

30 October 2024

## ADDENDUM 2

### **Materials Recovery Facility Retrofit**

FMK Architects, PA  
123 New Bern Street  
Charlotte, North Carolina 28203

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#### **NOTICE TO CONTRACTOR:**

This Addendum shall and does hereby become part of the documents for the above referenced project.

The Contractor shall be responsible for seeing that their subcontractors are properly apprised of the contents of this Addendum.

All information contained in this Addendum shall supercede and shall take precedence over any conflicting information in the original drawings and specifications.

The Contractor shall make the Owner and/or Architect aware of any apparent conflicts between the contents of this revision and other portions of the original documents or work completed to date.

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#### **CLARIFICATIONS:**

##### REVISIONS TO DRAWINGS

G0.00	Corrected index of Mechanical, Fire Sprinkler & Electrical sheets
G0.01	Corrected date of Addendum 01
M0.01	Added note for schedule/sequencing clarification.
M1.01	Clarification to note about RTU demolition scope.
FS0.01	Dry riser detail and fire hose reel specification added.
FS1.03	Clarification of extent of tipping floor area
FS1.04	Clarification of extent of tipping floor area and fire hose reel locations added.
FS3.04	Fire hose reel piping locations added.
E0.04	CCTV power circuit added
E1.01	Power to added CCTV cameras

30 October 2024

ADDENDUM 2

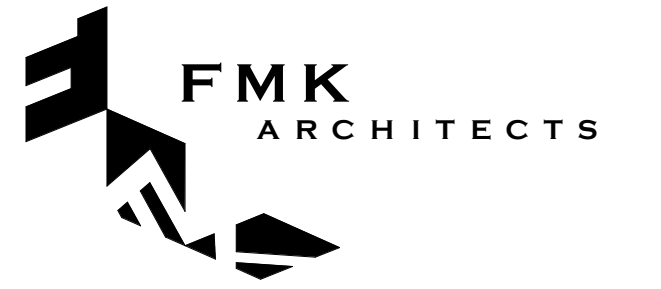
**Materials Recovery Facility Retrofit**

T-001	Symbol legend updated
T-100	Additional security camera locations added

END OF ADDENDUM 2

# CD Package for Materials Recovery Facility Equipment Retrofit

1007 Amble Dr, Charlotte, NC 28206



123 New Bern Street  
Charlotte, NC 28203  
P - 704.375.9950  
F - 704.375.3555



## Schedule of Drawings

General	Mechanical	Electrical	Technology	Structural	Fire Sprinkler	Industrial Equipment - Reference Only
G0.00 Cover	M0.01 Mechanical Specifications	E0.01 Electrical Legend and Notes	T-001 Technology - General Notes & Legends	S-001 GENERAL NOTES	FS0.01 Fire Sprinkler Specifications	IE1.00 Industrial Equipment Information
G0.01 Appendix B Information	M0.02 Mechanical Schedules & Details	E0.02 Electrical Specifications	T-100 Technology - Overall Plan	S-002 GENERAL NOTES, ABBREVIATIONS, & SYMBOLS	FS1.01 Floor Plan Area A - Fire Sprinkler New Work	IE1.01 Industrial Equipment Information
	M0.03 Plumbing Schedules & Details	E0.03 Electrical Power Riser Diagram & Schedules	T-101 Technology - Enlarged Partial Plans	S-101 FOUNDATION PLAN	FS1.02 Floor Plan Area B - Fire Sprinkler New Work	IE1.02 Industrial Equipment Information
	M1.01 Floor Plan Area A - Mechanical Demolition	E0.04 Electrical Power Riser Diagram & Schedules	T-501 Technology - Details	S-102 ROOF FRAMING PLAN	FS1.03 Floor Plan Area C - Fire Sprinkler New Work	IE1.03 Industrial Equipment Information
	M2.01 Floor Plan Area A - Mechanical New Work	E1.00 Overall Floor Plan - Demolition	T-601 Technology - Riser Diagram	S-301 SLAB ON GRADE DETAILS	FS1.04 Floor Plan Area D - Fire Sprinkler New Work	IE1.04 Industrial Equipment Information
	M2.02 Floor Plan Area B - Mechanical New Work	E1.01 Overall Floor Plan - Electrical		S-302 FOUNDATION SECTIONS	FS2.01 High Ceiling Area A - Fire Sprinkler Demolition	IE1.05 Industrial Equipment Information
	M2.03 Floor Plan Area C - Mechanical New Work	E2.01 Overall Floor Plan - Lighting and Fire Alarm		S-501 STEEL FRAMING DETAILS	FS2.02 High Ceiling Area B - Fire Sprinkler Demolition	IE1.06 Industrial Equipment Information
	M2.04 Floor Plan Area D - Mechanical New Work				FS2.03 High Ceiling Area C - Fire Sprinkler Demolition	IE1.07 Industrial Equipment Information
A0.10 3-D Reference Views	M3.01 Enlarged Enclosure 01 - Mechanical				FS2.04 High Ceiling Area D - Fire Sprinkler Demolition	IE1.08 Industrial Equipment Information
A0.11 3-D Reference Views	M3.02 Enlarged Enclosure 02 - Mechanical				FS3.01 High Ceiling Area A - Fire Sprinkler New Work	IE1.09 Industrial Equipment Information
A0.20 Life Safety Plan	M3.03 Enlarged IT Closet - Mechanical				FS3.02 High Ceiling Area B - Fire Sprinkler New Work	IE1.10 Industrial Equipment Information
A1.01 Overall Floor Plan					FS3.03 High Ceiling Area C - Fire Sprinkler New Work	
A2.01 Enlarged Plans, Schedules, and Details					FS3.04 High Ceiling Area D - Fire Sprinkler New Work	
					FS4.01 Enlarged Enclosure 01 - Fire Sprinkler	
					FS4.02 Enlarged Enclosure 02 - Fire Sprinkler	
					FS4.03 Enlarged IT Room - Fire Sprinkler	

## Project Team

Owner	<b>Mecklenburg County Solid Waste Services</b> 2145 Suttle Ave Charlotte, NC 28208 980.314.3857 Client: Darren Stienhiler, PE
Architectural	<b>FMK Architects</b> 123 New Bern Street Charlotte, NC 28203 704.375.9950 Contact: Neil Dixon, AIA
Plumbing Fire Protection Mechanical Electrical	<b>Wolf Trail Engineering PLLC</b> 1001 Lancaster Avenue Monroe, NC 28112 704-282-0826 Contact: M. Michael Schon, PE LEED AP
Structural	<b>Stewart, Inc.</b> 101 North Tryon Street - Suite 1400 Charlotte, NC 28202 704.909.3520 Contact: Lance Williams

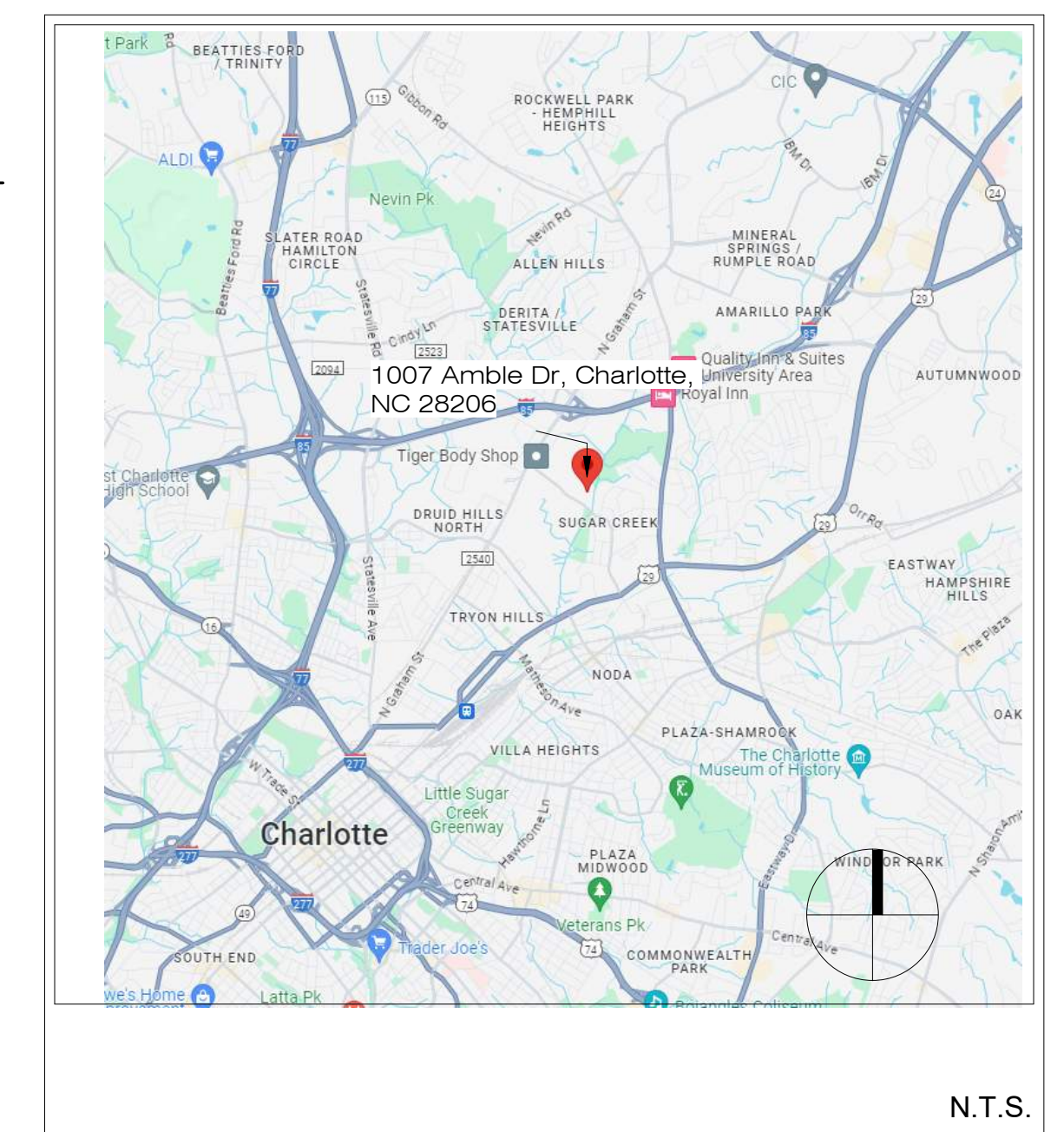
## Issue Date

10/08/2024 - CD

## Revisions

Number	Description	Date
2	Addendum 02	10/30/24

## Locator Map



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SHEET NUMBER  
**G0.00**

**2018 APPENDIX B  
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS  
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)**  
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: Materials Recovery Facility Equipment Retrofit  
Address: 1007 Amble Drive Charlotte, NC  
Owner/Authorized Agent: Mecklenburg County / Darren Steinhibler Phone #: 704-336-4528  
E-Mail: darren.steinhibler@mecklenburgcountync.gov  
Owned by: County  
Code Enforcement Jurisdiction: County

**CONTACT:**

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	FMK Architects	Neil Dixon	7171	(704)817-5424	ndixon@fmkarchitects.com
Civil	N.A.	N.A.			
Landscaping	N.A.	N.A.			
Electrical	Schultz Engineering	Brian Winkler	33160	(980) 292-5646	bwinkler@schultzeng.com
Fire Alarm	Schultz Engineering	Brian Winkler	33160	(980) 292-5646	bwinkler@schultzeng.com
Plumbing	N.A.	N.A.			
Mechanical	Wolf Trail Engineering	Mike Schon	11982	(704)282-0824	mike@wolftrailengineering.com
Sprinkler/Standpipes	Wolf Trail Engineering	Mike Schon	11982	(704)282-0824	mike@wolftrailengineering.com
Structural	Stewart Engineering	Lance Williams	26465	(704)321-1266	williams@stewartinc.com
Retaining Walls >5' High	N.A.	N.A.			
Other (South Carolina)	N.A.	N.A.			

(\*Other\* should include firms and individuals such as process, pre-engineered, interior designers, etc.)

**2018 NC BUILDING CODE:** Renovation  
**2018 NC EXISTING BUILDING CODE:** Alteration Level II N/A N/A  
**CONSTRUCTED:** (date) 1995 **CURRENT OCCUPANCY(S)** (Ch. 3): F-1, B  
**RENOVATED:** (date) 2010 **PROPOSED OCCUPANCY(S)** (Ch. 3): F-1  
**RISK CATEGORY** (Table 1604.5): Current: Select one Proposed: Select one

**BASIC BUILDING DATA**  
Construction Type: III  
Sprinklers: Yes NFPA 13  
Standpipes: No  
Primary Fire District: No Flood Hazard Area: Yes  
Special Inspections Required: Yes (Contact the local inspection jurisdiction for additional procedures and requirements.) - SEE STRUCTURAL DRAWINGS FOR SCHEDULE

**Gross Building Area Table**

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
1 <sup>st</sup> Floor	113,625	0	113,625
TOTAL	113,625	0	113,625

2018 NC Administrative Code and Policies

**ACCESSIBLE DWELLING UNITS  
(SECTION 1107) NOT APPLICABLE**

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

**ACCESSIBLE PARKING  
(SECTION 1106) EXISTING TO REMAIN**

AS PART OF PREVIOUSLY APPROVED MULD-CD ZONING, ALL PARKING (INCLUDING HANDICAPPED ACCESSIBLE SPACES) ALREADY EXISTS ON ADJACENT LARGER 3030 SOUTH PARCEL.

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES REQUIRED	TOTAL # OF PARKING SPACES PROVIDED	# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE SPACES PROVIDED
			REGULAR WITH 2 ACCESSIBLE	132" ACCESSIBLE	
Main	43	50	1		2
TOTAL	43	50	1		2

**PLUMBING FIXTURE REQUIREMENTS  
(TABLE 290.1)**

**EXCEPTION TO FIXTURE REQUIREMENTS HAS BEEN APPROVED BASED ON NCCPC 403.6 - SEE ATTACHED WITH NO COMMON AREAS. ALL PLUMBING FIXTURES ARE WITHIN DWELING UNITS.**

USE	WATER CLOSETS			LAVATORIES			SHOWER	DRINKING FOUNTAINS		
	MALE	FEMALE	UNSEX	MALE	FEMALE	UNSEX		REGULAR	ACCESSIBLE	
1 <sup>st</sup> Flr	6	7	1	3	6	1	0	1	1	
NEW REQ'D	0	0	0	0	0	0	0	0	0	

**SPECIAL APPROVALS**

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

2018 NC Administrative Code and Policies

**2018 APPENDIX B  
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS  
ELECTRICAL DESIGN  
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)  
SEE ELECTRICAL DRAWINGS - SHEET E1.4**

**ELECTRICAL SUMMARY**

**ELECTRICAL SYSTEM AND EQUIPMENT**

Method of Compliance: Select one

**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 \_\_\_\_\_

**Additional Efficiency Package Options**  
(When using the 2018 NCCPC, 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

**ALLOWABLE AREA**

**Primary Occupancy Classification(s):** Factory - F-1 Select one Select one Select one  
**Accessory Occupancy Classification(s):** Storage (S-1), Business Select one  
**Incidental Uses (Table 509):** \_\_\_\_\_  
**Special Uses (Chapter 4 - List Code Sections):** \_\_\_\_\_  
**Special Provisions (Chapter 5 - List Code Sections):** \_\_\_\_\_  
**Mixed Occupancy:** Yes Separation: Unseparated Exception: \_\_\_\_\_

Select one  
Actual Area of Occupancy A + Actual Area of Occupancy B ≤ 1  
Allowable Area of Occupancy A Allowable Area of Occupancy B ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A)	(B)	(C)	(D)
		BUILDING AREA PER STORY (FACTUAL)	TABLE 506.2.1 AREA	AREA FOR POSTAGE INCREASE <sup>1,2</sup>	ALLOWABLE AREA PER STORY OR UNLIMITED <sup>3</sup>
1 <sup>st</sup>	Factory F-1	96,000 ft <sup>2</sup>	12,500 ft <sup>2</sup>		Unlimited
T <sup>2</sup>	Storage S-1	11,225 ft <sup>2</sup>	15,500 ft <sup>2</sup>		Unlimited
U <sup>2</sup>	Business (Office)	6,400 ft <sup>2</sup>	23,000 ft <sup>2</sup>		Unlimited

<sup>1</sup> Frontage area increases from Section 506.3 are computed thus:  
a. Perimeter which fronts a public way or open space having 20 feet minimum width = (F)  
b. Total Building Perimeter = (P)  
c. Ratio (F/P) = (F/P)  
d. W = Minimum width of public way = (W)  
e. Percent of frontage increase  $I_f = 100(F/P - 0.25) \times W/30 =$  (%)  
<sup>2</sup> Unlimited area applicable under conditions of Section 507.  
<sup>3</sup> Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).  
<sup>4</sup> The maximum area of open parking garages must comply with Table 406.5.4.  
<sup>5</sup> Frontage increase is based on the sprinklered area value in Table 506.2.

**ALLOWABLE HEIGHT**

Building Height in Feet (Table 504.3) <sup>1</sup>	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE <sup>1</sup>
Building Height in Feet (Table 504.3) <sup>1</sup>	55	29	
Building Height in Stories (Table 504.4) <sup>2</sup>	2	1	

<sup>1</sup> Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.  
<sup>2</sup> The maximum height of air traffic control towers must comply with Table 412.3.1.  
<sup>3</sup> The maximum height of open parking garages must comply with Table 406.5.4.

2018 NC Administrative Code and Policies

**ENERGY SUMMARY**

**ENERGY REQUIREMENTS:**  
The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designated portion 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 energy complies with code: Select one  
Exempt Building: Yes Provide code or statutory reference: Group F, S and U buildings are exempt per Section 1301.1.1

Climate Zone: 3A  
Method of Compliance: Select one  
(If "Other" specify source here)

**THERMAL ENVELOPE** (Prescriptive method only)

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

**Exterior Walls** (each assembly)  
Description of assembly: \_\_\_\_\_  
U-Value of total assembly: \_\_\_\_\_  
R-Value of insulation: \_\_\_\_\_  
Openings (windows or doors with glazing)  
U-Value of assembly: \_\_\_\_\_  
Solar heat gain coefficient: \_\_\_\_\_  
projection factor: \_\_\_\_\_  
Door R-Values: \_\_\_\_\_

**Walls below grade** (each assembly)  
Description of assembly: \_\_\_\_\_  
U-Value of total assembly: \_\_\_\_\_  
R-Value of insulation: \_\_\_\_\_

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

**Floors slab on grade**  
Description of assembly: \_\_\_\_\_  
U-Value of total assembly: \_\_\_\_\_  
R-Value of insulation: \_\_\_\_\_  
Horizontal/vertical requirement: \_\_\_\_\_  
slab heated: \_\_\_\_\_

2018 NC Administrative Code and Policies

Approved  
Tommy Rowland  
Code Administrator  
01/27/2022 9:06:55 AM



**MECKLENBURG COUNTY**  
Land Use & Environmental Services Agency

January 26, 2022  
Mr. Tommy Rowland, Mechanical/Plumbing Code Administrator  
Mecklenburg County IUESA - Code Enforcement  
2145 Sulte Ave  
Charlotte, NC 28208  
Re: Mecklenburg County Material Recovery Facility - Storage Area Addition  
1007 Amble Drive, Charlotte, NC 28206  
Building Occupancy and Plumbing Fixture Counts  
Tommy:

The Mecklenburg County Material Recovery Facility (MRF), located at 1007 Amble Drive, processes recycled materials collected in Charlotte and Mecklenburg County. The building housing the equipment and affiliated staff is a mixed-occupancy building with three total occupant types. The single stream sorting operation machinery and piled unsorted and baled post-processing materials consume the majority of the floor space in the Factory (F-1) classified area. A floor plan of the building and its proposed addition is attached for your reference.

This correspondence is in reference to the project above and the requirements of the NC State Existing Building Code, section 1101.2. This is a mixed-occupancy building with three total occupant types.

Mecklenburg County plans to add a 1600-square foot addition (storage area) to an already-existing storage area located in the southern end of the building. Per NC State Existing Building Code Section 1101.2, and the corresponding section of the plumbing code, after construction of the proposed addition, the building areas and occupant load calculations are:

Occupancy Type	Area (sf)	Occupants
Factory (F-1)	96,000	960
Business (B)	6,400	64
Storage (S-1)	11,200	24
Total	113,600	1,048

**FIRE PROTECTION REQUIREMENTS**

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	RATING (W/REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINT
Structural Frame, including columns, girders, joists							
Bearing Walls							
Exterior	60"	0	N/A	N/A	N/A	N/A	N/A
North	60"	0	N/A	N/A	N/A	N/A	N/A
East	60"	0	N/A	N/A	N/A	N/A	N/A
West	60"	0	N/A	N/A	N/A	N/A	N/A
South	60"	0	N/A	N/A	N/A	N/A	N/A
Interior	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonbearing Walls and Partitions							
Exterior walls							
North	N/A	0	N/A	N/A	N/A	N/A	N/A
East	N/A	0	N/A	N/A	N/A	N/A	N/A
West	N/A	0	N/A	N/A	N/A	N/A	N/A
South	N/A	0	N/A	N/A	N/A	N/A	N/A
Interior walls and partitions	N/A	0	N/A	N/A	N/A	N/A	N/A
Floor Construction							
Including supporting beams and joists							
Floor Ceiling Assembly	0	N/A	N/A	N/A	N/A	N/A	N/A
Columns Supporting Floors	0	N/A	N/A	N/A	N/A	N/A	N/A
Roof Construction, including supporting beams and joists	0	N/A	N/A	N/A	N/A	N/A	N/A
Roof Ceiling Assembly	0	N/A	N/A	N/A	N/A	N/A	N/A
Columns Supporting Roof	0	N/A	N/A	N/A	N/A	N/A	N/A
Shaft Enclosures - Elev	0	N/A	N/A	N/A	N/A	N/A	N/A
Shaft Enclosures - Other	0	N/A	N/A	N/A	N/A	N/A	N/A
Corridor Separation (Fireseawall)	0	N/A	N/A	N/A	N/A	N/A	N/A
Occupancy/Fire Barrier Separation	0	N/A	N/A	N/A	N/A	N/A	N/A
Party Fire Wall Separation	0	N/A	N/A	N/A	N/A	N/A	N/A
Smoke Barrier Separation	0	N/A	N/A	N/A	N/A	N/A	N/A
Smoke Partition	0	N/A	N/A	N/A	N/A	N/A	N/A
Transit Dwelling Unit	0	N/A	N/A	N/A	N/A	N/A	N/A
Sleeping Unit Separation	0	N/A	N/A	N/A	N/A	N/A	N/A
Incidental Use Separation	0	N/A	N/A	N/A	N/A	N/A	N/A

\* Indicate section number permitting reduction

2018 NC Administrative Code and Policies

**2018 APPENDIX B  
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS  
MECHANICAL DESIGN  
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)  
SEE STRUCTURAL DRAWINGS - SHEET S001**

**DESIGN LOADS:**

**Importance Factors:** Snow (I<sub>s</sub>) Select one  
Seismic (I<sub>e</sub>) Select one

**Live Loads:** Roof \_\_\_\_\_ psf  
Mezzanine \_\_\_\_\_ psf  
Floor \_\_\_\_\_ psf

**Ground Snow Load:** \_\_\_\_\_ psf

**Wind Load:** Ultimate Wind Speed \_\_\_\_\_ mph (ASCE-7)  
Exposure category Select one

**SEISMIC DESIGN CATEGORY:** Select one  
Provide the following Seismic Design Parameters:  
Risk Category (Table 1604.5) Select one  
Spectral Response Acceleration S<sub>s</sub> \_\_\_\_\_ %ig S<sub>1</sub> \_\_\_\_\_ %ig  
Site Classification (ASCE 7) Select one  
Data Source: Select one  
Basic structural system Select one  
Analysis procedure: Select one  
Architectural, Mechanical, Components anchored? Select one

**LATERAL DESIGN CONTROL:** Select one

**SOIL BEARING CAPACITIES:**  
Select one  
Pile size, type, and capacity \_\_\_\_\_ psf

2018 NC Administrative Code and Policies

Approved  
Tommy Rowland  
Code Administrator  
01/27/2022 9:07:00 AM

These calculated occupant numbers then generate the following plumbing fixture requirements per NCCPC Table 403.1:

	Water Closet	Lavatories	Drinking Fountain
Male	16	6	
Female	16	6	
Total	32	12	4

The current building contains the following plumbing fixtures:  
• Female Water Closets = 7  
• Male Water Closets = 6  
• Male Urinals = 3  
• Male Lavatories = 6  
• Female Lavatories = 6  
• Drinking Fountains = 4

These fixtures are proposed to remain unchanged by the addition, as no additional staff are needed.

The MRF operates with three shifts per day. The maximum number of personnel currently on-site during the first two shifts is 60, and the maximum number of personnel currently during the third shift is 5. These numbers are far below the calculated maximum. Therefore, Mecklenburg County Solid Waste Services hereby requests per NCCPC Section 403.6, a ruling of actual occupant loads per the following table to be applied to this facility so long as it remains in its current use.

Occupancy Type	Occupants	Required Toilets	Required Lavatories	Provided Toilets	Provided Lavatories	Drinking Fountains
Factory (F-1)	200	5 Male / 5 Female	1.5 Male / 1.5 Female	6 Male / 5 Female	3 Male / 3 Female	
Business (B)	80	2 Male / 2 Female	1 Male / 1 Female	3 Male / 2 Female	3 Male / 3 Female	
Storage (S-1)	9	0	0	0	0	
Total	282	7 Male / 7 Female	3 Male / 3 Female	9 Male / 7 Female	6 Male / 6 Female	2 Required/ 4 Provided

Please feel free to contact Darren Steinhibler with any questions you may have at 980-314-3857.

Sincerely,  
  
Jeffrey Smithberger, Director  
Mecklenburg County IUESA - Solid Waste

**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 (%)
60"	N/A	N/A	None

**LIFE SAFETY SYSTEM REQUIREMENTS**

Emergency Lighting: Yes  
Exit Signs: Yes  
Fire Alarm: Yes  
Smoke Detection Systems: Partial Monitor Duct Detector in HVAC and Smoke detectors at control panels  
Carbon Monoxide Detection: Yes

**LIFE SAFETY PLAN REQUIREMENTS**

Life Safety Plan Sheet #: AL11

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 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

2018 NC Administrative Code and Policies

**2018 APPENDIX B  
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS  
MECHANICAL DESIGN  
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)  
SEE MECHANICAL DRAWINGS - SHEET M**

**MECHANICAL SUMMARY**

**MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT**

**Thermal Zone**  
winter dry bulb: \_\_\_\_\_  
summer dry bulb: \_\_\_\_\_  
relative humidity: \_\_\_\_\_

**Interior design conditions**  
winter dry bulb: \_\_\_\_\_  
summer dry bulb: \_\_\_\_\_  
relative humidity: \_\_\_\_\_

**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 NC Administrative Code and Policies



123 New Bern Street  
Charlotte, NC 28203  
P - 704.375.9550  
F - 704.375.3555



**Materials Recovery Facility  
Equipment Retrofit**  
1007 Amble Dr., Charlotte, NC 28206

REVISIONS:

No.	Description	Date
1	Addendum 01	10/18/24
2	Addendum 02	10/30/24

**SECTION 806.2 COMPLIANCE STATEMENT**

APPLICABLE TO ALTERATIONS TO A PRIMARY FUNCTION AREA, CHANGE OF USE AND ADDITIONS TO EXISTING BUILDING

EXCEPTIONS (CHECK ALL THAT APPLY):  
 Exception #2 - Alterations limited solely to windows, hardware, operating controls, electrical outlets and signs.  
 Exception #3 - Alterations limited to mechanical systems, electrical systems installation or alteration of fire protection systems

## FIRE SPRINKLER SPECIFICATIONS

**01 GENERAL**  
**WORK INCLUDED:**  
 THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND A SERVICES NECESSARY FOR AND REASONABLY INCIDENTAL TO FURNISHING AND INSTALLING A FIRE SPRINKLER SYSTEM, AS INDICATED ON THE CONTRACT DRAWINGS AND/OR CALLED FOR IN THE SPECIFICATIONS.  
 THE CONTRACTOR SHALL EXAMINE THE PREMISES AND OBSERVE CONDITIONS UNDER WHICH THE WORK WILL BE DONE OR OTHER CIRCUMSTANCES WHICH WILL AFFECT THE CONTEMPLATED WORK.  
 ALL FIRE SPRINKLER WORK SHALL BE MADE IN ACCORDANCE WITH RULES AND REGULATIONS OF GOVERNING AUTHORITIES, DFS, AND NFPA 13. THE ENTIRE FIRE SPRINKLER SYSTEM SHALL BE TESTED AND INSPECTED BY THE INSURANCE COMPANY'S REPRESENTATIVE AND THE WORK MUST BE AS APPROVED BY THEM.  
 PERMITS: APPLY FOR AND PAY FOR ALL NECESSARY PERMITS, FEES, AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION. ADEQUATE CHARGES, BOND PROPERTY ASSESSMENTS AND FACILITIES CHARGE ARE NOT TO BE CONSTRUED TO BE A PART OF THIS CONTRACT.  
**SCHEDULE:**  
 THE CONTRACTOR SHALL SUBMIT A SCHEDULE SHOWING MAKE, TYPE, MANUFACTURER'S NAME AND TRADE DESIGNATION OF ALL PIECES OF MATERIAL AND EQUIPMENT.  
 THE SCHEDULE SHALL BE ACCOMPANIED BY MANUFACTURER'S SPECIFICATIONS AND SHALL GIVE DIMENSIONS, KIND OF MATERIAL, FINISH, ETC., AND SUCH OTHER DETAIL INFORMATION AS MAY BE REQUIRED TO PERMIT VERIFICATION OF THE QUALITY AND CONSTRUCTION OF THE PRODUCT.  
**WORKING PLANS:** THIS CONTRACTOR SHALL PREPARE COMPLETE SHOP DRAWINGS WHICH SHALL COMPLY WITH APPLICABLE CODES. THE CONTRACTOR SHALL INCORPORATE REVIEW COMMENTS FROM THE OWNER'S INSURANCE CARRIER AND THE AUTHORITY HAVING JURISDICTION BEFORE SUBMITTING TO THE ARCHITECT.  
**SCOPE:**  
 SEE SCOPE OF WORK NOTES, THIS SHEET.

**02 PRODUCTS**  
**GENERAL**  
 ALL MATERIALS, PIPING, FITTING VALVES AND APPLIANCES HEREINAFTER SPECIFIED AND THOSE WHICH ARE ESSENTIAL BUT HAVE NOT BEEN SPECIFIED SHALL BE NEW AND OF THE HIGHEST GRADE AND QUALITY, FREE FROM DEFECTS AND SUCH AS BREAKS, FLAWS, AND IMPERFECTIONS.  
 ALL APPLIANCES AND APPURTENANCES SHALL BEAR LABEL OF F.M. OR I.L. THROUGH PENETRATION ASSEMBLIES SHALL BE PROVIDED AT EACH OPENING WHERE EXPOSED SPRINKLER PIPES PASS THROUGH RATED WALLS, FLOORS, AND PARTITIONS.  
**PIPE AND FITTINGS**  
**PIPING**  
 STANDARD WEIGHT BLACK STEEL SEAMLESS OR WELDED (ASTM A-53) AS MANUFACTURED BY NATIONAL TUBE CO., BETHLEHEM STEEL CO., OR APPROVED EQUAL; OR (WHERE APPLICABLE) ALLOY LIGHT WALL SPRINKLER PIPE WITH ROLL GROOVED COUPLINGS CONFORMING TO (ASTM A-135).  
**FITTINGS**  
 BLACK C.I. SPRINKLER FITTINGS, #175 WATER WORKING PRESSURE, SREWED, FLANGED, OR VICTALIC TYPE COUPLINGS FOR ROLL GROOVED PIPING.  
**VALVES**  
 1. UP TO 2" SHALL BE ALL BRONZE GATE VALVES OUTSIDE SCREW AND YOKE - SCREWED 175# STANDARD.  
 2. VALVES 2-1/2" AND LARGER SHALL HAVE CAST IRON BODIES OUTSIDE SCREW AND YOKE - 175# STANDARD; THREADED FOR 2-1/2" TO 4"; FLANGED FOR OVER 4".  
 3. VALVES SHALL BE EQUIVALENT TO NIBCO OR APPROVED EQUAL AS LISTED BELOW.  
 A. BRONZE GATE VALVE NIBCO T-104-0 (RISING STEM)  
 B. ISBM GATE VALVE NIBCO F-637-31 (O S & Y)  
 C. BUTTERFLY VALVE NIBCO FP-20-EL  
**PIPE HANGERS**  
 PIPE HANGERS SHALL BE OF TYPE APPROVED AND LISTED IN NFPA 13.  
 ALL HANGERS SHALL BE FASTENED BY MEANS OF BEAM CLAMPS, CONCRETE INSERTS, OR OTHER APPROVED DEVICES, INSTALLED BY THIS CONTRACTOR.  
**SPRINKLER HEADS**  
 SPRINKLER HEADS SHALL BE AS APPROVED BY FM. SPRAY TYPE HEADS OF ORDINARY TEMPERATURE RATING SHALL BE INSTALLED WITH THE EXCEPTION OF THOSE AT OR NEAR UNIT HEATERS OR AT ANY OTHER LOCATION WHERE ABOVE ORDINARY TEMPERATURE MAY BE ANTICIPATED.  
 SPRINKLER HEADS SHALL BE SPRAY TYPE CONCEALED PENDANT WITH PAINTED COVER PLATE OR AS REQUIRED BY THE OWNER. REGULAR PENDANT HEADS IN FINISHED SPACES SHALL BE CHROME PLATED WITH CHROME PLATED CEILING PLATES UNLESS OTHERWISE NOTED. NEW HEADS SHALL MATCH EXISTING.  
 CONTRACTOR SHALL FURNISH SPARE HEADS AS REQUIRED BY NFPA 13. THESE SPRINKLER HEADS SHALL CORRESPOND AS TO TYPE AND TEMPERATURE RATINGS WITH THE SPRINKLER HEADS IN THIS SYSTEM.  
 PROVIDE SPRINKLER HEAD WIRE GUARDS FOR ALL SPRINKLER HEADS WHERE HEADS ARE LOCATED 7-FEET OR LESS ABOVE THE FLOOR LEVEL.  
 PROVIDE RECESSED SPRINKLER HEADS AT ALL GUESTROOM BATH/VANITY AREAS.  
 ALL SPRINKLER HEADS SHALL BE WHITE IN COLOR UNLESS NOTED OTHERWISE ON PLANS.  
 PROVIDE RECESSED SPRINKLER HEADS IN POOL AREAS.  
**TAMPER SWITCHES**  
 PROVIDE TAMPER SWITCH ON ALL CONTROL VALVES. SWITCHES TO BE COMPATIBLE WITH FIRE ALARM OR ALARM MONITORING SYSTEM AND SHALL MATCH EXISTING SWITCHES.  
**03 EXECUTION**  
**TEST AND INSPECTION**  
 ALL TESTS SHALL BE MADE BY THIS CONTRACTOR IN THE PRESENCE OF AN INSPECTOR FROM THE AUTHORITY HAVING JURISDICTION AND A REPRESENTATIVE OF THE OWNER.  
 THE SYSTEM SHALL BE TESTED AS REQUIRED BY NFPA 13. BEFORE ASKING FINAL APPROVAL OF THE AUTOMATIC SPRINKLER EQUIPMENT BY THE AUTHORITY HAVING JURISDICTION, THE CONTRACTOR SHALL FURNISH A WRITTEN STATEMENT THAT THE WORK HAS BEEN COMPLETED AND TESTED IN ACCORDANCE WITH THE APPROVED SPECIFICATIONS AND DRAWINGS.  
**WORKMANSHIP**  
 ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED AND COMPLETED IN A FIRST-CLASS WORKMANLIKE MANNER AND IN ACCORDANCE WITH THE BEST MODERN METHODS AND PRACTICES. ANY MATERIAL WHICH SHALL NOT PRESENT AN ORDERLY AND REASONABLY NEAT AND/OR WORKMANLIKE APPEARANCE, SHALL BE REMOVED AND REPLACED WHEN SO DIRECTED BY THE ARCHITECT OR ENGINEER OF RECORD. THE REMOVAL AND REPLACEMENT OF THIS WORK SHALL BE DONE WHEN DIRECTED IN WRITING BY THE ARCHITECT OR ENGINEER OF RECORD, AT THE CONTRACTOR'S EXPENSE.  
 THE SYSTEM SHALL BE DESIGNED AND BUILT IN A WORKMANLIKE MANNER, ALL IN ACCORDANCE WITH DETAILED DRAWINGS TO BE SUBMITTED FOR APPROVAL. THE WORK SHALL INCLUDE ALL COMPONENTS REQUIRED TO PROVIDE A COMPLETE SYSTEM. SPRINKLER MAINS AND BRANCHES SHALL BE RUN CONCEALED IN CEILINGS AND FURRED SPACES.  
 THIS CONTRACTOR SHALL PROVIDE LOW POINT DRAINS WHEREVER NECESSARY. HE SHALL AT ALL TIMES COOPERATE WITH ALL OTHER TRADES AS SPRINKLER WORK IS INSTALLED.  
 LONG RUNS OF PIPE SHALL BE PROVIDED WITH SUITABLE MEANS TO PERMIT FREE MOVEMENT RESULTING FROM EXPANSION AND CONTRACTION OF THE PIPE. REDUCTION IN PIPE SIZES SHALL BE MADE WITH ONE-PIECE REDUCTION FITTINGS. COUPLINGS SHALL NOT BE USED EXCEPT WHERE THE LENGTH OF PIPE BETWEEN SPACE FITTINGS EXCEEDS 20-FEET.  
 EACH CONTROL VALVE SHALL BE PROVIDED WITH AN APPROVED LETTERED SIGN. ALL OTHER SIGNS SHALL BE FURNISHED AS REQUIRED.

## FIRE SPRINKLER SCOPE OF WORK

**01 GENERAL**  
**WORK INCLUDED:**  
 THE FIRE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORK OUTLINED ON THE FIRE SPRINKLER DRAWINGS.  
 - THE FIRE SPRINKLER CONTRACTOR SHALL COORDINATE ALL WORK WITH VAN DYK (EQUIPMENT VENDORS), GENERAL CONTRACTOR, AND OTHER TRADES TO MAINTAIN PROJECT SCHEDULE. DEMOLITION WORK AND NEW WORK SHALL BE CAREFULLY COORDINATED TO MAINTAIN KEY TARGET DATES TO MAINTAIN THE OVERALL PROJECT SCHEDULE.  
 - FIRE SPRINKLER CONTRACTOR SHALL VISIT SITE TO BECOME FAMILIAR WITH THE SYSTEM AND SCOPE OF WORK. HE/SHE WILL NOT BE EXCUSED FROM DOING REQUIRED WORK BECAUSE THEY DID NOT VISIT THE SITE.  
 - THE FIRE SPRINKLER SYSTEM SHALL REMAIN ACTIVE DURING CONSTRUCTION. ANY SHUTDOWN OF THE SYSTEM SHALL BE COORDINATED WITH COUNTY PERSONNEL PRIOR TO THE SHUTDOWN.  
 - FIRE SPRINKLER CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, HYDRAULIC CALCULATIONS FOR EXISTING BUILDING WITH NEW PROCESSING EQUIPMENT AS NEEDED FOR A DEFERRED FIRE SPRINKLER SUBMISSION TO THE FIRE MARSHAL/ENGINEER FOR APPROVAL.  
 - WORK SHALL INCLUDE DEMOLITION AS INDICATED BELOW:  
 A) THE FIRE SPRINKLER CONTRACTOR SHALL CUT AND CAP ALL BRANCH LINE TAPS THAT SERVE THE EXISTING SPRINKLER SYSTEM BELOW THE ROOF GRID. THE TAPS SHALL BE CAPPED ABOVE THE BOTTOM OF THE STRUCTURE. AFTER DEMOLITION, THE FIRE SPRINKLER GRID AT THE STRUCTURE WILL BE ISOLATED FROM ALL DROPS SERVING THE EXISTING EQUIPMENT TO BE REMOVED. THE REMAINING SPRINKLER SYSTEM DOWNSTREAM OF THE CAP SHALL BE REMOVED BY THE DEMOLITION CONTRACTOR.  
 B) THE EXISTING SPRINKLER GRID SYSTEM PIPE ROUTING NEEDS TO BE REVIEWED WITH THE ENGINEER/VAN DYK MODEL TOP REVIEW IF THERE ARE ANY CONFLICTS AS PART OF THE SHOP DRAWING DEVELOPMENT.  
 C) EXISTING SPRINKLER HEADS IN THE PARTS OF THE SPRINKLER SYSTEM TO REMAIN IN USE AND USED AS PART OF THE FINISHED RENOVATION WILL BE REPLACED WITH NEW HEADS TO MATCH EXISTING HEADS.  
 - THE SPRINKLER RISERS AND ASSOCIATED TAMPER/FLOW SWITCHES, VALVES, ETC. SHALL BE INSPECTED FOR PROPER OPERATION. IF ANY MAJOR REPAIRS ARE REQUIRED, THE FIRE SPRINKLER CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR/OWNER PRIOR TO ANY REPAIRS/REPLACEMENT OF PARTS OF THE SYSTEM.  
 - THE EXISTING SPRINKLER GRID AT THE ROOF STRUCTURE SHALL BE COORDINATED WITH THE NEW PROCESSING EQUIPMENT PROVIDED BY VAN DYK. THERE ARE AREAS WHERE THE NEW PROCESSING EQUIPMENT MAY BE IN CLOSE PROXIMITY OF THE EXISTING FIRE SPRINKLER SYSTEM. THE NEW EQUIPMENT LOCATIONS WILL TAKE PRECEDENT OVER THE EXISTING SPRINKLER PIPING/HEAD LOCATIONS IF A CONFLICT ARISES. THE EXISTING FIRE SPRINKLER PIPE/HEADS SHALL BE REMOVED AROUND THE NEW PROCESSING EQUIPMENT. THE AREA OF CONCERN WHERE A CONFLICT MAY OCCUR INCLUDES THE AREA AROUND THE MAGNET.  
 - FIRE SPRINKLER COVERAGE IS REQUIRED AT VARIOUS PARTS OF THE NEW CONVEYOR SYSTEM. THESE PLACES INCLUDE THE ENCLOSURES, PLATFORMS, STAIRS ETC WHERE THERE IS OBSTRUCTIONS WIDER THAN 48" AND/OR REQUIRED BY NFPA CODES. THIS LAYOUT SHALL BE PART OF THE DEFERRED SHOP DRAWING SUBMISSION TO THE FIRE MARSHAL. REVIT FILES OF THE NEW CONVEYOR SYSTEM INCLUDING THE PLATFORMS, ENCLOSURES, WILL BE AVAILABLE THRU THE COUNTY AND VAN DYK FOR THE CONTRACTOR'S USE IN DEVELOPING SHOP DRAWINGS.  
 - THE FIRE SPRINKLER SYSTEM SHALL BE TESTED AS REQUIRED BY NFPA CODES AT THE COMPLETION OF THE PROJECT. THE TESTING OF THE SYSTEM SHALL BE SCHEDULED SO THE FIRE MARSHAL, COUNTY PERSONNEL AND ENGINEER ARE PRESENT.

## FIRE SPRINKLER NOTES

- FIRE SPRINKLER CONTRACTOR SHALL COORDINATE WORK PRIOR TO INSTALLATION WITH FIRE SPRINKLER, ELECTRICAL, STRUCTURAL, PLUMBING & ARCHITECTURAL SYSTEMS TO AVOID CONFLICTS.
- FIRE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL FIRE RATINGS WHERE PIPES PENETRATE FIRE RATED ASSEMBLIES. FIRE SAFING MATERIAL SHALL BE UL LISTED.
- SUBMIT FIRE SPRINKLER SHOP DRAWINGS TO LOCAL FIRE MARSHAL AND OWNER'S INSURANCE UNDERWRITER FOR APPROVAL.
- ALL SPRINKLER PIPING INSTALLATION SHALL CONFORM TO NFPA 13, NFPA 24 AND NFPA 25. MOST CURRENT ADOPTED EDITIONS SHALL APPLY.
- ALL SPRINKLER HEADS SHALL BE CENTERED IN CEILING TILE WHERE APPLICABLE.
- FIRE SPRINKLER CONTRACTOR SHALL PROVIDE HEADS BELOW OBSTRUCTIONS 48" AND WIDER PER NFPA 13. MOST CURRENT ADOPTED EDITION SHALL APPLY.
- FIRE SPRINKLER CONTRACTOR SHALL COORDINATE HEAD LOCATIONS AND ELEVATIONS WITH ARCHITECTURAL REFLECTED CEILING PLAN.
- THE INSTALLED SPRINKLER SYSTEM SHALL BE TESTED IN ACCORDANCE TO NFPA-25, INSPECTION, TESTING AND MAINTENANCE OF WATER-BASED FIRE SPRINKLER SYSTEM.
- FIRE SPRINKLER CONTRACTOR SHALL ROUTE ALL EXPOSED PIPING PERPENDICULAR AND PARALLEL TO STRUCTURE. ALL WORKMANSHIP SHALL BE NEAT AND CLEAN IN APPEARANCE.
- FIRE SPRINKLER CONTRACTOR SHALL ROUTE ALL EXPOSED PIPING IN ACCORDANCE TO NFPA 13, NFPA 24 AND NFPA 25. MOST CURRENT ADOPTED EDITIONS SHALL APPLY.
- FIRE SPRINKLER CONTRACTOR SHALL REFER TO FIRE SPRINKLER SPECIFICATIONS, WET-PIPE FIRE SUPPRESSION SPRINKLERS, FOR ADDITIONAL INFORMATION.
- SEE ELECTRICAL DRAWINGS & FIRE ALARM RISER DETAIL FOR ADDITIONAL INFORMATION RELATING TO SYSTEM ACTIVATION, CONTROLS, INTERLOCKS, FIRE ALARM STORES, ALARMS, ETC.
- EXISTING FIRE SPRINKLER SYSTEM AT ROOF STRUCTURE SHALL REMAIN IN OPERATION DURING CONSTRUCTION. ANY SHUT DOWN OF THE SYSTEM SHALL BE COORDINATED WITH MECKLENBURG COUNTY PERSONNEL.

## SPRINKLER HEAD LEGEND

- PENDANT, DRY HEAD, SEMI RECESSED, WHITE ESCUTCHEON
  - ⊙ PENDANT, DRY HEAD, UP-RIGHT, TO BE REPLACED
  - ⊗ PENDANT, DRY HEAD, CONCEALED, FLAT PLATE, PAINT COVER TO MATCH CEILING COLOR.
  - PENDANT, DRY HEAD, SEMI RECESSED, WHITE ESCUTCHEON
  - ◄ PENDANT, SIDEWALL, DRY HEAD, CHROME ESCUTCHEON
  - ◄◄ PENDANT, SIDEWALL, DRY HEAD, CHROME ESCUTCHEON
- NOTES:**
- EC EXTENDED COVERAGE HEAD
  - E EXISTING SPRINKLER HEAD
  - N NEW SPRINKLER HEAD
  - R RELOCATED SPRINKLER HEAD
  - X EXISTING SPRINKLER HEAD TO BE REMOVED

## DESIGN CRITERIA

### OFFICES, PUBLIC SPACES

OCCUPANCY CLASSIFICATION - LIGHT HAZARD  
 DENSITY - 10 GPM/1500 SQ.FT.  
 SYSTEM - DRY PIPE  
 MATERIALS, VALVES, HANGERS SHALL BE PER NFPA 13, 24 AND 25.  
 MAXIMUM HEAD COVERAGE 168 SQ.FT.  
 DESIGN SHALL BE PER NFPA 13, 24 AND 25.

### RECYCLING AREA

OCCUPANCY CLASSIFICATION - ORDINARY HAZARD GROUP 2  
 DENSITY - 20 GPM/1500 SQ.FT.  
 SYSTEM - DRY PIPE  
 MATERIALS, VALVES, HANGERS SHALL BE PER NFPA 13, 24 AND 25.  
 MAXIMUM HEAD COVERAGE 120 SQ.FT. (STD HEADS)  
 DESIGN SHALL BE PER NFPA 13, 24 AND 25.

### COMPRESSOR ROOM

OCCUPANCY CLASSIFICATION - ORDINARY HAZARD GROUP 2  
 DENSITY - 20 GPM/1500 SQ.FT.  
 SYSTEM - DRY PIPE  
 MATERIALS, VALVES, HANGERS SHALL BE PER NFPA 13, 24 AND 25.  
 MAXIMUM HEAD COVERAGE 120 SQ.FT. (STD HEADS)  
 DESIGN SHALL BE PER NFPA 13, 24 AND 25.

## FIRE SPRINKLER DRAWING SCHEDULE

DRAWING NUMBER	DESCRIPTION
FS0.01	FIRE SPRINKLER SPECIFICATIONS
FS1.01	FLOOR PLAN AREA A - FIRE SPRINKLER NEW WORK
FS1.02	FLOOR PLAN AREA B - FIRE SPRINKLER NEW WORK
FS1.03	FLOOR PLAN AREA C - FIRE SPRINKLER NEW WORK
FS1.04	FLOOR PLAN AREA D - FIRE SPRINKLER NEW WORK
FS2.01	HIGH CEILING AREA A - FIRE SPRINKLER DEMOLITION
FS2.02	HIGH CEILING AREA B - FIRE SPRINKLER DEMOLITION
FS2.03	HIGH CEILING AREA C - FIRE SPRINKLER DEMOLITION
FS2.04	HIGH CEILING AREA D - FIRE SPRINKLER DEMOLITION
FS3.01	HIGH CEILING AREA A - FIRE SPRINKLER NEW WORK
FS3.02	HIGH CEILING AREA B - FIRE SPRINKLER NEW WORK
FS3.03	HIGH CEILING AREA C - FIRE SPRINKLER NEW WORK
FS3.04	HIGH CEILING AREA D - FIRE SPRINKLER NEW WORK
FS4.01	ENLARGED ENCLOSURE 01 - FIRE SPRINKLER
FS4.02	ENLARGED ENCLOSURE 02 - FIRE SPRINKLER
FS4.03	ENLARGED IT ROOM - FIRE SPRINKLER

## FIRE SPRINKLER HOSE REELS

THE FIRE SPRINKLER HOSE REELS SHALL BE INSTALLED PER 2018 NC BUILDING CODE, 2018 NC FIRE CODE, AND APPLICABLE NFPA CODES, MAINLY NFPA-14.  
 THE HOSE REELS SHALL BE EQUAL POTTER ROEMER 2510 HOSE RACK ASSEMBLY. THE HOSE REEL SYSTEM INCLUDING THE PLATFORMS, ENCLOSURES, WILL BE AVAILABLE THRU THE COUNTY AND VAN DYK FOR THE CONTRACTOR'S USE IN DEVELOPING SHOP DRAWINGS.  
 THE FIRE SPRINKLER SYSTEM SHALL BE TESTED AS REQUIRED BY NFPA CODES AT THE COMPLETION OF THE PROJECT. THE TESTING OF THE SYSTEM SHALL BE SCHEDULED SO THE FIRE MARSHAL, COUNTY PERSONNEL AND ENGINEER ARE PRESENT.

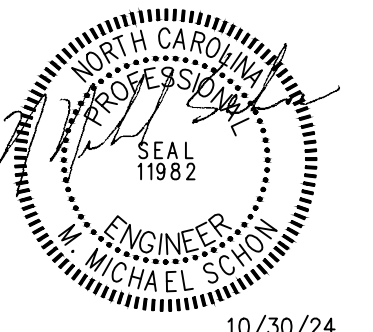
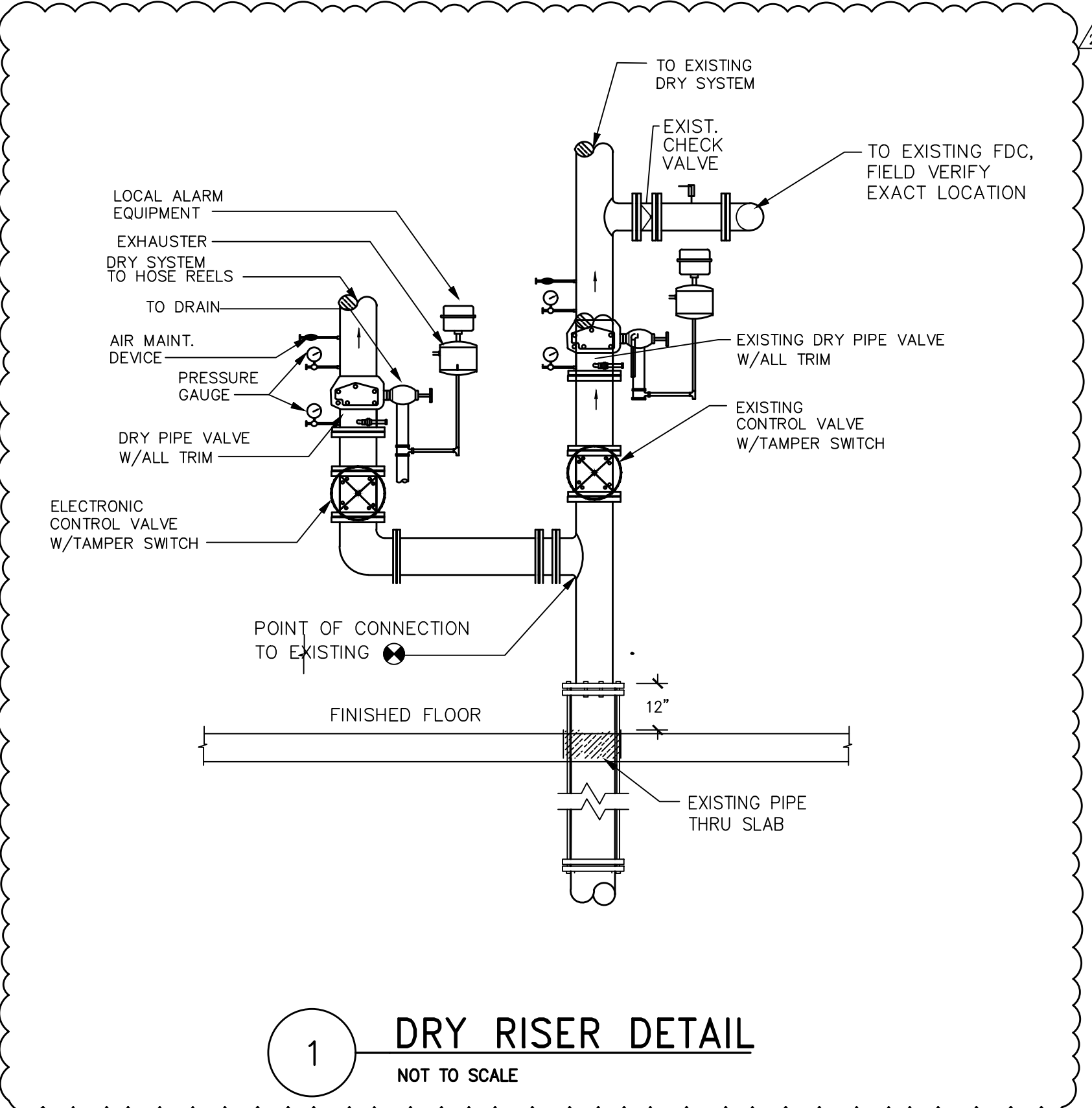
THE HOSE REELS SHALL BE EQUAL POTTER ROEMER 2510 HOSE RACK ASSEMBLY. THE HOSE REEL SYSTEM INCLUDING THE PLATFORMS, ENCLOSURES, WILL BE AVAILABLE THRU THE COUNTY AND VAN DYK FOR THE CONTRACTOR'S USE IN DEVELOPING SHOP DRAWINGS.  
 - LENGTH OF HOSE - 100 FT  
 - SIZE - 1 1/2" (100 GPM @ 65 PSI)  
 - MOUNTED 45° AFT  
 - PROVIDE WITH ACCESSORIES REQUIRED FOR A CLASS II STANDPIPE.  
 - THE FIRE HOSE RACK ASSEMBLY SHALL INCLUDE BRASS VALVES, HOSE SUPPORT HANGER, SWING ARM AND NOZZLE AS REQUIRED FOR THE HOSE. HOSE THREAD TO MATCH THE LOCAL AHJ AND FIRE DEPARTMENT REQUIREMENTS

THE COVERAGE WITH A 100 FOOT HOSE IS 100 FEET PLUS 30 FEET OF SPRAY. THE THREE HOSE REELS ARE LOCATED ON THE WEST EXTERIOR WALL IN THE TIPPING AREA. THE FIRE HOSE REELS SHALL BE LOCATED AT THE COLUMNS, FIELD VERIFY EXACT LOCATION.

THE NEW FIRE RISER FOR THE HOSE REELS WILL COME OFF ONE OF THE FOUR EXISTING STANDPIPES THAT SERVE THE BUILDING. THE TAP SHALL BE LOCATED PRIOR (UP STREAM) OF ANY EXISTING FLOW AND TAMPER SWITCHES.

NEW FIRE SPRINKLER PIPING SHALL MATCH EXISTING. PIPING SHALL BE ROUTED VERTICALLY UP THE EXTERIOR WEST WALL AND BE ROUTED ABOVE THE BOTTOM CHORD OF THE TRUSS. HANGERS, PIPING SUPPORTS, MISCELLANEOUS FITTINGS SHALL MEET NFPA 13 AND ANY OTHER APPLICABLE CODES AND BE COMPATIBLE WITH THE EXISTING FIRE SPRINKLER/ALARM SYSTEM.

THE FIRE SPRINKLER WORK SHALL INCLUDE A SIMPLE ELECTRONIC CONTROLLER AT EACH HOSE REEL THAT WILL OPEN THE ELECTRONIC ACTUATOR ON FLOW AND TAMPER SWITCH TO PROVIDE WATER IN THE FIRE HOSE PIPING.



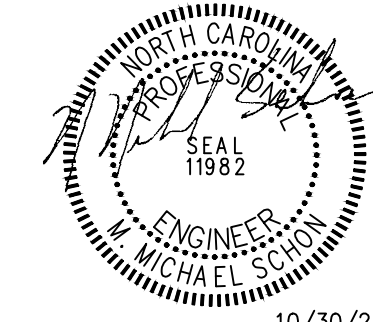
10/30/24

# Materials Recovery Facility Equipment Retrofit

CD Package for  
 1007 Amble Dr, Charlotte, NC 28206



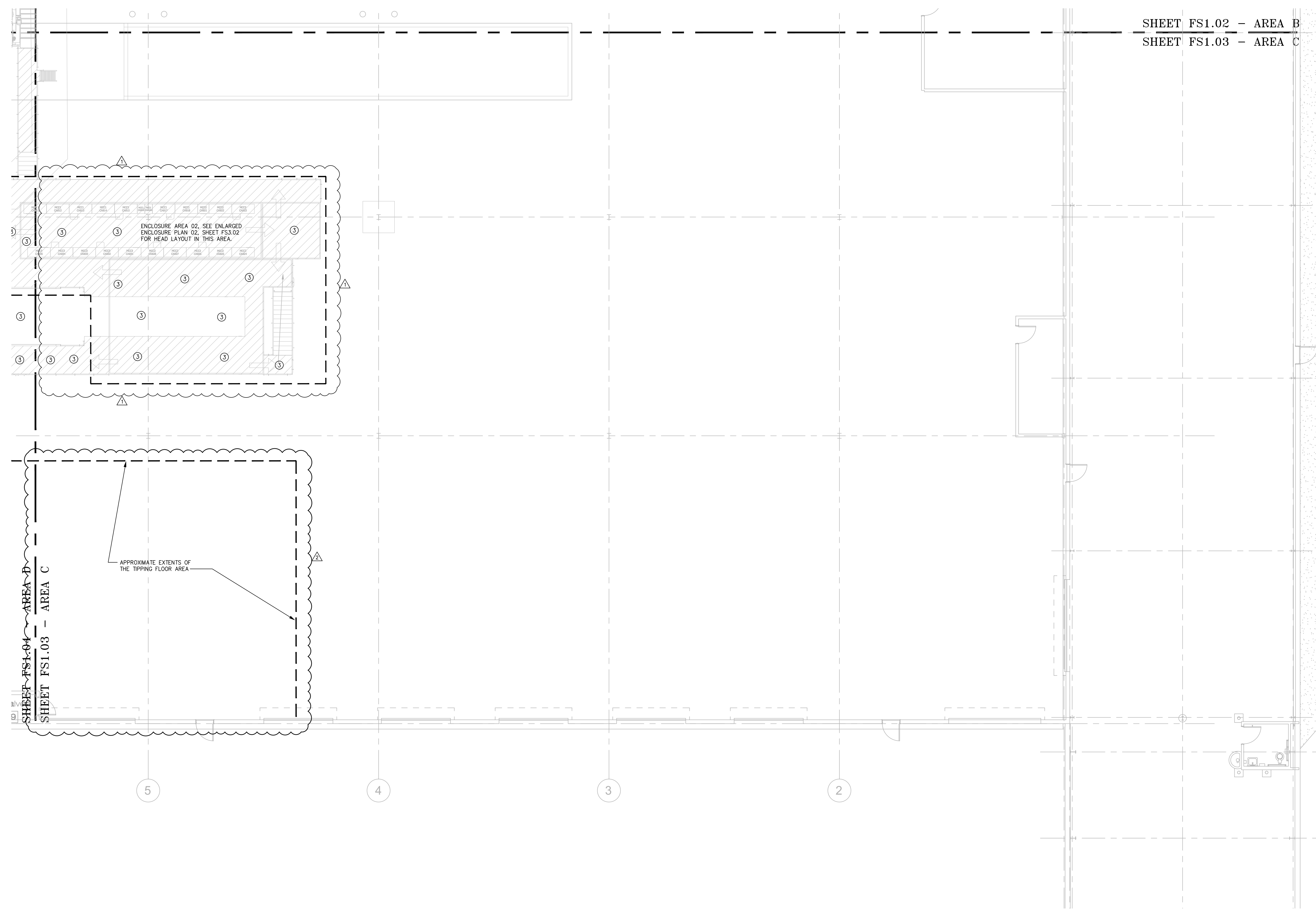
REVISIONS:		
No.	Description	Date
1	2	10/18/24
2	Addendum 01	10/30/24
	Addendum 02	



**KEY PLAN NOTES**

- SEE SHEET FS0.01 FOR SPECIFICATIONS, LEGENDS, GENERAL NOTES, SCHEDULES AND DETAILS.
- THE NEW SPRINKLER SYSTEM EXTENDS DOWN FROM THE EXISTING MAIN GRID AT THE STRUCTURE SHALL PROVIDE FIRE SPRINKLER PROTECTION FOR THE EQUIPMENT LEVELS INCLUDING THE FOUR NEW ENCLOSURE AREAS, UNDER PLATFORMS, WALKWAYS, AND CONVEYOR TRACKS WIDER THAN 48". THE NEW EQUIPMENT FINAL ASSEMBLY SHALL HAVE FIRE SPRINKLER PROTECTION PER NFPA CODES, SEE FIRE SPRINKLER SCOPE OF WORK, SHEET FS0.01.
- AREAS IN NEW EQUIPMENT ASSEMBLY AREA WHERE NEW FIRE SPRINKLER SYSTEM SHALL BE REQUIRED UNDER PLATFORMS, ENCLOSURES, CONVEYORS AND STAIRS. SPRINKLER HEADS SHALL BE UPRIGHT PENDANT HEADS. THE FIRE SPRINKLER CONTRACTOR SHALL FIELD VERIFY ANY ADDITIONAL AREAS WHERE DROPS ARE REQUIRED FOR A COMPLETE, FIRE SPRINKLER SYSTEM.

THE FIRE SPRINKLER CONTRACTOR SHALL HAVE ACCESS TO THE 3D (REVIT) MODEL PREPARED BY THE EQUIPMENT VENDOR FOR THE DEVELOPMENT OF FIRE SPRINKLER SHOP DRAWINGS. AFTER THE FIRE SPRINKLER DESIGN IS COMPLETE AND READY TO BE SUBMITTED (DEFERRED SUBMITTAL) TO THE MECKLENBURG COUNTY CODE ENFORCEMENT, THE FIRE SPRINKLER DESIGN SHALL BE SHARED WITH THE EQUIPMENT VENDOR TO COORDINATE EQUIPMENT INSTALL WITH THE FIRE SPRINKLER INSTALL.



SHEET FS1.02 - AREA B  
SHEET FS1.03 - AREA C

SHEET FS1.04 - AREA D  
SHEET FS1.03 - AREA C

**1 FLOOR PLAN AREA C - FIRE SPRINKLER NEW WORK**  
SCALE: 1/8" = 1'-0"

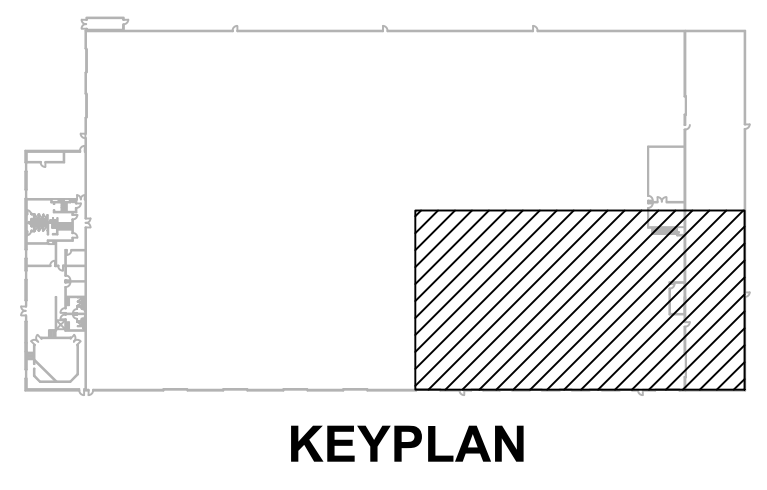
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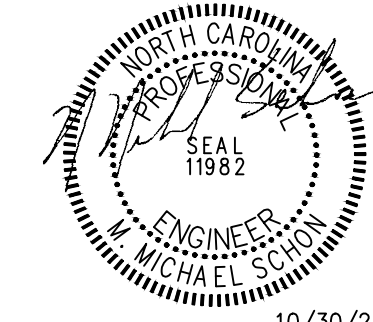


REVISIONS:

No.	Description	Date
1	Addendum 01	10/18/24
2	Addendum 02	10/30/24

2411  
10/08/2024 - CD  
SHEET NAME  
FLOOR PLAN  
AREA C - FIRE  
SPRINKLER  
NEW WORK  
SHEET NUMBER  
**FS1.03**

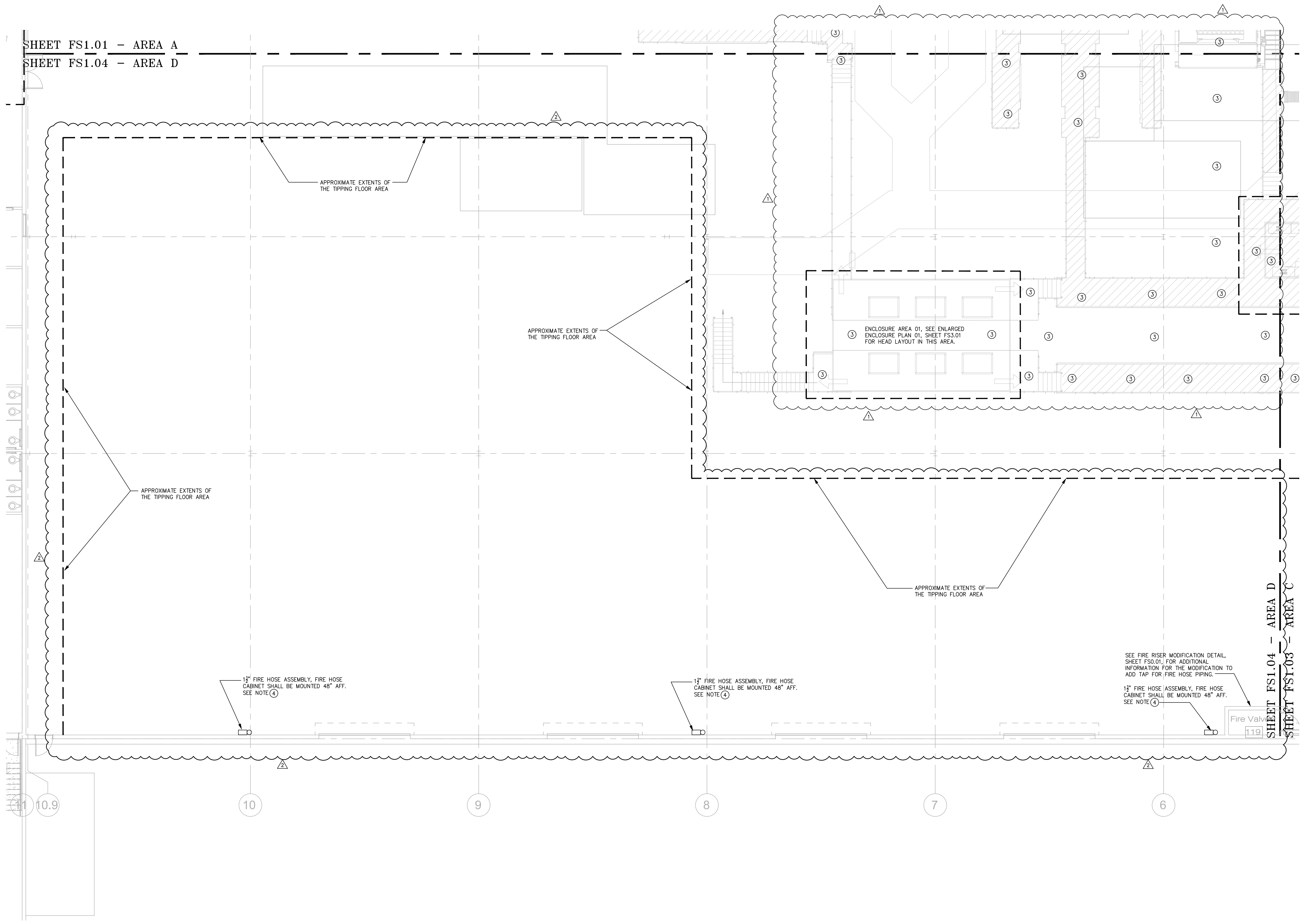




**KEY PLAN NOTES**

- SEE SHEET FSD.01 FOR SPECIFICATIONS, LEGENDS, GENERAL NOTES, SCHEDULES AND DETAILS.
- THE NEW SPRINKLER SYSTEM EXTENDS DOWN FROM THE EXISTING MAIN GRID AT THE STRUCTURE SHALL PROVIDE FIRE SPRINKLER PROTECTION FOR THE EQUIPMENT LEVELS INCLUDING THE FOUR NEW ENCLOSURE AREAS, UNDER PLATFORMS, WALKWAYS, AND CONVEYOR TRACKS WIDER THAN 48". THE NEW EQUIPMENT FINAL ASSEMBLY SHALL HAVE FIRE SPRINKLER PROTECTION PER NFPA CODES, SEE FIRE SPRINKLER SCOPE OF WORK, SHEET FSD.01.
- AREAS IN NEW EQUIPMENT ASSEMBLY AREA WHERE NEW FIRE SPRINKLER SYSTEM SHALL BE REQUIRED UNDER PLATFORMS, ENCLOSURES, CONVEYORS AND STAIRS. SPRINKLER HEADS SHALL BE UPRIGHT PENDANT HEADS. THE FIRE SPRINKLER CONTRACTOR SHALL FIELD VERIFY ANY ADDITIONAL AREAS WHERE DROPS ARE REQUIRED FOR A COMPLETE FIRE SPRINKLER SYSTEM.
- FIRE LINE DROP DOWN TO FIRE HOSE REEL, MOUNTED 48" AFF. FIRE SUPPLY PIPE TO FIRE HOSE REEL IS DRY. SEE SHEET FSD.01 FOR ADDITIONAL INFORMATION.

THE FIRE SPRINKLER CONTRACTOR SHALL HAVE ACCESS TO THE 3D (REVIT) MODEL PREPARED BY THE EQUIPMENT VENDOR FOR THE DEVELOPMENT OF FIRE SPRINKLER SHOP DRAWINGS. AFTER THE FIRE SPRINKLER DESIGN IS COMPLETE AND READY TO BE SUBMITTED (DEFERRED SUBMITTAL) TO THE MECKLENBURG COUNTY CODE ENFORCEMENT, THE FIRE SPRINKLER DESIGN SHALL BE SHARED WITH THE EQUIPMENT VENDOR TO COORDINATE EQUIPMENT INSTALL WITH THE FIRE SPRINKLER INSTALL.



SHEET FS1.01 - AREA A  
SHEET FS1.04 - AREA D

SHEET FS1.04 - AREA D  
SHEET FS1.03 - AREA C

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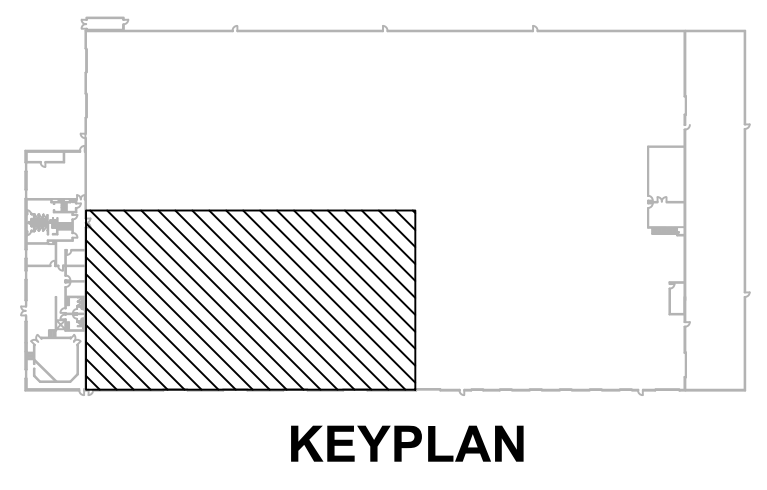


REVISIONS:

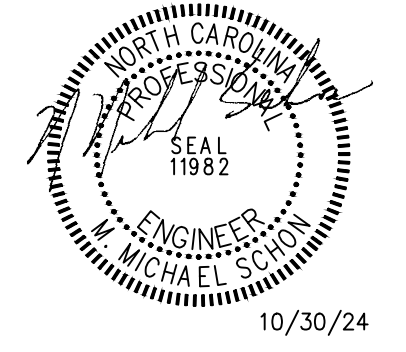
No.	Description	Date
1	Addendum 01	10/18/24
2	Addendum 02	10/30/24

2411  
10/08/2024 - CD  
SHEET NAME  
FLOOR PLAN  
AREA D - FIRE  
SPRINKLER  
NEW WORK

SHEET NUMBER  
**FS1.04**



**1** FLOOR PLAN AREA D - FIRE SPRINKLER NEW WORK  
SCALE: 1/8" = 1'-0"

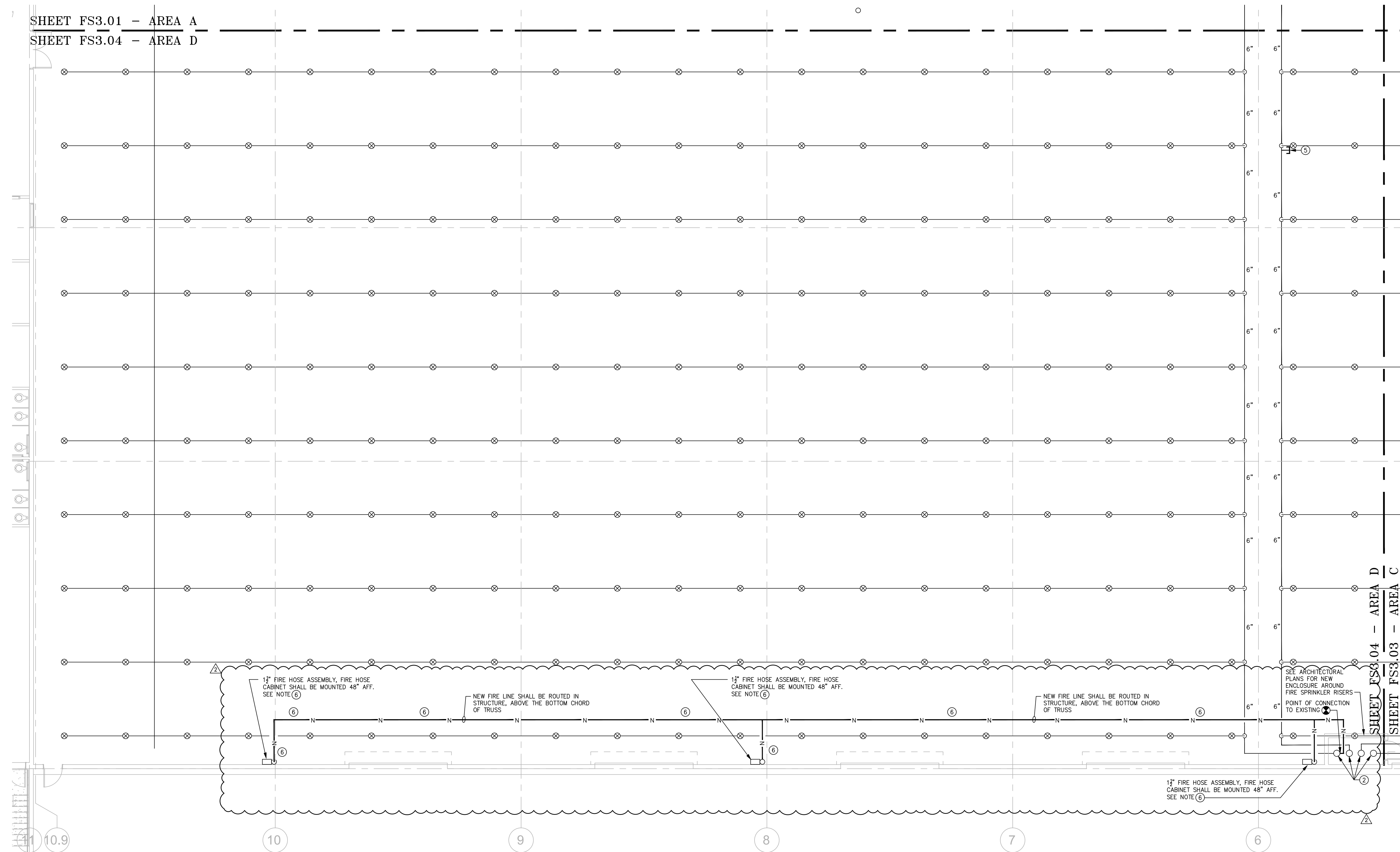


**KEY PLAN NOTES**

- ① SEE SHEET FS0.01 FOR SPECIFICATIONS, LEGENDS, GENERAL NOTES, SCHEDULES AND DETAILS.
- ② EXISTING SPRINKLER RISER ASSEMBLY TO REMAIN. FIELD VERIFY EXACT LOCATION.
- ③ EXISTING UPRIGHT SPRINKLER HEADS AT THE STRUCTURAL GRID SYSTEM SHALL BE REPLACED WITH NEW HEADS, MATCHING THE EXISTING HEADS. FIELD VERIFY EXACT TYPE/CONDITIONS.
- ④ EXISTING 2" TAP FOR TIE IN FROM EXISTING SYSTEM TO NEW SPRINKLER SYSTEM SERVING MACHINERY LEVEL. FIELD VERIFY EXACT LOCATION.
- ⑤ EXISTING 4" TAP FOR TIE IN FROM EXISTING SYSTEM TO NEW SPRINKLER SYSTEM SERVING MACHINERY LEVEL. FIELD VERIFY EXACT LOCATION.
- ⑥ NEW DRY PIPE FIRE SPRINKLER LINE SERVING THE HOSE REELS. SIZE SHALL BE SIZED BASED ON 100 GPM THROUGH HYDRAULIC CALCULATIONS. THE NEW PIPE SHALL TIE INTO AN EXISTING RISER PRIOR TO THE EXISTING DRY PIPE VALVE. SEE DETAIL, SHEET FS0.01. FIELD VERIFY EXACT LOCATION/CONDITIONS.

THE FIRE SPRINKLER CONTRACTOR SHALL HAVE ACCESS TO THE 3D (REVIT) MODEL PREPARED BY THE EQUIPMENT VENDOR FOR THE DEVELOPMENT OF FIRE SPRINKLER SHOP DRAWINGS. AFTER THE FIRE SPRINKLER DESIGN IS COMPLETE AND READY TO BE SUBMITTED (DEFERRED SUBMITTAL) TO THE MECKLENBURG COUNTY CODE ENFORCEMENT, THE FIRE SPRINKLER DESIGN SHALL BE SHARED WITH THE EQUIPMENT VENDOR TO COORDINATE EQUIPMENT INSTALL WITH THE FIRE SPRINKLER INSTALL.

SHEET FS3.01 - AREA A  
SHEET FS3.04 - AREA D



SHEET FS3.04 - AREA D  
SHEET FS3.03 - AREA C

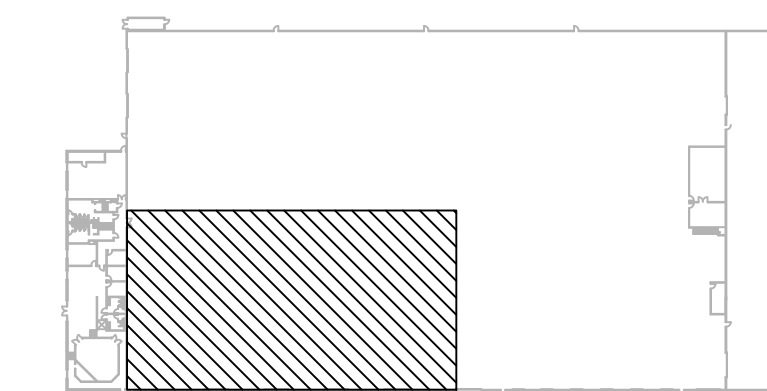
REVISIONS:

No.	Description	Date
1	Addendum 01	10/18/24
2	Addendum 02	10/30/24

CD Package for  
**Materials Recovery Facility**  
**Equipment Retrofit**  
1007 Amble Dr, Charlotte, NC 28206



1 HIGH CEILING AREA D - FIRE SPRINKLER NEW WORK  
SCALE: 1/8" = 1'-0"



2411  
10/08/2024 - CD  
SHEET NAME  
HIGH CEILING  
AREA D - FIRE  
SPRINKLER  
NEW WORK  
SHEET NUMBER  
**FS3.04**



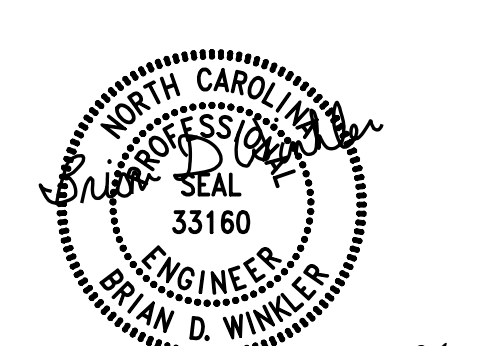
SHULTZ ENGINEERING

212 N. McDowell St, Suite 204  
Charlotte, NC 28204  
(704) 342-7303 | (704) 342-0293  
www.shultzeng.com | SEC - 24-228  
NC FIRM LICENSE NUMBER: C-0086  
TX FIRM LICENSE NUMBER: F-0358  
PM: M.D. E.D. F.D.



FMK ARCHITECTS

123 New Bern Street  
Charlotte, NC 28203  
P - 704.375.9950  
F - 704.375.5555



# Materials Recovery Facility Equipment Retrofit

CD Package for

1007 Ambler Dr, Charlotte, NC 28206



REVISIONS table with columns: No., Description, Date

2411  
10/08/2024 - CD  
SHEET NAME  
ELECTRICAL POWER RISER  
DIAGRAM & SCHEDULES  
(2 OF 2)  
SHEET NUMBER  
E0.04

PANEL HM table with columns: CCT BRKR NO., AMP, P, LOAD DESCRIPTION, NOTE, WIRE SIZE, LOAD KVA, PHASE, WIRE SIZE, LOAD DESCRIPTION, P, AMP, NO.

PANEL HL table with columns: CCT BRKR NO., AMP, P, LOAD DESCRIPTION, NOTE, WIRE SIZE, LOAD KVA, PHASE, WIRE SIZE, LOAD DESCRIPTION, P, AMP, NO.

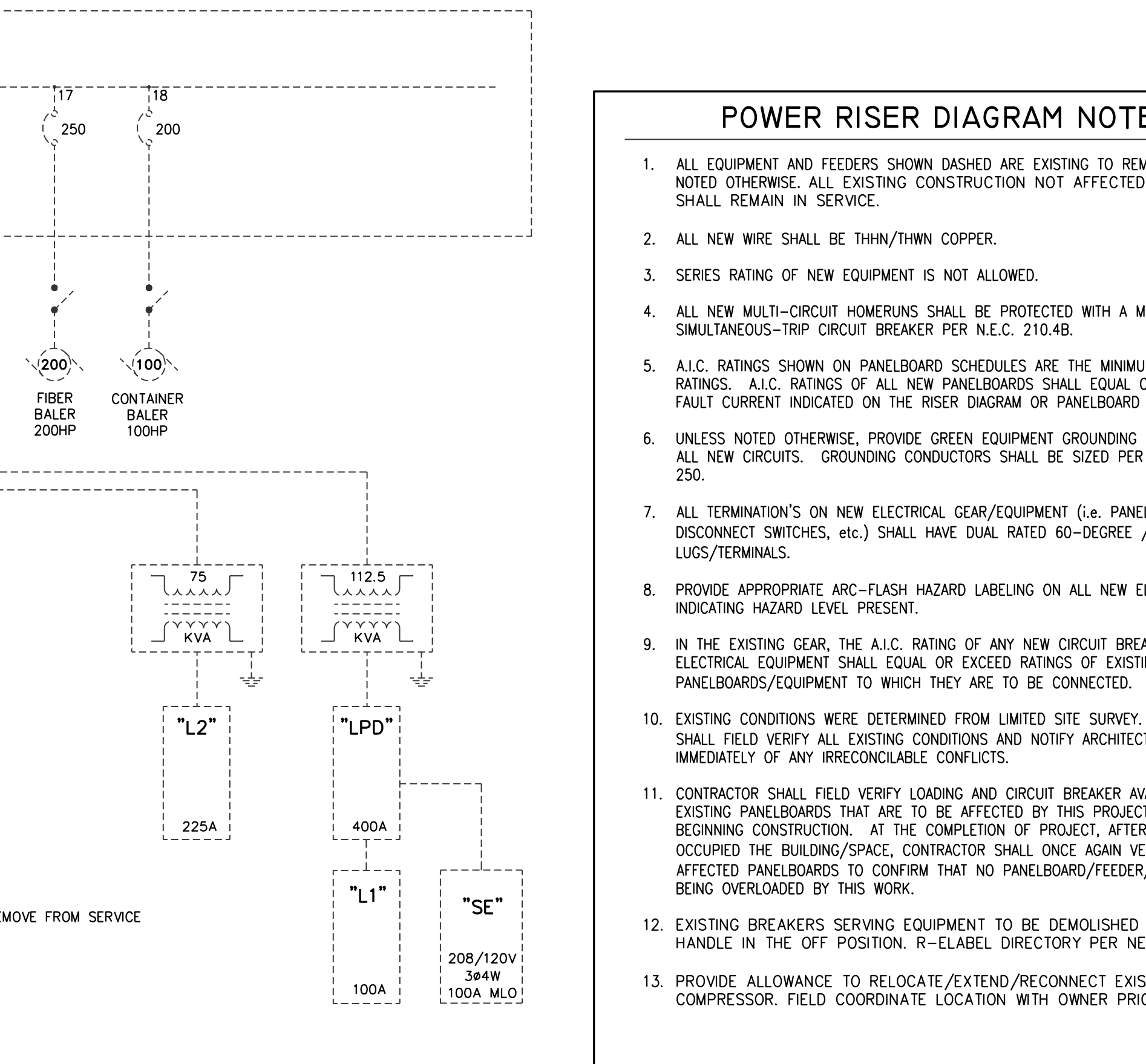
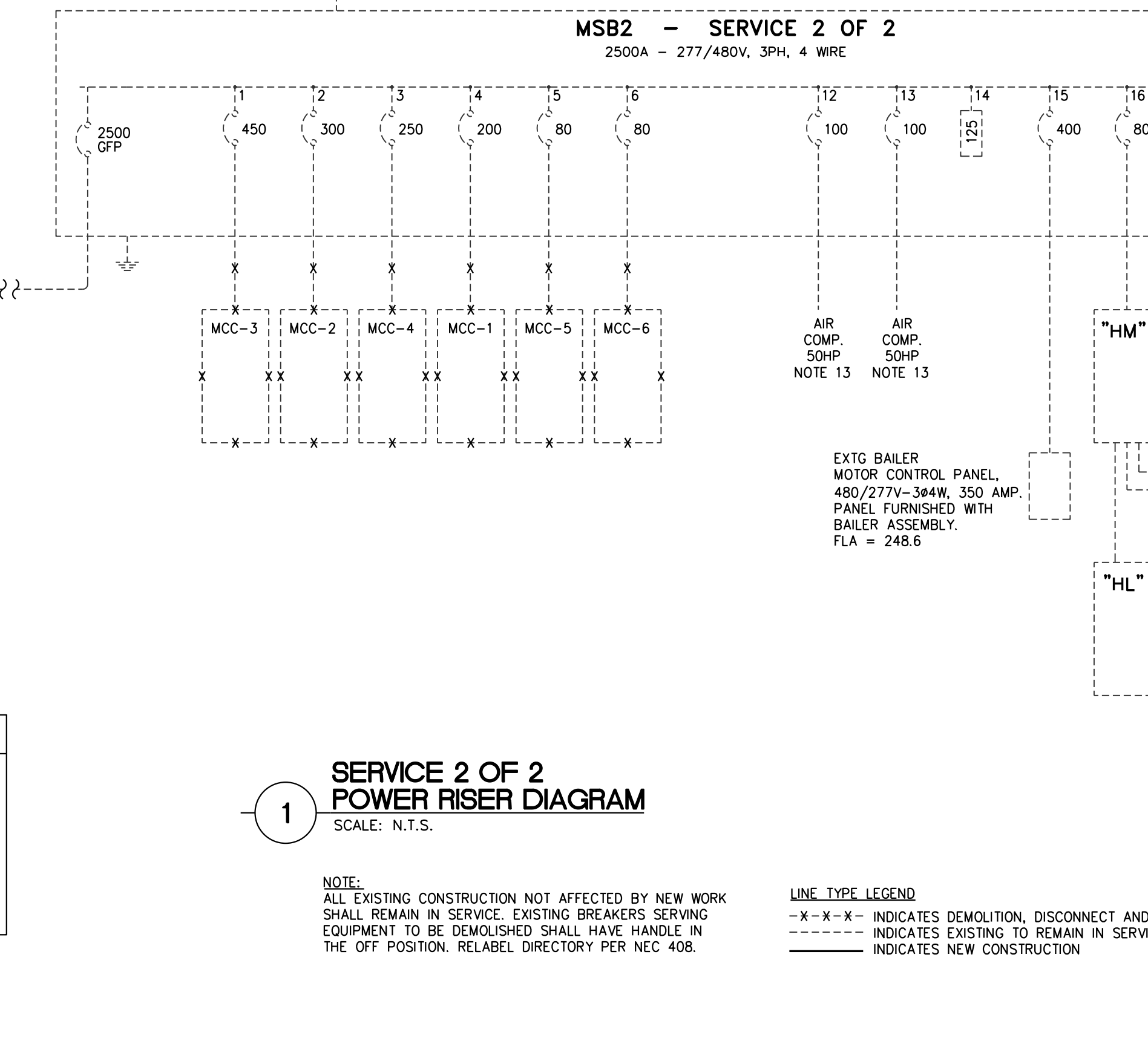
PANEL LPD table with columns: CCT BRKR NO., AMP, P, LOAD DESCRIPTION, NOTE, WIRE SIZE, LOAD KVA, PHASE, WIRE SIZE, LOAD DESCRIPTION, P, AMP, NO.

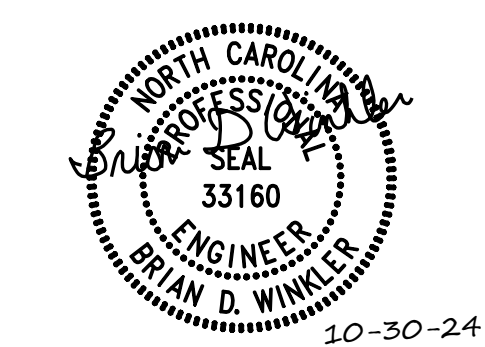
NEC ARTICLE 220 LOAD CATEGORY table with columns: CATEGORY, CONN KVA, DEMD KVA, DEMD KVA, DEMD KVA, CONN KVA, DEMD KVA, CONN KVA, DEMD KVA

NEC ARTICLE 220 LOAD CATEGORY table with columns: CATEGORY, CONN KVA, DEMD KVA, DEMD KVA, DEMD KVA, CONN KVA, DEMD KVA, CONN KVA, DEMD KVA

NEC ARTICLE 220 LOAD CATEGORY table with columns: CATEGORY, CONN KVA, DEMD KVA, DEMD KVA, DEMD KVA, CONN KVA, DEMD KVA, CONN KVA, DEMD KVA

VOLTAGE DROP TABLE with columns: TYPICAL BRANCH CIRCUIT LOAD, VOLTAGE, WIRE SIZE, MAX. WIRE LENGTH FOR 3% DROP





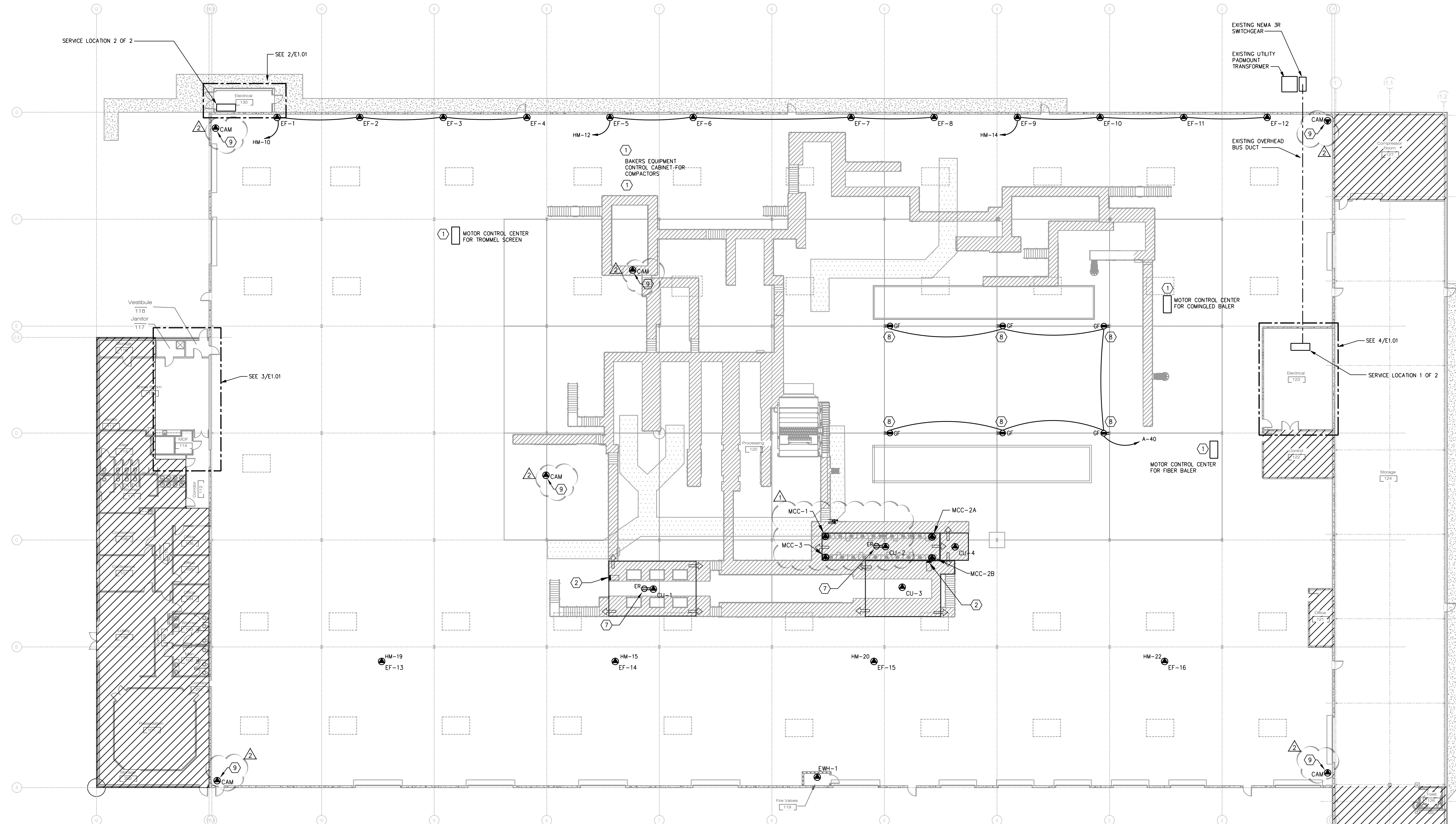
CD Package for  
**Materials Recovery Facility**  
**Equipment Retrofit**  
 1007 Ambler Dr, Charlotte, NC 28206



REVISIONS:

No.	Description	Date
1	Addendum 01	10/18/24
2	Addendum 02	10/30/24

2411  
 10/08/2024 - CD  
 SHEET NAME  
**OVERALL FLOOR PLAN - ELECTRICAL**  
 SHEET NUMBER  
**E1.01**



**1 OVERALL FLOOR PLAN - ELECTRICAL**  
 SCALE: 1/16" = 1'-0"

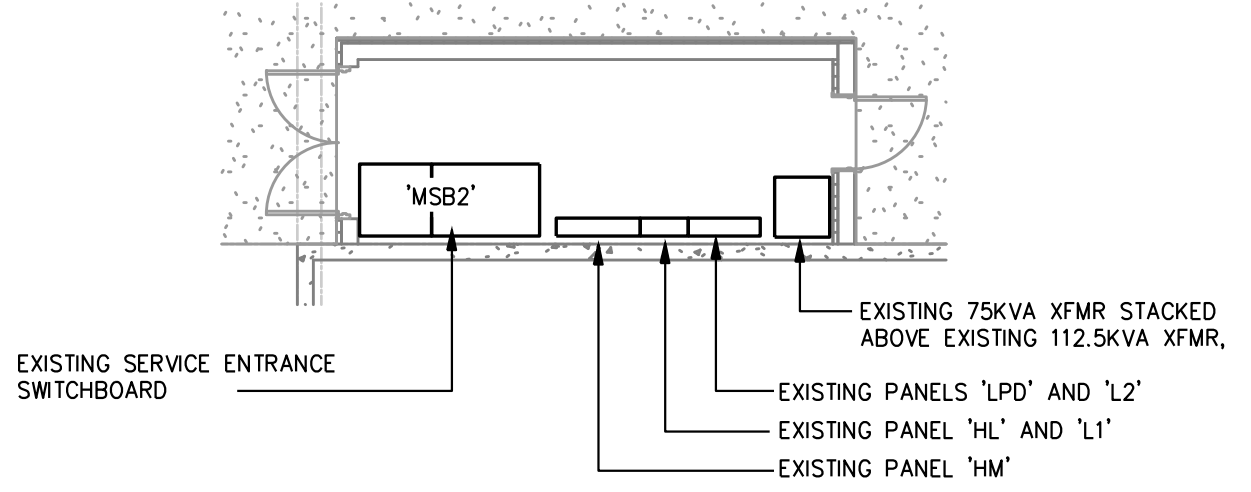
**ELECTRICAL EQUIPMENT CONNECTION SCHEDULE**

TAG	EQUIPMENT	VOLT	PHASE	AMPS	KW	HP	MCA	MOCP	DISCONNECT SWITCH			POWER CIRCUIT	NOTES	
									SIZE	POLES	FUSES			
MCC-1	MOTOR CONTROL CENTER	480	3	-	-	-	746	800	3	NF	-	MSB1	1,2	
MCC-2A	MOTOR CONTROL CENTER	480	3	-	-	-	257	300	800	3	NF	-	MSB1	1,2
MCC-2B	MOTOR CONTROL CENTER	480	3	-	-	-	450	500	800	3	NF	-	MSB1	1,2
MCC-3	MOTOR CONTROL CENTER	480	3	-	-	-	387	400	400	3	NF	-	MSB1	1,2
EF-1 THRU 12	EXHAUST FAN	480	3	-	-	1.5	-	-	30	3	FPN	3R	SEE PLANS	1
EF-13 THRU 16	EXHAUST FAN	480	3	-	-	5	-	-	30	3	NF	3R	SEE PLANS	1
AC-1/CU-1	DUCTLESS SPLIT SYSTEM	208	1	-	-	-	19.3	30	30	3	FPN	3R	LPD-1	1,3
AC-2/CU-2	DUCTLESS SPLIT SYSTEM	208	1	-	-	-	32	40	60	3	FPN	3R	LPD-3	1,3
AC-3/CU-3	DUCTLESS SPLIT SYSTEM	208	1	-	-	-	19.3	30	30	3	FPN	3R	LPD-5	1,3
AC-4/CU-4	DUCTLESS SPLIT SYSTEM	208	1	-	-	-	10	15	30	3	FPN	3R	LPD-7	1,3
EWH-1	ELECTRIC WALL HEATER	277	1	-	-	5	-	-	30	1	-	3R	HL-36	1,3

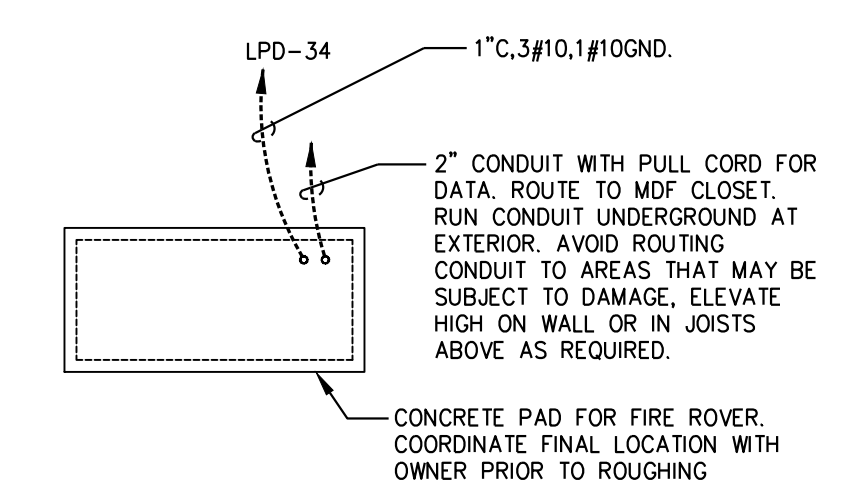
**NOTES:**

- COORDINATE WITH MECH/PLUMB CONTRACTORS AND OTHER EQUIPMENT VENDORS/INSTALLERS TO ENSURE OVERCURRENT PROTECTION DEVICES AND ASSOCIATED CIRCUIT FOR EQUIP IS SIZED PER MFGERS RECOMMENDATIONS. FIELD COORDINATE FINAL LOCATION OF ALL EQUIPMENT PRIOR TO ROUGHING. ANY CHANGES REQUIRED SHALL BE MADE PRIOR TO ORDERING MATERIALS AND WILL BE INSTALLED AT THE COST OF THE PERSON AND/OR COMPANY MAKING THE CHANGES.
- LAND FEEDER TO EQUIPMENT DISCONNECT SWITCH TERMINALS. PROVIDE LUGS AS REQUIRED TO MAKE CONNECTION COMPLETE. COORDINATE WITH EQUIPMENT VENDOR FOR EXACT REQUIREMENTS. PRELIMINARY INFORMATION INDICATES THE LUGS ARE MANUFACTURED BY EXTON, N24S SERIES. COORDINATE.
- 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.

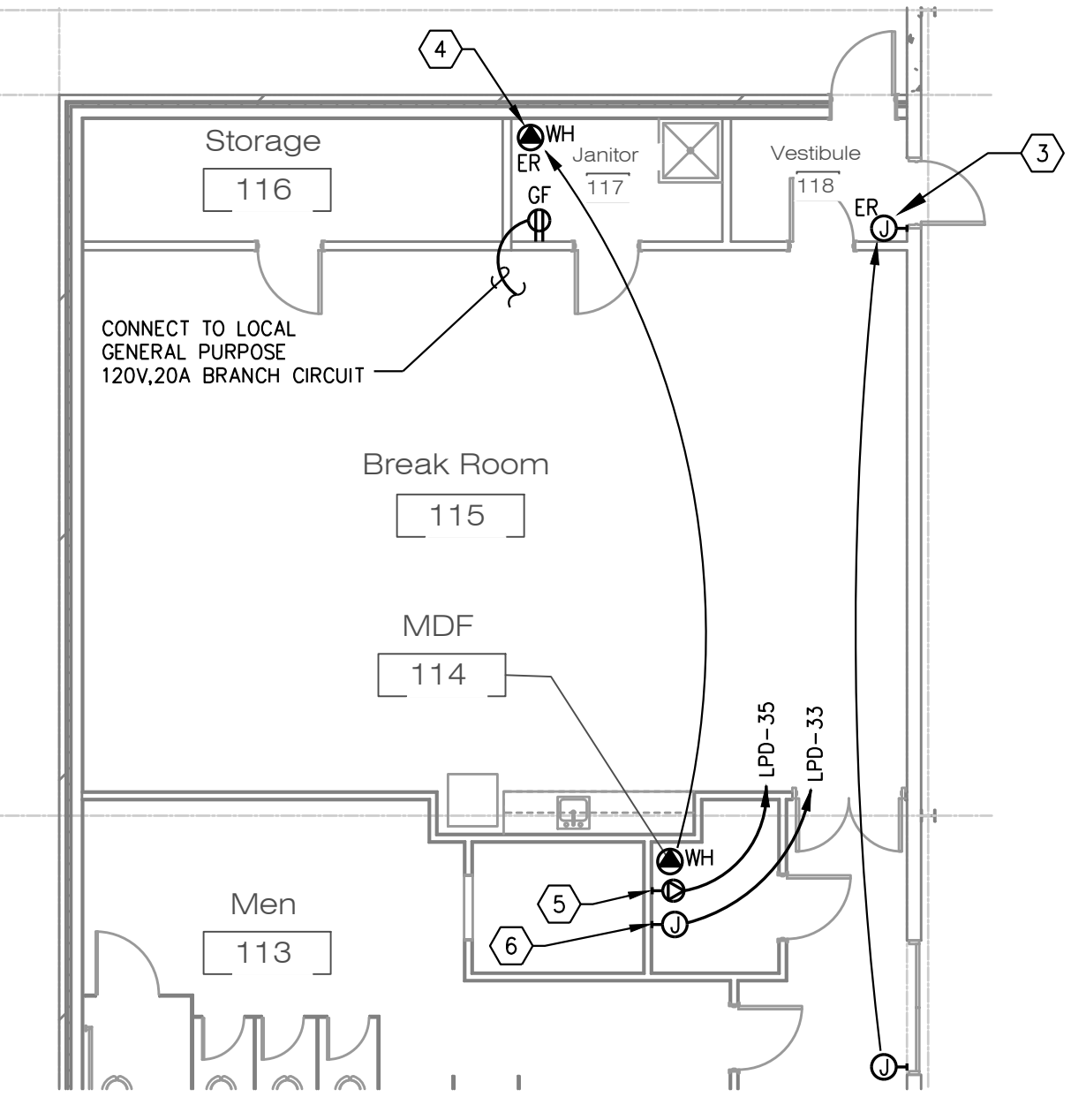
- KEYED ELECTRICAL NOTES**
- EXISTING EQUIPMENT SHOWN RELOCATED. FIELD VERIFY EXACT LOCATION PRIOR TO ROUGHING. EXTEND EXISTING CIRCUIT AND RE-CONNECT EXISTING ELECTRICAL CONNECTION TO EQUIPMENT. WHERE EXISTING EQUIPMENT/RACEWAY THAT IS IN GOOD CONDITION AND CODE COMPLIANT MAY BE RE-USED TO FACILITATE RELOCATED EQUIPMENT.
  - APPROXIMATE LOCATION OF ENCLOSURE PANEL, 208V, SINGLE PHASE, 100A. EC TO RE-ROUTE EXISTING FEEDER TO ENCLOSURE PANEL'S TERMINALS. PRE-PACKAGED ENCLOSURE CONSTRUCTION AND DESIGN BY OTHERS. ANTICIPATED LOAD IS 20A.
  - EXISTING AIR CURTAIN TO BE RELOCATED. RELOCATE AND EXTEND EXISTING CIRCUIT/DISCONNECT AS REQUIRED TO ACCOMMODATE RELOCATION. FIELD COORDINATE PRIOR TO ROUGHING.
  - EXISTING ELECTRIC WATER HEATER TO BE RELOCATED. RELOCATE AND EXTEND EXISTING CIRCUIT/DISCONNECT AS REQUIRED TO ACCOMMODATE RELOCATION. FIELD COORDINATE PRIOR TO ROUGHING.
  - PROVIDE NEW RECEPTACLE, NEMA 5-30R, FOR COUNTY COMMUNICATIONS EQUIPMENT. COORDINATE MOUNTING HEIGHT/LOCATION WITH IT VENDOR PRIOR TO ROUGHING.
  - PROVIDE NEW CONNECTION FOR COUNTY SECURITY CABINET. COORDINATE MOUNTING HEIGHT/LOCATION WITH SUPPLIER PRIOR TO ROUGHING.
  - RELOCATE EXISTING ROOFTOP GFCI/WP RECEPTACLE TO NEW LOCATION AS INDICATED.
  - LOCATE RECEPTACLE IN THE HOLLOW SPACE OF COLUMN. PROVIDE METAL IN-USE TYPE DUST-TIGHT COVER FOR RECEPTACLE.
  - PROVIDE NEMA 5-20 RECEPTACLE ADJACENT TO CCTV CAMERA. COORDINATE EXACT LOCATION/MOUNTING/HEIGHT WITH THE CAMERA INSTALLER PRIOR TO ROUGHING-IN. RECEPTACLE SHALL BE FITTED WITH METAL IN-USE DUST TIGHT COVER. CONNECT RECEPTABLES TO CIRCUIT L2-23.



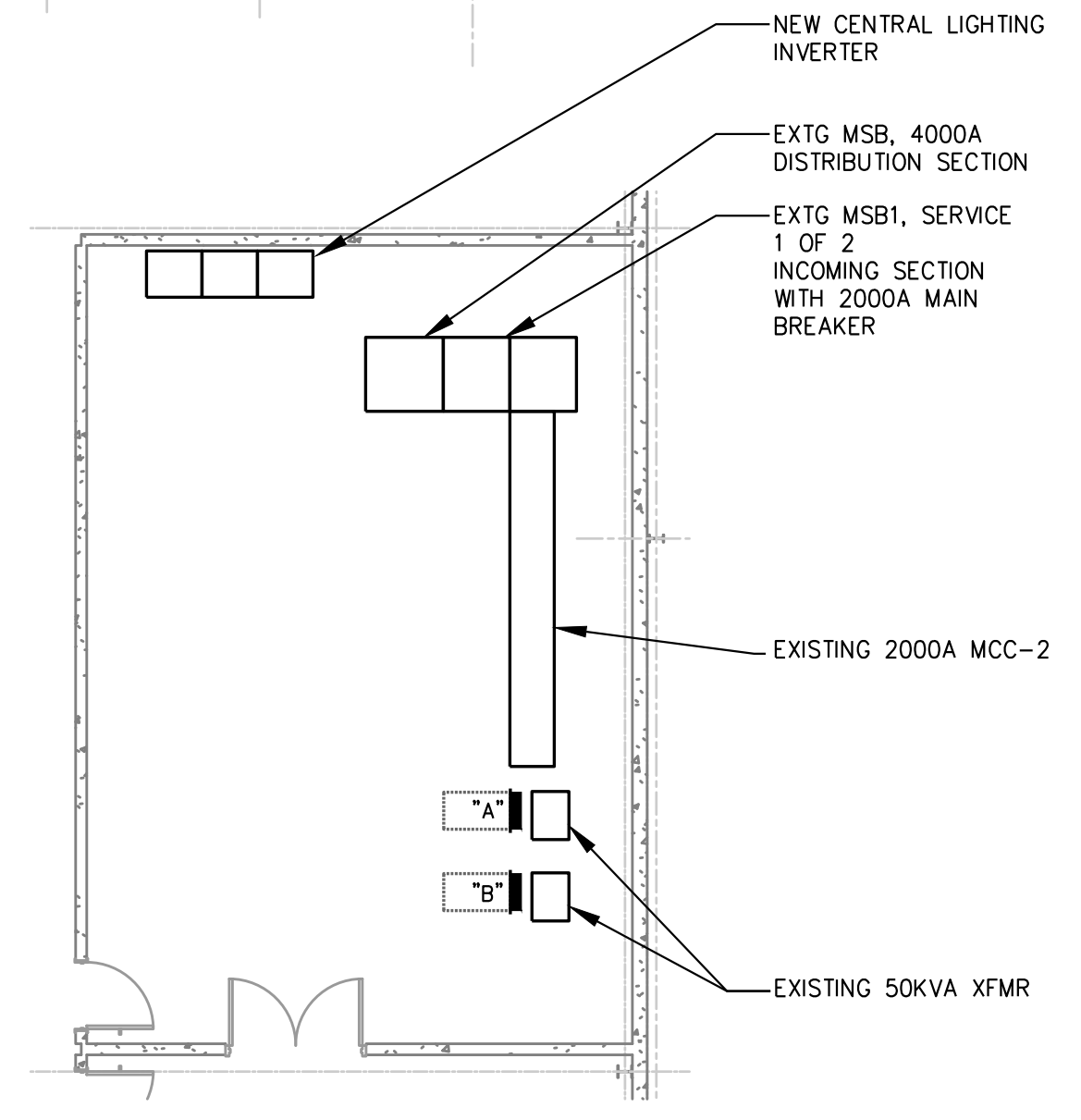
**2 ENLARGED PARTIAL PLAN EXISTING ELECTRICAL ROOM**  
 SCALE: 1/8" = 1'-0"



**5 FIRE ROVER SYSTEM**  
 SCALE: 1/16" = 1'-0"



**3 PARTIAL ELECTRICAL PLAN**  
 SCALE: 1/8" = 1'-0"



**4 PARTIAL ELECTRICAL PLAN**  
 SCALE: 1/8" = 1'-0"

**TELECOMMUNICATIONS GENERAL NOTES:**

- ALL WORK SHALL CONFORM TO THE LATEST ADOPTED NATIONAL ELECTRICAL CODE, STATE CODE, LOCAL AUTHORITY REQUIREMENTS, BICSI STANDARDS, LATEST COUNTY TELECOM STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL VISIT THE PREMISES AND THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL DETAILS OF THE WORK AND WORKING CONDITIONS. VERIFY ALL FIELD CONDITIONS AND ADVISE THE ENGINEER OF ANY DISCREPANCY THAT MAY PREVENT OR HINDER THE SPECIFIED WORK FROM BEING COMPLETED.
- THE CONTRACTOR SHALL STUDY THE STRUCTURE AND FINISH CONDITIONS AFFECTING THEIR WORK AND SHALL COORDINATE THEIR WORK ACCORDINGLY. THE CONTRACTOR SHALL PROVIDE ALL ACCESSORIES, HANGERS, AND ANCHORS AS NECESSARY TO MEET SUCH CONDITIONS WITHOUT ANY ADDITIONAL COST.
- PRIOR TO ACCOMPLISHING ANY WORK IN ANY AREA, ALL WORK SHALL BE PLANNED AND COORDINATED WITH OTHER TRADES. ALL ROUGH-IN FOR LOW VOLTAGE WIRING TO BE FURNISHED AND INSTALLED BY THE E.C. UNLESS OTHERWISE NOTED. ALL LINE VOLTAGE POWER FOR LOW VOLTAGE EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE E.C. UNLESS OTHERWISE NOTED.
- PROPERLY SUPPORT ALL WORK AND EQUIPMENT INSTALLED UNDER THIS CONTRACT. STUDY ALL DRAWINGS, MANUFACTURER'S INSTRUCTIONS, AND CATALOG DATA TO DETERMINE HOW EQUIPMENT ACCESSORIES, AND RELATED ITEMS ARE TO BE SUPPORTED, MOUNTED, OR SUSPENDED. PROVIDE ALL BOLTS, INSERTS, BRACKETS, STRUCTURAL SUPPORTS, AND ACCESSORIES FOR PROPER SUPPORT OF EQUIPMENT FURNISHED UNDER THIS CONTRACT, UNLESS OTHERWISE NOTED TO BE BY E.C.
- COORDINATE MOUNTING HEIGHT AND LOCATION OF ALL WALL MOUNTED EQUIPMENT WITH ARCHITECTURAL ELEVATIONS.
- THE TELECOMMUNICATIONS DRAWINGS ARE DIAGRAMMATIC. THE TELECOMMUNICATIONS INSTALLATION SHALL BE FULLY COORDINATED WITH ALL OTHER TRADES, PRIOR TO ROUGH-IN. BETWEEN THE TELECOMMUNICATIONS WIRING AND DEVICES AND ARCHITECTURAL, ELECTRICAL, SECURITY, AUDIO VISUAL, MECHANICAL AND FIRE PROTECTION WORK.
- ALL LOW VOLTAGE CABLING AS INDICATED ON THESE "T" SHEET DRAWINGS CAN BE SHARED USING THE SAME BASKET STYLE CABLE TRAY, THAT IS BEING PROVIDED BY THE E.C. WITH LIKE CABLES BUNDLED WITH HOOK AND LOOP FASTENERS EVERY 10'.
- PROVIDE HOOK AND LOOP FASTENERS ON BUNDLES OF LIKE CABLES ON THE CABLE RUNWAY WITHIN THE TELECOM ROOMS AND ON 6" CENTERS FROM RUNWAY TO FINAL TERMINATION WITH THE RESPECTIVE RACKS, CABINETS, PUNCH-DOWN BLOCKS, ETC.
- FOR CABLING ROUTED ON WALLS WITHIN THE TELECOM ROOM, BETWEEN SLEEVES/CONDUITS AND OVERHEAD RUNWAY SYSTEM, ROUTE CABLING ON WALL WITHIN D RINGS OR VERTICAL CABLE RUNWAY TO TRAIN CABLING TO AVOID SAGGING AND STRAINING.
- IN GENERAL, THE E.C. IS PROVIDING ALL THE FLEXIBLE AND RIGID CONDUIT, BOXES, RINGS, SUPPORTS, AND CABLE TRAY FOR THE TELECOMMUNICATIONS CABLING, UNLESS OTHERWISE NOTED, T.C. TO PROVIDE J-HOOKS ON 5' CENTERS WHERE CONDUIT OR TRAY IS NOT PROVIDED.
- ALL WIRING SHALL BE PLENUM RATED.
- ALL EQUIPMENT MUST BE LABELED BY AN APPROVED NORTH CAROLINA 3RD PARTY TESTING LAB.
- PROVIDE 12" SLACK LOOP PRIOR TO DROPPING DOWN TO OUTLET, HOWEVER WIRELESS APs REQUIRE A 20" SLACK LOOP.
- T.C. MUST BE A HUBBELL CERTIFIED CONTRACTOR WITH INDIVIDUALLY CERTIFIED HUBBELL TECHNICIANS.

**SECURITY GENERAL NOTES:**

- ALL WORK SHALL CONFORM TO THE LATEST ADOPTED NATIONAL ELECTRICAL CODE, STATE BUILDING CODE, LOCAL AUTHORITY REQUIREMENTS, ASIS STANDARDS, BICSI STANDARDS, LOCAL MECKLENBURG COUNTY SECURITY GUIDELINES AND SPECIFICATIONS.
- THE SECURITY CONTRACTOR SHALL VISIT THE PREMISES AND THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL DETAILS OF THE WORK AND WORKING CONDITIONS. VERIFY ALL FIELD CONDITIONS AND ADVISE THE ENGINEER OF ANY DISCREPANCY THAT MAY PREVENT OR HINDER THE SPECIFIED WORK FROM BEING COMPLETED.
- THE SECURITY CONTRACTOR SHALL STUDY THE PROPOSED CAMERA LOCATION CONDITIONS AFFECTING THEIR WORK AND SHALL COORDINATE THEIR WORK ACCORDINGLY. THE CONTRACTOR SHALL PROVIDE ALL ACCESSORIES, STRAPS, HANGERS, MOUNTS, BRACKETS AND ANCHORS AS NECESSARY TO MEET SUCH CONDITIONS WITHOUT ANY ADDITIONAL COST TO THE OWNER.
- PRIOR TO ACCOMPLISHING ANY WORK IN ANY AREA, ALL WORK SHALL BE PLANNED AND COORDINATED WITH THE OWNER AND NOTE THE BUILDING WILL BE ACTIVE WITH STAFF AND GUESTS DURING CONSTRUCTION. LOCAL COVID PROTOCOLS ARE TO BE FOLLOWED AT THIS TIME.
- PROPERLY SUPPORT ALL WORK AND EQUIPMENT INSTALLED UNDER THIS CONTRACT. STUDY ALL EXISTING CONDITIONS AND MANUFACTURER'S INSTRUCTIONS, AND CATALOG DATA TO DETERMINE HOW BEST EQUIPMENT ACCESSORIES AND RELATED ITEMS ARE TO BE SUPPORTED, MOUNTED, OR SUSPENDED. PROVIDE ALL BOLTS, INSERTS, BRACKETS, STRUCTURAL SUPPORTS, AND ACCESSORIES FOR PROPER SUPPORT OF EQUIPMENT FURNISHED UNDER THIS CONTRACT, UNLESS OTHERWISE NOTED TO BE BY E.C.
- THE DRAWINGS ARE DIAGRAMMATIC.
- DURING A WALK-THROUGH WITH THE OWNER/ENGINEER, CAREFULLY REVIEW FINAL EQUIPMENT LOCATIONS PRIOR TO INSTALLATION.
- CONFIRM CAMERA FOCUSING, FIELD OF VIEW, STANDARD VS CORRIDOR FORMAT, ETC. WITH OWNER/ENGINEER. THIS SHALL BE DONE BY PROVIDING THE OWNER WITH A PHOTO OF EACH CAMERA VIEW FOR COMMENT AND PRE-APPROVAL.
- CONTRACTOR TO PROVIDE PATCH CORDS ON BOTH ENDS OF ALL CABLING RUNS AND INTO THE EXISTING POE SWITCH. UTILIZE LARGER CORNER BRACKETS AND ATTEMPT TO CONCEAL THE FLEXIBLE CONDUIT BEHIND THE CORNER BRACKETS AS MUCH AS POSSIBLE.
- CONTRACTOR SHALL SUBMIT IP DEVICE LIST TO OWNER PRIOR TO ANTICIPATED COMMISSIONING DATE.
- PROVIDE ALL REQUIRED LICENSES FOR CAMERAS/SOFTWARE/HARDWARE.
- LABEL ALL CAMERAS, SERVERS, POWER SUPPLIES, ETC. PER THE OWNER'S DIRECTION.
- PREPROGRAM/PREAM CAMERAS AS MUCH AS POSSIBLE INCLUDING IP ADDRESSES, PRIOR TO MOUNTING. CONFIGURE FINAL FOCUSING IN THE FIELD.
- FOR CABLING ROUTED ON WALLS WITHIN THE TELECOM ROOM, BETWEEN SLEEVES/CONDUITS AND OVERHEAD RUNWAY SYSTEM, ROUTE CABLING ON WALL WITHIN D RINGS TO TRAIN CABLING TO AVOID SAGGING AND STRAINING. PROVIDE ANY REQUIRED SLEEVES TO PENETRATE WALLS BETWEEN ROOMS FOR NEW CABLING.
- ALL WIRING SHALL BE PLENUM RATED.
- ALL EQUIPMENT MUST BE LABELED BY AN APPROVED NORTH CAROLINA 3RD PARTY TESTING LAB.
- CONTRACTOR AND INSTALLING TECHNICIAN SHALL BE CAMERA AND VMS MFR CERTIFIED.
- CONTRACTOR TO HIRE QUALIFIED ELECTRICIAN TO INSTALL ALL NECESSARY CONDUIT/BOXES/FITTING/SUPPORTS. DO NOT ASSUME THERE ARE ANY EXISTING RACEWAYS TO BE REUSED.
- CONTRACTOR TO SEAL UP ANY PENETRATIONS AS REQUIRED BASED ON THE EXISTING WALL MATERIAL.
- CONTRACTOR TO PROCURE ALL NECESSARY PERMITS AND HAVE ALL NECESSARY INSPECTIONS FROM THE CITY/COUNTY BLDG DEPT.
- ALL CAT6 CABLING SHALL BE HUBBELL #6SRPX, FOR RUNS LESS THAN 295', AND PAIGE GAMECHANGER #258300336 OR SUPERIOR ESSEX POWERWISE XD FOR RUNS OVER 295' AND UNDER 500' AND LEVITON ONE REACH FOR DISTANCES OVER 500', AS INSTALLED, TESTED AND CERTIFIED BY A HUBBELL/GAMECHANGER/SUPERIOR ESSEX CERTIFIED TECHNICIAN. CONTRACTOR TO SUBMIT TEST RESULTS ALONG WITH MANUFACTURER PROVIDED 25 YEAR WARRANTY FOR ALL CABLING WORK INSTALLED.
- ALL CONDUIT ABOVE GRADE SHALL BE RIGID METALLIC (GRC) OR INTERMEDIATE METAL (IMC), AND MOUNTED TIGHT TO STRUCTURE, UNLESS OTHERWISE NOTED.
- ALL CONDUIT AND BOXES SHALL BE 1" MINIMUM, UNLESS OTHERWISE NOTED.

**SYMBOL LEGEND**  
(NOTE: NOT ALL SYMBOLS ARE NECESSARILY USED ON PLANS)

TYPE	DESCRIPTION
	CABLE RUNWAY. SEE ENLARGED TELECOM ROOM PLANS FOR SIZE, LOCATION AND LENGTH. PROVIDE ALL REQUIRED HARDWARE, SWEEPING BENDS, HANGERS ETC., INSTALL PER MANUFACTURERS RECOMMENDATIONS. FURNISHED AND INSTALLED BY E.C.
	TELECOM REUSABLE FIRE-RATED SLEEVE THROUGH WALL, 4" SQUARE X 14" LONG, 1/2/3/4 HOUR RATINGS, WITH RADIUS CONTROL MODULES. STI EZ PATH #44+EZRCM44S OR EQUAL.
	FLOOR/WALL MOUNTED TELECOM CABINET. SEE RACK ELEVATION DETAIL AND FLOOR PLANS FOR ADDITIONAL INFORMATION.
	FLOOR MOUNTED 2-POST TELECOM RACK WITH 6" VERTICAL WIRE MANAGEMENT UNLESS OTHERSIDE NOTED. SEE RACK ELEVATION DETAIL AND FLOOR PLANS FOR ADDITIONAL INFORMATION.
	TELECOMMUNICATIONS TERMINATION BACKBOARD - 3/4" THICK X 8" HIGH X LENGTH PER PLANS, UON. BACKBOARD SHALL BE FIRE RATED NON-PAINTED, VOID FREE, A/C GRADE WITH 'A' SIDE FACING OUT, MOUNTED 12" AFF. CONTRACTOR TO HAVE NETWORK ENTERPRISE CENTER VERIFY RATING PRIOR TO HANGING PLYWOOD.
	TELECOMMUNICATIONS STYLE COPPER GROUND BAR WITH STAND-OFF INSULATORS. PROVIDE 2 HOLE LONG BARREL IRREVERSIBLE CRIMP CONNECTIONS FOR ALL BONDING AND GROUNDING CONDUCTORS. REFER TO DETAILS FOR FURTHER INFORMATION. SUBSCRIPT 'PBB' DENOTES PRIMARY BONDING BUSBAR. SUBSCRIPT 'SBB' DENOTES SECONDARY BONDING BUSBAR.
	COUNTY TELECOM OUTLET (WORK AREA OUTLET) AT 18" AFF. CAT6 DATA CABLES AND RJ-45 CAT6 JACKS, AS INDICATED ON PLANS, ON A 4"SQ X 2-1/8"D BOX, 1G FACEPLATE, T.C. TO PROVIDE J-HOOKS TO CABLE TRAY AND CONTINUE ON TO TELECOM ROOM. REFER TO OUTLET AND FACEPLATE DETAILS & RISER.
	COUNTY TELECOM OUTLET (WORK AREA OUTLET) MOUNTED AT HEIGHT TO MATCH SIMILAR ELECTRICAL HEIGHTS FOR SWITCHES AND ABOVE COUNTERS PER ADA, W/CAT6 DATA CABLES AND RJ-45 CAT6 JACKS, AS INDICATED ON PLANS, ON A 4"SQ X 2-1/8"D BOX, 1G FACEPLATE, T.C. TO PROVIDE J-HOOKS TO CABLE TRAY AND CONTINUE ON TO TELECOM ROOM. REFER TO OUTLET AND FACEPLATE DETAILS & RISER.
	COUNTY TELECOM AP OUTLET, FLUSH MOUNTED IN CLG, W/ 1 PRIMARY DATA CAT6A CABLE & 1 CAT6A RJ-45 JACK IN BISCUIT JACK OF 4-11/16"SQ X 2-1/8"D BOX, T.C. TO PROVIDE J-HOOKS TO CABLE TRAY AND CONTINUE ON TO TELECOM ROOM. ACCESS POINT DEVICE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. REFER TO OUTLET & FACEPLATE DETAILS & RISER.
	COUNTY TELECOM OUTLET WALL/PENDANT MOUNTED FOR ROOM DISPLAY AS NOTED, W/ 4 CAT6 DATA CABLES & 4 RJ-45 CAT6 JACKS, MOUNTED FLUSH INSIDE OF A COMMON RECESSED CHIEF #PAC501B AV BOX, CONDUIT TO ABOVE CEILING BY E.C., REFER TO OUTLET & FACEPLATE DETAILS & RISER. REFER TO FLOOR PLAN FOR VARIOUS WALL MOUNTING HEIGHTS.
	3RD PARTY TELECOM OUTLET (WORK AREA OUTLET) AT 18" AFF. CAT6 DATA CABLES AND RJ-45 CAT6 JACKS, AS INDICATED ON PLANS, ON A 4"SQ X 2-1/8"D BOX, 1G FACEPLATE, T.C. TO PROVIDE J-HOOKS TO CABLE TRAY AND CONTINUE ON TO TELECOM ROOM. REFER TO OUTLET AND FACEPLATE DETAILS & RISER.
	3RD PARTY TELECOM OUTLET (WORK AREA OUTLET) MOUNTED AT HEIGHT TO MATCH SIMILAR ELECTRICAL HEIGHTS FOR SWITCHES AND ABOVE COUNTERS PER ADA, W/CAT6 DATA CABLES AND RJ-45 CAT6 JACKS, AS INDICATED ON PLANS, ON A 4"SQ X 2-1/8"D BOX, 1G FACEPLATE, T.C. TO PROVIDE J-HOOKS TO CABLE TRAY AND CONTINUE ON TO TELECOM ROOM. REFER TO OUTLET AND FACEPLATE DETAILS & RISER.
	3RD PARTY TELECOM AP OUTLET, FLUSH MOUNTED IN CLG, W/ 1 PRIMARY DATA CAT6A CABLE & 1 CAT6A RJ-45 JACK IN BISCUIT JACK OF 4-11/16"SQ X 2-1/8"D BOX, T.C. TO PROVIDE J-HOOKS TO CABLE TRAY AND CONTINUE ON TO TELECOM ROOM. ACCESS POINT DEVICE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. REFER TO OUTLET & FACEPLATE DETAILS & RISER.
	3RD PARTY TELECOM OUTLET WALL/PENDANT MOUNTED FOR ROOM DISPLAY AS NOTED, W/ 4 CAT6 DATA CABLES & 4 RJ-45 CAT6 JACKS, MOUNTED FLUSH INSIDE OF A COMMON RECESSED CHIEF #PAC501B AV BOX, CONDUIT TO ABOVE CEILING BY E.C., REFER TO OUTLET & FACEPLATE DETAILS & RISER. REFER TO FLOOR PLAN FOR VARIOUS WALL MOUNTING HEIGHTS.
	3RD PARTY TELECOM OUTLET FOR COUNTY REMOTE ACCESS (WORK AREA OUTLET) AT 18" AFF. GAMECHANGER OR EQUAL CAT6 DATA CABLES AND RJ-45 CAT6 JACKS, AS INDICATED ON PLANS, ON A 4"SQ X 2-1/8"D BOX, 1G FACEPLATE, T.C. TO PROVIDE J-HOOKS TO CABLE TRAY AND CONTINUE ON TO TELECOM ROOM. REFER TO OUTLET AND FACEPLATE DETAILS & RISER.
	CCTV CAMERA, WALL MOUNTED (W) OR BEAM SURFACE (S), PTC CAMERA, BRACKET, 60W POWER INJECTOR, AND LICENSE BY S.C., CAT6 DATA CABLES & RJ-45 CAT6 JACKS BY T.C., 4" SQ J-BOX AND 3/4" LOW VOLTAGE CONDUIT AND SHARED 120V, 20A POWER CIRCUIT IN 3/4" CONDUIT WITH RECEPTACLE ADJACENT TO CAMERA BY E.C., CAMERA TO BE HANWHA #NXP-9250R OR EQUAL BY AXIS OR PELCO.
	CCTV SYSTEM, NVR SERVER WITH S2 SOFTWARE, SIZED TO SUPPORT CAMERAS ON THIS PROJECT, SEE VMS SPECIFICATIONS FOR FURTHER DETAILS, MOUNT ON PLYWOOD IN THE MDF ROOM, PLUG INTO LOCAL POWER OUTLET AND PROVIDE CAT6 HUBBELL PATCH CORD INTO COUNTY NETWORK CABINET.

**GROUNDING AND BONDING GENERAL NOTES:**

- ALL GROUNDING AND BONDING FOR EQUIPMENT/SYSTEMS IN THESE 'T' DRAWINGS ARE TO BE BY THE T.C.
- ALL METALLIC OBJECTS IN THE TELECOM ROOMS SHALL BE GROUNDING AND BONDED PER ANSI J-STD-607-B AND THE GROUNDING SPECIFICATIONS.
- PROVIDE #6 INSULATED COPPER BONDING CONDUCTOR FROM THE LOCAL BUILDING STEEL, CABLE RUNWAYS, SLEEVES, EQUIPMENT CABINETS, SYSTEMS EQUIPMENT GROUND TERMINALS, NETWORK SWITCHES, ETC. BACK TO THE PBB IN TELECOM ROOM.
- E.C. SHALL PROVIDE #10 INSULATED COPPER GROUNDING CONDUCTOR FROM THE PBB IN THE IT ROOM TO THE MAIN ELECTRICAL GROUND BAR.
- PROVIDE 2 HOLE IRREVERSIBLE COMPRESSION LUGS.
- LABEL EACH GROUNDING AND BONDING CONDUCTOR ON EACH END PER THE DETAILS.

**UL LISTING GENERAL NOTES:**

ALL EQUIPMENT AND DEVICES SHALL BE UL LISTED OR 3RD PARTY APPROVED BY A NC APPROVED TESTING AGENCY.

**ABBREVIATIONS**

Type	Description
AC	ALTERNATING CURRENT
AFC	ABOVE FINISHED COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AMP	AMPERE
AP	(WIRELESS) ACCESS POINT
AV	AUDIO VISUAL
AVC	AUDIO VISUAL CONTRACTOR
AWG	AMERICAN WIRE GAUGE
BCT	BONDING CONDUCTOR FOR TELECOM
BET	BUILDING ENTRANCE TERMINAL
C	CONDUIT
CATV	CABLE TELEVISION
CLG	CEILING
CM	CEILING MOUNT
COR	CONTRACTING OFFICER REPRESENTATIVE
CR	CARD READER
DS	DIGITAL SIGNAGE
EC	ELECTRICAL CONTRACTOR
EMT	ELECTRICAL METALLIC TUBING
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
G OR GND	GROUND
GC	GENERAL CONTRACTOR
GFGI	GOVERNMENT FIRNISH GOVERNMENT INSTALLED
GOV'T	GOVERNMENT
HH	HANDHOLD
IG	ISOLATED GROUND
INTERCOM	INTERCOMMUNICATION
J-BOX	JUNCTION BOX
KW	KILOWATTS
LH	LEFT HAND

**ABBREVIATIONS**

Type	Description
LV	LOW VOLTAGE
MA	MAXIMUM
MATV	MASTER ANTENNA TELEVISION (CATV)
MC	MECHANICAL CONTRACTOR
MD	MOTION DETECTOR
MH	MANHOLE
MIC	MICROPHONE
MIN	MINIMUM
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
P	POLE
PA	PUBLIC ADDRESS
PACS	PHYSICAL ACCESS CONTROL SYSTEM
PB	PUSH BUTTON SWITCH
PBB	PRIMARY BONDING BUSBAR
PET	PROTECTED ENTRANCE TERMINAL
POS	POINT OF SALE
RH	RIGHT HAND
RIM	READER INTERFACE MODULE
RS	ROOM SCHEDULE DISPLAY
RU	RACK UNIT
SBB	SECONDARY BONDING BUSBAR
SC	SECURITY CONTRACTOR
SOG	SLAB ON GRADE
SPD	SURGE SUPPRESSION DEVICE
SPKR	SPEAKER
TC	TELECOMMUNICATIONS CONTRACTOR, TIME CLOCK
TEBC	TELECOM EQUIPMENT BONDING CONDUCTOR
TR	TELECOM ROOM
TTB	TELEPHONE TERMINAL BOARD
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
V	VOLT(S)
W	WATTS OR WIRE
WAP	WIRELESS ACCESS POINT
WG	WIRE GUARD
WIC	WALL MOUNTABLE INTERCONNECT CENTER
WP	WEATHERPROOF

CD Package for

# Materials Recovery Facility Equipment Retrofit

1007 Amble Dr, Charlotte, NC 28206

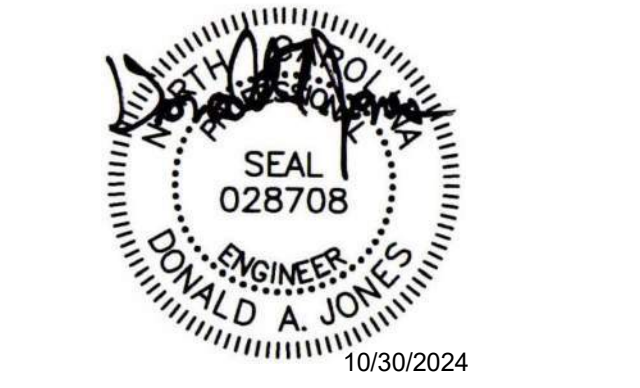
**REVISIONS:**

Number	Description	Date
1	Addendum 01	10/21/24
2	Addendum 02	10/30/24



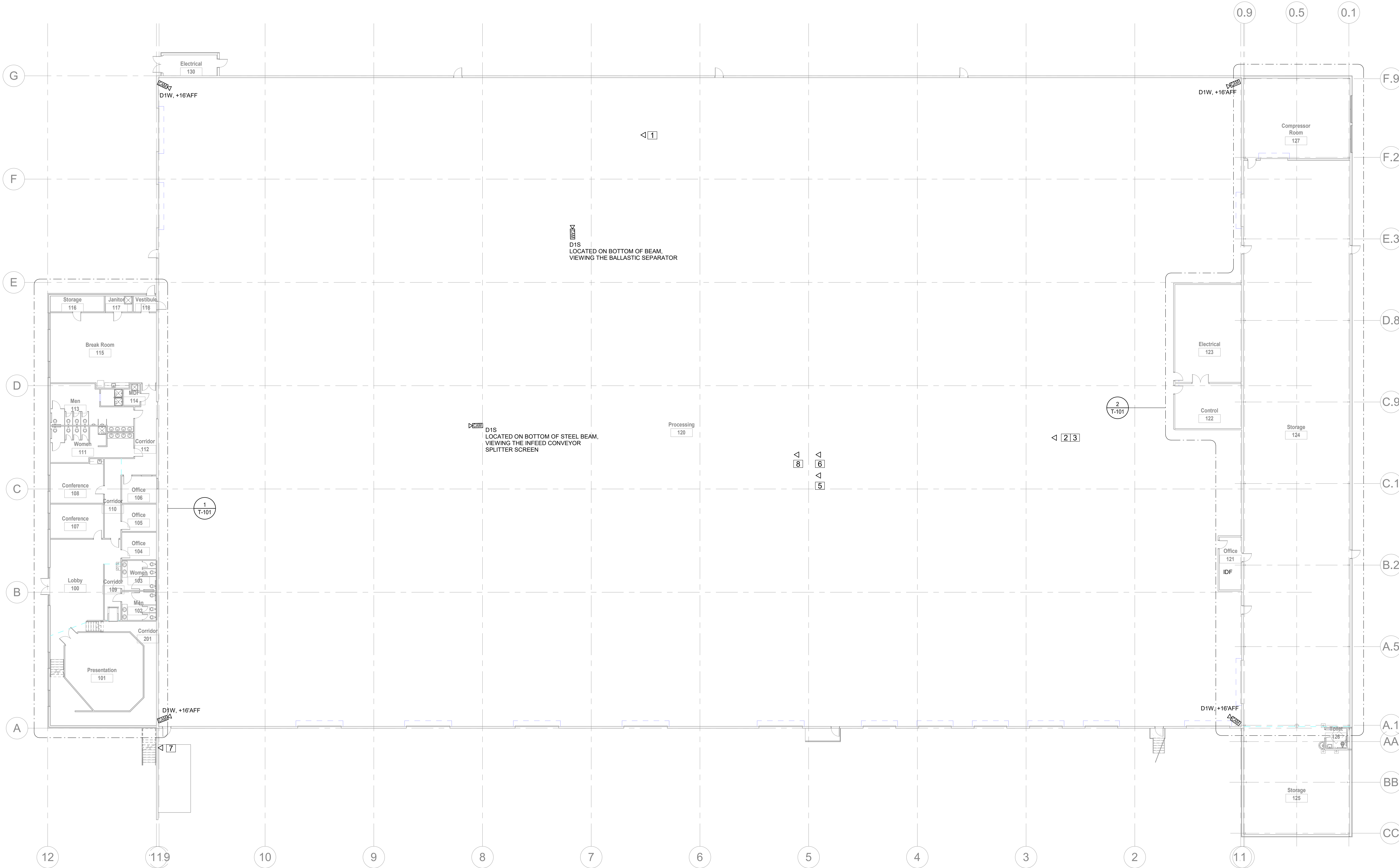
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**KEYED NOTED:** [X]

1. DATA OUTLET FOR 3RD PARTY TOMRA OPTICAL SORTER. FIELD VERIFY EXACT LOCATION. ROUTE TO 3RD PARTY IT CABINET IN MDF ROOM.
2. DATA OUTLET FOR 3RD PARTY BOLLEGRAAF CONTROL PANEL. FIELD VERIFY EXACT LOCATION. ROUTE TO 3RD PARTY IT CABINET IN IDF ROOM.
3. DATA OUTLET FOR 3RD PARTY BOLLEGRAAF BALER. FIELD VERIFY EXACT LOCATION. ROUTE TO 3RD PARTY IT CABINET IN IDF ROOM.
4. NOT USED.
5. DATA CABLE WITH RJ-45 JACK TO 3RD PARTY VAN DYK MCC/TOMRA NETWORK CABINET. FIELD VERIFY EXACT LOCATION. ROUTE TO 3RD PARTY IT CABINET IN THE IDF ROOM.
6. DATA OUTLET FOR 3RD PARTY SUPERVISOR'S OFFICE. FIELD VERIFY EXACT LOCATION. ROUTE TO 3RD PARTY IT CABINET IN THE IDF ROOM.
7. DATA OUTLET FOR 3RD PARTY FIRE ROVER EQUIPMENT. FIELD VERIFY EXACT LOCATION. PROVIDE IN A NEMA 3R ENCLOSURE ADJACENT TO EQUIPMENT WITH 1" HUB IN THE BOTTOM OF THE ENCLOSURE. PROVIDE 60' OF PATCH CORD COILED UP INSIDE THE NEMA ENCLOSURE. CAT6 PATCH CORD TO BE ARMORED AND OUTDOOR RATED. ROUTE TO 3RD PARTY IT CABINET IN MDF ROOM.
8. DATA CABLE WITH RJ-45 JACK FOR 3RD PARTY VAN DYK TOMRA UNIT. ROUTE TO VAN DYK NETWORK CABINET. FIELD VERIFY EXACT LOCATION.



CD Package for  
**Materials Recovery Facility  
Equipment Retrofit**  
1007 Amble Dr, Charlotte, NC 28206



REVISIONS:

Number	Description	Date
1	Addendum 01	10/21/24
2	Addendum 02	10/30/24

2411  
10/08/2024 - CD  
SHEET NAME  
**TECHNOLOGY -  
OVERALL PLAN**

SHEET NUMBER  
**T-100**

**1 TELECOM - OVERALL PLAN**  
SCALE 1/16" = 1'-0"

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