Wilson Street Park
Phase 1

Restroom Building, Parking Area, Trails
Construction Documents

July 23, 2021

City of Concord Parks & Recreation Dept.

147 Academy Avenue NW | PO Box 308

Concord, NC 28026-0308

Concord NORTH CAROLINA PARKS & RECREATION

SHEET INDEX (revision 1)

- G-1.0 COVER SHEET
- A-1.1 APPENDIX B
- L-1.0 OVERALL SITE PLAN
- L-1.1 PAVING, GRADING, STAKING PLAN
- L-1.2 ENLARGED PAVING, GRADING, EROSION CONTROL PLAN
- L-1.3 ENLARGED PAVING, GRADING, EROSION CONTROL PLAN
- L-1.4 FIRE PROTECTION SITE PLAN (revision 1)
- L-2.1 SITE DETAILS
- L-2.2 SITE DETAILS
- L-2.3 SITE DETAILS
- L-3.1 PLANTING PLAN
- L-3.2 PLANTING SPECS AND DETAILS
- C-1.1 UTILITY PLAN
- C-1.2 UTILITY DETAILS
- A-1.0 FLOOR PLANS AND SCHEDULES
- A-1.1 ROOF PLAN, FINISH SCHEDULE, AND DETAILS
- A-2.0 ELEVATIONS AND DETAILS
- A-3.0 SECTIONS AND DETAILS
- A-3.1 ELEVATIONS AND DETAILS
- A-4.0 DOOR AND WINDOW DETAILS
- S-1.0 STRUCTURAL FOUNDATION AND FRAMING PLANS
- M-1 MECHANICAL HVAC SCHEDULES AND NOTES
- M-2 MECHANICAL HVAC PLANS AND DETAILS
- E-1 ELECTRICAL SPECIFICATIONS
- E-2 ELECTRICAL DIAGRAMS, NOTES, AND SCHEDULES
- E-3 ELECTRICAL FLOOR PLAN, PANEL SCHEDULE, POWER RISER
- P-1 PLUMBING SCHEDULES AND NOTES
- P-2 PLUMBING DETAILS
- P-3 PLUMBING WATER AND WASTE PLANS

SITE INFORMATION

SITE LOCATION - PIN NUMBER:
56310155900000

SITE ADDRESS:
106 WILSON ST NE, CONCORD, NC 28025

OWNER:
CITY OF CONCORD
PO BOX 308
CONCORD, NC 28026-0308

ZONING:
RM-2 - CITY OF CONCORD

JURISDICTION: CONCORD CITY LIMITS
COUNTY: CABARRUS

SITE ACREAGE:
308,264 SQ.FT. = 7.08 ACRES

SITE LIMITS OF DISTURBANCE:
39,741 SQ.FT. = 0.91 ACRES

North Carolina 811 www.nc811.org

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Urban Design + Land Planning + Landscape Architecture
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citizen design
Architecture • Planning • Stuff

Wilson St. Park
Concord, NC

REV. #	DATE	DESCRIPTION
1	08/30/2021	ACCELA CYCLE 1 COMMENTS

NORTH CAROLINA C-415 VIZ, PLLC

NORTH CAROLINA No. 707 8/30/2021

DATE:	7/23/2021
SCALE:	AS SHOWN
JOB NUMBER:	20-45.1
DESIGNED BY:	GRF
DRAWN BY:	GRF

COVER SHEET

G1.0

C:_VIZ\Projects\Concord Wilson St PH1 CD\Wilson St Park LA_8-22-2021.dwg

2018 APPENDIX B: Wilson Street Park New Restroom

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

Name of Project: Wilson Street Park New Restroom
Address: 106 Wilson Street, Concord Zip Code 28025
Owner/Authorized Agent: Brian Conroy Phone No.: 704.661.2337 E-Mail: Brian.citizendesign@gmail.com
Owned By: ■ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City Concord ■ County Cabarrus ☐ State NC

CONTACT: Brian Conroy

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	citizen design	Brian Conroy	12145	704.661.2337	Brian.citizendesign@gmail.com
Civil					
Electrical	Shults Engineering	Brian D. Winkler	33160	980.202.5646	Bwinkler@shultzeg.com
Fire Alarm					
Plumbing	Shults Engineering	Charlie Curlin	25028	704.334.7363	ccurlin@shultzeg.com
Mechanical	Shults Engineering	Charlie Curlin	25028	704.334.7363	ccurlin@shultzeg.com
Retaining Walls > 5'-0"					
Structural	IDE Charlotte	Chad Ritter	31995	704.999.3867	chad@IDEcharlotte.com

Other
("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: ■ New Building ☐ Addition ☐ Renovation
☐ 1st Time Interior Completion
☐ Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements.
☐ Phased Construction - Shell/Core- Contact the local inspection jurisdiction for possible additional procedures and requirements.

2018 NC EXISTING BUILDING CODE: EXISTING: ☐ Prescriptive ☐ Repair ☐ Chapter 14
Alteration: ☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use

CONSTRUCTED: (date) _____ **CURRENT OCCUPANCY(S)** (Ch. 3): _____
RENOVATED: (date) _____ **PROPOSED OCCUPANCY(S)** (Ch. 3): _____

RISK CATEGORY (Table 1604.5): **Current:** ☐ I ■ II ☐ III ☐ IV
Proposed: ☐ I ■ II ☐ III ☐ IV

BASIC BUILDING DATA
Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
(check all that apply) ☐ I-B ☐ II-B ☐ III-B ■ V-B
Sprinklers: ■ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ■ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ■ No ☐ Yes **Flood Hazard Area:** ■ No ☐ Yes
Special Inspections Required: ■ No ☐ Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)

Gross Building Area Table

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor		1,040	1,040
Basement			
TOTAL			1,040

ALLOWABLE AREA

Primary Occupancy Classification(s): Select one Select one Select one Select one Select one Select one
Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ■ 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 ☐ 1 ☐ 2
☐ I-2 Condition ☐ 1 ☐ 2
☐ I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ I-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): _____
Incidental 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 determined, shall apply to the entire building.

☐ Separated Use (5 08.4) - 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.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

NOT USED + NOT USED + ... = _____ ≤ 1.00

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	OPEN COVERED	608	U.L.	0	U.L.
1	RESTROOMS	274	U.L.	0	U.L.

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = NA (F)
b. Total Building Perimeter = NA (P)
c. Ratio (F/P) = NA (F/P)
d. W = Minimum width of public way = NA (W)
e. Percent of frontage increase $I_f = 100[F/P - 0.25] \times W/30$ = NA (%)
[2] Unlimited area applicable under conditions of Section 507.
[3] Maximum Building Area = total number of stories in the building x D (maximum3 stories) (506.2).
[4] The maximum area of open parking garages must comply with Table 406.5.4. The maximum area 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.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	U.L.	22'-8"	
Building Height in Stories (Table 504.4)	U.L.	1	

[1] Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/_____ * REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	>30'	0	0	3/A3.0			
Bearing Walls	>30'		0	1/A-3.0			
Exterior							
North							
East							
West							
South							
Interior			0	1/A-3.0			
Nonbearing Walls and Partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions		0	0	2/A3.0			
Floor Construction Including supporting beams and joists		0	0	1/A-3.0			
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof Construction, including supporting beams and joists		0	0	1/A-3.0			
Roof Ceiling Assembly		0	0	1/A-3.0			
Columns Supporting Roof		0	0	3/A3.0			
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation		NA					
Occupancy/Fire Barrier Separation		NA					
Party/Fire Wall Separation		NA					
Smoke Barrier Separation		NA					
Smoke Partition		NA					
Tenant/Dwelling Unit/ Sleeping Unit Separation		NA					
Incidental Use Separation		NA					

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
30'< X	UP, NS	NO LIMIT	1.1%

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 #: 3/A-1.0

☐ 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 Use 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 (Tables 1006.2.1 & 1006.3.2(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
☐ 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

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
NA							

ACCESSIBLE PARKING
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES REQUIRED	TOTAL # OF PARKING SPACES PROVIDED	# OF ACCESSIBLE SPACES PROVIDED REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	TOTAL # ACCESSIBLE PROVIDED
NEW		33			2	2
TOTAL						

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATERCLOSETS MALE	WATERCLOSETS FEMALE	WATERCLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS /TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
SPACE	EXIST' G										
	NEW	1	2	0	1	1	1	0	0		1

SPECIAL APPROVALS

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

ENERGY SUMMARY

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the energy 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 ☐ Yes (Provide code or statutory reference) : _____

Climate Zone: ■ 3A ☐ 4A ☐ 5A

Method of Compliance: Energy Code ☐ Performance ■ Prescriptive
ASHRAE 90.1 ☐ Performance ☐ Prescriptive
(If "Other" specify source here) _____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: WOOD RAFTERS @ 24"O.C.
U-Value of total assembly:
R-Value of insulation: R-38
Skylights in each assembly: NONE
U-Value of skylight:
total square footage of skylights in each assembly:

Exterior Walls (each assembly)
Description of assembly: 2x6 WOOD STUDS @ 16"
U-Value of total assembly:
R-Value of insulation: R-20 BATT
Openings (windows or doors with glazing)
U-Value of assembly: 0.32
Solar heat gain coefficient: 0.4
projection factor: 0.63
Door R-Values: 1.43 MIN.

Walls below grade (each assembly)
Description of assembly: NONE
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: NONE

Floors slab on grade
Description of assembly: 4" SLAB ON GRADE
U-Value of total assembly: F-0.730
R-Value of insulation: NONE
Horizontal/vertical requirement:
slab heated: NONE

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors: Snow (I_S) 1.0
Seismic (I_E) 1.0

Live Loads: Roof 20 psf
Mezzanine NA psf
Floor 100 psf

Ground Snow Load: 11 psf

Wind Load: Ultimate Wind Speed 115 mph (ASCE-7)
Exposure Category B

SEISMIC DESIGN CATEGORY: ☐ A ☐ B ■ C ☐ D
Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5) ☐ I ■ II ☐ III ☐ IV
Spectral Response Acceleration S_S 35 %g S_1 11 %g
Site Classification (ASCE 7) ☐ A ☐ B ☐ C ■ D ☐ E ☐ F
Data Source: ☐ Field Test ■ Presumptive ☐ Historical Data
Basic structural system ■ Bearing Wall ☐ Dual w/Special Moment Frame
☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel
☐ Moment Frame ☐ Inverted Pendulum
Analysis Procedure: ☐ Simplified ■ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanical, Components anchored? ■ Yes ☐ No

LATERAL DESIGN CONTROL: Earthquake ☐ Wind ■

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) _____ psf
Presumptive Bearing capacity 1,500 psf
Pile size, type, and capacity _____

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS: SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
winter dry bulb: _____
summer dry bulb: _____

Interior design conditions
winter dry bulb: _____
summer dry bulb: _____
relative humidity: _____

SEE MECHANICAL DRAWINGS

Building heating load: _____

Building cooling load: _____

Mechanical Spacing Conditioning System
Unitary
description of unit: _____
heating efficiency: _____
cooling efficiency: _____
size category of unit: _____
Boiler
Size category. If oversized, state reason.: _____
Chiller
Size category. If oversized, state reason.: _____

List equipment efficiencies: _____

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code ☐ Performance ☐ Prescriptive
ASHRAE 90.1 ☐ Performance ☐ Prescriptive

Lighting schedule (each fixture type)
lamp type required in fixture
number of lamps in fixture
ballast type used in the fixture
number of ballasts in fixture
total wattage per fixture
total interior wattage specified vs. allowed (whole building or space by space)
total exterior wattage specified vs. allowed

SEE ELECTRICAL DRAWINGS

Additional Efficiency Package Options
(When using the 2018 NCECC; not required for ASHRAE 90.1)
☐ C406.2 More Efficient HVAC Equipment Performance
☐ C406.3 Reduced Lighting Power Density
☐ C406.4 Enhanced Digital Lighting Controls
☐ C406.5 On-Site Renewable Energy
☐ C406.6 Dedicated Outdoor Air System
☐ C406.7 Reduced Energy Use in Service Water Heating

CITIZEN DESIGN, PLLC — REGISTERED ARCHITECTURAL CORPORATION — 53241 — Charlotte, North Carolina

BRIAN H. CONROY — REGISTERED ARCHITECT — 12145 — NORTH CAROLINA — CHARLOTTE, NC — 06/03/2021

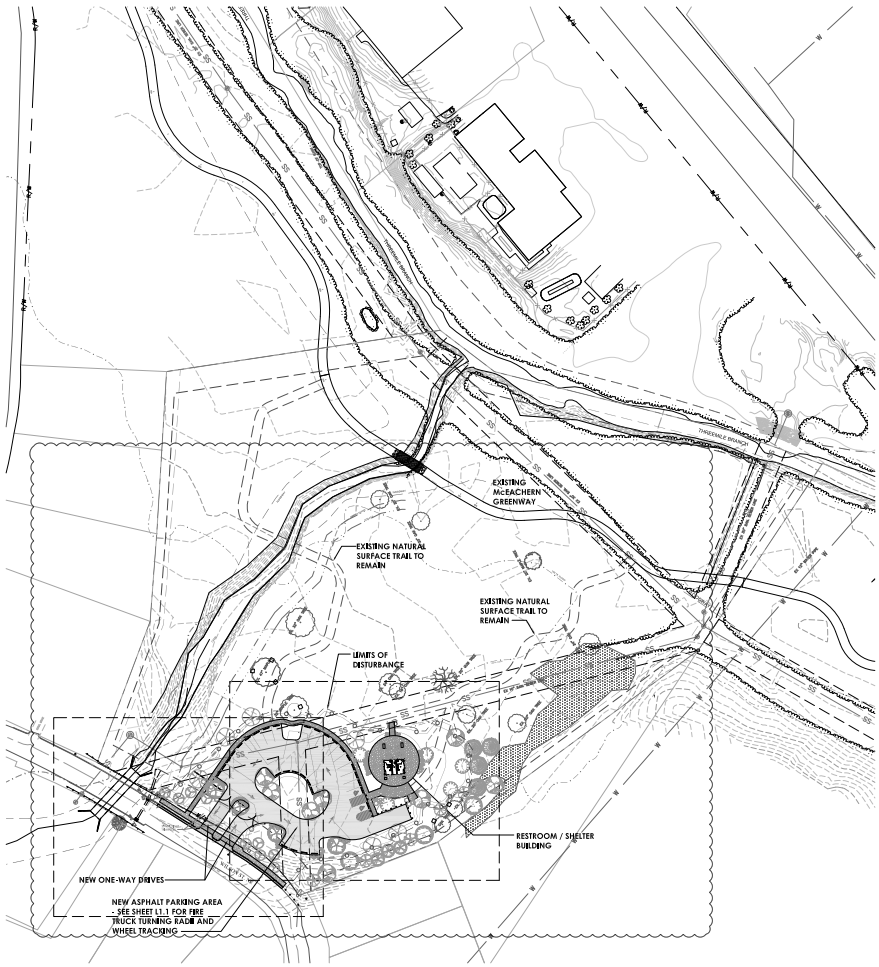
REVISIONS

NO.	DATE	BY	CHKD	DESCRIPTION

City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture • Planning • Stuff

DATE: 06/03/2021
NAME: APPENDIX B
SHEET: A 0.1



GENERAL NOTES:

1. THE CONTRACTOR SHALL OBTAIN ALL PERMIT APPROVALS PRIOR TO BEGINNING WORK.
2. THE CONTRACTOR SHALL PREVENT DESTRUCTION OF ANY AND ALL SURVEY MONUMENTS, BENCH MARKS, PROPERTY CORNERS, AND ALL OTHER SURVEY POINTS. WHERE THE REMOVAL OF SUCH POINTS IS NECESSARY FOR ACCOMPLISHMENT OF THE WORK, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT/OWNER PRIOR TO THE DISTURBANCE.
3. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON THE PLANS, AND WHERE SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL ON HIS OWN INITIATIVE AND AT NO ADDITIONAL COST TO THE OWNER, HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE, OTHER OBSTRUCTIONS, OR FROM ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NON-SUBSCRIBING UTILITIES. THE CONTRACTOR SHALL CONTACT ***NORTH CAROLINA ONE CALL*** AT ***811*** FOR ASSISTANCE IN LOCATING UTILITIES.
4. THE CONTRACTOR SHALL COORDINATE WITH THE CITY FOR LOCATING OF ALL LIGHTING, ELECTRICAL UNDERGROUND UTILITIES, UNDERGROUND IRRIGATION LINES, AND ANY OTHER UTILITIES/LINES NOT LOCATED BY 811 SERVICES.
5. PROTECT ALL ADJACENT PROPERTIES, THE GENERAL PUBLIC, AND ALL OTHER FACILITIES. SHOULD DAMAGES OCCUR, CONTRACTOR SHALL REPAIR IMMEDIATELY AS DIRECTED BY THE TOWN. CONTRACTOR IS FINANCIALLY RESPONSIBLE FOR ALL REPAIRS, AND REPAIRS ARE TO BE PERFORMED TO THE TOWN'S SATISFACTION.
6. UTILIZE SIGNS, BARRICADES, FLAGMEN, OR GUARDS AS REQUIRED TO ENSURE THE SAFETY OF ALL VEHICULAR AND PEDESTRIAN TRAFFIC DURING ALL CONSTRUCTION ACTIVITIES.
7. THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY.
8. CONTRACTOR SHALL PROVIDE ALL SIGNS NECESSARY FOR CONSTRUCTION OF THE PROJECT.
9. THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHT-OF-WAYS, PUBLIC OR PRIVATE, PRIOR TO WORKING IN THESE AREAS.
10. NO CONSTRUCTION MATERIALS CAN BE STORED IN THE FLOODPLAIN.

SITE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LINE AND GRADE, AND SURVEY STAKING OF ALL WORK AS ILLUSTRATED ON PLANS. IF EXISTING CONDITIONS DIFFER FROM THOSE ILLUSTRATED ON PLANS, NOTIFY LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
2. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH NCDOT, NCDEQ, THE STATE OF NORTH CAROLINA, CABARRUS COUNTY, AND THE CITY OF CONCORD.
3. ALL NEW SIDEWALK, UNLESS OTHERWISE INDICATED ON THE DRAWINGS, SHALL BE MINIMUM FIVE (5) FEET IN WIDTH AND SHALL BE MINIMUM FIVE FEET (5) CLEAR AT ALL POINTS AND MEET ALL REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
4. EXISTING SIDEWALK, CURB, AND ASPHALT PAVEMENT TO BE REMOVED/REPLACED SHALL BE SAW-CUT CLEAN EDGES.
5. CONCRETE JOINTS OR SCORE MARKS ARE TO BE SHARP AND CLEAN WITHOUT SHOWING EDGES OF JOINTING TOOL.
6. ALL EXCESS EXCAVATION, SITE DEBRIS, AND DEBRIS FROM CLEARING AND GRUBBING EXERCISES SHALL BE REMOVED FROM THE SITE AT THE CONTRACTOR'S EXPENSE.
7. EXCESS EXCAVATION MATERIAL REMOVAL IS THE CONTRACTOR'S RESPONSIBILITY.
8. UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL BE GRASSED WITH FESCUE SEED AND STRAW AS INDICATED IN THE DOCUMENTS.
9. ALL GRADED AREAS TO RECEIVE SEED SHALL HAVE EXISTING SOIL AMENDED TO PROPERLY PLACE PERMANENT COVER AS INDICATED IN THE DOCUMENTS OR PER CITY OF CONCORD STANDARDS.

GRADING NOTES:

1. THE SITE TOPOGRAPHY AND OTHER TOPOGRAPHIC DATA SHOWN ON THE PLANS OR INCLUDED IN THE SPECIFICATIONS ARE FOR USE BY THE CONTRACTOR. THE CONTRACTOR SHALL MAKE ADDITIONAL INVESTIGATIONS AS REQUIRED TO ACQUAINT HIMSELF ADEQUATELY WITH THE SITE, INCLUDING SUBSURFACE SOIL CONDITIONS FOR SUCCESSFUL EXECUTION OF THE WORK.
2. UNLESS OTHERWISE INDICATED, ALL PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN ARE FINISH GRADE.
3. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE PROTECTION OF HIS WORK. SUCH GRADING AS IS REQUIRED FOR THIS PURPOSE SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE AT NO ADDITIONAL COST TO THE TOWN. THE OWNER MAY DIRECT THE CONTRACTOR TO PERFORM SUCH GRADING AND DRAINAGE AS NECESSARY TO PREVENT SURFACE RUNOFF FROM DAMAGING THE WORK OR OFF-SITE PROPERTIES.
4. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING ANY SOIL EROSION ON-SITE OR OFF-SITE FOR THE DURATION OF THE PROJECT USING METHODS INDICATED ON THE PLANS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT.
5. SEE EROSION CONTROL REQUIREMENTS IF GRADED AREAS HAVE NO ACTIVITY FOR MORE THAN 7 DAYS.
6. ALL EXCESS EXCAVATION, SITE DEBRIS, AND DEBRIS FROM CLEARING AND GRUBBING EXERCISES SHALL BE REMOVED FROM THE SITE AT THE CONTRACTOR'S EXPENSE.
7. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ON ADJACENT PROPERTIES BEYOND WHAT IS SHOWN. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED IN WRITING FROM THE AFFECTED PROPERTY OWNER, AND APPROVED BY THE CITY PRIOR TO COMMENCING ANY WORK.
8. ALL EARTH FILL SHALL BE PLACED IN UNIFORM LAYERS OR LIFTS NOT EXCEEDING 6" IN COMPACTED THICKNESS.
9. ALL EARTH SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY, PLUS OR MINUS OF THE OPTIMUM MOISTURE (ASTM-D6798). FOR AREAS TO BE GRASSED, PERCENTAGE OF COMPACTIONS SHALL BE AS DETERMINED FOR THE INTENDED USE AND COVER.

EROSION AND SEDIMENT CONTROL NOTES

1. ALL EROSION CONTROL MEASURES SHALL CONFORM TO THOSE SET FORTH IN THE STATE OF NORTH CAROLINA EROSION CONTROL PLANNING AND DESIGN MANUAL, COUNTY ORDINANCE, CITY ORDINANCE, OR THE MOST RESTRICTIVE OF ANY STANDARDS THAT CONFLICT.
2. LIMITS OF DISTURBANCE FOR THIS PROJECT IS LESS THAN ONE ACRE, SO AN EROSION CONTROL PERMIT IS NOT REQUIRED. HOWEVER, GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN AND PERMIT IS A VIOLATION OF THE COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
3. ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED WITHIN 14 CALENDAR DAYS. CERTAIN DISTURBED AREAS ARE REQUIRED TO BE SEEDED/MULCHED SOONER THAN 14 DAYS. REFER TO EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.
4. SLOPES SHALL BE GRADED NO STEEPER THAN 3:1. FILL SLOPES GREATER THAN 10' VERTICAL REQUIRE ADEQUATE TERRACING. ANY SLOPES PROPOSED GREATER THAN 3:1 SHALL BE APPROVED BY LANDSCAPE ARCHITECT. NO SLOPES IN ANY CASE SHALL BE GREATER THAN 2:1.
5. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES BEYOND WHAT IS SHOWN. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED, IN WRITING, FROM THE AFFECTED PROPERTY OWNER(S), AND APPROVED BY THE CITY PRIOR TO PROCEEDING WITH THAT WORK.
6. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY 7 DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ½ INCH. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED AS NECESSARY.
7. AFTER CONSTRUCTION IS COMPLETED AND SITE STABILIZED, REMOVE ALL TEMPORARY AND PERMANENTLY VEGETATE ALL REMAINING DISTURBED AREAS THAT WERE COVERED BY TEMPORARY MEASURES.

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Wilson St. Park
Concord, NC

Concord PARKS & RECREATION

REV. #	DATE	DESCRIPTION
1	08/30/2021	ACCELA CYCLE 1 COMMENTS

NORTH CAROLINA LICENSED LANDSCAPE ARCHITECT C-415 VIZ, PLLC

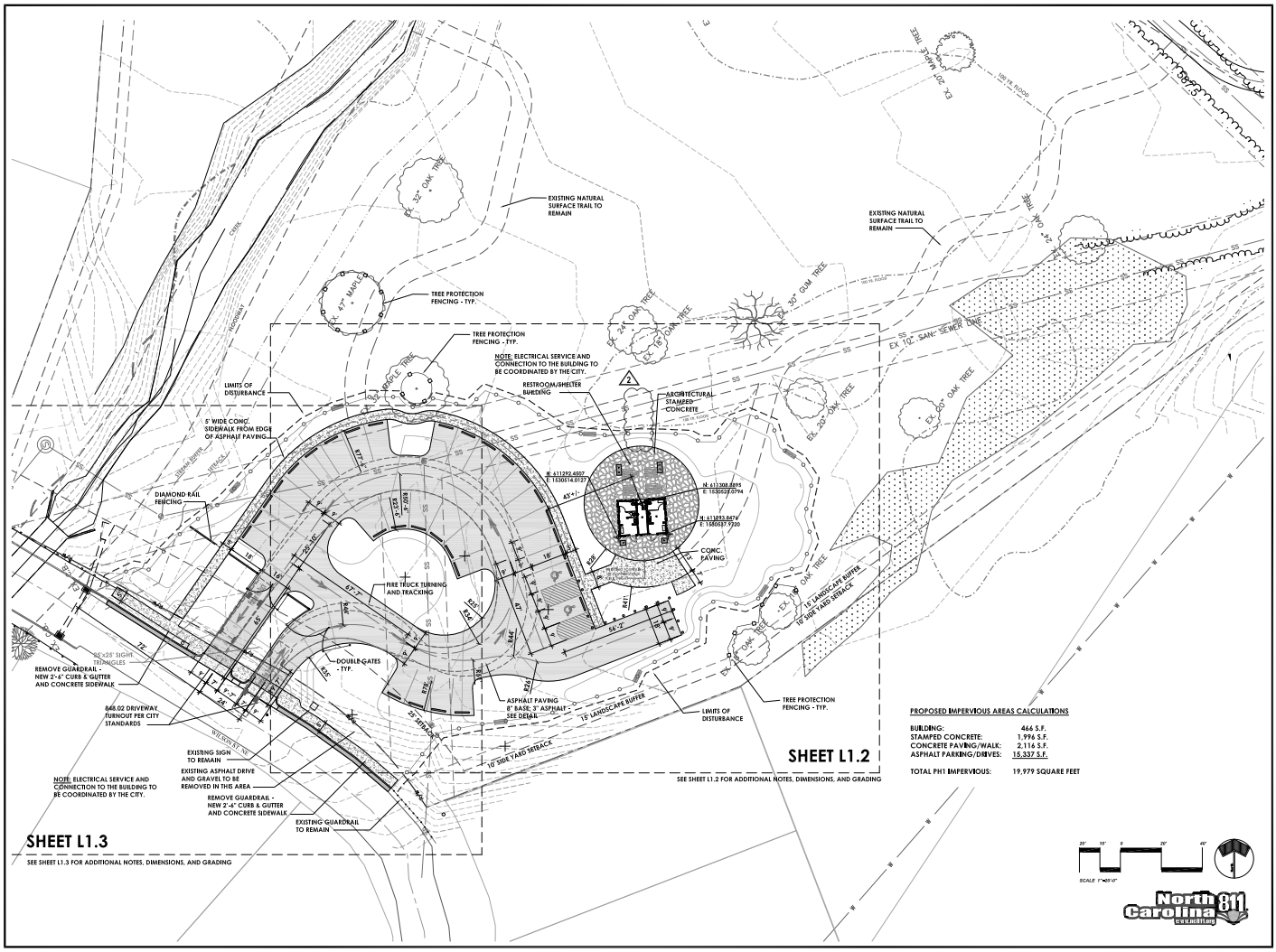
8/30/2021

DATE: 7/23/2021
SCALE: AS SHOWN
JOB NUMBER: 20-45.1
DESIGNED BY: GRF
DRAWN BY: GRF

OVERALL SITE PLAN

L1.0

C:_MD\Projects\Concord Wilson St Park L_R25-2021.dwg



PROPOSED IMPERVIOUS AREAS CALCULATIONS

BUILDING:	466 S.F.
STAMPED CONCRETE:	1,996 S.F.
CONCRETE PAVING/WALK:	2,116 S.F.
ASPHALT PARKING/DRIVES:	15,337 S.F.
TOTAL PH1 IMPERVIOUS:	19,979 SQUARE FEET

SCALE: 1"=20'-0"

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Wilson St. Park
Concord, NC

Concord PARKS & RECREATION

REV. #	DATE	DESCRIPTION
1	08/30/2021	ACCELA CYCLE 1 COMMENTS
2	09/14/2021	ACCELA CYCLE 2 COMMENTS

NORTH CAROLINA C-415 VIZ, PLLC

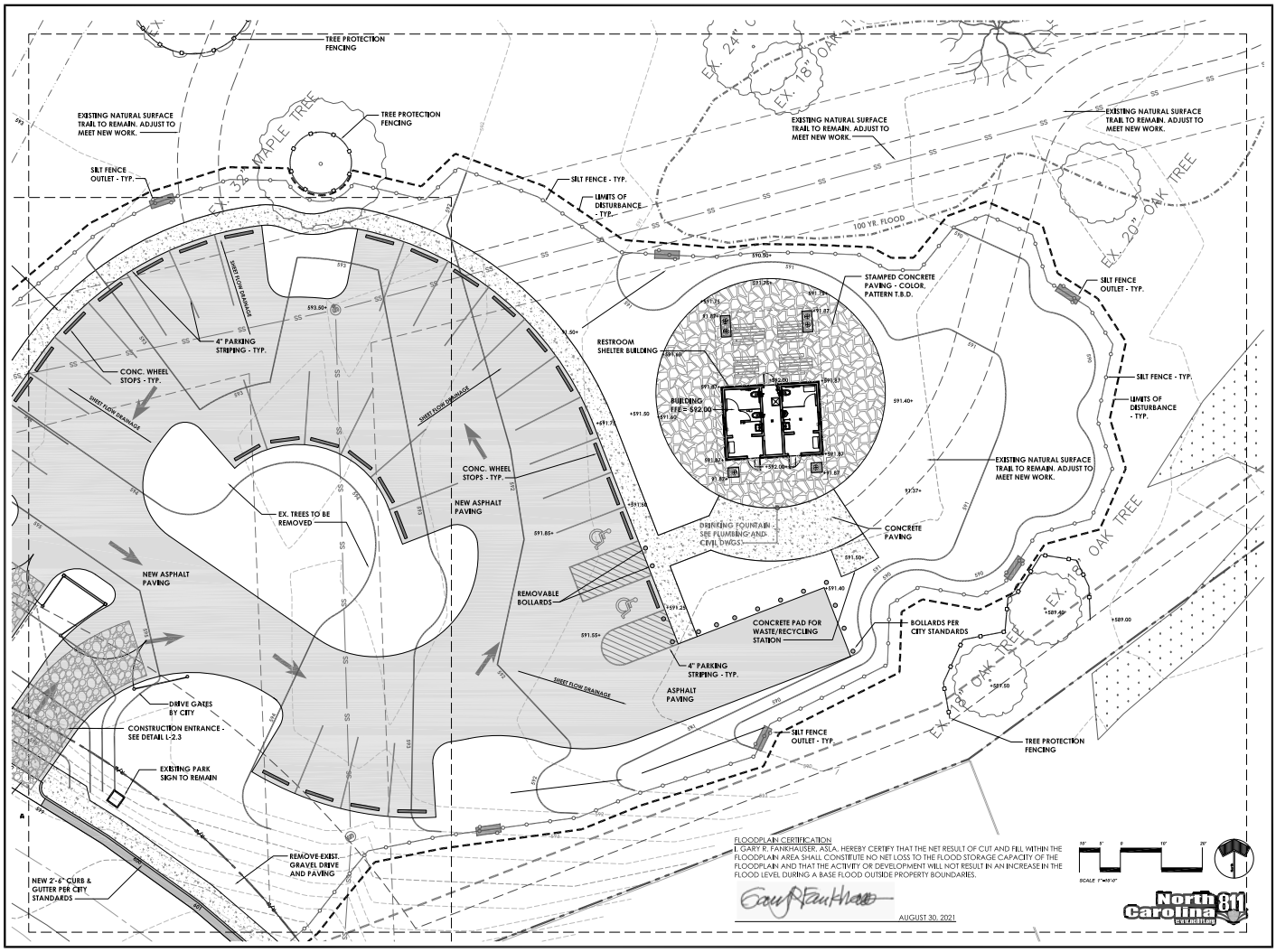
7/14/2021

DATE: 7/23/2021
SCALE: AS SHOWN
JOB NUMBER: 20-45.1
DESIGNED BY: GRF
DRAWN BY: GRF

STAKING, PAVING, AND GRADING PLAN

L1.1

C:_MD Projects\Concord Wilson St PH1 (20) Wilson St Park L1_5-14-2021.dwg



FLOODPLAIN CERTIFICATION

I, GARY R. FAHNHAUSER, ASLA, HEREBY CERTIFY THAT THE NET RESULT OF CUT AND FILL WITHIN THE FLOODPLAIN AREA SHALL CONSTITUTE NO NET LOSS TO THE FLOOD STORAGE CAPACITY OF THE FLOODPLAIN AND THAT THE ACTIVITY OR DEVELOPMENT WILL NOT RESULT IN AN INCREASE IN THE FLOOD LEVEL DURING A BASE FLOOD OUTSIDE PROPERTY BOUNDARIES.

AUGUST 30, 2021

SCALE: 1"=10'-0"

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C:\...\NS-Projects\Concord Wilson St Park\L2\Wilson St Park L2_7-14-2021.dwg

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Concord PARKS & RECREATION

REV. #	DATE	DESCRIPTION
1	08/30/2021	ACCELA CYCLE 1 COMMENTS
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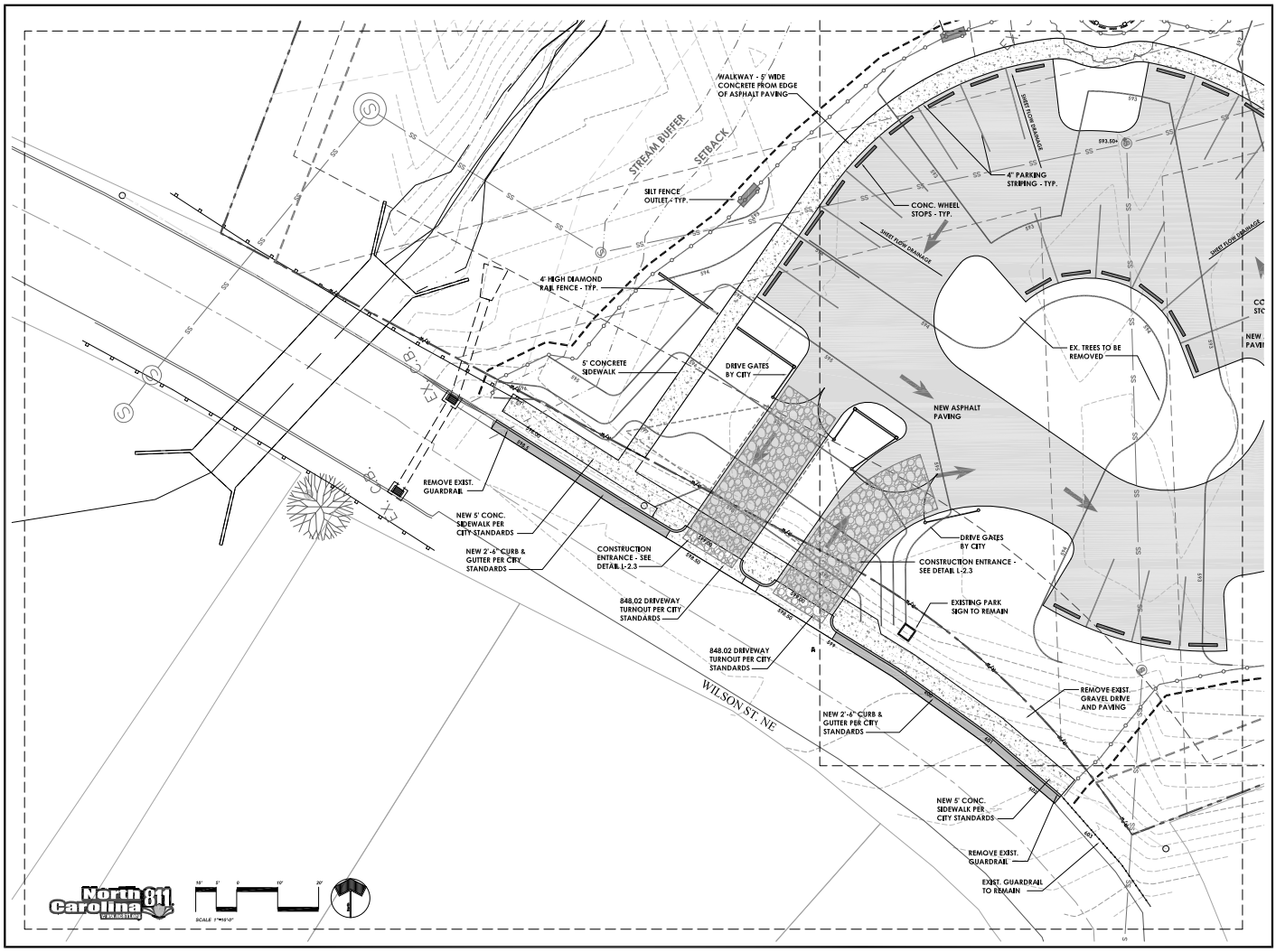
NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT C-415 VIZ, PLLC

7/14/2021

DATE:	7/23/2021
SCALE:	AS SHOWN
JOB NUMBER:	20-45.1
DESIGNED BY:	GRF
DRAWN BY:	GRF

ENLARGED PAVING, GRADING, EROSION CONTROL PLAN

L1.2



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Concord
PARKS & RECREATION

REV. #	DATE	DESCRIPTION
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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT C-415 VIZ, PLLC

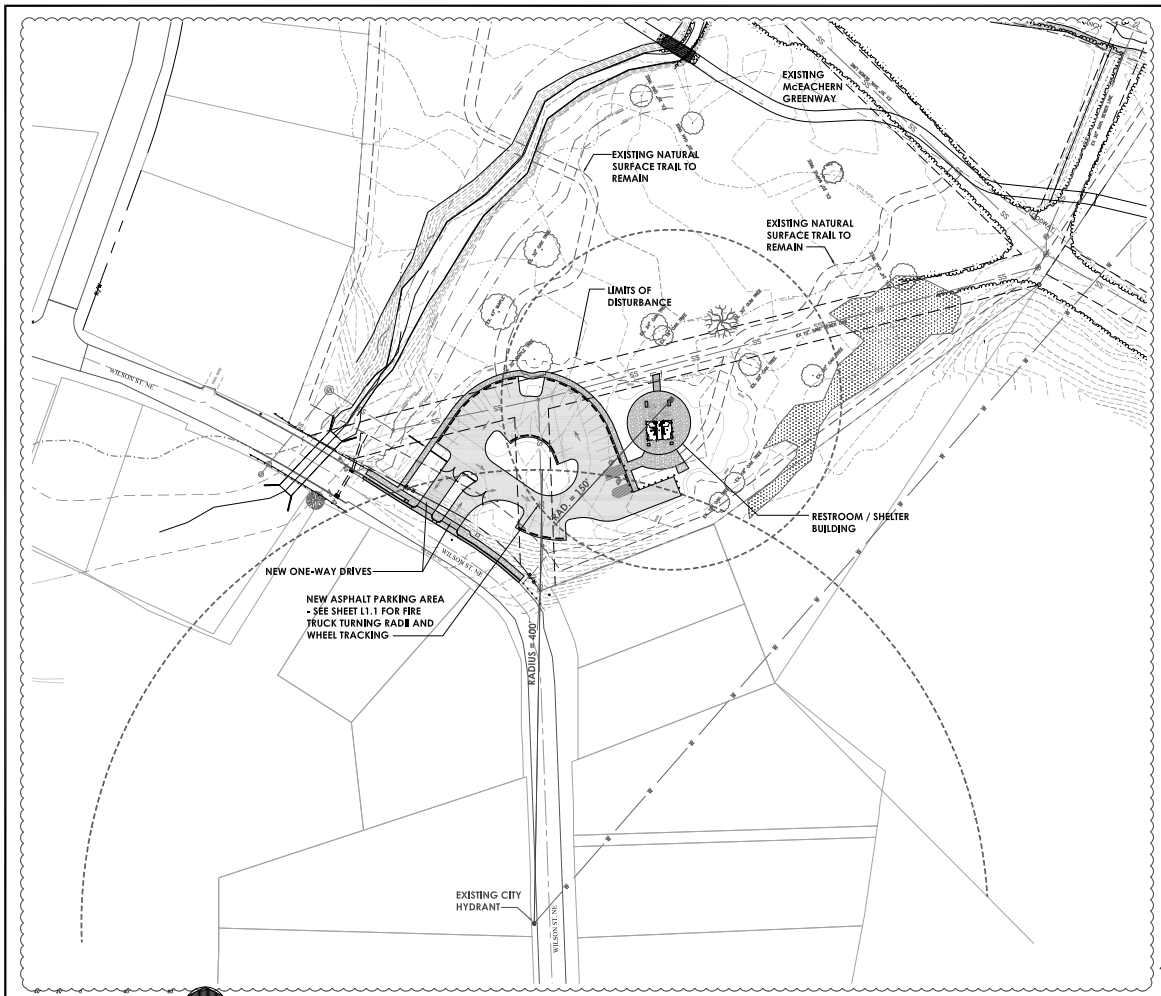
9/14/2021

DATE: 7/23/2021
SCALE: AS SHOWN
JOB NUMBER: 20-45.1
DESIGNED BY: GRF
DRAWN BY: GRF

ENLARGED PAVING, GRADING, EROSION CONTROL PLAN

L1.3

C:_MD Projects\Concord Wilson St Park (CD)\Wilson St Park L4_3rd-L4-2021.dwg



SCALE 1"=80'-0"

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Concord PARKS & RECREATION

Rev. #	DATE	DESCRIPTION
1	08/30/2021	ACCELA CYCLE 1 COMMENTS

NORTH CAROLINA C-415 VIZ, PLLC

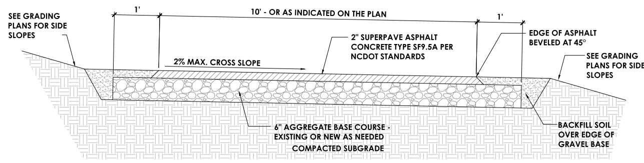
8/30/2021

DATE:	7/23/2021
SCALE:	AS SHOWN
JOB NUMBER:	20-45.1
DESIGNED BY:	GRF
DRAWN BY:	GRF

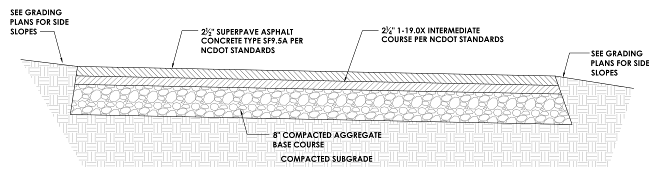
FIRE PROTECTION SITE PLAN

L1.4 ⚠

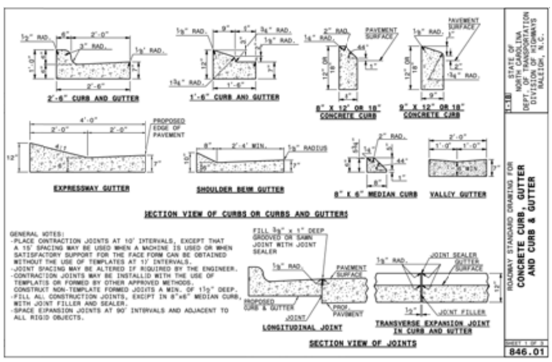
C:_MD Projects\Concord Wilson St Park_CD\Wilson St Park L4_8-25-2021.dwg

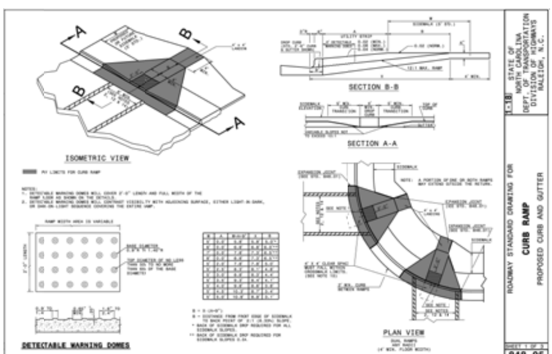

SEE GRADING PLANS FOR SIDE SLOPES
1'
10' - OR AS INDICATED ON THE PLAN
1'
EDGE OF ASPHALT BEVELED AT 45°
2" SUPERPAVE ASPHALT CONCRETE TYPE SF9.5A PER NCDOT STANDARDS
2% MAX. CROSS SLOPE
SEE GRADING PLANS FOR SIDE SLOPES
6" AGGREGATE BASE COURSE - EXISTING OR NEW AS NEEDED
COMPACTED SUBGRADE
BACKFILL SOIL OVER EDGE OF GRAVEL BASE

ASPHALT TRAIL PAVING SECTION DETAIL SCALE: 1"=1'-0"

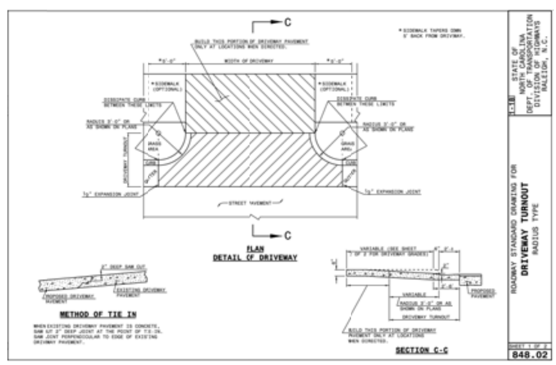


ASPHALT PARKING AND DRIVE PAVING SECTION DETAIL SCALE: 1"=1'-0"


2'-6" CURB AND GUTTER
1'-6" CURB AND GUTTER
8" X 12" OR 18" CONCRETE CURB
9" X 12" OR 18" CONCRETE CURB
EXPRESSWAY GUTTER
SHOULDER BERM GUTTER
6" X 6" MEDIAN CURB
VALLEY GUTTER
SECTION VIEW OF CURBS OR CURBS AND GUTTERS
GENERAL NOTES:
-PLACE CONTRACTION JOINTS AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS.
-JOINT SPACING MAY BE ALTERED IF REQUIRED BY THE ENGINEER.
-CONTRACTION JOINTS MAY BE INSTALLED WITH THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. CONSTRUCT NON-TEMPLATE FORMED JOINTS A MIN. OF 1½" DEEP.
-FILL ALL CONSTRUCTION JOINTS, EXCEPT IN 6"x6" MEDIAN CURB, WITH JOINT FILLER AND SEALER.
-SPACE EXPANSION JOINTS AT 90' INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.
LONGITUDINAL JOINT
TRANSVERSE EXPANSION JOINT IN CURB AND GUTTER
SECTION VIEW OF JOINTS
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.
ROADWAY STANDARD DRAWING FOR CONCRETE CURB, GUTTER AND CURB & GUTTER
846.01



NOTE: DETECTABLE WARNING DOME PANELS TO BE RED IN COLOR PER CITY OF CONCORD STANDARDS. 1



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Concord Parks & Recreation

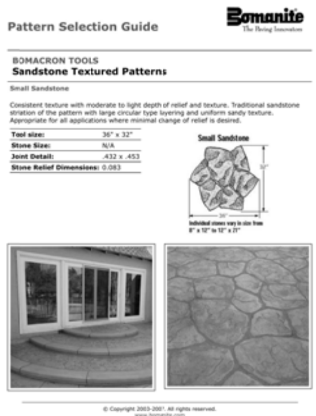
REV. #	DATE	DESCRIPTION
1	08/30/2021	ACCELA CYCLE 1 COMMENTS

DATE:	7/23/2021
SCALE:	AS SHOWN
JOB NUMBER:	20-45.1
DESIGNED BY:	GRF
DRAWN BY:	GRF

SITE DETAILS

L2.1

C:_VIZ\Projects\Concord Wilson St PH1 CD\Wilson St Park LA_8-22-2021.dwg



Pattern Selection Guide

Bomanite
The Paving Innovator

BOMACRON TOOLS
Sandstone Textured Patterns

Small Sandstone

Consistent texture with moderate to light depth of relief and texture. Traditional sandstone striation of the pattern with large circular type layering and uniform sandy texture. Appropriate for all applications where minimal change of relief is desired.

Tool size:	36" x 32"
Stone Size:	N/A
Joint Detail:	.432 x .453
Stone Relief Dimensions:	0.083

Small Sandstone

Individual stones vary in size from 8" x 12" to 12" x 21"

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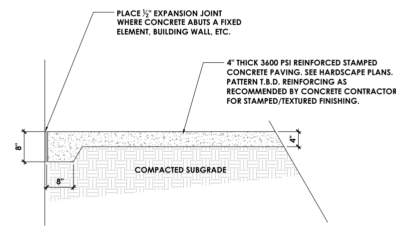
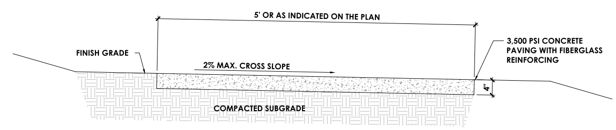


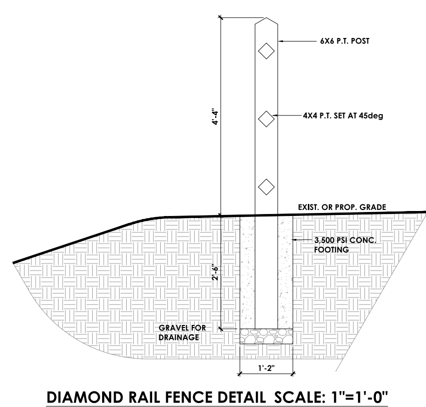
NOTES:

1. INTEGRAL COLOR SCORED CONCRETE PAVING WITH IMPRINTS AND/OR TEXTURES SHALL BE AS SHOWN ON THE DRAWINGS.
2. CONCRETE CONTRACTOR SHALL BE EXPERIENCED IN PLACING AND FINISHING ARCHITECTURAL CONCRETE.
3. EXPANSION JOINTS SHALL BE INCORPORATED WITHIN PATTERN AS DETERMINED BY CODE OR STANDARD PRACTICE.
4. EACH PATTERN/COLOR TO BE SEPARATELY POURED USING STEEL EDGE FORMS TO ACHIEVE A TRUE AND CONSISTENT RADIUS OR STRAIGHT LINE EDGE.

ARCHITECTURAL STAMPED/TEXTURED CONCRETE PAVING SECTION SCALE: 1"=1'-0"



CONCRETE SIDEWALK PAVING SECTION DETAIL SCALE: 1"=1'-0"



DIAMOND RAIL FENCE DETAIL SCALE: 1"=1'-0"

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Wilson St. Park
Concord, NC

Concord PARKS & RECREATION

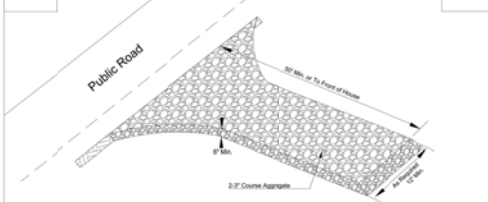
REV. #	DATE	DESCRIPTION
1	00/00/2011	OWNER COMMENTS

DATE:	7/23/2021
SCALE:	AS SHOWN
JOB NUMBER:	20-45.1
DESIGNED BY:	GRF
DRAWN BY:	GRF

SITE DETAILS

L2.2

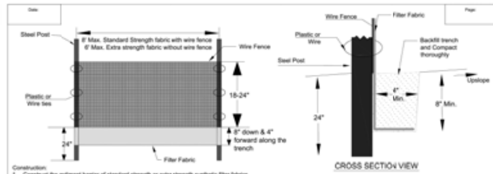
C:_VIZ\Projects\Concord Wilson St PH1 CD\Wilson St Park LA_6-2-2021.dwg



Construction:
1. Clear the entrance and exit area of all vegetation, rock, and other objectionable material and properly grade it.
2. Place the gravel to the specific grade and dimensions shown on the plans, and smooth it.
3. Provide drainage to carry water to a sediment trap or other suitable outlet.
4. Use geotextile fabrics in order to improve stability of the foundation in locations subject to seepage or high water table.

Maintenance:
1. Per NCG-01 inspect at least once a week and after each 1 inch or greater rainfall; make any required repairs immediately.
2. Maintain the gravel pad in a condition to prevent mud or sediment from leaving the construction site. This may require periodic topdressing with 2 inch stone.
3. Immediately remove all objectionable materials spilled, washed or tracked onto public roadways.

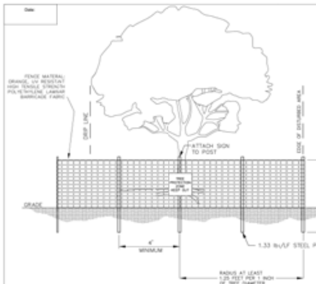
CONSTRUCTION ENTRANCE/EXIT



Construction:
1. Construct the sediment barrier of standard strength or extra strength synthetic filter fabrics.
2. Ensure that the height of the sediment fence does not exceed 24 inches above the ground. (Higher fences may impound volumes of water sufficient to cause failure of the structure)
3. Construct the filter fabric from a continuous roll cut to the length of the barrier to avoid joints. When joints are necessary, securely fasten the filter cloth only at a support post with 4 feet minimum overlap to the next post.
4. Support standard strength filter fabric by wire mesh fastened securely to the upslope side of the posts. Extend the wire mesh support to the bottom of the trench. Fasten the wire reinforcement, then fabric on the upslope side of the fence post. Wire or plastic zip ties should have a minimum 50 pound tensile strength.
5. When a wire mesh support fence is used, space posts a maximum of 8 feet apart. Supports should be driven securely into the ground a minimum of 24 inches.
6. Extra strength filter fabric with 6 foot post spacing does not require a wire mesh support fence. Securely fasten the filter fabric directly to posts. Wire or plastic zip ties should have a minimum of 50 pound tensile strength.
7. Excavate the trench approximately 4 inches wide and 8 inches deep along the proposed line of the posts and upslope from the barrier.
8. Place 12 inches of fabric along the bottom and side of the trench.
9. Backfill the trench with soil placed over the filter fabric and compact. Thorough compaction of the backfill is critical to silt fence performance.
10. Do not attach filter fabric to existing trees.

Maintenance:
1. Inspect sediment fences at least once a week and after each 1 inch or greater rainfall. Make any required repairs immediately.
2. Should the fabric of a sediment fence collapse, tear, decompose, or become ineffective, replace it promptly.
3. Remove sediment deposits as necessary to provide adequate storage volume for the next rain and reduce pressure on the fence. Take care to avoid undermining the fence during cleanouts.
4. Remove all fencing materials and unstable sediment deposits and bring the area to grade and stabilize it after the contributing drainage area has been properly stabilized.

SILT FENCE



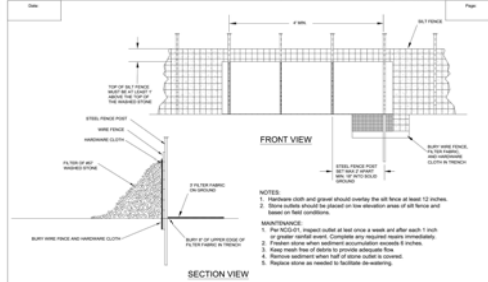
MATURE TREE PROTECTION ZONE RADIUS

TRUNK DIAMETER	GOOD PROTECTION	BETTER PROTECTION	BEST PROTECTION
8 INCHES	10 FEET	12 FEET	20 FEET
12 INCHES	15 FEET	18 FEET	30 FEET
16 INCHES	20 FEET	24 FEET	40 FEET
20 INCHES	25 FEET	30 FEET	50 FEET

NOTES:
1. Leave critical areas (such as flood plains, steep slopes and wetlands) with desirable trees in their natural condition or only partially cleared.
2. Select trees to be preserved before siting roads, buildings or other structures.
3. Minimize trenching in areas with trees. Place several utilities in the same trench.
4. Prohibit or restrict access to tree protection zones(TPZ). Post "Keep Out" signs on all sides of fencing and do not store construction equipment or materials in TPZ.
5. Monitor trees using a professional or train your staff to monitor tree health during and after construction on a regular, frequent basis.
6. Assign a crew member to weekly TPZ fence integrity checks. Repair and replace TPZ fencing as needed.

MAINTENANCE:
1. Prune any damaged trees. In spite of precautions, some damage to protected trees may occur. In such cases, repair any damage to the crown, trunk, or root system immediately.
2. Repair roots by cutting off the damaged areas and painting them then with tree paint. Spread peat moss or moist topsoil over exposed roots.
3. Repair damage to bark by trimming around the damaged area, taper the cut to provide drainage and paint with tree paint.
4. Cut off all damaged tree limbs above the tree collar at the trunk or main branch. Use three separate cuts to avoid peeling bark from healthy areas of the tree.

TREE PROTECTION ZONES



NOTES:
1. Hardware cloth and gravel should overlay the silt fence at least 12 inches.
2. Stone outlets should be placed on low elevation areas of silt fence and based on field conditions.

MAINTENANCE:
1. Per NCG-01, inspect outlet at lest once a week and after each 1 inch or greater rainfall event. Complete any required repairs immediately.
2. Freshen stone when sediment accumulation exceeds 6 inches.
3. Keep mesh free of debris to provide adequate flow.
4. Remove sediment when half of stone outlet is covered.
5. Replace stone as needed to facilitate de-watering.

SILT FENCE OUTLET

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Wilson St. Park
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Concord PARKS & RECREATION

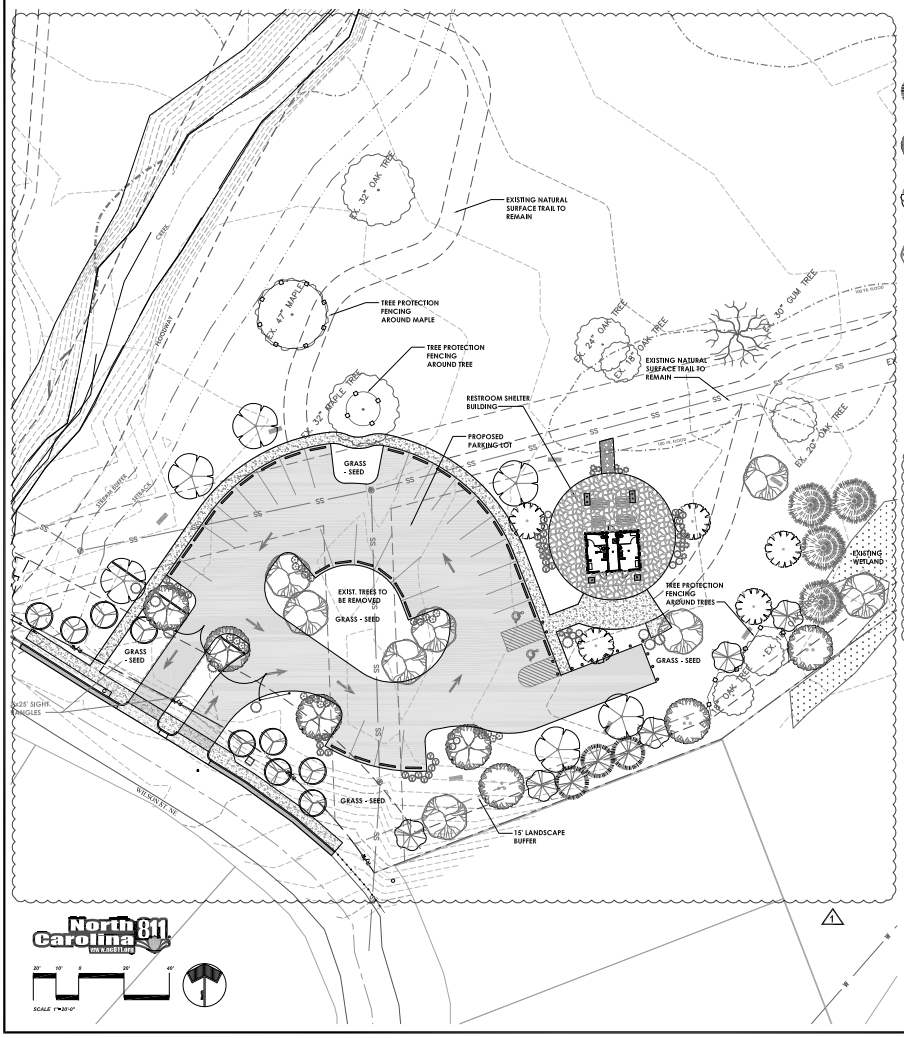
REV. #	DATE	DESCRIPTION
1	00/00/2011	OWNER COMMENTS

DATE: 7/23/2021
SCALE: AS SHOWN
JOB NUMBER: 20-45.1
DESIGNED BY: GRF
DRAWN BY: GRF

SITE DETAILS

L2.3

North Carolina 811



PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME	COMMON NAME	SIZE	QTY
	Ce	Cercis canadensis	Eastern Redbud Multi-trunk	8` Ht.	9
	Cy	Cryptomeria japonica `Yoshino`	Yoshino Cryptomeria	8` Ht.	3
	Kc	Koelreuteria paniculata 'Coral Sun'	Coral Sun Golden Rain Tree	2.5" Cal.	6
	Lt	Liriodendron tulipifera	Tulip Poplar	2.5" Cal.	3
	Mm	Magnolia x soulangeana	Saucer Magnolia Multi-Trunk	8` Ht.	5
	Pc	Pistacia chinensis	Chinese Pistache	8` Ht.	5
	Po	Platanus occidentalis	American Sycamore	2.5" Cal.	4
	Qh	Quercus lyrata `QLFTB` TM	Highbeam Overcup Oak	2.5" Cal.	8
	Ts	Taxodium distichum 'Sofine' TM	Autumn Gold Bald Cypress	2.5" Cal.	4

SHRUBS	CODE	BOTANICAL NAME	COMMON NAME	SIZE	QTY
	Ig	Ilex glabra	Inkberry Holly	7 gal.	9
	Lh	Lavandula angustifolia `Hidcote Blue`	Hidcote Blue Lavender	3 gal.	24
	Lp	Loropetalum chinense `Purple Daydream`	Purple Daydream Loropetalum	3 gal.	23
	Aa	Rhododendron x `Conlee`	Autumn Amethist	3 gal.	27
	Va	Viburnum dentatum `Christom` TM	Blue Muffin Arrowwood Viburnum	3 gal.	12

CITY OF CONCORD LANDSCAPE NOTES:

1. LANDSCAPE CONTRACTOR SHALL COORDINATE AN ON-SITE MEETING WITH THE CITY ARBORIST BEFORE INSTALLATION OF ANY PLANT MATERIAL.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE ANSI A300 STANDARD FOR TREE, SHRUB, AND OTHER WOODY PLANT MANAGEMENT-STANDARD PRACTICES.
3. ALL PLANT STOCK SHALL COMPLY WITH THE CURRENT EDITION OF ANSI Z60.1 AMERICAN STANDARD FOR NURSERY STOCK.
4. ALL PLANTING AREAS SHALL MEET THE REQUIREMENTS OF THE CONCORD DEVELOPMENT ORDINANCE ARTICLE 11 AND TECHNICAL STANDARDS ARTICLE 7.
5. HEIGHT AND WIDTH OF PLANT MATERIAL SUPERSEDES CONTAINER SIZE.
6. UTILITIES SHALL BE LOCATED BEFORE PLANTING. WWW.NC811.ORG.
7. PLANTING LOCATIONS WILL BE ADJUSTED TO PROVIDE SUFFICIENT SPACE FOR UTILITIES, EASEMENTS, STREET LIGHTING, TRAFFIC SIGNS, AND SIGHT TRIANGLES. 5' CLEARANCE AROUND ALL SIDES OF FIRE HYDRANTS AND UTILITY APPURTENANCES. NO TREES SHALL BE PLANTED WITHIN 75' OF A STOP SIGN. NO PLANTS OR TREES LOCATED WITHIN SITE TRIANGLES. 15' CLEARANCE FROM ALL STREET LIGHT POLES.
8. ANY PROPOSED REDESIGN OF THE APPROVED PLANTING PLAN OR PLANT SPECIES SUBSTITUTIONS SHALL BE APPROVED BY THE CITY ARBORIST BEFORE INSTALLATION.
9. ALL TREES AND THEIR PLANTED LOCATION SHALL BE INSPECTED BY CITY STAFF BEFORE APPROVAL. ANY PLANT MATERIAL WHICH HAS DIED, TURNED BROWN, OR DEFOLIATED PRIOR TO INSPECTION SHALL BE REJECTED.
10. ANY PROPOSED PRIVATE IRRIGATION MAY BISECT BUT SHALL NOT RUN PARALLEL WITHIN UTILITY EASEMENTS OR STREET RIGHT OF WAYS, AND SHALL MEET THE REQUIREMENTS OF THE CITY OF CONCORD CODE OF ORDINANCE CHAPTER 62. SECTION 62-164.

CITY OF CONCORD LANDSCAPE REQUIREMENTS:

U.D.O. SECTION 11.4. BUFFER YARDS
CLASS 3, TYPE B BUFFER YARD - CIVIC USE: PHASE 1 BUFFER LENGTH = 264 L.F. @ 0.7 POINTS/L.F. = 184.80 POINTS REQUIRED
POINTS PROVIDED: 198 POINTS
SHADE TREES 14 @ 12 PTS. EACH = 168 POINTS; ORNAMENTAL TREES - 5 @ 6 POINTS EA. = 30 POINTS

U.D.O. SECTION 11.5. BUILDING YARDS
CATEGORY 1 BUILDING YARD - BUILDING LENGTH = 52 L.F. @ 0.5 POINTS/L.F. = 26 POINTS REQUIRED
POINTS PROVIDED: 36 POINTS
ORNAMENTAL TREES - 2 @ 6 POINTS EA. = 12 POINTS; EVERGREEN SHRUBS - 24 @ 1 POINT EA. = 24

U.D.O. SECTION 11.6. PARKING LOT YARDS
PROPOSED PARKING LOT = 10,112 SQ.FT. 10% LANDSCAPE AREA REQUIRED = 1,512 SQ.FT.
LANDSCAPE AREA PROVIDED = 3,028 SQ.FT.
PROPOSED PARKING SPACES = 33 SPACES @ 1 SHADE TREE & 8 SHRUBS PER SPACE = 4 SHADE TREES, 27 SHRUBS REQUIRED.
LANDSCAPE PROVIDED = 11 SHADE TREES; 36 SHRUBS

U.D.O. SECTION 11.7. STREET YARDS
CLASS 1 STREET YARD - STREET LENGTH = 192 L.F. @ 0.24 POINTS/L.F. = 46.10 POINTS REQUIRED
POINTS PROVIDED: 54 POINTS
ORNAMENTAL TREES - 9 @ 6 POINTS EA. = 54 POINTS

NOTES:

1. CONTRACTOR TO VERIFY PLANT TOTALS. IF THERE IS A CONFLICT IN PLANT TOTALS BETWEEN QUANTITIES SHOWN IN THE PLANT LEGEND AND THOSE INDICTED ON THE PLANS, THE PLANT LEGEND QUANTITIES AND SUMMARY QUANTITIES SHALL TAKE PRECEDENCE.
2. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES ARE NOT NECESSARILY SHOWN ON THE PLANS, AND WHERE SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL ON HIS OWN INITIATIVE AND AT NO ADDITIONAL COST TO THE OWNER, HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE, OTHER OBSTRUCTIONS, OR FROM ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NON-SUBSCRIBING UTILITIES. THE CONTRACTOR SHALL CONTACT **NORTH CAROLINA ONE CALL** AT **811** FOR ASSISTANCE IN LOCATING UTILITIES.
3. DISTURBED AREAS OTHER THAN PLANT BEDS/TREE RINGS SHALL BE SEEDED WITH TALL FESCUE GRASS UNLESS OTHERWISE DIRECTED BY THE CITY.
4. THE LANDSCAPE CONTRACTOR SHALL PERFORM FINISH GRADING TO ENSURE A SMOOTH TRANSITION BETWEEN PLANT BEDS AND LAWN AREAS.
5. ALL PLANTING AND LANDSCAPE WORK SHALL BE IN ACCORDANCE WITH CURRENT CITY STANDARDS.

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citizen design
Architecture + Planning + Study

Wilson St. Park
Concord, NC

Concord PARKS & RECREATION

REV. #	DATE	DESCRIPTION
1	08/30/2021	ACCELA CYCLE 1 COMMENTS

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT C-415 VIZ, PLLC

8/30/2021

DATE: 7/23/2021
SCALE: AS SHOWN
JOB NUMBER: 20-45.1
DESIGNED BY: GRF
DRAWN BY: GRF

PLANTING PLAN

L3.1

C:_MD Projects\Concord Wilson St Park L3_8-25-2021.dwg

CITY OF CONCORD LANDSCAPE NOTES:

1. LANDSCAPE CONTRACTOR SHALL COORDINATE AN ON-SITE MEETING WITH THE CITY ARBORIST BEFORE INSTALLATION OF ANY PLANT MATERIAL.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE ANSI A300 STANDARD FOR TREE, SHRUB, AND OTHER WOODY PLANT MANAGEMENT-STANDARD PRACTICES.
3. ALL PLANT STOCK SHALL COMPLY WITH THE CURRENT EDITION OF ANSI Z60.1 AMERICAN STANDARD FOR NURSERY STOCK.
4. ALL PLANTING AREAS SHALL MEET THE REQUIREMENTS OF THE CONCORD DEVELOPMENT ORDINANCE ARTICLE 11 AND TECHNICAL STANDARDS ARTICLE 7.
5. HEIGHT AND WIDTH OF PLANT MATERIAL SUPERSEDES CONTAINER SIZE.
6. UTILITIES SHALL BE LOCATED BEFORE PLANTING. WWW.NCBA1.ORG.
7. PLANTING LOCATIONS WILL BE ADJUSTED TO PROVIDE SUFFICIENT SPACE FOR UTILITIES, EASEMENTS, STREET LIGHTING, TRAFFIC SIGNS, AND SIGHT TRIANGLES. 5' CLEARANCE AROUND ALL SIDES OF FIRE HYDRANTS AND UTILITY APPURTENANCES. NO TREES SHALL BE PLANTED WITHIN 75' OF A STOP SIGN. NO PLANTS OR TREES LOCATED WITHIN SITE TRIANGLES. 15' CLEARANCE FROM ALL STREET LIGHT POLES.
8. ANY PROPOSED REDESIGN OF THE APPROVED PLANTING PLAN OR PLANT SPECIES SUBSTITUTIONS SHALL BE APPROVED BY THE CITY ARBORIST BEFORE INSTALLATION.
9. ALL TREES AND THEIR PLANTED LOCATION SHALL BE INSPECTED BY CITY STAFF BEFORE APPROVAL. ANY PLANT MATERIAL WHICH HAS DIED, TURNED BROWN, OR DEFOLIATED PRIOR TO INSPECTION SHALL BE REJECTED.
10. ANY PROPOSED PRIVATE IRRIGATION MAY BISECT BUT SHALL NOT RUN PARALLEL WITHIN UTILITY EASEMENTS OR STREET RIGHT OF WAYS, AND SHALL MEET THE REQUIREMENTS OF THE CITY OF CONCORD CODE OF ORDINANCE CHAPTER 62. SECTION 62-164.

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GRASSING SEED-SOD SPECIFICATIONS

1. ALL DISTURBED AREAS TO BE GRASSED AND WATERED UNTIL FINAL ACCEPTANCE BY THE TOWN

2. GRASS MATERIAL

A. SEED: TALL FESCUE, OR EQUIVALENT APPROVED BY THE CITY.
B. SEED: ANNUAL RYEGRASS SEED

3. SOIL AMENDMENTS

A. 100% NATURAL ORGANIC HUMUS COMPOST - 'SOIL3' BY SUPERSOD, OR EQUIVALENT APPROVED BY THE CITY. SPREAD AND TILL 'SOIL3' ADDITIVE IN AMOUNT RECOMMENDED FOR TALL FESCUE SEED.
B. DOLOMITIC LIME

4. MULCHES

A. CLEAN STRAW FOR SEED PLACEMENT.

5. SEEDING

A. SOW FESCUE (CALENDAR DEPENDENT) SEED WITH SPREADER OR SEEDING MACHINE AT A RATE OF 3LBS PER 1,000 SQUARE FEET.
B. SOW ANNUAL RYEGRASS SEED WITH SPREADER OR SEEDING MACHINE AT A RATE OF 5LBS PER 1,000 SQUARE FEET.
C. EVENLY DISTRIBUTE SEED BY SOWING EQUAL QUANTITIES IN TWO DIRECTIONS AT RIGHT ANGLES TO EACH OTHER.
D. RAKE SEED LIGHTLY INTO TOP 1/4 INCH OF SOIL, ROLL LIGHTLY, AND WATER WITH FINE SPRAY.
E. SPREAD STRAW MULCH AT A RATE OF 2 TONS PER ACRE TOO FORM A CONTINUOUS BLANKET.

PLANTING SPECIFICATIONS

1. PLANT MATERIAL

A. FURNISH NURSERY-GROWN PLANTS INDICATED IN PLANT LEGEND SHOWN ON DRAWINGS AND COMPLYING WITH ANSI Z60.1 - 2014, *AMERICAN STANDARD FOR NURSERY STOCK.*
B. ANNUALS: PROVIDE HEALTHY, DISEASE-FREE PLANTS OF SPECIES AND VARIETY SHOWN OR LISTED, WITH WELL-ESTABLISHED ROOT SYSTEMS. PROVIDE ONLY PLANTS THAT ARE ACCLIMATED TO OUTDOOR CONDITIONS BEFORE DELIVERY.
C. CONTRACTOR SHALL PROVIDE A ONE YEAR WARRANTY FROM FINAL ACCEPTANCE ON ALL PLANTS UNLESS APPROVED OTHERWISE BY THE OWNER.

2. SOIL AMENDMENTS AS REQUIRED FROM SOILS REPORT/TESTING

A. LIME: ASTM C 602, AGRICULTURAL LIMING MATERIAL CONTAINING A MINIMUM OF 80 PERCENT CALCIUM CARBONATE EQUIVALENT.
B. SULFUR: GRANULAR, BIODEGRADABLE, AND CONTAINING A MINIMUM OF 90 PERCENT SULFUR.
C. IRON SULFATE: GRANULATED FERROUS SULFATE CONTAINING A MINIMUM OF 20 PERCENT IRON AND 10 PERCENT SULFUR.
D. ALUMINUM SULFATE: COMMERCIAL GRADE, UNADULTERATED.
E. PERLITE: HORTICULTURAL PERLITE, SOIL AMENDMENT GRADE.
F. AGRICULTURAL GYPSUM: MINIMUM 90 PERCENT CALCIUM SULFATE.
G. SAND: CLEAN, WASHED, NATURAL OR MANUFACTURED, AND FREE OF TOXIC MATERIALS.
H. COMPOST: WELL-COMPOSTED, STABLE, AND WEED-FREE ORGANIC MATTER, PH RANGE OF 5.5 TO 8; MOISTURE CONTENT 35 TO 55 PERCENT BY WEIGHT; 100 PERCENT PASSING THROUGH 3/4-INCH SIEVE.
I. SPHAGNUM PEAT: PARTIALLY DECOMPOSED SPHAGNUM PEAT MOSS, FINELY DIVIDED OR GRANULAR TEXTURE, WITH A PH RANGE OF 3.4 TO 4.8.
J. MANURE: WELL-ROTTED, UNLEACHED, STABLE OR CATTLE MANURE CONTAINING NOT MORE THAN 25 PERCENT BY VOLUME OF STRAW, SAWDUST, OR OTHER BEDDING MATERIALS; FREE OF TOXIC SUBSTANCES, STONES, STICKS, SOIL, WEED SEED, DEBRIS, AND MATERIAL HARMFUL TO PLANT GROWTH.

3. FERTILIZERS

A. BONEMEAL: COMMERCIAL, RAW OR STEAMED, FINELY GROUND; A MINIMUM OF 1 PERCENT NITROGEN AND 10 PERCENT PHOSPHORIC ACID.
B. SUPERPHOSPHATE: COMMERCIAL, PHOSPHATE MIXTURE, SOLUBLE; A MINIMUM OF 20 PERCENT AVAILABLE PHOSPHORIC ACID.
C. COMMERCIAL FERTILIZER: COMMERCIAL-GRADE COMPLETE FERTILIZER OF NEUTRAL CHARACTER, CONSISTING OF FAST-AND SLOW-RELEASE NITROGEN.
D. SLOW-RELEASE FERTILIZER: GRANULAR OR PELLETED FERTILIZER.

4. PLANTING MIX

A. PLANTING MIX: SHALL BE NATURAL, FERTILE, AGRICULTURAL TOPSOIL, CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, WITH PH RANGE OF 5.5 TO 7. IT MAY BE DEVELOPED BY AMENDING THE EXISTING SOIL OR REMOVING THE EXISTING SOIL AND REPLACING WITH NEW SOIL. IT SHALL BE FREE OF ROOTS, PLANTS, SOD, STONES, CLODS, CLAY LUMPS, POCKETS OF COARSE SAND, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, BUILDING DEBRIS, AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH. PLANTING MIX SHALL NOT BE USED WHILE IN A FROZEN OR MUDDY CONDITION. UNLESS OTHERWISE SPECIFIED, THE PLANTING MIX SHALL CONTAIN THE FOLLOWING PERCENTAGES:
- CLAY: MIN. 10% - MAX. 30% (RED CLAY WELL PULVERIZED); CLAY SHALL BE STERILE.
- SILT: MIN. 30% - MAX. 50%
- COARSE SAND: MIN. 30% - MAX. 45% (1.0mm TO 0.5mm DIA., AND FREE OF ROCK)
- ORGANIC MAT.:MIN. 5% (COMPOST/HUMUS SUCH AS SAWDUST OR LEAF MOLD THAT IS DECOMPOSED)
- ELEMENTS: CALCIUM 65% - 80%; MAGNESIUM 10% - 30%; POTASSIUM 5% - 8%

B. CONTRACTOR TO PROVIDE SOILS TEST/ANALYSIS INDICATING ABOVE REQUIREMENTS.

5. MULCHES

A. DOUBLE HAMMERED HARDWOOD MULCH FOR ALL PLANT BEDS UNLESS OTHERWISE INDICATED.

6. PLANT BED ESTABLISHMENT

A. LAYOUT PLANT BEDS AS INDICATED ON THE PLANTING PLAN AND REMOVE UNNECESSARY MATERIAL TO A MINIMUM DEPTH OF 18 INCHES.
B. LOOSEN SUBGRADE OF PLANTING BEDS TO A MINIMUM DEPTH OF 6 INCHES. REMOVE STONES LARGER THAN 1 INCH IN ANY DIMENSION AND STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
C. SPREAD PLANTING MIX (SEE 4 ABOVE) TO A DEPTH OF 18 INCHES BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. DO NOT SPREAD IF PLANTING MIX OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
D. FINISH GRADING: GRADE PLANTING BEDS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.

7. EXCAVATION FOR TREES AND SHRUBS

A. PLANTING PITS AND TRENCHES: EXCAVATE CIRCULAR PLANTING PITS WITH SIDES SLOPING INWARD AT A 45-DEGREE ANGLE. EXCAVATIONS WITH VERTICAL SIDES ARE NOT ACCEPTABLE. TRIM PERIMETER OF BOTTOM LEAVING CENTER AREA OF BOTTOM RAISED SLIGHTLY TO SUPPORT ROOT BALL AND ASSIST IN DRAINAGE AWAY FROM CENTER. DO NOT FURTHER DISTURB BASE. ENSURE THAT ROOT BALL WILL SIT ON UNDISTURBED BASE SOIL TO PREVENT SETTLING. SCARIFY SIDES OF PLANTING PIT SMEARED OR SMOOTHED DURING EXCAVATION.
B. EXCAVATE APPROXIMATELY THREE TIMES AS WIDE AS BALL DIAMETER.
C. DO NOT EXCAVATE DEEPER THAN DEPTH OF THE ROOT BALL, MEASURED FROM THE ROOT FLARE TO THE BOTTOM OF THE ROOT BALL.
D. SUBSOIL AND TOPSOIL REMOVED FROM EXCAVATIONS MAY NOT BE USED SOLELY AS PLANTING MIX (SEE NOTE 4 ABOVE).

PLANTING SPECIFICATIONS (CONT.)

8. TREE, SHRUB, AND VINE PLANTING

A. BEFORE PLANTING, VERIFY THAT ROOT FLARE IS VISIBLE AT TOP OF ROOT BALL ACCORDING TO ANSI Z60.1.
B. REMOVE STEM GIRDLING ROOTS AND KINKED ROOTS. REMOVE INJURED ROOTS BY CUTTING CLEANLY; DO NOT BREAK.
C. SET STOCK PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 1 INCH ABOVE ADJACENT FINISH GRADES.
D. USE PLANTING SOIL FOR BACKFILL.
E. BALLED AND BURLAPPED: AFTER PLACING SOME BACKFILL AROUND ROOT BALL TO STABILIZE PLANT, CAREFULLY CUT AND REMOVE BURLAP, ROPE, AND WIRE BASKETS FROM TOPS OF ROOT BALLS AND FROM SIDES, BUT DO NOT REMOVE FROM UNDER ROOT BALLS. REMOVE PALLETS, IF ANY, BEFORE SETTING. DO NOT USE PLANTING STOCK IF ROOT BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATION.
F. CONTAINER-GROWN: CAREFULLY REMOVE ROOT BALL FROM CONTAINER WITHOUT DAMAGING ROOT BALL OR PLANT.
G. BACKFILL AROUND ROOT BALL IN LAYERS, TAMPING TO SETTLE SOIL AND ELIMINATE VOIDS AND AIR POCKETS. WHEN PLANTING PIT IS APPROXIMATELY ONE-HALF FILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS ABSORBED.
H. CONTINUE BACKFILLING PROCESS. WATER AGAIN AFTER PLACING AND TAMPING FINAL LAYER OF SOIL.
I. WHEN PLANTING ON SLOPES, SET THE PLANT SO THE ROOT FLARE ON THE UPHILL SIDE IS FLUSH WITH THE SURROUNDING SOIL ON THE SLOPE; THE EDGE OF THE ROOT BALL ON THE DOWNHILL SIDE WILL BE ABOVE THE SURROUNDING SOIL. APPLY ENOUGH SOIL TO COVER THE DOWNHILL SIDE OF THE ROOT BALL.
J. PRUNE/REMOVE ONLY DEAD, DYING, OR BROKEN BRANCHES. DO NOT PRUNE FOR SHAPE. PRUNE TO RETAIN NATURAL CHARACTER.
K. PRUNE, THIN, AND SHAPE TREES, SHRUBS, AND VINES ACCORDING TO STANDARD PROFESSIONAL HORTICULTURAL AND ARBORICULTURAL PRACTICES FOR NEWLY PLANTED PLANTS. UNLESS OTHERWISE INDICATED BY LANDSCAPE ARCHITECT, DO NOT CUT TREE LEADERS.

9. GROUND COVER, PERENNIAL, AND ANNUAL PLANTING

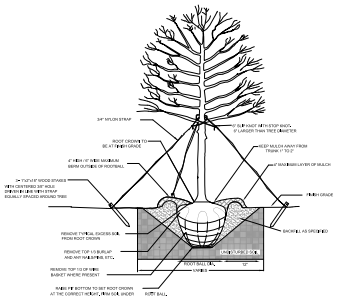
A. SET OUT AND SPACE GROUND COVER, PERENNIALS, AND/OR ANNUALS AS INDICATED IN EVEN ROWS WITH TRIANGULAR SPACING.
B. USE PLANTING MIX FOR BACKFILL.
C. DIG HOLES LARGE ENOUGH TO ALLOW SPREADING OF ROOTS.
D. WORK SOIL AROUND ROOTS TO ELIMINATE AIR POCKETS AND LEAVE A SLIGHT SAUCER INDENTATION AROUND PLANTS TO HOLD WATER.
E. WATER THOROUGHLY AFTER PLANTING, TAKING CARE NOT TO COVER PLANT CROWNS WITH WET SOIL.
F. PROTECT PLANTS FROM HOT SUN AND WIND; REMOVE PROTECTION IF PLANTS SHOW EVIDENCE OF RECOVERY FROM TRANSPLANTING SHOCK.

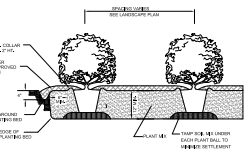
10. PLANT AND PLANT BED MULCHING

A. MULCH BACKFILLED SURFACES OF PLANTING BEDS AND OTHER AREAS INDICATED.
B. TREES AND TREE-FORM SHRUBS IN TURF AREAS: APPLY ORGANIC MULCH RING OF 3-INCH AVERAGE THICKNESS, WITH MINIMUM 36-INCH RADIUS AROUND TRUNKS OR STEMS. DO NOT PLACE MULCH WITHIN 3 INCHES OF TRUNKS OR STEMS.
C. ORGANIC MULCH IN PLANT BEDS: APPLY 3-INCH AVERAGE THICKNESS OF MULCH OVER ENTIRE SURFACE OF PLANT BED, AND FINISH LEVEL WITH ADJACENT FINISH GRADES. DO NOT PLACE MULCH WITHIN 2 INCHES OF TRUNKS OR STEMS.

11. PLANT MAINTENANCE

A. MAINTAIN PLANTINGS BY PRUNING, CULTIVATING, WATERING, WEEDING, FERTILIZING, MULCHING, RESTORING PLANTING SAUCERS, RESETTING TO PROPER GRADES OR VERTICAL POSITION, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE PLANTINGS. SPRAY OR TREAT AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE.
B. SET IRRIGATION SYSTEM FOR ZONE DURATION APPLICABLE FOR NEWLY PLANTED PLANTS IF APPLICABLE.
C. FILL IN AS NECESSARY SOIL SUBSIDENCE THAT MAY OCCUR BECAUSE OF SETTLING OR OTHER PROCESSES. REPLACE MULCH MATERIALS DAMAGED OR LOST IN AREAS OF SUBSIDENCE.
D. APPLY TREATMENTS AS REQUIRED TO KEEP PLANT MATERIALS, PLANTED AREAS, AND SOILS FREE OF PESTS AND PATHOGENS OR DISEASE. USE PRACTICES TO MINIMIZE THE USE OF PESTICIDES AND REDUCE HAZARDS.
E. APPLY PESTICIDES AND OTHER CHEMICAL PRODUCTS AND BIOLOGICAL CONTROL AGENTS IN ACCORDANCE WITH AUTHORITIES HAVING JURISDICTION AND MANUFACTURER'S WRITTEN RECOMMENDATIONS. COORDINATE APPLICATIONS WITH OWNER'S OPERATIONS AND OTHERS IN PROXIMITY TO THE WORK. NOTIFY OWNER BEFORE EACH APPLICATION IS PERFORMED.
F. PROTECT PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND OPERATIONS OF OTHER CONTRACTORS AND TRADES. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR, OR REPLACE DAMAGED PLANTINGS.





North Carolina 811 one call center

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Wilson St. Park
Concord, NC

Concord NORTH CAROLINA PARKS & RECREATION

REV. #	DATE	DESCRIPTION
1	08/30/2021	ACCELA CYCLE 1 COMMENTS

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT C-415 VIZ, PLLC

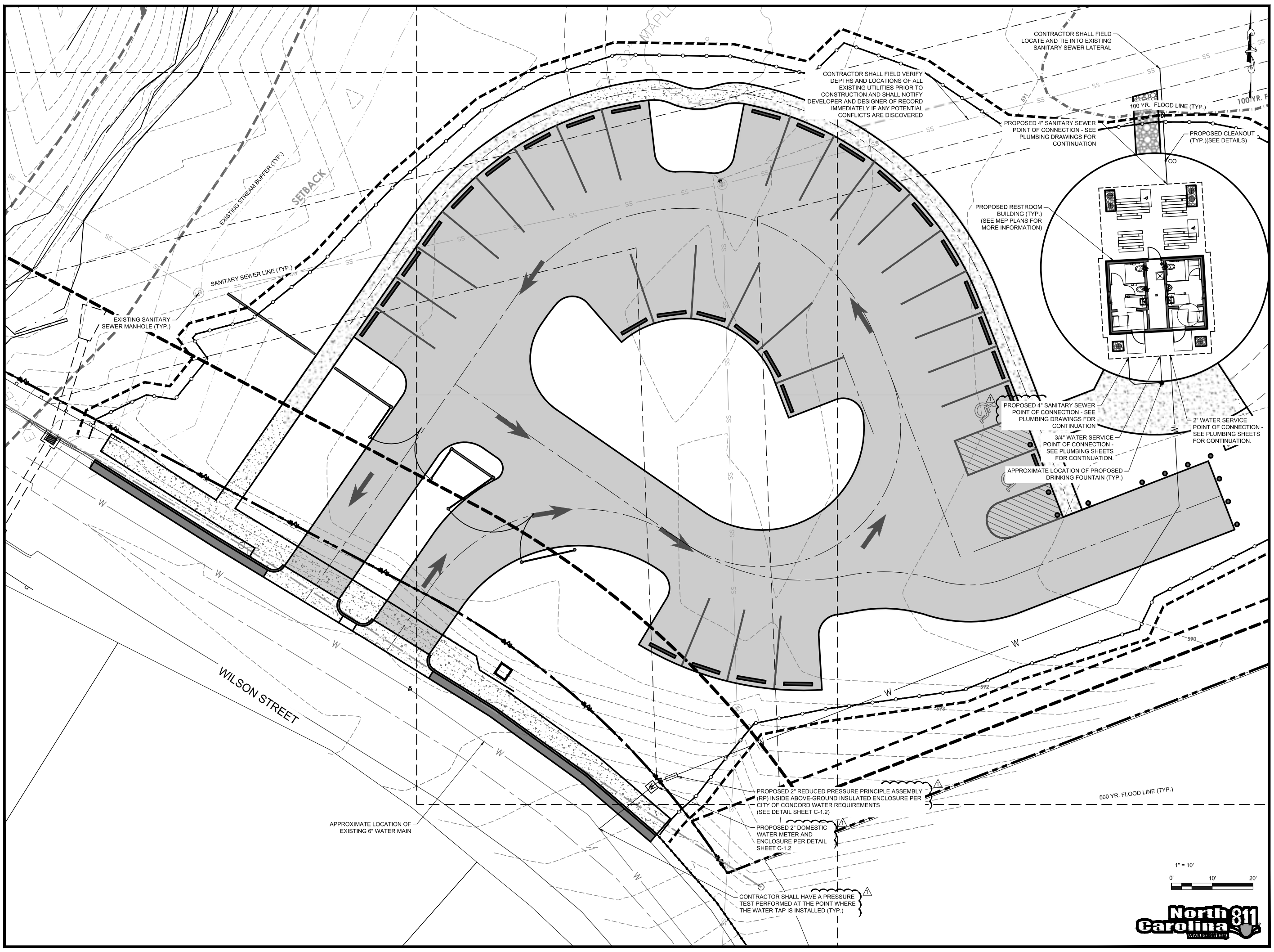
No. 327 Sarah Barnes 8/30/2021

DATE: 7/23/2021
SCALE: AS SHOWN
JOB NUMBER: 20-45.1
DESIGNED BY: GRF
DRAWN BY: GRF

PLANTING PLAN

L3.2

C:_VIZ\Projects\Concord Wilson St Park\1_CD\Wilson St Park L3_8-25-2021.dwg


CONTRACTOR SHALL FIELD LOCATE AND TIE INTO EXISTING SANITARY SEWER LATERAL
CONTRACTOR SHALL FIELD VERIFY DEPTHS AND LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND SHALL NOTIFY DEVELOPER AND DESIGNER OF RECORD IMMEDIATELY IF ANY POTENTIAL CONFLICTS ARE DISCOVERED
100 YR. FLOOD LINE (TYP.)
PROPOSED 4" SANITARY SEWER POINT OF CONNECTION - SEE PLUMBING DRAWINGS FOR CONTINUATION
PROPOSED CLEANOUT (TYP.)(SEE DETAILS)
CO
PROPOSED RESTROOM BUILDING (TYP.) (SEE MEP PLANS FOR MORE INFORMATION)
EXISTING STREAM BUFFER (TYP.)
SETBACK
SANITARY SEWER LINE (TYP.)
EXISTING SANITARY SEWER MANHOLE (TYP.)
PROPOSED 4" SANITARY SEWER POINT OF CONNECTION - SEE PLUMBING DRAWINGS FOR CONTINUATION
3/4" WATER SERVICE POINT OF CONNECTION - SEE PLUMBING SHEETS FOR CONTINUATION.
2" WATER SERVICE POINT OF CONNECTION - SEE PLUMBING SHEETS FOR CONTINUATION.
APPROXIMATE LOCATION OF PROPOSED DRINKING FOUNTAIN (TYP.)
WILSON STREET
PROPOSED 2" REDUCED PRESSURE PRINCIPLE ASSEMBLY (RP) INSIDE ABOVE-GROUND INSULATED ENCLOSURE PER CITY OF CONCORD WATER REQUIREMENTS (SEE DETAIL SHEET C-1.2)
PROPOSED 2" DOMESTIC WATER METER AND ENCLOSURE PER DETAIL SHEET C-1.2
500 YR. FLOOD LINE (TYP.)
APPROXIMATE LOCATION OF EXISTING 6" WATER MAIN
CONTRACTOR SHALL HAVE A PRESSURE TEST PERFORMED AT THE POINT WHERE THE WATER TAP IS INSTALLED (TYP.)
1" = 10'
0' 10' 20'
North Carolina 811

Dewberry

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Concord
North Carolina
High Performance Living

Wilson Street Park
106 Wilson Street, NE
Concord, North Carolina 28025

City of Concord
Parks & Recreation Department

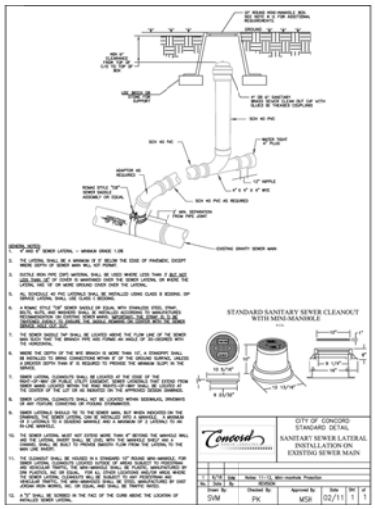
REV. #	DATE	DESCRIPTION
1	08/30/2021	ACCELA CYCLE 1 COMMENTS

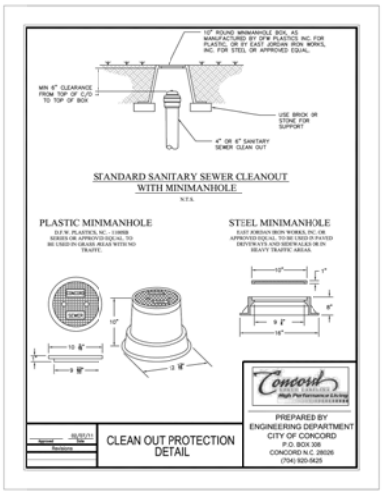
SEAL 40016

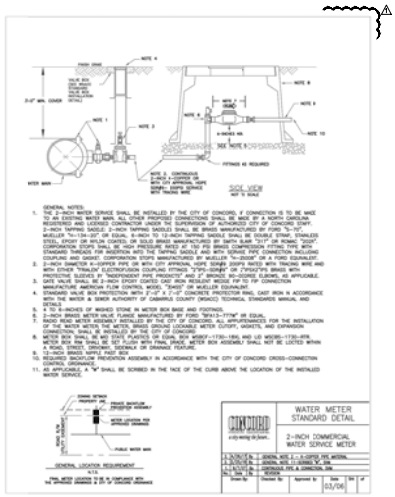
DATE:	07/23/2021
SCALE:	AS SHOWN
JOB NUMBER:	50140519
DESIGNED BY:	
DRAWN BY:	

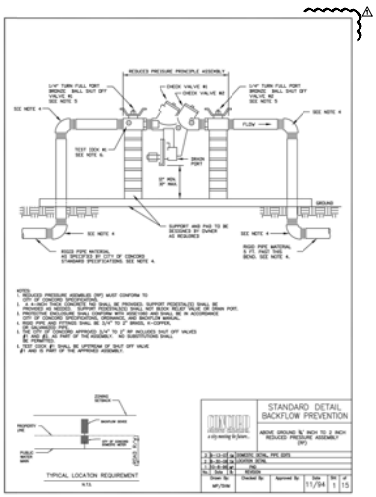
UTILITY PLAN

C-1.1









North Carolina 811

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High Performance Living

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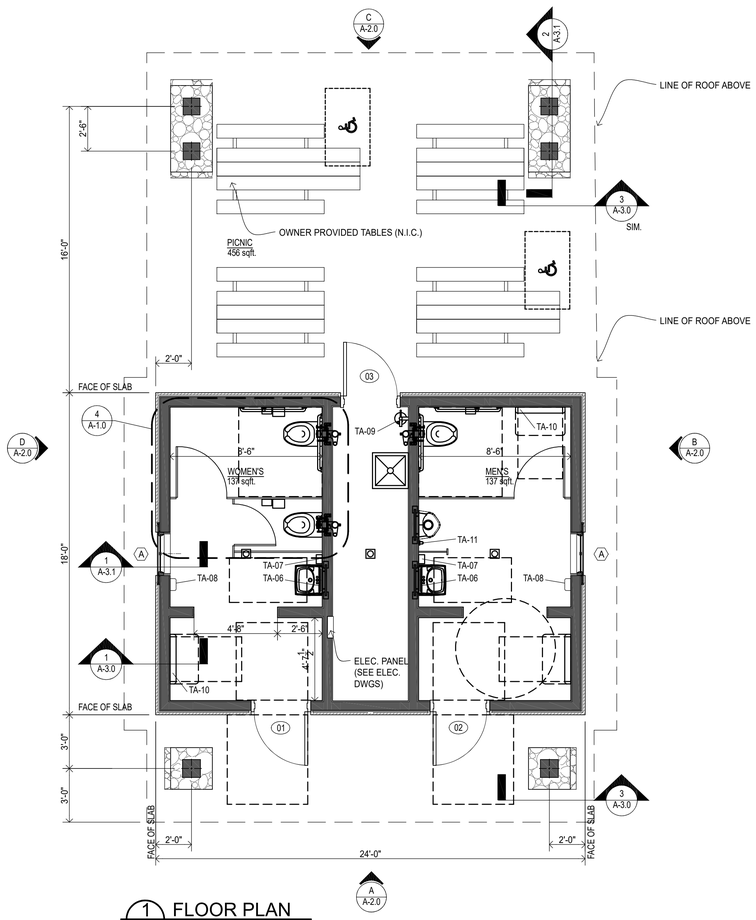
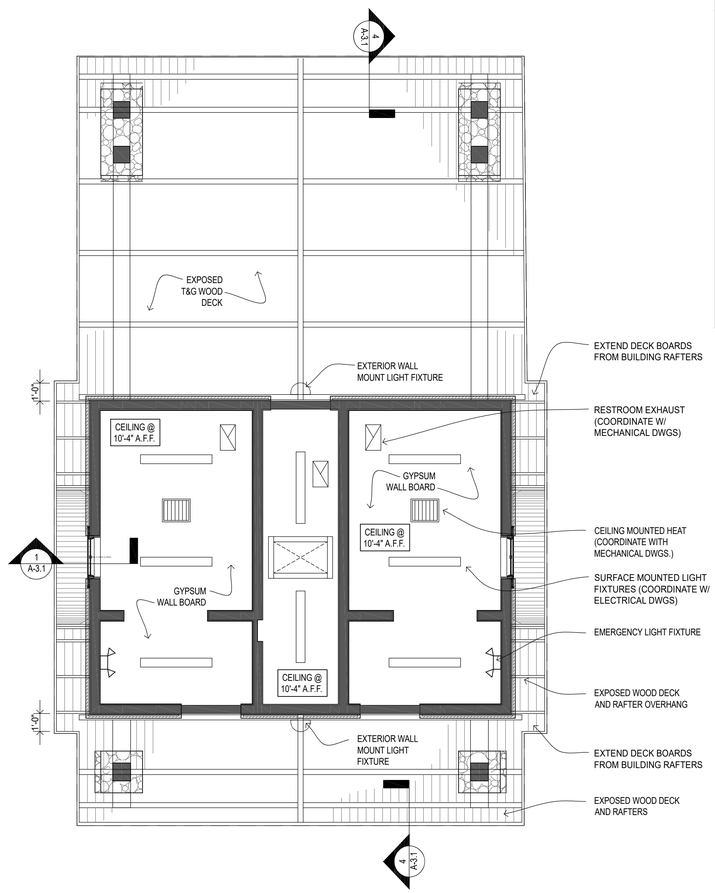
UTILITY DETAILS

C-1.2



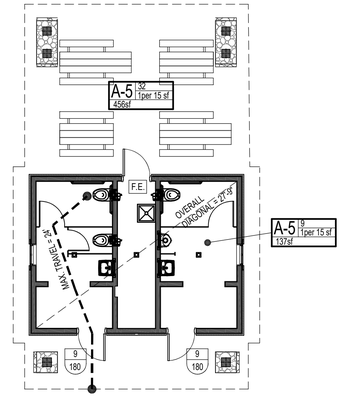
1 FLOOR PLAN
A1.0 SCALE: 1/4" = 1'-0"



2 REFLECTED CEILING PLAN
A1.0 SCALE: 1/4" = 1'-0"

LIFE SAFETY LEGEND

OCCUPANCY SYMBOL	OCCUPANCY CLASSIFICATION / OCCUPANCY LOAD / ALLOWABLE AREA PER OCCUPANT / AREA (sqft)
EGRESS OPENING SYMBOL	XX / XX — ACTUAL OCCUPANT LOAD OF OPENING; ALLOWABLE OCCUPANT LOAD OF OPENING
EGRESS STAIR/ RAMP SYMBOL	XX / XX — ACTUAL OCCUPANT LOAD OF OPENING; ALLOWABLE OCCUPANT LOAD OF OPENING
OVERALL DIAGONAL OF AREA SERVED	
MAXIMUM TRAVEL DISTANCE IN SPACE	
F.E.	PORTABLE ABC FIRE EXTINGUISHER



3 LIFE SAFETY PLAN
A1.0 SCALE: 1/8" = 1'-0"

ISO REQUIRED FIRE FLOW

NFF = $(C_i)(O_i)[1.0 + (X + P)_k]$
= (870.72)(.85) [1.0 + (0)]
= 637GPM

WHERE:
NFF = NEEDED FIRE FLOW (GPM)
C_i = 18F ($\sqrt{A}$)
F = 1.5 FOR WOOD FRAME CONSTRUCTION
A = AFFECTIVE AREA = 1,040sqft. UNDER ROOF
= 18(1.5)($\sqrt{1,040}$)
= 870.72 (CAN BE ROUNDED TO 750 PER ISO)
O_i = OCCUPANCY FACTOR = .85 FOR C-2 (LIMITED COMBUSTIBILITY)
= .85 FOR C-2
$(X + P)_k$ = EXPOSURE AND COMMUNICATION FACTOR
= 0

FLOOR PLAN SYMBOL KEY:

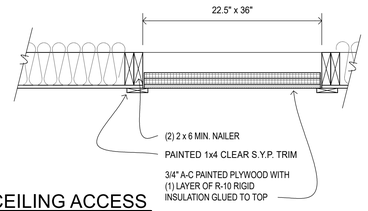
- 2x6 @ WOOD STUDS AT 16" O.C. (SEE DRAWING A-3.0)
- NEW THIN CUT STONE VENEER (SEE NOTES ON A/2.0)

FLOOR PLAN NOTES:

1. INTERIOR DIMENSIONS SHOWN ON FLOOR PLAN ARE FROM FACE OF FINISH WALL
2. EXTERIOR DIMENSIONS SHOWN ARE FROM FACE OF FOUNDATION WALL
3. MAXIMUM CROSS SLOPE OF ANY FLOOR SURFACE SHALL NOT EXCEED 1:48
4. INTERIOR CONCRETE FLOOR SLAB: COORDINATE WITH INSTALLER FOR CURING AND PREPARATION. SMOOTH LIGHT TROWEL FINISH. DO NOT HARD TROWEL.
5. EXTERIOR CONCRETE (IN NON-STAMPED FINISH AREAS) TO HAVE LIGHT BROOM FINISH.
E.J. - EXPANSION JOINT WITH TOOLED EDGES
C.J. - CONTROL JOINT WITH TOOLED EDGES ON EXTERIOR AND SAW CUT INTERIOR
(SEE FOUNDATION PLAN FOR ADDITIONAL JOINT LOCATIONS)
6. COORDINATE UTILITY AND CONDUIT ROUGH-INS WITH MEP AND SITE DRAWINGS.
7. FOUNDATIONS AND SLABS TO REST ON UNDISTURBED SUITABLE SOIL OR SELECT STRUCTURAL FILL COMPACTED TO 100% MAXIMUM DRY DENSITY. 2.000PSF MINIMUM SOIL BEARING PRESSURE
8. PROVIDE POSITIVE DRAINAGE AROUND AND AWAY FROM BUILDING.

GENERAL NOTES:

1. GENERAL CONTRACTOR TO USE AND CROSS REFERENCE ALL CONTRACT DOCUMENTS, THEY ARE COMPLIMENTARY TO ONE ANOTHER. THE CONTRACTOR MUST COORDINATE ACROSS ALL CONTRACT DOCUMENTS AND DISCIPLINES INCLUDING PROJECT DRAWINGS, PROJECT SPECIFICATIONS, ADDENDUM, AND WRITTEN DIRECTIVES FROM THE ARCHITECT. REPORT ANY DISCREPANCIES BETWEEN CONTRACT DOCUMENTS TO THE ARCHITECT PRIOR TO COMMENCING WORK.
2. FURNISH ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR COMPLETION AND OPERATION OF THIS PROJECT IN ACCORDANCE WITH ALL APPLICABLE CODES.
3. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. DISCREPANCIES BETWEEN FIELD DIMENSIONS AND OR CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION BEFORE COMMENCING WORK.
4. CONTRACTOR RESPONSIBLE FOR SAFE DELIVERY AND STORAGE OF ALL MATERIALS.
5. ALTERATIONS, CHANGES OR SUBSTITUTIONS TO THE CONTRACT DOCUMENTS PERFORMED WITHOUT THE OWNERS WRITTEN APPROVAL SHALL BE CORRECTED AT THE CONTRACTORS EXPENSE.
6. ALL CONTRACTORS AND ALL SUB CONTRACTORS SHALL HAVE A COMPLETE SET OF CONTRACT DOCUMENTS AT ALL TIMES TO ENSURE COORDINATION OF BUILDING ELEMENTS THAT ARE DETAILED ACROSS SEVERAL DISCIPLINES.
7. CONSTRUCTION MEANS AND METHODS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NO DIRECTION IS GIVEN OR IMPLIED BY THE DESIGN PROFESSIONAL TO REVIEW, SUPERVISE OR APPROVE CONSTRUCTION MEANS AND METHODS.



5 CEILING ACCESS
A1.0 SCALE: 1" = 1'-0"

REFLECTED CEILING NOTES:

1. GYPSUM WALLBOARD CEILING:
   - APPLY ONE LAYER OF 1/2" M.M.R.G.W.B. TO UNDERSIDE OF ALL INTERIOR CEILING JOISTS.
   - SEE PLAN FOR FINISH CEILING HEIGHTS.
2. NEW ATTIC ACCESS DOOR:
   - SEE DETAIL 5/A1.0
3. EXPOSED 2x6 T&G DECK BOARDS WITH V-GROOVED EDGES. SOUTHERN YELLOW PINE No. 1
4. COORDINATE WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR CEILING FIXTURE LOCATIONS.

TOILET PARTITIONS: (SEE REQUIRED W.C. CLEARANCES A-1.0)

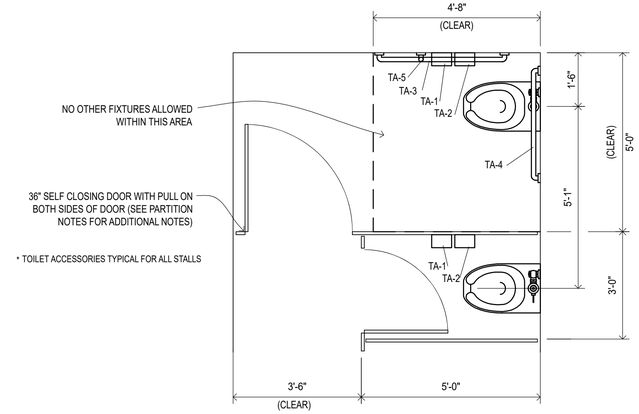
SOLID THRU-COLOR REINFORCED COMPOSITE FLOOR MOUNTED, OVERHEAD BRACED WITH HEAVY-GAUGE INSTITUTIONAL TYPE 304 STAINLESS STEEL. FULL HEIGHT HARDWARE AND TAMPER RESISTANT FASTENERS. (BOBRICK 1092.67 SierraSeries OR EQUAL).

- 3/4" THICK STYLES AND 1/2" THICK PANELS
- SOLID COLOR FOR FULL THICKNESS, NON-GHOSTING GRAFFITI REMOVAL.
- URINAL SCREENS TO BE 18" W x 48"TALL, OVERHEAD BRACE W/ 4" STYLE. BOTTOM OF PARTITION SHALL BE AT AT 12" A.F.F.
- WALL PARTITION SUPPORTS SHALL BE FULL LENGTH.
- STAINLESS STEEL INSTITUTIONAL GRADE HARDWARE TO INCLUDE COAT HOOK, DOOR STOPS, LATCH AND PULLS ON BOTH SIDES OF DOOR.
- FULL HEIGHT SELF CLOSING PARTITION DOOR HINGES
- PROVIDE STAINLESS STEEL IN LINE STILE STIFFENER PACKET FOR MEN'S STALL
- 15-YEAR WARRANTY
- PARTITIONS TO MEET ACCESSIBILITY REQUIREMENTS OF ANSI117.1 2017

NEW TOILET ACCESSORIES: (SEE REQUIRED MOUNTING HEIGHTS A-1.1) 1

1. O.P.C.I. - OWNER PROVIDED CONTRACTOR INSTALLED
2. CONTRACTOR TO PROVIDE 2x BLOCKING BEHIND ALL WALL AND CEILING MOUNTED TOILET ACCESSORIES AND PARTITIONS.

TA-1: O.P.C.I. - SINGLE ROLL TOILETTE PAPER DISPENSER
TA-2: SANITARY NAPKIN DISPOSAL: STAINLESS STEEL 22 GA. RADIUSED CORNERS ALL WELDED, PIANO HINGE (BOBRICK B-270 OR APPROVED EQUAL).
TA-3: 18GA STAINLESS STEEL GRAB BAR 1-1/2" Ø x42"
TA-4: 18GA STAINLESS STEEL GRAB BAR 1-1/2" Ø x36"
TA-5: 18GA STAINLESS STEEL GRAB BAR 1-1/2" Ø x18" (VERTICAL)
TA-6: 18"x36" MIRROR WITH WELDED STAINLESS STEEL FRAME. SHATTER PROOF GLASS (BOBRICK B-2908 OR EQUAL)
TA-7: O.P.C.I. - PLASTIC FOAM SOAP DISPENSER
TA-8: ELECTRIC HAND DRIER - XLERATOR, MODEL: THINAIR TS-SB W/ STAINLESS COVER COORDINATE WITH ELECTRICAL DRAWINGS
TA-9: FIRE EXTINGUISHER: WALL MOUNTED, MINIMUM RATED 2-A, TYPE ABC
TA-10: BABY CHANGING STATION: KOALA KARE PRODUCTS KB110-SSWM. 4" MAX PROJECTION
TA-11: 18GA STAINLESS STEEL GRAB BAR 1-1/2" Ø x24" (VERTICAL)



4 ENLARGED RESTROOM
A1.0 SCALE: 1/2" = 1'-0"

REVISIONS

NO.	DATE	BY	CHKED	DESCRIPTION
1	11/15/2021	BHC		ADDENDUM 1

BRIAN H. CONROY
REGISTERED ARCHITECT
NO. 12142
NORTH CAROLINA
CHARLOTTE, NC
11/15/2021

Concord NORTH CAROLINA PARKS & RECREATION

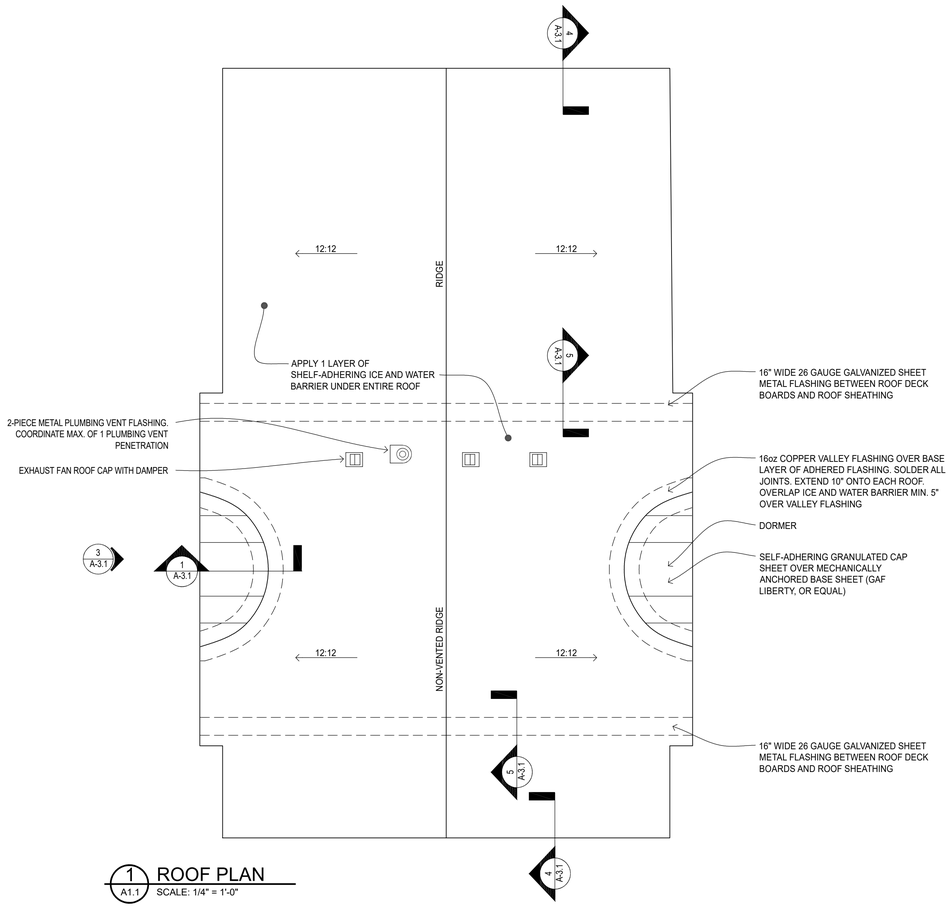
City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture • Planning • Stuff

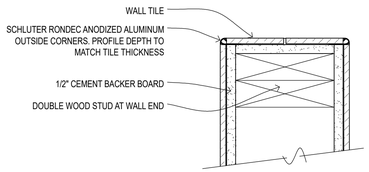
DATE: 06/03/2021

NAME: FLOOR PLANS AND SCHEDULES

SHEET: A 1.0



1 A1.1 ROOF PLAN
SCALE: 1/4" = 1'-0"



2 A1.1 OUTSIDE TILED CORNER
SCALE: 3" = 1'-0"

ROOM NUM.	ROOM NAME	FLOOR FINISH	BASE	WALLS MATERIAL	FINISH	CEILING MATERIAL	FINISH	COMMENTS
01	MENS	EPOXY	STACK-ON COVE	CEMENT BRD/ G.W.B.	TILE/ PT-2	M.M.R.G.W.B.	PT-2	
02	WOMENS	EPOXY	STACK-ON COVE	CEMENT BRD/ G.W.B.	TILE/ PT-2	M.M.R.G.W.B.	PT-2	
03	CHASE	SEALED CONCRETE	4" RUBBER	G.W.B.	PT-2	M.M.R.G.W.B.	PT-2	FRP TO 4'-0" A.F.F. BEHIND MOP SINK
04	OPEN WOOD AREAS	STAMPED CONCRETE	STONE	WOOD BEAMS, COLUMNS AND JOISTS	PT-4	EXPOSED WOOD	PT-3	SEE SITE DRAWINGS FOR FLOOR PATTERN AND ADDITIONAL INFORMATION
05	EXTERIOR	STAMPED CONCRETE	STONE	PVC	PT-1	EXPOSED WOOD	PT-3	
06								

ROOM FINISH SCHEDULE

CEMENT BRD. 1/2" THICK CEMENT BOARD SCREWED TO STUDS AT 8" O.C
M.M.R.G.W.B. 1/2" MOLD AND MOISTURE RESISTANT GYPSUM WALLBOARD FASTENED WITH SCREWS AT 8" O.C. EDGES, 12" O.C. FIELD

ROOM FINISH NOTES:

1. OWNER APPROVED PRODUCT SUBMITTALS AND COLOR SELECTION REQUIRED PRIOR TO INSTALLATION OF ANY FINISH MATERIAL.
2. FINISH LEVEL TO MEET OR EXCEED ASTM C840 LEVEL 5. CONTRACTOR TO PRESSURE WASH, CLEAN, SAND SURFACES AS REQUIRED TO ACHIEVE REQUIRED FINISH.
3. ALL FINISHES SHALL BE STORED, APPLIED AND CURED PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
4. BUILDING MATERIALS TO RECEIVE FINISH APPLICATION SHALL BE CLEANED AND PREPARED FOR APPLIED FINISH ACCORDING MANUFACTURER'S SPECIFICATIONS.
5. THE MAXIMUM VERTICAL DIFFERENCE BETWEEN ANY TWO ADJACENT FLOOR SURFACES SHALL NOT EXCEED 1/2".

EPOXY FLOOR: CONTRACTOR TO COORDINATE SLAB PREP WITH FLOORING INSTALLER. SLIP RESISTANT, SEAMLESS EPOXY FLOOR WITH URETHANE TOP COAT. FLOOR PREPARATION, MOISTURE TESTING, INSTALLATION AND APPLICATION PER MANUFACTURER'S SPECIFICATIONS. CONCRETE FLOOR TO BE DIAMOND GROUND PER FLOORING MANUFACTURER INSTALLATION INSTRUCTIONS.
- CONCRETE STAIN: SURECRETE DESIGN PRODUCTS: EcoStain. COLOR AS SELECTED BY OWNER
- EPOXY BASE COAT: FLOROCK 4805 AT A RATE OF 160sqft/ GALLON
- URETHANE TOP COAT: FLOROCK SATIN FINISH MC/HT WITH 2oz OF GLASS BEADS PER GALLON AT A RATE OF 500sqft/ GALLON

SEALED CONCR.: HEAVY DUTY, HEAVY SOLIDS, GLOSS URETHANE FLOOR COATING. MEETING ADA REQUIREMENTS FOR SLIP RESISTANCE. APPLIED 3 TO 4.5 MILLS WET. ACCEPTABLE MANUFACTURES: (SHERWIN WILLIAMS, ARMORSEAL REXTHANE 1 OR EQUAL)

TILE: 6"x6" BRIGHT WHITE SEMI-GLOSS GLAZED CERAMIC WALL TILE WITH MATCHING 6"x6" STACK-ON COVE BASE AND 2"x6" BULLNOSE CAP AND TRIM PIECES. TILE HEIGHT TO NEAREST FULL COURSING AT 7'-10" A.F.F. (DALTILE , CLASSIC COLOR WHEEL COLLECTION, OR APPROVED EQUAL).
- OUTSIDE CORNERS: SCHLUTER ANODIZED ALUM RONDEC. (SEE DETAILS).
- DOOR FRAME EDGES: SCHLUTER SCHIENE ANODIZED ALUMINUM (SEE DETAILS)
- GROUT: NON-SANDED DELOREAN GREY EPOXY GROUT, 3/32" WIDE GROUT LINE.

PT-1: ONE COAT EXTERIOR LATEX PRIMER/ SEALER (SHERWIN WILLIAMS B51-450 SERIES) PLUS, MINIMUM TWO COATS PREMIUM EXTERIOR, VINYL SAFE, ACRYLIC, SATIN FINISH. SHERWIN WILLIAMS DURATION K33-200 SERIES OR EQUAL. (5.3-6.4 MILS WET, 2.1-2.6 MILS DRY PER COAT)

PT-2: ONE COAT LATEX PRIMER SHERWIN-WILLIAMS PRO-MAR 200 B28W2600 OR EQUAL. PLUS TWO COATS INDUSTRIAL PRE-CATALYZED WATER BASE EPOXY. (SHERWIN-WILLIAMS PRO INDUSTRIAL B73-300 SERIES, OR EQUAL) (4.0MILS WET, 1.5 MILS DRY PER COAT)
COLOR: SW 6175, SAGEY SEMI-GLOSS

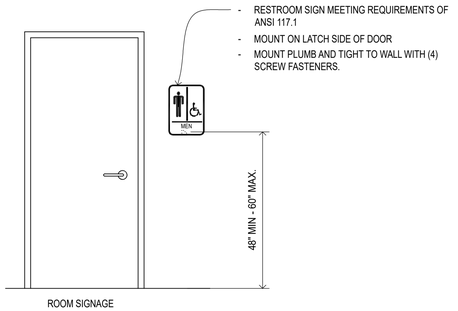
PT-3: REMOVE ALL SURFACE CONTAMINATION, MARKS AND MILDEW FROM SURFACE BY PROPER CLEANING PER MANUFACTURES APPROVED METHODS. SAND ANY DETERIORATED OR MARKED WOOD TO A FRESH SURFACE. APPLY MINIMUM TWO COATS CLEAR SATIN FINISH URETHANE EXTERIOR TOP COAT, CONTAINING UV AND MILDEW INHIBITOR. SHERWIN WILLIAMS MINWAX HELMSMAN SPAR URETHANE OR EQUAL. 1

PT-4: REMOVE ALL SURFACE CONTAMINATION, MARKS AND MILDEW FROM SURFACE BY PROPER CLEANING PER MANUFACTURES APPROVED METHODS. APPLY MINIMUM TWO COATS SEMI-TRANPARENT SATIN FINISH EXTERIOR LOG HOME STAIN AND SEALER, CONTAINING UV AND MILDEW INHIBITOR. SHERWIN WILLIAMS SUPERDECK LOG HOME AND DECK STAIN OR EQUAL. 1

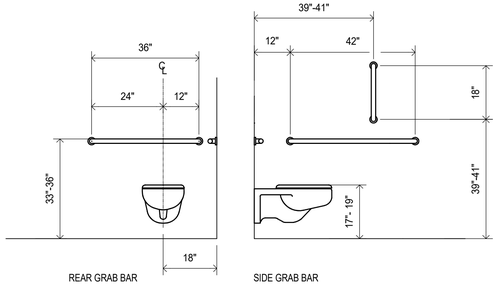
F.R.P.: FIBER REINFORCED PLASTIC, SMOOTH FINISH, NOMINAL 3/32" THICK. PANEL INSTALLED PER MANUFACTURES INSTALLATION INSTRUCTIONS. USE MANUFACTURER'S APPROVED ADHESIVE. MANUFACTURER'S MOLDINGS SHALL SURROUND ALL PANELS AND BE PROPERLY SEALED WITH A CONTINUOUS BEAD OF SILICONE SEALANT.

UNFINISHED METALS: SHOP PRIMED AND PAINTED WITH TWO COATS OF HIGH GLOSS POLYAMIDE EPOXY PAINT.

STONE VENEER: SEE STONE VENEER NOTES ON A2.0

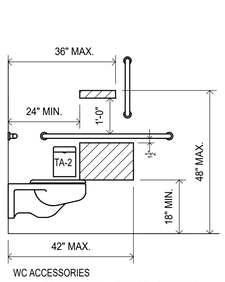


ROOM SIGNAGE

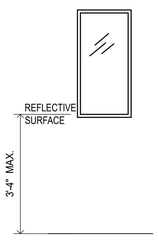


REAR GRAB BAR

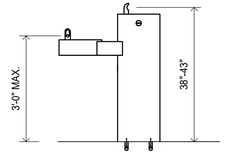
SIDE GRAB BAR



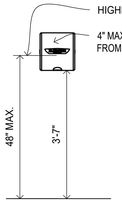
WC ACCESSORIES
- ACCEPTABLE TA-1 OUTLET LOCATIONS



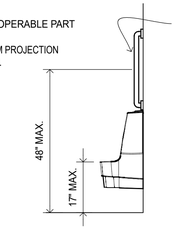
MIRROR



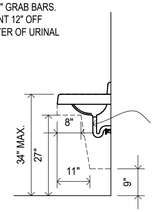
DRINKING FOUNTAIN



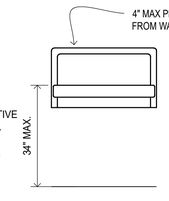
HAND DRYER



URINAL



LAVATORY



BABY CHANGING STATION

REVISIONS

NO.	DATE	BY	CHKED	DESCRIPTION
1	11/15/2021	BHC		ADDENDUM 1

BRIAN H. CONROY REGISTERED ARCHITECT 12487 NORTH CAROLINA CHARLOTTE, NC 11-15-2021

Concord PARKS & RECREATION NORTH CAROLINA

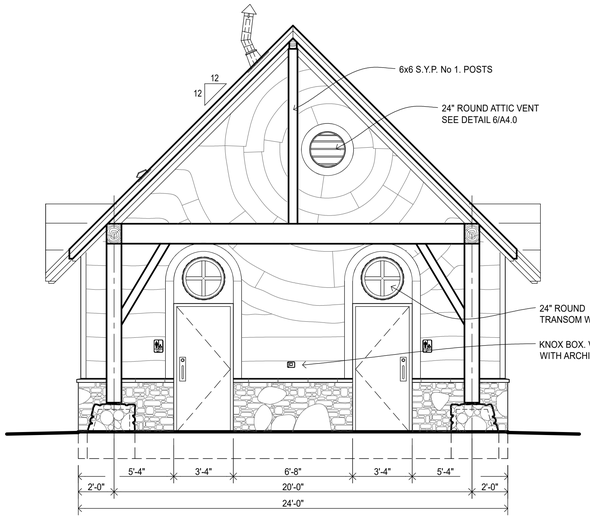
City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

citizen design Stuff
2408 Commonwealth Ave. Charlotte, NC 28205
Architecture • Planning • Stuff

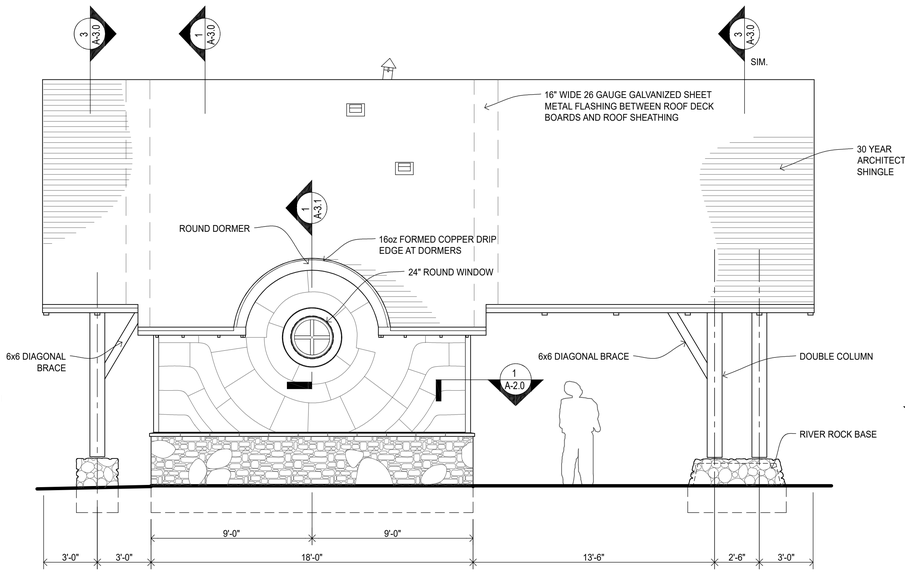
DATE: 08/16/2021

NAME: ROOF PLAN FINISH SCHEDULE AND DETAILS

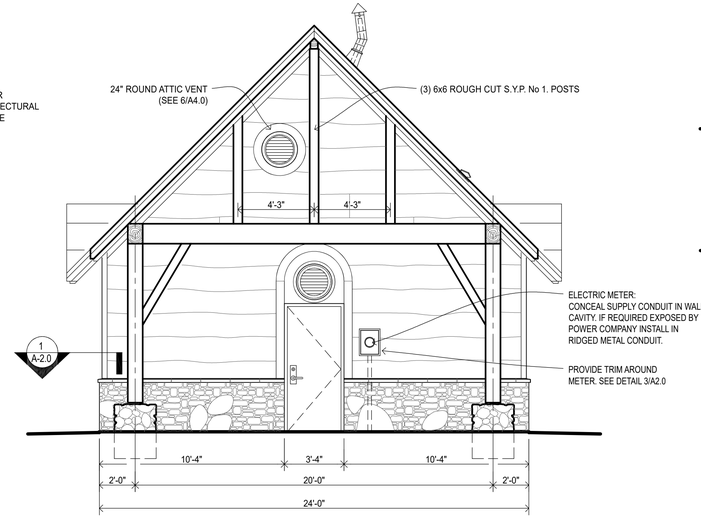
SHEET: A 1.1



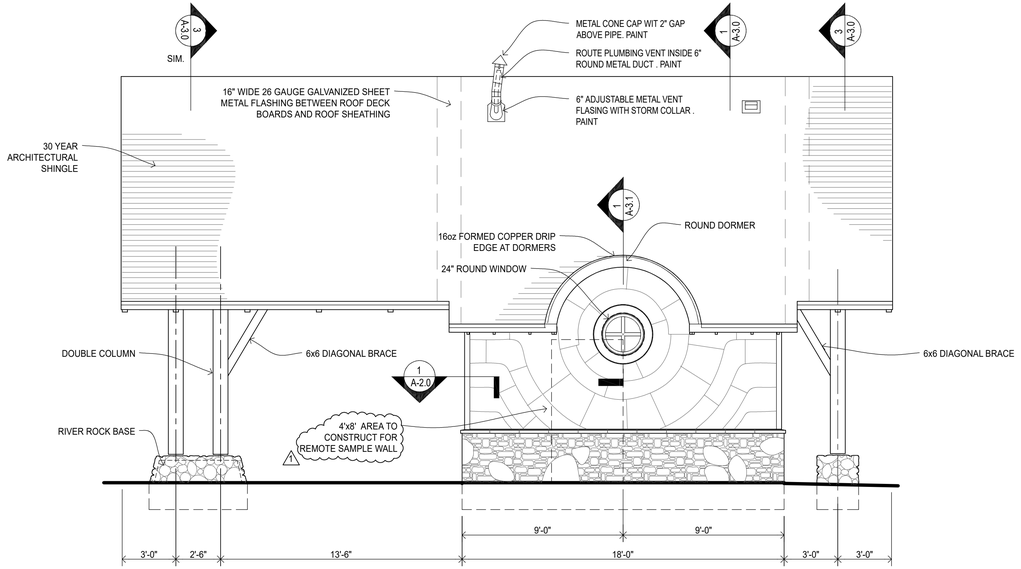
A SOUTH ELEVATION
A2.0 SCALE: 1/4"=1'-0"



B EAST ELEVATION
A2.0 SCALE: 1/4"=1'-0"



C NORTH ELEVATION
A2.0 SCALE: 1/4"=1'-0"



D WEST ELEVATION
A2.0 SCALE: 1/4"=1'-0"

PVC SIDING AND TRIM:

1. LAP SIDING: SHALL BE CUT FROM 4'x 8' x 5/8" THICK SMOOTH FACE PVC PANELS. 2D-CAD SIDING PANEL PATTERNS SHALL BE PROVIDED TO USE AS TEMPLATE GUIDE.

   TRIM BOARDS: 1-1/2" THICK PVC TRIM BOARDS SHALL BE USED IN SIDING AND WINDOW TRIM AREAS. 3/4" THICK TRIM BOARDS CAN BE USED AWAY FROM SIDING. TEXTURE SHALL BE SMOOTH. MINIMUM LENGTH OF BOARD BETWEEN CUT JOINTS SHALL BE 8'-0". MITER AND GLUE ALL INTERMITTENT JOINTS.

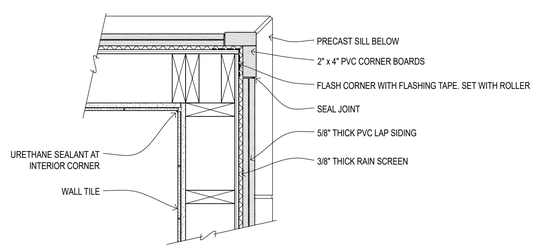
2. RAINSCREEN BEHIND SIDING SHALL BE HDPE, 3/16" TALL, WITH FLAT CORRUGATIONS DESIGNED FOR USE BEHIND SIDING. INSTALL PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS (MTIDRY SURE CAVITY OR EQUAL)
2. SIDING PANELS AND TRIM TO BE INSTALLED PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
3. ALL SIDING AND TRIM MUST BE FLASHED IN ACCORDANCE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS
4. MANUFACTURER'S RECOMMENDED FASTENERS AND FASTENER SPACINGS FOR INSTALLATION INTO SPECIFIED MATERIALS SHALL BE USED.
5. SAMPLE WALL PANEL: A MINIMUM 4'x8' TALL WALL PANEL WITH ALL BASE, CAP AND RAIN SCREEN FLASHINGS SHALL BE CONSTRUCTED FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO INSTALLATION ON THE BUILDING. The SAMPLE SHALL BE SEPPARTE FROM THE BUILDING. PROTECT AND RETAIN SAMPLE AS A BASIS FOR APPROVAL OF COMPLETED STONE WORK.

ADHERED THIN STONE VENEER

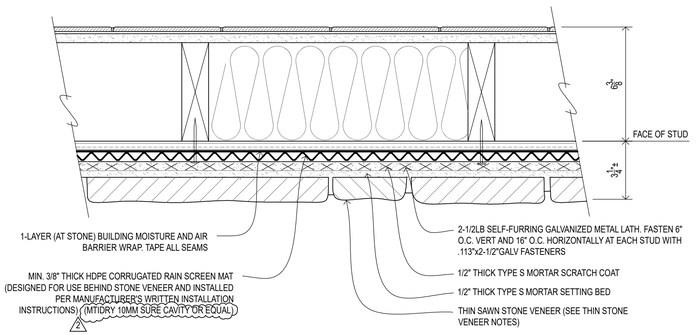
1. STONE COURSING AND JOINTS TO MATCH THE DAVID PHILLIPS ACTIVITY CENTER SHELTER. PICTURE RIGHT.
2. MANUFACTURED LEDGESTONE AND FIELD STONE MIX AS MANUFACTURED BY BUILDERS CHOICE STONE (STONE MASTER, Inc.).
   - 85% SOUTHERN APPALACHIAN LEDGESTONE - DAKOTA BROWN BLEND
   - 15% FIELD STONE - TENNESSEE MOUNTAIN.
   - MORTAR JOINTS SHALL BE 1/4"-1/2" WIDE
   - USE MANUFACTURED CORNER PIECES.
3. WATER TABLE: SLOPED PRECAST. BUILDERS CHOICE: 18"L x 3.75"d x 2.375"h WAINSCOT SILL WITH SNAPPED EDGE, COLOR: LIGHT BROWN
4. TYPE S PORTLAND CEMENT. COLOR AS SELECTED BY ARCHITECT; GREY FOR STONE AND MATCH COLOR AT PRECAST SILL.
5. INSTALL PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND MASONRY VENEER MANUFACTURES ASSOCIATION (MVMA) INSTALLATION GUIDE WITH DRAINAGE CAVITY.
6. DO NOT INSTALL STONE WHEN AIR TEMPERATURE FALLS BELOW 40 DEGREES FAHRENHEIT.
7. PROTECT ADJACENT WORK FROM MORTAR AND DAMAGE.
8. CLEAN AND REMOVE ACCESS MORTAR FROM STONE AFTER INSTALLATION PER MANUFACTURE'S INSTRUCTIONS. DO NOT USE STRONG CHEMICAL CLEANERS.
9. SAMPLE WALL PANEL: A MINIMUM 4'x8' TALL WALL PANEL WITH ALL BASE, CAP AND RAIN SCREEN FLASHINGS SHALL BE CONSTRUCTED FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO INSTALLATION ON THE BUILDING. The SAMPLE SHALL BE SEPPARTE FROM THE BUILDING. PROTECT AND RETAIN SAMPLE AS A BASIS FOR APPROVAL OF COMPLETED STONE WORK.

COLUMN BASE ADHERED THIN STONE VENEER

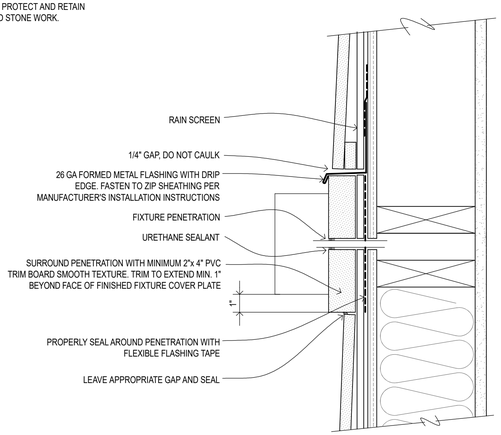
1. MANUFACTURED RIVER ROCK: ELDORADO STONE, COLORADO RIVER ROCK.
   - MORTAR JOINTS SHALL BE 1/4"-1/2" WIDE
   - USE MANUFACTURED CORNER PIECES.
2. INSTALL PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND MASONRY VENEER MANUFACTURES ASSOCIATION (MVMA) INSTALLATION GUIDE WITH DRAINAGE CAVITY.
3. TYPE S PORTLAND CEMENT. COLOR AS SELECTED BY ARCHITECT; COLOR: GREY FOR STONE.
4. DO NOT INSTALL STONE WHEN AIR TEMPERATURE FALLS BELOW 40 DEGREES FAHRENHEIT
5. PROTECT ADJACENT WORK FROM MORTAR AND DAMAGE.
6. CLEAN AND REMOVE ACCESS MORTAR FROM STONE AFTER INSTALLATION PER MANUFACTURE'S INSTRUCTIONS. DO NOT USE STRONG CHEMICAL CLEANERS.
7. SAMPLE COLUMN BASE: CONSTRUCT SEPPARATE SAMPLE BASE PRIOR TO INSTALLATION ON THE BUILDING. PROTECT AND RETAIN SAMPLE AS A BASIS FOR APPROVAL OF COMPLETED STONE WORK.



1 OUTSIDE CORNER DETAIL
A2.0 SCALE: 1-1/2"=1'-0"



2 THIN STONE PLAN DETAIL
A2.0 SCALE: 3"=1'-0"



3 SIDING PENETRATION DETAIL
A2.0 SCALE: 3"=1'-0"

REVISIONS

NO.	DATE	BY	CHKED	DESCRIPTION
1	11/15/2021	BHC		ADDENDUM 1
2	12/6/2021	BHC		ADDENDUM 2

BRIAN H. CONROY
REGISTERED ARCHITECT
NO. 12142
NORTH CAROLINA
CHARLOTTE, NC
12/6/2021

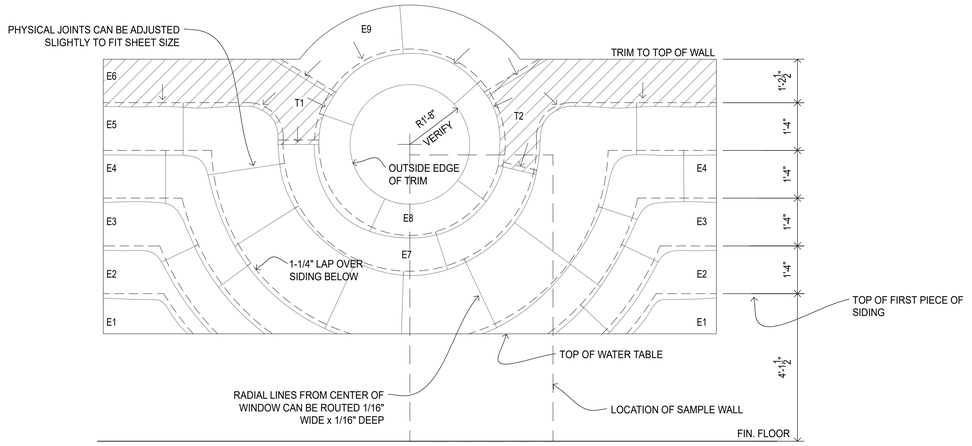
City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture • Planning • Stuff

DATE: 12/6/2021

NAME: ELEVATIONS AND DETAILS

SHEET: A 2.0



B A2.1 SIDE ELEVATIONS
SCALE: 1/2"=1'-0"

SIDING LAYOUT SYMBOL KEY

TRANSITIONAL SIDING PIECE. SIDING PIECE LAPS OVER PIECES ON BOTH SIDES. SEAL TO SIDING BELOW WITH PAINTABLE SILICONE SEALANT

SIDING OVERLAPS PIECE BELOW

LINE OF SIDING PIECE BELOW

SIDING LAYOUT NOTES

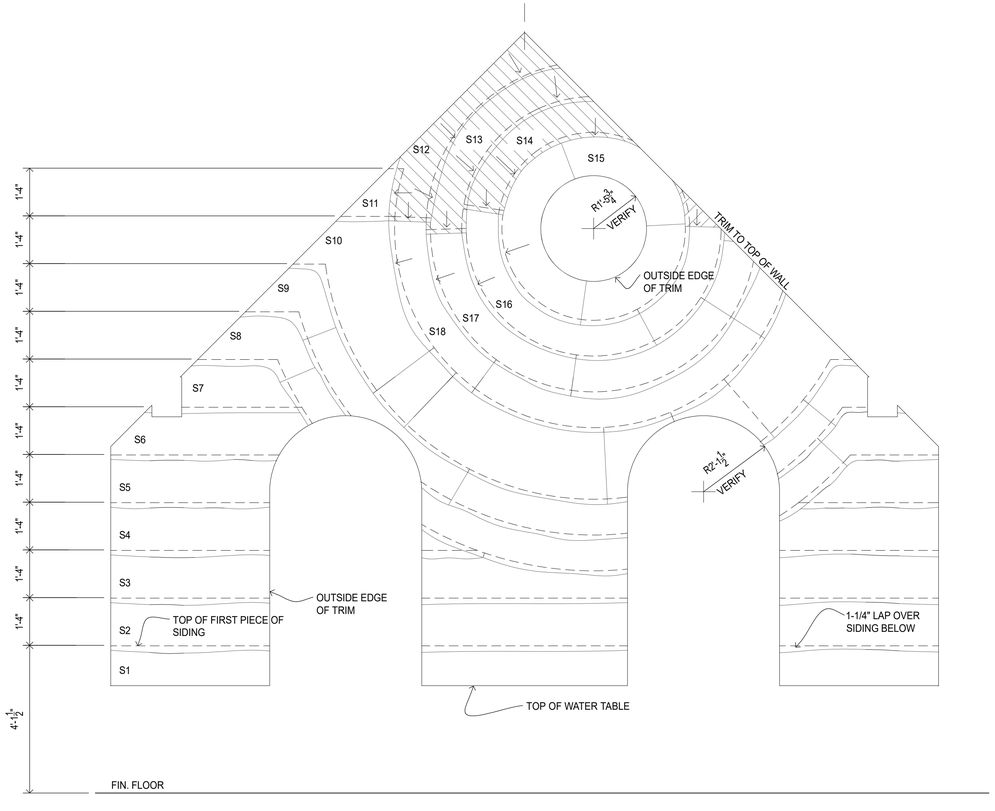
1. SEE SIDING NOTES ON A2.0 FOR ADDITIONAL INFORMATION.
2. MAINTAIN MINIMUM 1-1/4" OVERLAP ON SIDING PANELS
3. CONTRACTOR RESPONSIBLE FOR FINAL VERIFICATION OF FIELD DIMENSIONS.
4. SIDING PIECES SHALL BE FABRICATED LONG TO ALLOW FOR FIELD TRIMMING AT ENDS AND PENETRATIONS
5. PROVIDE 1 1/4" TALL STARTER STRIPS AS NEED AT FIRST PIECE OF SIDING AND ABOVE PENETRATIONS.

PVC SIDING AND TRIM:

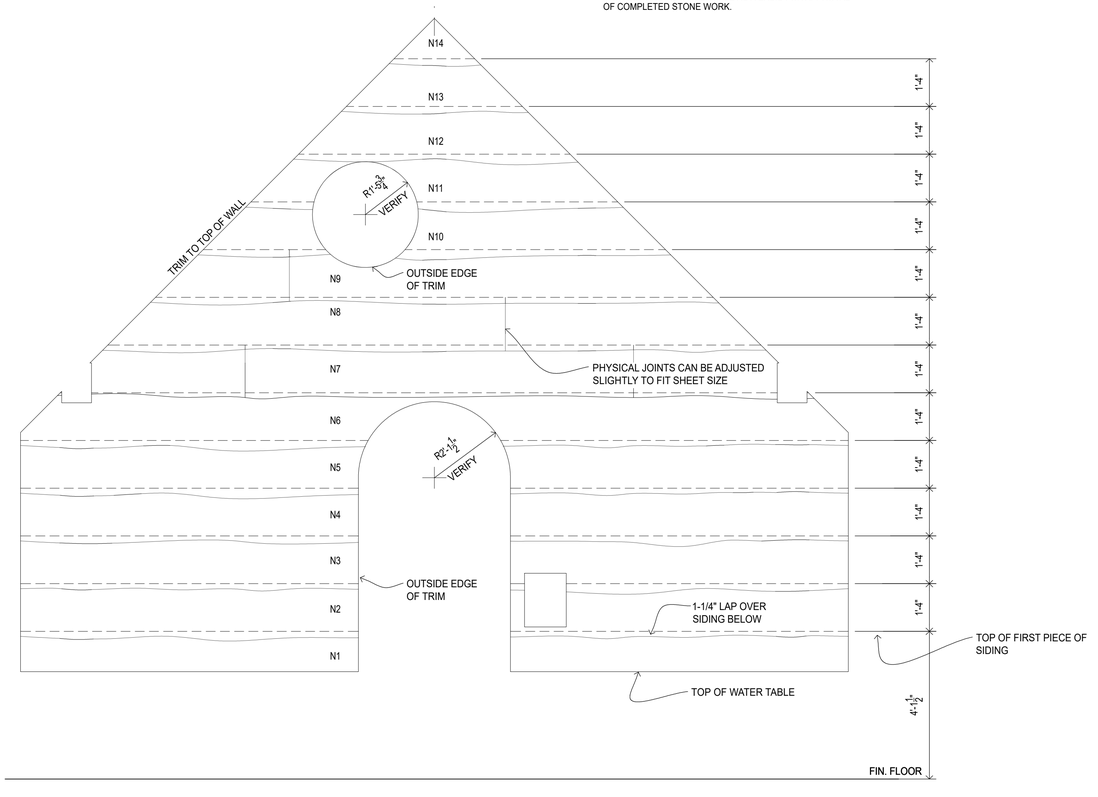
1. LAP SIDING: SHALL BE CUT FROM 4'x 8' x 5/8" THICK SMOOTH FACE PVC PANELS. 2D-CAD SIDING PANEL PATTERNS SHALL BE PROVIDED TO USE AS TEMPLATE GUIDE.

   TRIM BOARDS: 1-1/2" THICK PVC TRIM BOARDS SHALL BE USED IN SIDING AND WINDOW TRIM AREAS. 3/4" THICK TRIM BOARDS CAN BE USED AWAY FROM SIDING. TEXTURE SHALL BE SMOOTH. MINIMUM LENGTH OF BOARD BETWEEN CUT JOINTS SHALL BE 8'-0". MITER AND GLUE ALL INTERMITTENT JOINTS.

   RAINSCREEN BEHIND SIDING SHALL BE HDPE, 3/16" TALL, WITH FLAT CORRUGATIONS DESIGNED FOR USE BEHIND SIDING. INSTALL PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS (MTIDRY SURE CAVITY OR EQUAL)
2. SIDING PANELS AND TRIM TO BE INSTALLED PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
3. ALL SIDING AND TRIM MUST BE FLASHED IN ACCORDANCE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS
4. MANUFACTURER'S RECOMMENDED FASTENERS AND FASTENER SPACINGS FOR INSTALLATION INTO SPECIFIED MATERIALS SHALL BE USED.
5. SAMPLE WALL PANEL: A MINIMUM 4'x8' TALL WALL PANEL WITH ALL BASE, CAP AND RAIN SCREEN FLASHINGS SHALL BE CONSTRUCTED FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO INSTALLATION ON THE BUILDING. The SAMPLE SHALL BE SEPPARTE FROM THE BUILDING. PROTECT AND RETAIN SAMPLE AS A BASIS FOR APPROVAL OF COMPLETED STONE WORK.



A A2.1 SOUTH ELEVATION
SCALE: 1/2"=1'-0"



C A2.1 NORTH ELEVATION
SCALE: 1/2"=1'-0"

REVISIONS

NO.	DATE	BY	CHKED	DESCRIPTION

BRIAN H. CONROY REGISTERED ARCHITECT 12,145 NORTH CAROLINA CHARLOTTE, NC
12/6/2021

PARKS & RECREATION
Concord NORTH CAROLINA

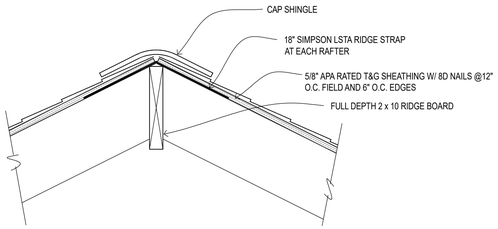
City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture • Planning • Stuff

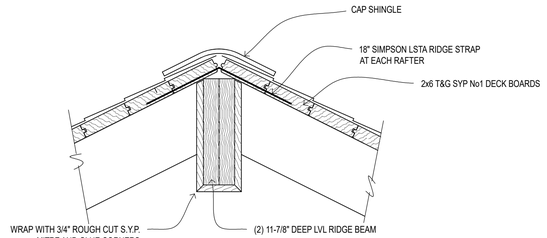
DATE: 12/6/2021

NAME: SIDING LAYOUT

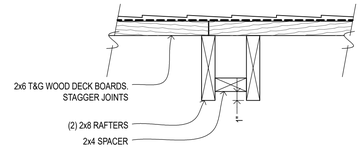
SHEET: A 2.1



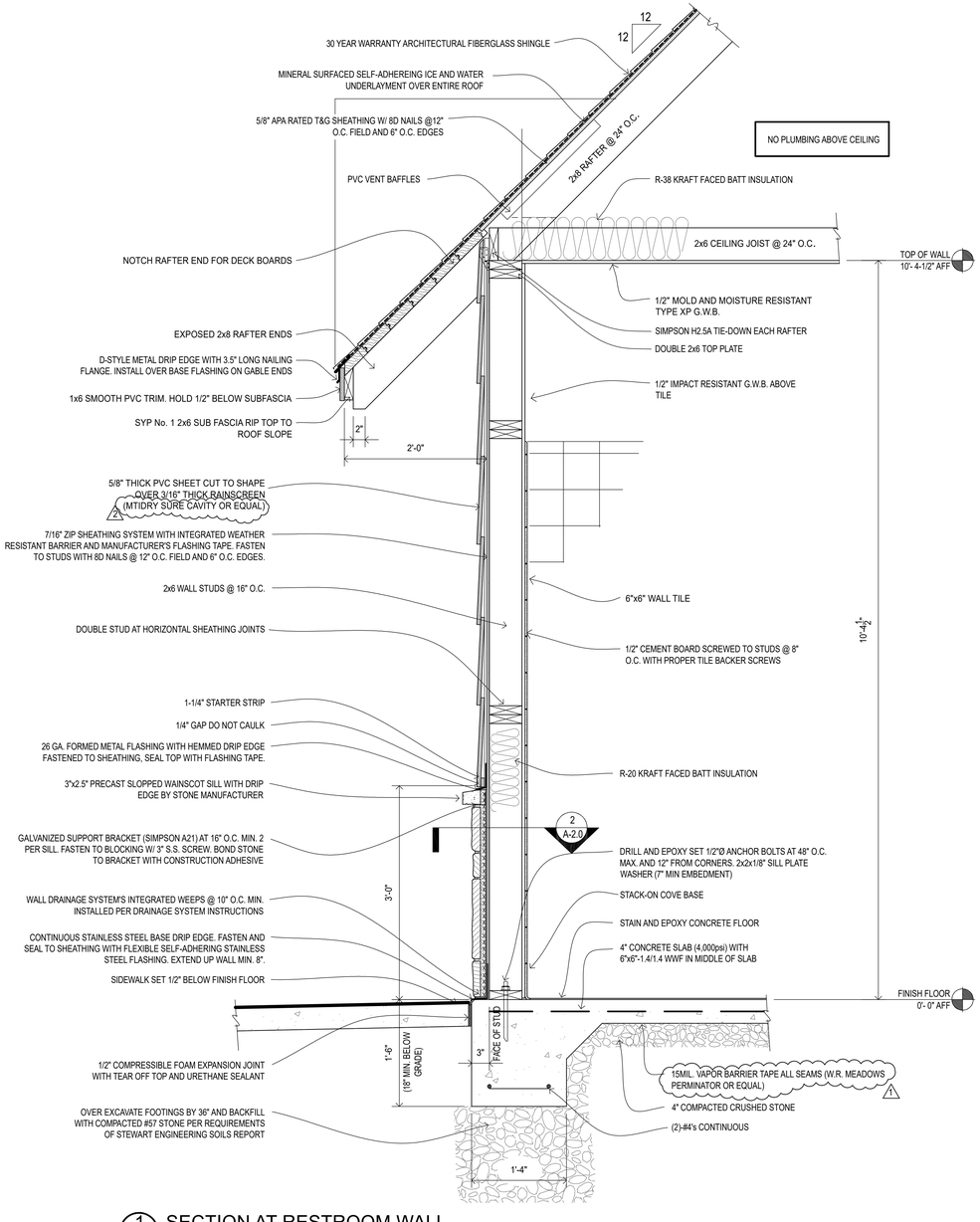
2 A3.0 FRAMED RIDGE DETAIL
SCALE: 1-1/2" = 1'-0"



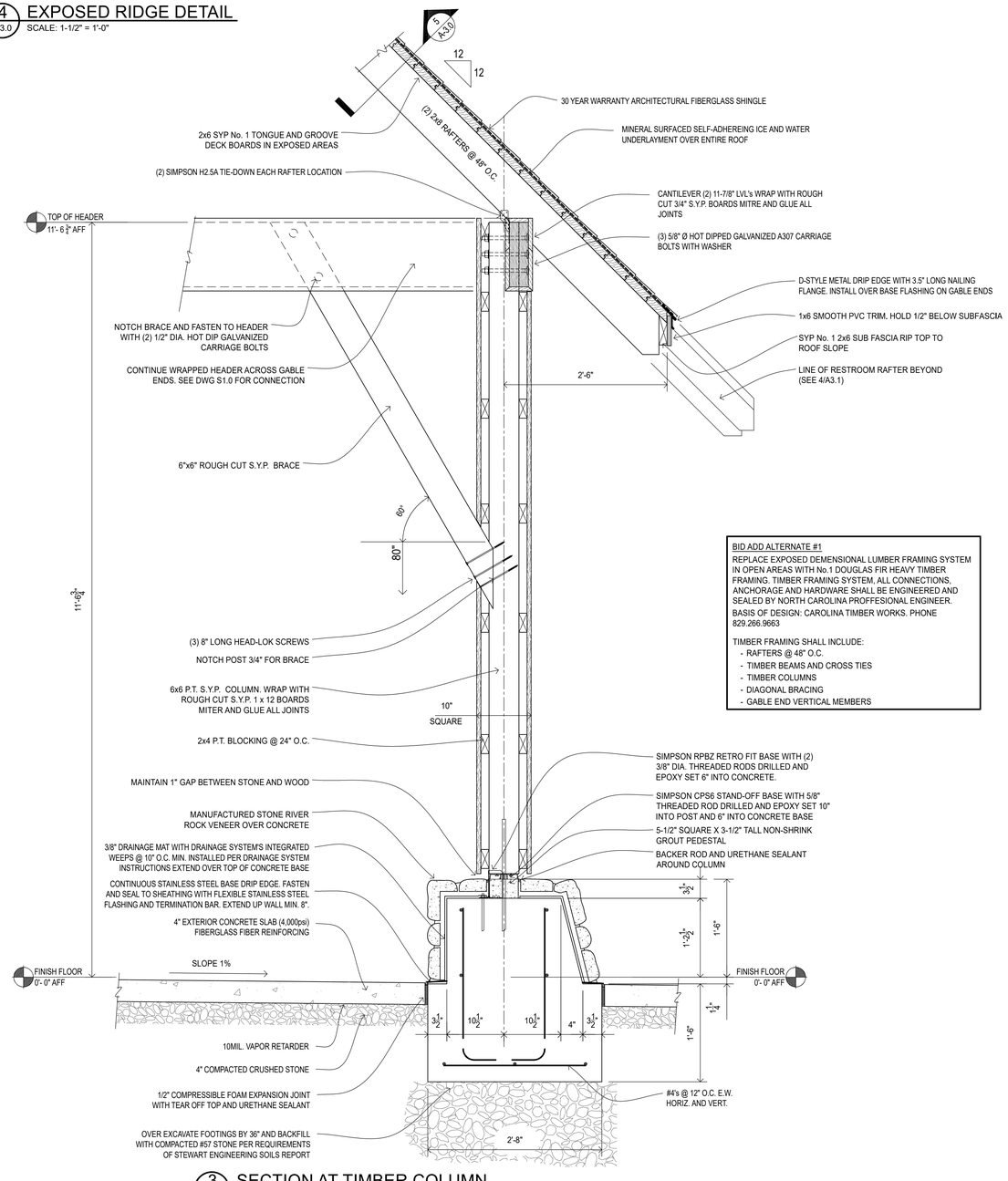
4 A3.0 EXPOSED RIDGE DETAIL
SCALE: 1-1/2" = 1'-0"



5 A3.0 EXPOSED RAFTER DETAIL
SCALE: 1-1/2" = 1'-0"



1 A3.0 SECTION AT RESTROOM WALL
SCALE: 1" = 1'-0"



3 A3.0 SECTION AT TIMBER COLUMN
SCALE: 1" = 1'-0"

REVISIONS

NO.	DATE	BY	CHKED	DESCRIPTION
1	11/15/2021	BHC		ADDENDUM 1
2	12/6/2021	BHC		ADDENDUM 2

BRIAN H. CONROY REGISTERED ARCHITECT 12143 NORTH CAROLINA CHARLOTTE, NC 12-6-2021

Concord PARKS & RECREATION NORTH CAROLINA

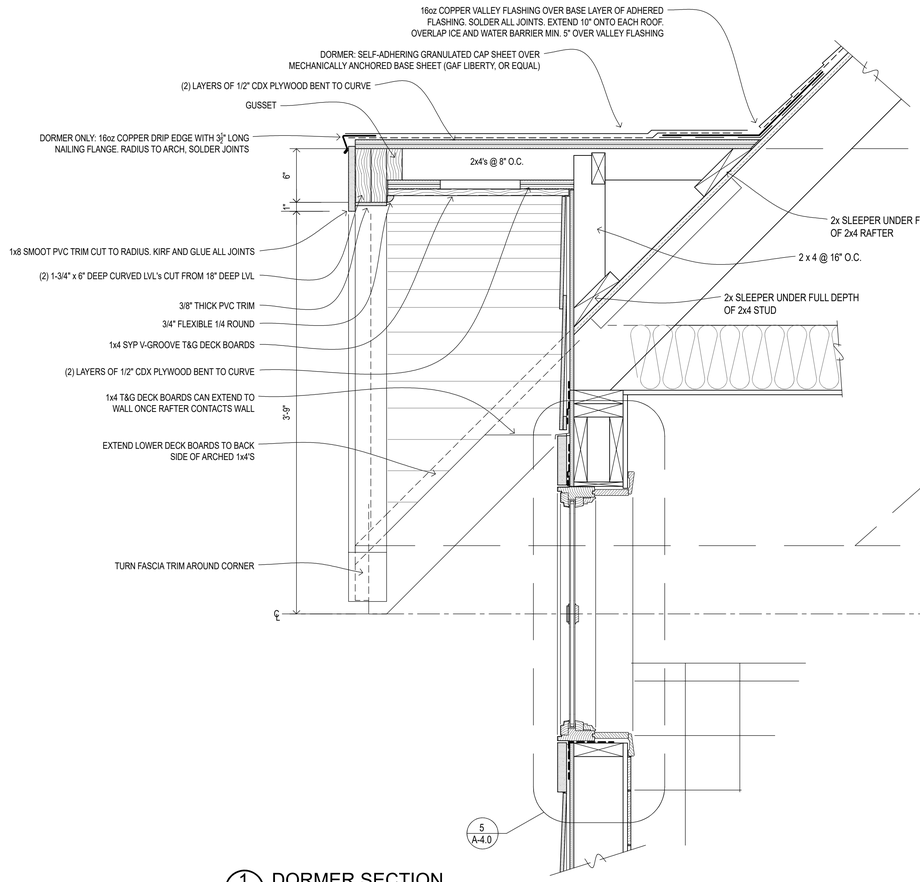
City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture • Planning • Stuff

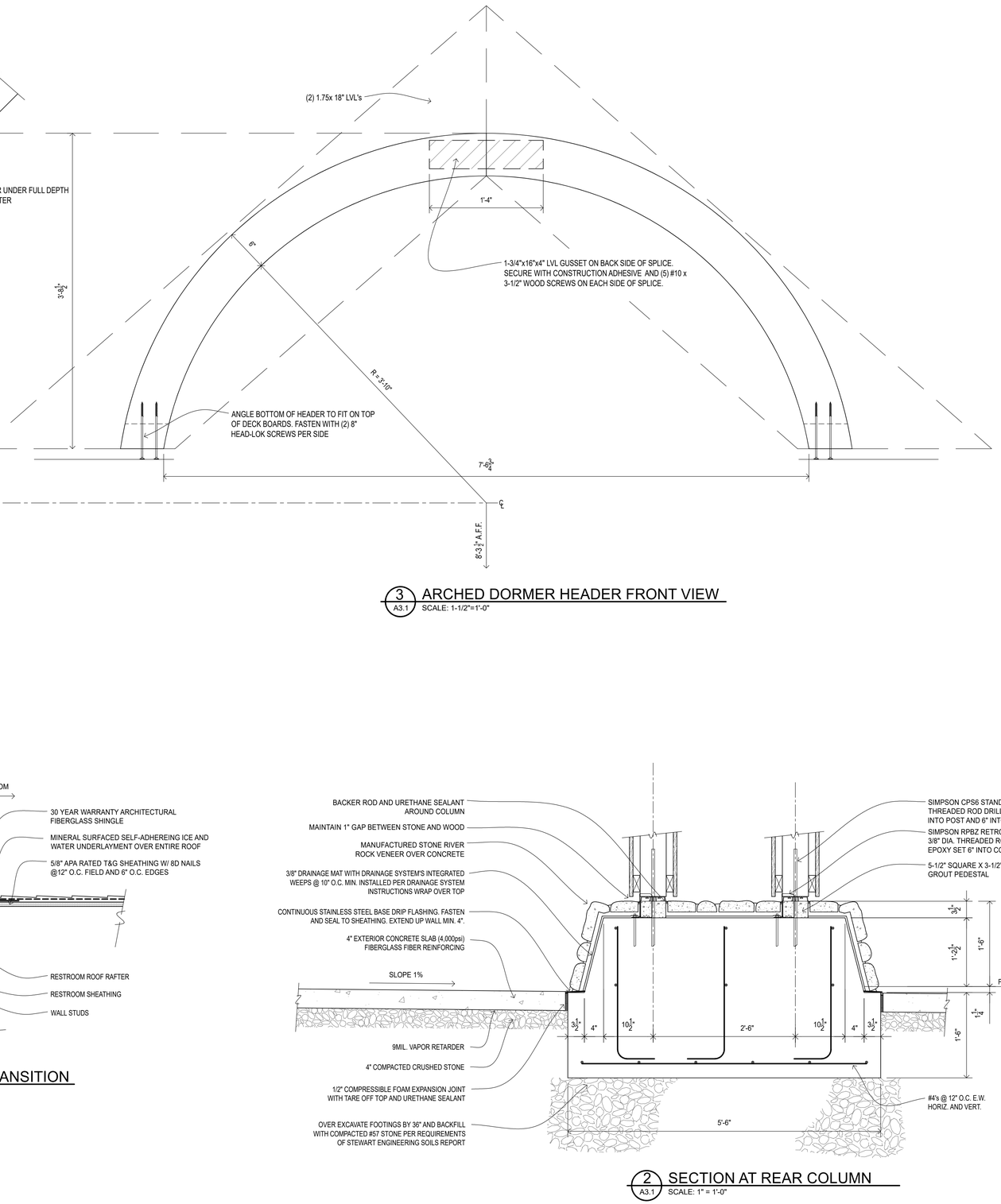
DATE: 12/06/2021

NAME: SECTIONS AND DETAILS

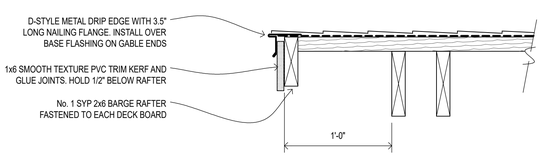
SHEET: A 3.0



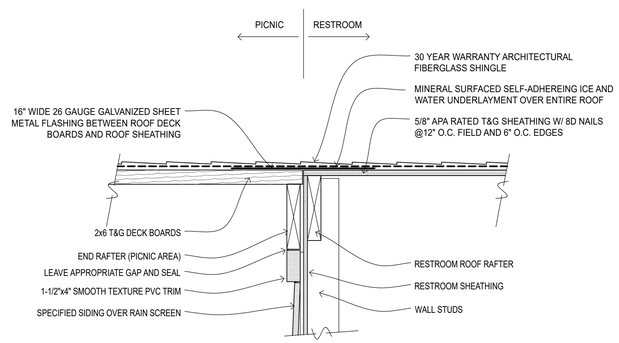
1 A3.1 DORMER SECTION
SCALE: 1-1/2"=1'-0"



3 A3.1 ARCHED DORMER HEADER FRONT VIEW
SCALE: 1-1/2"=1'-0"



4 A3.1 GABLE END
SCALE: 1-1/2"=1'-0"



5 A3.1 ROOF SHEATHING TRANSITION
SCALE: 1-1/2"=1'-0"

2 A3.1 SECTION AT REAR COLUMN
SCALE: 1" = 1'-0"

REVISIONS

NO.	DATE	BY	CHKED	DESCRIPTION

BRIAN H. CONROY
REGISTERED ARCHITECT
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NORTH CAROLINA
CHARLOTTE, NC
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CONCORD
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PARKS & RECREATION

City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture • Planning • Stuff

DATE: 06/03/2021

NAME: ELEVATIONS AND DETAILS

SHEET: A 3.1

DOOR SCHEDULE

DOOR No.	DOOR	DOOR SIZE	FRAME	HARDWARE SET	COMMENTS
01	H.M.	3'-0"x7'-0"	A	01	DOOR OPERATES AS PUSH/ PULL WHEN FACILITY OPEN
02	H.M.	3'-0"x7'-0"	A	01	DOOR OPERATES AS PUSH/ PULL WHEN FACILITY OPEN
03	H.M.	3'-0"x7'-0"	B	02	

DOOR NOTES:

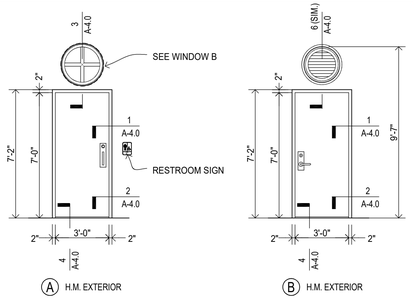
1. OWNER APPROVED SUBMISSION BY AHC CERTIFIED DOOR HARDWARE CONSULTANT REQUIRED BEFORE INSTALLATION OF DOORS AND HARDWARE.
2. DOORS AND FRAMES TO BE PAINTED WITH TWO COATS OF HIGH GLOSS EPOXY PAINT.
3. DOOR HARDWARE TO MEET THE ACCESSIBILITY REQUIREMENTS OF ANSI117.1 AND NC BUILDING CODE.
4. ALL DOOR HARDWARE TO MEET ANSI GRADE 1 STANDARDS FOR INSTITUTIONAL DUTY. INCLUDE ALL APPURTENANCES TO MAKE FULLY FUNCTIONAL AS INTENDED BY OWNER.
5. ALL HARDWARE TO BE STAINLESS STEEL. SATIN FINISH
6. OWNER TO PROVIDE PERMANENT 7-PIN CORES AT SUBSTANTIAL COMPLETION. CONTRACTOR TO PROVIDE REMOVABLE CONSTRUCTION CORES.
7. CONTRACTOR TO PROVIDE AND INSTALL KNOX BOX ON EXTERIOR OF BUILDING. COORDINATE LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.

FRAME: - 14 GAGE GALVANIZED WELDED HOLLOW METAL FRAME. KNOCKDOWN FRAMES ARE NOT PERMITTED. EXPOSED WELDS TO BE GROUND AND FINISHED SMOOTH.
- ALL HARDWARE LOCATIONS TO BE REINFORCED
- GALVANIZED METALS TO RECEIVE SHOP COAT OF PAINT-GRIP FINISH

METAL DOOR: - 16 GAGE FACE SHEETS AND INTERNAL STEEL STIFFNER CHANNELS
- GALVANIZED FLUSH HOLLOW METAL DOOR. INSULATED CORE (R2.2min.)
- GALVANIZED METALS TO RECEIVE SHOP COAT OF PAINT-GRIP FINISH
- PAINT WITH TWO COATS OF HIGH GLOSS EPOXY PAINT.

HARDWARE SET 01:

CORE	BEST INTERCHANGEABLE - TO MATCH OWNER'S CURRENT FORMAT
CYLINDER:	TO ACCEPT BEST INTERCHANGEABLE 7-PIN CORES. INTEGRATED STAINLESS STEEL TRIM WITH LOCKSET
LOCKSET:	SINGLE CYLINDER FULL MORTISE, DEADLOCK ONLY, INSTITUTIONAL DUTY, ANSI-117.1 COMPLIANT . ONLY LOCKABLE WITH KEY FROM EXTERIOR. DEAD BOLT RETRACTED BY STAFF KEY ONLY. LOCKSET OPERATES AS PUSH/ PULL DOOR WHEN FACILITY IS OPEN TO PUBLIC.
PUSH/ PULL PLATES:	ADA COMPLIANT 4"x16" x.050 STAINLESS STEEL PUSH AND PULL PLATES. CUT FOR LOCK CYLINDER. PROVIDE 3/4" DIAMETER 8" CTC STAINLESS STEEL PULL HANDLE ON PULL SIDE.
HINGES:	HEAVY WEIGHT 5 KNUCKLE BALL BEARING STAINLESS STEEL (3) PER DOOR
CLOSER:	VANDAL RESISTANT WITH CAST IRON BODY, FORGED PARALLEL ARMS AND POSITIVE STOP HOLD OPEN, METAL COVER. MOUNT ON INTERIOR SIDE OF DOOR
THRESHOLD:	5-1/2" WIDE INDUSTRIAL DUTY ALUMINUM ANSI-117.1 COMPLIANT (VERIFY EPOXY FLOOR THICKNESS).
KICK PLATE:	12"x34" x .050 STAINLESS STEEL. MOUNT ON PUSH SIDE OF DOOR.
DRIP CAP:	ALUMINUM MOUNTED TO FRAME EXTERIOR
SWEEP:	ALUMINUM WITH NYLON BRISTLES
SEALS:	ALUMINUM WITH HEAVY DUTY BULB TYPE SEALS
ROOM SIGN:	PLASTIC RESTROOM NAME SIGN WITH CONTRASTING RAISED BOARDER AND TEXT MEETING THE ACCESSIBILITY REQUIREMENTS OF ANSI-117.1. SEE TYPICAL MOUNTING HEIGHTS FOR ADDITIONAL INFORMATION.

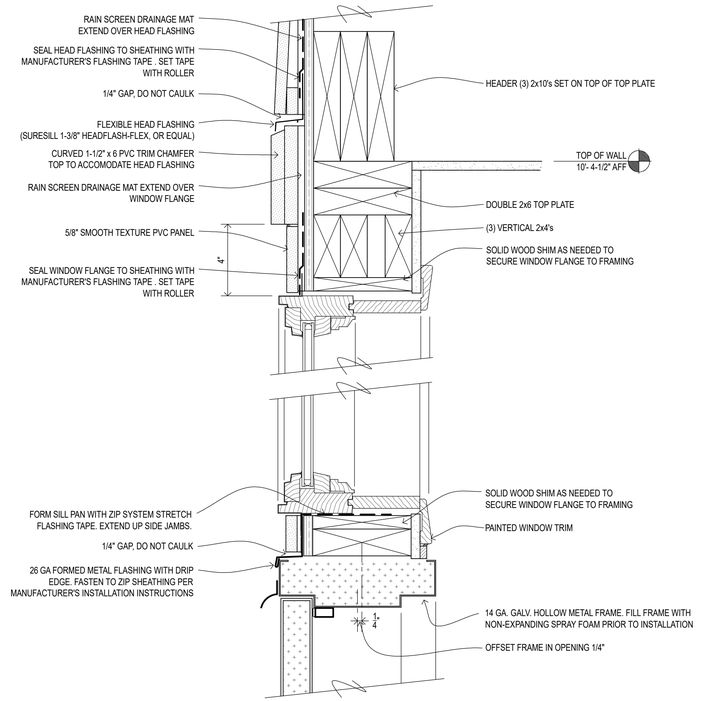


A H.M. EXTERIOR

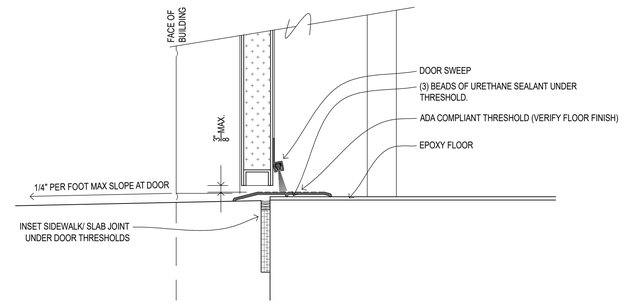
B H.M. EXTERIOR

HARDWARE SET 02:

CORE	BEST INTERCHANGEABLE - TO MATCH OWNER'S CURRENT FORMAT
CYLINDER:	TO ACCEPT BEST INTERCHANGEABLE CORES. INTEGRATED STAINLESS STEEL TRIM WITH LOCKSET
LOCKSET:	STOREROOM FUNCTION. SINGLE CYLINDER FULL MORTISE, INSTITUTIONAL DUTY WITH ANSI-117.1 COMPLIANT CAST STAINLESS STEEL WITHNELL ROUNDED PROFILE LEVERS. ONLY LOCKABLE WITH KEY FROM EXTERIOR. EXTERIOR LEVER IS INOPERATIVE. LATCH BOLT ALWAYS RETRACT FROM INTERIOR (INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EGRESS).
HINGES:	HEAVY WEIGHT 5 KNUCKLE BALL BEARING STAINLESS STEEL (3) PER DOOR
CLOSER:	VANDAL RESISTANT WITH CAST IRON BODY, FORGED PARALLEL ARMS AND HOLD OPEN, METAL COVER. MOUNT ON INTERIOR SIDE OF DOOR.
WALL STOP:	INDUSTRIAL DUTY STAINLESS STEEL WALL MOUNT WITH RUBBER BUMPER
THRESHOLD:	1/4" TO 1/2", 5-1/2" WIDE OFFSET INDUSTRIAL DUTY ALUMINUM ANSI-117.1 COMPLIANT (VERIFY EPOXY FLOOR).
KICK PLATE:	12"x34" x .050 STAINLESS STEEL. MOUNT ON PUSH SIDE OF DOOR.
DRIP CAP:	ALUMINUM MOUNTED TO FRAME EXTERIOR
SWEEP:	ALUMINUM WITH NYLON BRISTLES
SEALS:	ALUMINUM WITH HEAVY DUTY BULB TYPE SEALS
ESCUTCHEONS:	4" x 12" .050 STAINLESS STEEL. PROVIDE ON BOTH SIDES OF DOOR.



3 A4.0 DOOR HEAD
SCALE: 3" = 1'-0"

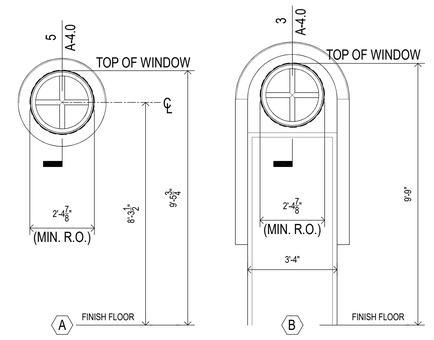


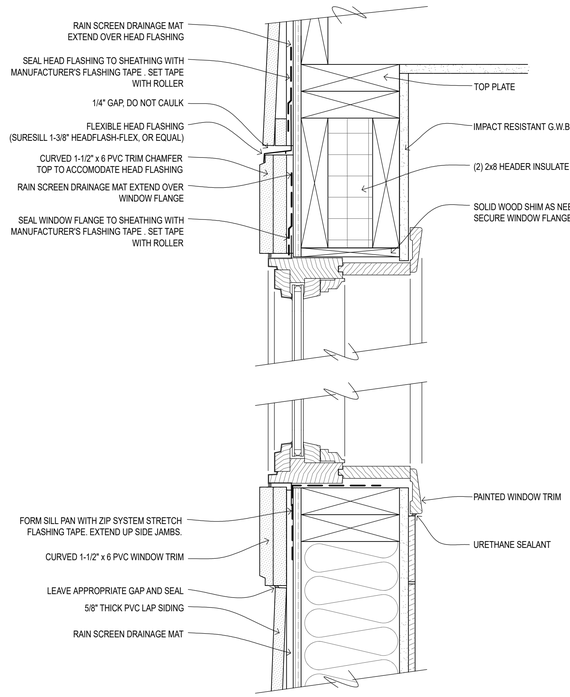
4 A4.0 DOOR THRESHOLD
SCALE: 3" = 1'-0"

WINDOW SCHEDULE

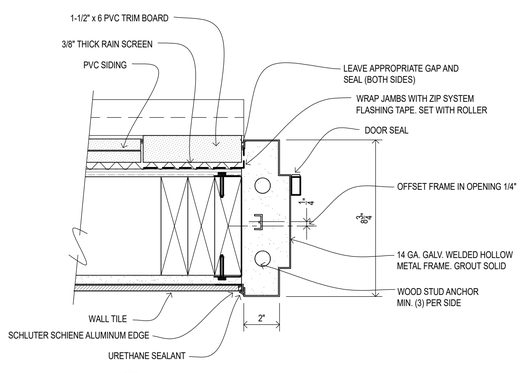
WINDOW TYPE	FRAME AND MULLIONS	SHGC	MAX. U VALUE	COMMENTS
A	24" DIAMETER VINYL CLAD WOOD ROUND WINDOW WITH 2-1/4" INTERIOR AND EXTERIOR MULLIONS	0.25	0.32	INSULATED GLAZING
B	24" DIAMETER VINYL CLAD WOOD ROUND WINDOW WITH 2-1/4" INTERIOR AND EXTERIOR MULLIONS	0.25	0.32	INSULATED GLAZING

ROUND WINDOWS: ANDERSON WINDOWS, 400 SERIES (CIR 24) VINYL CLAD WOOD WINDOW WITH 2-1/4" INTERIOR AND EXTERIOR MULLIONS. INTERIOR JAMB EXTENSION AND WM324 INTERIOR PINE CASING.

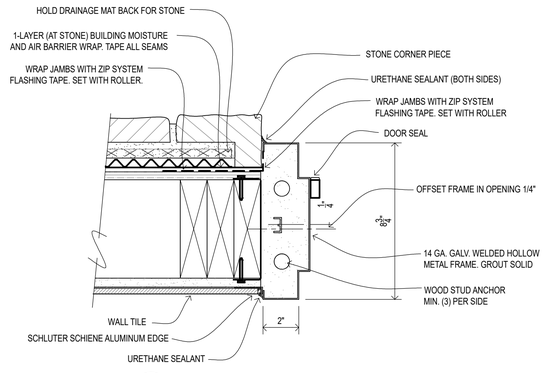




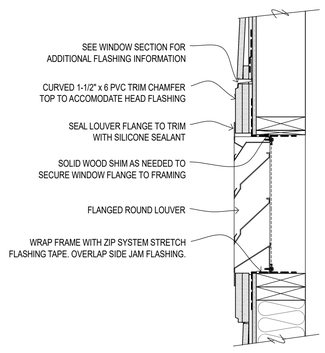
5 A4.0 WINDOW SECTION
SCALE: 3" = 1'-0"



1 A4.0 UPPER DOOR JAMB
SCALE: 3" = 1'-0"



2 A4.0 LOWER DOOR JAMB
SCALE: 3" = 1'-0"



6 A4.0 LOUVER DETAIL
SCALE: 3" = 1'-0"

REVISIONS

NO.	DATE	BY	CHKED	DESCRIPTION

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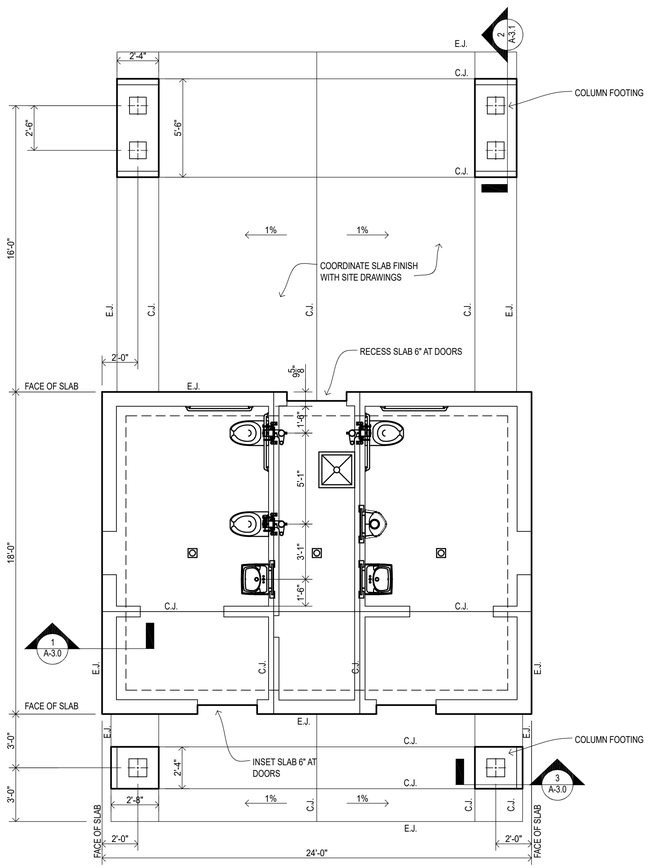
City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture • Planning • Stuff

DATE: 06/03/2021

NAME: DOOR AND WINDOW DETAILS

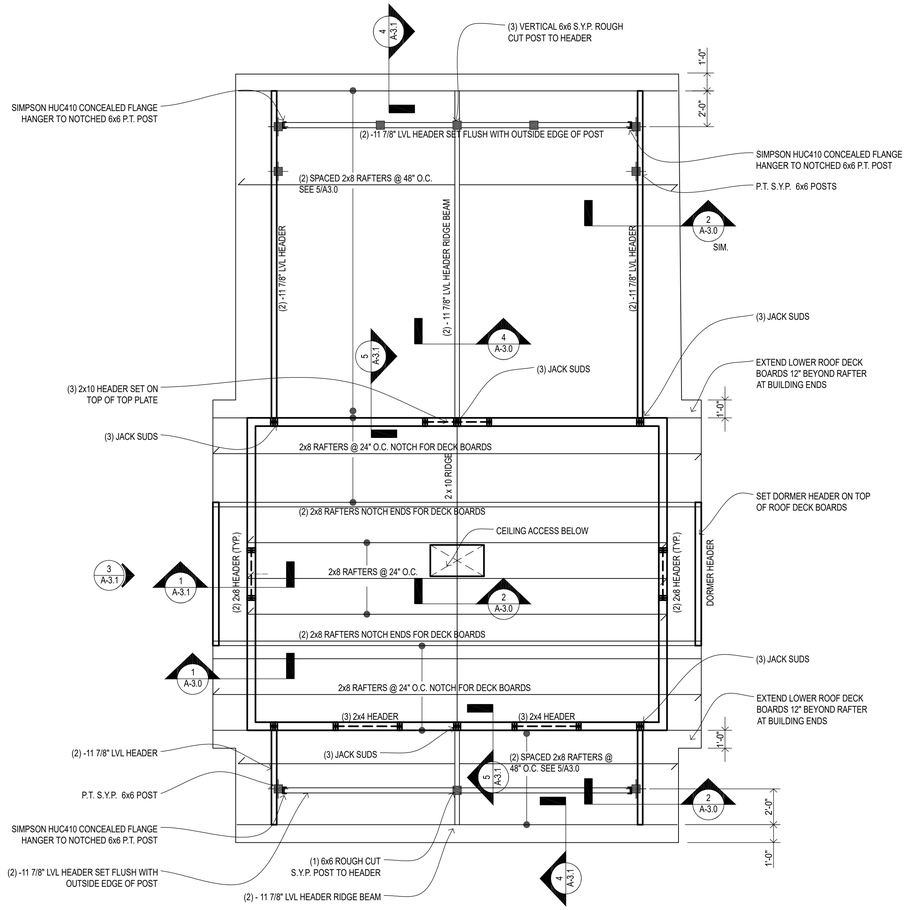
SHEET: A 4.0



1 S1.0 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

FOUNDATION PLAN NOTES:

1. PERIMETER SLAB TURN DOWN SHALL BE 18" DEEP x16" WIDE WITH (2) #4's CONT. 4,000PSI CONCRETE.
2. OVER EXCAVATE FOOTINGS BY 36" AND BACKFILL WITH COMPACTED #57 STONE PER REQUIREMENTS OF STEWART ENGINEERING SOILS REPORT DATED 6/3/2021
3. SLAB ON GRADE SHALL BE 4" THICK 4,000PSI CONCRETE WITH FIBERMESH REINFORCING OR 6x6xW1.4x1.4 WWF OVER 10 MIL VAPOR BARRIER OVER 4" CLEAN CRUSHED STONE.
4. MAXIMUM CROSS SLOPE OF ANY FLOOR SURFACE SHALL NOT EXCEED 1:48
5. INTERIOR CONCRETE FLOOR SLAB CURED AND PREPARED PER FINISH FLOOR COVERING MANUFACTURES WRITTEN INSTRUCTIONS. SMOOTH LIGHT TROWEL FINISH. DO NOT HARD TROWEL.
6. NON-STAMPED EXTERIOR CONCRETE TO HAVE LIGHT BROOM FINISH.
   E.J. - EXPANSION JOINT WITH TOOLED EDGES, 1/2" FOAM EXPANSION JOINT WITH TEAR OFF TOP AND URETHANE SEALANT.
   C.J. - CONTROL JOINT WITH TOOLED EDGES ON EXTERIOR AND SAW CUT INTERIOR. SPACING AS SHOWN OR 12' O.C. MAXIMUM.
7. COORDINATE UTILITY AND CONDUIT ROUGH-INS WITH MEP AND SITE DRAWINGS.
8. EXCAVATIONS FOR FOUNDATIONS AND SLABS TO REST ON UNDISTURBED SUITABLE SOIL OR SELECTECT STRUCTURAL FILL COMPACTED TO 100% MAXIMUM DRY DENSITY. 1,500PSF MINIMUM SOIL BEARING PRESSURE



2 S1.0 FRAMING PLAN
SCALE: 1/4" = 1'-0"

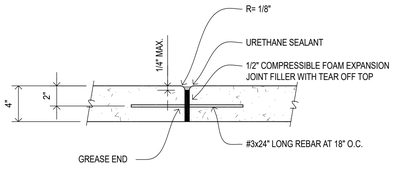
BID ADD ALTERNATE #1

REPLACE EXPOSED DIMENSIONAL LUMBER FRAMING SYSTEM IN OPEN AREAS WITH No.1 DOUGLAS FIR HEAVY TIMBER FRAMING. TIMBER FRAMING SYSTEM, ALL CONNECTIONS, ANCHORAGE AND HARDWARE SHALL BE ENGINEERED AND SEALED BY NORTH CAROLINA PROFESSIONAL ENGINEER.
BASIS OF DESIGN: CAROLINA TIMBER WORKS. PHONE 829.266.9663

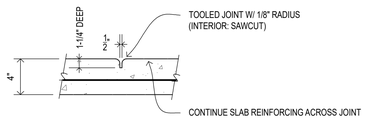
TIMBER FRAMING SHALL INCLUDE:
- RAFTERS @ 48" O.C.
- TIMBER BEAMS AND CROSS TIES
- TIMBER COLUMNS
- DIAGONAL BRACING
- GABLE END VERTICAL MEMBERS

FRAMING NOTES:

1. WOOD FRAMED BRACED WALL LINE NOTE:
   THIS STRUCTURE HAS BEEN ANALYZED FOR LATERAL LOADING USING 7/16 OSB RATED WALL SHEATHING FASTENED W/ 8D NAILS AT 6" O.C. ALONG EDGES AND 12" O.C. AT INTERMEDIATE FRAMING. BLOCK AND NAIL ALL PANEL EDGES.
2. RESTROOM CEILING JOISTS: 2x6's SPF #2 @ 24" O.C.
3. PROVIDE DOUBLE CEILING JOISTS AROUND 22.5"x36" ACCESS TO ATTIC.
4. ALL WALL STUDS SHALL BE 2x6 SPF #2 @ 16" O.C. UNLESS OTHERWISE NOTED.
5. ALL LOAD BEARING HEADERS SHALL BE (2) 2x8's SPF #2 UNLESS OTHERWISE NOTED.
6. MINIMUM (1) JACK STUD AND (1) KING STUD TO BE INSTALLED ON EACH SIDE OF OPENING UNLESS OTHERWISE NOTED.
7. FASTEN FIRST KING STUD TO LUMBER HEADER WITH AT LEAST (3) 16D (3-1/2"x 0.162") IN EACH PLY.
8. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ADDITIONAL FRAMING DETAIL INFORMATION.
9. TIMBER FRAME ALTERNATE: FINAL TIMBER DESIGN (INCLUDING BRACING, AND ATTACHMENTS) TO BE DESIGNED BY TIMBER SUPPLIER AND SEALED BY A NORTH CAROLINA PROFESSIONAL ENGINEER



3 S1.0 SIDEWALK EXPANSION JOINT
SCALE: 3/4" = 1'-0"



4 S1.0 CONTROL JOINT
SCALE: 3/4" = 1'-0"

NORTH CAROLINA PROFESSIONAL SEAL 31995 ENGINEER CHAD T. RITTER

IDE INTELLIGENT DESIGN ENGINEERING
1945 J N PEASE PLACE, SUITE #204
CHARLOTTE, NC 28262
CORPORATE LICENSE #: C-3118
PHONE: 704-335-7200

REVISIONS			
NO.	DATE	BY	CHKED	DESCRIPTION

City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

Concord NORTH CAROLINA PARKS & RECREATION

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture • Planning • Stuff

DATE: 07/22/2021

NAME: FOUNDATION AND FRAMING PLANS

SHEET: S 1.0

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
	SUPPLY DIFFUSER
	RETURN GRILLE
10x10	RA TRANSFER GRILLE
EF-1	EXHAUST FAN
T	THERMOSTATIC CONTROL
R	REMOTE TEMPERATURE SENSOR
C	CARBON MONOXIDE SENSOR
OS	OCCUPANCY SENSOR
	RECTANGULAR DUCT
	FLEXIBLE DUCT
	ROUND RIGID DUCT
	TURNING VANES
VD	VOLUME DAMPER
BDD	BACKDRAFT DAMPER
SD	SPLITTER DAMPER
FD	FIRE DAMPER WITH 8x8 ACCESS DOOR
--- C ---	CONDENSATE PIPING
S	DUCT-MOUNTED SMOKE DETECTOR
$	WALL SWITCH
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
CC	COOLING COIL
CFM	CUBIC FEET PER MINUTE
COB	COOLING-ONLY VAV BOX
CU	CONDENSING UNIT
DF	DUCT FURNACE
EA	EXHAUST AIR
FPB	FAN-POWERED VAV BOX
HP	HEAT PUMP
RA	RETURN AIR
RTU	ROOFTOP UNIT (PACKAGED)
SA	SUPPLY AIR
SP	STATIC PRESSURE
	DOOR UNDER CUT 3/4"
	DOOR LOUVER

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

METHOD OF COMPLIANCE

PRESCRIPTIVE [X] ENERGY COST BUDGET [ ]

THERMAL ZONE	3A
EXTERIOR DESIGN CONDITIONS	
WINTER DRY BULB	18°F
SUMMER DRY BULB	94°F
HDD65	3412
CDD65	1549
INTERIOR DESIGN CONDITIONS	
WINTER DRY BULB	70 °F
SUMMER DRY BULB	74°F
RELATIVE HUMIDITY	50%

BUILDING HEATING LOAD

SPACE OR ZONE	CALCULATED LOAD (BTUH)
MEN'S TOILET	10,900 BTUH
WOMEN'S TOILET	10,900 BTUH
JANITOR	5,120 BTUH

BUILDING COOLING LOAD

SPACE OR ZONE	CALCULATED LOAD (BTUH)
MEN'S TOILET	NOT APPLICABLE
WOMEN'S TOILET	NOT APPLICABLE
JANITOR	NOT APPLICABLE

MECHANICAL SPACING CONDITIONING SYSTEM	
UNITARY	
DESCRIPTION OF UNIT	ELECTRIC SPACE HEATERS
HEATING EFFICIENCY	SEE SCHEDULE THIS SHEET
COOLING EFFICIENCY	SEE SCHEDULE THIS SHEET
HEAT OUTPUT OF UNIT	SEE SCHEDULE THIS SHEET
COOLING OUTPUT OF UNIT	SEE SCHEDULE THIS SHEET
BOILER	
TOTAL BOILER OUTPUT	NOT APPLICABLE
CHILLER	
TOTAL CHILLER OUTPUT	NOT APPLICABLE
LIST EQUIPMENT EFFICIENCIES	NOT APPLICABLE
EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS)	
MOTOR HORSEPOWER	SEE SCHEDULE THIS SHEET
NUMBER OF PHASES	SEE SCHEDULE THIS SHEET
MINIMUM EFFICIENCY	STANDARD WITH PACKAGED EQUIPMENT
MOTOR TYPE	STANDARD WITH PACKAGED EQUIPMENT
NUMBER OF POLES	STANDARD WITH PACKAGED EQUIPMENT

MECHANICAL GENERAL NOTES

1. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATION OF DOORS, WINDOWS, CEILING CONFIGURATION, ETC.

2. INSTALLATION OF ANY EQUIPMENT SHALL BE IN ACCORDANCE WITH APPROVED SHOP DRAWINGS. CONTRACTOR TO COORDINATE THE SHOP DRAWING INFORMATION WITH ALL OTHER TRADES. (EXAMPLE ROOFTOP UNITS PHYSICAL SIZE AND WEIGHT MUST BE COORDINATED WITH STRUCTURAL SYSTEMS THRU GENERAL CONTRACTOR, LIKEWISE ALL ELECTRICAL CHARACTERISTICS WILL REQUIRE COORDINATION THRU GENERAL CONTRACTOR WITH ELECTRICAL CONTRACTOR).

3. ALL DUCTWORK SHALL BE SUPPORTED AS PER SMACNA STANDARDS.

4. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH THE WORK UNDER OTHER TRADES, TO AVOID INTERFERENCE.

5. ALL RECTANGULAR AND ROUND DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH SMACNA STANDARDS. ALL SQUARE ELBOWS SHALL HAVE DOUBLE THICKNESS TURNING VANES.

6. MECHANICAL CONTRACTOR SHALL BALANCE SYSTEM TO CFM'S INDICATED ON PLANS AND PROVIDE ARCHITECT WITH COMPLETE BALANCE REPORT.

7. NEW FLEXIBLE DUCT SHALL BE INSULATED THERMAFLEX M-KE OR APPROVED EQUAL. MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL BE 4'-0".

8. LOCATE ALL TEMPERATURE SETTING DEVICES AND SWITCHES 4'-0" ABOVE FINISHED FLOOR, OR PER LOCAL ADA REQUIREMENTS. (INTEGRAL EXCLUDED).

9. ALL DUCTWORK SPECIFIED OR NOTED TO BE LINED SHALL BE LINED WITH ONE INCH THICK DUCT LINER HAVING NOT LESS THAN A "k" VALUE OF 0.22 AT 75° F. MEAN TEMPERATURE WITH ONE SIDE COATED FACING AIR STREAM CONFORMING TO THE DUCT LINE MATERIALS STANDARD AHC-101 DATED 1975 OF THE NATIONAL INSULATION MANUFACTURERS ASSOCIATION. NOT APPLICABLE FOR EXHAUST.

10. ALL DUCTWORK SPECIFIED OR NOTED TO BE LINED SHALL BE INCREASED IN SIZE TO ALLOW FOR LINER. DUCT DIMENSIONS SHOWN OR NOTED ON PLANS ARE INSIDE CLEAR.

11. SPACE ABOVE CEILING TO BE USED AS RETURN AIR PLENUM WHERE DUCT IS NOT INDICATED ABOVE RETURN AIR GRILLES. DUCTS RETURNING AIR ABOVE CEILING SHALL BE OPEN END WITH BOXED EDGES.

12. ANY DEVICE REQUIRING A THERMOSTAT FOR CONTROL SHALL BE FURNISHED WITH A THERMOSTAT WHETHER INDICATED ON THE DRAWINGS OR NOT. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO FURNISH ALL THERMOSTATS, CONTROLS, ETC.

13. ALL CUTTING, PATCHING OF SLAB, ROOF OR OTHER BUILDING COMPONENTS TO BE BY THE GENERAL CONTRACTOR.

14. WHERE INDICATED, THERMOSTATS SHALL HAVE OPAQUE PLASTIC LOCKING GUARDS FURNISHED BY THERMOSTAT MANUFACTURER AS STANDARD ACCESSORY SIMILAR TO WHITE-ROGERS PLASTIC THERMOSTAT GUARDS.

15. THE TOPS OF ALL SUPPLY AND RETURN AIR DISTRIBUTION ON A DUCTED RETURNED SYSTEM SHALL BE INSULATED WITH 1-1/2" THICK BATT INSULATION WITH VAPOR BARRIER.

16. ALL PIPING, DUCTS, VENTS, ETC., EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED AND COUNTERFLASHED IN A WATERPROOF MANNER.

17. EXTEND ALL DRAIN LINES TO SPLASHBLOCK OR AS INDICATED, SO ROUTED AS TO AVOID INTERFERENCE WITH PASSAGEWAYS AND MAINTENANCE. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED. ALL DRAIN LINES SHALL BE INSULATED.

18. ALL PIPING AND DUCTWORK INSULATION SHALL BE RUN CONTINUOUSLY THROUGH FLOORS AND PARTITIONS.

19. ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE SPECIFICATIONS AND FURTHER SUPPORTS OR HANGERS AS REQUIRED TO PREVENT THE WEIGHT OF PIPING BEING PLACED ON EQUIPMENT.

20. ALL CONCRETE PADS UNDER MECHANICAL EQUIPMENT SHALL BE 4" THICK REINFORCED WITH 6x6 10/10 WIRE MESH BY MECHANICAL CONTRACTOR, UNLESS NOTED OTHERWISE. COORDINATE PAD LOCATIONS WITH GENERAL CONTRACTOR TO VERIFY KEY LOCATIONS.

21. PROVIDE A DIELECTRIC FITTING BETWEEN FERROUS AND NON-FERROUS PIPING.

22. FIRE DAMPERS SHALL BE INSTALLED WHERE SHOWN ON PLANS AND AT SLAB, WHERE DUCTS PASS THROUGH FLOORS.

FAN SCHEDULE

FAN EF-1 JANITOR

GREENHECK MODEL CSP-B150 CEILING CABINET EXHAUST FAN DIRECT DRIVE

100 CFM @ 0.375" ESP; 129 WATTS; 768 FRPM; 120V/60/1ø; 0.4 SONES; WITH:
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

FAN EF-2 RESTROOMS (2 FANS)

GREENHECK MODEL CSP-B150 CEILING CABINET EXHAUST FAN DIRECT DRIVE

100 CFM @ 0.375" ESP; 129 WATTS; 768 FRPM; 120V/60/1ø; 0.4 SONES; WITH:
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

ACCESSORIES:
① BACKDRAFT DAMPER ② DISCONNECT SWITCH ③ VIBRATION ISOLATION
④ ALUMINUM GRILLE ⑤ OCCUPANCY SENSOR ⑥ SPEED CONTROLLER
⑦ RJ-6x9 PITCHED ROOF CAP

APPROVED FAN EQUALS ARE: COOK AND PENNBARRY

LOUVER SCHEDULE

L-1 – ATTIC VENTILATION LOUVER
RUSKIN MODEL ELF375 – 24" ROUND

ELF375 IS A STATIONARY LOUVER, EXTRUDED ALUMINUM CONTUCTION. PROVIDE LOUVER TO MATCH WALL CONSTRUCTION TYPE.

200 CFM, 0.50 SF, 400 FPM INTAKE VELOCITY, 0.025" PRESSURE DROP, 873 FPM WATER PENETRATION VELOCITY.

PROVIDE LOUVER L-1 WITH: ① ② ③ ④

L-2 – MAKEUP AIR INTAKE LOUVER (EXHAUST MAKEUP)
RUSKIN MODEL ELF375 – 24" ROUND

ELF375 IS A STATIONARY LOUVER, EXTRUDED ALUMINUM CONTUCTION. PROVIDE LOUVER TO MATCH WALL CONSTRUCTION TYPE.

200 CFM, 0.50 SF, 400 FPM INTAKE VELOCITY, 0.025" PRESSURE DROP, 873 FPM WATER PENETRATION VELOCITY.

PROVIDE LOUVER L-2 WITH: ① ② ③ ④

ACCESSORIES:
① INSECT SCREEN ② KYNAR FINISH
③ INTEGRAL FLANGE ④ COLOR AS DIRECTED BY THE ARCHITECT

ALTERNATE BID

G.C. TO PROVIDE ALTERNATE BIT FOR DUCTLESS MINI-SPLIT ADDITION. ADDITIONAL EQUIPMENT REQUIRED BELOW.

AHU-1 AND AHU-2 WALL CASSETTE UNIT (MITSUBISHI MODEL MSZ-GL09NA)

0.75 TON WALL CASSETTE UNIT, 399 CFM (HI SPEED); RATED COOLING=9,000 BTUH @80/67°F INDOOR AND 95°F/75°F OUTDOOR, RATED HEATING=10,900 BTUH.

INDOOR UNIT: WALL MOUNTED CASSETTE UNIT, PROVIDE WITH WIRELESS WALL-MOUNT THERMOSTAT. POWER SUPPLY 208/230V/1/60, MCA= 1, MOCP=15, INDOOR FAN FLA=0.76, INDOOR FAN WATTS=30. WEIGHT 22 LBS.

HP-1 OUTDOOR UNIT – (MITSUBISHI MODEL MXZ-2C20NA)

MULTI-SYSTEM 1.5 TON HEAT PUMP UNIT, 1,342 CFM (HI SPEED); RATED COOLING=18,000 BTUH @80/67°F INDOOR AND 95°F/75°F OUTDOOR, RATED HEATING=20,000 BTUH, SEER=20.0, EER=12.7, HSPF=10.0, COP=3.93.

OUTDOOR UNIT: PAD-MOUNTED UNIT, POWER SUPPLY 208/230V/1/60, SYSTEM MCA=17.2, SYSTEM MOCP=20; COMPRESSOR RLA=10.7, OUTDOOR FAN FLA=2.43, WEIGHT 126 LBS.

R-410A REFRIGERANT, 230 FOOT MAX PIPING LENGTH, 49 FOOT MAX PIPING HEIGHT.

ELECTRIC UNIT HEATER SCHEDULE

EH-1 WALL-MOUNTED FORCED AIR HEATER

QMARK MODEL LFK151, 1500 W, 120V/1ø, SURFACE MOUNT, INTEGRAL TAMPER-RESISTANT THERMOSTAT, FAN DELAY, DISCONNECT BY E.C.

EH-2 CEILING-MOUNTED FORCED AIR HEATER

QMARK MODEL EFF4007, 3000 W, 240V/1ø, 12.5 AMPS, RECESS MOUNT, ROUGH-IN BOX, INTEGRAL TAMPER-RESISTANT THERMOSTAT, FAN DELAY, DISCONNECT SWITCH PROVIDED, PROVIDE CONTROL RELAY/TRANSFORMER AS REQUIRED.

APPROVED HEATER EQUALS ARE: MARKELL AND CHROMALOX

DIFFUSER SCHEDULE

TAG	SERVICE	CFM	NECK SIZE	FRAME TYPE	PATTERN	DAMPER	MATERIAL	FINISH	MFG & MODEL No.	TYPE	NOTES
A	SUPPLY	AS NOTED	AS NOTED	SURFACE	NA	YES	STEEL	NOTE 2	NAILOR MODEL 61SV	SINGLE DEFLECTION GRILLE	1,2,3

NOTES:

1. DIFFUSER DESIGNATIONS ON PLANS AS FOLLOWS: DIFFUSER OR NECK SIZE — 12x12; AIR QUANTITY — 333; C — DIFFUSER TYPE AS NOTED ABOVE
2. COLOR AS DIRECTED BY ARCHITECT.
3. AIR VOLUME BALANCE AND CONTROL SHALL BE ACCOMPLISHED VIA DAMPERS IN THE BRANCH DUCTS, NOT DAMPERS AT THE GRILLES.

MECHANICAL DRAWING INDEX

SHULTZ ENGINEERING GROUP, PC

REVISIONS

NO.	DATE	BY	CHKD	DESCRIPTION

City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

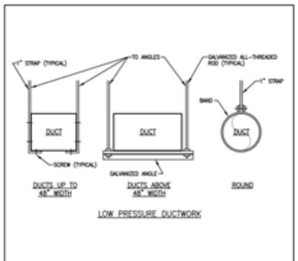
Concord NORTH CAROLINA PARKS & RECREATION

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture • Planning • Stuff

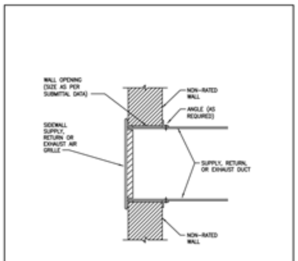
DATE: 06/01/2021

NAME: MECHANICAL HVAC SCHEDULES AND NOTES

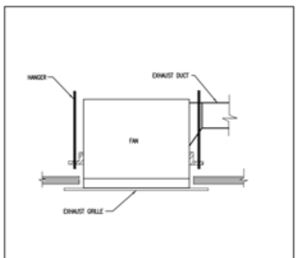
SHEET: M1



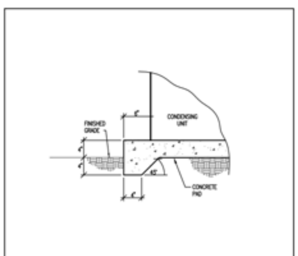
4	DUCTWORK HANGER DETAILS
M2	NO SCALE



5	SIDEWALL AIR DISTRIBUTION - NON-RATED WALL
M2	NO SCALE



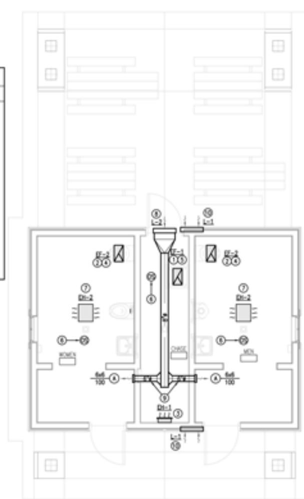
3	EXHAUST FAN DETAIL
M2	NO SCALE



2	OUTDOOR UNIT PAD DETAIL
M2	NO SCALE

KEYED NOTES

KEY	NOTE
1	CEILING CABINET EXHAUST FAN EF-1
2	CEILING CABINET EXHAUST FAN EF-2
3	RECESS MOUNTED HEATER EH-1 IN WALL.
4	8x8 EXHAUST FROM EF-2, TO CONNECT TO ROOF CAP.
5	6x6 EXHAUST DUCT TO FROM EF-1 TO CONNECT TO ROOF CAP.
6	OCCUPANCY SENSOR FOR EXHAUST FAN CONTROL – MOUNTED ON CEILING
7	RECESSED MOUNTED HEATER EH-2 IN CEILING
8	8" EXHAUST MAKEUP AIR DUCT FROM 24" ROUND WALL LOUVER L-2 ABOVE DOOR – TRANSITION AS REQUIRED.
9	6" MAKEUP AIR DUCT TO WALL GRILLE.
10	24" ROUND ATTIC VENTILATION LOUVER L-1 IN GABLE. SEE ARCHITECTURAL PLANS FOR EXACT LOCATION.



1 MECHANICAL HVAC PLAN
M2 SCALE: 1/4" = 1'-0"

ALTERNATE BID

KEYED NOTES

KEY	NOTE
1	CEILING CABINET EXHAUST FAN EF-1
2	CEILING CABINET EXHAUST FAN EF-2
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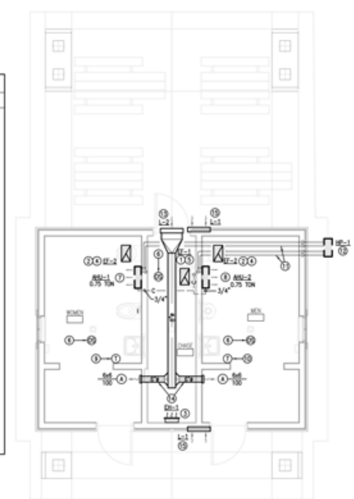
4	8x8 EXHAUST FROM EF-2, TO CONNECT TO ROOF CAP.
5	6x6 EXHAUST DUCT TO FROM EF-1 TO CONNECT TO ROOF CAP.
6	OCCUPANCY SENSOR FOR EXHAUST FAN CONTROL – MOUNTED ON CEILING
7	NEW MINI-SPLIT WALL CASSETTE AIR HANDLING UNIT AHU-1. ROUTE CONDENSATE TO SPILL IN SERVICE SINK.
8	NEW MINI-SPLIT WALL CASSETTE AIR HANDLING UNIT AHU-2. ROUTE CONDENSATE TO SPILL IN SERVICE SINK.
9	WIRELESS THERMOSTAT / AIR HANDLING UNIT CONTROLLER FOR NEW AIR HANDLING UNIT AHU-1 MOUNTED AT CEILING HEIGHT IN LOCKING BOX.
10	WIRELESS THERMOSTAT / AIR HANDLING UNIT CONTROLLER FOR NEW AIR HANDLING UNIT AHU-2 MOUNTED AT CEILING HEIGHT IN LOCKING BOX.
11	INSULATED REFRIGERANT LINE SET UP FROM OUTDOOR UNIT TO ABOVE CEILING.
12	NEW MINI-SPLIT HEAT PUMP UNIT HP-1 ON EQUIPMENT PAD. ROUTE REFRIGERANT PIPES IN NEW REFRIGERANT PIPE CONDUIT. COORDINATE THE EXACT LOCATION WITH OTHER EQUIPMENT ON THE ROOF TO AVOID CONFLICTS. MINIMUM THICKNESS OF EQUIPMENT PAD IS 4", AND SHALL EXTEND BEYOND THE EQUIPMENT FOOTPRINT A MINIMUM OF 6 INCHES ON ALL FOUR SIDES.
13	8" EXHAUST MAKEUP AIR DUCT FROM 24" ROUND WALL LOUVER L-2 ABOVE DOOR – TRANSITION AS REQUIRED.
14	6" MAKEUP AIR DUCT TO WALL GRILLE.
15	24" ROUND ATTIC VENTILATION LOUVER L-1 IN GABLE. SEE ARCHITECTURAL PLANS FOR EXACT LOCATION.



2 MECHANICAL HVAC PLAN (ALTERNATE BID)
M2 SCALE: 1/4" = 1'-0"

REVISIONS
NO.	DATE	BY	CHKD	DESCRIPTION

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Wilson Street Park
106 Wilson Street, Concord, NC 28026

Concord North Carolina PARKS & RECREATION

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture • Planning • Stuff

DATE: 06/01/2021
NAME: MECHANICAL HVAC PLANS AND DETAILS
SHEET: M2

ELECTRICAL SPECIFICATIONS

SECTION 16010
ELECTRICAL SYSTEMS DESCRIPTIONS

A. PROJECT INCLUDES
1. ELECTRICAL SYSTEMS FOR THE FOLLOWING APPLICATIONS: REFER TO INDIVIDUAL SPECIFICATION SECTIONS FOLLOWING FOR DETAILED REQUIREMENTS.
   a. POWER AND DISTRIBUTION.
   b. LIGHTING, INCLUDING EXIT AND EMERGENCY LIGHTING.
   c. POWER CONNECTIONS FOR HVAC, PLUMBING AND OWNER-PROVIDED EQUIPMENT.

B. PRODUCTS
1. SYSTEMS, PRODUCTS, AND STANDARDS ARE LISTED IN INDIVIDUAL SPECIFICATION SECTIONS WHICH FOLLOW.
2. ALL MATERIALS, DEVICES, APPLIANCES, AND EQUIPMENT SHALL BE NEW AND LABEL LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY APPROVED BY THIS STATE.

C. GENERAL PROJECT REQUIREMENTS
1. PROVIDE ALL WORK AND MATERIALS FOR THE INSTALLATION OF COMPLETE WIRING SYSTEMS AS SPECIFIED HEREIN AND SHOWN ON THE DRAWINGS.
2. ALL ELECTRICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE ELECTRICAL CONTRACTOR.
3. ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY THE OWNER.
4. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE MOST RECENT ADOPTED VERSION OF THE N.F.P.A., NATIONAL ELECTRICAL CODE (N.E.C.), AND ALL APPLICABLE STATE AND LOCAL CODES.
5. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CUTTING AND PATCHING FOR INSTALLATION OF ELECTRICAL WORK AND REPAIR ANY DAMAGE DONE.
6. SHOP DRAWINGS AND CATALOG DATA SHALL BE SUBMITTED FOR ANY NEW LIGHTING FIXTURES, METER BASE, PANELBOARDS, TRANSFORMERS, DISCONNECT SWITCHES, STARTERS, WIRING DEVICES AND MISCELLANEOUS MATERIALS. SHOP DRAWINGS SHALL BE SUBMITTED AS SPECIFIED IN ARCHITECTURAL SPECIFICATIONS, OR AT A MINIMUM, PROVIDE AN ELECTRONIC "PDF" FILE OF ALL SUBMITTAL MATERIALS.
7. PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR ANY NEW PANELBOARDS, MOTOR STARTERS AND DISCONNECT SWITCHES. LABELS SHALL BE WHITE LETTERS ON BLACK FIELD. NAMEPLATE SHALL INDICATE EQUIPMENT NAME, VOLTAGE AND CIRCUIT/FEEDER SERVING EQUIPMENT (WHERE APPLICABLE).
8. COORDINATE POWER SERVICE LOCATION AND REQUIREMENTS WITH LOCAL POWER COMPANY. MAKE PROVISIONS FOR METERING AS REQUIRED BY POWER COMPANY. IF REQUIRED, CONTRACTOR SHALL PROVIDE AND INSTALL CONCRETE SERVICE TRANSFORMER PAD PER POWER COMPANY REQUIREMENTS. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL REQUIREMENTS WITH THE LOCAL POWER COMPANY PRIOR TO SUBMISSION OF BID. ANY ADDITIONAL COSTS REQUIRED BY THE POWER COMPANY SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR AND SHALL BE INCLUDED IN THE BID.
9. ELECTRICAL CONTRACTOR SHALL TEST ALL WIRING FOR CONTINUITY AND GROUNDS PRIOR TO WIRING BEING ENERGIZED. FAULTY WIRING SHALL BE REPLACED.
10. ELECTRICAL CONTRACTOR SHALL CONNECT ALL HVAC, PLUMBING, AND OTHER CONTRACTOR OR OWNER FURNISHED EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS (UNLESS OTHERWISE NOTED). CONTROL WIRING FOR EQUIPMENT NOT PROVIDED BY THE ELECTRICAL CONTRACTOR, SHALL BE PROVIDED BY THE RESPECTIVE CONTRACTOR. COORDINATE WITH EQUIPMENT SHOP DRAWINGS AND EQUIPMENT CONTRACTOR FOR DISCONNECT SWITCH, CONDUIT, WIRING REQUIREMENTS, FUSE AND BREAKER SIZES, AND VOLTAGE REQUIREMENTS. ELECTRICAL CONTRACTOR SHALL PROVIDE A TIMER (AS REQUIRED BY CODE) FOR ALL PLUMBING RECIRCULATION PUMPS. ALL FINAL CONNECTIONS TO JUNCTION BOXES SHALL BE BY THE ELECTRICAL CONTRACTOR.
11. EACH BIDDER SHALL VISIT THE JOB SITE PRIOR TO BIDDING TO FAMILIARIZE HIMSELF/HERSELF WITH EXISTING CONDITIONS. FAILURE TO VISIT SITE SHALL NOT EXCUSE CONTRACTOR FROM PERFORMING REQUIRED WORK, NOR SHALL IT BE AN ACCEPTABLE REASON FOR REQUESTING ADDITIONS TO THE CONTRACT.
12. THIS PROJECT INVOLVES SOME WORK ON EXISTING ELECTRICAL FACILITIES. EXISTING FEEDER, BRANCH CIRCUITS, COMMUNICATIONS, RACEWAYS, ETC. WHICH ARE DISRUPTED BY THIS PROJECT SHALL BE RE-ROUTED AND/OR RE-FED FROM A NEW SOURCE AS REQUIRED TO MAINTAIN THEM IN FULL AND PERMANENT SERVICE.
13. THIS PROJECT INVOLVES SOME DEMOLITION WORK. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER REMOVAL OF WIRING, RACEWAY, FIXTURES, OUTLETS, ETC. AS NECESSARY TO ACCOMPLISH THE DEMOLITION WORK.
14. IT IS THE RESPONSIBILITY OF ALL CONTRACTORS AND TRADES TO COORDINATE THE INSTALLATION OF THEIR WORK WITH THE INSTALLATION OF WORK BY ALL OTHER CONTRACTORS AND TRADES. THE REQUIREMENTS OF THESE DRAWINGS, GENERAL REQUIREMENTS AND ALL ITEMS OF THE CONTRACT DOCUMENTS ARE EQUALLY BINDING ON ALL CONTRACTORS AND TRADES. EACH CONTRACTOR IS REQUIRED TO MAINTAIN FULL SETS OF THE CONTRACT DOCUMENTS FOR HIS EMPLOYEES' USE, ON THE PROJECT, TO ASSURE THAT ALL WORK IS PROPERLY COORDINATED AND INSTALLED WITH THE WORK OF OTHER CONTRACTORS AND TRADES.
15. WHENEVER THERE ARE DISCREPANCIES BETWEEN DRAWINGS, OR BETWEEN THE DRAWINGS AND SPECIFICATIONS, OR CONFLICTS WITHIN THE SPECIFICATIONS AND/OR DRAWINGS, AND SUCH DISCREPANCY IS NOT CALLED TO THE ENGINEER'S ATTENTION IN TIME TO PERMIT CLARIFICATION BY ADDENDUM, THE CONTRACTOR SHALL BASE HIS BID UPON PROVIDING THE BETTER QUALITY OR GREATER OF WORK OR MATERIAL CALLED FOR, SHALL SUBMIT A WRITTEN STATEMENT WITH HIS PROPOSAL NOTING SUCH DISCREPANCIES, AND SHALL SO FURNISH AND INSTALL SUCH BETTER QUALITY OR GREATER QUANTITY UNLESS OTHERWISE ORDERED IN WRITING.
16. CONTRACTOR SHALL ASSUME FULL LIABILITY FOR ANY WORK, EQUIPMENT AND MATERIALS PURCHASED AND/OR INSTALLED THAT ARE IN DISCREPANCY, IF IT IS NOT FIRST BROUGHT TO THE ATTENTION OF THE ENGINEER, IN WRITING, FOR CLARIFICATION. IF NOT BROUGHT TO THE ENGINEER'S ATTENTION, CONTRACTOR SHALL PAY FOR ANY EQUIPMENT, MATERIALS AND WORK THAT MUST BE REPLACED.

SECTION 16011
ELECTRICAL DEMOLITION

A. EXECUTION
1. THE EXTENT OF THE ELECTRICAL DEMOLITION WORK IS INDICATED ON THE ELECTRICAL AND ARCHITECTURAL DRAWINGS AND SPECIFIED HEREIN.
2. WHILE DEMOLISHING THE EXISTING ELECTRICAL SYSTEMS, ALL NECESSARY MODIFICATIONS TO THE PORTIONS OF THE EXISTING SYSTEMS, WHICH ARE TO REMAIN, SHALL BE MADE SO THAT THE ENTIRE SYSTEM(S) CONTINUES TO FUNCTION AS INTENDED, EVEN AFTER DEMOLITION AND ASSOCIATED NEW CONSTRUCTION.
3. ELECTRICAL DEMOLITION, RELOCATION OF EXISTING EQUIPMENT, AND ANY CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THIS NEW ELECTRICAL WORK IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
4. THE ELECTRICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE EXISTING BUILDING AND WITH THE WORK OF ALL OTHER TRADES AND INCLUDE ALL WORK NECESSARY TO COMPLY WITH THE INTENT OF THE DEMOLITION.
5. IT SHALL BE UNDERSTOOD THAT FIELD CONDITIONS MAY BE ENCOUNTERED DURING THE EXECUTION OF THIS CONTRACT, WHICH WILL REQUIRE EXTENSION OR RELOCATION OF EXISTING SYSTEMS OR EQUIPMENT WHICH ARE NOT SPECIFICALLY SHOWN ON THE DRAWINGS, BUT WHICH ARE REQUIRED TO MEET THE STATED INTENT THAT THE BUILDING CONTINUES TO FUNCTION UNAFFECTED BY THE DEMOLITION AND ASSOCIATED NEW CONSTRUCTION. THIS CONTRACT SHALL INCLUDE SUCH WORK AS WOULD NORMALLY BE EXPECTED IN AN EXISTING BUILDING OF THIS AGE AND TYPE.
6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR, REGARDING DEMOLITION OF THE EXISTING ELECTRICAL SYSTEMS, AS IS NECESSARY, SO THAT THE DEMOLITION OF THE GENERAL CONTRACTOR SHALL NOT DAMAGE THOSE PORTIONS OF THE ELECTRICAL SYSTEMS THAT ARE TO REMAIN IN SERVICE, ARE TO BE REUSED, OR ARE TO BECOME THE PROPERTY OF THE OWNER.
7. ALL SALVAGEABLE MATERIALS RESULTING FROM DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER. THE OWNER SHALL DETERMINE WHAT IS SALVAGEABLE. SALVAGEABLE ITEMS SHALL BE TURNED OVER TO THE OWNER. NON-SALVAGEABLE ITEMS SHALL BE PROPERLY DISPOSED OF BY THE ELECTRICAL CONTRACTOR.
8. EQUIPMENT OR MATERIALS WHICH ARE TO BE REUSED OR TURNED OVER TO THE OWNER SHALL BE CAREFULLY REMOVED AND STORED IN A CLEAN, DRY AREA. SHOULD THE CONTRACTOR ENCOUNTER SUCH EQUIPMENT WHICH IS NOT IN SATISFACTORY CONDITION FOR REUSE AND NOT IN WORKING ORDER, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY.
9. ELECTRICAL CONTRACTOR SHALL DISCONNECT ELECTRICAL SERVICES TO ALL EQUIPMENT REQUIRING REMOVAL, AND SHALL DISCONNECT AND REMOVE ALL RECEPTACLES AND TELEPHONE OUTLETS FROM PARTITIONS TO BE DEMOLISHED. CONDUIT SHALL BE REMOVED BACK TO THE POINT WHERE IT WILL BE CONCEALED AT THE COMPLETION OF THIS CONTRACT. WIRE AND CABLE SHALL BE REMOVED BACK TO THE FIRST OUTLET BOX, PANELBOARD, CABINET OR TERMINATION POINT WHICH IS TO REMAIN.
10. WHERE NEW WALL OR FLOOR FINISHES CONFLICT WITH EXISTING ELECTRICAL WORK THAT IS TO REMAIN, RELOCATE THE ELECTRICAL WORK INVOLVED OR PROVIDE BOX EXTENSIONS OR SIMILAR DEVICES AND REINSTALL ON THE NEW FINISH.
11. REMOVE ANY ABANDONED CONDUITS, WIRING AND BOXES ENCOUNTERED WITHIN THE PROJECT EXTENTS.

SECTION 16110
RACEWAYS AND BOXES

A. PROJECT INCLUDES
1. ELECTRICAL CONDUIT, TUBING, SURFACE RACEWAYS, BOXES, AND CABINETS FOR ELECTRICAL POWER AND SIGNAL DISTRIBUTION.

B. PRODUCTS
1. WIRING METHODS:
   a. CONCEALED INDOOR WIRING: ZINC-COATED ELECTRICAL METALLIC TUBING FOR SIZES 1/2" THROUGH 4", INTERMEDIATE STEEL CONDUIT FOR SIZES LARGER THAN 4".
   b. EXPOSED INDOOR OR OUTDOOR WIRING: RIGID.
   c. CONCEALED OUTDOOR WIRING: INTERMEDIATE STEEL CONDUIT OR SCHEDULE 80 OR 40 PVC.
   d. UNDERGROUND WIRING, SINGLE RUN: SCHEDULE 80 OR 40 PVC.
   e. UNDERGROUND WIRING, GROUPED: SCHEDULE 80 OR 40 PVC.
   f. CONNECTION TO EQUIPMENT: FLEXIBLE METAL CONDUIT, LIQUID-TIGHT AT EXTERIOR OR IN DAMP LOCATIONS.
2. FITTINGS FOR ELECTRICAL METALLIC TUBING SHALL BE HEXAGONAL, GALVANIZED STEEL, GLAND TYPE, COMPRESSION TYPE AND THREADLESS.
3. RACEWAY ACCESSORY MATERIALS:
   a. CONDUIT BODIES: SHALL COMPLY WITH N.E.C. REQUIREMENTS.
   b. SURFACE RACEWAYS, METALLIC: GALVANIZED STEEL, WITH SNAP-ON COVERS AND IVORY ENAMEL FINISH. SURFACE RACEWAY MAY ONLY BE USED WITH PRIOR, WRITTEN APPROVAL FROM OWNER, ARCHITECT AND ENGINEER.
4. BOXES AND FITTINGS:
   a. CABINET BOXES: CODE GAUGE GALVANIZED SHEET METAL, NEMA 1 -INDOORS, NEMA 3R -OUTDOORS OR IN DAMP LOCATIONS.
   b. PULL AND JUNCTION BOXES: CODE GAUGE GALVANIZED SHEET METAL, NEMA 1 -INDOORS, NEMA 3R -OUTDOORS OR IN DAMP LOCATIONS.
   c. METAL OUTLET, DEVICE AND SMALL WIRING BOXES: SHALL COMPLY WITH UL 514A.

C. EXECUTION
1. PROPERLY SUPPORT ALL CONDUITS WITH STRAPS AND CLAMPS PER THE MOST RECENT, ADOPTED EDITIONS OF THE N.E.C. AND STATE BUILDING CODE. RUN ALL CONDUITS PARALLEL OR PERPENDICULAR TO BUILDING WALLS/SURFACES.
2. MINIMUM CONDUIT SIZE ABOVE SLAB/GRADE SHALL BE 1/2". MINIMUM CONDUIT SIZE IN OR BELOW FLOOR SLAB SHALL BE 3/4".
3. 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, FIRE, WATER, AND DUST. ROOF PENETRATIONS SHALL BE WITHIN THE EQUIPMENT CURB.
4. CONDUITS INSTALLED UNDERGROUND OR IN CONCRETE SHALL HAVE JOINTS MADE WATER-TIGHT BY USING A POLYTETRA-FLUOROETHYLENE TAPE. ALL METALLIC UNDERGROUND CONDUITS SHALL BE THOROUGHLY COATED WITH TWO COATS OF ASPHALTUM OR BITUMASTIC. APPROVED SEALS SHALL BE PROVIDED IN HAZARDOUS LOCATIONS AS REQUIRED BY THE N.E.C.
5. PROVIDE PULLWIRE IN ALL EMPTY CONDUITS.
6. FLEXIBLE METAL CONDUIT SHALL NOT BE USED IN EXPOSED AREAS.

SECTION 16120
WIRES AND CABLES

A. PROJECT INCLUDES
1. WIRES, CABLES, AND CONNECTORS FOR POWER, LIGHTING, SIGNAL, CONTROL AND RELATED SYSTEMS RATED 600 VOLTS AND LESS.

B. PRODUCTS
1. WIRE COMPONENTS:
   a. CONDUCTORS FOR POWER AND LIGHTING CIRCUITS: SOLID CONDUCTORS FOR SIZES #14 AWG THROUGH #8 AWG, STRANDED CONDUCTORS FOR #6 AWG AND LARGER.
   b. CONDUCTOR MATERIAL: COPPER.
   c. INSULATION: THHN/THWN.
   d. JACKETS: FACTORY-APPLIED NYLON OR PVC, COLOR CODED: "BLACK/RED/WHITE" FOR "A" AND "B" PHASES, NEUTRAL, RESPECTIVELY FOR 120/240-VOLT SYSTEM. BRANCH CIRCUIT CONDUCTORS: SHALL NOT BE SMALLER THAN #12 AWG. CONTROL WIRING MAY BE #14 AWG.
   e. NEUTRAL CONDUCTORS: #10 AWG MINIMUM FOR ALL MULTIWIRE BRANCH CIRCUITS.
   f. "MC" TYPE CABLE WITH INTEGRAL, GREEN, INSULATED GROUND CONDUCTOR, MAY ONLY BE UTILIZED TO SERVE BRANCH CIRCUITS SIZED #8 AWG OR SMALLER.
   g. WIRING TO LIGHTING FIXTURES SHALL BE AS REQUIRED BY U.L. LABEL.
2. CABLES:
   a. PORTABLE CORD FOR FLEXIBLE PENDANT LEADS TO OUTLETS AND EQUIPMENT: UL TYPE S.
   b. CONTROL/SIGNAL TRANSMISSION MEDIA: TWISTED PAIR TYPE.
3. CONNECTORS: UL LISTED SOLDERLESS METAL CONNECTORS WITH APPROPRIATE TEMPERATURE RATINGS.

SECTION 16140
WIRING DEVICES

A. PROJECT INCLUDES
1. WIRING DEVICES FOR ELECTRICAL SERVICE.

B. PRODUCTS
1. WIRING DEVICES AND COMPONENTS:
   a. RECEPTACLES: 20-AMP DUPLEX (HUBBELL #5362, OR APPROVED EQUIVALENT).
   b. GROUND-FAULT INTERRUPTER (GFI) RECEPTACLES: FEED-THRU TYPE GROUND-FAULT CIRCUIT INTERRUPTER WITH INTEGRAL DUPLEX RECEPTACLES. (HUBBELL #GF-5362, OR APPROVED EQUIVALENT).
   c. SNAP SWITCHES: SINGLE-POLE, 20 AMPERE (HUBBELL #1221, OR APPROVED EQUIVALENT), THREE-WAY, 20 AMPERE (HUBBELL #1223, OR APPROVED EQUIVALENT).
   d. WALL PLATES: SINGLE AND COMBINATION TYPES, #302 BRUSHED STAINLESS STEEL, UNLESS OTHERWISE NOTED ON DRAWINGS.
   e. COLOR OF ALL DEVICES TO BE GRAY.

C. EXECUTION
1. DUPLEX RECEPTACLES SHALL BE 20-AMP.
2. DEVICE/OUTLET BOXES SHALL NOT BE MOUNTED BACK-TO-BACK IN WALLS.
3. WEATHERPROOF COVERS SHALL PROTECT THE OUTLET WHILE IN USE, EQUIVALENT TO LEVITON #M5999. COVERS SHALL BE EXTRA DEEP, METALLIC WITH OUTLET MOUNTED IN HORIZONTAL ORIENTATION.
4. PROVIDE ALL OUTLETS (INCLUDING TELEPHONE) WITH APPROPRIATE STAINLESS STEEL COVERPLATES.

SECTION 16400
SERVICE AND DISTRIBUTION

A. PROJECT MAY INCLUDE
1. ELECTRICAL SERVICE AND DISTRIBUTION INCLUDING SERVICE ENTRANCE, GROUNDING, PANELBOARDS, OVERCURRENT PROTECTIVE DEVICES, MOTOR CONTROLLERS AND DISCONNECT SWITCHES.

B. PRODUCTS
1. GROUNDING:
   a. GROUNDING EQUIPMENT: COPPER CONDUCTORS, N.E.C. APPROVED CONNECTORS.
   b. GROUNDING ELECTRODES: COPPER-CLAD STEEL GROUND RODS.
   c. GROUNDING SYSTEM: SHALL COMPLY WITH N.E.C. ARTICLE 250.
   d. SERVICE GROUND IMPEDANCE SHALL BE MEASURED, AND SHALL BE 5 OHMS OR LESS. IF UPON MEASUREMENT, SERVICE GROUND READING EXCEEDS 5 OHMS, THEN ADDITIONAL GROUND RODS SHALL BE DRIVEN TO REDUCE READING TO 5 OHMS OR LESS. NOTIFY ENGINEER OF FINAL SERVICE GROUND MEASUREMENT.
2. PANELBOARDS:
   b. PANELBOARDS: WITH OVERCURRENT PROTECTIVE DEVICES, DEAD-FRONT SAFETY ENCLOSURE SUITABLE FOR USE (20" WIDE MINIMUM WITH 4" WIRING GUTTERS AT TOP, SIDES, AND BOTTOM), COPPER BUS, MECHANICAL TYPE MAIN AND NEUTRAL LUGS.
   c. PANELBOARD TYPE: LIGHTING AND APPLIANCE BRANCH CIRCUIT PANELBOARDS, BOLT ON CIRCUIT BREAKERS.
   d. SERIES RATING IS NOT ALLOWED FOR ALL NEW PANELBOARDS, CIRCUIT BREAKERS AND DEVICES.
   e. ACCEPTABLE MANUFACTURERS: SQUARE D, SIEMENS, G.E. OR CUTLER-HAMMER.
3. DISCONNECT SWITCHES:
   a. HEAVY-DUTY TYPE.
   b. NEMA 1 ENCLOSURE - INDOORS, NEMA 3R ENCLOSURE - OUTDOORS AND WET AREAS.
   c. FUSED OR NON-FUSED AS INDICATED ON DRAWINGS.
   d. FUSED SWITCHES SHALL HAVE REJECTION-TYPE FUSE CLIPS.
   e. ALL DISCONNECTS SHALL BE HEAVY-DUTY RATED, AND SHALL HAVE A MECHANICAL INTERLOCK TO PREVENT THE DOOR FROM BEING OPENED, WITHOUT DEFEATING THE INTERLOCK. THE MECHANICAL INTERLOCK SHALL ALSO PREVENT ACTIVATING THE SWITCH WHEN THE DOOR IS OPEN. THE MECHANICAL INTERLOCK SHALL BE DE-FEATABLE BY A SPECIAL TOOL, AND SHALL BE U.L. LISTED AS PART OF THE DISCONNECT.
   f. ACCEPTABLE MANUFACTURERS: SQUARE D, SIEMENS, G.E. OR CUTLER-HAMMER
4. OVERCURRENT PROTECTIVE DEVICES:
   g. OVERCURRENT PROTECTIVE DEVICES: INTEGRAL TO PANELBOARDS OR SWITCHBOARDS.
   h. FUSIBLE SWITCHES: RATING AS INDICATED ON DRAWINGS AND SUITABLE FOR USE.
   i. MOLDED CASE CIRCUIT BREAKERS: BOLT-ON TYPE, AUTOMATIC THERMAL MAGNETIC TYPE CALIBRATED FOR 40-DEGREES C, OR AMBIENT COMPENSATION.
   j. ACCEPTABLE MANUFACTURERS: SQUARE D, SIEMENS, G.E. OR CUTLER-HAMMER.
5. FUSES:
   k. SIZES INDICATED ON DRAWINGS.
   l. CLASS R-5, TIME DELAY, UNLESS OTHERWISE NOTED.
   m. A SET OF 3 SPARE FUSES OF EACH SIZE AND TYPE SHALL BE FURNISHED TO THE OWNER.
   n. ACCEPTABLE MANUFACTURERS: BUSSMAN, GOULD SHAWMUT OR LITTLE FUSE.

C. EXECUTION
1. ALL MULTI-CIRCUIT HOMERUNS SHALL BE PROTECTED WITH A MULTI-POLE, SIMULTANEOUS-TRIP CIRCUIT BREAKER PER N.E.C. 210-4B.
2. ALL TERMINATION'S ON ELECTRICAL GEAR/EQUIPMENT (i.e. PANELBOARDS, DISCONNECT SWITCHES, etc.) SHALL HAVE DUAL RATED 60-DEGREE / 75-DEGREE LUGS/TERMINALS.

SECTION 16515
INTERIOR AND EXTERIOR LIGHTING

A. PROJECT INCLUDES
1. INTERIOR AND EXTERIOR LIGHTING FIXTURES, LAMPS, BALLASTS, EMERGENCY LIGHTING UNITS, EXIT SIGNS AND ACCESSORIES.

B. PRODUCTS
1. INTERIOR AND EXTERIOR LIGHTING COMPONENTS (SEE "LIGHT FIXTURE SCHEDULE"):
   a. FLUORESCENT FIXTURES: BALLASTS, CBM-ETL LABELED, UL 935, ELECTRONIC, HIGH-FREQUENCY, THD LESS THAN OR EQUAL TO 20%.
   b. HIGH INTENSITY DISCHARGE (HID) FIXTURES: BALLASTS, H.P.F. WITH QUIETEST SOUND RATING POSSIBLE.
   c. EXIT SIGNS: L.E.D., SELF-POWERED NI-CAD BATTERY TYPE.
   d. EMERGENCY LIGHTING UNITS: INTEGRAL, NI-CAD BATTERY, L.E.D. LAMPS.
   e. ACRYLIC LENS: A-12, .125" MINIMUM.
   f. FLUORESCENT LAMPS TO BE 3500 KELVIN, 2850 LUMENS, T8, CRI GREATER THAN 80, UNLESS NOTED OTHERWISE ON LIGHT FIXTURE SCHEDULE.
   g. L.E.D. LAMPS SHALL BE MINIMUM OF 85 CRI, 3500 KELVIN IN INTERIOR LIGHT FIXTURES AND 5000 KELVIN IN EXTERIOR LIGHT FIXTURES, UNLESS NOTED OTHERWISE ON LIGHT FIXTURE SCHEDULE.

C. EXECUTION
1. LAY-IN FIXTURES SHALL BE SUSPENDED FROM BUILDING STRUCTURE WITH MINIMUM OF TWO WIRES AT OPPOSITE CORNERS. FIXTURES SHALL ALSO BE ATTACHED TO GRID SYSTEM WITH EARTHQUAKE CLIPS. DO NOT SUPPORT FIXTURES FROM CEILING GRID.
2. SEE ARCHITECTURAL "REFLECTED CEILING PLANS" OR ELECTRICAL LIGHTING PLANS FOR EXACT LOCATIONS OF ALL LIGHT FIXTURES.
3. COORDINATE LIGHT FIXTURE MOUNTING METHODS WITH ARCHITECTURAL FINISHES.
4. COORDINATE LIGHT FIXTURE VOLTAGE WITH VOLTAGE OF LIGHTING CIRCUIT SERVING LIGHT FIXTURE.
5. NO SINGLE-LAMP BALLASTS SHALL BE USED EXCEPT WHERE THE BALLASTS ARE ELECTRONIC HIGH-FREQUENCY TYPE, FIXTURE(S) IS ON AN EMERGENCY CIRCUIT, OR WHERE THERE ISN'T AN AVAILABLE FIXTURE TO PAIR WITH. TANDEM WIRING SHALL BE USED TO AVOID THE USE OF SINGLE-LAMP BALLASTS.
6. PROVIDE INTERNAL OR EXTERNAL DISCONNECTING MEANS FOR EACH FLUORESCENT LUMINAIRE THAT UTILIZES DOUBLE-ENDED LAMPS AND CONTAIN BALLAST(S) THAT CAN BE SERVICED IN PLACE TO COMPLY WITH N.E.C.
7. CATALOG NUMBERS GIVEN ON PLANS OR IN SPECIFICATIONS DENOTE MINIMUM QUALITY AND PERFORMANCE REQUIRED. APPROVED EQUIVALENT EQUIPMENT BY OTHER MANUFACTURERS IS ACCEPTABLE.

SECTION 16915
LIGHTING CONTROL EQUIPMENT

A. PROJECT INCLUDES
1. LIGHTING CONTROL EQUIPMENT:
   a. PROGRAMMABLE LIGHTING CONTROL SYSTEM.

B. PRODUCTS
1. LIGHTING CONTROL EQUIPMENT COMPONENTS:
   a. CONTACTORS AND RELAYS: ELECTRICALLY-OPERATED AND MECHANICALLY-HELD DEVICES, PROVIDE MECHANICALLY-HELD CONTACTORS WITH S.P.D.T. PILOT RELAY.
   b. TIME SWITCHES: SOLID-STATE TYPE TIME SWITCHES, SOLID STATE, WITH S.P.D.T. DRY CONTACTS FOR RELAY OR CONTACTOR CONTROL. TIME SWITCHES SHALL MAINTAIN PROGRAMMING FOR A MINIMUM OF 10hrs. UPON LOSS OF POWER.
   c. SENSORS: SOLID-STATE TYPE PHOTOELECTRIC RELAYS, SOLID STATE, WITH S.P.D.T. DRY CONTACTS FOR RELAY OR CONTACTOR CONTROL, WITH TIME DELAY TO PREVENT FALSE OPERATION.

END OF SPECIFICATIONS

ELECTRICAL DRAWING INDEX

E1	ELECTRICAL SPECIFICATIONS
E2	ELECTRICAL DIAGRAMS, NOTES AND SCHEDULES
E3	ELECTRICAL FLOOR PLAN, PANEL SCHEDULE AND POWER RISER

REVISIONS

NO.	DATE	BY	CHKD	DESCRIPTION

City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture • Planning • Stuff

DATE:
06/01/2021

NAME:
ELECTRICAL SPECIFICATIONS

SHEET:
E1

ELECTRICAL SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
GENERAL	
	CONDUIT RUN CONCEALED IN CEILING OR IN WALL.
	CONDUIT RUN CONCEALED IN FLOOR OR BELOW SLAB/GRADE.
	CONDUIT RUN EXPOSED ON SURFACE.
	CIRCUIT HOME RUN. NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS.
	120/208 VOLT DISTRIBUITION OR BRANCH CIRCUIT PANELBOARD.
J J	FLUSH OR SURFACE-MOUNTED JUNCTION BOX.
POWER	
	DUPLEX, GROUNDING TYPE, 120 VOLT, 20 AMP, RECEPTACLE WITH COVERPLATE. PROVIDE #12 GREEN GROUND JUMPER. MOUNT 18" A.F.F. TO CENTER UNLESS OTHERWISE SHOWN.
	SAME AS DUPLEX RECEPTACLE ABOVE EXCEPT MOUNTED ABOVE COUNTERTOP BACKSPLASH, OR AT 46" A.F.F. TO CENTER WHERE THERE IS NO ASSOCIATED CASEWORK.
WP	SAME AS DUPLEX RECEPTACLE ABOVE EXCEPT MOUNTED IN HEAVY DUTY WEATHERPROOF ENCLOSURE WITH METAL COVER.
GFI	SAME AS DUPLEX RECEPTACLE ABOVE EXCEPT GROUND-FAULT INTERRUPTING TYPE.
EWC	GFI TYPE DUPLEX RECEPTACLE WITH COVERPLATE TO SERVE ELECT. WATER COOLER. RECEPTACLE TO BE MOUNTED WITHIN COOLER CABINET. COORD. LOCATION WITH PLUMB. CONTR. PRIOR TO ROUGH-IN.
	NON-FUSED DISCONNECT SWITCH. SUBSCRIPT INDICATES AMPERAGE AND NUMBER OF POLES.
	FUSED DISCONNECT SWITCH. SUBSCRIPT INDICATES AMPERAGE, NUMBER OF POLES, AND AMPERAGE OF FUSES. ("FPN" - PROVIDE FUSES SIZED PER EQUIPMENT NAMEPLATE)

SYMBOL	DESCRIPTION
CONTROLS	
S	SINGLE POLE, 120/277 VOLT, 20 AMP, RECESSED WALL SWITCH WITH PLATE. MOUNT 46" A.F.F. TO CENTER.
SK	SAME AS SINGLE-POLE SWITCH ABOVE EXCEPT WITH KEYED SWITCH
Soc	OCCUPANCY SENSOR WALL SWITCH, 120/277-VOLT, 1000W, RECESSED WALL-MOUNTED SENSOR WITH COVERPLATE. DUAL TECHNOLOGY PASSIVE INFRARED/ULTRASONIC TECHNOLOGY. AUTOMATIC ON, 30-SEC TO 30-MIN TIME DELAY ADJUSTMENT TO TURN LIGHTS OFF. COLOR TO MATCH REMAINING BUILDING WIRING DEVICES. HUBBELL #AD1277, OR APPROVED EQUIVALENT BY LEVITON OR WATT-STOPPER.
OC	2 CIRCUIT, CEILING-MOUNTED OCCUPANCY SENSOR, LINE-VOLTAGE, 2000 SQ FT, SEMI-RECESSED SENSOR WITH COVERPLATE. DUAL TECHNOLOGY PASSIVE INFRARED/ULTRASONIC TECHNOLOGY. AUTOMATIC ON, 30-SEC TO 30-MIN TIME DELAY ADJUSTMENT TO TURN LIGHTS OFF. WHITE COLOR. HUBBELL #LVDT2000R, OR APPROVED EQUIVALENT BY LEVITON OR WATT-STOPPER.
	CEILING OR WALL MOUNTED EMERGENCY BATTERY PACK. SEE LIGHT FIXTURE SCHEDULE.
	LED STRIP LIGHT. LETTER INDICATES TYPE. SEE LIGHT FIXTURE SCHEDULE.
	LED LIGHTING WITH EMERGENCY BATTERY BACKUP, CEILING OR WALL MOUNTED RESPECTIVELY. LETTER INDICATES TYPE. SEE LIGHT FIXTURE SCHEDULE.
	LED WALL MOUNTED CYLINDER FIXTURE. LETTER INDICATES TYPE. SEE LIGHT FIXTURE.
	EXIT SIGN WITH BATTERY (CONNECTED TO EMERGENCY CIRCUIT BACKED-UP BY GENERATOR). NUMBER OF FACES AND ARROWS AS INDICATED ON DRAWINGS. LETTERS INDICATE TYPE. SEE LIGHT FIXTURE SCHEDULE.

LIGHT FIXTURE SCHEDULE

A	DESCRIPTION:	4' LED SURFACE-MTD. VOLUMETRIC LIGHT. STEEL HOUSING W/WHITE FINISH WHITE OPAL LENS, INTEGRAL ON/OFF OCCUPANCY SENSOR.			LAMP INFO:	NO.: LED	TYPE: 5000LUM/35K	BALLAST TYPE:	ELECTRONIC	NOTE(S):	SEE NOTE 2
	MANUFACTURER:	LITHONIA	CATALOG SERIES:	STL4 LED	EQUIVALENT MANUFACT:		APPROVED EQUIVALENT			TOTAL FIXT. WATTAGE:	53
EM	DESCRIPTION:	EMERGENCY BATTERY PACK LIGHT FIXTURE, POLYCARBONATE HOUSING WITH WHITE FINISH, (2)-LIGHT HEADS, INTEGRAL Ni-Cad BATTERY.			LAMP INFO:	NO.:	TYPE: LED	BALLAST TYPE:	NA	NOTE(S):	MOUNT AT 8'-0"
	MANUFACTURER:	SURE-LITES	CATALOG SERIES:	SEL25	EQUIVALENT MANUFACT:		APPROVED EQUIVALENT			TOTAL FIXT. WATTAGE:	1.0
EA	DESCRIPTION:	QUARTER SPHERE LED WALL PACK. BRONZE FINISH, UL WET LABEL. TYPE 3 DISTRIBUTION. EQUIPPED WITH 90 MINUTE EMERGENCY BATTERY PACK.			LAMP INFO:	NO.:	TYPE: 1600LUM / 40K	BALLAST TYPE:	NA	NOTE(S):	MOUNT AT HEIGHT DIRECTED BY ARCH
	MANUFACTURER:	HUBBELL	CATALOG SERIES:	QSP1 SERIES	EQUIVALENT MANUFACT:		APPROVED EQUIVALENT			TOTAL FIXT. WATTAGE:	21

LIGHT FIXTURE SCHEDULE NOTES

1. VOLTAGES OF LIGHT FIXTURES SHALL BE COORDINATED WITH LIGHTING CIRCUIT TO WHICH FIXTURE IS CONNECTED.
2. SURFACE MOUNTED TO CEILING. COORDINATE LOCATIONS OF FIXTURES WITH ARCHITECTURAL LIGHTING PLAN.
3. COORDINATE MOUNTING REQUIREMENTS OF ALL FIXTURES WITH ARCHITECTURAL PLANS AND FINISH SCHEDULES.
4. FLANGES AND TRIMS SHALL MATCH CEILING TYPES.
5. ALL EMERGENCY LIGHTS, EXIT SIGNS AND NIGHT LIGHTS SHALL BE CONNECTED TO THE UNSWITCHED LEG OF THE NEAREST LIGHTING CIRCUIT SERVING THAT SAME AREA/ROOM.

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (ELECTRICAL DESIGN)

ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE

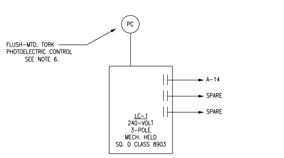
ENERGY CODE: ■ PRESCRIPTIVE ☐ PERFORMANCE
ASHRAE 90.1: ☐ PRESCRIPTIVE ☐ PERFORMANCE

LIGHTING SHEDULE

LAMP TYPE REQUIRED IN FIXTURE — SEE LIGHT FIXTURE SCHEDULE
NUMBER OF LAMPS IN FIXTURE
BALLAST TYPE USED IN FIXTURE
NUMBER OF BALLASTS IN FIXTURE
TOTAL WATTAGE PER FIXTURE
TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED: 477 W vs. 614 W
TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED (TRADABLE): 42 W vs. 750 W
TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED (NON-TRADABLE): N.A

ADDITIONAL EFFICIENCY PACKAGE OPTIONS

- ☐ C406.2 MORE EFFICIENT HVAC EQUIPMENT PERFORMANCE
- ■ C406.3 REDUCED LIGHTING POWER DENSITY
- ☐ C406.4 ENHANCED DIGITAL LIGHTING CONTROLS
- ☐ C406.5 ON-SITE RENEWABLE ENERGY
- ☐ C406.6 DEDICATED OUTDOOR AIR SYSTEM
- ☐ C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING



1 LIGHTING CONTACTOR DIAGRAM
SCALE: N.T.S.

NOTES:
1. PROVIDE LABEL ON EACH CONTACTOR INDICATING CIRCUITS WIRED THRU THIS CONTACTOR AND CIRCUIT NUMBERS
2. PHOTOCELL TURNS ON ALL CIRCUITS IN LC-1.
3. PHOTOCELL DOES NOT ALLOW ANY CIRCUITS TO BE ON DURING DAYLIGHT HOURS.
4. CIRCUIT "A-13" FOR LIGHTING CONTROLS.
5. PHOTOCELL SHALL BE FLUSH-MOUNTED TYPE WITH COVERPLATE MOUNTED ON ROOF AND AIMED NORTH. TORK #3010, OR APPROVED EQUIVALENT.
6. PROVIDE WITH MANUAL OVER RIDE SWITCH IN LOCKABLE COVER ADJACENT TO CONTACTOR, FOR MANUAL OVER RIDE CONTROL.

ELECTRICAL EQUIPMENT CONNECTION SCHEDULE

CONNECTION DESIGNATION	LOAD DESCRIPTION	VOLTS /PH	LOAD INFORMATION HP	LOAD	MCA	MOCP	DISCONNECT INFORMATION FURN. BY	INSTALLED BY	TYPE	SWITCH RATING	POLE	FUSE OR TRIP RATING	NEMA ENCL TYPE	CIRCUIT ID	CONNECTION NOTES	CONNECTION DESIGNATION
EH-1	ELECTRIC HEATER	120/1		1.5 KVA			ELEC. CNTR.	ELEC. CNTR.	MTR RATED SW	20	1	20	1	A-16	1	EH-1
EH-2	ELECTRIC HEATER	240/1		3.0 KVA			ELEC. CNTR.	ELEC. CNTR.	MTR RATED SW	20	2	20	1	SEE PLANS	2	EH-2
AHU-1, AHU-2 / HP-1	AIR HANDLER / HEAT PUMP	240/1		3 KVA	17	20	ELEC. CNTR.	ELEC. CNTR.	FPN	30	2	20	3R	A-2	2,4	AHU-1, AHU-2 / HP-1
EF-1	EXHAUST FAN	120/1		129 W			ELEC. CNTR.	ELEC. CNTR.	MTR RATED SW	20	1	-	3R	A-1	1,3	EF-1
EF-2	EXHAUST FAN	120/1		135 W			ELEC. CNTR.	ELEC. CNTR.	MTR RATED SW	20	1		3R	A-1	1,3	EF-2
EWH-1	WATER HEATER	120/1		3.0 KVA			ELEC. CNTR.	ELEC. CNTR.	NON-FUSED		1		1	A-15	1	EWH-1

NOTES:
1. PROVIDE A SINGLE-POLE, MOTOR-RATED, TOGGLE SWITCH WITH OVERLOAD HEATERS SIZED PER EQUIPMENT NAMEPLATE, TO SERVE AS LOCAL DISCONNECT SWITCH. PROVIDE WEATHERPROOF ENCLOSURE WHERE LOCATED OUTDOORS OR IN WET AREA.
2. WIRE TO "LINE-SIDE" OF INTEGRAL, N.E.C.-COMPLIANT DISCONNECT SWITCH PROVIDED WITH UNIT.
3. FAN TO BE CONNECTED TO CIRCUIT SERVING LIGHTS IN SAME ROOM. COORDINATE CONTROLS WITH MC.
4. POWER FOR INDOOR AIR HANDLING UNIT IS FED FROM RESPECTIVE OUTDOOR CONDENSING UNIT. EXTEND POWER CIRCUIT FROM CONDENSING UNIT TO LINE-SIDE OF INTEGRAL, N.E.C.-COMPLIANT DISCONNECT SWITCH PROVIDED IN AIR HANDLING UNIT BY MANUFACTURER. FIELD VERIFY CONNECTIONS TO EQUIPMENT WITH MECH. CONTRACTOR PRIOR TO ROUGH-IN.

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NC FIRM LICENCE NUMBER: C-0898

REVISIONS NO.	DATE	BY	CHKED	DESCRIPTION

NORTH CAROLINA PROFESSIONAL SEAL 33160 ENGINEER BRIAN D. WINKLER 6/1/21

Concord NORTH CAROLINA PARKS & RECREATION

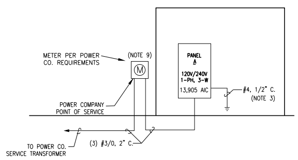
City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

citizen design
2408 Commonwealth Ave. Charlotte, NC 28205
Architecture • Planning • Stuff

DATE: 06/01/2021

NAME: ELECTRICAL DIAGRAMS, NOTES AND SCHEDULES

SHEET: E2



2 POWER RISER DIAGRAM

N.T.S

NOTES:

1. ALL WIRE SHALL BE THHN/THWN COPPER.
2. SERIES RATING IS NOT ALLOWED.
3. EXTEND SERVICE GROUNDING ELECTRODE CONDUCTOR TO DRIVEN GROUND RODS, BUILDING STEEL FRAMING, METAL UNDERGROUND WATER MAIN PIPING (WITHIN 5' OF ENTERING BUILDING), AND CONCRETE-ENCASED ELECTRODE. (SEE 3/E3).
4. ALL MULTI-CIRCUIT HOMERUNS SHALL BE PROTECTED WITH A MULTI-POLE, SIMULTANEOUS-TRIP CIRCUIT BREAKER PER N.E.C. 210.4B.
5. A.I.C. RATINGS SHOWN ON PANELBOARD SCHEDULES ARE THE MINIMUM ALLOWED RATINGS. CONTRACTOR SHALL CONTACT ELECTRIC UTILITY COMPANY TO OBTAIN MAXIMUM AVAILABLE FAULT CURRENT AT THE POWER SERVICE TRANSFORMER. A.I.C. RATINGS OF ALL PANELBOARDS SHALL EQUAL OR EXCEED THE FAULT CURRENT INDICATED ON THE RISER DIAGRAM OR PANELBOARD SCHEDULES.
6. UNLESS NOTED OTHERWISE, PROVIDE GREEN EQUIPMENT GROUNDING CONDUCTOR IN ALL CIRCUITS. GROUNDING CONDUCTORS SHALL BE SIZED PER N.E.C. ARTICLE 250.
7. ALL TERMINATION'S ON ELECTRICAL GEAR/EQUIPMENT (i.e. PANELBOARDS, DISCONNECT SWITCHES, etc.) SHALL HAVE DUAL RATED 60-DEGREE / 75-DEGREE LUGS/TERMINALS.
8. PROVIDE APPROPRIATE ARC-FLASH HAZARD LABELING ON ALL ELECTRICAL GEAR INDICATING HAZARD LEVEL PRESENT.
9. ALL CONDUITS ENTERING OR LEAVING METER SHALL BE CONCEALED WITHIN WALL. ANY CONDUITS THAT CAN NOT BE CONCEALED (i.e. SERVICE FEEDER CONDUIT) SHALL BE INSTALLED IN RIGID METAL CONDUIT.

A

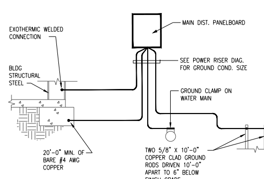
MAIN TYPE: **MAIN BREAKER** — VOLTAGE (L-L): **240** — PHASE: **1**
AMPERE RATING: **200** — VOLTAGE (L-N): **120** — WIRE: **3**
LUG OPTIONS: — BUS RTG (AMPS): **200** — MIN. KAIC: **22**
REMARKS: **NEW PANEL** — MOUNTING: **SURFACE**

CCT BRKR NO.	AMPS	P	LOAD DESCRIPTION	COM.	WIRE SIZE	LOAD KVA	PHASE A	PHASE B	LOAD KVA	WIRE SIZE	COM.	LOAD DESCRIPTION	P	AMPS	CCT BRKR NO.
1	20	1	LIGHTS		12	0.4	1.8		1.4	12	C	HP-1 / AHU-1/AHU-2	2	20	2
3	20	2	EH-2	B	12	1.5		2.9	1.4						
						1.5	3.0		1.5	12	B	EH-2	2	20	6
7	20	1	REC-GENERAL		12	1.4		2.9	1.5						
9	20	1	SPARE				1.0		1.0	12		HAND DRYER	1	20	10
11	20	1	SPARE					1.0	1.0	12		HAND DRYER	1	20	12
13	20	1	LC-1 (LTG CONTROL)		12	0.1	0.2		0.1	12		OUTDOOR LIGHTS	1	20	14
15	20	1	EH-1		12	1.5		1.5				SPARE	1	20	16
17	20	1	SPARE				3.0		3.0	8		EWH-1	1	35	18
19			SPACE ONLY					0.0				SPACE ONLY			20
21			SPACE ONLY				0.0					SPACE ONLY			22
23			SPACE ONLY					0.0				SPACE ONLY			24
25			SPACE ONLY				0.0					SPACE ONLY			26
27			SPACE ONLY					0.0				SPACE ONLY			28
28			SPACE ONLY					0.0				SPACE ONLY			30
							9.0	8.3							

NEC ARTICLE 220 LOAD CATEGORY:	CONN KVA	DEMD FACT	DEMD KVA	DEMD KVA	DEMD FACT	CONN KVA	NEC ARTICLE 220 LOAD CATEGORY:
TOTAL INTERIOR LIGHTS	0.0	1.20	0.0				
I ENERGY CODE REQ'D.				0.0	1.00	0.0	MISC. HVAC S
N NON-ENER. CODE REQ'D.				0.0	1.00	0.0	MOTORS M
E EXTERIOR LIGHTS	0.1	1.25	0.1	0.0	0.25	0.0	LARGEST MOTOR LM
R RECEPTACLES (FIRST 10)	1.4	1.00	1.4	0.0	1.00	0.0	WATER HEATERS W
(REMAINDER)	0.0	0.50	0.0	0.0	1.00	0.0	ELEVATORS L
P HVAC PACKAGED UNITS	0.0	1.00	0.0	0.0	1.00	0.0	KITCHEN EQUIPMENT K
H HEAT PUMPS / COND. UNITS	2.8	1.00	2.8			0	NO. OF UNITS OF EQUIP.
A AIR HANDLING UNITS	0.0	1.00	0.0	0.0	1.25	0.0	COMPUTER LOADS O
X CHILLER / COOLING TOWER	0.0	1.00	0.0	0.0	1.00	0.0	SHOP EQUIPMENT Q
T ELECTRIC HEAT	7.5	1.00	7.5	2.5	1.00	2.5	MISC. LOADS C
V VAV BOXES / FAN BOXES	0.0	1.00	0.0	0.0	1.00	0.0	SYSTEM FURNITURE Z

NOTE:
- A PANEL SHALL BE UL SERVICE ENTRANCE RATED AND LISTED.
- B LOAD SHOWN IS PART OF BASE BID. ALTERNATE BID THIS BREAKER IS SPARE.
- C THIS LOAD IS PART OF ADD ALTERNATE BID, UNDER BASE BID THIS BREAKER IS SPARE.

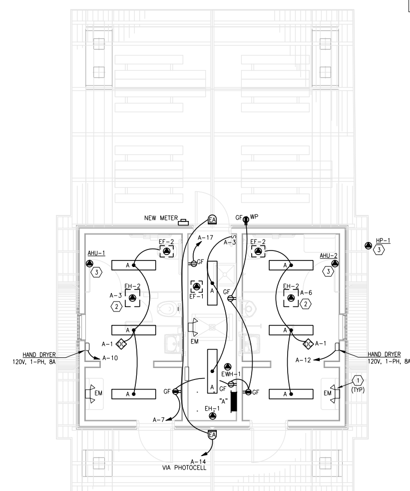
CONNECTED KVA:	14.3
CONNECTED AMPS:	59.6
DEMAND AMPS:	59.7



3 SERVICE GROUNDING DIAGRAM

N.T.S

NOTE:
EXTEND GROUNDING ELECTRODE CONDUCTOR TO EACH OF THE TERMINATION POINTS SHOWN ABOVE, WHICH ARE AVAILABLE ON THIS SITE/BUILDING.



1 FLOOR PLAN -LIGHTING/POWER

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

ELECTRICAL LIGHTING/POWER NOTES

1. ALL EMERGENCY LIGHTS, EXIT SIGNS AND NIGHT LIGHTS SHALL BE CONNECTED TO THE UNSWITCHED LEG OF THE NEAREST LIGHTING CIRCUIT SERVING THAT SAME AREA/ROOM.
2. THIS IS PART OF BASE BID. UNDER THE ADDITIVE ALTERNATE BID, THIS LOAD AND ASSOCIATED BRANCH CIRCUIT IS DELETED.
3. THIS IS PART OF ADDITIVE ALTERNATE BID.

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citizen design
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Charlotte, NC 28205
Architecture • Planning • Stuff

DATE:
06/01/2021

NAME:
ELECT. FLOOR PLAN, PANEL SCHEDULE AND POWER RISER

SHEET:
E3

PLUMBING GENERAL NOTES

GENERAL REQUIREMENTS:

1. PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE NORTH CAROLINA STATE PLUMBING CODE AND WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
2. GENERAL AND SPECIAL CONDITIONS ARE HEREBY MADE AN INTEGRAL PART OF THE PLUMBING SPECIFICATIONS INSOFAR AS THE GENERAL AND SPECIAL CONDITIONS ARE APPLICABLE TO THE PLUMBING WORK, UNLESS OTHERWISE SPECIFIED.
3. SCOPE: PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL PLUMBING SYSTEMS IN ACCORDANCE WITH ALL APPLICABLE CODES.
4. 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.
5. WARRANTY: PROVIDE A ONE YEAR WARRANTY, FROM THE DATE OF ACCEPTANCE OF WORK BY THE OWNER, FOR ALL PLUMBING MATERIALS AND EQUIPMENT.
6. 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.
7. CUT WALLS, FLOORS AND CEILINGS AS REQUIRED FOR INSTALLATION OF PLUMBING WORK. ALL CUTTING SHALL BE NEAT TO A MINIMUM. PATCH AND FINISH SURFACES TO MATCH ADJOINING SURFACES.
8. PLUMBING PLANS SHALL NOT BE SCALED. REFERENCE THE ARCHITECTURAL PLANS FOR ALL LOCATIONS OF PLUMBING FIXTURES, WALLS, DOORS, WINDOWS, ETC.
9. PLUMBING PIPING 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.
10. 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 GENERAL CONTRACTOR.
11. DO NOT INSTALL PLUMBING PIPING IN AREAS SUBJECT TO FREEZING TEMPERATURES. INSTALL PLUMBING PIPING SHOWN IN EXTERIOR WALLS ON THE CONDITIONED SIDE OF THE WALL INSULATION.
12. PROVIDE NON-CONDUCTING DIELECTRIC UNIONS WHENEVER CONNECTING DISSIMILAR METALS.
13. ATTACH HANGERS TO STRUCTURE.
14. PROVIDE ACCESS DOORS FOR VALVES, WATER HAMMER ARRESTORS, TRAP PRIMERS, ETC. CONCEALED IN MASONRY WALLS, DRYWARD WALLS AND/OR CEILINGS THAT WILL REQUIRE MAINTENANCE ACCESS.
15. 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, STORM DRAIN SYSTEM, NATURAL GAS SYSTEM

PLUMBING FIXTURES AND EQUIPMENT:

1. PROVIDE COMPLETE PLUMBING FIXTURES AND EQUIPMENT. INCLUDE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAIL PIECES, ESCUTCHEONS, ETC.
2. PLUMBING FIXTURES AND EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS.
3. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SUBSTITUTIONS TO SPECIFIED PLUMBING FIXTURES AND EQUIPMENT INCLUDING BUT NOT LIMITED TO, PROVIDING MAINTENANCE ACCESS CLEARANCE, PIPING, ELECTRICAL, REPLACEMENT OF OTHER SYSTEM 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:

1. 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:

1. 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.
2. 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.

WATER SYSTEM DRAIN DOWN

TYPICAL STEPS TO DRAIN A WATER SYSTEM

NOTE – SOME STEPS MAY NOT BE NECESSARY DEPENDING ON EQUIPMENT INSTALLED. THIS LIST IS PROVIDED AS AN EXAMPLE. PC SHALL USE INDUSTRY APPROVED METHODS, AND SHALL PROVIDE ANY VALVES, FITTINGS, OR OTHER APPURTENANCES NECESSARY TO ACHIEVE DRAIN-DOWN FOR FREEZE PROTECTION.

1. TURN OFF ELECTRICITY TO THE WATER PUMP SYSTEM
2. TURN OFF ELECTRICITY TO WATER HEATER IF ELECTRIC OR TURN OFF GAS SUPPLY IF THE WATER HEATER IS GAS-FIRED.
3. SHUT OFF WATER SYSTEMS BY SHUTTING THE VALVE ON THE MUNICIPAL WATER.
4. DRAIN THE PRESSURE TANK
5. OPEN ALL FAUCETS
6. DISCONNECT HOSES FROM EXTERIOR FAUCETS
7. OPEN DRAIN VALVE CLOSEST TO THE MAIN SHUT-OFF VALVE SO WATER WILL DRAIN OUT TO CLEAR THE SHUT-OFF VALVE
8. DRAIN HOLDING TANK
9. FLUSH ALL TOILETS AND DIP ALL WATER OUT OF THE FLUSH TANK (OR PUMP IT OUT USING A HAND BILGE PUMP)
10. DRAIN ALL FLEXIBLE SPRAY HOSES IN SHOWERS AND SINKS
11. OPEN DIVERTER VALVE TO SHOWER HEAD SO WATER DRAINS OUT
12. DRAIN WATER SOFTENERS SO WATER WILL DRAIN BACK FROM SOFT WATER PIPES AND CONTROLS. (DRINK TANK PROBABLY WILL NOT FREEZE)
13. DRAIN ANY OTHER WATER TREATMENT EQUIPMENT – SUCH AS FILTERS
14. DRAIN WATER HEATERS
15. BLOW OUT ANY REMAINING WATER FROM THE SYSTEM USING AN AIR COMPRESSOR.

PLUMBING MATERIAL SPECIFICATIONS

DOMESTIC WATER PIPING:

1. DOMESTIC WATER PIPING AND JOINTS BELOW GRADE: PROVIDE TYPE 'K' SOFT ANNEALED SEAMLESS COPPER TUBING (ASTM B 88) WITH NO JOINTS FOR PIPING 2½" AND SMALLER.
2. 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 1" AND SMALLER SHALL BE LEAD FREE 95-5 TIN/SILVER SOLDER JOINTS (ASTM B 32). JOINTS 1¼" AND LARGER SHALL BE BCUP SILVER/PHOSPHORUS/COPPER BRAZED JOINTS (AWS A5.8) OR PROVIDE COPPER PIPE AND FITTINGS AS SPECIFIED ABOVE EXCEPT WITH GROOVED ENDS (ASTM B 88, ASME B16.18) AND JOINTS UTILIZING GROOVED MECHANICAL COUPLINGS MEETING (ASTM F1476).
3. STERILIZE THE DOMESTIC WATER SYSTEM IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION'S SPECIFICATIONS AND LOCAL HEALTH DEPARTMENT REGULATIONS.
4. INSULATE DOMESTIC WATER PIPING ABOVE GRADE (EXCEPT EXPOSED CONNECTIONS TO PLUMBING FIXTURES) WITH GLASS FIBER INSULATION HAVING A VAPOR BARRIER AND JACKET. PIPE INSULATION SHALL HAVE A CONDUCTIVITY NOT EXCEEDING 0.27 BTUH x SQ. FT. FOLLOW SCHEDULE BELOW.

SERVICE TYPE	PIPE SIZES	INSULATION THICKNESS
DOMESTIC HOT WATER & CIRCULATION	½" – 1¼"	1"
DOMESTIC COLD WATER	½" – 1¼"	½"
DOMESTIC COLD WATER	1½" – 4"	1"

5. 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.
6. PROVIDE FULL PORT, BALL TYPE SHUT-OFF VALVES AND INSTALL IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.
7. 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.
8. 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 LOW POINTS.

SANITARY WASTE / VENT AND STORM PIPING:

1. SANITARY WASTE AND STORM DRAIN 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 (CISPI 310), OR SOLID CORE SCHEDULE 40 PVC (ASTM-2665).
2. SANITARY WASTE/VENT PIPING AND STORM DRAIN PIPING ABOVE GRADE: PROVIDE SERVICE WEIGHT CAST IRON NO-HUB PIPE AND FITTINGS (CISPI 301) WITH NEOPRENE GASKET AND STAINLESS STEEL CLAMP JOINTS (CISPI 310), OR SOLID CORE SCHEDULE 40 PVC (ASTM-2665).
3. SLOPE SANITARY WASTE AND STORM DRAIN PIPING AT ¼" PER FOOT MINIMUM FOR PIPING 2½" AND SMALLER AND ⅛" PER FOOT MINIMUM FOR PIPING 3" AND LARGER UNLESS NOTED OTHERWISE. SLOPE ALL KITCHEN WASTE PIPING AT ½" PER FOOT MINIMUM. COORDINATE ALL INVERT ELEVATIONS PRIOR TO CONSTRUCTION.
4. PROVIDE CLEAN-OUTS AT THE BASE OF SANITARY WASTE STACKS AND STORM DRAIN RISERS 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.
5. 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"x8" CONCRETE PAD.
6. WHERE WASTE PIPING IS EXPOSED IN REST ROOM AREAS, PROVIDE CHROME PLATED BRASS PIPING, REMOVABLE P-TRAPS, MATCHING STOPS AND ESCUTCHEONS FOR ALL LAVATORIES.
7. INSULATE ROOF DRAIN BODIES AND HORIZONTAL PRIMARY AND SECONDARY STORM DRAIN PIPING ABOVE GRADE WITH 1" THICK GLASS FIBER INSULATION WITH VAPOR BARRIER AND JACKET.
8. 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.

CUTTING AND PATCHING:

1. ALL CUTTING AND PATCHING OF SLAB, ROOF, OR OTHER BUILDING COMPONENTS TO BE BY THE GENERAL CONTRACTOR.

PLUMBING FIXTURE CONNECTION SCHEDULE

LABEL	FIXTURE NAME	COLD WATER	HOT WATER	WASTE	VENT
P-1	WATER CLOSET	1"	----	4"	2"
P-1A	WATER CLOSET (ADA)	1"	----	4"	2"
P-2A	URINAL (ADA)	1"	----	2"	1-1/2"
P-3A	LAVATORY – WALL HUNG (ADA)	1/2"	1/2"	1-1/2"	1-1/2"
P-4	JANITOR SERVICE SINK	1/2"	1/2"	3"	1-1/2"
WH	WALL HYDRANT	3/4"	----	----	----
HB	HOSE BIBB	----	3/4"	----	----

WATER HEATER

EWH-1 – ELECTRIC WATER HEATER
A.O SMITH DEL 20, 20 GALLON CAPACITY, 3.0 KW @ 120V, 14, 21.0 GPH RECOVERY @54°F RISE. 22 INCHES TALL, 22 INCHES IN DIAMETER. TOTAL WEIGHT IS 73 LBS (TANK) + 167 LBS (WATER) = 240 LBS TOTAL. WATER HEATERS SHALL HAVE COMBINATION TEMPERATURE AND PRESSURE RELIEF VALVE, MAGNESIUM ANODE, GLASS-LINED, 5 YEAR WARRANTY ON TANK, STANDARD WARRANTY ON ACCESSORIES, SEE PLANS FOR SIZES. PROVIDE A 2 GALLON BLADDER TYPE EXPANSION TANK ON WATER HEATERS ABOVE 3 GALLON STORAGE.

PLUMBING DRAWING INDEX

PLUMBING MATERIAL SCHEDULES

SHOP DRAWINGS
1. SHOP DRAWINGS SHALL BE SUBMITTED ON THE FOLLOWING ITEMS: CLEANOUTS, DRAINS, PLUMBING FIXTURES, BRASS, TRIM, FIXTURE CARRIERS, DOMESTIC WASTE AND VENT PIPING ABOVE GRADE, DOMESTIC WASTE PIPING BELOW GRADE, COUPLINGS AND DOMESTIC WATER PIPING.

CLEANOUTS – CAST IRON PIPE
1. EXPOSED PIPE (INSIDE SPACES AND CEILING PLENUMS): CAST IRON CLEANOUT TEE WITH BRASS PLUG.
2. IN WALLS: (WCO) CAST IRON FERRULE, CENTER TAPPED BRONZE PLUG WITH STAINLESS STEEL COVER NOT TO EXCEED 8" IN DIAMETER MADE W-8550/W-8480R, EQUAL: ZURN Z-1440-1.
3. IN VINYL COMPOSITION AND QUARRY TILE FLOORS: (FCO) SATIN NIKALOY SCORIATED COVER AND RIM, CLEANOUT PLUG WITH LEAD SEAL, CAST IRON BODY, CAULKED OUTLET AND LEVELING SCREWS. MADE W-60005, EQUAL: ZURN Z-1440T.
4. IN CARPET FLOORS: (FCO) SAME AS FOR TILE FLOORS ABOVE PLUS CARPET MARKER.
5. OUTDOOR OR GRADE CLEANOUTS: (GCO) TRACTOR GRATE, NIKALOY SCORIATED COVER, C.O. PLUG WITH LEAD SEAL, CAST IRON BODY, CAULKED OUTLET AND ADJUSTABLE HEAD. SET IN 18"x18"x18" CONCRETE PAD. MADE W-60002-1, EQUAL: ZURN ZN-1400-HD.
6. ALL CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS THE PIPE UP TO 4" PIPES AND SHALL BE IN 4" IN SIZE FOR LARGER PIPING.

DRAINS – ALL FLOOR DRAINS TO HAVE TRAP PRIMERS PER LOCAL CODE
1. ALL FLOOR DRAINS EXCEPT WHERE INSTALLED IN SLAB-ON-GRADE SHALL BE FLASHED WITH 24"x24", 3 lb. PER SQ. FT. SHEET LEAD EMBEDDED IN FLOOR CONSTRUCTION.

PLUMBING FIXTURES – GENERAL
1. ALL LIKE FIXTURES AND TRIM SHALL BE OF ONE MANUFACTURER.
2. PROVIDE STOPS ON WATER SUPPLIES TO ALL PLUMBING FIXTURES, INCLUDING FIXTURES NOT FURNISHED UNDER THIS SECTION OF THE WORK, AND ALL WALL HYDRANTS. STOPS ON LAVATORY SUPPLIES SHALL BE CHROME PLATED.
3. PLUMBING FIXTURES SHALL BE AMERICAN STANDARD, KOHLER OR CRANE. FLUSH VALVES TO BE ZURN OR EQUAL BY SLOAN.
4. ALL FIXTURES SHALL BE GRADE 'A'. NAME AND TRADEMARK OF MANUFACTURER SHALL BE PRINTED OR PRESSED ON ALL FIXTURES AND A LABEL WHICH CANNOT BE REMOVED WITHOUT DESTROYING IT, CONTAINING THE MANUFACTURER'S NAME OR TRADEMARK AND THE QUALITY OR CLASS OF THE FIXTURE SHALL BE AFFIXED TO ALL FIXTURES AND NOT REMOVED UNTIL AFTER THE WORK HAS BEEN ACCEPTED.
5. EACH WALL HUNG FIXTURE SHALL BE HUNG BY MEANS OF WALL HANGERS, WHICH SHALL BE ANCHORED TO THE PARTITIONS BY MEANS OF 3/8 INCH TOGGLE BOLTS.

PLUMBING FIXTURES – CONNECTIONS
THE FOLLOWING MATERIALS SHALL BE USED TO CONNECT EACH PLUMBING FIXTURE TO THE DRAINAGE SYSTEM:
1. WATER CLOSET: (CONNECTION INCLUDED IN FIXTURE CARRIER).
2. LAVATORY: COPPER DWV DRAINAGE PIPE WITH WROUGHT COPPER DWV DRAINAGE FITTINGS. (EXPOSED CHROME PLATED). PROVIDE WHITE ADA INSULATION KITS ON ALL ADA AND GROUP LAVATORIES, TRUEBRO, INC., HANDI LAV-GUARD OR EQUAL.

PLUMBING FIXTURES – EXECUTION
1. ALL SUPPLIES AND WASTE CONNECTIONS AND FIXTURE ANCHORING SHALL BE FIRMLY SECURED INSIDE WALL AND CHASES. SHOULD ANY SUPPLIAE BE DETECTED DURING OR AFTER INSTALLATION, THE PLUMBING SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE CORRECTION. NO PORTION OF THE WATER PIPING MAY HAVE DISSIMILAR METALS SECURING IT.
2. NO GALVANIZED PIPE WILL BE PERMITTED IN ANY PORTION OF THE WATER SYSTEM WHERE RIGID SCREWED PIPE IS REQUIRED. USE RED BRASS.
3. ALL WATER RUNOUTS TO FIXTURES SHALL BE SECURED INSIDE PLUMBING CHASE TO RIGID BUILDING STRUCTURE OR TO RIGID PLUMBING DRAINAGE PIPING.
4. FILL VOID UNDER FAUCETS ON LAVATORIES AND SINKS WITH PLUMBER'S PUTTY TO PREVENT WATER FROM DRAINING THROUGH FIXTURE HOLES.
5. CAULK FIXTURES TO WALL.

NOTE:
SOME OF THE FIXTURES LISTED ABOVE MAY NOT BE USED ON THIS PROJECT – SEE PLANS FOR EXACT FIXTURES USED.

PLUMBING FIXTURE SCHEDULE

P-1 – WATER CLOSET (WALL MOUNTED, ADA COMPLIANT)
AMERICAN STANDARD 2257.103, EQUAL: KOHLER K-4330, CRANE 3446; 1.6 GPF, ELONGATED BOWL, SIPHON JET, VITREOUS CHINA, ZURN Z-6000-WS1-1EHC FLUSH VALVE MOUNTED 24" ABOVE WATER CLOSET, WITH ZURN WALL BRACE; CHURCH 9500ST OPEN FRONT SEAT, WHITE SOLID PLASTIC; ZURN HEAVY DUTY 21202-N SERIES CARRIER FOR WALL MOUNTING FIXTURE RIM 15" ABOVE FINISH FLOOR (VERTICAL DISCHARGE CARRIER)

P-1A – WATER CLOSET (WALL MOUNTED, ADA COMPLIANT)
AMERICAN STANDARD 2257.103, EQUAL: KOHLER K-4330, CRANE 3446; 1.6 GPF, ELONGATED BOWL, SIPHON JET, VITREOUS CHINA, ZURN Z-6000-WS1-1EHC FLUSH VALVE MOUNTED 11" ABOVE WATER CLOSET; CHURCH 9500ST OPEN FRONT SEAT, WHITE SOLID PLASTIC; ZURN HEAVY DUTY 21202-N SERIES CARRIER FOR WALL MOUNTING FIXTURE RIM 18" ABOVE FINISH FLOOR (VERTICAL DISCHARGE CARRIER)

P-2A – URINAL (ADA COMPLIANT)
AMERICAN STANDARD 6550.501, EQUAL: KOHLER K-5016T, CRANE 7309; SIPHON JET, VITREOUS CHINA; ZURN Z-6003-WS1-1EHC FLUSH VALVE; (ROUGH WASTE OUTLET AT 17"); ZURN Z-1222 FLOOR MOUNT PLATE TYPE URINAL CARRIER WITH BEARING PLATE. PROVIDE MOUNTING HEIGHT REQUIRED FOR HANDICAPPED.

P-3A – LAVATORY (ADA COMPLIANT)
KOHLER K-2867; 20"x18" ENAMELED CAST IRON, WALL HUNG LAVATORY, CHICAGO FAUCETS MODEL 802-665ABCP DECK-MOUNTED 4" FIXED CENTERS HOT AND COLD WATER MECHANICALLY METERED MIXING SINK FAUCET. CHROME-PLATED SOLID BRASS CONSTRUCTION. 2.2 GPM PRESSURE COMPENSATING AERATOR. 1.75" METAL, VANDAL-PROOF PUSH HANDLES WITH BLUE AND RED INDEX BUTTONS. WHP CSEL-CLOSING, AUTO-TIMED METERING CARTERIDGE, ADJUSTABLE RUN TIME 2-15 SECONDS. PUSH TO OPEN, 0.20 GALLONS PER CYCLE. PROVIDE GRID DRAIN. PROVIDE MOUNTING HEIGHT REQUIRED FOR HANDICAPPED. PROVIDE FLOOR CARRIER WITH CONCEALED HORIZONTAL ARMS. COORDINATE ANCHOR BOLT REQUIREMENTS WITH KOHLER INSTALLATION DATA. INSTALL WITH STAINLESS STEEL FASTENING HARDWARE.

P-4 – JANITOR'S MOP SERVICE BASIN
FIAT 750-100, 24"x24"x12" TERRAZZO BASIN WITH 3" CAST BRASS DRAIN AND STAINLESS STEEL STRAINER; SERVICE FAUCET #830-AA WITH VACUUM BREAKER; INTEGRAL STOPS; #832-AA-307 HOSE AND HOSE BRACKET. MUST BE INSTALLED ON A 1/2" LAYER OF MORTAR.

WH – WALL HYDRANT
MIFAB SERIES MH1-20 ENCASED, NON-FREEZE WALL HYDRANT. CONTRACTOR SHALL ORDER THE LENGTH AS NEEDED. ASSE 1019-B CERTIFIED EXPOSED-TYPE, SELF DRAINING, NON-FREEZE WALL HYDRANT WITH ASSE 1011 APPROVED ANTI-SIPHON AND VANDAL-RESISTANT INTEGRAL VACUUM BREAKER WITH 3/4" MALE HOSE CONNECTION. HYDRANT IS ASSEMBLED COMPLETE WITH NEOPRENE PLUNGER FLOW AND DRAIN CONTROL, HARDENED BRONZE OPERATING STEM, DRAIN PORT WITH HEXAGON NUT, HEAVY DUTY CASING, 360° SWIVEL INLET CONNECTION, HEAVY DUTY CHROME PLATED BRONZE CASTING, POLISHED CHROME FACE PLATE AND SATIN NICKEL BRONZE BOX WITH HINGED LOCKING COVER. OPERATING KEY INCLUDED.

HB – HOSE BIBB
ZURN Z-1341-PC-LK; WALL FAUCET WITH INTEGRAL BREAKER, POLISHED CHROME FINISH, 3/4" SWEAT INLET, PROVIDE WITH CHROME-PLATED ROUGH CAST BRONZE BOX WITH HINGED COVER AND LOOSE KEY. CONNECT TO HOT WATER.

DF – DRINKING FOUNTAIN
MURDOCK MODEL: GRN4S-BF1-PF, BARRIER FREE BI-LEVEL PEDESTAL MOUNTED DRINKING FOUNTAIN, 18 GAGE, 304 STAINLESS STEEL, CORROSION AND SCRATCH RESISTANT FINISH, PROVIDE WITH JUG FILLER SPIGOT (SELF-CLOSING VALVE WITH PLAIN END) AND WITH PET FOUNTAIN RECEPTOR.

ACCEPTABLE MANUFACTURERS ARE:
CLAY: AMERICAN STANDARD, KOHLER
ZURN INTERCEPTOR: J.R. SMITH, WOODFORD
ZURN DRAINS AND HYDRANTS: J.R. SMITH, WATTS
STORM-WILLIAMS: FIAT, CRANE FIAT: FLORESTONE
FALCON: AMERICAN STANDARD, KOHLER
MIFAB: ZURN, WOODFORD

SHULTZ ENGINEERING, INC.

REVISIONS

NO.	DATE	BY	CHKED	DESCRIPTION

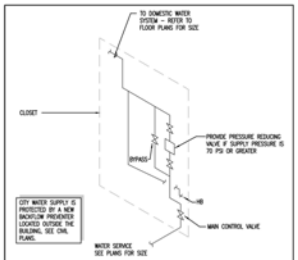
citizen design
2468 Commonwealth Ave. Charlotte, NC 28205
Architecture • Planning • Stuff

City of Concord Parks and Recreation
Wilson Street Park
106 Wilson Street, Concord, NC 28026

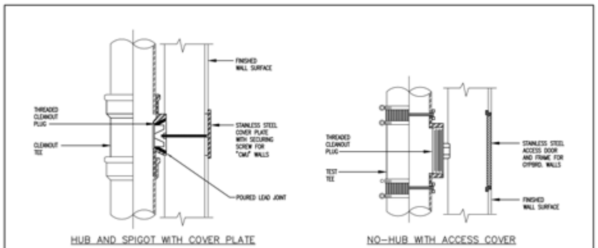
DATE: 06/01/2021

NAME: PLUMBING SCHEDULES AND NOTES

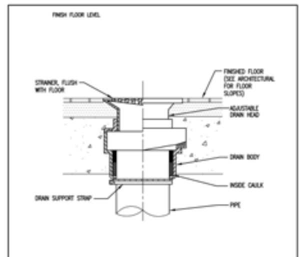
SHEET: P1


TO DOMESTIC WATER SYSTEM – REFER TO FLOOR PLANS FOR SIZE
CLOSET
PROVIDE PRESSURE REDUCING VALVE IF SUPPLY PRESSURE IS 70 PSI OR GREATER
BYPASS
CITY WATER SUPPLY IS PROTECTED BY A NEW BACKFLOW PREVENTER LOCATED OUTSIDE THE BUILDING, SEE CIVIL PLANS.
MAIN CONTROL VALVE
WATER SERVICE SEE PLANS FOR SIZE

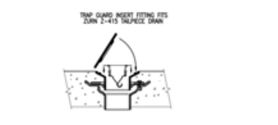
1	TYPICAL BUILDING WATER SERVICE RISER
P2	NO SCALE


FINISHED WALL SURFACE
THREADED CLEANOUT PLUG
CLEANOUT TEE
STAINLESS STEEL COVER PLATE WITH SECURING SCREW FOR "CMU" WALLS
POURED LEAD JOINT
HUB AND SPIGOT WITH COVER PLATE
THREADED CLEANOUT PLUG
TEST TEE
STAINLESS STEEL ACCESS DOOR AND FRAME FOR GYPBRD. WALLS
FINISHED WALL SURFACE
NO-HUB WITH ACCESS COVER

2	WALL CLEANOUTS
P2	NO SCALE



3	FLOOR DRAIN
P2	NO SCALE



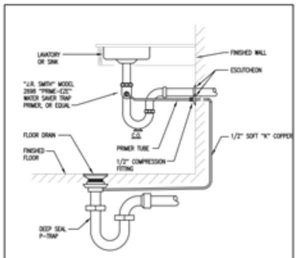
PART NO. TG22-ZURN 2" INSERT FITS INSIDE Z-415 DRAINS

IMPORTANT NOTES:

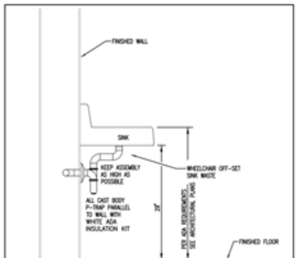
1. THIS TRAP GUARD INSERT CAN BE INSTALLED INTO ZURN #415 DRAIN TOPS TO PREVENT SEWER GAS
2. THE EXTRA WIDE FLANGE NEEDS TO HAVE AN ADHESIVE TYPE CAULK INSTALLED AROUND THE BOTTOM EDGE.
3. MOST Z415 TAIL PIECES HAVE 4 PROTRUSIONS INSIDE THE 3½" OPENING SO THE SEAL MUST BE MADE AROUND THE EDGE OF THE TG FLANGE. MAKE SURE INSIDE OF TAILPIECE IS CLEAN.

NOTE: CARE SHOULD BE TAKEN NOT TO TOUCH THE ELASTOMERIC FLEXIBLE MATERIAL WITH THE PRIMER.

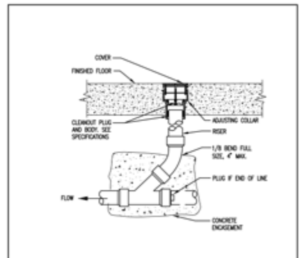
4	TRAP GUARD INSERT FOR FLOOR DRAINS
P2	NO SCALE



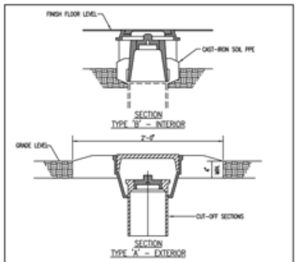
5	TRAP PRIMER
P2	NO SCALE



6	SINK OFFSET WASTE FOR ADA
P2	NO SCALE

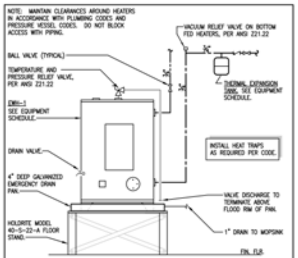


7	FLOOR CLEANOUT
P2	NO SCALE

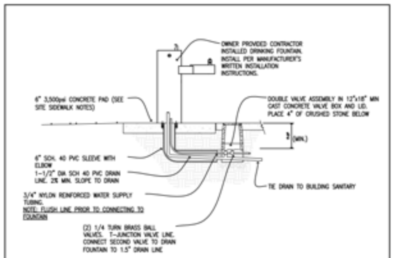


8	CLEANOUT CAP
P2	NO SCALE

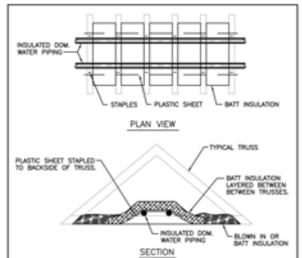
NOTE: MAINTAIN CLEARANCES AROUND HEATERS IN ACCORDANCE WITH PLUMBING CODES AND PRESSURE VESSEL CODES. DO NOT BLOCK ACCESS WITH PIPING.


VACUUM RELIEF VALVE ON BOTTOM FED HEATERS, PER ANSI Z21.22
BALL VALVE (TYPICAL)
TEMPERATURE AND PRESSURE RELIEF VALVE, PER ANSI Z21.22
THERMAL EXPANSION TANK. SEE EQUIPMENT SCHEDULE.
EHW-1
SEE EQUIPMENT SCHEDULE.
DRAIN VALVE
INSTALL HEAT TRAPS AS REQUIRED PER CODE.
4" DEEP GALVANIZED EMERGENCY DRAIN PAN.
VALVE DISCHARGE TO TERMINATE ABOVE FLOOD RIM OF PAN.
HOLDRITE MODEL 40-S-22-A FLOOR STAND.
1" DRAIN TO MOPSINK
FIN. FLR.

9	EHW-1 - ELECTRIC WATER HEATER
P2	NO SCALE


OWNER PROVIDED CONTRACTOR INSTALLED DRINKING FOUNTAIN. INSTALL PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
6" 3,500psi CONCRETE PAD (SEE SITE SIDEWALK NOTES)
DOUBLE VALVE ASSEMBLY IN 13"x18" MIN CAST CONCRETE VALVE BOX AND LID. PLACE 4" OF CRUSHED STONE BELOW
6" SCH. 40 PVC SLEEVE WITH ELBOW
1-1/2" DIA SCH 40 PVC DRAIN LINE. 2% MIN. SLOPE TO DRAIN
TIE DRAIN TO BUILDING SANITARY
3/4" NYLON REINFORCED WATER SUPPLY TUBING.
NOTE: FLUSH LINE PRIOR TO CONNECTING TO FOUNTAIN
(2) 1/4 TURN BRASS BALL VALVES. T-JUNCTION VALVE LINE. CONNECT SECOND VALVE TO DRAIN FOUNTAIN TO 1.5" DRAIN LINE

10	DF - DRINKING FOUNTAIN DETAIL
P2	NO SCALE


INSULATED DOM. WATER PIPING
STAPLES
PLASTIC SHEET
BATT INSULATION
PLAN VIEW
TYPICAL TRUSS
PLASTIC SHEET STAPLED TO BACKSIDE OF TRUSS.
BATT INSULATION LAYERED BETWEEN BETWEEN TRUSSES.
INSULATED DOM. WATER PIPING
BLOWN IN OR BATT INSULATION
SECTION

11	FREEZE PROTECTION OF PIPING IN ATTIC
P2	NO SCALE

REVISIONS

NO.	DATE	BY	CHKD	DESCRIPTION

City of Concord Parks and Recreation

Wilson Street Park

106 Wilson Street, Concord, NC 28026

citizen design
2408 Commonwealth Ave.
Charlotte, NC 28205
Architecture • Planning • Stuff

DATE:
06/01/2021

NAME:
PLUMBING DETAILS

SHEET:
P2

PLUMBING LEGEND

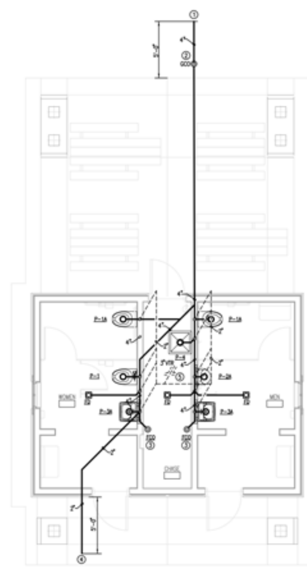
	COLD WATER PIPING (CW)
	COLD WATER PIPING BENEATH FLOOR
	EXISTING COLD WATER PIPING (CWX)
	HOT WATER PIPING (HW)
	HOT WATER RECIRC PIPING (HWR)
	EXISTING HOT WATER PIPING (HWX)
	EXISTING HOT WATER RECIRC PIPING (HWRX)
	VENT PIPING (V)
	EXISTING VENT PIPING (VX)
W	WASTE PIPING (W)
XW	EXISTING WASTE PIPING (WX)
GW	GREASE WASTE (GW)
G	NEW GAS PIPING (G)
XG	EXISTING GAS PIPING (XG)
FCO	BRASS/FLOOR CLEAN OUT
YCO GCO	YARD (GRADE) CLEAN OUT
	VENT THRU ROOF (VTR)
	AIR ADMITTANCE VALVE (AAV)
	SHUTOFF VALVE
	PRESSURE-REDUCING VALVE
	CONNECT NEW TO EXISTING
	POINT OF DEMOLITION
	DEMOLISH PIPE OR FIXTURE
AAV	AIR ADMITTANCE VALVE (STUDOR VENT)
AFF	ABOVE FINISH FLOOR
CO	CLEANOUT
XCO	EXISTING CLEANOUT
FCO	FLOOR CLEANOUT
XFCO	EXISTING FLOOR CLEANOUT
FD	FLOOR DRAIN (ROUND OR RECTANGULAR)
XFD	EXISTING FLOOR DRAIN (ROUND OR RECT)
FS	FLOOR SINK
XFS	EXISTING FLOOR SINK
VTR	VENT THROUGH ROOF
XVTR	EXISTING VENT THROUGH ROOF
GT	GREASE TRAP (INTERCEPTOR)
XGT	EXISTING GREASE TRAP (INTERCEPTOR)

KEYED NOTES - WASTE PIPING

KEY	NOTE
1	NEW 4" SANITARY WASTE LINE THAT SERVES THE RESTROOM BUILDING. SEE SITE PLAN FOR GENERAL LOCATION INFORMATION. INVERT = -4.0' BFF.
2	NEW GRADE (SANITARY) CLEANOUT
3	NEW FLOOR (SANITARY) CLEANOUT
4	NEW 2" WASTE PIPING INSTALLED FROM REMOTE DRINKING FOUNTAIN (DF). SEE SITE PLAN FOR CONTINUATION. SEE DETAIL 10/P2.
5	3" VENT THROUGH THE ROOF. PROVIDE 6" TYPE B VENT PIPES WITH ADJUSTABLE ELBOWS, 6" ADJUSTABLE METAL VENT FLASHING WITH STORM COLLAR, AND METAL CONE CAP WITH 3" GAP ABOVE TOP OF PIPE. THE 6" VENT PIPE SURROUNDING THE 3" ACTUAL PLUMBING VENT IS FOR AN ARCHITECTURAL AESTHETIC. SEE ELEVATIONS ON ARCHITECTURAL PLAN A2.0 FOR MORE INFORMATION.

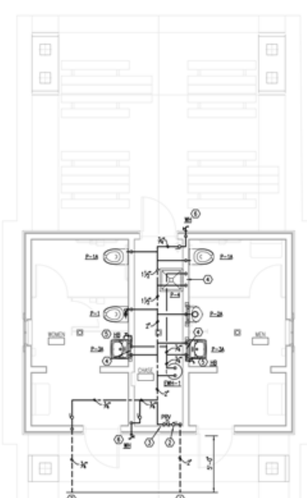
KEYED NOTES - WATER PIPING

KEY	NOTE
1	NEW 2" DOMESTIC WATER PIPE TO SERVE THE RESTROOM BUILDING. SEE CIVIL FOR CONTINUATION.
2	2" DOMESTIC WATER RISER WITH SHUTOFF VALVE IN RISE AND PRESSURE REDUCING VALVE UPSTREAM OF ALL FIXTURES.
3	NEW FULL PORT DOMESTIC WATER SHUTOFF VALVE.
4	¾" HW & CW LINES DOWN IN WALL TO FIXTURE (TYPICAL).
5	HOSE BIBB FOR RESTROOM CLEANUP – CONNECT TO HOT WATER LINE.
6	INSTALL WALL HYDRANT ABOVE THE STONE SILL WITH ENOUGH CLEARANCE TO CONNECT A HOSE.
7	NEW ¾" DOMESTIC WATER PIPE BELOW GRADE TO SERVE REMOTE WATER FOUNTAIN. SEE SITE PLAN FOR CONTINUATION. SEE DETAIL 10/P2.



1 PLUMBING WASTE PLAN
P3 SCALE: 1/4" = 1'-0"

SEE CONNECTION SCHEDULES FOR RUNOUT SIZES TO FIXTURES



2 PLUMBING WATER PLAN
P3 SCALE: 1/4" = 1'-0"

SEE CONNECTION SCHEDULES FOR RUNOUT SIZES TO FIXTURES

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DATE:
06/01/2021

NAME:
PLUMBING WATER AND WASTE PLANS

SHEET:
P3