J.E. "JIM" RAMSEUR PARK

PARKS & RECREATION DEPARTMENT

1252 Cox Mill Rd, Concord, NC 28027

ISSUED FOR BIDDING 01/14/25

PROJECT TEAM

CIVIL ENGINEERING | LANDSCAPE ARCHITECTURE | STRUCTURAL | ARCHITECTURAL



13860 Ballantyne Corporate Place, Suite 425 Charlotte, NC 28277 800-414-1045 www.woolpert.com

MECHANICAL | ELECTRICAL | PLUMBING | TELECOMMUNICATION



1927 South Tryon Street, Suite 300 Charlotte, NC 28203 704-338-1292 www.optimaengineering.com

MECHANICALLY STABILIZED EARTH RETAINING WALLS



4685 South Ash Ave, Suite H4 Tempe, AZ 85282 480-897-8200

COST ESTIMATING

Harris Cost, LLC

PO Box 14979 Surfside Beach, SC 29587 864-307-0021 www.harriscost.com

www.terracon.com

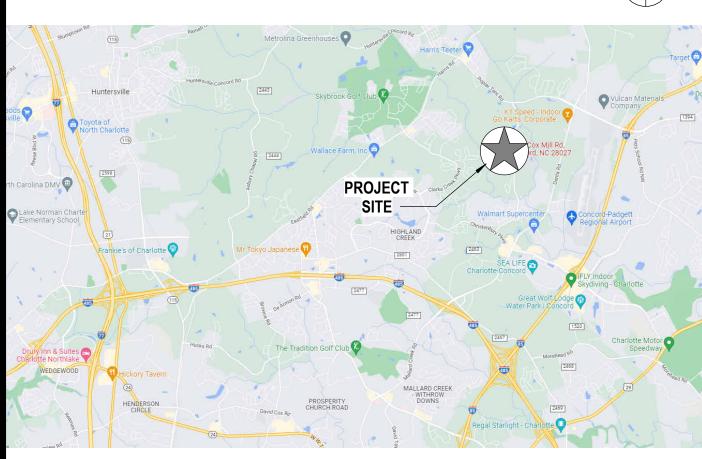
AQUATIC DESIGNER



CORY ANDERSON
Aquatic Play Solution Expert

22214 Market St Cornelius, NC, 28031

LOCATION MAP



PICKLEBALL - OPEN LAWN CONCEPT RENDERING

PROJECT IMAGE



GENERAL NOTES

- 1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO ORDERING OR FABRICATION OF MATERIALS OR THE BEGINNING OF CONSTRUCTION. NOTIFY ARCHITECT AND OWNER REPRESENTATIVE OF ALL DISCREPANCIES. ALL WORK REQUIRING MEASURING TO BE DONE ACCORDING TO FIGUR ON DRAWINGS. DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND DRAWINGS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND OWNER REPRESENTATIVE. CONTRACTOR TO SUBMIT SPECIFIC DISCREPANCY FOR ARCHITECT REVIEW. PRIOR TO COMMENCING WITH THE WORK IN QUIESTION.
- ALL WORK TO CONFORM TO STATE AND LOCAL CODES, ORDINANCES, REQUIREMENTS AND APPLICABLE STANDARDS.
 THE CONTRACTOR SHALL ARRANGE FOR THE PREMISES TO BE MAINTAINED IN AN ORDERLY MANNER, FREE OF DUST AND DEBRIS, THROUGHOUT THE COURSE OF THE WORK. PROVIDE AND MAINTAIN TEMPORARY BARRICADES AS REQUIRED TO PROTECT THE PUBLIC AND OWNERS PERSONNEL DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING STRUCTURE OR EQUIPMENT. ANY SUCH DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMO OF THE 2018 IFC.
- 4. CONTRACTOR TO REVIEW OTHER DRAWINGS ISSUED FOR THIS PROJECT FOR ADDITIONAL INFORMATION FROM OTHER TRADES TO COORDINATE THE REQUIRED SCORE OF WORK
- TRADES TO COORDINATE THE REQUIRED SCOPE OF WORK.

 5. DO NOT SCALE FROM THE DRAWINGS. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE. THE OWNER'S
- REPRESENTATIVE MUST BE NOTIFIED OF ANY CONFLICTS IN DIMENSIONING.

 6. EXTERIOR DIMENSIONS ARE TO FACE OF CMU, FACE OF METAL STUD, OR COLUMN CENTERLINE UNLESS OTHERW
- OF INTERIOR STUD UNLESS OTHERWISE NOTED.

 7. ALL MATERIALS, FIXTURES AND EQUIPMENT INDICATED IN THE CONSTRUCTION DOCUMENTS SHALL BE NEW AND AS
- SPECIFIED, UNLESS IDENTIFIED OTHERWISE.

 8. ALL NEW FINISHED AND PATCHED SURFACES SHALL BE SMOOTH, CONTINUOUSLY FREE OF IMPERFECTIONS AND IN PROPER CONDITION TO RECEIVE THE SPECIFIED FINISH. PATCHED AREAS SHALL MATCH THE ADJACENT MATERIALS
- 9. ALL FLOORS ON EITHER SIDE OF A DOORWAY OR OPENING SHALL BE LEVEL AND HAVE MAXIMUM ELEVATION
- 10. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE 8" FROM THE FACE OF CMU TO FACE OF CMU OF DOOR
- 11. DOOR SIZES, STYLES, AND SPECIFICATIONS, ROUGH OPENING SIZES AND EXACT LOCATIONS TO BE CHECKED AND
- VERIFIED BY THE CONTRACTOR BEFORE ORDERING AND BEFORE CONSTRUCTION BEGINS.

 12. ALL PENETRATIONS OF FIRE RATED FLOORS, WALLS AND CEILINGS TO BE SEALED WITH PROPER APPROVED
- MATERIALS TO THE FULL THICKNESS OF THE CONSTRUCTION ELEMENTS.

 13. FIRE STOP ALL FLOORS, WALLS AND CEILINGS AS REQUIRED BY APPLICABLE CODE.
- 14. ALL WOOD BLOCKING IN EXTERIOR WALLS TO BE MOISTURE RESISTANT TREATED IN ACCORDANCE WITH SPECIFICATIONS. WHERE REQUIRED BY CODE, ALL WOOD BLOCKING IN INTERIOR WALLS TO BE FIRE RETARDANT TREATED IN ACCORDANCE WITH SPECIFICATIONS.
- 15. INSTALL SEALANT AT EXTERIOR SIDE OF ALL JOINTS, SEAMS, CONNECTIONS OR OPENINGS WHICH WOULD ALLOW WATER OR AIR INFILTRATION EXCEPT AS NOTED OTHERWISE. SEALANT COLOR TO MATCH ARCHITECT'S SAMPLE.
- 16. THE CONTRACTOR SHALL VERIFY AND COORDINATE, WITH ALL TRADES, THE SIZES AND LOCATIONS OF ALL OPENINGS FOR MECHANICAL, PLUMBING, AND ELECTRICAL EQUIPMENT, EQUIPMENT PADS, OR BASES AS WELL AS POWER, WATER, AND DRAIN INSTALLATIONS BEFORE PROCEEDING WITH WORK. SUBCONTRACTOR SHALL PROVIDE COORDINATION DRAWINGS FOR PROPER PLACEMENT OF ALL TRADES' WORK. ALL CONCERNS, SPACE LIMITATIONS O STRUCTURAL CONFLICTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT, PRIOR TO COMMENCING WITH THE WORK IN QUESTION.
- 7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND LOCATE ELECTRICAL, DATA, AND PHONE RECEPTACLES, SWITCHES, ETC. TO AVOID CONFLICTS WITH CASEWORK, DOORS, AND OTHER TRADES.
- 18. ALL APPLICABLE BUILDING COMPONENTS SHALL BE ATTACHED TO MEET SEISMIC LOADS AND SEISMIC DESIGN CATEGORY AS NOTED ON THE CODE SUMMARY FOR EACH BUILDING.

VICINITY MAP





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STMENT

CHARLOTTE, NC 28227

"JIM" RAMSEUR PAF
8 & RECREATION DEPARTMEN

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PROJECT NO: 081197

DATE ISSUED: 06/15/2023

DESIGNED BY: BF

DRAWN BY: DL

SHEET NAME:
COVER SHEET

SHEET NO:

G-001.2

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PANEL SCHEDULES

SHEET NO:

1

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MSE ION DE

RATI

H. A.

081197

06/15/2023

PROJECT NO:

DATE ISSUED:

DESIGNED BY:

DRAWN BY:

CHECKED BY:

SHEET NAME:

SHEET INDEX

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G-002.2

WOOLPERT

ARCHITECTURE | ENGINEERING | GEOSPATIAL 13860 BALLANTYNE CORPORATE PLACE

> **CHARLOTTE, NC 28227** 800.414.1045

						J.E. "Jiı	m" Rams	eur Park	- City of Co	oncord - S	Site Loadi	ng Estima	ates			
			Occupan	cy Loading	P	lumbing Fixtur	es					Vehicle Space	es (Parking)			
Key Note	Site Function	Approx. Square Feet	Required	Proposed/Ca lculated	Male	Female	Lavs	Proposed Parking	*Parking Occupancy	Range	Minimum	Factor per SF (1 per)	Maximum	Factor per SF (1 per)	Concord UDO Land Use per Table 10.3.1	Notes
1	Dog Park	60,000		30	0.20	0.375	0.175	10	300	100-120	100	600	120	500	Retail - Amusement Park	
2	Open Event Lawn	19,000		96	0.64	1.2	0.56	32	96	32-38	32	600	38	500	Retail - Amusement Park	
3	Open Splashpad Lawn3	6,000		30	0.20	0.375	0.175	10	30	10-12	10	600	12	500	Retail - Amusement Park	
4	Pickleball Courts (6)			24	0.16	0.3	0.14	18	54	18-24	18	3	24	4	Charlotte Precedent Used	Tennis or Racquet Courts (City of Charlotte)
5	Pickleball Spectator Seating	Per Seats1	144	72	0.48	0.9	0.42	24	72	24-36	24	6	36	4	Institutional and Civic - Public Assembly	Non-simultaneous loading during rare spectator events
6	Splashpad	3,600		36	0.24	0.45	0.21	12	36	12-29	12	300	29	125	Institutional and Civic - All other Institutional Uses	
7	Adventure Playground	18,000		90	0.60	1.125	0.525	30	90	30-36	30	600	36	500	Retail - Amusement Park	
8	Small Amphitheater	Per Seats2	45	45	0.30	0.5625	0.2625	8	24	8-12	8	6	12	4	Auditorium/ Public Assembly	
9	Basketball Courts (2)			24	0.16	0.3	0.14	8	18	6-8	6	3	8	4	Charlotte Precedent Used	Proposed 3on3 per hoop x 4 hoops
10	Outdoor Education Pad	400	27	24	0.16	0.3	0.14	2	6	2-4	2	300	4	125		4 picnic tables @6ppl ea
11	Shelter - Splashpad (35x35)	1,225	82	48	0.32	0.6	0.28	5	15	5-10	5	300	10	125		8 picnic tables @6ppl ea
12	Shelter - Dog Park (16x20)	320	22	24	0.16	0.3	0.14	2	6	2-3	2	300	3	125	Institutional and Civic - All other Institutional Uses	4 picnic tables @6ppl ea
13	Shelter - Event Lawn (40x30)3	1,200	80	72	0.48	0.9	0.42	4	12	4-10	4	300	10	125		12 picnic tables @6ppl ea
14	Shelter - Rentable (16x20)	320	22	24	0.16	0.3	0.14	2	6	2-3	2	300	3	125		4 picnic tables @6ppl ea
15	Shelter - Rentable (16x20)	320	22	24	0.16	0.3	0.14	2	6	2-3	2	300	3	125		4 picnic tables @6ppl ea
16	Shelter - Rentable (16x20)3	320	22	24	0.16	0.3	0.14	2	6	2-3	2	300	3	125		4 picnic tables @6ppl ea
17	Greenway Trails															Convenience Access, not dedicated trailhead
18	Phase 2 - Recreation Center	51,500	1024					78	234	78-412	78	666.667	412	125	"Other" Institutional Uses" for maximum Retail - Health Clubs and Fitness Centers for minimum.	53,350 Total SF minus 1,850 spectator zone calculated as actual seats
18	Phase 2 - Rec Center Spectator Seating	1,850	264					44	132	44-66	44	6	66	4	Auditorium/ Public Assembly	
19	Phase 2 - Outdoor Education	900	60						6	2-8	2	666.667	8	125	"Other" Institutional Uses" for maximum Retail - Health Clubs and Fitness Centers for minimum.	Calculated as same as interior classrooms @ 15sf/pp - Duplicate occupancy from within rec center
	Proposed Site Occupancy			687												
	Plumbing Fixtures Required				5	9	5									
	Plumbing Fixtures Provided				5	9	12									
	Pickleball Restroom				3	4	5									1 All Gender/Family
	Splashpad Restroom				1	3	4									2 All Gender/Family
	Basketball Restroom				1	2	3									1 All Gender/Family
	Total Parking Req'd Phase 1							171	777	259-351	259		351			
	Total Parking Req'd Phase 1 + Phase 2							277	1101	367-812	367		812			Numbers exclude program being demolished to make way for new rec center
	Proposed Parking Spaces on Site							278								
	Difference							1								

*Parking Occupancy is based on 3 people per parking space using the minimum number of spaces. U.S. Census Bureau indicates the avg. household from 2016-2020 has 2.6 persons per household.

1Estimated 72LF of fixed seating per court x 4 courts = 288LF of seating @ 2' width per person = 144 people

2Estimated 90LF of fixed seating @ 2' width per person = 45 people 3Program Space will be demolished to make way for future rec center, thus may overlap with rec center parking

1) Site Restroom Facilities not calculated since they serve the surrounding amenities

Drinking Fountains:

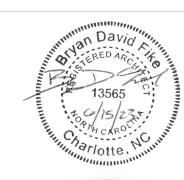
Assembly A5 for outdoor park/amusement facilities

1 DF per 1,000 Occupants Required:

687-777 Total Occupants = 1 DF Required 4 Regular DF Actual:

4 Accessible DF 8 Total DF

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CITY OF CONCORD J.E. "JIM" RAMSEUR PARK PARKS & RECREATION DEPARTMENT

PROJECT NO: 081197 DATE ISSUED: 06/15/2023 DESIGNED BY:

DRAWN BY: CHECKED BY:

SHEET NAME: SITE LOADING CALCULATIONS

SHEET NO:

G-003.2

PUBLIC AREAS: = 100 PSF **BOARDWALKS**: = 60 PSF 4. SNOW LOADS: GROUND SNOW LOAD, Pg = 10 PSF EXPOSURE FACTOR, Ce = 1.0 TEMPERATURE FACTOR, Ct = 1.2 IMPORTANCE FACTOR, Is = 1.0 = 9 PSF FLAT ROOF SNOW LOAD, Pf = 9 PSF

SLOPED ROOF SNOW LOAD, Ps DRIFTING: PER ASCE 7, AS REQUIRED 5. WIND LOADS: BASIC WIND SPEED, V

> RISK CATEGORY **EXPOSURE CATEGORY** = C INTERNAL PRESSURE COEFFICIENT, Gcpi = <u>+</u> 0.18 HURRICANE PRONE REGION WIND BORNE DEBRIS REGION COMPONENTS AND CLADDING NOT DESIGNED BY THE ENGINEER OF RECORD SHALL BE DESIGNED FOR THE WIND PRESSURES LISTED

= 111 MPH

= VARIFS

EQUIVALENT LATERAL FORCE

BELOW. PRESSURES ARE BASED ON A TRIBUTARY AREA OF 10 SQUARE FEET. WIND PRESSURES FOR LARGER TRIBUTARY AREAS MAY BE USED BASED ON DELEGATED DESIGN CALCULATIONS. WALLS:

MAIN AREA = 17.7 PSF **POSITIVE** NEGATIVE = -19.2 PSF CORNERS = 17.7 PSF = -23.6 PSF NEGATIVE MAIN AREA: = 16.0 PSF POSITIVE **NEGATIVE** = -21.0 PSF = 16.0 PSF = -29.2 PSF CORNERS: POSITIVE = 16.0 PSF **NEGATIVE** = -45.6 PSF SEISMIC LOADS: RISK CATEGORY = || IMPORTANCE FACTOR, le = 1.0 SITE CLASS: = C

MAPPED SPECTRAL RESPONSE ACCELERATIONS = 0.182= 0.078SPECTRAL RESPONSE COEFFICIENTS = 0.158 = 0.078SEISMIC DESIGN CATEGORY BASIC SEISMIC FORCE RESISTING SYSTEM: STEEL ORDINARY CANTILEVERED COLUMNS RESPONSE MODIFICATION FACTOR, R = 1.25 RESPONSE COEFFICIENT, Cs = 0.126

<u>FOUNDATION</u>

DESIGN BASE SHEAR

ANALYSIS PROCEDURE

THE SOILS AND FOUNDATION ENGINEERING REPORT IS FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE CONSIDERED PART OF THE CONTRACT DOCUMENTS. FURTHERMORE, NO WARRANTY IS MADE BY THE OWNER WITH REGARD TO THE COMPLETENESS AND ACCURACY OF THE SUBSURFACE INVESTIGATION DATA, SOIL TEST DATA OR STATEMENTS AND INTERPRETATIONS GIVEN IN REPORT NO. 71225209 PREPARED BY TERRACON ON 11/23/2022

WATER LEVELS INDICATED ON THE BORING LOGS MAY BE SUBJECT TO SEASONAL AND/OR ANNUAL VARIATIONS. A DEWATERING SYSTEM OF SUFFICIENT CAPACITY SHALL BE INSTALLED AND OPERATED TO MAINTAIN THE CONSTRUCTION AREA FREE OF WATER AT ALL TIMES UNTIL ALL SUBGRADE AND GROUND LEVEL SLABS, PERIMETER WALLS AND WATERPROOFING ARE INSTALLED AND THE PERMANENT BUILDING

DRAINAGE SYSTEM IS FULLY OPERATIONAL THE BEARING VALUE OF THE SOIL WAS DETERMINED BY FIELD EXPLORATION AND LABORATORY ANALYSIS. THE FOUNDATION DESIGN IS BASED ON THE FOLLOWING NET ALLOWABLE BEARING PRESSURE(S):

SPREAD FOOTINGS ALL FOOTING EXCAVATIONS SHALL BE INSPECTED, PRIOR TO CONCRETE PLACEMENT, BY A GEOTECHNICAL ENGINEER TO VERIFY SUITABLE BEARING

MATERIAL OF CAPACITY AS SPECIFIED. NOTIFY THE OWNER'S REPRESENTATIVE WHEN ADDITIONAL EXCAVATION IS REQUIRED TO REACH SUITABLE BEARING MATERIAL.

THE GEOTECHNICAL ENGINEER SHALL CERTIFY IN WRITING THAT ALL FOUNDATIONS WERE PLACED ON SOIL WITH THE BEARING VALUE AS SPECIFIED.

WITHIN THE EXCAVATION AREA OF THE FOUNDATIONS, ALL VEGETATION, TOPSOIL, PREVIOUSLY PLACED FILL AND UNSUITABLE SOILS SHALL BE REMOVED. ALL FOOTINGS SHALL BEAR ON VIRGIN SOIL OR PROPERLY PLACED AND COMPACTED ENGINEERED FILL AS SPECIFIED IN GEOTECHNICAL REPORT. SEE TYPICAL OVER-EXCAVATION DETAIL ON S-502.

FOUNDATION DESIGN DOES NOT ACCOUNT FOR WINTER CONSTRUCTION. ANY UNENCLOSED/UNHEATED SPACES SHALL BE ADEQUATELY PROTECTED AGAINST FROST DURING WINTER CONSTRUCTION BY CONTRACTOR.

FOOTING ELEVATIONS SHOWN ON THE DRAWINGS REPRESENT ESTIMATED DEPTHS AND ARE NOT TO BE CONSTRUED AS LIMITING THE AMOUNT OF EXCAVATION REQUIRED TO REACH SUITABLE **BEARING MATERIAL**

). THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORTS IN ALL EXCAVATIONS AS REQUIRED TO PREVENT HORIZONTAL MOVEMENT OR VERTICAL SETTLEMENT OF SURROUNDING SOIL AND/OR PROPERTY WHICH WILL ENDANGER LIVES OR PROPERTY.

I. FOUNDATIONS (CONCRETE) SHALL NOT BE PLACED ON FROZEN SUBGRADE. 12. THE CONTRACTOR SHALL PROTECT IN-PLACE FOUNDATIONS AND SLABS-ON-

GRADE FROM FROST PENETRATION UNTIL THE PROJECT IS COMPLETE. 13. WHERE FOUNDATION WALLS HAVE FILL ON BOTH SIDES, BACKFILLING SHALL BE DONE SIMULTANEOUSLY ON BOTH SIDES OF THE WALL.

14. ALL WALL FOOTINGS ARE TO BE CENTERED ON WALLS, UNO. ALL PAD FOOTINGS ARE TO BE CENTERED ON COLUMNS, UNO.

FOUNDATION/ UNDERGROUND MECHANICAL COORDINATION

1. UNDERGROUND SEWER, WATER, GAS LINES, ETC. CROSSING CONTINUOUS WALL FOUNDATIONS SHALL NOT PASS THROUGH FOOTINGS. WHERE PIPE OCCURS ABOVE TOP OF FOOTING, SLEEVE THROUGH WALL. WHERE PIPE OCCURS IN FOOTING DEPTH, DROP TOP OF FOOTING SUCH THAT PIPE PASSES JUST ABOVE FOOTING. IF TOP OF PIPE IS LESS THAN 6" BELOW BOTTOM OF FOOTING, PROVIDE 1" COMPRESSIBLE FOAM INSULATION BELOW FOOTING FOR WIDTH OF TRENCH. 2. CONTRACTOR SHALL PROVIDE A CAST IN PLACE SLEEVE FOR ALL HORIZONTAL ELEMENTS THAT

EXTEND THROUGH FOOTING AND FOUNDATION WALL, SUCH AS DRAIN TILE, CONDUIT, PIPING, ECT.

CONCRETE

COORDINATE SLEEVES WITH EOR.

1. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING STANDARDS:

A) ACI 301 - "SPECIFICATIONS FOR STRUCTURAL CONCRETE". B) ACI MCP - "MANUAL OF CONCRETE PRACTICE"

C) ACI 318 - "BUILDING CODE REQUIREMENTS FOR REINFORCED D) ACI 318.1 - "BUILDING CODE REQUIREMENTS FOR STRUCTURAL PLAIN

CONCRETE". 2. CONCRETE SHALL HAVE A MINIMUM 28-DAY ULTIMATE COMPRESSIVE STRENGTH AS FOLLOWS:

A) SLABS-ON-GRADE B) FOOTINGS, PIERS AND WALLS 3000 PSI 3. ALL CONCRETE EXPOSED TO SOIL TO BE AIR ENTRAINED WITH 5%-8%

AIR ENTRAINMENT 4. ALL CONCRETE IS TO BE NORMAL WEIGHT CONCRETE UNLESS NOTED

5. ALL CONCRETE FLATWORK EXPOSED TO WEATHER TO BE FREE OF LIGNITE AND OTHER DELETERIOUS MATERIALS. 6. THE COARSE AGGREGATE SHALL BE WELL GRADED #57 STONE WITH A

MAXIMUM AGGREGATE SIZE OF 3/4". AGGREGATE FOR SLAB ON GRADE MAY HAVE A MAXIMUM AGGREGATE SIZE OF 1". 7. THE SLUMP OF THE CONCRETE SHALL BE 4". IF A HIGH RANGE WATER REDUCER IS USED THEN THE SLUMP PRIOR TO THE ADDITION OF THE

WATER REDUCER SHALL BE 4". THE SLUMP SHALL NOT EXCEED 10" AFTER THE ADDITION OF A HIGH RANGE WATER REDUCER. 8. MINIMUM CEMENTITIOUS REQUIREMENTS:

A) 3000 PSI CONCRETE: 517 LBS/CU. YD. B) 4000 PSI CONCRETE: 564 LBS/CU. YD. 9. MAXIMUM FLYASH (ASTM C618) CONTENT: 10. MAXIMUM WATER-CEMENT RATIO: A) AIR ENTRAINED CONCRETE:

0.45 B) NON-AIR ENTRAINED CONCRETE: 11. CONCRETE DESIGN SUBMITTALS SHALL INCLUDE A HISTORY OF BREAKS ACCORDING TO ACI 318.

12. PROTECTION FOR REINFORCING BARS: UNFORMED SURFACES IN CONTACT WITH SOIL FORMED SURFACES EXPOSED TO SOIL OR WEATHER #6 BARS AND LARGER #5 BARS AND SMALLER FORMED SURFACES NOT EXPOSED TO SOIL OR WEATHER BEAMS AND COLUMNS 1 1/2" SLABS, WALLS AND JOISTS 1 1/2" #14 BARS AND LARGER

25%

#11 BARS AND SMALLER 13. CONSTRUCTION JOINTS IN WALLS TO BE KEYED AND PLACED AT APPROVED LOCATIONS.

14. ALL COLUMN POCKETS TO BE FILLED WITH CONCRETE AFTER COLUMN IS

15. SLEEVES AND OPENINGS IN BEAMS, JOISTS AND SLABS NOT SHOWN ON STRUCTURAL DRAWINGS ARE NOT PERMITTED, UNLESS APPROVED BY THE ENGINEER.

CONCRETE JOINTS

1. CONSTRUCTION AND/OR CONTRACTION CONTROL JOINTS (SAW CUT, TOOLED, OR PLASTIC FORMED) SHALL BE EXECUTED AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT AGGREGATE FROM DISLODGING BY SAW OR TOOL AND PRIOR TO SHRINKAGE STRESS CRACKING AS DETAILED ON THE DRAWINGS AND

2. MAXIMUM SPACING OF CONSTRUCTION AND/OR CONTRACTION CONTROL JOINTS IN SLAB-ON-GRADE CONSTRUCTION SHALL BE 12'-0" O.C.. JOINTS SHALL BE PLACED TO PRODUCE PANELS THAT ARE AS SQUARE AS POSSIBLE AND

NEVER EXCEEDING A LENGTH TO WIDTH RATIO OF 1.5 TO 1 3. CONSTRUCTION AND/OR CONTRACTION CONTROL JOINTS FOR SLAB-ON-GRADE

CONSTRUCTION SHALL BE LOCATED ON COLUMN LINES.

4. RETAINING WALLS: PROVIDE CONTROL JOINTS AT 20'-0" MAXIMUM

PLACED AT 40'-0" ON CENTER MAXIMUM.

INTERVALS OR AS INDICATED ON THE DRAWINGS. 5. 1" EXPANSION JOINTS IN CANTILEVERED RETAINING WALLS SHALL BE REINFORCING FOR CONCRETE

1. ALL REINFORCING STEEL SHALL CONFORM TO THE LATEST EDITIONS OF THE

FOLLOWING: A) ACI 315 - "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" B) ACI 318 - "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"

C) MSP2 - "CRSI MANUAL OF STANDARD PRACTICE". D) AWS D1.4 - "STRUCTURAL WELDING CODE - REINFORCING STEEL"

E) WRI - "WELDED WIRE FABRIC MANUAL OF STANDARD PRACTICE" 2. STEEL REINFORCING BARS SHALL CONFORM TO ASTM 615 (GRADE 60), 60 KSI YIELD POINT DEFORMED BARS IN ACCORDANCE WITH LATEST ASTM

SPECIFICATIONS UNLESS NOTED OTHERWISE. 3. WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A185. 4. ALL REINFORCING BARS TO BE DETAILED AND PLACED IN ACCORDANCE WITH THE

ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" SPECIFICATIONS. CONTINUOUS BARS TO BE LAPPED. 5. ONLY REBAR CONFORMING TO ASTM A706 REBAR MAY BE WELDED PROVIDE (2) #5 SUPPORT BARS TO SUPPORT TOP STEEL TO STEEL IN SLABS.

PROVIDE EXTRA REINFORCEMENT AROUND ALL OPENINGS GREATER THAN 8" SQUARE OR ROUND. PROVIDE (2) #5 DIAGONALS AT 3" OC FOR EACH MAT OR BARS AT EACH SIDE AND CORNER OF OPENING EXTENDING A MINIMUM OF 24" PAST CORNER OF THE OPENING. PLACE 2" CLEAR FROM OPENING.

8. PROVIDE CORNER BARS IN THE OUTSIDE FACE AND AT WALL JUNCTURES MATCHING HORIZONTAL WALL BARS. USE (3) #5 VERTICAL CONSTRUCTION RODS AT CORNERS. 9. PROVIDE #5 @ 12" O.C. HORIZONTAL AND VERTICAL IN EACH FACE OF ALL WALLS,

UNLESS NOTED OTHERWISE. 10. LAP SPLICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE UNLESS

F'c = 3000 PSI TENSION LAP SPLICE LENGTHS (INCHES) – TOP BARS (NOTES 1,2) (UNO) BAR SIZE #3 #4 #5 #6 #7 #8 #9 #10 29" 38" 47" 56" 82" 94" 105" 116" F'c = 4000 PSI TENSION LAP SPLICE LENGTHS (INCHES) - TOP BARS (NOTES 1,2) (UNO) #3 #4 #5 #6 #7 #8 #9 #10

24" 33" 40" 48" 71" 81" 91" 11. WELDED WIRE FABRIC SHALL LAP A MINIMUM OF 6" AND BE TIED TOGETHER. 12. CONTRACTOR MAY SUBSTITUTE BLENDED FIBER SECONDARY REINFORCING PROVIDED THE BLEND CONSISTS OF MULTIFILAMENT POLYPROPYLENE FIBERS AND COLD DRAWN STEEL WIRE FIBERS, NOVOMESH 850 OR APPROVED EQUIVALENT, APPLIED AT A DOSAGE RATE OF 24 lb/cy UNLESS NOTED OTHERWISE OR A

ROUGH CARPENTRY:

1. CROSS-LAMINATED TIMBER (CLT) MUST BEAR A GRADE MARK MEETING ANSI/APA PRG

DIFFERENT RECOMMENDATION IS MADE BY THE MANUFACTURER.

ALL ROOF, FLOOR AND WALL SHEATHING SHALL BE APA RATED, WITH EXTERIOR GLUE. ROOF SHEATHING SHALL HAVE A PANEL IDENTIFICATION INDEX OF 24/16. FLOOR SHEATHING SHALL HAVE AN IDENTIFICATION INDEX OF 48/24.

PLYWOOD SHEATHING SHALL BE ATTACHED TO FRAMING MEMBERS AS DESCRIBED BELOW UNLESS NOTED OTHERWISE ON PLAN. REFER TO SHEAR WALL SCHEDULE FOR REQUIRED WALL SHEATHING & NAILING:

					MIN.	NAIL	NAIL	NAIL SPACING	
	PLYWOOD	TONGUE			PENETRATION	SPACING	SPACING @	@	
	THICKNESS	&	NAIL	NAIL	INTO SUPPORT	@ PANEL	INTERIOR	DIAPHRAHM	
LOCATIONS	(IN.)	GROOVE	SIZE	TYPE	(IN.)	EDGES	SUPPORT	BOUNDARY	BLOCKED
ROOF	5/8"	Yes	10d	Wire	1 1/2"	6"	12"	6"	No
WALLS	7/16"	No	8d	Wire	1 3/8"	6"	12"	6"	Yes
FLOOR	3/4"	Yes	10d	Wire	1 1/2"	6"	12"	6"	No

4. ALL DIMENSION LUMBER USED IN LOAD-BEARING WALLS, FLOOR JOISTS, EXTERIOR LINTELS, INTERIOR LINTELS, ALL BEARING AND JAMB STUDS, COLUMNS AND BEAMS, SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:

900 PS 175 PSI 565 PSI 1,400,000 PSI

THESE VALUES ARE BASED ON ALLOWABLE STRESSES PROVIDED IN THE NDS (2018) AND DO NOT INCLUDE ADJUSTMENT FACTORS.

THE FOLLOWING SPECIES AND COMMERCIAL GRADES CONFORM TO THE ABOVE MINIMUM DESIGN VALUES:

DOUGLAS FIR - LARCH: NO. 2 NO. 2, OR APPROVED EQUAL SOUTHERN PINE:

ALL DIMENSION LUMBER USED FOR NON-LOAD BEARING WALLS SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:

675 PSI 70 PSI FV: FC (PERP) 425 PSI 1,200,000 PSI

THESE VALUES ARE BASED ON ALLOWABLE STRESSES PROVIDED IN THE NDS (2018) AND DO NOT INCLUDE ADJUSTMENT FACTORS.

6. A.C.Q. LUMBER SHALL BE USED IN ALL LOCATIONS WHERE LUMBER IS EXPOSED TO WEATHER, MOISTURE, OR IS IN CONTACT WITH CONCRETE.

7. GYPSUM SHEATHING SHALL BE ATTACHED TO FRAMING MEMBERS AS DESCRIBED ON FRAMING PLANS.

STRUCTURAL STEEL

1. STRUCTURAL STEEL WORK SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING:

A) AISC - "SPECIFICATION FOR DESIGN, FABRICATION AND ERECTION OF STEEL FOR BUILDINGS"

B) AISC - "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND

C) AWS D1.1 - "STRUCTURAL WELDING CODE - STEEL" D) AISC - "STRUCTURAL STEEL DETAILING MANUAL"

2. STRUCTURAL STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING UNLESS NOTED OTHERWISE.

> HOT ROLLED WF AND WT SHAPES ASTM A992 (FY = 50 KSI)PLATES & ANGLES ASTM A36 (FY = 36 KSI)CHANNELS ASTM A992 (FY = 50 KSI)SS & M SHAPES ASTM A36 (FY = 36 KSI)ASTM A572 GR 50 HP SHAPES (FY = 50 KSI)**RECTANGULAR HSS** ASTM A500 GR C (FY = 50 KSI)ROUND HSS ASTM A500 GR B (FY = 46 KSI)HIGH STRENGTH BOLTS ASTM A325 3/4" DIAMETER (MIN.) ANCHOR RODS ASTM F1554 GR 36 (FY = 36 KSI)ASTM A36 THREADED ROD

(FY = 36 KSI)HEADED STUD ANCHORS ASTM A108 WELDING ELECTRODES CONFORM TO AWS D1.1 SPECS

FOR WELD METAL

3. DETAIL STEEL BEAM CONNECTIONS AS SIMPLE SPAN BEAMS, UNLESS NOTED OTHERWISE. 4. SUBMIT SHOP DRAWINGS WHICH ADEQUATELY DEPICT THE STRUCTURAL ELEMENTS AND CONNECTIONS SHOWN IN THE CONTRACT DOCUMENTS. CONNECTIONS SHALL BE DETAILED BASED ON THE DESIGN INFORMATION PROVIDED IN THE CONTRACT DOCUMENTS. CONNECTIONS SHALL BE DESIGNED FOR THE SERVICE LOAD REACTION VALUES SHOWN ON THE STRUCTURAL DRAWINGS. FOR STEEL MEMBERS WHOSE REACTIONS ARE NOT SHOWN, THE DESIGN REACTION SHALL BE OBTAINED FROM THE TABLES ENTITLED "MAXIMUM TOTAL UNIFORM LOAD" IN THE AISC "STEEL CONSTRUCTION MANUAL", LATEST EDITION. THE DESIGN REACTION IS EQUAL TO HALF THE TABULATED VALUE FOR NONCOMPOSITE BEAMS AND EQUAL TO THE TABULATED VALUE FOR COMPOSITE BEAMS. DEVIATION FROM THE CONNECTION DETAILS DEPICTED IN THE CONTRACT DOCUMENTS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE STRUCTURAL ENGINEER. REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE FULL RESPONSIBILITY FOR THE DESIGN AND ADEQUACY OF SUCH CONNECTIONS. STRUCTURAL ENGINEER SHALL BE COMPENSATED BY THE CONTRACTOR FOR

THE COST INVOLVED IN THE REDESIGN OF CONNECTIONS FOR THE

CONVENIENCE OF THE CONTRACTOR.

BOLT TIGHTENING: A) ALL BOLTED CONNECTIONS TO BE DESIGNED AS SNUG-TIGHT BEARING CONNECTIONS WITH THREADS INCLUDED IN THE SHEAR PLANE, UNLESS

B) ALL BOLTED CONNECTIONS DESIGNATED AS PRE-TENSIONED PER ASTM F1852 OR SLIP-CRITICAL (FRICTION) SHALL BE INSTALLED WITH LOAD INDICATOR WASHERS OR TENSION CONTROLLED BOLTS 6. ALL WELDS SHALL BE MADE BY WELDERS, CERTIFIED ACCORDING TO AWS

ALL FILLER METAL USED IN WELDING SHALL BE 70 KSI YIELD LOW-HYDROGEN. 8. ALL WELDS TO BE VISUALLY INSPECTED.

A) 15% OF FIELD & SHOP GROOVE WELDS TO BE TESTED BY NON-DESTRUCTIVE TESTING.

B) 20% OF FIELD & SHOP FILLET WELDS TO BE TESTED BY NON-DESTRUCTIVE TESTING. 9. ALL STRUCTURAL STEEL AND MISCELLANEOUS METALS SHALL BE PRIME

PAINTED WITH ONE COAT OF FABRICATOR'S STANDARD RUST-INHIBITIVE PRIMER OR AS INDICATED IN THE PROJECT SPECIFICATION. TOUCH UP ALL DISTURBED AREAS AFTER ERECTION. 10. CUTS, HOLES (OPENINGS), ETC. REQUIRED IN STRUCTURAL STEEL MEMBERS

FOR THE WORK OF OTHER TRADES SHALL NOT BE ALLOWED, EXCEPT BY WRITTEN PERMISSION FROM THE ENGINEER. STEEL COLUMN BASE PLATES SHALL BE SIZE SHOWN ON PLAN WITH NON-

METALLIC NON-SHRINK GROUT FOR UNIFORM BEARING. 12. ALL TESTING AND INSPECTION OF WELDS SHALL BE DONE BY AN INDEPENDENT TESTING SERVICE ACCEPTABLE TO THE ARCHITECT AND SHALL CONFORM TO THE LATEST EDITION OF AWS D1.1. WELD INSPECTORS TO BE AWS CERTIFIED.

WOOLPERT ARCHITECTURE | ENGINEERING | GEOSPATIA 11301 CARMEL COMMONS BLVD

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CHARLOTTE, NC 28226

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JIM" RAMSE N DEVELOPMENT [GN PROJECT NO:

081197 DATE ISSUED: 06/15/2023 **DESIGNED BY:** DM DRAWN BY:

CHECKED BY: MM SHEET NAME:

STRUCTRUAL GENERAL **NOTES**

SHEET NO:

- ALL REINFORCED CONCRETE MASONRY MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE FOLLOWING:

 A) TMS 602 "SPECIFICATION FOR MASONRY STRUCTURES", LATEST EDITION.
 - B) TMS 402 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES",
 LATEST EDITION.
 JOTES APPLY TO MASONRY SHOWN ON STRUCTURAL DRAWINGS AND
- 2. NOTES APPLY TO MASONRY SHOWN ON STRUCTURAL DRAWINGS AND SHALL BE THE MINIMUM REQUIREMENTS FOR MASONRY SHOWN ON THE ARCHITECTURAL DRAWINGS.
- 3. CONCRETE MASONRY:

 A) COMPRESSIVE STRENGTH OF MASONRY, UNIT STRENGTH METHOD

 fm = 2000 RSI
 - B) CONCRETE MASONRY UNITS (HOLLOW): ASTM C90 MEDIUM WEIGHT, 2 CELL UNITS.
 - C) COURSE CONVENTIONAL GROUT: 3000 PSI IN ACCORDANCE WITH ASTM C1019. SLUMP OF 8" TO 11", USING 3/8" PEA GRAVEL AND CONFORMS TO ASTM C476. MIN STRENGTH AT 28 DAYS = 2000 PSI MINIMUM.
 - D) MORTAR: ASTM C270, LATEST EDITION.

 TYPE- M, AT BELOW GRADE, HYDRATE LIME REQUIRED.

 TYPE- N, AT INTERIOR NON-LOAD BEARING WALLS.

 TYPE S, TYPICAL.
- ALL CMU SHALL BE LAID IN RUNNING BOND, UNLESS NOTED OTHERWISE.
 REINFORCING: BARS SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE.
- 6. CONTINUOUS WIRE REINFORCING (LADDER JOINT REINFORCING) SHALL BE GALVANIZED FABRICATED UNITS WITH A SINGLE PAIR OF 9 GAUGE SIDE RODS AND 9 GAUGE CROSS RODS WIRE COMPLYING WITH ASTM A82, JOINT REINFORCING SHALL BE SPACED AT 16" OC VERTICALLY IN MASONRY WALLS AND AT 8" OC VERTICALLY IN PARAPETS.
- 7. DOWELS FROM CAST IN PLACE CONCRETE SHALL MATCH THE VERTICAL REINFORCEMENT IN THE WALL ABOVE UNLESS OTHERWISE NOTED. SUCH
- DOWELS SHALL BE FURNISHED BY THE CONCRETE CONTRACTOR.

 8. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CMU CELL, IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL IN 6
- VERTICAL. DOWELS MAY BE GROUTED INTO A WALL REINFORCING.

 9. SPLICING REINFORCING SHALL BE LAPPED 48 BAR DIAMETERS OR 24", WHICHEVER IS GREATER. MECHANICAL SPLICES MAY BE USED IN LIEU OF
- 10. VERTICAL BARS SHALL BE HELD IN POSITION, USING BAR POSITIONERS AT INTERVALS NOT EXCEEDING 200 DIAMETERS OF THE REINFORCING, AND AT TOP OF WALL
- TOP OF WALL.

 11. VERTICAL REINFORCING BARS SHALL HAVE A MINIMUM CLEARANCE OF 3/4"
 FROM THE MASONRY OR ADJACENT BARS AND NOT LESS THAN ONE BAR
- DIAMETER BETWEEN BARS NOT SPLICED. HORIZONTAL STEEL SHALL MAINTAIN 1" MINIMUM CLEARANCE FROM THE MASONRY.

 12. VERTICAL GROUTING MAY BE EITHER "LOW LIFT" OR "HIGH LIFT" AT THE
- CONTRACTOR'S OPTION.

 13. VERTICAL CELLS THAT WILL BE GROUTED SHALL HAVE VERTICAL
 ALIGNMENT TO MAINTAIN A CONTINUOUS UNOBSTRUCTED CELL AREA NOT
 LESS THAN 2" x 3".
- 14. GROUTING SHALL BE STOPPED 1 1/2" BELOW THE TOP OF A COURSE SO AS TO FORM A KEY AT THE POUR JOINT.
- 10 FORM A KEY AT THE POUR JOINT.

 15. GROUTING OF MASONRY BEAMS OVER OPENINGS SHALL BE DONE IN A CONTINUOUS OPERATION.
- 16. ALL STEEL BEAMS BEARING ON MASONRY WALLS SHALL HAVE 3 COURSES MINIMUM FILLED WITH GROUT DIRECTLY BELOW THE BEARING POINT UNLESS NOTED OTHERWISE.
- 17. ALL BOLTS, ANCHORS, ETC., INSERTED IN THE WALLS, SHALL BE GROUTED SOLID INTO POSITION.
- 18. ALL HORIZONTAL REINFORCING (JOINT REINFORCING AND REBAR) SHALL STOP AT CONTROL JOINTS EXCEPT BOND BEAMS CONTINUOUS AT FLOORS AND ROOFS
- 19. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS AND DETAILS OF DOOR AND WINDOW OPENINGS FOR SPECIAL COURSING AND OTHER MASONRY DETAILS. THE INFORMATION SHOWN ON THE STRUCTURAL DRAWINGS IS INTENDED TO DEFINE THE STRUCTURAL REQUIREMENT ONLY.
- 20. PROVIDE BOND BEAMS AT: TOP AND BOTTOM OF OPENINGS (EXTEND MINIMUM OF 2'-0" PAST OPENING), TOP OF WALLS, FLOOR LINES, ROOF LINES, TOP OF PARAPETS, BELOW JOIST AND TRUSS BEARING, FLOOR AND ROOF DECK CONNECTIONS TO WALLS, AND WHERE JOIST, TRUSS, DECK, AND ETC. HAVE SLOPING BEARING ELEVATIONS, PROVIDE MULTIPLE BOND BEAMS. BOND BEAMS SHALL BE CONTINUOUS UNLESS NOTED OTHERWISE.
- BEAMS. BOND BEAMS SHALL BE CONTINUOUS UNLESS NOTED OTHERWIS!
 21. IN SHEAR WALLS, PROVIDE VERTICAL WALL REINFORCING, SAME SIZE
 AS ADJACENT BAR, AT: CORNERS, ENDS, JAMBS, EACH SIDE OF OPENING,
 AND EACH SIDE OF CONTROL JOINTS.
- 22. CONTINUE VERTICAL REINFORCING FLOOR TO FLOOR (OR ROOF) AND
- EXTEND TO TOP OF PARAPET.

 23. PROVIDE STANDARD HOOKS ON BARS TERMINATING INTO MASONRY FACE: IN WALLS AT OPENING, HEADS, JAMBS, EXPANSION JOINTS, ENDS IN BEAMS AT TOP. BOTTOM. AND ENDS.
- 24. COORDINATE BLOCKOUTS, REVEALS, HOLES, OPENINGS, AND BUILT IN ITEMS WITH ALL CONTRACT DOCUMENTS AND TRADES.
- 25. GROUT SOLID MASONRY AT BOND BEAMS, CELLS CONTAINING VERTICAL REINFORCING, PARTIAL HEIGHT COURSES BETWEEN BOND BEAMS AND JOIST, TRUSS, DECK, BEARING, BELOW BEAMS AND LINTELS FOR FULL HEIGHT OF WALL x 24" WIDE, COLUMNS & PILASTERS AND MASONRY BELOW FINISHED GRADE OR FINISHED FLOOR.
- 26. SEE ARCHITECTURAL DRAWINGS FOR MOVEMENT JOINT LOCATIONS,
- UNLESS NOTED OTHERWISE.

 27. INTERIOR NON-LOAD BEARING MASONRY WALLS THAT ARE NOT LATERALLY BRACED PER THE ABOVE NOTE SHALL BE REINFORCED WITH #5 BARS AT 48" O.C. FULL HEIGHT OF WALL AND DOWELED INTO THE THICKENED SLAB BELOW. COORDINATE LOCATIONS WITH THE GENERAL CONTRACTOR. THE REINFORCEMENT MAY BE OMITTED FOR 6" WALL LESS THAN 5'-0" HIGH, 8" WALLS LESS THAN 7'-0" HIGH, 10" WALLS LESS THAN 8'-6" HIGH AND 12"
- WALLS LESS THAN 7'-0" HIGH.

 28. NON-LOAD BEARING INTERIOR MASONRY WALLS THAT ARE NOT LATERALLY BRACED AT OR NEAR THE TOP OF THE WALL SHALL BE REINFORCED AS FOLLOWS FOR CORRESPONDING WALL HEIGHTS (REINFORCEMENT SHALL BE CENTERED IN THE WALL):
 - 6" WALLS:

 FOR WALLS UP TO 7'-4"

 FOR WALLS 7'-4" TO 12'-0"

 MO REINFORCEMENT REQUIRED

 #6 @ 48" O.C. FULL HEIGHT
 - FOR WALLS UP 10 7-4 NO REINFORCEMENT REQU FOR WALLS 7'-4" TO 12'-0" #6 @ 48" O.C. FULL HEIGHT 8" CMU:
 - FOR WALLS UP TO 9'-4"

 FOR WALLS 9'-4" TO 15'-4"

 FOR WALLS OVER 15'-4"

 #6 @ 40" O.C. FULL HEIGHT

 ASONRY WALLS ARE DESIGNED FOR IN PLACE LOADS, MASONRY
- 29. MASONRY WALLS ARE DESIGNED FOR IN PLACE LOADS. MASONRY CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING OF WALLS UNTIL ALL CONNECTIONS ARE COMPLETE AND MORTAR AND GROUT HAVE CURED. NOTE THAT INTERIOR WALLS ARE NOT DESIGNED FOR EXTERIOR WIND LOADS SO CARE SHOULD BE TAKEN TO ADEQUATELY BRACE WALL FOR EXTERIOR WIND LOADS DURING CONSTRUCTION.

GENERAL REQUIREMENTS

- 1. CONTRACTOR AGREES THAT CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF THE WORK, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD OWNER AND STRUCTURAL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF OWNER OR STRUCTURAL ENGINEER.
- 2. THE CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INCLUDE THE METHOD OF CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO: BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, TEMPORARY STRUCTURES, AND PARTIALLY COMPLETED WORK. OBSERVATION VISITS TO THE SITE BY STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- 3. WOOLPERT ENGINEERING SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE IN ANY WAY FOR CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH ANY CONSTRUCTION ACTIVITIES, SINCE THESE ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY UNDER THE CONTRACT.
- 4. WOOLPERT ENGINEERING SHALL NOT BE RESPONSIBLE FOR CONTRACTOR'S SCHEDULE OR FAILURES TO CARRY OUT ANY CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. WOOLPERT ENGINEERING SHALL NOT HAVE CONTROL OVER OR CHARGE OF ACTIONS OF CONTRACTOR, SUB-CONTRACTOR, OR ANY OF THEIR AGENTS, OR EMPLOYEES, OR ANY OTHER PERSONS PERFORMING PORTIONS OF ANY CONSTRUCTION ACTIVITIES.
- 5. THE STRUCTURE IS STABLE ONLY IN ITS COMPLETED FORM. TEMPORARY SUPPORTS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL INTERMEDIATE STAGES OF CONSTRUCTION SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR.
- 6. REFERENCE TO STANDARD SPECIFICATIONS OR CODES OF ANY TECHNICAL SOCIETY, ORGANIZATION, OR ASSOCIATION OR TO CODES OF LOCAL OR STATE AUTHORITIES, SHALL MEAN THE STANDARDS IN EFFECT AS OF THE DATE OF THE CONTRACT DOCUMENTS, UNLESS OTHERWISE NOTED.
- DATE OF THE CONTRACT DOCUMENTS, UNLESS OTHERWISE NOTED.
 CONTRACT DOCUMENTS SHALL GOVERN IN THE EVENT OF A CONFLICT WITH STANDARD SPECIFICATIONS OF ANY TECHNICAL SOCIETY, ORGANIZATION, OR ASSOCIATION.
- 8. NO PROVISION OF ANY REFERENCED STANDARD SPECIFICATION OR CODE, WHETHER OR NOT SPECIFICALLY INCORPORATED BY REFERENCE IN THE CONTRACT DOCUMENTS, SHALL BE EFFECTIVE TO CHANGE THE DUTIES AND RESPONSIBILITIES OF THE OWNER, ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR OR ANY OF THEIR CONSULTANTS, AGENTS, OR EMPLOYEES FROM THOSE SET FORTH IN THE CONTRACT DOCUMENTS, NOR SHALL IT BE EFFECTIVE TO ASSIGN TO STRUCTURAL ENGINEER OR ANY OF STRUCTURAL ENGINEER'S CONSULTANTS, AGENTS, OR EMPLOYEES ANY DUTY OR AUTHORITY TO SUPERVISE OR DIRECT THE FURNISHING OR PERFORMANCE IF THE WORK OR ANY DUTY OR AUTHORITY TO UNDERTAKE RESPONSIBILITIES CONTRARY TO THE
- PROVISIONS OF THE CONTRACT DOCUMENT.

 9. ALL OMISSIONS AND CONFLICTS WITHIN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK. WHEN THIS PROCEDURE IS NOT FOLLOWED, THE CONTRACTOR WILL BE RESPONSIBLE FOR CORRECTING IN-PLACE WORK WHEN THE ENGINEER DETERMINES THAT WORK TO BE INADEQUATE.
- 10. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS AT THE JOB SITE. ANY DISCREPANCIES BETWEEN THE CONDITIONS FOUND AND THOSE INDICATED IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
- 11. SEE DOCUMENTS FROM OTHER DISCIPLINES FOR FLOOR, WALL, AND ROOF OPENINGS, TRENCHES, PITS, PIPE SLEEVES, EQUIPMENT PADS, METAL PAN STAIRS, MISCELLANEOUS IRON, ETC.
- 12. DO NOT PLACE PIPES, DUCTS, CHASES, ETC. IN STRUCTURAL BEAM AND COLUMN MEMBERS. DO NOT CUT ANY STRUCTURAL MEMBER FOR PIPES, DUCTS, ETC., UNLESS NOTED OTHERWISE. NOTIFY STRUCTURAL ENGINEER WHEN DOCUMENTS BY OTHER DISCIPLINES SHOW OPENINGS, POCKETS, ETC. NOT INDICATED IN THE STRUCTURAL DRAWINGS BUT ARE LOCATED IN THE STRUCTURAL MEMBERS. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM STRUCTURAL ENGINEER (EOR) FOR INSTALLATION OF SUCH
- PIPES, DUCTS, CHASES, ETC.

 13. DETAILS LABELED "TYPICAL" ON THE STRUCTURAL DRAWINGS APPLY TO ALL SITUATIONS OCCURRING ON PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE LOCATIONS SPECIFICALLY INDICATED. WHERE A DETAIL IS NOT INDICATED, THE DETAIL SHALL BE THE SAME AS FOR OTHER SIMILAR
- CONDITIONS.

 14. CONTRACTOR TO VERIFY ALL WEIGHTS, LOCATIONS & DIMENSIONS OF MECHANICAL EQUIPMENT SHOWN, NOTIFY THE EOR OF DISCREPANCIES, AND COORDINATE THIS INFORMATION WITH ALL NECESSARY INDIVIDUALS

SUBMITTALS

- 1. SUBMITTALS PREPARED BY SUBCONTRACTORS SHALL BE REVIEWED BY
- CONTRACTOR PRIOR TO SUBMITTING TO ARCHITECT.

 2. WOOLPERT ENGINEERING ASSUMES NO RESPONSIBILITY FOR ANY MISUSE, MODIFICATION, OR MISREPRESENTATION OF ANY INFORMATION CONTAINED IN ANY ELECTRONIC MEDIA TRANSFERRED. WOOLPERT ENGINEERING SHALL BE HELD HARMLESS FROM ANY AND ALL CLAIMS, SUITS, LIABILITY, DEMANDS, OR COSTS ARISING OUT OF, OR RESULTING FROM THE USE OF SAID DOCUMENT(S). UTILIZATION OF THE ELECTRONIC DOCUMENTS IS AT RECIPIENT'S OWN RISK.
- 3. CONTRACTOR SHALL VERIFY THE STRUCTURALLY SUPPORTED EQUIPMENT WEIGHTS, OPENING SIZES, AND LOCATIONS INDICATED ON THE STRUCTURAL DRAWINGS WITH DRAWINGS FROM OTHER DISCIPLINES AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
- 4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING SIZE, METHOD OF ANCHORAGE, WEIGHT, OPENINGS, AND LOCATIONS OF EQUIPMENT NOT INDICATED ON THE STRUCTURAL DRAWINGS PRIOR TO ORDERING FOR REVIEW BY STRUCTURAL ENGINEER TO DETERMINE ADEQUACY OF THE STRUCTURE.
- 5. ALL SUBMITTALS REVIEWED BY STRUCTURAL ENGINEER ARE REVIEWED FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION INCLUDED IN THE CONTRACT DOCUMENTS. ANY ACTION INDICATED IS SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR CORRELATING PROCESSES AND TECHNIQUES OF CONSTRUCTION, AND COORDINATION OF THE WORK WITH THAT OF OTHER
- 6. ALL SUBMITTALS SHALL BE REVIEWED BY THE ENGINEER FOR COMPLIANCE AND CONFORMANCE TO THE CONTRACT DOCUMENTS. SUBMITTALS SHALL BE REVIEWED AND RETURNED WITHIN THE FOLLOWING PERIOD AFTER BEING RECEIVED BY THE ENGINEER:
- BEING RECEIVED BY THE ENGINEER:

 STRUCTURAL STEEL 10 WORKING DAYS
 REBAR 10 WORKING DAYS
 CONCRETE MIX DESIGNS 10 WORKING DAYS
- 7. CONTRACTOR DESIGNED ELEMENTS SHALL BE DESIGNED BY LICENSED PROFESSIONAL ENGINEERS REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, DESIGN LOAD DATA, SUPPORT REACTIONS, AND CERTIFICATION THAT ELEMENTS WERE DESIGNED FOR LOADS SPECIFIED IN THE CONTRACT DOCUMENTS OR IN THE BUILDING CODE. ALL DOCUMENTS NOTED SHALL BE SEALED BY THE LICENSED ENGINEER. IF CRITERIA INDICATED ARE NOT SUFFICIENT, SUBMIT A WRITTEN REQUEST FOR ADDITIONAL INFORMATION TO THE ARCHITECT. THE FOLLOWING ELEMENTS AND THEIR CONNECTIONS SHALL BE CONTRACTOR DESIGNED:
 - TRUSSES; (LIGHT GAUGE & WOOD)
 STRUCTURAL STEEL CONNECTIONS NOT DETAILED OR
 SHOWN ON THE DRAWINGS.

STRUCTURAL ABBREVIATIONS

DWL

ECC

EOD

EOR

EOS

EQUIP

EQ

ΕW

EWEF

EXIST

EXP

EXT

F/F

FAB

FDN

FTG

GΑ

GB

GC

GL

GYP

HK

HS

HT

ID

HOR

HRD BD

GEN

GALV

EXCAV

DOWEL

EQUAL

ECCENTRICITY

EXPANSION JOINT

ENGINEER OF RECORD

EACH WAY EACH FACE

EACH FACE

ELEVATION

EQUIPMENT

EACH WAY

EXCAVATE

EXISTING

EXPANSION

FACE TO FACE

FLOOR DRAIN

FOUNDATION

FACE OF WALL

FEET OR FOOT

FAR SIDE

FOOTING

GALVANIZED

GRADE BEAM

GENERAL CONTRACTOR

GLUE LAMINATE TIMBER

GAUGE

GENERAL

GYPSUM

HEIGHT

HORIZONTAL

HARD BOARD

HEADED STUD

INSIDE DIAMETER

INCH OR INCHES

FIREPROOFING

FINISHED FLOOR

FACE OF CONCRETE

FABRICATOR

EXTERIOR

EDGE OF DECK

EDGE OF SLAB

ANCHOR BOLT

ם ח	ADDITIONAL	INICO	INICODALATION
DDL	ADDITIONAL	INFO	INFORMATION
DJ	ADJACENT	INS	INSULATION
FF.	ABOVE FINISH FLOOR	INT	INTERIOR
	AIR HANDLING UNIT	JF	JOINT FILLER
LT	ALTERNATE	JST	JOIST
PPROX	APPROXIMATE(LY)	JT	JOINT
RCH	ARCHITECT/ARCHITECTURAL	K	KIP (OR 1000 POUNDS)
/	BOTTOM OF	KLF	KIPS PER LINEAR FOOT
/B	BACK TO BACK	LB, #	POUNDS
L	BRICK LEDGE	LG	LEG
_ LDG	BUILDING	LH	LEFT HAND
M	BEAM	LL	LIVE LOAD
OTT	BOTTOM	LLH	LONG LEG HORIZONTAL
RG	BEARING	LLV	LONG LEG VERTICAL
RDG	BRIDGING	LOC	LOCATION
SMT		LVL	LAMINATED VENEER LUMBER
	BASEMENT		
/C	CENTER TO CENTER	MATL	MATERIAL
	COMPRESSION	MAU	MAKE-UP AIR UNIT
Α	CAISSON	MAX	MAXIMUM
Н	CHANNEL	MECH	MECHANICAL
IP	CAST-IN-PLACE CONCRETE	MEP	MECHANICAL ELECTRICAL PLUMBING
J	CONTRACTION/CONSTRUCTION		MEZZANINE
	JOINT	MEZZ	MANUFACTURER
L	CENTER LINE	MFR	MINIMUM
LG	CEILING	MIN	MISCELLANEOUS
LR	CLEAR	MISC	MASONRY OPENING
M	CONSTRUCTION MANAGER	MO	METAL PANEL
MU	CONCRETE MASONRY UNIT	MP	METAL
OL	COLUMN	MTL	NOT APPLICABLE
ONC	CONCRETE	NA	NOT IN CONTRACT
ONF	CONFERENCE	NIC	NUMBER
ONN	CONNECTION	NO, #	NOMINAL
ONST	CONSTRUCTION	NOM	NEAR SIDE
ONT	CONTINUE (D) (OUS)	NS	NOT TO SCALE
ONTR	CONTRACTOR	NTS	NORMAL WEIGHT CONCRETE
OORD	COORDINATE	NWC	ON CENTER
		OC	
TR	CENTER BAR ANGLIOR		OUTSIDE DIAMETER
BA	DEFORMED BAR ANCHOR	OD	OPPOSITE HAND
BL	DOUBLE	OH	OPENING
ET	DETAIL	OPNG	PRECAST CONCRETE
IA	DIAMETER	PC	PLATE
IAG	DIAGONAL	PL	POUNDS PER LINEAR FOOT
IM	DIMENSION (S)	PLF	PLYWOOD
L	DEAD LOAD	PLYWD	PREFABRICATED
P	DRILLED PIER	PREFAB PSF	POUND PER SQUARE FOOT
WG	DRAWING	PSF	POUND PER SQUARE INCH
1 A /I	DOME	DOL	DOOT TENOIONED

QTY

REF

REINF

REQ

REV

RTU

SECT

SHT

SIM

SOG

STD

STL

T&B

T&G

TCX

THK

TYP

UNO

VERT

WITHOUT

WORK POINT

WATERSTOP

WELDED WIRE REINFORCEMENT

WOOD

WEIGHT

VIF

W/O

WD

WS

WWR

WP

TD

STRUCT

SPEC

SCHED

INCLUDE

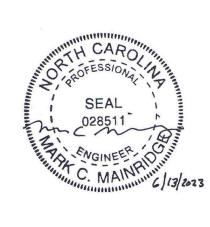
POST TENSIONED QUANTITY RADIUS **ROOF DRAIN** REFERENCE REINFORCE (D) REQUIRE (D) REVISED/REVISION RIGHT HAND **ROOF TOP UNIT** SCHEDULE SECTION SQUARE FOOT SHEET SIMILAR SNOW LOAD SLAB ON GRADE **SPECIFICATION** STAINLESS STEEL STANDARD STEEL STRUCTURAL TOP AND BOTTOM TONGUE AND GROVE TOP OF TENSION TOP CHORD EXTENSION TRENCH DRAIN THICK **TYPICAL** SHEAR UNLESS NOTED OTHERWISE VERTICAL VERIFY IN FIELD WITH

WOOLPERT

ARCHITECTURE | ENGINEERING | GEOSPATIA

11301 CARMEL COMMONS BLVD

SUITE 300



CHARLOTTE, NC 28226

704.525.6284

ISSUANCE SCHEDULE
DESCRIPTION

NUMBER DA

NUMBER

SEUR PARK IT DRAWINGS

OF CONCORD
. "JIM" RAMSI
GN DEVELOPMENT I

PROJECT NO: 081197
DATE ISSUED: 06/15/2023

DM

MM

DATE ISSUED: 06/
DESIGNED BY:
DRAWN BY:
CHECKED BY:

SHEET NAME:
STRUCTRUAL GENERAL
NOTES

SHEET NO:

S-002

- 1. SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH CHAPTER 17 OF THE BUILDING CODE AND CHAPTER N OF AISC 360-10. (SEE INCLUDED
- OFFICIAL, OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND CONTRACTOR. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR, AND IF NOT CORRECTED, SHALL BE REPORTED TO BUILDING OFFICIAL, OWNER, ARCHITECT, AND STRUCTURAL ENGINEER.
- KNOWLEDGE, PERFORMED IN ACCORDANCE WITH THE CONTRACT
- 4. THE FOLLOWING TYPES OF WORK REQUIRE SPECIAL INSPECTIONS: (REFER TO THE BUILDING CODE AND SPECIFICATIONS FOR DETAILED INSPECTION REQUIREMENTS.)

STEEL CONSTRUCTION

TABLE 1705.3

REQUIRED VERIFICATION AND	INSPECTION (OF CONCR	ETE CONSTR	RUCTION
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD	IBC REFERENCED
1. INSPECTIONN OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT:	-	Х	ACI 318: 3.5, 7.1-7.7	1910.4
2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1705.2.2, ITEM 2b.	-	Х	AWS D1.4 ACI 318: 3.5.2	-
3. INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED.	-	Х	AIC 318: 8.1.3, 21.2.8	1908.5, 1909.1
4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.	-	Х	ACI 318: 3.8.6, 8.1.3, 21.2.8	1909.1
5. VERIFYING USE OF REQUIRED DESIGN MIX.	-	Х	ACI 318: CH 4, 5.2-5.4	1904.2, 1910.2, 1910.3
6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C 172, ASTM C 31, ACI 318: 5.6, 5.8	1910.10
7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	Х	-	ACI 318: 5.9, 5.10	1910.6, 1910.7, 1910.8
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	Х	ACI 318: 5.11-5.13	1910.9
9. INSPECTION OF PRESTRESSED CONCRETE: a. APPLICATION OF PRESTRESSING FORCES. b. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC FORCE-RESISTING SYSTEM.	X X	-	ACI 318: 18.20 ACI 318: 18.18.4	-
10. ERECTION OF PRECAST CONCRETE MEMBERS.	-	Х	ACI 318: CH 16	-
11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	-	X	ACI 318: 6.2	-
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	Х	ACI 318: 6.1.1	-

1. WHERE APPLICABLE, SEE ALSO SECTION 1705.11, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE. 2. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH ACI 355.2 OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF THE WORK.

REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS					
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC			
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TOACHIEVE DESIGN BEARING CAPACITY.	-	Х			
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	Х			
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X			
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	Х	-			
5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	Х			

LEVEL B SPECIAL INSPECTION - MASONRY

MINIMUM TESTS

VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH ARTICLE 1.5B.1.b.3 FOR SELF CONSOLIDATING GROUT.

VERIFICATION OF fm AND fAAC IN ACCORDANCE WITH ARTICLE 1.4B PRIOR TO CONSTRUCTION EXCEPT WHERE SPECIFICALLY EXEMPTED BY THE CODE.

MINIMUM INSPECTION

VERIFICATION	FREQUE	NCY	REFERENCED FOR CRITERIA		
	CONTINUOUS	PERIODIC	TMS 402/ ACI 530/ ASCE 5	TMS 602/ ACI 530.1/ ASCE 6	
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS.		Х		ART 1.5	
2. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE.					
a. PROPORTIONS OF SITE PREPARED MORTAR.		Х		ART 2.1, 2.6A	
b. CONSTRUCTION OF MORTAR JOINTS.		Х		ART 3.3B	
c. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES.		X		ART 2.4B, 2.4H	
d. LOCATION OF REINFORCEMENT, CONNECTORS AND PRESTRESSING TENDONS AND ANCHORAGES.		Х		ART 3.4B, 3.6A	
e. PRESTRESSING TECHNIQUE.		Х		ART 3.6B	
f. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY.	X (3)	X (3)		ART 2.1C	
3. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:					
a. GROUT SPACE.		Х		ART 3.2D, 3.2F	
b. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES.		Х	SEC 1.16	ART 2.4, 3.4	
c. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES.		X	SEC 1.16	ART 3.2E, 3.4, 3.6F	
d. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES.		Х		ART 2.6B, 2.4G.1.b	
e. CONSTRUCTIONS OF MORTAR JOINTS.		Х		ART 3.3B	
4. VERIFY DURING CONSTRUCTION:					
a. SIZE AND LOCATION OFSTRUCTURAL ELEMENTS.		Х		ART 3.3F	
b. TYPE, SIZE AND LOCATION OF ANCHORS INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSRUCTION.		Х	SEC 1.16.4.3, 1.17.1		
c. WELDING OF REINFORCEMENT.	Х		SEC 2.1.8.7.2, 3.3.3.4(c), 8.3.3.4(b)		
d. PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F (4.4°C)) OR HOT WEATHER (TEMPERATURE ABOVE 90°F (32.2°C)).		Х		ART 1.8C, 1.8D	
e. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE.	Х			ART 3.6B	
f. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE.	Х			ART 3.5, 3.6C	
g. PLACEMENTOF ACC MASONRY UNITS AND CONSTRUCTIONS OF THIN BED MORTAR JOINTS.	X (2)	X (3)		ART 3.3B.8	
5. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS AND/ OR PRISMS.		Х		ART 1.4B.2a.3, 1.4B.2b.3, 1.4B.2c.3, 1.4B.3,1.4B.4	

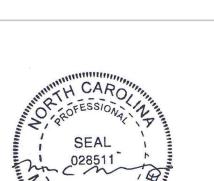
- 1. FREQUENCY REFERS TO THE FREQUENCY OF INSPECTION, WHICH MAY BE CONTINUOUS DURING THE TASK LISTED OR PERIODICALLY DURING THE LISTED TASK, AS DEFINED IN THE TABLE.
- 2. REQUIRED FOR THE FIRST 5,000 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY.
 3. REQUIRED AFTER THE FIRST 5,000 SQUARE FEET (465 SQURE METERS) OF AAC MASONRY.



SUITE 300

CHARLOTTE, NC 28226

704.525.6284



CITY OF CONCORD

J.E. "JIM" RAMSEUR PA

DESIGN DEVELOPMENT DRAWINGS

081197 06/15/2023

PROJECT NO: DATE ISSUED: **DESIGNED BY:** DRAWN BY:

CHECKED BY:

SHEET NAME:

SPECIAL INSPECTION

SHEET NO:

- TABLES AND NOTE 4. FOR SPECIAL INSPECTION REQUIREMENTS)
- 2. SPECIAL INSPECTION REPORTS SHALL BE FURNISHED TO BUILDING
- 3. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT STATING THAT THE STRUCTURAL WORK WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S

MASONRY CONSTRUCTION WOOD CONSTRUCTION CONCRETE CONSTRUCTION

REQUIRED VERIFICATION AND INSPECTION OF STRUCTURAL STEEL INSPECTION TASKS PRIOR TO WELDING

REFERENCED STANDARD: AISC 360 2013 TABLE N5.4-1

REFERENCED STANDARD: AISC 360 2013 TABLE N5.4-1					
INSPECTION TASKS PRIOR TO WELDING	QC	QA			
WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE.	Р	Р			
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	Р	Р			
MATERIAL IDENTIFICATION (TYPE/ GRADE).	0	0			
WELDER IDENTIFICATION SYSTEM.	0	0			
FIT-UP OF GROOCE WELDS (INCLUDING JOINT GEOMETRY): * JOINT PREPARATION * DIMENSIONS (ALIGNMENT, ROOF OPENING, ROOT FACE, BEVEL) * CLEANLINESS (CONDITION OF STEEL SURFACES) * TACKING (TACK WELD QUALITY AND LOCATION) * PREHEAT APPLIED * BACKING TYPE AND FIT (IF APPLICABLE)	0	0			
CONFIGURATION AND FINISH OF ACCESS HOLES.	0	0			
FIT-UP OF FILLET WELDS: * JOINT PREPARATION * DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) * CLEANLINESS (CONDITION OF STEEL SURFACES) * TACKING (TACK WELD QUALITY AND LOCATION)	0	O			
CHECK WELDING EQUIPMENT.	0	-			

- 1. O OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS..
- 2. P PERFORM THESE TASKS FOR EACH WELDEDJOINT OR MEMBER. 3. THE FABRICATOR OR ERECTOR, AS APPLICABLE, SHALL MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBED CAN IDENTIFIED, STAMP, IF USED, SHALL BE LOW-STRESS TYPE.

REQUIRED VERIFICATION AND INSPECTION OF STRUCTURAL STEEL INSPECTION TASKS DURING WELDING

REFERENCED STANDARD: AISC 360 2013 TABLE N5.4-2					
INSPECTION TASKS DURING WELDING	QC	QA			
USE OF QUALIFIED WELDERS.	0	0			
CONTROL AND HANDLING OF WELDING CONSUMABLES: * PACKAGING * EXPOSURE CONTROL	0	0			
NO WELDING OVER CRACKED TACK WELDS.	0	0			
ENVIRONMENTAL CONDITIONS: * WIND SPEED WITHIN LIMITS * PRECIPITATION AND TEMPERATURE	0	0			
WPS FOLLOWED: * SETTINGS ON WELDING EQUIPMENT * TRAVEL SPEED * SELECTED WELDING MATERIALS * SHIELDING GAS TYPE/ FLOW RATE * PREHEAT APPLIED * INTERPASS TEMPERATURE MAINTAINED (MIN/ MAX) * PROPER POSITION (F,V, H, OH)	0	O			
WELDING TECHNIQUES: * INTERPASS AND FINAL CLEANING * EACH PASS WITHIN PROFILE LIMITATIONS * EACH PASS MEETS QUALITY REQUIREMENTS	0	0			

O - OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS..
 P - PERFORM THESE TASKS FOR EACH WELDEDJOINT OR MEMBER.

REQUIRED VERIFICATION AND INSPECTION OF STRUCTURAL STEEL INSPECTION TASKS AFTER WELDING REFERENCED STANDARD: AISC 360 2013 TABLE N5.4-3

INSPECTION TASKS PRIOR TO WELDING	QC	QA
WELDS CLEANED.	0	0
SIZE, LENGTH AND LOCATION OF WELDS.	Р	Р
WELDS MEET VISUAL ACCEPTANCE CRITERIA: * CRACK PROHIBITAON * WELD/BASE METAL FUSION * CRATER CROSS SECTION * WELD PROFILES * UNDERCUT * PROSITY	Р	Р
ARC STRIKES	Р	Р
k AREA	Р	Р
BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	Р	Р
REPAIR ACTIVITIES	Р	Р
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	Р	Р

1. O - OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.. 2. P - PERFORM THESE TASKS FOR EACH WELDEDJOINT OR MEMBER.

REQUIRED VERIFICATION AND INSPECTION TASKS PRIOR TO BOLTING REFERENCED STANDARD: AISC 360 2013 TABLE N5 6-1

REFERENCED STANDARD: AISC 360 2013 TABLE No.6-1					
INSPECTION TASKS PRIOR TO BOLTING	QC	QA			
MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS.	0	Р			
FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS.	0	0			
PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE).	0	0			
PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL.	0	0			
CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS.	0	0			
PREINSTALLATION VERIFICATIONTESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED.	Р	0			
PROPER STORAFE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS.	0	0			

O - OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS..
 P - PERFORM THESE TASKS FOR EACH WELDEDJOINT OR MEMBER.

REQUIRED VERIFICATION AND INSPECTION TASKS DURING BOLTING

REFERENCED STANDARD: AISC 360 2013 TABLE N5.6-2					
INSPECTION TASKS DURING BOLTING	QC	QA			
FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED.	0	0			
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION.	0	0			
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING.	0	0			
FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES.	0	0			

- 1. O OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS..
- 2. P PERFORM THESE TASKS FOR EACH WELDEDJOINT OR MEMBER.

REQUIRED VERIFICATION AND INSPECTION DURING BOLTING

REFERENCED STANDARD: AISC 360 2013 TABLE N5.6-3					
INSPECTION TASKS DURING BOLTING	QC	QA			
DOCUMENT ACCEPTANCE OF REJECTION OF BOLTED CONNECTIONS.	Р	Р			

- 1. O OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE
- 2. P PERFORM THESE TASKS FOR EACH WELDEDJOINT OR MEMBER.



WOOLPERT 11301 CARMEL COMMONS BLVD SUITE 300 CHARLOTTE, NC 28226



704.525.6284

CITY OF CONCORD

J.E. "JIM" RAMSEUR PA

DESIGN DEVELOPMENT DRAWINGS

081197 06/15/2023

DATE ISSUED: DESIGNED BY: DRAWN BY:

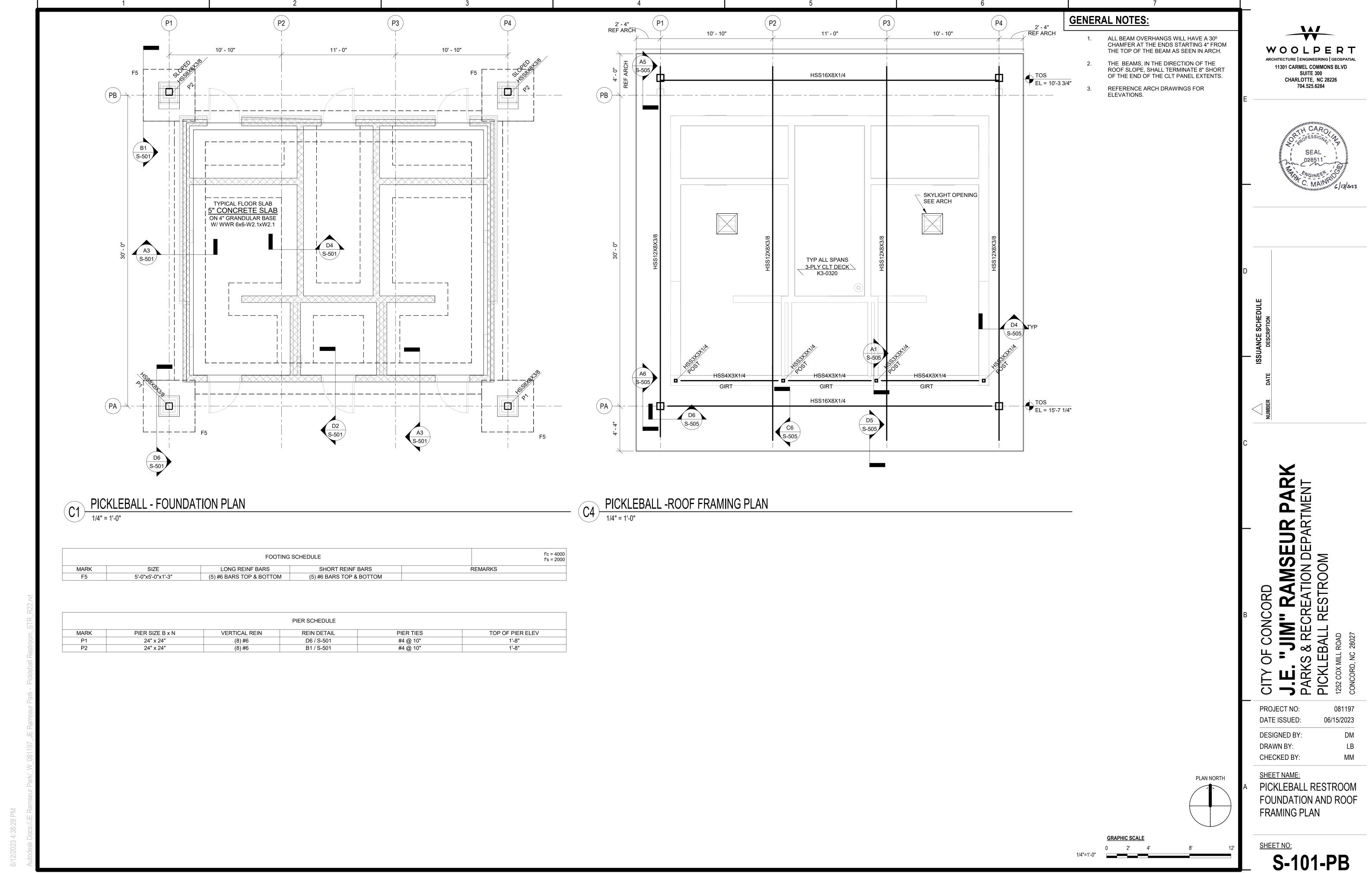
CHECKED BY:

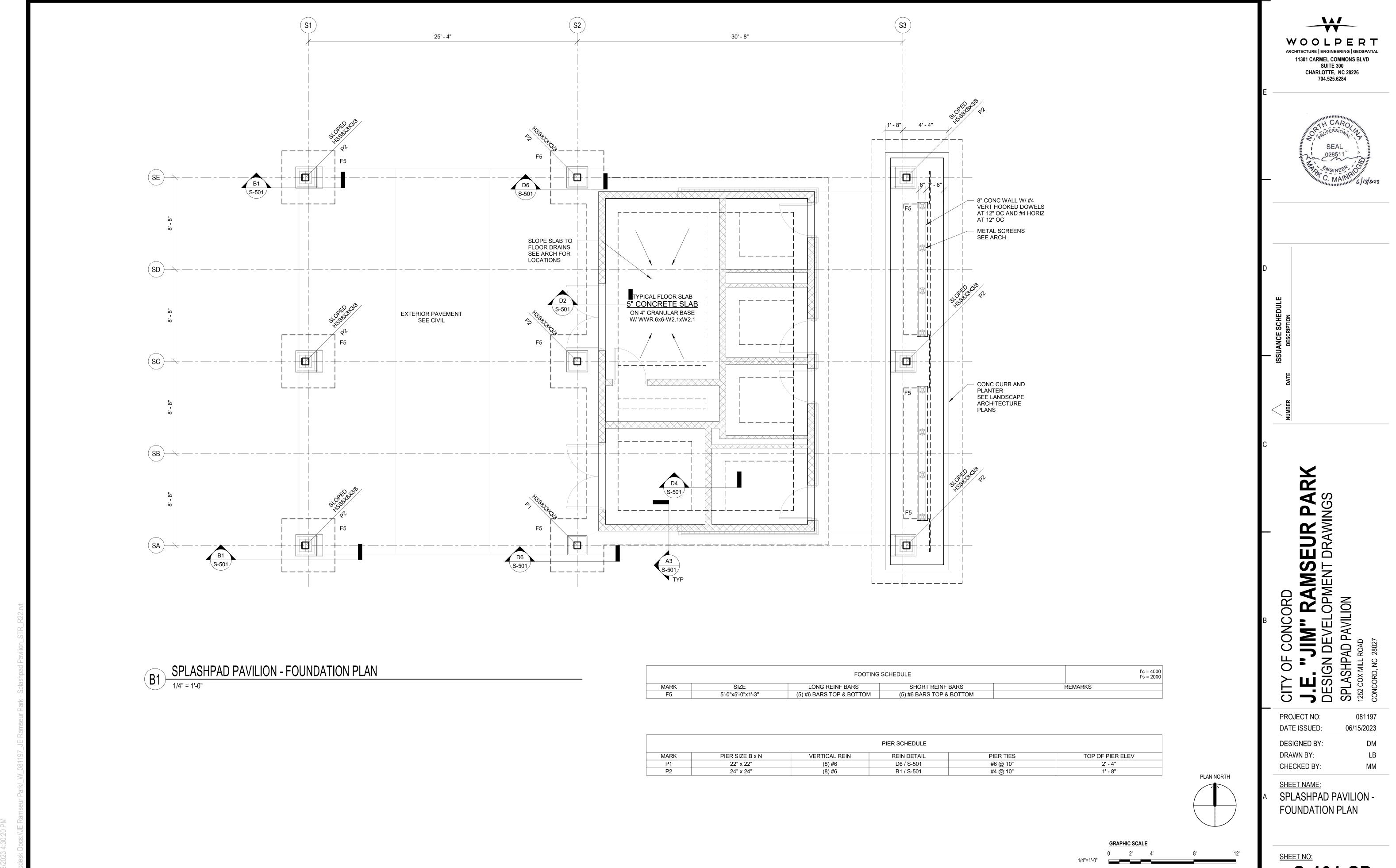
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PROJECT NO:

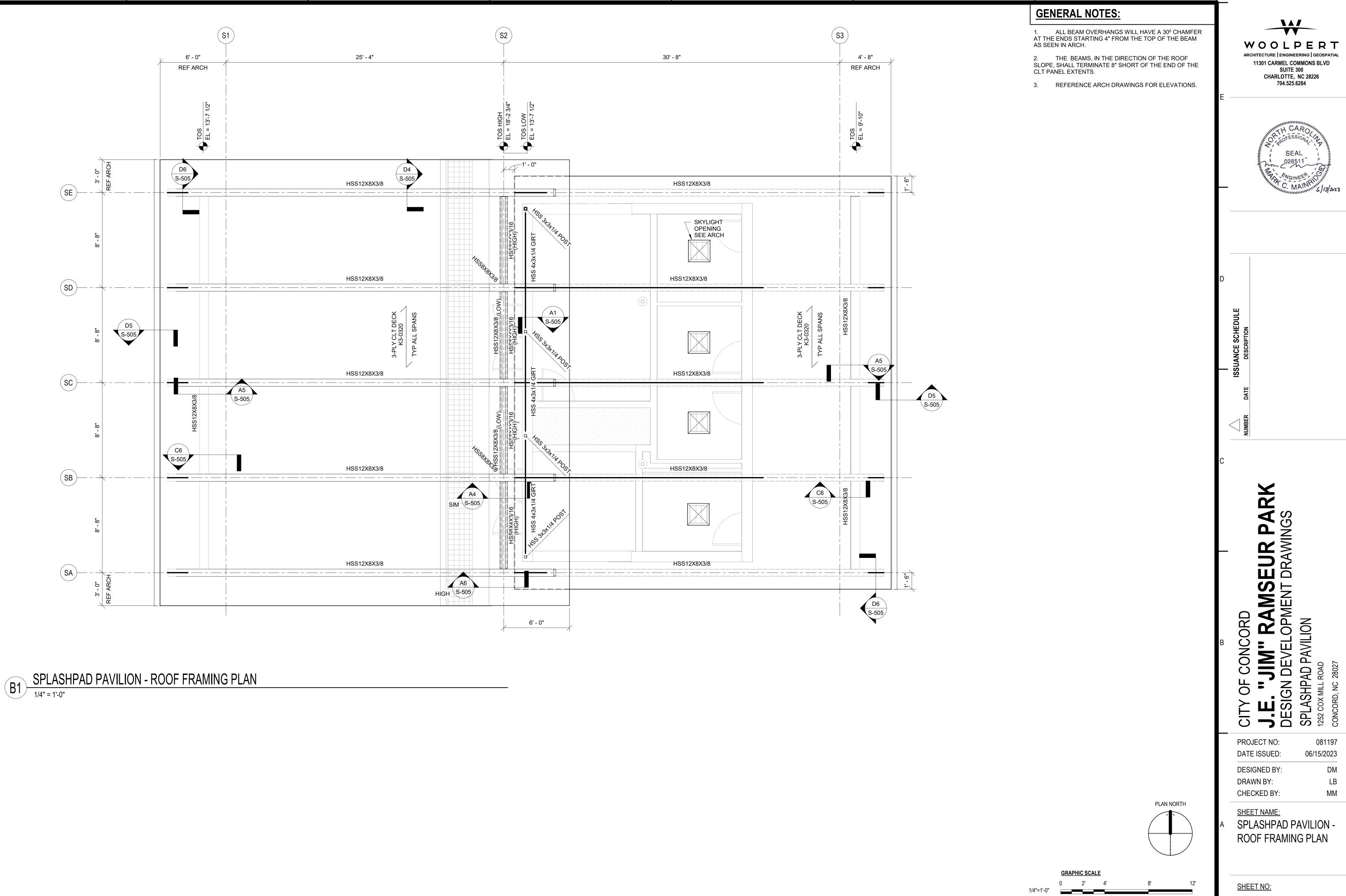
SPECIAL INSPECTION

SHEET NO:





S-101-SP



SHEET NO: S-102-SP

081197

06/15/2023

1. REFERENCE ARCH DRAWINGS FOR ELEVATIONS.

WOOLPERT 11301 CARMEL COMMONS BLVD SUITE 300 CHARLOTTE, NC 28226 704.525.6284



CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
BASKETBALL RESTROOM BLDG

1252 Cox Mill Rd

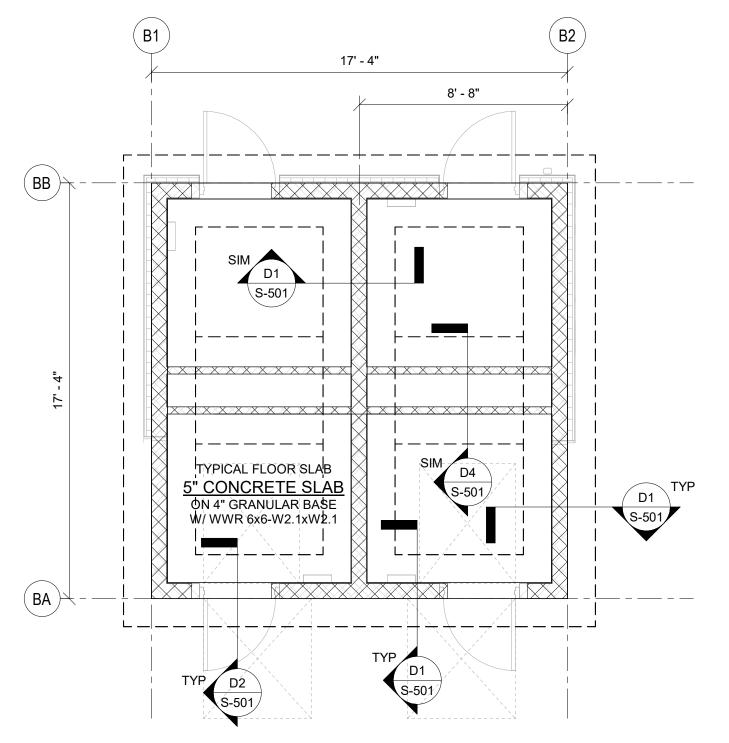
081197

PROJECT NO: DATE ISSUED: 06/15/2023

DM DESIGNED BY: DRAWN BY: MM CHECKED BY:

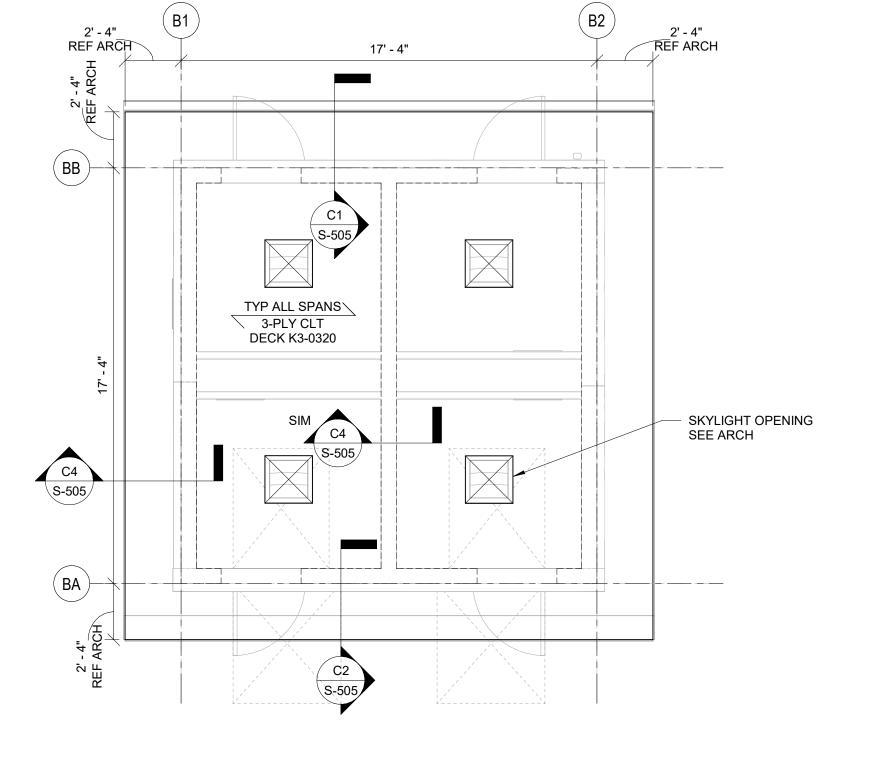
SHEET NAME:
BASKETBALL RESTROOM FOUNDATION AND ROOF FRAMING PLAN

SHEET NO: **S-101-BB**

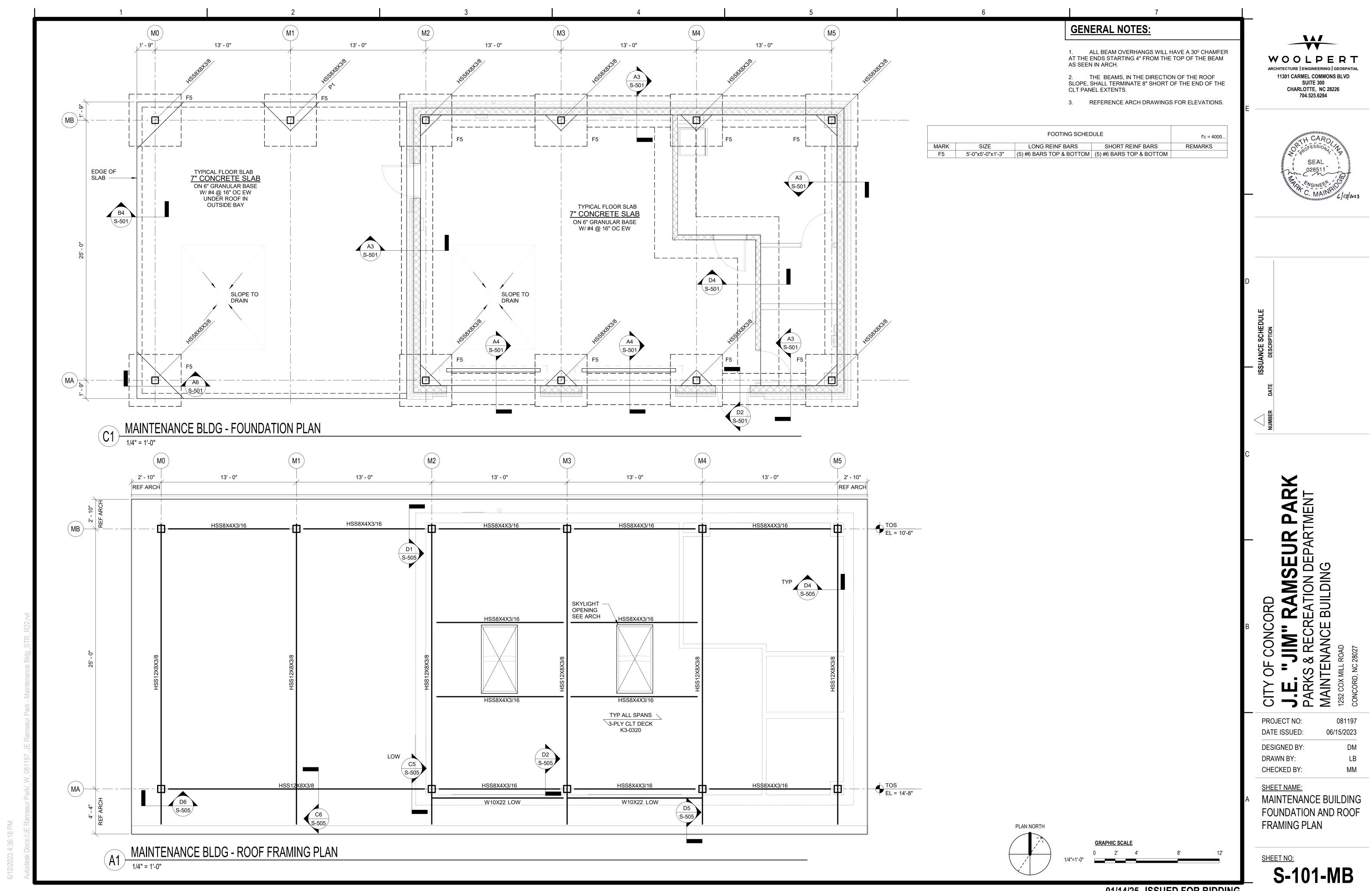


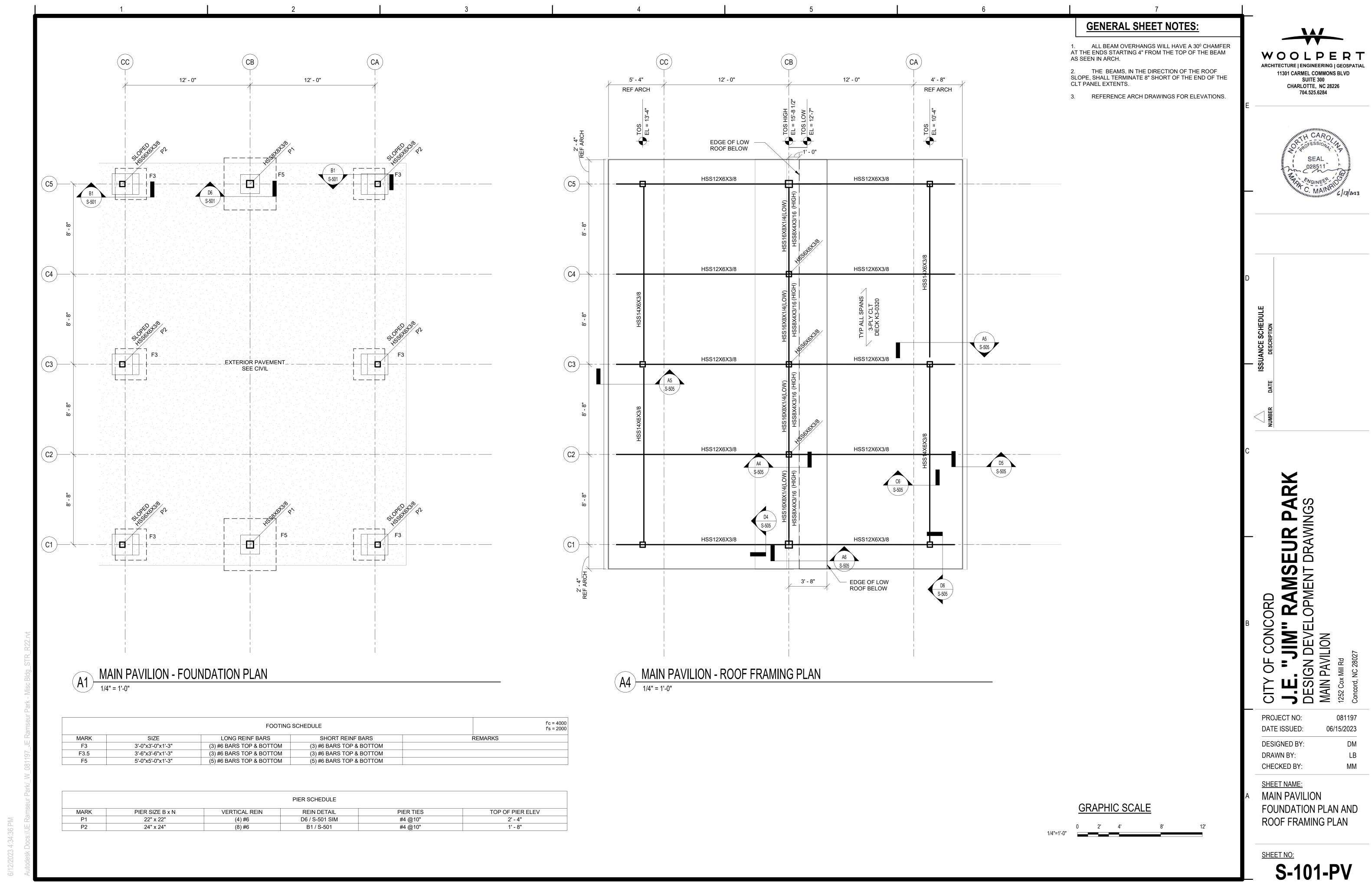
BASKETBALL RESTROOM - FOUNDATION PLAN

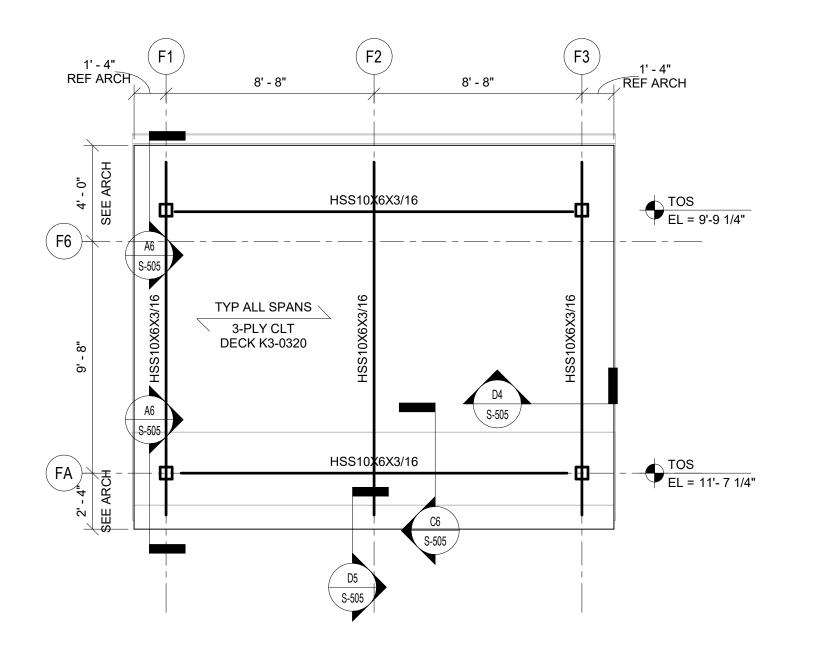
1/4" = 1'-0"



BASKETBALL RESTROOM - ROOF FRAMING PLAN





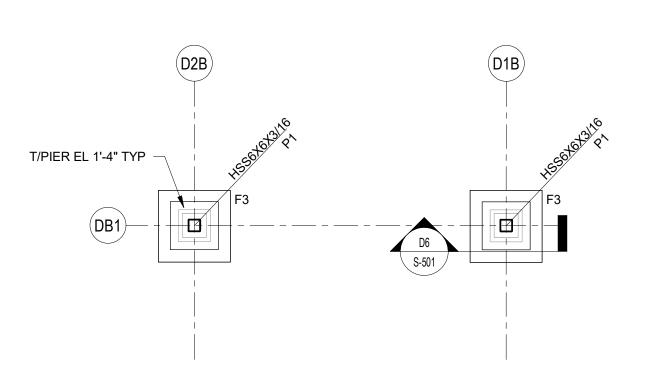


SMALL PAVILIONS FOUNDATION PLAN

SMALL PAVILIONS ROOF FRAMING PLAN

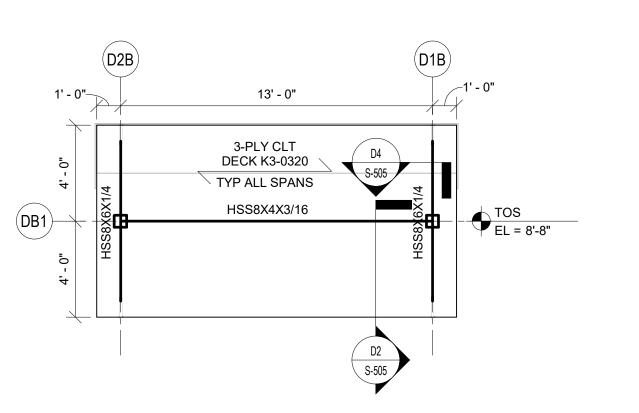
		FOOTING	SCHEDULE	f'c = 400 f's = 200
MARK	SIZE	LONG REINF BARS	SHORT REINF BARS	REMARKS
F3	3'-0"x3'-0"x1'-3"	(3) #6 BARS TOP & BOTTOM	(3) #6 BARS TOP & BOTTOM	
F3.5	3'-6"x3'-6"x1'-3"	(3) #6 BARS TOP & BOTTOM	(3) #6 BARS TOP & BOTTOM	
F5	5'-0"x5'-0"x1'-3"	(5) #6 BARS TOP & BOTTOM	(5) #6 BARS TOP & BOTTOM	

			PIER SCHEDULE		
MARK	PIER SIZE B x N	VERTICAL REIN	REIN DETAIL	PIER TIES	TOP OF PIER ELEV
P1	22" x 22"	(4) #6	D6 / S-501 SIM	#4 @10"	2' - 4"
P2	24" x 24"	(8) #6	B1 / S-501	#4 @10"	1' - 8"



DOG PARK SHADE STRUCTURE - FOUNDATION PLAN

1/4" = 1'-0"



DOG PARK SHADE STRUCTURE - ROOF FRAMING PLAN

1/4" = 1'-0"

GENERAL SHEET NOTES:

1. SMALL PAVILION DESIGN ON THIS SHEET APPLIES TO SMALL SHELTER A, B, C, AND D.

2. SMALL SHELTER A AND C ARE IN BASE BID.

3. SMALL SHELTER B IS ADD ALTERNATE NO 3. SEE SPECIFICATION 012300 ALTERNATES AND SITE PLANS.

4. SMALL SHELTER D IS ADD ALTERNATE NO 4. SEE SPECIFICATION 012300 ALTERNATES AND SITE PLANS.

5. ALL BEAM OVERHANGS WILL HAVE A 30° CHAMFER AT THE ENDS STARTING 4" FROM THE TOP OF THE BEAM AS SEEN IN ARCH.

6. THE BEAMS, IN THE DIRECTION OF THE ROOF SLOPE, SHALL TERMINATE 8" SHORT OF THE END OF THE CLT PANEL EXTENTS.

7. REFERENCE ARCH DRAWINGS FOR ELEVATIONS.

WOOLPERT ARCHITECTURE | ENGINEERING | GEOSPATIAL 11301 CARMEL COMMONS BLVD SUITE 300 CHARLOTTE, NC 28226 704.525.6284



CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK

DESIGN DEVELOPMENT DRAWINGS

SMALL PAVILIONS AND SHADE STRUCTURES

1252 Cox MIII Rd

081197 PROJECT NO: 06/15/2023 DATE ISSUED:

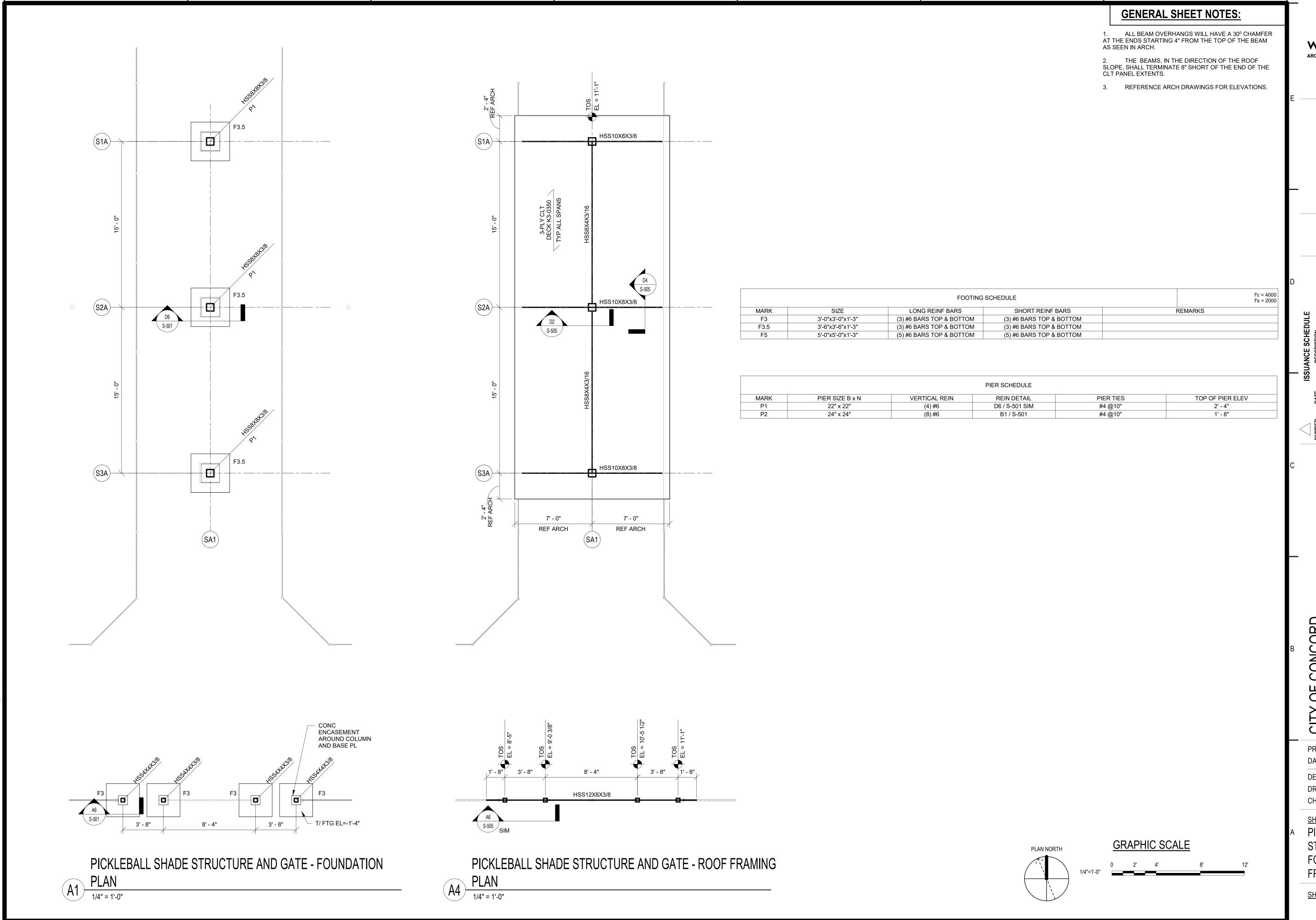
DESIGNED BY: DRAWN BY: CHECKED BY:

SHEET NAME: SMALL PAVILION FLOOR

SHEET NO:

S-102-PV

GRAPHIC SCALE



WOOLPERT ARCHITECTURE | ENGINEERING | GEOSPATIAL 11301 CARMEL COMMONS BLVD SUITE 300

CHARLOTTE, NC 28226

704.525.6284

CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
DESIGN DEVELOPMENT DRAWINGS
PICKLEBALL COURTS SHADE STRUCTURES AND GAT
CONCORT, NC 28027

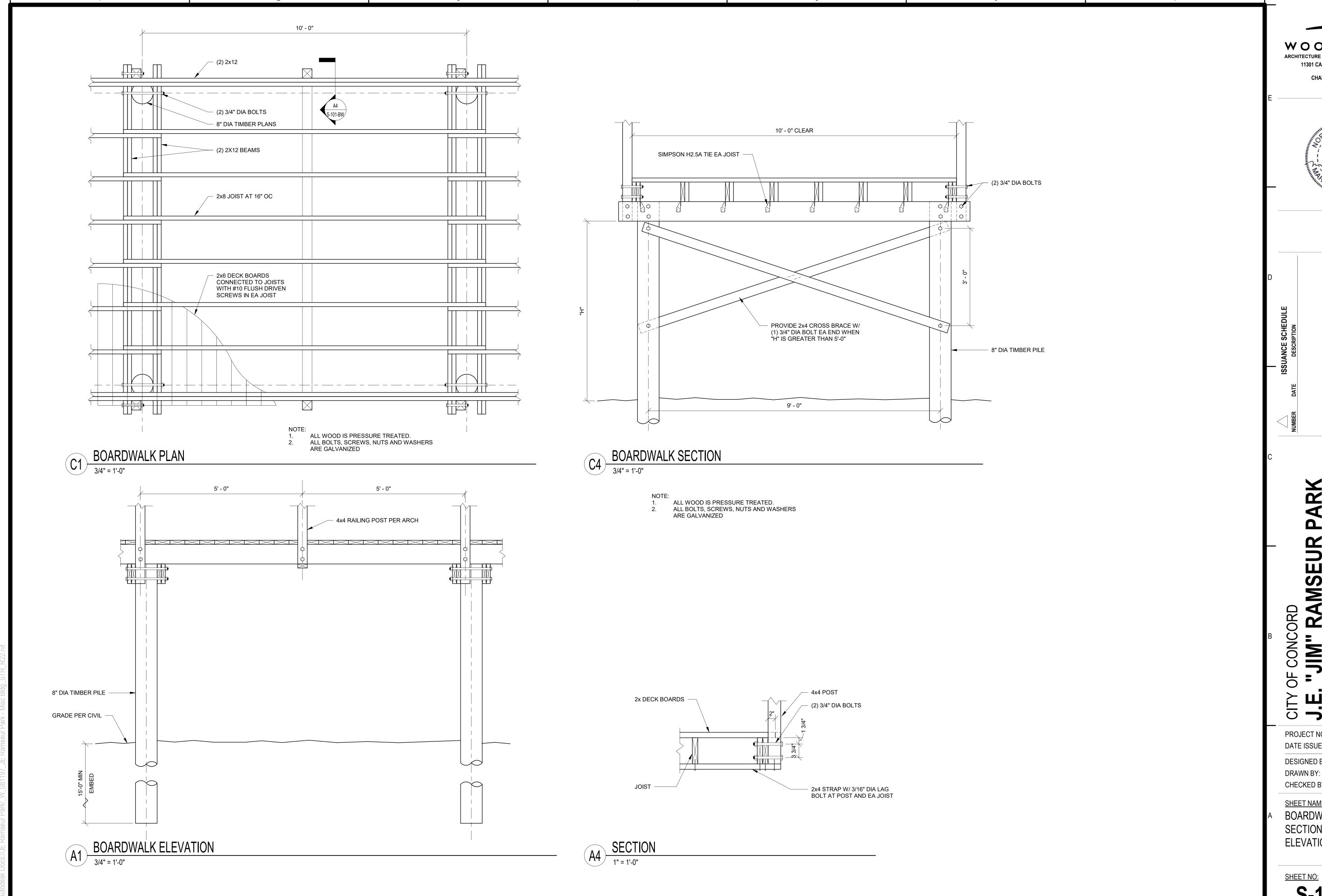
081197 PROJECT NO: 06/15/2023 DATE ISSUED:

DESIGNED BY: DRAWN BY: CHECKED BY:

SHEET NAME: PICKLEBALL SHADE STRUCTURE AND GATE FOUNDATION AND FRAMING PLAN

SHEET NO:

S-101-SS



11301 CARMEL COMMONS BLVD SUITE 300 CHARLOTTE, NC 28226 704.525.6284



CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK

DESIGN DEVELOPMENT DRAWINGS

ROARDWALK

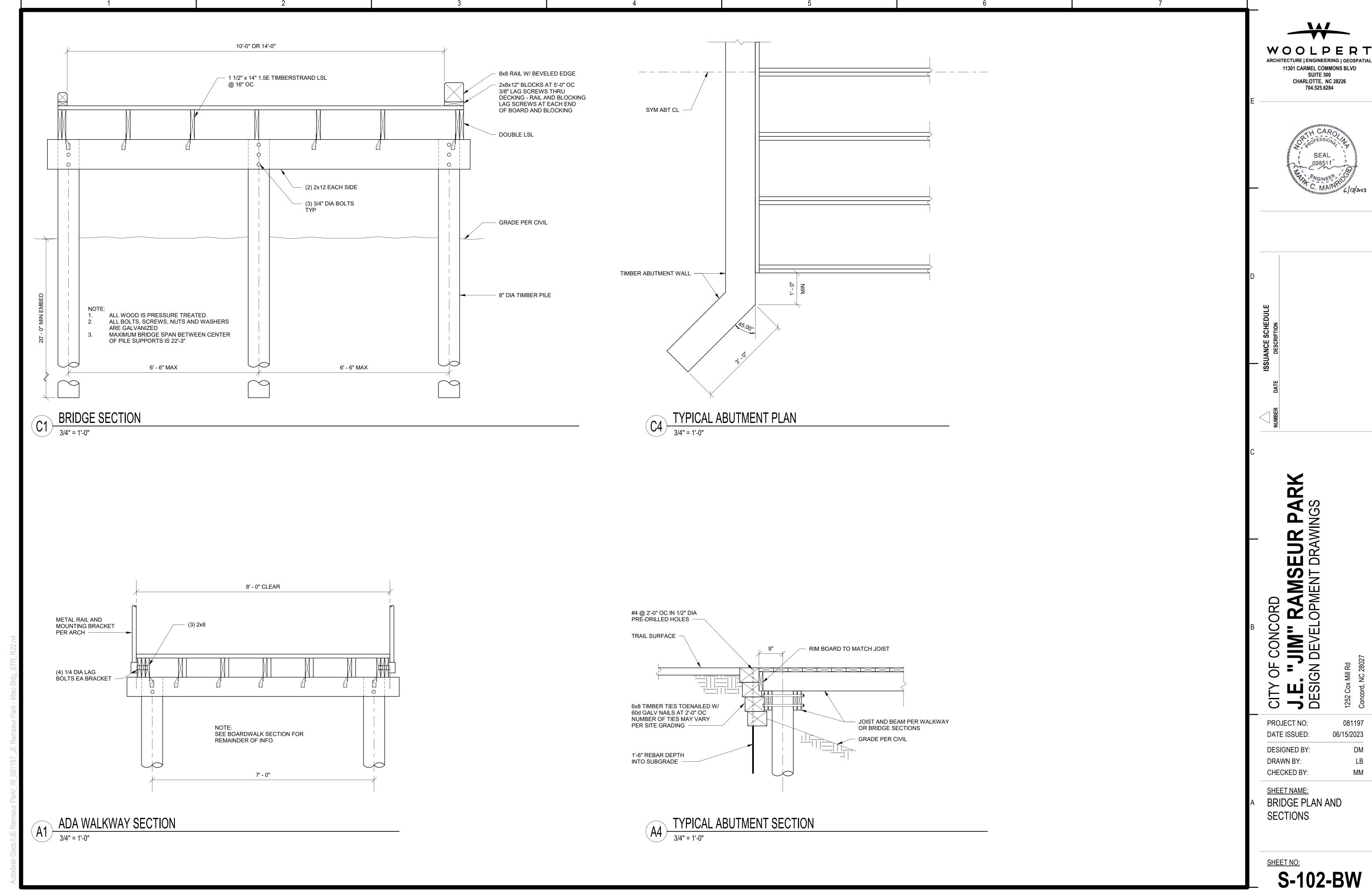
1252 Cox Mill Rd

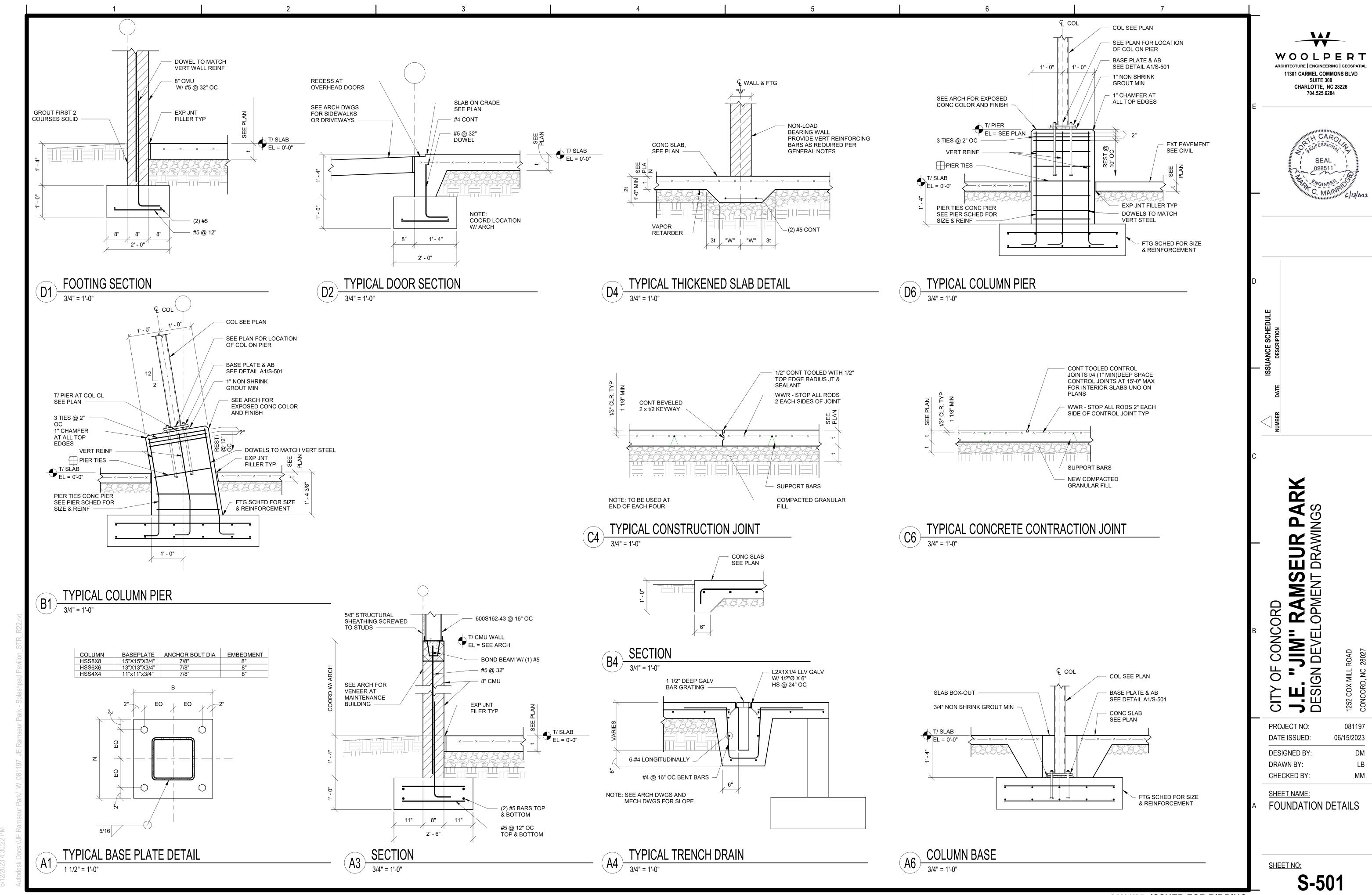
081197 PROJECT NO: 06/15/2023 DATE ISSUED: DM

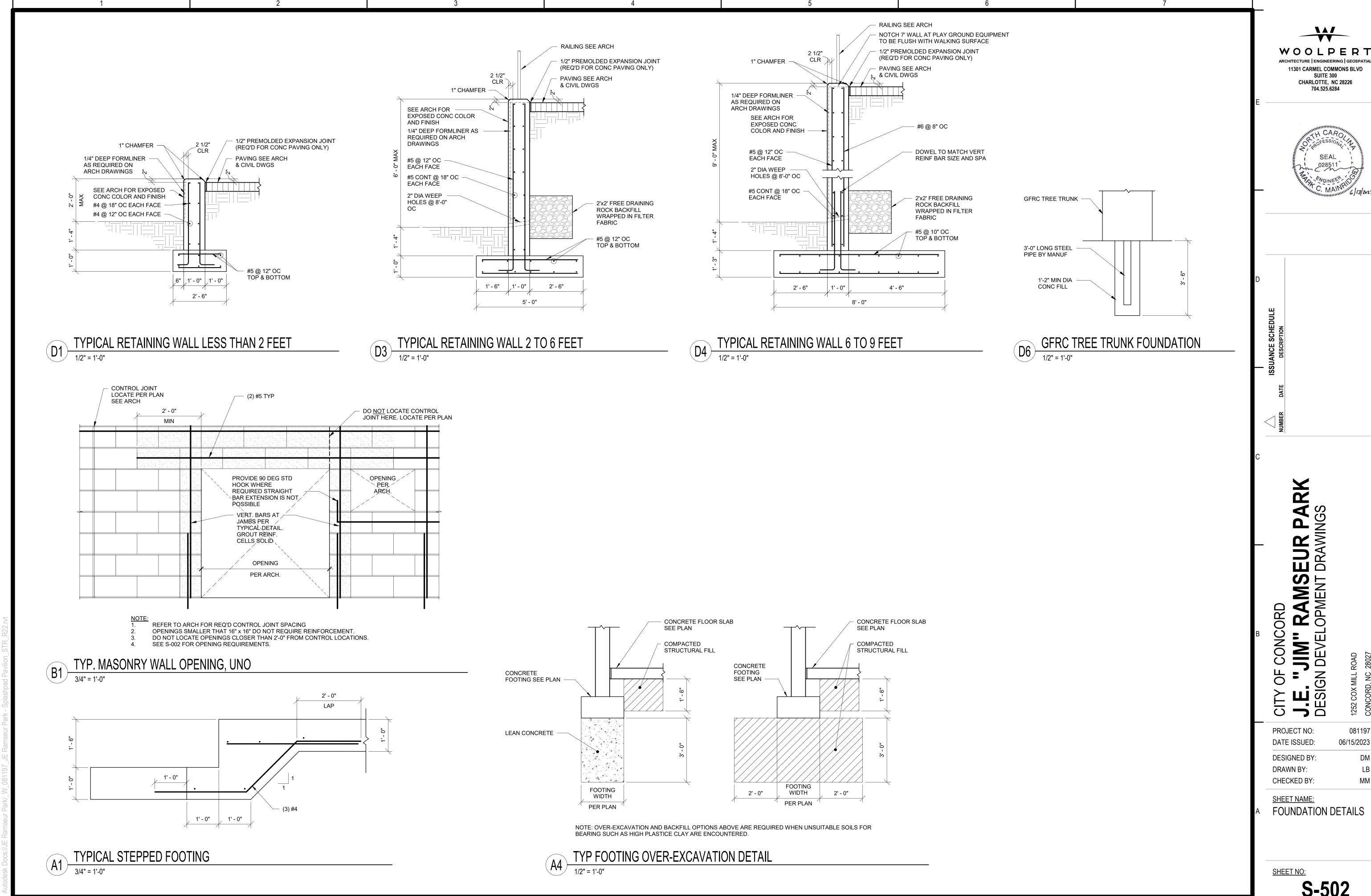
DESIGNED BY: DRAWN BY: CHECKED BY:

SHEET NAME: BOARDWALK PLAN, SECTIONS AND **ELEVATION**

S-101-BW





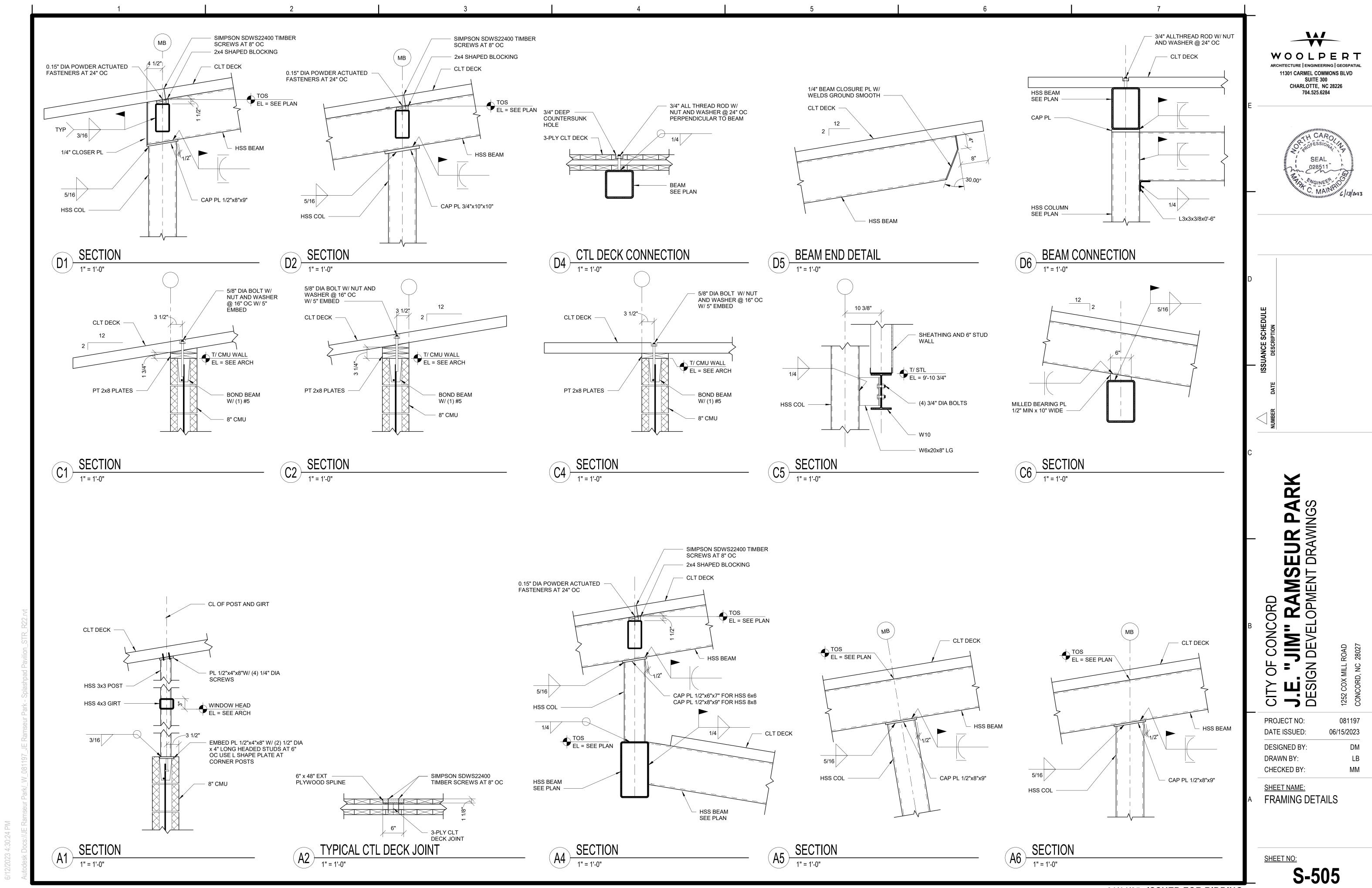


SUITE 300

704.525.6284

081197

06/15/2023



REFERENCE SYMBOLS

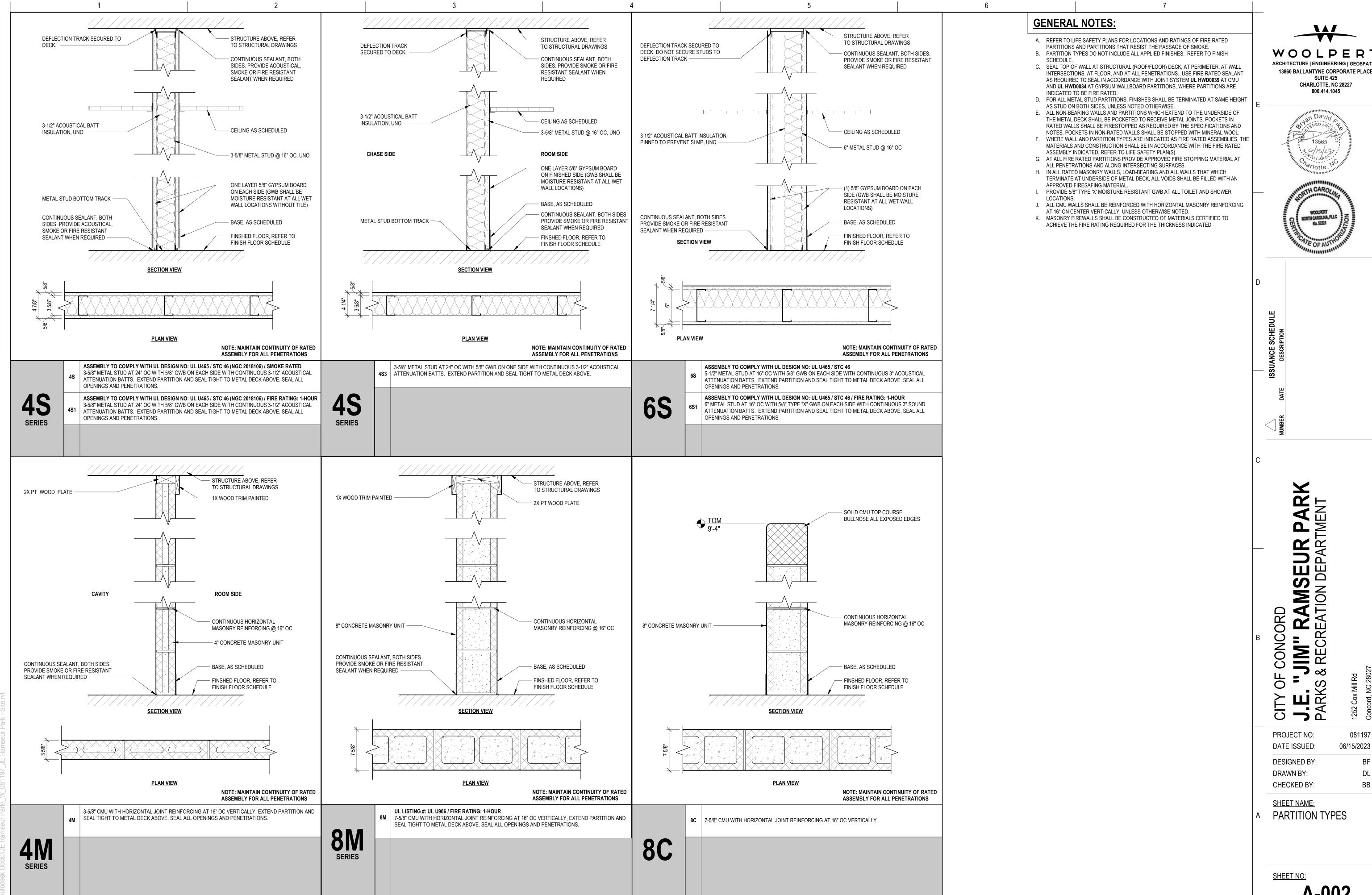
MATERIAL SYMBOLS

ABBREVIATIONS

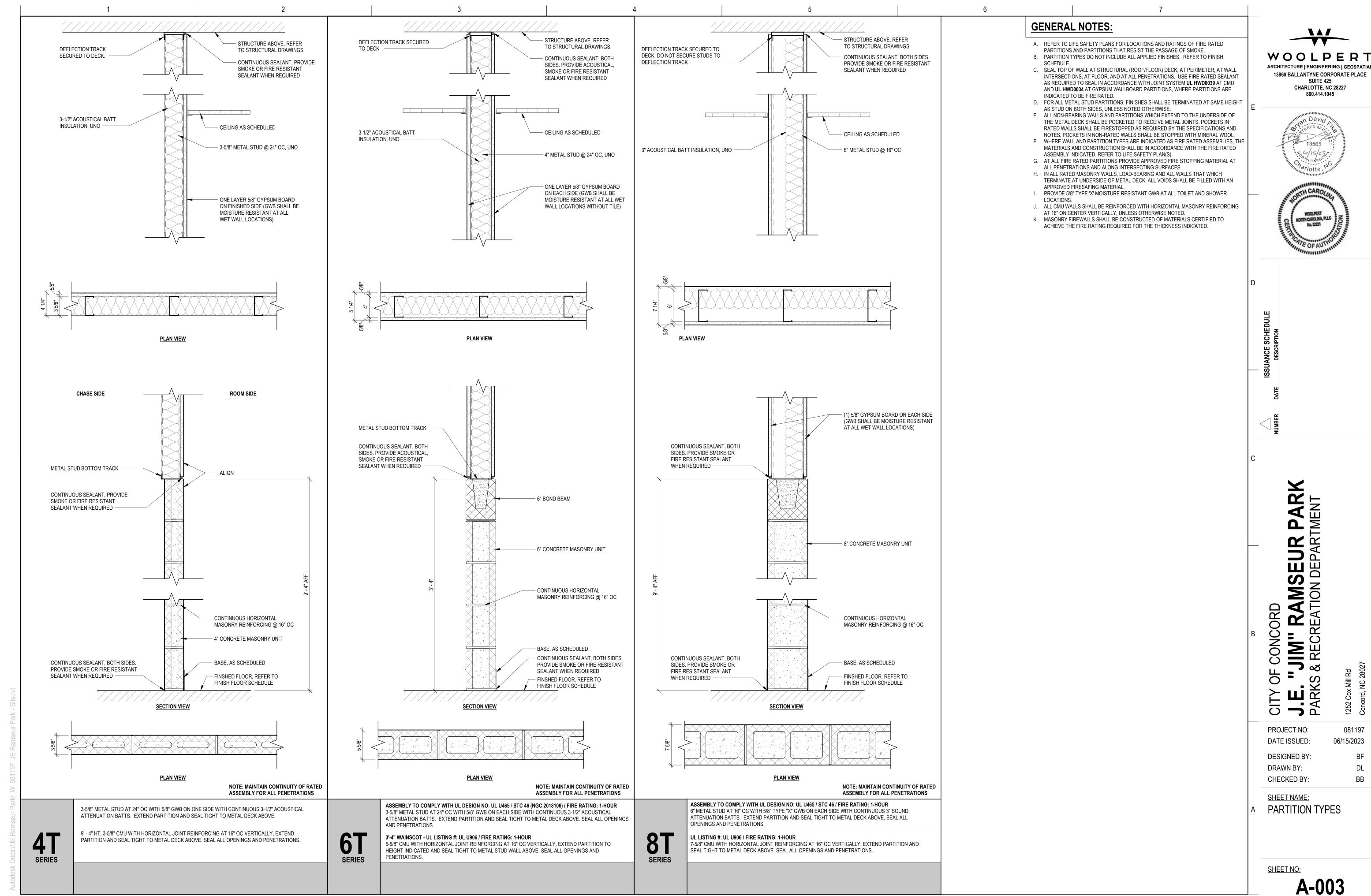
01/14/25 -ISSUED FOR BIDDING

081197

06/15/2023



ARCHITECTURE | ENGINEERING | GEOSPATIAI 13860 BALLANTYNE CORPORATE PLACE



2018 APPENDIX B **BUILDING CODE SUMMARY**

FOR ALL COMMERCIAL PROJECTS

(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Zip Code ²⁸⁰²⁷

State

E-MAIL

BRYAN.FIKE@WOOLPERT.COM

BMILLER@OPTIMAENGINEERING.COM

RALMOND@OPTIMAENGINEERING.COM

MARK.MAINRIDGE@WOOLPERT.COM

ANDREW.PACK@WOOLPERT.COM

Chapter 14

☐ Change of Use

☐ IV

☐ IV

■ V-B

Level III

Appendix B for Building

RAY.NIX@WOOLPERT.COM

E-Mail

■ County CABARRUS State

TELEPHONE #

(704) 526-3032

(843) 972-4596

(704) 338-1292

(704) 338-1292

(801) 699-4987

(704) 525-6284

Private

ATT	OWA	DI	T.	ADE	٨

ALLOWABLE AREA
Primary Occupancy Classification: <u>SELECT ONE</u>
Assembly \square A-1 \square A-2 \square A-3 \square A-4 \square A-5
Business
Educational
Factory F-1 Moderate F-2 Low
Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM
Institutional I-1 Condition I 1 2 _
\square 1-2 Condition \square 1 \square 2 \square
\square 1-3 Condition \square 1 \square 2 \square 3 \square 4 \square 5
1-4
Mercantile
Residential R-1 R-2 R-3 R-4
Storage S-1 Moderate S-2 Low High-piled
Parking Garage Open Enclosed Repair Garage
Utility and Miscellaneous
Accessory Occupancy Classification(s):
ncidental Uses (Table 509):
Special Uses (Chapter 4 – List Code Sections)
Special Provisions: (Chapter 5 – List Code Sections):
Mixed Occupancy: No Yes Separation: Hr. Exception:
☐ Non-Separated Use (508.3)
The required type of construction for the building shall be determined by applying the height and area limitations

for each of the applicable occupancies to the entire building. The most restrictive type of construction, so

See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1

Actual Area of Occupancy A + Actual Area of Occupancy B ≤ 1 Allowable Area of Occupancy A Allowable Area of Occupancy B

determined, shall apply to the entire building.

Separated Use (508.4) -

2018 NC Administrative Code and Policies

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 ⁴ AREA	(C) AREA FOR FRONTAGE INCREASE ^{1,5}	(D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2,3}
1	GROUP U	760 SF	5,500 SF	N/A	5,500 SF

Frontage area increases from Section 506.3 are computed thus:

Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F) Total Building Perimeter

c. Ratio (F/P) = _____

W = Minimum width of public way = _____

Percent of frontage increase $I_f = 100 [F/P - 0.25] \times W/30 =$ (%) Unlimited area applicable under conditions of Section 507.

Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).

⁴ The maximum area of open parking garages must comply with Table 406.5.4 ⁵ Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	40'	16'-8"	
Building Height in Stories (Table 504.4)	1	1	

Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4. ² The maximum height of air traffic control towers must comply with Table 412.3.1

³ The maximum height of open parking garages must comply with Table 406.5.4

FIRE PROTECTION REQUIREMENTS

SEPARA DISTAN (FEET Structural Frame, including columns, girders, trusses Bearing Walls Exterior North East 10' West South Interior Nonbearing Walls and Partitions Exterior walls North 10' East 10' Nonbearing Walls and Partitions Exterior walls North 10' East 10' North 10' East North 10' East 10' West South 10' Roof Construction including supporting beams and joists Roof Ceiling Assembly Roof Ceiling Assembly N/A Column Supporting Roof N/A Column Supporting Roof N/A Column Supporting Roof	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PROVIDED (W/* REDUCTION)	AND SHEET #	FOR RATED ASSEMBLY	RATED PENETRATION	FOR RATED JOINTS
Structural Frame, including columns, girders, trusses Bearing Walls Exterior North East Vest South Interior North East North Interior North East North Interior Nonbearing Walls and Partitions Exterior walls North Individual and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly Column Supporting Roof N/A Column Supporting Roof	0 0 0 0 0 0 0 0 0 0 0	(***	SHEET#		PENETRATION	
Structural Frame, including columns, girders, trusses Bearing Walls Exterior North East 10' West South Interior North East North East North East 10' Nonbearing Walls and Partitions Exterior walls North 10' East 10' North Including Supporting beams and joists Floor Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof	0 0 0 0 0 0 0 0 0	REDUCTION		ASSEMBLY		JOINTS
including columns, girders, trusses Bearing Walls Exterior North East West South Interior Nonbearing Walls and Partitions Exterior walls North 10' East 10' Nonbearing Walls and Partitions Exterior walls North 10' East 10' West 10' The south North Including supporting beams and joists Floor Construction Including supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof N/A Column Supporting Roof N/A Column Supporting Roof	0 0 0 0 0 0 0 0					
trusses Bearing Walls Exterior North East 10' West South Interior Nonbearing Walls and Partitions Exterior walls North 10' East 10' North 10' Interior North Individual and partitions Fouth Interior walls North Including supporting beams and joists Floor Ceiling Assembly Column Supporting Roof N/A Column Supporting Roof	0 0 0 0 0 0 0 0					
Bearing Walls Exterior North East 10' West South Interior Nonbearing Walls and Partitions Exterior walls North 10' East 10' West 10' Interior N/A North 10' East 10' West 10' South Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof N/A Column Supporting Roof N/A Column Supporting Roof	0 0 0 0 0 0 0					
Exterior North East 10' West South Interior Nonbearing Walls and Partitions Exterior walls North East 10' West 10' South 10' Interior N/A Indiding supporting beams and joists Floor Ceiling Assembly Column Supporting Roof N/A Column Supporting Roof	0 0 0 0 0 0 0					
North East 10' West 10' South 10' Interior N/A Nonbearing Walls and Partitions Exterior walls North 10' East 10' West 10' South 10' Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly Column Supporting Roof N/A Column Supporting Roof 10'	0 0 0 0 0 0 0					
East 10' West 10' South 10' Interior N/A Nonbearing Walls and Partitions Exterior walls North 10' East 10' West 10' South 10' Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly N/A Column Supporting Floors N/A Roof Ceiling Assembly 10' Roof Ceiling Assembly N/A Column Supporting Roof 10'	0 0 0 0 0 0					
West 10' South 10' Interior N/A Nonbearing Walls and Partitions Exterior walls North 10' East 10' West 10' South 10' Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly N/A Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof 10'	0 0 0 0 0 0 0					
South 10' Interior N/A Nonbearing Walls and Partitions Exterior walls North 10' East 10' West 10' South 10' Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly N/A Column Supporting Floors N/A Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof 10'	0 0 0 0 0 0					
Interior N/A Nonbearing Walls and Partitions Exterior walls North 10' East 10' West 10' South 10' Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly N/A Column Supporting hors N/A Roof Ceiling Assembly 10' Roof Ceiling Assembly N/A Column Supporting Roof 10'	0 0 0 0 0					
Nonbearing Walls and Partitions Exterior walls North East 10' West South Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof N/A Column Supporting Roof N/A 10'	0 0 0 0					
Partitions Exterior walls North 10' East 10' West 10' South 10' Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof 10' Column Supporting Roof 10'	0 0 0					
Exterior walls North East 10' West South Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof N/A Column Supporting Roof N/A Column Supporting Roof	0 0 0					
East 10' West 10' South 10' Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly N/A Column Supporting Floors N/A Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof 10'	0 0					
West 10' South 10' Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly N/A Column Supporting Floors N/A Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof 10'	0					
South 10' Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly N/A Column Supporting Floors N/A Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof 10'	0					
Interior walls and partitions Floor Construction Including supporting beams and joists Floor Ceiling Assembly Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof 10'						
Floor Construction Including supporting beams and joists Floor Ceiling Assembly Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof N/A	0					
Floor Construction Including supporting beams and joists Floor Ceiling Assembly Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof N/A						
Including supporting beams and joists Floor Ceiling Assembly Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof 10'	0					
and joists Floor Ceiling Assembly N/A Column Supporting Floors N/A Roof Construction, including supporting beams and joists Roof Ceiling Assembly N/A Column Supporting Roof 10	0					
Floor Ceiling Assembly Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly Column Supporting Roof N/A Column Supporting Roof						
Column Supporting Floors Roof Construction, including supporting beams and joists Roof Ceiling Assembly Column Supporting Roof 10'	٥ ١					
Roof Construction, including supporting beams and joists Roof Ceiling Assembly Column Supporting Roof 10'						
Roof Ceiling Assembly N/A Column Supporting Roof 10'						
Column Supporting Roof 10'	۸ 0					
	0					
Shaft Enclosures - Exit N/A	N/A					
Shaft Enclosures - Other N/A						
Corridor Separation N/A						
0 /5' 5 '			1			
Separation 1977						
Party/Fire Wall Separation N/A						
Smoke Barrier Separation N/A			1			
Smoke Partition N/A	N/A					
Tenant/Dwelling Unit/ Sleeping Unit Separation				I		
Incidental Use Separation N/A	N/A					

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET FROM PERPERTY LINES	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
30 OR GREATER	UP, NS	NO LIMIT	

2018 NC Administrative Code and Policies

Appendix B for Building

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	☐ No ■ Yes
Exit Signs:	■ No □ Yes
Fire Alarm:	■ No □ Yes
Smoke Detection Systems:	■ No □ Yes □ Partial
Carbon Monoxide Detection:	■ No ☐ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A-100-PB

Fire and/or smoke rated wall locations (Chapter 7)

Assumed and real property line locations (if not on the site plan)

Exterior wall opening area with respect to distance to assumed property lines (705.8) Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)

Occupant loads for each area

Exit access travel distances (1017)

Common path of travel distances (1006.2.1 & 2006.3.2(1))

Dead end lengths (1020.4)

Clear exit widths for each exit door

■ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)

Actual occupant load for each exit door

A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier.

Location of doors with panic hardware (1010.1.10) Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)

Location of doors with electromagnetic egress locks (1010.1.9.9)

Location of doors equipped with hold-open devices

Location of emergency escape windows (1030)

The square footage of each fire area (202)

The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)

Note any code exceptions or table notes that may have been utilized regarding the items above

Section/Table/Note	Title

ACCESSIBLE DWELLING UNITS

_	(SECTION 1107)						
TOTAL	ACCESSIBLE	ACCESSIBLE	TYPE A	TYPE A	Түре В	Түре В	TOTAL
Units	Units	Units	Units	Units	Units	Units	ACCESSIBLE UNITS
	REQUIRED	Provided	REQUIRED	Provided	Required	Provided	PROVIDED

ACCESSIBLE PARKING

LOT OR PARKING	TOTAL # OF PA	RKING SPACES	# OF ACC	TOTAL#		
AREA	REQUIRED	PROVIDED	REGULAR WITH	VAN SPACE	ES WITH	ACCESSIBLE
			5' ACCESS	132" ACCESS	8' ACCESS	PROVIDED
			AISLE	AISLE	AISLE	
ΓΟΤΑL						

PLUMBING FIXTURE REQUIREMENTS

	(1ABLE 2902.1)											
USE		V	WATERCLOSETS URINALS		URINALS	LAVATORIES			SHOWERS	DRINKING	FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX	/ TUBS	REGULAR	Accessible	
SPACE	EXIST'G	0	0	0	0	0	0	0	0	0	0	
	NEW	2	3	1	1	2	2	1	0	1	1	
	REQ'D SEE SHEET G-003 FOR REQUIRED FIXTURES BASED ON SITE LOADING ESTIMATES						0	0.33	0.33			

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below) NOTE: REQUIRED PLUMBING FIXTURES ARE BASED ON SITE/PARKING CALCULATIONS.

BUILDING IS A SUPPORT BUILDING FOR PARK. DRINKING FOUNTAINS PROVIDED ARE

PEDESTAL MOUNTED OUTSIDE OF BUILDING AND NOT SHOWN ON BUILDING PLAN.

ENERGY SUMMARY

ENERGY REQUIREMENTS: The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy

cost for the proposed design. Existing building envelope complies with code: No Yes (The remainder of this section is not applicable)

Exempt Building: No Provide Code or Statutory reference): GROUP U OCCUPANCY, NCBC 1301.1.1 Climate Zone: 3A 4A 5A

☐ Prescriptive **Method of Compliance: Energy Code** Performance ASHRAE 90.1 Performance Prescriptive (If "Other" specify source here) N/A

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly) Description of assembly: U-Value of total assembly: R-Value of insulation: Skylights in each assembly U-Value of skylight: Total square footage of skylights in each assembly:

Exterior Walls (each assembly)

Description of assembly: U-Value of total assembly: R-Value of insulation: Openings (windows or doors with glazing) U-Value of assembly: Solar heat gain coefficient: Projection factor: Door R-Values:

Walls below grade (each assembly) Description of assembly: U-Value of total assembly:

R-Value of insulation: Floors over unconditioned space (each assembly)

Description of assembly: U-Value of total assembly: R-Value of insulation:

Floors slab on grade Description of assembly: U-Value of total assembly: R-Value of insulation:

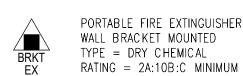
Horizontal/Vertical requirement: Slab Heated:

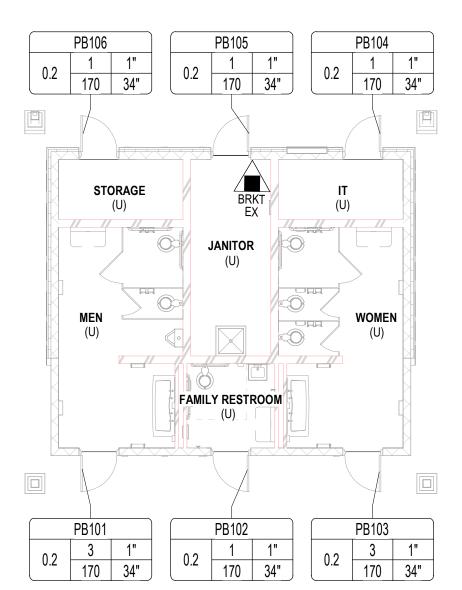
2018 NC Administrative Code and Policies

Appendix B for Building

LIFE SAFETY LEGEND

TRAVEL DISTANCE (TD)





REFERENCE PLAN

2018 NC Administrative Code and Policies

Appendix B for Building

SHEET NO: A-100-PB

LIFE SAFETY PLAN

PB - CODE SUMMARY AND

REATION DEPARTMENT

"JIM" RAM 8 RECREATION

PROJECT NO:

DATE ISSUED:

DESIGNED BY:

CHECKED BY:

SHEET NAME:

DRAWN BY:

081197

06/15/2023

WOOLPER

ARCHITECTURE I ENGINEERING I GEOSPATIA

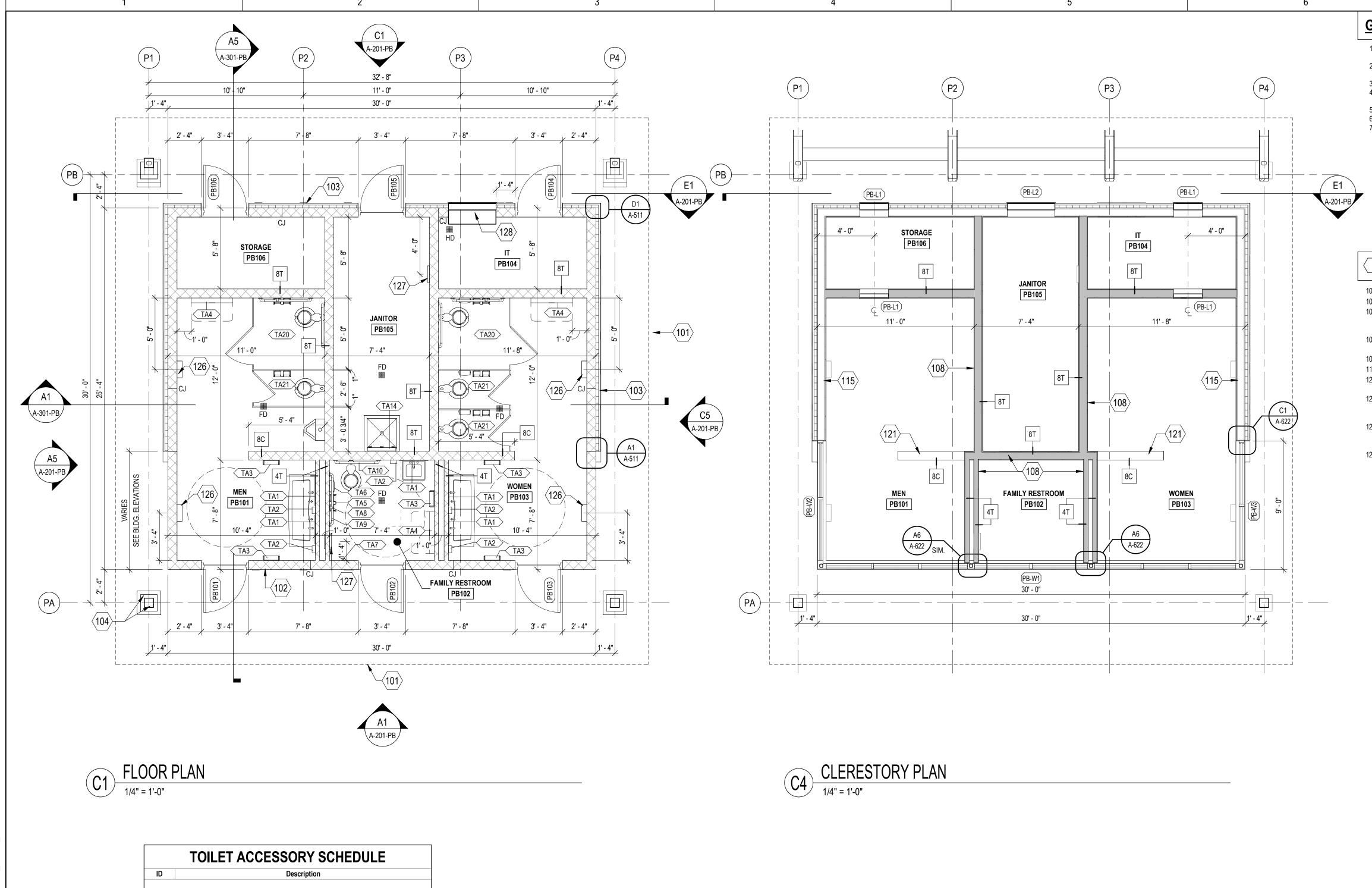
13860 BALLANTYNE CORPORATE PLACE

SUITE 425

CHARLOTTE, NC 28227 800.414.1045

No. 52221

Appendix B for Building



GENERAL NOTES:

1. ALL DIMENSIONS TO BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO STARTING WORK.

2. ALL DIMENSIONS ARE FACE OF MASONRY, POURED CONCRETE, OR FACE OF STUD

(WOOD OR METAL, U.N.O).

3. ALL MASONRY DIMENSIONS ARE NOMINAL, U.N.O. 4. REFER TO MEP DRAWINGS FOR MOUNTING HEIGHTS OF SWITCHES, OUTLETS,

ALARMS AND ALL SURFACE MOUNTED COMPONENTS. REFER TO SHEETS A-601 FOR DOOR SCHEDULE AND A-701 FOR FINISH SCHEDULE. 6. PROVIDE 1.5% SLOPE TO FLOOR DRAINS, MINIMUM OF 3' IN ALL DIRECTIONS, U.N.O. 7. MASONRY CONTRACTOR SHALL COORDINATE ALL CONDUIT AND RECESSED

FIXTURES WITH APPLICABLE TRADES PRIOR TO COMMENCING INSTALLATION OF

WOOLPERT

ARCHITECTURE | ENGINEERING | GEOSPATIAL

13860 BALLANTYNE CORPORATE PLACE

SUITE 425

CHARLOTTE, NC 28227

800.414.1045



SHEET KEYNOTES:

101 OUTLINE OF ROOF OR STRUCTURE ABOVE, TYP.

102 ARCHITECTURAL CMU - 8" PARTIALLY GROUTED W/ INSULATION FILL

103 CLADDING SYSTEM - HIGH-DENSITY FIBER CEMENT PANELS ON ALUMINUM GRID FRAMING SYSTEM. BASIS-OF-DESIGN IS EQUITONE TECTIVA PANELS ON UNIVERSE 7000 EXPOSED FASTENER SYSTEM

104 STEEL COLUMN W/ CONCRETE BASE, SEE STRUCTURAL - PROVIDE BASE PLATE COVER PER DETAIL C1/A-502

108 ALIGN FINISHED FACE OF GYP BD W/ CMU WALL BELOW

115 EXTERIOR WALL ASSEMBLY, SEE WALL SECTIONS FOR DETAILS

121 PROVIDE SOLID CMU TOP COURSE OF WING WALL, BULLNOSE ALL EXPOSED EDGES, TYP. TOP OF WALL: 9'-4" AFF

126 SURFACE-MOUNTED ELECTRIC WALL HEATER, SEE MECHANICAL DRAWINGS. MASONRY CONTRACTOR TO COORDINATE RECESSED J-BOXES AND POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO CONSTRUCTION.

127 RECESSED ELECTRIC WALL HEATER, SEE MECHANICAL DRAWINGS. MASONRY CONTRACTOR TO COORDINATE RECESSED J-BOXES AND POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO CONSTRUCTION. SEE DETAIL D5/A-502.

128 PTAC UNIT, SEE MECHANICAL DRAWINGS. PROVIDE CONDENSATION LINE ALONG INSIDE WALL TO HUB DRAIN.

CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
PICKLEBALL RESTROOM (PB)

081197

06/15/2023

PROJECT NO: DATE ISSUED:

DESIGNED BY: DRAWN BY: CHECKED BY:

SHEET NAME: PB - FLOOR PLAN & **CLERESTORY PLAN**

SHEET NO:

A-101-PB

01/14/25 -ISSUED FOR BIDDING

GRAPHIC SCALE

PLAN NORTH

TA1 24X36 MIRROR W/ STAINLESS STEEL ANGLE FRAME TA2 SURFACE MOUNTED SOAP DISPENSER - OFOI

TA4 SURFACE MOUNTED BABY CHANGING STATION

TA7 DOUBLE ROBE HOOK TA8 18" GRAB BAR

TA14 MOP AND BROOM HOLDER

TA21 TYPICAL TOILET STALL

TA20 TYPICAL ACCESSIBLE TOILET STALL

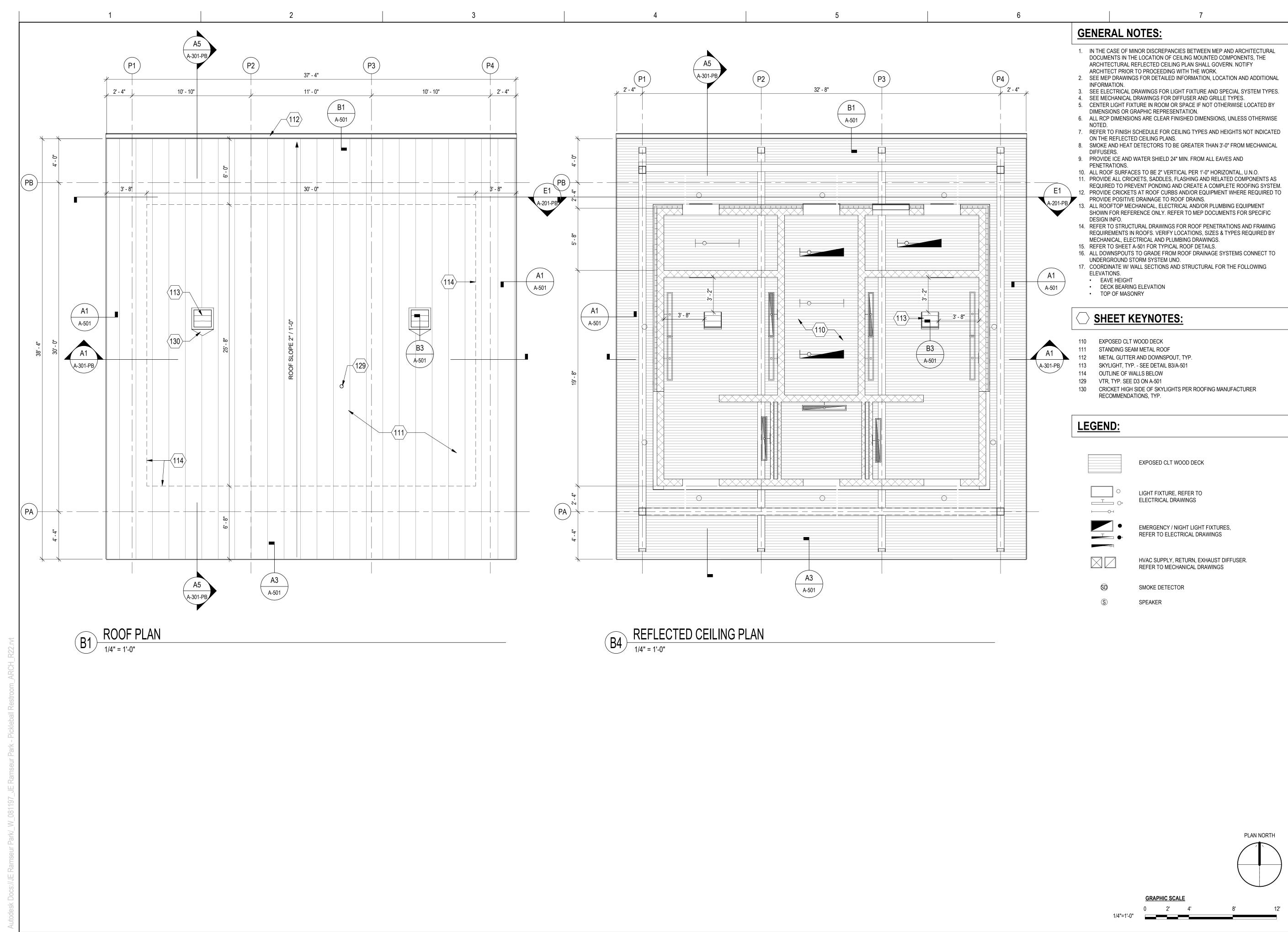
TA9 42" GRAB BAR

TA10 36" GRAB BAR

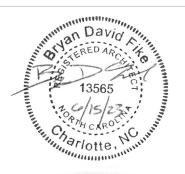
TA3 ADA COMPLIANT SURFACE MOUNTED AUTOMATIC HAND DRYER

TA5 TWO-ROLL SURFACE MOUNTED TOILET TISSUE DISPENSER - OFOI

TA6 SURFACE MOUNTED SANITARY NAPKIN DISPENSER - OFOI



WOOLPERT ARCHITECTURE | ENGINEERING | GEOSPATIAL 13860 BALLANTYNE CORPORATE PLACE SUITE 425



CHARLOTTE, NC 28227

800.414.1045



CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
PICKLEBALL RESTROOM (PB)

081197 PROJECT NO: 06/15/2023 DATE ISSUED: DESIGNED BY:

DRAWN BY: CHECKED BY:

SHEET NAME: PB - REFLECTED CEILING PLAN & ROOF PLAN

DL

SHEET NO:

01/14/25 - ISSUED FOR BIDDING

A-102-PB

081197 06/15/2023

PB - BUILDING **ELEVATIONS**

A-201-PB



(P1)

2' - 4" 1' - 4"

MEN

PB101

BUILDING SECTION

1/4" = 1'-0"

STEEL FRAMING, SEE STRUCTURAL

STEEL COLUMN W/
CONCRETE BASE, SEE
STRUCTURAL - PROVIDE
BASE PLATE COVER
PER DETAIL C1/A-502

GRAPHIC SCALE

SHEET NO:

A-301-PB

 STEEL COLUMN W/ CONCRETE BASE,
 SEE STRUCTURAL - PROVIDE BASE
 PLATE COVER PER DETAIL C3/A-502 PB FIRST FLOOR 0' - 0" BUILDING SECTION

1/4" = 1'-0"

30' - 0"

B3 A-501

SKYLIGHT, TYP.

PB T.O.S. LOW
10' - 3 3/4" - EXPOSED CLT WOOD DECK HIGH-DENSITY FIBER CEMENT PANEL CLADDING SYSTEM PRE-FIN. METAL GUTTER AND DOWNSPOUT, TYP. — HIGH-DENSITY FIBER CEMENT PANEL CLADDING SYSTEM — ARCHITECTURAL CMU PB FIRST FLOOR 0' - 0"

(P3) 30' - 0"

WOMEN PB103

JANITOR PB105

4' - 0"

- CLERESTORY WINDOWS

STEEL FRAMING, SEE STRUCTURAL

- ARCHITECTURAL CMU

PB T.O.S. HIGH 15' - 7 1/4"

CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
PICKLEBALL RESTROOM (PB) PROJECT NO:

081197 06/15/2023 DATE ISSUED: DESIGNED BY: DRAWN BY: CHECKED BY:

WOOLPERT ARCHITECTURE | ENGINEERING | GEOSPATIAL

13860 BALLANTYNE CORPORATE PLACE
SUITE 425
CHARLOTTE, NC 28227
800.414.1045

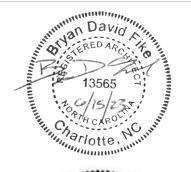
SHEET NAME: PB - BUILDING SECTIONS

01/14/25 - ISSUED FOR BIDDING

STANDING SEAM METAL ROOF -

ICE AND WATER SHIELD -

WOOLPERT ARCHITECTURE | ENGINEERING | GEOSPATIAL 13860 BALLANTYNE CORPORATE PLACE SUITE 425 **CHARLOTTE, NC 28227** 800.414.1045





CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
PICKLEBALL RESTROOM (PB)

081197 PROJECT NO: 06/15/2023 DATE ISSUED: DESIGNED BY:

DRAWN BY: CHECKED BY: SHEET NAME:

PB - WALL SECTIONS

SHEET NO:

A-311-PB

See below for area calculations for each story, the area of the occupancy shall be such that the sum of the

ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

<u>Actual Area of Occupancy A</u> + <u>Actual Area of Occupancy B</u> ≤ 1

Allowable Area of Occupancy A Allowable Area of Occupancy B

2018 APPENDIX B **BUILDING CODE SUMMARY**

FOR ALL COMMERCIAL PROJECTS

(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Zip Code ²⁸⁰²⁷

State

E-MAIL

BRYAN.FIKE@WOOLPERT.COM

BMILLER@OPTIMAENGINEERING.COM

■ V-B

RAY.NIX@WOOLPERT.COM

E-Mail

■ County_CABARRUS State

TELEPHONE #

(704) 526-3032

(843) 972-4596

(704) 338-1292

704) 338-1292

Private

Owner/Authorized Agent: CITY OF CONCORD Phone # (

■ City/County

CONTACT: DAVID WELLING, PROJECT MANAGER, WOOLPERT - (704) 526-3130, DAVID.WELLING@WOOLPERT.COM

BRYAN D. FIKE

RAY M. NIX, JR

BRANDON L. MILLER

GEORGE C. FOWLER, III 26023

Address: 1252 COX MILL ROAD, CONCORD, NC

Code Enforcement Jurisdiction: City___

WOOLPER'

WOOLPERT

OPTIMA ENGINEERING

Owned By:

DESIGNER

Electrical Fire Alarm

Plumbing

Civil

Architectural

	STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 ⁴ AREA	(C) AREA FOR FRONTAG INCREASE ^{1,5}	(D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2,3}			
	1	GROUP U	607 SF	5,500 SF	N/A	5,500 SF			
	1	S-1	46 SF	9,000 SF	N/A	5,500 SF			
1	Frontage area increases from Section 506.3 are computed thus: a. Perimeter which fronts a public way or open space having 20 feet minimum width =(F) b. Total Building Perimeter =(P) c. Ratio (F/P) =(F/P) d. W = Minimum width of public way =(W)								
		cent of frontage incre		, ,	= (%)				
2	Unlimited	area applicable under	conditions of Secti	ion 507.					
3	Maximum	Building Area = total	number of stories	in the building x I) (maximum 3 storie	es) (506.2).			
		num area of open parl				, , ,			

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	40'	20'-0"	
Building Height in Stories (Table 504.4)	1		
Provide code reference if the "Show on l	Plans" quantity is not base	ed on Table 504.3 or 504.4.	

² The maximum height of air traffic control towers must comply with Table 412.3.1

⁵ Frontage increase is based on the unsprinklered area value in Table 506.2.

³ The maximum height of open parking garages must comply with Table 406.5.4

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	PROVIDED (W/* REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	10'	0					
Bearing Walls		0					
Exterior		0					
North	10'	0					
East	10'	0					
West	10'	0					
South	10'	0					
Interior	N/A	0					
Nonbearing Walls and Partitions Exterior walls		0					
North	10'	0					
East	10'	0					
West	10'	0					
South	10'	0					
Interior walls and partitions		1HR	1HR	8M/A-002	UL U906	UL U906	8M/A-002
Floor Construction Including supporting beams and joists	N/A	0					
Floor Ceiling Assembly	N/A	1HR	1HR	B5/A-311-SP	UL U499	UL U499	B5/A-311-SF
Column Supporting Floors	N/A	0					
Roof Construction, including supporting beams and joists	10'	0					
Roof Ceiling Assembly	N/A	N/A					
Column Supporting Roof	10'	0					
Shaft Enclosures - Exit	N/A	N/A					
Shaft Enclosures - Other	N/A	N/A					
Corridor Separation	N/A	N/A					
Occupancy/Fire Barrier Separation	N/A	1HR	1HR	8M/A-002	UL U906	UL U906	8M/A-002
Party/Fire Wall Separation	N/A	N/A					
Smoke Barrier Separation	N/A	N/A					
Smoke Partition	N/A	N/A					
Tenant/Dwelling Unit/ Sleeping Unit Separation	N/A	N/A					
Incidental Use Separation	N/A	N/A					

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET FROM PERPERTY LINES	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
30 OR GREATER	UP, NS	NO LIMIT	N/A

2018 NC Administrative Code and Policies

Appendix B for Building

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	☐ No ■ Yes
Exit Signs:	■ No □ Yes
Fire Alarm:	■ No □ Yes
Smoke Detection Systems:	■ No □ Yes □ Partial
Carbon Monoxide Detection:	■ No □ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A-100-SP

- Fire and/or smoke rated wall locations (Chapter 7)
- Assumed and real property line locations (if not on the site plan)
- Exterior wall opening area with respect to distance to assumed property lines (705.8) Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)
- Occupant loads for each area
- Exit access travel distances (1017)
- Common path of travel distances (1006.2.1 & 2006.3.2(1))
- Dead end lengths (1020.4) Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
- Actual occupant load for each exit door A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of
- occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier. Location of doors with panic hardware (1010.1.10)
- Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
- Location of doors with electromagnetic egress locks (1010.1.9.9)
- Location of doors equipped with hold-open devices
- Location of emergency escape windows (1030)
- The square footage of each fire area (202)
- The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- Note any code exceptions or table notes that may have been utilized regarding the items above

Section/Table/Note	Title

ACCESSIBLE DWELLING UNITS

(SECTION 1107)							
TOTAL Units	ACCESSIBLE UNITS	Accessible Units	Type A Units	Type A Units	TYPE B Units	TYPE B Units	TOTAL ACCESSIBLE UNITS
	REQUIRED	Provided	REQUIRED	Provided	REQUIRED	Provided	PROVIDED
.							

ACCESSIBLE PARKING

(SECTION 1106)								
LOT OR PARKING AREA	TOTAL # OF PA	ARKING SPACES PROVIDED	# OF AC	CESSIBLE SPACES PRO VAN SPACI	TOTAL # ACCESSIBLE			
	,		5' ACCESS AISLE	132" ACCESS AISLE	8' ACCESS AISLE	PROVIDED		
TOTAL								
						·		

PLUMBING FIXTURE REQUIREMENTS

(TABLE 2902.1)										
USE		WATERCLOSETS URINA		URINALS	LAVATORIES			SHOWERS	DRINKING	FOUNTAINS
		FEMALE	UNISEX		MALE	FEMALE	UNISEX	/ TUBS	REGULAR	Accessible
EXIST'G	0	0	0	0	0	0	0	0	0	0
NEW	1	1	2	0	1	1	2	0	1	1
REQ'D SEE SHEET G-003 FOR REQUIRED FIXTURES BASED ON SITE LOADING ESTIMATES							ESTIMATES	0	0.33	0.33
	EXIST'G NEW	MALE EXIST'G 0 NEW 1	MALE FEMALE EXIST'G 0 0 NEW 1 1	MALE FEMALE UNISEX EXIST'G 0 0 0 NEW 1 1 2	SE WATERCLOSETS URINALS MALE FEMALE UNISEX EXIST'G 0 0 0 NEW 1 1 2 0	SE WATERCLOSETS URINALS MALE FEMALE UNISEX MALE EXIST'G 0 0 0 0 NEW 1 1 2 0 1	SE WATERCLOSETS URINALS LAVATORII MALE FEMALE UNISEX MALE FEMALE EXIST'G 0 0 0 0 0 NEW 1 1 2 0 1 1	SE WATERCLOSETS URINALS LAVATORIES MALE FEMALE UNISEX EXIST'G 0 0 0 0 0 NEW 1 1 2 0 1 1 2	SE WATERCLOSETS URINALS LAVATORIES SHOWERS / TUBS EXIST'G 0 0 0 0 0 0 0 0 NEW 1 1 2 0 1 1 2 0	SE WATERCLOSETS URINALS LAVATORIES SHOWERS / TUBS DRINKING MALE FEMALE UNISEX / TUBS REGULAR EXIST'G 0 0 0 0 0 0 0 NEW 1 1 2 0 1 1 2 0 1

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below) NOTE: REQUIRED PLUMBING FIXTURES ARE BASED ON SITE/PARKING CALCULATIONS.

BUILDING IS A SUPPORT BUILDING FOR PARK. DRINKING FOUNTAINS PROVIDED ARE

PEDESTAL MOUNTED OUTSIDE OF BUILDING AND NOT SHOWN ON BUILDING PLAN.

2018 NC Administrative Code and Policies

ENERGY SUMMARY

ENERGY REQUIREMENTS: The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy **Conservation Code** shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: No Yes (The remainder of this section is not applicable) Exempt Building: No Provide Code or Statutory reference): GROUP U OCCUPANCY, NCBC 1301.1.1

WOOLP

ARCHITECTURE | ENGINEERING | GEOSPATIA

13860 BALLANTYNE CORPORATE PLACE

SUITE 425

CHARLOTTE, NC 28227 800.414.1045

ASHRAE 90.1 Performance Prescriptive (If "Other" specify source here) N/A

THERMAL ENVELOPE (Prescriptive method only)

Climate Zone: 3A 4A 5A

Method of Compliance: Energy Code Performance

Roof/ceiling Assembly (each assembly) Description of assembly: U-Value of total assembly: R-Value of insulation: Skylights in each assembly U-Value of skylight: Total square footage of skylights in each assembly:

Exterior Walls (each assembly)

Description of assembly: U-Value of total assembly: R-Value of insulation: Openings (windows or doors with glazing) U-Value of assembly: Solar heat gain coefficient:

Projection factor: Door R-Values: Walls below grade (each assembly)

U-Value of total assembly: R-Value of insulation:

Description of assembly:

Floors over unconditioned space (each assembly) Description of assembly:

U-Value of total assembly: R-Value of insulation:

2018 NC Administrative Code and Policies

340 68"

190 38"

340

REFERENCE PLAN

PROVIDE NFPA 704 PLACARDING TO

PER 2018 NCBC TABLE 414.2.5(1)

Appendix B for Building

CHEMICAL ROOM AS DIRECTED BY THE AHJ.

S-1 ALLOWED FOR CONTROL AREA AS LONG

CONTROL AREA LIMITS ARE NOT EXCEEDED

1-HOUR FIRE BARRIER @

WALLS AND CEILING CAP

1/8" = 1'-0"

AS MAXIMUM ALLOWABLE QUANTITY PER

Floors slab on grade Description of assembly: U-Value of total assembly:

R-Value of insulation: Horizontal/Vertical requirement: Slab Heated:

Appendix B for Building

☐ Prescriptive

LIFE SAFETY LEGEND

TRAVEL DISTANCE (TD) ______

PORTABLE FIRE EXTINGUISHER WALL BRACKET MOUNTED TYPE = DRY CHEMICALRATING = 2A:10B:C MINIMUM

BRKT EX

PARK STORAGE

170 34" **ALL GENDER RR** SP105 PUMP ROOM ALL GENDER RR ALL GENDER RR CHEMICAL STO SP106 (S-1)

170 34" 170 34" ALL GENDER RR

SHEET NAME:

PROJECT NO:

DATE ISSUED:

DESIGNED BY:

CHECKED BY:

DRAWN BY:

SP - CODE SUMMARY AND LIFE SAFETY PLAN

081197

06/15/2023

A" RAMSEUR PA ECREATION DEPARTMEN D PAVILION (SP)

SHEET NO:

Separated Use (508.4) -

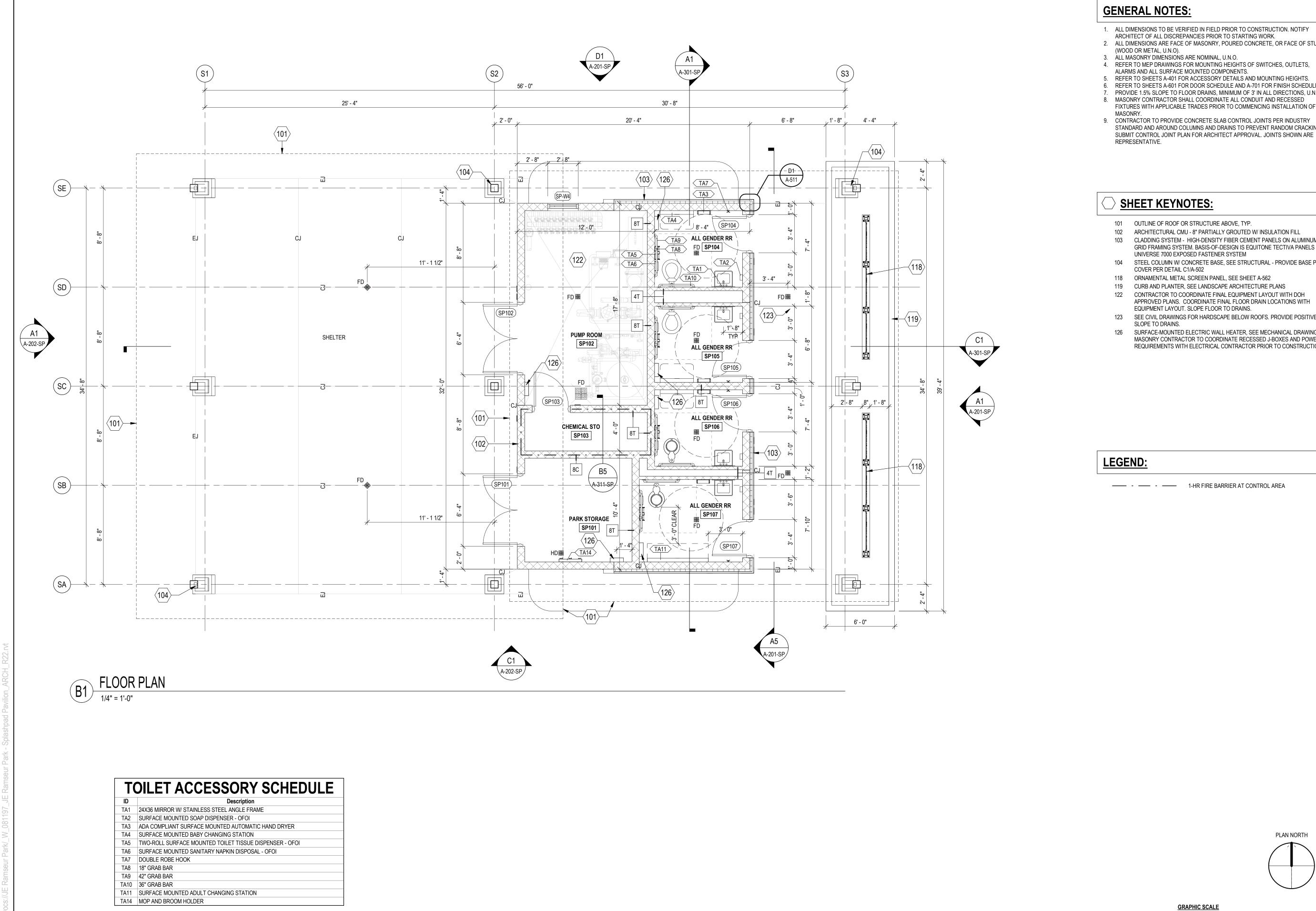
2018 NC Administrative Code and Policies

Appendix B for Building

01/14/25 - ISSUED FOR BIDDING

SP107

0.2 1 1" 170 34"



1. ALL DIMENSIONS TO BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO STARTING WORK.

2. ALL DIMENSIONS ARE FACE OF MASONRY, POURED CONCRETE, OR FACE OF STUD

3. ALL MASONRY DIMENSIONS ARE NOMINAL, U.N.O.

4. REFER TO MEP DRAWINGS FOR MOUNTING HEIGHTS OF SWITCHES, OUTLETS,

ALARMS AND ALL SURFACE MOUNTED COMPONENTS. REFER TO SHEETS A-401 FOR ACCESSORY DETAILS AND MOUNTING HEIGHTS.

REFER TO SHEETS A-601 FOR DOOR SCHEDULE AND A-701 FOR FINISH SCHEDULE. PROVIDE 1.5% SLOPE TO FLOOR DRAINS, MINIMUM OF 3' IN ALL DIRECTIONS, U.N.O. 8. MASONRY CONTRACTOR SHALL COORDINATE ALL CONDUIT AND RECESSED

9. CONTRACTOR TO PROVIDE CONCRETE SLAB CONTROL JOINTS PER INDUSTRY STANDARD AND AROUND COLUMNS AND DRAINS TO PREVENT RANDOM CRACKING. SUBMIT CONTROL JOINT PLAN FOR ARCHITECT APPROVAL. JOINTS SHOWN ARE



101 OUTLINE OF ROOF OR STRUCTURE ABOVE, TYP.

102 ARCHITECTURAL CMU - 8" PARTIALLY GROUTED W/ INSULATION FILL 103 CLADDING SYSTEM - HIGH-DENSITY FIBER CEMENT PANELS ON ALUMINUM GRID FRAMING SYSTEM. BASIS-OF-DESIGN IS EQUITONE TECTIVA PANELS ON

104 STEEL COLUMN W/ CONCRETE BASE, SEE STRUCTURAL - PROVIDE BASE PLATE COVER PER DETAIL C1/A-502

118 ORNAMENTAL METAL SCREEN PANEL, SEE SHEET A-562

119 CURB AND PLANTER, SEE LANDSCAPE ARCHITECTURE PLANS

122 CONTRACTOR TO COORDINATE FINAL EQUIPMENT LAYOUT WITH DOH APPROVED PLANS. COORDINATE FINAL FLOOR DRAIN LOCATIONS WITH EQUIPMENT LAYOUT. SLOPE FLOOR TO DRAINS.

123 SEE CIVIL DRAWINGS FOR HARDSCAPE BELOW ROOFS. PROVIDE POSITIVE

126 SURFACE-MOUNTED ELECTRIC WALL HEATER, SEE MECHANICAL DRAWINGS.

MASONRY CONTRACTOR TO COORDINATE RECESSED J-BOXES AND POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO CONSTRUCTION.

---- - --- 1-HR FIRE BARRIER AT CONTROL AREA

J.E. "JIM" RAMSEUR PAPARKS & RECREATION DEPARTME SPLASHPAD PAVILION (SP)

ARCHITECTURE | ENGINEERING | GEOSPATIAL

13860 BALLANTYNE CORPORATE PLACE

SUITE 425

CHARLOTTE, NC 28227

800.414.1045

PROJECT NO: DATE ISSUED:

081197

06/15/2023

DESIGNED BY: DRAWN BY: CHECKED BY:

SHEET NAME: SP - FLOOR PLAN

SHEET NO:

A-101-SP

PLAN NORTH

GENERAL NOTES:

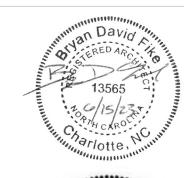
- 1. PROVIDE ICE AND WATER SHIELD 24" MIN. FROM ALL EAVES AND PENETRATIONS. 2. ALL ROOF SURFACES TO BE 2" VERTICAL PER 1'-0" HORIZONTAL, U.N.O.
- 3. PROVIDE ALL CRICKETS, SADDLES, FLASHING AND RELATED COMPONENTS AS REQUIRED TO PREVENT PONDING AND CREATE A COMPLETE ROOFING SYSTEM. 4. PROVIDE CRICKETS AT ROOF CURBS AND/OR EQUIPMENT WHERE REQUIRED TO
- PROVIDE POSITIVE DRAINAGE TO ROOF DRAINS. 5. ALL ROOFTOP MECHANICAL, ELECTRICAL AND/OR PLUMBING EQUIPMENT SHOWN FOR REFERENCE ONLY. REFER TO MEP DOCUMENTS FOR SPECIFIC DESIGN INFO.
- 6. REFER TO STRUCTURAL DRAWINGS FOR ROOF PENETRATIONS AND FRAMING REQUIREMENTS IN ROOFS. VERIFY LOCATIONS, SIZES & TYPES REQUIRED BY
- MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS. 7. REFER TO SHEET A-501 FOR TYPICAL ROOF DETAILS. 8. ALL DOWNSPOUTS TO GRADE FROM ROOF DRAINAGE SYSTEMS CONNECT TO
- UNDERGROUND STORM SYSTEM UNO. 9. COORDINATE W/ WALL SECTIONS AND STRUCTURAL FOR THE FOLLOWING
- ELEVATIONS.
- EAVE HEIGHT
- DECK BEARING ELEVATION
- TOP OF MASONRY

SHEET KEYNOTES:

- 111 STANDING SEAM METAL ROOF
- 112 METAL GUTTER AND DOWNSPOUT, TYP.
- 113 SKYLIGHT, TYP. SEE DETAIL B3/A-501
- 114 OUTLINE OF WALLS BELOW
- 129 VTR, TYP. SEE D3 ON A-501 130 CRICKET HIGH SIDE OF SKYLIGHTS PER ROOFING MANUFACTURER
- RECOMMENDATIONS, TYP. 134 OUTLINE OF ROOF BELOW

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PROJECT NO: DATE ISSUED:

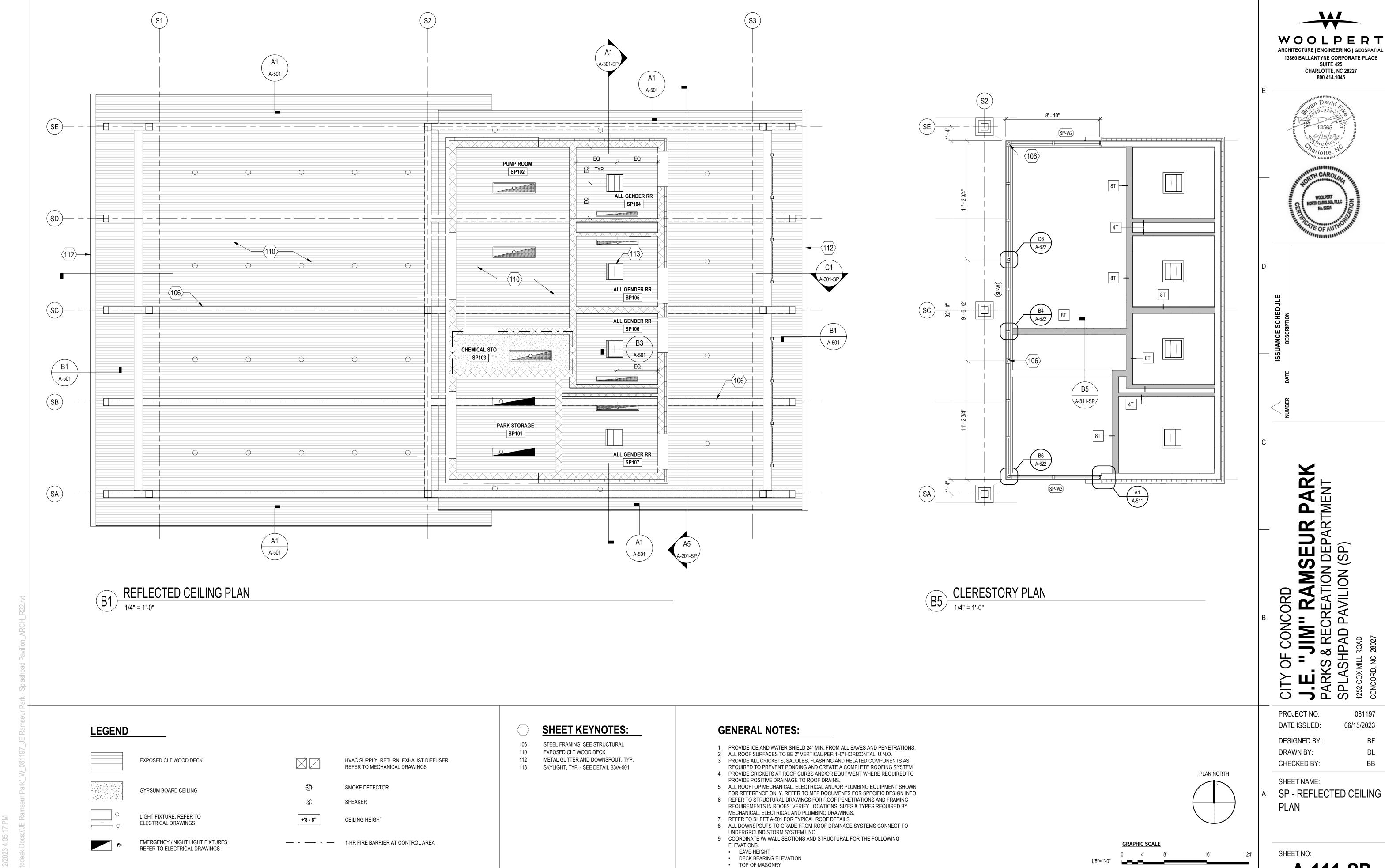
DESIGNED BY: DRAWN BY: CHECKED BY:

SHEET NAME: SP - ROOF PLAN

SHEET NO:

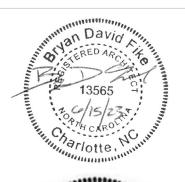
A-102-SP





A-111-SF

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081197 06/15/2023

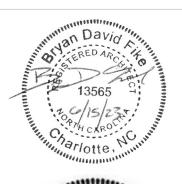
SP - BUILDING

ELEVATIONS

A-201-SP









CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
SPLASHPAD PAVILION (SP)

1252 COX MILL ROAD

PROJECT NO: 081197

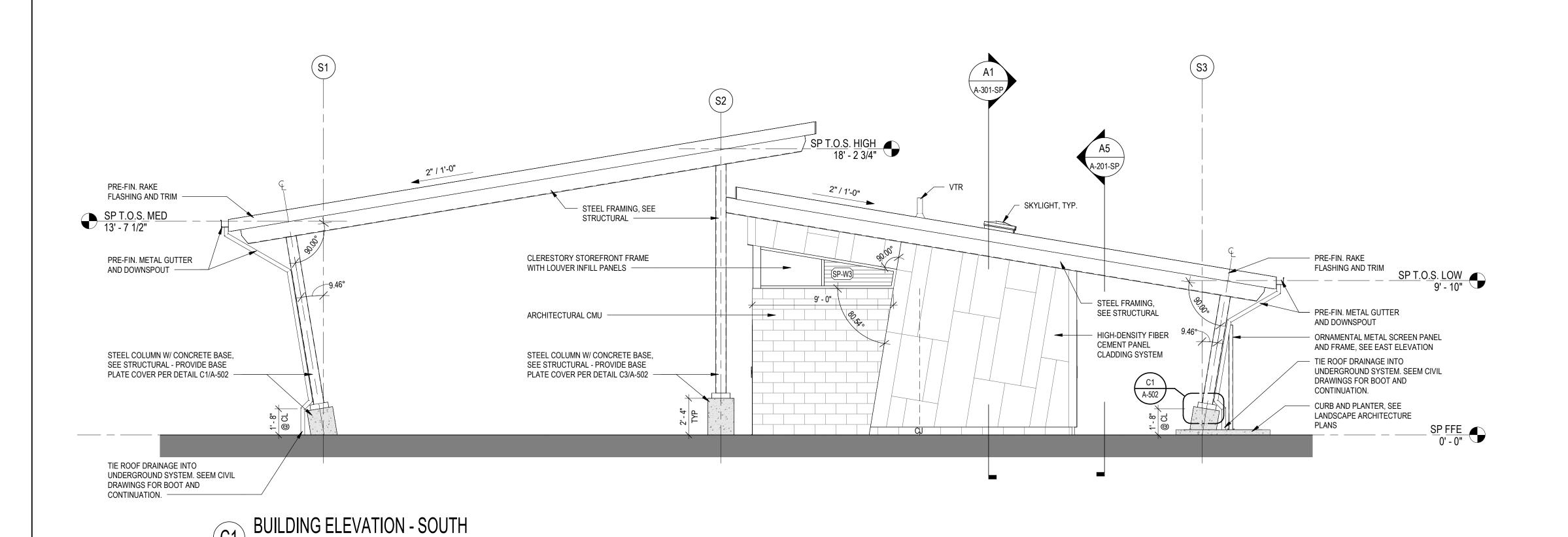
06/15/2023 DATE ISSUED: DESIGNED BY:

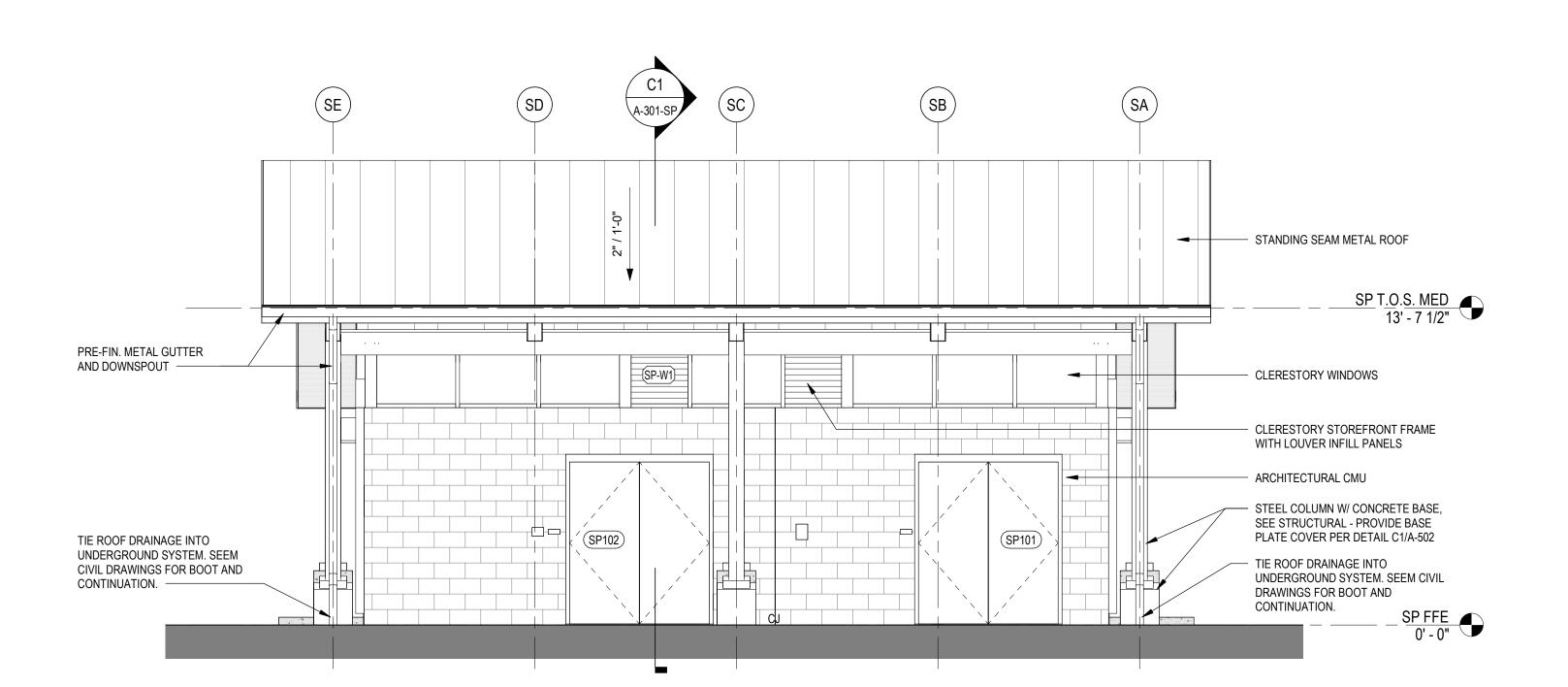
DRAWN BY: CHECKED BY:

SHEET NAME: SP - BUILDING **ELEVATIONS**

SHEET NO:

A-202-SP





BUILDING ELEVATION - WEST

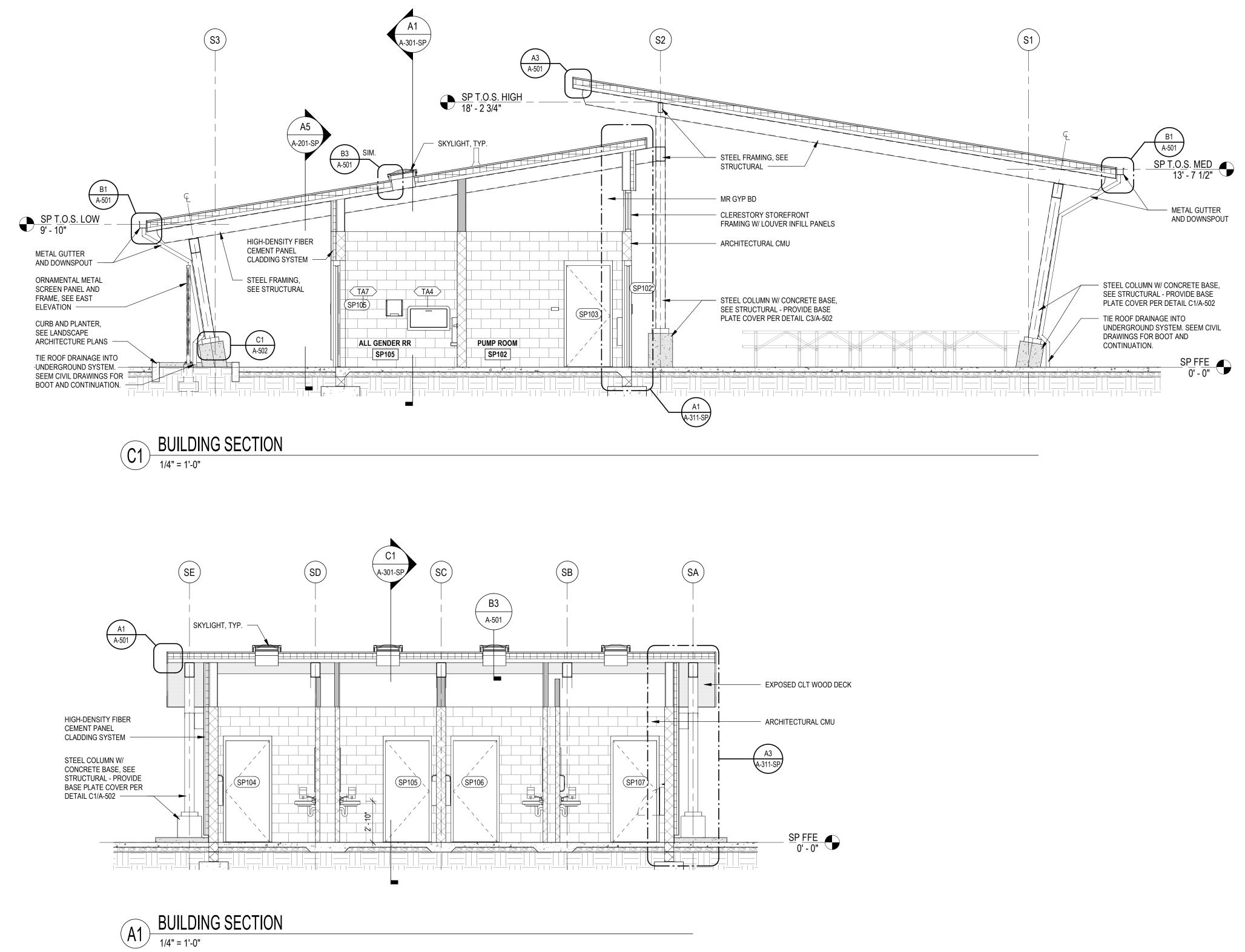
RESTROOM PAVILION SEE ARCHITECTURAL

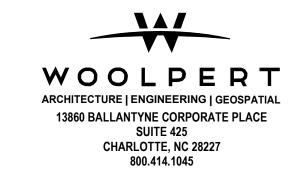
EGMENTAL WALL, C1 SEE B SHEETS

KEY PLAN

GRAPHIC SCALE











CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
SPLASHPAD PAVILION (SP)

1252 COX MILL ROAD

PROJECT NO: 081197 06/15/2023 DATE ISSUED: DESIGNED BY:

DRAWN BY: CHECKED BY:

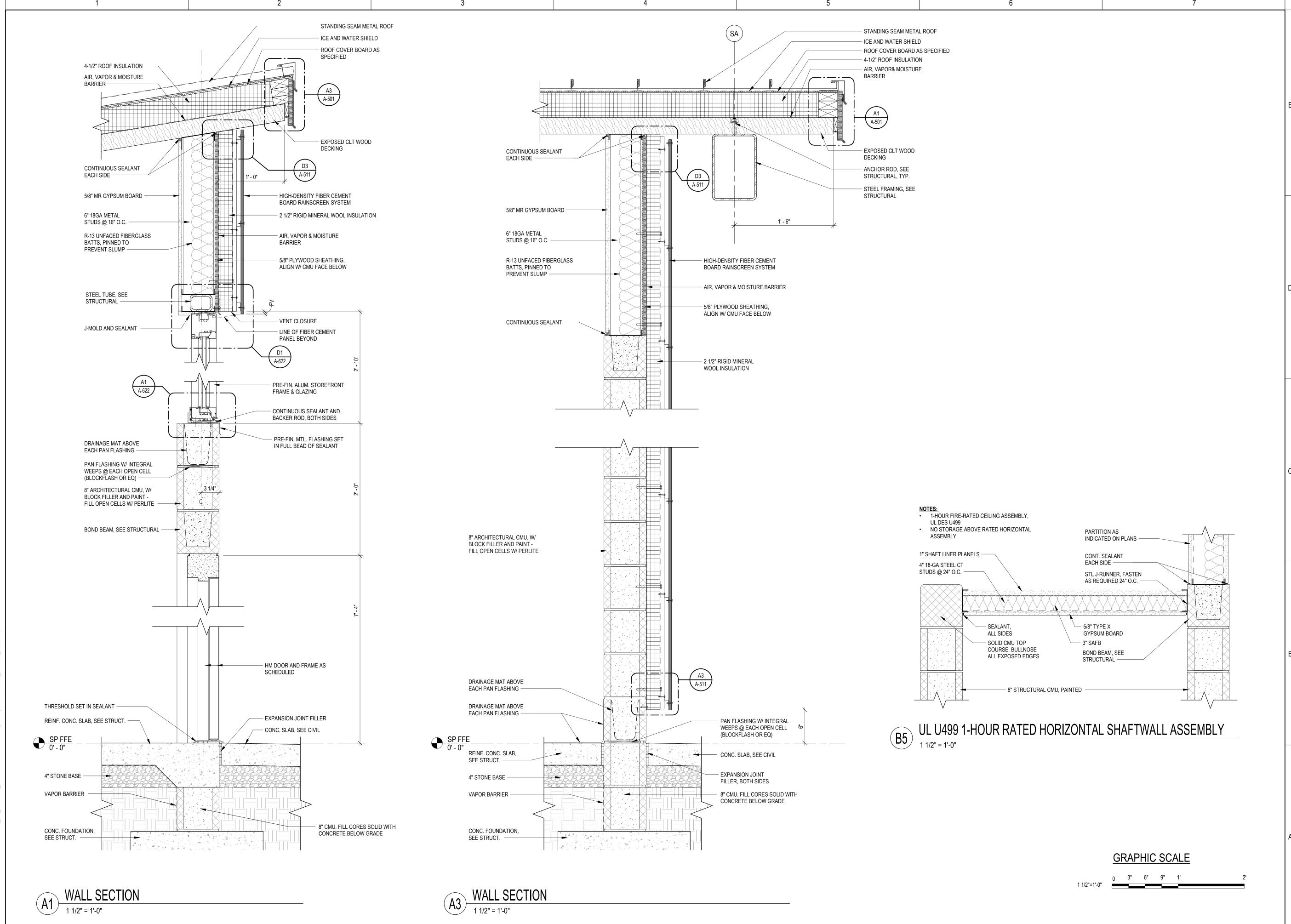
SHEET NAME:

SP - BUILDING SECTIONS

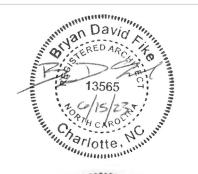
SHEET NO:

A-301-SP

GRAPHIC SCALE



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J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
SPLASHPAD PAVILION (SP)

PROJECT NO: 081197 06/15/2023 DATE ISSUED: **DESIGNED BY:**

DRAWN BY: CHECKED BY:

SHEET NAME:

SP - WALL SECTIONS

SHEET NO: A-311-SP

Incidental Uses (Table 509): _

Special Uses (Chapter 4 – List Code Sections)

Non-Separated Use (508.3)

Separated Use (508.4) -

2018 NC Administrative Code and Policies

Special Provisions: (Chapter 5 – List Code Sections):

determined, shall apply to the entire building.

Mixed Occupancy: No Yes Separation: Hr. Exception:

<u>Actual Area of Occupancy A</u> + <u>Actual Area of Occupancy B</u> ≤ 1 Allowable Area of Occupancy A Allowable Area of Occupancy B

The required type of construction for the building shall be determined by applying the height and area limitations

for each of the applicable occupancies to the entire building. The most restrictive type of construction, so

See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

2018 APPENDIX B **BUILDING CODE SUMMARY**

FOR ALL COMMERCIAL PROJECTS

(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Zip Code ²⁸⁰²⁷

State

E-MAIL

BRYAN.FIKE@WOOLPERT.COM

BMILLER@OPTIMAENGINEERING.COM

RALMOND@OPTIMAENGINEERING.COM

MARK.MAINRIDGE@WOOLPERT.COM

ANDREW.PACK@WOOLPERT.COM

Chapter 14

☐ Change of Use

☐ IV

☐ IV

SUB-TOTAL

300 SF

300 SF

Appendix B for Building

■ V-B

RAY.NIX@WOOLPERT.COM

E-Mail

■ County_CABARRUS State

☐ Private

Name of Project: J.E. "JIM" RAMSEUR PARK - BASKETBALL RESTROOM

Owner/Authorized Agent: CITY OF CONCORD Phone # (_____)

■ City/County

Address: 1252 COX MILL ROAD, CONCORD, NC

Code Enforcement Jurisdiction: City___

Owned By:

Ι	STORY	DESCRIPTION AND	(A)	(B)	(C)	(D)
	NO.	USE	BLDG AREA PER STORY (ACTUAL)	TABLE 506.2 ⁴ AREA	AREA FOR FRONTAGE INCREASE ^{1,5}	ALLOWABLE AREA PER STORY OR UNLIMITED ^{2,3}
ľ	1	GROUP U	300 SF	5,500 SF	N/A	5,500 SF
L						
1]	Frontage	area increases from Se	ection 506.3 are con	nputed thus:		
	a. Pe	rimeter which fronts a	public way or open	space having 20:	feet minimum width =	(F)
	b. To	otal Building Perimeter	=	(P)		
	c. Ra	atio (F/P) =	(F/P)			
	1	3.61 1 1.1.1 0	1 11	(TTT)		

 $W = Minimum width of public way = ____ (W)$

Percent of frontage increase $I_f = 100 [F/P - 0.25] \times W/30 =$ (%)

Unlimited area applicable under conditions of Section 507.

Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).

⁴ The maximum area of open parking garages must comply with Table 406.5.4 Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	40'	13'-0"	
Building Height in Stories (Table 504.4)	1	1	

Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4. ² The maximum height of air traffic control towers must comply with Table 412.3.1

³ The maximum height of open parking garages must comply with Table 406.5.4

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	RATING PROVIDED (W/* REDUCTION)	DETAIL # AND SHEET #	DESIGN# FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	10'	0					
Bearing Walls		0					
Exterior		0					
North	10'	0					
East	10'	0					
West	10'	0					
South	10'	0					
Interior	N/A	0					
Nonbearing Walls and Partitions Exterior walls		0					
North	10'	0					
East	10'	0					
West	10'	0					
South	10'	0					
Interior walls and partitions		0					
Floor Construction Including supporting beams and joists	N/A	0					
Floor Ceiling Assembly	N/A	0					
Column Supporting Floors	N/A	0					
Roof Construction, including supporting beams and joists	10'	0					
Roof Ceiling Assembly	N/A	0					
Column Supporting Roof	10'	0					
Shaft Enclosures - Exit	N/A	N/A					
Shaft Enclosures - Other	N/A	N/A					
Corridor Separation	N/A	N/A					
Occupancy/Fire Barrier Separation	N/A	N/A					
Party/Fire Wall Separation	N/A	N/A					
Smoke Barrier Separation	N/A	N/A					
Smoke Partition	N/A	N/A					
Tenant/Dwelling Unit/ Sleeping Unit Separation	N/A	N/A					
Incidental Use Separation	N/A	N/A					

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET FROM PERPERTY LINES	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
30 OR GREATER	UP, NS	NO LIMIT	N/A

2018 NC Administrative Code and Policies

Appendix B for Building

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	☐ No ■ Yes
Exit Signs:	■ No ☐ Yes
Fire Alarm:	■ No ☐ Yes
Smoke Detection Systems:	■ No ☐ Yes ☐ Partial
Carbon Monoxide Detection:	■ No □ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A-100-BB

Fire and/or smoke rated wall locations (Chapter 7)

Assumed and real property line locations (if not on the site plan)

Exterior wall opening area with respect to distance to assumed property lines (705.8) Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)

Occupant loads for each area

Exit access travel distances (1017)

Common path of travel distances (1006.2.1 & 2006.3.2(1))

Dead end lengths (1020.4)

Clear exit widths for each exit door ■ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)

Actual occupant load for each exit door

A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier.

Location of doors with panic hardware (1010.1.10) Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)

Location of doors with electromagnetic egress locks (1010.1.9.9)

Location of doors equipped with hold-open devices

Location of emergency escape windows (1030)

The square footage of each fire area (202)

The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)

Note any code exceptions or table notes that may have been utilized regarding the items above

Section/Table/Note Title

ACCESSIBLE DWELLING UNITS

(SECTION 1107)											
TOTAL UNITS	Accessible Units Required	Accessible Units Provided	TYPE A Units Required	TYPE A Units Provided	TYPE B Units Required	TYPE B Units Provided	TOTAL ACCESSIBLE UNITS PROVIDED				
	,										

ACCESSIBLE PARKING

	(SECTION 1106)										
LOT OR PARKING AREA	TOTAL # OF PA	ARKING SPACES PROVIDED	# OF ACC	CESSIBLE SPACES PRO VAN SPACI		TOTAL # ACCESSIBLE					
			5' ACCESS AISLE	132" ACCESS AISLE	8' ACCESS AISLE	PROVIDED					
TOTAL											

PLUMBING FIXTURE REQUIREMENTS

	(1ABLE 2902.1)													
U	USE WATERCLOSETS URINALS LAVATORIES		SHOWERS	DRINKING	FOUNTAINS									
MALE FEMALE UNISEX			MALE	FEMALE	UNISEX	/ TUBS	REGULAR	Accessible						
SPACE	EXIST'G	0	0	0	0	0	0	0	0	0	0			
NEW		1	1	1	0	1	1	1	0	1	1			
REQ'D SEE SHEET G-003 FOR REQUIRED FIXTURES BASED ON SITE LOADING ESTIMATES						0	0.33	0.33						

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below) NOTE: REQUIRED PLUMBING FIXTURES ARE BASED ON SITE/PARKING CALCULATIONS.

BUILDING IS A SUPPORT BUILDING FOR PARK. DRINKING FOUNTAINS PROVIDED ARE

PEDESTAL MOUNTED OUTSIDE OF BUILDING AND NOT SHOWN ON BUILDING PLAN.

2018 NC Administrative Code and Policies

ENERGY SUMMARY

ENERGY REQUIREMENTS: The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: No Yes (The remainder of this section is not applicable)

Exempt Building: No Provide Code or Statutory reference): GROUP U OCCUPANCY, NCBC 1301.1.1 Climate Zone: 3A 4A 5A

Method of Compliance: Energy Code Performance ☐ Prescriptive ASHRAE 90.1 Performance ☐ Prescriptive (If "Other" specify source here) N/A

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly) Description of assembly: U-Value of total assembly: R-Value of insulation: Skylights in each assembly U-Value of skylight:

Total square footage of skylights in each assembly:

Exterior Walls (each assembly) Description of assembly: U-Value of total assembly: R-Value of insulation: Openings (windows or doors with glazing) U-Value of assembly: Solar heat gain coefficient: Projection factor:

Walls below grade (each assembly) Description of assembly:

U-Value of total assembly: R-Value of insulation:

Door R-Values:

Floors over unconditioned space (each assembly)

Description of assembly: U-Value of total assembly: R-Value of insulation:

Floors slab on grade Description of assembly:

U-Value of total assembly: R-Value of insulation:

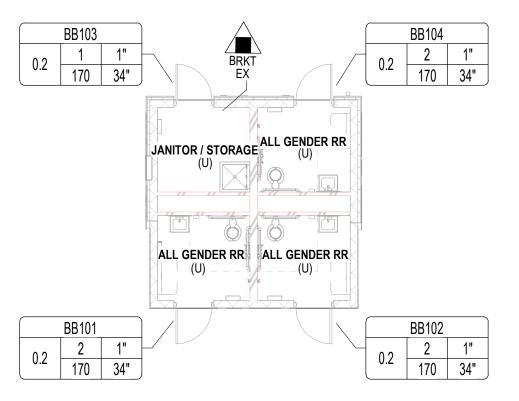
Horizontal/Vertical requirement: Slab Heated: 2018 NC Administrative Code and Policies

Appendix B for Building

LIFE SAFETY LEGEND

TRAVEL DISTANCE (TD)

PORTABLE FIRE EXTINGUISHER WALL BRACKET MOUNTED TYPE = DRY CHEMICALRATING = 2A:10B:C MINIMUM



REFERENCE PLAN

Appendix B for Building

SHEET NO:

A-100-BB

BB - CODE SUMMARY AND

LIFE SAFETY PLAN

JA TA Partme

RAMSEUR REATION DEPART

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ASK

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06/15/2023

S REC

H A

PROJECT NO:

DATE ISSUED:

DESIGNED BY:

CHECKED BY:

SHEET NAME:

DRAWN BY:

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WOOLPER

ARCHITECTURE | ENGINEERING | GEOSPATIA

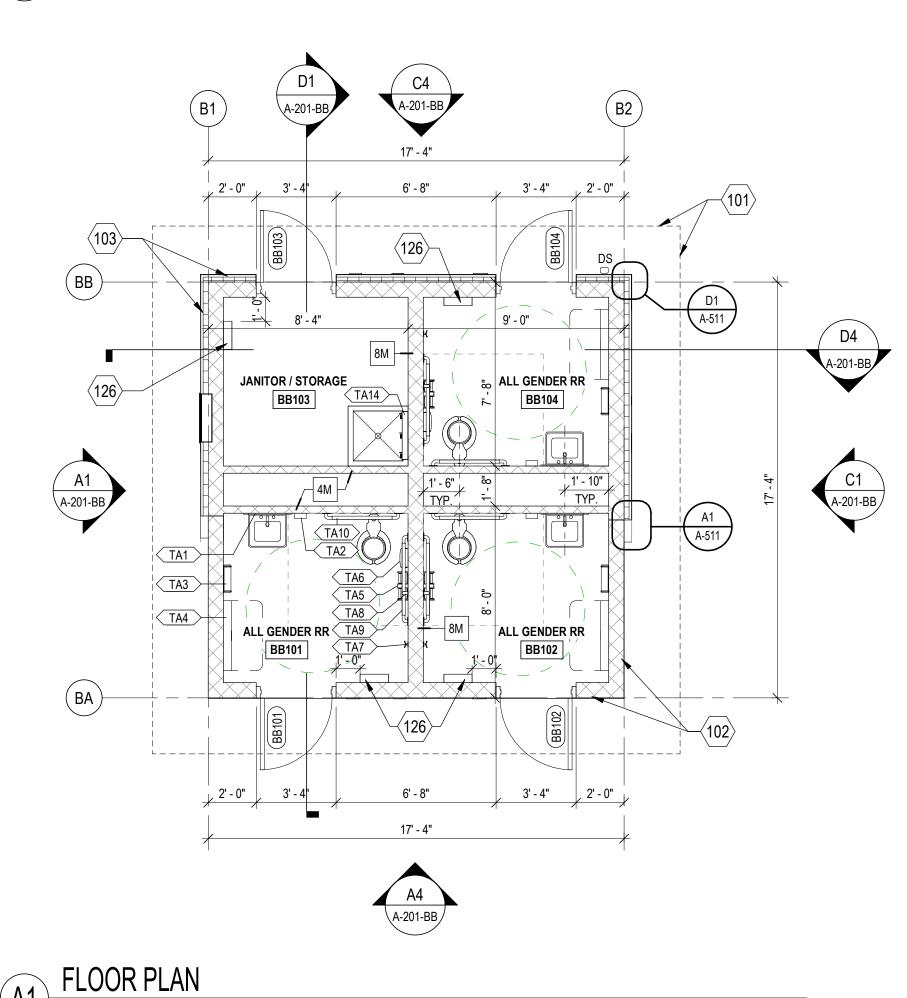
13860 BALLANTYNE CORPORATE PLACE

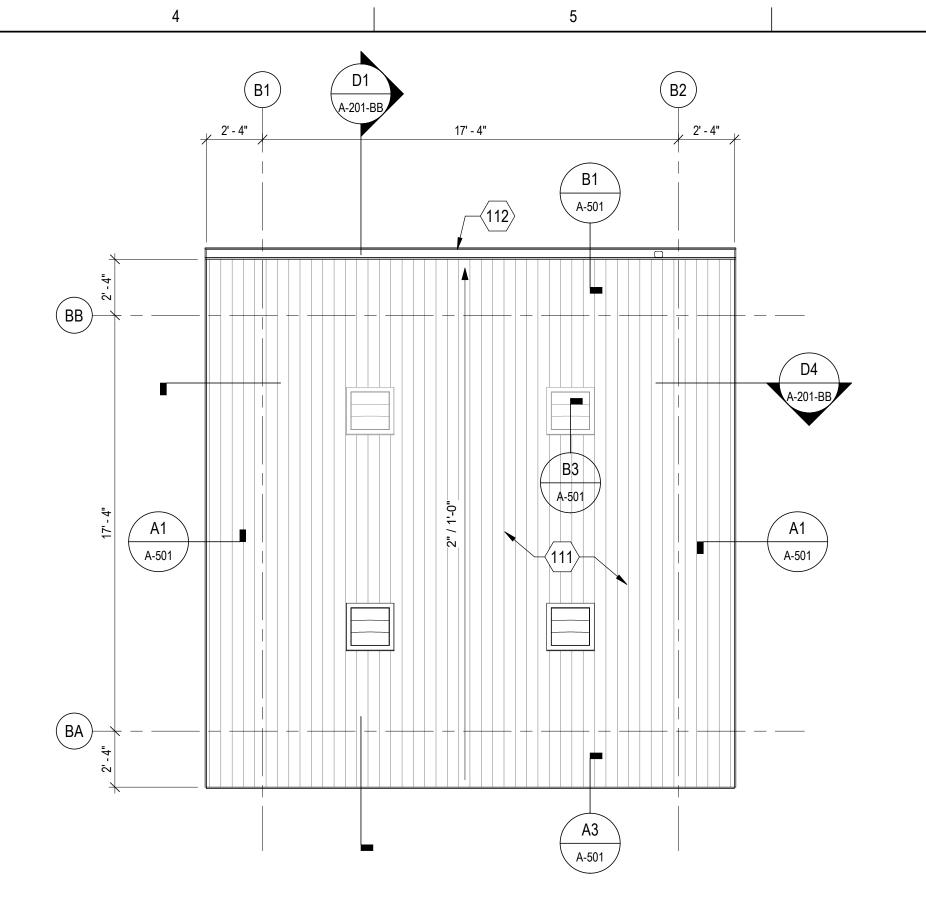
SUITE 425

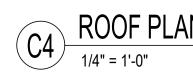
CHARLOTTE, NC 28227

800.414.1045

REFLECTED CEILING PLAN







TA10 36" GRAB BAR

TA14 MOP AND BROOM HOLDER

TOILET ACCESSORY SCHEDULE TA1 24X36 MIRROR W/ STAINLESS STEEL ANGLE FRAME TA2 SURFACE MOUNTED SOAP DISPENSER - OFOI TA3 ADA COMPLIANT SURFACE MOUNTED AUTOMATIC HAND DRYER TA4 SURFACE MOUNTED BABY CHANGING STATION TA5 TWO-ROLL SURFACE MOUNTED TOILET TISSUE DISPENSER - OFOI TA6 SURFACE MOUNTED SANITARY NAPKIN DISPOSAL - OFOI TA7 DOUBLE ROBE HOOK TA8 18" GRAB BAR TA9 42" GRAB BAR

FLOOR PLAN NOTES:

1. ALL DIMENSIONS TO BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION. NOTIFY

ARCHITECT OF ALL DISCREPANCIES PRIOR TO STARTING WORK. 2. ALL DIMENSIONS ARE FACE OF MASONRY, POURED CONCRETE, OR FACE OF STUD

(WOOD OR METAL, U.N.O). 3. ALL MASONRY DIMENSIONS ARE NOMINAL, U.N.O.

4. REFER TO MEP DRAWINGS FOR MOUNTING HEIGHTS OF SWITCHES, OUTLETS,

ALARMS AND ALL SURFACE MOUNTED COMPONENTS. 5. REFER TO SHEETS A-601 FOR DOOR SCHEDULE AND A-701 FOR FINISH SCHEDULE.

RCP & ROOF PLAN NOTES:

PROVIDE ICE AND WATER SHIELD 24" MIN. FROM ALL EAVES AND PENETRATIONS. ALL ROOF SURFACES TO BE 2" VERTICAL PER 1'-0" HORIZONTAL, U.N.O.

PROVIDE ALL CRICKETS, SADDLES, FLASHING AND RELATED COMPONENTS AS REQUIRED TO PREVENT PONDING AND CREATE A COMPLETE ROOFING SYSTEM. 4. PROVIDE CRICKETS AT ROOF CURBS AND/OR EQUIPMENT WHERE REQUIRED TO PROVIDE POSITIVE DRAINAGE TO ROOF DRAINS.

5. ALL ROOFTOP MECHANICAL, ELECTRICAL AND/OR PLUMBING EQUIPMENT SHOWN FOR REFERENCE ONLY. REFER TO MEP DOCUMENTS FOR SPECIFIC DESIGN INFO. 6. REFER TO STRUCTURAL DRAWINGS FOR ROOF PENETRATIONS AND FRAMING REQUIREMENTS IN ROOFS. VERIFY LOCATIONS, SIZES & TYPES REQUIRED BY

8. ALL DOWNSPOUTS TO GRADE FROM ROOF DRAINAGE SYSTEMS CONNECT TO UNDERGROUND STORM SYSTEM UNO.

MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS. 7. REFER TO SHEET A-501 FOR TYPICAL ROOF DETAILS.

9. COORDINATE W/ WALL SECTIONS AND STRUCTURAL FOR THE FOLLOWING

ELEVATIONS.

EAVE HEIGHT

SHEET KEYNOTES:

7000 EXPOSED FASTENER SYSTEM

112 METAL GUTTER AND DOWNSPOUT, TYP.

110 EXPOSED CLT WOOD DECK 111 STANDING SEAM METAL ROOF

101 OUTLINE OF ROOF OR STRUCTURE ABOVE, TYP.

102 ARCHITECTURAL CMU - 8" PARTIALLY GROUTED W/ INSULATION FILL

103 CLADDING SYSTEM - HIGH-DENSITY FIBER CEMENT PANELS ON ALUMINUM GRID

126 SURFACE-MOUNTED ELECTRIC WALL HEATER, SEE MECHANICAL DRAWINGS. MASONRY CONTRACTOR TO COORDINATE RECESSED J-BOXES AND POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO CONSTRUCTION.

FRAMING SYSTEM. BASIS-OF-DESIGN IS EQUITONE TECTIVA PANELS ON UNIVERSE

 DECK BEARING ELEVATION TOP OF MASONRY

WOOLPERT ARCHITECTURE | ENGINEERING | GEOSPATIAL 13860 BALLANTYNE CORPORATE PLACE SUITE 425 **CHARLOTTE, NC 28227** 800.414.1045







LEGEND:

EXPOSED CLT WOOD DECK

LIGHT FIXTURE, REFER TO ELECTRICAL DRAWINGS

EMERGENCY / NIGHT LIGHT FIXTURES, REFER TO ELECTRICAL DRAWINGS



HVAC SUPPLY, RETURN, EXHAUST DIFFUSER. REFER TO MECHANICAL DRAWINGS

SPEAKER

SMOKE DETECTOR

GRAPHIC SCALE 1/4"=1'-0"

SHEET NO:

A-101-BB

BB - FLOOR PLAN, ROOF

081197

06/15/2023

CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
BASKETBALL RESTROOM (BB)

PROJECT NO:

DATE ISSUED:

DESIGNED BY:

CHECKED BY:

SHEET NAME:

PLAN, & RCP

DRAWN BY:

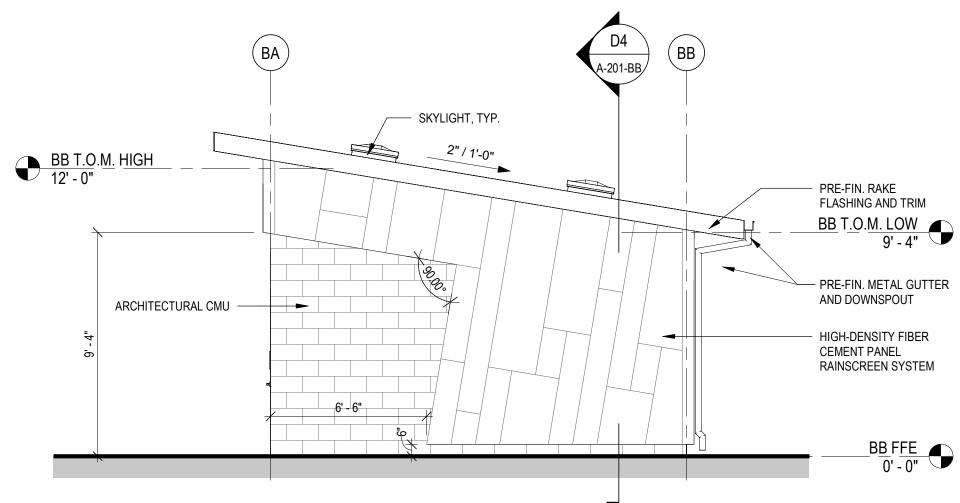
PLAN NORTH

01/14/25 - ISSUED FOR BIDDING

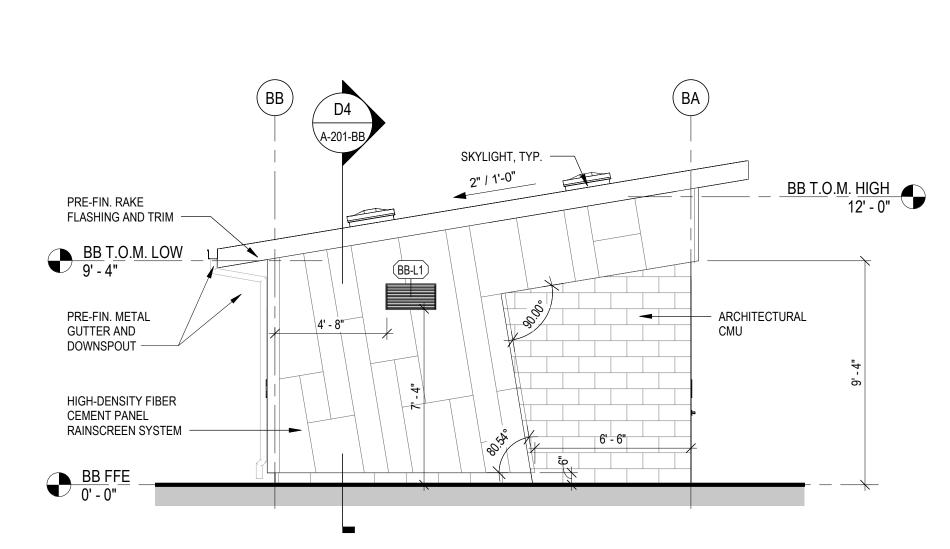
BUILDING ELEVATION - WEST

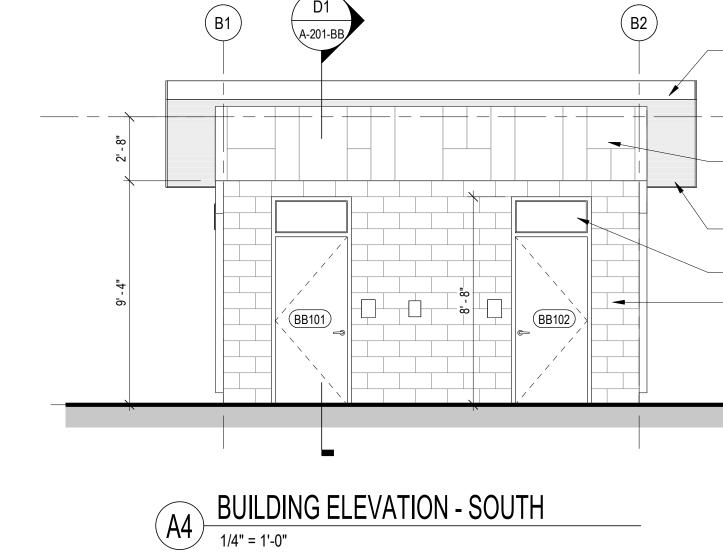
1/4" = 1'-0"

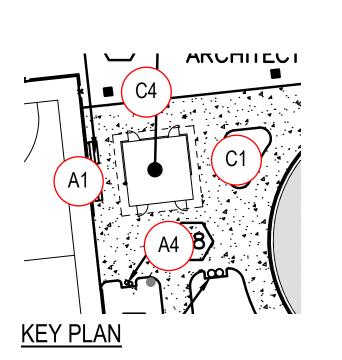
STANDING SEAM METAL ROOF OVER 4-1/2" ROOF INSULATION OVER EXPOSED CLT WOOD DECK -BB T.O.M. HIGH PRE-FIN. METAL GUTTER AND DOWNSPOUT -HIGH-DENSITY FIBER CEMENT PANEL CLADDING SYSTEM BB T.O.M. LOW 9' - 4" - ARCHITECTURAL CMU HIGH-DENSITY FIBER CEMENT PANEL JANITOR / STORAGE ALL GENDER RR TRANSOM WINDOW CLADDING SYSTEM BB103 BB101 TA10 TA9 A1 A-301-BB **BUILDING SECTION** 1/4" = 1'-0"

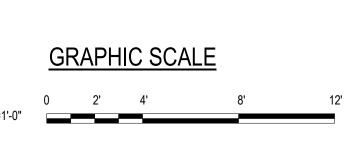




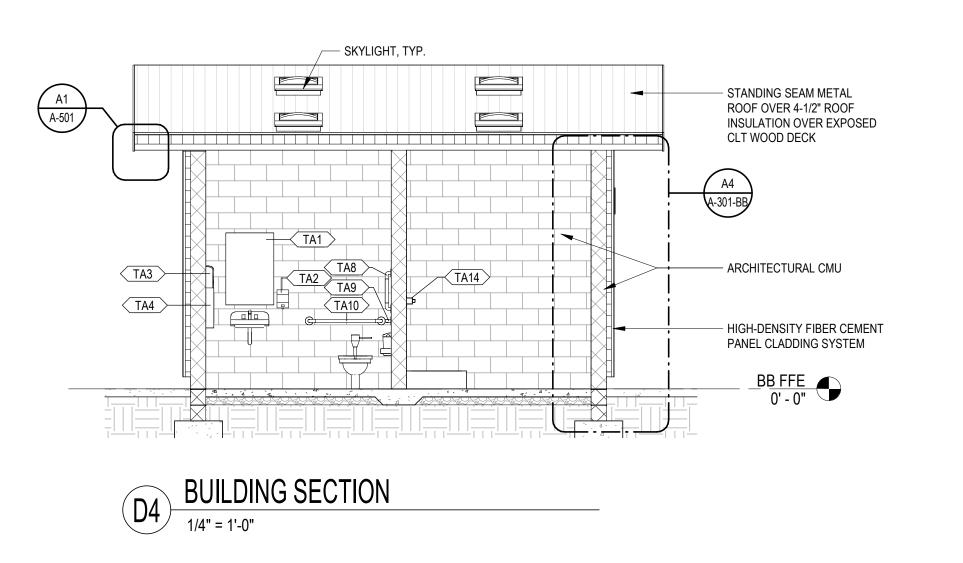


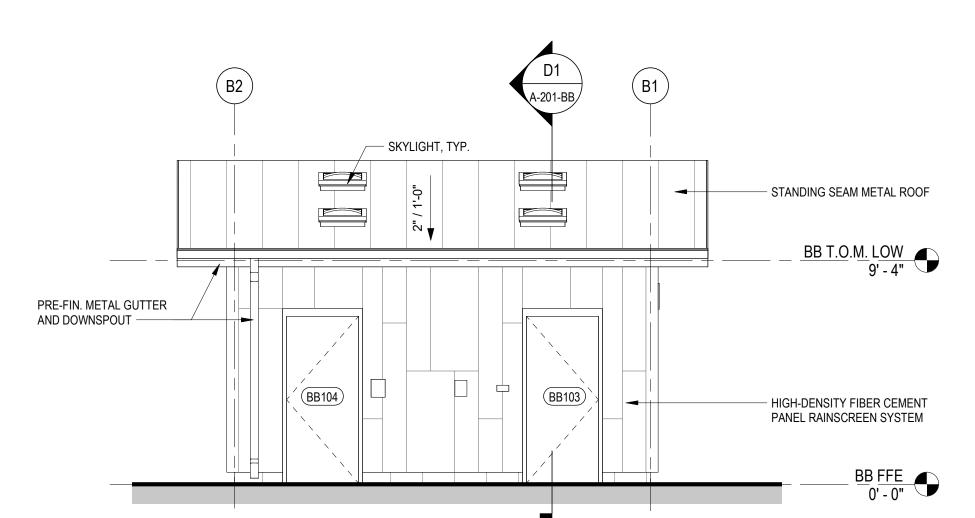






A-201-BB





BUILDING ELEVATION - NORTH 1/4" = 1'-0"

- PRE-FIN. PEAK FLASHING AND TRIM BB T.O.M. HIGH 12' - 0" HIGH-DENSITY FIBER CEMENT PANEL RAINSCREEN SYSTEM EXPOSED CLT WOOD TRANSOM WINDOW - ARCHITECTURAL CMU BB FFE 0' - 0"

01/14/25 - ISSUED FOR BIDDING

DATE ISSUED: DESIGNED BY: DRAWN BY:

PROJECT NO:

06/15/2023 CHECKED BY:

081197

WOOLPERT

ARCHITECTURE | ENGINEERING | GEOSPATIAL

13860 BALLANTYNE CORPORATE PLACE

SUITE 425

CHARLOTTE, NC 28227

800.414.1045

WOOLPERT

SHEET NAME: BB - BUILDING **ELEVATIONS AND** SECTIONS

CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
BASKETBALL RESTROOM (BB)

1252 COX MILL RE

SHEET NO:

WOOLPERT ARCHITECTURE | ENGINEERING | GEOSPATIAL 13860 BALLANTYNE CORPORATE PLACE





081197 06/15/2023

A-301-BB

2018 APPENDIX B **BUILDING CODE SUMMARY**

FOR ALL COMMERCIAL PROJECTS

(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

(Reproduce the following data on the building plans sheet 1 or 2)

Zip Code ²⁸⁰²⁷

State

E-Mail

■ County_CABARRUS State

☐ Private

Name of Project: __J.E. "JIM" RAMSEUR PARK - MAINTENANCE BUILDING

Owner/Authorized Agent: CITY OF CONCORD Phone # (_____)

■ City/County

Address: 1252 COX MILL ROAD, CONCORD, NC

Code Enforcement Jurisdiction: City___

Owned By:

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER	(B) TABLE 506.2 ⁴	(C) AREA FOR FRONTAGE	(D) ALLOWABLE AREA PER
		STORY (ACTUAL)	AREA	INCREASE ^{1,5}	STORY OR UNLIMITED ^{2,3}
1	S-1	840 SF	9,000 SF	N/A	9,000 SF
1	BUSINESS	342 SF	9,000 SF	N/A	9,000 SF
Frontage a	rea increases from Se	ction 506.3 are con	nputed thus:		
a. Per	imeter which fronts a	public way or open	space having 20	feet minimum width = .	(F)
b. Tot	al Building Perimeter	=	(P)		
	io (F/P) =				
d. W=	= Minimum width of	public way =	(W)		

- Percent of frontage increase $I_f = 100 [F/P 0.25] \times W/30 =$ (%)
- Unlimited area applicable under conditions of Section 507. Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
- ⁴ The maximum area of open parking garages must comply with Table 406.5.4 ⁵ Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	(TABLE 503)	SHOWN ON PLANS	CODE REFERENCE					
Building Height in Feet (Table 504.3)	40'	16'-2"						
Building Height in Stories (Table 504.4)	uilding Height in Stories (Table 504.4)							
Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4.								

² The maximum height of air traffic control towers must comply with Table 412.3.1

³ The maximum height of open parking garages must comply with Table 406.5.4

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE		RATING	DETAIL#	DESIGN#	DESIGN # FOR	DESIGN#
	SEPARATION DISTANCE	REQ'D	PROVIDED (W/*	AND SHEET #	FOR RATED	RATED PENETRATION	FOR RATED
	(FEET)		REDUCTION)		ASSEMBLY		JOINTS
Structural Frame,	401						
including columns, girders,	10'	0					
trusses		0					
Bearing Walls		0					
Exterior	10'						
North	10' 10'	0					
East							
West	10'	0					
South	10'	0					
Interior	N/A	0					
Nonbearing Walls and Partitions							
Exterior walls		0					
	10'	0					
North East	10'	0					
	10'	0					
West South	10'	0					
	N/A	0					
Interior walls and partitions	IN/A	0					
Floor Construction	N/A	0					
Including supporting beams							
and joists	N1/A						
Floor Ceiling Assembly	N/A	0					
Column Supporting Floors	N/A	0					
Roof Construction, including	10'	0					
supporting beams and joists	NI/A						
Roof Ceiling Assembly	N/A	0					
Column Supporting Roof	10'	0					
Shaft Enclosures - Exit	N/A	N/A					
Shaft Enclosures - Other	N/A	N/A					
Corridor Separation	N/A	N/A					
Occupancy/Fire Barrier Separation	N/A	N/A					
Party/Fire Wall Separation	N/A	N/A					
Smoke Barrier Separation	N/A	N/A					
Smoke Partition	N/A	N/A					
Tenant/Dwelling Unit/ Sleeping Unit Separation	N/A	N/A					
Incidental Use Separation	N/A	N/A					

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET FROM PERPERTY LINES	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
30 OR GREATER	UP, NS	NO LIMIT	N/A

2018 NC Administrative Code and Policies

Appendix B for Building

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	☐ No ■ Yes
Exit Signs:	■ No □ Yes
Fire Alarm:	■ No □ Yes
Smoke Detection Systems:	■ No ☐ Yes ☐ Partial
Carbon Monoxide Detection:	■ No ☐ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A-100-MB

- Fire and/or smoke rated wall locations (Chapter 7)
- Assumed and real property line locations (if not on the site plan)
- Exterior wall opening area with respect to distance to assumed property lines (705.8) Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)
- Occupant loads for each area
- Exit access travel distances (1017)
- Common path of travel distances (1006.2.1 & 2006.3.2(1))
- Dead end lengths (1020.4) Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
- Actual occupant load for each exit door A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of
- occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier.
- Location of doors with panic hardware (1010.1.10) Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
- Location of doors with electromagnetic egress locks (1010.1.9.9)
- Location of doors equipped with hold-open devices
- Location of emergency escape windows (1030)
- The square footage of each fire area (202)
- The square footage of each smoke compartment for Occupancy Classification I-2 (407.5) Note any code exceptions or table notes that may have been utilized regarding the items above

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G .: /E 11 AL.	Tri d

ACCESSIBLE DWELLING UNITS

(SECTION 1107)										
TOTAL	ACCESSIBLE	ACCESSIBLE	Түре А	Түре А	Түре В	Түре В	TOTAL			
Units	Units	Units	Units	Units	Units	Units	ACCESSIBLE UNITS			
	Required	PROVIDED	REQUIRED	Provided	Required	Provided	PROVIDED			

ACCESSIBLE PARKING

LOT OR PARKING	TOTAL # OF PA	RKING SPACES	# OF ACC	TOTAL#		
AREA	REQUIRED PROVIDED		REGULAR WITH	VAN SPACI	ES WITH	ACCESSIBLE
•			5' ACCESS	132" ACCESS	8' ACCESS	PROVIDED
			AISLE	AISLE	AISLE	
TOTAL						

PLUMBING FIXTURE REQUIREMENTS

	(TABLE 2902.1)											
USE		V	WATERCLOSETS U		URINALS		LAVATORIES			DRINKING	FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX	/ TUBS	REGULAR	Accessible	
SPACE	EXIST'G	0	0	0	0	0	0	0	0	0	0	
	NEW	0	0	1	0	0	0	1	0	0	0	
	REQ'D	0	0	1	0	0	0	1	0	0	0	
		,			•	•						

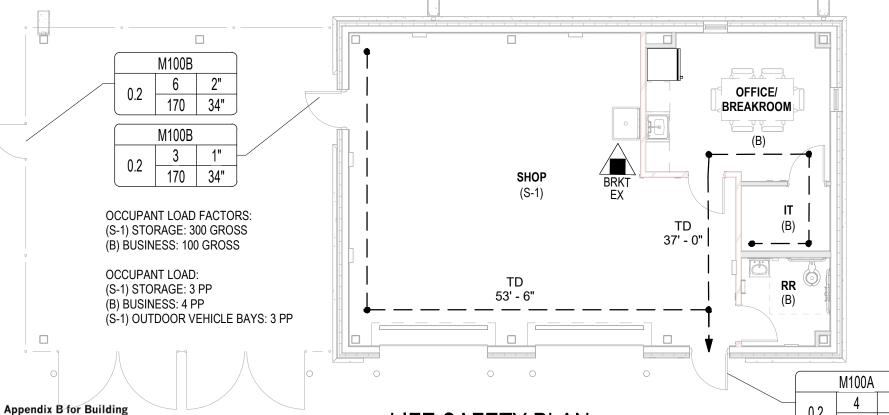
SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below)

2018 NC Administrative Code and Policies

TRAVEL DISTANCE (TD)

PORTABLE FIRE EXTINGUISHER WALL BRACKET MOUNTED TYPE = DRY CHEMICAL RATING = 2A:10B:C MINIMUM



ENERGY SUMMARY

The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy

Existing building envelope complies with code: No Yes (The remainder of this section is not applicable)

Prescriptive

WOOLP

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13860 BALLANTYNE CORPORATE PLACE

SUITE 425

CHARLOTTE, NC 28227

800.414.1045

Exempt Building: No Yes (Provide Code or Statutory reference): SB 131, GROUP S PRIMARY OCCUPANCY Climate Zone: 3A 4A 5A **Method of Compliance: Energy Code** Performance ☐ Prescriptive

THERMAL ENVELOPE (Prescriptive method only)

ENERGY REQUIREMENTS:

cost for the proposed design.

Roof/ceiling Assembly (each assembly) Description of assembly: U-Value of total assembly: R-Value of insulation:

ASHRAE 90.1 Performance

(If "Other" specify source here) N/A

Skylights in each assembly U-Value of skylight: Total square footage of skylights in each assembly:

Exterior Walls (each assembly) Description of assembly: U-Value of total assembly: R-Value of insulation: Openings (windows or doors with glazing) U-Value of assembly:

Solar heat gain coefficient: Projection factor: Door R-Values:

Description of assembly: U-Value of total assembly: R-Value of insulation:

Walls below grade (each assembly)

2018 NC Administrative Code and Policies

Floors over unconditioned space (each assembly) Description of assembly: U-Value of total assembly: R-Value of insulation:

Floors slab on grade Description of assembly: U-Value of total assembly:

R-Value of insulation: Horizontal/Vertical requirement: Slab Heated:

Appendix B for Building

LIFE SAFETY LEGEND

0.2 4 2" 170 34" LIFE SAFETY PLAN

SHEET NO:

MB - CODE SUMMARY AND

LIFE SAFETY PLAN

MSEUR PA

RA

PROJECT NO:

DATE ISSUED:

DESIGNED BY:

CHECKED BY:

SHEET NAME:

DRAWN BY:

RECRE IANCE I

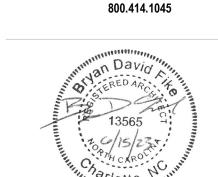
081197

06/15/2023

Appendix B for Building 2018 NC Administrative Code and Policies

Allowable Area of Occupancy A Allowable Area of Occupancy B

- A. ALL DIMENSIONS TO BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT OF ALL DISCREPANCIES PRIOR TO STARTING WORK.
- B. ALL DIMENSIONS ARE FACE OF MASONRY, POURED CONCRETE, OR FACE OF STUD (WOOD OR METAL, U.N.O).
- ÀLL MASONRY DIMENSIONS ARE NOMINAL, U.N.O. D. REFER TO MEP DRAWINGS FOR MOUNTING HEIGHTS OF SWITCHES, OUTLETS,
- ALARMS AND ALL SURFACE MOUNTED COMPONENTS. REFER TO SHEET A-401 FOR ACCESSORY DETAILS AND MOUNTING HEIGHTS.
- REFER TO SHEETS A-601 FOR DOOR SCHEDULE AND A-701 FOR FINISH SCHEDULE.



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SUITE 425

CHARLOTTE, NC 28227



SHEET KEYNOTES:

- 101 OUTLINE OF ROOF OR STRUCTURE ABOVE, TYP. 103 CLADDING SYSTEM - HIGH-DENSITY FIBER CEMENT PANELS ON ALUMINUM GRID FRAMING SYSTEM. BASIS-OF-DESIGN IS EQUITONE TECTIVA PANELS ON UNIVERSE 7000 EXPOSED FASTENER SYSTEM
- 104 STEEL COLUMN W/ CONCRETE BASE, SEE STRUCTURAL PROVIDE BASE PLATE COVER PER DETAIL C1/A-502
- 115 EXTERIOR WALL ASSEMBLY, SEE WALL SECTIONS FOR DETAILS
- 116 CAST STONE SILL
- 117 PIPE SLEEVE BOLLARD, SEE DETAIL A3/A-502
- DRAIN TIED TO OIL/WATER SEPARATOR. SEE PLUMBING DRAWINGS.
- 126 SURFACE-MOUNTED ELECTRIC WALL HEATER, SEE MECHANICAL DRAWINGS. MASONRY CONTRACTOR TO COORDINATE RECESSED J-BOXES AND POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO CONSTRUCTION.
- 127 RECESSED ELECTRIC WALL HEATER, SEE MECHANICAL DRAWINGS. MASONRY CONTRACTOR TO COORDINATE RECESSED J-BOXES AND POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO CONSTRUCTION. SEE DETAIL D5/A-502.
- 132 FURNITURE SHOWN IN MB102 IS REPRESENTATIVE ONLY. FURNITURE IS OFOI 133 36" HEAVY DUTY RUBBER CORNER GUARD
- 135 CONC. SPLASHBLOCK, TYP.
- 136 BLACK VINYL COATED CHAIN LINK FENCING. SEE CIVIL DRAWINGS FOR GATE PLACEMENT, LAYOUT, AND DETAILS
- 137 PERSONNEL GATE FREE EGRESS, SEE CIVIL DRAWINGS

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PARKS & RECREATION DEPARTMEN
MAINTENANCE BUILDING (MB)

081197

06/15/2023

PROJECT NO: DATE ISSUED:

> **DESIGNED BY:** DRAWN BY: CHECKED BY:

SHEET NAME: MB - FLOOR PLAN

SHEET NO: A-101-MB

TOILET ACCESSORY SCHEDULE

ID Description
TA1 24X36 MIRROR W/ STAINLESS STEEL ANGLE FRAME

TA2 SURFACE MOUNTED SOAP DISPENSER - OFOI TA3 ADA COMPLIANT SURFACE MOUNTED AUTOMATIC HAND DRYER
TA5 TWO-ROLL SURFACE MOUNTED TOILET TISSUE DISPENSER - OFOI

TA6 SURFACE MOUNTED SANITARY NAPKIN DISPOSAL - OFOI

TA8 18" GRAB BAR TA9 42" GRAB BAR

TA10 36" GRAB BAR

PLAN NORTH 1/4"=1'-0"

GRAPHIC SCALE

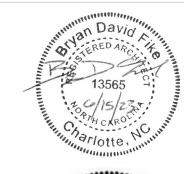
GENERAL NOTES:

- PROVIDE ICE AND WATER SHIELD 24" MIN. FROM ALL EAVES AND PENETRATIONS.
- ALL ROOF SURFACES TO BE 2" VERTICAL PER 1'-0" HORIZONTAL, U.N.O. 3. PROVIDE ALL CRICKETS, SADDLES, FLASHING AND RELATED COMPONENTS AS
- REQUIRED TO PREVENT PONDING AND CREATE A COMPLETE ROOFING SYSTEM. 4. PROVIDE CRICKETS AT ROOF CURBS AND/OR EQUIPMENT WHERE REQUIRED TO
- PROVIDE POSITIVE DRAINAGE TO ROOF DRAINS. 5. ALL ROOFTOP MECHANICAL, ELECTRICAL AND/OR PLUMBING EQUIPMENT SHOWN FOR REFERENCE ONLY. REFER TO MEP DOCUMENTS FOR SPECIFIC DESIGN INFO.
- 6. REFER TO STRUCTURAL DRAWINGS FOR ROOF PENETRATIONS AND FRAMING REQUIREMENTS IN ROOFS. VERIFY LOCATIONS, SIZES & TYPES REQUIRED BY MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS.
- 7. REFER TO SHEET A-501 FOR TYPICAL ROOF DETAILS. 8. ALL DOWNSPOUTS TO GRADE FROM ROOF DRAINAGE SYSTEMS TERMINATE AT
- CONCRETE SPLASH BLOCK AT MAINTENANCE BUILDING. 9. COORDINATE W/ WALL SECTIONS AND STRUCTURAL FOR THE FOLLOWING ELEVATIONS.
- EAVE HEIGHT
- DECK BEARING ELEVATION TOP OF MASONRY

SHEET KEYNOTES:

- 111 STANDING SEAM METAL ROOF
- 112 METAL GUTTER AND DOWNSPOUT, TYP.
- 113 SKYLIGHT, TYP. SEE DETAIL B3/A-501
- 114 OUTLINE OF WALLS BELOW
- 129 VTR, TYP. SEE D3 ON A-501
- CRICKET HIGH SIDE OF SKYLIGHTS PER ROOFING MANUFACTURER RECOMMENDATIONS, TYP.

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CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
MAINTENANCE BUILDING (MB)

1252 COX MILL ROAD

PROJECT NO: DATE ISSUED:

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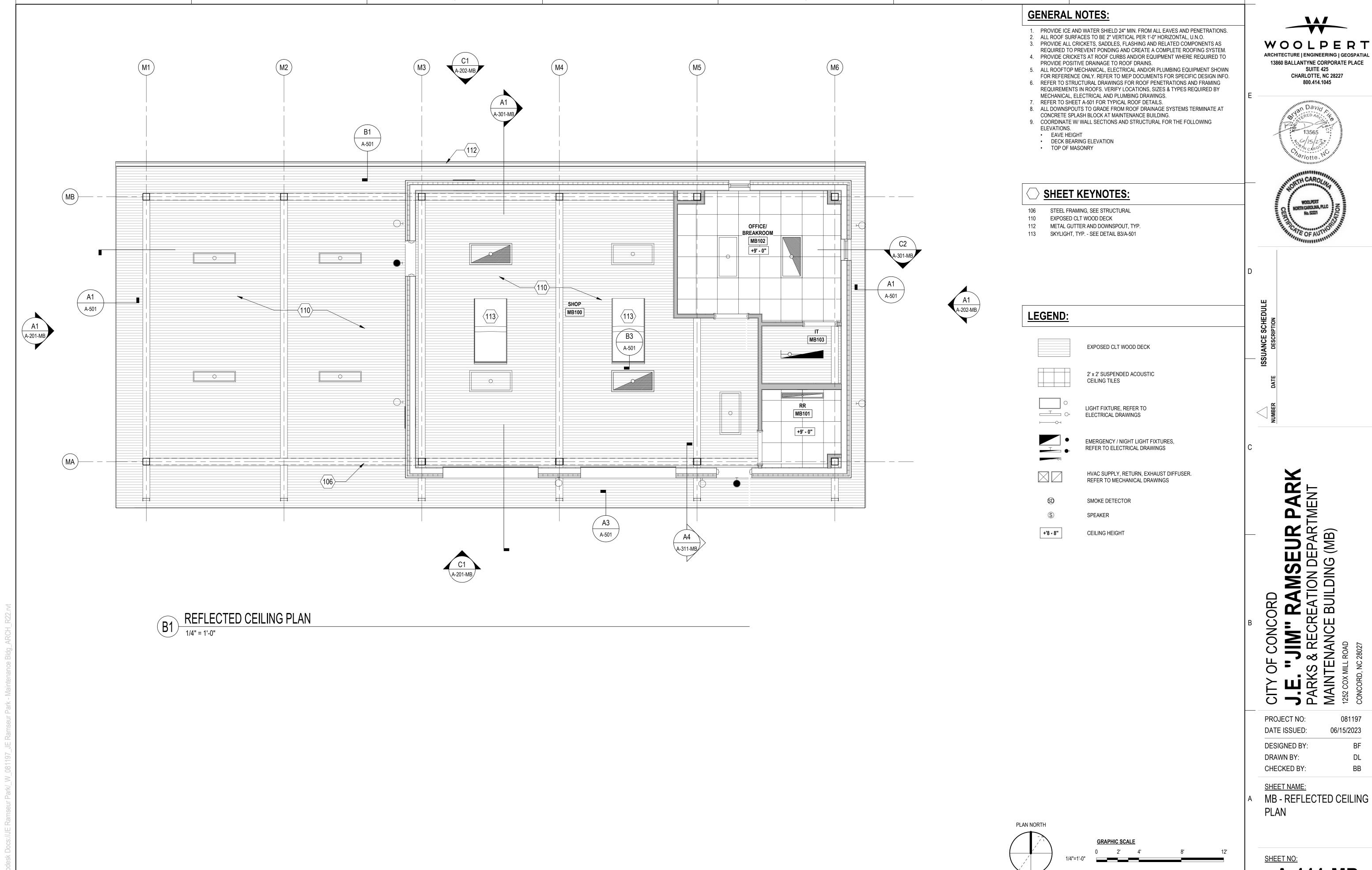
06/15/2023

DESIGNED BY: DRAWN BY: CHECKED BY:

SHEET NAME: MB - ROOF PLAN

SHEET NO:

A-102-MB



01/14/25 -ISSUED FOR BIDDING

A-111-MB

081197

MB

PRE-FIN. RAKE FLASHING

MB T.O.S. LOW 10' - 6"

AND TRIM -

PRE-FIN. METAL GUTTER AND DOWNSPOUT -

HIGH-DENSITY FIBER CEMENT PANEL CLADDING SYSTEM —

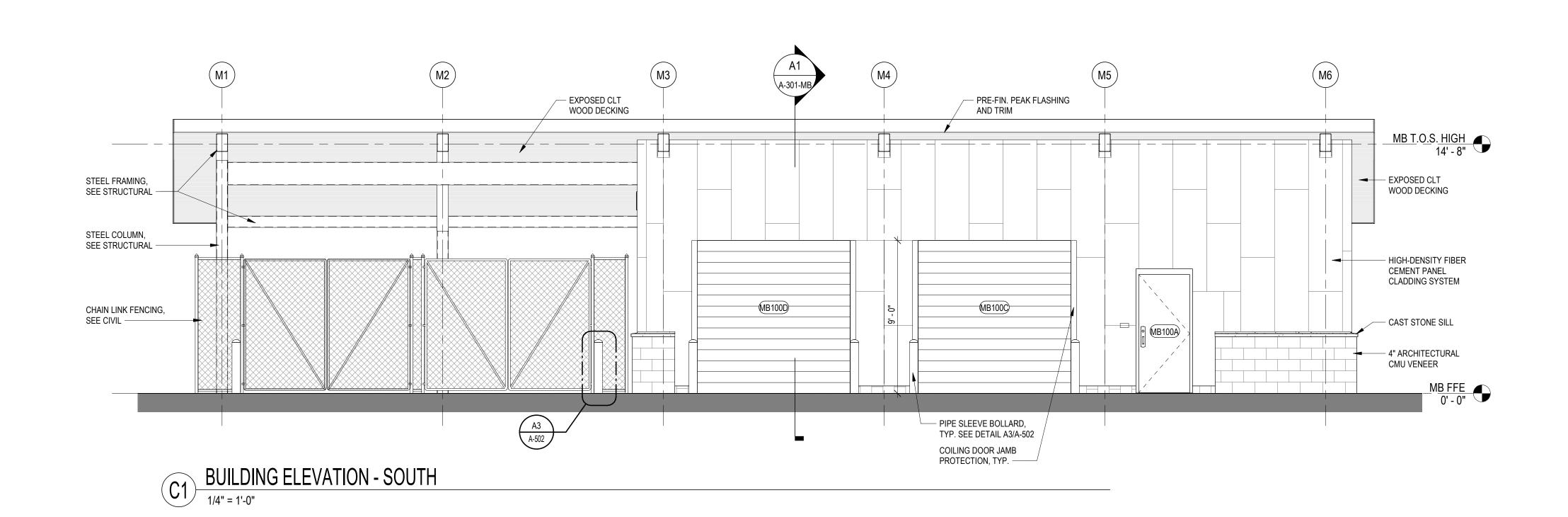
CAST STONE SILL

4" ARCHITECTURAL CMU VENEER -

SKYLIGHT, TYP. -







MB T.O.S. HIGH 14' - 8"

STEEL FRAMING, SEE STRUCTURAL

- STEEL COLUMN, SEE STRUCTURAL

2" / 1'-0"

SHEET NO:

PROJECT NO:

DATE ISSUED:

DESIGNED BY:

CHECKED BY:

SHEET NAME:

MB - BUILDING

ELEVATIONS

DRAWN BY:

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06/15/2023

A-201-MB

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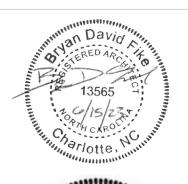
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SUITE 425
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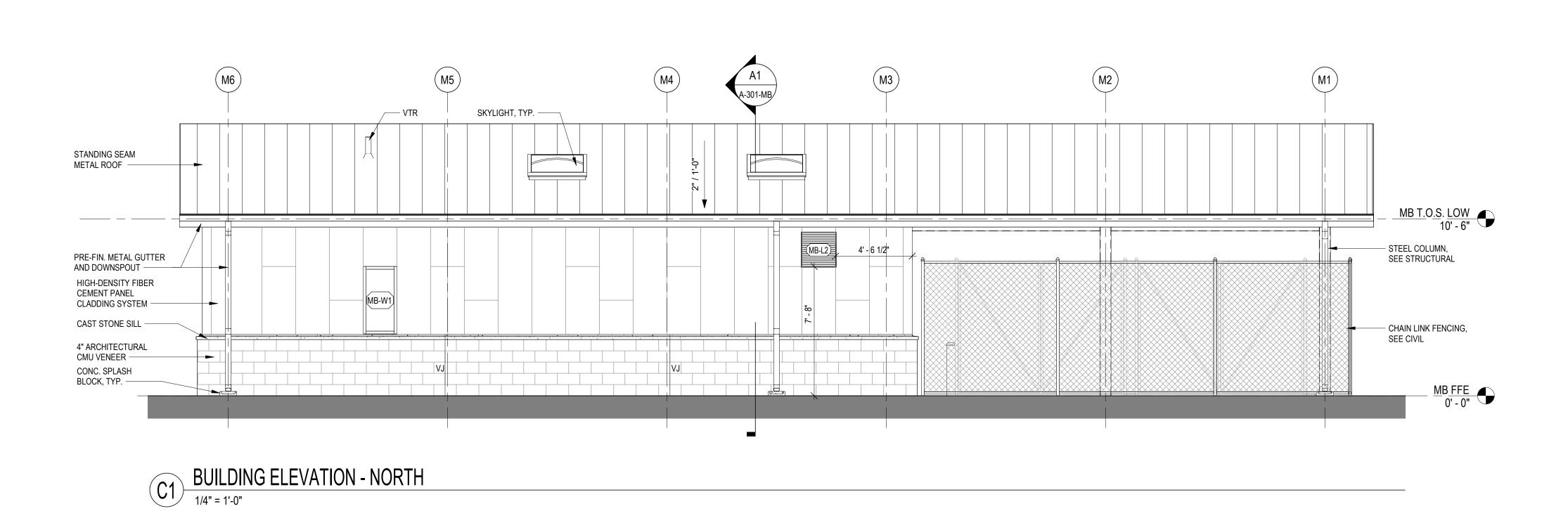
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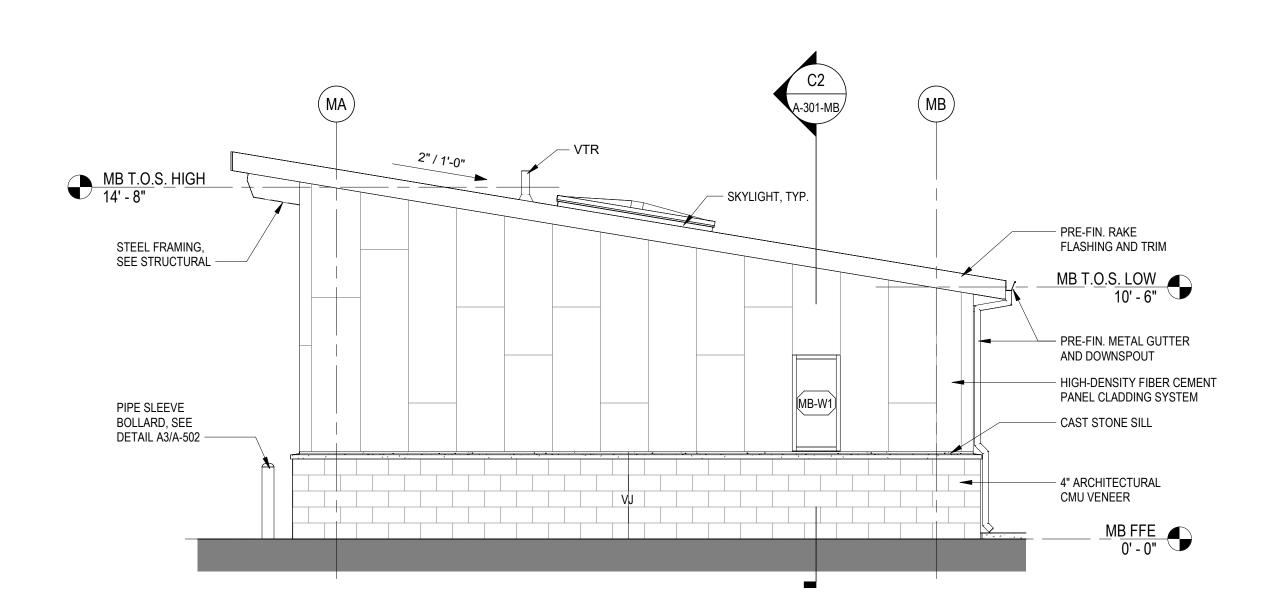
SHEET NAME: MB - BUILDING

ELEVATIONS

SHEET NO:

A-202-MB





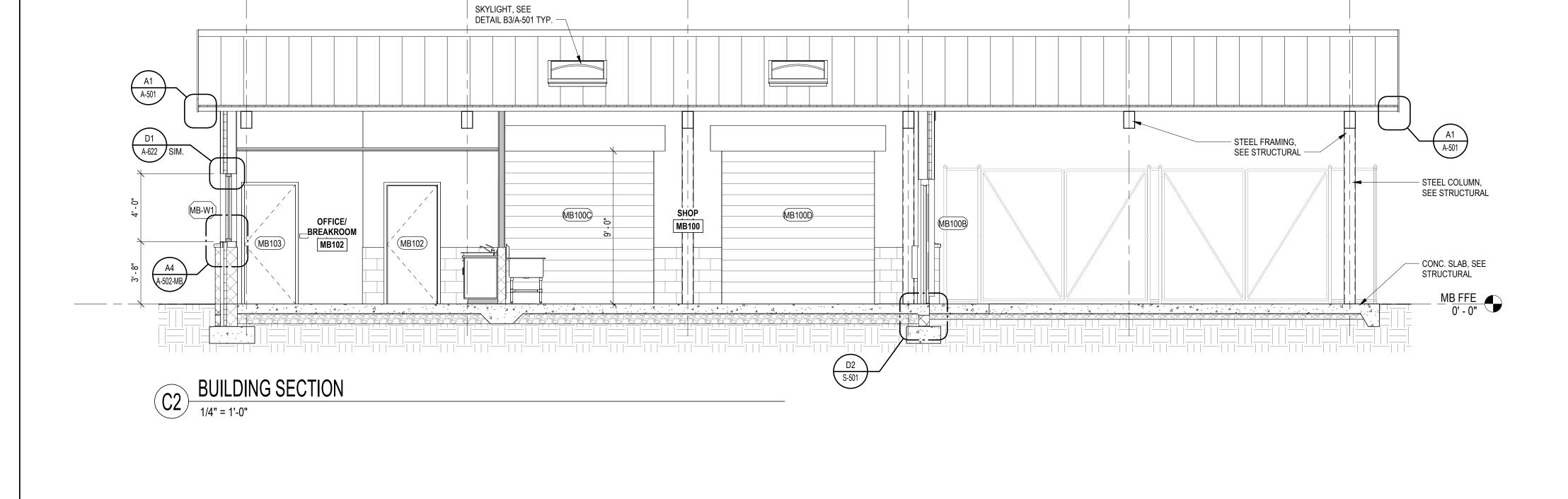
MAINTENANCE -BUILDING

GRAPHIC SCALE

KEY PLAN



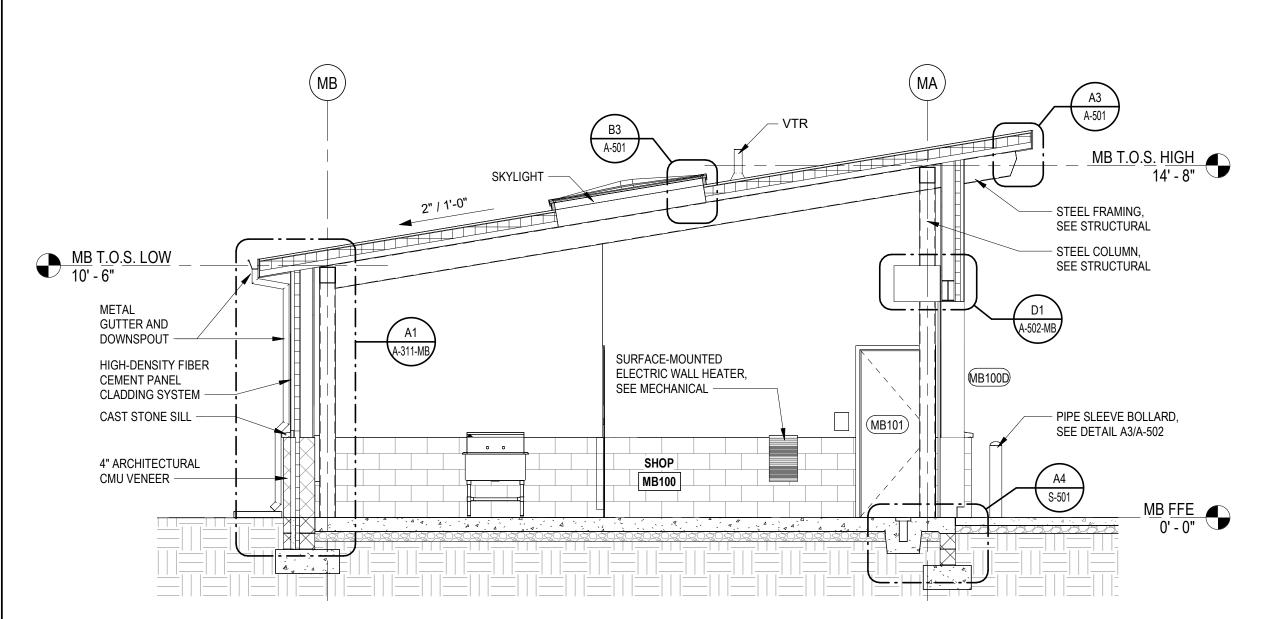
(M6)



(M3)

(M1)

 $\overline{\text{M4}}$



GRAPHIC SCALE 1/4"=1'-0"

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MAINTENANCE BUILDING (MB)

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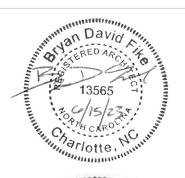
SHEET NAME:

MB - BUILDING SECTIONS

SHEET NO:

A-301-MB

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06/15/2023

A-311-MB



PLUMBING FIXTURE,

REFER TO PLUMBING

DRAWINGS -

3/4" WD LEDGER

CASEWORK DETAIL

1 1/2" = 1'-0"

2'-1"

- UNDERMOUNT SINK, REFER

- 1/2" SOLID SURFACE SIDE SPLASH WHERE APPLICABLE

- 3/4" PLYWD DOOR/DRAWER

FRONT W/ PLAM ON ALL

EXPOSED SURFACES

- 3/4" PLYWD AT SIDES

EXPOSED SURFACES

W/ PLAM ON ALL

- FINISH FLOOR

TO PLUMBING DRAWINGS

AT ALL ADJACENT TALL CABINETS AND WALLS

- CONT WD BLKG

- DOOR PULL

2'-1" MB 1/2" SOLID SURFACE BACKSPLASH AND COUNTERTOP ——— - 1/2" SOLID SURFACE SIDE TYP UON ON PLANS SPLASH WHERE APPLICABLE AT ALL ADJACENT TALL CABINETS AND WALLS - CONT WD BLKG 3/4" WD LEDGER 1/2" PLYWD DRAWER RECESSED METAL SHELVING BACK AND SIDES W/ PLAM ON ALL EXPOSED STANDARDS - 1/2" SOLID SURFACE BACKSPLASH SURFACES -AND COUNTERTOP DRAWER/DOOR PULL 1/4" PLYWD DRAWER BOTTOM W/ PLAM ON S A3 - 3/4" PLYWD DOOR/DRAWER ALL EXPOSED SURFACES — FRONT W/ PLAM ON ALL A-401-MB \A-401-MB/ **EXPOSED SURFACES** 1'-10" REF. (NIC) 1/4" PLYWD BACK W/ - 3/4" PLYWD SHELVES PLAM ON ALL (1" PLYWD IF OVER 3'-0") W/ **EXPOSED** PLAM ON ALL EXPOSED SURFACES -SURFACES AND VINYL EDGE BANDING 3/4" PLYWD BOTTOM AND SIDES W/ PLAM ON SEE ELEVATION FOR QUANTITY OF SHELVES MB FFE 0' - 0" ALL EXPOSED - BASE AS SCH SURFACES -- FINISH FLOOR 2' - 6" 2' - 6" 2' - 6" CONT WD FRAMING W/ INTERMEDIATE 2 1/2" 7' - 6" SUPPORTS AS REQD CASEWORK DETAIL INTERIOR ELEVATION 1 1/2" = 1'-0" **GRAPHIC SCALE** 0 6" 1' 2' 3' 4' 5' 6' 0 3" 6" 9" 1' 1 1/2"=1'-0"

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MAINTENANCE BUILDING (MB)

081197 PROJECT NO: 06/15/2023 DATE ISSUED: **DESIGNED BY:** DRAWN BY:

CHECKED BY:

SHEET NAME: INTERIOR ELEVATION AND CASEWORK DETAILS

SHEET NO:

A-401-MB

DOUBLE STUD JAMB

SEALANT (BOTH SIDES)

HOLLOW METAL FRAME -

PRE-FIN TRIM, TYP,

SEALANT (BOTH SIDES)

HOLLOW METAL FRAME

HIGH-DENSITY FIBER CEMENT BOARD

RAINSCREEN SYSTEM

MOISTURE BARRIER

2 1/2" RIGID MINERAL WOOL INSULATION —

PLAN DETAIL

@ 16" AFF

AIR, VAPOR &

1 1/2" = 1'-0"

HIGH-DENSITY FIBER CEMENT BOARD RETURN -

WOOD SHIM/BLOCKING, TYP,

5/8" PLYWOOD SHEATHING -

AIR, VAPOR & MOISTURE

2 1/2" RIGID MINERAL WOOL

INSULATION -

@ 48" AFF

— SEE PARTITION

TYPES

- 5/8" MR GYPSUM

- 6" 18GA METAL

STUDS @ 16" O.C.

- LINE OF 4" ARCHITECTURAL CMU VENEER BELOW

HIGH-DENSITY FIBER CEMENT

BOARD RAINSCREEN SYSTEM

- 8" STRUCTURAL CMU

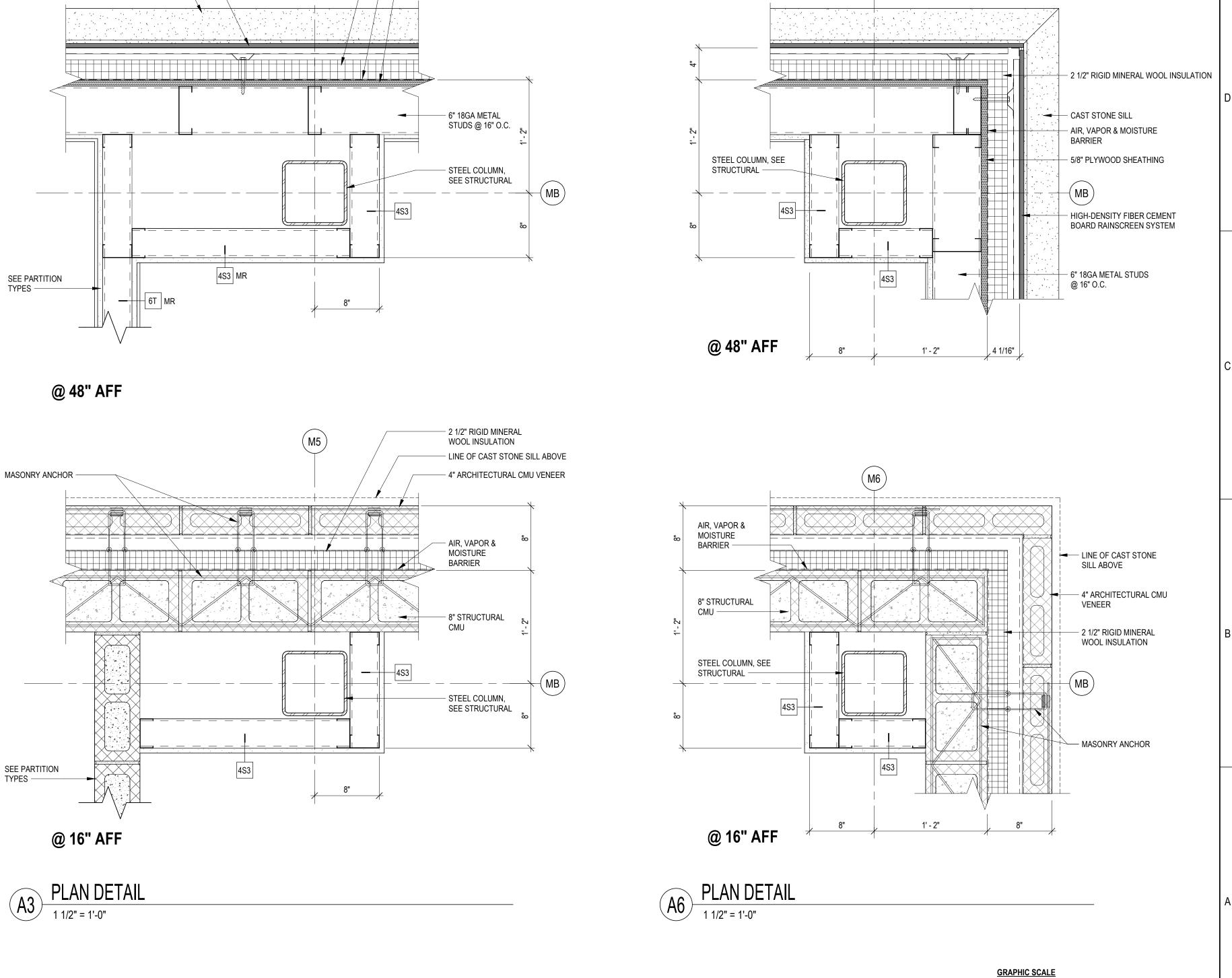
- MASONRY ANCHOR

- 4" ARCHITECTURAL CMU VENEER

- LINE OF CAST STONE SILL ABOVE

- CAST STONE SILL

BOARD



HIGH-DENSITY FIBER

CEMENT BOARD RAINSCREEN SYSTEM -

CAST STONE SILL -

TYPES -

SEE PARTITION

(M5)

- 2 1/2" RIGID MINERAL WOOL INSULATION

AIR, VAPOR & MOISTURE BARRIER

- 5/8" PLYWOOD SHEATHING

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J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
MAINTENANCE BUILDING (MB)

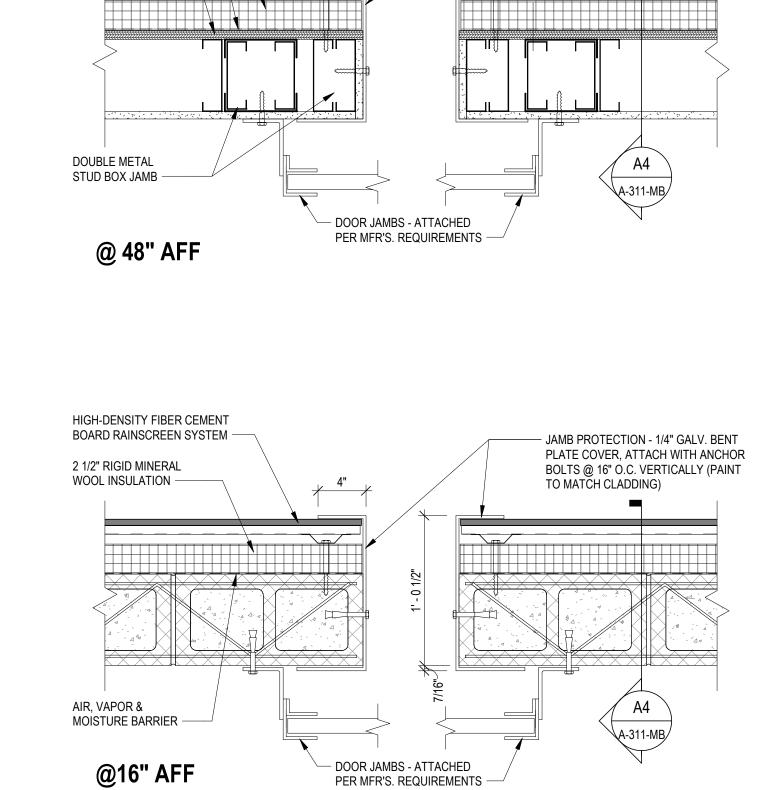
PROJECT NO: 081197 06/15/2023 DATE ISSUED: DESIGNED BY: DRAWN BY:

CHECKED BY: SHEET NAME:

PLAN DETAILS

SHEET NO:

A-501-MB



5/8" GYP. BD. OVER 6"

STUD BOX HEADER

AS REQUIRED

STEEL COILING DOOR W/ ROLL-UP MECHANISM AND HOUSING -

HIGH-DENSITY FIBER CEMENT

BOARD RAINSCREEN SYSTEM -

2 1/2" RIGID MINERAL

WOOL INSULATION -

MOISTURE BARRIER

JAMB DETAIL

AIR, VAPOR &

5/8" PLYWOOD

SHEATHING -

ATTACHMENT TO HEADER AS RECOMMENDED BY MFR. -

METAL STUDS @ 16" OC -

HIGH-DENSITY FIBER CEMENT

BOARD CLADDING SYSTEM

- 5/8" PLYWOOD

SHEATHING

– AIR, VAPOR &

MOISTURE BARRIER

- 2 1/2" RIGID MINERAL WOOL INSULATION

— 2 1/2" METAL STUDS @ 16" OC

- STEEL BEAM, SEE STRUCTURAL

PRE-FIN. TRIM OVER 3/4" PLYWOOD SUB-FASCIA

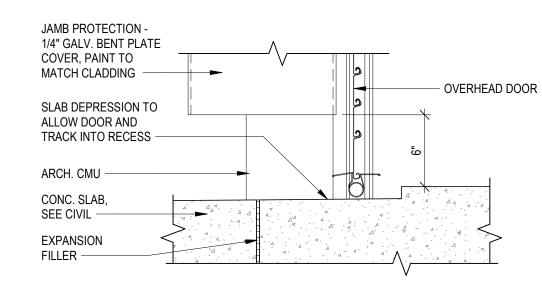
- METAL STUD RUNNER

JAMB PROTECTION - 1/4" GALV. BENT

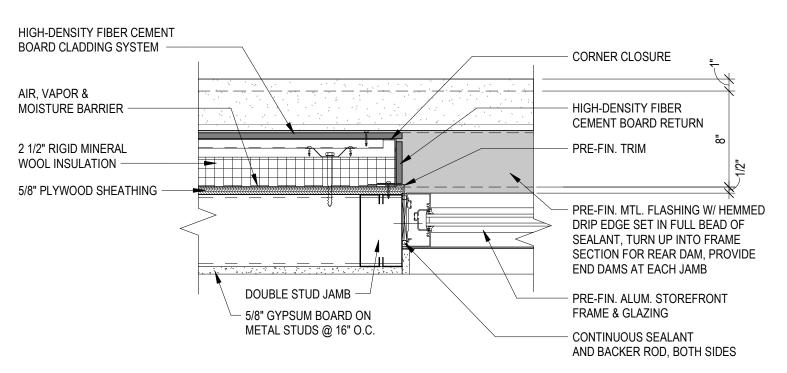
PLATE COVER, ATTACH WITH ANCHOR

BOLTS @ 16" O.C. VERTICALLY (PAINT

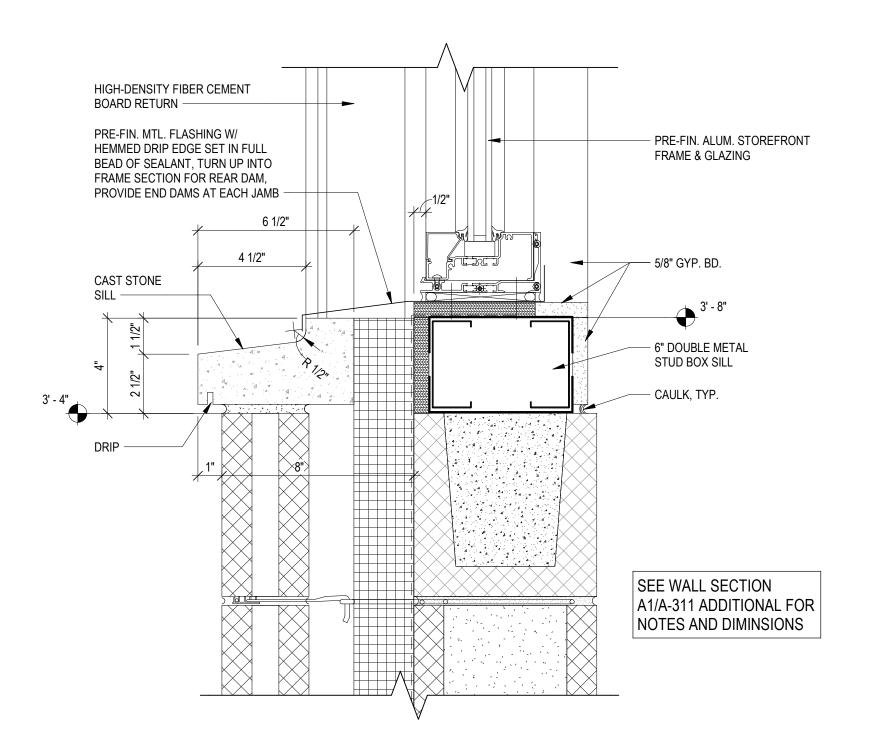
TO MATCH CLADDING)



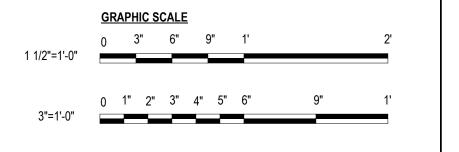




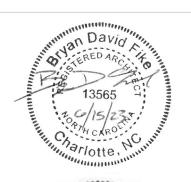




SILL DETAIL



WOOLPERT ARCHITECTURE | ENGINEERING | GEOSPATIAL 13860 BALLANTYNE CORPORATE PLACE SUITE 425 CHARLOTTE, NC 28227 800.414.1045





J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
MAINTENANCE BUILDING (MB)

081197

06/15/2023 DATE ISSUED: **DESIGNED BY:** DRAWN BY:

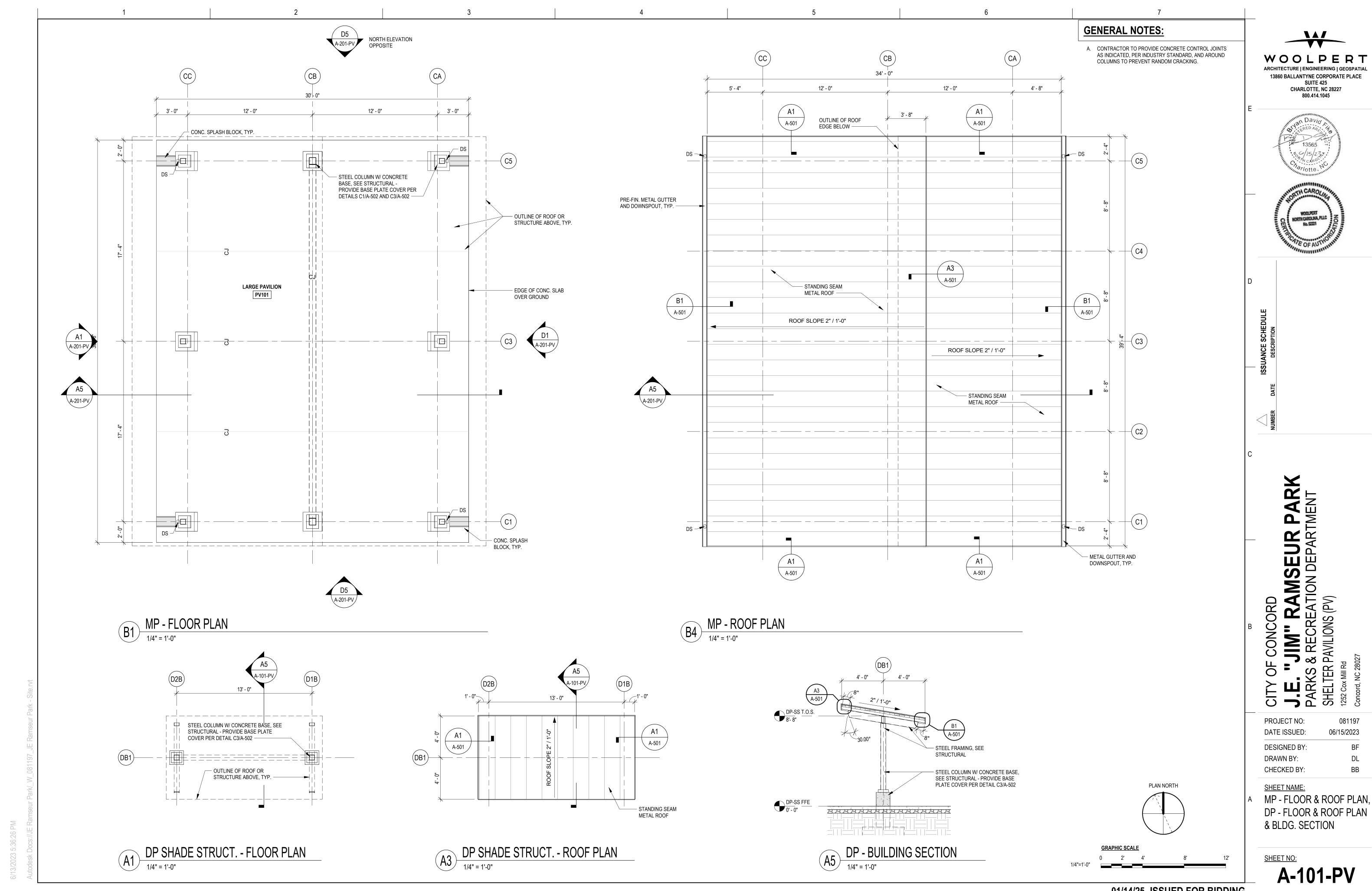
CHECKED BY: SHEET NAME:

COILING DOOR AND STOREFRONT DETAILS

SHEET NO:

PROJECT NO:

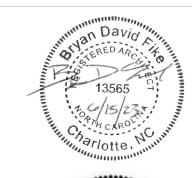
A-502-MB



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800.414.1045





CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT
SHELTER PAVILIONS (PV)
1252 Cox Mill Rd

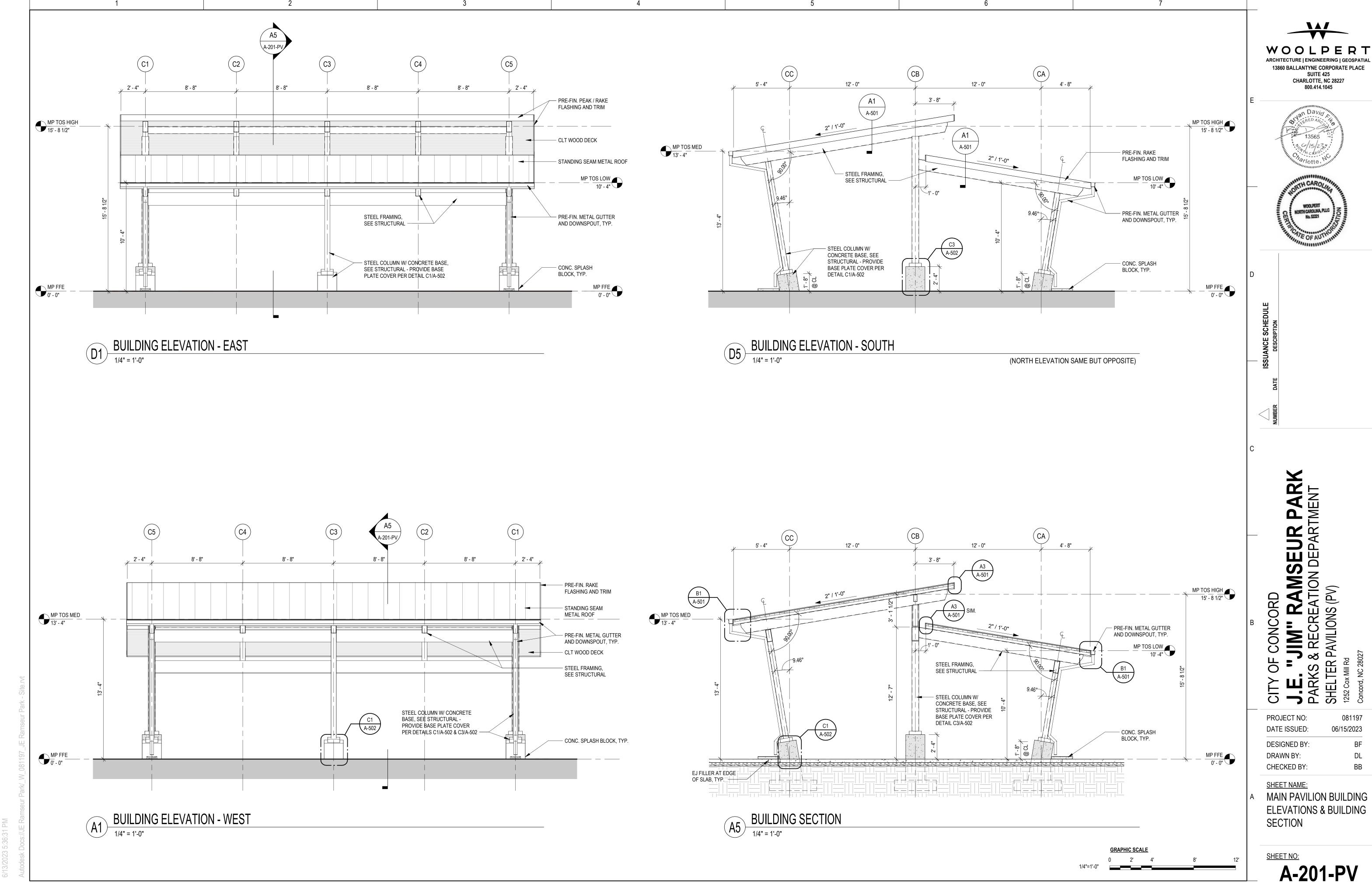
081197 PROJECT NO: 06/15/2023 DATE ISSUED:

DESIGNED BY: DRAWN BY: CHECKED BY:

SHEET NAME:

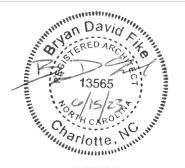
SMALL PAVILIONS PLANS, **ELEVATIONS & BUILDING** SECTION

SHEET NO: A-102-PV



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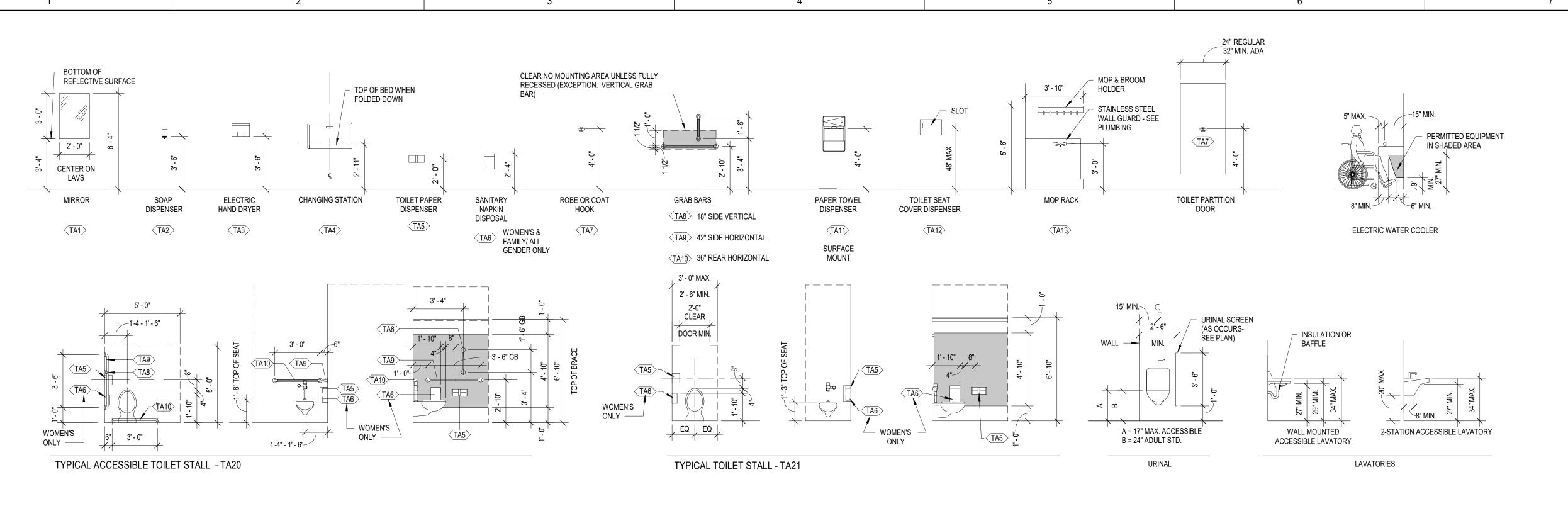


081197 06/15/2023

PICKLEBALL SHADE

STRUCTURES - PLANS & **ELEVATIONS**

A-101-SS



TOILET ACCESSORY ELEVATIONS & PLUMBING FIXTURES

CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT

WOOLPERT

ARCHITECTURE | ENGINEERING | GEOSPATIAL

13860 BALLANTYNE CORPORATE PLACE SUITE 425 CHARLOTTE, NC 28227 800.414.1045

PROJECT NO: 081197 DATE ISSUED: 06/15/2023 DESIGNED BY:

DRAWN BY: CHECKED BY:

SHEET NAME:
TOILET ACCESSORY **ELEVATIONS & PLUMBING FIXTURES**

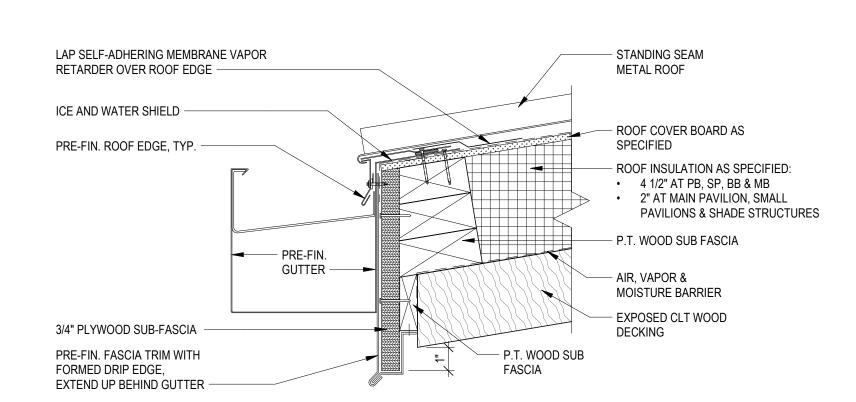
SHEET NO:

A-401

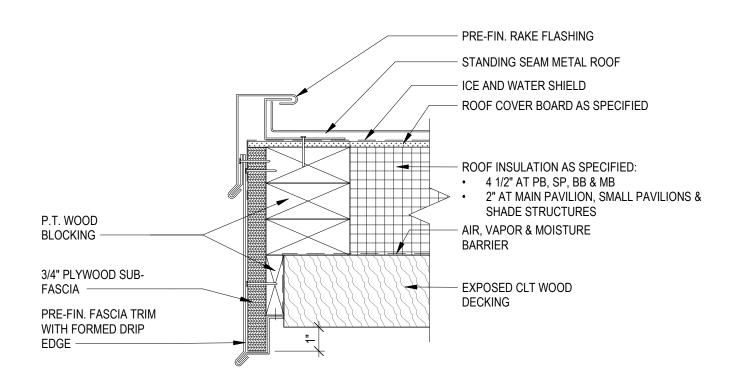
GRAPHIC SCALE

 PROVIDE EXPANSION JOINT SPACING @ GUTTER PER SMACNA GUIDELINES.
 GUTTER & FLASHING BY MTL. BLDG.MFR. - EXACT DETAILS & INSTALLATION PER MFR. RECOMMENDATIONS.

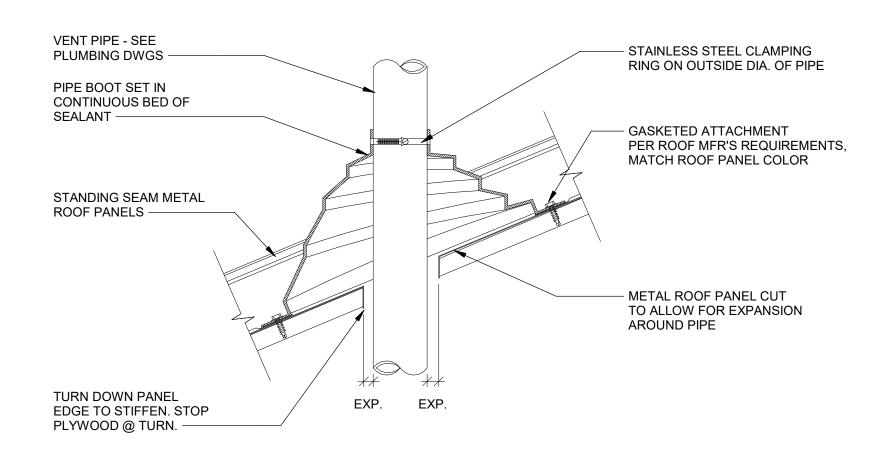
TYP. GUTTER EXPANSION DETAIL



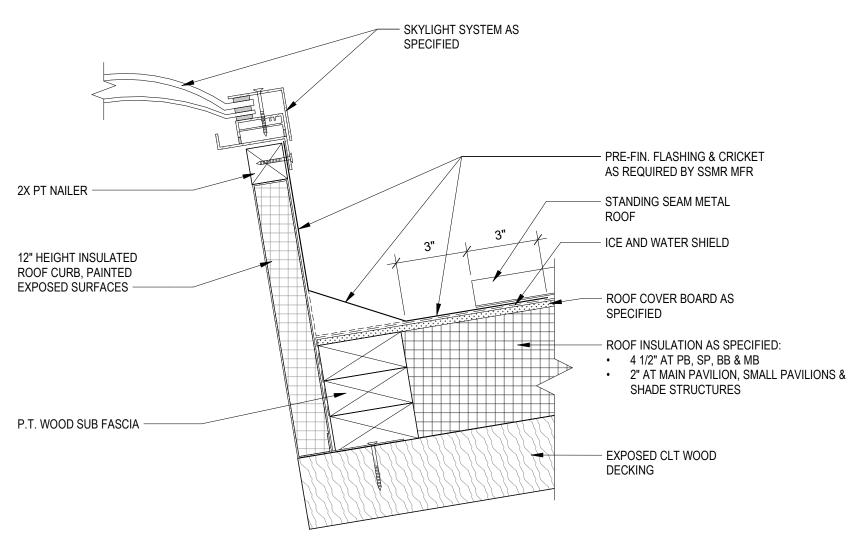
TYP. GUTTER DETAIL



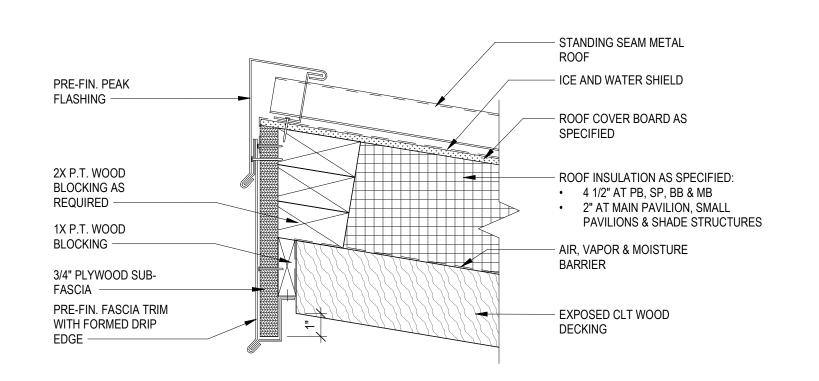
TYP. METAL RAKE DETAIL - SIDE



TYP. METAL ROOF PIPE PENETRATION DETAIL

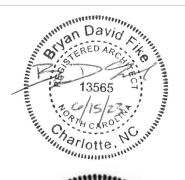


TYP. SKYLIGHT CURB DETAIL



TYP. METAL PEAK DETAIL - SECTION 3" = 1'-0"







BRACING STRAP -COLOR AND MATERIAL TO MATCH DOWNSPOUT

5" X 5" PRE-FINISHED

STEEL COLUMN (OR WALL

CONSTRUCTION) SEE BLDG.

DOWNSPOUT -

ELEVATIONS. -

CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT

PROJECT NO: 081197 06/15/2023 DATE ISSUED: **DESIGNED BY:** DRAWN BY: CHECKED BY:

SHEET NAME:

TYPICAL ROOF DETAILS

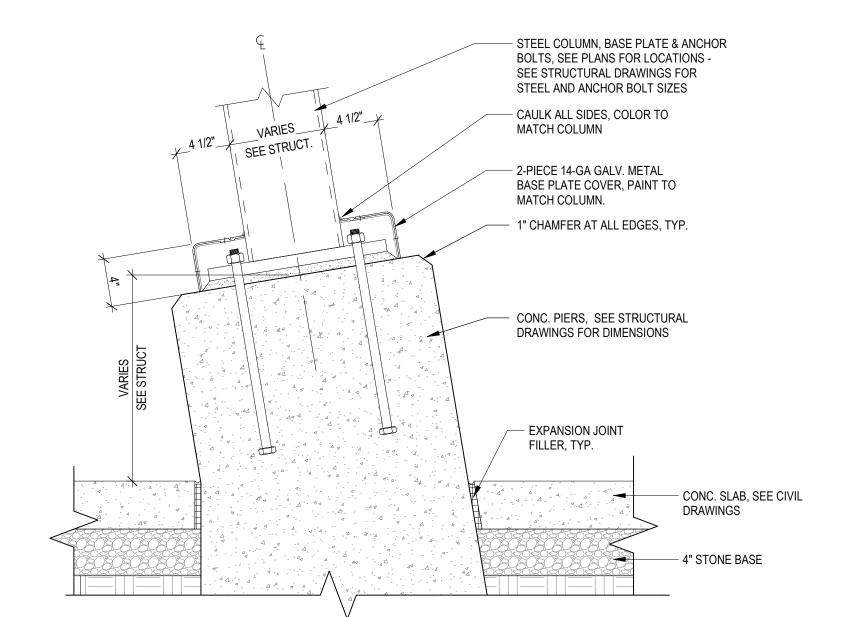
SHEET NO:

A-501

GRAPHIC SCALE

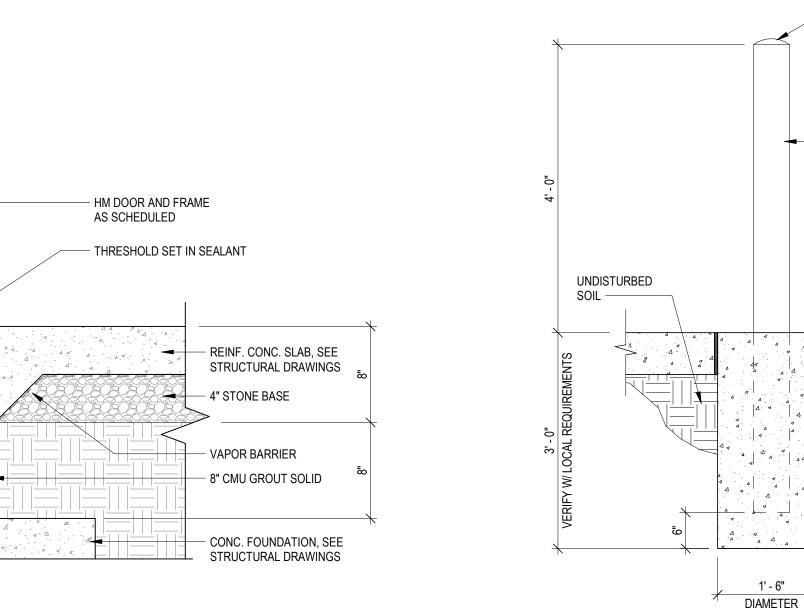
3" 6" 9" 1'

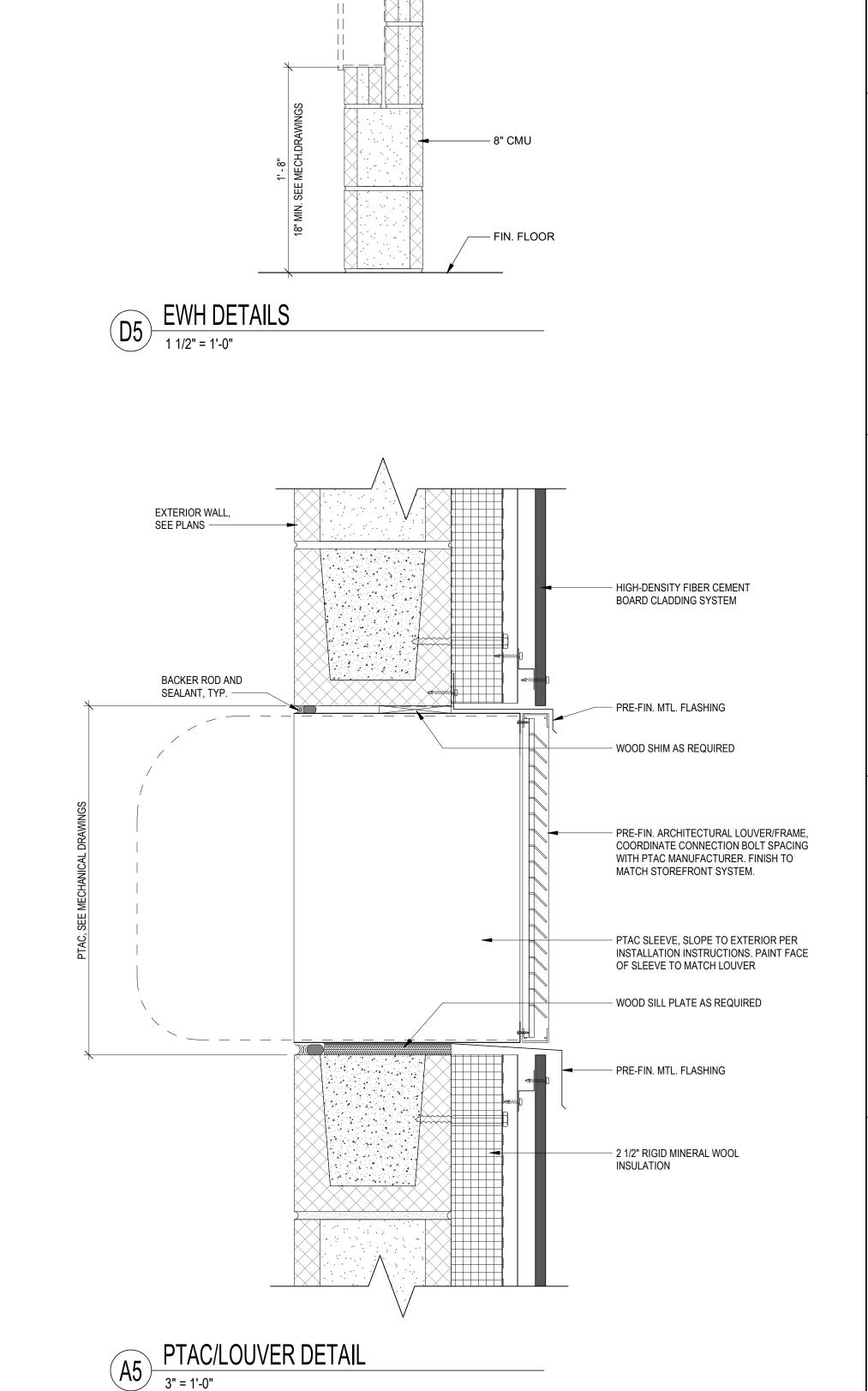
0 1" 2" 3" 4" 5" 6"



TYP. SLANTED COLUMN / CONC. BASE DETAIL

TYP. COLUMN / CONC. BASE DETAIL





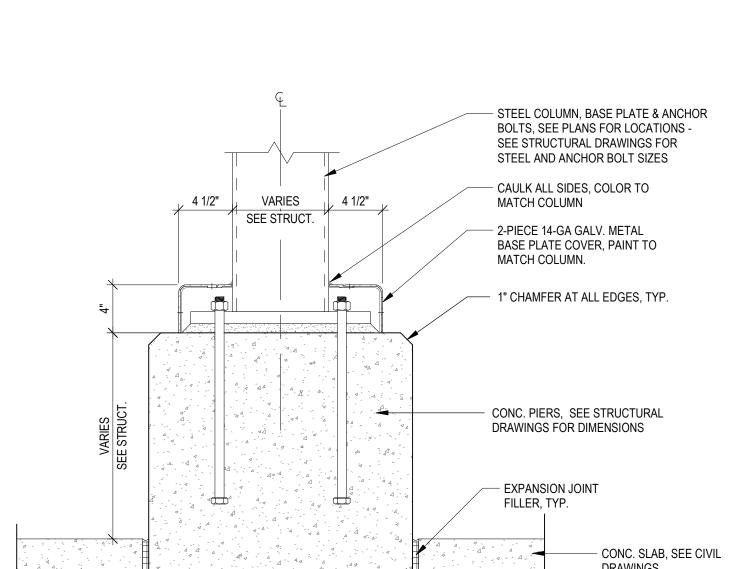
- 4" CMU

RECESSED ELECTRIC WALL HEATER, SEE

CONTRACTOR TO COORDINATE RECESSED J-BOXES AND POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO

MECHANICAL DRAWINGS. MASONRY

CONSTRUCTION. -



DRAWINGS - 4" STONE BASE

> PRE FAB BOLLARD CAP AS PROVIDED BY "TOPGARD" PIPE BOLLARDS CAPS OR EQ.

- 6" DIAM. STD. STL. PIPE FILL W/CONC., SEE PLANS FOR

LOCATIONS. PAINTED SAFETY YELLOW

- 1/2" EXP. JOINT FILLER

AND SEALANT

- CONCRETE PIER **FOOTING**

CONCRETE SLAB

EXPANSION JOINT FILLER CONC. SLAB, SEE CIVIL —

TYP. SECTION DETAIL

TYP. BOLLARD DETAIL

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CITY OF CONCORD

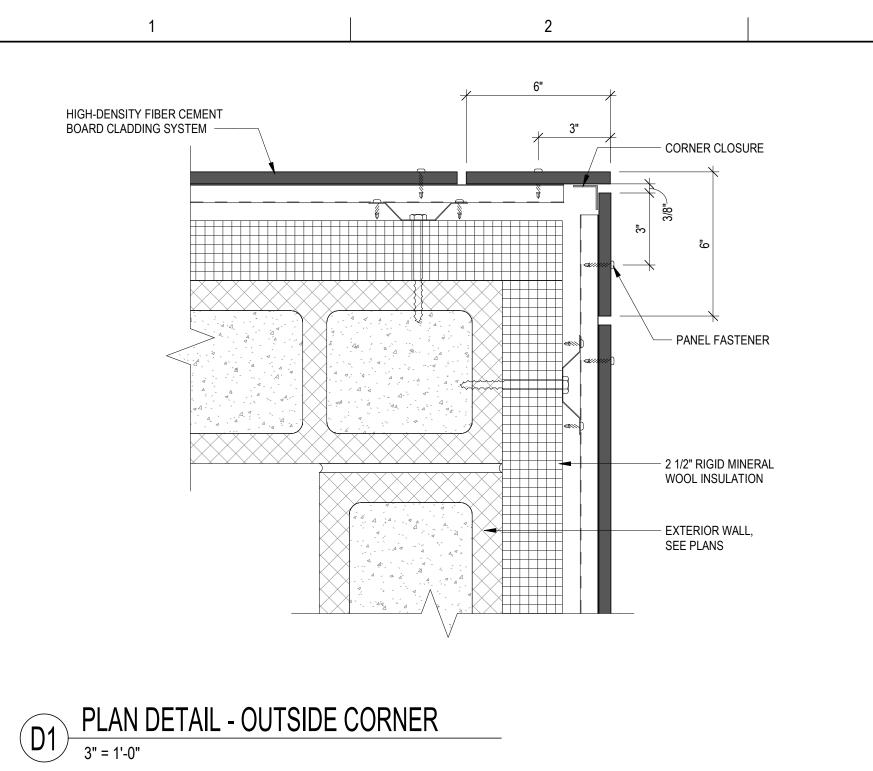
J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT

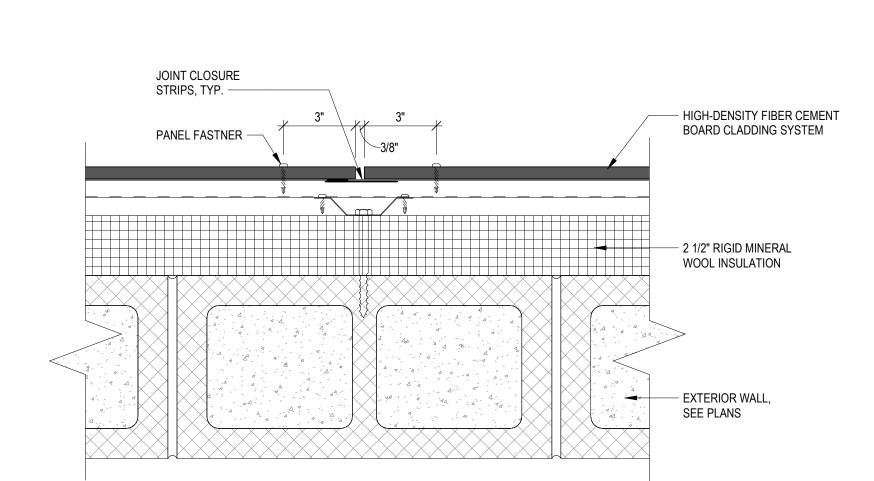
PROJECT NO: 081197 06/15/2023 DATE ISSUED:

DESIGNED BY: DRAWN BY: CHECKED BY:

SHEET NAME: TYPICAL DETAILS

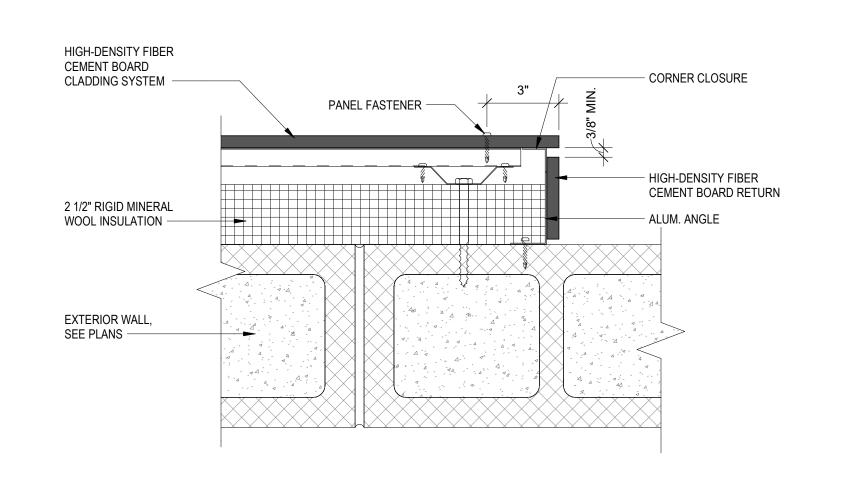
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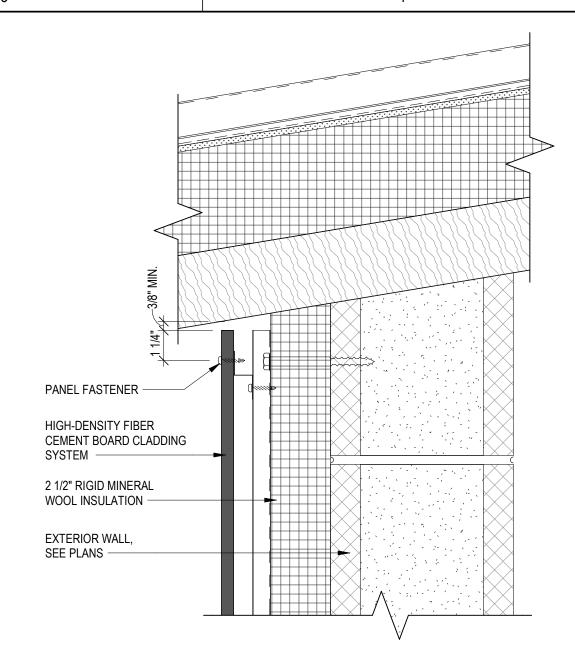




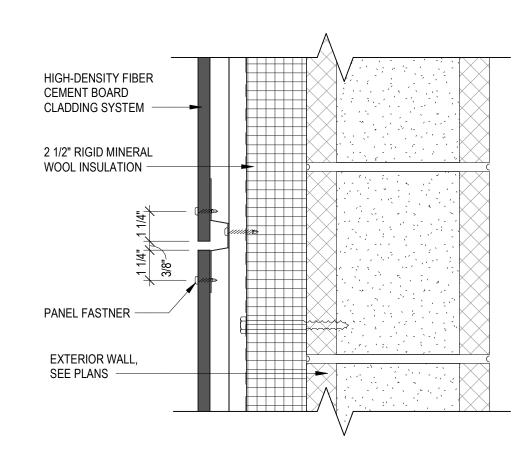


PLAN DETAIL - RETURN

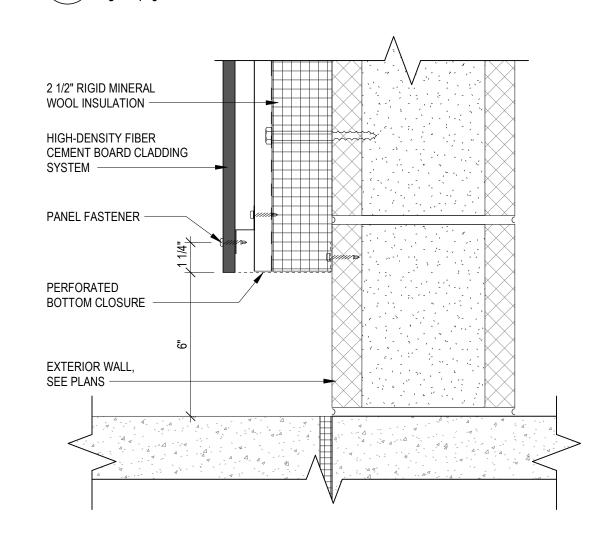




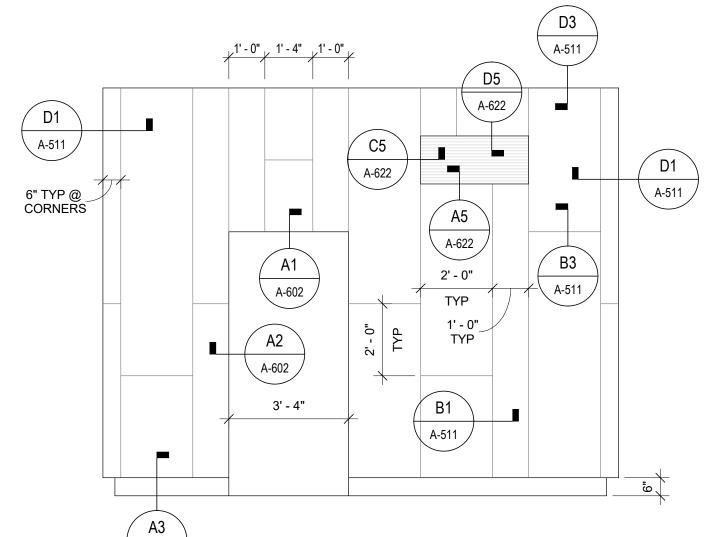
SECTION DETAIL - TOP OF WALL





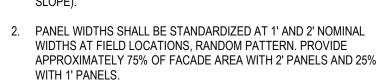


SECTION DETAIL - BOTTOM OF WALL



NOTES:
SEE ELEVATIONS FOR HIGH DENSITY FIBER CEMENT PANEL LAYOUT
DESIGN INTENT. FINAL PANEL LAYOUT IS BY CLADDING
MANUFACTURER. PROVIDE SHOP DRAWINGS FOR ARCHITECT REVIEW
AND APPROVAL PRIOR TO FABRICATION.

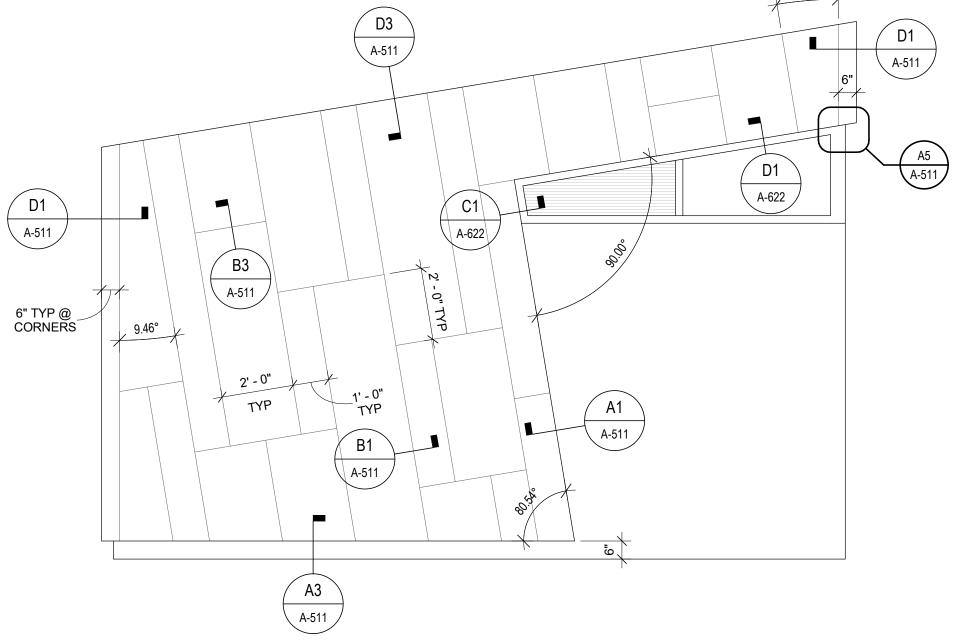
1. PANELS SHALL BE VERTICALLY ORIENTED, SINGLE LENGTHS NO GREATER THAN 10', WITH AVG LENGTH OF 6'. DIRECTIONAL PANEL TEXTURES SHALL ALL BE ORIENTED IN THE SAME DIRECTION. ANGLE PANEL ORIENTATION WHERE INDICATED TO MATCH A 9.46 DEGREE SLOPE (PERPENDICULAR TO 2:12 ROOF SLOPE).



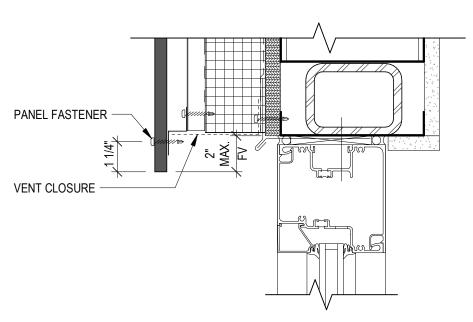
- PROVIDE 6" WIDE PANELS AT ALL BUILDING CORNERS.
 VARIATIONS IN WIDTHS IS ALLOWED AT DOORS AND OPENINGS TO ALIGN PANEL EDGES TO OPENING, OR AT END OF RUN TO
- 5. PROVIDE HIGH DENSITY FIBER CEMENT RETURN PANEL AT JAMBS OF RECESSED OPENINGS.
- 6. SPACE BETWEEN PANELS SHALL BE 3/8".

MEET LENGTH REQUIRED.

- 7. HORIZONTAL JOINTS SHALL BE RANDOMLY STAGGERED AT INCRIMENTS OF 2', OR NEAREST FRAME SPACING.
- 8. PROVIDE JOINT BAFFLES OR CLOSER PANELS AT OPEN JOINTS TO PREVENT TRASH FROM BEING STUFFED INTO THE CAVITY.
- 9. PROVIDE BUTT OR MITERED OUTSIDE CORNERS.
- 10. PROVIDE SUPPORT FRAMING BEHIND PANEL-MOUNTED FIXTURES AND EQUIPMENT. FABRICATOR TO COORDINATE WITH ENGINEERING DRAWINGS FOR LOCATIONS.
- 11. PANEL AND FRAMING MANUFACTURER SHALL COORDINATE WITH BUILDING CONTROL JOINTS TO PROVIDE CONNECTIONS CAPABLE OF MOVEMENT.

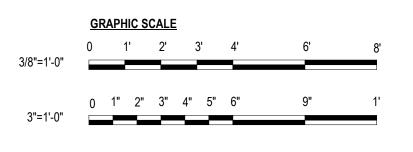


FIBER CEMENT PANEL DETAIL LEGEND



TYP. PANEL END DETAIL

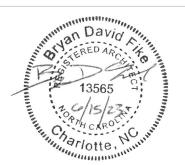
3" = 1'-0"



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SUITE 425
CHARLOTTE, NC 28227
800.414.1045





DESCRIPTION

ISSUANCE ISSUANCE DESC

NUMBER

CITY OF CONCORD J.E. "JIM" RAMSEUR PARK PARKS & RECREATION DEPARTMENT

1252 Cox Mill Rd Concord, NC 28027

PROJECT NO: 081197

DATE ISSUED: 06/15/2023

DESIGNED BY: BF

DRAWN BY: DL

CHECKED BY: BB

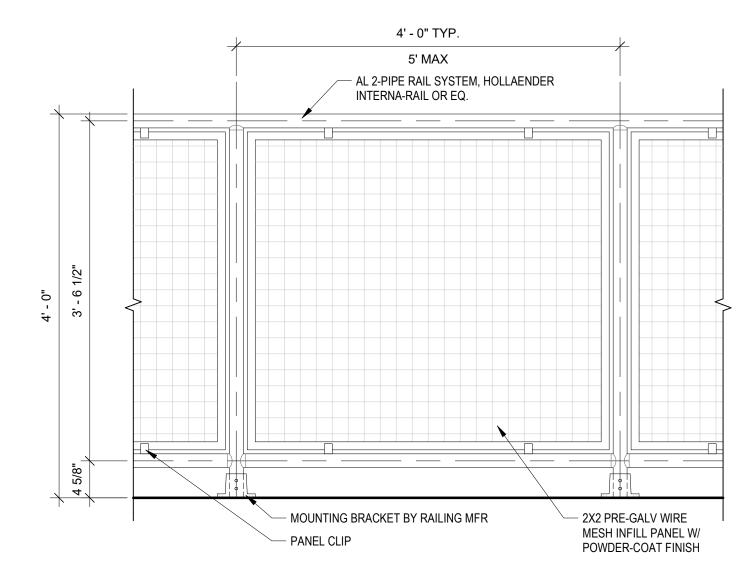
SHEET NAME:
FIBER CEMENT PANELS MOUNTING DETAILS

SHEET NO:

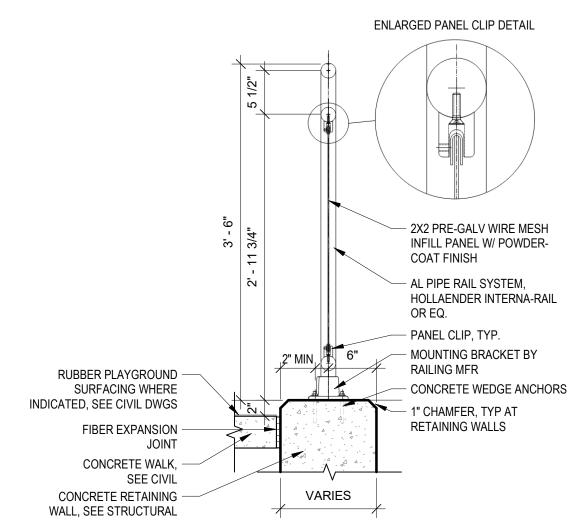
A-511

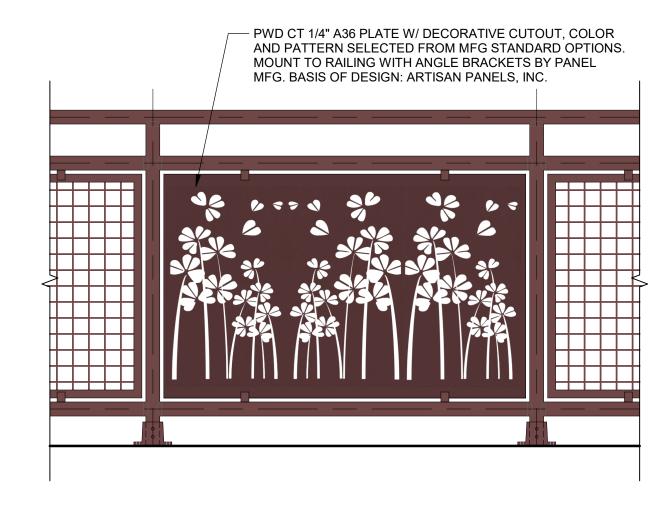
01/14/25 -ISSUED FOR BIDDING

TYP. ELEVATION @ METAL RAILING

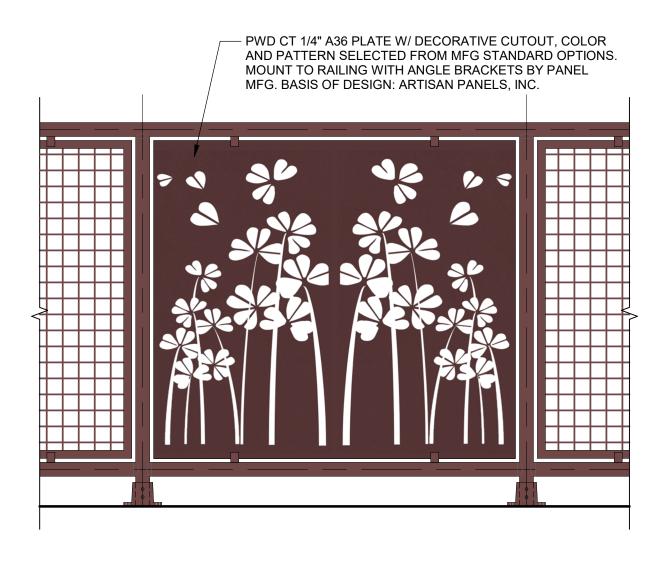


TYP. ELEVATION @ 48" METAL RAILING

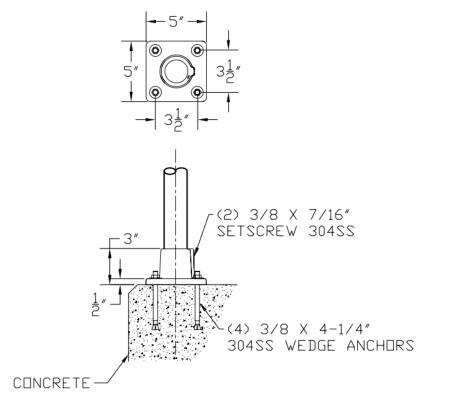




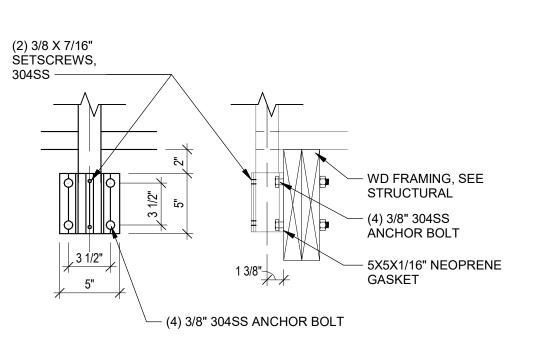
ELEVATION @ DECORATIVE METAL RAILING



B3 ELEVATION @ 48" DECORATIVE METAL RAILING



TYP. BASE DETAIL



BASE DETAIL @ CANOPY WALK
1 1/2" = 1'-0"

GENERAL NOTES:

- A. RAILING ASSEMBLY MUST MEET 200LB POINT LOAD AND 50LB/LF UNIFORM LOAD PER NCBC 1607.8.1. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWINGS AND CALCULATIONS SEALED BY A LICENSED ENGINEER IN THE
- STATE OF NC.

 B. DECORATIVE PANEL INFILLS SHALL MATCH SIZE AND PC FINISH OF MESH INFILL PANELS TO PROVIDE A CONSISTENT GAP WIDTH AND COLOR. SEE SITE PLAN
- C. SITE RAILING DETAILS SHOWN ARE TYPICAL TO INDICATE DESIGN INTENT. SEE CIVIL DRAWINGS FOR LAYOUTS AND LOCATION-SPECIFIC REQUIREMENTS.
- D. RAILING AT NATURE PLAYGROUND IS ADD ALTERNATE NO 1. SEE SPECIFICATION SECTION 012300 ALTERNATES AND SITE PLANS.



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SUITE 425 CHARLOTTE, NC 28227

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CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT

PROJECT NO: 081197 06/15/2023 DATE ISSUED:

DESIGNED BY: DRAWN BY: CHECKED BY:

SHEET NAME: TYP METAL RAILING **DETAILS**

SHEET NO: A-561

TYP. SECTION @ METAL RAILING

1" = 1'-0"

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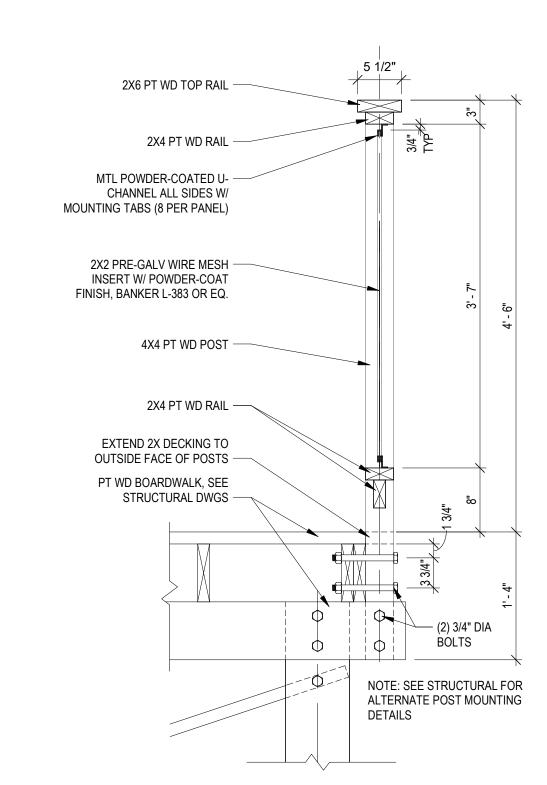
GRAPHIC SCALE

2X4 PT WD RAIL MTL POWDER-COATED U-CHANNEL ALL SIDES W/ MOUNTING TABS (8 PER PANEL) 2X2 PRE-GALV WIRE MESH INSERT W/ POWDER-COAT FINISH, BANKER L-383 OR EQ. 4X4 PT WD POST -2X4 PT WD RAIL -COORDINATE RAILING HEIGHT WITH -FINAL FFE OF PIP SURFACING TO MAINTAIN 42" GUARDRAIL HEIGHT - EXPOSED SLAB EDGE SHALL BE CONTINUOUS POUR, NOT PIP RUBBER SURFACING, BROKEN BY POST FOOTINGS. KEY INTO CONCRETE SLAB, SEE CIVIL - APPROXIMATE GRADE, SEE CIVIL CONCRETE SLAB WITH TURN-DOWN EDGE, SEE CIVIL EMBED POST IN 3000 PSI CONCRETE POST FOOTING. PROVIDE 6" COVER ALL SIDES.

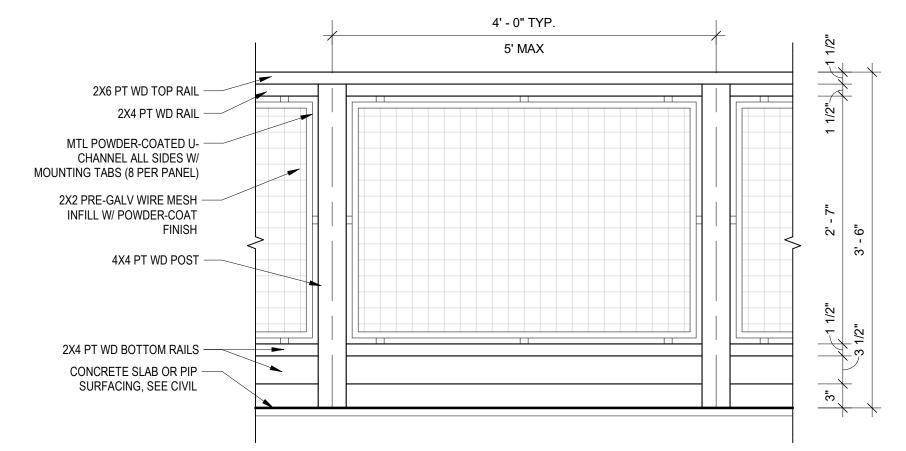
2X6 PT WD TOP RAIL

CONTRACTOR TO COORDINATE FOOTINGS AND SLAB EDGE.

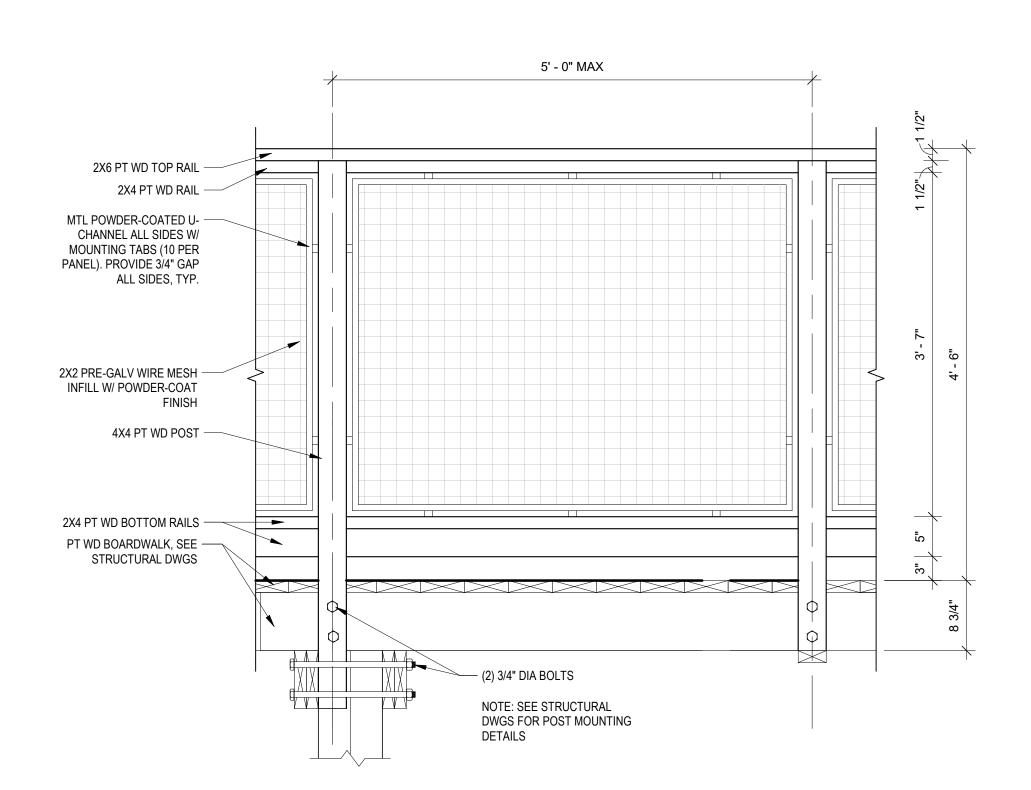
WOOD RAILING SECTION @ NATURE PLAYGROUND 1" = 1'-0"



WOOD RAILING SECTION @ BOARDWALK



WOOD RAILING ELEVATION @ NATURE PLAYGROUND



WOOD RAILING ELEVATION @ BOARDWALK

- PER NCBC 1607.8.1. CONTRACTOR SHALL PROVIDE ENGINEERED SHOP DRAWINGS AND CALCULATIONS SEALED BY A LICENSED ENGINEER IN THE
- B. DECORATIVE PANEL INFILLS SHALL MATCH SIZE AND PC FINISH OF MESH INFILL
- C. SITE RAILING DETAILS SHOWN ARE TYPICAL TO INDICATE DESIGN INTENT. SEE



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13860 BALLANTYNE CORPORATE PLACE

SUITE 425

CHARLOTTE, NC 28227

800.414.1045



OF CONCORD
"JIM" RAMSEUR PARK
S & RECREATION DEPARTMENT

J.E. PARK 081197 PROJECT NO: 06/15/2023 DATE ISSUED:

DESIGNED BY: DRAWN BY: CHECKED BY:

SHEET NAME: TYP WOOD RAILING **DETAILS**

SHEET NO:

GENERAL NOTES:

A. RAILING ASSEMBLY MUST MEET 200LB POINT LOAD AND 50LB/LF UNIFORM LOAD STATE OF NC.

PANELS TO PROVIDE A CONSISTENT GAP WIDTH AND COLOR. SEE SITE PLAN FOR LOCATIONS.

CIVIL DRAWINGS FOR LAYOUTS AND LOCATION-SPECIFIC REQUIREMENTS.

D. RAILING AT NATURE PLAYGROUND IS ADD ALTERNATE NO 1. SEE SPECIFICATION SECTION 012300 ALTERNATES AND SITE PLANS.

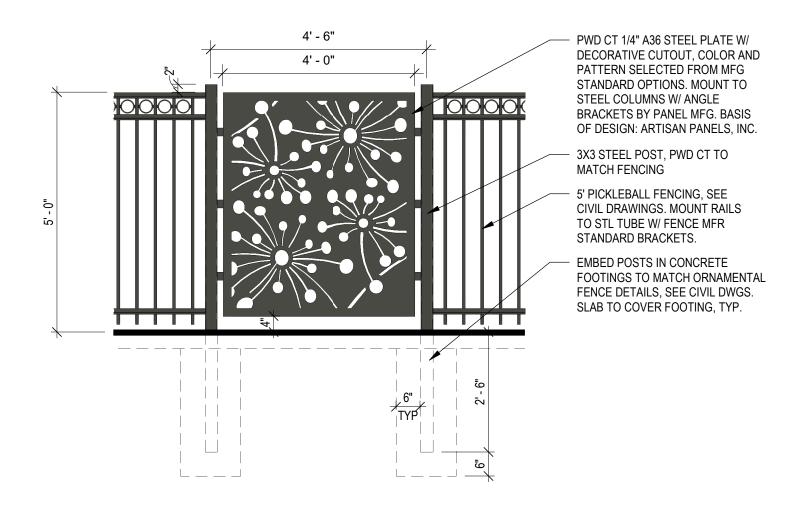
- PWD CT 1/4" A36 PLATE W/ DECORATIVE CUTOUT, COLOR AND PATTERN SELECTED FROM MFG STANDARD OPTIONS. MOUNT TO RAILING WITH ANGLE BRACKETS BY PANEL MFG. BASIS OF DESIGN: ARTISAN PANELS, INC.

ELEVATION @ DECORATIVE WOOD RAILING

ENLARGED ELEVATION - PICKLEBALL ORNAMENTAL GATES (+1 OPPOSITE)

ELEVATION - SPLASHPAD ORNAMENTAL PANELS (2)

4' - 0" 4' - 0" 4' - 0" 3' - 6" PWD CT 1/4" A36 STEEL PLATE W/ DECORATIVE CUTOUT, COLOR AND PATTERN SELECTED FROM MFG STANDARD OPTIONS. MOUNT TO STEEL COLUMNS W/ ANGLE BRACKETS BY PANEL MFG. BASIS OF DESIGN: ARTISAN PANELS, INC. 3X3 STEEL POST, PWD CT TO MATCH BUILDING COLUMNS - 6.25"X6.25" BASE PLATE WELDED TO STL TUBE. PROVIDE (4) 6" ANCHOR BOLTS EACH POST CONTINUOUS CONCRETE FOOTING, SEE STRUCTURAL. SP FFE 0' - 0"

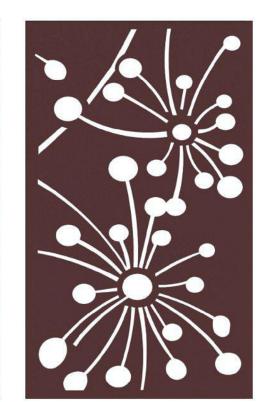


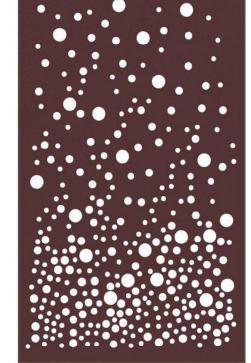
ELEVATION - PICKLEBALL ORNAMENTAL PANELS (6)



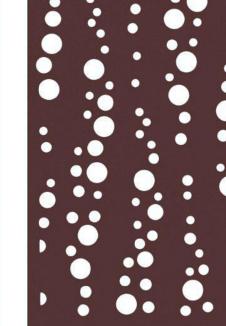
SIZE AND SHAPE.

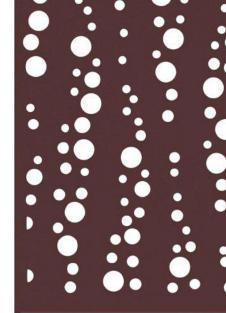
SAMPLE PATTERN OPTIONS FROM ARTISAN PANELS, INC. FINAL PATTERN DESIGN TO BE SELECTED FROM MANUFACTURER FULL LINE OF PATTERNS SIZED TO FIT PANEL















GRAPHIC SCALE

A-563

"JIM" RAMSEUR PAI 8 & RECREATION DEPARTMEN

J.E. PARK

081197

06/15/2023

PROJECT NO:

DATE ISSUED:

DESIGNED BY:

SHEET NAME:

SHEET NO:

ORNAMENTAL METAL

PANEL DETAILS

DRAWN BY: CHECKED BY:

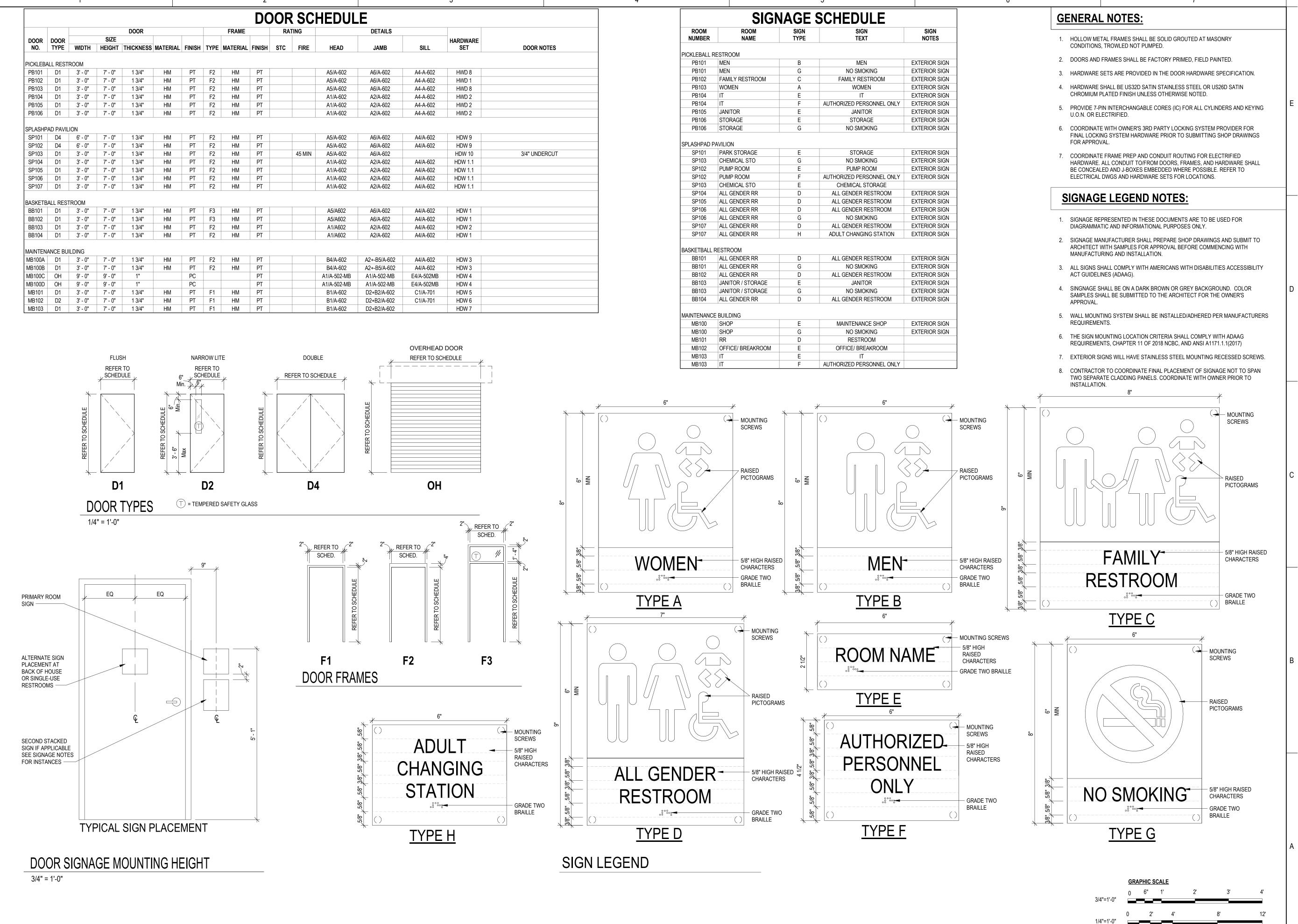
OF

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13860 BALLANTYNE CORPORATE PLACE SUITE 425

CHARLOTTE, NC 28227 800.414.1045

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WOOLPERT ARCHITECTURE | ENGINEERING | GEOSPATIA 13860 BALLANTYNE CORPORATE PLACE SUITE 425 **CHARLOTTE, NC 28227**

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CITY OF CONCORD

J.E. "JIM" RAMSEUR PA

PARKS & RECREATION DEPARTMEN

081197 06/15/2023

DATE ISSUED: **DESIGNED BY:** DRAWN BY: CHECKED BY:

SHEET NAME:

PROJECT NO:

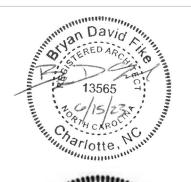
DOOR SCHEDULE, TYPES, HARDWARE, & SIGNAGE

SHEET NO:

A-601

01/14/25 -ISSUED FOR BIDDING







CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT

081197 06/15/2023

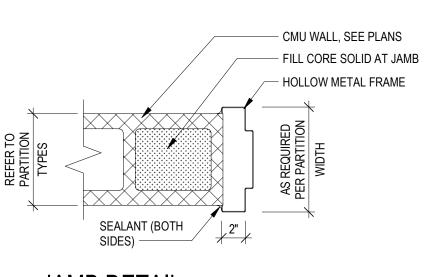
PROJECT NO: DATE ISSUED: DESIGNED BY: DRAWN BY:

CHECKED BY: SHEET NAME:

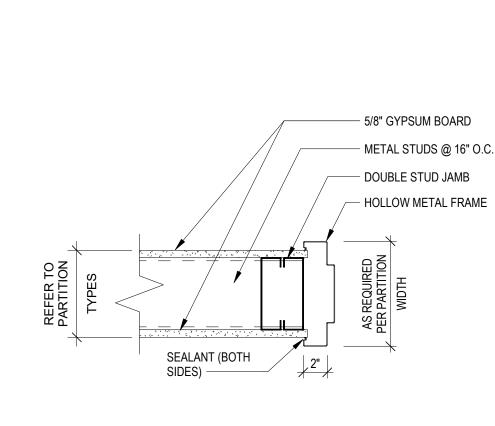
DOOR DETAILS

SHEET NO:

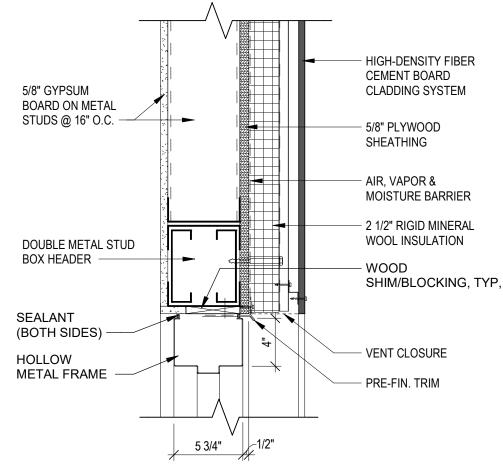
A-602



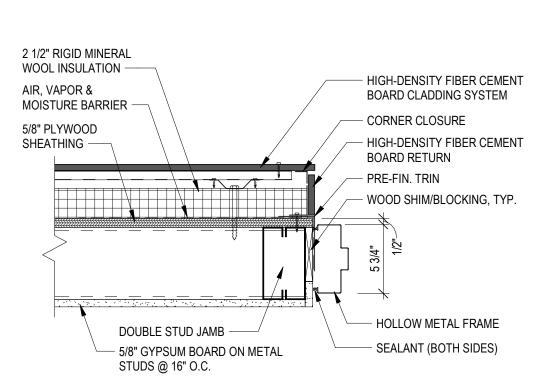












- CMU WALL,

SEE PLANS

- CMU BOND

- SEALANT

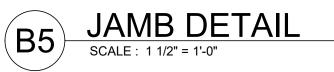
SOLID

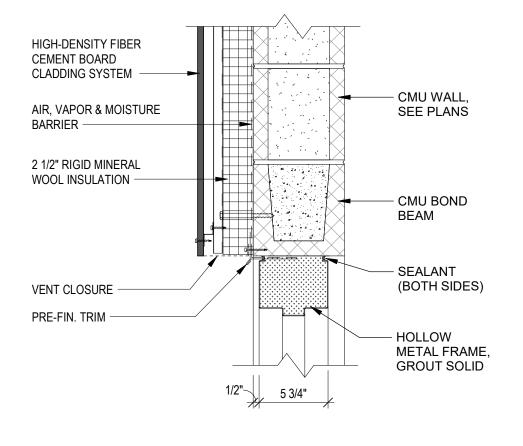
(BOTH SIDES)

- HOLLOW METAL

FRAME, GROUT

BEAM





REFER TO PARTITION **TYPES**

AS REQUIRED

PER PARTITION

WIDTH

HEAD DETAIL

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

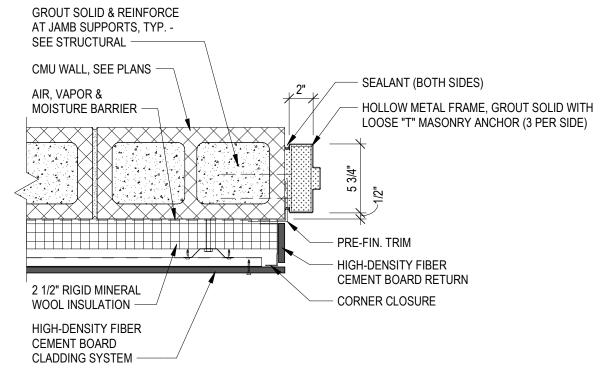
5/8" GYPSUM BOARD

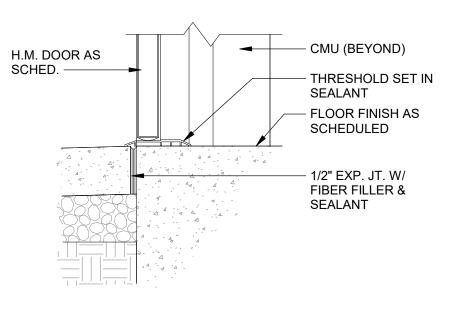
- METAL STUDS @ 16" O.C.

- METAL STUD BOX HEADER

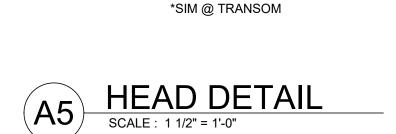
SEALANT (BOTH SIDES)

- HOLLOW METAL FRAME









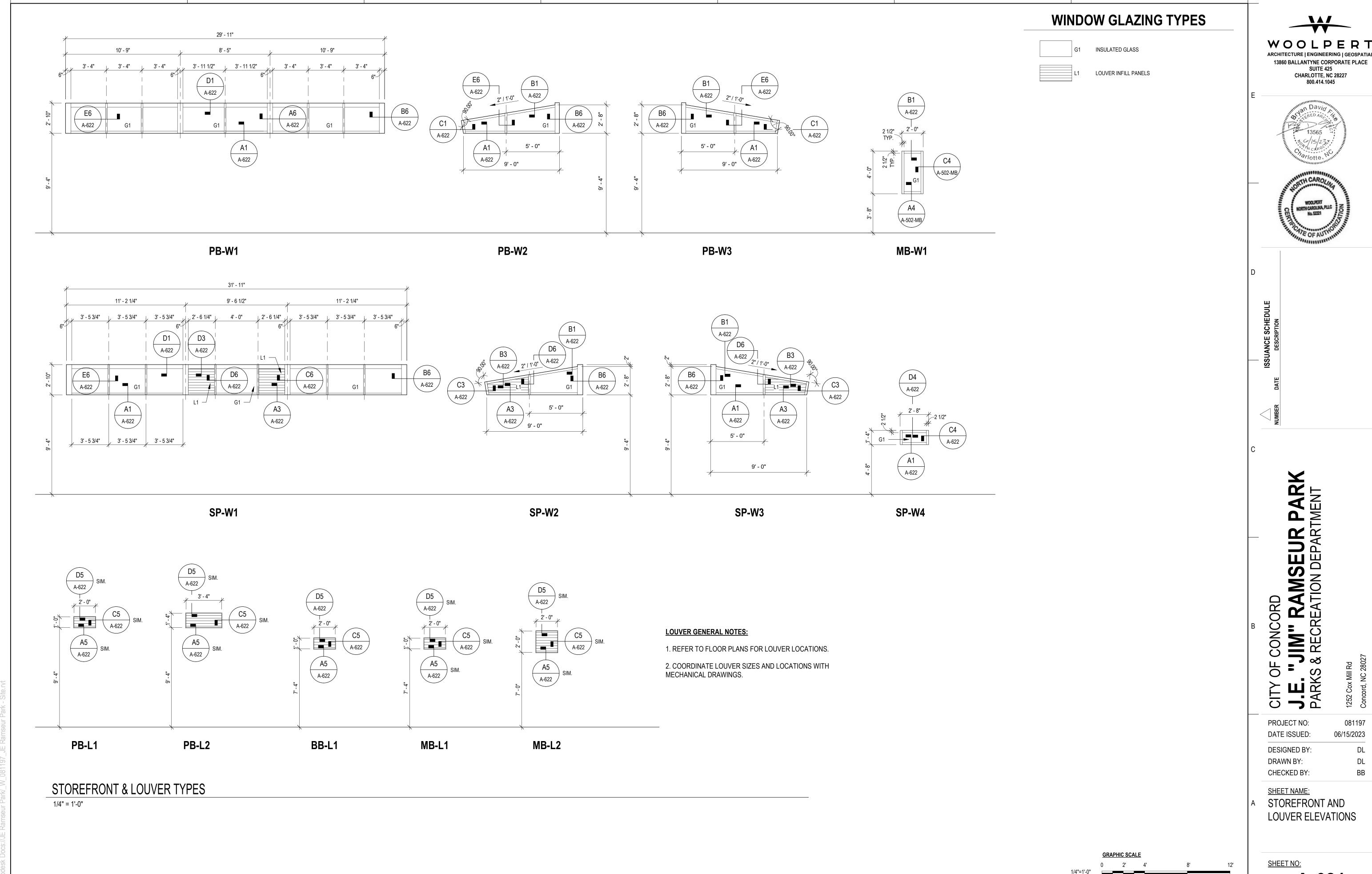
JAMB DETAIL SCALE : 1 1/2" = 1'-0"

CMU WALL, SEE PLANS

- SEALANT (BOTH SIDES)

- FILL CORE SOLID AT JAMB

HOLLOW METAL FRAME, GROUT SOLID WITH LOOSE "T" MASONRY ANCHOR (3 PER SIDE)

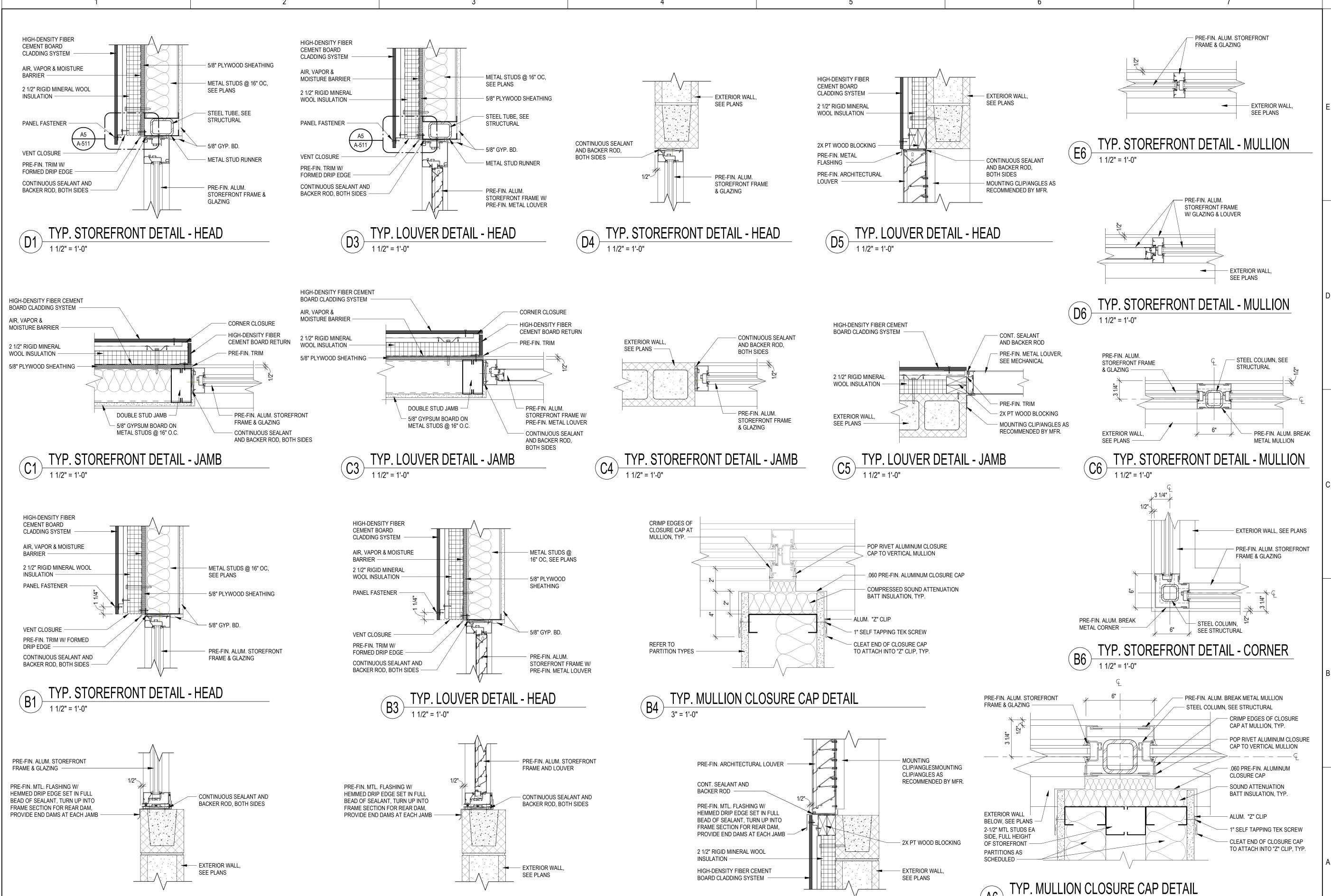


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081197

06/15/2023

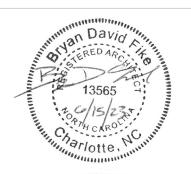


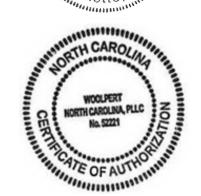
TYP. LOUVER DETAIL - SILL

TYP. LOUVER DETAIL - SILL

TYP. STOREFRONT DETAIL - SILL

ARCHITECTURE | ENGINEERING | GEOSPATIA 13860 BALLANTYNE CORPORATE PLACE SUITE 425 **CHARLOTTE, NC 28227** 800.414.1045





"JIM" RAMSEUR PA

& RECREATION DEPARTMEN CONC OF. S HARK ARK

081197

PROJECT NO: 06/15/2023 DATE ISSUED: **DESIGNED BY:** DRAWN BY: CHECKED BY:

SHEET NAME: STOREFRONT AND LOUVER DETAILS

SHEET NO:

A-622

01/14/25 -ISSUED FOR BIDDING

GRAPHIC SCALE

o 3" 6" 9" 1'

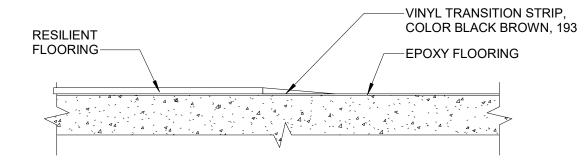
0 1" 2" 3" 4" 5" 6"

WALL BRACKET SECTION

FIRE EXTINGUISHER NOTES:

A. WALL BRACKETS & FIRE EXTINGUISHERS PER SPECIFICATIONS B. PROVIDE APPROPRIATELY RATED FIRE EXTINGUISHER CABINET IN RATED WALL/ASSEMBLIES

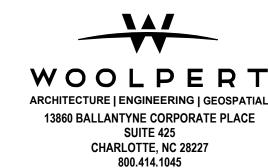
FIRE EXTINGUISHER BRACKET MOUNT



FLOORING / TRANSITION DETAIL

FINISH SCHEDULE WALL FINISH ROOM CEILING CEILING **FLOOR** NUMBER NAME MATERIAL HEIGHT NOTES FINISH PICKLEBALL RESTROOM PB101 MEN RESINOUS FLOORING 6" COVED RESINOUS FLOORING CLT WOOD DECK VARIES PB102 FAMILY RESTROOM RESINOUS FLOORING 6" COVED RESINOUS FLOORING CMU, PT CLT WOOD DECK **VARIES** PB103 WOMEN RESINOUS FLOORING 6" COVED RESINOUS FLOORING CLT WOOD DECK VARIES CMU, PT PB104 IT SEALED CONCRETE CMU, PT VARIES CLT WOOD DECK VARIES PB105 JANITOR SEALED CONCRETE EXPOSED CMU CLT WOOD DECK PB106 STORAGE SEALED CONCRETE EXPOSED CMU CLT WOOD DECK VARIES SPLASHPAD PAVILION SP101 PARK STORAGE VARIES SEALED CONCRETE CMU/GYP BD, PT CLT WOOD DECK SP102 PUMP ROOM VARIES SEALED CONCRETE CMU/GYP BD, PT CLT WOOD DECK 8' - 11" SP103 CHEMICAL STO SEALED CONCRETE CMU/GYP BD, PT GYP BD VARIES SP104 ALL GENDER RR RESINOUS FLOORING 6" COVED RESINOUS FLOORING CMU/GYP BD, PT CLT WOOD DECK SP105 ALL GENDER RR RESINOUS FLOORING 6" COVED RESINOUS FLOORING CMU/GYP BD, PT CLT WOOD DECK **VARIES** SP106 ALL GENDER RR RESINOUS FLOORING 6" COVED RESINOUS FLOORING CMU/GYP BD, PT CLT WOOD DECK VARIES VARIES SP107 ALL GENDER RR RESINOUS FLOORING 6" COVED RESINOUS FLOORING CMU/GYP BD, PT CLT WOOD DECK BASKETBALL RESTROOM BB101 ALL GENDER RR RESINOUS FLOORING 6" COVED RESINOUS FLOORING CLTWOOD DECK VARIES CMU, PT BB102 ALL GENDER RR RESINOUS FLOORING 6" COVED RESINOUS FLOORING CMU, PT CLTWOOD DECK VARIES VARIES BB103 JANITOR / STORAGE SEALED CONCRETE EXPOSED CMU CLTWOOD DECK VARIES BB104 ALL GENDER RR RESINOUS FLOORING 6" COVED RESINOUS FLOORING CMU, PT CLTWOOD DECK MAINTENANCE BUILDING MB100 SHOP **EPOXY FLOORING** CMU/GYP BD, PT CLT WOOD DECK VARIES MB101 RR VCT CMU/GYP BD, PT ACT 9' - 0" 9' - 0" MB102 OFFICE/ BREAKROOM VCT CMU/GYP BD, PT ACT MB103 IT CLT WOOD DECK VARIES VCT CMU/GYP BD, PT

PAIN	IT		STANDING	G SEAN	/I METAL ROOF	WINI	DOW/STOR	EFRONT METAL	
PT-1	MFR: COLOR: LOCATION:	SHERWIN WILLIAMS TBD INTERIOR MASONRY, GYP BD, INTERIOR WOOD TRIM	SSM-1 MFR PRO COLO FINIS	DUCT: OR:	PAC-CLAD PAC-150 180 DOUBLE LOCK GRAPHITE PC, KYNAR 500	SF-1	MFR: PRODUCT: COLOR:	YKK PC, 70% KYNAR UC 99477 CHARCOAL	
PT-2	MFR:	SHERWIN WILLIAMS	ROOFING	META	LS	GLA	ZING		
	COLOR: TO MATCH ROOFING METALS LOCATION: STRUCTURAL STEEL, HM DOORS AND FRAMES, EXPOSED FERROUS METAL UON		COL0 FINIS	MFR: PAC-CLAD COLOR: GRAPHITE FINISH: PC, KYNAR 500 LOCATION: FASCIA, TRIM, RAKES, GUTTERS,		GL-1	MFR: PRODUCT: COLOR:	GUARDIAN SNR-50 CRYSTAL GRAY	
PT-3	MFR: COLOR:	SHERWIN WILLIAMS TO MATCH FIBER CEMENT PANELS	NOT	ES:	DOWNSPOUTS COLOR/FINISH TO MATCH SSM-1	COIL	ING DOOR	S	
	LOCATION:	LOUVERS	CROSS-L	AMINA [.]	TED TIMBER DECKING	CD-1	MFR: FINISH: COLOR:	COOKSON SPECTRASHIELD PC TBD FROM STANDARD RAL COLOR OPTIONS	
			CLT-1 MFR		SANSIN				
			FINIS COLO LOCA CLT-2 MFR	OR: ATION: ::	SDF/SDF TOPCOAT TWO-COAT SYSTEM NATURAL/CLEAR EXTERIOR EXPOSED FACES AND ENDS SANSIN		MFR: PRODUCT: FINISH: COLOR:	SCRANTON HINY HIDERS ORANGE PEEL STAINLESS	
FINISH NOTES		PRODUCT: PURITY CLEAR FINISH: TWO-COAT SYSTEM COLOR: NATURAL/CLEAR		PLAS	STIC LAMIN	ATE			
 FINISHES AND PRODUCTS LISTED HERE ARE TO ESTABLISH BASIS-OF-DESIGN ONLY. SEE SPECS. ABBREVIATIONS LISTED ON INTERIOR FINISH SHEETS ARE FOR FINISH SCHEDULE & FINISH INFORMATION ONLY. FINISHES AND PRODUCTS SHALL BE INSTALLED PER 		LOCATION: INTERIOR EXPOSED FACES AND ENDS		PL-1	MFR: PRODUCT:	WILSONART STANDARD LAMINATE			
		HIGH-DENSITY FIBER CEMENT PANELS			COLOR: FINISH:	D96 SHADOW MATTE FINISH			
		FC-1 MFR: PRODUCT:		EQUITONE TECTIVA	SOL	ID SURFACI			
AS		RECOMMENDATIONS WITH DUCTS CONSISTENT WITH MFR URFMENTS	COL	COLOR: T85		SS-1	MFR: PRODUCT:	WILSONART SOLID SURFACE	
4. AL		RROUS METAL TO BE PAINTED, SEE	ARCHITE	CTURA	L CMU		COLOR:	9135MG CASHMERE MIRAGE	
	-	E SELECTED BY ARCHITECT FROM NUFACTURER STANDARD OPTIONS.	COL	DUCT: OR:	JOHNSON CONCRETE PRODUCTS PRESTIGE MASONRY JCL-3522 CAVE OF CRYSTALS			NOUS FLOORING	
			FINIS		SMOOTH FACE	RF-1	PRODUCT:	SHERWIN WILLIAMS RESUFLOR DECO QUARTZ BC23	
		BREVIATIONS	CMU MOF				FINISH: COLOR:	DECORATIVE BROADCAST, 1/8" FALLEN FOG	
CT CD CLT CMU	COILING D CROSS-LA			LONGLEAF PALMETTO TBD BASED ON FINAL CMU SELECTION		LOCATION: NOTES:	PER SCHEDULE PROVIDE INTEGRAL COVE BASE AS SCHEDULED		
CS	CAST STO	NE	201107			VCT	VCT		
FC HIGH-DENSITY FIBER CEMENT PANELS GL GLAZING GYP BD GYPSUM BOARD M MORTAR MFR MANUFACTURER			CONCRET			VCT-1	MFR:	ARMSTRONG FLOORING	
		TURER	MFR: PRODUCT: COLOR:		READY-MIX INTEGRAL COLOR TBD FROM MFR FULL COLOR LINE TO		PRODUCT: COLOR:	EXCELON IMPERIAL 59237 TRACERY	
PC PL	POWDER PLASTIC L		FINIS	SH:	MATCH SITE WALLS RUBBED FINISH	RUB	BER BASE	E	
PT RB	PAINT RUBBER E					RB-1	MFR: PRODUCT:	JOHNSONITE 4" COVE BASE	
RF BF	STOREFR		CAST STO				COLOR:	32 PEBBLE	
		S SEAM METAL		DUCT:	HARTSTONE CUSTOM CONCRETE ELEMENTS SOFT WHITE				
SS SSM TP VCT	STANDING TOILET PA	S SEAM METAL		DUCT:					







CITY OF CONCORD

J.E. "JIM" RAMSEUR PARK
PARKS & RECREATION DEPARTMENT

081197 PROJECT NO: 06/15/2023

DATE ISSUED: DESIGNED BY: DRAWN BY:

CHECKED BY:

SHEET NAME: FINISH SCHEDULE

SHEET NO:

GRAPHIC SCALE

PLUMBING MATERIALS AND NOTES

DOMESTIC WATER PIPING:

- 1. DOMESTIC WATER PIPING AND JOINTS <u>BELOW GRADE</u>: PROVIDE TYPE 'K' SOFT ANNEALED SEAMLESS COPPER TUBING (ASTM B 88) WITH NO JOINTS FOR PIPING 1" AND SMALLER, PROVIDE TYPE 'K' HARD DRAWN SEAMLESS COPPER TUBING (ASTM B 88) AND CAST COPPER ALLOY FITTINGS (ASME B16.18) WITH BCUP SILVER/PHOSPHORUS/COPPER BRAZED JOINTS (AWS A5.8) FOR PIPING 114" TO 3" IN SIZE. PROVIDE DUCTILE IRON PIPE AND FITTINGS (AWWA C151, AWWA C110) WITH RUBBER GASKET JOINTS AND RODS (AWWA C111) PIPING 4" AND LARGER.
- DOMESTIC WATER PIPING AND JOINTS ABOVE GRADE: PROVIDE TYPE 'L' HARD DRAWN SEAMLESS COPPER TUBING (ASTM B 88) AND CAST COPPER ALLOY FITTINGS (ASME B16.18). JOINTS 2" AND SMALLER SHALL BE LEAD FREE 95-5 TIN/SILVER SOLDER JOINTS (ASTM B 32), JOINTS 21/2" AND LARGER SHALL BE BCUP SILVER/PHOSPHORUS/COPPER BRAZED JOINTS (AWS A5.8). ALTERNATELY PRESS FITTINGS MAY BE USED FOR JOINTS. SEALING ELEMENTS FOR PRESS FITTINGS SHALL BE EPDM. SEALING ELEMENTS SHALL BE FACTORY INSTALLED. PRESS FITTINGS SHALL ALLOW IDENTIFICATION OF AN UNPRESSED FITTING DURING PRESSURE TESTING.
- STERILIZE THE DOMESTIC WATER SYSTEM IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION'S SPECIFICATIONS AND LOCAL HEALTH DEPARTMENT REGULATIONS.
- INSULATE DOMESTIC WATER PIPING ABOVE GRADE (EXCEPT EXPOSED CONNECTIONS TO PLUMBING FIXTURES) WITH GLASS FIBER INSULATION HAVING A VAPOR BARRIER AND JACKET. PIPE INSULATIÓN SHALL HAVE A CONDUCTIVITY NOT EXCEEDING 0.27 BTUH x SQ. FT. FOLLOW SCHEDULE BELOW: SERVICE TYPE

DOMESTIC HOT WATER & CIRCULATION 1/2" - 11/4" 1" DOMESTIC HOT WATER & CIRCULATION 1/2" - 4" 11/2"	71/17
DOMESTIC HOT WATER & CIRCUI ATION 116" 4" 116"	
DOMESTIC FIOT WATER & CIRCULATION 172 - 4 172	
DOMESTIC COLD WATER 1/2" - 11/4" 1/2"	
DOMESTIC COLD WATER 1½" - 4" 1"	

- DOMESTIC WATER PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES ARE REQUIRED TO MEET A FLAME-SPREAD RATING OF 25 OR LESS AND A SMOKE-DEVELOPED RATING OF 50 OR LESS. AS TESTED BY ASTM E84 (NFPA 255) METHOD AND SHALL BE PLENUM RATED. PROVIDE PVC JACKET FOR EXPOSED PIPING IN MECHANICAL ROOMS. INSULATION SHALL BE CONTINUOUS THROUGH ALL WALLS AND AT ALL HANGERS. PROVIDE GALVANIZED STEEL SHIELD BETWEEN PIPE HANGER AND INSULATION.
- PROVIDE TWO-PIECE, BRONZE OR BRASS BODY, FULL PORT, 600 PSI WOG, BALL TYPE SHUT-OFF VALVES WITH BLOW-OUT PROOF STEMS AND ADJUSTABLE PACKING GLANDS. VALVES SHALL BE LEAD FREE PER NSF 61. ANNEX G REQUIREMENTS. INSTALL VALVES IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.
- PROTECT COPPER PIPING AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPING IS CARRIED ON TRAPEZE HANGERS WITH OTHER PIPING, PROVIDE A PERMANENT ELECTROLYTIC ISOLATION MATERIAL TO PREVENT CONTACT WITH DISSIMILAR OTHER METALS.
- PROTECT COPPER PIPING AGAINST CONTACT WITH ALL MASONRY. WHERE COPPER IS SLEEVED THROUGH MASONRY, PROVIDE COPPER OR RED BRASS SLEEVES. WHERE COPPER MUST BE CONCEALED IN OR AGAINST MASONRY PARTITIONS, PROVIDE A HEAVY COATING OF ASPHALTIC ENAMEL ON THE COPPER PIPING AND 15# ASPHALT SATURATED FELT BETWEEN THE PIPING AND THE MASONRY PARTITION.
- 9. DOMESTIC WATER PIPING SHALL BE SLOPED FOR DRAINAGE WITH DRAIN VALVES INSTALLED AT
- 10. DOMESTIC WATER SUPPLY PIPING SHALL BE TESTED AND PROVED WATERTIGHT UNDER A WATER PRESSURE OF NO LESS THAN THE WORKING PRESSURE OF THE SYSTEM, OR AN AIR TEST OF NO LESS THAN ONE-HUNDRED (100) PSI. THIS PRESSURE SHALL BE HELD FOR AT LEAST FIFTEEN (15) MINUTES. WATER USED IN TESTING SHALL BE OBTAINED FROM A POTABLE SOURCE OF

SANITARY WASTE / VENT PIPING:

- SANITARY WASTE PIPING BELOW GRADE: PROVIDE SERVICE WEIGHT CAST IRON HUB AND SPIGOT PIPE (ASTM A 74) WITH COMPRESSION JOINTS (CISPI HSN) AND NEOPRENE GASKETS (ASTM C 564) OR NO-HUB PIPE AND FITTINGS (CISPI 301) WITH NEOPRENE GASKET/STAINLESS STEEL CLAMP JOINTS (HEAVY DUTY, ASTM C1540-15)
- SANITARY WASTE/VENT PIPING ABOVE GRADE: PROVIDE SERVICE WEIGHT CAST IRON NO-HUB PIPE AND FITTINGS (CISPI 301) WITH NEOPRENE GASKET/STAINLESS STEEL CLAMP JOINTS (HEAVY DUTY. ASTM C1540-15).
- 3. SLOPE SANITARY WASTE PIPING AT 14" PER FOOT MINIMUM FOR PIPING 212" AND SMALLER AND 1/8" PER FOOT MINIMUM FOR PIPING 3" AND LARGER UNLESS NOTED OTHERWISE.
- 4. PROVIDE CLEAN-OUTS AT THE BASE OF SANITARY WASTE STACKS. AND AT EVERY TURN IN PIPING IN EXCESS OF 45° AND NO FURTHER THAN 100'-0" APART IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.
- PROVIDE FLOOR CLEANOUTS WITH TOPS DESIGNED TO MATCH SPECIFIC FLOOR FINISHES SUCH AS CARPET, TILE, ETC. YARD CLEANOUTS SHALL BE PROVIDED IN AN 18"x18"x6" CONCRETE PAD.
- WHERE WASTE PIPING IS EXPOSED IN REST ROOM AREAS, PROVIDE CHROME PLATED BRASS PIPING, REMOVABLE P-TRAPS, MATCHING STOPS AND ESCUTCHEONS FOR ALL LAVATORIES.
- SANITARY WASTE AND VENT SYSTEMS SHALL BE TESTED AND PROVED WATER TIGHT UNDER A HEAD PRESSURE OF NO LESS THAN 10 FT. THIS PRESSURE SHALL BE HELD FOR A PERIOD OF

PLUMBING GENERAL NOTES

GENERAL REQUIREMENTS:

- PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE NORTH CAROLINA STATE PLUMBING CODE AND WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- SCOPE: PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL PLUMBING SYSTEMS IN ACCORDANCE WITH ALL APPLICABLE CODES.
- PERMITS: APPLY AND PAY FOR ALL NECESSARY PERMITS, FEES AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION. ACREAGE CHARGES, FACILITIES CHARGES AND

BOND PROPERTY ASSESSMENTS ARE NOT TO BE CONSTRUED TO BE A PART OF THIS CONTRACT.

- WARRANTY: PROVIDE A ONE YEAR WARRANTY, FROM THE DATE OF ACCEPTANCE OF WORK BY THE OWNER, FOR ALL PLUMBING MATERIALS AND EQUIPMENT.
- COORDINATE ALL PLUMBING PIPING LOCATIONS, ROUGH-IN LOCATIONS AND EQUIPMENT LOCATIONS WITH OTHER TRADES TO AVOID CONFLICTS AND INTERFERENCES. FINAL PIPING AND EQUIPMENT LOCATIONS SHALL BE A CODE COMPLIANT INSTALLATION FOR ALL TRADES.
- FIELD VERIFY PROPER OPERATION OF EXISTING SYSTEMS BEFORE STARTING CONSTRUCTION. NOTIFY THE ARCHITECT / ENGINEER OF RECORD OF ANY PROBLEMS OR DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS AND/OR ANY POTENTIAL PROBLEMS OBSERVED BEFORE CONTINUING WORK IN THE EFFECTED AREAS.
- WHERE DISCREPANCIES ARE FOUND IN THE DRAWINGS AND SPECIFICATIONS THE MORE STRINGENT SHALL APPLY. CONTACT ENGINEER FOR CLARIFICATION.
- 8. ALL PIPING SHALL BE MANUFACTURED IN THE UNITED STATES OF AMERICA.
- 9. ALL VALVES, BACKFLOW PREVENTERS, BOOSTER PUMPS, ETC. SERVING THE DOMESTIC WATER SYSTEM SHALL MEET LEAD FREE STANDARDS PER ANSI/NSF 372 AND NSF 61, ANNEX G.
- 10. CUT WALLS, FLOORS AND CEILINGS AS REQUIRED FOR INSTALLATION OF PLUMBING WORK. ALL CUTTING SHALL BE HELD TO A MINIMUM. PATCH AND FINISH SURFACES TO MATCH ADJOINING
- 1. PLUMBING PLANS SHALL NOT BE SCALED. REFERENCE THE ARCHITECTURAL PLANS FOR ALL LOCATIONS OF PLUMBING FIXTURES, WALLS, DOORS, WINDOWS, ETC.
- 2. PLUMBING PIPING AND SPECIALTIES SHALL BE LOCATED CONCEALED IN WALLS, PARTITIONS OR ABOVE CEILINGS UNLESS NOTED OTHERWISE. PLUMBING PIPING IN EXPOSED AREAS SHALL BE RUN TIGHT TO UNDERSIDE OF STRUCTURE. PROVIDE ACCESS DOORS FOR CONCEALED SPECIALTIES.
- 3. PLUMBING PIPING, VENTS, ETC. EXTENDING THROUGH EXTERIOR WALLS AND/OR THE ROOF SHALL BE FLASHED AND COUNTER FLASHED IN A WATERPROOF MANNER. COORDINATE FLASHING WITH THE
- 14. DO <u>NOT</u> INSTALL PLUMBING PIPING IN AREAS SUBJECT TO FREEZING TEMPERATURES. INSTALL PLUMBING PIPING SHOWN IN EXTERIOR WALLS ON THE CONDITIONED SIDE OF THE WALL INSULATION.
- 15. PROVIDE NON-CONDUCTING DIELECTRIC UNIONS WHENEVER CONNECTING DISSIMILAR METALS.
- 16. ATTACH HANGERS TO STRUCTURE, HANGERS SHALL NOT ATTACH TO THE DECK.
- 17. PROVIDE ACCESS DOORS FOR VALVES, WATER HAMMER ARRESTORS, TRAP PRIMERS, ETC. CONCEALED IN MASONRY WALLS, GYPBOARD WALLS AND/OR CEILINGS THAT WILL REQUIRE MAINTENANCE ACCESS.
- 18. CORE DRILL THROUGH MASONRY (CMU BLOCK) WALLS FOR ALL PIPE PENETRATIONS. WHEN DRILLING OPENINGS FOR INSULATED PIPES THE OPENING'S DIAMETER SHALL BE LARGE ENOUGH FOR PIPE INSULATION TO REMAIN <u>CONTINUOUS</u> PASSING THROUGH THE OPENING.SEAL WATER TIGHT. PROVIDE ESCUTCHEONS IN EXPOSED FINISHED AREAS.
- PLUMBING SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO: PLUMBING FIXTURES AND EQUIPMENT, FIRE STOPPING, SEISMIC BRACING, PIPE IDENTIFICATION, DOMESTIC WATER SYSTEM, SANITARY WASTE AND VENT SYSTEM.

PLUMBING FIXTURES AND EQUIPMENT:

GENERAL CONTRACTOR.

- PROVIDE COMPLETE PLUMBING FIXTURES AND EQUIPMENT. INCLUDE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAIL PIECES, ESCUTCHEONS, ETC.
- PLUMBING FIXTURES AND EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS.
- NO PRIVATE LABELED MATERIALS WILL BE ACCEPTED AS EQUALS TO PRODUCTS SPECIFIED
- 4. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SUBSTITUTIONS TO SPECIFIED PLUMBING FIXTURES AND EQUIPMENT INCLUDING BUT NOT LIMITED TO; PROVIDING COMPONENTS, BUILDING ALTERATIONS, ETC. AND ANY MODIFICATIONS TO ASSOCIATED MECHANICAL ELECTRICAL OR PLUMBING SYSTEMS REQUIRED BY THE EQUIPMENTS INSTALLATION INSTRUCTIONS. ALL COSTS ASSOCIATED WITH SUBSTITUTIONS SHALL BE INCLUDED IN THE ORIGINAL BASE BID.

FIRE STOPPING:

FIRE STOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OF FIRE RATED WALLS, FLOORS AND PARTITIONS. PROVIDE A DEVICE(S) OR SYSTEM(S) WHICH HAS BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814 AND INSTALL IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE A DEVICE(S) OR SYSTEM(S) WITH AN 'F' RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED. REFER TO ARCHITECTURAL PLANS FOR WALL AND FLOOR TYPES.

PIPE IDENTIFICATION:

- PIPE IDENTIFICATION SHALL MATCH THE FACILITY'S EXISTING STANDARD. IF NO STANDARD EXISTS, THEN THE PIPE IDENTIFICATION SHALL BE IN ACCORDANCE WITH ANSI A13.1.
- PROVIDE PIPING LABELS FOR ALL PLUMBING PIPING. PIPING LABELS SHALL BE ACRYLIC FACED, WRAP-AROUND TYPE. EACH LABEL SHALL INDICATE THE PIPING CONTENTS, DIRECTION OF FLOW AND SHALL BEAR THE MANUFACTURER'S STANDARD COLOR FOR THE SERVICE INDICATED.

PLUMBING DRAWING INDEX

	I LOMBING BIV WING INDEX	
SHT. NO.	SHEET NAME	<u>SCALE</u>
	PLUMBING LEGENDS, NOTES, AND SCHEDULES PLUMBING SCHEDULES & NOTES	
P-101-BB	SANITARY WASTE FLOOR PLANS SANITARY WASTE FLOOR PLANS	1/4" = 1'-0" 1/4" = 1'-0" 1/4" = 1'-0"
P-101-MB	SANITARY WASTE FLOOR PLANS SANITARY WASTE FLOOR PLANS SUPPLY PIPING FLOOR PLANS	1/4" = 1'-0" 1/4" = 1'-0" 1/4" = 1'-0"
P-201-BB	SUPPLY PIPING FLOOR PLANS SUPPLY PIPING FLOOR PLANS	1/4" = 1'-0" 1/4" = 1'-0"
	SUPPLY PIPING FLOOR PLANS PLUMBING DETAILS	1/4" = 1'-0"

PLUMBING LEGEND

<u>NEW PIPING</u>	ABBR.	DESCRIPTION
	CW	COLD WATER PIPING
	HW	HOT WATER PIPING
	W	SANITARY WASTE PIPING
	V	SANITARY VENT PIPING
——— GW ——	GW	GREASE LADEN WASTE PIPING
D	D	DRAIN
	_	ELBOW DOWN
	_	ELBOW UP
	_	PIPE CONTINUES
	_	PIPE CAP
	_	BALL VALVE
	CV	CHECK VALVE
	BV	BALANCING VALVE / CIRCUIT SETTER
——————————————————————————————————————	_	GAS COCK
	PRV	PRESSURE REDUCING/REGULATING VALVE
<u> </u>	_	SOLENOID VALVE
	RPZ	
	_	REĐUKEDPOMPSSURE ZONE BACKFLOW PREVENTER
	_	DIRECTION OF FLOW
	_	PIPE REDUCER
	FCO	FLOOR CLEAN OUT
	WCO	WALL CLEAN OUT
	CO	END OF LINE CLEAN OUT
	YCO	YARD CLEAN OUT
	FD	FLOOR DRAIN
	FS	FLOOR SINK
- ⊚)	RD	ROOF DRAIN
—- <u>-</u> <u>-</u> - <u>-</u> - <u>-</u> - <u>-</u> - <u>-</u> <u>-</u> <u>-</u>	НВ	HOSE BIBB/WALL HYDRANT
<u> SA-#</u>	SA	SHOCK ARRESTOR - SUFFIX INDICATES PDI SIZE
	_	THERMOMETER
@	_	PRESSURE GAUGE
-	TP	TRAP PRIMER
•	CTE	CONNECT TO EXISTING

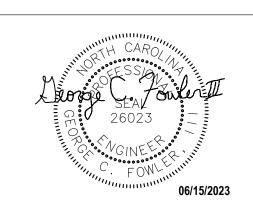
ADDITIONAL ABBREVIATIONS

ABV	ABOVE	IW	INDIRECT WASTE
AFF	ABOVE FINISHED FLOOR	KW	KILOWATT
AFG	ABOVE FINISHED GRADE	LAV	
BAS		MBH	,
BEL		MFG	
BFF	BELOW FINISHED FLOOR	MH	MOUNTING HEIGHT
втин	BRITISH THERMAL UNIT / HOUR	PH	PHASE
CFH	CUBIC FEET PER HOUR '	PSI	POUNDS PER SQUARE INCH
CLG	CEILING	SF	SQUARE FEET
	CONTINUATION	SFU	SUPPLY FIXTURE UNITS
DFU	DRAINAGE FIXTURE UNIT (WASTE)	T&P	TEMPERATURE AND PRESSURE
DN		l TW	TEMPERED WATER
EX		TYP	TYPICAL
	FINISHED FLOOR ELEVATION	UR	
	FINISH	VB	
	FLOOR	VLV	
	FROM	VTR	
		wc`	
FU		""	With Occount
	GALLONS PER CYCLE (METERING)	EC	ELECTRICAL CONTRACTOR
GPF	GALLONS PER FLUSH	GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE	MC MC	MECHANICAL CONTRACTOR
HP	HORSE POWER	PC	
INV	INVERT ELEVATION	PC	PLUMBING CONTRACTOR

PLUMBING LOAD SUMMARY

BUILDING	LOAD	FIXTURE UNITS	FLOW
SPLASHPAD RR	SANITARY WASTE	37 DFU	_
SFLASHFAD KK	DOMESTIC WATER	49 WSFU	28.8 GPM
BASKETBALL RR	SANITARY WASTE	29 DFU	_
	DOMESTIC WATER	39 WSFU	26 GPM
PICKLEBALL RR	SANITARY WASTE	53 DFU	_
	DOMESTIC WATER	83 WSFU	38.8 GPM
MAINTENANCE BLDG	SANITARY WASTE	20 DFU	_
MAINTENANCE BEDG	DOMESTIC WATER	21 WSFU	20 GPM







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PLUMBING LEGENDS, NOTES, AND SCHEDULES

SHEET NO:

ISSUED FOR BIDDING

OPTIMA #: 22-0236

081197

NOTES:

PROVIDE WATERLESS INLINE TRAP GUARD FOR EACH FLOOR DRAIN CONFORMING TO ASSE 1072 AND EQUAL TO RECTORSEAL "SURESEAL" MODEL SS3009V. INSTALL TRAP GUARDS IN THE OUTLET OF THE FLOOR DRAIN BODY (NOT IN THE STRAINER).

<u>APPROVED MANUFACTURERS:</u>

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE MODEL WHICH MOST CLOSELY MATCHES THE SPECIFIED PRODUCT. PROVIDE PRODUCTS MADE BY ANY OF THE MANUFACTURER'S LISTED. NO PRIVATE LABELED MATERIALS WILL BE ACCEPTED AS EQUALS TO PRODUCTS SPECIFIED HEREIN.

ALL FIXTURES OF THE SAME TYPE AND/OR MATERIAL SHALL BE PROVIDED BY A SINGLE MANUFACTURER.

2. PROVIDE TRAP-PRIMER PPP MODEL P-1 AND $1\!\!/_2$ " COPPER LINE TO DRAIN TRAP.

INLINE FLOOR DRAIN TRAP SEALER DRAINS, CLEANOUTS WATER SPECIALTIES WASTE SPECIALTIES (WASHER BOX) WALL HYDRANTS/HOSE BIBBS BACKFLOW PREVENTERS, PRVS, ETC

SURESEAL, MIFAB, PROVENT ZURN, J.R. SMITH, WADE, JOSAM, WATTS PPP, SIOUX CHIEF, ZURN, WATTS GUY GRAY, SIOUX CHIEF, OATEY WOODFORD, ZURN, WATTS WATTS, ZURN-WILKINS, APOLLO

WATER HEATER SCHEDULE											
		STORAGE	GPH RECOVERY	ELECTRICAL DATA			Ā	SELECTION B			
SYM.	DESCRIPTION	(GALLONS)	@ 90°F RISE	KW	VOLTS	PHASE	HERTZ	MANUFACTURER	MODEL	REMARKS	
<u>WH1</u>	ELECTRIC INSTANTANEOUS WATER HEATER	_	_	4.1	208	1	60	EEMAX	SPEX4208	1,2	
<u>WH2</u>	ELECTRIC INSTANTANEOUS WATER HEATER	_	_	8.3	208	1	60	EEMAX	SPEX8208	1,2	
<u>WH3</u>	ELECTRIC WATER HEATER	30	21	4.5	208	1	60	BRADFORD WHITE	RE230LN6	1,2	

REMARKS:

APPROVED MANUFACTURERS: A.O. SMITH, LOCHINVAR, BRADFORD 2. WATER HEATER SHALL MEET OR EXCEED THE REQUIREMENTS OF WHITE, EEMAX.

EXPANSION TANK SCHEDULE								
CVM	DESCRIPTION	VOLUME (GALLONS)	DIAMETER (INCHES)	HEIGHT (INCHES)	SELECTION BASED ON		REMARKS	
SYM.					MANUFACTURER	MODEL	NEWARNS	
ET1	BLADDER TYPE EXPANSION TANK	6.4	12"	15%"	AMTROL	ST-12	1	

REMARKS:

EQUIVALENT MANUFACTURERS: BELL & GOSSETT, WESSELS COMPANY.

OIL/WATER SEPARATOR - OWS1

150 GALLON OIL INTERCEPTOR EQUAL TO ZURN PROCEPTOR OMC-150 OR EQUAL BY STRIEM, ENDURA OR MI-FAB. 150 GALLON CAPACITY, 150 GPM MAX FLOW RATE, FIBERGLASS CONSTRUCTION, 4" INLETS AND OUTLETS, 3" VENTS PROVIDE MANWAYS TO MEET INVERT DEPTH AND H-20 TRAFFIC RATED MANHOLE COVERS AND FRAMES. INSTALLED FLUSH WITH FINISHED GRADE. PROVIDE REINFORCED CONCRETE RELIEVING SLAB. INSTALL PER THE MANUFACTURERS INSTRUCTIONS. COORDINATE EXACT LOCATION WITH SITE UTILITY CONTRACTOR. PROVIDE HIGH OIL LEVEL ALARM, INTERLOCKED WITH B.A.S. SYSTEM.

	PLUMBING FIXTURE AND EQUIPMENT SCHEDULE									
	SYM.	DESCRIPTION	CON	NECTI V	ONS CW	(IN.) HW	SPECIFICATION	REMARKS		
2	P1A	WATER CLOSET, HET, ADA COMPLIANT, ELONGATED BOWL, WALL MOUNTED, MANUAL FLUSH VALVE, 1.28 GPF	4"	2"	11/4"	ı	FIXTURE: AMERICAN STANDARD AFWALL SEAT: AMERICAN STANDARD 5901.100 FLUSH VALVE: SLOAN 111-1.28 MATERIAL: VITREOUS CHINA COLOR: WHITE			
	<u>P1B</u>	WATER CLOSET, HET, ADA COMPLIANT, ELONGATED BOWL, FLOOR MOUNTED, MANUAL FLUSH VALVE, 1.28 GPF	4"	2"	11/4"	1	FIXTURE: AMERICAN STANDARD PRIOLO SEAT: AMERICAN STANDARD 5901.100 FLUSH VALVE: SLOAN 111-1.28 MATERIAL: VITREOUS CHINA COLOR: WHITE			
	<u>P2A</u>	URINAL, HEU, ADA COMPLIANT, WALL MOUNTED, MANUAL FLUSH VALVE 0.125 GPF	2"	1½"	3/4"	ı	FIXTURE: AMERICAN STANDARD WASHBROOK 6590001.020 COLOR: WHITE MATERIAL: VITREOUS CHINA FLUSH VALVE: SLOAN 186CARRIER: ZURN WALL MOUNTED URINAL CARRIER	FIXTURE LIP HEIGHT 17" AFF.		
	<u>P3</u>	LAVATORY, ADA COMPLIANT, 21" x 18" RECTANGULAR, WALL MOUNTED, GRID DRAIN, CENTERED FAUCET HOLES, MANUAL FAUCET WITH WRIST BLADE HANDLES (0.5 GPM) FAUCET FLOW RATE.	2"	11/2"	1/2"	1/2"	FIXTURE: AMERCAN STANDARD 0356.927 'LUCERNE' DRAIN: MCGUIRE 155A GRID STRAINER DELTA 86T113 P-TRAP: MCGUIRE 8902 11/4" x 11/2" STOPS: MCGUIRE LF175 COLOR: WHITE MATERIAL: VITREOUS CHINA	SEE NOTE 1 BELOW. PROVIDE ASSE 1070 MIXING VALVE TIGHT TO UNDERSIDE OF LAVATORY.		
	<u>P3A</u>	LAVATORY, A.D.A. COMPLIANT, TWO STATION SOLID SURFACE, RECTANGULAR BOWLS, ALPINE WHITE COLOR, WALL MOUNTED, WITH STAINLESS STEEL KNEE PANEL, 4" CENTER FAUCET HOLES, METERING FAUCET PUSH LEVER HANDLES (0.5 GPM) FAUCET FLOW RATE	2"	11/2"	1/2"	1/2"	FIXTURE: BRADLEY VERGE LVLD2 (2 LAVATORIES) WITH BACKSPLASH, RIGHT & LEFT SIDE SPLASHES, TRENCH DRAIN W/ STAINLESS STEEL DRAIN CAP. FAUCETS: (2) DELTA 86T1153 P-TRAP: McGUIRE 8902C (1-1/4"x1-1/2", 17 GA.) SUPPLIES/STOPS: ZURN 8806-XL-LR-LK	SEE NOTE 1 BELOW. BOWL RIM HEIGHT 34" AFF PROVIDE ASSE 1070 MIXING VALVE TIGHT TO UNDERSIDE OF LAVATORY.		
	<u>P5</u>	1-COMP. STAINLESS STEEL SINK, ADA COMPLIANT, 25" x 22" x 6", 3 HOLE PUNCH, KITCHEN FAUCET, 1.5 GPM OUTLET, BASKET STRAINER	2"	11/2"	1/2"	1/2"	FIXTURE: ELKAY DLR252210 DRAIN: JUST J-35, BASKET STRAINER FAUCET: DELTA 470-WE-DST (1.5 GPM) P-TRAP: MCGUIRE 8912 1½" x 1½" STOPS: MCGUIRE LF175-LK DISPOSAL: ISE BADGER 1, 1/3 HP, WITH POWER CORD	SEE NOTE 1 BELOW.		
	<u>P5A</u>	1-COMP. SINK, 24" x 24"x 12", 2 HOLE PUNCH CENTERED FAUCET HOLES, MANUAL FAUCET WITH WRIST BLADE HANDLES (0.5 GPM) FAUCET FLOW RATE, BASKET STRAINER	2"	1½"	1/2"	1/2"	FIXTURE: ELKAY B1C24X24X DRAIN: JUST J-35, BASKET STRAINER FAUCET: DELTA 28T9-AC (1.5 GPM) P-TRAP: MCGUIRE 8912 1½" x 1½" STOPS: MCGUIRE LF175-LK	SEE NOTE 1 BELOW.		
	<u>P6</u>	MOP SINK, 24"x 24"x 12" TERRAZZO BASIN, 6" DROP FRONT WITH STAINLESS STEEL THRESHOLD CAP, 36" HIGH STAINLESS STEEL WALL GUARDS, SERVICE FAUCET, HOSE, MOP HANGER BRACKET.	3"	2"	1/2"	1/2"	FIXTURE: FIAT TSB100, 830AA, 832AA, (2) MSG3624 FAUCET: AMERICAN STANDARD 8344.012 WITH INTEGRAL VACUUM BREAKER, DRAIN: 3" STAINLESS STEEL SLOTTED P-TRAP: 3" DEEP SEAL, CAST IRON	PROVIDE CHECK VALVES ON HW AND CW SUPPLIES.		

SEE DETAILS 5 & 7/P-501.

I. PROVIDE INSULATION KIT FOR EXPOSED TRIM UNDER SINK THAT MEETS OR EXCEEDS ASTM E84—07 (25/450).

APPROVED MANUFACTURERS:

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE MODEL WHICH MOST CLOSELY MATCHES THE SPECIFIED PRODUCT. PROVIDE PRODUCTS MADE BY ANY OF THE MANUFACTURER'S LISTED. NO PRIVATE LABELED MATERIALS WILL BE ACCEPTED AS EQUALS TO PRODUCTS SPECIFIED

ALL FIXTURES OF THE SAME TYPE AND/OR MATERIAL SHALL BE PROVIDED BY A SINGLE MANUFACTURER.

VITREOUS CHINA FIXTURES TOILET SEATS FLUSH VALVES MANUAL FAUCETS

SENSOR OPERATED STAINLESS STEEL SINKS

UTILITY SINKS SHOWER INSERTS MIXING/SHOWER VALVES SUPPLIES, P-TRAPS ADA KIT FOR EXPOSED TRIM INLINE FLOOR DRAIN TRAP SEALER DRAINS, CARRIERS, CLEANOUTS

WATER SPECIALTIES WASTE SPECIALTIES (WASHER BOX) WALL HYDRANTS/HOSE BIBBS BACKFLOW PREVENTERS, PRVS, ETC EMERGENCY FIXTURES

KOHLER, AMERICAN STANDARD, ZURN, TOTO, SLOAN CHURCH, OLSONITE, BEMIS, CENTOCO

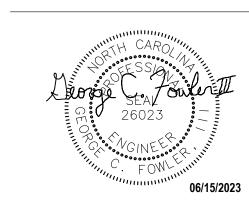
SLOAN, ZURN, DELANEY T&S BRASS, CHICAGO, ZURN, DELTA COMMERCIAL, MOEN COMMERCIAL SLOAN, T&S BRASS, ZUR

ELKAY, JUST, ADVANCE-TABCO ELECTRIC WATER COOLERS/DRINKING FOUNTAINS ELKAY, OASIS, HAWS, HALSEY—TAYLOR FIAT, FLORESTONE, STERN WILLIAMS COMFORT DESIGNS, LIBERTY LINE, STERLING LEONARD, SYMMONS, LAWLER McGUIRE, BRASSCRAFT, KEENEY

TRUEBRO, PLUMBEREX, KEENEY SURESEAL, MIFAB, PROVENT ZURN, J.R. SMITH, WADE, JOSAM, WATTS PPP, SIOUX CHIEF, ZURN, WATTS GUY GRAY, SIOUX CHIEF, OATEY WOODFORD, ZURN, WATTS WATTS, ZURN-WILKINS, APOLLO GUARDIAN, HAWS, BRADLEY

SHOCK ARRESTOR TABLE							
DRAWING SYMBOL	FIXTURE UNITS	PDI WH201 STANDARD DESIGNATION	ARRESTOR SIZE	APPROVED MANUFACTURERS			
SA-A	1-11	А	1/2"	- SIOUX CHIEF			
<u>SA-B</u>	12-32	В	3/4"	- WATTS - PPP INC.			
<u>SA-C</u>	33-60	С	1"				
<u>SA-D</u>	61–113	D	11/4"	REMARKS			
<u>SA-E</u>	114-154	E	1½"	INSTALL SHOCK ARRESTORS			
<u>SA-F</u>	155-330	F	2"	PER PDI WH201 GUIDELINES			







CONC

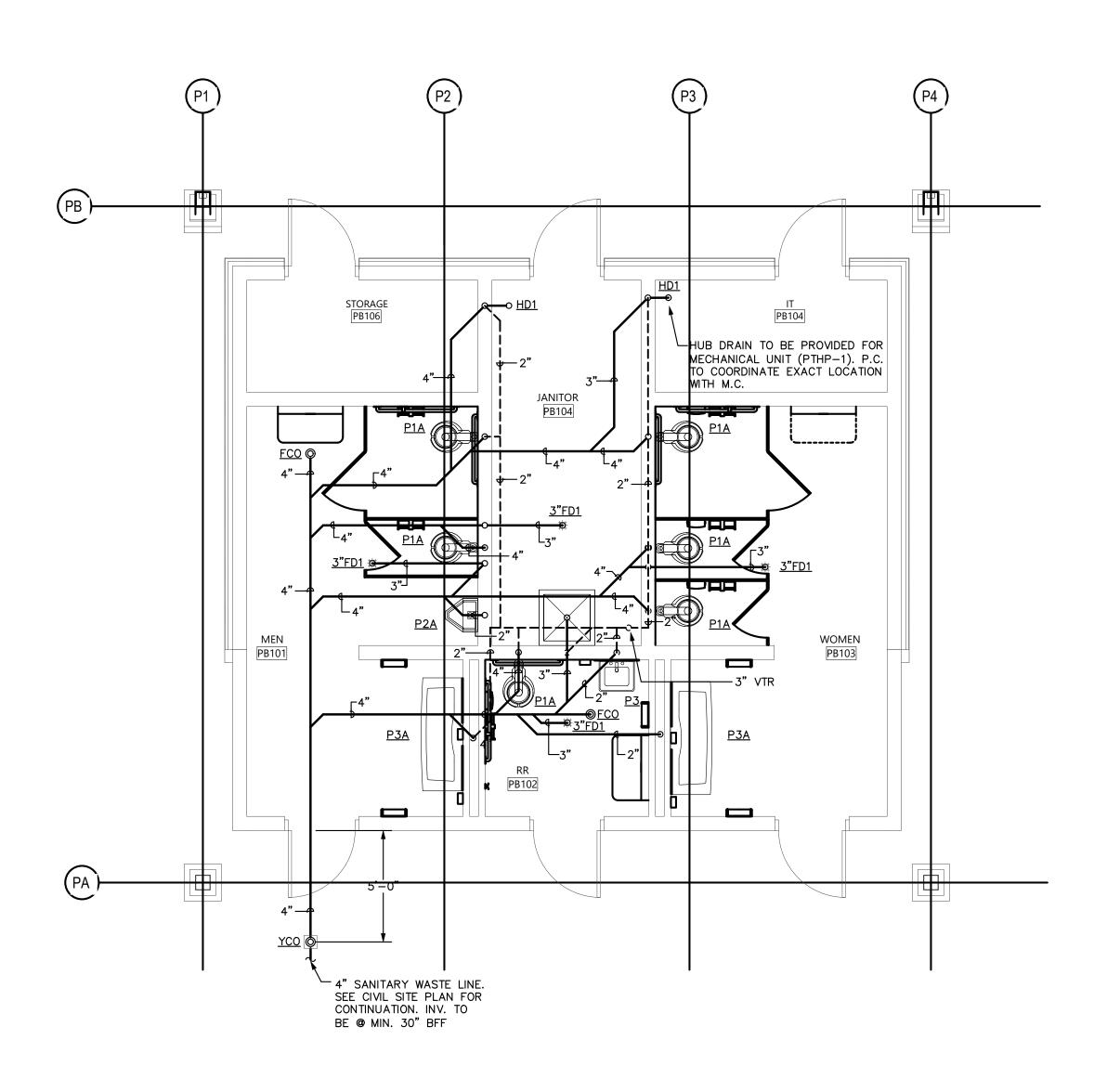
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PLUMBING SCHEDULES & NOTES

SHEET NO:

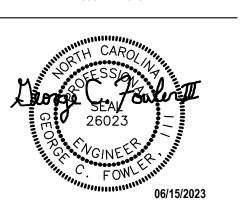


PICKLEBALL RR SANITARY WASTE PLAN

1/4" = 1'-0"



WOOLPERT 13860 BALLANTYNE CORPORATE PLACE
SUITE 425
CHARLOTTE, NC 28227
800.414.1045



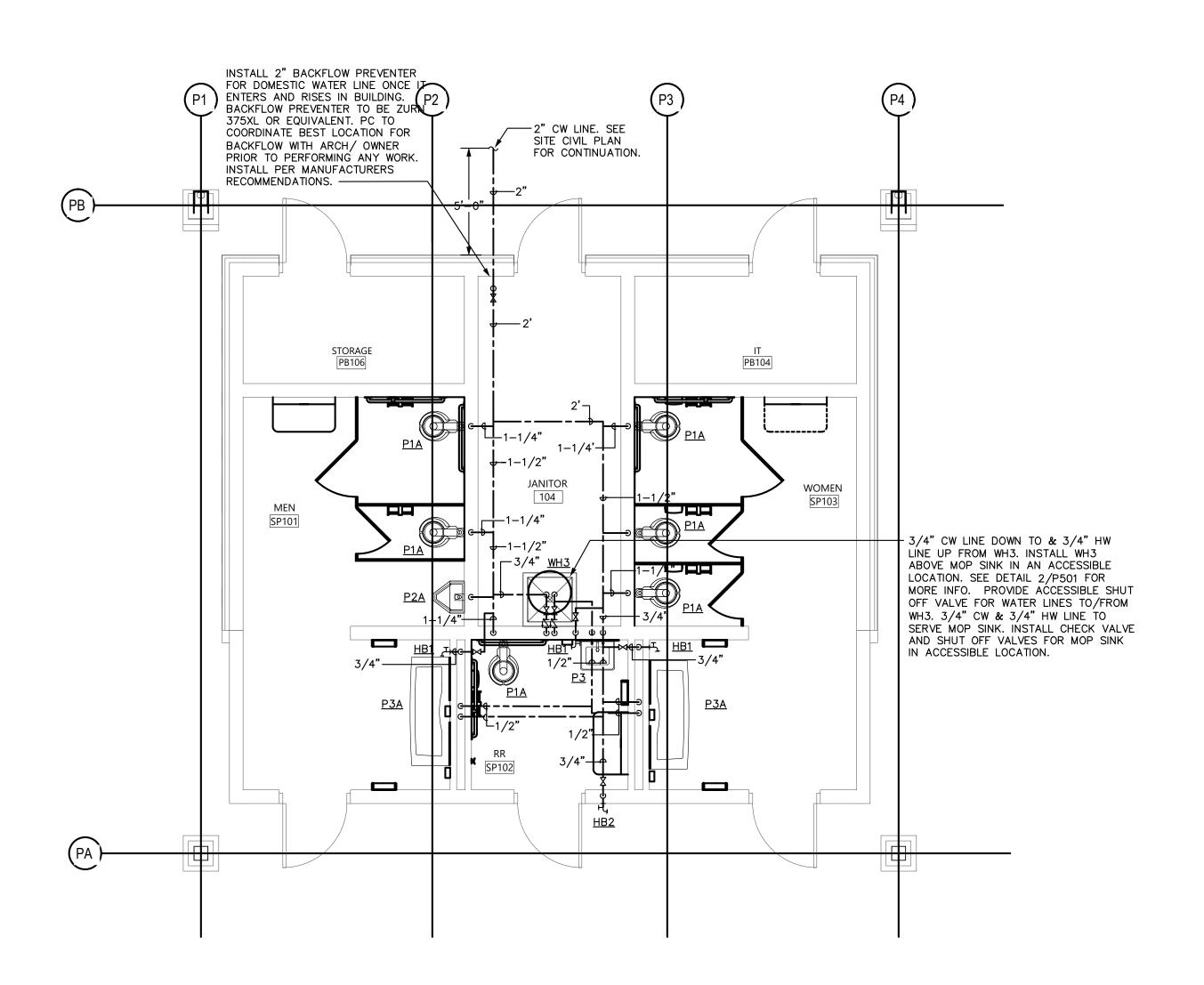


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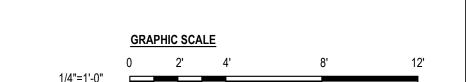
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P-101-PB

GRAPHIC SCALE



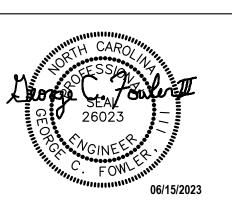
PICKLEBALL RR SUPPLY PIPING PLAN

1/4" = 1'-0"



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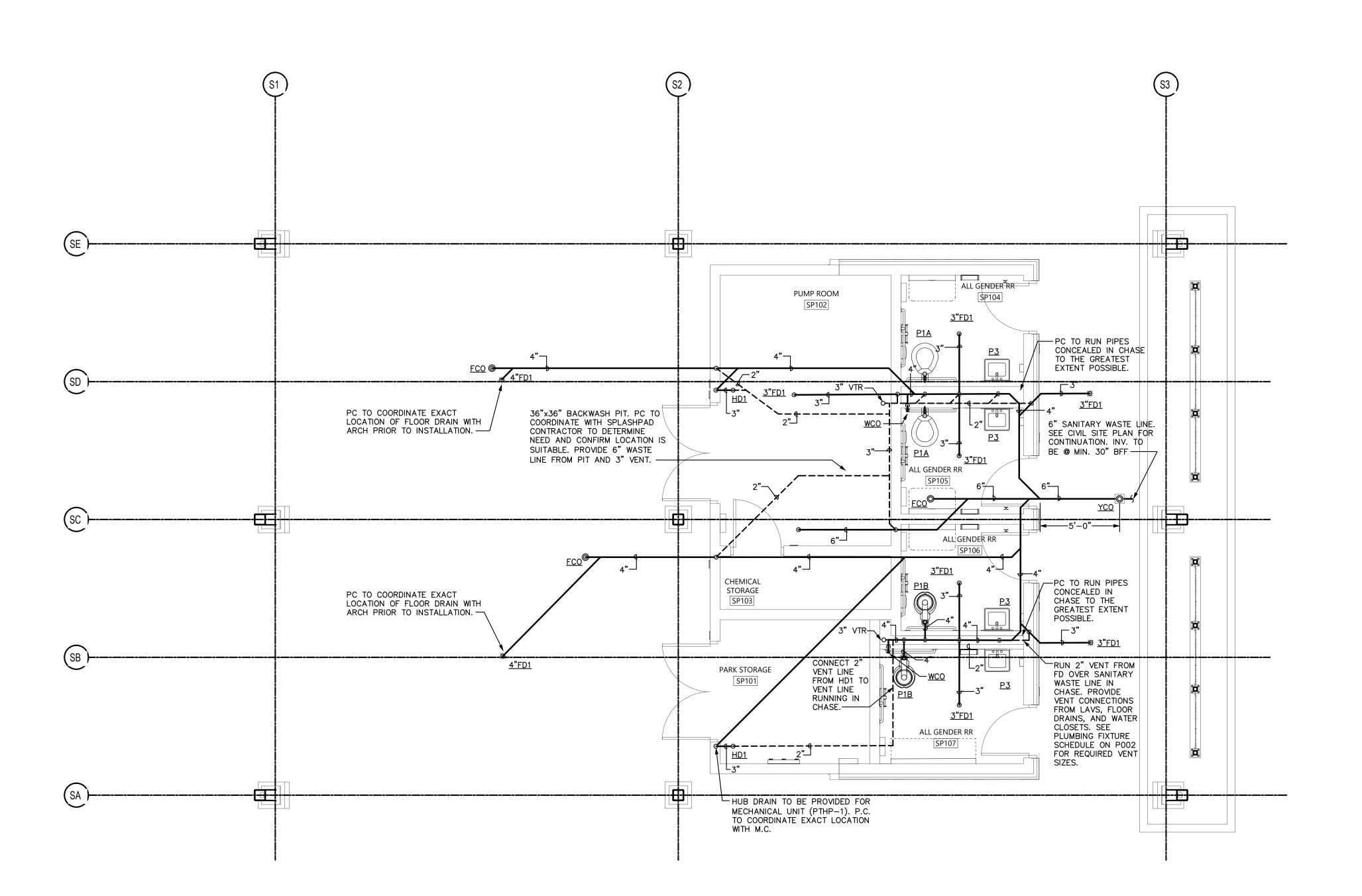




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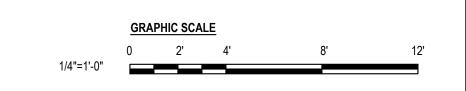
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P-201-PB

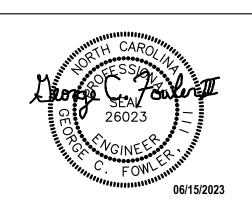


SPLASHPAD RR SANITARY WASTE PLAN

1/4" = 1'-0"



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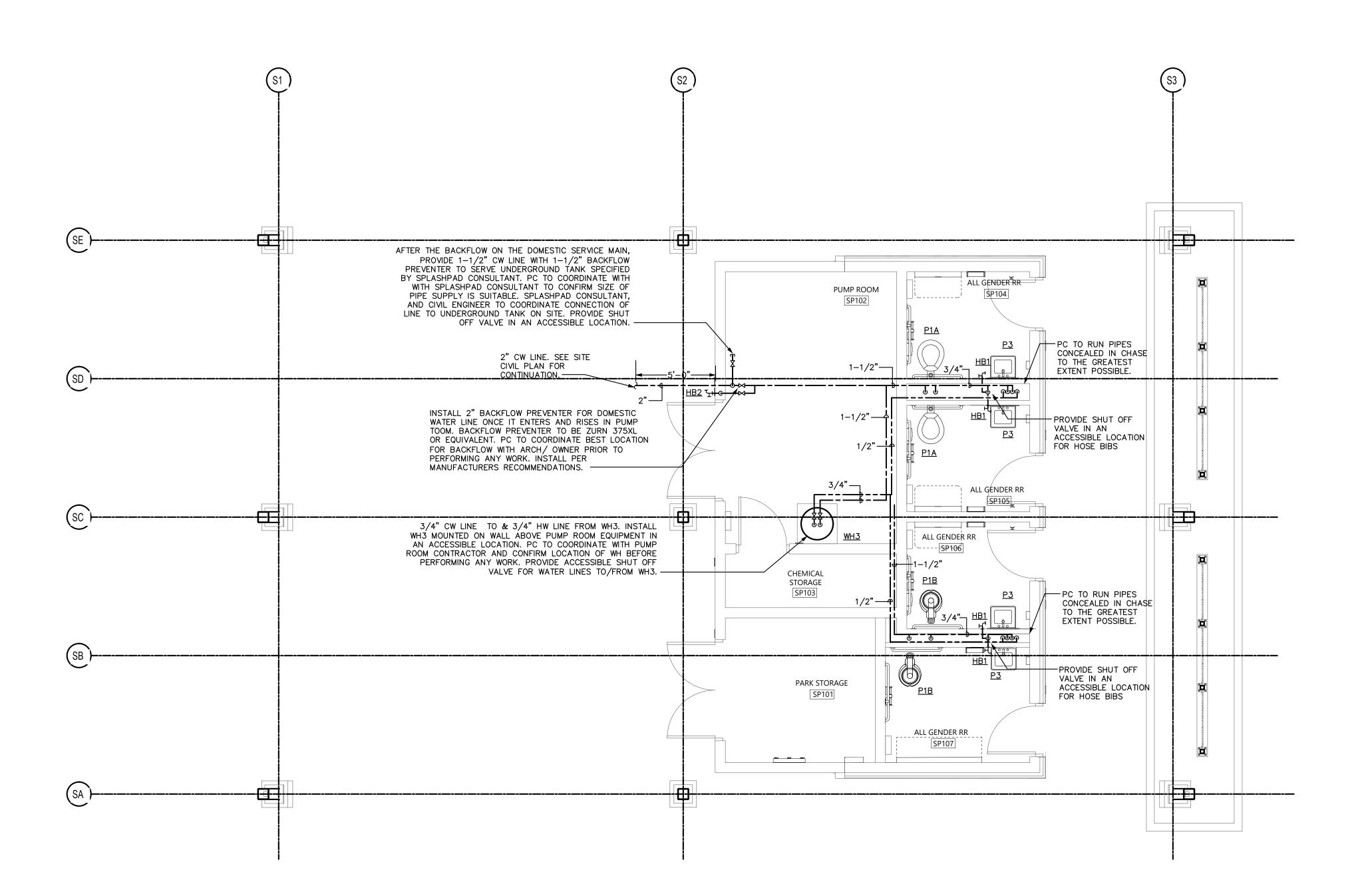


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SHEET NAME: SANITARY WASTE FLOOR PLANS

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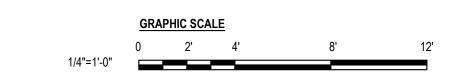
P-101-SP



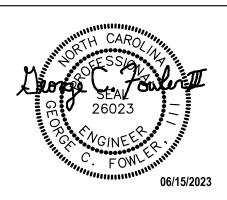
SPLASHPAD RR SUPPLY PIPING PLAN

1/4" = 1'-0"

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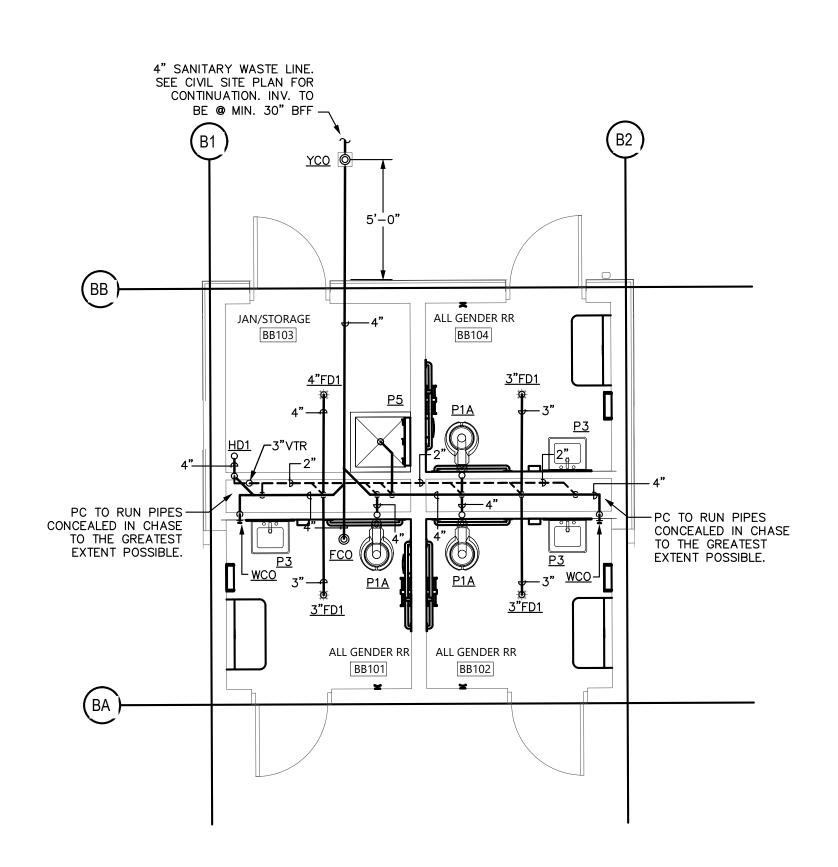
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SHEET NAME: SUPPLY PIPING FLOOR **PLANS**

SHEET NO: **P-201-SP**

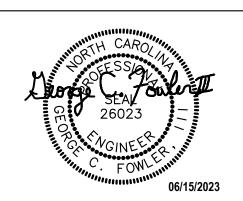


BASKETBALL RR SANITARY WASTE PLAN

1/4" = 1'-0"



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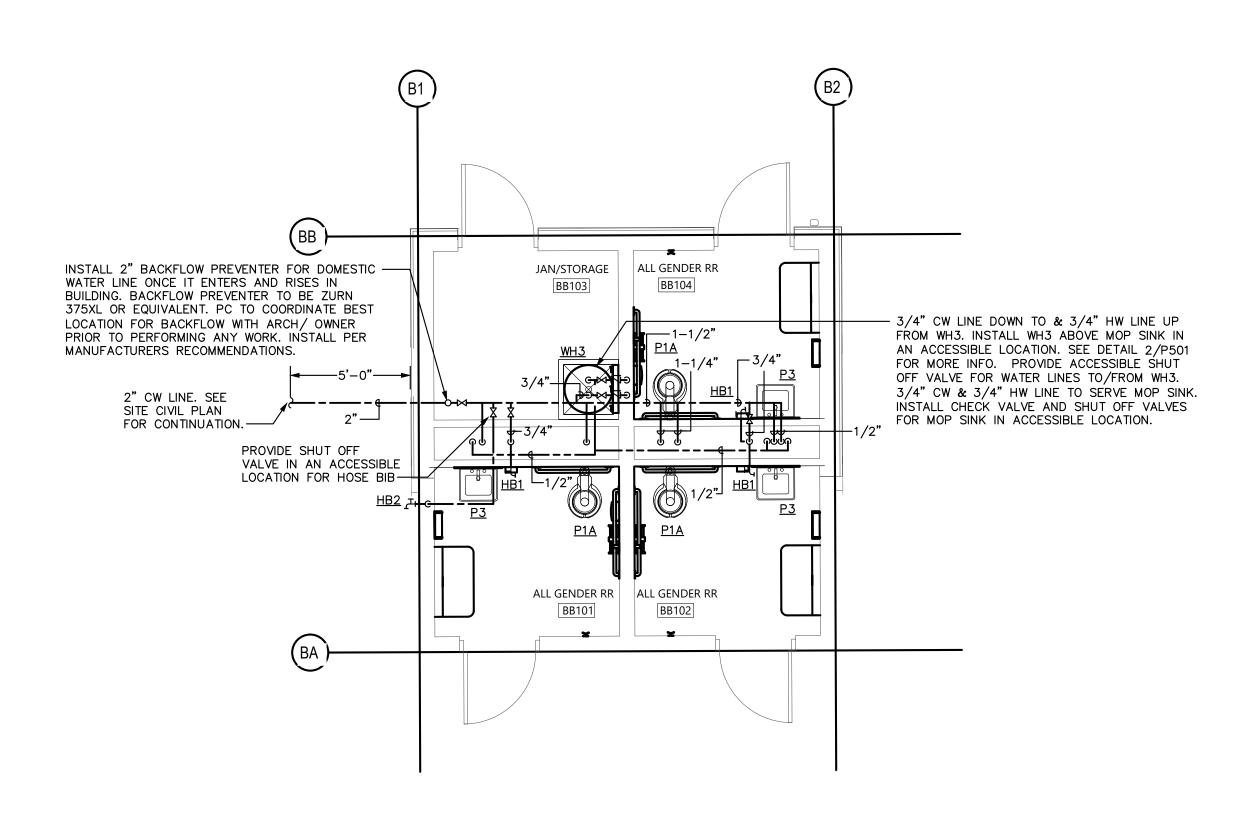


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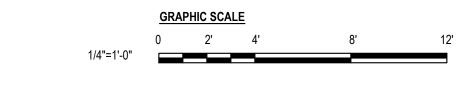
SHEET NO:
P-101-BB

GRAPHIC SCALE



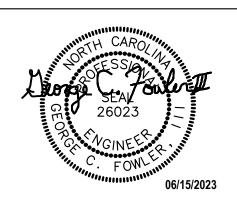
1 BASKETBALL RR SUPPLY PIPING PLAN

1/4" = 1'-0"



WOOLPERT

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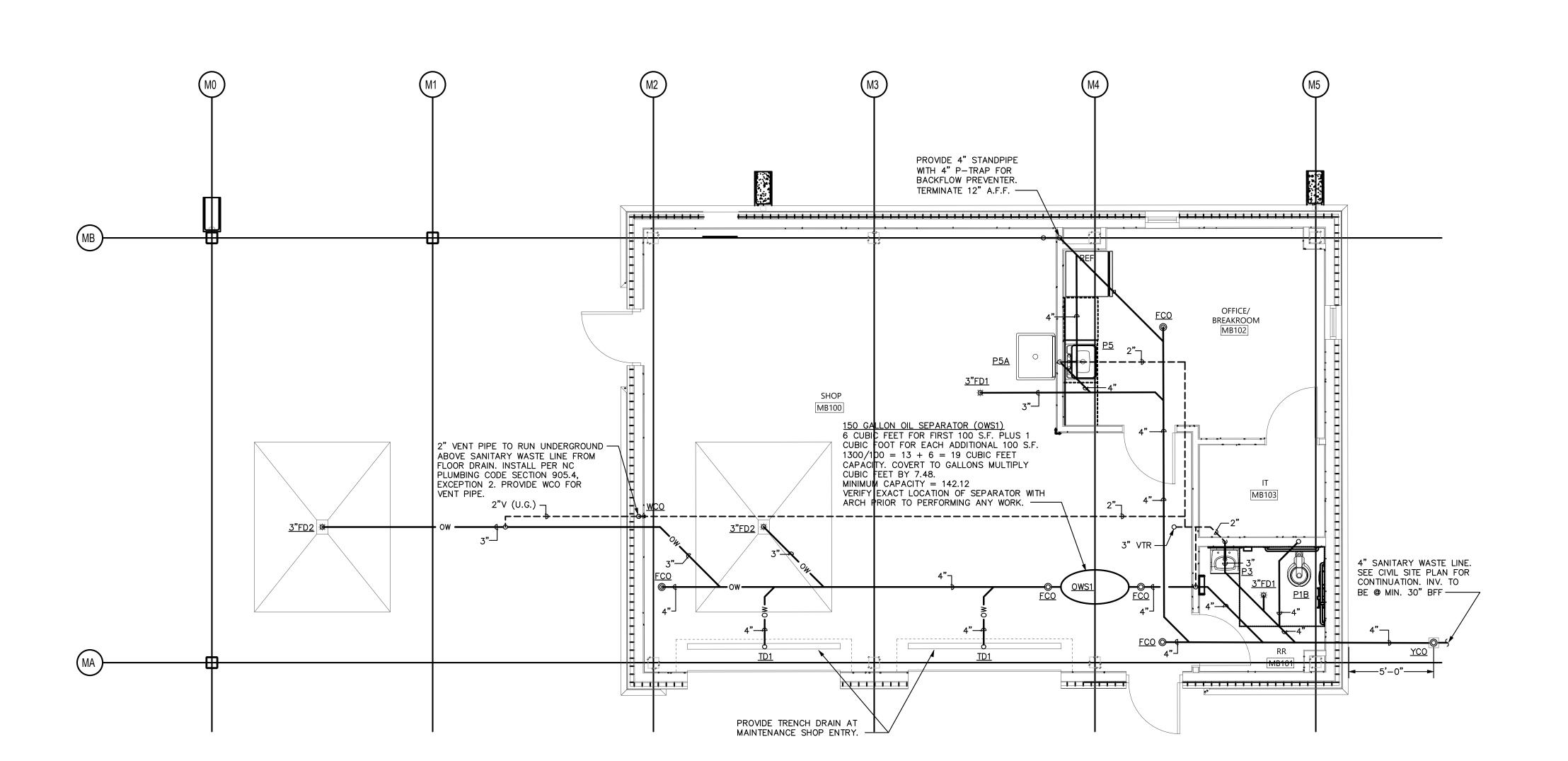




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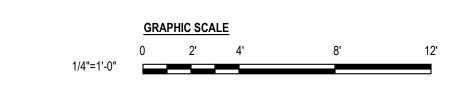
SHEET NAME: SUPPLY PIPING FLOOR **PLANS**

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MAINTENANCE BLDG SANITARY WASTE PLAN

1/4" = 1'-0"



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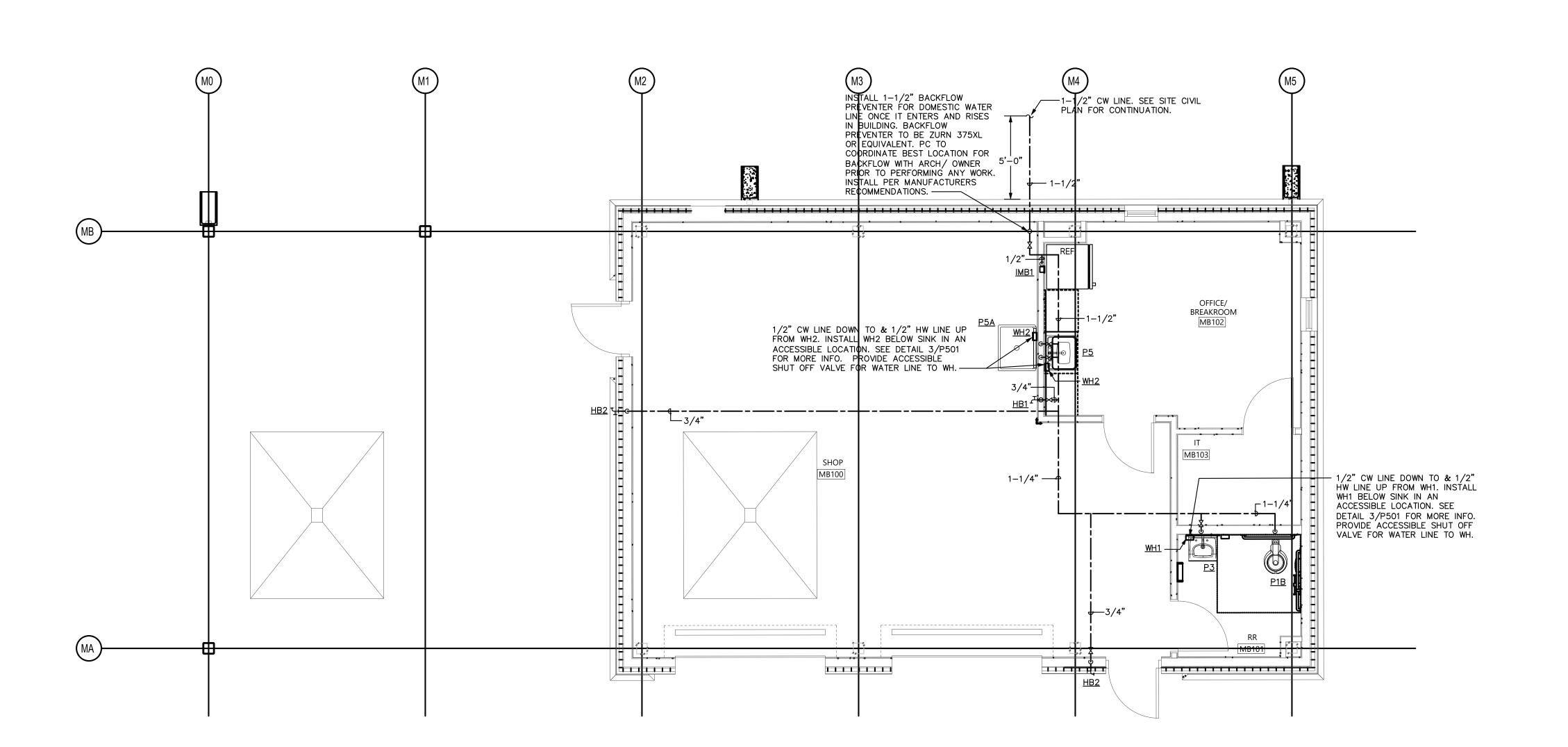




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SHEET NAME: SANITARY WASTE FLOOR PLANS

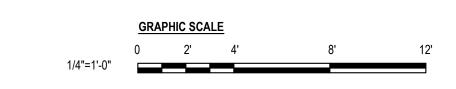
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P-101-MB



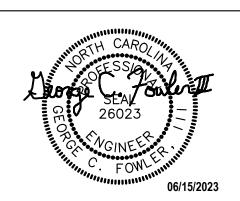
MAINTENANCE BLDG SUPPLY PIPING PLAN

1/4" = 1'-0"

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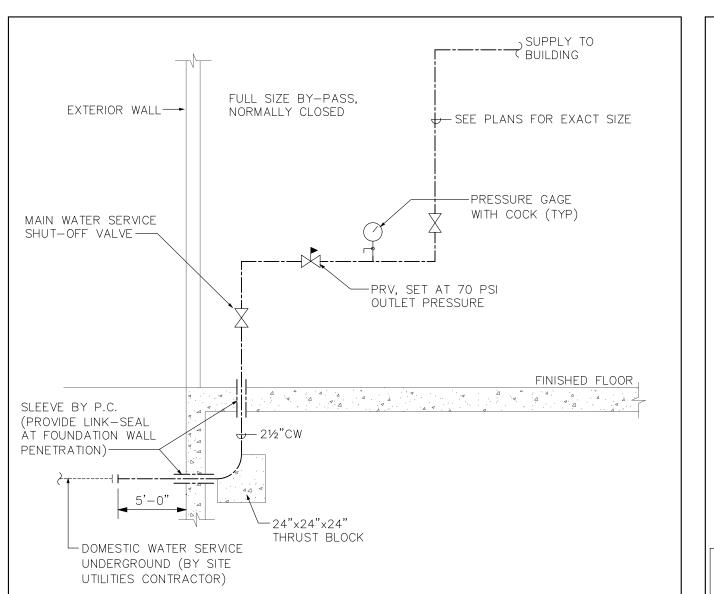


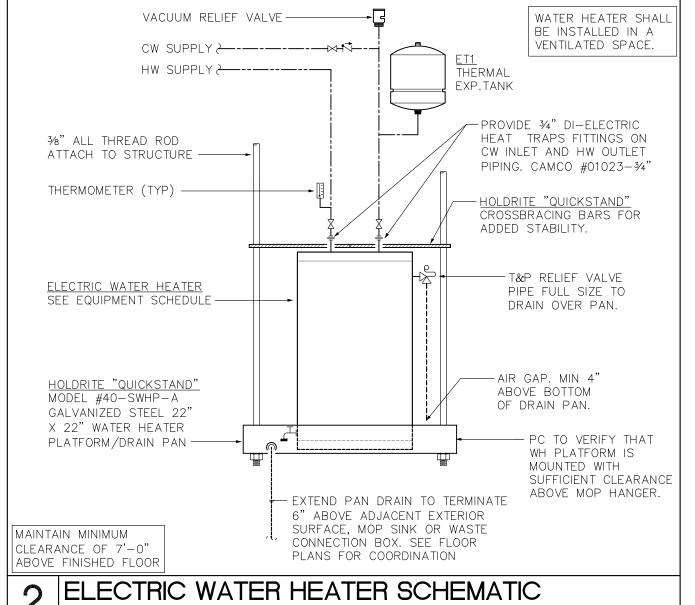


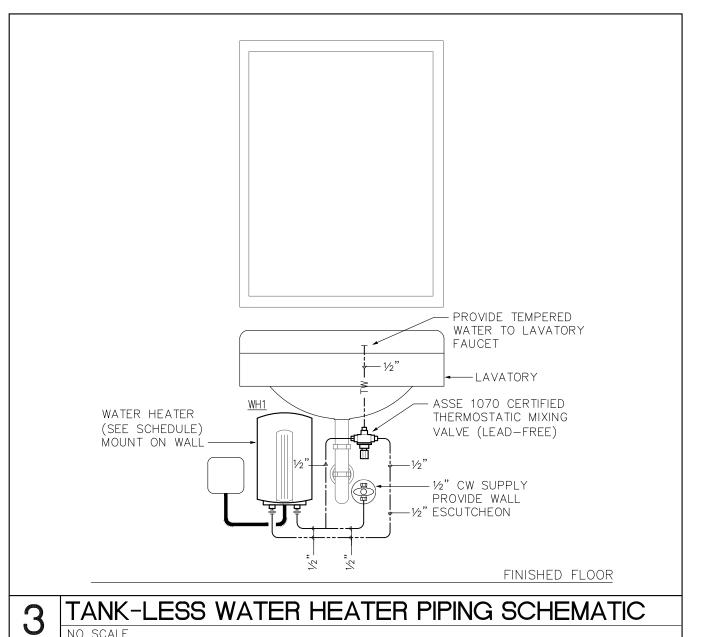
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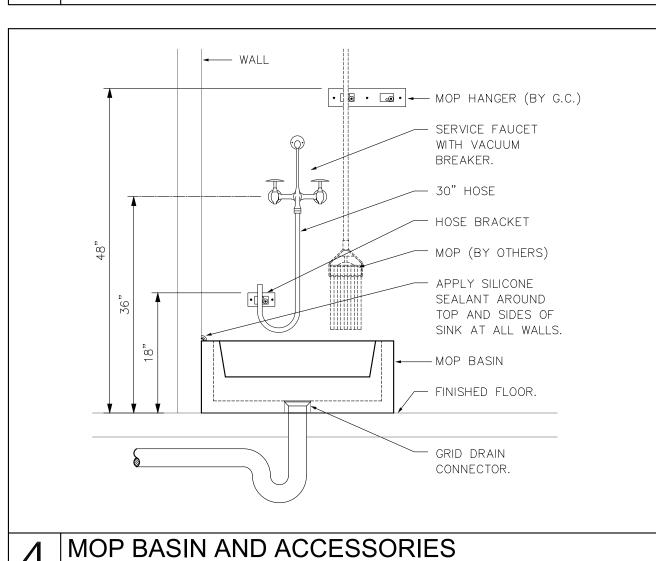
SHEET NAME: SUPPLY PIPING FLOOR **PLANS**

SHEET NO:
P-201-MB

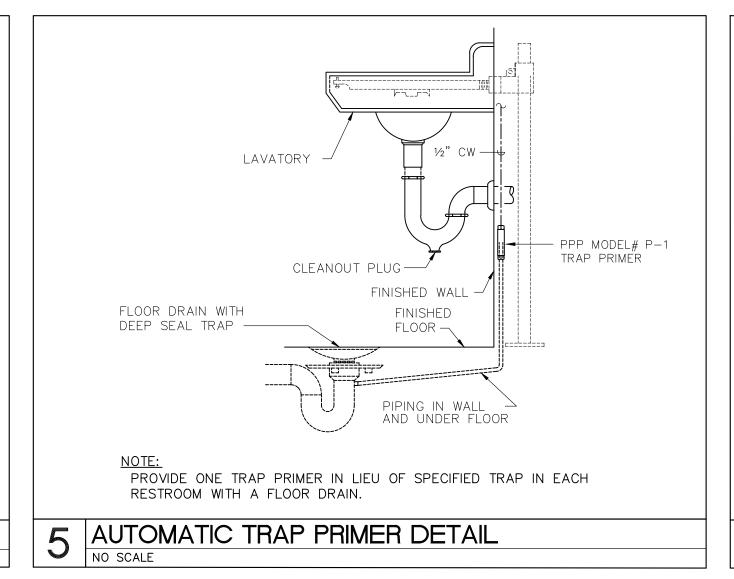




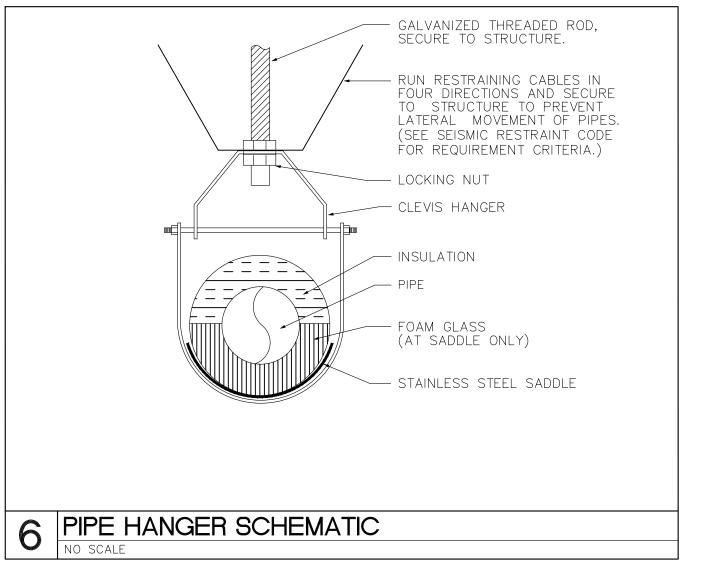


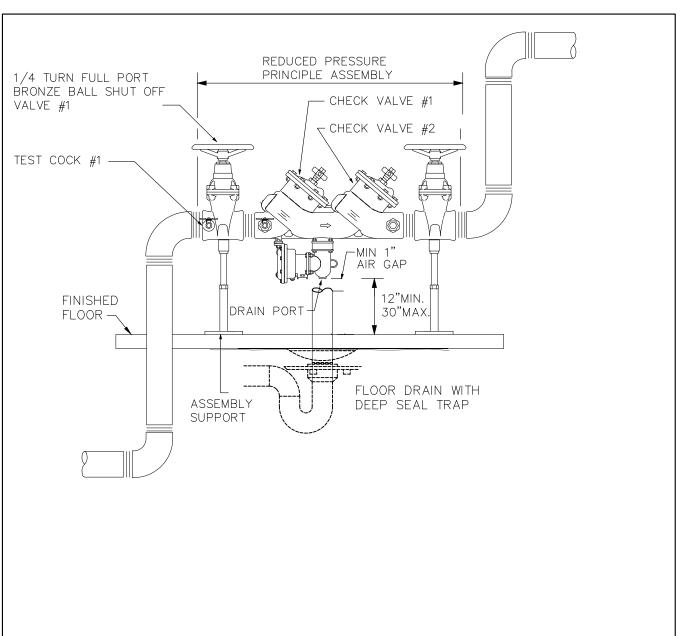


WATER SERVICE ENTRANCE SCHEMATIC

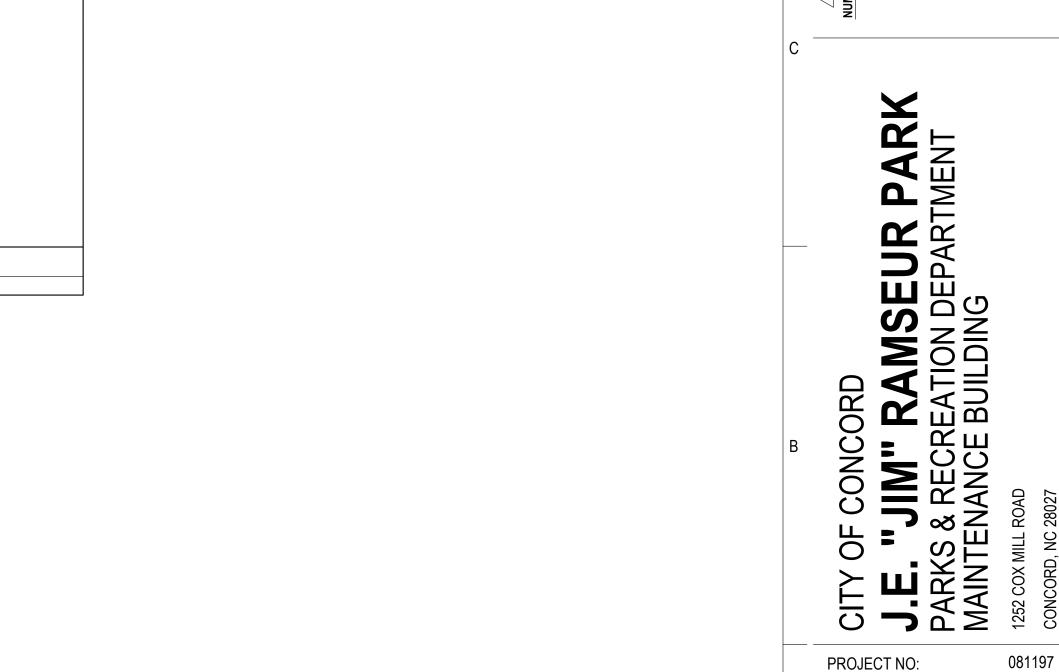


NO SCALE





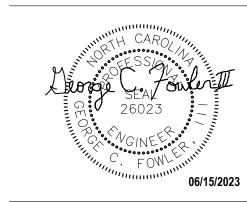
REDUCED PRESSURE PRINCIPLE ASSEMBLY



ISSUED FOR BIDDING

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SHEET NAME: **PLUMBING**

DATE ISSUED:

DESIGNED BY:

DRAWN BY: CHECKED BY:

DETAILS

SHEET NO:

06/15/2023

MCH

MCH

COMMERCIAL	ENERGY	EFFICIENCY	_	MECHANICAL	SUMMARY

501.1 METHOD OF COMPLIANCE ☐ NC SPECIFIC COMCHECK PROVIDED 2012 NCECC CHAPTER 5 (EQUAL TO ASHRAE 90.1-2010) 501.2 APPLICATION COMPLIANCE ☐ 506.2.1 EFFICIENT MECH EQUIPMENT 506.2.4 HI EFFICIENCY DOMESTIC HW 506.2.2 REDUCED LTG DENSITY 506.2.5 ONSITE RENEWABLE ENERGY ☐ 506.2.3 ENERGY RECOVERY SYSTEMS ☐ 506.2.6 DAYLIGHTING CONTROLS

301.1 CLIMATE ZONE 3A – CABARRUS COUNTY, NORTH CAROLINA

DESIGN CONDITIONS

EXTERIOR (ASHRAE 90.1-2010 TABLE D-1) WINTER DRY BULB SUMMER DRY BULB 74° F. SUMMER WET BULB INTERIOR (2018 NCECC SECTION 302.1) WINTER DRY BULB SUMMER DRY BULB *PROVIDE 5°F DEADBAND PER 503.2.4.2

503.2 HEATING & COOLING LOADS AND EQUIPMENT & SYSTEM SIZING

REFER TO SCHEDULES BUILDING HEATING LOAD REFER TO SCHEDULES BUILDING COOLING LOAD REFER TO SCHEDULES INSTALLED HEATING CAPACITY REFER TO SCHEDULES INSTALLED COOLING CAPACITY

503.2.3 & 506.2.1 - REQUIRED & INCREASED HVAC EQUIPMENT PERFORMANCE SYSTEM DESCRIPTION - FANS FOR VENTILATION, ELECT. WALL HEATERS, AND

DUCTLESS SPLIT FOR OFFICE HEATING/COOLING

MINIMUM HVAC EQUIPMENT EFFICIENCY COMPLIANCE — TABLE 503.2.3

☐ INCREASED HVAC EQUIPMENT EFFICIENCY COMPLIANCE - TABLE 506.2.1

EQUIP TYPE	SIZE CATEGORY (BTUH)	SUBCATEGORY	503.2.3 MINIMUM EFFICIENCY (b)	506.2.1 INCREASED EFFICIENCY	DESIGN <u>EFFIC.</u>
TABLE 5.3.2	.3(1) — UNITAR`	Y AIR CONDITIONER	S AND CONDENS	SING UNITS	
AIR COND, AIR COOLED	< 65,000 (<= 5 TONS)	SPLIT SYSTEM & SINGLE PACKAGE	13.0 SEER	15.0 SEER 12.5 EER	SEE SCHEDULE
TABLE C403	.2.3(2) - ELEC1	RICALLY OPERATE	D UNITARY AND	APPLIED HEA	AT PUMPS
AIR COOLED COOL MODE	< 65,000 (<= 5 TONS)	SPLIT SYSTEM & SINGLE PACKAGE	14.0 SEER	15.4 SEER	SEE SCHEDULE

. IPLVS ARE ONLY APPLICABLE TO EQUIPMENT WITH CAPACITY MODULATION. DEDUCT 0.2 FROM THE REQUIRED EERS AND IPLVS FOR UNITS WITH A HEATING SECTION OTHER THAN ELECTRIC RESISTANCE HEAT.

503.2.4 THRU 503.2.9

HVAC SYSTEMS ARE FULLY COMPLIANT WITH THE REQUIREMENTS FOR HVAC SYSTEM CONTROL, VENTILATION, ENERGY RECOVERY, DUCT AND PLENUM INSULATION AND SEALING, PIPING INSULATION, AND SYSTEM COMPLETION.

503.2.10 - AIR SYSTEM DESIGN AND CONTROL

ALL FANS INSTALLED ON THE PROJECT ARE BELOW 5 HP AND ARE EXEMPT FROM THESE REQUIREMENTS.

503.3 - SIMPLE HVAC SYSTEMS AND EQUIPMENT (PRESCRIPTIVE)

PROJECT CONSISTS OF ONLY DX SINGLE ZONE SYSTEMS FULLY COMPLIANT WITH THE SIMPLE PRESCRIPTIVE REQUIREMENTS OF 503.3.

FANS: COOK, GREENHECK, PENN, TWIN CITY AIR DISTRIBUTION: CARNES, METAL*AIRE, NAILOR, PRICE, TITUS FIRE DAMPERS: NAILOR, RUSKIN, POTTORFF, PREFCO, SAFE-AIRE DUCTLESS SPLIT SYSTEMS: DAIKIN, MITSUBISHI, PANASONIC, EMI ELECTRIC WALL HEATER: INDEECO, MARKEL, VULCAN PTHP: G.E., FRIEDRICH, AMANA, TRANE

EQUIVALENT MANUFACTURERS LISTING

OR AS INDICATED IN THE SPECIFICATIONS, PRIOR APPROVAL IS REQUIRED FOR ALL

MANUFACTURERS NOT LISTED. SEE SPECIFICATIONS FOR ADDITIONAL REQUIRMENTS.

LISTING OF MANUFACTURER'S NAME DOES NOT GUARANTEE APPROVAL. ALL EQUIPMENT MUST

MEET OR EXCEED QUALITY AND CAPACITIES OF SPECIFIED EQUIPMENT. FINAL APPROVAL WILL

BE BASED ON EQUIPMENT SUBMITTALS. ANY MANUFACTURER NOT LISTED BUT WISHING TO BID

THIS PROJECT SHALL SUBMIT A WRITTEN REQUEST A MINIMUM OF 14 DAYS PRIOR TO BID DATE

ALL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT TO COMPLY WITH BASIS OF DESIGN, INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, PIPING, SHEET METAL, ELECTRICAL REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC., SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT WILL BE APPROVED DURING CONSTRUCTION AND ALL COST WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.

ELECTRICAL/MECHANICAL DEMARCATION

REFER TO DETAIL 8/M-501 FOR MECHANICAL CONTRACTOR'S RESPONSIBILITIES RELATED TO ELECTRICAL DISCONNECTS, STARTERS AND WIRING OF MECHANICAL EQUIPMENT. ALL DISCONNECTS, STARTERS AND WIRING (LOAD SIDE OF DISCONNECTS) SHALL BE FURNISHED AND INSTALLED BY M.C. UNLESS OTHERWISE NOTED IN DETAIL 8/M-501. COORDINATE ALL ELECTRICAL REQUIREMENTS WITH E.C. PRIOR TO ASSEMBLING SHOP DRAWING SUBMITTALS OR ORDERING EQUIPMENT.

MECHANICAL GENERAL NOTES

- DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATION OF DOORS, WINDOWS, CEILING DIFFUSERS, ETC.
- 2. ALL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT TO COMPLY WITH BASIS OF DESIGN. INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, PIPING, SHEET METAL, ELECTRICAL, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC., SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT WILL BE APPROVED DURING CONSTRUCTION AND ALL COST WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR. THIS INCLUDES ANY MODIFICATIONS TO ANY ASSOCIATED MECHANICAL, PLUMBING, OR ELECTRICAL SYSTEMS REQUIRED BY THIS SPECIFIC MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 3. ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH THE LATEST SMACNA STANDARDS. ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTWORK SHALL BE WRAPPED WITH 2" THICK DUCT WRAP WITH VAPOR BARRIER. INSULATION (INCLUDING FLEXIBLE DUCT INSULATION) SHALL HAVE A MINIMUM INSTALLED R-VALUE OF 6.0. ROOFTOP UNIT RETURN DUCTWORK AND TRANSFER DUCTS SHALL BE LINED WITH 1" THICK FIBERGLASS DUCT LINER FOR ACOUSTICAL PURPOSES. DUCT DIMENSIONS ON PLANS ARE FREE AREA SIZE.
- 4. ALL DUCTWORK SHALL BE SEALED PER THE REQUIREMENTS OF THE NORTH CAROLINA MECHANICAL CODE. SEAL LOW PRESSURE SUPPLY, RETURN, OUTSIDE AIR, AND EXHAUST DUCTWORK FOR POSITIVE/NEGATIVE 2" PRESSURE CLASS, SMACNA SEAL CLASS A, SMACNA LEAKAGE CLASS 4.
- 5. ALL PIPING, DUCTS, VENTS, ETC., EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED AND COUNTERFLASHED IN A WATERPROOF MANNER.
- 6. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH THE WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS, TO AVOID INTERFERENCE.
- 7. THE MECHANICAL CONTRACTOR SHALL BALANCE ALL MECHANICAL SYSTEMS TO THE PERFORMANCE SPECIFICATIONS INDICATED ON PLANS AND PROVIDE THE ENGINEER WITH AN ELECTRONIC COPY OF A COMPLETE TEST AND BALANCE REPORT. THE REPORT IS TO BE ISSUED A MINIMUM OF TWO WEEKS PRIOR TO PROJECT COMPLETION. THE TEST AND BALANCE REPORT WILL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER. ANY ADDITIONAL TESTING, ADJUSTING AND BALANCING REQUIRED (AT ENGINEER'S REQUEST) AFTER REVIEW OF THE INITIAL REPORT SHALL BE PROVIDED AT NO ADDITIONAL COST. TESTING AND BALANCING CONTRACTOR TO CONFIRM FILTERS ARE CLEAN, AND FREE OF DEBRIS PRIOR TO BEGINNING WORK. THE MECHANICAL CONTRACTOR SHALL REPLACE ANY DIRTY FILTERS, AS NEEDED. TEST AND BALANCE REPORT TO BE COMPLETED BY AN INDEPENDENT, CERTIFIED TEST AND BALANCE CONTRACTOR.
- 8. UPON PROJECT COMPLETION, THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER INSTALLATION INFORMATION INCLUDING RECORD SUBMITTALS (WITH ANY SUBMITTAL REVIEW COMMENTS ADDRESSED) AND O&M MANUALS FOR EACH PIECE OF EQUIPMENT INCLUDING ALL SELECTED OPTIONS, THE NAME AND ADDRESS OF AT LEAST ONE SERVICE AGENCY, FULL CONTROL SYSTEM O&M AND CALIBRATION INFORMATION INCLUDING WIRING DIAGRAMS, SCHEMATICS, FULL SEQUENCE OF OPERATION, AND PROGRAMMED
- PROVIDE A ONE YEAR WARRANTY FOR ALL WORK PERFORMED BEGINNING ON THE DAY THE SYSTEM IS COMPLETELY OPERATIONAL AND ACCEPTABLE BY THE OWNER.
- 10. PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND ALL EQUIPMENT FOR MAINTENANCE AND FILTER REMOVAL.
- 11. CONDENSATE DRAIN PIPING SHALL BE TYPE 'K' HARD DRAWN COPPER AND SHALL BE INSULATED WITH 11/2" THICK FIBERGLASS INSULATION WITH A DENSITY OF 1.5 LB. PER CUBIC FOOT. INSULATION SHALL HAVE A FACTORY APPLIED PRESSURIZED VAPOR BARRIER JACKET WITH PRESSURE SENSITIVE ADHESIVE SELF-SEALING LAP. INSULATION AND JACKET SHALL BE RATED FOR INSULATION IN A RETURN AIR PLENUM.
- 12. ALL REFRIGERANT PIPE SHALL BE NITROGENIZED ACR COPPER TUBE. SIZE, INSULATE, AND INSTALL REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. REFRIGERANT PIPING INSULATION EXPOSED OUTDOORS SHALL BE COVERED WITH AN OUTER ALUMINUM
- 13. ANY DEVICE REQUIRING A THERMOSTAT FOR CONTROL SHALL BE FURNISHED WITH A THERMOSTAT WHETHER INDICATED ON THE DRAWINGS OR NOT.
- 14. INSTALL THE TOP OF ALL THERMOSTATS, SENSORS, AND SWITCHES AT 4'-0" (MAXIMUM) ABOVE FINISH FLOOR. COORDINATE EXACT THERMOSTAT LOCATION WITH OWNER PRIOR TO INSTALLATION, ANY DEVICE ON A PERIMETER WALL SHALL BE MOUNTED ON A FOAM-FILLED. ELECTRICAL BOX, WITH ALL GAPS BETWEEN BOX AND WALL SEALED TO PREVENT INFILTRATION.
- 15. CONTRACTOR SHALL LOCATE EXHAUST FANS, OUTLETS, AND GAS FLUES A MINIMUM OF 10'-0" FROM ANY OUTSIDE AIR INTAKE AND 3'-0" AWAY FROM ANY OPERABLE BUILDING OPENING.
- 16. DUCTWORK AND PIPING PASSING THROUGH/ABOVE ELECTRICAL ROOMS SHALL BE CLOSELY
- 17. EQUIPMENT OPERATED DURING CONSTRUCTION SHALL USE FILTERED MEDIA TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING COILS, DUCTWORK SYSTEMS, AIR TERMINALS ETC. AT COMPLETION OF CONSTRUCTION, MECHANICAL CONTRACTOR SHALL CLEAN ALL SYSTEMS WITH ALL CONTROL DEVICES WIDE OPEN AND REMOVE ANY REMAINING DEBRIS PRIOR TO TEST AND BALANCING. MECHANICAL CONTRACTOR SHALL REPLACE ALL FILTRATION WITH NEW FILTERS AT COMPLETION OF CONSTRUCTION. ANY DUCTWORK, AIR TERMINALS, AND/OR OTHER EQUIPMENT UPSTREAM OF FILTRATION SHALL BE CLEANED THOROUGHLY OF
- 18. MECHANICAL CONTRACTOR SHALL PROVIDE PRE-PRINTED COLOR-CODED PIPE LABELS WITH 1-1/2" HIGH LETTERING INDICATING SERVICE AND FLOW DIRECTION. PLASTIC PIPE LABELS UTILIZED IN A RETURN AIR PLENUM SHALL BE LISTED/APPROVED FOR USE IN A RETURN AIR PLENUM. ALL PIPING TO MATCH EXISTING FACILITIES STANDARD (IF APPLICABLE).

REFRIGERANT PIPING: YELLOW BACKGROUND, BLACK LETTERING

19. ALL MECHANICAL EQUIPMENT SHALL BE U.L. LISTED AND LABELED AS A COMPLETE PACKAGE, NOT THROUGH INDIVIDUAL COMPONENTS OR PARTS. PROVIDE REQUIRED 3RD PARTY FIELD UL LISTING SERVICES AS REQUIRED TO COMPLY.

MECHANICAL DRAWING INDEX

SHEET# SHEET TITLE M - 001MECHANICAL LEGEND, NOTES, & SCHEDULES M - 002MECHANICAL SCHEDULES

M-101-PB MECHANICAL FLOOR PLAN M-101-SP MECHANICAL FLOOR PLAN M-101-BB MECHANICAL FLOOR PLAN M-101-MB MECHANICAL FLOOR PLAN

MECHANICAL DETAILS

MECHANICAL LEGEND

DESCRIPTION <u>ABBR.</u> **SYMBOL** CONDENSATE DRAIN PUMPED CONDENSATE ——— PD — PD THERMOSTAT / TEMP SENSOR (4'-0" AFF TO TOP) S SWITCH (4'-0" AFF TO TOP) \boxtimes SUPPLY AIR DIFFUSER (4-WAY)

EXHAUST AIR GRILLE DOUBLE LINE DUCTWORK SINGLE LINE DUCTWORK

20"x14" FLAT OVAL DUCT 20/14 20"x14" RECTANGULAR DUCT 20x14 20"x14" RECTANGULAR DUCT LINED 20x14L 8ø 8" DIAMETER ROUND DUCT DUCT MOUNTED SMOKE DETECTOR

M.C.

E.C.

P.C.

N.I.C.

AFF

DN

ПP

W/ ACCESS DOOR STATIC-PRESSURE SENSOR М MOTORIZED DAMPER BD

BACKDRAFT DAMPER

MECHANICAL CONTRACTOR

ELECTRICAL CONTRACTOR

PLUMBING CONTRACTOR

ABOVE FINISHED FLOOR

NOT IN CONTRACT

DOWN

UP

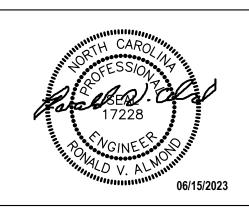
CARBON MONOXIDE SENSOR CO2 CARBON DIOXIDE SENSOR UNDERCUT DOOR √_(U)-

COORDINATED WITH THE ELECTRICAL CONTRACTOR. DUCTWORK OR PIPING SHALL NOT BE LOCATED ABOVE ELECTRICAL PANELS.

CONSTRUCTION DEBRIS BEFORE HANDING OVER TO OWNER.

OTHERWISE, PIPE LABELS SHALL MATCH THE FOLLOWING:

WOOLPERT ARCHITECTURE ENGINEERING GEOSPATIAL 13860 BALLANTYNE CORPORATE PLACE SUITE 425



CHARLOTTE, NC 28227

800.414.1045





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081197 PROJECT NO: 06/15/2023 DATE ISSUED: **DESIGNED BY:** CAH CAH DRAWN BY: RVA CHECKED BY:

SHEET NAME: MECHANICAL LEGEND, **NOTES AND** SCHEDULES

SHEET NO:

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DU	CT	LESS SPI	LIT SY	<u> STEMS (I</u>	DX C	COOLING +	HEATING (ONLY)			
INDOO	R UNIT	Ι			OUTDOO	R UNIT					
CVMDOL	<u>CFM</u>	ELECTRICAL DATA	<u>OPERATING</u>	<u>MANUFACTURER</u>	CVMDOL	COOLING CAPACITY	HEATING CAPACITY	COMPRESSOR	ELEC [*]	TRICAL	<u>DATA</u>
<u>SYMBOL</u>	<u>CI IVI</u>	MCA VOLTAGE	WEIGHT	DVIKIN	<u>SYMBOL</u>	TO (BILLY) SHO (BILLY)	(RTIIH)	RLA	MCA	ELICE \	VOLTACE

	<u>INDOO</u>	R UNIT					<u>OUTDOO</u>	R UNIT									
ſ	CVMDOL	<u>CFM</u>	ELECTE			MANUFACTURER	CVMDOL	COOLING	CAPACITY	HEATING CAPACITY	COMPRESSOR	ELEC	TRICAL	DATA	<u>OPERATING</u>	MANUFACTURER	ALLOWABLE LINE-SET
ı	SYMBOL	<u>CI W</u>	<u>MCA</u>	<u>VOLTAGE</u>	<u>WEIGHT</u>	<u>DAIKIN</u>	SYMBOL	TC (BTUH)	SHC (BTUH)	(BTUH)	<u>RLA</u>	<u>MCA</u>	<u>FUSE</u>	<u>VOLTAGE</u>	<u>WEIGHT</u>	<u>DAIKIN</u>	<u>LENGTHS</u>
	<u>AC-1</u>	770	0.4	208V-1ø	38 LBS	FFQ18Q2VJU	<u>CU-1</u>	18,000	16,000	19,000	18.9	19.5	20	208V-1ø	96 LBS	RKS18LVJU	98' TOTAL, 66' VERT.
	<u>AC-2</u>	716	_	208V-1ø	31 LBS	FTK24AXVJU	<u>CU-2</u>	21,200	15,670	_	13.0	13.4	20	208V-1ø	106 LBS	RK24AXJU	98' TOTAL, 65' VERT.
Г																	

- 1. ALL UNITS SHALL BE U.L. LISTED AND HAVE A MINIMUM SEER2 OF 14.3.
- 2. COOLING CAPACITIES ARE BASED ON 95° AMBIENT, 80° ENTERING AIR DRY BULB, 67° ENTERING AIR WET BULB. AIRFLOWS INDICATED ARE AT 'HIGH' SPEED.
- MOUNT GROUND-MOUNTED UNITS ON 4" CONCRETE PAD.
- 4. PROVIDE MANUFACTURER'S SUGGESTED CLEARANCES AROUND UNIT.
- 5. PROVIDE UNITS WITH MANUFACTURER'S WIND BAFFLES OR LOW AMBIENT CONTROLS FOR OPERATION DOWN TO 0° F, INVERTER COMPRESSOR, 7-DAY
- PROGRAMMABLE THERMOSTAT (WALL-MOUNTED), NON-LOCKING DISCONNECT FOR INDOOR UNIT, INTEGRAL IN-LINE CONDENSATE PUMP.
- 6. PROVIDE OUTDOOR UNITS WITH 6 YEAR EXTENDED COMPRESSOR WARRANTY.
- 7. SEE MANUFACTURER'S RECOMMENDATIONS FOR REQUIRED ADDITIONAL REFRIGERANT CHARGE AND RECOMMENDED LINE-SET LENGTHS.
- 8. POWER SUPPLY TO CONDENSING UNIT IS A SINGLE POINT ELECTRICAL CONNECTION FOR THE SYSTEM (A/C UNIT AND CONDENSING UNIT). THE ELECTRICAL CONTRACTOR SHALL PROVIDE POWER TO THE CONDENSING UNIT AND FROM THE CONDENSING UNIT TO THE A/C UNIT. MC SHALL PROVIDE ALL CODE REQUIRED DISCONNECT SWITCHES.
- REFRIGERANT PIPING AND WIRING FOR WALL-MOUNTED INDOOR UNITS SHALL BE ROUTED IN WALL WHERE POSSIBLE. ANY EXPOSED PIPING SHALL BE PAINTED TO MATCH WALL-FINISH.

PICKLEBALL RR VENTI	LATION CAL	CULATIONS (NCMC 2018, 9	SECT 403	3):				
OCCUPANCY CLASSIFICATION	PEOPLE O/A RATE IN BREATHING ZONE (CFM/PERSON)	AREA O/A RATE IN BREATHING ZONE (CFM/SQ. FT.)	DEFAULT OCCUPANCY DENSITY (PEOPLE/1000 SQ. FT.)		AREA (SQ. FT.)		CALCULATED PEOPLE O/A (CFM)	CALCULATED AREA O/A (CFM)	CALCULATE AREA E/A (CFM)
TOILET ROOMS - PUBLIC	0	0.000000	0	70.000000	7	(FIXTURES)	0	0	490
			BLDG TOTAL (OUTSIDE AIR REQ'	D (Ez=0.8, C	L CFM)		0	
			BUILDING TO	TAL OUTSIDE AIR	PROVIDED (C	FM)		O*	
					BUILDING	TOTAL EXHA	UST AIR REQU	IRED (CFM)	490
* MAKE-UP AIR PROVIDED VIA EXTERIOR LOUV	ERS.				BUILDING	TOTAL EXHA	UST AIR PROV	IDED (CFM)	800
SEE PLANS FOR SIZING AND LOCATIONS									

MAINTENANCE BLDG	VENTILATION	CALCULATION	ONS (NCMC 2	2018, SEC	T 403):				
OCCUPANCY CLASSIFICATION	PEOPLE O/A RATE IN BREATHING ZONE (CFM/PERSON)		DEFAULT OCCUPANCY DENSITY (PEOPLE/1000 SQ. FT.)	EXHAUST AIRFLOW RATE (CFM/SQ. FT.)	AREA (SQ. FT.)	CALCULATED OCCUPANCY (PEOPLE)	CALCULATED PEOPLE O/A (CFM)	CALCULATED AREA O/A (CFM)	CALCULATED AREA E/A (CFM)
OFFICE	5	0.060000	5	0.000000	182	1	5	11	0
TOILET ROOMS — PUBLIC	0	0.000000	0	70.000000	1	(FIXTURES)	0	0	70
			BLDG TOTAL (OUTSIDE AIR REQ'	D (Ez=0.8, 0	CFM)	2	20	
			BUILDING TOT	TAL OUTSIDE AIR	PROVIDED (C	FM)	2	0*	
					BUILDING	TOTAL EXHA	UST AIR REQUI	RED (CFM)	70
* MAKE-UP AIR PROVIDED VIA EXTERIOR LOU SEE PLANS FOR SIZING AND LOCATIONS	IVERS.				BUILDING	TOTAL EXHA	UST AIR PROVI	DED (CFM)	850

SPLASH PAD RR VENTI	LATION CAL	CULATIONS	(NCMC 2018,	SECT 403	3):			_	
OCCUPANCY CLASSIFICATION	PEOPLE O/A RATE IN BREATHING ZONE (CFM/PERSON)		DEFAULT OCCUPANCY DENSITY (PEOPLE/1000 SQ. FT.)		AREA (SQ. FT.)	CALCULATED OCCUPANCY (PEOPLE)	CALCULATED PEOPLE O/A (CFM)	CALCULATED AREA O/A (CFM)	CALCULATED AREA E/A (CFM)
TOILET ROOMS - PUBLIC	0	0.000000	0	70.000000	4	(FIXTURES)	0	0	280
			BLDG TOTAL	OUTSIDE AIR REQ'	D (Ez=0.8, C	FM)		0	
			BUILDING TO	TAL OUTSIDE AIR	PROVIDED (CI	-M)	()*	
					BUILDING	TOTAL EXHA	UST AIR REQU	IRED (CFM)	280
* MAKE-UP AIR PROVIDED VIA EXTERIOR LOUVE	RS.				BUILDING	TOTAL EXHA	UST AIR PROV	IDED (CFM)	675
SEE PLANS FOR SIZING AND LOCATIONS									

BASKETBALL RR VENT	ILATION CAL	CULATIONS	(NCMC 2018,	SECT 40	3):				
OCCUPANCY CLASSIFICATION	PEOPLE O/A RATE IN BREATHING ZONE (CFM/PERSON)		DEFAULT OCCUPANCY DENSITY (PEOPLE/1000 SQ. FT.)		AREA (SQ. FT.)	CALCULATED OCCUPANCY (PEOPLE)	CALCULATED PEOPLE O/A (CFM)	CALCULATED AREA O/A (CFM)	CALCULATED AREA E/A (CFM)
TOILET ROOMS — PUBLIC	0	0.000000	0	70.000000	3	(FIXTURES)	0	0	210
			BLDG TOTAL (DUTSIDE AIR REQ'I) (Ez=0.8, C	EFM)		0	
			BUILDING TOT	AL OUTSIDE AIR F	PROVIDED (CI	-M)		0	
					BUILDING	TOTAL EXHA	UST AIR REQU	IRED (CFM)	210
					BUILDING	TOTAL EXHA	UST AIR PROV	IDED (CFM)	400
									1

FA	N SCHEDULE												
SYMBOL	LOCATION	TYPE	<u>CFM</u>	APPROX.	DRIVE	FAN RPM	<u>E</u> L	ECTRICAL	DATA		<u>MANUFACTURER</u>	ACCESSORIES CONTRO	
<u>3 IMBUL</u>	LOCATION	<u>IIFE</u>	CFIVI	<u>S.P.</u>	DICIVE	17/14 131 141	<u>VFD</u>	<u>WATTS</u>	<u>MOCP</u>	<u>VOLTAGE</u>	<u>GREENHECK</u>	ACCESSORIES	CONTROLS
<u>F-1</u>	JAN STORAGE BB103	INLINE	400	0.5	DIRECT	1,175	NO	153		120/1/60	CSP-A780	A,B,C,D,E,F	3
<u>F-2</u>	JANITOR PB104	INLINE	800	0.5	DIRECT	1,009	NO	191		120/1/60	CSP-A1410	A,B,C,D,E,F	3
<u>F-3</u>	PARK STORAGE SP101	INLINE	400	0.5	DIRECT	1,175	NO	153		120/1/60	CSP-A780	A,B,C,D,E,F	3
<u>F-4</u>	CHEMICAL STORAGE SP103	INLINE	100	0.5	DIRECT	824	NO	68		120/1/60	CSP-B150	A,B,C,D,E,F	4
<u>F-5</u>	PUMP ROOM SP102	INLINE	175	0.5	DIRECT	941	NO	623		120/1/60	CSP-A290	A,B,C,D,E,F	1
<u>F-6</u>	SHOP MB100	INLINE	750	0.5	DIRECT	978	NO	168		120/1/60	CSP-A1410	A,B,C,D,E,F	5
- 7	DD MD101	CADINET	100	0.25	DIDECT	1 061	NO	10		120 /1 /60	CD 4125	ABDI	7

ACCESSORIES

- A: DISCONNECT SWITCH D: HANGING BRACKETS G: MAGNETIC STARTER WITH AUXILIARY J: GREASE TRAP
- WITH VIBRATION ISOLATION CONTACTS B: BACKDRAFT DAMPER E: BELT GUARD H: PREFAB. ROOF CURB C: ACOUSTICAL LINING F: EXTENDED LUBE LINES I: BIRDSCREEN

- 1: CONTROLLED BY BUILDING AUTOMATION SYSTEM
- 2: ROOM THERMOSTAT 3: ROOM OCCUPANCY SENSOR - INPUT FROM ANY ASSOCIATED ROOM OCC. SENSOR SHALL START FAN.
- 4: CONTINUOUS OPERATION 5: MANUAL WALL MOUNTED 2-HR TIMER SWITCH

- 1. ALL FANS SHALL BE U.L. LISTED AND LABELED AND SHALL BE AMCA CERTIFIED FOR SOUND AND AIR FLOW. ALL FANS INSTALLED INSIDE, ABOVE, OR ADJACENT TO OCCUPIED SPACES SHALL HAVE A MAXIMUM 9.0 INLET SONE LEVEL.
- 2. ALL FANS SHALL BE SUPPLIED BY ONE MANUFACTURER UNLESS NOTED OTHERWISE.
- 3. MECHANICAL CONTRACTOR SHALL PROVIDE MAGNETIC STARTER WITH AUXILIARY CONTACTS AS REQUIRED.
- 4. INSTALL INLINE FANS TIGHT TO BOTTOM OF STRUCTURE
- 5. FAN F-4 SHALL BE NON-CORROSIVE MATERIAL DUE TO PROXIMITY TO CHEMICALS.

ELECTRIC WALL HEATER SCHEDULE

		· · · · ·						
CAMBOI	LOCATION	CEM	IZM		<u>MOTOR</u>		<u>MANUFACTURER</u>	ACCECCODIEC
SYMBOL	LOCATION	<u>CFM</u>	<u>KW</u>	R.P.M.	<u>H.P.</u> (AMPS)	<u>VOLTAGE</u>	<u>MARKEL</u>	ACCESSORIES
<u>EWH-1</u>	RR & JANITOR	175	1.5	600	12.5	120V-1ø	E3323TD-RP	A,B,C
<u>EWH-2</u>	PUMP, STOR. & SHOP	175	2.25	600	10.8	208V-1ø	HF3325TD-RP	A,B,C

- 1. HEAT CAPACITY BASED ON 65°F E.A.T.
- 2. SEE PLANS FOR TYPE OF THERMOSTAT REQUIRED (WALL MOUNTED OR UNIT MOUNTED). UNIT HEATERS SHOWN WITHOUT THERMOSTAT INDICATED SHALL BE PROVIDED WITH A UNIT MOUNTED THERMOSTAT.
- 3. SET TO MAINTAIN 45°F.

- <u>ACCESSORIES</u>
- A: DISCONNECT SWITCH B: INTEGRAL THERMOSTAT

K: INLET GUARD

L: EXHAUST GRILL

- C: SURFACE MOUNT OR RECESSED WALL ENCLOSURE PER PLANS

*ENSURE WALL HEATER IN MECHANICAL STORAGE ROOM IS CORROSION RESISTANT.

GRILLE AND DIFFUSER SCHEDULE

<u>SYMBOL</u>	<u>SERVICE</u>	CFM RANGE	FACE SIZE	NECK SIZE	<u>TYPE</u>	<u>OBD</u>	<u>PRICE</u>
Α	EXHAUST	51-125	8x8	6x6	SINGLE DEFLECTION	YES	630
		126-305	14x8	12x6	SINGLE DEFLECTION	YES	630
В	TRANSFER		26x14	24x12	SINGLE DEFLECTION	NO	630

- 1. ALL DEVICES SHALL BE FURNISHED WITH AN ENAMEL OFF-WHITE FINISH, PROVIDE COLOR SAMPLE SELECTIONS TO ARCH FOR REVIEW.
- 2. ALL DEVICES SHALL BE FURNISHED WITH FRAMES SUITABLE FOR TYPE OF INSTALLATION REQUIRED.
- 3. PROVIDE MINIMUM FACE SIZE WITH SPECIFIED NECK SIZE FOR ALL AIR DISTRIBUTION EXPOSED OR LOCATED IN HARD CEILINGS. PROVIDE SHEET-METAL RUN-OUTS (NO FLEX) FOR ALL EXPOSED AIR DISTRIBUTION.
- 4. PROVIDE OBD FOR ALL AIR DISTRIBUTION WHERE RUNOUT DUCTS ARE LOCATED ABOVE HARD CEILINGS. OBD ADJUSTMENT SCREW SHALL BE CONCEALED BEHIND THE BLADES OF
- 5. ALL AIR TERMINALS THAT SERVE TOILETS SHALL BE ALUMINUM.

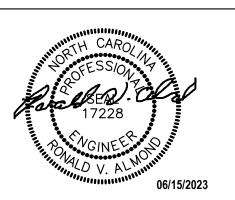
PACKAGED TERMINAL HEAT PUMP SCHEDULE

<u>PTHP-1 & 2</u>

EQUAL TO AMANA - PTH093

PACKAGED TERMINAL HEAT PUMP WITH ELECTRIC HEAT, 9,000 BTU COOLING/HEATING CAP, 3.5KW ELECT HEAT, EER 12.0, AIRFLOW - 290 CFM, 208/1/60, 20A MOCP, NEMA 6-20P PLUG, 42"W x 16"H x 22" D, 112 POUNDS





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P

081197 PROJECT NO: 06/15/2023 DATE ISSUED: CAH **DESIGNED BY:** DRAWN BY: CHECKED BY:

SHEET NAME: MECHANICAL **SCHEDULES**

SHEET NO:

ISSUED FOR BIDDING

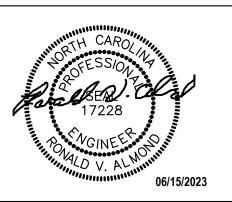
P1 P2 — 40x14 LOUVER BY ARCH ___ 24x12 LOUVER BY ARCH PROVIDE FULL SIZE SHEETMETAL PLENUM ELEVATE UNIT, DRAIN PAN SHALL DRAIN WITH 3"DRAIN LINE TO HUB PROVIDE FULL SIZE,
INSULATED SHEETMETAL DRAIN PROVIDED BY P.C. DRAIN PAN SHALL SLOPE TO DRAIN OUTLET. FULL SIZE WITH SLOPED REFER TO ARCH PLANS FOR EXT. GRILLE/LOUVER. PTHP AND DRAIN PLENUM FULL SIZE WITH воттом PAN SHALL NOT EXTEND PAST GRILLE, AND SHALL BE ATTACHED, STRAPPED TO WALL FOR ANCHORAGE PB SLOPED BOTTOM MOUNT AT ELEV. MIN OF 48" AFG. (BOTT OF UNIT) --- 24x12 LOUVER BY ARCH PROVIDE INSULATED SHEETMETAL PLENUM FULL SIZE WITH SLOPED BOTTOM STORAGE PTHP-1 PB106 FULL SIZE INSULATED - FULL SIZE INSULATED DUCTWORK EXTENSION
OF ASSOCIATED LOUVER DUCTWORK EXTENSION
OF ASSOCIATED LOUVER —PROVIDE BACKDRAFT DAMPER IN PLENUM EXTENSION, AND GRILLE ON WALL —14x12 ---MOUNT HEATER A MIN OF 18"
A.F.F., COORDINATE WITH BLOCK (24x12) COURSING, AND ARCH DETAILING FOR SURFACE MOUNTED HEATER W/ INTEGRAL TSTAT (TYP. OF 4) <u>EWH-1</u> 300-A 300∕~A (12x6) V 100-A MOUNT SIDE WALL GRILLE IN WALL. COORDINATE WITH ARCH PLANS MORE WALL DETAILS PB103 100-A (6x6) EWH-1 PB102 PA

PICKLEBALL RR FLOOR PLAN - MECHANICAL

1/4" = 1'-0"







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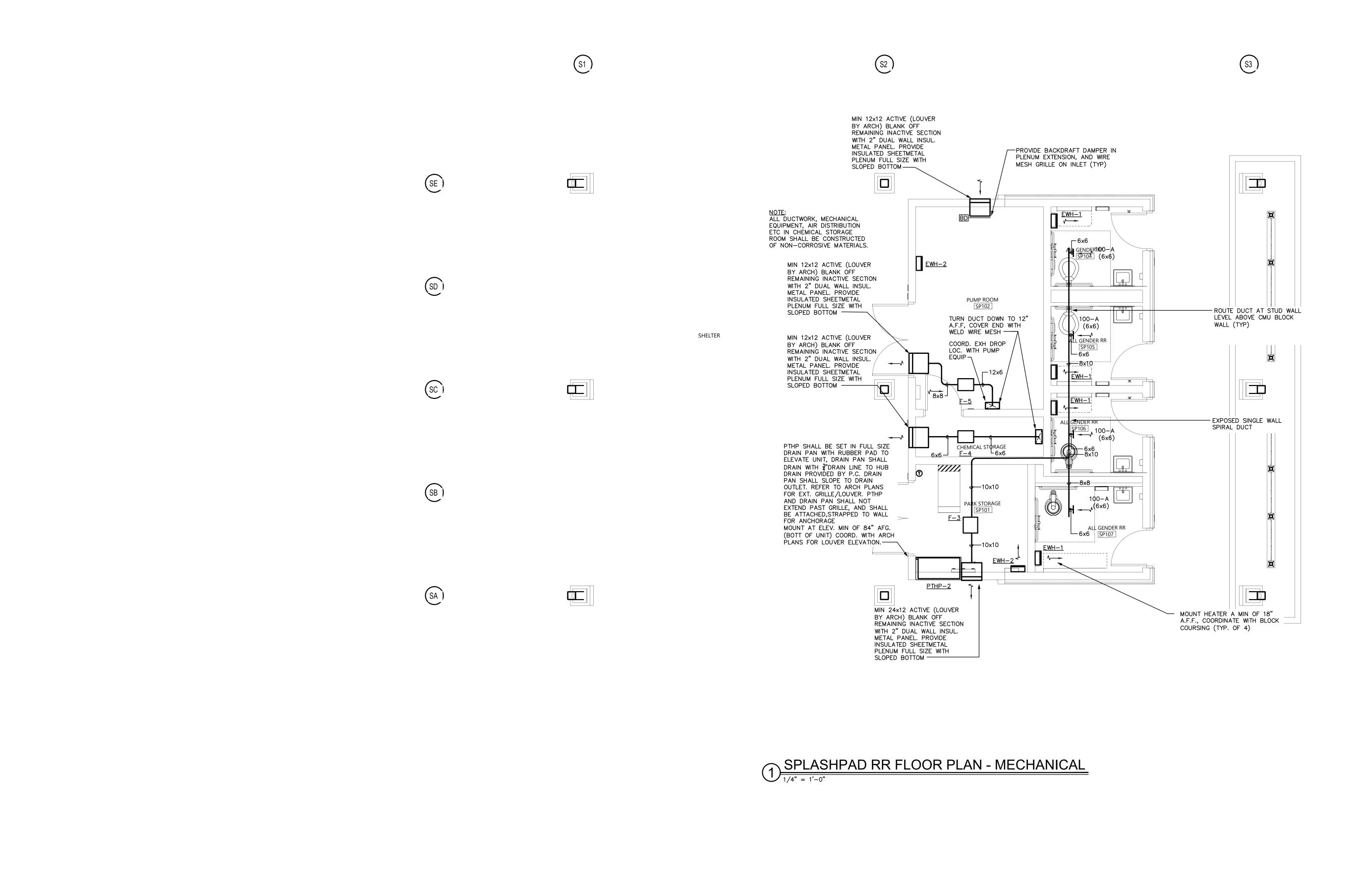


081197 PROJECT NO: 06/15/2023 DATE ISSUED: CAH DESIGNED BY: DRAWN BY: RVA CHECKED BY:

SHEET NAME: MECHANICAL FLOOR PLAN

SHEET NO:

M-101-PB 3 OF 7 OPTIMA #: 22-0236



WOOLPERT ARCHITECTURE ENGINEERING GEOSPATIAL 13860 BALLANTYNE CORPORATE PLACE SUITE 425

CHARLOTTE, NC 28227 800.414.1045





R PARK STMENT

OF CONCORD

081197 PROJECT NO: 06/15/2023 DATE ISSUED: CAH DESIGNED BY: DRAWN BY: RVA CHECKED BY:

SHEET NAME: MECHANICAL FLOOR PLAN

SHEET NO:

M-101-SP 4 OF 7 OPTIMA #: 22-0236

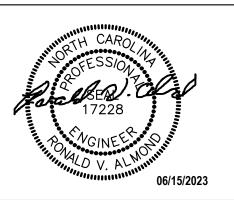
(B2) B1 <u>EWH-1</u> MOUNT HEATER A MIN
OF 18" A.F.F.,
COORDINATE WITH
BLOCK COURSING, AND 24x12 LOUVER BY ARCH PROVIDE SHEETMETAL <u>EWH−1</u> JAN/STORAGE ARCH DETAILING FOR PLENUM FULL SIZE WITH SLOPED BOTTOM SURFACE MOUNTED HEATER (TYP. OF 4) ---MOUNT SIDE WALL GRILLE
IN STUD WALL ABOVE CMU
BLOCK WALL. COORDINATE
WITH ARCH PLANS MORE
WALL DETAILS (TYP) COORD. DUCT ROUTING WITH WATER HEATER THIS AREA 100-A (6x6) ROUTE DUCT IN PLBG CHASE, COORD. WITH PLBG UTILITIES THIS AREA ALL GENDER RR
BB102 ALL GENDER RR

BB101 <u>EWH-1</u>

1 BASKETBALL FLOOR PLAN - MECHANICAL



WOOLPERT ARCHITECTURE ENGINEERING GEOSPATIAL 13860 BALLANTYNE CORPORATE PLACE SUITE 425 CHARLOTTE, NC 28227



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SHEET NAME: MECHANICAL FLOOR PLAN

PF

SHEET NO:

M-101-BB 5 OF 7 OPTIMA #: 22-0236

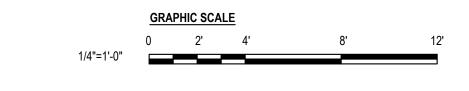
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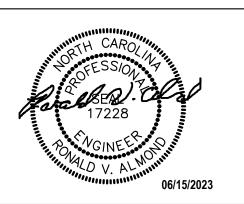
INSTALL CU ON 4" CONCRETE PAD (TYP.) — M3 -REFRIGERANT PIPING UP IN THE EXTERIOR MAINTAIN WALL AND ABOVE THE CEILING. ALL MANUFACTURER'S EXTERIOR REFRIGERANT PIPING TO BE REQUIRED CLEARANCES PROVIDED WITH CLOSED CELL INSULATION (TYP.) — \ AND ALUMINUM PROTECTION JACKET. SEAL WALL PENETRATION WATER TIGHT (TYP.) - 24x24 LOUVER BY ARCH PROVIDE INSULATED SHEETMETAL PLENUM FULL SIZE WITH SLOPED BOTTOM EWH-2 <u>ÉWH-2</u> EXTENDED DUCT DOWN AND PROVIDE OPENING WITH MOD -ROUTE 1" CONDENSATE DRAIN INTERLOCKED WITH FAN F-6 PIPE DOWN TO EXTERIOR, AND WELDED WIRE MESH 12" TURN DOWN IN WALL TURN OUT ABOVE GRADE AND SPILL ON TO SPLASH BLOCK OA WALL CAP (MATCH DUCT SIZE) ___3/4" D <u>EWH-2</u> SHOP LOCAL ALARM: CO MONITOR. MOUNT MB100 AT MANUFACTURERS RECOMMENDED HEIGHT <u>AC-2</u> MOUNT HEATER A MIN OF 18" A.F.F., COORDINATE WITH BLOCK -- WALL HEATER SHALL BE SURFACE MOUNTED IN THIS PROVIDE WELDED COURSING, FOR SURFACE LOCATION IF WALL THICKNESS WIRE MESH ON DOES NOT ALLOW FOR MOUNTED HEATER (TYP OF 4) RECESSED MOUNTING. <u>F-6</u> 12x12 12x12 MOUNT TIGHT 24x12 LOUVER BY ARCH PROVIDE SHEETMETAL PLENUM FULL SIZE WITH SLOPED BOTTOM TO STRUCTURE — -EXH WALL CAP (MATCH DUCT SIZE) 1111111 - COORDINATE LOCATION WITH ROLL UP GARAGE DOOR <u>EWH-1</u> 2-HOUR MANUAL TWIST TIMER INTERLOCKED WITH FAN <u>F-6</u>.

MAINTENANCE BLDG FLOOR PLAN - MECHANICAL

1/4" = 1'-0"







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ISSUANCE SCHEDULE
BER DATE DESCRIPTION

UR PARK

J.E. "JIM" RAMSEUR PA
PARKS & RECREATION DEPARTME
MAINTENANCE BUILDING

PROJECT NO: 081197

DATE ISSUED: 06/15/2023

DESIGNED BY: CAH

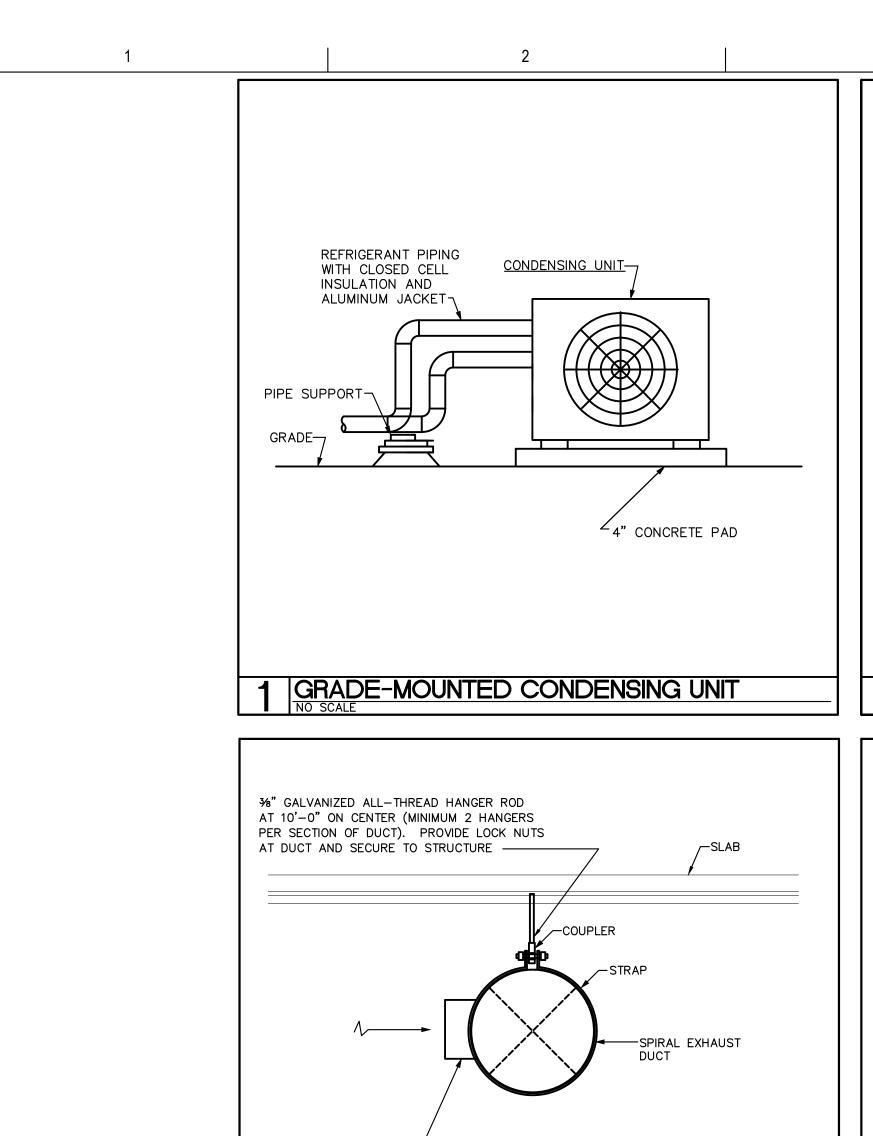
DRAWN BY: CAH

CHECKED BY: RVA

SHEET NAME:
MECHANICAL
FLOOR PLAN

SHEET NO:

M-101-MB
6 OF 7
OPTIMA #: 22-0236



- TYPE 'A' DIFFUSER

ALL EXPOSED SPIRAL DUCTWORK SHALL BE A SINGLE WALL LINDAB SPIROSAFE

SELF-SEALING DUCT SYSTEM (OR APPROVED EQUAL). REGISTERS ON SPIRAL DUCT SHALL BE MOUNTED WITHOUT THE USE OF RECTANGULAR REGISTER TAPS.

TOP AND BOTTOM FLANGES SHALL MEET FLUSH WITH THE SPIRAL DUCT WALL

DBL. DEFL. DIFFUSER MOUNTING DETAIL

DUCTWORK SHALL BE INSTALLED LEVEL, AS HIGH AS POSSIBLE

(UNLESS OTHERWISE NOTED).

NOTES:

REGARDLESS OF DUCT DIAMETER.

(1) EQUIPMENT OF TRADES OTHER THAN ELECTRICAL.

2 CONDUIT AND WIRING BY MECHANICAL, PLUMBING

3 IF AN ADDITIONAL DISCONNECT IS REQUIRED BY NEC,

A COMBINATION STARTER OR VFD MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND

STARTER LOCATE ADJACENT TO EQUIPMENT.

5 FEEDER CIRCUIT WIRING AND CONDUIT IN ELECTRICAL

WORK SEE PANELBOARD SCHEDULES FOR WIRE AND

6 JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS

DISCONNECT IS SUPPLIED, A JUNCTION BOX SHALL BE

INSTALLED ADJACENT TO EQUIPMENT. THE ELECTRICAL

CONTRACTOR SHALL PROVIDE LINE SIDE WIRING TO

VFD IN THE MCC ARE PROVIDED BY THE ELECTRICAL

BUILT IN SWITCH, THE ELECTRICAL CONTRACTOR SHALL

THE JUNCTION BOX. LOAD SIDE WIRING WILL BE PROVIDED BY MECHANICAL CONTRACTOR OR OTHER

7 PROJECTS UTILIZING AN MCC. THE STARTER, CB, OR

8 IN ALL CASES THE EQUIPMENT CONTRACTOR SHALL

MAKE FINAL CONNECTIONS STARTUP, AND TEST

9 IF THE ROOF TOP EQUIPMENT IS NOT PROVIDED WITH

PROVIDE A DISCONNECT SWITCH.

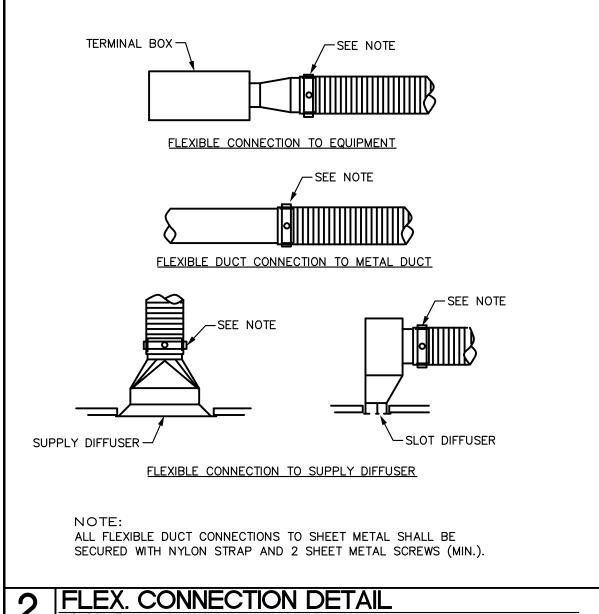
FOR SOME EQUIPMENT. IF NO STARTER OR

IT SHALL BE PROVIDED AND INSTALLED BY THE

CONTRACTOR OR OTHER TRADES.

EQUIPMENT CONTRACTOR.

CONTRACTOR.



TO ANGLES

6 DUCTWORK HANGER DETAILS

PANELBOARD

6

ROOF TOP

EQUIPMENT

SWITCH

WITH BUILT-IN

DUCTS ABOVE

SWITCHBOARD

L______

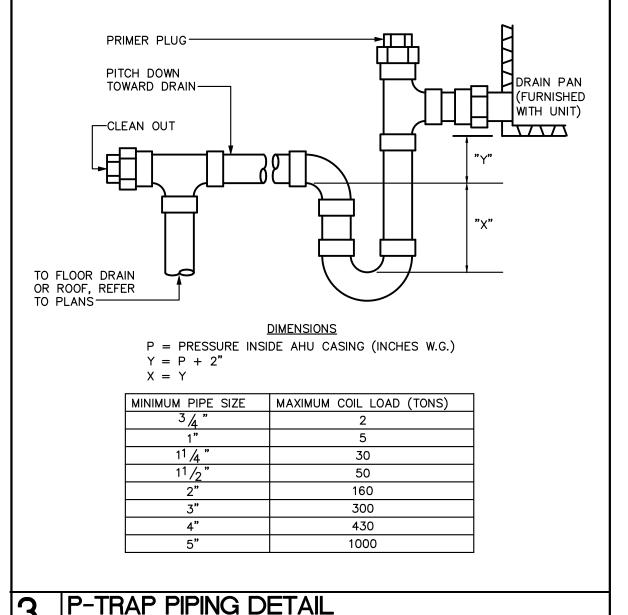
L______

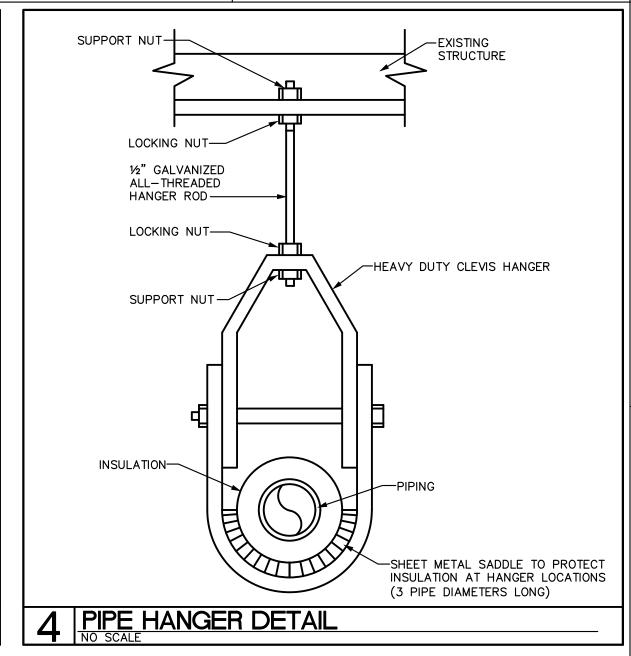
<u>48" WIDTH</u>

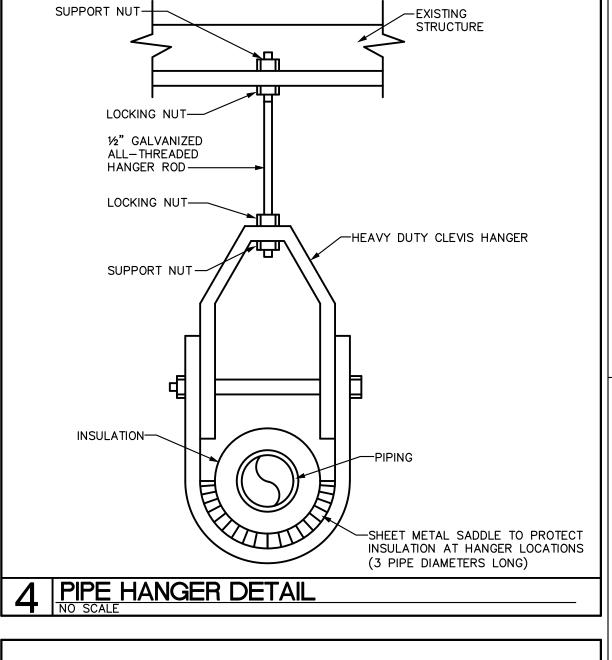
LOW PRESSURE DUCTWORK

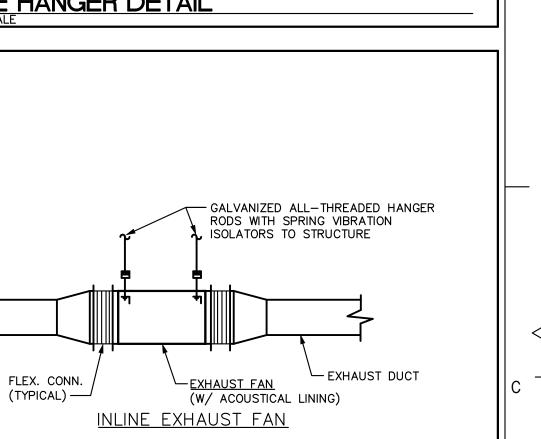
DUCT

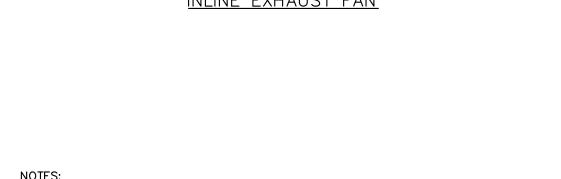
<u>48" WIDTH</u>



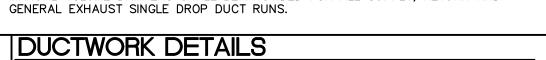








1. COORDINATE LOCATION OF FAN WITH OTHER TRADES TO INSURE SERVICE CLEARANCES. 2. MECHANICAL CONTRACTOR SHALL PROVIDE ACCESS DOOR IN CEILING IF REQUIRED.



RECESSED WALL

ARCH FOR FINAL

SURFACE MOUNTED

EQUIPMENT.

18" MIN. AFF

ENCLOSURE, COORD. WITH

INSTALLATION REQUIREMENTS

COORDINATE CMU

BLOCK COURSING

FOR FRAMED OUT

WALL OPENING

WITH ASSOCAITED WALL TYPE. REFER TO PLANS FOR

_SIDE OF DUCT

SINGLE DROP

MANUAL

VOLUME

-DOUBLE-THICKNESS

②BRANCH TAKE-OFF

1. USE BRANCH TAKE-OFF 1 WHEN MAIN AND BRANCH DUCTS ARE DIFFERENT DEPTHS

2. USE BRANCH TAKE-OFF 2 WHEN MAIN AND BRANCH DUCTS ARE SAME DEPTHS

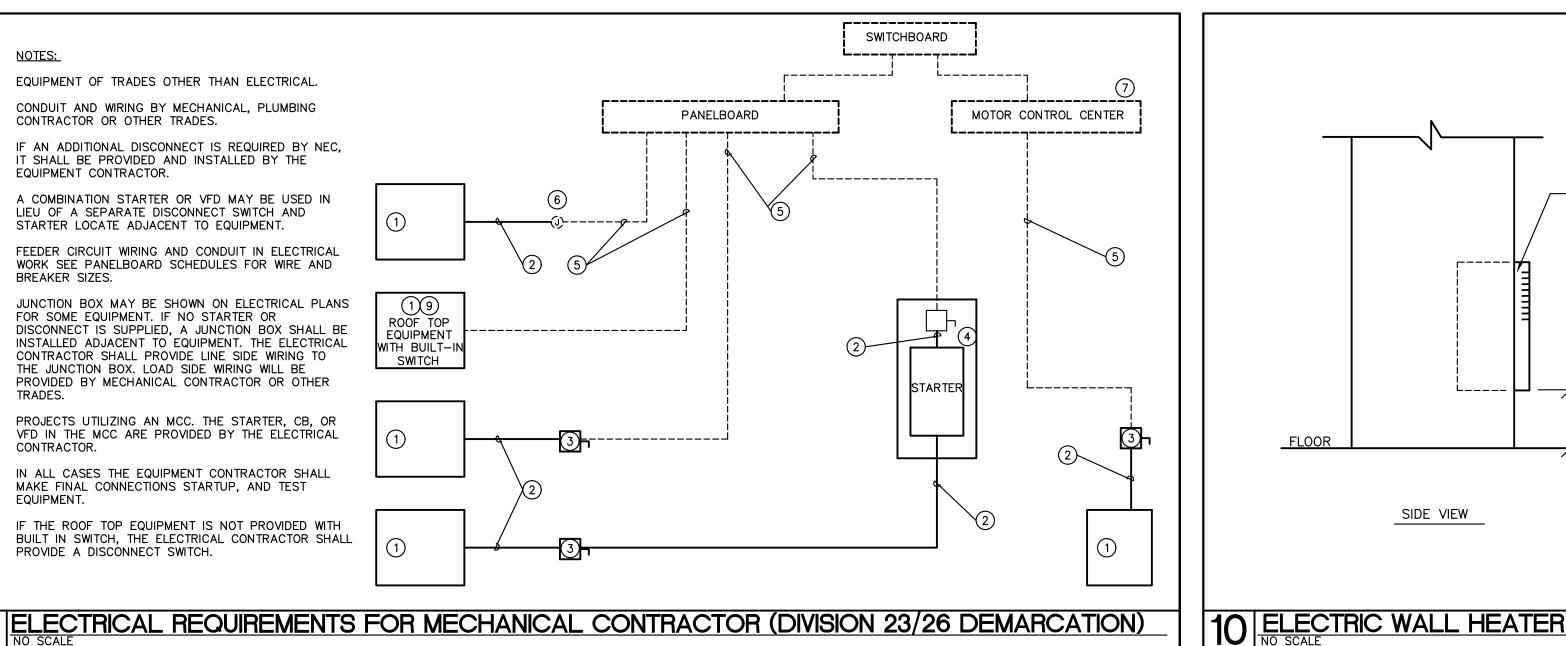
3. MANUAL VOLUME DAMPERS SHALL BE PROVIDED FOR ALL SUPPLY, RETURN AND

✓DOWN TO

DIFFUSER



①BRANCH TAKE-OFF



MANUAL

VOLUME

DAMPER-

SPLITTER DAMPER

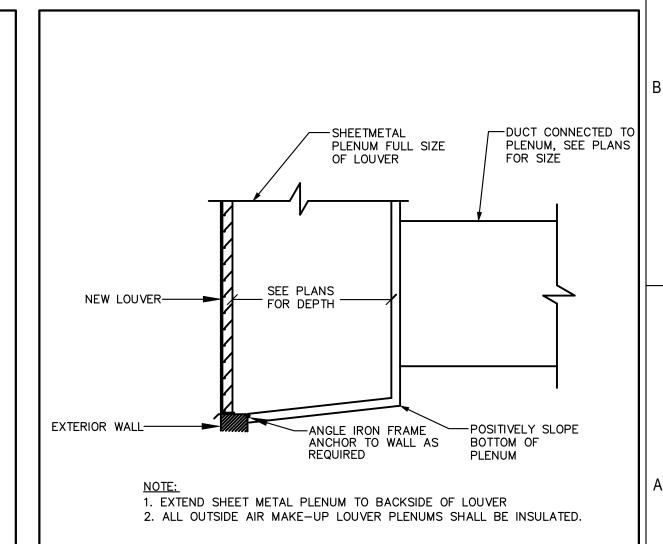
WITH ROD AND LOCKING QUADRANT-

-GALV. ALL-THREADED

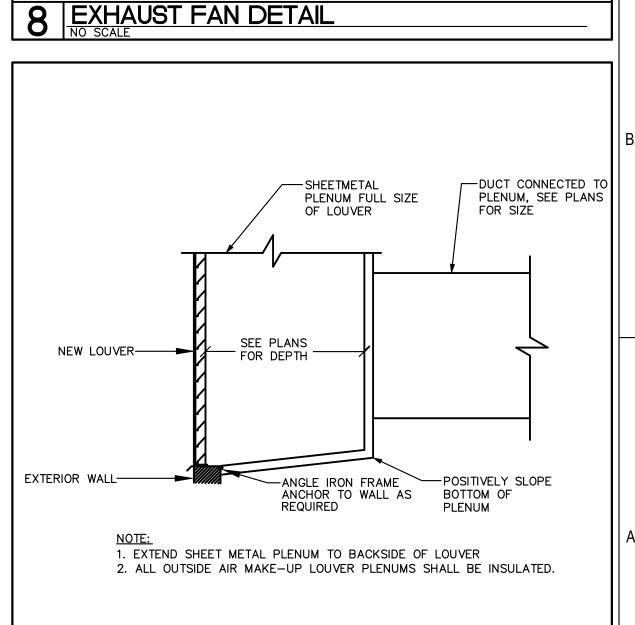
ROD (TYP)

ROUND

ANGLE



11 SHEET METAL PLENUM





WOOLPERT

13860 BALLANTYNE CORPORATE PLACE SUITE 425

CHARLOTTE, NC 28227

800.414.1045

 $\overline{\mathbf{Z}}$ \mathbf{M} OOOF

081197 PROJECT NO: 06/15/2023 DATE ISSUED: CAH **DESIGNED BY:** CAH DRAWN BY: RVA CHECKED BY:

SHEET NAME: MECHANICAL DETAILS

SHEET NO:

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ENERGY CONSERVATION CODE COMMERCIAL ENERGY EFFICIENCY — ELECTRICAL SUMMARY
C401 METHOD OF COMPLIANCE 2018 NCECC CHAPTER 4
C406 ADDITIONAL EFFICIENCY PACKAGE OPTIONS C406.2 EFFICIENT MECH EQUIPMENT C406.5 ON—SITE RENEWABLE ENERGY C406.3 REDUCED LTG DENSITY C406.6 DEDICATED OA SYSTEM C406.4 ENHANCED DIGITAL LTG CNTLS C406.7 HI—EFF SERVICE WTR HTG NOT APPLICABLE BASED ON PROJECT C406.7.1 WTR HTG LOAD FRACTION SCOPE
C408 - SYSTEM COMMISSIONING:
BUILDING IS LESS THAN 10,000 SQUARE FEET AND IS EXEMPT FROM THE SYSTEM COMMISSIONING REQUIREMENTS OF SECTION C408.
BUILDING IS GREATER THAN 10,000 SQUARE FEET AND REQUIRES SYSTEM COMMISSIONING PER SECTION C408.
C405.2 - LIGHTING CONTROLS (MANDATORY REQUIREMENTS):
LIGHTING SYSTEMS ARE PROVIDED WITH CONTROLS AS REQUIRED PER SECTION C405.2, EXCEPT WHERE EXEMPT.
☐ NOT APPLICABLE
C405.3 — EXIT SIGNS (MANDATORY REQUIREMENTS):
INTERNALLY ILLUMINATED EXIT SIGNS DO NOT EXCEED 5 WATTS PER SIDE.
■ NOT APPLICABLE C405.4 — INTERIOR LIGHTING POWER REQUIREMENTS (PRESCRIPTIVE) (NON—EXEMPT):
NOT APPLICABLE PER 2018 NCECC C503.1, EXCEPTION 2.G.
C405.4.1 — TOTAL <u>CONNECTED</u> INTERIOR LIGHTING POWER:
6,700 WATTS SPECIFIED
25 % REDUCTION OF SPECIFIED VS. ALLOWED (APPLICABLE IF C406.1.2 IS SELECTED)
C405.4.2 - TOTAL <u>ALLOWABLE</u> INTERIOR LIGHTING POWER:
METHOD OF COMPLIANCE:
■ BUILDING AREA METHOD □ SPACE—BY—SPACE METHOD
7,900_WATTS ALLOWED

C405.5.1 - EXTERIOR BUILDING LIGHTING POWER (NON-EXEMPT):

C405.6 - ELECTRICAL ENERGY CONSUMPTION (DWELLING UNITS):

C405.7 - ELECTRICAL TRANSFORMERS (MANDATORY REQUIREMENTS):

C405.8 - ELECTRICAL MOTORS (MANDATORY REQUIREMENTS):

EFFICIENCY REQUIREMENTS PER C405.7, EXCEPT WHERE EXEMPT.

SEPARATE ELECTRICAL METERING HAS BEEN PROVIDED FOR EACH DWELLING UNIT IN GROUP R-2 BUILDINGS.

ELECTRICAL TRANSFORMERS HAVE BEEN SPECIFIED TO MEET MINIMUM

ELECTRICAL MOTORS HAVE BEEN SPECIFIED TO MEET MINIMUM EFFICIENCY REQUIREMENTS PER C405.8, EXCEPT WHERE EXEMPT.

TOTAL CONNECTED EXTERIOR LIGHTING POWER:

TOTAL <u>ALLOWABLE</u> EXTERIOR LIGHTING POWER:

12,254 WATTS SPECIFIED

28,543 WATTS ALLOWED

☐ NOT APPLICABLE

NOT APPLICABLE

■ NOT APPLICABLE

NOT APPLICABLE

SYMBOL SCHEDULE

DEVICES AND PATHWAYS

- WIRING SYSTEM CONCEALED IN WALL OR CEILING. WHEN SHOWN, CROSS LINES INDICATE NUMBER OF WIRES. (GROUND WIRES ARE NOT SHOWN) WIRING SYSTEM CONCEALED IN OR UNDER SLAB OR UNDERGROUND. WIRING SYSTEM EXPOSED
- O CONDUIT TURNED UP TO FLOOR ABOVE. CONDUIT TURNED DOWN TO FLOOR BELOW.
- BRANCH CIRCUIT HOMERUN TO PANEL.
- JUNCTION BOX WITH CONNECTION TO EQUIPMENT SERVED. 4" SQUARE BOX WITH A SINGLE—GANG OPENING AND PLASTER RING. JUNCTION BOX FOR HAND DRYER CONNECTION; SEE MOUNTING HEIGHTS DETAIL FOR EXACT HEIGHT; SEE ARCH. SHEETS FOR COORDINATION 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING. PROVIDE HANDLE LOCK ON BREAKERS THAT SERVE HAND DRYERS.
- DUPLEX RECEPTACLE, 20 AMP, 120 VOLT. HUBBELL 5352, OR
- DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER BACKSPLASH, OR AT HEIGHT NOTED.
- QUAD RECEPTACLE. TWO NEMA 5-20R DUPLEX RECEPTACLES.
- STANDARD TWO NEMA 5-20R DUPLEX RECEPTACLE FOR ELECTRIC
- WATER COOLER. COORDINATE LOCATION WITH PLUMBING CONTRACTOR.
- GROUND FAULT RECEPTACLE. NEMA 5-20R DUPLEX. ALL RECEPTACLES INSTALLED OUTSIDE, WITHIN 6' OF A SINK OR IN A KITCHEN SHALL BE GFCI.
- ISOLATED GROUND RECEPTACLE. NEMA 5-20R DUPLEX.
- WEATHERPROOF RECEPTACLE. NEMA 5-20R GFI DUPLEX. COVER SHALL BE INTERMATIC #WP1020 (CLEAR) OR SPECIFICATION EQUAL.
- DUPLEX RECEPTACLE, 20 AMP, 120 VOLT (USE 20 AMP FOR SINGLE RECEPTACLE ON A CIRCUIT.) COOPER 5352, OR EQUAL. T.V. RECEPTACLE MOUNTED AT 88" AFF.
- DUPLEX SWITCHED TAMPER RESISTANT RECEPTACLE, 20 AMP, 120 VOLT.
- SURGE PROTECTION DEVICE (SPD); SEE DETAIL
- KITCHEN RECEPTACLE. SEE KITCHEN EQUIPMENT SCHEDULE. SPECIAL OUTLET. SEE PLANS.

LIGHTING (SEE FIXTURE SCH.)

FLUORESCENT OR LED LIGHTING FIXTURE. SEE FIXTURE SCHEDULE. SUSPEND FOUR CORNERS WITH WIRE TO STRUCTURE. DO NOT ALLOW GRID ALONE TO SUPPORT FIXTURE.

FLUORESCENT OR LED STRIP FIXTURE.

FLUOR., LED OR H.I.D. LIGHTING FIXTURE.

WALL MOUNTED INCANDESCENT, FLUOR., LED OR H.I.D. LIGHTING FIXTURE. FLUORESCENT OR LED FIXTURE WITH EMERGENCY BATTERY BALLAST OR DRIVER.

PROVIDE 1100 LUMEN INVERTER RATED FOR 90 MINUTE OPERATION. SEE FIXTURE SCHEDULE FOR FIXTURE TYPE, EMERGENCY DEVICE SHALL SUPPLEMENT FIXTURE FLUORESCENT OR LED DOWNLIGHT WITH AN EMERGENCY BATTERY BALLAST OR

DRIVER. BASED ON 1100 LUMEN INVERTER (SEE SCHEDULE FOR FIXTURE LUMEN

MAXIMUM.) EMERGENCY DEVICE SHALL SUPPLEMENT FIXTURE. EXIT LIGHT WITH ARROWS AND NUMBERS OF FACES AS INDICATED ON PLANS.

90 MIN BATTERY BACKUP. SEE LIGHTING FIXTURE SCHEDULE.

EMERGENCY BATTERY PACK FIXTURE. 90 MINUTE EMERGENCY INTEGRAL

EMERGENCY BATTERY PACK/EXIT COMBO FIXTURE WITH 90 MINUTE BATTERY BACKUP, SEE FIXTURE SCHÉDULE.

EXTERIOR EMERGENCY FIXTURE WITH EMERGENCY BALLAST OR DRIVER. PROVIDE 1100 LUMEN INVERTER RATED FOR 90 MINUTE OPERATION. SEE FIXTURE SCHEDULE FOR FIXTURE TYPE, EMERGENCY DEVICE SHALL SUPPLEMENT FIXTURE

SINGLE HEAD POLE FIXTURE. SEE FIXTURE SCHEDULE.

BATTERY. SEE LIGHTING FIXTURE SCHEDULE

DOUBLE HEAD POLE FIXTURE. SEE FIXTURE SCHEDULE.

LIGHT BOLLARD OR POLE TOP FIXTURE. SEE FIXTURE SCHEDULE.

FLOODLIGHT. SEE FIXTURE SCHEDULE.

SINGLE POLE SWITCH, 20 AMP, 120/277 VOLT, COOPER AH 1221, OR EQUAL BY HUBBELL, LEVITON, AND PASS & SEYMOUR.

DOUBLE POLE SWITCH, 20 AMP, 120/277 VOLT, COOPER 1222, OR EQUAL

THREE WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1223, THREE WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1223, OR EQUAL BY HUBBELL, LEVITON, AND PASS & SEYMOUR.

FOUR WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1224, OR EQUAL.

KEY OPERATED SWITCH

INDICATES TWO LEVEL SWITCHING. SWITCH OUTER TWO LAMPS OF FIXTURES TOGETHER AND THE INNER LAMP(S) TOGETHER.

CEILING MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY. SENSOR SWITCH CM PDT 10, WATT STOPPER #DT-300, COOPER OAC-DT OR EQUAL.

WALL MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY. SENSOR SWITCH WV-PDT, WATT STOPPER #DT-200, LEVITON, GREENGATE OR EQUAL. CONICAL PATTERN, MOUNT AS CLOSE TO CORNER OF ROOM AS POSSIBLE. MOUNT 10' AFF OR 6" BELOW CEILING (IF LOWER THAN 10'.)

CEILING MOUNTED VACANCY SENSOR, DUAL TECHNOLOGY. SENSOR SWITCH, WATT STOPPER, COOPER OR EQUAL.

WALL MOUNTED OCCUPANCY SENSOR AND SWITCH. INFRARED TECHNOLOGY WITH NEUTRAL, 120/277V RATED. WATT STOPPER #WS-250, OR EQUAL BY SENSOR SWITCH, AND LEVITON.

PANELS, DISCONNECTS

- CONNECTION TO MOTOR. STARTER PROVIDED BY OTHERS UNLESS OTHERWISE NOTED.
- FRACTIONAL HORSEPOWER MANUAL MOTOR STARTER, WITH OVERLOAD
- NON-FUSED HEAVY DUTY DISCONNECT SWITCH. NUMERALS INDICATE SWITCH RATING. NEMA 1 ENCLOSURE, UNLESS OTHERWISE
- FUSED HEAVY DUTY DISCONNECT SWITCH. NUMERALS INDICATE SWITCH RATING/FUSE SIZE. NEMA 1 ENCLOSURE, UNLESS OTHERWISE
- CIRCUIT BREAKER. NUMERALS INDICATE RATING. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED. COMBINATION STARTER/FUSED DISCONNECT. NUMERALS INDICATE
- PLYWOOD TELEPHONE BACKBOARD. SIZE AS INDICATED ON RISER.

SWITCH RATING. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.

PANELBOARD. SEE SCHEDULE FOR MOUNTING. TOP OF PANEL AT 6'-6" AFF. DOOR MOTOR CONTROL. MOUNT +48" AFF, CONTROLS SHALL BE UP, DOWN, AND STOP MOUNTED ON 4" SQUARE BOX (FLUSH BOX)

SECURITY

SECURITY CAMERA. PROVIDE 3/4" CONDUIT TO LOCAL ACCESSIBLE CEILING. PROVIDE DOUBLE GANG JUNCTION BOX WITH SINGLE GANG OPENING PLATE. PROVIDE PULL STRING.

> ACCESS CONTROL SYSTEM AT DOOR. SEE DETAIL FOR CONDUIT AND 120V POWER REQUIREMENTS. ACCESS CONTROL SYSTEM BY OTHERS.

- SCHEDULE NOTES:

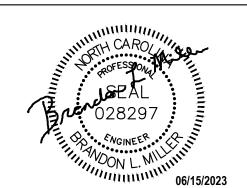
 1. SEE DETAIL FOR STANDARD MOUNTING HEIGHTS OF ALL DEVICES, UNLESS
- ALL DEVICES (SWITCHES AND RECEPTACLES) SHALL BE GRAY. COVER PLATE SHALL BE 302 STAINLESS STEEL. ALL COVÉR PLATES IN MASONRY WALLS SHALL
- BE JUMBO PLATES. 3. DEVICE BOXES SHALL NOT BE MOUNTED BACK TO BACK IN COMMON WALLS
- UNLESS OTHERWISE NOTED. ALL FIRE ALARM SHALL BE IN CONDUIT UNLESS OTHERWISE NOTED.
- ALL LOW VOLTAGE CABLING SHALL BE PLENUM RATED.
- 6. MC CABLE SHALL NOT BE PERMITTED. ALL PLAN DRAWINGS SHALL SUPERCEDE SPECIFICATIONS WHEN PLANS AND
- SPECIFICATIONS ARE IN CONFLICT. ALL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT TO COMPLY WITH BASIS
- OF DESIGN, INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, CONDUIT, WIRE, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC., SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT WILL BE APPROVED DURING CONSTRUCTION AND ALL COST WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- 9. SHARED NEUTRAL OR "SUPER NEUTRAL" CONDUCTORS SHALL NOT BE PERMITTED UNLESS SPECIFICALLY SHOWN ON THESE DRAWINGS.
- 10. E.C. SHALL BID CONTRACT AS A MULTI-PRIME CONTRACT. ALL REFERENCES TO GENERAL CONTRACTOR OR G.C. SHALL BE CONSIDERED THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY FOR CONSTRUCTION AND PRICING.
- 11. SERIES RATED PANELS ARE NOT ACCEPTABLE 12. STACKED TRANSFORMERS SHALL BE COORDINATED AND INSTALLED PRIOR TO DOOR OPENING OF ELECTRICAL ROOMS
- 13. ALL WALL MOUNTED OCCUPANCY/VACANCY SENSOR SWITCH OUTLETS SHALL BE BE PROVIDED WITH A GROUNDED CONDUCTOR AS PART OF THE WIRING SYSTEM.

TELECOMMUNICATIONS

- TELEHONE AND DATA OUTLET ABOVE COUNTER OR HEIGHT SPECIFIED. MINIMUM 1 1/4" CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING FOR J-HOOK SYSTEM OR TO LOCAL CABLE TRAY (WITHIN 6") AS APPLICABLE WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING. WHERE NO HEIGHT SHOWN, MOUNT 6" ABOVE COUNTER TOP. IF CABLE QUANTITY AND SERVICE ARE NOT IDENTIFIED, THEN PATHWAY ONLY OR REFER TO TO TECHNOLOGY DRAWINGS FOR CABLE AND ACTIVATION TYPE.
- TELEPHONE AND DATA OUTLET. MINIMUM 1 1/4" CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING FOR J-HOOK SYSTEM OR TO LOCAL CABLE TRAY (WITHIN 6") AS APPLICABLE WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING.



ARCHITECTURE ENGINEERING GEOSPATIAL 13860 BALLANTYNE CORPORATE PLACE SUITE 425 CHARLOTTE, NC 28227 800.414.1045







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081197 PROJECT NO: 06/15/2023 DATE ISSUED: **DESIGNED BY:** BLM DRAWN BY: CHECKED BY:

SHEET NAME:

SHEET NO:

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OPTIMA #: 22-0236

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1. <u>GENERAL:</u>

- THE WORK COVERED BY THESE SPECIFICATIONS CONSISTS OF FURNISHING ALL LABOR, EQUIPMENT, MATERIAL,S AND SUPPLIES AS NECESSARY FOR THE COMPLETE AND SATISFACTORY OPERATING ELECTRICAL SYSTEMS AS SHOWN ON THE PLANS.
- B. ALL WORK SHALL BE IN ACCORDANCE WITH LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE, NFPA, STATE BUILDING CODE, AND ANY OTHER LOCAL REQUIREMENTS THAT MAY
- C. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL ELECTRICAL PERMITS AND INSPECTION FEES. D. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY THE UNDERWRITER'S LABORATORIES, INC. OR BY A STATE APPROVED THIRD PARTY TESTING AGENCY FOR THE USE INTENDED WHERE A STANDARD FOR SUCH MATERIALS AND USE EXISTS. ALL ITEMS OF THE SAME TYPE AND RATING SHALL BE IDENTICAL AND OF THE SAME MANUFACTURER.
- E. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CATALOG DATA IN ELECTRONIC FORMAT (PDF) FOR ALL ELECTRICAL ITEMS IN THE SCOPE OF WORK, INCLUDING, BUT NOT LIMITED TO, RACEWAYS, BOXES, FITTINGS, CONDUCTORS, LUMINAIRES, LAMPS, BALLASTS, WIRING DEVICES, SAFETY SWITCHES, DISCONNECTS, TRANSFORMERS, PANELBOARDS.
- FIRE ALARM, TELECOMMUNICATIONS, ETC. FOR APPROVAL AS APPLICABLE FOR THE PROJECT. ONE COMPLETE SET OF APPROVED SUBMITTALS SHALL BE MAINTAINED
- AT THE JOB SITE.

 F. ALL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT TO COMPLY WITH THE BASIS OF DESIGN, INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, CONDUIT, WIRING, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, METHODS, ETC., SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COSTS ASSOCIATED WITH SUBSTITUTED EQUIPMENT WILL BE APPROVED AFTER BIDS HAVE BEEN ACCEPTED AND ALL COSTS WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. CREDITS SHALL BE GIVEN TO THE OWNER WHERE SUCH EQUIPMENT AND METHODS RESULT IN LESS EXPENSE TO
- G. ONE COMPLETE SET OF THE LATEST CONSTRUCTION PLANS OF ALL TRADES SHALL BE MAINTAINED AT THE JOB SITE. IN ADDITION, ALL ADDENDUMS, BULLETINS, AND/OR SKETCHES SHALL BE INCORPORATED INTO THE ON—SITE CONSTRUCTION PLANS AS THE JOB PROGRESSES.
- H. COMPLETELY ADEQUATE HOUSING SHALL BE PROVIDED FOR ALL MATERIALS STORED ON JOB SITE. ONLY CONDUIT MAY BE STORED OUTSIDE, BUT NOT IN CONTACT WITH THE GROUND.

 I. THE CONDUIT AND NEUTRAL SYSTEM SHALL BE GROUNDED AT THE MAIN SERVICE
- EQUIPMENT. GROUNDING ELECTRODE SYSTEM SHALL BE INSTALLED PER NEC 250.

 J. PROVIDE AN INTERSYSTEM BONDING TERMINATION DEVICE AT THE MAIN ELECTRICAL SERVICE
- PER NEC 250.94.

 K. WIRING SHALL BE TESTED FOR CONTINUITY AND GROUNDS BEFORE BEING ENERGIZED.
 FAULTY WIRING SHALL BE REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- L. PROVIDE ALL CUTTING AND PATCHING FOR INSTALLATION OF WORK AND REPAIR ANY DAMAGE DONE.

 M. THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL EQUIPMENT REQUIRING ELECTRICAL
- M. THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS (UNLESS OTHERWISE NOTED), EXCEPT FOR CONTROL WIRING FOR EQUIPMENT NOT PROVIDED BY THE ELECTRICAL CONTRACTOR. CONTROL WIRING FOR SUCH EQUIPMENT SHALL BE PROVIDED BY THE RESPECTIVE DISCIPLINE.
- N. ALL ELECTRICAL JUNCTION BOXES, SWITCHGEAR, CABLING, VOICE/DATA OUTLETS, LOW VOLTAGE CABINETS, EMERGENCY RECEPTACLES, ETC. SHALL BE LABELED ACCORDING TO PANEL/RACK AND CIRCUIT NUMBER.
- O. UPON COMPLETION OF WORK, CONTRACTOR SHALL PRESENT ENGINEER WITH CERTIFICATE OF APPROVAL FROM LOCAL INSPECTOR AND/OR AUTHORITY HAVING JURISDICTION BEFORE WORK WILL BE APPROVED FOR FINAL PAYMENT.
- P. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF ONE YEAR EFFECTIVE THE DATE THE PROJECT IS ACCEPTED BY THE OWNER. ANY IMPERFECT MATERIALS OR WORKMANSHIP SHALL BE REPLACED WITHOUT ADDED COST TO THE PROJECT.
- Q. IT SHALL NOT BE THE INTENT OF ISSUED PLANS AND/OR SPECIFICATIONS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE ELECTRICAL CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL NECESSARY ITEMS FOR A COMPLETE AND OPERATING SYSTEM.

 R. THE WORD "PROVIDE" MEANS THAT THIS CONTRACTOR SHALL FURNISH, FABRICATE, ERECT,

CONNECT. AND COMPLETELY INSTALL SYSTEMS IN PROPER OPERATING CONDITION. ALL

- LABOR, PRODUCT OPTIONS, ACCESSORIES AND INCIDENTAL MATERIALS REQUIRED SHALL BE INCLUDED AS PART OF THIS WORK TO COMPLETE THE INSTALLATION.

 S. THE WORD "CONNECT" MEANS THAT THIS CONTRACTOR SHALL PROVIDE (SEE DEFINITION ABOVE) ALL DISCONNECTING MEANS, OVERCURRENT PROTECTION AND WIRING REQUIRED TO PLACE THE EQUIPMENT AND SYSTEMS IN PROPER OPERATING CONDITION AND TO COMPLY
- WITH CODE REQUIREMENTS.

 T. CONTRACTOR SHALL COORDINATE THE ROUGH—IN OF ALL OUTLET LOCATIONS WITH ARCHITECTURAL FLOOR PLANS, ELEVATIONS, AND MILLWORK SHOP DRAWINGS PRIOR TO
- U. ELECTRICAL CONTRACTOR SHALL NOT SCALE PLANS. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, UNLESS OTHERWISE NOTED.
- V. CONTRACTOR SHALL TEST ALL "LIFE SAFETY" EQUIPMENT AND SYSTEMS FOR PROPER FUNCTION AND OPERATION. UPON SUCCESSFUL COMPLETION OF TESTS, CONFIRMATION SHALL BE SENT TO THE ENGINEER OF RECORD IN THE FORM OF A LETTER STATING THE TESTS PERFORMED, THE RESULTS, AND THE DATE TESTS WERE SUCCESSFULLY COMPLETE. "LIFE SAFETY" EQUIPMENT AND SYSTEMS CONSIST OF THOSE AS SPECIFIED IN THE STATE BUILDING CODE, THE NATIONAL ELECTRICAL CODE (NEC), NFPA 101, AND ANY OTHER LOCAL REQUIREMENTS THAT MAY APPLY.
- W. IF DURING THE COURSE OF WORK, THE CONTRACTOR DISCOVERS A PROBLEM WITH THE PERFORMANCE OF THE INSTALLATION RELATIVE TO THE PLANS AND SPECIFICATIONS, THE NEC, OR OTHER CODES OR REQUIREMENTS, THE CONTRACTOR SHALL IMMEDIATELY BRING THE PROBLEM TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER FOR RESOLUTION PRIOR TO THE EXECUTION OF THE WORK.
- X. WHERE THERE ARE CONFLICTS BETWEEN THE PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL BRING THE ISSUE TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION PRIOR TO THE EXECUTION OF THE WORK OR ORDERING ANY MATERIALS. NO ADDITIONAL COSTS SHALL BE WARRANTED WITHOUT A CHANGE TO THE PROJECT SCOPE.
- Y. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PROVIDING TEMPORARY POWER AND LIGHTING FOR ALL TRADES. AT NO TIME SHALL EXISTING BUILDING POWER SYSTEMS BE UTILIZED WITHOUT WRITTEN PERMISSION FROM THE OWNER.
 Z. COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL SERVICE WITH THE POWER COMPANY. WHERE MORE THAN ONE SERVICE IS SUPPLIED TO A BUILDING, PROVIDE
- IDENTIFICATION AT EACH SERVICE PER NEC 230-2(E).

 AA.COORDINATE LOCATION AND REQUIREMENTS FOR TELEPHONE SERVICE WITH THE TELEPHONE

COM

- A. CONDUIT SHALL BE MANUFACTURED BY ALLIED, WHEATLAND, REPUBLIC CONDUIT, WESTERN TUBE. OR APPROVED EQUIVALENT.
- TUBE, OR APPROVED EQUIVALENT.

 B. FOR INTERIOR WORK, CONDUIT SHALL BE ZINC COATED EMT EXCEPT WHERE NOT PERMITTED BY CODE. USE SCHEDULE 40 PVC BELOW CONCRETE SLAB, IN DUCTBANKS, AND FOR EXTERIOR WORK WHERE NOT SUBJECT TO DAMAGE. USE IMC WHERE SUBJECT TO PHYSICAL
- DAMAGE.
 C. EMT FITTINGS SHALL BE COMPRESSION GLAND TYPE, OF MALLEABLE STEEL. CONNECTORS
 SHALL HAVE INSULATED THROATS. CAST, SET SCREW, OR INDENTER TYPE FITTINGS ARE
 NOT ACCEPTABLE. ALL FITTINGS FOR EMT SHALL BE MADE OF STEEL.
- D. ALL RACEWAY SHALL BE RUN CONCEALED, UNLESS OTHERWISE NOTED. FISH ALL NEW OUTLETS IN EXISTING WALLS, WHERE POSSIBLE. ALL RUNS SHALL BE NEAT AND SQUARE.
 E. LOW VOLTAGE CABLING NOT SPECIFIED TO BE INSTALLED IN CONDUIT, SHALL BE INSTALLED IN A CABLE TRAY SYSTEM OR J-HOOK SYSTEM CONSISTING OF MINIMUM 2" DIAMETER HOOKS LOCATED ON 3'-0" CENTERS IN ALL ACCESSIBLE CEILINGS. WHERE THERE ARE

ELECTRICAL SPECIFICATIONS

- INACCESSIBLE CEILINGS, PROVIDE CONDUIT FOR ENTIRE LENGTH OF INACCESSIBILITY.

 F. RACEWAYS USED FOR LOW VOLTAGE SYSTEMS SUCH AS TELECOMMUNICATIONS, FIRE ALARM, SECURITY, CCTV, CONTROLS, AND SIMILAR CONDUITS ABOVE THE CEILING AND BACKBOARD(S) SHALL BE PROVIDED WITH INSULATED THROAT BUSHINGS AT EACH CONDUIT TERMINATION. THESE BUSHINGS SHALL BE BE INSTALLED PRIOR TO PULLING LOW-VOLTAGE
- CABLES.
 G. RACEWAY PENETRATIONS THROUGH FLOOR SLABS AND FIRE—RATED WALLS SHALL BE FILLED

WITH IMPERVIOUS, NON-SHRINK GROUT SUFFICIENTLY TIGHT TO PREVENT THE TRANSFER OF SMOKE, WATER, AND DUST. ROOF PENETRATIONS SHALL BE WITHIN THE EQUIPMENT ROOF CURB.

- H. SUPPORT ALL CONDUIT WITH STRAPS AND CLAMPS.
 I. ALL CONDUIT SHALL BE RUN PARALLEL OR PERPENDICULAR TO BUILDING LINES, WHETHER EXPOSED OR NOT AND SUPPORTED FROM STRUCTURE AND PROPERLY SECURED.
 J. WHERE CONDUITS PASS THROUGH A BUILDING EXPANSION JOINT, PROVIDE GALVANIZED EXPANSION FITTINGS WITH BONDING JUMPERS.
- K. MINIMUM CONDUIT SIZE SHALL BE 3/4" FOR INTERIOR WORK, 1" FOR EXTERIOR WORK.
 L. PROVIDE MINIMUM 210# TEST NYLON PULL CORD AND NYLON BUSHINGS IN ALL EMPTY
- M. LIQUID—TIGHT METAL CONDUIT SHALL ONLY BE USED FOR FINAL CONNECTIONS TO EQUIPMENT AND ALL OTHER ROTATING AND VIBRATING EQUIPMENT, MAXIMUM LENGTH OF
- 3'-0".

 N. FLEXIBLE METAL CONDUIT, MINIMUM SIZE 3/8", SHALL ONLY BE USED FOR FINAL
- CONNECTION TO LIGHTING FIXTURES, MAXIMUM LENGTH OF 6'-0".

 O. PROVIDE PULL BOXES, SUCH THAT NO SINGLE CONDUIT RUN HAS BENDS IN EXCESS OF 360°. PULL BOXES SHALL BE SUITABLE AND APPROVED FOR THE INTENDED USE. WHERE CONDUITS PASS UNDER PAVED AREAS, THEY SHALL BE RGS.
- P. ALL CONDUIT BENDS/ELBOWS EMERGING FROM UNDERGROUND SHALL BE IMC AND SHALL EXTEND A MINIMUM OF 18" BELOW GRADE.
- Q. ALL UNDERGROUND RACEWAYS SHALL BE THOROUGHLY COATED WITH TWO COATS OF
- ASPHALTUM BITUMASTIC.

 R. ALL CONDUITS INSTALLED UNDERGROUND OR IN CONCRETE SHALL HAVE JOINTS MADE WATERTIGHT BY USE OF POLYETRA—FLUOROETHYLENE TAPE.
- S. THE USE OF AC OR NM CABLE IS NOT PERMITTED.

 T. MC CABLE MAY ONLY BE UTILIZED WHERE PERMITTED BY CODE AND IT SHALL ONLY BE
 ALLOWED WHERE CONCEALED BEHIND HARD WALLS AND HARD CELLINGS. MC CABLE SHA
- ALLOWED WHERE CONCEALED BEHIND HARD WALLS AND HARD CEILINGS. MC CABLE SHALL NOT BE EXPOSED.

 U. APPROVED SEALS SHALL BE PROVIDED IN HAZARDOUS LOCATIONS AS REQUIRED BY THE
- NEC.
 V. ALL CONDUIT IN POOL EQUIPMENT, CHLORINE, AND ACID ROOMS SHALL BE GALVANIZED RIGID CONDUIT OR PVC.
- A. JUNCTION AND PULL BOXES SHALL BE CODE GAUGE GALVANIZED STEEL. ACCEPTED MANUFACTURERS SHALL BE STEEL CITY (THOMAS & BETTS), RACO, CROUSE—HINDS, APPLETON (EMERSON), OR APPROVED EQUIVALENT.
- B. OUTLET BOXES SHALL NOT BE MOUNTED BACK TO BACK IN COMMON WALLS. C. ATTACH EMT WITH CONNECTORS HAVING INSULATED THROAT.
- D. ATTACH BOXES TO STUD WORK USING CADDY BAR STRAPS THAT CONNECT TO TWO ADJACENT METAL STUDS TO PREVENT TWISTING OF BOX IN WALL.
- E. ALL OUTLET BOXES (INCLUDING TELEPHONE, CABLE TV, AND COMPUTER) SHALL HAVE COVER PLATES, BLANK IF NOT USED.
- F. ALL EXTERIOR BOXES SHALL BE WATER—TIGHT.
 G. ALL ELECTRICAL EQUIPMENT ENCLOSURES IN POOL EQUIPMENT, CHLORINE, AND ACID ROOMS SHALL BE NEMA—4X STAINLESS STEEL OR NON—METALLIC, WET—LOCATION LISTED AND LISTED TO RESIST CORROSION FROM POOL CHEMICALS.

4. <u>CONDUCTORS:</u>

OUTLET BOXES:

- A. CONDUCTORS SHALL BE MANUFACTURED BY SOUTHWIRE (SIMPULL), ENCORE (SUPERSLICK), UNITED COPPER (SLK), CERRO (SLP), OR APPROVED EQUAL, "PRE-LUBRICATED" BY THE MANUFACTURER.
- B. ALL CONDUCTORS SHALL BE COPPER, RATED 75°C WET/DRY EXCEPT WHERE OTHERWISE NOTED OR REQUIRED BY U.L. OR OTHER CODES.
- C. ALL CONDUCTORS SHALL BE SINGLE INSULATED CONDUCTOR, THHN/THWN-2. SIZES #10
 AWG AND SMALLER SHALL BE SOLID, SIZES #8 AWG AND LARGER SHALL BE STRANDED.

 D. BRANCH CIRCUITS SHALL NOT BE SMALLER THAN #12 AWG. CONTROL WIRING MAY BE #14
- E. CONDUCTORS SHALL BE COLOR CODED BLACK/RED/BLUE FOR 120/208 VOLT SYSTEMS AND BROWN/ORANGE/YELLOW FOR 277/480 VOLT SYSTEMS FOR A, B, AND C PHASES, RESPECTIVELY. NEUTRAL SHALL BE WHITE FOR 120/208 VOLT SYSTEMS AND NATURAL GRAY FOR 277/480 VOLT SYSTEMS. GROUND CONDUCTOR SHALL BE GREEN ON ALL SYSTEMS. ALL CONDUCTOR SIZES SHALL HAVE COLOR—CODED INSULATION. THE USE OF
- COLORED TAPE ON LARGER WIRE SIZES SHALL NOT BE ALLOWED.

 F. INSULATION SHALL BE DUAL RATED TYPE THHN/THWN-2 FOR FEEDERS AND BRANCH CIRCUITS. FIXTURE TAPS SHALL BE #12 THHN/THWN-2 IN FLEX WITH GREEN #12 AWG GROUNDING CONDUCTOR.
- G. ALL CONDUCTORS SHALL BE IN CONDUIT.

 H. WIRING TO LIGHTING FIXTURES SHALL BE A

CONDUCTOR.

- H. WIRING TO LIGHTING FIXTURES SHALL BE AS REQUIRED BY UL LABEL.
 I. MULTI-WIRE BRANCH CIRCUITS SHALL NOT BE ALLOWED, UNLESS EXPLICITLY INDICATED ON THE DRAWINGS. WHERE EXPLICITLY INDICATED ON THE DRAWINGS:
 1) ALL 20A MULTI-WIRE RECEPTACLE CIRCUITS SHALL UTILIZE A #10 AWG NEUTRAL
 - OR

 2) ONLY WHERE PERMITTED UNDER "RACEWAYS", MC CABLE ASSEMBLIES CAN BE AFC "SUPER NEUTRAL" OR EQUAL, UNLESS OTHERWISE INDICATED ON THE DRAWINGS. WHERE MULTI-WIRE BRANCH CIRCUITS ARE EXPLICITLY INDICATED ON THE DRAWINGS, THEY SHALL BE INSTALLED PER NEC 210.4. MEANS SHALL BE PROVIDED TO SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES IN ADDITION TO OTHER REQUIREMENTS PER NEC
- 210.4.

 J. JOINTS IN #10 AWG AND SMALLER SHALL BE MADE UP WITH CRIMPED CONNECTORS WITH INSULATING CAPS (NO TAPE) OR WIRENUTS (MAXIMUM OF 3 CONDUCTORS UNDER ANY CONNECTOR OR WIRENUT). LARGER WIRE SHALL USE SPLIT BOLTS OR BOLTED CLAMPS.
- K. ALL WRING LUGS THROUGHOUT THE PROJECT, INCLUDING, BUT NOT LIMITED TO, BREAKERS, PANELBOARD/SWITCHBOARD LUGS, SAFETY SWITCH LUGS, MOTOR STARTER LUGS, TRANSFORMERS LUGS, WIRING DEVICE TERMINALS, AND ALL EQUIPMENT LUGS/TERMINALS SHALL BE RATED FOR USE WITH 75 DEGREE INSULATED CONDUCTORS AT THEIR 75 DEGREE AMPACITY AND SHALL BE SIZED AND SELECTED TO MATCH THE CONDUCTOR SIZE AND
- L. CIRCUIT JOINTS SHALL NOT BE MADE ON DEVICE TERMINALS.

 M. WIRE WITHIN PANELBOARDS SHALL BE NEATLY TRAINED, SQUARED, BUNCHED, AND TAGGED.

 N. ALL SYSTEM FURNITURE CONNECTIONS SHALL COMPLY WITH NEC 605.
- N. ALL SYSTEM FURNITURE CONNECTIONS SHALL COMPLY WITH NEC 605.

 O. GROUND ALL EQUIPMENT PER NEC ARTICLE 250. BOND WHERE CONDUITS ENTER ENCLOSURES THROUGH CONCENTRIC KNOCKOUTS. ALL FLEX, INCLUDING FIXTURE TAPS, SHALL INCLUDE GREEN GROUNDING CONDUCTOR, #12 AWG MINIMUM. PROVIDE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR IN EACH CONDUIT AND FOR EACH CIRCUIT, SIZED DEP NEC 250-122
- SIZED PER NEC 250-122.

 P. ALL CONDUCTORS INSTALLED IN VERTICAL RACEWAYS SHALL BE SUPPORTED AT INTERVALS AS REQUIRED PER NEC 300-19.
- Q. THE ELECTRICAL CONTRACTOR SHALL FOLLOW AND APPLY THE TABLE BELOW, REGARDLESS WHAT THE PANEL SCHEDULE INDICATES, FOR SIZING ALL 120V & 277V, 20 AMP BRANCH CIRCUITS (COPPER CONDUCTORS) TO ALLOW A MAXIMUM OF 3% VOLTAGE DROP FROM THE CIRCUIT BREAKER TO THE FIRST DEVICE ON THE BRANCH CIRCUIT AND ACHIEVE A MAXIMUM OF 5% VOLTAGE DROP ACROSS THE ENTIRE BRANCH CIRCUIT:

VOLTAGE CONDUCTOR LENGTH * BRANCH CIRCUIT

<u>VOLTAGE</u>	CONDUCTOR LENGTH *	<u>BRANCH</u>
120	0' - 50'	#1
120	51' — 90'	#1
120	91' — 140'	#8
120	141' – 225'	#6
277	0' – 125'	#12
277	126' – 200'	# 1C
277	201' – 330'	#8
277	331' <u> </u>	#6

* — THE LENGTH IS MEASURED FROM THE CIRCUIT BREAKER TO THE FIRST DEVICE WHICH THE BRANCH CIRCUIT SERVES. WHERE THE DISTANCE EXCEEDS ABOVE, CONSULT WITH

5. <u>WIRING DEVICES:</u>

WIRING DEVICES SHALL BE SPECIFICATION GRADE, MINIMUM, EQUAL TO COOPER QUALITY INDICATED BELOW OR AS MANUFACTURED BY HUBBELL, LEGRAND-PASS & SEYMOUR, LEVITON, OR APPROVED EQUAL, UNLESS OTHERWISE NOTED:

SWITCHES (120/277V) SHALL BE AS FOLLOWS:

SINGLE-POLE 20 AMP	COOPER	AH1221
DOUBLE-POLE 20 AMP	COOPER	AH1222
THREE-WAY 20 AMP	COOPER	AH1223
FOUR-WAY 20 AMP	COOPER	AH1224
SINGLE-POLE-PILOT 20 AMP	COOPER	AH1221PL
DOUBLE-POLE-PILOT 20 AMP	COOPER	AH1222PL
THREE-WAY-PILOT 20 AMP	COOPER	AH1223Pl
SINGLE-POLE-KEY 20 AMP	COOPER	AH1221L
DOUBLE-POLE-KEY 20 AMP	COOPER	AH1222L
THREE-WAY-KEY 20 AMP	COOPER	AH1223L
FOUR-WAY-KEY 20 AMP	COOPER	AH1224L

DUPLEX RECEPTACLES SHALL HAVE A NYLON FACE AND SHALL BE AS FOLLOWS:

15 AMP	DUPLEX		COOF	PER 5252
20 AMP	DUPLEX		COOF	PER 5352
15 AMP	DUPLEX	GFCI	COOP	ER SGF15F
20 AMP	DUPLEX	GFCI	COOP	ER SGF20F
15 AMP	DUPLEX	TAMPER	COOP	ER TR5262
20 AMP	DUPLEX	TAMPER	COOP	ER TR5362
15 AMP	DUPLEX	GFCI-TAMPER	COOP	ER TRSGF15F
20 AMP	DUPLEX	GFCI-TAMPER	COOP	ER TRSGF20F
15 AMP	DUPLEX	IG	COOP	ER IG5262
20 AMP	DUPLEX	IG	COOP	ER IG5362
15 AMP	DUPLEX	SPD	COOF	PER 5262S
20 AMP	DUPLEX	SPD	COOPI	ER 5362S
15 AMP	DUPLEX	IG-SPD	COOF	PER IG5262S
20 AMP	DUPLEX	IG-SPD	COOF	PER IG5362S
15 AMP	DUPLEX	CORROSION	COOF	PER 5262CR
20 AMP	DUPLEX	CORROSION	COOP	ER 5362CR

THE PART NUMBERS ABOVE ARE FOR WIRING DEVICE TYPE ONLY. SEE BELOW FOR WIRING DEVICE COLOR AND PLATE MATERIAL/COLOR.

- B. SEE MOUNTING HEIGHT ELEVATION DETAIL FOR STANDARD MOUNTING HEIGHTS OF ALL DEVICES, UNLESS OTHERWISE NOTED.
- C. ALL WIRING DEVICES (SWITCHES AND RECEPTACLES) SHALL BE GRAY, UNLESS OTHERWISE NOTED. ALL COVER PLATES SHALL BE 302 STAINLESS STEEL. COVER PLATES IN MASONRY WALLS SHALL BE OVERSIZE TYPE.
- ALL COVER PLATES SHALL BE 302 STAINLESS STEEL. COVER PLATES IN MASONRY WALLS SHALL BE JUMBO SIZE.
- F. EACH DUPLEX RECEPTACLE INDICATED TO BE ON A DEDICATED CIRCUIT SHALL BE 20 AMP TYPE.
- G. ADJACENT DEVICES SHALL HAVE A COMMON WALL PLATE.
 H. WEATHERPROOF COVERS SHALL BE "WHILE—IN—USE" SO PLUGS MAY BE INSTALLED WITHOUT COMPROMISING THE WP FUNCTION. COOPER #WIU—2 DOUBLE—GANG WITH CLEAR COVER OR
- APPROVED EQUAL.
 I. A MAXIMUM OF 10 GENERAL PURPOSE RECEPTACLES SHALL BE ON EACH BRANCH CIRCUIT.
- J. DIMMERS SHALL BE LINEAR SLIDE, PRESENT ON/OFF, SQUARE LAW DIMMING, W/RFI FILTERING AND VOLTAGE COMPENSATION CIRCUITING.
- K. ALL WALL MOUNTED OCCUPANCY/VACANCY SENSORS/SWITCHES SHALL BE INSTALLED WITH AN EQUIPMENT GROUNDING CONDUCTOR.
 L. GROUND—FAULT CIRCUIT—INTERRUPTER (GFCI) PROTECTION FOR PERSONNEL SHALL BE PROVIDED FOR ALL LOCATIONS PER NEC 210.8 INSTALLED IN A READILY ACCESSIBLE.
- PROVIDED FOR ALL LOCATIONS PER NEC 210.8, INSTALLED IN A READILY ACCESSIBLE LOCATION. WHERE A DEVICE LOCATION IS NOT ACCESSIBLE, THE GFCI PROTECTION SHALL BE PROVIDED WITH THE BREAKER SERVING THE DEVICE.
- M. ALL GFCI RECEPTACLES SHALL HAVE AUTO—MONITORING / SELF—TEST FUNCTION AND REVERSE LINE—LOAD MISFIRE FUNCTION AND MEET ALL REQUIREMENTS OF UL 943 (LATEST EDITION).

SUPPORTS:

- A. ALL EQUIPMENT SHALL BE ADEQUATELY SUPPORTED FROM STRUCTURE.
 B. INSERTS IN MASONRY SHALL BE LEAD OR FIBER IN DRILLED HOLES, OR CAST IN PLACE.
 C. NAILS OR POWDER ACTUATED FASTENERS SHALL NOT BE USED.
- D. EMT/IMC/RGS SUPPORTS SHALL BE A MAXIMUM OF 8'-0" APART AND A MAXIMUM OF 3'-0" FROM BOXES.

 F. LIGHTING FIXTURES MOUNTED IN OR ON CEILING SHALL BE SUPPORTED FROM STRUCTURE
- E. LIGHTING FIXTURES MOUNTED IN OR ON CEILING SHALL BE SUPPORTED FROM STRUCTURE VIA 12 GAUGE STEEL WIRE. PROVIDE A MINIMUM OF FOUR WIRES, ONE ATTACHED TO EACH CORNER OF LAY—IN FIXTURES. RECESSED DOWNLIGHT FIXTURES SHALL BE SUPPORTED THE SAME. DO NOT SUPPORT RACEWAY OR FIXTURES FROM CEILING GRID OR DUCT WORK. USE U.L. LISTED GRID CLIPS ON ALL LAY—IN FIXTURES.

7. PAINTING

A. SUITABLE FINISH COAT SHALL BE PROVIDED FOR ALL EQUIPMENT. PANEL TUBS, COVERS, ETC. SHALL BE PRIMED AND ENAMELED TO BLEND WITH ADJACENT SURFACES, OR SHALL BE MANUFACTURER'S STANDARD COLOR BAKED ENAMEL FINISH, OR AS DIRECTED BY THE ARCHITECT.

TELECOMMUNICATIONS:

- A. FURNISH A COMPLETE TELEPHONE CONDUIT SYSTEM AS INDICATED ON THE DRAWINGS.
 B. TELECOMMUNICATION OUTLETS SHALL CONSIST OF A 4" SQUARE DEEP BOX WITH SINGLE GANG PLASTER RING. PROVIDE BLANK PLATE WITH KNOCKOUTS FOR OUTLETS, AS
- PERMANENT COVERS WILL BE PROVIDED BY A SEPARATE INSTALLER.

 C. PROVIDE MINIMUM 1" RACEWAY, UNLESS OTHERWISE NOTED, FROM EACH BOX TO ABOVE NEAREST ACCESSIBLE CEILING SPACE FOR J-HOOK SYSTEM OR TO CABLE TRAY AS APPLICABLE. PROVIDE MINIMUM 210# TEST NYLON PULL CORD AND NYLON BUSHINGS IN ALL EMPTY RACEWAYS.
- D. PROVIDE RACEWAYS FOR ALL EXTERIOR AND/OR EXPOSED LOCATIONS.
- E. PROVIDE GROUNDING FOR ALL TELEPHONE/DATA SYSTEMS AND EQUIPMENT PER REQUIREMENTS AND SPECIFICATIONS PROVIDED BY THE OWNERS DESIGNATED VENDOR.
- F. ALL LOW-VOLTAGE CABLING SHALL BE PLENUM-RATED.





800.414.1045



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CONCORD

IM" RAMSEUR PA

RECREATION DEPARTMEN

ANCE BUILDING

PROJECT NO: 06/15

DESIGNED BY: BLM

081197

OPTIMA #: 22-0236

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SHEET NAME:
ELECTRICAL

DRAWN BY:

SHEET NO:

ISSUED FOR BIDDING

E-002

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THE ENGINEER.

9. <u>LIGHTING FIXTURES:</u>

- A. TYPES AND MANUFACTURERS ARE SCHEDULED ON THE PLANS. EQUIVALENT FIXTURES BY OTHERS MAY BE SUBMITTED ONLY AS INDICATED ON THE PLANS AND ARE SUBJECT TO THE APPROVAL OF THE OWNER AND ENGINEER. B. ALL FIXTURES SHALL BE U.L. LISTED AND LABELED.
- C. LED DRIVERS AND/OR BALLASTS SHALL BE AS INDICATED IN THE LIGHTING FIXTURE
- SCHEDULE OR AS OTHERWISE NOTED. D. ALL FIXTURES SHALL BE PROVIDED FOR PROPER VOLTAGE BASED ON THE CIRCUIT ASSIGNMENT INDICATED ON THE PLANS
- CATALOG NUMBERS ARE FOR GENERAL IDENTIFICATION OF FIXTURES ONLY. ALL RELATED PARTS, SUCH AS PLASTER RINGS, JUNCTION BOXES, LOUVERS, SHIELDS, MOUNTING STEMS, CANOPIES. CONNECTORS, STRAPS, NIPPLES, HARDWARE, ACCESSORIES, ETC., TO FIT THEM PROPERLY TO THE CONSTRUCTION, SHALL BE FURNISHED AND INSTALLED BY THIS CONTRACTOR. CONTRACTOR SHALL PROVIDE SUITABLE TRIM AND APPURTENANCES TO MOUNT FIXTURES IN TYPE OF CEILING OR WALL AS SPECIFIED IN ARCHITECTURAL FINISH SCHEDULES REGARDLESS OF CATALOG NUMBER GIVEN. ALL FIXTURES SHALL BE GROUNDED PER THE NEC.
- FIXTURES CONNECTED WITH FLEX TO THE RIGID RACEWAY PORTION OF THE WIRING SYSTEM SHALL CARRY A GREEN BONDING JUMPER WITHIN THE FLEX. THE JUMPER SHALL BE FASTENED TO BOTH THE FIXTURE AND THE RACEWAY SYSTEM WITH A STEEL CITY "G" CLIP OR APPROVED EQUIVALENT. PHASE AND GROUND CONDUCTORS RUN IN FLEX SHALL BE #12 AWG MINIMUM. MAXIMUM FLEX LENGTH SHALL BE 6'-0". MOUNT ALL FIXTURES PLUMB AND SQUARE WITH ROWS ALIGNED.
- I. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF FIXTURES. J. CONTRACTOR SHALL COORDINATE FIXTURE TYPE AND TRIM WITH CEILING CONSTRUCTION AND
- ADJUST ACCORDINGLY WITHOUT ADDITIONAL EXPENSE. K. ALL LIGHTING FIXTURES SHALL BE THERMALLY PROTECTED PER THE NEC.
- L. LIGHTING FIXTURES MOUNTED IN OR ON CEILING IN HAZZARDOUS AREAS SHALL BE SUPPORTED FROM STRUCTURE VIA HOT DIPPED GALVANIZED CABLES HUNG FROM GALVANIZED EYEBOLTS AND USING GALVANIZED THIMBLES TO RESIST CORROSION FROM POOL CHEMICALS.

10. <u>LIGHTING CONTROLS:</u>

- A. FURNISH AND INSTALL WHERE SHOWN AN ELECTRONIC TIME CONTROLLER AS MANUFACTURED BY TORK (NSI), PARAGON, INTERMATIC, OR APPROVED EQUAL. CONTACTS SHALL BE SPST OR AS INDICATED, RATED 120/277V AT 20A BALLAST LOAD, AND MINIMUM 30,000 SWITCHING CYCLES. PROVIDE WITH THE NUMBER OF CHANNELS INDICATED (MINIMUM 2 CHANNELS) OR AS REQUIRED TO MEET THE INTENT OF THE DRAWINGS. EACH CHANNEL SHALL BE INDIVIDUALLY PROGRAMMABLE WITH 128 ON-OFF OPERATIONS PER WEEK PLUS FOUR SEASONAL SCHEDULES TO MODIFY THE BASIC PROGRAM AND A HOLIDAY SCHEDULE THAT OVERRIDES THE WEEKLY OPERATION. THE CONTROLLER SHALL BE PROVIDED WITH A PHOTOELECTRIC SENSOR, ASTRONOMIC DIAL, AND A BATTERY BACKED-UP, NON-VOLATILE MEMORY FOR SCHEDULES AND TIME CLOCK.
- LIGHTING CONTACTORS SHALL SWITCH LOADS AT THE VOLTAGE AND AMPERE RATING INDICATED AND SHALL HAVE THE NUMBER OF POLES INDICATED ON THE DRAWINGS OR AS REQUIRED. THE CONTACTOR AND CONTACTS SHALL BE CONTINUOUSLY RATED FOR THE LOAD SERVED, INCLUDING TUNGSTEN FILAMENT, INDUCTIVE, AND HIGH-INRUSH BALLAST
- C. ALL LIGHTING CONTACTORS SHALL BE ELECTRICALLY HELD AND BE INSTALLED IN A NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.

EQUIPMENT IDENTIFICATION:

- A. PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR ALL ELECTRICAL EQUIPMENT SUPPLIED FOR THE PROJECT, INCLUDING BUT NOT LIMITED TO, WIRING TROUGHS, SAFETY SWITCHES, DISCONNECTS, TRANSFORMERS, PANELBOARDS, SWITCHBOARDS, SWITCHGEARS, MOTOR CONTROL CENTERS (MCC), BUSWAYS, GENERATORS, AUTOMATIC TRANSFER SWITCHES (ATS), UNINTERRUPTIBLE POWER SUPPLY (UPS), POWER DISTRIBUTION UNITS (PDU), FLOOR/REMOTE DISTRIBUTION CABINETS (FDC/RDC), STATIC TRANSFER SWITCHES (STS), ETC. NAMEPLATE SHALL INDICATE THE DEVICE NAME, SYSTEM VOLTAGE (VOLTAGE/PHASE/WIRE), AND UPSTREAM DEVICE AND CIRCUIT. PROVIDE NAMEPLATES FOR CIRCUIT BREAKÉRS IN SWITCHGEARS. SWITCHBOARDS AND DISTRIBUTION PANELS.
- NAMEPLATE COLORS SHALL BE AS FOLLOWS: 120/208V EQUIPMENT 277/480V EQUIPMENT EMERGENCY SYSTEMS FIRE ALARM SYSTEM SECURITY SYSTEMS TELEPHONE SYSTEMS DATA SYSTEMS TV SYSTEMS PAGING SYSTEMS

ABOVE 12 SQUARE INCHES: 6 SCREWS.

BLACK SURFACE WITH WHITE CORE GREEN SURFACE WITH WHITE CORE BRIGHT RED SURFACE WITH WHITE CORE BURGUNDY SURFACE WITH WHITE CORE ORANGE SURFACE WITH WHITE CORE BROWN SURFACE WITH WHITE CORE PURPLE SURFACE WITH WHITE CORE WHITE SURFACE WITH BLACK CORE

BLUE SURFACE WITH WHITE CORE

- NAMEPLATES UP TO 8 SQUARE INCHES SHALL NOT BE LESS THAN 1/16" THICK. NAMEPLATES LARGER THAN 8 SQUARE INCHES SHALL NOT LESS THAN 1/8" THICK. LETTERING HEIGHT SHALL BE 1/2" MINIMUM.
- NAMEPLATES SHALL BE ATTACHED WITH SELF-DRILLING/SELF-TAPPING SCREWS, EXCEPT RIVETS SHALL BE USED WHERE END OF SCREW IS NOT PROTECTED. QUANTITY AS FOLLOWS: UP TO 5 SQUARE INCHES: 2 SCREWS. 5 TO 12 SQUARE INCHES: 4 SCREWS.

12. <u>DISCONNECTS:</u>

- DISCONNECT SWITCHES SHALL BE HEAVY-DUTY TYPE IN NEMA 1 ENCLOSURES, UNLESS OTHERWISE NOTED, FUSED OR NON-FUSED AS INDICATED. SWITCHES SHALL HAVE REJECTION-TYPE FUSE CLIPS. SWITCHES SHALL BE BY EATON, SQUARE-D, GENERAL ELECTRIC, OR APPROVED EQUAL. WHERE FED FROM A LOAD CENTER, GENERAL-DUTY
- SWITCHES SHALL BE PERMITTED. FUSES LESS THAN 60A SHALL BE CLASS RK5, DUAL-ELEMENT, TIME-DELAY WITH
- C. FUSES GREATER THAN 60A SHALL BE CLASS J, DUAL-ELEMENT, TIME-DELAY WITH
- INDICATION. A SET OF 3 SPARE FUSES OF EACH SIZE AND TYPE SHALL BE FURNISHED TO THE OWNER. E. ALL ELECTRICAL EQUIPMENT ENCLOSURES IN POOL EQUIPMENT, CHLORINE, AND ACID ROOMS SHALL BE NEMA-4X STAINLESS STEEL OR NON-METALLIC, WET-LOCATION LISTED AND LISTED TO RESIST CORROSION FROM POOL CHEMICALS.

13. PANELBOARDS:

- A. PANELBOARDS SHALL BE PROVIDED AS MANUFACTURED BY EATON, SQUARE-D, GENERAL ELECTRIC, OR APPROVED EQUAL. ALL NEW EQUIPMENT FOR THE PROJECT SHALL BE BY THE SAME MANUFACTURER. LOAD CENTER TYPE PANELBOARDS SHALL BE USED WHERE THE PANELBOARD SERVES A DWELLING UNIT.
- ALL BREAKERS SHALL BE AUTOMATIC THERMAL-MAGNETIC TYPE MOLDED CASE BOLT-ON TYPE, CALIBRATED FOR 40 DEGREE C, OR AMBIENT COMPENSATION, UNLESS OTHERWISE

ALL BUSSING, INCLUDING NEUTRAL AND GROUND, SHALL BE COPPER.

- PANELS SHALL BE FULLY RATED (AIC). NO SERIES AIC RATINGS ARE ALLOWED. PANELS SHALL HAVE FULL SIZE EQUIPMENT GROUNDING BARS AND NEUTRAL BARS, EXCEPT WHERE INDICATED TO BE 200%.
- F. ALL PANELBOARD AND BREAKER LUGS SHALL BE SIZED AND RATED PER THE CONDUCTOR SIZE AND MATERIAL. G. LIGHTING AND APPLIANCE PANELS (100A-600A) SHALL HAVE FRONT ACCESSIBLE HINGED

- DOOR-IN-DOOR COVERS WITH DEAD FRONT, SHALL BE 20" WIDE MINIMUM WITH MINIMUM 4" WIDE WIRING GUTTERS.
- DISTRIBUTION PANELS (600A-1200A) SHALL HAVE FRONT ACCESSIBLE DEAD FRONT COVERS. PROVIDE HANDLE LOCK-ON DEVICES FOR ALL CIRCUIT BREAKERS CONNECTED TO EMERGENCY, EXIT, NIGHT LIGHTING, FIRE ALARM, TELEPHONE BOARDS, AND SECURITY
- BREAKERS USED FOR SWITCHING SHALL BE SWITCHING DUTY (SWD) RATED. K. BREAKERS USED FOR HEATING, AIR-CONDITIONING AND/OR REFRIGERATION SHALL BE HACR
- GROUND-FAULT CIRCUIT-INTERRUPTER (GFCI) PROTECTION FOR PERSONNEL SHALL BE PROVIDED FOR ALL LOCATIONS PER NEC 210.8, INSTALLED IN A READILY ACCESSIBLE LOCATION. WHERE A DEVICE LOCATION IS NOT ACCESSIBLE, THE GFCI PROTECTION SHALL BE PROVIDED WITH THE BREAKER SERVING THE DEVICE.
- M. ARC-FAULT CIRCUIT-INTERRUPTER (AFCI) PROTECTION SHALL BE PROVIDED FOR ALL LOCATIONS PER NEC 210.12, INSTALLED IN A READILY ACCESSIBLE LOCATION. THIS INCLUDES ALL 120V, 15A AND 20A BRANCH CIRCUITS IN DWELLING UNITS, DORMITORY/STUDENT HOUSING UNITS AND HOTEL/MOTEL GUEST ROOMS/SUITES AS DEFINED BY THE NEC.
- N. ALL OVERCURRENT DEVICES WHICH COMPRISE THE EMERGENCY SYSTEM OR LEGALLY REQUIRED STANDBY SYSTEM SHALL BE SELECTIVELY COORDINATED. THE ELECTRICAL CONTRACTOR SHALL PROVIDE MANUFACTURER DOCUMENTATION INDICATING COMPLIANCE WITH THE SELECTIVE COORDINATION REQUIREMENTS PER THE NEC.
- O. ALL PANELBOARDS SHALL HAVE METAL DIRECTORY FRAME. FOR EACH PANELBOARD, PROVIDE TYPED CIRCUIT DIRECTORY PER NEC 408.4. SPARE CIRCUIT BREAKERS SHALL BE LABELED SPARE AND IN THE OFF POSITION.

14. FIRE STOPPING:

- A. ALL PENETRATIONS OF RATED ASSEMBLIES SHALL BE SEALED WITH RATED MATERIALS
- MEETING ASTM E-814. PROVIDE FIRESTOPPING DEVICE(S) OR SYSTEM(S) WHICH HAVE BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814. INSTALL THE DEVICE(S) OR SYSTEM(S) IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE THE APPROPRIATE DEVICE(S) OR SYSTEM(S) WITH AN 'F' RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRÀTED.
- C. DEVICE(S) AND/OR SYSTEM(S) SHALL BE BY HILTI, 3M OR EQUIVALENT.

A. THE ELECTRICAL CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR PROVIDING SEISMIC SUPPORT AND BRACING OF ELECTRICAL COMPONENTS TO RESIST THE EFFECTS OF EARTHQUAKES ON THE ELECTRICAL SYSTEM AS WELL AS ANY REQUIRED SPECIAL INSPECTIONS BASED ON THE SPECIFIC GEOGRAPHIC LOCATION AS REQUIRED. THE SEISMIC RESTRAINTS AND SPECIAL INSPECTIONS SHALL MEET ALL APPLICABLE STATE AND LOCAL BUILDING CODE REQUIREMENTS AS WELL AS ASCE-7 REQUIREMENTS.

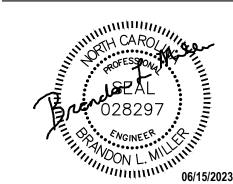
16. <u>ELECTRICAL COORDINATION WITH OTHER TRADES:</u>

- A. THE ELECTRICAL CONTRACTOR SHALL CONNECT AND/OR PROVIDE FINAL CONNECTIONS TO ALL EQUIPMENT SUPPLIED BY OTHERS APPLICABLE TO THE PROJECT. INCLUDING BUT NOT LIMITED TO, MECHANICAL, PLUMBING, FIRE PROTECTION AND SUPPRESSION, OWNER FURNISHED, KITCHEN, LABORATORY, ETC. UNLESS OTHERWISE NOTED.
- B. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL CONNECTIONS PRIOR TO ROUGH-IN USING APPROVED CATALOG SHEETS AND SHOP DRAWINGS.
- C. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANUAL MOTOR STARTER SWITCHES, DISCONNECT SWITCHES, RECEPTACLES, ETC. TO MECHANICAL AND PLUMBING EQUIPMENT. ALL STARTERS, OTHER THAN MANUAL STARTER SWITCHES, SHALL BE PROVIDED BY OTHERS, BUT INSTALLED BY THE ELECTRICAL CONTRACTOR.
- D. ALL DISCONNECT SWITCHES AND FUSE SIZES SHALL BE COORDINATED WITH SHOP DRAWINGS PRIOR TO ORDERING OR INSTALLING. ANY EQUIPMENT INSTALLED INCORRECTLY BECAUSE OF LACK OF COORDINATION WILL BE REMOVED AND INSTALLED CORRECTLY AT THE EXPENSE OF THE FLECTRICAL CONTRACTOR
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL CONDUIT RUNS AND LIGHT FIXTURE LOCATIONS ABOVE THE CEILING WITH OTHER TRADES PRIOR TO INSTALLATION.
- ALL DUCT SMOKE DETECTORS SHALL BE PROVIDED AND CONNECTED BY THE ELECTRICAL CONTRACTOR, BUT INSTALLED BY THE MECHANICAL CONTRACTOR.
- G. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY OUTLETS FOR HEAT TAPE CONNECTIONS FOR MECHANICAL SYSTEMS. PROVIDE CLASS B (30mA) GFCI PROTECTION ON THE BREAKER SUPPLYING THE HEAT TAPE.
- H. THE ELECTRICAL CONTRACTOR SHALL PROVIDE 120V POWER AT EACH HVAC UNIT HAVING A CONTROLS POWER SUPPLY. CIRCUIT(S) SHALL BE DEDICATED 20A SERVING A MAXIMUM OF 10 HVAC UNITS PER CIRCUIT. COORDINATE ALL LOCATIONS WITH THE MECHANICAL CONTRACTOR.

17. COMMISSIONING:

- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR EQUIPMENT/SYSTEM START-UP AND TESTING. THE ELECTRICAL CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR EQUIPMENT/SYSTEM COMMISSIONING AS DIRECTED BY THE COMMISSIONING AUTHORITY (CxA) THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE COMMISSIONING AUTHORITY AND PROVIDE ALL NECESSARY TIME, EQUIPMENT, MATERIALS, AND PROCEDURES REQUIRED FOR A FULLY COMMISSIONED PROJECT.
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SYSTEM COMMISSIONING PER 2018 NCECC SECTION C408. WHERE AN INDEPENDENT COMMISSIONING AGENT IS NOT ENGAGED BY THE OWNER, THE EC SHALL HIRE A REGISTERED DESIGN PROFESSIONAL (ENGINEER SEALED IN NC OR CERTIFIED COMMISSIONING PROFESSIONAL) TO PERFORM THE COMMISSIONING DUTIES DESCRIBED IN SECTION C408, AND PROVIDE THE OWNER AND CODE OFFICIAL WITH A SEALED STATEMENT OF COMPLETION (APPENDIX C1). THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE COMMISSIONING AGENT AND PROVIDE ALL NECESSARY TIME, MATERIALS, AND PROCEDURES REQUIRED FOR A FULLY COMMISSIONED

WOOLPERT ARCHITECTURE ENGINEERING GEOSPATIAL 13860 BALLANTYNE CORPORATE PLACE SUITE 425



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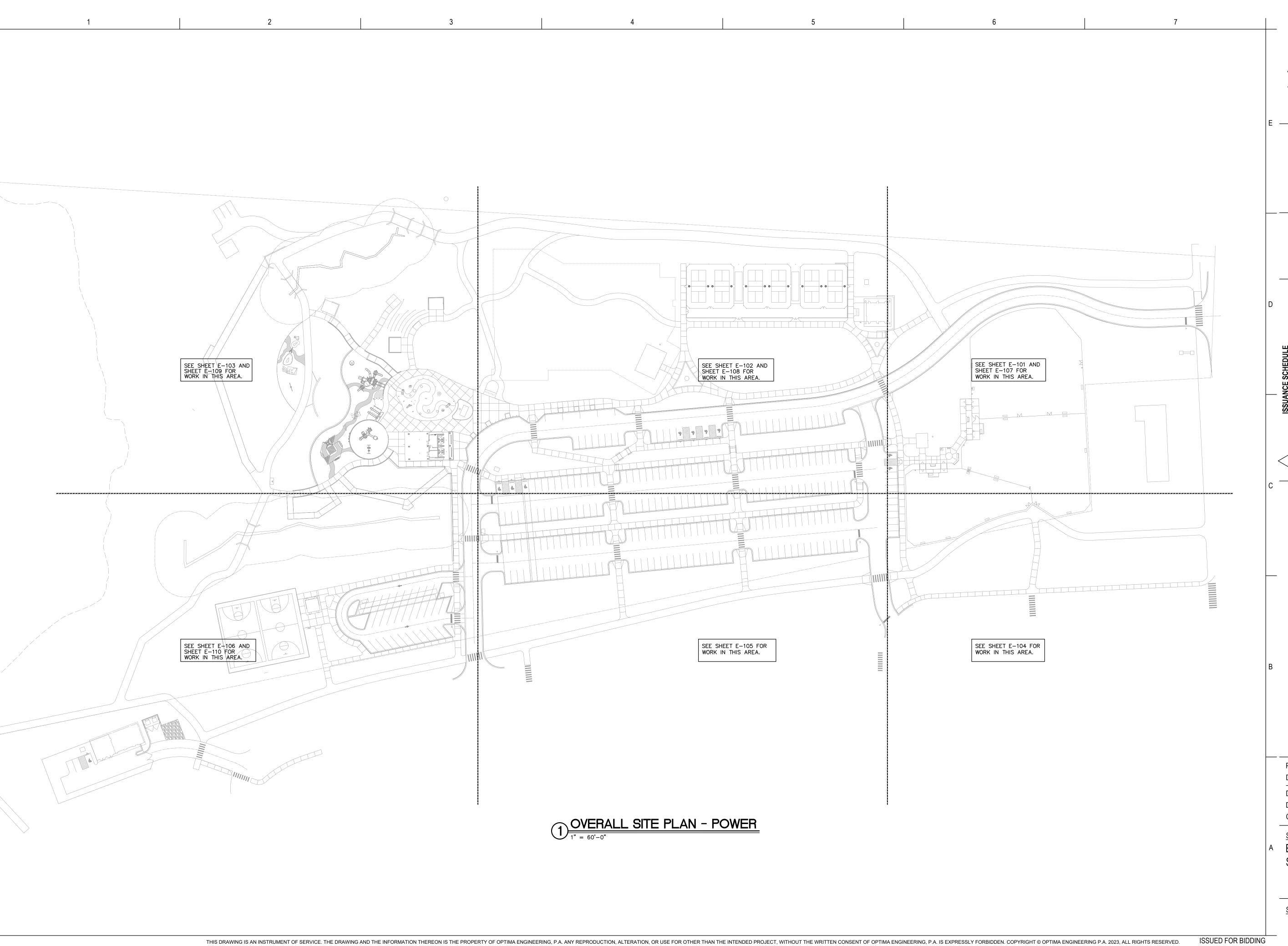
081197 PROJECT NO: 06/15/2023 DATE ISSUED: **DESIGNED BY:** BLM DRAWN BY: CHECKED BY:

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ELECTRICAL SPECIFICATIONS (CONT'D)
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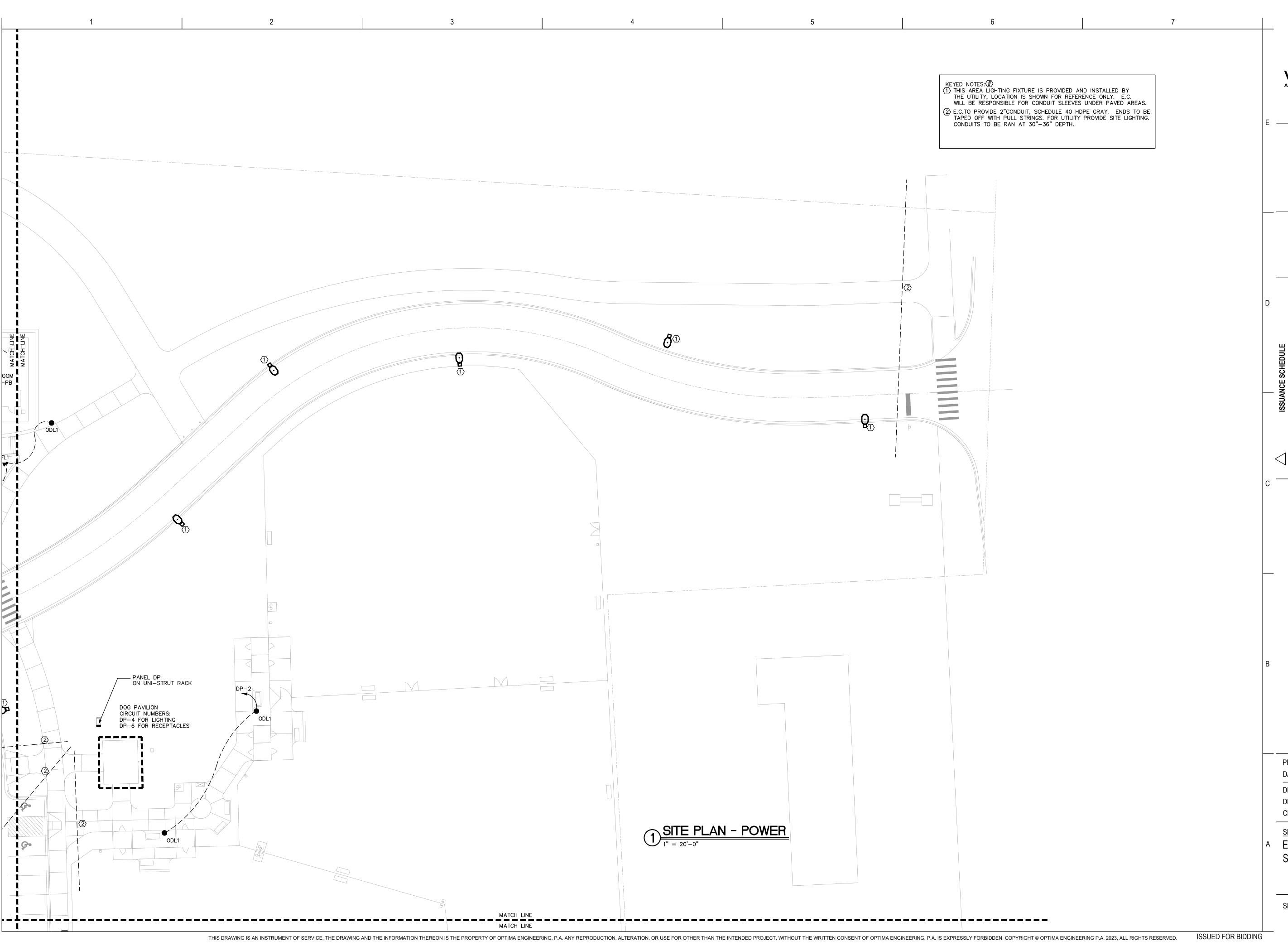


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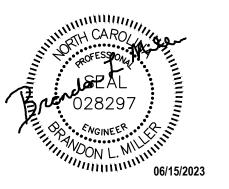
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SHEET NO:

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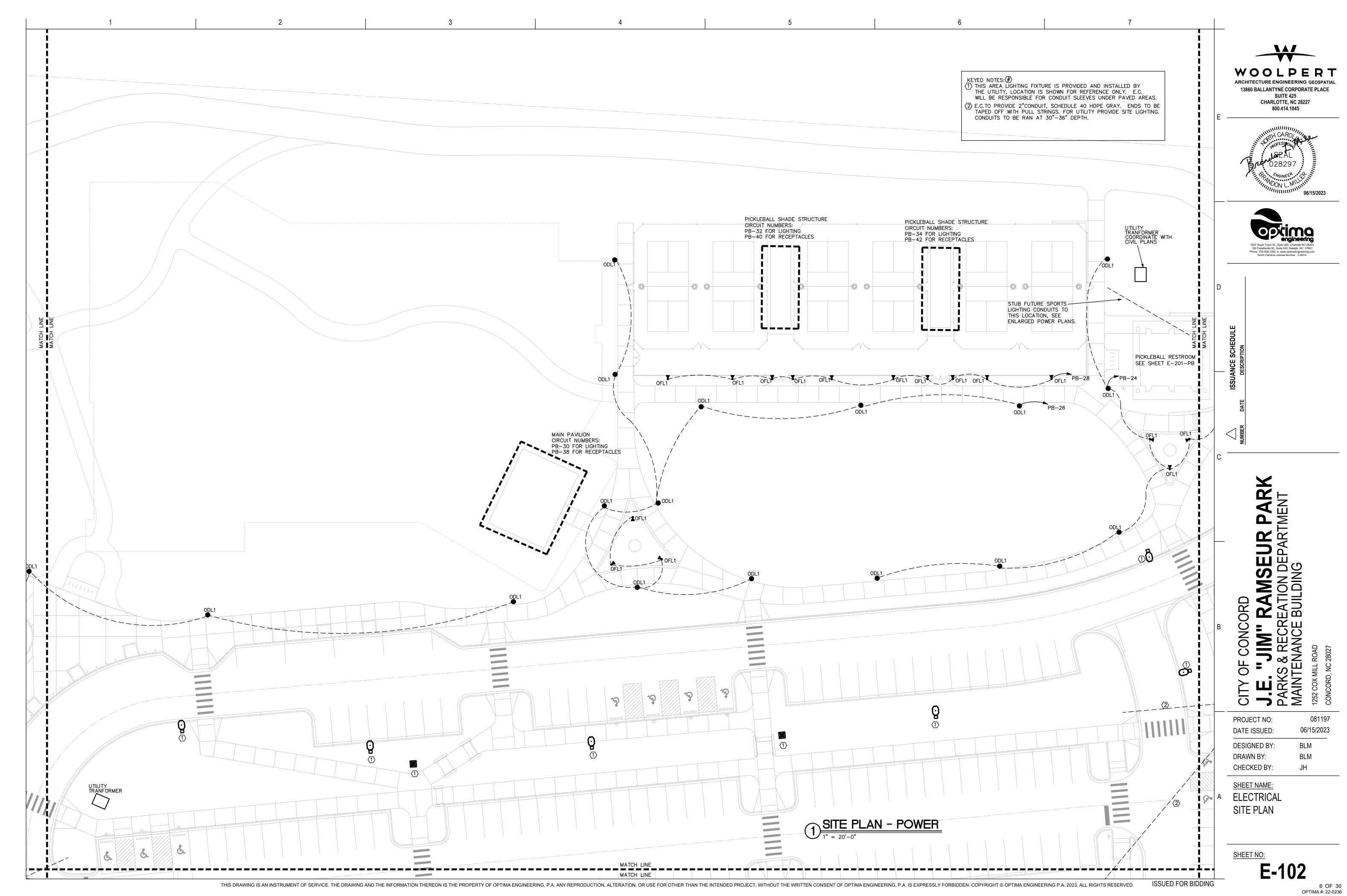
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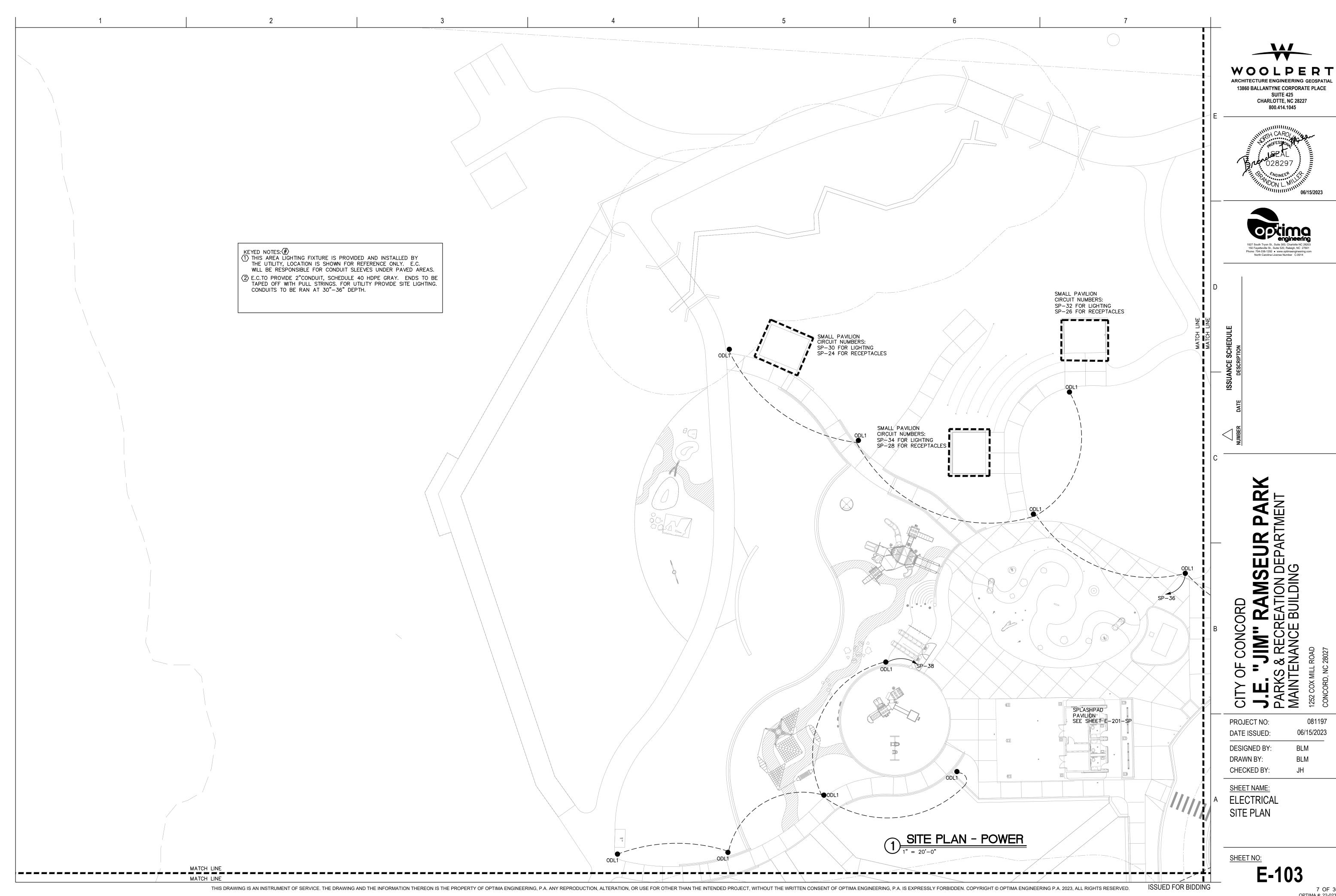
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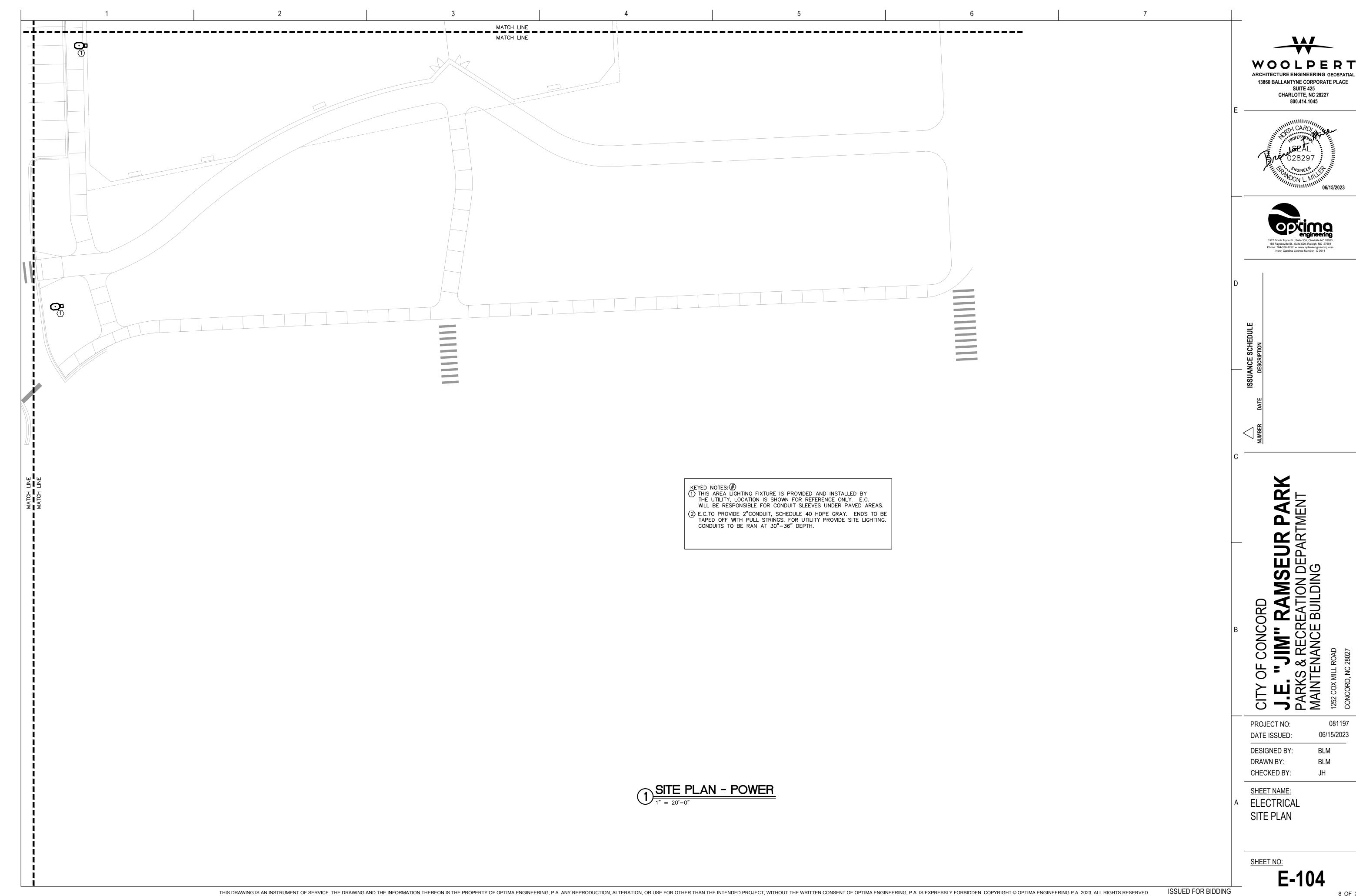
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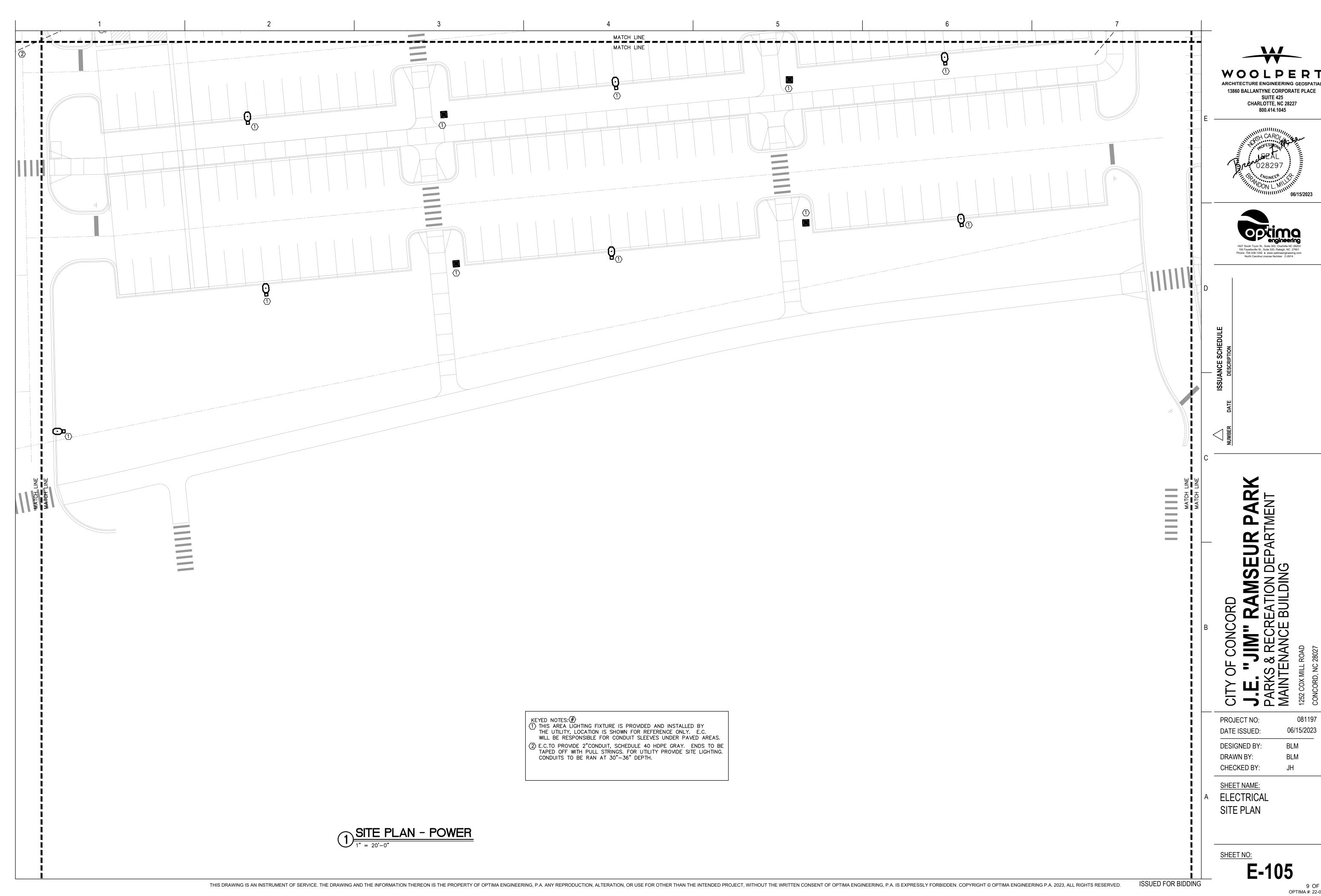
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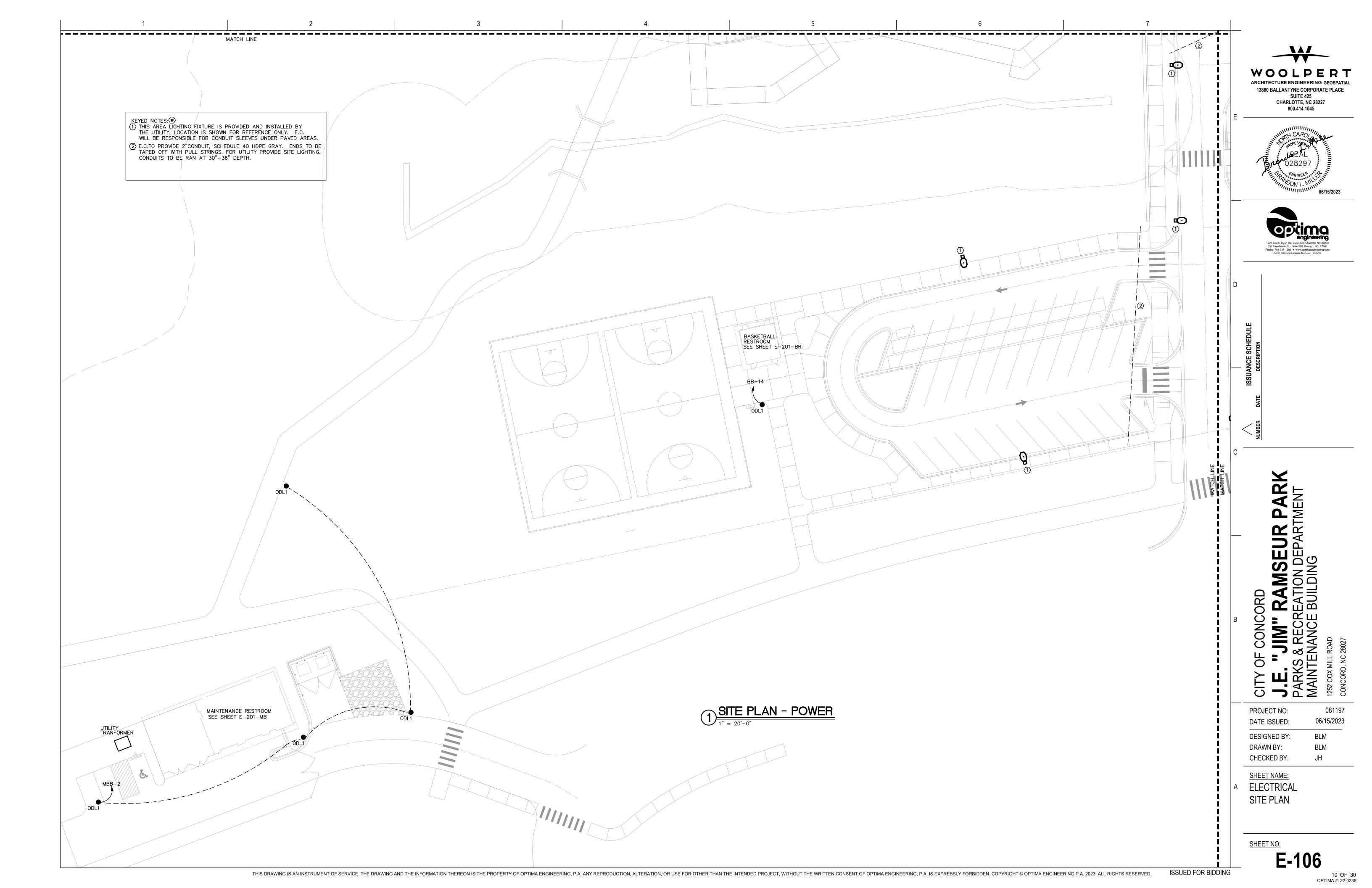
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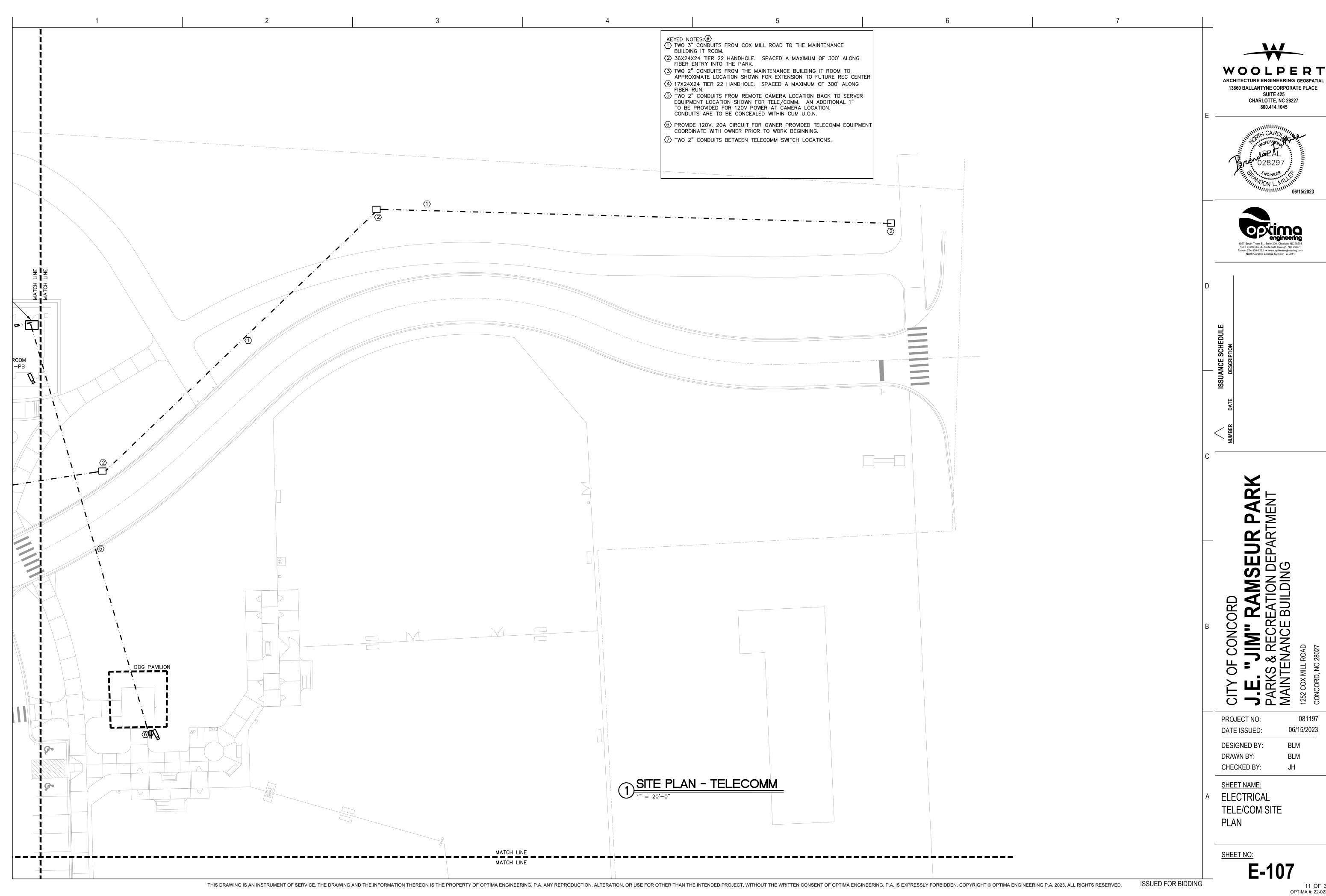


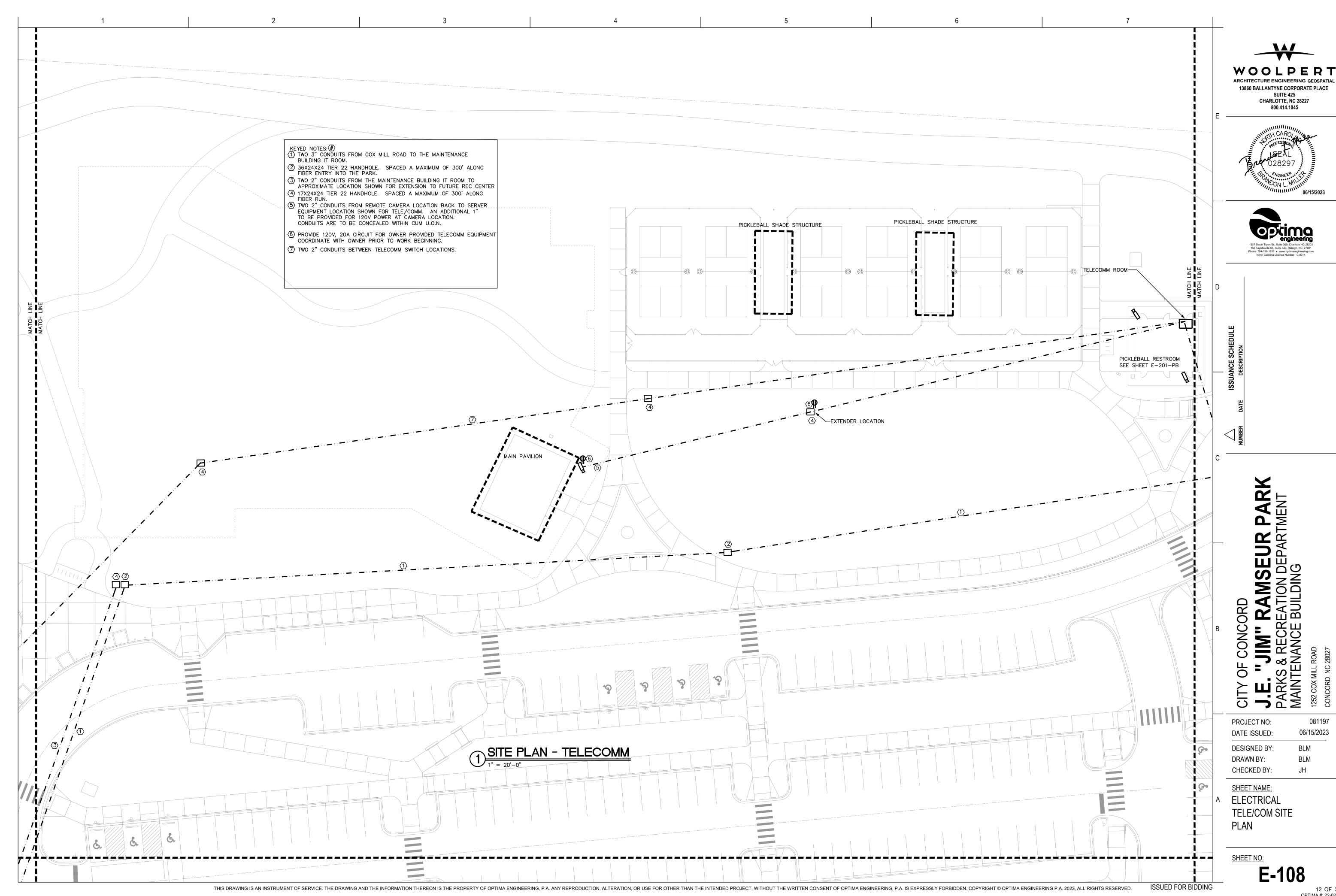


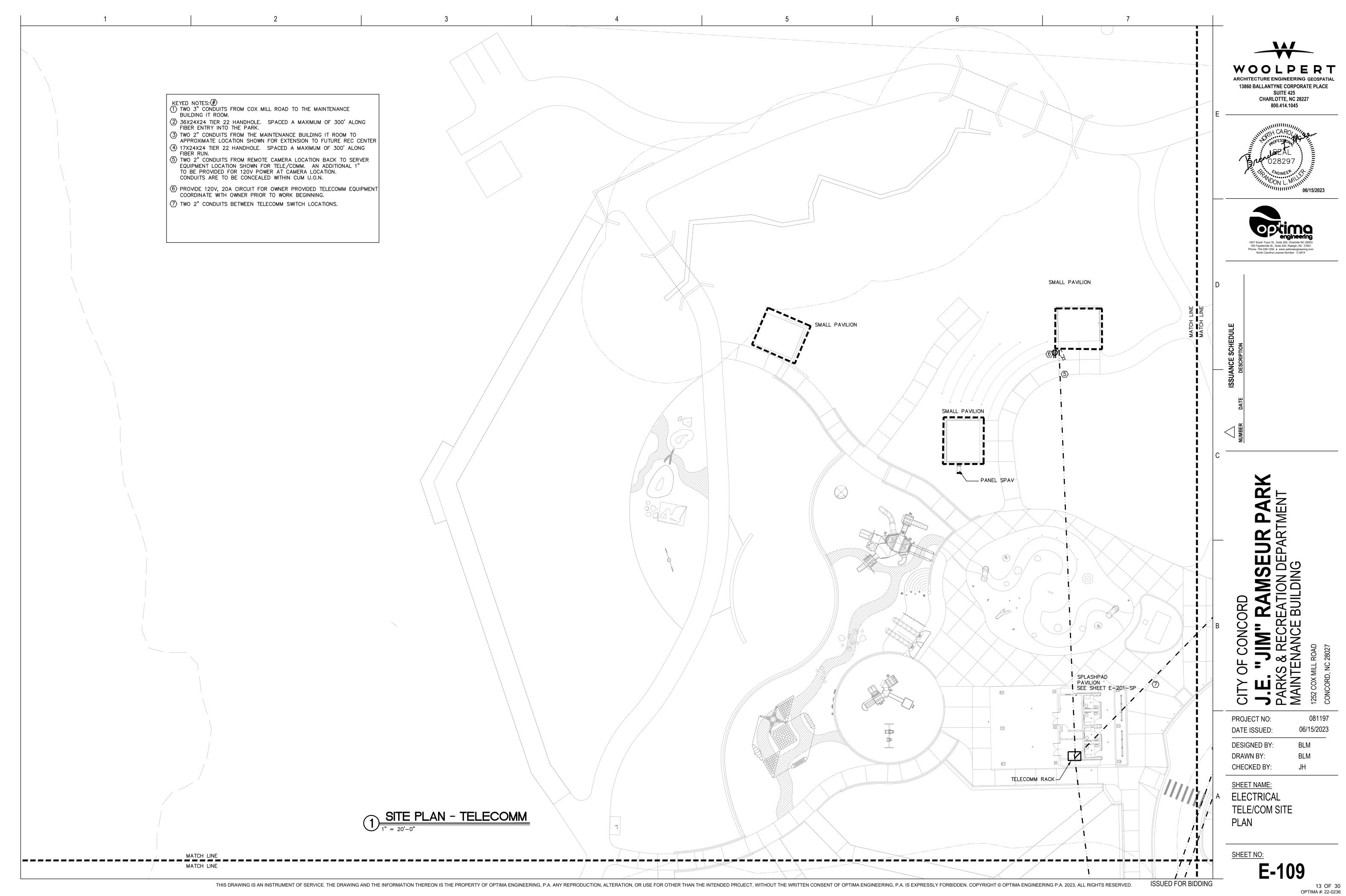


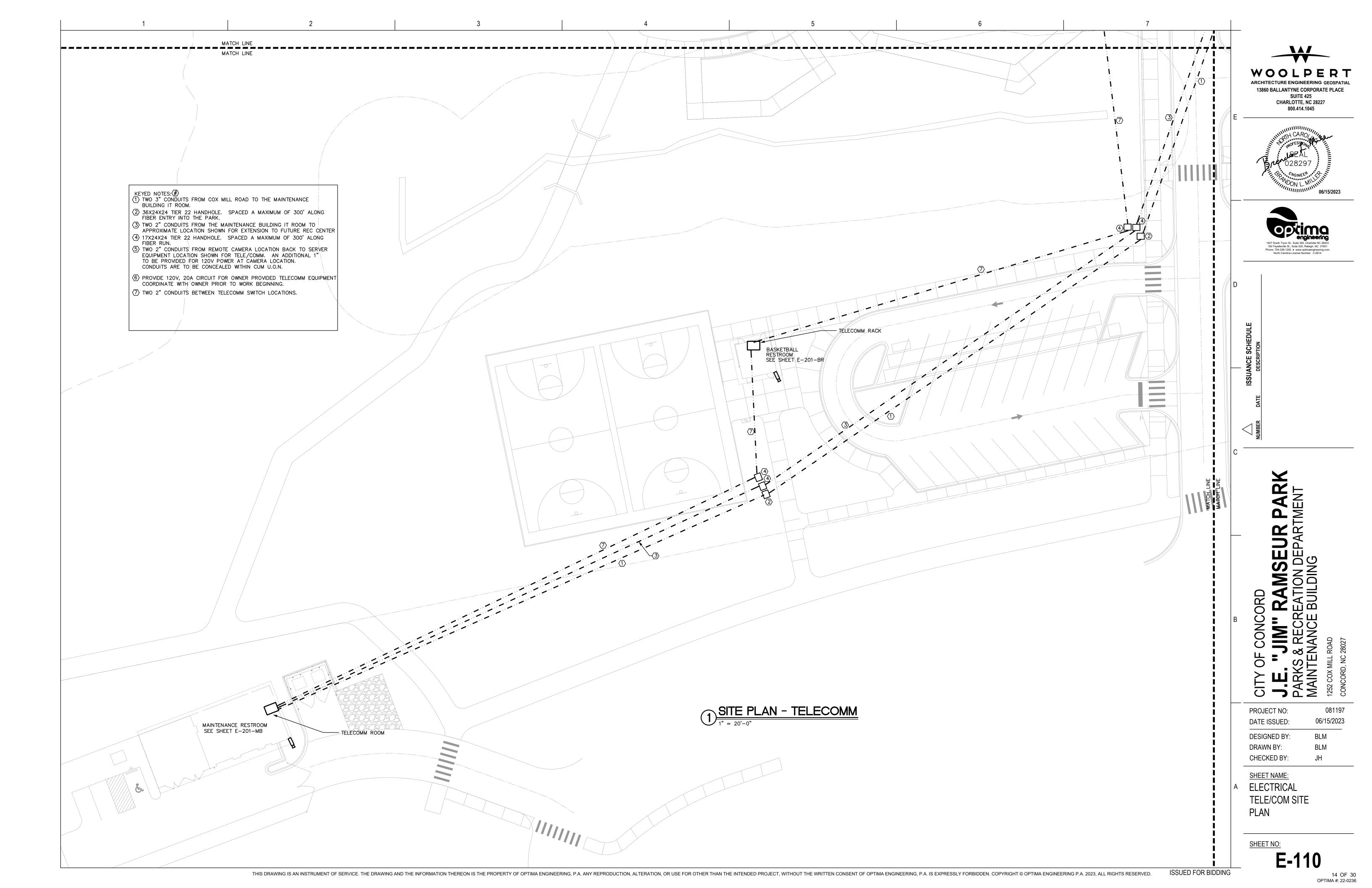












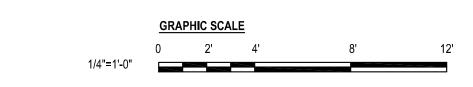
FUTURE SPORTS LIGHTING
STUB SIX 1"EC FROM PANEL
PBA TO ACCESSIBLE LOCATION
ON SITE. SEE SITE PLAN FOR
STUB LOCATION. (P4) P2 (P3) PB PB SPORTS LIGHTING CONTROLS NEMA 6-20R BY OTHERS PB-10 WL1 MEN PB101 PA PICKLEBALL RESTROOM FLOOR PLAN - LIGHTING

1/4" = 1'-0"

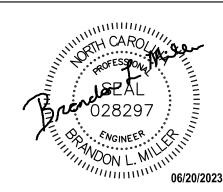
PICKLEBALL RESTROOM PLOOR PLAN - POWER

1/4" = 1'-0"

LIGHTING GENERAL NOTES: 1. PROVIDE REMOTE 90MIN EMERGENCY DRIVER, SIZED FOR LOAD, FOR "PCL1" FIXTURES THAT ARE SHOWN AS EMERGENCY FIXTURES REMOTE DRIVER SHOULD BE IN BACK OF HOUSE AREA. POWER GENERAL NOTES: 1. ALL CONDUITS ARE TO BE RAN INSIDE THE MASONRY WALLS WITH RECESSED JUNCTION BOXES.



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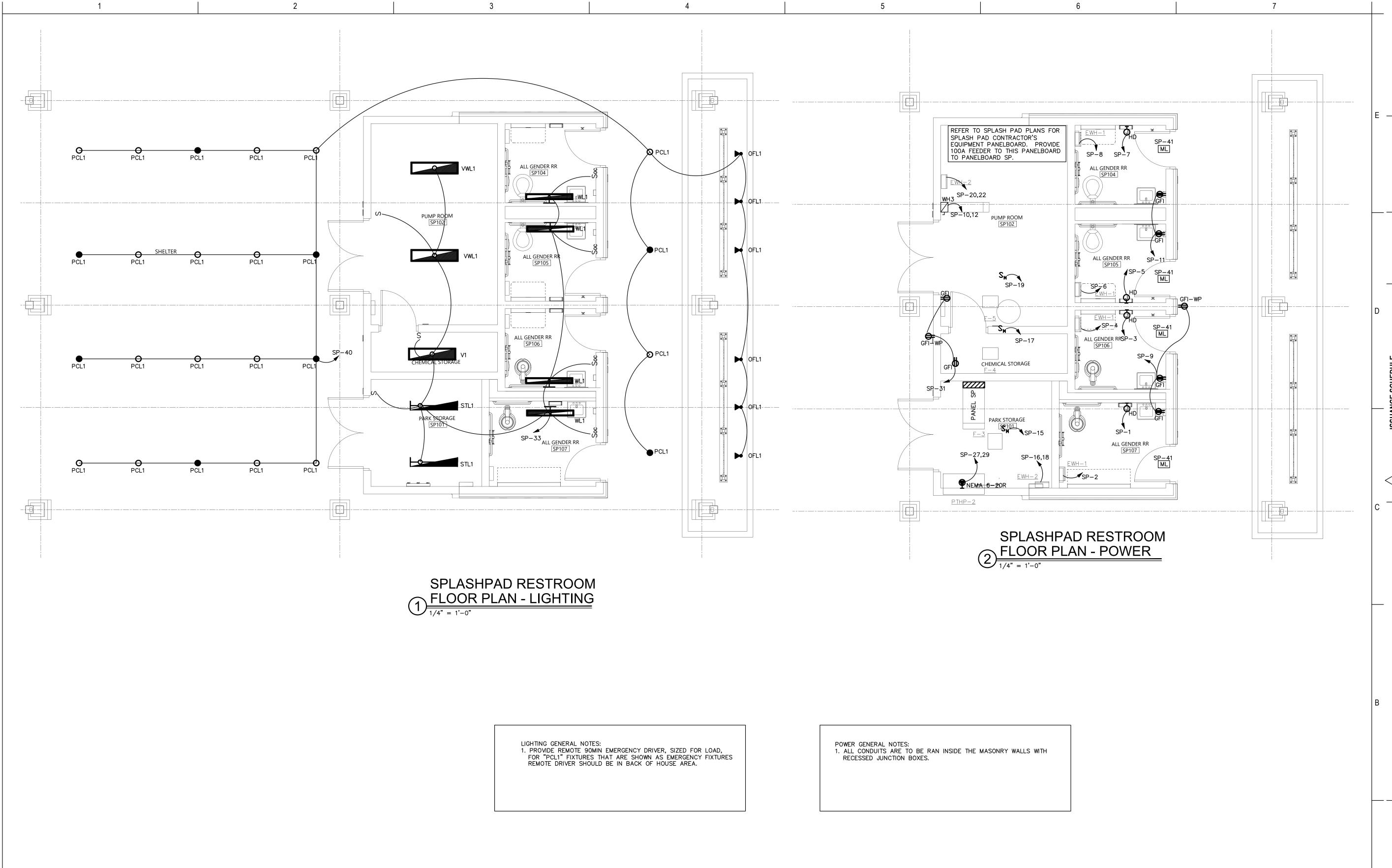




PROJECT NO: 081197 06/15/2023 DATE ISSUED: DESIGNED BY: BLM DRAWN BY: CHECKED BY:

SHEET NAME: ELECTRICAL FLOOR PLAN

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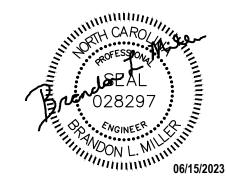


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ISSUANCE SCHEDULE

NUMBER DATE DESCRIPTION

OF CONCORD

"JIM" RAMSEUR PARK

KS & RECREATION DEPARTMENT

PROJECT NO: 081197

DATE ISSUED: 06/15/2023

DESIGNED BY: BLM

DRAWN BY: BLM

CHECKED BY: JH

SHEET NAME:

ELECTRICAL
FLOOR PLAN

SHEET NO:

E-121-SI

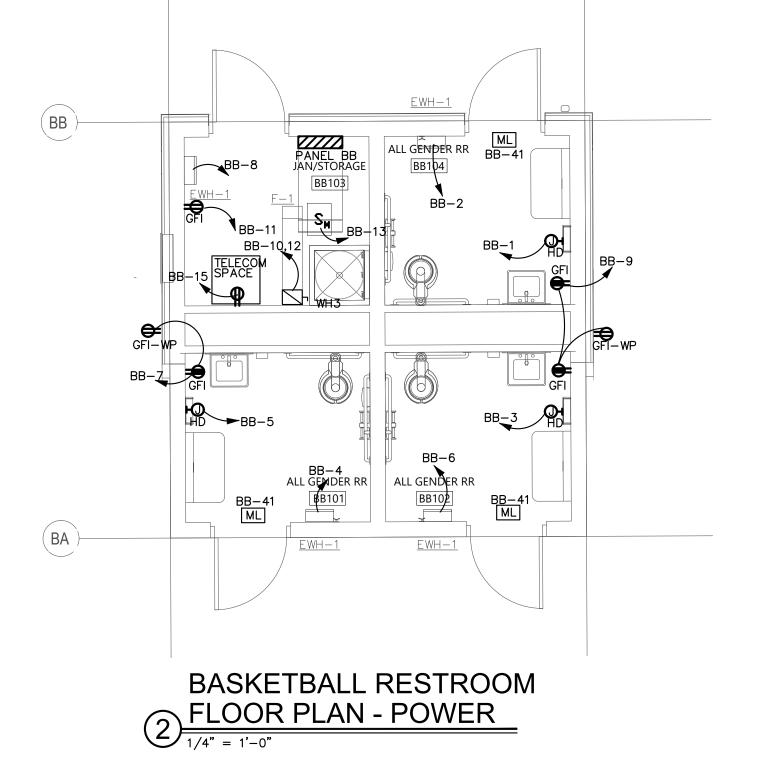
GRAPHIC SCALE

BASKETBALL RESTROOM
FLOOR PLAN - LIGHTING

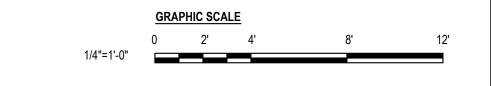
1/4" = 1'-0"

LIGHTING GENERAL NOTES:

1. PROVIDE REMOTE 90MIN EMERGENCY DRIVER, SIZED FOR LOAD,
FOR "PCL1" FIXTURES THAT ARE SHOWN AS EMERGENCY FIXTURES
REMOTE DRIVER SHOULD BE IN BACK OF HOUSE AREA.



POWER GENERAL NOTES:
1. ALL CONDUITS ARE TO BE RAN INSIDE THE MASONRY WALLS WITH RECESSED JUNCTION BOXES.



WOOLPERT

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ISSUANCE SCHEDULE
NUMBER DATE DESCRIPTION

CONCORD

JIM" RAMSEUR PARK

RECREATION DEPARTMENT

PROJECT NO: 081197

DATE ISSUED: 06/15/2023

DESIGNED BY: BLM

DRAWN BY: BLM

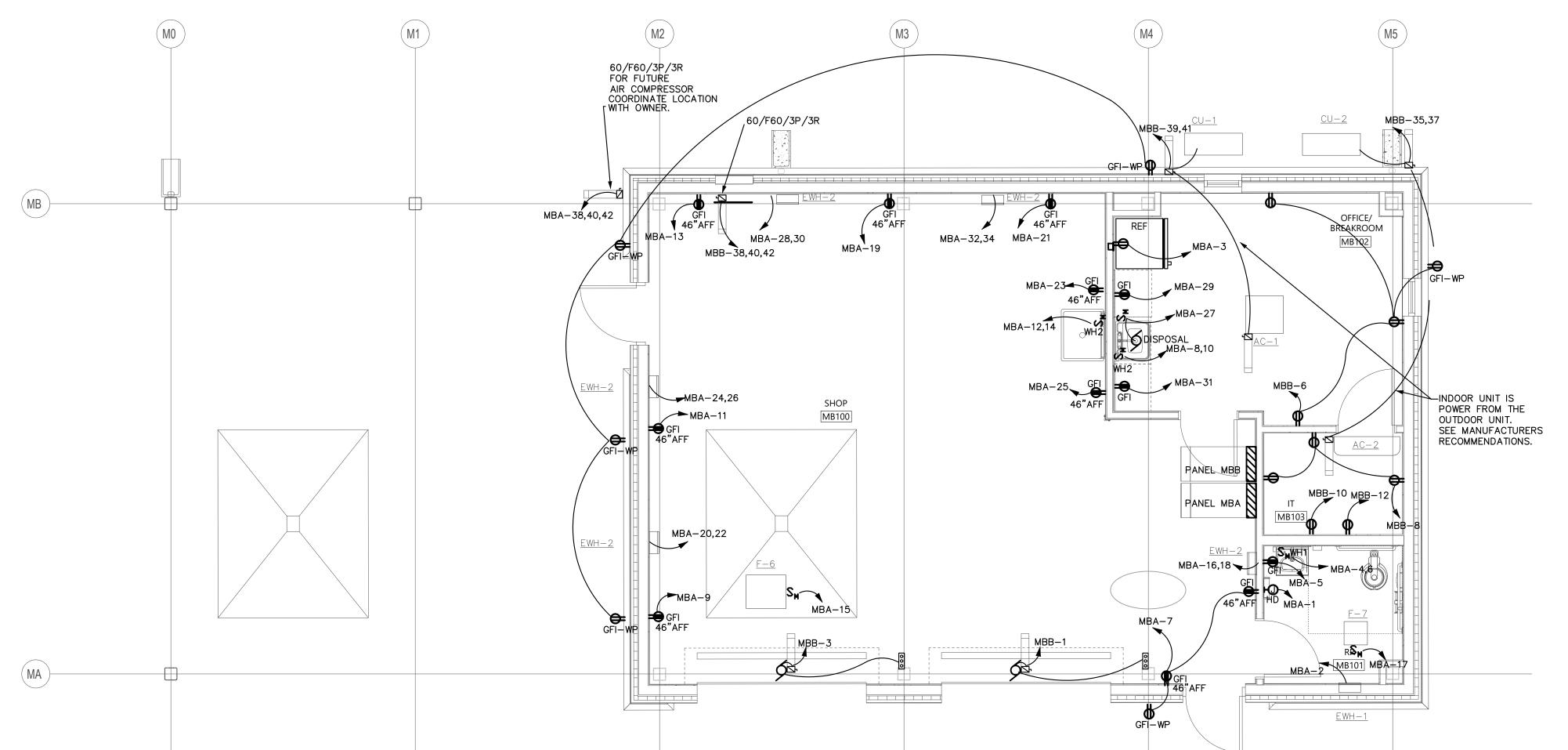
CHECKED BY: JH

SHEET NAME:
ELECTRICAL
FLOOR PLAN

SHEET NO:

E-121-BB

17 OF 30
OPTIMA #: 22-0236



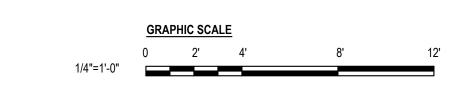
MAINTENANCE BUILDING

FLOOR PLAN - POWER

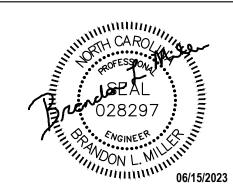
1/4" = 1'-0"

POWER GENERAL NOTES:

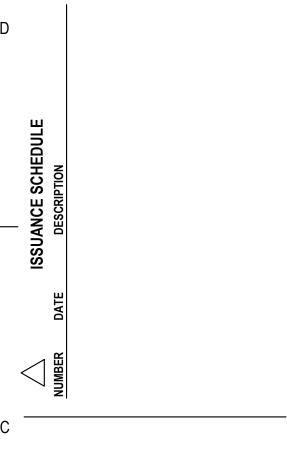
1. ALL CONDUITS ARE TO BE RAN INSIDE THE MASONRY WALLS WITH RECESSED JUNCTION BOXES.



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PROJECT NO: 081197

DATE ISSUED: 06/15/2023

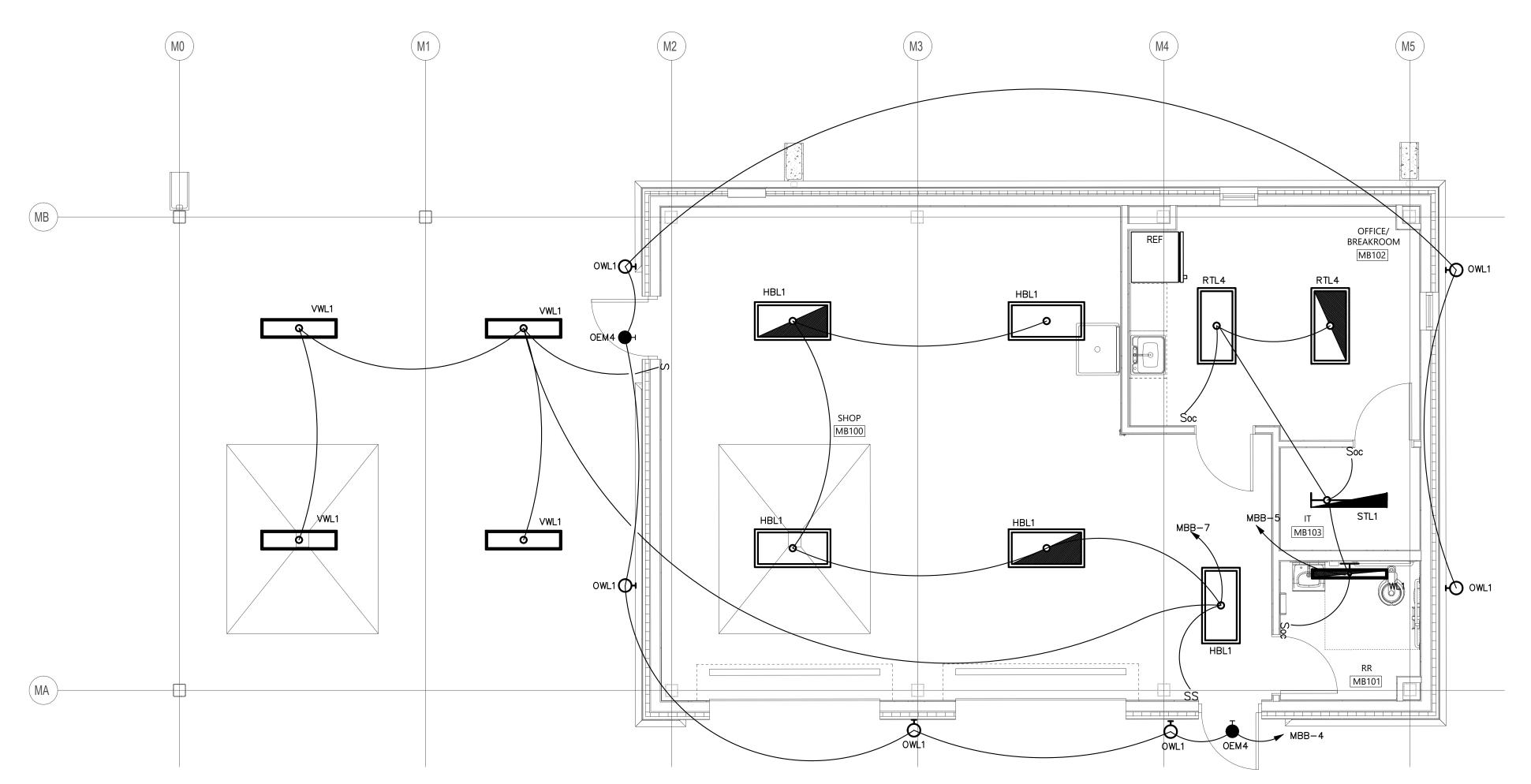
DESIGNED BY: BLM

DRAWN BY: BLM

CHECKED BY: JH

A ELECTRICAL FLOOR PLAN - POWER

SHEET NO: F-121-M



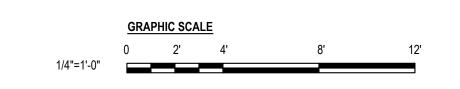
MAINTENANCE BUILDING
FLOOR PLAN - LIGHTING

1/4" = 1'-0"

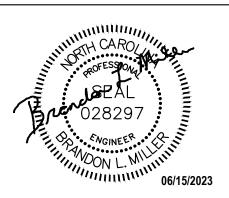
LIGHTING GENERAL NOTES:

1. PROVIDE REMOTE 90MIN EMERGENCY DRIVER, SIZED FOR LOAD,
FOR "PCL1" FIXTURES THAT ARE SHOWN AS EMERGENCY FIXTURES
REMOTE DRIVER SHOULD BE IN BACK OF HOUSE AREA.

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WOOLPERT ARCHITECTURE ENGINEERING GEOSPATIAL
13860 BALLANTYNE CORPORATE PLACE
SUITE 425
CHARLOTTE, NC 28227
800.414.1045





081197 PROJECT NO: 06/15/2023 DATE ISSUED: DESIGNED BY: BLM DRAWN BY: CHECKED BY:

SHEET NAME: ELECTRICAL FLOOR PLAN -LIGHTING

SHEET NO:

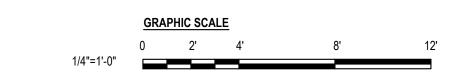
O PCL1 O PCL1 O PCL1 O PCL1 SEE SITE PLAN FOR CKT INFORMATION O PCL1 O PCL1 O PCL1 O PCL1 SEE SITE PLAN
FOR CKT INFORMATION O PCL1 O PCL1

MAIN PAVILION
ELECTRICAL FLOOR PLAN

1/4" = 1'-0"

GENERAL NOTES:

1. CONDUIT RUNS ARE TO RUN PARALLEL TO STRUCTURE AND ALONG
STRUCTURAL ELEMENTS IN A NEAT AND SYMMETRICAL MANOR.
CONDUIT RUNS AND LAYOUTS SHOULD BE COORDINATED WITH ARCHITECT
PRIOR TO WORK BEGINNING.



WOOLPERT
ARCHITECTURE ENGINEERING GEOSPATIAL
13860 BALLANTYNE CORPORATE PLACE
SUITE 425
CHARLOTTE, NC 28227
800.414.1045





ISSUANCE SCHEDULE

NUMBER DATE DESCRIPTION

CONCORD

IM" RAMSEUR PARK

RECREATION DEPARTMENT

DJECT NO:
TE ISSUED:

06/18

PROJECT NO: 081197

DATE ISSUED: 06/15/2023

DESIGNED BY: BLM

DRAWN BY: BLM

CHECKED BY: JH

SHEET NAME:
ELECTRICAL
FLOOR PLAN

SHEET NO:

E-121-PV

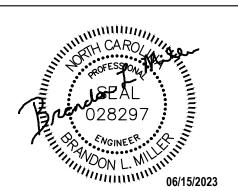
1 2 5

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ARCHITECTURE ENGINEERING GEOSPATIAL

13860 BALLANTYNE CORPORATE PLACE
SUITE 425
CHARLOTTE, NC 28227
800.414.1045





SUANCE SCHEDULE

NUMBER DATE DESCRIPTION

ARK DATE IS

ONCORD

M. RAMSEUR PARK

RECREATION DEPARTMENT

NOF BUILDING

PARKS & RECRE/MAINTENANCE BI

PROJECT NO: 081197

DATE ISSUED: 06/15/2023

DESIGNED BY: BLM

DRAWN BY: BLM

CHECKED BY: JH

SHEET NAME: ELECTRICAL FLOOR PLAN

SHEET NO:

E-122-P\

DOG PARK PAVILION AND SMALL PAVILION (THREE LOCATIONS)

ELECTRICAL FLOOR PLAN

1/4" = 1'-0"

GENERAL NOTES:

1. CONDUIT RUNS ARE TO RUN PARALLEL TO STRUCTURE AND ALONG STRUCTURAL ELEMENTS IN A NEAT AND SYMMETRICAL MANOR. CONDUIT RUNS AND LAYOUTS SHOULD BE COORDINATED WITH ARCHITECT PRIOR TO WORK BEGINNING.

GRAPHIC SCALE

0 2' 4' 8' 1.

1/4"=1'-0"

PCL1

PCL1

PCL1

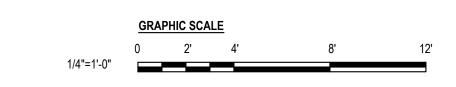
SEE SITE PLAN
FOR CKT INFORMATION

PCL1

PICKLEBALL SHADE STRUCTURE ELECTRICAL FLOOR PLAN 1/4" = 1'-0"

GENERAL NOTES:

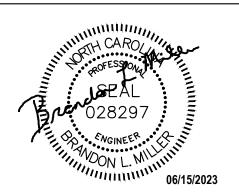
1. CONDUIT RUNS ARE TO RUN PARALLEL TO STRUCTURE AND ALONG
STRUCTURAL ELEMENTS IN A NEAT AND SYMMETRICAL MANOR.
CONDUIT RUNS AND LAYOUTS SHOULD BE COORDINATED WITH ARCHITECT
PRIOR TO WORK BEGINNING.



WOOLPERT

ARCHITECTURE ENGINEERING GEOSPATIAL

13860 BALLANTYNE CORPORATE PLACE
SUITE 425
CHARLOTTE, NC 28227
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ISSUANCE SCHEDULE
NUMBER DATE DESCRIPTION

OF CONCORD "JIM" RAMSEUR PARK S & RECREATION DEPARTMENT

PROJECT NO: 081197

DATE ISSUED: 06/15/2023

DESIGNED BY: BLM

DRAWN BY: BLM

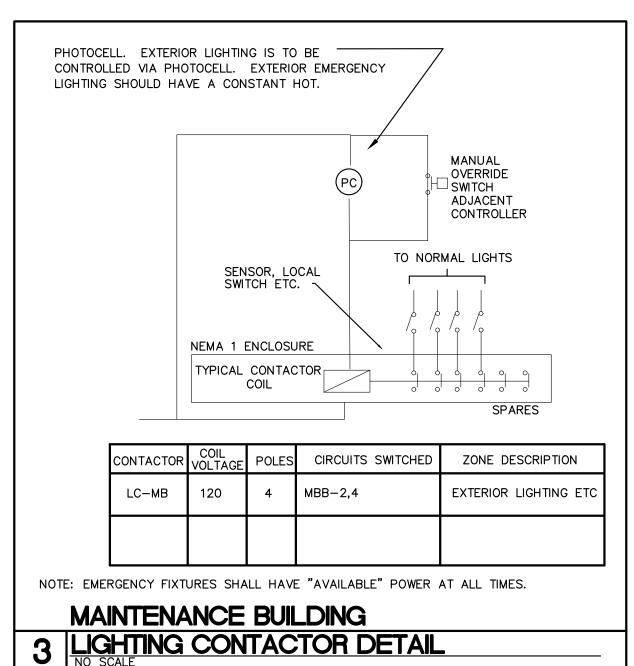
CHECKED BY: JH

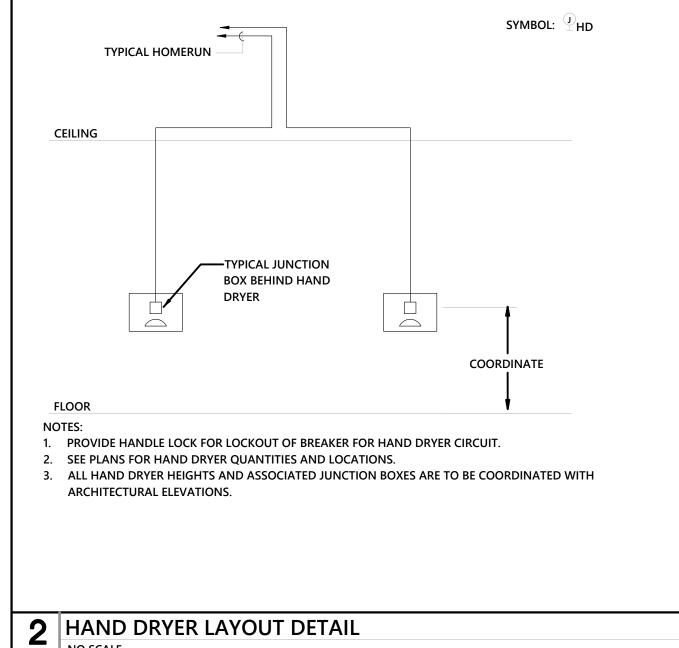
SHEET NAME:

A ELECTRICAL
FLOOR PLAN

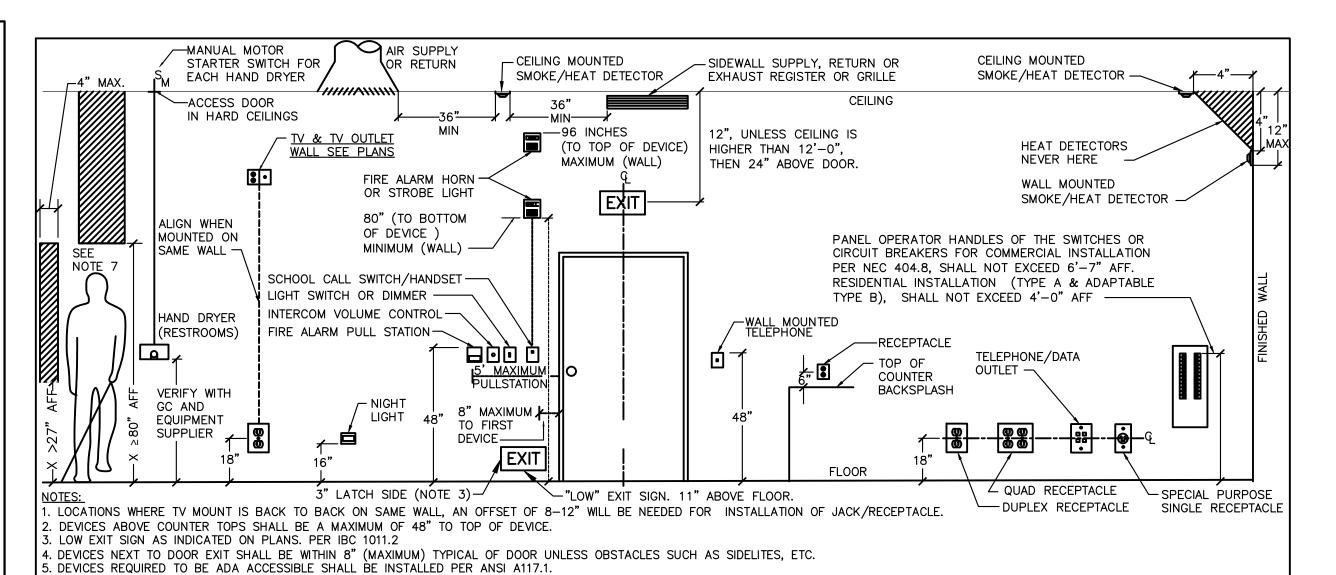
SHEET NO:

E-121-S





NO SCALE



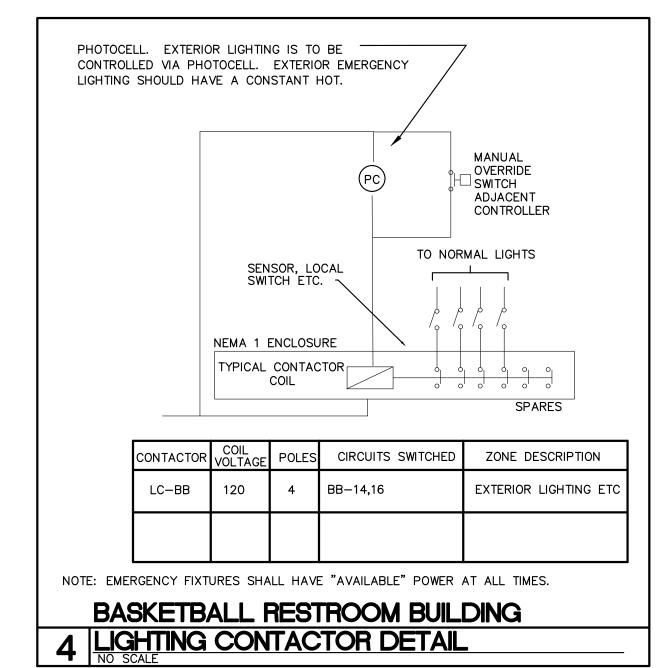
E. ALL METALLIC & NON-METALLIC, SWITCH AND RECEPTACLE BOXES INSTALLED IN FRAME WALLS SHALL INCLUDE APPROVED FIRESTOP PUTTY PADS APPPLIED ON THE BACK AND ALL SIDES OF BOX NOT

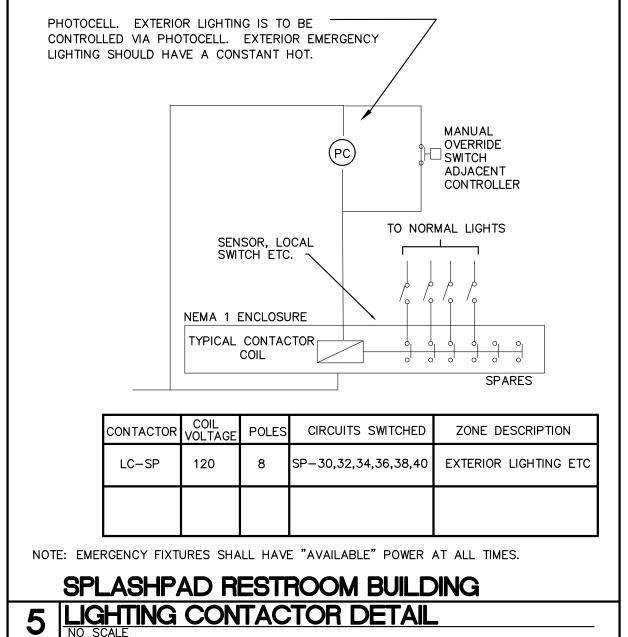
. IN THE CIRCULATION PATH, IF THERE ARE PENDANT LIGHT FIXTURES, ENSURE THEY ARE LOCATED 80" A.F.F. OR HIGHER UNLESS LOCATED ABOVE A FIXED ELEMENT. WALL MOUNTED FIXTURES

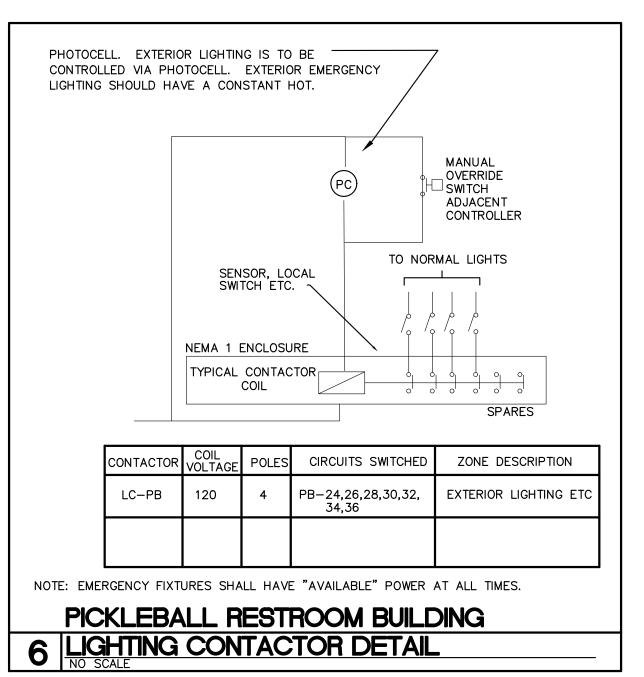
LOCATED 27" AND 80" A.F.F. SHALL NOT EXTEND GREATER THAN 4" FROM WALL OR BASE OR HAVE FIXED PROTECTION AT 27" A.F.F. OR LOWER WHEN THESE ELEMENTS ARE LOCATED IN THE

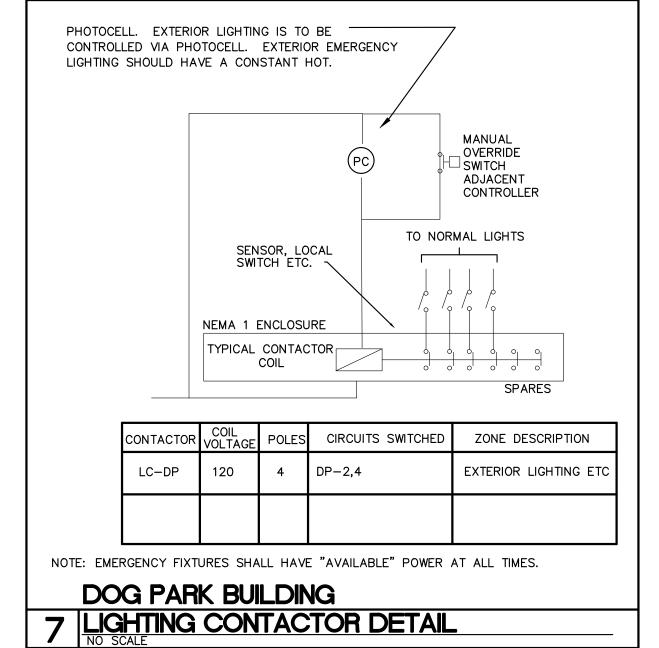
MOUNTING HEIGHTS OF DEVICES - ELEVATION

TOUCHING THE WOOD STUD.











9F

13860 BALLANTYNE CORPORATE PLACE

SUITE 425

CHARLOTTE, NC 28227

800.414.1045

PROJECT NO:	08119
DATE ISSUED:	06/15/202
DESIGNED BY:	BLM
DRAWN BY:	BLM
CHECKED BY:	JH

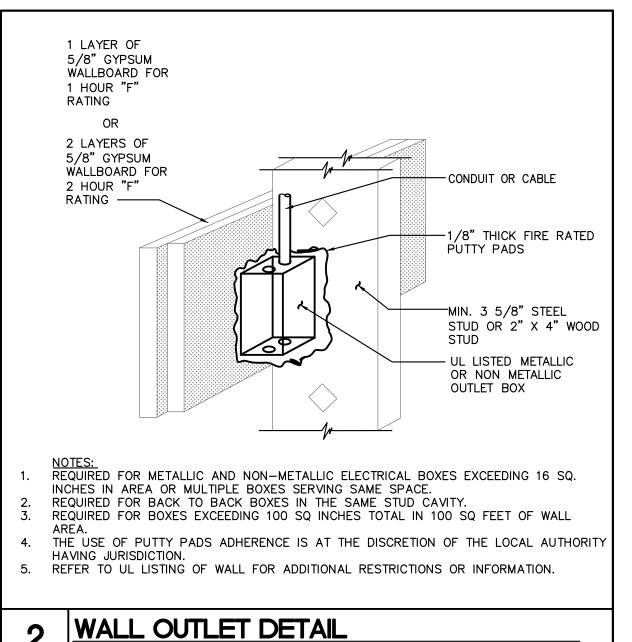
SHEET NAME: **ELECTRICAL DETAILS**

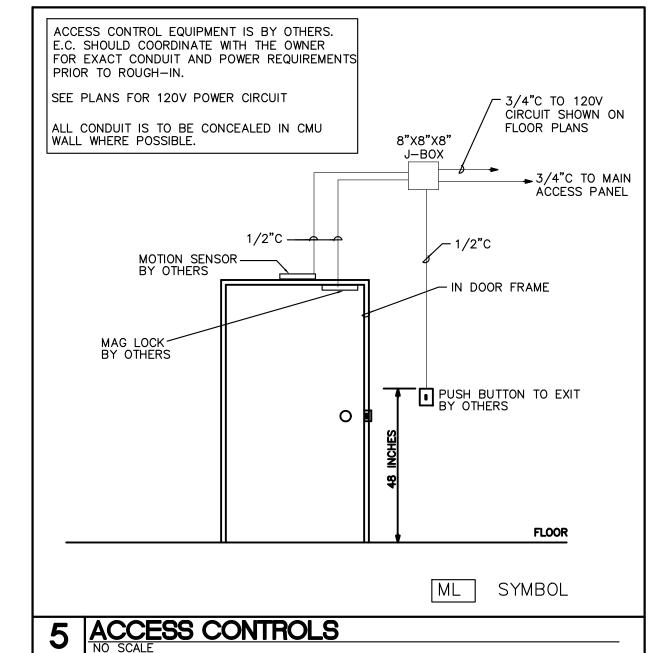
SHEET NO:

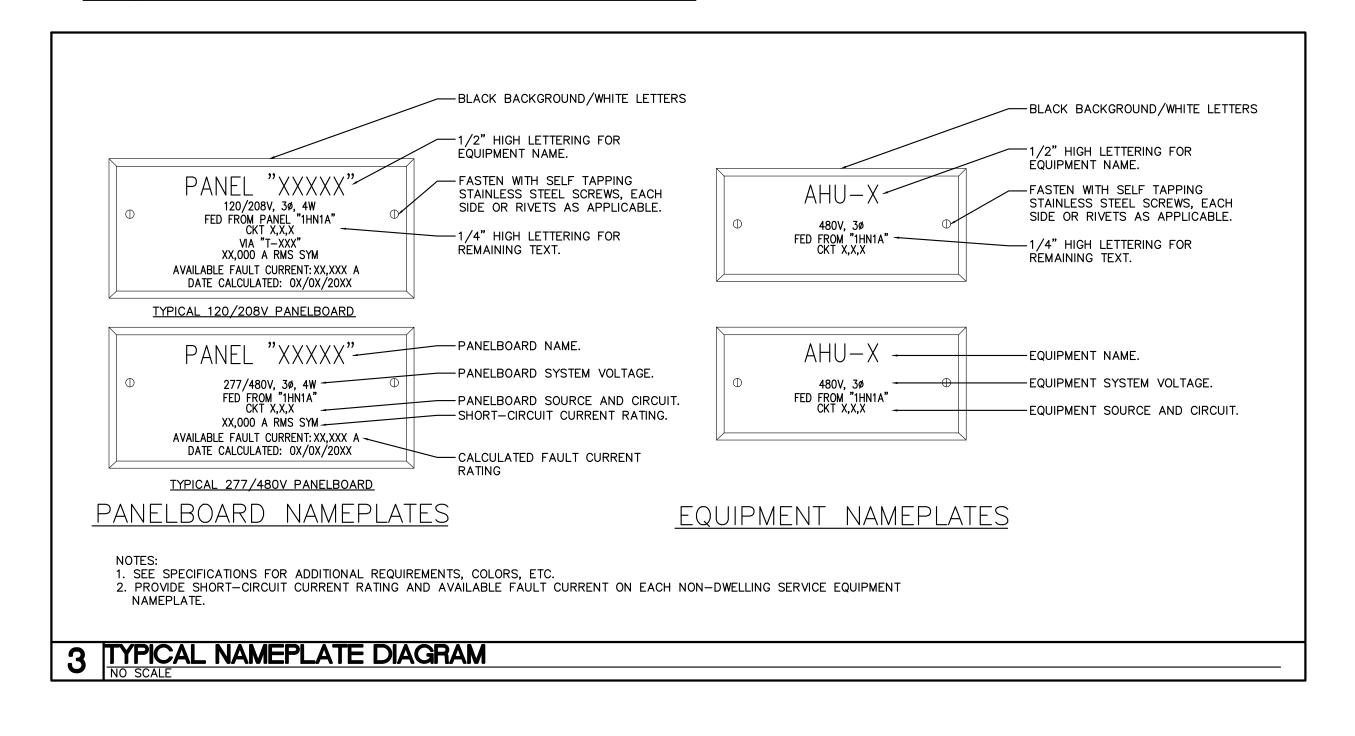
ISSUED FOR BIDDING

шиши CABLE TRAY -GROUND BAR IN EACH TEL/IT ROOM ---GROUND BAR AT BOND AS REQ'D. BY NEC ARTICLE 250 FEQUIPMENT GROUNDING BUS EQUIPMENT 2 HOLE COMPRESSION LUG. TYPICAL -SERVICE GROUND IN 1"EMT TO BUILDING STRUCTURAL STEEL STRUCTURAL STEEL - Insulated #6 GND. SERVICE EQUIPMENT -SERVICE CONDUIT NEUTRAL BUS ——/ -1"EMT TO EDGE OF BUILDING/SLAB -UNBROKEN GROUNDING CONDUCTOR. SEE POWER RISER FOR SIZE METAL DOMESTIC WATER / AT ENTRANCE POINT TO - BUILDING LINE DOUBLE BARREL—COMPRESSION LUG "1" SCH. 40 PVC TO OUTSIDE OF BUILDING PVC SLEEVE -FLOOR/FOUNDATION EXOTHERMIC WELD -- #3/0 BARE COPPER OR STEEL REINFORCEMENT OR ROD NOT LESS THAN 1/2" DIAMETER EXOTHERMIC BELOW GRADE -TYPICAL - 10'-0" LONG, 3/4" ROUND COPPER CLAD GROUND ROD. DRIVE TO

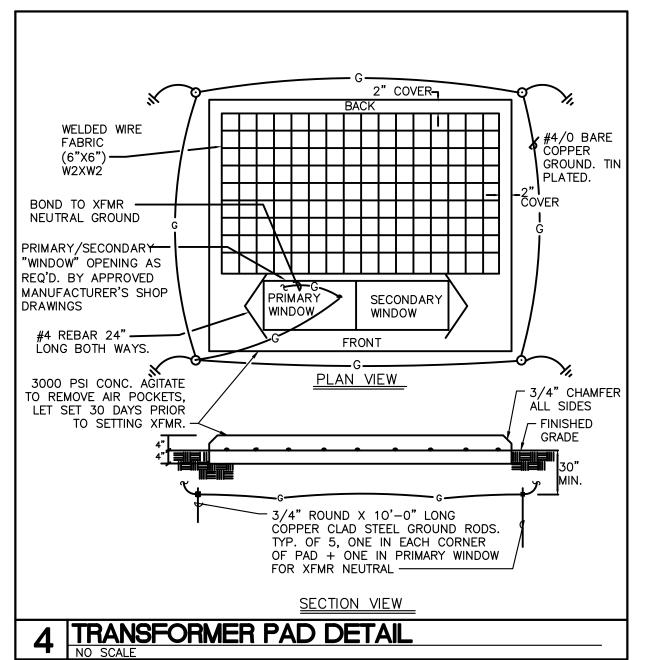
SERVICE GROUND DIAGRAM







NOT LESS THAN 12" BELOW GRADE.









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P

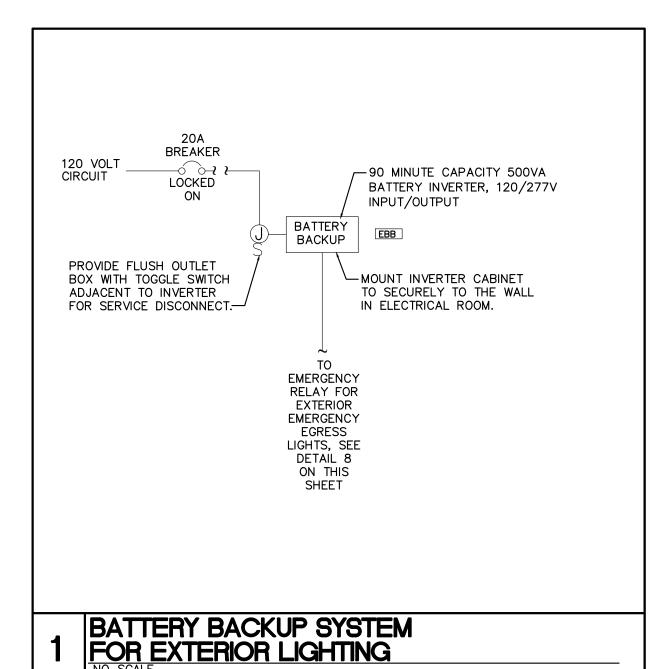
PARK TMENT CONC

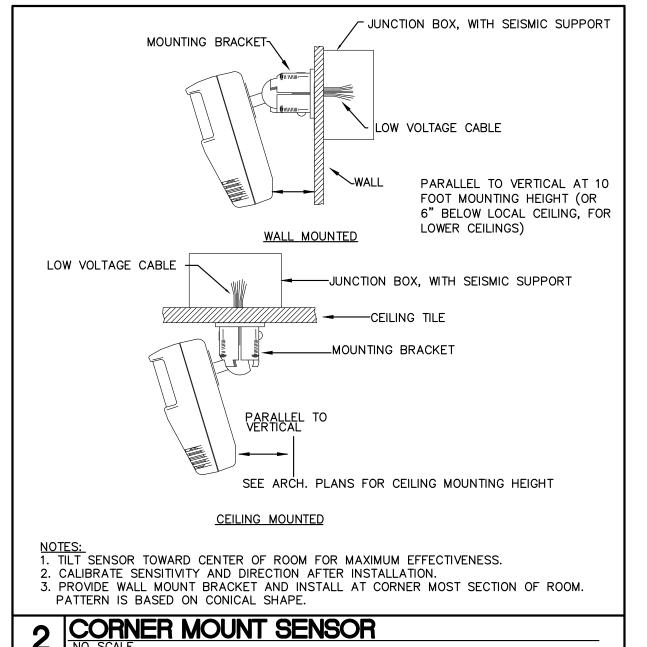
081197 PROJECT NO: 06/15/2023 DATE ISSUED: **DESIGNED BY:** BLM DRAWN BY: CHECKED BY:

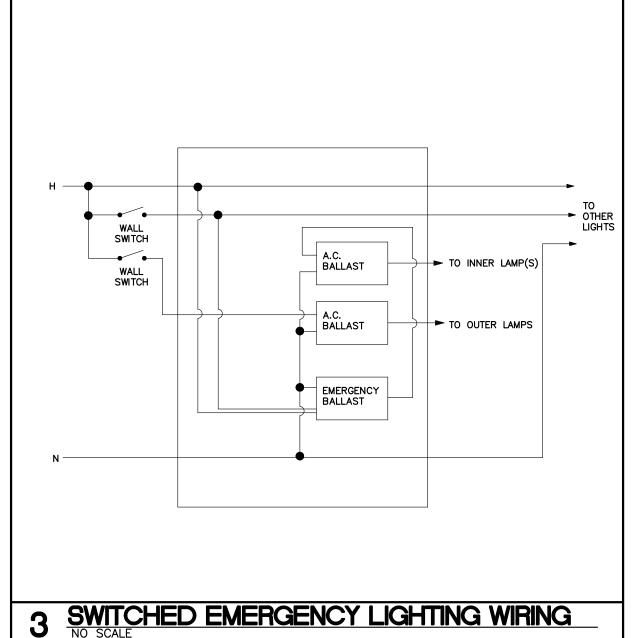
SHEET NAME: ELECTRICAL **DETAILS**

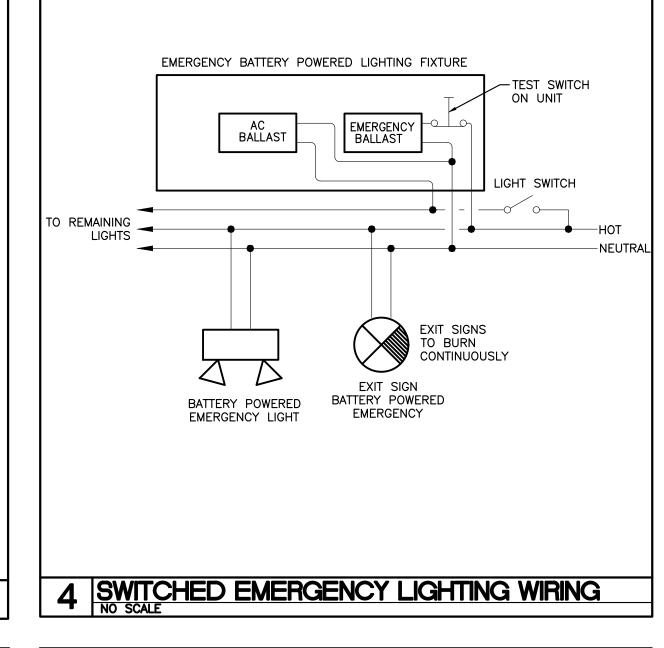
SHEET NO:

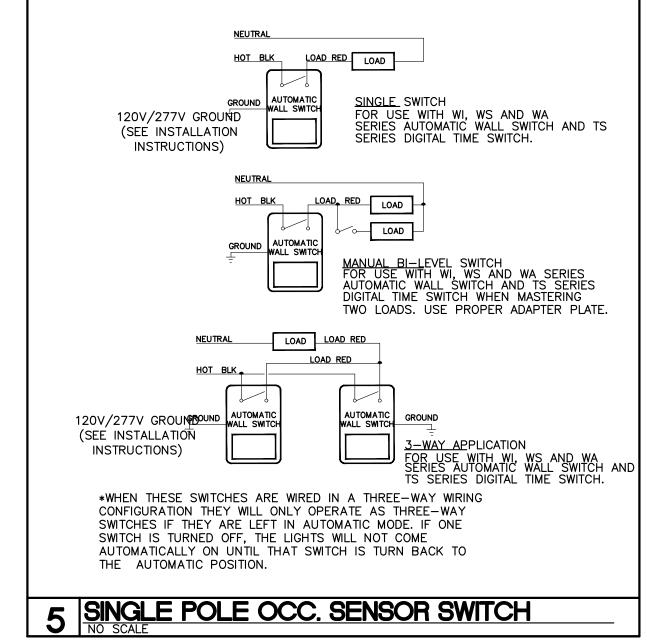
1 2 5 7

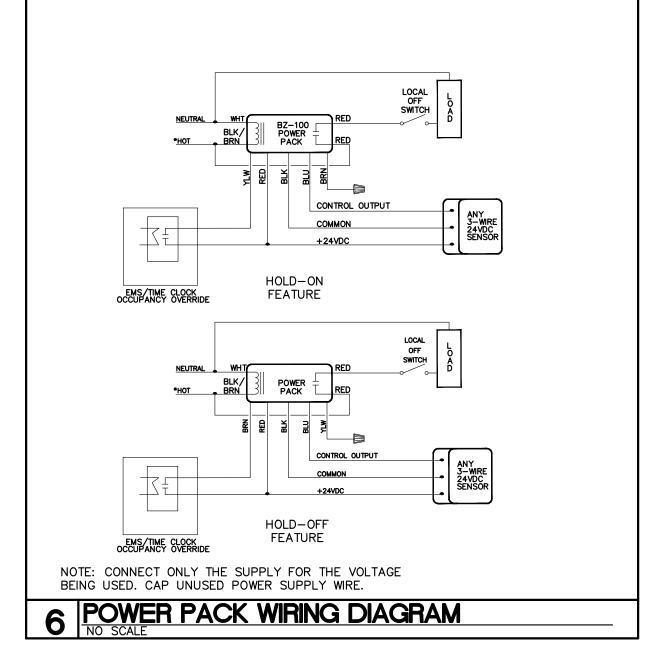


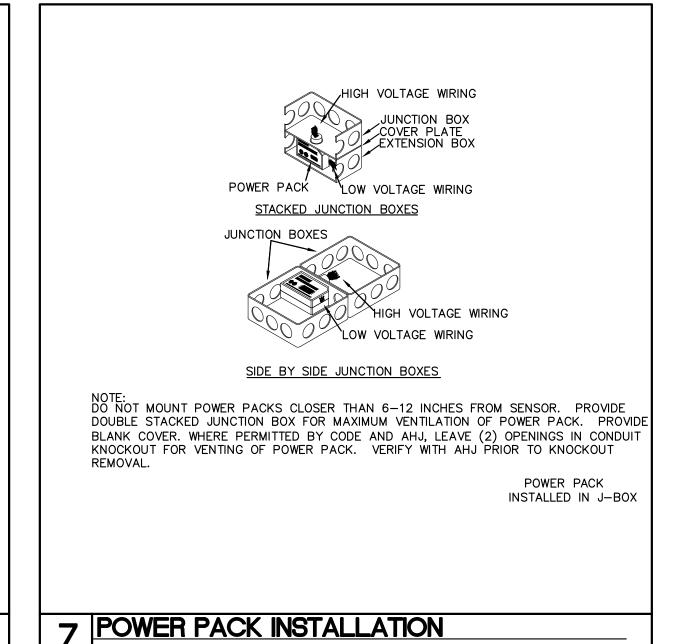




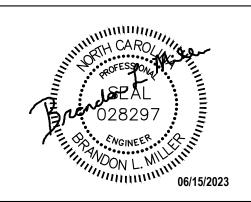














SUANCE SCHEDULE
DESCRIPTION

MIMPED

NUMBER

OF CONCORD
"JIM" RAMSEUR PARK
(S & RECREATION DEPARTMENT

PARKS & RECREAT
MAINTENANCE BUIL

PROJECT NO: 081197

DATE ISSUED: 06/15/2023

DESIGNED BY: BLM

DRAWN BY: BLM

CHECKED BY: JH

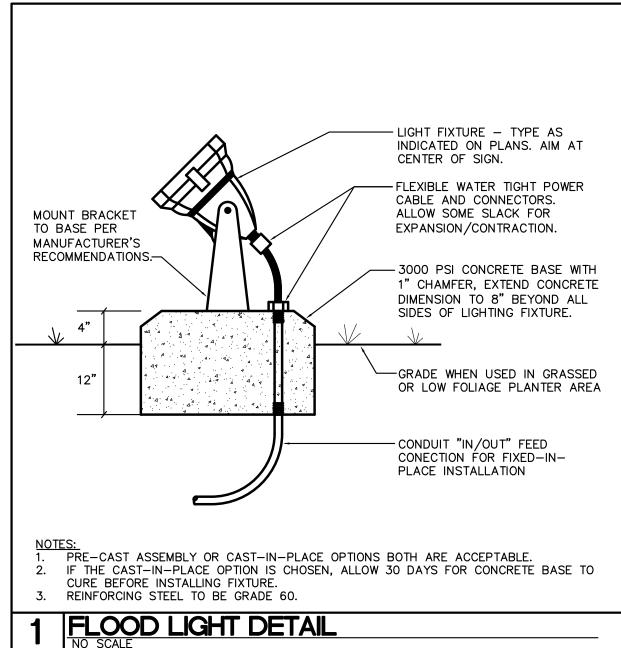
SHEET NAME:

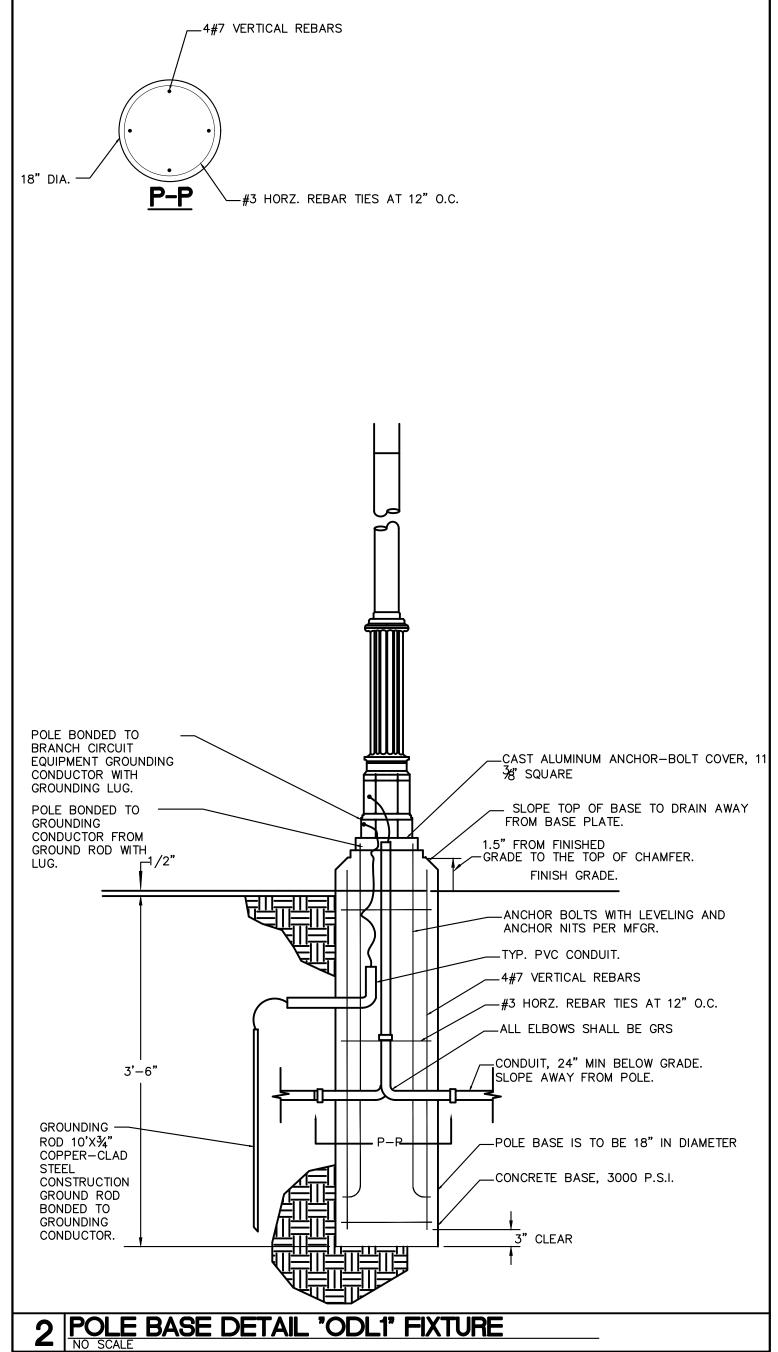
ELECTRICAL

DETAILS

SHEET NO:

E-503











J.E. "JIM" RAMSEUR PARK PARKS & RECREATION DEPARTMENT MAINTENANCE BUILDING OF CONCORD

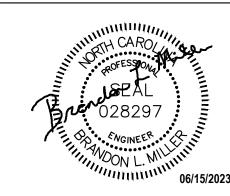
081197 PROJECT NO: 06/15/2023 DATE ISSUED: DESIGNED BY: BLM DRAWN BY: CHECKED BY:

SHEET NAME: **DETAILS**

- 2. LED DRIVERS SHALL BE PROVIDED FROM PER MANUFACTURER RECOMMENDATION. AS PART OF THIS RECOMMENDATION COORDINATE THE REQUIRED WAVE OUTPUT SO THEY ARE COMPATIBLE. THIS INCLUDES EMERGENCY DRIVERS.
- 4. FIXTURES IN FIRE RATED CEILING SHALL BE PROVIDED WITH FIRE RATED TENTS AS REQUIRED.

- 8. DIMMING OF FIXTURES SHALL BE WITH A SWITCH AS RECOMMENDED BY THE DRIVER MANUFACTURER.
- 9. THE CONTRACTOR SHALL VERIFY THE LEAD TIME OF ALL PRODUCTS SPECIFIED IN THIS SCHEDULE AT THE TIME OF PACKAGE QUOTE.
- 10. DURING THE BID PROCESS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DELIVERY/SCHEDULING ISSUES.
- 11. NO SUBSTITUTIONS WILL BE ALLOWED DUE TO LACK OF COORDINATION OF DELIVERY DATES AND CONSTRUCTION SCHEDULE AFTER BID. 12. ALL EXPEDITED EXPENSES SHALL BE THE RESPONSIBILTY OF THE CONTRACTOR.
- 13. FIXTURES TO BE INSTALLED IN CEILINGS, INDICATED ON ARCHITECTURAL PLANS AS HAVING INSULATION IN CONTACT WITH CEILING SURFACE, SHALL BE IC RATED BY MANUFACTURER.
- 14. LED DRIVERS LOCATED IN UNCONDITIONED SPACES SHALL BE RATED FOR 90 DEGREES F.
- 15. PROVIDE 90 MINUTE EMERGENCY BATTERY BACK UP. EMERGENCY BACK UP SHALL BE BASED ON TYPE OF FIXTURE, LED DRIVER, BALLAST, ETC. EMERGENCY BACKUP SHALL BE DUAL INPUT FOR BOTH SWITCHING AND CHARGING. PROVIDE UNSWITCHED "HOT" FROM LOCAL CIRCUIT UNLESS OTHERWISE INDICATED ON PLANS. PROVIDE WITH INDICATOR LIGHT. INSTALL LED INDICATOR ON LIGHT FIXTURE UNLESS DECORATIVE. DECORATIVE FIXTURES SHALL HAVE INDICATOR PLACED AT LOCAL CEILING. BODINE, PHILLIPS, POWER
- 16. PROVIDE EMERGENCY RELAY BASED ON MINIMUM BODINE GLCD-20B OR EQUAL. SEE PLANS FOR INTENT. PROVIDE EMERGENCY GENERATOR/INVERTER CIRCUIT AND SWITCH LEG NORMAL CIRCUIT. SEE DETAIL. 17. POLES PROVIDED FOR LED FIXTURES SHALL BE METAL, REGARDLESS OF SPECIFICATION FOR GROUNDING PURPOSES.





800.414.1045



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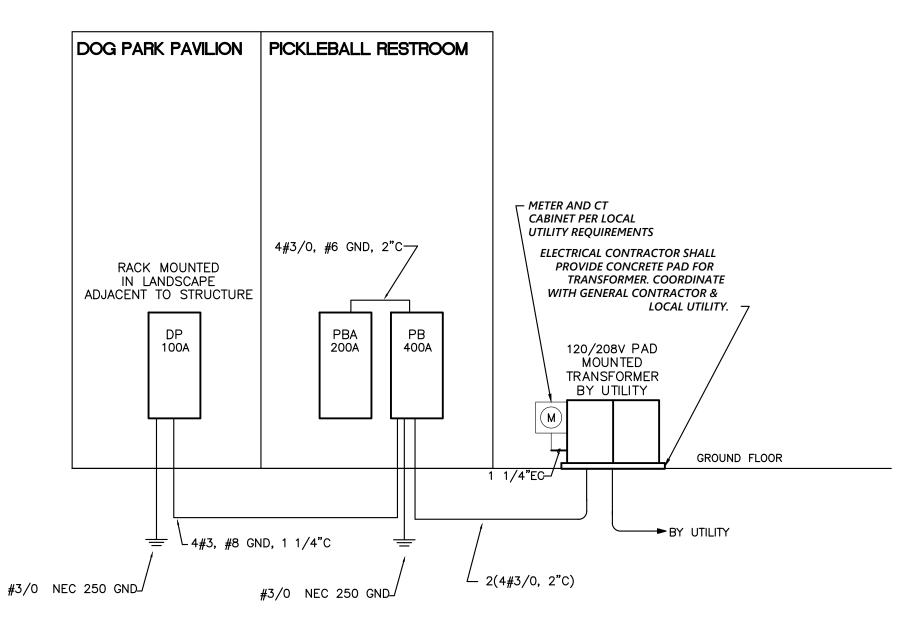
081197 PROJECT NO: 06/15/2023 DATE ISSUED: DESIGNED BY: BLM DRAWN BY: CHECKED BY:

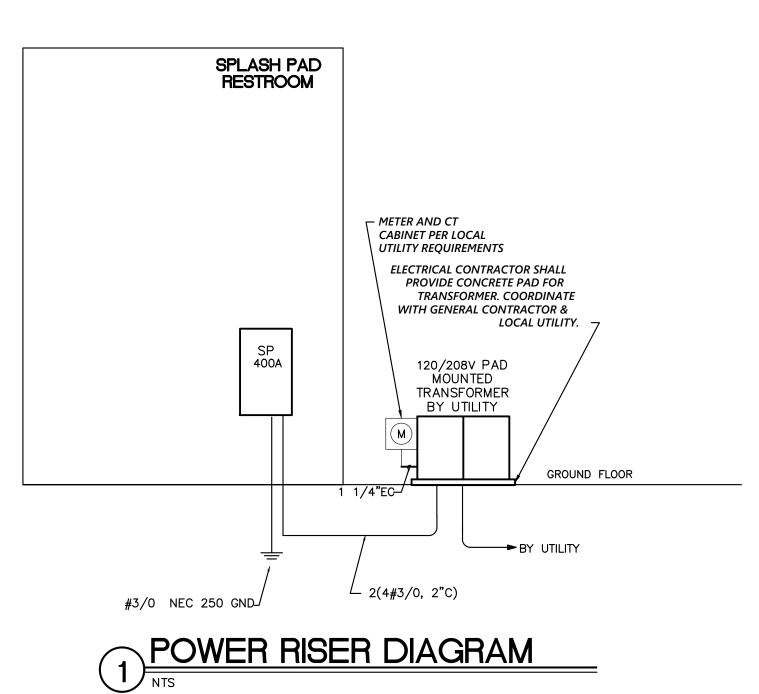
SHEET NAME:

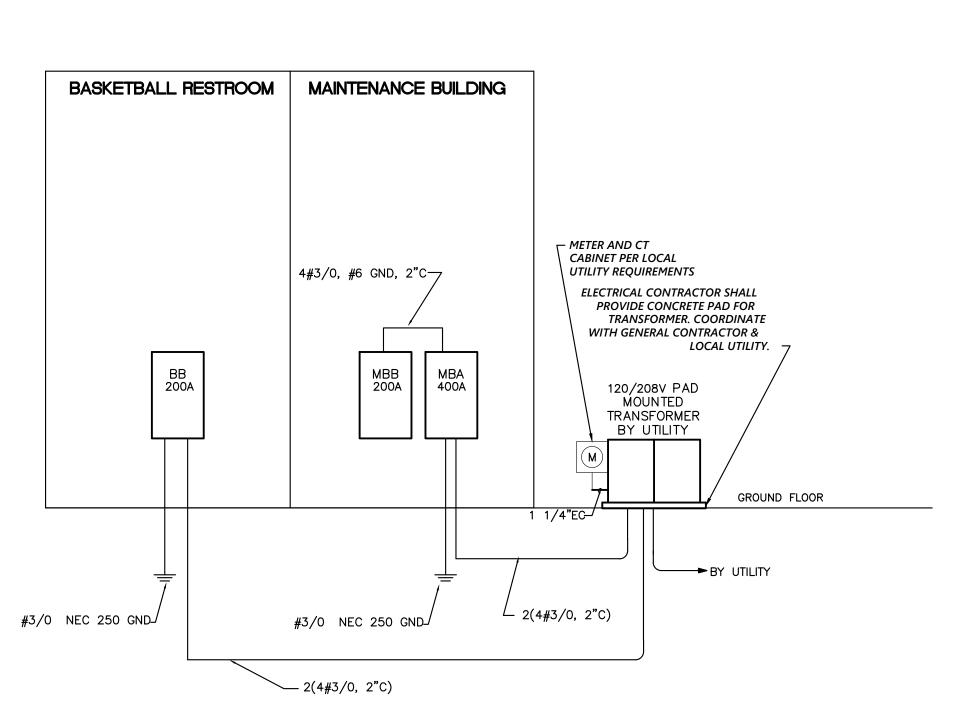
SHEET NO:

EQUIPMENT RACK, 3" GALVANIZED STEEL PIPE WITH CAP, PROVIDE SWAY BRACING AS REQUIRED -2.5"x2.5"x1/4" **PANEL** GALVANIZED ANGLE (MIN).
INSTALL AS REQUIRED TO
MOUNT EQUIPMENT -GALVANIZED U-BOLTS TYPICAL -12"ø, 24" DEEP CONCRETE 3000PSI IN 28 DAYS 2 RISER RACK DETAIL

NO SCALE













1

J.E. "JIM" RAI
PARKS & RECREATION

081197 PROJECT NO: 06/15/2023 DATE ISSUED: DESIGNED BY: BLM BLM DRAWN BY: CHECKED BY:

SHEET NAME: POWER RISER DIAGRAMS

SHEET NO:

E-701

							P	ANE	L:	ME	BA				SQD MFGR
		VOLTA	AGE:	120 /	208		3	PHAS	SE		4	WIRE			NF TYPE
	ı	MOUNT	ING:	SURF	ACE		400	AMP			MAIN	CIRCU	JIT BR	EAKER	42,000 AIC
LOAD KVA	LOAD SEF	RVED		WIRE	TRIP	FRAME (Note 1)	CKT NO	AE	3 C	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED	LOAD KVA
1.50	HAND DRYERS (NC)TF 8)		12	20		1 _	\	\Box	\2		20	12	EWH-1	1.50
	RECEPTACLES (GF		(FR)	12	20		3 _/	$\overline{\downarrow}$	/	1 4		25	10	WH-1	2.25
0.54	RECEPTACLES	T DI (L/ t	<u> </u>	12	20		5 _/	$\downarrow \downarrow \downarrow$	_•/	- 6		20	10		2.25
0.54	RECEPTACLES			12	20		₇ _/	\searrow	/	1 — 8		50	6	WH-2	4.20
0.54	RECEPTACLES			12	20		₉ _/	$\downarrow \downarrow \downarrow \downarrow$	•/	- 10			6	=	4.20
	RECEPTACLES			12	20		† ₁₁ –⁄	$\downarrow \downarrow \downarrow$	∳-/	- 12		50	6	WH-2	4.20
0.54	RECEPTACLES			12	20		13 –⁄	$\searrow \downarrow$	/	^ _ 14			6		4.20
	FAN F-6			12	20		15 –⁄	$\downarrow \downarrow \downarrow$	/	- 16		15	12	EWH-2	1.20
1.00	FAN F-7			12	20		17 –⁄	$\downarrow \downarrow \downarrow$	∳-/	^ _ 18			12		1.20
0.54	RECEPTACLES			12	20		19 –⁄	$\downarrow \downarrow$	+	- 20		15	12	EWH-2	1.20
0.54	RECEPTACLES			12	20		21 –⁄	$\downarrow \downarrow \downarrow$	/	^ _ 22			12		1.20
0.54	RECEPTACLES			12	20		23 –⁄	$\forall +$	∳-/	- 24		15	12	EWH-2	1.20
0.54	RECEPTACLES			12	20		25 –⁄	$\downarrow \downarrow \downarrow$	/	^ _ 26			12		1.20
0.80	DISPOSAL			12	20]27 –⁄	$\downarrow \downarrow \bullet$	/	\ – 28		15	12	EWH-2	1.20
0.36	RECEPTACLES			12	20]29 –⁄	$\forall \vdash$	∳-/	^ _ 30			12		1.20
0.36	RECEPTACLES			12	20]31 –⁄	$\downarrow \downarrow$	\dashv	- 32		15	12	EWH-2	1.20
0.00	SPACE ONLY]33 –⁄	$\downarrow \downarrow \bullet$	/	^ _ 34			12		1.20
0.00	SPACE ONLY]35 –⁄	\mathcal{A}	∳-/	<u>~</u> 36				SPACE ONLY	0.00
10.03]37 –∕	┡┤	+	\ — 38			6		5.00
9.50	PANEL MBB				200		39 –⁄	┞┼┼┩	/	- 40		60	6	FUTURE COMPRESSOR	5.00
10.50							41 –⁄	\Box	<u> </u>	<u> </u>			6		5.00
40.9								SUB-T							49.8
	LOAD (KVA)	Conn.	D.F.	Dmd	Т	OTAL L			HASE	:	NOT	ES:			
	LIGHTS	2.0	1.25	2.5			ONNE				1.	BREAK	ER FRAI	ME SHALL BE AS REQ'D PER PA	NEL AIC RATING
	HEATING	13.5	1.00	13.5	A =	32.6			1.0 A					_Y RATED - SERIES RATINGS NO	
	COOLING	0.0	1.00	0.0	B =	29.6			·6.7 A				•	INCL GND AND NEUTRAL, SHAL	
	VENTILATION	2.0	1.00	2.0	C =		KVA		7.6 A		1			PANEL & BRKR LUGS SHALL M	
	MOTORS	0.0	1.00	0.0			DEMA				1			ED DOOR-IN-DOOR WITH OUTER	DOOR LOCK.
	KITCHEN	0.0	0.65	0.0	A=		KVA		3.1 A					L DIRECTORY FRAME	
	REC. (1st 10kVA)	9.6	1.00	9.6	B =	29.8			7.8 A			GFI BRI			
	REC. (>10kVA)	0.0	0.50	0.0	C =		KVA		8.6 A	ı	ł) BE LOCKABLE IN OFF POSITIO	
	WATER HEATER	0.0	1.00	0.0				125%			9.	THIS PA	NEL SH	IALL BE U.L. LISTED FOR USE A	S S.E. EQUIP.
	MISC.	36.3	1.00	36.3	A=		KVA		1.4 A						
	SPARE	27.3	1.00	27.3	B =	37.2			9.7 A						
	TOTAL (KVA)	90.7		91.2	C =	35.8	KVA	29	8.3 A	į					

							P/	INE	<u> </u>	DP	<u> </u>			SQI	MFGR
		VOLTA	GE:	120 /	208		3	PHA	SE		4	WIRE		NF	TYPE
	I	MOUNT	ING:	SURF	ACE		100	AMF)		MAIN	CIRCU	JIT BR	EAKER 42,000) AIC
LOAD KVA	LOAD SEF	RVED		WIRE	TRIP	FRAME (Note 1)	CKT NO	Α	вс	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED	LOAD KVA
0.00	SPARE			12	20		1 -	\checkmark	$+\!+\!\!\!\!/$	<u> </u>		20	8	EXTERIOR LIGHTING (NOTE 10)	0.50
0.00	SPARE			12	20		3 🗸	4	┿ ∤-′	` − 4		20	8	EXTERIOR LIGHTING (NOTE 10)	0.50
0.00	SPARE			12	20		5 _	4	├	` − 6		20	12	RECEPTACLES	0.36
0.00	SPARE			12	20		7 _	lack	├ ┼/	~ 8		20	12	SPARE	0.00
0.00	SPARE			12	20		9 _	Ч.	↓	` − 10		20	12	SPARE	0.00
0.00	SPARE			12	20		11 –	\downarrow	├	√ 12		20	12	SPARE	0.00
0.00	SPARE			12	20		13 –	ackslash	├ -/	<u> </u>		20	12	SPARE	0.00
	SPARE			12	20		15 -	.	↓	<u> </u>		20	12	SPARE	0.00
0.00	SPARE			12	20		17 -	4	↓	\ 18		20	12	SPARE	0.00
0.00	SPARE			12	20		19 –	lack	↓	~ 20		20	12	SPARE	0.00
0.00	SPARE			12	20		21 –	- 1	/	_ 22		20	12	SPARE	0.00
0.00	SPARE			12	20		23 _	.	/	<u>~</u> 24		20	12	SPARE	0.00
0.00	SPARE			12	20		25 –	- 1	\coprod	<u>~</u> 26		20	12	SPARE	0.00
0.00	SPARE			12	20		27 _	1	/	<u>~</u> 28		20	12	SPARE	0.00
0.00	SPARE			12	20		29 –	.	/	<u>√</u> 30		20	12	SPARE	0.00
0.00	OI AIL			12	20		31 –	- 1		<u>√</u> 32		20	12	OF AILE	0.00
							33	.		<u>√</u> 34					
							35 –			`_ 36					
							37		oxdot	~_ 38					
							39	L		~_ 40					
							33 41 –⁄			~- 42					
0.0								HID 7	OTAL						1.4
0.0	LOAD (KVA)	Conn.	D.F.	Dmd	Т	OTAL L					NOT	FS:			1.4
	LIGHTS	1.0	1.25	1.3	'		ONNE			•	1			ME SHALL BE AS REQ'D PER PANEL AIC	
	HEATING	0.0	1.00	0.0	A =	0.5 k			4.2 A		-			LY RATED - SERIES RATINGS NOT ALLC	_
	COOLING	0.0	1.00	0.0	B =	0.5 k			4.2 A			_	_	INCL GND AND NEUTRAL, SHALL BE CO	
	VENTILATION	0.0	1.00	0.0	C =	0.5 h			3.0 A					PANEL & BRKR LUGS SHALL MATCH FE	
		0.0	1.00	0.0	U -		DEMA	ND	3.0 A		4				
	MOTORS KITCHEN	0.0	0.65	0.0	A =	0.6 k		טויו	5.2 A		4			ED DOOR-IN-DOOR WITH OUTER DOOR L	.OOr\.
	REC. (1st 10kVA)	0.0	1.00	0.0	B =	0.6 r			5.2 A		I	GFI BRI		L DIRECTORY FRAME	
	· · · · · · · · · · · · · · · · · · ·													DELOCKA DI E IN OFF POSITIONI	
	REC. (>10kVA)	0.0	0.50	0.0	C =	0.4 k		1050	3.0 A		1			DISE LOCKABLE IN OFF POSITION.	
	WATER HEATER	0.0	1.00	0.0	Λ –	DEMA		1259	% 6.5 A		4	NEMA 3			04
	MISC.	0.0	1.00	0.0	A =	0.8 k					10.	VIAEX	IERIOR	LIGHTING CONTROLS SEE RISER ON E-5	UʻI
	SPARE	0.0	1.00	0.0	B =	0.8 k			6.5 A						
	TOTAL (KVA)	1.4		1.6	C =	0.5 k	\VA		3.7 A						

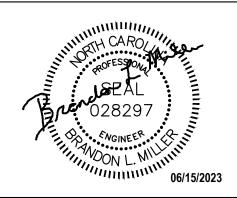
							<u>P</u> Al	NEL:	ME	BB_				SQD	MFGF
		VOLTA	GE:	120 /	208		3 P	HASE		4	WIRE			NF	TYPE
		MOUNT	ING:	SURF	ACE		200 A	MP		MAIN	CIRCU	IT BR	EAKER 4	12,000	AIC
LOAD KVA	LOAD SEF	RVED		WIRE	TRIP	FRAME (Note 1)	CKT NO	АВС	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED		LOAE KVA
1.50	MOTORIZED DOOR			12	20		1 -^-	lack	_^_ ₂		20	8	EXTERIOR LIGHTING (NOTE	E 9)	0.50
1.50	MOTORIZED DOOR			12	20		3 -∕~	 	4		20	8	EXTERIOR LIGHTING (NOTE		0.50
0.50	LIGHTING			12	20		5 _^_	│ 	^ 6		20	12	RECEPTACLES	ĺ	1.00
0.50	LIGHTING			12	20		7	lack	8		20	12	RECEPTACLES		1.00
0.00	SPARE				20		9	 	- ^- 10		20	12	RECEPTACLES		1.00
	SPARE				20		11 -^-	│ 	^ − 12		20	12	RECEPTACLES		1.00
	SPARE				20		13 - ^-	lack	-^- 14		20		SPARE		0.00
0.00	SPARE				20		15 -^-	 • 	- ^- 16		20		SPARE		0.00
0.00	SPARE				20		17 -^-	│ 	- ^− 18		20		SPARE		0.00
0.00	SPARE				20		19 - 🗸	lack			20		SPARE		0.00
0.00	SPARE				20		21 -^-	 			20		SPARE		0.00
	SPARE				20		23 _^_	 	√ _ 24		20		SPARE		0.00
	SPARE				20		25	lack	_^_ 26		20		SPARE		0.00
	SPARE				20		27 _^_		_^_ 28		20		SPARE		0.00
	SPARE				20		29 _^_	 	∕_ 30		20		SPARE		0.00
	SPARE				20		31	lack	_^_ 32		20		SPARE		0.00
0.00	SPARE				20		33	 	_^_ 34		20		SPARE		0.00
1.50	CU-1			10	20		35 –⁄1	\sqcup	∕- 36		20		SPARE		0.00
1.53				10			37		-1 38			6			5.00
1.50	CU-2			10	20		39 –⁄1	$\vdash \downarrow \vdash$	<u> </u>		60	6	FUTURE EQUIPMENT	ŀ	5.00
1.50				10			₄₁	\sqcup	/ _ 42			6		ŀ	5.00
10.0				I	<u> </u>	1	SU	B-TOTA	LS.	1					20.0
	LOAD (KVA)	Conn.	D.F.	Dmd	-	TOTAL L	OAD PE	R PHAS	SE:	ТОИ	ES:			<u> </u>	
	LIGHTS	2.0	1.25	2.5		CC	DNNEC	ΓED		1.	BREAKE	R FRAI	ME SHALL BE AS REQ'D PER PANI	ELAICR	ATING
	HEATING	0.0	1.00	0.0	A =	10.0	KVA	83.5	Α	2.	SHALL	BE FULI	Y RATED - SERIES RATINGS NOT	ALLOW	VED.
	COOLING	0.0	1.00	0.0	B =	9.5 k	(VA	79.1	Α	3.	ALL BU	SSING.	NCL GND AND NEUTRAL, SHALL	BE COP	PER.
	VENTILATION	0.0	1.00	0.0	C =	10.5		87.4	Α	1			PANEL & BRKR LUGS SHALL MA		
	MOTORS	0.0	1.00	0.0			DEMAN	D		5.	PROVID	E HINGE	D DOOR-IN-DOOR WITH OUTER D	OOR LO	CK.
	KITCHEN	0.0	0.65	0.0	A =	10.3	KVA	85.6	A	6.	PROVID	E META	L DIRECTORY FRAME		
	REC. (1st 10kVA)	4.0	1.00	4.0	B =	9.6 k		80.1		1	GFI BRE				
	REC. (>10kVA)	0.0	0.50	0.0	C =	10.6		88.5		8.	BREAKE	R IS TO	BE LOCKABLE IN OFF POSITION.		
	WATER HEATER	0.0	1.00	0.0			ND @ 1			4			LIGHTING CONTROLS SEE RISER (1
	MISC.	18.0	1.00	18.0	A =	12.9		107.0	A	1				_,	-
	SPARE	6.0	1.00	6.0	B =	12.0		100.2							
	TOTAL (KVA)	30.0		30.5	C -	13.3		110.6							

MISC. SPARE TOTAL (KVA)

30.0 30.5 C = 13.3 KVA

							PAN	1E	iL: B	B				SG	D MFG
		VOLTA	AGE:	120 /	208		3 PH	IAS	SE		4	WIRE		N	NF TYP
		MOUNT	ING:	SURF	ACE		200 AN	ΙP			MAIN	CIRCL	JIT BR	EAKER 42,00	OO AIC
LOAD KVA	LOAD SER	RVED		WIRE	TRIP	FRAME (Note 1)	CKT NO A	٨В		KT IO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED	LOA KV
1.50	HAND DRYERS (NO	TE 8)		12	20		1		+	2		20	12	EWH-1	1.5
	HAND DRYERS (NO			12	20		3 - ^ +	-	-	4		20	12	EWH-1	1.5
	HAND DRYERS (NO			12	20		5	_	→ ^-	6		20	12	EWH-1	1.5
0.54	RECEPTACLES	· · · · · ·		12	20		7	_	+	8		20	12	EWH-1	1.5
0.54	RECEPTACLES			12	20		9 - 🖴	-	-	10		30	10	WH-3	2.2
0.54	RECEPTACLES			12	20		11 - ^ +		 ∳^-	12			10		2.2
1.00	FAN F-1			12	20		13 - ^ +	-		14		20	8	EXTERIOR LIGHTING (NOTE 9)	0.5
0.54	RECEPTACLES			12	20		15 - ^ +	-	-			20	8	EXTERIOR LIGHTING (NOTE 9)	0.5
0.40	LIGHTING			12	20		17 - ^ +		- -∳^-	18		20	12	SPARE	0.0
0.00	SPARE			12	20		19 - ^ 💠		+	20		20	12	SPARE	0.0
0.00	SPARE			12	20		21 - ^ +	-	-	22		20	12	SPARE	0.0
0.00	SPARE			12	20		23 - ^ +		→ ^-	24		20	12	SPARE	0.0
0.00	SPARE			12	20		25 - 🔷		+	26		20	12	SPARE	0.0
0.00	SPARE			12	20		27 - ^ +	- ∳		28		20	12	SPARE	0.0
0.00	SPARE			12	20		29 - 🔨		→ ^-	30		20	12	SPARE	0.0
0.00	SPACE ONLY						31 - ^ +		+	32				SPACE ONLY	0.0
0.00	SPACE ONLY						33 - ^ +	-	-	34				SPACE ONLY	0.0
0.00	SPACE ONLY						35 - ^ +		→ ^-	36				SPACE ONLY	0.0
0.00	SPACE ONLY						37 - 🔨	_	+					SPACE ONLY	0.0
0.00	SPACE ONLY						39 - ^ +	-	-	40				SPACE ONLY	0.0
1.00	ACCESS CONTROL	S		12	20		41 - ^ +		- -∳^-	42				SPACE ONLY	0.0
9.1							SUE	3-T	OTALS			•			11
	LOAD (KVA)	Conn.	D.F.	Dmd	Т	TOTAL L	OAD PEF	R P⊦	HASE:		NOT	ES:			
	LIGHTS	1.4	1.25	1.8		CC	ONNECT	ΞD			1.	BREAK	ER FRAI	MESHALL BEAS REQ'D PER PANEL AK	CRATI
	HEATING	6.0	1.00	6.0	A=	6.5 K	(VA	5	54.5 A		2.	SHALL	BE FULI	Y RATED - SERIES RATINGS NOT ALL	OWED.
	COOLING	0.0	1.00	0.0	B =	6.8 K	(VA	5	6.9 A		3.	ALL BU	ISSING,	NCL GND AND NEUTRAL, SHALL BE C	OPPER.
	VENTILATION	1.0	1.00	1.0	C =	7.2 K	(VA	5	59.9 A		4.	ALL INC	OMING	PANEL & BRKR LUGS SHALL MATCH F	EEDER
	MOTORS	0.0	1.00	0.0			DEMAND	1			5.	PROVID	E HINGE	D DOOR-IN-DOOR WITH OUTER DOOR	LOCK.
	KITCHEN	0.0	0.65	0.0	A =	6.7 K	(VA	5	55.5 A		6.	PROVID	E META	L DIRECTORY FRAME	
	REC. (1st 10kVA)	2.2	1.00	2.2	B =	7.0 K	(VA	5	57.9 A		7.	GFI BRE	EAKER		
	REC. (>10kVA)	0.0	0.50	0.0	C =	7.3 K	(VA	6	80.7 A		8.	BREA K	ER IS TO	BE LOCKABLE IN OFF POSITION.	
	WATER HEATER	4.5	1.00	4.5		DEMAN	ND @ 12	5%)		9.	VIA EX	TERIOR I	LIGHTING CONTROLS SEE RISER ON E-	501
	MISC.	5.5	1.00	5.5	A =	8.3 K	(VA	6	9.4 A		10.	THIS PA	NEL SH	ALL BEU.L. LISTED FOR USEAS S.E. F	EQUIP.
	SPARE	0.0	1.00	0.0	B =	8.7 K	(VA	7	'2.4 A						
	TOTAL (KVA)	20.6		20.9	C =	9.1 K	(VA	7	'5.9 A						







CITY OF CONCORD

J.E. "JIM" RAMSEUR PAF

PARKS & RECREATION DEPARTMEN

MAINTENANCE BUILDING

081197 PROJECT NO: 06/15/2023 DATE ISSUED: DESIGNED BY: BLM DRAWN BY:

CHECKED BY: SHEET NAME:

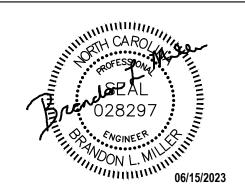
PANEL SCHEDULES

							PΑ	NEL:	PB	A				SQD MFGR
		VOLTA	GE:	120 /	208		3 F	PHASE		4	WIRE			NF TYPE
	N	MOUNT	ING:	SURF	ACE	2	200 A	AMP		MAIN	CIRCU	JIT BR	EAKER 4	2,000 AIC
LOAD KVA	LOAD SER	:VED		WIRE	TRIP	1~ 0 1	KT IO	АВС	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED	LOAD KVA
1.80	FUTURE SPORTS L	TG CNT	ΈΙ		20	1	$\overline{}$		1 2					1.80
0.00	SPARE SPARE	100111			20	3 5	_√		- 4 - 6		20		FUTURE SPORTS LIGHTING POLES P1 AND P2	1.80
0.00	SPARE SPARE				20	7 9	^ ^-		- 8 - 10		20		FUTURE SPORTS LIGHTING	1.80 1.80
0.00	SPARE SPARE SPARE				20 20 20		2		─ 12 - 14 - 16		20		POLES P3 AND P4 FUTURE SPORTS LIGHTING	1.80 1.80 1.80
0.00	SPARE SPARE				20	17	_		10 18 1 20		20		POLES P5 AND P6	1.80
0.00	SPACE ONLY SPACE ONLY					21 23	3 _ _ _		- 22 - 24		20		FUTURE SPORTS LIGHTING POLES P7 AND P8	1.80 1.80
0.00	SPACE ONLY SPACE ONLY					27	, ,	++/	^_ 26 ^_ 28				SPACE ONLY SPACE ONLY	0.00
0.00	SPACE ONLY SPACE ONLY					31	,	•	~ 30 ~ 32				SPACE ONLY SPACE ONLY	0.00
0.00	SPACE ONLY SPACE ONLY SPACE ONLY					35	3 _^ 5 _^ -^		^— 34 ^— 36 ^— 38				SPACE ONLY SPACE ONLY	0.00 0.00 0.00
0.00	SPACE ONLY SPACE ONLY				20	39	^_		~ 40 ~ 42				SPACE ONLY SPACE ONLY	0.00
3.6	0.7.02 0.12.						SI	UB-TOTAL	S				O. 7.0 = O. 1.	21.6
	LOAD (KVA) LIGHTS	Conn.	D.F. 1.25	Dm d 0.0	Т	OTAL LOA			:	NOT 1.		ER FRAI	ME SHALL BE AS REQ'D PER PANE	
	HEATING COOLING	0.0	1.00	0.0	A = B =	9.0 KVA 7.2 KVA	۱ ۴	74.9 A		3.	ALL BL	JSSING,	LY RATED - SERIES RATINGS NOT INCL GND AND NEUTRAL, SHALL I	BE COPPER.
	VENTILATION MOTORS	0.0	1.00	0.0	C =		MAN			5.	PROVID	DE HINGE	PANEL & BRKR LUGS SHALL MATED DOOR-IN-DOOR WITH OUTER DO	
	KITCHEN REC. (1st 10kVA) REC. (>10kVA)	0.0 0.0 0.0	0.65 1.00 0.50	0.0 0.0 0.0	A = B = C =	9.0 KVA 7.2 KVA 9.0 KVA	۱ ۴	74.9 A 60.0 A 74.9 A		б.	PROVIL	JE IVIEI A	L DIRECTORY FRAME	
	WATER HEATER MISC.	0.0 0.0 1.8	1.00	0.0 1.8	A=	DEMAND 11.3 KV	@ 1							
	SPARE TOTAL (KVA)	23.4	1.00	23.4	B = C =	9.0 KVA	۱ ۴	74.9 A 93.7 A						

							P/	λNE	EL:	PB				SC	QD MFGR
		VOLTA	GE:	120 /	208		3	РНА	SE		4	WIRE			NF TYPE
	N	MOUNT	ING:	SURF	ACE		400	AMP)		MAIN	CIRCL	JIT BR	EAKER 42,0	00 AIC
LOAD KVA	LOAD SER	RVED		WIRE	TRIP	FRAME (Note 1)	CKT NO	А	в с	CKT NO	FRAME (Note 1)	TRIP	WIRE	LOAD SERVED	LOAD KVA
1.50	HAND DRYERS (NO	TE 8)		12	20		1 -	$\searrow -$		-^- ₂		20	12	EWH-1	1.50
1.50	HAND DRYERS (NO	TE 8)		12	20		3 –	$\forall \neg$	 	^_ 4		20	12	EWH-1	1.50
1.50	HAND DRYERS (NO	TE 8)		12	20		5 –	+	+	∽ 6		20	12	EWH-1	1.50
1.50	HAND DRYERS (NO	TE 8)		12	20		7 –	ackslash		-∕- 8		20	12	EWH-1	1.50
1.50	HAND DRYERS (NO	TE 8)		12	20		9 –	$\forall \neg$	lack	- ∕- 10		20	12	EWH-1	1.50
0.54	RECEPTACLES			12	20		11 –	+	+	-∕ ₁₂		20	12	EWH-1	1.50
0.54	RECEPTACLES			12	20		13 –	ackslash		-1 4		30	10	WH-3	2.25
0.54	RECEPTACLES			12	20		15 –	\dashv	+	- ^ − 16			10		2.25
0.54	RECEPTACLES			12	20		17 –	\forall	+	- ∕ 18		20	12	SPARE	0.00
1.00	FAN F-2			12	20		19 –	ackslash		- 20		20	10	PTAC	1.50
0.54	RECEPTACLES			12	20		21 –	$\forall \neg$	-	-^_ ₂₂			10		1.50
0.54	RECEPTACLES			12	20		23 –	+	+	∽ – 24		20	8	EXTERIOR LIGHTING (NOTE 10	0.50
0.70	LIGHTING			12	20		25 🗸	\searrow		∽ 26		20	8	EXTERIOR LIGHTING (NOTE 10	0.50
1.00	ACCESS CONTROL	S		12	20		27 🖍	4	┝─┼	-∕ ₂₈		20	8	EXTERIOR LIGHTING (NOTE 10	0.50
9.00							29 🗸	\vdash	+	∽ 30		20	8	EXTERIOR LIGHTING (NOTE 10	0.50
7.20	PANEL PBA				200		31 –⁄	\		∽ 32		20	8	EXTERIOR LIGHTING (NOTE 10	0.50
9.00							33 –⁄	\	lack	- ∕ 34		20	8	EXTERIOR LIGHTING (NOTE 10	0.50
0.50							35 –⁄	\vdash	+	-∕ 36		20	8	EXTERIOR LIGHTING (NOTE 10	0.50
0.50	PANEL DP				100		37 🗸	\		-∕- 38		20	8	PAVILION RECEPTACLE	0.36
0.36							39 🗝	\—	-	- ∕ 40		20	8	PAVILION RECEPTACLE	0.36
1.80	FUTURE SPORTS L	TG CNT	RL		20		41 –	\forall	│ 	- ∕ 42		20	8	PAVILION RECEPTACLE	0.36
41.8								SUB-T	OTA	LS	•				21.1
	LOAD (KVA)	Conn.	D.F.	Dmd	T	TOTAL L	OAD P	PER P	HAS	E:	ГОИ	TES:			
	LIGHTS	5.2	1.25	6.5		C	ONNE	CTED] 1.	BREAK	ER FRAI	ME SHALL BE AS REQ'D PER PANEL A	C RATING.
	HEATING	9.0	1.00	9.0	A =	21.1	KVA	17	75.3	Α	2.	SHALL	BE FULI	LY RATED - SERIES RATINGS NOT ALI	LOWED.
	COOLING	0.0	1.00	0.0	B =	22.6	KVA	18	37.8	Α	3.	ALL BU	ISSING,	INCL GND AND NEUTRAL, SHALL BE O	OPPER.
	VENTILATION	4.0	1.00	4.0	C =	19.3	KVA	16	30.5	Α	4.	ALL INC	COMING	PANEL & BRKR LUGS SHALL MATCH	FEEDERS.
	MOTORS	0.0	1.00	0.0			DEMA	ND			5.	PROVID	E HINGE	ED DOOR-IN-DOOR WITH OUTER DOOF	LOCK.
	KITCHEN	0.0	0.65	0.0	A =	23.4	KVA	19	94.9	A	6.	PROVID	E META	L DIRECTORY FRAME	
	REC. (1st 10kVA)	4.7	1.00	4.7	B =	21.3	KVA	17	77.1	Α	7.	GFI BRE	EAKER		
	REC. (>10kVA)	0.0	0.50	0.0	C =	19.5	KVA	16	32.5	A	8.	BREAK	ER IS TO) BE LOCKA BLE IN OFF POSITION.	
	WATER HEATER	4.5	1.00	4.5		DEMA	ND @	125%	6		9.	THIS PA	NEL SH	IALL BE U.L. LISTED FOR USE AS S.E.	EQUIP.
	MISC.	10.3	1.00	10.3	A =	29.3	KVA	24	43.6	A	10.	VIA EX	TERIOR	LIGHTING CONTROLS SEE RISER ON E	-501
	SPARE	25.2	1.00	25.2	B =	26.6	KVA	22	21.3	Α	11.	THIS PA	NEL SH	IALL BE U.L. LISTED FOR USE AS S.E.	EQUIP.
	TOTAL (KVA)	62.9		64.2	C =	24.4	KVA	20	03.1	Α					

		\/C! T:		400 :	000					: SP		14/15-			D MFGF
		VOLTA		120 /				3 PH/				WIRE			F TYPE
		MOUNT	ING:	SURF	ACE	1	40) AM	Р		MAIN	CIRCL	JIT BR	EAKER 42,00	O AIC
LOAD KVA	LOAD SEF)./ED		WRE	TRIP	FRAME (Note 1)	CK1 NO		ВО	CKT C NO	FRAME (Note 1)	TRIP	WRE	LOAD SERVED	LOAE KVA
							1	允	Ť	$\overline{}$					_
	HAND DRYERS (NC			12	20		1 -				-	20	12	EWH-1	1.50
	HAND DRYERS (NC			12	20		3 - 5 -	$\wedge \mathbb{L}$		↓		20	12	EWH-1	1.50
	HAND DRYERS (NC			12 12	20 20		³	$\wedge \bot$				20 20	12 12	EWH-1 EWH-1	1.50 1.50
	RECEPTACLES	11 = 0)		12	20		 9	$\wedge \bot$		<u></u>		30	10	WH-3	2.25
	RECEPTACLES			12	20		 11	$\wedge \perp$	<u> </u>	♦/ 12		30	10	VVII-3	2.25
	RECEPTACLES			12	20		'	$\wedge \downarrow$		I^ 14		20	12	SPARE	0.00
	FAN F-3			12	20		15 -	$\wedge \!\! \perp$	_	16	-	15	12	EWH-2	1.20
	FAN F-4			12	20		117 -	$\wedge \!\!\! \perp$	Д.,	18		'	12	L V V I I - Z	1.20
	FAN F-5			12	20		119 -	$\wedge \downarrow$		1 20		15	12	EWH-2	1.20
7.00	17441-0			3			21 -	$\Lambda oldsymbol{\perp}$		↓ / _ 22		'	12		1.20
	SPLASH PAD ELEC	PANFI		3	100		23 –	$\downarrow \downarrow$	Ц.,	~ 24		20	8	SMALL PAVILION RECEPTACLE	0.36
	BY OTHERES	174422		3	100		25 -	⋏				20	8	SMALL PAVILION RECEPTACLE	0.36
	PTAC-2			10	20		27 -	1				20	8	SMALL PAVILION RECEPTACLE	0.36
1.50	1 1710 2			10	20		29 –	ᄮ	Щ.	30		20	8	SMALL PAVILION LTG (NOTE 9)	0.30
	RECEPTACLES			12	20		31 -	$\wedge lacksquare$				20	8	SMALL PAVILION LTG (NOTE 9)	0.30
	LIGHTING			12	20		33 –			-\^_ 34		20	8	SMALL PAVILION LTG (NOTE 9)	0.30
0.00				·-			35 –	_	<u> </u>	√ — 36	; 	20	8	EXTERIOR LIGHTING (NOTE 9)	0.50
	SPARE				100		37 –			<u> </u>		20	8	EXTERIOR LIGHTING (NOTE 9)	0.50
0.00							39 –	$\wedge \!\!\! \perp$	—	<u> </u>		20	8	EXTERIOR LIGHTING (NOTE 9)	0.50
	ACCESS CONTROL	S		12	20		41 –	$\wedge \!\!\!\! \perp$	Щ,	- 42	:			SPARE	
	SPARE						43 -	\wedge_{-}	_	 				SPARE	
	SPARE						45 -	$\wedge \!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	-	 	; 			SPARE	
	SPARE						47 -	$\wedge \!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$		∳ ^_ 48	в			SPARE	
	SPARE						49 -	$\wedge_{lacktright}$	_	 	,			SPARE	
	SPARE						51 -	$\wedge \!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	-	 	:			SPARE	
	SPARE						53 -	$\wedge \!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	+-	♦ ∕ 54				SPARE	
							1 -	$\wedge_{lacktright}$	-	 ^-					
							1 -	$\wedge \!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	-	 					
							1 -	$^+$	+-	∳ ^_					
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							1 -	$\wedge \!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	-	├ ^-					
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							1 -	$^+$	+-	∳ ^_					
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							1 -	$^+$	-	┼^-					
] -	$^+$	+	∳ ^_					
] -	\wedge_{igaphi}		┼^-					
] -	$^+$	-	┼^-					
							-	$^{\perp}$	+-	∳ ^					
37.0								SUB-							18.8
	LOAD (KVA)	Conn.	D.F.	Dmd	T	OTAL L	OAD	PER	PHAS	SE:	NOT	ES:			
	LIGHTS	3.2	1.25	4.0				CTE			1.	BREAK	ER FRAI	MESHALL BE AS REQ'D PER PANEL AK	RATING
	HEATING	10.8	1.00	10.8	A =		KVA		145.2					LY RATED - SERIES RATINGS NOT ALLO	
	COOLING	0.0	1.00	0.0	B=		KVA	1	163.6				,	INCL GND AND NEUTRAL, SHALL BE CO	
	VENTILATION	6.0	1.00	6.0	C =	18.7	KVA		155.3	3 A	-			PANEL & BRKR LUGS SHALL MATCH F	
	MOTORS	0.0	1.00	0.0			DEM							ED DOOR-IN-DOOR WITH OUTER DOOR	LOCK.
	KITCHEN	0.0	0.65	0.0	A =	17.6			146.9					L DIRECTORY FRAME.	
	REC. (1st 10kVA)	3.2	1.00	3.2	B =	20.1		1	167.0			GFI BRE			
	REC. (>10kVA)	0.0	0.50	0.0	C =		KVA		157.0) A	4			BE LOCKABLE IN OFF POSITION.	
					1						1 -				-04
	WATER HEATER	4.5	1.00	4.5				125			9.	VAEX	I ERIOR I	LIGHTING CONTROLS SEE RISER ON E-	001
	WATER HEATER MISC. SPARE	4.5 28.0 0.0	1.00 1.00 1.00	4.5 28.0 0.0	A= B=	22.1 25.1	KVA	1	<u>%</u> 183.6 208.7		-			LIGHTING CONTROLS SEE RISER ON E-9 ALL BE U.L. LISTED FOR USE AS S.E. E	









CITY OF CONCORD J.E. "JIM" RAMSEUR PAF PARKS & RECREATION DEPARTMEN MAINTENANCE BUILDING 1252 COX MILL ROAD CONCORD, NC 28027

081197 PROJECT NO: 06/15/2023 DATE ISSUED: BLM DESIGNED BY: DRAWN BY: CHECKED BY:

SHEET NAME: PANEL SCHEDULES

SHEET NO: