Plan

2313-01

FA201

PROJECT NUMBER

#### FIRE ALARM GENERAL NOTES:

- REFER TO PARTIAL FIRE ALARM RISER DIAGRAM <u>2/FA301</u> FOR GENERAL FIRE ALARM SYSTEM NOTES.
- 2. FIRE STOP ALL FIRE RATED FLOORS, CEILINGS, AND WALLS AS REQUIRED BY CODE. PENETRATIONS INTO OR THROUGH FIRE RESISTANCE RATED WALLS SHALL COMPLY WITH IBC CHAPTER 7.
- PROVIDE EXPANSION FITTINGS AS REQUIRED AT ALL EXPANSION JOINTS. COORDINATE WITH ARCHITECTURAL DRAWINGS.
- 4. WHERE EXPOSED, BRANCH CIRCUITS SHALL BE RUN IN EMT CONDUIT ROUTED PARALLEL AND PERPENDICULAR TO BUILDING STRUCTURE. WHERE CONCEALED WITHIN WALLS OR ABOVE CEILING. EXPOSED CONDUIT SHALL BE PAINTED PER THE ARCHITECTURAL DRAWINGS.
- 5. THE COLOR OF FIRE ALARM NOTIFICATION DEVICES SHALL BE VERIFIED WITH ARCHITECT PRIOR TO PROCUREMENT.
- 6. THE EXACT LOCATION OF ALL DEVICES AND ASSOCIATED EQUIPMENT SHALL BE LOCATED PER NFPA, ADA, AND ALL OTHER CODES HAVING JURISDICTION.

### FIRE ALARM KEY NOTES: (#)

- 1. COORDINATE LOCATION OF EXTERIOR FIRE ALARM HORN STROBE WITH FIRE DEPARTMENT PRIOR TO ROUGH-IN.
- 2. PROVIDE FIRE ALARM SUPERVISORY SYSTEM FOR THIS BUILDING. REFER TO DETAIL FOR FURTHER INFORMATION.

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FIRE ALARM DEFERRED
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SHEET TITLE

SHEET NUMBER

Maintenance Level 1 Fire Alarm Plan

MBER

PROJECT NUMBER

FA202

2313-01

Ilot Date:

GENERAL SUPERVISORY FIRE ALARM SYSTEM NOTES:

- REFER TO FLOOR PLAN FOR QUANTITY AND LOCATION OF SYSTEM COMPONENTS. EXACT ARRANGEMENT AND QUANTITY OF DEVICES SHALL BE INDICATED ON THE SHOP DRAWINGS. PROVIDE COMPLETE RISER DIAGRAM AS PART OF SHOP DRAWINGS.
- VERIFY WIRING SIZES WITH THE FIRE ALARM SYSTEM MANUFACTURER AND INSTALL AS DIRECTED. DO NOT LOAD ANY CIRCUIT BEYOND 80% OF RATED CAPACITY. ADD CIRCUITS AS REQUIRED AND SUBMIT CALCULATIONS TO SUBSTANTIATE.
   FIRE ALARM WIRING SHALL BE ROUTED VIA A SEPARATE CONDUIT SYSTEM (3/4" MINIMUM). FIRE RATED MC CABLE IS ACCEPTABLE WHERE CONCEALED. MC CABLE SHALL BE COLORED RED.
- SURVIVABILITY REQUIREMENTS OF THE CITY OF PITTSBURGH.

  4. FIRE ALARM CIRCUITS SHALL BE CLEARLY IDENTIFIED AT TERMINAL AND JUNCTION LOCATIONS IN COMPLIANCE WITH 2017 NEC SECTION 760.30.
- 5. PROVIDE ADDITIONAL POWER SUPPLIES, BATTERIES, EXTENDER PANELS, ETC. AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. PROVIDE BATTERY CALCULATIONS, WIRING DIAGRAMS, EQUIPMENT CUTS, ETC. AS PART OF THE SHOP DRAWING SUBMITTAL.

PROVIDE CONDUIT SLEEVES WITH ESCUTCHEON PLATES WHERE PASSING THROUGH WALLS,

FLOOR, OR CEILINGS. WIRING SHALL BE INSTALLED IN THE APPROPRIATE RACEWAY TO MEET THE

- 6. CANDELA RATING SHALL BE PER 2013 NFPA-72 CHAPTER 18 REQUIREMENTS. ALL VISUAL AND AUDIO DEVICES SHALL BE SYNCHRONIZED.
- 7. AUDIBLE ALARM SYSTEM SOUND PRESSURE LEVELS SHALL COMPLY WITH 2018 IBC SECTION 907.5.2.1.
- 8. COORDINATE WITH DIVISION 23 TO PROVIDE DUCT DETECTORS WHERE REQUIRED FOR HVAC EQUIPMENT. COORDINATE LOCATION OF REMOTE TEST SWITCHES WITH OWNER PRIOR TO INSTALLATION. THESE SHALL BE LOCATED IN UTILITY OR BACK OF HOUSE SPACES.
- 9. COORDINATE THE EXACT QUANTITY OF TAMPER, FLOW, AND PRESSURE SWITCH CONNECTIONS, AS APPLICABLE, WITH DIVISION 21 PRIOR TO PROCUREMENT.
- 10. PROVIDE ADDRESSABLE CONTROL MODULES TO INTERFACE WITH ALL ACCESS CONTROLLED DOORS AS REQUIRED BY CODE. CONTROL MODULES SHALL FUNCTION TO SIGNAL DOORS TO FAIL SAFE UPON ACTIVATION OF FIRE ALARM.
- 11. THE COMPLETED FIRE ALARM SYSTEM SHALL BE FULLY TESTED IN ACCORDANCE WITH NFPA-72 AND LOCAL FIRE DEPARTMENT REQUIREMENTS BY THE INSTALLER, IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE AND THE LOCAL FIRE MARSHALL. UPON COMPLETE ON A SUCCESSFUL TEST, THE INSTALLER SHALL SO CERTIFY, IN WRITING, TO THE OWNER AND GENERAL CONTRACTOR.
- 12. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS, PRODUCTS, EXECUTION, AND INSTALLATION OF THE FIRE ALARM SYSTEM.

FIRE ALARM RISER KEY NOTES: (#)

1. IN ORDER TO PROVIDE DIAL OUT CAPABILITIES TO THE FIRE DEPARTMENT, TWO TRANSMISSION CHANNELS SHALL BE PROVIDED TO THE DACT WITHIN THE FIRE ALARM SYSTEM PER 2016 NFPA-72 SECTION 26.6.3.2.1.4. THE SYSTEM SHALL EMPLOY ONE PHONE LINE AND AN ADDITIONAL, APPROVED TRANSMISSION MEANS AS OUTLINED UNDER THAT CODE SECTION AND DEEMED AVAILABLE AT THE SITE. WHERE ONE OF THE ALTERNATE TRANSMISSION CHANNELS IS NOT AVAILABLE AT THE SITE AND WHERE THE AHJ APPROVES, A SECOND TELEPHONE LINE MAY BE USED IN LIEU OF THE ALTERNATE TECHNOLOGY. COORDINATE WITH OWNER TO DETERMINE IF THE DACT DIALS DIRECTLY TO FIRE DEPARTMENT OR TO THIRD PARTY 24/7 MONITORING SERVICE CONTRACTED BY OWNER.

ROOF

FIRST FLOOR

1 PARTIAL FIRE ALARM RISER DIAGRAM - SUPERVISORY

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SHEET TITLE

PROJECT NUMBER

Partial Fire Alarm Riser Diagram - Supervisory

2313-01

FA301

Plot Date:

- 1. MECHANICAL CONTRACTOR SHALL PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE HVAC SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND REQUIRED BY CODE.
- 2. THE CONTRACT DOCUMENT DRAWINGS ARE DIAGRAMMATIC ONLY, AND ARE INTENDED TO CONVEY THE SCOPE AND GENERAL ARRANGEMENT OF WORK.
- 3. ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR BY FIELD INSPECTION PRIOR TO BIDDING. ANY INTERFERENCES TO INSTALLATION SHALL BE NOTED AND THE CONTRACTOR SHALL INCLUDE IN HIS BID PRICE THE COST TO AVOID OR RELOCATE ALL ITEMS, INCLUDING ITEMS OF OTHER TRADES, THAT INTERFERE. ALL WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. ALL OFFSETS, RISES, TRANSITIONS AND DROPS IN DUCTS AND PIPING AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- 4. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURERS' CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS OR PIPE ADAPTERS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.
- 5. PROVIDE ACCESS IN WALLS & CEILINGS TO ACCESS ALL EQUIPMENT, VALVES, CONTROL DEVICES, VOLUME DAMPERS, AND FIRE/SMOKE DAMPERS.
- 6. FOLLOW MANUFACTURE'S RECOMMENDATIONS FOR INSTALLATION OF EQUIPMENT. ALSO REFER TO TYPICAL DETAILS FOR INSTALLATION OF EQUIPMENT.
- 7. ALL MATERIALS FURNISHED, AND ALL WORK PERFORMED BY THE MECHANICAL CONTRACTOR SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS, INCLUDING BUT NOT LIMITED TO THE LATEST APPLICABLE EDITIONS OF NFPA, IEEE, OSHA, SMACNA, INTERNATIONAL MECHANICAL CODE, INTERNATIONAL BUILDING CODE, AND ANY STATE, COUNTY, AND LOCAL CODES.
- 8. ALL EQUIPMENT, DUCTWORK, ETC., SHALL BE SUPPORTED SUFFICIENTLY AND ANY ADDITIONAL SUPPORT SHALL BE PROVIDED AS REQUIRED TO PROVIDE VIBRATION FREE AND SAFE INSTALLATION. ALL MISCELLANEOUS STEEL REQUIRED AND/OR AS SHOWN IN DETAILS FOR DUCTWORK, AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. SUPPORT ALL DUCTWORK, PIPING AND EQUIPMENT MOUNTED ABOVE THE CEILING DIRECTLY FROM THE STRUCTURE. ALL ATTACHMENTS TO BEAMS, TRUSSES, OR JOIST SHALL BE MADE AT PANEL POINTS WITH BEAM CLAMPS MEETING MSS STANDARDS.
- ALL CONTROL WIRE AND CONDUIT SHALL COMPLY WITH NEC AND ELECTRICAL SPECIFICATIONS FOR THIS PROJECT.

### DUCTWORK GENERAL NOTES (ALL DRAWINGS):

- 1. ALL DUCTWORK INDICATED IS SCHEMATIC AND SHOW ONLY RELATIVE POSITIONS. PROVIDE OFFSETS, RISES, TRANSITIONS AND ELBOWS AS NEEDED TO INSTALL PROPERLY.
- 2. PROVIDE ACCESS DOORS IN DUCTWORK FOR OPERATION, ADJUSTMENT, AND MAINTENANCE OF ALL HVAC DEVICES, FANS, DAMPERS, (FIRE, SMOKE, BALANCING) COILS, AND TERMINAL EQUIPMENT.
- 3. LOCATIONS OF TERMINAL DEVICES, AIR OUTLETS AND INLETS ARE APPROXIMATE. LOCATE PER THE ARCHITECTURAL DRAWINGS AND TO AVOID OTHER TRADE'S WORK. COORDINATE LOCATIONS WITH OTHER TRADES. CONSULT ARCHITECT/ENGINEER FOR CLARIFICATION IF CONFLICTS OCCUR.
- 4. DUCT DIMENSIONS SHOWN ARE CLEAR INSIDE FACE-TO-FACE DIMENSIONS AND DO NOT INCLUDE DUCT LINER WHERE SPECIFIED. INCREASE DIMENSIONS OF LINED DUCTWORK TO PROVIDE FREE INSIDE AREA EQUAL DIMENSIONS SHOWN. REFER TO THE SPECIFICATIONS FOR LOCATION OF LINED DUCTWORK.
- 5. FINAL CONNECTIONS FROM HIGH VELOCITY MAIN DUCTS TO AIR TERMINAL UNITS SHALL BE MADE WITH FLEXIBLE DUCTWORK NOT EXCEEDING 3 FEET IN LENGTH. CONNECTIONS BETWEEN LOW VELOCITY DUCTWORK AND/OR TERMINAL UNITS TO AIR INLETS AND OUTLETS SHALL BE MADE WITH FLEXIBLE DUCTWORK NOT EXCEEDING 6 FEET IN LENGTH. LONGER DUCT RUN OUTS SHALL BE CONSTRUCTED OF HARD DUCT OF THE SAME MATERIAL SPECIFIED FOR THE SYSTEM SERVED AND INSULATED AS SPECIFIED FOR THAT SYSTEM. FLEXIBLE DUCTWORK SHALL BE OF THE PRESSURE CLASS AND FACTORY INSULATED AS SPECIFIED FOR THE SYSTEM WHERE INSTALLED.
- 6. FLEXIBLE DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS WITHOUT ANY SAGS, SHARP TURNS OR KINKS. AT THE MINIMUM, THE FLEXIBLE DUCTWORK SHALL BE FASTENED TO THE HARD DUCT BY A NYLON STRAP SECURED BY SHEETMETAL SCREWS TO PREVENT SLIPPING OFF FROM COLLAR.
- 7. PROVIDE VOLUME DAMPERS AT EACH AIR OUTLET, AIR INLET AND TERMINAL DEVICE AND AT EACH BRANCH TAKE-OFF CONNECTION FROM THE MAIN.

#### MECHANICAL PIPING GENERAL NOTES (ALL DRAWINGS):

- 1. ALL PIPING SHOWN HAS BEEN DRAWN SCHEMATICALLY FOR CLARITY AND SHOW ONLY RELATIVE POSITIONS. PROVIDE OFFSETS AND ELBOWS AS NEEDED TO INSTALL PROPERLY AND TO AVOID INTERFERENCES.
- 2. ALL NEW OR REPLACED HYDRONIC PIPING SHALL BE INSTALLED SO THAT IT CAN BE COMPLETELY VENTED AT HIGH POINTS AND DRAINED AT LOW POINTS. PROVIDE AIR VENTS AT HIGH POINTS, TYPE PER SPECIFICATIONS. PROVIDE 1/2" BALL VALVES WITH HOSE END CONNECTIONS AND CAPS AT LOW POINT. ALL WATER MAINS SHALL BE INSTALLED LEVEL, UNLESS OTHERWISE NOTES.
- 3. PROVIDE SERVICE VALVES AT EACH BRANCH CONNECTION FROM MAINS AND AT EACH TERMINAL DEVICE OR EQUIPMENT CONNECTION.
- 4. CONTRACTOR SHALL PROVIDE NEW VALVES ON EXISTING PIPING WHERE THE PIPES ARE TO BE REMOVED SO THAT THE SYSTEM DOES NOT HAVE TO BE DRAINED WHILE REMOVING EXISTING UNITS, INSTALLING NEW UNITS AND MAKING CONNECTIONS TO NEW EQUIPMENT.

				ME	ECHANICAL LEGEND			
SYMBOL	ABRV.	DESCRIPTION	SYMBOL		DESCRIPTION	SYMBOL	ABRV.	DESCRIPTION  EVISTING DIDING TO DEMAIN
	EX	EXISTING EQUIPMENT OR DUCTWORK TO REMAIN	•		CONNECTION POINT, NEW TO EXISTING	— EX (X) —	EX	EXISTING PIPING TO REMAIN - (X) DESIGNATES SERVICE
₹===\$	RX	EXISTING EQUIPMENT OR DUCTWORK TO BE REMOVED	•		DISCONNECTION POINT	— RX (X) —	RX	EXISTING PIPING TO BE REMOVED - (X) DESIGNATES SERVICE
<b>*</b>		NEW EQUIPMENT OR DUCTWORK	1		DRAWING KEYNOTE	— HWS —	HWS	HEATING WATER SUPPLY PIPING
<b></b>		LINED DUCTWORK	A		DEMOLITION DRAWING KEYNOTE	— HWR —	HWR	HEATING WATER RETURN PIPING
$\boxtimes$		SUPPLY DUCT UP	<b>∠</b> î\		REVISION NUMBER	— CWS —	CWS	CONDENSER WATER SUPPLY PIPING
×		SUPPLY DUCT DOWN			REVISION CLOUD	— CWR —	CWR	CONDENSER WATER RETURN PIPING
		RETURN DUCT UP	<u> </u>		PIPE UP	—CHWS—	CHWS	CHILLED WATER SUPPLY PIPING
		RETURN DUCT DOWN	<i>-</i> ⇒		PIPE DOWN	— CHWR —	CHWR	CHILLED WATER RETURN PIPING
		EXHAUST DUCT UP	Ŷ		PIPE TEE DOWN	—LPS —	LPS	LOW PRESSURE STEAM SUPPLY PIPING (0-15 PSIG)
		EXHAUST DUCT DOWN			TOP PIPE CONNECTION	— LPR —	LPR	LOW PRESSURE STEAM CONDENSATE RETURN
<b>S</b>		ROUND DUCT ELBOW UP	₹—		BALL VALVE OR SHUTOFF VALVE IN RISE	— MPS —	MPS	MEDIUM PRESSURE STEAM SUPPLY PIPING (16-60 PSIG)
		ROUND DUCT ELBOW DOWN	<del></del> 3		PIPE CAP	— MPR —	MPR	MEDIUM PRESSURE STEAM CONDENSATE RETURN
		ELBOW WITH TURNING VANES	<b></b>   <b></b>		PIPE UNION	—HPS—	HPS	HIGH PRESSURE STEAM SUPPLY PIPING (61 TO 200 PSIG)
		DUCT OFFSET - RISE			FLANGED CONNECTION	— HPR —	HPR	HIGH PRESSURE STEAM CONDENSATE RETURN
₽ D D		DUCT OFFSET - DROP			CONCENTRIC PIPE REDUCER	— GWS —	GWS	GLYCOL WATER SUPPLY
		SQUARE / RECTANGULAR DUCT TRANSITION			ECCENTRIC PIPE REDUCER	— GWR —	GWR	GLYCOL WATER RETURN
		SQUARE/RECTANGULAR TO ROUND DUCT TRANSITION	-		FLOW ARROW	— RL —	RL	REFRIGERANT LIQUID PIPING
	SD	SUPPLY DIFFUSER - MULTI-DIRECT.	—×—		PIPE ANCHOR	—— RS ——	RS	REFRIGERANT SUCTION PIPING
X		SUPPLY DIFFUSER - DIRECT. (HATCH DENOTES BLANK OFF)	<u> </u>		PIPE GUIDE	— FOS —	FOS	FUEL OIL SUPPLY PIPING
11- 11 -	SG/EG	SIDEWALL SUPPLY or RETURN GRILLE - (R = REGISTER)	<b>—∓</b>	BV	BALL VALVE	— FOR —	FOR	FUEL OIL RETURN PIPING
	LD	LINEAR DIFFUSER. SEE SCHEDULE FOR INFORMATION.	—	BFV	BUTTERFLY VALVE	— CW—	CW	CITY (DOMESTIC) WATER
	RG/EG	RETURN GRILLE - (R = REGISTER)		PV	PLUG VALVE	—— PC ——	PC	PUMPED STEAM CONDENSATE
	EG	EXHAUST GRILLE - (R = REGISTER)	<b>─</b> ₩	GV	GATE VALVE	— D —	D	CONDENSATE DRAIN PIPING
		FLEXIBLE DUCT	<b>─</b> ₩	GBV	GLOBE VALVE	— V —	V	VENT PIPING
	FLEX	FLEXIBLE DUCT CONNECTION (TO EQUIPMENT)		PRV	PRESSURE REDUCING VALVE	— G —	G	NATURAL GAS PIPING
<u> </u>		SPIN TAP WITH VOLUME CONTROL DAMPER		CV	CHECK VALVE		NΛF	ECHANICAL ABBREVIATIONS
AD AD	AD	DUCT ACCESS DOOR	<b>─</b> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u>	BFP	BACKFLOW PREVENTER		V. DES	CRIPTION
<u> </u>	VD	VOLUME CONTROL DAMPER	<b>≱</b> ⊦		PRESSURE RELIEF VALVE			TING, VENTILATION AND AIR CONDITIONING PLY AIR
<b>₩</b> BDI	BD	BACKDRAFT DAMPER	<u> </u>		AUTOMATIC FLOW CONTROL VALVE			URN AIR
(M]	MD	MOTORIZED DAMPER	-		CALIBRATED BALANCING VALVE			AUST AIR SIDE AIR
—————————————————————————————————————		ACCESS PANEL	<u> </u>		AUTOMATIC AIR VENT		A TRA	NSFER AIR
—_Ar_	FD	FIRE DAMPER			MANUAL AIR VENT	MB		) - BRITISH THERMAL UNITS
	SD	SMOKE DAMPER	 		P/T PLUG	k\ SEN		0-WATT (1 KW = 3,412 BTUH) SIBLE
<b>─</b>	FD/SD	COMBINATION FIRE & SMOKE DAMPER	Q <sub>1</sub>		PRESSURE GAGE W/ SHUT-OFF	LA	T. LATI	ENT
	RD	CEILING RADIATION FIRE DAMPER	<u> </u>		THERMOMETER	E.A.		ERING AIR TEMPERATURE VING AIR TEMPERATURE
	DD	DUCT SMOKE DETECTOR			STRAINER (W/ BALL VALVE AND CAP)			ERING WATER TEMPERATURE
(T)		THERMOSTAT	, — <del>I</del>		HOSE BIBB			VING WATER TEMPERATURE  BULB / WET BULB
(H)		HUMIDISTAT			FLEXIBLE CONNECTOR	IN. W.0 FT. W.0		HES WATER GAUGE (AIR) T WATER GAUGE (HYDRONIC)
(TH)		COMBINATION THERMOSTAT & HUMIDISTAT			2-WAY CONTROL VALVE	E.S.I	P. EXT	ERNAL STATIC PRESSURE
(SP)		STATIC PRESSURE SENSOR			3-WAY CONTROL VALVE	T.S.I		AL STATIC PRESSURE  NSFER GRILLE
(CO <sub>2</sub> )		CARBON DIOXIDE SENSOR	<del>-</del>		TRIPLE DUTY VALVE WITH MEASURING CONNECTIONS			REGISTER RENHEIT
(CO)		CARBON MONOXIDE SENSOR			INVERTED BUCKET STEAM TRAP			IOVE EXISTING ITEM & RELOCATE TO NEW LOCATION
(NO <sub>x</sub> )		NITROUS OXIDE SENSOR			FLOAT & THERMOSTATIC STEAM TRAP			OCATE EXISTING
(S)		TEMPERATURE SENSOR	— <b>√</b> →	RA/FA	RETURN OR EXHAUST AIR	UN	O UNL	ESS NOTED OTHERWISE
(§) [S]		STARTER			SUPPLY OR OUTSIDE AIR			TO SCALE IN CONTRACT
OS OS			TVP	JA / UA	OULT OF OUTOIDE VILV	Р	H PHA	SE
		OCCUPANCY SENSOR  REFRIGERANT DETECTOR	TYP #		EQUIPMENT UNIT DESIGNATION		Z HER  DIAN	METER
(R)		REFRIGERANT DETECTOR	TAG		DIFFUSER, REGISTER & GRILLE UNIT	AF	F ABO	VE FINISHED FLOOR VATION FROM DATUM
WC	11.5	WINDOW/DOOR CONTACT SWITCH	CFM		DESIGNATION W/ CFM			L LOAD AMPS
—(Ū)—	UC	UNDER CUT DOOR - 1"						MUM CIRCUIT AMPACITY  IMUM OVERCURRENT PROTECTION
—(Ľ)→		LOUVERED DOOR				NOTES:	·   w///	
						1. NOT ALL SY	MBOLS A	AND ABBREVIATIONS ARE IN USE FOR THIS PROJECT.

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A+S Project #: 2381015

ISSUED FOR REV DATE

ISSUE FOR BID 04/11/2024

SEALS AND SIGNATURES

CONSTRUCTION

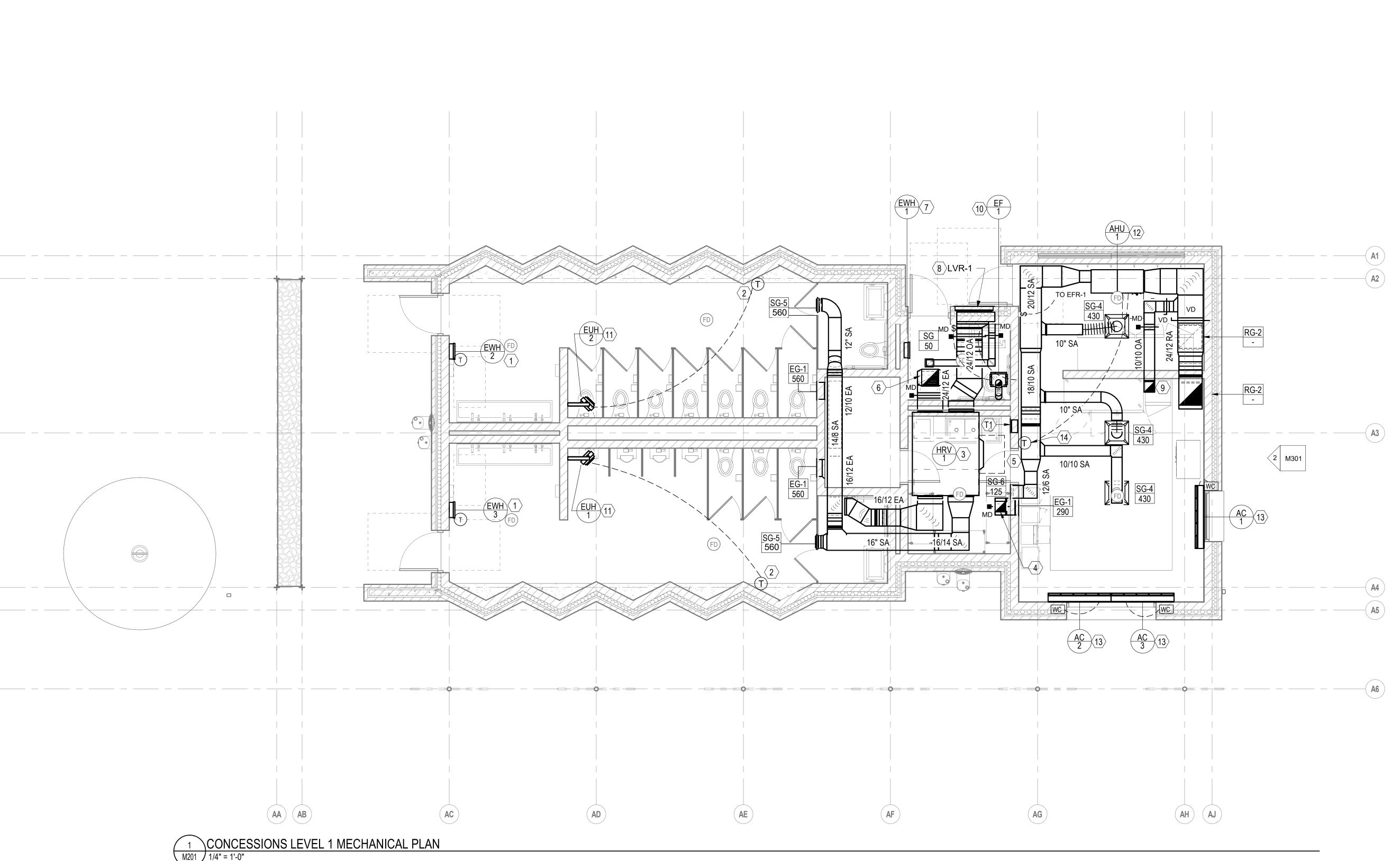
SHEET TITLE

Mechanical Data Sheet

PROJECT NUMBER

M001

SHEET NUMBER



#### **MECHANICAL GENERAL NOTES:**

- 1. CONTRACTOR SHALL COORDINATE AND VERIFY FINAL LINTEL SIZE REQUIREMENTS FOR STRUCTURAL PENETRATIONS REQUIRING LINTELS. FINAL LINTEL SIZE SHALL BE VERIFIED TO MATCH DIMENSIONS OF CONTRACTOR'S APPROVED DUCT SHOP DRAWINGS.
- 2. CONDENSATE DRAIN PIPING SHALL BE SLOPED NO LESS THAN 1/4" PER LINEAL FOOT OF HORIZONTAL RUN. PIPING SHALL BE SLOPED TOWARDS POINT OF TERMINATION.
- 3. MECHANICAL FRESH AIR INTAKES SHALL BE LOCATED NO LESS THAN 10 FEET FROM ALL EXHAUST OUTLETS. CONTRACTOR SHALL VERIFY MECHANICAL EQUIPMENT INSTALLATION IS IN ACCORDANCE WITH THIS REQUIREMENT.
- CONTRACTOR SHALL PROVIDE HORIZONTAL
  PIPING SUPPORT (DURA-BLOK: BASIS OF DESIGN)
  WITH RUBBER BASE AND METAL VERTICAL
  CHANNEL AT A MINIMUM SPACING OF 5 FEET PER
  LINEAR FEET OF EXTERIOR REFRIGERANT
  PIPING.
- MECHANICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION, CLEARANCE, ACCESS AND MAINTANANCE REQUIREMENTS.
- 6. ALL CEILING HUNG EQUIPMENT WITH
  CONDENSATE DRAIN PIPING SHALL BE PROVIDED
  WITH UL RATED CONDENSATE PUMP WITH
  VERTICAL LIFT OF NO LESS THAN 10 FEET.
  CONDENSATE PUMP BASIS OF DESIGN SHALL BE
  LITTLE GIANT VCMA-20-PRO WITH INTEGRAL
  SAFETY SWITCH. MC SHALL COORDINATE WITH
  EC TO PROVIDE 120V/60HZ POWER FOR 0.6 AMP
  DRAW AT CONDENSATE PUMP.

#### MECHANICAL KEY NOTES: (#)

- ELECTRIC WALL HEATER SHALL BE INSTALLED SURFACE MOUNTED AT WALL. INSTALL OUTSIDE OF THE BOUNDARIES OF ADA CLEARANCE.
- 2. WALL MOUNTED LCD TOUCHSCREEN
  PROGRAMMABLE THERMOSTAT SHALL BE
  INSTALLED ON WALL 48" ABOVE FINISHED FLOOR.
  PROVIDE THERMOPLASTIC LOCKBOX
  ENCLOSURE AROUND THERMOSTAT.
  THERMOSTAT SHALL FEATURE SUMMER FAN
  SWITCH FOR FAN ONLY OPERATION.
- 3. HEAT RECOVERY VENTILATOR SHALL BE INSTALLED HUNG ABOVE CEILING. IF CEILING IS A HARD GYPSUM CEILING, CEILING SHALL BE PROVIDED WITH ACCESS PANELS SIZED IN ACCORDANCE FOR FULL SERVICE AND REPLACEMENT OF UNIT. CONTROLS ENCLOSURE SERVICE CLEARANCE SHALL BE COORDINATED WITH ALL TRADES TO ENSURE SERVICE SPACE IS CLEAR OF OBSTRUCTION.
- 4. 16"X10" EXHAUST AIR DUCT SHALL TRANSITION UP TO EFR-1 INLET OPENING AT ROOF ABOVE. PROVIDE MOTORIZED CONTROL DAMPER AT OR NEAR INLET OPENING TO ROOFTOP EXHAUST FAN.
- 5. DOOR SHALL BE PROVIDED WITH LOUVERED TRANSFER GRILLE WITHIN DOOR.
- 6. 16"X16" EXHAUST AIR DUCT SHALL TRANSITION UP TO GRV-1 INLET OPENING AT ROOF ABOVE. PROVIDE MOTORIZED CONTROL DAMPER AT OR NEAR INLET OPENING TO ROOFTOP GRAVITY RELIEF VENTILATOR.
- 7. ELECTRIC WALL HEATER SHALL BE RECESSED IN WALL.
- 8. 36"X18" LOUVER SHALL BE INSTALLED AT EXTERIOR WALL. PROVIDE BIRDSCREEN AT INSIDE FACE OF LOUVER. PROVIDE INSULATED PLENUM BOX ON INSIDE FACE OF LOUVER FOR MULTIPLE OUTSIDE AIR DUCT CONNECTION.
- 9. 10"X10" FRESH AIR DUCT SHALL TRANSITION UP TO GRV-2 INLET OPENING AT ROOF ABOVE. PROVIDE MOTORIZED CONTROL DAMPER AT OR NEAR INLET OPENING TO ROOFTOP GRAVITY INTAKE VENTILATOR.
- 10. EXHAUST FAN SHALL BE INSTALLED AT GYPSUM CEILING. 6" ROUND EXHAUST DUCTWORK SHALL ELBOW AND BE ROUTED UPWARDS TO ROOF CAP AT ROOF ABOVE. EXHAUST FAN SHALL BE CONTROLLED BY SWITCH AT WALL WITHIN ROOM. ACTIVATION OF WALL SWTICH SHALL ENERGIZE MOTORIZED CONTROL DAMPER ASSOCIATED WITH FRESH AIR GRILLE WITHIN SPACE.
- 11. ELECTRIC UNIT HEATER SHALL BE HUNG FROM WALL MOUNTING BRACKET WITH SPRING VIBRATION ISOLATION HANGER. BOTTOM OF HEATER SHALL BE INSTALLED NO LESS THAN 9'-0" ABOVE FINISHED FLOOR. HEATER SHALL BE INSTALLED WITH LOUVER DIFFUSER FOR DIRECTIONAL FLOW PATTERN THROW ACROSS RESTROOM.
- 12. MULTIPOISE AIR HANDLING UNIT SHALL BE INSTALLED ABOVE CEILING HUNG FROM STRUCTURE VIA SPRING VIBRAITON ISOLATION HANGERS. INSTALL PER THE MANUFACTURERS INSTALLATION AND CLEARANCE REQUIREMENTS (1) 3/4" CONDENSATE DRAIN PIPING SHALL BE ROUTED TO AND TERMINATE INDIRECTLY AT MOP SINK ADJACENT ROOM. PROVIDE UL-508 RATED DRAIN PAN LEVEL SENSOR CUTOFF DEVICE AT SECONDARY DRAIN PAN BENEATH UNIT. REFRIGERANT PIPING SHALL BE ROUTED FORM AIR HANDLING UNIT TO ASSOCIATED OUTDOOR HEAT PUMP. COORDINATE ROUTING OF ALL PIPING IN FIELD.

- 7. ALL MECHANICAL EQUIPMENT, SENSORS AND DAMPERS LOCATED ABOVE HARD CEILINGS OR WITHIN WALLS SHALL BE PROVIDED WITH ACCESS PANELS SIZED IN ACCORDANCE WITH MANUEL ACTURED IS INSTALLATION.
- WITHIN WALLS SHALL BE PROVIDED WITH ACCESS PANELS SIZED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION REQUIREMENTS AND SUCH THAT THE FULL REMOVAL OF THE EQUIPMENT AND/OR DAMPER IS POSSIBLE. PROVIDE RATED ACCESS PANELS FOR ALL ACCESS PANELS LOCATED WITHIN RATED CEILINGS OR WALLS. ACCESS DOORS SHALL BE TAMPER AND VANDAL PROOF.
- 8. THERMOSTATS AND OTHER CONTROL DEVICES SHALL BE INSTALLED 48" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.

AT SERVING WINDOW(S) SUCH THAT OPENING OF

OPERATION ASSOCIATED WITH THE AIR CURTAIN.

INSTALLED ON WALL 48" ABOVE FINISHED FLOOR.

WINDOW ACTIVATES THE AIR CURTAIN IN

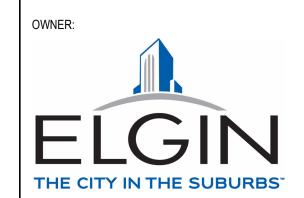
ACCORDANCE WITH THE SEQUENCE OF

14. WALL MOUNTED LCD TOUCHSCREEN 7 DAY

PROGRAMMABLE THERMOSTAT SHALL BE



VOLUME 2 OF 2



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## PZS

ARCHITECT OF RECORD:

13. AMBIENT PASS THRU AIR CURTAIN SHALL BE
INSTALLED WALL MOUNTED ABOVE SERVING
WINDOW IN ACCORDANCE WITH
MANUFACTURER'S INSTALLATION
REQUIREMENTS. MANUFACTURER'S PROVIDED
WINDOW/DOOR CONTACT SHALL BE INSTALLED

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A+S Project #: 23810	015	
ISSUED FOR	REV	DATE
ISSUE FOR BID		04/11/2024

SEALS AND SIGNATURES



SHEET TITLE

Concessions Level 1
Mechanical Plan

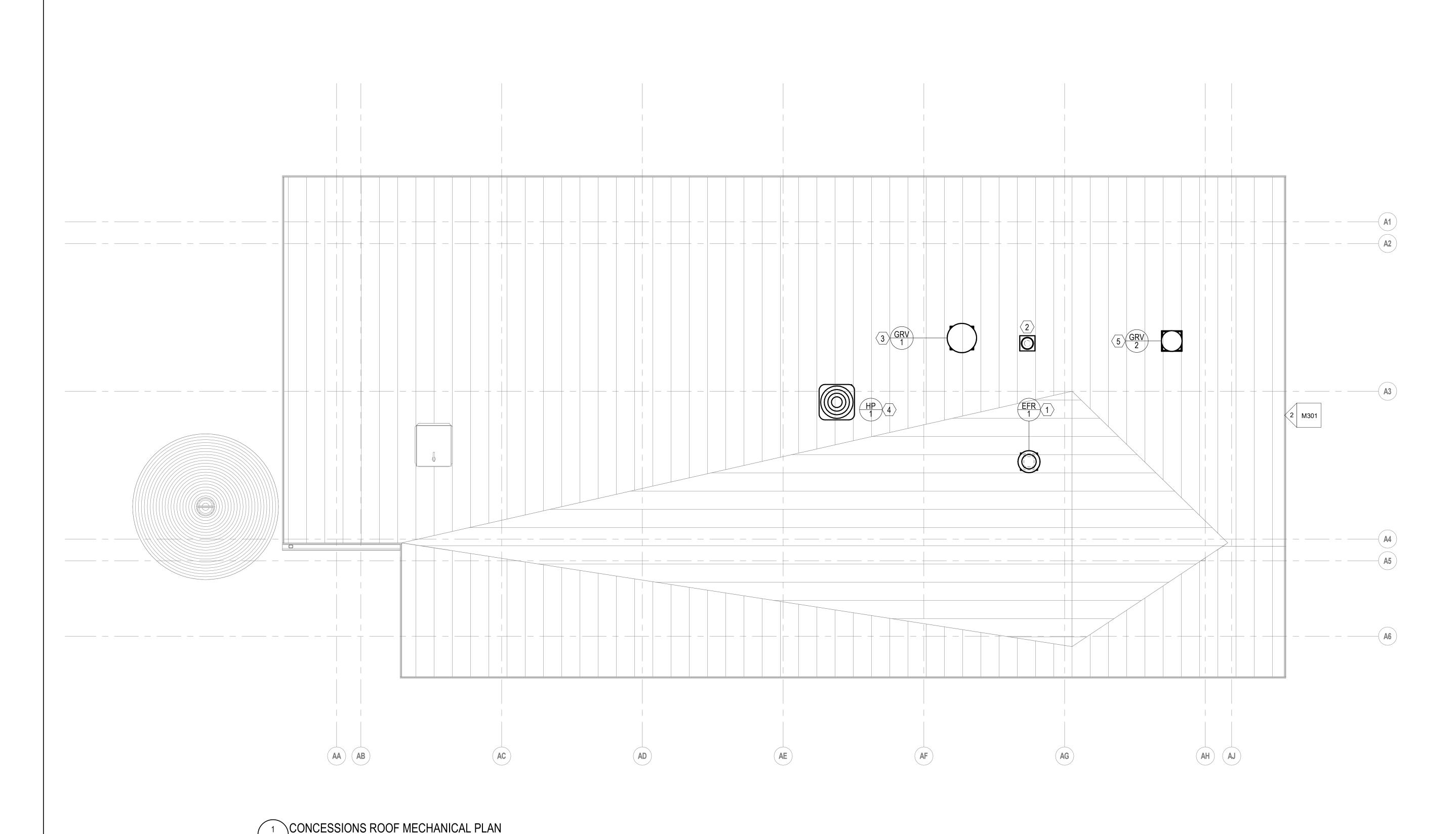
2313-01

PROJECT NUMBER

M201

SHEET NUMBER

Plot Date:



#### MECHANICAL GENERAL NOTES:

- 1. CONTRACTOR SHALL COORDINATE AND VERIFY FINAL LINTEL SIZE REQUIREMENTS FOR STRUCTURAL PENETRATIONS REQUIRING LINTELS. FINAL LINTEL SIZE SHALL BE VERIFIED TO MATCH DIMENSIONS OF CONTRACTOR'S APPROVED DUCT SHOP DRAWINGS.
- 2. MECHANICAL EQUIPMENT SHALL BE INSTALLED NO LESS THAN 10 FEET FROM ROOF EDGE OR PARAPET. THE CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DESCREPANCIES THAT WOULD RESULT IN MECHANICAL EQUIPMENT BEING INSTALLED WITHIN 10 FEET OF ROOF EDGE OR PARAPET. NEW MECHANICAL EQUIPMENT INSTALLED WITHIN 10 FEET OF ROOF EDGE SHALL BE PROVIDED WITH SERVICE AND MAINTENANCE RAILING IN ACCORDANCE WITH THE 2021 IMC AND OSHA REQUIREMENTS.
- 3. MECHANICAL FRESH AIR INTAKES SHALL BE LOCATED NO LESS THAN 10 FEET FROM ALL EXHAUST OUTLETS. CONTRACTOR SHALL VERIFY MECHANICAL EQUIPMENT INSTALLATION IS IN ACCORDANCE WITH THIS REQUIREMENT.
- 4. MECHANICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION, CLEARANCE, ACCESS AND MAINTANANCE REQUIREMENTS.

#### MECHANICAL KEY NOTES: (#)

- 1. CENTRIFUGAL ROUND DOWNBLAST EXHAUST FAN SHALL BE INSTALLED ON 18" MINIMUM INSULATED CANTED AND SLANTED ROOF CURB AND VIBRATION ISOLATION RAILS. EXHAUST OUTLET SHALL TERMINATE NO LESS THAN 18" ABOVE HIGHEST ROOF HEIGHT WITHIN 4 FEET OF TERMINATION. EXHAUST FAN SHALL BE EQUIPPED WITH BRIDSCREEN.
- 2. GREENHECK RCC-7 EXHAUST VENT ROOF CAP SHALL BE INSTALLED ON 18" MINIMUM INSULATED CANTED AND SLANTED ROOF CURB. EXHAUST INLET SHALL TRANSITION FROM ROOF CAP OPENING TO 6" ROUND EXHAUST DUCT AND SHALL BE ROUTED DOWN TO CEILING BELOW. EXHAUST OUTLET SHALL TERMINATE NO LESS THAN 18" ABOVE HIGHEST ROOF HEIGHT WITHIN 4 FEET OF TERMINATION. ROOF CAP SHALL BE EQUIPPED WITH BRIDSCREEN.
- 3. GRAVITY RELIEF VENTILATOR SHALL BE INSTALLED ON 18" MINIMUM INSULATED CANTED AND SLANTED ROOF CURB. EXHAUST INLET SHALL TRANSITION FROM GRV OPENING TO 24"X12" EXHAUST DUCT AND SHALL BE ROUTED DOWN TO ERV-1 AT CEILING BELOW. EXHAUST OUTLET SHALL TERMINATE NO LESS THAN 18" ABOVE HIGHEST ROOF HEIGHT WITHIN 4 FEET OF TERMINATION. GRAVITY RELIEF VENTILATOR SHALL BE EQUIPPED WITH BRIDSCREEN.
- 4. HEAT PUMP SHALL BE INSTALLED ON 18" TALL ADJUSTABLE SLANTED/SLOPED HEAT PUMP STANDS AND VIBRATION ISOLATION PADS. HEAT PUMP STAND SHALL BE ADJUSTED TO ROOF SLOPE AND HEAT PUMP SHALL SIT LEVEL. INSTALL PER THE MANUFACTURER'S INSTALLATION REQUIREMENTS. REFRIGERANT LINE PIPING SHALL BE ROUTED FROM HEAT PUMP TO ASSOCIATED AIR HANDLING UNIT. COORDINATE ROUTING OF REFRIGERANT PIPING IN FIELD.
- 5. GRAVITY INTAKE VENTILATOR SHALL BE INSTALLED ON 18" MINIMUM INSULATED CANTED AND SLANTED ROOF CURB. EXHAUST INLET SHALL TRANSITION FROM GRV OPENING TO1 10"X10" OUTSIDE AIR DUCT AND SHALL BE ROUTED DOWN TO AHU-1 RETURN DUCT AT CEILING BELOW. EXHAUST OUTLET SHALL TERMINATE NO LESS THAN 18" ABOVE HIGHEST ROOF HEIGHT WITHIN 4 FEET OF TERMINATION. GRAVITY RELIEF VENTILATOR SHALL BE EQUIPPED WITH BRIDSCREEN.

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A+S Project #: 2381015

ISSUED FOR	REV	DATE
ISSUE FOR BID		04/11/2024

SEALS AND SIGNATURES



SHEET TITLE

Concessions Roof Mechanical Plan

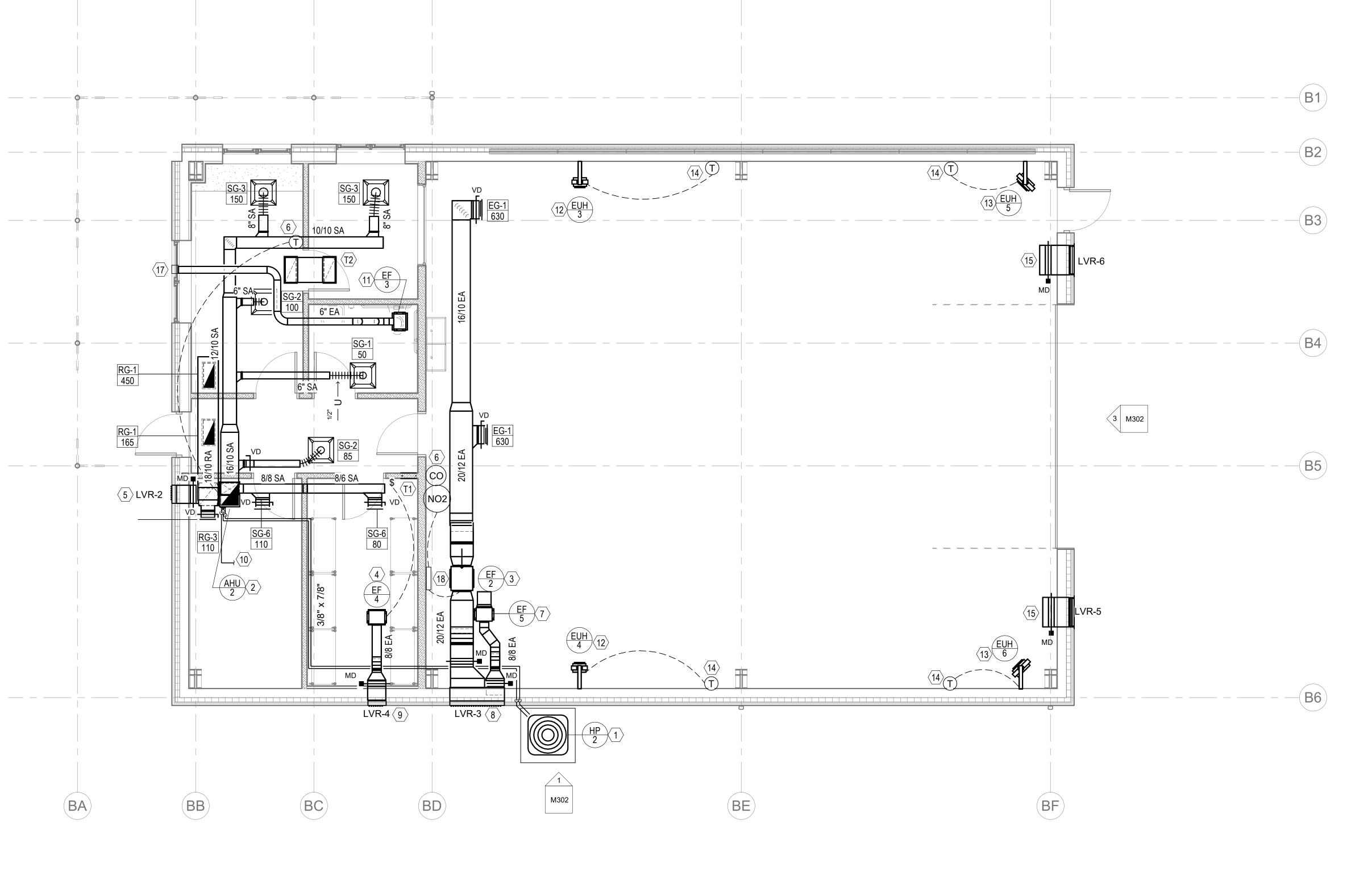
2313-01

M202

SHEET NUMBER

PROJECT NUMBER

M202 1/4" = 1'-0"



# MAINTENANCE LEVEL 1 MECHANICAL PLAN

 $M203 \int 1/4" = 1'-0"$ 

- CONTRACTOR SHALL COORDINATE AND VERIFY FINAL LINTEL SIZE REQUIREMENTS FOR STRUCTURAL PENETRATIONS REQUIRING LINTELS. FINAL LINTEL SIZE SHALL BE VERIFIED TO MATCH DIMENSIONS OF CONTRACTOR'S
- 2. CONDENSATE DRAIN PIPING SHALL BE SLOPED NO LESS THAN 1/4" PER LINEAL FOOT OF HORIZONTAL RUN. PIPING SHALL BE SLOPED
- 3. MECHANICAL FRESH AIR INTAKES SHALL BE LOCATED NO LESS THAN 10 FEET FROM ALL EXHAUST OUTLETS. CONTRACTOR SHALL VERIFY MECHANICAL EQUIPMENT INSTALLATION IS IN
- 5. MECHANICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION, CLEARANCE, ACCESS AND MAINTANANCE REQUIREMENTS.
- 6. THERMOSTATS AND OTHER CONTROL DEVICES UNLESS OTHERWISE NOTED.

#### MECHANICAL KEY NOTES: (#)

- 1. HEAT PUMP SHALL BE INSTALLED ON 6" CONCRETE OUTDOOR PAD WITH HEAT PUMP STANDS AND VIBRATION ISOLATION PADS. INSTALL PER THE MANUFACTURER'S INSTALLATION REQUIREMENTS. REFRIGERANT LINE PIPING SHALL BE ROUTED FROM HEAT PUMP TO ASSOCIATED AIR HANDLING UNIT. COORDINATE ROUTING OF REFRIGERANT PIPING IN FIELD. FINAL LOCATION OF HEAT PUMP SHALL BE COORDINATED WITH EXTERIOR WALL MOUNTED ELECTRICAL PANELS AND EQUIPMENT.
- 2. MULTIPOISE AIR HANDLING UNIT SHALL BE INSTALLED ON RETURN BASE UNIT STANDS WITH NEOPRENE VIBRATION ISOLATORS. INSTALL PER THE MANUFACTURER'S INSTALLATION AND CLEARANCE REQUIREMENTS. (1) 3/4" CONDENSATE DRAIN PIPING SHALL BE ROUTED TO AND TERMINATE INDIRECTLY AT NEAREST FLOOR DRAIN. PROVIDE UL-508 RATED DRAIN PAN LEVEL SENSOR CUTOFF DEVICE AT SECONDARY DRAIN PAN BENEATH UNIT. REFRIGERANT PIPING SHALL BE ROUTED FORM AIR HANDLING UNIT TO ASSOCIATED OUTDOOR HEAT PUMP. COORDINATE ROUTING OF ALL PIPING IN FIELD AND AVOID CONFLICTS WITH ELECTRICAL EQUIPMENT WORKING CLEARANCE.
- 3. CENTRIFUGAL INLINE EXHAUST FAN SHALL BE INSTALLED HUNG FROM CEILING VIA SPRING VIBRATION ISOLATION HANGERS. FINAL ELEVATION OF UNIT SHALL BE COORDINATED SUCH THAT UNIT MOUTING HEIGHT IS COORDINATED WITH STRUCTURE AND DOES NOT INTERFERE WITH IBC REQUIRED MINIMUM MOUNTING HEIGHT OF EQUIPMENT.
- 4. CABINET EXHAUST FAN SHALL BE LOCATED WITHIN STORAGE ROOM SPACE AND SHALL BE ROUTED TO EXTERIOR LOUVER. EXHAUST FAN SHALL BE CONTROLLED VIA CYCLE TIMER AND WITH SWITCH OPERATED OCCUPANT OVERRIDE.
- 5. 16"X12" LOUVER SHALL BE INSTALLED AT EXTERIOR WALL. PROVIDE BIRDSCREEN AT INSIDE FACE OF LOUVER. FRESH AIR DUCTWORK SHALL CONNECT TO RETURN AIR SECTION DOWNSTREAM OF ALL OTHER RETURN CONNECTIONS AND SHALL BE PROVIDED WITH A MANUAL VOLUME CONTROL DAMPER AND MOTORIZED CONTROL DAMPER.
- 6. COMBINATION CO/NO2 SENSOR SHALL BE INSTALLED WALL MOUNTED WITHIN STORAGE SPACE. INSTALL PER THE MANUFACTURER'S REQUIREMENTS IN ACCORDANCE WITH RECOMMENDED MOUNTING HEIGHT AND CLEARANCE FROM OBSTRUCTION. FINAL LOCATION OF SENSOR SHALL PERMIT FULL COVERAGE OF STORAGE SPACE FOR A 50 FOOT RADIUS COVERAGE ZONE.
- 7. INLINE EXHAUST FAN SHALL BE LOCATED WITHIN SHALL BE HUNG FROM STRUCTURE VIA SPRING VIBRATION ISOLATION HANGERS. INELT DUCTWORK SHALL TERMINATE AT BIRDSCREEN WITHIN STORAGE SPACE. EXHAUST DUCTWORK FROM FAN SHALL BE ROUTED TO EXTERIOR LOUVER. EXHAUST FAN SHALL OPERATE CONTINUOUSLY.
- 8. 48"X20" LOUVER SHALL BE INSTALLED AT EXTERIOR WALL. PROVIDE BIRDSCREEN AT INSIDE FACE OF LOUVER. PROVIDE INSULATED PLENUM BOX ON INSIDE FACE OF LOUVER FOR EXHAUST AIR DUCT CONNECTIONS. MULTIPLE EXHAUST DUCT CONNECTIONS SHALL BE MADE AT PLENUM BOX.

#### **MECHANICAL GENERAL NOTES:**

- 7. ALL MECHANICAL EQUIPMENT, SENSORS AND DAMPERS LOCATED ABOVE HARD CEILINGS OR WITHIN WALLS SHALL BE PROVIDED WITH ACCESS PANELS SIZED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION APPROVED DUCT SHOP DRAWINGS. REQUIREMENTS AND SUCH THAT THE FULL REMOVAL OF THE EQUIPMENT AND/OR DAMPER
- TOWARDS POINT OF TERMINATION.
- ACCORDANCE WITH THIS REQUIREMENT.
- 4. CONTRACTOR SHALL PROVIDE HORIZONTAL PIPING SUPPORT (DURA-BLOK: BASIS OF DESIGN) WITH RUBBER BASE AND METAL VERTICAL CHANNEL AT A MINIMUM SPACING OF 5 FEET PER LINEAR FEET OF EXTERIOR REFRIGERANT
- SHALL BE INSTALLED 48" ABOVE FINISHED FLOOR
- 9. 16"X12" LOUVER SHALL BE INSTALLED AT EXTERIOR WALL. PROVIDE BIRDSCREEN AT INSIDE FACE OF LOUVER. EXHAUST AIR DUCTWORK SHALL TRANSITION AS NECESSARY TO CONNECT WITH WITH LOUVER INLET.

IS POSSIBLE. PROVIDE RATED ACCESS PANELS

FOR ALL ACCESS PANELS LOCATED WITHIN

SHALL BE TAMPER AND VANDAL PROOF.

RATED CEILINGS OR WALLS. ACCESS DOORS

- 10. 3/4" CONDENSATE DRAIN PIPING SHALL TERMINATE INDIRECTLY AT FLOOR DRAIN. COORDINATE ROUTING AND FINAL LOCATION OF DRAIN IN FIELD.
- 11. EXHAUST FAN SHALL BE INSTALLED AT GYPSUM CEILING. 6" ROUND EXHAUST DUCTWORK SHALL ELBOW AND BE ROUTED TOWARDS EXTERIOR WALL CAP. EXHAUST FAN SHALL BE CONTROLLED BY SWITCH AT WALL WITHIN ROOM. ACTIVATION OF WALL SWITCH SHALL ENERGIZE MOTORIZED CONTROL DAMPER ASSOCIATED WITH FRESH AIR GRILLE WITHIN SPACE.
- 12. ELECTRIC UNIT HEATER SHALL BE HUNG FROM WALL MOUNTING BRACKET WITH SPRING VIBRATION ISOLATION HANGER. BOTTOM OF HEATER SHALL BE INSTALLED NO LESS THAN 8'-0" ABOVE FINISHED FLOOR. HEATER SHALL BE INSTALLED WITH LOUVER DIFFUSER FOR DIRECTIONAL FLOW PATTERN THROW ACROSS STORAGE SPACE.
- 13. ELECTRIC UNIT HEATER SHALL BE HUNG FROM WALL MOUNTING BRACKET WITH SPRING VIBRATION ISOLATION HANGER. BOTTOM OF HEATER SHALL BE INSTALLED NO LESS THAN 8'-0" ABOVE FINISHED FLOOR. HEATER SHALL BE ANGLED 45 DEGREES ACROSS THE HORIZONTAL PLANE AS INDICATED ON DRAWINGS SHALL BE INSTALLED WITH LOUVER DIFFUSER FOR DIRECTIONAL FLOW PATTERN THROW ACROSS STORAGE SPACE.
- 14. WALL MOUNTED LCD TOUCHSCREEN PROGRAMMABLE THERMOSTAT SHALL BE INSTALLED ON WALL 48" ABOVE FINISHED FLOOR.
- 15. 26"X18" LOUVER SHALL BE INSTALLED AT EXTERIOR WALL.FRESH AIR DUCTWORK SHALL EXTEND INTO STORAGE AREA SPACE AND SHALL BE PROVIDED WITH A MANUAL VOLUME CONTROL DAMPER AND MOTORIZED CONTROL DAMPER. PROVIDE BIRDSCREEN AT OPEN STUB TERMINATION INTO STORAGE SPACE. .
- 16. WALL MOUNTED PROGRAMMABLE THERMOSTAT SHALL BE INSTALLED ON WALL 48" ABOVE FINISHED FLOOR.
- 17. SIEHO CFXC HOODED EXHAUST WALL CAP SHALL BE INSTALLED AT WALL ABOVE LOW ROOF OVERHANG . PROVIDE INTEGRAL BACKDRAFT DAMPER AND INSECT SCREEN. VENT TERMINATION SHALL BE INSTALLED NO LESS THAN 3 FEET ABOVE TOP OF WINDOW.
- 18. CO/NO2 TWO CHANNEL CONTROL PANEL SHALL BE INSTALLED ON WALL WITH WEATHERPROOF NEMA 4X FIBERGLASS ENCLOSURE AND LCD GRAPHIC DISPLAY, RELAY OUTPUTS, EVENT LOGGING, ADJUSTABLE SETPOINTS, DISCRETE ANALOG OUTPUTS AND POWER FOR EXTERNAL HORN/STROBES. MC SHALL COORDINATE WITH EC TO PROVIDE 120V/1PH/60HZ POWER (1.2 AMP FLA) SUPPLY WITH CIRCUIT BREAKER. BASIS OF DESIGN CONTOL PANEL SHALL BE CALIBRATION TECHNOLOGIES MODEL GG-2 CONTROL PANEL.

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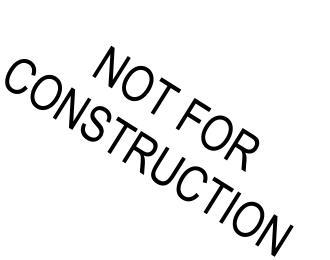
TYLIN | SILMAN STRUCTURAL SOLUTIONS 200 S WACKER DR, SUITE 1400 CHICAGO, IL 60606 312.682.6300



ALLEN + SHARIFF 625 W ADAMS ST, 19TH FLOOR CHICAGO, IL 60661 312.620.3668 A+S Project #: 2381015

ISSUED FOR REV DATE 04/11/2024 ISSUE FOR BID

SEALS AND SIGNATURES



Maintenance Level 1 Mechanical Plan

2313-01

PROJECT NUMBER **M203** 

#### MECHANICAL GENERAL NOTES:

- CONTRACTOR SHALL COORDINATE AND VERIFY FINAL LINTEL SIZE REQUIREMENTS FOR STRUCTURAL PENETRATIONS REQUIRING LINTELS. FINAL LINTEL SIZE SHALL BE VERIFIED TO MATCH DIMENSIONS OF CONTRACTOR'S APPROVED DUCT SHOP DRAWINGS.
- 2. MECHANICAL EQUIPMENT SHALL BE INSTALLED NO LESS THAN 10 FEET FROM ROOF EDGE OR PARAPET. THE CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DESCREPANCIES THAT WOULD RESULT IN MECHANICAL EQUIPMENT BEING INSTALLED WITHIN 10 FEET OF ROOF EDGE OR PARAPET. NEW MECHANICAL EQUIPMENT INSTALLED WITHIN 10 FEET OF ROOF EDGE SHALL BE PROVIDED WITH SERVICE AND MAINTENANCE RAILING IN ACCORDANCE WITH THE 2021 IMC AND OSHA REQUIREMENTS.
- 3. MECHANICAL FRESH AIR INTAKES SHALL BE LOCATED NO LESS THAN 10 FEET FROM ALL EXHAUST OUTLETS. CONTRACTOR SHALL VERIFY MECHANICAL EQUIPMENT INSTALLATION IS IN ACCORDANCE WITH THIS REQUIREMENT.
- 4. MECHANICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION, CLEARANCE, ACCESS AND MAINTANANCE REQUIREMENTS.

3 M302

ELGIN SPORTS
COMPLEX
EXPANSION
475 SPORTS WAY
ELGIN, ILLINOIS 60123

VOLUME 2 OF 2

ELGIN
THE CITY IN THE SUBURBS"

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**HPZS** 

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Silman Structural Solutions

STRUCTURAL ENGINEER:
TYLIN I SILMAN STRUCTURAL SOLUTIONS

STRUCTURAL ENGINEER:
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200 S WACKER DR, SUITE 1400
CHICAGO, IL 60606
312.682.6300

Allen + Shariff
MEP Engineering | Project Management

MEP ENGINEER:
ALLEN + SHARIFF
625 W ADAMS ST, 19TH FLOOR
CHICAGO, IL 60661
312.620.3668
A+S Project #: 2381015

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ISSUE FOR BID		04/11/2024

SEALS AND SIGNATURES



SHEET TITLE

PROJECT NUMBER

Maintenance Roof Mechanical Plan

2313-01

M204
SHEET NUMBER

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Silman Structural Solutions

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CHICAGO, IL 60606
312.682.6300

Allen+Shariff

MEP Engineering | Project Management

MEP ENGINEER:

ALLEN + SHARIFF

MEP ENGINEER:
ALLEN + SHARIFF
625 W ADAMS ST, 19TH FLOOR
CHICAGO, IL 60661
312.620.3668
A+S Project #: 2381015

ISSUE FOR BID

REV DATE

SEALS AND SIGNATURES



Concessions Building
Mechanical Elevations

PROJECT NUMBER

M301

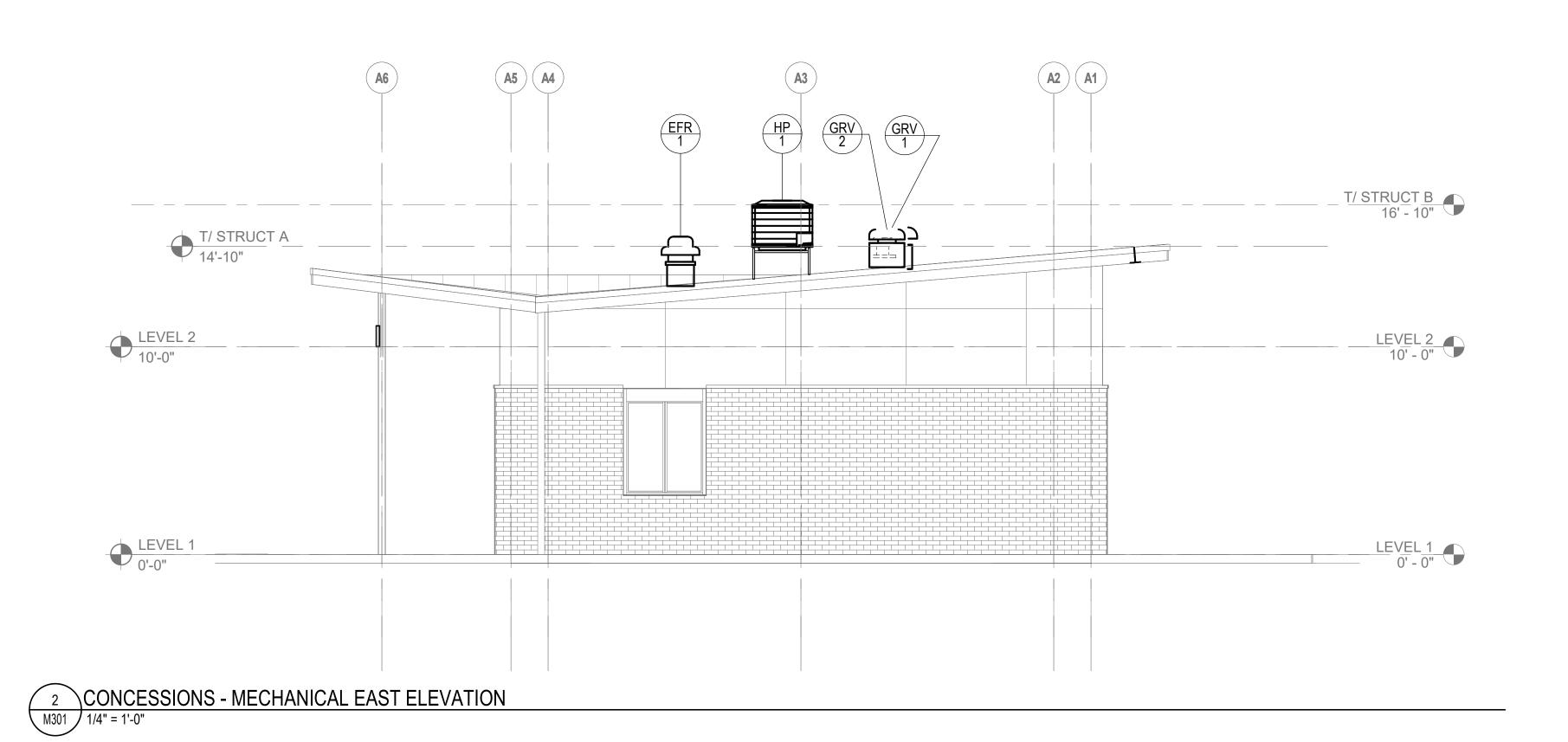
SHEET NUMBER

LEVEL 2
10-07

LEVEL 2
10-07

1 CONCESSIONS - MECHANICAL NORTH ELEVATION

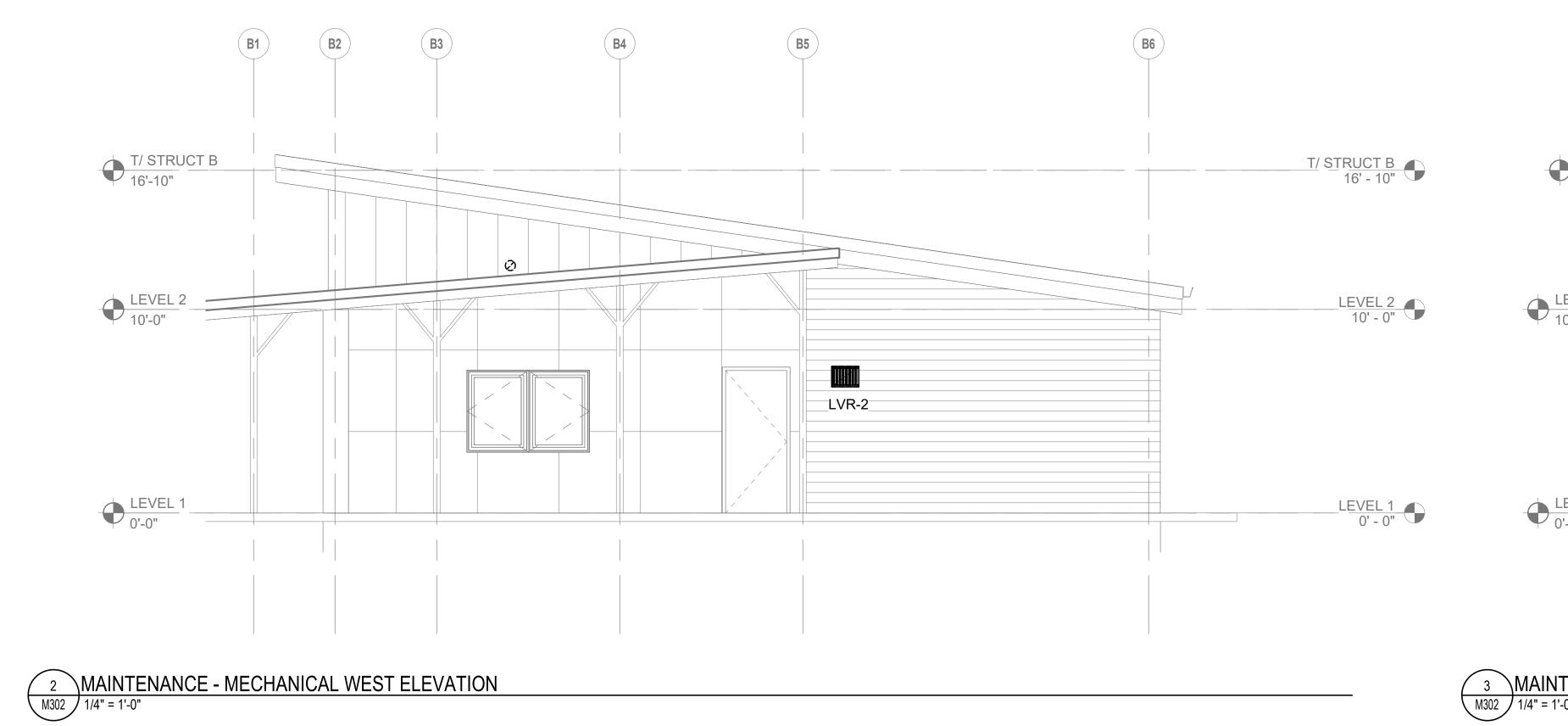
M301 1/4" = 1'-0"

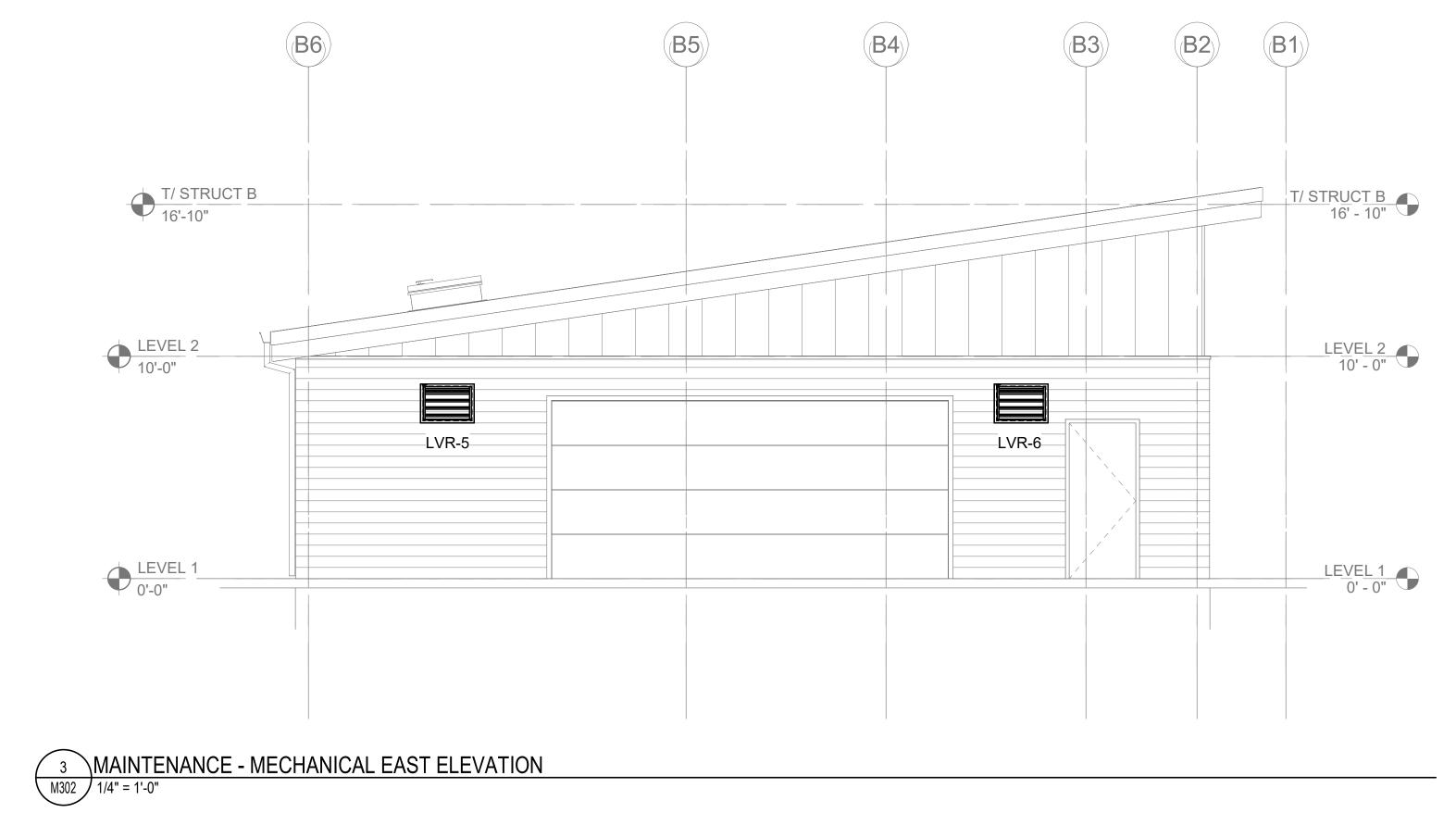


#### MECHANICAL GENERAL NOTES:

- 1. CONTRACTOR SHALL COORDINATE AND VERIFY FINAL LINTEL SIZE REQUIREMENTS FOR STRUCTURAL PENETRATIONS REQUIRING LINTELS. FINAL LINTEL SIZE SHALL BE VERIFIED TO MATCH DIMENSIONS OF CONTRACTOR'S APPROVED DUCT SHOP DRAWINGS.
- 2. MECHANICAL FRESH AIR INTAKES SHALL BE LOCATED NO LESS THAN 10 FEET FROM ALL EXHAUST OUTLETS. CONTRACTOR SHALL VERIFY MECHANICAL EQUIPMENT INSTALLATION IS IN ACCORDANCE WITH THIS REQUIREMENT.
- 3. CONTRACTOR SHALL PROVIDE HORIZONTAL PIPING SUPPORT (DURA-BLOK: BASIS OF DESIGN) WITH RUBBER BASE AND METAL VERTICAL CHANNEL AT A MINIMUM SPACING OF 5 FEET PER LINEAR FEET OF EXTERIOR REFRIGERANT PIPING.
- 4. MECHANICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION, CLEARANCE, ACCESS AND MAINTANANCE REQUIREMENTS.
- 5. COORDINATE FINAL HEIGHT OF LOUVERS WITH ARCHITECTURAL ELEVATIONS.

#### 1 MAINTENANCE - MECHANICAL SOUTH ELEVATION M302 1/4" = 1'-0"





#### MECHANICAL GENERAL NOTES:

- CONTRACTOR SHALL COORDINATE AND VERIFY FINAL LINTEL SIZE REQUIREMENTS FOR STRUCTURAL PENETRATIONS REQUIRING LINTELS. FINAL LINTEL SIZE SHALL BE VERIFIED TO MATCH DIMENSIONS OF CONTRACTOR'S APPROVED DUCT SHOP DRAWINGS.
- 2. MECHANICAL FRESH AIR INTAKES SHALL BE LOCATED NO LESS THAN 10 FEET FROM ALL EXHAUST OUTLETS. CONTRACTOR SHALL VERIFY MECHANICAL EQUIPMENT INSTALLATION IS IN ACCORDANCE WITH THIS REQUIREMENT.
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- 4. MECHANICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION, CLEARANCE, ACCESS AND MAINTANANCE REQUIREMENTS.
- 5. COORDINATE FINAL HEIGHT OF LOUVERS WITH ARCHITECTURAL ELEVATIONS.

EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123 VOLUME 2 OF 2

COMPLEX

**ELGIN SPORTS** 

OWNER: THE CITY IN THE SUBURBS

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CHICAGO, IL 60606
312.682.6300

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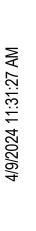
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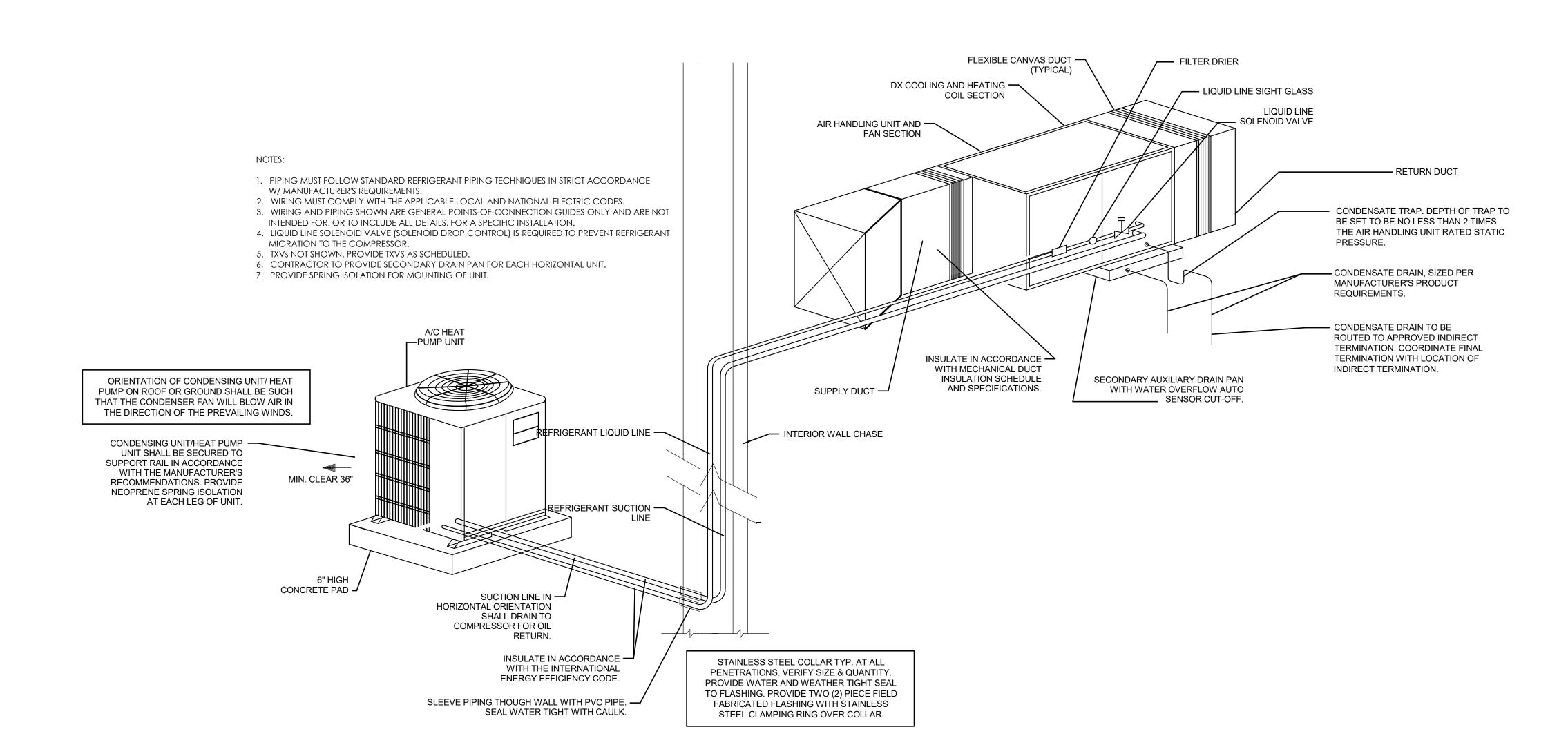
SEALS AND SIGNATURES

Maintenance Building Mechanical Elevations

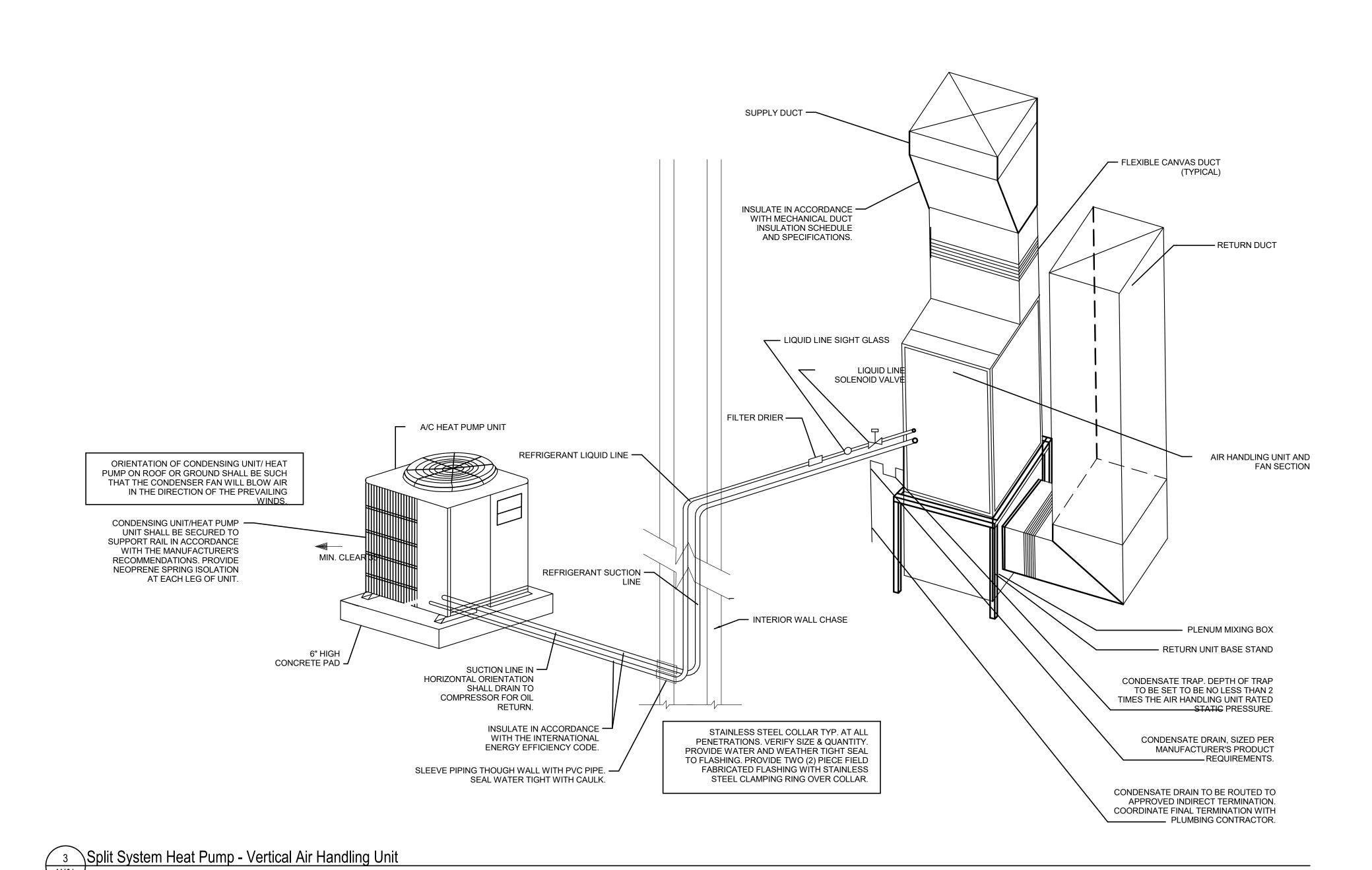
2313-01 PROJECT NUMBER

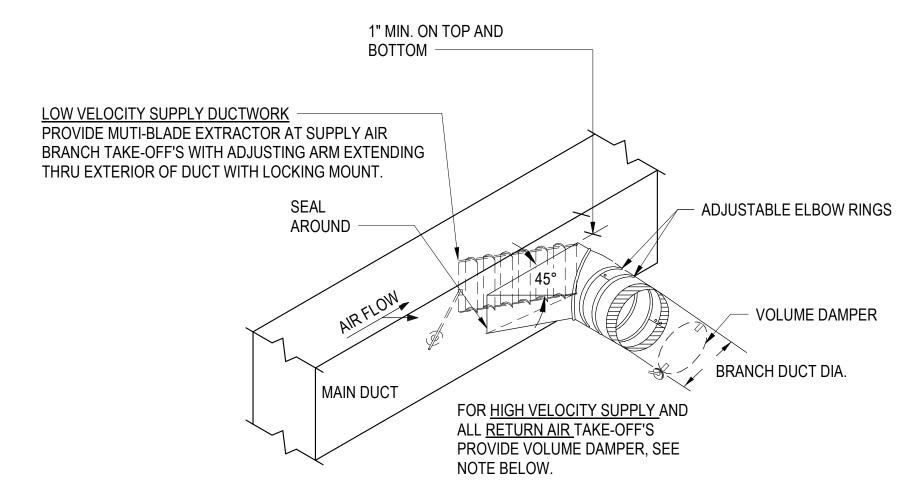
M302 SHEET NUMBER



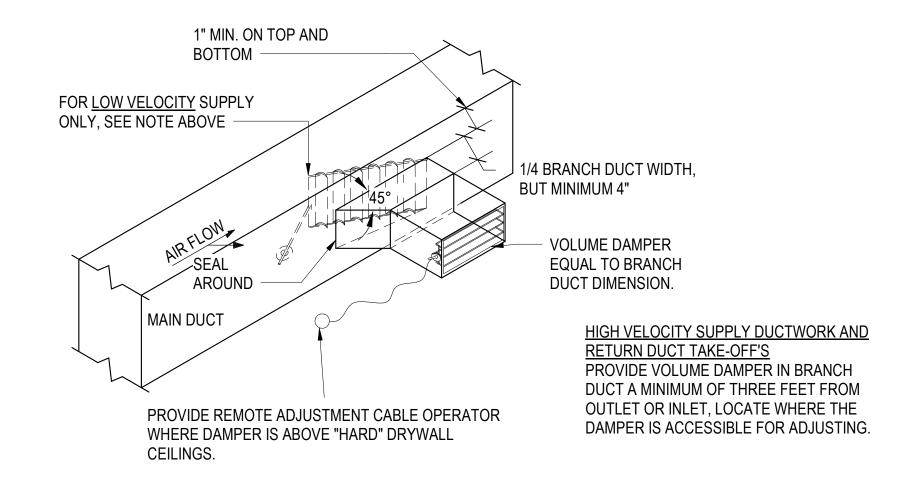


Split System Heat Pump - Horizontal Air Handling Unit



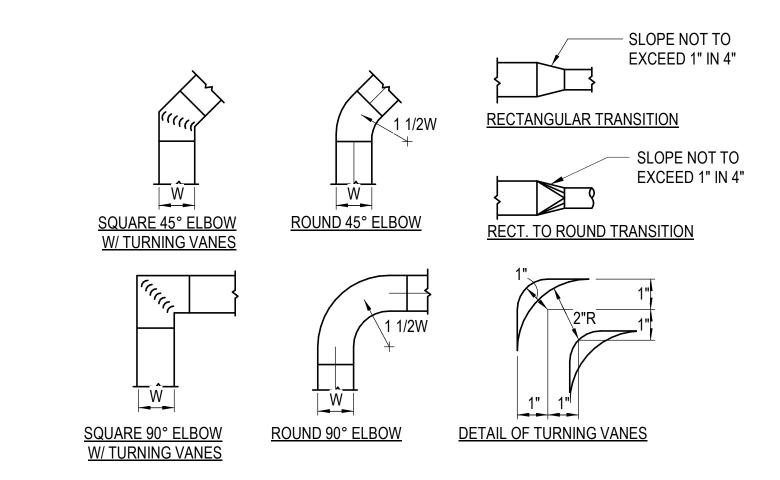


#### **ROUND DUCT TAKE-0FF**



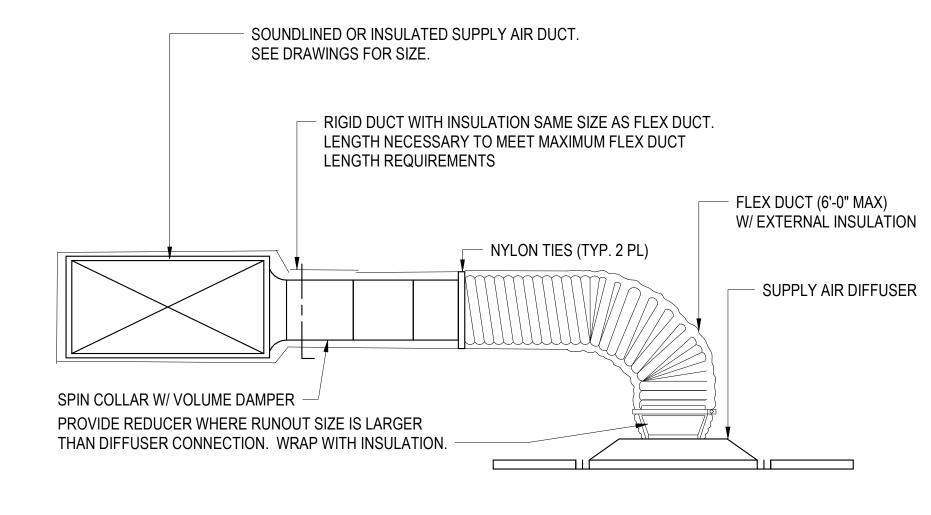
#### **RECTANGULAR DUCT TAKE-0FF**





PROVIDE RADIUS ELBOWS, 18" AND LARGER WITH TURNING BLADES AT 1/3 AND 1/2 THE WIDTH OF THE DUCT FROM THE INSIDE RADIUS. TURNING BLADES SHALL BE PROVIDED WITH HEMMED ENDS (SEE SECTION 15840 OF MECHANICAL SPECIFICATIONS FOR ADDITIONAL DUCT CONSTRUCTION INFORMATION AND RESTRICTIONS.)





5 SUPPLY AIR DIFFUSER CONNECTION DETAIL

ELGIN SPORTS COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2



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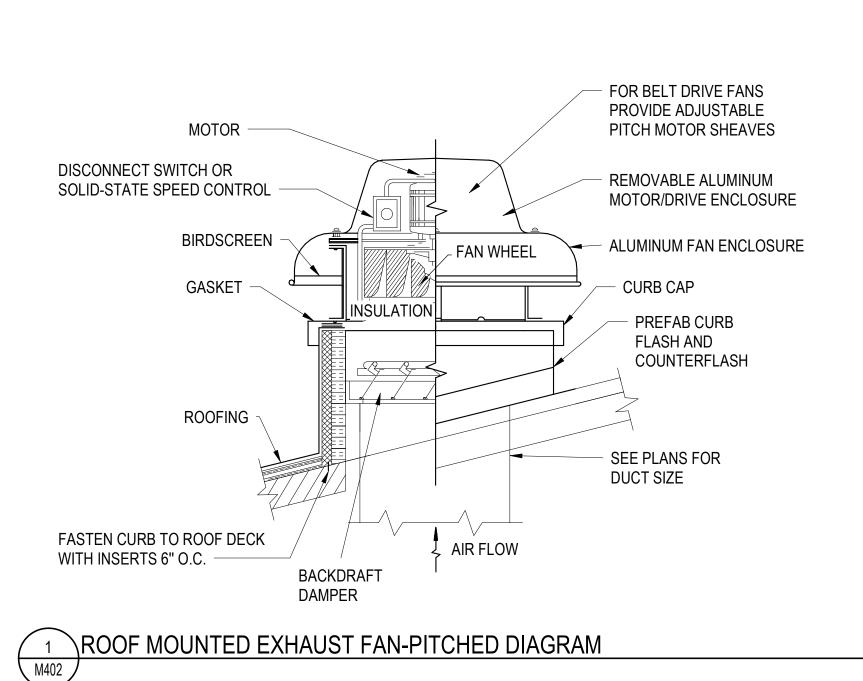
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ISSUE FOR BID		04/11/2024

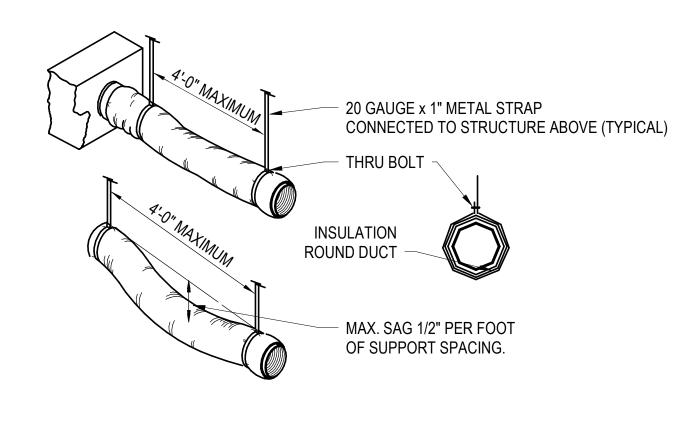
SEALS AND SIGNATURES



SHEET TITLE **Mechanical Details** 

2313-01 PROJECT NUMBER M401

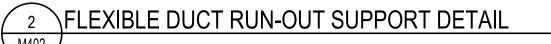


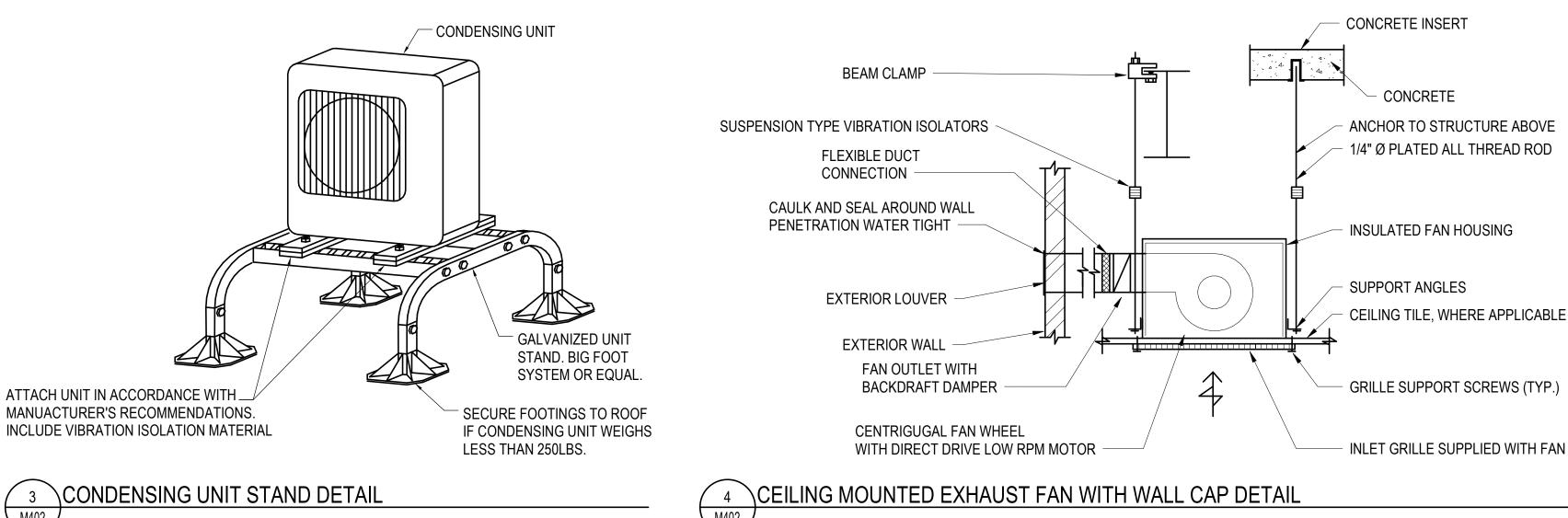


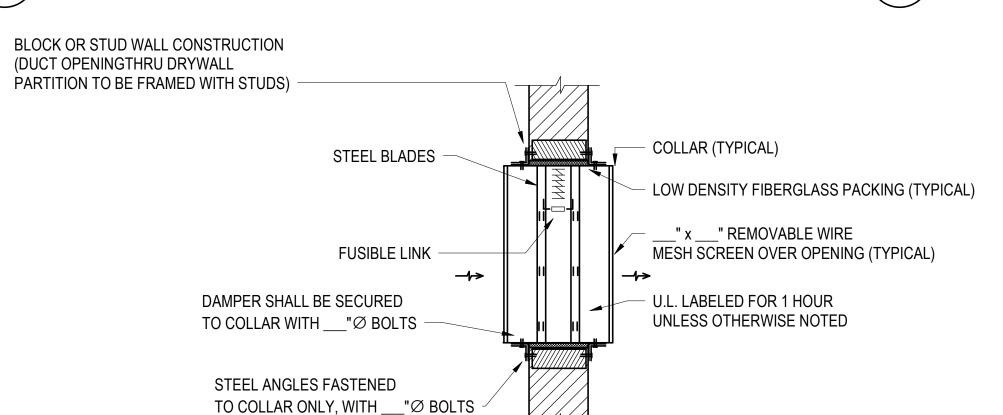
### NOTES:

1. FLEXIBLE DUCT SHOULD EXTEND STRAIGHT FOR SEVERAL INCHES FROM RECTANGULAR DUCT CONNECTION BEFORE BENDING.

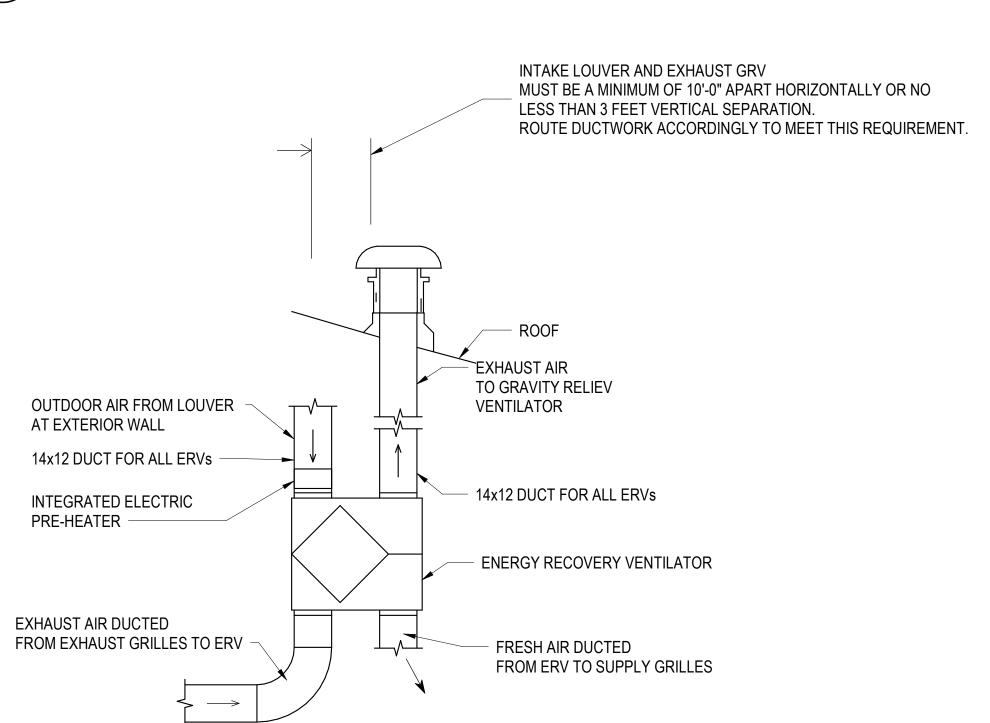
2. FLEXIBLE DUCT SHOULD NOT EXCEED 6'-0" IN LENGTH. USE RIGID ROUND DUCTWORK WHEN RUNOUTS EXCEED 6'-0".

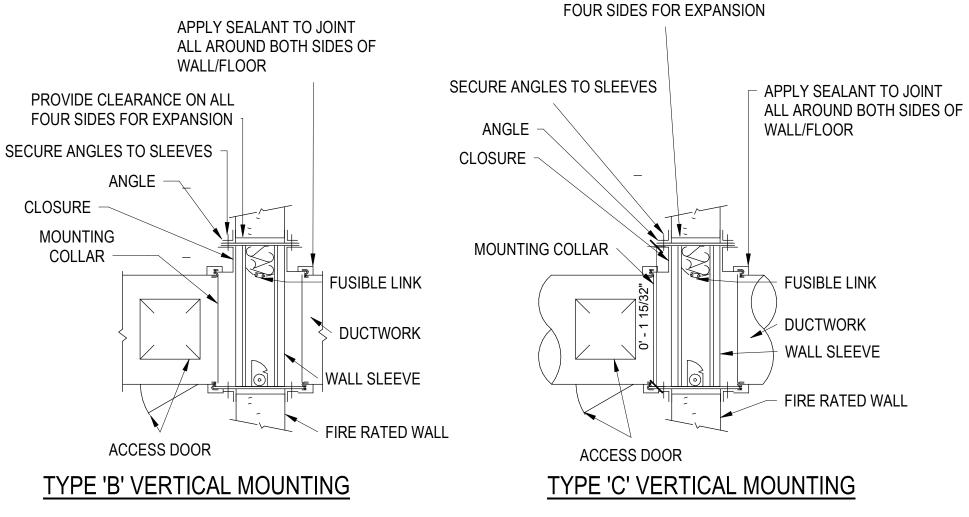












PROVIDE CLEARANCE ON ALL

6 FIRE DAMPER DETAILS

1. ANGLES SHALL BE A MINIMUM OF 1 1/2" x 1 1/2" x 14GA. FASTEN TO COLLAR ONLY, WITH 1/4" DIA. NUTS & BOLTS OR WELDING 8" ON CENTER OR, NO. 10 SHEET METAL SCREWS 8" ON CENTER OR 3/16" STEEL POP RIVETS (SEE NOT 3 FOR CLEARANCE AND OVERLAP 2. COLLARS SHALL BE OF THE SAME OR HEAVIER GAUGE AS THE DUCT TO WHICH IT IS ATTACHED. GAUGES SHALL CONFORM TO SMACNA OR ASHRAE DUCT STANDARDS.

3. WHEN THE FOLLOWING DUCT COLLARS CONNECTIONS ARE USED, THE MINIMUM GAUGE OF THE COLLAR SHALL BE 16 GAUGE ON DAMPERS NOT EXCEEDING 36"W x 24"H AND 14 GAUGE ON LARGER CURTAIN TYPE DAMPERS 4. FIRE DAMPERS SHALL HAVE A CLEARANCE OF 1/8" PER FOOT ON HEIGHT AND WIDTH AND ANGLES SHALL INCREASE IN SIZE,

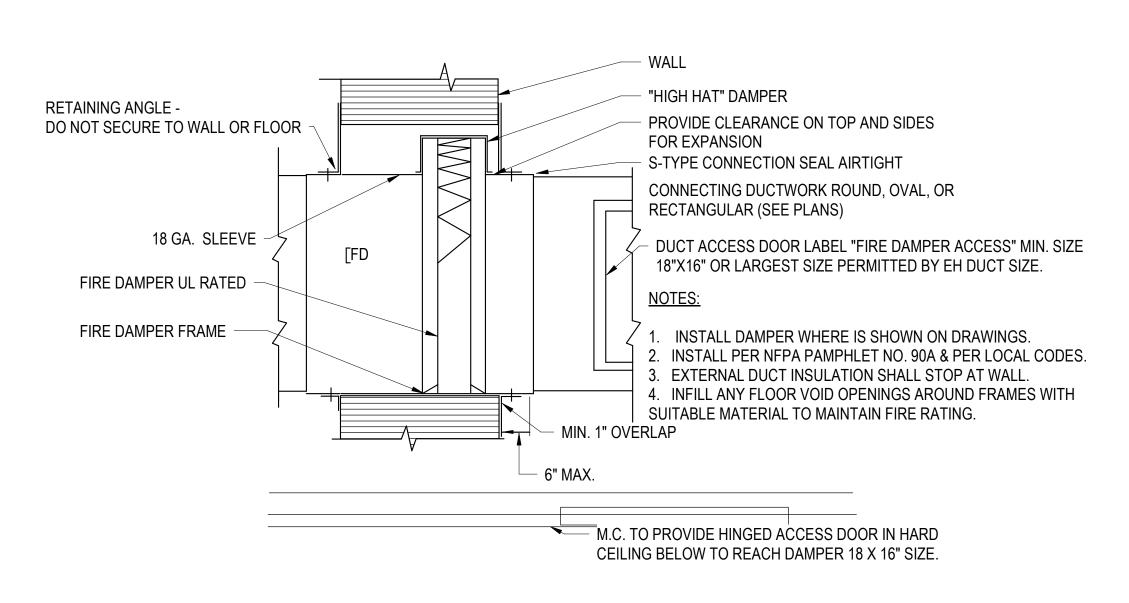
PROPORTIONATELY, SO THAT THERE WILL BE A MINIMUM OF 1" OVERLAP ON THE PARTITION. 5. ON TYPE 'C' INSTALLATIONS, THE WALL COLLAR MUST BE 18 GAUGE OR HEAVIER.

6. MAXIMUM SINGLE DAMPER OF MULTIPLE DAMPER ASSEMBLY SHALL BE 40" x 40" IN VERTICAL MOUNTINGS, 42"H x 36"H IN HORIZONTAL MOUNTINGS. 7. IN MULTIPLE DAMPER ASSEMBLY, UNITS SHALL BE FASTENED TOGETHER.

8. FIRE DAMPER INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS "NFPA 90A", "UL 555", & "FIRE DAMPER & HEAT STOP GUIDE FOR AIR HANDLING SYSTEMS 1992 EDITION". 9. FIRE DAMPER SLEEVES SHALL HAVE BREAK-AWAY CONNECTIONS AT DUCT ATTACHMENTS. 10. ACCESS DOOR FOR A FIRE DAMPER LOCATED IN A RATED WALL DIRECTLY BEHIND A GRILLE OR REGISTER MAY BE ELIMINATED. THE

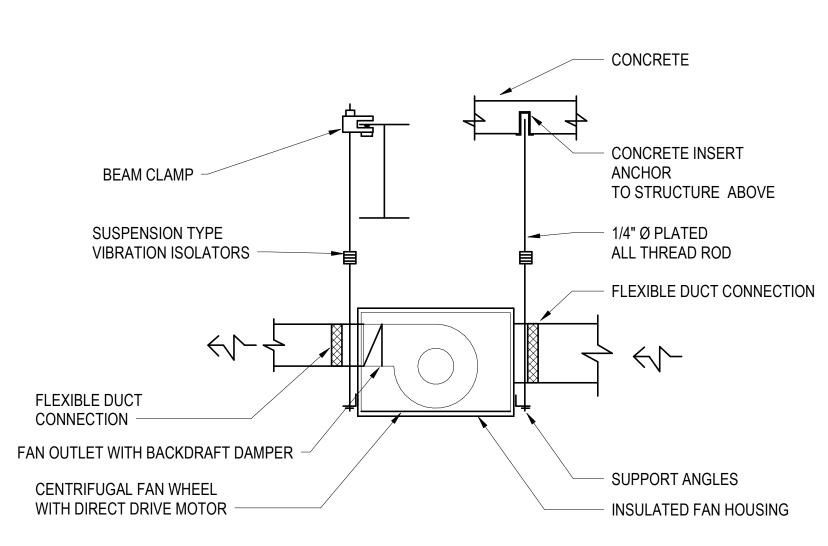
FUSIBLE LINK MAY BE ACCESSED THRU THE REMOVABLE CORE. 11. FIRE DAMPERS LOCATED IN FIRE RATED FLOORS SHALL BE RATED FOR HORIZONTAL MOUNTING AND SHALL BE INSTALLED IN A SIMILAR MANNER TO THOSE INSTALLED IN FIRE RATED WALLS.

12. NOT REQUIRED ON FUME HOOD EXHAUST DUCTWORK. 13. ACCESS DOORS TO BE DOUBLE WALL INSULATED TYPE IF DUCTWORK IS SPECIFIED TO BE INSULATED TYPE

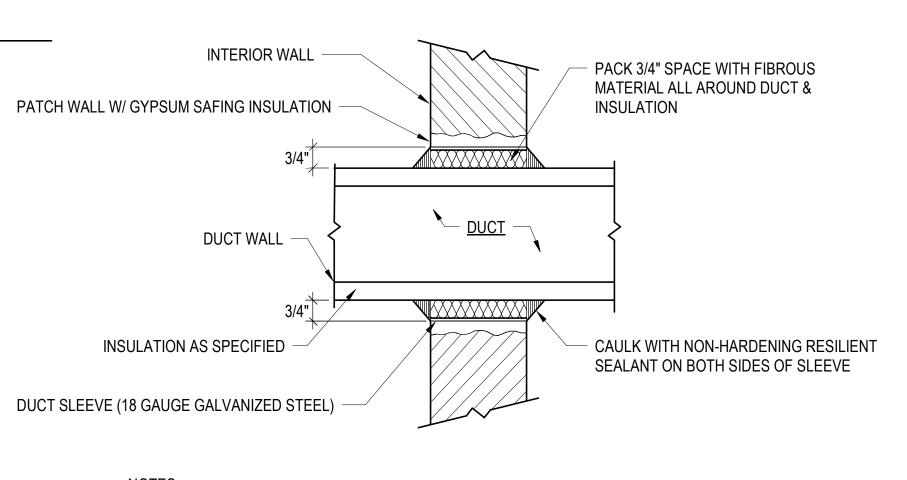


VERTICAL FIRE DAMPERS

**\HEAT RECOVERY VENTILATOR DETAILS** 



1) PROVIDE VARIABLE SPEED SWITCH ON THE SIDE OF THE CASING FOR FINAL AIR BALANCE.

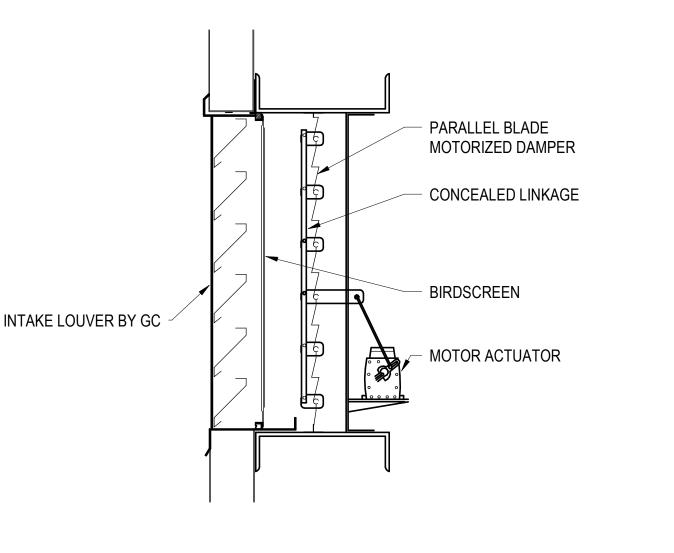


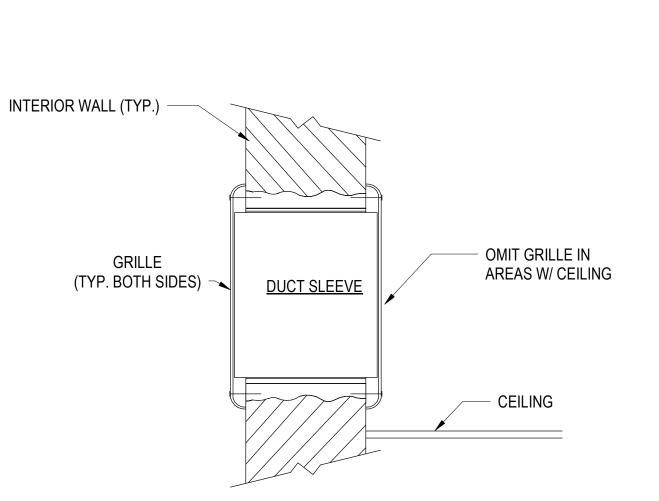
1. FOR INSTALLATION IN 2 HOUR RATED FIRE WALL CONSTRUCTION, SEE FIRE DAMPER DIAGRAM 2. FOR INFORMATION ON DUCT SLEEVES THRU RATED WALLS AND FLOORS SEE SPECIFICATIONS SECTION

3. 3/4" MIN. SPACE IS REQUIRED BETWEEN SLEEVE & DUCT INSULATION IN AREA WHERE DUCT IS SPECIFIED TO BE INSULATED. 4. ONLY 1 HOUR RATED SMOKE PARTITIONS & 2 HOUR RATED FIRE WALLS ARE INDICATED ON HEATING DRAWINGS. FOR ADDITIONAL RATED WALLS SEE ARCHITECTURAL DRAWINGS.

9 INSULATED DUCT AND DUCT SLEEVE THRU NON-RATED WALL DETAIL

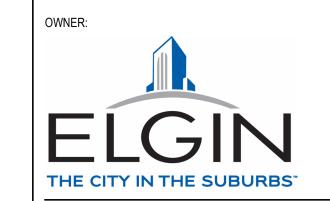
5. CONTRACTOR TO EXTEND FLOOR SLEEVES IN EQUIPMENT ROOMS & OVER HABITABLE SPACES 2 INCHES ABOVE FINISHED FLOOR.





ELGIN SPORTS COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2



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625 W ADAMS ST, 19TH FLOOR CHICAGO, IL 60661 312.620.3668 A+S Project #: 2381015

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SUE FOR BID		04/11/2024

SEALS AND SIGNATURES



SHEET TITLE **Mechanical Details** 

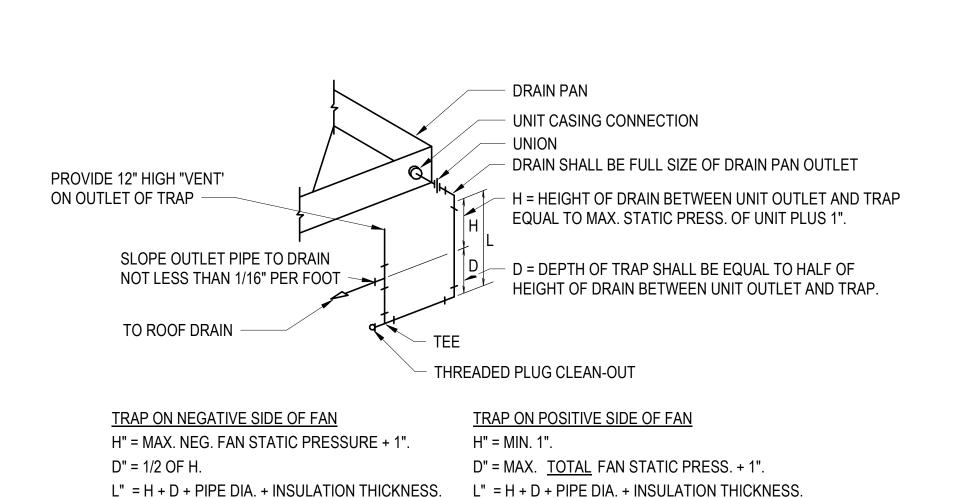
2313-01

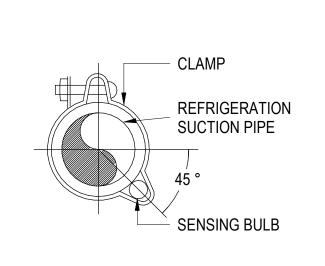
PROJECT NUMBER M402

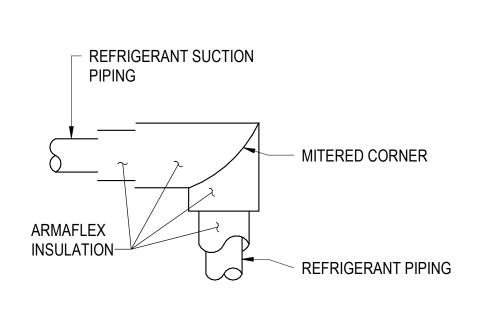
10 LOUVER DAMPER DETAIL

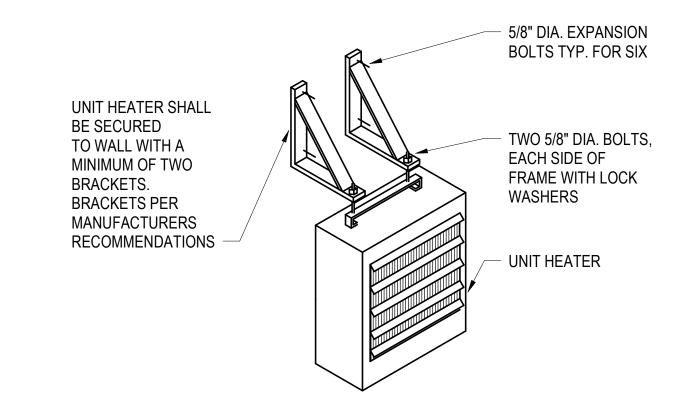








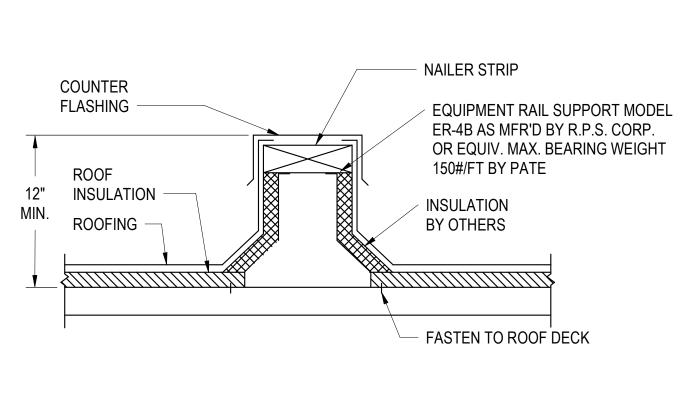


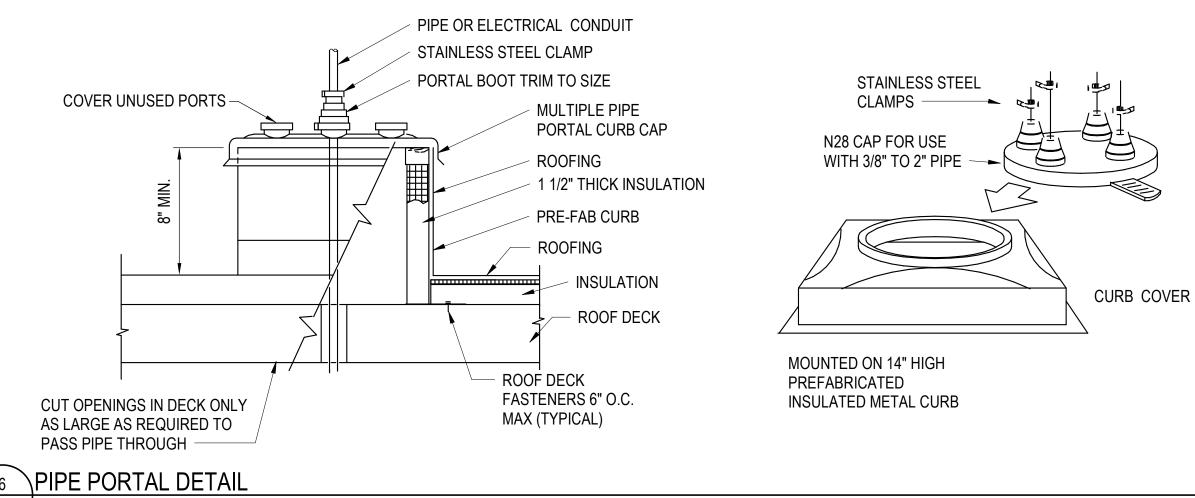


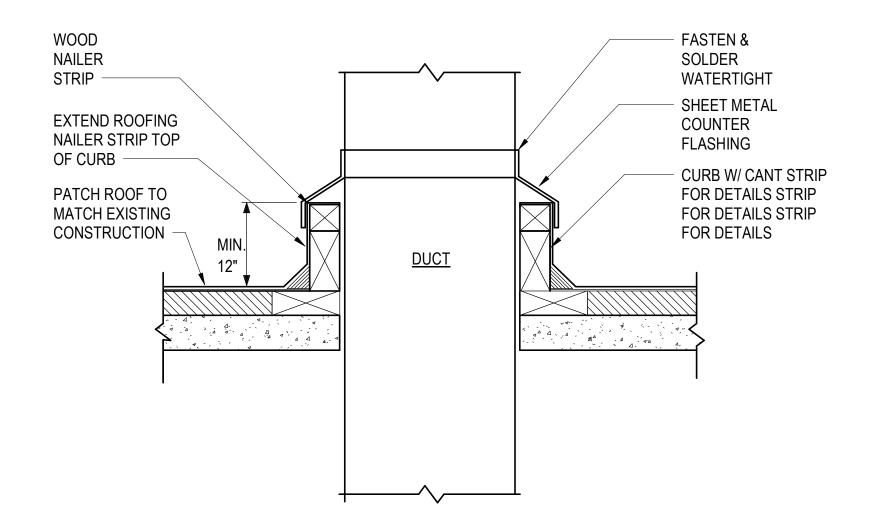






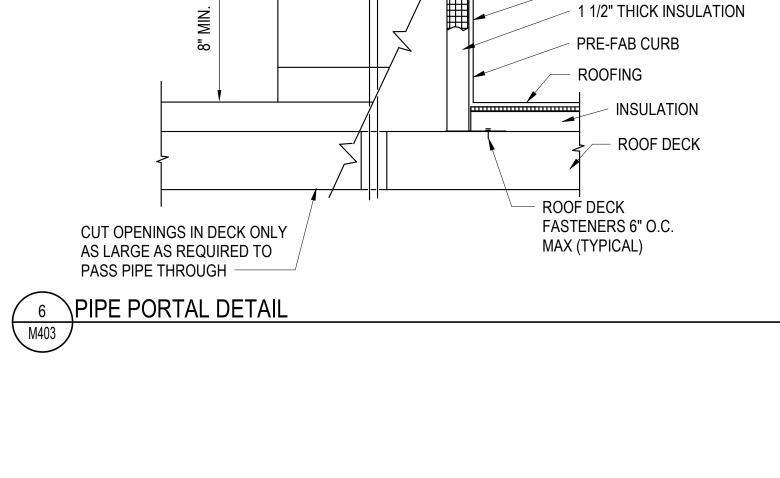








CONDENSATE DRAIN TRAP DETAIL





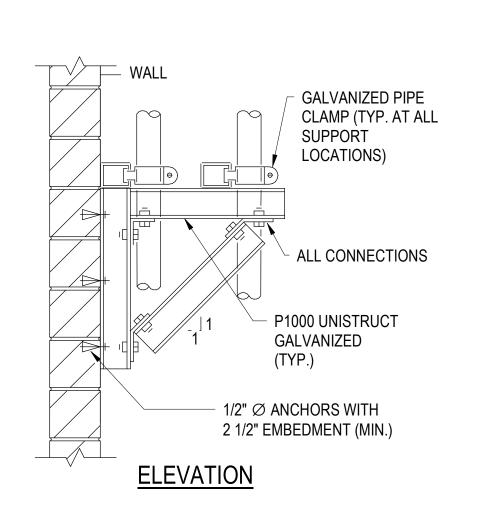
AIR TRANSFER DUCT. (REFER TO -DRAWINGS FOR SIZES)

AIR TRANSFER GRILLE -

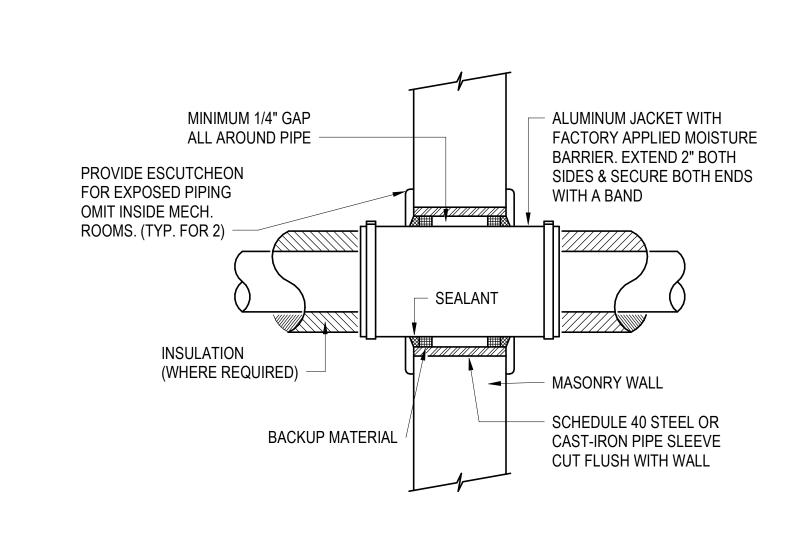
WITH FIXED LOUVERS (TYP.)

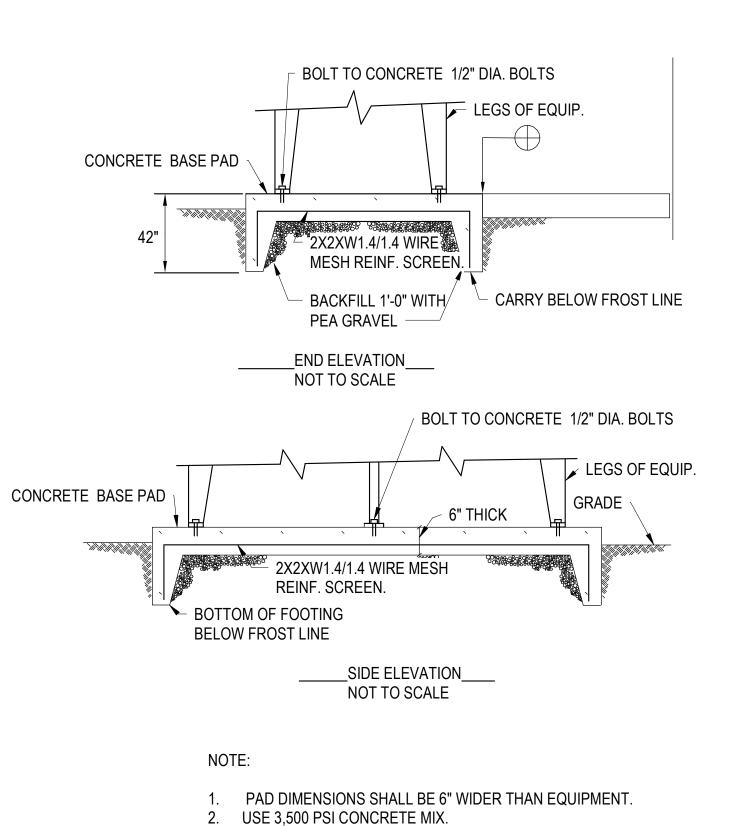
1" SOUND LINING (ALL SIDES OF -

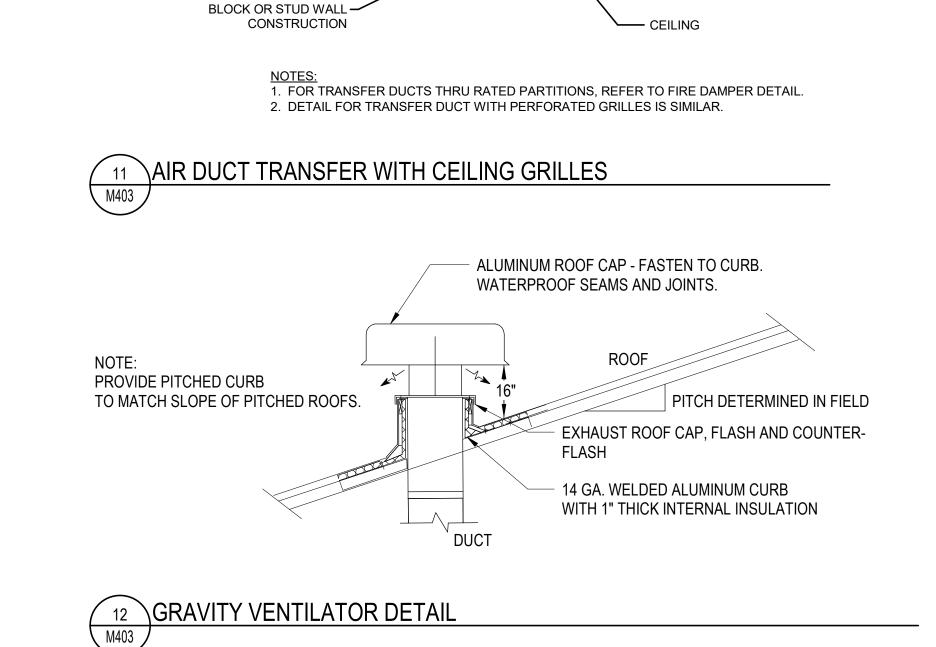
SHEET METAL SCREWS (TYP.) -



VERTICAL PIPE SUPPORT DETAIL

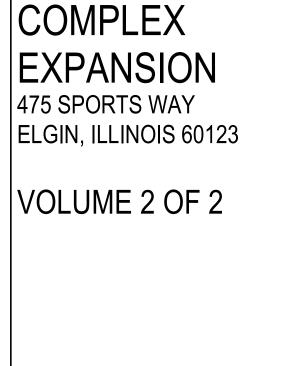






9 WALL PIPE PENETRATION DETAIL





**ELGIN SPORTS** 



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SEALS AND SIGNATURES

20 GAUGE x 1" METAL STRAP CONNECTED TO STRUCTURE

ABOVE (TYP.)

SHEET METAL EXTENSION

CEILING GRID



**Mechanical Details** 

2313-01 PROJECT NUMBER

M403 SHEET NUMBER

ROOF 3/8" X 7/8" MECHANICAL ROOM **GROUND FLOOR** MECHANICAL PIPING RISER DIAGRAM - MAINTENANCE BUILDING **ELGIN SPORTS** COMPLEX **EXPANSION** 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2



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MEP ENGINEER:
ALLEN + SHARIFF
625 W ADAMS ST, 19TH FLOOR
CHICAGO, IL 60661
312.620.3668
A+S Project #: 2381015

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SEALS AND SIGNATURES



Mechanical Riser Diagram

2313-01 PROJECT NUMBER M501

PLEATED

0.125"

1. PROVIDE DOUBLE WALL INSULATED CONSTRUCTION.

2. PROVIDE NON FUSED DISCONNECT. 3. PREMIUM CONTROLS WITH CONSTANT AIR VOLUME OPERATION.

4. PROVIDE MOTORIZED CONTROL DAMPERS ON OA AND EA AIRSTREAMS. 5. PROVIDE BYPASS OPTION WITH MOTORIZED CONTROL DAMPER FOR BYPASS SECTION.

**EXHAUST** 

1120

1120

6. PROVIDE FILTER SENSOR ALARMS ON BOTH OA AND EA AIRSTREAMS.

7. ECM FAN MOTOR WITH ALUMINUM IMPELLOR. 8. PROVIDE REMOTE SPEED POTENTIOMETER.

9 PROVIDE VIBRATION ISOLATION KIT.

10. PROVIDE REMOTE CONTROLLER WITH LCD DISPLAY SCREEN CONTROL PANEL.

11. PROVIDE ELECTRIC RESISTANCE PRE-HEATER FOR FROST PREVENTION.

12. HEAT RECOVERY VENTILATOR SHALL BE PASSIVE HOUSE HVI RATED. 13. PROVIDE SINGLE POINT ELECTRICAL CONNECTION.

AIR HAI	NDLING UNIT SC	HEDUL	E																								
UNIT DES.	SERVES	SI	UPPLY FA	N DATA			DX	HEATING CAF	PACITY				DX COC	DLING COIL	_		ELECTR	RIC RESISTA	ANCE HEATI	NG COIL	ELEC	CTRICAL	DATA	MODEL	WEIGHT	BASIS OF DESIGN	REMARKS
DES.		CFM	MIN OA CFM	E.S.P. IN. WG	HP	MBH @ 47 DEG F	MBH @ 17 DEG F	MBH @ 0 DEG F	EDB @ 0 DEG F.	LAT @ 0 DEG F.	EA DB	EA WB	LA DB	LA WB	SENS. MBH	TOTAL MBH	EAT	LAT	TOTAL MBH	TOTAL KW	VOLTS/PH	MCA	MOCP			DESIGN	
AHU-1	CONCESSIONS	1415	290	0.5	1.0	50.0	22.5	14.5	54.4°F	63.8°F	77.4°F	64.5°F	55.0°F	54.0°F	38.4	48.0	63.8	81.7	27.3	8.0	240/1PH	51.0	60.0	CBA38MV-048	189 LBS.	LENNOX	1 THRU 17,19
AHU-2	OFFICE AND STORAGE	725	125	0.5	1/2	26.0	11.6	8.0	56.9°F	66.9°F	76.9°F	64.1°F	55.0°F	54.0°F	19.2	24.0	66.9	81.7	27.3	8.0	240/1PH	47.0	50.0	CBA38MV-024	141 LBS.	LENNOX	1 THRU 18

E.A.

N/A

70.0

1. PROVIDE APPROPRIATE CLEARANCE FOR SERVICE AND MAINTENANCE PER THE MANUFACTURER'S INSTALLATION REQUIREMENTS.

2. PROVIDE PRIMARY CONDENSATE DRAIN, SECONDARY MICROBIAL DUAL POSITION DRAIN PAN WITH UL RATED OVERFLOW SENSOR CUTOFF.

4. PROVIDE AUXILIARY ELECTRIC RESISTANCE HEATER. 5. PROVIDE SINGLE POINT ELECTRICAL CONNECTION.

6. PROVIDE FULLY INSULATED CABINET. 7. R-410 REFRIGERANT.

8. PROVIDE OUTDOOR TEMPERATURE AND HUMIDITY SENSOR.

9. PROVIDE DISCHARGE AIR TEMPERATURE SENSOR. 10. PROVIDE DEHUMIDIFICATION CONTROL VIA HUMIDITROL DEHUMIDIFICATION SYSTEM.

11. PROVIDE MERV 8 FILTERS. 12. PROVIDE DISCONNECT.

13. PROVIDE AIR FLOW SWITCH.

14. PROVIDE VIBRATION ISOLATION. 15. HORIZONTAL AIR HANDLING UNIT.

16. PROVIDE 7 DAY REMOTE WALL MOUNTED PROGRAMMABLE SMART WIFI ENABLED THERMOSTAT. 17. UNIT SHALL FEATURE VARIABLE SPEED DIRECT DRIVE ECM BLOWER MOTOR.

18. PROVIDE SIDE RETURN UNIT STAND. 19. PROVIDE HORIZONTAL SUPPORT FRAME KIT.

AIR COC	DLED HEAT PUI	MP SCHED	ULE																
UNIT		TAGES	NOM	IINAL CAPA	CITY	COOLING EFF.	HEATING EFF.	EAT D	EG F.	ELE	CTRICAL	-	REFRIGER	ANT LINESET			_		
DES.	SERVES	NO. OF S	COOL MBTUH	HEAT MBTUH @ 17 Deg.	HEAT MBTUH @ 47 Deg.	SEER2	HSPF2	COOL -ING	HEAT -ING	VOLTS/PH.	MCA	MOCP	SUCTION	LIQUID	SOUND PRESS. DBA	WEIGHT	MANUF.	MODEL	REMARKS
HP-1	AHU-1	VARIABLE	48	22.5	50.0	21.8	9.8	91	-6.0	240/1	32.8	35	7/8"	3/8"	74	313 LBS.	LENNOX	SL25XPV-048	1 THRU 20
HP-2	AHU-2	VARIABLE	24	11.6	26.0	23.2	9.7	91	-6.0	240/1	20.3	25	7/8"	3/8"	68	268 LBS.	LENNOX	SL25XPV-024	1 THRU 20

NOTES:

1. VARIABLE FAN AND VARIABLE SPEED SCROLL COMPRESSOR.

2. PROVIDE DISCONNECT. 3. MOUNT UNIT ON EQUIPMENT 14" CONDENSING UNIT STAND WITH VIBRATION ISOLATION PADS.

4. PROVIDE LIQUID LINE SOLENOID VALVE KIT.

5. PROVIDE FREEZE PROTECTION KIT (EVAPORATOR FREEZE THERMOSTAT) 6. PROVIDE WINTER START CONTROL.

7. PROVIDE LOW AMBIENT KIT. 8. PROVIDE FILTER DRIER.

9. PROVIDE HIGH AND LOW PRESSURE SWITCHES.

10. PROVIDE THERMOSTATIC EXPANSION VALVE. 11. PROVIDE BRASS SUCTION AND LIQUID SERVICE VALVES WITH SWEAT CONNECTIONS AND SERVICE PORTS.

12. PROVIDE CRANKCASE HEATER.

13. PROVIDE COMPRESSOR SOUND JACKET. 14. PROVIDE PROVIDE FUSED DISCONNECT.

15. PROVIDE SIGHT GLASS.

16. PROVIDE LONG LINE APPLICATION KIT ON RUNS GREATER THAN 80 EQUIVALENT FEET OR 40 VERTICAL FEET.

17. PROVIDE HARD START KIT (COMPRESSOR START ASSIST CAPACITOR AND RELAY).

18. PROVIDE 7-DAY PROGRAMMABLE SMART WIFI THERMOSTAT.

19. PROVIDE COMPRESSOR SOUND HOOD, FORWARD SWEPT CONDENSER FAN BLADE, QUIET MOUNT SPLIT POST COMPRESSOR GROMMETS. 20. PROVIDE OUTDOOR AIR TEMPERATURE SENSOR.

EXHAUST	FAN SCHEDULE													
				ESP	FAN	MAX	WEIGHT	INILET		MOTOR		BASIS OF	DESIGN	
TAG	SERVES	TYPE	CFM	(IN W.C.)	RPM	SONES (OUTLET)	(LB)	INLET (dBA)	HP	FLA	VOLTS/ PH	MFG.	MODEL	REMARKS
EF-1	103 FAMILY RESTROOM	CEILING CABINET	70	0.25"	838	0.9	11	31	-	0.29	115/1	GREENHECK	SP-A50-90-VG	1,2,3,4,6,8,9
EF-3	M103 RESTROOM	CEILING CABINET	70	0.25"	838	0.9	11	31	-	0.29	115/1	GREENHECK	SP-A50-90-VG	1,2,3,4,6,8,9
EF-4	M104 STORAGE ROOM	CEILING CABINET	125	0.3"	982	2.5	24	40	-	1.5	115/1	GREENHECK	SP-A390-VG	1,2,3,4,5,8,9
EF-5	M106 EQUIPMENT STORAGE AREA	CEILING INLINE	290	0.3"	1180	1.5	24	33	-	1.5	115/1	GREENHECK	CSP-A390-VG	1,2,3,4,7,8,10

1. PROVIDE INTEGRAL BACKDRAFT DAMPER. 2. PROVIDE INSULATED CABINET.

3. PROVIDE DISCONNECT.

4. PROVIDE VIBRATION SPRING ISOLATOR HANGING KIT. 5. EXHAUST FAN SHALL OPERATE CONTINUOUSLY VIA TIMECLOCK WITH LOCAL OCCUPANT OVERRIDE SWITCH .

6. EXHAUST FAN SHALL OPERATE VIA A WALL MOUNTED LINE VOLTAGE SWITCH. 7. EXHAUST FAN SHALL BE CONFIGURED FOR INLINE FAN OPERATION.

8. PROVIDE VARIABLE SPEED MOTOR FOR FAN BALANCING.

9. EXHAUST FAN SHALL FEATURE CEILING CABINET EXHAUST GRILL. 10. EXHAUST FAN SHALL OPERATE CONTINUOUSLY DURING THE OCCUPIED HOURS OF BUILDING OPERATION.

		AIR FLO	WC		ELECTRICAL		PHYSICAL	-		
TAG	SERVES	CFM	H.P.	VOLTS/PHASE	AMP 1 / AMP 2	MOCP 1 / MOCP 2	LENGTH	WEIGHT	MANUFACTURER	MODEL
AC-1	CONCESSIONS	1449	1 @ 1/5	120/1	3.4	15.0	5'-0"	35	BERNER	PE-06C-1060A
AC-2	CONCESSIONS	1449	1 @ 1/5	120/1	3.4	15.0	5'-0"	35	BERNER	PE-06C-1060A
AC-3	CONCESSIONS	1449	1 @ 1/5	120/1	3.4	15.0	5'-0"	35	BERNER	PE-06C-1060A

1. PROVIDE DISCONNECT SWITCH.

2. ARCHITECT TO CONFIRM FINISH AND COLOR.

3. PROVIDE REMOTE VARIABLE SPEED SWITCH. 4. PROVIDE REMOTE 24V CONTROL WINDOW/DOOR MAGNETIC REED SWITCH AND 24V CONTROL TRANSFORMER.

**ELGIN SPORTS** COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

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A+S Project #: 2381015

ISSUED FOR

SUED FOR	REV	DATE
SSUE FOR BID		04/11/2024

SEALS AND SIGNATURES



Mechanical Schedules

2313-01 PROJECT NUMBER M601

ROUFTOP	DOWNBLAST EXHAUST FAN SCHED	ULE												
				SP IN	FAN	MAX	ROOF	WT.	INLET	МОТО	DR	BASIS OF	DESIGN	
TAG	SERVES	TYPE	CFM	W.C.	RPM	SONES (INLET)	OPNG SIZE	LB.S	(dBA)	HP (WATT)	VOLTS/ PH	MFG.	MODEL	REMARKS
EFR-1	100 CONCESSIONS	DOWNBLAST CENTRIFUGAL	280	0.35	1205	5.1	10"X10"	29	48	1/10	120/1	GREENHECK	G-090-VG	1 THRU 7

**REMARKS**: 1. PROVIDE DISCONNECT SWITCH

2. DIRECT DRIVEN "VARI-GREEN" ECM MOTOR DOWNBLAST EXHAUST FAN. 3. PROVIDE MOTOR VIBRATION ISOLATION.

4. PROVIDE MOTORIZED BACKDRAFT CONTROL DAMPER (120V/1PH/60HZ). COORDINATE ELECTRICAL REQUIREMENTS OF CONTROL DAMPER.

5. PROVIDE BIRDSCREEN AT FAN OPENING. 6. PROVIDE 18" HIGH INSULATED SLANTED AND CANTED ROOF CURB.

7. EXHAUST FAN SHALL BE OPERATED MANUAL VIA LINE VOLTAGE WALL SWITCH LOCATED AT ENTRY TO CONCESSIONS SPACE FROM BUILDING EXTERIOR.

GRAVITY RELIEF VENTILATOR SCHEDULE

01010111111221	E. VEIVIIE (TOTOGNEE										
TAG	LOCATION	INTAKE/ EXHAUST	CFM	PRESSURE DROP IN. W.C	THROAT SIZE	HOOD SIZE	AIR OPG. HEIGHT ABOVE ROOF	WEIGHT (LBS.)	MANUFACTURER	MODEL	REMARKS
GRV-1	CONCESSIONS BUILDING ROOF	EXHAUST	1120	0.114	15" ROUND	29" ROUND	18"	13.0	GREENHECK	GRSR-15	1,2
GRV-2	CONCESSIONS BUILDING ROOF	INTAKE	280	0.036	10" ROUND	20.5" ROUND	18"	8.0	GREENHECK	GRSI-10	1,2

1. PROVIDE BIRDSCREEN AND 18" INSULATED SLANTED AND CANTED ROOF CURB.

2. PROVIDE MOTORIZED CONTROL DAMPER (120V/1PH/60HZ). MC SHALL COORDINATE ELECTRICAL REQUIREMENTS WITH EC.

GARAGE EXHAUST FAN SCHEDULE

L																
					MAX	ESP	FAN RPM AT	MAX	MAX DBA	WEIGHT		MOTOR		BASIS OF	DESIGN	
	TAG	SERVES	TYPE	MIN CFM	CFM	(IN W.C.)	MAX CFM	SONES (INLET)	(INLET)	(LB)	ВНР	HP	VOLTS/ PH	MFG.	MODEL	REMARKS
	EF-2	EQUIPMENT STORAGE AREA	INLINE CENTRIFUGAL	760	1260	0.5"	1403	9.0	59.0	55.0	0.24	1/2 HP	115/1	GREENHECK	SQ-120-VG	1 THRU 12

1. INTEGRATED SOFT-START IN EC MOTOR. EXTERNAL STARTER NOT TO BE PROVIDED.

2. FAN MUST HAVE DEDICATED INPUTS FOR (2) EXTERNAL SENSORS. SENSORS DO NOT REQUIRE EXTERNAL POWER. 3. FAN SPEED SHALL RUN PROPORTIONAL TO SENSOR OR BAS DEMAND. REFER TO GARAGE EXHAUST FAN CONTROL SEQUENCE. FAN SHALL FEATURE ADDITIONAL CONTROL FOR OVERRIDE OF FAN SYSTEM VIA REMOTE SPACE TEMPERATURE

4. SOUND MEASUREMENTS IN ACCORDANCE WITH ISO 13347. PARKING GARAGE INSTALLED SOUND LEVELS MUST BE PROVIDED. 5. FANS SHALL BE VARIABLE SPEED CONTROLLABLE AND PROVIDE SENSOR VALUES, FAN STATUS, AND FAULT CODES.

6. PROVIDE BACKDRAFT DAMPER. 7. PROVIDE SPRING VIBRATION ISOLATION HANGER KIT.

8. PROVIDE LOCAL NEMA3R OUTDOOR RATED DISCONNECT.

9. PROVIDE MOTOR VIBRATION SPRING ISOLATORS.

10. PROVIDE 24V CONTROL TRANSFORMER. 11. PROVIDE VARIABLE SPEED VARI-GREEN ECM MOTOR WITH TWO SPEED CONTROL.

12. PROVIDE ALUMINUM HOUSING.

ELECTRIC WAI	LL HEATER SCH	EDULE					
TAG	TYPE	KW	ELEC. VOLT/PH	AMPS	BASIS OF DESIGN	MODEL	REMARKS
EWH-1	WALL	1.8	240/1	7.5	BERKO	SSHO4004	1,3,4,5,6
EWH-2	WALL	1.8	240/1	7.5	BERKO	SSHO4004	2,3,4,5,6
EWH-3	WALL	1.8	240/1	7.5	BERKO	SSHO4004	2.3.4.5.6

REMARKS:

1. FULLY RECESSED ARCHITECTURAL HEAVY DUTY STYLE ELECTRIC WALL HEATER. 2. SURFACE MOUNTED ARCHITECTURAL HEAVY DUTY STYLE ELECTRIC WALL HEATER.

3. INTEGRAL DISCONNECT.

4. TAMPER PROOF COVER. 5. INTEGRAL SMARTSERIES 5/2 PROGRAMMABLE THERMOSTAT AND PROPORTIONAL HEATING CAPABILITY.

6. PROVIDE FAN TIME DELAY SWITCH.

ELECTRIC RES	SISTANCE UNIT HE	ATER SCH	EDULE						
TAG	TYPE	KW	втин	ELEC. VOLT/PH	AMPS	WEIGHT	BASIS OF DESIGN	MODEL	REMARKS
EUH-1	CEILING/WALL	3.0	10239	240/1	12.5	27 LBS.	BERKO	MUH0321-PRO-SSP	1 THRU 8
EUH-2	CEILING/WALL	3.0	10239	240/1	12.5	27 LBS.	BERKO	MUH0321-PRO-SSP	1 THRU 8
EUH-3	CEILING/WALL	5.0	17065	240/1	21.0	27 LBS.	BERKO	MUH0521-PRO-SSP	1 THRU 8
EUH-4	CEILING/WALL	5.0	17065	240/1	21.0	27 LBS.	BERKO	MUH0521-PRO-SSP	1 THRU 8
EUH-5	CEILING/WALL	7.5	25,597	240/1	31.3	38 LBS.	BERKO	MUH072-PRO-SSP	1 THRU 8
EUH-6	CEILING/WALL	7.5	25,597	240/1	31.3	38 LBS.	BERKO	MUH072-PRO-SSP	1 THRU 8

1. PROVIDE VIBRATION ISOLATION HANGERS. 2. WALL MOUNTING BRACKET WITH UNIT HEATER HORIZONTAL ROTATIONAL CAPABILITY.

3. PROVIDE DISCONNECT. 4. PROVIDE SUMMER FAN SWITCH.

5. RADIAL DIFFUSER. 6. PROVIDE REMOTE WALL MOUNTED SMARTSERIES PRO THERMOSTAT.

7. PROVIDE 24V CONTROL TRANSFORMER AND CONTACTOR.

8. FOR INSTALLATIONS OF UNIT HEATERS BELOW 7'-0", PROVIDE PROTECTIVE WIRE GUARD IN FRONT OF FAN.

HVAC LOUVER	RS													
TAG	MAKE/MODEL	AIR FLOW CFM	INTAKE OR EXH.		SIZE		FREE AREA VEL. FPM	WATER PENETRATION VELOCITY	IN	MATERIAL	FRAME TYPE	BLADE TYPE	FINISH/COLOR	NOTES
				W	Н	D	VLL. I FIVI	(FPM)	W.C.					
LVR-1	GREENHECK EHH-501	1170	INTAKE	36"	18"	5"	823	1250	0.16	ALUMINUM	CHANNEL, DRAINABLE HEAD	WIND DRIVEN RAIN	BY ARCHITECT	1,2,3,4
LVR-2	GREENHECK EHH-501	125	INTAKE	16"	12"	5"	415	1250	0.16	ALUMINUM	CHANNEL, DRAINABLE HEAD	WIND DRIVEN RAIN	BY ARCHITECT	1,2,3,4
LVR 3	GREENHECK EHH-501	1550	EXHAUST	48"	20"	5"	716	1250	0.16	ALUMINUM	CHANNEL, DRAINABLE HEAD	WIND DRIVEN RAIN	BY ARCHITECT	1,2,3,4
LVR 4	GREENHECK EHH-501	125	EXHAUST	16"	12"	5"	415	1250	0.16	ALUMINUM	CHANNEL, DRAINABLE HEAD	WIND DRIVEN RAIN	BY ARCHITECT	1,2,3,4
LVR 5	GREENHECK EHH-501	760	INTAKE	26"	18"	5"	835	1250	0.16	ALUMINUM	CHANNEL, DRAINABLE HEAD	WIND DRIVEN RAIN	BY ARCHITECT	1,2,3,4
LVR 6	GREENHECK EHH-501	765	INTAKE	26"	18"	5"	835	1250	0.16	ALUMINUM	CHANNEL, DRAINABLE HEAD	WIND DRIVEN RAIN	BY ARCHITECT	1,2,3,4

2. PROVIDE 120V MOTORIZED CONTROL DAMPER AT INSIDE FACE OF LOUVER.

1. PROVIDE BIRD SCREEN ON INSIDE FACE OF LOUVER. 3. FINISH AND COLOR SHALL BE SELECTED BY ARCHITECT FROM MANUFACTURER'S CUSTOM RANGE OF COLORS. 4. LOUVER SHALL BE ACMA RATED FOR RESISTANCE AGAINST WIND DRIVEN RAIN.

CARBON MONOXIDE (CO) / NITROUS DIOXIDE (NO2) SCHEDULE AND ACTIVATION LEVEL SETPOINTS

				MAIN GARAGE	LEVEL FOR		BASIS	OF DESIGN	
SENSOR TAG	SERVES	TYPE	QTY	EXHAUST FAN ACTIVATION LEVEL	MAXIMUM FAN SPEED	CONTAMINANT ALARM	MFG.	MODEL	REMARKS
со	M106 EQUIPMENT STORAGE	24V CONTROL	1	35 PPM	50 PPM	200 PPM	DUOSENSE	GG-CO-N02-WH	1,2,3,4,5,6,7
NO2	M106 EQUIPMENT STORAGE	24V CONTROL	1	2.5 PPM	5 PPM	10 PPM	DUOSENSE	GG-CO-N02-WH	1,2,3,4,5,6,7

1. FAN SPEED PROPORTIONAL FROM FAN ACTIVATION LEVEL TO LEVEL FOR MAXIMUM SPEED.

2. FAN ACTIVATION LEVEL AND LEVEL FOR MAXIMUM FAN SPEED MUST BE ADJUSTABLE. 3. FINAL QUANTITY OF NO2 AND CO SENSORS SHALL BE COORDINATED WITH RATED SENSOR COVERAGE RADIUS SUCH THAT ENTIRE PARKING GARAGE SQUARE AREA IS MONITORED. MC

SHALL PROVIDE ADDITIONAL SENSORS, ASSOCIATED WIRING AS NECESSARY.

4. PROVIDE STROBE LIGHT AND HORN ALARM STATION AT EACH COMBINED CO&NO2 SENSOR LOCATION. MC SHALL PROVIDE ADDITIONAL STROBES AND HORNS, ASSOCIATED WITH WIRING AS NECESSARY IN COORDINATION WITH FINAL CO&NO2 SENSOR QUANTITY AND LOCATIONS.

5. PROVIDE WAREHOUSE KIT WITH WALL PLATE AND SAFETY CAGE.

6. SENSOR HOUSING SHALL BE NEMA 3RX WASHDOWN DUTY POLYCARBONATE ENCLOSURE SAFE FOR WASH-DOWN AREAS.

7. PROVIDE 24V CONTROL TRANSFORMER.

8. PROVIDE GG 2 2-CHANNEL CONTROL PANEL. MC TO COORDINATE WITH EC TO PROVIDE 120V/1PH/60HZ POWER AND CIRCUIT BREAKER TO PANEL.

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A+S Project #: 2381015

ISSUED FOR REV DATE 04/11/2024

SEALS AND SIGNATURES

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Mechanical Schedules

2313-01

M602

SHEET NUMBER

PROJECT NUMBER

THERMAL INSUI	LATION SCHEDULE (MAINTENANCE/OFFICE BUILDING)								
					SMAG	CNA CLASS			
SYSTEM	SYSTEM- LOCATION	OPERATING TEMPERATURE	MATERIAL	TYPE	THICKNESS IN.S	DENSITY LB/CU. FT.	INSTALLED "R" VALUE/ CONDUCTIVITY	JACKET	REMARKS
DUCT	SUPPLY AIR DUCT - INDOOR CONCEALED, UNCONDITIONED ABOVE CEILING	40-120	MINERAL-FIBER	BLANKET	2.0"	1.50	6.3	FSK	1
DUCT	RETURN AIR DUCT - INDOOR CONCEALED, UNCONDITIONED ABOVE CEILING	40-120	MINERAL-FIBER	BLANKET	2.0"	1.50	6.3	FSK	1
DUCT	SUPPLY AIR DUCT - INDOOR EXPOSED	40-120	MINERAL-FIBER	LINER	1.0 "	2.25	4.3	FSK	7,8
DUCT	RETURN AIR DUCT - INDOOR EXPOSED	40-120	MINERAL-FIBER	LINER	1.0 "	2.25	4.3	FSK	7,8
DUCT	EXHAUST DUCT WITHIN 10 FEET OF EXTERIOR OPENING - INDOOR	40-120	MINERAL-FIBER	BOARD	1.0 "	2.25	4.3	FSK	
DUCT	OUTSIDE AIR DUCT - INDOOR	0-100	MINERAL-FIBER	BOARD	3.0 "	2.25	12.0	FSK	6
PIPING	REFRIGERANT - CONDITIONED SPACE	40-60	MINERAL-FIBER	PRE-MOLDED				ASJ+SSL	5
PIPING	REFRIGERANT - UNCONDITIONED SPACE	40-60	MINERAL-FIBER WICKING	PRE-MOLDED	REFER TO I	PIPING INSULAT SCHEDULE	TION THICKNESS	ASJ+SSL	5
PIPING	COLD CONDENSATE DRAIN - INDOOR, ONLY ON METAL PIPE	40-60	MINERAL-FIBER	PRE-MOLDED				ASJ+SSL	5
PIPING	OUTDOOR CONDENSATE PIPING EXPOSED TO FREEZING (HEAT TRACED PIPE)	40-100	MINERAL-FIBER	PRE-MOLDED				ALUM.	

NOTES:

1. CONCEALED, ACCESSIBLE LOCATIONS - ABOVE LAY-IN OR ACCESSIBLE CEILINGS, ACCESSIBLE MECHANICAL SHAFTS.

2. CONCEALED, INACCESSIBLE LOCATIONS - ABOVE HARD CEILINGS, (DRY WALL, PLASTER), MECHANICAL SHAFTS, BEHIND WALLS.

3. FOR DUCTS LOCATED OUTDOORS PROVIDE WATERPROOF CONSTRUCTION WITH WATER & UV RESISTANT MASTIC ON ALL JOINTS. INTERNALLY LINE WITH ACOUSTICAL DUCT LINER. CROSS-BREAK TOP TO SHED WATER.

4. DO NOT INSULATE:

- TRANSFER AIR DUCTWORK (ACOUSTICALLY LINE DUCT)

5. COVER EXPOSED PIPING LOCATED BELOW 7' 0" ABOVE FINISHED FLOOR WITH PVC JACKET.

6. MULTIPLE INSULATION METHODS MAY BE USED TO ACHIEVE THE TOTAL REQUIRED R-VALUE. 7. DUCTWORK SHALL BE CLEANED AND PREPARED FOR PAINTING WHERE EXPOSED OR VISIBLE TO OCCUPANTS. COLOR TO BE SELECTED BY ARCHITECT.

8. FOR EXPOSED SPIRAL DUCTWORK, PROVIDE PRE-KERFED SPIRAL DUCTLINER WITH ANTIMICROBIAL COATING AND FSK LAMINATE COATING.

THERMAL INSULA	ATION SCHEDULE (CONCESSIONS/RESTROOM BUILDING)				SMAC	CNA CLASS			
SYSTEM	SYSTEM- LOCATION	OPERATING TEMPERATURE	MATERIAL	TYPE	THICKNESS IN.S	DENSITY LB/CU. FT.	INSTALLED "R" VALUE/ CONDUCTIVITY	JACKET	REMARKS
DUCT	SUPPLY AIR DUCT - INDOOR CONCEALED, ACCESSIBLE	40-120	MINERAL-FIBER	BLANKET	2.0"	0.75	5.0	FSK	1
DUCT	SUPPLY AIR DUCT - INDOOR CONCEALED, INACCESSIBLE	40-120	MINERAL-FIBER	BOARD	1.5 "	2.25	6.5	FSK	2
DUCT	RETURN AIR DUCT - INDOOR CONCEALED, ACCESSIBLE	40-120	MINERAL-FIBER	LINER	1.0 "	2.25	4.3	FSK	1
DUCT	RETURN AIR DUCT - INDOOR CONCEALED, INACCESSIBLE	40-120	MINERAL-FIBER	LINER	1.0 "	2.25	4.3	FSK	2
DUCT	SUPPLY AIR DUCT - INDOOR EXPOSED	40-120	MINERAL-FIBER	LINER	1.0 "	2.25	4.3	FSK	7,8
DUCT	RETURN AIR DUCT - INDOOR EXPOSED	40-120	MINERAL-FIBER	LINER	1.0 "	2.25	4.3	FSK	7,8
DUCT	EXHAUST DUCT WITHIN 10 FEET OF EXTERIOR OPENING - INDOOR	40-120	MINERAL-FIBER	BOARD	1.0 "	2.25	4.3	FSK	
DUCT	OUTSIDE AIR DUCT - INDOOR	0-100	MINERAL-FIBER	BOARD	3.0 "	2.25	12.0	FSK	6
DUCT	ERV SUPPLY & RETURN DUCTWORK - CONCEALED	40-120	MINERAL-FIBER	BOARD	1.5 "	2.25	6.5	FSK	1
DUCT	ERV SUPPLY & RETURN DUCTWORK - EXPOSED (IN RESTROOMS)	40-120	UNINSULATED*	-	-	ı	-	-	7
DUCT	ERV SUPPLY & RETURN DUCTWORK - EXPOSED (CONDITIONED SPACES)	40-120	MINERAL-FIBER	BOARD	1.5 "	2.25	6.5	FSK	7,8
PIPING	REFRIGERANT - CONDITIONED SPACE	40-60	MINERAL-FIBER	PRE-MOLDED				ASJ+SSL	5
PIPING	REFRIGERANT - UNCONDITIONED SPACE	40-60	MINERAL-FIBER WICKING	PRE-MOLDED	REFER TO F	PIPING INSULAT SCHEDULE	ION THICKNESS	ASJ+SSL	5
PIPING	COLD CONDENSATE DRAIN - INDOOR, ONLY ON METAL PIPE	40-60	MINERAL-FIBER	PRE-MOLDED				ASJ+SSL	5
PIPING	OUTDOOR CONDENSATE PIPING EXPOSED TO FREEZING (HEAT TRACED PIPE)	40-100	MINERAL-FIBER	PRE-MOLDED				ALUM.	

1. CONCEALED, ACCESSIBLE LOCATIONS - ABOVE LAY-IN OR ACCESSIBLE CEILINGS, ACCESSIBLE MECHANICAL SHAFTS. 2. CONCEALED, INACCESSIBLE LOCATIONS - ABOVE HARD CEILINGS, (DRY WALL, PLASTER), MECHANICAL SHAFTS, BEHIND WALLS.

3. FOR DUCTS LOCATED OUTDOORS PROVIDE WATERPROOF CONSTRUCTION WITH WATER & UV RESISTANT MASTIC ON ALL JOINTS. INTERNALLY LINE WITH ACOUSTICAL DUCT LINER. CROSS-BREAK TOP TO SHED WATER.

4. DO NOT INSULATE: - TRANSFER AIR DUCTWORK (ACOUSTICALLY LINE DUCT)

5. COVER EXPOSED PIPING LOCATED BELOW 7' 0" ABOVE FINISHED FLOOR WITH PVC JACKET. 6. MULTIPLE INSULATION METHODS MAY BE USED TO ACHIEVE THE TOTAL REQUIRED R-VALUE.

7. DUCTWORK SHALL BE CLEANED AND PREPARED FOR PAINTING WHERE EXPOSED OR VISIBLE TO OCCUPANTS. COLOR TO BE SELECTED BY ARCHITECT. 8. FOR EXPOSED SPIRAL DUCTWORK, PROVIDE PRE-KERFED SPIRAL DUCTLINER WITH ANTIMICROBIAL COATING AND FSK LAMINATE COATING.

PIPE INSULATION T	HICKNESS SCH	IEDULE						
	INSULATION	CONDUCTIVITY		NOMINAL PI	PE OR TUBE	SIZE (IN)		
FLUID OPERATING TEMPERATURE AND USAGE (°F)	CONDUCTIVITY BTU·IN.(h·ft <sup>2</sup> ·°F)	MEAN RATING TEMPERATURE (°F)	< 1	1 to < 1 ½	1 ½ < 4	4 to < 8	≥ 8	•
> 350	0.32 - 0.34	250	4.5	5.0	5.0	5.0	5.0	
251 - 350	0.29 - 0.32	200	3.0	4.0	4.5	4.5	4.5	
201 - 250	0.27 - 0.30	150	2.5	2.5	2.5	3.0	3.0	
141 - 200	0.25 - 0.29	125	1.5	1.5	2.0	2.0	2.0	
105 - 140	0.21 - 0.28	100	1.0	1.0	1.5	1.5	1.5	
40 - 60	0.21 - 0.27	75	0.5	0.5	1.0	1.0	1.0	
40	0.20 - 0.26	50	0.5	1.0	1.0	1.0	1.5	

PIPING SERVING AS PART OF A HEATING OR COOLING SYSTEM SHALL BE THERMALLY INSULATED IN ACCORDANCE WITH TABLE ABOVE (IECC 2021 TABLE C403.2.10) WITH THE FOLLOWING EXCEPTIONS: 1. FACTORY-INSTALLED PIPING WITHIN HVAC EQUIPMENT TESTED AND RATED IN ACCORDANCE WITH A TEST PROCEDURE REFERENCED

2. FACTORY-INSTALLED PIPING WITHIN ROOM FAN-COILS AND UNIT VENTILATORS TESTED AND RATED ACCORDING TO AHRI 330 (EXCEPT THAT THE SAMPLING AND VARIATION PROVISIONS OF SECTION 6.5 SHALL NOT APPLY) AND AHRI 840, RESPECTIVELY. 3. PIPING THAT CONVEYS FLUIDS THAT HAVE A DESIGN OPERATING TEMPERATURE RANGE BETWEEN 60°F AND 105°F. 4. PIPING THAT CONVEYS FLUIDS THAT HAVE NOT BEEN HEATED OR COOLED THROUGH THE USE OF FOSSIL FUELS OR ELECTRIC

5. STRAINERS, CONTROL VALVES, AND BALANCE VALVES ASSOCIATED WITH PIPING 1 INCH OR LESS IN DIAMETER. 6. DIRECT BURIED PIPING THAT CONVEYS FLUIDS AT OR BELOW 60°F.

DUCT CONSTRU	CTION SCHEDULE (MAINTENANCE/OFFICE BUILDING)							
					DUCT			
SYSTEM	LOCATION IN DUCT SYSTEM	MATERIAL	STATIC PRESSURE IN.S W.C.	SEAL CLASS	LEAKAGE CLASS (RECT./ROUND)	POS. or NEG.	TEST PRESS. INs W.C.	REMARKS
AHU-2	SUPPLY DUCT & RETURN DUCTS	GALVANIZED STEEL	2"	А	12	POS.	2	SEE BELOW
VARIOUS	OUTSIDE AIR DUCTWORK	GALVANIZED STEEL	2"	А	12	POS.	2	SEE BELOW
VARIOUS	TRANSFER AIR DUCT	GALVANIZED STEEL	1"	А	24/12	NEG.	1	SEE BELOW
EF-3, EF-4, EF-5	GENERAL EXHAUST DUCT RUNS UNDER 45' RUN	GALVANIZED STEEL	1"	В	24/12	NEG.	1	SEE BELOW
EF-2	GENERAL EXHAUST DUCT RUNS GREATER THAN 45' RUN	GALVANIZED STEEL	2"	Α	12	NEG.	2	SEE BELOW
NOTES: 1. FOR DUCTS LOCAT	NOTES:  I. FOR DUCTS LOCATED OUTDOORS PROVIDE WATERPROOF CONSTRUCTION WITH WATER & UV RESISTANT MASTIC ON ALL JOINTS. INTERNALLY LINE WITH ACOUSTICAL DUCT LINER. CROSS-BREAK TOP TO SHED WATER.							

			SMACNA CLASS					
SYSTEM	LOCATION IN DUCT SYSTEM	MATERIAL	STATIC PRESSURE IN.S W.C.	SEAL CLASS	LEAKAGE CLASS (RECT./ROUND)	POS. or NEG.	DUCT TEST PRESS. INs W.C.	REMARKS
AHU-1 AND HRV-1	SUPPLY DUCT & RETURN DUCTS	GALVANIZED STEEL	2"	А	12	POS.	2	SEE BELOW
VARIOUS	OUTSIDE AIR DUCTWORK	GALVANIZED STEEL	2"	А	12	POS.	2	SEE BELOW
VARIOUS	TRANSFER AIR DUCT	GALVANIZED STEEL	1"	А	24/12	NEG.	1	SEE BELOW
EF-1, EFR-1, HRV-1	GENERAL EXHAUST DUCT RUNS UNDER 45' RUN	GALVANIZED STEEL	1"	В	24/12	NEG.	1	SEE BELOW

GRILL	.E, REG	ISTER & D	IFFUSE	R SCH	EDULE					
TAG	FACE SIZE (SLOT WIDTH)	# SLOTS/ BAR, GRID SPACE	DEFLECTION/ THROW	CONN. SIZE	MAX CFM	P.D. IN. W.C.	MAX. NC	BASIS OF DESIGN	MODEL	REMAR
SG-1	24/24	N/A	4W	6"□	160	0.06	27	PRICE	ASPD	1,2,3,6
SG-2	24/24	N/A	4W	6"□	160	0.06	27	PRICE	SPD	1,2,6,
SG-3	24/24	N/A	4W	8"□	280	0.08	27	PRICE	SPD	1,2,6,
SG-4	24/24	N/A	4W	10"□	280	0.08	27	HAVACO	SPL-D 10	1,2,7,
SG-5	14.25"□	1" SPACING	N/A	12"□	628	0.09	23	PRICE	RSG	1,2,3,5
SG-6	14/8	N/A	2W	12/6	310	0.12	23	PRICE	620D	1,2,3,
RG-1	24/12	3/4"	45°	22/10	1260	0.14	35	PRICE	530D	1,2,7
RG-2	24/24	3/4"	45°	22/22	2527	0.14	37	PRICE	530D	1,2,7
EG-1	18/12	3/4"	45°	16/10	635	0.14	33	PRICE	530D	1,2,3,

1. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING TYPES AND MOUNTING REQUIREMENTS. 2. COLOR SHALL BE SELECTED BY ARCHITECT FROM MANUFACTURERS STANDARD COLOR CHART.

3. PROVIDE ALUMINUM CONSTRUCTION. 4. DOUBLE DEFLECTION LOUVERED SUPPLY DIFFUSER. 5. ROUND DOUBLE DEFLECTION DIFFUSER WITH WALL MOUNT FRAME AND WITH BUTTERFLY VOLUME

6. SQUARE PLAQUE DIFFUSER WITH INSULATED BACK PAN ACCESSORY. 7. PROVIDE OPPOSED BLADE DAMPERS AT DIFFUSERS, GRILLES, OR REGISTERS IF INSTALLED IN HARD CEILING OR AT INACCESSIBLE BULKHEAD. 8. PLASTIC CONSTRUCTION 3 CONE FACE SQUARE CEILING DIFFUSER WITH INSULATED R-6 BACK PAN OPTION AND INTEGRAL DAMPER. PROVIDE SURFACE MOUNTING KIT.

TRANSFER AIR DUCT SCHEDULE								
DESIGNATION	DUCT SIZE	CFM RANGE	DETAIL					
T1	12 x 6	0-200	#11/M402					
T2 22 x 10 0-1200 #11/M403								

2. REFER TO DETAIL FOR DUCT CONFIGURATION. 3. PROVIDE 1" THICK ACOUSTICAL LINER. 4. EACH END OF TRANSFER DUCT FOR TYPE T1 & T2 SHALL BE EQUIPPED WITH LOUVERED SINGLE DEFLECTION RETURN GRILLE OF EQUAL SIZE WITH OPPOSED BLADE DAMPER (MODEL PRICE 630D).

**ELGIN SPORTS** COMPLEX **EXPANSION** 475 SPORTS WAY ELGIN, ILLINOIS 60123

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SEALS AND SIGNATURES

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Mechanical Schedules

2313-01 PROJECT NUMBER

AIR HANDLING	AREA SERVED	SPACE DESIGNATION		AREA RATE			PEOPLE RA	TE		TOTAL REQ'D VENT @ ROOM	VENT EFFECTIVENESS	TOTAL REQ'D VENT @ AHU	TOTAL PROVIDED	TOTAL REQUIRED	TOTAL PROVIDED
UNIT			AREA (SQFT)	REQ'D VENT (CFM/SQFT)	REQ'D VENT (CFM)	PEOPLE	REQ'D VENT (CFM/PERSON)	DIVERSITY	REQ'D VENT (CFM)	VENT @ ROOM (CFM)	(%)	VENT @ AHU INLET (CFM)	VENT @ AHU INLET (CFM)	VENT/EXHAUST (CFM)	VENT/EXHAUST (CFM)
AHU-1	100 CONCESSIONS	KITCHEN	382	-	-	0	0.0	1.0	0	-	-	0.7 CFM/SQ.FT. KITCHEN	290	280.0*	290 (THROUGH EFR-1)
AHU-1	101 BOH	STORAGE - DRY MATERIALS	88	0.12	11	1	5.0	1.0	5	16	0.8	19.4	25	-	-
AHU-1	102 MECH/ELEC	UTILITY / MECHANICAL ROOM	52	0.00	0	0	0.0	1.0	0	0	0.8	0.0	0	-	-
EF-1	103 FAMILY	RESTROOM	48	-	-	0	0.0	1.0	0	-	-	70 CFM INTERMITTENT EXHAUST (1 FIXTURE @ 70 CFM EACH)	-	70	70
HRV-1	104 WOMEN'S RESTROOM	RESTROOM	363	-	-	0	0.0	1.0	0	-	-	560 CFM INTERMITTENT EXHAUST (8 FIXTURES @ 70 CFM EACH)	-	560.0	560.0
HRV-1	105 MEN'S RESTROOM	RESTROOM	364	-	-	0	0.0	1.0	0	-	-	560 CFM INTERMITTENT EXHAUST (8 FIXTURES @ 70 CFM EACH)	-	560.0	560.0

REMARKS:

\* IN ACCORDANCE WITH IMC 2015 SECTION 507.3, THE EXHAUST RATE FOR LIGHT DUTY COOKING ELECTRIC APPLIANCES NOT LOCATED UNDER TYPE II KITCHEN OR 0.7 CFM/SQ.FT. OF "EFFECTIVE COOKING AREA" IN WHICH EACH LIGHTING DUTY ELECTRIC COOKING APPLIANCE SHALL BE CONSIDERED 100 SQUARE FEET OF COOKING AREA FOR THE PURPOSES OF THE EXHAUST RATE CALCULATION. THE NUMBER OF QUALIFYING LIGHT DUTY ELECTRIC COOKING APPLIANCES FOR THIS KITCHEN SPACE IS 4. THEREFORE, THE EFFECTIVE COOKING AREA SHALL BE CONSIDERED TO BE 400 SQUARE FEET AND THE EXHAUST RATE SHALL BE IN ACCORDANCE WITH THE 2015 IMC REQUIREMENT OF 0.7 CFM/SQ.FT. OF EFFECTIVE COOKING AREA.

1. CALCULATIONS WERE PERFORMED BASED ON IMC-2015 SECTIONS 402 & 403 AND ASHRAE STANDARD 62.1 - 2013.

AIR HANDLING UNIT	AREA SERVED	SPACE DESIGNATION		AREA RATE			PEOPLE RA	.ΤΕ		TOTAL REQ'D VENT @ ROOM (CFM)	VENT EFFECTIVENESS	TOTAL REQ'D VENT @ AHU INLET (CFM)	TOTAL PROVIDED TOTAL VENT @ AHU VENT/EX	TOTAL REQUIRED	TOTAL PROVIDED VENT/EXHAUST (CFN
UNIT			AREA (SQFT)	REQ'D VENT (CFM/SQFT)	REQ'D VENT (CFM)	PEOPLE	REQ'D VENT (CFM/PERSON)	DIVERSITY	REQ'D VENT (CFM)	(CFM)	(%)	INLET (CFM)	VENT @ AHU INLET (CFM)	VENT/EXHAUST (CFM)	
AHU-2	M100 CORRIDOR	CORRIDOR	91	0.06	5	0	0.0	1.0	0	5	0.8	6.8	25	-	-
AHU-2	M101 OFFICE 1	OFFICE	142	0.06	9	2	5.0	1.0	10	19	0.8	23.2	40	-	-
AHU-2	M102 MECHANICAL ROOM	UTILITY / MECHANICAL ROOM	128	0.00	0	0	0.0	1.0	0	0	0.8	0.0	0	-	-
EF-3	M103 RESTROOM	RESTROOM	52	-	-	0	0.0	1.0	0	-	-	70 CFM INTERMITTENT EXHAUST (1 FIXTURE @ 70 CFM EACH)	-	70	70
AHU-2	M104 STORAGE ROOM	CORRIDOR	125	0.06	8	0	0.0	1.0	0	8	0.8	9.4	40	-	125 (INTERMITTENT
AHU-2	M105 OFFICE 2	OFFICE	81	0.06	5	1	5.0	1.0	5	10	0.8	12.3 0.75	20	-	-
EF-2 & EF-5	M106 EQUIPMENT STORAGE ROOM	GARAGE - WITHIN VOLUME OF EQUIPMENT STORAGE AREA	1,789	-	-	0	0.0	1.0	0	-	-	CFM/SQ.FT. GARAGE INTERMITTENT / 0.05 CFM/SQ.FT. GARAGE CONTINUOUS	-	1341.0 / 90.0	1550.0 / 290.0

KITCHEN VEI	NTILATION AIR BALANCE SCHE	DULE (CONCESSIONS/RESTROOM BUIL	.DING)	
UNIT	AREA SERVED	FRESH AIR VENTILATION	EXHAUST AIR	TOTAL
AHU-1	100 CONCESSIONS	290 CFM	-	+290.0
EFR-1	100 CONCESSIONS	-	280 CFM	-280.0
TOTAL	10B KITCHEN / DINING	290 CFM	280 CFM	+10.0

AIR BALANCE SCHE	DULE (CONCESSIONS	/RESTROOM BUILDING)
AIR HANDLING UNIT	TOTAL PROVIDED VENT @ AHU INLET (CFM)	TOTAL PROVIDED VENT/EXHAUST (CFM)
AHU-1	290	-
HRV-1	1260	-
FAMILY RESTROOM INTAKE GRILLE	70	-
EFR-1	-	280
HRV-1	-	1260
EF-1	-	70
TOTAL	1620 CFM	1610 CFM

AIR HANDLING UNIT	TOTAL REQ'D VENT @ AHU INLET (CFM)	TOTAL PROVIDED VENT @ AHU INLET (CFM)
HRV-1	1260.0	1260.0
AHU-1	280.0	290.0

AIR BALANCE SCHEDULE (MAINTENANCE/OFFICE BUILDING)						
AIR HANDLING UNIT	TOTAL PROVIDED VENT @ AHU INLET (CFM)	TOTAL PROVIDED VENT/EXHAUST (CFM)				
AHU-2	125	-				
GARAGE INTAKE LOUVERS 1550		-				
EF-2	-	1260 (INTERMITTENT)				
EF-5	-	290 (CONTINUOUS)				
EF-3	-	70 (INTERMITTENT)				
EF-4	-	125 (INTERMITTENT)				
TOTAL	1675 CFM	1740 CFM				

AIR HANDLING UNIT	TOTAL REQ'D VENT @ AHU INLET (CFM)	TOTAL PROVIDED VENT @ AHU INLET (CFM)
AHU-2	52.0	125.0

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SEALS AND SIGNATURES		



HEET TITLE

PROJECT NUMBER

Mechanical Schedules

2313-01

M604
SHEET NUMBER

#### PLUMBING GENERAL NOTES (ALL DRAWINGS):

1. CONFORM TO APPLICABLE CODES (LOCAL, STATE, NATIONAL CODES, NFPA, OSHA, ETC.), GOVERNMENT REGULATIONS, UTILITY COMPANY REQUIREMENTS, AND APPLICABLE STANDARDS. PLUMBING DESIGN AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE MOST RECENT STATE OF ILLINOIS PLUMBING CODE AS OF PERMIT APPLICATION ISSUANCE.

2. OBTAIN PERMITS AND PAY FEES. ARRANGE FOR REQUIRED TESTS, INSPECTIONS AND APPROVALS.

2. OBTAIN PERMITS AND PAY FEES. ARRANGE FOR REQUIRED TESTS, INSPECTIONS AND APPROVALS.

3. FURNISH PLUMBING FIXTURES, EQUIPMENT AND MATERIAL INDICATED AND SHOWN ON DRAWINGS AND INSTALL COMPLETE AND PLACE IN PROPER OPERATION.

4. PROVIDE PLUMBING FIXTURES, DRAINS AND EQUIPMENT WITH PLUMBING CODE REQUIRED TRIM, CONTROLS AND ACCESSORIES.

5. INSULATE HOT AND COLD WATER PIPING PER 2021 INTERNATIONAL ENERGY CODE.

6. SEWERS TO BE PITCHED A MINIMUM OF 1/4" PER FOOT FOR SIZES 2" AND UNDER, AND 1/8" PER FOOT FOR SIZES 3" AND LARGER OR TO GRADES INDICATED ON DRAWINGS.

7. CHANGES IN DIRECTION AND BRANCH CONNECTIONS SHALL BE MADE WITH APPROVED DRAINAGE FITTINGS COMPATIBLE WITH THE PIPING SYSTEM MATERIAL IN WHICH IT IS INSTALLED.

8. FIXTURES AND SANITARY DRAINS SHALL BE VENTED AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH CODE. VENTS ARE TO BE EXTENDED UP THROUGH ROOF.

9. ANY SPACE WITHIN THE BUILDING IN WHICH A RETURN AIR PLENUM PLENUM IS UTILIZED, NON PLENUM RATED MATERIALS AND PIPNG SHALL NOT BE INSTALLED IN RETURN AIR PLENUMS, USE HUB AND SPIGOT CAST IRON (ASTM A 74-2009), SOLDERED JOINT COPPER PIPING IN PLENUMS.

10. INCLUDE UNIONS, OR OTHER DISCONNECT MEANS, STOPS OR VALVES FOR ISOLATION OF FIXTURES AND EQUIPMENT. VALVES TO BE FULLY COMPATIBLE WITH PIPING FOR SERVICE INTENDED AS MANUFACTURED BY APOLLO, KITZ, NIBCO, WATTS, CRANE OR OTHER APPROVED MANUFACTURER. INCLUDE HOSE OR DRAIN VALVES AT LOW POINTS WHERE FIXTURES CANNOT BE USED FOR DRAINAGE.

11. HANGERS ON INSULATED PIPE SHALL BE OUTSIDE OF INSULATION, SIZED ACCORDINGLY AND WITH SUFFICIENT SADDLE TO PROTECT INSULATION.

12. FLUSH, VENT AND SANITIZE ALL WATER PIPING WITH EQUIVALENT SOLUTION OF 50 PPM OF AVAILABLE CHLORINE UPON COMPLETION. COMPLY WITH PLUMBING CODE REQUIREMENTS FOR SANITIZATION.

13. COORDINATE FINAL PIPE ROUTING WITH ARCHITECT AND OTHER TRADES.

14. NO WORK SHALL BE INSTALLED UNTIL TRADES HAVE SIGNED OFF ON THE COORDINATION DRAWINGS AND THE COORDINATION DRAWINGS ARE APPROVED BY THE ARCHITECT.

15. THE INDICATED SCOPE OF THE DRAWINGS ARE FOR GUIDANCE ONLY AND REPRESENTS THE LIMIT OF GENERAL CONSTRUCTION WORK. THIS CONTRACTOR MAY BE REQUIRED TO DO WORK IN AREAS OUTSIDE OF THIS SCOPE WHERE NECESSARY TO DEMOLISH, INSTALL NEW SYSTEMS OR EXTEND TO EXISTING SYSTEMS IN ORDER TO PERFORM THE WORK INDICATED ON THESE DRAWINGS. COORDINATE WITH OWNER'S REPRESENTATIVE TO GAIN ACCESS TO ADJOINING SPACES AND TO MINIMIZE DISRUPTION OF SERVICES.

DIVISION OF MECHANICAL / ELECTRICAL WORK						
ITEM	MECH / DIV. 22 AND 23	ELEC / DIV. 26				
AUTOMATIC TEMPERATURE CONTROLS	FURNISH, INSTALL, & WIRE	POWER WIRE				
CONTROL PANELS FOR MECHANICAL EQUIPMENT	FURNISH & INSTALL	POWER WIRE				
LOW VOLTAGE CONTROL WIRING FOR MECH	FURNISH & INSTALL					
LINE VOLTAGE CONTROL WIRING FOR MECH	FURNISH, INSTALL, & WIRE					
MECHANICAL FLOW SWITCHES	FURNISH, INSTALL, & WIRE					
THERMOSTATS / SENSORS	FURNISH, INSTALL, & WIRE					
P/E & E/P SWITCHES	FURNISH, INSTALL, & WIRE					
DISCONNECT SWITCHES FOR MECH. EQUIP.	FURNISH & INSTALL	POWER WIRE				
MECHANICAL EQUIP. MONITORS	FURNISH, INSTALL, & CONTROL WIRE	POWER WIRE				
MANUAL STARTERS FOR MECH. EQUIP.	FURNISH & INSTALL	POWER WIRE				
MAGNETIC STARTERS FOR MECH. EQUIP	FURNISH	INSTALL & POWER WIRE				
MOTOR CONTROL CENTERS	CONTORL WIRING	FURNISH, INSTALL, & POWER WIRE				
VARIABLE SPEED CONTROLLERS	FURNISH, INSTALL, & CONTROL WIRE	POWER WIRE				
MOTORIZED DAMPERS & VALVES	FURNISH, INSTALL, & CONTROL WIRE	POWER WIRE & WIRE				
DUCT SMOKE DETECTORS	INSTALL	FURNISH & WIRE				
HEAT TRACE CABLE FOR PIPING	FURNISH & INSTALL	POWER WIRE				
OIL / GAS EMERGENCY SHUT-OFF SWITCHES		FURNISH, INSTALL, & POWER WIRE				
SPRINKLER FLOW & TAMPER SWITCHES	BY SPRINKLER CONTRACTOR	WIRE				

		PLUMBING	3 LEGEND		
SYMBOL		DESCRIPTION  EXISTING PIPING TO REMAIN -	SYMBOL	ABRV.	DESCRIPTION  CONNECTION POINT NEW TO EXISTING
- EX (X)	EX	(X) DESIGNATES SERVICE  EXISTING PIPING TO BE REMOVED -	•		CONNECTION POINT, NEW TO EXISTING
-RX (X) —	RX	(X) DESIGNATES SERVICE PIPING ROUTED BELOW GRADE / SLAB	•		DISCONNECTION POINT
	_	(LINE TYPE INDICATES SERVICE TYPE UNO)	(1)		DRAWING KEYNOTE
— SAN ——	SAN	SANITARY PIPING  GREASE WASTE PIPING	(A)		DEMOLITION DRAWING KEYNOTE
— GW ——	GW	(TO GREASE INTERCEPTOR)	<u></u>		REVISION NUMBER
— OW —	OW	OIL WASTE PIPING			REVISION CLOUD
— ST —	ST	STORM PIPING (PRIMARY)	<del></del> 0		PIPE UP
-OST	OST	SECONDARY / OVERFLOW DRAIN PIPING	<b>-</b> →		PIPE DOWN
— V ——	V	VENT PIPING	<del></del>		PIPE TEE DOWN
— CW —	CW	DOMESTIC COLD WATER PIPING			TOP PIPE CONNECTION
— HW ——	HW	DOMESTIC HOT WATER PIPING	₹—		BALL VALVE OR SHUTOFF VALVE IN RISE
-HWR	HWR	DOMESTIC HOT WATER RETURN PIPING			PIPE CAP
— DIS —	DIS	DEIONIZED WATER SUPPLY PIPING	<b>──</b>    <b>─</b>		PIPE UNION
— DIR ——	DIR	DEIONIZED WATER RETURN PIPING			FLANGED CONNECTION
— TP ——	TP	TRAP PRIMER PIPING			CONCENTRIC PIPE REDUCER
— G ——	G	GAS PIPING (NATURAL OR PROPANE)			ECCENTRIC PIPE REDUCER
—F0 —	FO	FUEL OIL PIPING	<b>—</b>		FLOW ARROW
— CD —	CD	CONDENSATE DRAIN PIPING			PIPE ANCHOR
— PD ——	PD	PUMP DISCHARGE	<u>~</u>		PIPE GUIDE
— MV ——	MV	MEDICAL VACUUM PIPING	<b>T</b>	BV	BALL VALVE
— MA ——	MA	MEDICAL AIR PIPING		BFV	BUTTERFLY VALVE
			<u> </u>		
_ LV	LV	LABORATORY VACUUM PIPING	<u> </u>	PV	PLUG VALVE
— LA ——	LA	LABORATORY AIR PIPING		GV	GATE VALVE
— PV ——	PV	PROCESS AIR VACUUM PIPING		GBV	GLOBE VALVE
— PA ——	PA	PROCESS AIR PIPING		PRV	PRESSURE REDUCING VALVE
- OXY	OXY	OXYGEN PIPING		CV	CHECK VALVE
—HEX —	HEX	HELIX PIPING	— <u></u>	BFP	BACK FLOW PREVENTER
— N——	N	NITROGEN PIPING	*		PRESSURE RELIEF VALVE
— CA —	CA	COMPRESSED AIR PIPING	<b>→</b>		AUTOMATIC FLOW CONTROL VALVE
— AV ——	AV	ACID VENT PIPING	<b>—</b>		CALIBRATED BALANCING VALVE
— AW ——	AW	ACID WASTE PIPING	<b>A</b>		
	¹ j				AUTOMATIC AIR VENT
- CO2	CO2	CARBON DIOXIDE PIPING			MANUAL AIR VENT
— CO2 —— — MAI ——	CO2	CARBON DIOXIDE PIPING  MEDICAL AIR INTAKE PIPING	<u>♣</u>		
				PG	MANUAL AIR VENT
— MAI —— — MVD ——	MAI	MEDICAL AIR INTAKE PIPING	 	PG	MANUAL AIR VENT P/T PLUG
— MAI ——  — MVD ——  — NO ——	MAI MVD	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING	# # # # # # # # # # # # # # # # # # #	PG	MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF
- MAI	MAI MVD NO	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING  NITROUS OXIDE PIPING  WASTE ANESTHETIC GAS DISCHARGE  MEDICAL GAS OUTLET		PG T&P	MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF  THERMOMETER
- MAI	MAI MVD NO	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING  NITROUS OXIDE PIPING  WASTE ANESTHETIC GAS DISCHARGE			MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF  THERMOMETER  STRAINER
— MAI ——  — MVD ——  — NO ——  - WAGD —	MAI MVD NO	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING  NITROUS OXIDE PIPING  WASTE ANESTHETIC GAS DISCHARGE  MEDICAL GAS OUTLET (LETTER DESIGNATES GAS TYPE)		T&P	MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF  THERMOMETER  STRAINER  TEMPERATURE AND PRESSURE RELIEF VALVE
- MAI	MAI MVD NO	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING  NITROUS OXIDE PIPING  WASTE ANESTHETIC GAS DISCHARGE  MEDICAL GAS OUTLET (LETTER DESIGNATES GAS TYPE)  UTILITY METER  HOT WATER RECIRC. PUMP  DOMESTIC SHOCK ABSORBER/WATER HAMMER		T&P MV	MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF  THERMOMETER  STRAINER  TEMPERATURE AND PRESSURE RELIEF VALVE  MIXING VALVE  EXTERNAL WALL HYDRANT
- MAI	MAI MVD NO	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING  NITROUS OXIDE PIPING  WASTE ANESTHETIC GAS DISCHARGE  MEDICAL GAS OUTLET (LETTER DESIGNATES GAS TYPE)  UTILITY METER  HOT WATER RECIRC. PUMP  DOMESTIC SHOCK ABSORBER/WATER HAMMER ARRESTER; TEXT DENOTES SIZE (PDI: A ~ F)		T&P MV FCO	MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF  THERMOMETER  STRAINER  TEMPERATURE AND PRESSURE RELIEF VALVE  MIXING VALVE  EXTERNAL WALL HYDRANT  CLEAN OUT, FLOOR
- MAI	MAI MVD NO	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING  NITROUS OXIDE PIPING  WASTE ANESTHETIC GAS DISCHARGE  MEDICAL GAS OUTLET (LETTER DESIGNATES GAS TYPE)  UTILITY METER  HOT WATER RECIRC. PUMP  DOMESTIC SHOCK ABSORBER/WATER HAMMER ARRESTER; TEXT DENOTES SIZE (PDI: A ~ F)  GAS SOLENOID VALVE		T&P MV FCO	MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF  THERMOMETER  STRAINER  TEMPERATURE AND PRESSURE RELIEF VALVE  MIXING VALVE  EXTERNAL WALL HYDRANT  CLEAN OUT, FLOOR  CLEAN OUT, EXPOSED
- MAI	MAI MVD NO	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING  NITROUS OXIDE PIPING  WASTE ANESTHETIC GAS DISCHARGE  MEDICAL GAS OUTLET (LETTER DESIGNATES GAS TYPE)  UTILITY METER  HOT WATER RECIRC. PUMP  DOMESTIC SHOCK ABSORBER/WATER HAMMER ARRESTER; TEXT DENOTES SIZE (PDI: A ~ F)  GAS SOLENOID VALVE  GAS COCK		T&P MV FCO CO	MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF  THERMOMETER  STRAINER  TEMPERATURE AND PRESSURE RELIEF VALVE  MIXING VALVE  EXTERNAL WALL HYDRANT  CLEAN OUT, FLOOR  CLEAN OUT, EXPOSED  FLOOR DRAIN
- MAI	MAI MVD NO	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING  NITROUS OXIDE PIPING  WASTE ANESTHETIC GAS DISCHARGE  MEDICAL GAS OUTLET (LETTER DESIGNATES GAS TYPE)  UTILITY METER  HOT WATER RECIRC. PUMP  DOMESTIC SHOCK ABSORBER/WATER HAMMER ARRESTER; TEXT DENOTES SIZE (PDI: A ~ F)  GAS SOLENOID VALVE  GAS COCK  AQUASTAT		T&P MV FCO	MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF  THERMOMETER  STRAINER  TEMPERATURE AND PRESSURE RELIEF VALVE  MIXING VALVE  EXTERNAL WALL HYDRANT  CLEAN OUT, FLOOR  CLEAN OUT, EXPOSED  FLOOR DRAIN  ROOF DRAIN
- MAI — - MVD — - NO — - WAGD — - \\ - WAGD — - \\ - \\ - \\ - \\ - \\ - \\ - \\ -	MAI MVD NO WAGD	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING  NITROUS OXIDE PIPING  WASTE ANESTHETIC GAS DISCHARGE  MEDICAL GAS OUTLET (LETTER DESIGNATES GAS TYPE)  UTILITY METER  HOT WATER RECIRC. PUMP  DOMESTIC SHOCK ABSORBER/WATER HAMMER ARRESTER; TEXT DENOTES SIZE (PDI: A ~ F)  GAS SOLENOID VALVE  GAS COCK  AQUASTAT  VACUUM RELIEF VALVE		T&P MV FCO CO	MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF  THERMOMETER  STRAINER  TEMPERATURE AND PRESSURE RELIEF VALVE  MIXING VALVE  EXTERNAL WALL HYDRANT  CLEAN OUT, FLOOR  CLEAN OUT, EXPOSED  FLOOR DRAIN  ROOF DRAIN  PIPE TRAP
- MAI	MAI MVD NO	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING  NITROUS OXIDE PIPING  WASTE ANESTHETIC GAS DISCHARGE  MEDICAL GAS OUTLET (LETTER DESIGNATES GAS TYPE)  UTILITY METER  HOT WATER RECIRC. PUMP  DOMESTIC SHOCK ABSORBER/WATER HAMMER ARRESTER; TEXT DENOTES SIZE (PDI: A ~ F)  GAS SOLENOID VALVE  GAS COCK  AQUASTAT  VACUUM RELIEF VALVE  VACUUM BREAKER		T&P MV FCO CO	MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF  THERMOMETER  STRAINER  TEMPERATURE AND PRESSURE RELIEF VALVE  MIXING VALVE  EXTERNAL WALL HYDRANT  CLEAN OUT, FLOOR  CLEAN OUT, EXPOSED  FLOOR DRAIN  ROOF DRAIN
-MAI	MAI MVD NO WAGD	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING  NITROUS OXIDE PIPING  WASTE ANESTHETIC GAS DISCHARGE  MEDICAL GAS OUTLET (LETTER DESIGNATES GAS TYPE)  UTILITY METER  HOT WATER RECIRC. PUMP  DOMESTIC SHOCK ABSORBER/WATER HAMMER ARRESTER; TEXT DENOTES SIZE (PDI: A ~ F)  GAS SOLENOID VALVE  GAS COCK  AQUASTAT  VACUUM RELIEF VALVE		T&P MV FCO CO	MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF  THERMOMETER  STRAINER  TEMPERATURE AND PRESSURE RELIEF VALVE  MIXING VALVE  EXTERNAL WALL HYDRANT  CLEAN OUT, FLOOR  CLEAN OUT, EXPOSED  FLOOR DRAIN  ROOF DRAIN  PIPE TRAP
- MAI — - MVD — - NO — - WAGD — - \\ - WAGD — - \\ - \\ - \\ - \\ - \\ - \\ - \\ -	MAI MVD NO WAGD	MEDICAL AIR INTAKE PIPING  MEDICAL VACUUM DISCHARGE PIPING  NITROUS OXIDE PIPING  WASTE ANESTHETIC GAS DISCHARGE  MEDICAL GAS OUTLET (LETTER DESIGNATES GAS TYPE)  UTILITY METER  HOT WATER RECIRC. PUMP  DOMESTIC SHOCK ABSORBER/WATER HAMMER ARRESTER; TEXT DENOTES SIZE (PDI: A ~ F)  GAS SOLENOID VALVE  GAS COCK  AQUASTAT  VACUUM RELIEF VALVE  VACUUM BREAKER		T&P MV FCO CO	MANUAL AIR VENT  P/T PLUG  PRESSURE GAUGE W/ SHUT-OFF  THERMOMETER  STRAINER  TEMPERATURE AND PRESSURE RELIEF VALVE  MIXING VALVE  EXTERNAL WALL HYDRANT  CLEAN OUT, FLOOR  CLEAN OUT, EXPOSED  FLOOR DRAIN  ROOF DRAIN  PIPE TRAP  FLOOR DRAIN WITH TRAP PRIMER

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# Silman Structur Solutions STRUCTURAL ENGINEER: TYLIN | SILMAN STRUCTURAL SOLUTIONS 200 S WACKER DR, SUITE 1400 CHICAGO, IL 60606

Allen + Sharif
MEP Engineering | Project Manageme
MEP ENGINEER:
ALLEN + SHARIFF
625 W ADAMS ST, 19TH FLOOR
CHICAGO, IL 60661

312.620.3668 A+S Project #: 2381015

ISSUED FOR REV DATE \_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ 04/11/2024 ISSUE FOR BID

SEALS AND SIGNATURES



SHEET TITLE

Plumbing Data Sheet

PROJECT NUMBER

PO01

SHEET NUMBER

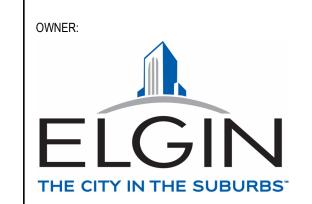
Olot Date.

- 1. 4" SAN UP AND ROUTED IN PLUMBING CHASE TO SERVE
- PLUMBING FIXTURES.

TP-3

- 2. 2" V UP
- 3. 3" SAN UP TO FLOOR SINK. 4. 3" SAN UP TO FLOOR DRAIN.
- 5. SAN UP TO FLOOR CLEAN OUT (FCO).
  A. SAN UP TO CLEAN OUT TO GRADE (COTG).
- 6. 4" SAN UP TO WWATER CLOSET. 7. 2" SAN UP TO DRINKING FOUNTAIN.

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# Silman Structural Solutions

STRUCTURAL ENGINEER:
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CHICAGO, IL 60606
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SEALS AND SIGNATURES



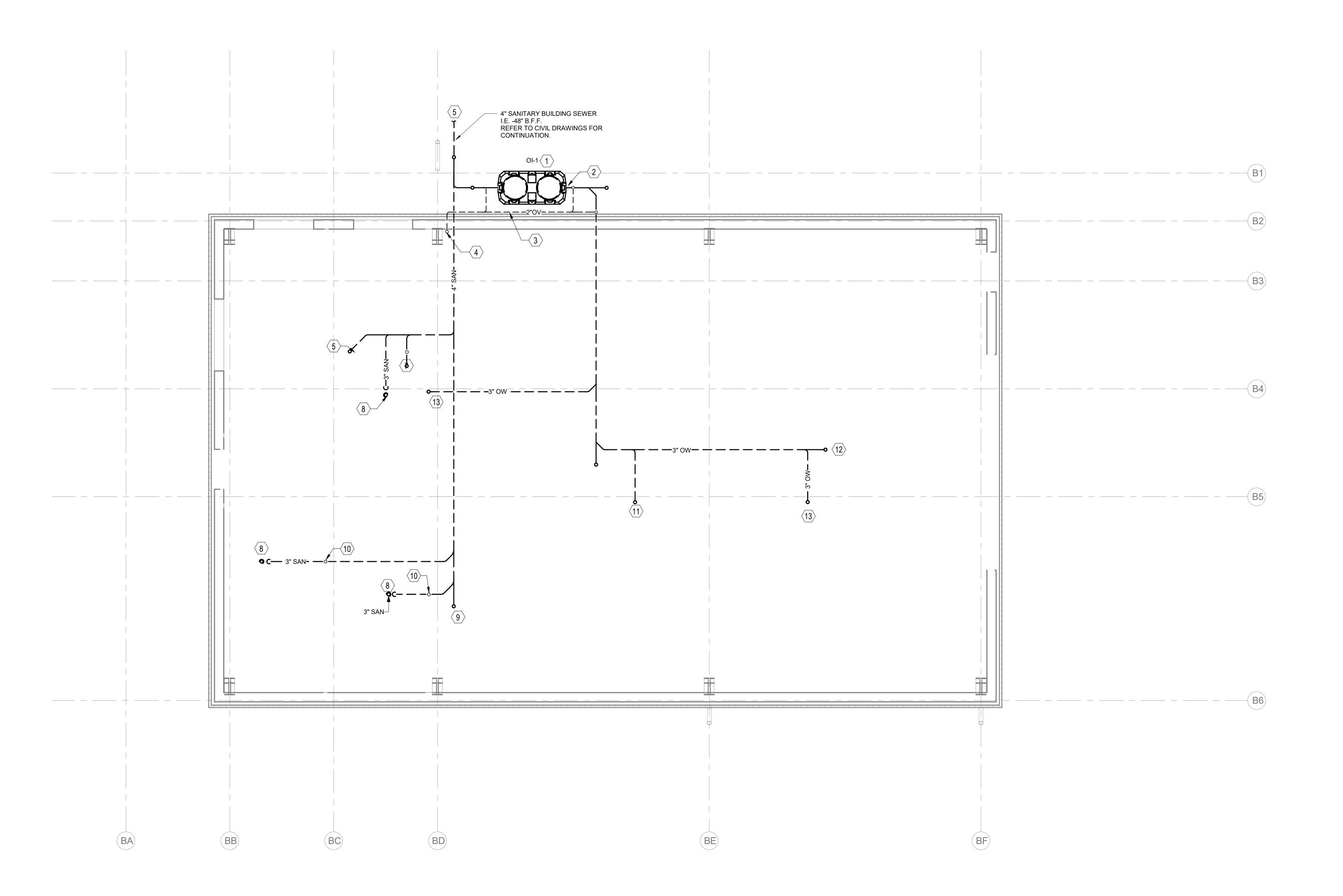
SHEET NUMBER

Concessions Underground
Plumbing Plan

2313-01 PROJECT NUMBER P201

CONCESSIONS UNDERGROUND PLUMBING DRAINAGE PLAN
1/4" = 1'-0"

4" SANITARY BUILDING SEWER
 I.E. -48" B.F.F.
 REFER TO CIVIL DRAWINGS FOR CONTINUATION



### 1 MAINTENANCE UNDERGROUND PLUMBING DRAINAGE PLAN

#### PLUMBING KEY NOTES: (#)

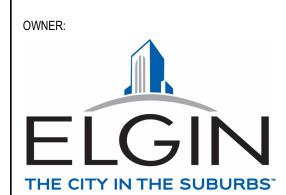
- HEAVY TRAFFIC RATED. OIL INTERCEPTOR BASIS OF DESIGN: COORDINATE FINAL LOCATION WITH CIVIL ENGINEER.
- THE UNIT INLET SHALL BE 4".
- 4. 2" V UP AND ROUTED TIGHT TO UNDERSIDE OF ROOF STRUCTURE.
- CONTINUATION.
- 6. 2" SANITARY DRAIN UP TO L-2.
- 10. 2" VENT PIPING UP IN PARTITION WALL TO CEILING ABOVE.
- 11. 4" OIL WASTE DRAIN PIPING UP TO FLOOR DRAIN FD-2.
- 12. 4" OIL WASTE DRAIN PIPING UP TO FLOOR CLEAN OUT.

- 1. (OI-1) UNDERGROUND TRIPLE BASIN 550 GALLON OIL SEPARATOR WITH VENT CONNECTIONS AND FEILD ADJUSTABLE RISERS. MAN COVER SHALL BE FLUSH TO GRADE. MANWAY COVERS SHALL BE HIGHLAND TANK OIL WATER SEPARATOR MODEL#00550HGSWHTCG.
- 2. 4" UNDERGROUND OIL WASTE TO OIL INTERCEPTOR. CONNECTION TO
- 3. 2" V ROUTED BELOW GRADE TO SERVE OIL INTERCEPTOR.
- 5. 4" BUILDING SANITARY DRAIN; REFER TO CIVIL DRAWINGS FOR
- 7. 4" SANITARY DRAIN UP TO WC-2.
- 8. 3" SANITARY DRAIN UP TO FD-1.
- 9. 3" SANITARY DRAIN UP TO FLOOR CLEAN OUT.

- 13. OIL WASTE DRAIN PIPING UP TO SS-2.

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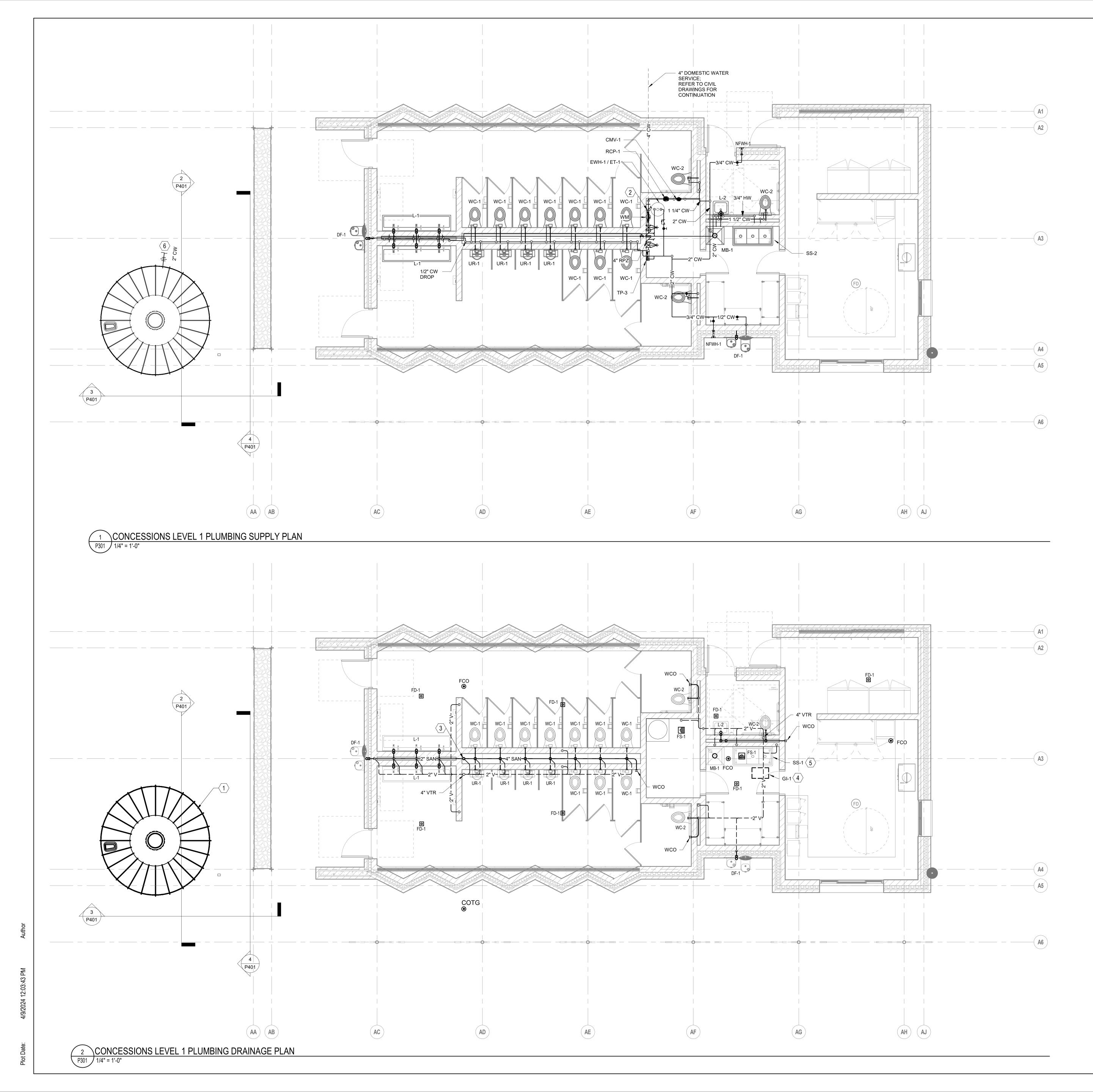
SEALS AND SIGNATURES



Maintenance Underground Plumbing Plan

2313-01 PROJECT NUMBER

P202



#### PLUMBING GENERAL NOTES:

- A. UNDERGROUND PIPIING INVERTS LEAVING THE BUILDING SHALL BE 6" PLUS LOCAL FROST DEPTH MEASURED FROM TOP OF PIPE TO FINISHED GRADE ELEVATION.
- B. THE DOMESTIC WATER SYSTEM SHALL BE PROVIDED WITH A MEANS OF PREVENTING WATER HAMMER PER STATE OF ILLINOIS PLUMBING CODE SECTION 890.1210 SUB-SECTION (f). C. ROUTE WATER HEATER T&P RELIEF AND BACKFLOW PREVENTER AIR GAP FITTING TO DISCHARGE TO FLOOR SINK

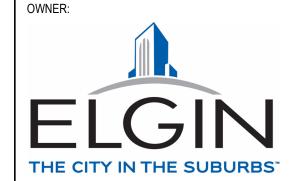
#### PLUMBING KEY NOTES: (#)

(FS-1) VIA AIR GAP.

- 1. 6100 GALLON NON-POTABLE WATER RAINWATER COLLECTION TANK SHALL BE INSTALLED OUTDOOR CONCRETE PLAZA. BASIS OF DESIGN TANK SHALL BE WATER STORAGE TANKS, INC. TANK MODEL 1202-WT-LPR. TANK SHALL BE CONSTRUCTED OF HDLPE MATERIAL, UV STABILIZED AND SHALL BE BLACK IN ACCORDANCE WITH FDA REGULATIO N177.1520 AND NSF/ANSI 61 STANDARDS. PROVIDE WITH IBC/CBC AND 150 MPH WIND RESTRAINT TIE-DOWN SYSTEMS. PROVIDE UNIFIED FITTING OUTLET WITH TRANSITION BOLTED FITTING AND EPDM GASKET. COLLECTION TANK SHALL FEATURE LEAK DETECTION SENSOR, ULTRASONIC LEVEL INDICATOR, 3" PVC SIGHT GLASS ASSEMBLY WITH BOTTOM TEE, REVERSE LEVEL GALLONAGE INDICATOR, EXTERNAL FILL PIPE ASSEMBLY. TANK SHALL FEATURE OVERFLOW FITTING, DRAINDOWN FITTING AND VALVE, AND LOW LEVEL OUTLET PIPING CONNECTION TO BE COORDINATED WITH IRRIGATION DESIGN DOCUMENTS. PROVIDE 316 STAINLESS STEEL SCREEN FILTER AT
- COLLECTION INLET OPENING. 2. THERMOSTATIC BALANCE VALVE ASSEMBLY AS SCHEDUELD ON DRAWINGS.
- 3. 4" SAN FROM BELOW SLAB AND ROUTED IN PLUMBING CHASE TO SERVE FIXTURES.
- 4. GREASE INTERCEPTOR GI-1 TO BE INSTALLED FLUSH WITH FFE. 5. SS-1 SINK BASINS SHALL DRAIN INDIRECTLY TO FLOOR SINK VIA AIR GAP.
- 6. 2" IRRIGATION PIPING SHALL BE CONNECTED TO TANK VIA FLANGED CONNECTION. PROVIDE UNION NEAR TANK CONNECITON. IRRIGATION PIPING SHALL BE ROUTED TO CONNECTION WITH IRRIGATION PUMP STATION. COORDINATE WITH IRRIGATION PLANS FOR EXACT LOCATION AND CONNECTION WITH PUMP STATION.

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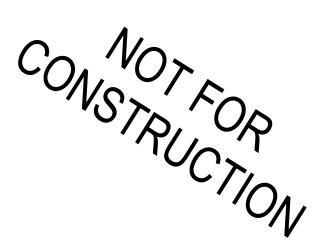
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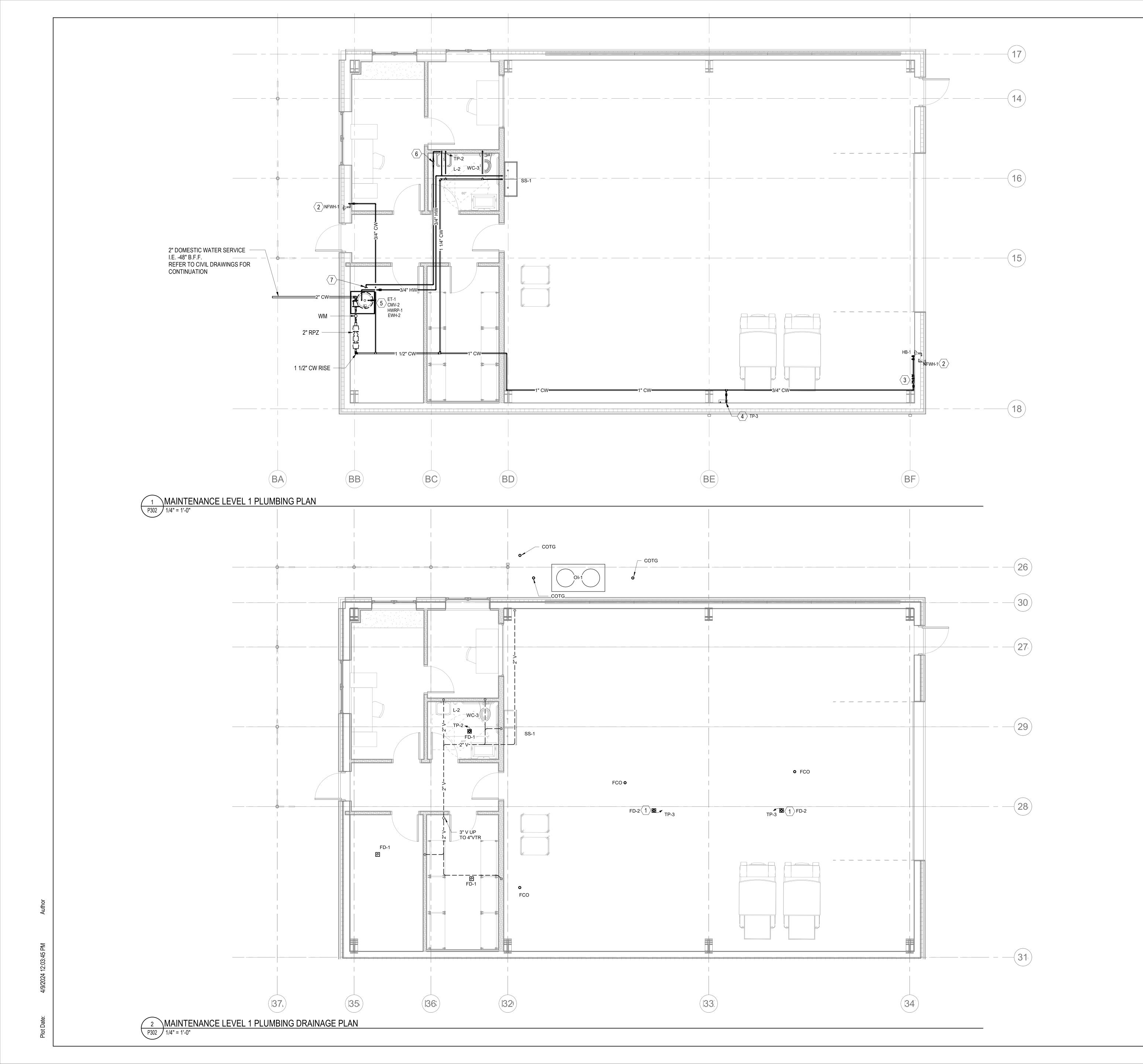
SEALS AND SIGNATURES



Concessions Level 1 Plumbing Plan

2313-01

PROJECT NUMBER P301



#### PLUMBING DRAINAGE GENERAL NOTES:

- A. UNDERGROUND PIPIING INVERTS LEAVING THE BUILDING SHALL BE 6" PLUS LOCAL FROST DEPTH MEASURED FROM TOP OF PIPE TO FINISHED GRADE ELEVATION.
  - B. THE DOMESTIC WATER SYSTEM SHALL BE PROVIDED WITH A MEANS OF PREVENTING WATER HAMMER PER STATE OF ILLINOIS PLUMBING CODE SECTION 890.1210 SUB-SECTION (f).
  - C. ROUTE WATER HEATER T&P RELIEF AND BACKFLOW PREVENTER AIR GAP FITTING TO DISCHARGE TO FLOOR DRAIN (FD-1) VIA AIR GAP.

#### PLUMBING DRAINAGE KEY NOTES: (#)

- 1. HEAVY DUTY HIGH TRAFFIC CAST IRON FLOOR DRAIN WITH STEEL COATED GRATE AND TRIP PRIMER TAP. PROVIDE DEEP SEAL TRAPS FILLED WITH MINERAL OIL.
- 2. NON-FREEZE WALL HYDRANT WITH INTEGRAL VACUUM BREAKER BACKFLOW PREVENTER, PRESSURE RELIEF VALVE. SHALL BE INSTALLED IN THIS LOCATION.
- 3. ASSE 1013 RPZ BFP; ASSE 1013 RPZ TO DISCHARGE VIA AIR GAP TO GRADE/SPLASH BLOCK.
- 4. 3/4" CW DN TO TRAP PRIMING STATION (TP-3). 5. FOR MORE INFORMATION OF WATER HEATER, CENTRAL MIXING VALVE, HOT WATER RECIRCULATION PUMP AND
- 6. THERMOSTATIC BALANCING VALVE ASSEMBLY AS
- SCHEDUELD ON DRAWINGS. 7. 3/4" HWR TO HWRP-1 AND EWH-2. FOR MORE INFORMATION ON ASSEMBLY REFER TO DETAIL ON

EXPANSION TANK ARRANGEMENT REFER TO DETAIL 2 ON

**ELGIN SPORTS** 

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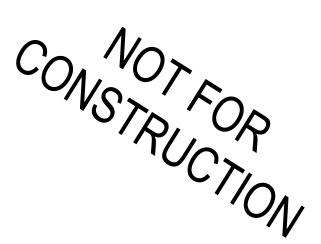


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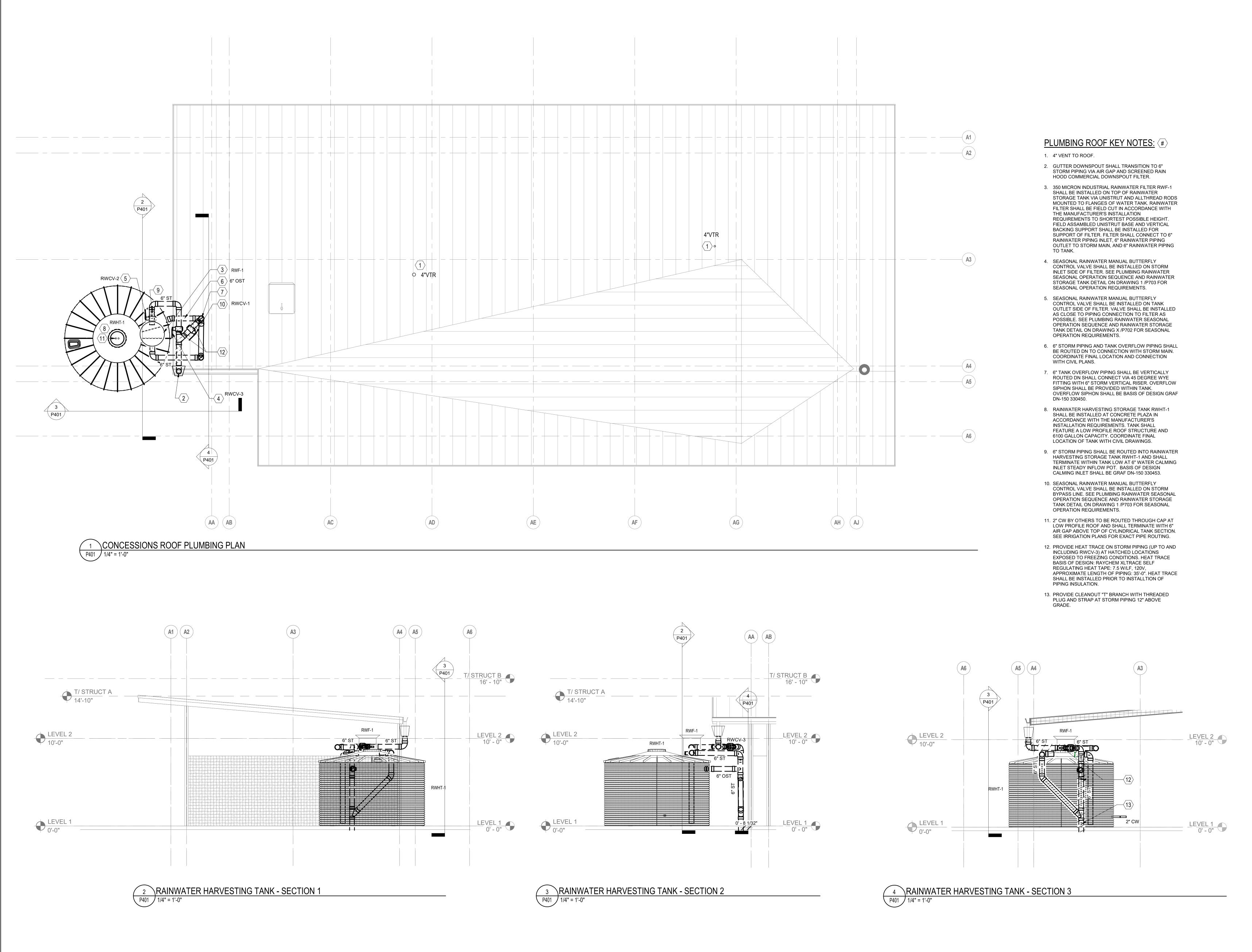
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Maintenance Level 1 Plumbing Plan

2313-01 PROJECT NUMBER P302



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MEP Engineering | Project Management

REV DATE

04/11/2024

CHICAGO, IL 60610

CHICAGO, IL 60606

MEP ENGINEER:

ALLEN + SHARIFF

CHICAGO, IL 60661 312.620.3668

A+S Project #: 2381015

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ARCHITECT OF RECORD:

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SEALS AND SIGNATURES

Concessions Building- Roof

2313-01 PROJECT NUMBER

P401 SHEET NUMBER

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PLUMBING DRAINAGE KEY NOTES: (#)

1. 4" VENT TO ROOF.

OWNER:

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MEP ENGINEER:
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312.620.3668
A+S Project #: 2381015

CONSTRUCTION

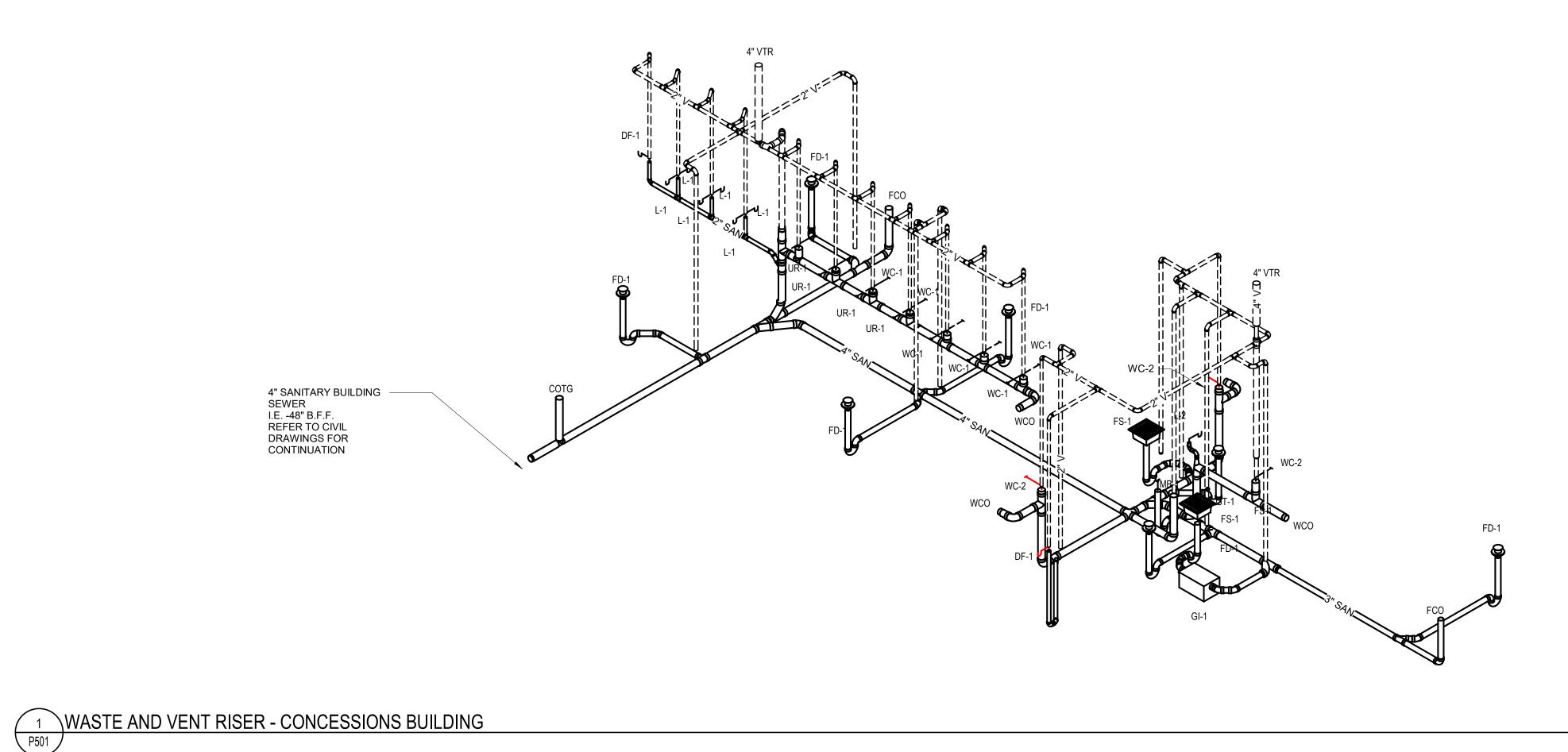
Maintenance Building- Roof

PROJECT NUMBER

P402
SHEET NUMBER

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Plot Date:

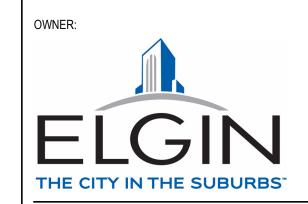


4" DOMESTIC WATER SERVICE I.E. -48" B.F.F. REFER TO CIVIL DRAWINGS FOR CONTINUATION

2 SUPPLY RISER - CONCESSIONS BUILDING

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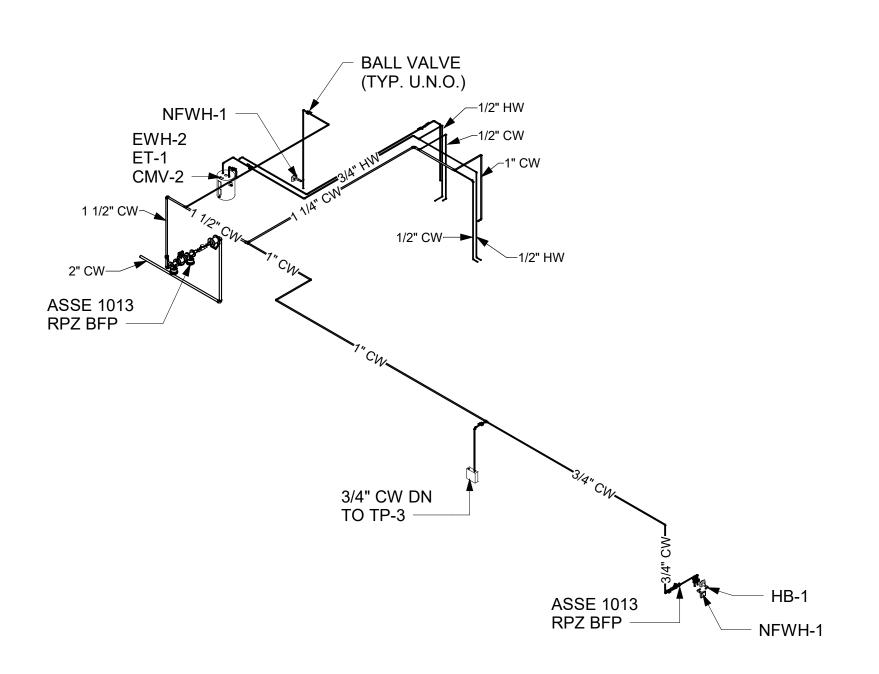
PROJECT NUMBER

Plumbing Riser Diagrams

2313-01

P501 SHEET NUMBER

WASTE AND VENT RISER - MAINTENANCE BUILDING



2 SUPPLY RISER - MAINTENANCE BUILDING

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Plumbing Riser Diagrams

2313-01

P502 SHEET NUMBER

1. PROVIDE EXPANSION TANK. REFER TO EXPANSION TANK SCHEDULE ON THIS DRAWING.

2. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR FURTHER INSTALLATION REQUIREMENTS. 3. PROVIDE METAL DRAIN PAN WITH WITH WATER HEATER INSTALLATION.

4. ROUTE T&P RELIEF AND DRAIN PAN DRAIN TO DISCHARGE VIA AIR GAP TO FLOOR DRAIN.

	EXPANSION TANK SCHEDULE (BASIS OF DESIGN)							
DESIGNATION	DESCRIPTION	MANUFACTURER / MODEL #	LOCATION	TANK SIZE	REMARKS			
<u>ET-1</u>	DOMESTIC HOT WATER EXPANSION TANK	AMTROL / ST-5	AS NOTED ON PLANS	2 GALLON	1, 2			

1. MAXIMUM WORKING PRESSURE 150 PSIG.

2. MAXIMUM SYSTEM TEMPERATURE 140 DEGREES F.

TO 140°F

DOMESTIC PIPING INSULATION SCHEDULE						
	FLUID			INSULATION THICKN	IESS (INCHES)	
SYSTEM OR SERVICE	TEMPERATURE	INSULATION TYPE		PIPE SIZE (IN	ICHES)	
	RANGE (DEG F)		1/2" TO 1-1/4"	1-1/2" TO 4"	4" TO 8"	> 8"
DOMESTIC HOT WATER AND HOT WATER CIRCULATION	105 TO 140	MINERAL FIBER	1"	1-1/2"	1-1/2"	1-1/2"
DOMESTIC COLD WATER	40 TO 60	MINERAL FIBER	1/2"	1/2"	1"	1"

INSTALLATION.

1. NOT ALL PIPE SIZES LISTED ARE USED ON PROJECT.

2. SIZES LISTED ARE BASED UPON 2021 IECC TABLE C403.12.3. 3. ALL PIPING INSULATION SHALL HAVE A MAXIMUM THERMAL CONDUCTIVITY FACTOR (K) OF 0.27..

4. OTHER INSULATION MATERIAL THAT MEETS OR EXCEEDS THE PERFORMANCE CHARACTERISTICS OF THE LISTED MATERIAL MAY BE USED. CONTRACTOR SHALL PROVIDE INSULATION PERFORMANCE CUT SHEET PRIOR TO

	MIXING VALVE SCHEDULE (BASIS OF DESIGN)						
DESIGNATION	DESCRIPTION	LOCATION	MANUFACTUER / MODEL #	OPTIONS	LOAD RANGE		
TMV-1	POINT OF USE MIXING VALVE; VALVE SHALL CONFORM TO ASSE 1070	AT ALL LAVATORIES AND HAND SINKS	WATTS / LFMMV	INTEGRAL STRAINERS AND CHECK VALVESON INLET PIPING	0.5 GPM @ 0.8 PSI DROP; OUTLET TEMPERATURE SHALL BE SET TO 105°F MIN. TO 110°F MAX.		
CMV-1	MAIN HOT WATER SERVICE MIXING VALVE CONFORMING TO ASSE 1017 STANDARD	CONCESSION	BRADLEY / S59-3045-B/P	INTEGRAL STRAINER AND CHECKSTOPS ON INLETS, PRE-PLUMBED FROM FACTORY, STANDARD THERMOMETER AND THERMOSTAT, WALL MOUNTING BRACKET	15.2 GPM @ 7.8 PSI DROP; OUTLET TEMPERATURE SET TO 125°F		
CMV-2	MAIN HOT WATER SERVICE MIXING VALVE CONFORMING TO ASSE 1017 STANDARD	MAINTENANCE	BRADLEY / S59-4016N	INTEGRAL STRAINER AND CHECKSTOPS ON INLET PIPING	7.1 GPM @ 9.5 PSI DROP; OUTLET TEMPERATURE SET TO 125°F		

SHOCK ARRESTOR SCHEDULE									
W.S.F.U.'S	CONN. SIZE	MODEL NO. (BASIS OF DESIGN)							
1 TO 11	1/2"	500A							
12 TO 32	3/4"	750B							
33 TO 60	1"	1000C							
61 TO 113	1"	1250D							
	1 TO 11 12 TO 32 33 TO 60	1 TO 11 1/2" 12 TO 32 3/4" 33 TO 60 1"							

1. W.S.F.U. COUNT BASED UPON PLUMBING DRAINAGE INSTITUTE (PDI) STANDARD PDI-WH 201.

2. MODEL NUMBERS BASED ON PRECISION PLUMBING PRODUCTS PISTON TYPE ARRESTORS.

3. NOT ALL MODEL #'S LISTED ARE USED ON PROJECT. REFER TO FLOOR PLANS FOR LOCATIONS AND SIZES USED.

TRAP PRIMER VALVE SCHEDULE								
DESG.	MANUFACTURER / MODEL #	TYPE	REMARKS					
TP-1	PRECISION PLUMBING PRODUCTS / P2-500	PRESSURE ACTUATED	1, 2					
TP-2	PRECISION PLUMBING PRODUCTS / P1-500	PRESSURE ACTUATED	1, 2					
TP-3	PRECISION PLUMBING PRODUCTS / MP-500	ELECTRONIC; 120V/1Ø	1, 2, 3					

1. NOT ALL MODEL #'S LISTED ARE USED ON PROJECT. REFER TO FLOOR PLANS FOR LOCATIONS AND SIZES USED.

2. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

3. PROVIDE DISTRIBUTION UNIT WITH VALVE TO SERVE MULTIPLE FLOOR DRAINS AS

BALANCE VALVE ASSEMBLY SPECIFICATION (BASIS OF DESIGN):

I. FURNISH AND INSTALL CIRCUITSOLVER® AS INDICATED ON THE PLANS. CIRCUITSOLVER® SHALL BE SELF CONTAINED AND FULLY AUTOMATIC WITHOUT ADDITIONAL PIPING OR CONTROL MECHANISMS. VALVE SHALL BE A CIRCUITSOLVER® AS

MANUFACTURED BY THERMOMEGATECH®, INC., OR EQUIVALENT. A. CIRCUITSOLVER® SHALL REGULATE THE FLOW OF RECIRCULATED DOMESTIC HOT WATER BASED ON WATER TEMPERATURE ENTERING THE CIRCUITSOLVER® REGARDLESS

OF SYSTEM OPERATING PRESSURE. 1. EVEN WHEN FULLY CLOSED THE CIRCUITSOLVER® SHALL BYPASS A SMALL

AMOUNT HOT WATER TO MAINTAIN DYNAMIC CONTROL OF THE RECIRCULATING

2. CIRCUITSOLVER® SHALL BE FACTORY ADJUSTABLE AS REQUIRED BY PROJECT CONDITIONS. 3. CIRCUITSOLVER® SHALL BE AVAILABLE IN SIZES RANGING FROM ½" NPT TO 2"

II. CIRCUITSOLVER® BODY AND ALL INTERNAL COMPONENTS SHALL BE CONSTRUCTED OF STAINLESS STEEL WITH MAJOR COMPONENTS CONSTRUCTED OF TYPE 303 STAINLESS

A. CIRCUITSOLVER® SIZES ½" THROUGH 2" SHALL BE RATED TO 200 PSIG MAXIMUM

WORKING PRESSURE. 1. ALL CIRCUITSOLVER® SHALL BE STANDARD TAPERED FEMALE PIPE THREAD,

B. ALL CIRCUITSOLVER® SHALL BE RATED TO 300°F (148.9°C) MAXIMUM WORKING C. ALL CIRCUITSOLVER® SHALL BE NSF-61 CERTIFIED FOR USE IN ALL DOMESTIC WATER

D. THERMAL ACTUATOR SHALL BE SPRING LOADED AND SELF CLEANING, DELIVERING CLOSING THRUST SUFFICIENT TO KEEP ORIFICE OPENING FREE OF SCALE DEPOSITS.

III. INSTALLATION OF CIRCUITSOLVER® SHALL BE MADE BY QUALIFIED TRADESMEN. INSTALL CIRCUITSOLVER® IN EACH DOMESTIC HOT WATER RETURN PIPING BRANCH

BEYOND LAST HOT WATER DEVICE IN THAT BRANCH. A. PROVIDE SUITABLE LINE SIZE ISOLATION VALVES, UNIONS, AND STRAINER AS INDICATED IN PIPING DETAIL SHOWN ON THE DRAWINGS. CIRCUITSOLVER® SHALL COME

WITH INTEGRAL CHECK VALVE INSTALLED BY THE MANUFACTURER. B. PROVIDE SUITABLE ACCESS PANEL AS REQUIRED IN NON-ACCESSIBLE CEILINGS AND

IV. BASIS OF DESIGN PRODUCT MODEL#: CSUAS-3/4-125-CV1 CIRCUITSOLVER ASSEMBLY WITH ISOLATION VALVES, STRAINER, INTEGRAL CHECK VALVE, AND 125°F CLOSING TEMPERATURE. PRESSURE LOSS THROUGH THE VALVE SHALL NOT BE MORE THAN 2 PSI @

STORM	WATER FILTER :	SCHEDULE										
MARK	FIXTURE TYPE	FILTER	INLET CONNECTION (IN.)	TO TANK OUTLET CONNECTION (IN.)	OVERFLOW OUTLET CONNECTION (IN.)	YIELD RATE @ 2977 GAL/HR	YIELD RATE @ 6125 GAL/HR	MANUFACTURER	MODEL NUMBER	WEIGHT (EMPTY)	ACCESSORIES	REMARKS
RWF-1	RAINWATER FILTER	350 MICRON	6.0	6.0	6.0	99.8%	96.5%	OPTIMAX	OPTIMAX INDUSTRIAL	80.0 LBS.	SEE REMARKS	1,2,3,4,5

1. FILTER SHALL FEATURE THREE LAYER CASCADE FILTER ASSEMBLY WITH STAINLESS STEEL FINE FILTER. 2. UNIT SHALL BE INSTALLED ON UNISTRUT PLATFORM WITH ALLTHREAD RODS AND VERTICAL UNISTRUT RISER SUPPORT. UNISTRUT SHALL BE MOUNTED TO RIBS OF STORAGE TANK ROOF PANELS.

3. PROVIDE OPTICLEAN SPRAYHEAD FOR MANUAL CLEANING. 4. PROVIDE BOLTED, TAMPER RESISTANT COVER.

5. PROVIDE ABOVE GRADE INSTALLATION KIT.

DESIGNATION	FIXTURE TYPE	C.W.	H.W.	WASTE	FLOW RATE	MANUFACTURER	MODEL NO.	TRIM	DRAIN	TRAP	SUPPLY	ACCESSORIES	REMARKS
L-1	WALL HUNG WASH STATION; THREE FAUCET	1/2"	1/2"	1-1/2"	0.5 GPM	BRADLEY		D3; FINISH TO BE D BY ARCHITECT	PROVIDED W/ FIXTURE	CHROME PLATED W/ CLEAN OUT PLUG	MCGUIRE SSLAV SUPPLIES W/ KEY OPERATED VALVES	TMV-1 OR SIMILAR MIXING VALVE PROVIDED W/ FIXTURE	1, 3, 4
L-2	LAVATORY; WALL HUNG, ADA	1/2"	1/2"	1-1/4"	0.5 GPM	KOHLER	K-2045	CHICAGO FAUCETS / 116.101.AB.1T	GRID DRAIN W/ OVERLFOW	CHROME PLATED W/ CLEAN OUT PLUG	MCGUIRE SSLAV SUPPLIES W/ KEY OPERATED VALVES	TMV-1	1, 2, 3, 4
WC-1	WATER CLOSET; WALL HUNG, MANUAL FLUSH VALVE; STANDARD	1"	-	4"	1.6 GPF	KOHLER	K-4325	SLOAN / ROYAL - 111-1.6	HORIZONTAL WATER CLOSET CARRIER	INTEGRAL	FLUSH VALVE	BEMIS 1955SSTFR SEAT	1, 4
WC-2	WATER CLOSET; WALL HUNG, MANUAL FLUSH VALVE; ADA	1"	-	4"	1.6 GPF	KOHLER	K-4325	SLOAN / ROYAL - 111-1.6	HORIZONTAL WATER CLOSET CARRIER	INTEGRAL	FLUSH VALVE	BEMIS 1955SSTFR SEAT	1, 2, 4, 5, 7
WC-3	WATER CLOSET; FLOOR MOUNTED, MANUAL FLUSH VALVE; ADA	1"	-	4"	1.6 GPF	KOHLER	K-96057	SLOAN / ROYAL - 111-1.6	-	INTEGRAL	FLUSH VALVE	BEMIS 1955SSTFR SEAT	1, 2, 4, 5, 7
UR-1	URINAL - WALL HUNG; MANUAL FLUSH VALVE	3/4"		2"	.125 GPF	SLOAN	WEUS	S-1000.1001	-	INTEGRAL	-	WALL SUPPORT	1, 4
MB-1	MOP SERVICE SINK	1/2"	1/2"	3"	NA	FIAT	MSB2424	832-AA / 830-AA	QUICK DRAIN CONNECTOR	SAME SIZE AS OUTLET	-	889-CC / MSG3636	1, 4
SS-1	SINK - STAINLESS STEEL, DOUBLE COMARTMENT	1/2"	1/2"	1-1/2"	NA	ELKAY	E2C16X20-0X	LK940TS08T6H	GRID DRAIN	SAME SIZE AS OUTLET	-	TMV-1	1, 4
SS-2	SINK - STAINLESS STEEL, THREE COMPARTMENT	1/2"	1/2"	(3) 1-1/2" INDIRECT	NA	ELKAY	3C12X16-0X	LK940TS08T6H	(3) LK24RT	-	-	-	1, 4
DF-1	DRINKING FOUNTAIN; BI-LEVEL. FREEZE PROOF	1/2"	-	1-1/4"	NA	HALSEY TAYLOR	HRF-SEBP	WALL BRACKET	-	INSULATED; SAME SIZE AS OUTLET	-	-	1, 2, 4
FD-1	FLOOR DRAIN	-	-	3"	NA	ZURN	Z415-P-V SERIES	SQUARE OR ROUND HEEL PROOF GRATE AS SELECTED BY ARCHITECT	-	SAME SIZE AS OUTLET	-	BACK WATER VALVE / TRAP PRIMER CONNECTION	1, 4
FD-2	AREA DRAIN	-	-	3"	NA	ZURN	FD-2350-P	-	-	SAME SIZE AS OUTLET	-	TRAP PRIMER CONNECTION	1, 4
HB-1	INTERIOR WALL HYDRANT; MILD CLIMATE	3/4"	-	-	NA	PRIER	C-158NP.75	VACUUM BREAKER; WHEEL HANDLE	-	-	-	-	1
NFWH-1	EXTERIOR WALL HYDRANT; FREEZE RESISTANT	3/4"	-	-	NA	PRIER	C-534F-XX AND C534BX	VACUUM BREAKER; KEY OPERATED; BOX COVER	-	-	-	-	1, 6
FS-1	FLOOR SINK	-	-	3"	NA	ZURN	Z1900-2	1/2 REMOVABLE GRATE; ANTI-SPLASH DOME	-	SAME SIZE AS OUTLET	-	-	1, 4
GI-1	GREASE INTERCEPTOR	-	-	3"	NA	ZURN	GT2700-25	TO BE MOUNTED IN FLOOR; LID SHALL BE FLUSH WITH FFE	-	-	-	-	1, 4
OI-1	OIL INTERCEPTOR	-	-	4"	NA	HIGHLAND TANK	550 GALLON OIL SEPARATOR MODEL#: 00550HGSWHTC0	-	-	-	-	HEAVY TRAFFIC RATED MANWAY COVERS	-

DESIGNATION

DESCRIPTION

DOMESTIC 125°F HOT

SHALL BE PROGRAMMED TO FACILITY'S HOURS OF OPERATION.

3. PROVIDE 3/4" FLANGED CONNECTION ON INLET AND OUTLET OF PUMP.

SHALL BE SET TO 120°F; CUT-OFF SHALL BE 125°F.

1. PROVIDE ALL REQUIRED COMPONENTS FOR COMPLETE FIXTURE ROUGH-IN, I.E., SUPPLIES, STOPS, TRAPS, CARRIERS, GRID DRAINS, TAILPIECES, ETC. NOT ALL REQUIRED COMPONENTS ARE SPECIFIED ABOVE. CARRIERS FOR LAVATORIES AND WATER CLOSETS SHALL COMPLY WITH ANSI STANDARD A112.6.1M AND PLUMBING DRAIN INSTITUTE (PDI) ARTICLE "MINIMUM SPACE REQUIREMENTS FOR ENCLOSED PLUMBING FIXTURE SUPPORTS."

DESIGN FLOW DESIGN HORSE VOLTS /

12

| HEAD (FT.) | POWER | PHASE

1/12 | 120V/1Ø |

REMARKS

1, 2, 3

2. FIXTURES SHALL BE ADA COMPLIANT. PROVIDED WITH ADA COMPLIANT ACCESSORIES. MOUNT ADA COMPLIANT. SEE ARCHITECTURAL PLANS FOR ELEVATIONS.

3. PROVIDE SKAL+GUARD INSULATING DEVICES ON EXPOSED UNDER-COUNTER PLUMBING. 4. REFER TO RISER DIAGRAM FOR VENT PIPE SIZES AND CONNECTIONS.

5. COORDINATE ADA GRAB BAR INSTALLATION WITH FLUSH VALVE. GRAB BARS SHALL NOT INTERFERE WITH USE AND MAINTENANCE OF FLUSH VALVE.

PUMP SCHEDULE (BASIS OF DESIGN)

1. PROVIDE NSI TORK INDUSTRIES TIMECLOCK MODEL# E101B WITH PUMP INSTALLATION. PUMP OPERATION SHALL BE INTERLOCKED WITH TIMECLOCK. TIME CLOCK

2. PROVIDE HONEYWELL AQUASTAT MODEL# L4006 WITH PUMP INSTALLATION. PUMP OPERATION SHALL BE INTERLOCKED WITH AQUASTAT. AQUASTAT CUT-IN TEMP

(GPM)

LOCATION

6. COORDINATE MODEL NUMBER SUFFIX "XX" WITH WALL THICKNESS. 7. FLUSH VALVE LEVER SHALL BE INSTALLED ON OPEN/APPROACH SIDE OF FIXTURE.

MANUFACTURER /

MODEL#

WATER RE-CIRCULATION | BELL & GOSETT / PL30B | AS NOTED ON

#### DEVELOPED LENGTH OF EXPANSION LOOP TO **ACCOMMODATE 1-1/2" MOVEMENT**

-LENGTH AS LISTED IN TABLE

NOMINAL PIPE DIA.	LI	ENGTH PIPING IN FEET	7
NOMINAL PIPE DIA.	STEEL PIPE	COPPER PIPE	SCH. 40 CPVC
1/2"	4.7'	5.3'	1.7'
3/4"	5.2'	6.2'	1.9'
1"	5.9'	7.1'	2.1'
1-1/4"	6.6'	7.8'	2.3'
1-1/2"	7.0'	8.5'	2.5'
2"	7.9'	9.7'	2.8'
2-1/2"	8.7'	10.8'	3.1'
3"	9.6'	11.8'	3.4'
4"	10.8'	13.5'	3.8'

1. EXPANSION LOOPS SHALL BE INSTALLED AT INTERVALS AS RECOMMENDED BY PIPE MANUFACTURER. 2. PRE-MANUFACTURED EXPANSION JOINTS MAY BE USED IN-LIEU OF EXPANSION

3. NOT ALL SIZES LISTED ARE USED IN PROJECT.

ABOVE	GROUND RAIN	WATER ST	ORAGE TA	_									
MARK	FIXTURE TYPE	GALLONS	INLET CONNECTION (IN.)	IRRIGATION OUTLET CONNECTION (IN.)	OVERFLOW OUTLET CONNECTION (IN.)	DRAIN OUTLET CONNECTION (IN.)	MANUFACTURER	MODEL NUMBER	DIAMETER	EAVE HEIGHT	PEAK HEIGHT	ACCESSORIES	REMARKS
RWHT-1	RAINWATER HARVESTING TANK	6100	6.0	2.0	6.0	4.0	CORGAL WATER STORAGE TANKS, INC.	1202-WT-LPR	12'-0"	7-3"	8'-3"	SEE REMARKS	1,2,3,4,5,6,7

1. STORAGE TANK SHALL BE CONSTRUCTED OF 20 GAUGE CORRUGATED, GALVANIZED STEEL WITH INTERNAL LIQUID TIGHT LINER AND SHALL FEATURE A LOW PROFILE ROOF SLOPE.

2. STORAGE TANK SHALL FEATURE ROOF ACCESS HATCH, BRAKE-FORMED RAISED RIBS, ROOF LADDER ANGLES, ANCHOR CLIPS AND PEAK CAP. 3. PROVIDE WITH BLACK GEOTEXTILE PRELINER AND MAIN LINER CONSTRUCTED OF FACTORY WELDED SEAM, FLEXIBLE MEMBRANE NSF-61 RATED PVC COATED POLYESTER FABRIC MAIN LINER.

4. PROVIDE ALL REQUIRED COMPONENTS FOR COMPLETE FIXTURE ROUGH-IN. 5. TANK SHALL BE EQUIPPED WITH FIELD INSTALLED LOW LEVEL FLOAT DEVICE AND LEVEL TRANSDUCER WITHIN TANK.

6. SEE PLANS AND RISERS FOR PIPE INLET SIZES AND CONNECTIONS. 7. SEE X / P703 AND X / P703 DETAILS FOR STORAGE TANK CONNECTIONS DETAILS AND LOCATIONS. COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123 VOLUME 2 OF 2

ELGIN SPORTS

OWNER: THE CITY IN THE SUBURBS

### **SMITHGROUP**

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312.682.6300

CHICAGO, IL 60661 312.620.3668 A+S Project #: 2381015 ISSUED FOR

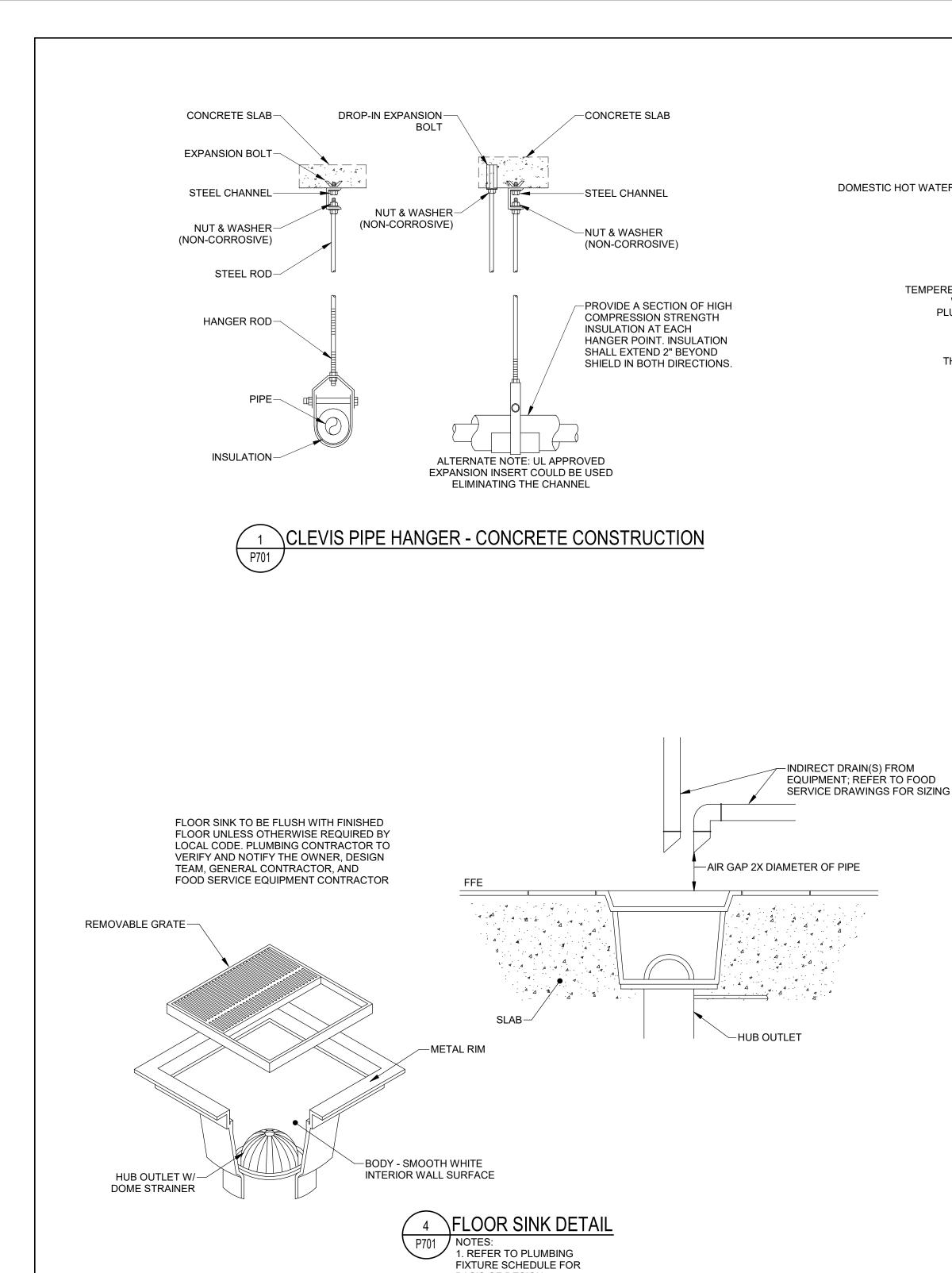
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ISSUE FOR BID		04/11/2024

SEALS AND SIGNATURES



Plumbing Schedules

2313-01 PROJECT NUMBER



BASIS OF DESIGN

AIR GAP 2X PIPE DIAMETER

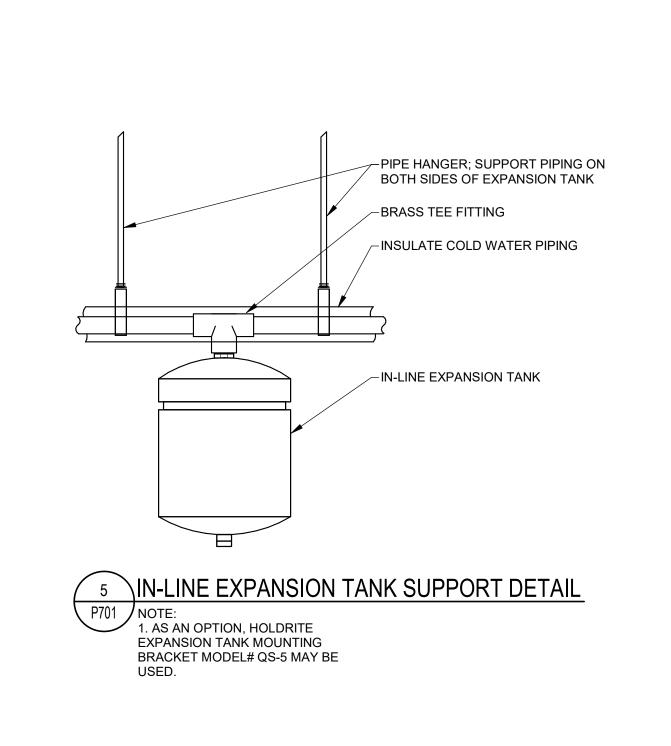
∕-3" GW DRAIN

THREE COMARTMENT SINK

7 THREE COMPARTMENT SINK INDIRECT DRAINAGE DETAIL

WASTE VALVE PROVIDED WITH—
THREE COMPARTMENT SINK

THREE 1-1/2" INDIVIDUAL DRAINS TO FLOOR SINK-



BALANCING VALVE (TYPICAL)

DOMESTIC WATER

HEATER SYSTEM;

REFER TO PLUMBING

DRAWINGS FOR

AND LAYOUT OF SYSTEM

2. REFER TO PLUMBING RISERS FOR PIPING SIZES.

FURTHER REQUIREMENTS.

**\CMV-1 CENTRAL MIXING VALVE PIPING DETAIL** 

1. REFER TO PLUMBING DRAWINGS FOR EQUIPMENT SPECIFICATIONS.

3. REFER TO EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS

UNTEMPERED DOMESTIC HOT

WATER TO CENTRAL MIXING VALVE

DOMESTIC

THERMAL

**EXPANSION TANK** 

BALL VALVE (TYPICAL)

DOMESTIC COLD WATER SUPPLY

CHECK VALVE (TYPICAL)

DOMESTIC HOT WATER

CIRCULATION PUMP

DOMESTIC HOT WATER RETURN →

TEMPERED DOMESTIC HOT -

WATER TO SERVE

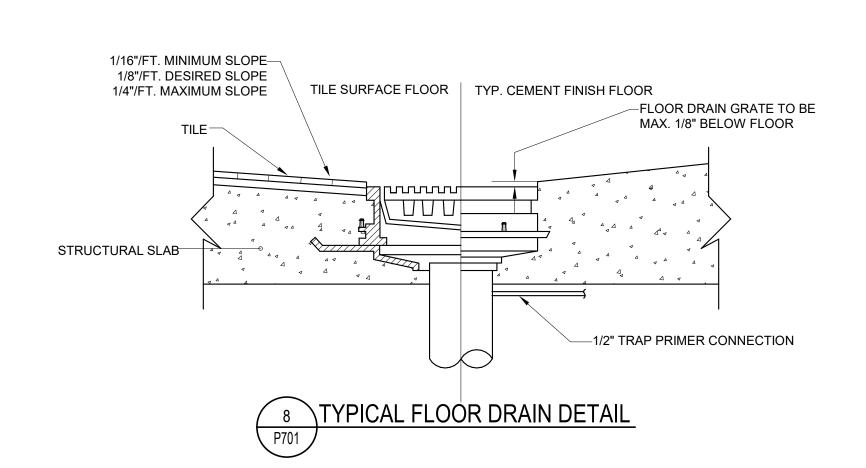
THERMOMETER (TYPICAL)

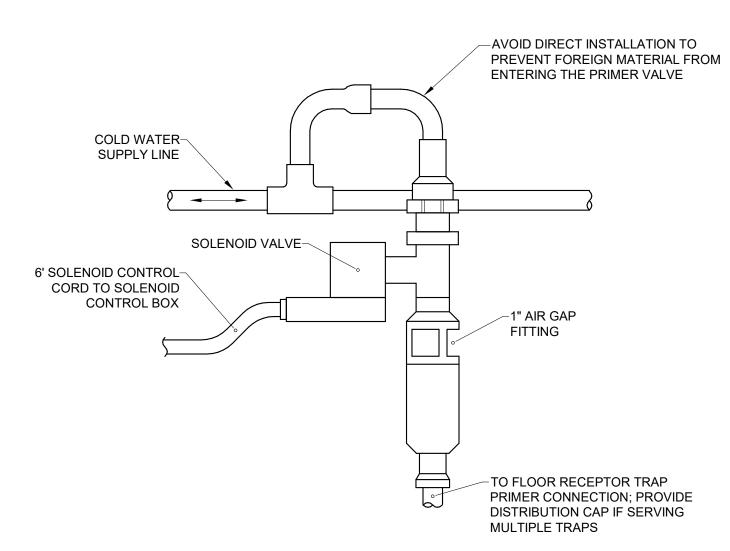
ASSE 1017 CENTRAL

MIXING VALVE CMV-1

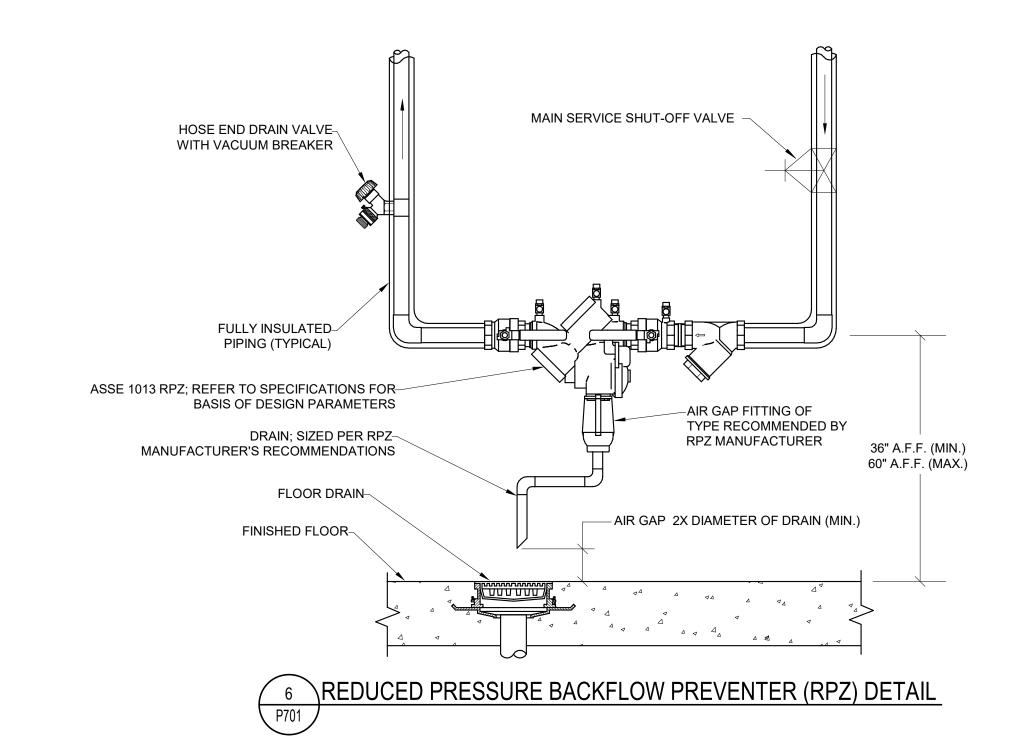
28" DROP HEAT TRAP — (TYPICAL OF TWO)

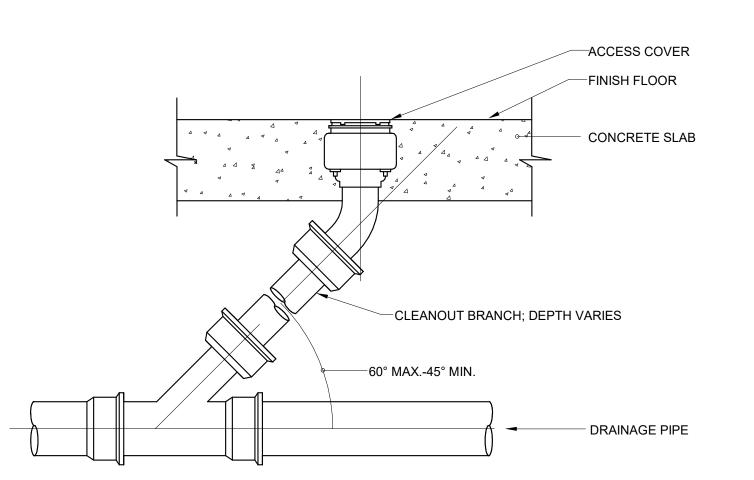
PLUMBING FIXTURES











9 TYPICAL FLOOR CLEAN OUT DETAIL P701 NOTES:

1. PROVIDE EXTRA HEAVY DUTY POLISHED BRONZE OR NICKEL BRONZE COVER IN FINISHED AREAS ONLY; CAST IRON IN UNFINISHED AREAS. 2. FLOOR CLEANOUT SHOWN. CLEANOUT AT GRADE SIMILAR EXCEPT PROVIDE 12"X12"X6" D CONCRETE BLOCK

AT GRADE.

**ELGIN SPORTS** COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2



## **SMITHGROUP**

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# Silman Structural Solutions

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CHICAGO, IL 60661 312.620.3668 A+S Project #: 2381015 ISSUED FOR REV DATE

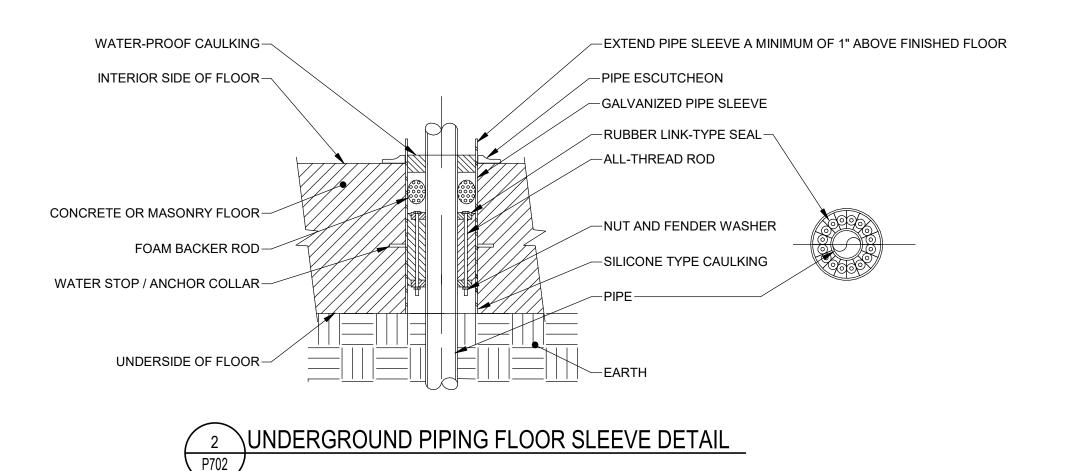
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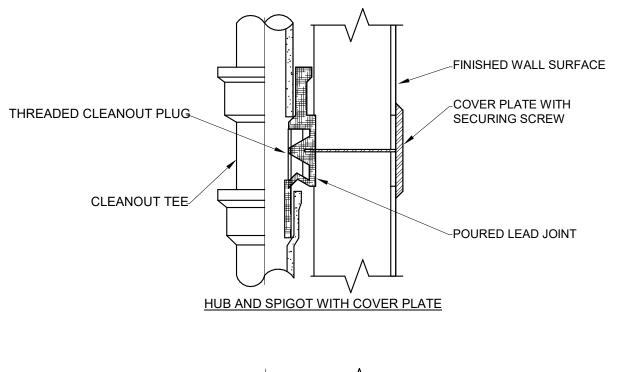
SEALS AND SIGNATURES

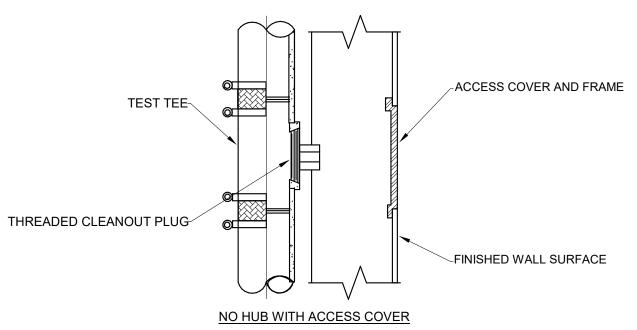


PLUMBING DETAILS

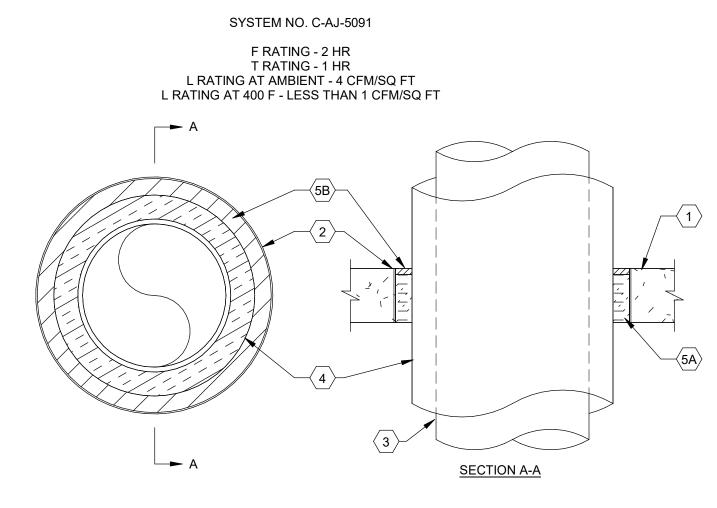
2313-01 PROJECT NUMBER P701







WALL CLEANOUTS DETAIL



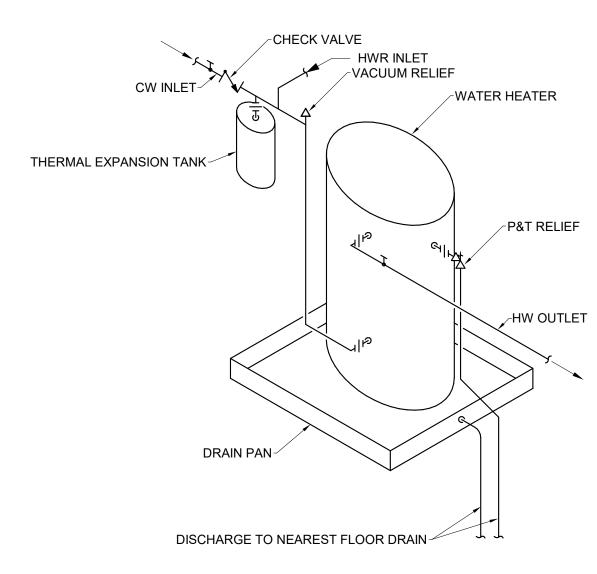
DETAIL NOTEO.

- DETAIL NOTES: (#)

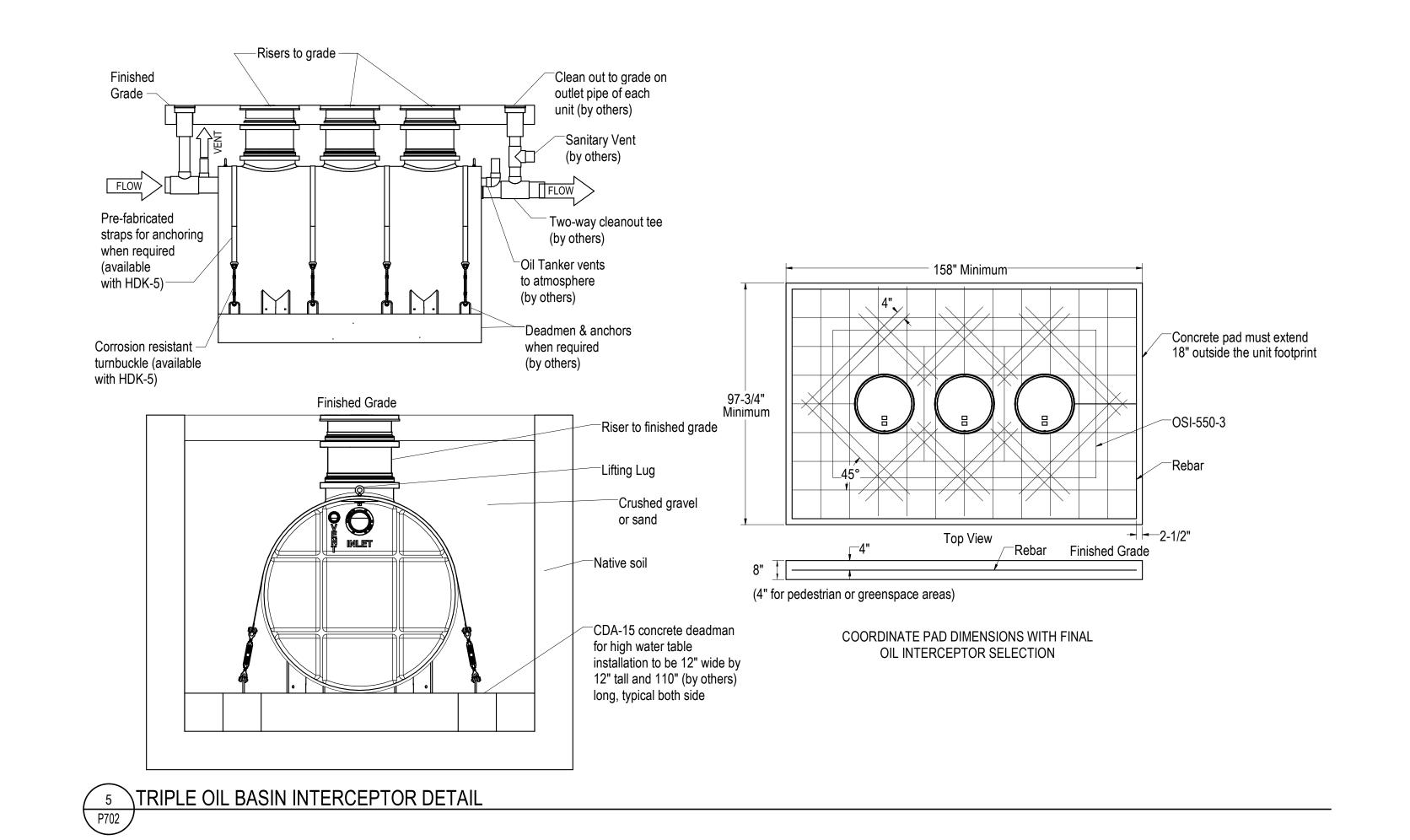
  1. FLOOR OR WALL ASSEMBLY MIN 4-1/2 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX DIAM OF OPENING IS 19-1/2 IN.
- METALLIC SLEEVE NOM 20 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
   THROUGH PENETRANTS ONE METALLIC PIPE OR TUBING TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. PIPE OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR TUBING MAY BE USED:

   STEEL PIPE NOM 12 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
   IRON PIPE NOM 12 IN. DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
   COPPER PIPE NOM 6 IN. DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
   COPPER TUBING NOM 6 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER
- 4. PIPE COVERING NOM 2 IN. THICK HOLLOW CYLINDRICAL HEAVY DENSITY (MIN 3.5 PCF) GLASS FIBER UNITS JACKETED ON THE OUTSIDE WITH AN ALL-SERVICE JACKET. LONGITUDINAL JOINTS SEALED WITH METAL FASTENERS OR FACTORY-APPLIED, SELF-SEALING LAP TAPE. TRANSVERSE JOINTS SECURED WITH METAL FASTENERS OR WITH BUTT TAPE SUPPLIED WITH THE PRODUCT. THE ANNULAR SPACE BETWEEN THE INSULATED PIPE AND THE EDGE OF THE PERIPHERY OF THE OPENING SHALL BE MIN 1/2 IN. TO A MAX 2-1/4 IN.
- A. PIPE COVERING (NOT SHOWN) AS AN ALTERNATE TO ITEM 4, MAX 2 IN. THICK CYLINDRICAL CALCIUM SILICATE (MIN 14 PCF) UNITS SIZED TO THE OUTSIDE DIAM OF THE PIPE OR TUBE MAY BE USED. PIPE INSULATION SECURED WITH STAINLESS STEEL BANDS OR MIN 8 AWG STAINLESS STEEL WIRE SPACED MAX 12 IN. OC. THE ANNULAR SPACE SHALL BE MIN 1/2 IN. TO MAX 2-1/4 IN.
- 5. FIRESTOP SYSTEM THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING: A. PACKING MATERIAL — MIN 4 IN. THICKNESS OF MIN 4 PCF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
- B. FILL, VOID OR CAVITY MATERIAL\* SEALANT MIN 1/2 IN. THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR WITH BOTH SURFACES OF WALL.
  6. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC FS-ONE SEALANT \*BEARING THE UL CLASSIFICATION MARK



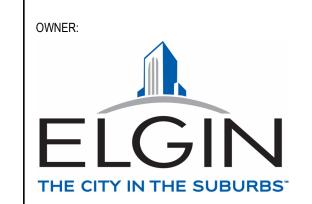


6 DOMESTIC WATER HEATER DETAIL



ELGIN SPORTS
COMPLEX
EXPANSION
475 SPORTS WAY
ELGIN, ILLINOIS 60123

VOLUME 2 OF 2



## **SMITHGROUP**

35 EAST WACKER SUITE 900 CHICAGO, IL 60601 312.641.0770 www.smithgroup.com

# **HPZS**

ARCHITECT OF RECORD: HPZS 314 W INSTITUTE PLACE, SUITE 1E CHICAGO, IL 60610 312.944.9600 www.hpzs.com

## IYI | Silman Structural Solutions

STRUCTURAL ENGINEER:
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200 S WACKER DR, SUITE 1400
CHICAGO, IL 60606
312.682.6300



MEP ENGINEER:
ALLEN + SHARIFF
625 W ADAMS ST, 19TH FLOOR
CHICAGO, IL 60661
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A+S Project #: 2381015

ISSUED FOR REV DATE

SEALS AND SIGNATURES



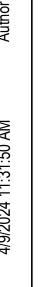
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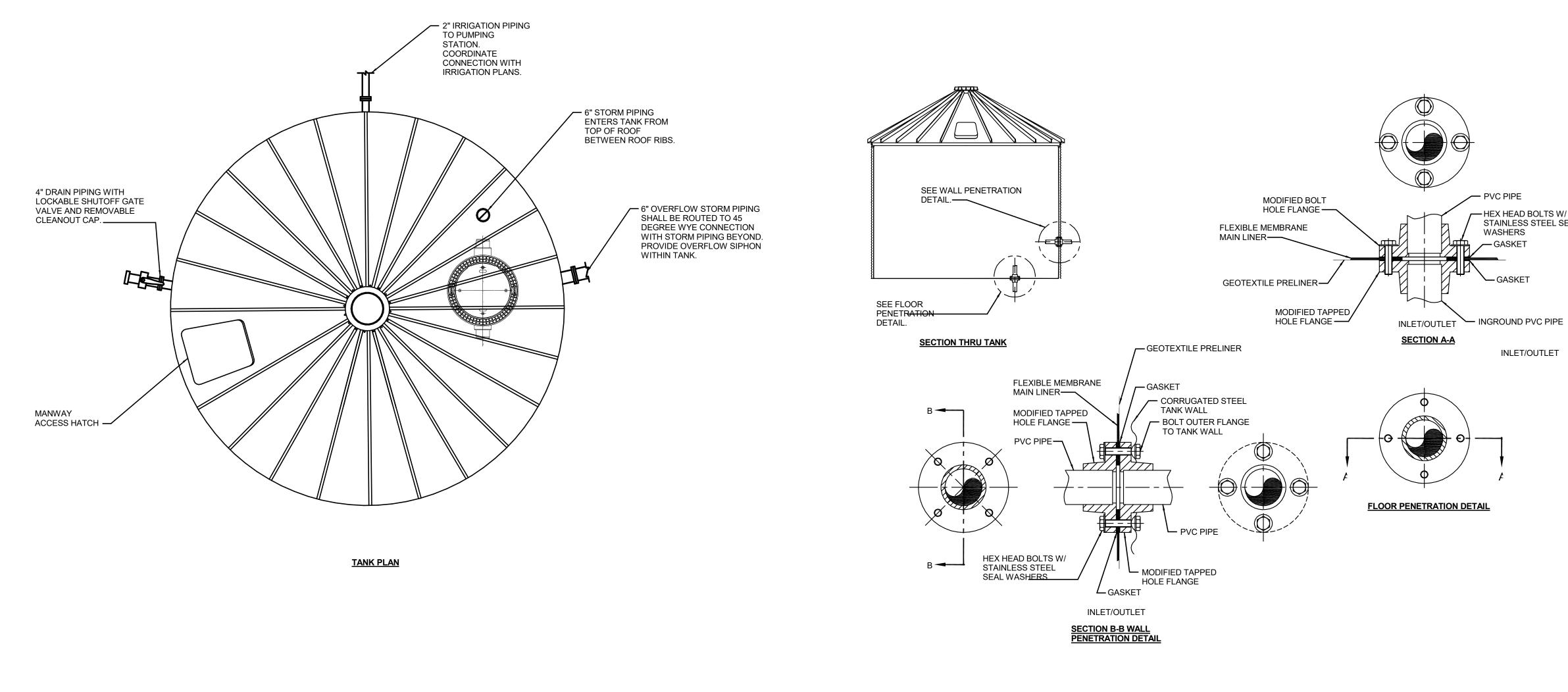
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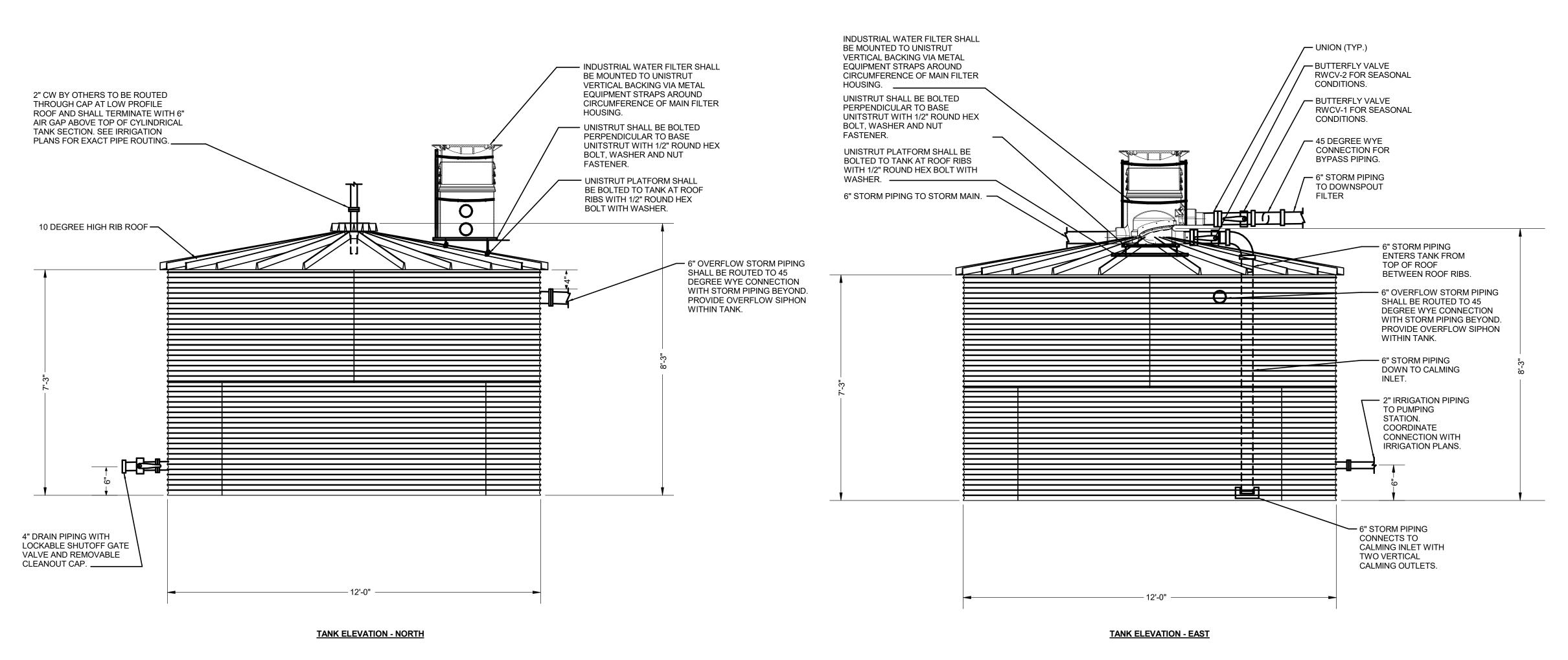
P702
SHEET NUMBER

PROJECT NUMBER

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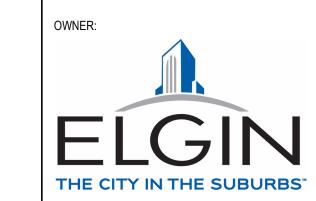




1 RAINWATER HARVESTING TANK CONNECTION DETAILS

ELGIN SPORTS COMPLEX EXPANSION 475 SPORTS WAY ELGIN, ILLINOIS 60123

VOLUME 2 OF 2



PVC PIPE

WASHERS

HEX HEAD BOLTS W/ STAINLESS STEEL SEAL

INLET/OUTLET

### **SMITHGROUP**

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A+S Project #: 2381015 ISSUED FOR REV DATE 04/11/2024 ISSUE FOR BID

SEALS AND SIGNATURES



PLUMBING DETAILS

2313-01

P703 SHEET NUMBER

PROJECT NUMBER