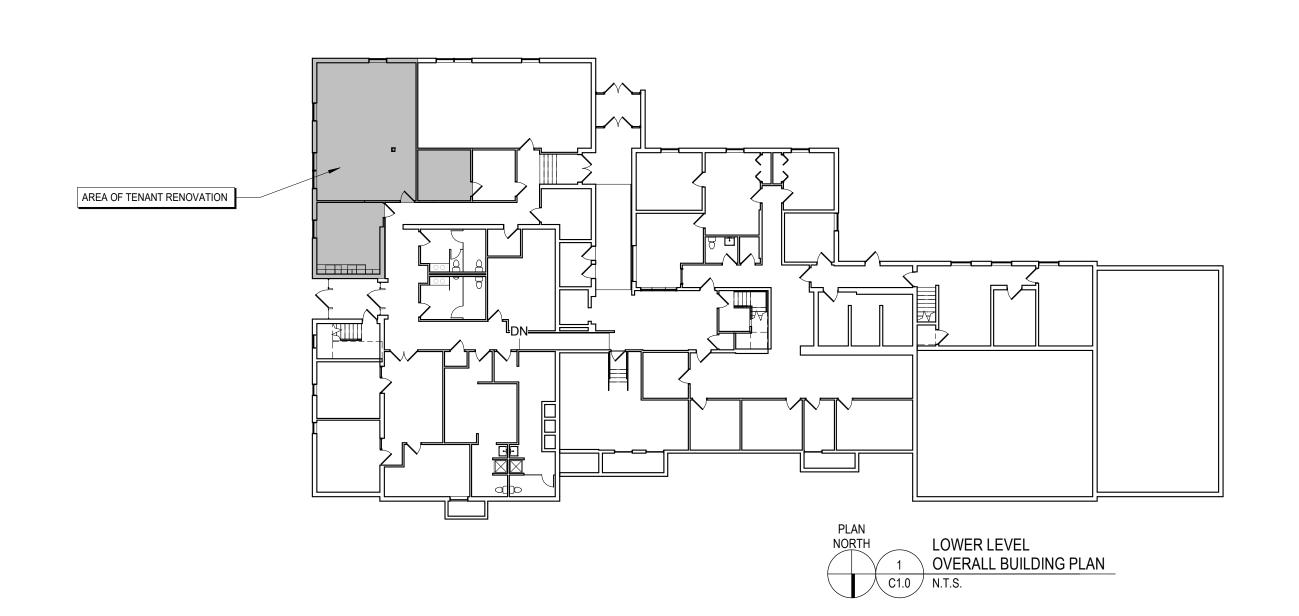




NORTHVILLE CITY HALL OFFICE ADDITION

215 W MAIN ST NORTHVILLE, MI 48167









PHONE 248.349.2708 marchitects.com PROJECT

NORTHVILLE CITY HALL OFFICE ADDITION

PROJECT ADDRESS

215 W MAIN ST NORTHVILLE, MI 48167

PROJECT NUMBER 21.31

> SHEET NAME COVOR SHEET

SHEET NUMBER



COPYRIGHT © 2023

ISSUE DATE 09.08.2023 **BID AND PERMIT**

CODE INFORMATION

2015 INTERNATIONAL BUILDING CODE ACCESSIBILITY: ICC ANSI A117.1-2009 MECHANICAL: 2015 INTERNATIONAL MECHANICAL CODE PLUMBING: ELECTRICAL: 2015 INTERNATIONAL PLUMBING CODE 2014 NATIONAL ELECTRIC CODE IFC 2015 AS REFERENCED IN THE 2015 IBC

FIRE CODE: FIRE ALARM: NFPA 72 (2013) EXISTING BUILDING IS NOT FULLY SPRINKLERED

CHAPTER 3
USE GROUP AND OCCUPANCY CLASSIFICATION **B BUSINESS**

<u>CHAPTER 6</u>
TABLE 601 - FIRE RESISTIVE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS) TYPE OF CONSTRUCTION
PRIMARY STRUCTURAL FRAMING 2B 0 HOURS

BEARING WALLS **EXTERIOR** INTERIOR 0 HOURS NONBEARING WALLS AND PARTITIONS **EXTERIOR** 0 HOURS FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS 0 HOURS ROOF CONSTRUCTION AND ASSOCIATED 0 HOURS SECONDARY MEMBERS

SECTION 602 - CONSTRUCTION CLASSIFICATION = 2B

MAXIMUM TRAVEL DISTANCE: A = 74'-5" B = 57'-3"

CHAPTER 8
TABLE 803.11 - INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY GROUP B - NON SPRINKLERED INTERIOR EXIT STAIRWAYS CORRIDORS AND ENCLOSURES FOR EXIT ACCESS STAIRWAYS B ROOMS AND ENCLOSED SPACES

CLASS A: FLAME SPREAD INDEX 0-25; SMOKE DEVELOPED INDEX 0-450 CLASS B: FLAME SPREAD INDEX 26-75; SMOKE DEVELOPED INDEX 0-450 CLASS C: FLAME SPREAD INDEX 76-200; SMOKE DEVELOPED INDEX 0-405 CHAPTER 9 SECTION 906 - PORTABLE FIRE EXTINGUISHERS

REQUIRED: - IN USE GROUP A - IN USE GROUP A
- WITHIN 30' OF COMMERCIAL COOKING EQUIPMENT
- IN AREAS WHERE FLAMMABLE OR COMBUSTIBLE LIQUIDS ARE STORED, USED, OR DISPENSED
- WHERE REQUIRED BY THE I.F.C. SECTIONS INDICATED IN TABLE 906.1

MAXIMUM TRAVEL DISTANCE TO EXTINGUISHER 75 FEET

CHAPTER 10 SECTION 1004 - OCCUPANT LOAD

BUSINESS USE = 1 OCCUPANT PER 100 SQUARE FEET GROSS AREA OF SCOPE OF WORK: 1160 / 100 = 11 OCCUPANTS

TABLE 1006.2.1 - SPACES WITH ONE EXIT OF EXIT ACCESS DOORWAY
OCCUPANCY MAXIMUM OCCUPANCY MAX. COMMON PATH OF TRAVEL LOAD OF SPACE WITHOUT SPRINKLER SYSTEM

SECTION 1017 - EXIT ACCESS TRAVEL DISTANCE TABLE 1016.2 - EXIT ACCESS TRAVEL DISTANCE OCCUPANCY B

WITHOUT SPRINKLER SYSTEM 200 FEET MAX. (ALLOWABLE)

SECTION 1020.2 - MINIMUM CORRIDOR WIDTH 44 INCHES

THE CONSTRUCTION DOCUMENTS WERE PREPARED FOR COMPLIANCE WITH THE INTERNATIONAL CONSTRUCTION CODES IN EFFECT AT THE TIME OF PERMIT SUBMITTAL. ALL ENGINEERS, CONTRACTORS AND SUPPLIERS INVOLVED WITH THIS PROJECT SHALL COMPLY WITH THE SAME CODES, ISSUED AND APPROVED CODE MODIFICATIONS AND/OR CITY OF NORTHVILLE, STATE OF MICHIGAN CONSTRUCTION BOARD OF APPEALS RULINGS AND WHENEVER REQUIRED SHALL PROVIDE SHOP DRAWINGS AND SUBMITTALS CLEARLY DESCRIBING COMPLIANCE TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FOR REVIEW AND APPROVAL.

LIFE SAFETY PLAN LEGEND

EGRESS PATH AND DISTANCE ALONG PATH



NON-REQUIRED PATH

CONSULTANTS

ARCHITECTS

114 EAST MAIN ST 3RD FLOOR NORTHVILLE, MICHIGAN PHONE 248.349.2708 marchitects.com

PROJECT

NORTHVILLE CITY HALL OFFICE ADDITION

PROJECT ADDRESS

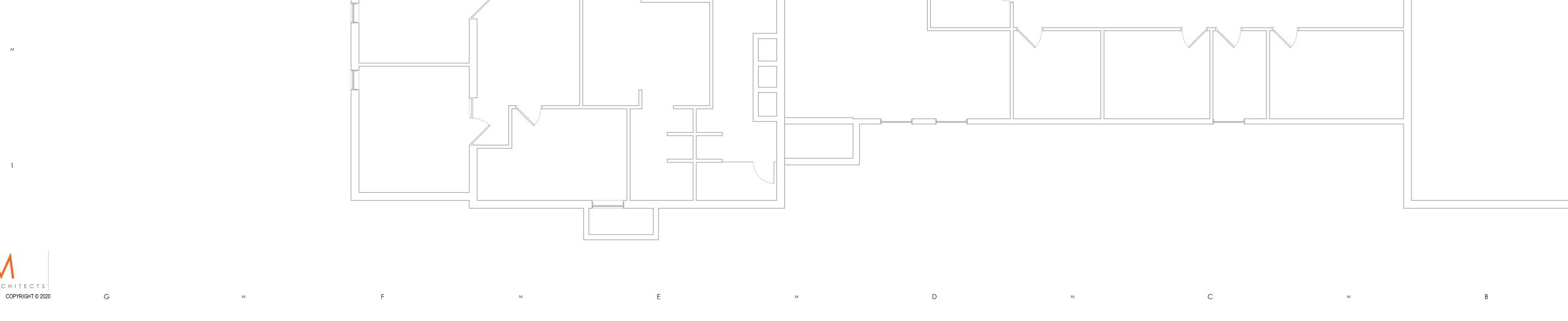
215 W MAIN ST NORTHVILLE, MI 48167

PROJECT NUMBER

SHEET NAME

LIFE SAFETY AND CODE ANALYSIS

SHEET NUMBER



21.31

ISSUE DATE 09.08.2023 **BID AND PERMIT**

GENERAL DEMOLITION NOTES

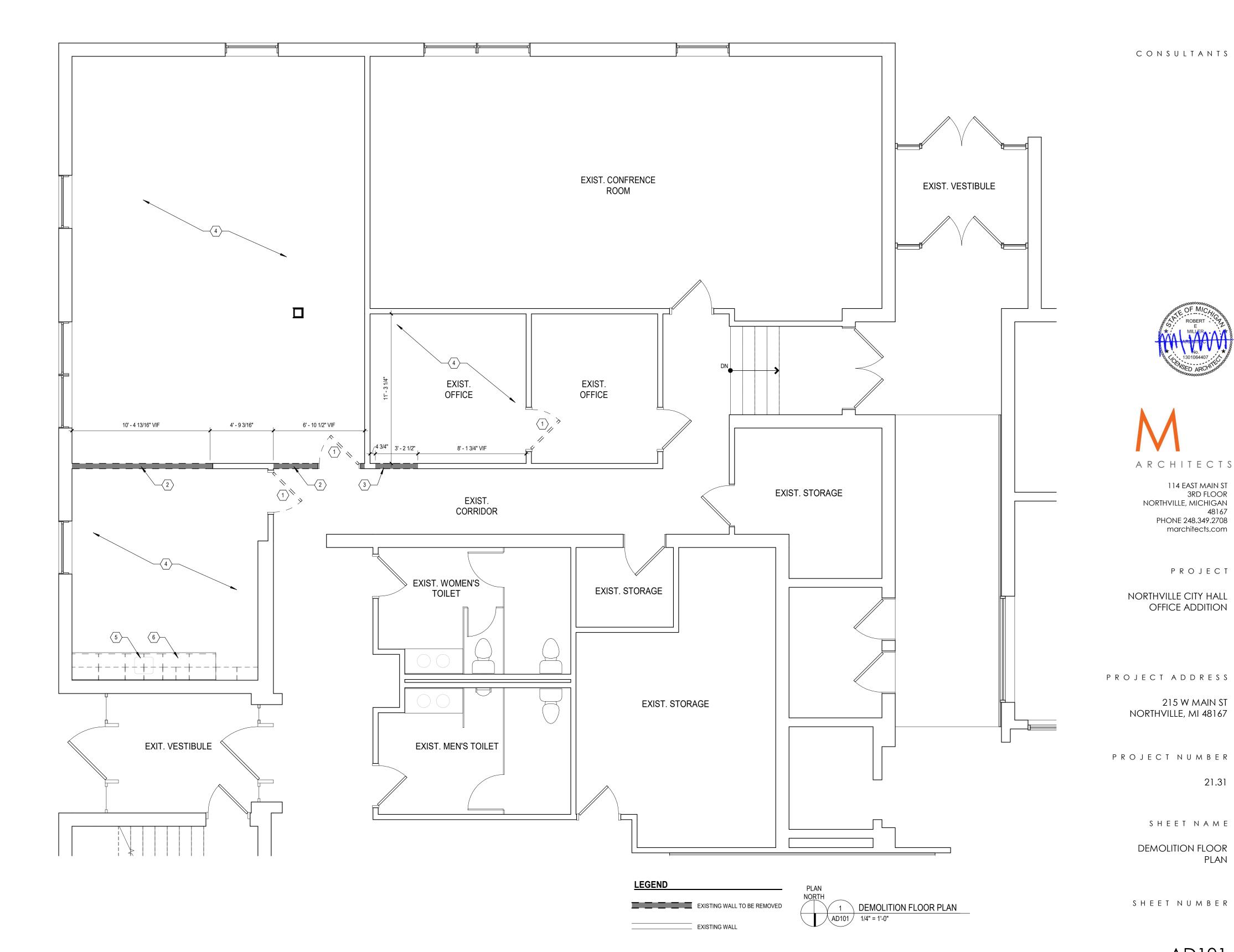
- 1. DEMOLITION CONTRACTOR SHALL DISPOSE OF ALL REMOVED MATERIALS.
- 2. ANY UN-NOTED EXISTING CONDITION WHICH CONFLICTS WITH THE PROJECT REQUIREMENTS AND MAY REQUIRE MODIFICATION, RELOCATION, OR REMOVAL TO COMPLETE THE INTENDED PROJECT SHALL BE IDENTIFIED

 M F M E D M C

- 3. REMOVE PARTITIONS, STUDS, DOORS, FRAMES, MILLWORK, MECHANICAL, PLUMBING, AND ELECTRICAL ELEMENTS AS INDICATED.
- 4. PATCH, REPAIR, AND FINISH ALL REMAINING OR DAMAGED WALLS AND/OR CEILINGS FOR LIKE NEW FINISH RESULTING FROM DEMOLITION.
- 5. EXISTING CONDITIONS AND ELEVATIONS ARE DERIVED FROM FIELD MEASUREMENTS AND ARE SHOWN TO ASSIST BIDDERS ONLY; NO CLAIM IS MADE TO THEIR VALIDITY. THE CONTRACTOR AND SUBCONTRACTORS SHALL VISIT THE SITE PRIOR TO SUBMITTING A BID AND PROVIDE FOR ALL EXISTING CONDITIONS. NO ALLOWANCE WILL BE MADE RESULTING FROM FAILURE TO CARRY OUT SUCH AN EXAMINATION.
- 6. THE CONTRACTOR SHALL FIELD CHECK ALL RELEVANT CONDITIONS AND DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WITH THE DRAWINGS PRIOR TO CONSTRUCTION.
- 7. THE WORK INVOLVED HEREIN SHALL BE THE ENTIRE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL ENSURE THAT SUCH WORK IS PROPERLY CARRIED OUT BY HIS FORCES OR HIS SUBCONTRACTORS. THE CONTRACTOR SHALL CONFIRM FOR HIMSELF THAT ALL ITEMS ARE
- 8. DEMOLITION WORK SHALL BE EXECUTED IN AN ORDERLY AND CAREFUL MANNER AND DEMOLISHED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR, FOR OFF-SITE DISPOSAL AT HIS EXPENSE, IN A LEGAL
- 9. ITEMS, MATERIALS, AND ADJACENT AREAS THAT ARE DESIGNATED TO REMAIN INTACT SHALL BE SEALED AND SECURED SO THAT THEY ARE NOT IMPACTED BY DEMOLITION. CONTRACTOR SHALL PROVIDE TEMPORARY BARRIERS AND SECURITY DEVICES, INCLUDING DUST-PROOF PARTITIONS AS REQUIRED TO PREVENT THE SPREAD OF DUST TO OTHER PARTS OF
- 10. PRIOR TO START OF CONSTRUCTION OR DEMOLITION THE CONTRACTOR SHALL COORDINATE WITH THE OWNER.
- 11. DEMOLITION CONTRACTOR SHALL COORDINATE THEIR WORK SCOPE WITH THE DEMOLITION DRAWINGS AND NEW WORK DRAWINGS. ADDITIONAL DEMOLITION WORK SCOPE MAY BE IDENTIFIED IN THE NEW WORK DRAWINGS. REVIEW ALL DOCUMENTS INCLUDING CONSULTING ENGINEERING DOCUMENTS FOR ADDITIONAL SCOPE OF WORK NOT NOTED IN THE ARCHITECTURAL DEMOLITION DRAWINGS.
- 12. STRIP OUT ALL POWER IN AREAS OF DEMOLITION TO NEAREST J-BOX ABOVE CEILING, OR WHERE FOUND, AND PROVIDE WIRE UNITS AT ALL TERMINATIONS AND CLOSE BOX WITH REQUIRED COVER.
- 13. COORDINATE REMOVAL OF ANY FURNITURE OR NON-FIXED MILLWORK / ITEMS WITH OWNER PRIOR TO REMOVAL.
- 14. GENERAL CONTRACTOR TO MAKE ALL REQUIRED UPGRADES TO EXISTING AUDIBLE / STROBE FIRE ALARM PER CODE REQUIREMENTS, WHERE FOUND.
- 15. VERIFY WITH OWNER FOR ANY MATERIAL THAT IS TO BE RETURNED TO OWNER INCLUDING, BUT NOT LIMITED TO:
 15.1 LIGHT FIXTURES
- 15.2 PLUMBING FIXTURES 15.3 MILLWORK
- 15.4 DOORS / FRAMES 15.5 WINDOWS / FRAMES

DEMOLITION NOTES

- $\fbox{1}$ EXISTING DOOR, FRAME, AND HARDWARE TO BE REMOVED.
- $\langle 2 \rangle$ EXISTING WALL TO BE REMOVED.
- \langle 3 \rangle EXISTING WALL TO BE REMOVED TO PREPARE FOR NEW OPENING.
- \langle 4 \rangle EXISTING CARPET AND GLUE TO BE REMOVED. PREP FLOOR FOR NEW FINISH
- $\fbox{5}$ EXISTING PLUMBING FIXTURES TO BE REMOVED. CAP ALL PLUMBING FOR REUSE AT NEW SINK LOCATION.
- 6 EXISTING MILLWORK TO BE REMOVED IN ITS ENTIRETY.



CONSULTANTS



ARCHITECTS

114 EAST MAIN ST 3RD FLOOR NORTHVILLE, MICHIGAN 48167 PHONE 248.349.2708 marchitects.com

PROJECT NORTHVILLE CITY HALL

OFFICE ADDITION

215 W MAIN ST NORTHVILLE, MI 48167

21.31

SHEET NAME DEMOLITION FLOOR

SHEET NUMBER

ARCHITECTS COPYRIGHT © 2020

ISSUE DATE 09.08.2023 **BID AND PERMIT**

GENERAL DEMOLITION NOTES

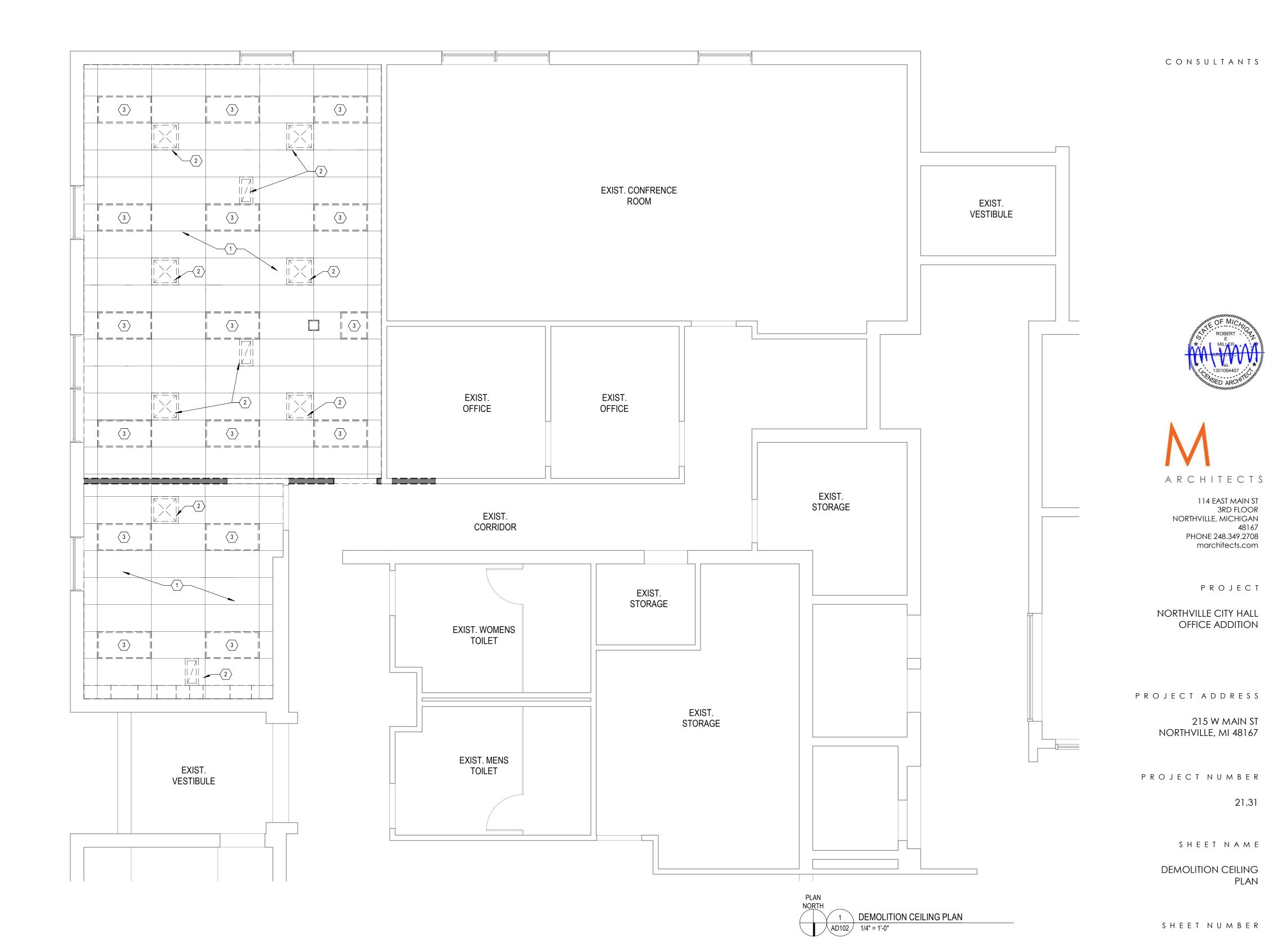
- 1. DEMOLITION CONTRACTOR SHALL DISPOSE OF ALL REMOVED MATERIALS.
- 2. ANY UN-NOTED EXISTING CONDITION WHICH CONFLICTS WITH THE PROJECT REQUIREMENTS AND MAY REQUIRE MODIFICATION, RELOCATION, OR REMOVAL TO COMPLETE THE INTENDED PROJECT SHALL BE IDENTIFIED

м

- 3. REMOVE PARTITIONS, STUDS, DOORS, FRAMES, MILLWORK, MECHANICAL, PLUMBING, AND ELECTRICAL ELEMENTS AS INDICATED.
- 4. PATCH, REPAIR, AND FINISH ALL REMAINING OR DAMAGED WALLS AND/OR CEILINGS FOR LIKE NEW FINISH RESULTING FROM DEMOLITION.
- 5. EXISTING CONDITIONS AND ELEVATIONS ARE DERIVED FROM FIELD MEASUREMENTS AND ARE SHOWN TO ASSIST BIDDERS ONLY; NO CLAIM IS MADE TO THEIR VALIDITY. THE CONTRACTOR AND SUBCONTRACTORS SHALL VISIT THE SITE PRIOR TO SUBMITTING A BID AND PROVIDE FOR ALL EXISTING CONDITIONS. NO ALLOWANCE WILL BE MADE RESULTING FROM FAILURE TO CARRY OUT SUCH AN EXAMINATION.
- 6. THE CONTRACTOR SHALL FIELD CHECK ALL RELEVANT CONDITIONS AND DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WITH THE DRAWINGS PRIOR TO CONSTRUCTION.
- 7. THE WORK INVOLVED HEREIN SHALL BE THE ENTIRE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL ENSURE THAT SUCH WORK IS PROPERLY CARRIED OUT BY HIS FORCES OR HIS SUBCONTRACTORS. THE CONTRACTOR SHALL CONFIRM FOR HIMSELF THAT ALL ITEMS ARE
- 8. DEMOLITION WORK SHALL BE EXECUTED IN AN ORDERLY AND CAREFUL MANNER AND DEMOLISHED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR, FOR OFF-SITE DISPOSAL AT HIS EXPENSE, IN A LEGAL
- 9. ITEMS, MATERIALS, AND ADJACENT AREAS THAT ARE DESIGNATED TO REMAIN INTACT SHALL BE SEALED AND SECURED SO THAT THEY ARE NOT IMPACTED BY DEMOLITION. CONTRACTOR SHALL PROVIDE TEMPORARY BARRIERS AND SECURITY DEVICES, INCLUDING DUST-PROOF PARTITIONS AS REQUIRED TO PREVENT THE SPREAD OF DUST TO OTHER PARTS OF
- 10. PRIOR TO START OF CONSTRUCTION OR DEMOLITION THE CONTRACTOR SHALL COORDINATE WITH THE OWNER.
- 11. DEMOLITION CONTRACTOR SHALL COORDINATE THEIR WORK SCOPE WITH THE DEMOLITION DRAWINGS AND NEW WORK DRAWINGS. ADDITIONAL DEMOLITION WORK SCOPE MAY BE IDENTIFIED IN THE NEW WORK DRAWINGS. REVIEW ALL DOCUMENTS INCLUDING CONSULTING ENGINEERING DOCUMENTS FOR ADDITIONAL SCOPE OF WORK NOT NOTED IN THE ARCHITECTURAL DEMOLITION DRAWINGS.
- 12. STRIP OUT ALL POWER IN AREAS OF DEMOLITION TO NEAREST J-BOX ABOVE CEILING, OR WHERE FOUND, AND PROVIDE WIRE UNITS AT ALL TERMINATIONS AND CLOSE BOX WITH REQUIRED COVER.
- 13. COORDINATE REMOVAL OF ANY FURNITURE OR NON-FIXED MILLWORK / ITEMS WITH OWNER PRIOR TO REMOVAL.
- 14. GENERAL CONTRACTOR TO MAKE ALL REQUIRED UPGRADES TO EXISTING AUDIBLE / STROBE FIRE ALARM PER CODE REQUIREMENTS, WHERE FOUND.
- 15. VERIFY WITH OWNER FOR ANY MATERIAL THAT IS TO BE RETURNED TO OWNER INCLUDING, BUT NOT LIMITED TO:
 15.1 LIGHT FIXTURES
- 15.2 PLUMBING FIXTURES 15.3 MILLWORK
- 15.4 DOORS / FRAMES 15.5 WINDOWS / FRAMES

DEMOLITION NOTES

- 1 EXISTING CEILING TILES AND GRID TO BE REMOVED.
- 2 EXISTING AIR DIFFUSER AND GRILL TO BE REMOVED AND SALVAGED FOR REUSE WHERE POSSIBLE. MAINTAIN DUCT WORK FOR REUSE.
- EXISTING LIGHT FIXTURE TO BE REMOVED AND SALVAGED FOR REUSE WHERE POSSIBLE. MAINTAIN CIRCUITING FOR REUSE.



С

CONSULTANTS



ARCHITECTS 114 EAST MAIN ST

3RD FLOOR NORTHVILLE, MICHIGAN 48167 PHONE 248.349.2708 marchitects.com

NORTHVILLE CITY HALL OFFICE ADDITION

PROJECT

PROJECT ADDRESS 215 W MAIN ST

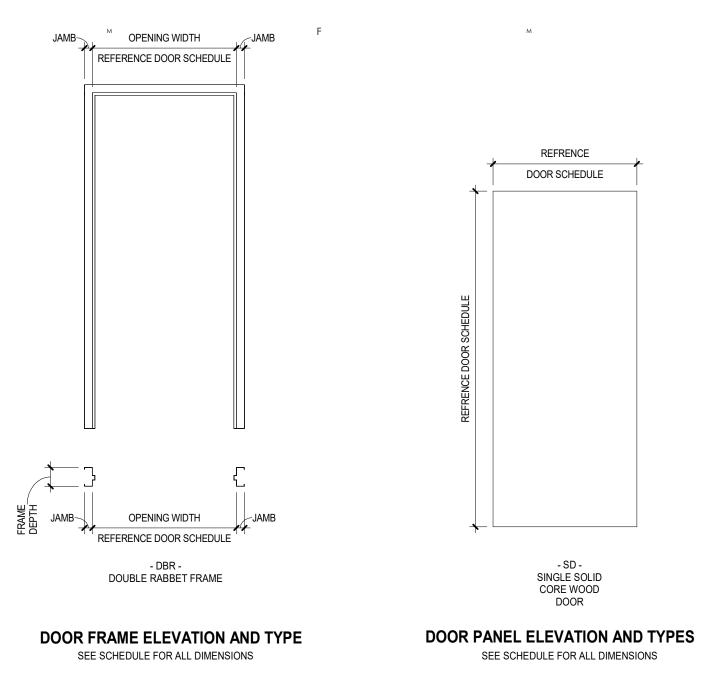
NORTHVILLE, MI 48167

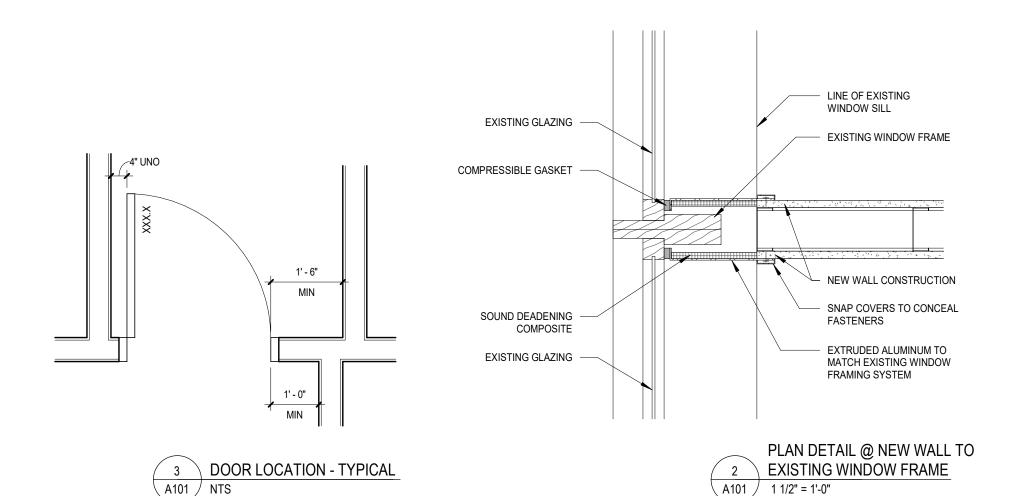
21.31

DEMOLITION CEILING

SHEET NAME

SHEET NUMBER







1.01 MANUFACTURERS

A. Products: Subject to compliance with requirements, provide the following: 1. MULL-it-OVER Products; Sound barrier mullion trim cap systems.

a. Tel: (616) 730-2162 b. url: www.mullitoverproducts.com

1.02 SYSTEM DESCRIPTION

A. General: Provide sound barrier mullion trim caps of design, basic profile, materials, and operation indicated. Provide units with capability to accommodate variations in adjacent surfaces. 1. Furnish units in lengths of sufficient additional length to allow for field trimming to required length to match variations in construction tolerances of adjacent systems.

1.03 PERFORMANCE REQUIREMENTS

A. Sound Transmission: 1. Single Sided Installations: STC 50 or higher. 2. Double-Sided Installations: [STC 55] or higher

B. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes. 2.01 EXAMINATION 1. Mullion trim cap to be sized to accommodate thermal movement.

1.04 SOUND BARRIER MULLION TRIM CAP A. Sound Barrier Mullion Trim Cap:

1. Products: MULL-it-OVER Products; Mullion trim Cap. B. Profile: 60 Classic Mullion Trim Cap and 60 Wide Sound Barrier.

1.05 COMPONENTS A. Aluminum Extrusions:

1. Thickness: 0.125 inches. 2. Profile: As selected and approved by Architect to allow solid attachment and fastening to the

partition wall framing. B. Sound Absorbing Foam: 1. Resistant to smoke, flame, and microbial growth.

2. Fire Rating: ASTM E 84 Class 1.

3. Fungi Resistance: Zero rating per ASTM G 21. C. Compressible Foam: Between edge of extrusion and interior face of curtain wall glass. 1. Thickness: Standard 1/2 inch (12.7 mm), 3/4" (19.1 mm), 1 inch (25.4 mm) or 1-1/2" (38.1 mm) as required to accommodate mullion deflection. 2. Color: Charcoal

D. Fasteners: 1. Self Tapping or appropriate threaded fastener.

2. Compatible with all materials fasteners will contact with and not causing galvanic corrosion. E. Snap Cover: Snap-on fastener cover. F. Acoustical Sound Sealant: Acrylic latex based.

1.06 ACCESSORIES

A. Provide necessary and related parts and tools to complete installation.

1.07 FABRICATION A. Extrusions and generic profiles to be shipped in custom lengths as required to meet project requirements or shipped in standard incremental foot lengths and cut to exact length on jobsite.

A. Exposed surfaces of exposed aluminum extrusion:

1. Standard Finish: Supplied in clear anodized finish. 2. Custom Finish: Custom anodized finishes and painted finishes available upon request.

B. Finishes: 1. Aluminum - clear anodized:

a. Clear anodized finish in accordance with AA-M10 A41 Class I (0.7 to 1.0 thick anodic coating) 2. Aluminum - color anodized or painted: a. Color Choice with matte or bright finish. Select from manufacturer's custom color offering.

PART 2 - EXECUTION

A. Examine substrates and conditions for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Examine walls and adjacent curtain wall for suitable conditions where sound barrier wall end cap will C. Proceed with installation only after unsatisfactory conditions have been corrected.

2.02 INSTALLATION

A. Measure and cut sound barrier wall end cap to proper lengths. B. Notch around horizontal mullions, sills, or other obstructions leaving appropriate gap for differential

movement between the sound barrier wall end cap and the obstruction. C. Apply continuous bead of acoustical sealant to the unexposed side of extruded aluminum surface that will be in contact with the drywall edge.

D. Place sound barrier wall end cap on the vertical surface of the drywall partition wall and loosely install fasteners in the top and bottom slotted holes of the wall end cap. E. Plumb the wall end cap leaving recommended gap spacing between the interior glass surface and

the wall end cap. Foam gasket to be in contact with glass. F. Tighten top and bottom fasteners to secure end cap. G. Install additional fasteners at 12 inches on center, minimum.

H. Install snap cover to conceal fasteners. I. Apply color matched sealant at joints of dissimilar materials as desired.

2.03 CLEANING A. After work is complete in adjacent areas, clean exposed surfaces with suitable cleaner that will not

harm or attack the finish.

2.04 PROTECTION A. Protect sound barrier wall end caps from damage during installation, general construction activities, and until turnover of structure.

121.A 121 OFFICE 3' - 0" | 7' - 0" | 0' - 1 3/4" | SOLID WOOD NONE 3' - 0" | 7' - 0" | 0' - 1 3/4" | SOLID WOOD 122.A 122 OFFICE 123.A 123 OFFICE 124.A 124 OFFICE 3' - 0" 7' - 0" 0' - 1 3/4" SOLID WOOD STAIN 3' - 0" 7' - 0" 0' - 1 3/4" SOLID WOOD 125.A 125 BREAKROOM STAIN H.M. DBR NONE COMMENT KEY: COMMENT NOTES: LOCKSET SHALL BE OPERATED FROM THE INTERIOR SIDE EXIT DOOR SHALL BE NON-LOCKING AGAINST EGRESS. 1. ELECTRIC OPENER, BY MANUFACTURER WITHOUT ANY SPECIAL KNOWLEDGE EFFORT OR KEY DOOR SHALL COMPLY WITH ANSI 117.1 AND THE AMERICANS 2. IMPACT RESISTANCE DOOR HARDWARE SHALL BE STANDARD CYLINDRICAL LATCH WITH DISABILITIES ACT. TYPE WITH LEVER HANDLES 3. TEMPERED GLASS GLASS IN DOOR SHALL BE TEMPERED. ALL METAL FRAMES SHALL BE SHOP PRIMED AND FIELD 4. MATCH EXISTING WOOD DOOR COLOR / STAIN FINISHED WITH SEMIGLOSS ENAMEL ALL HARDWARE AND KEYING TO BE COORDINATED WITH OWNER.

11' - 5 7/8" VIF

11' - 5 7/8" VIF

RECEPTION 120

OFFICE

121

MATERIAL

HARDWARE SET SCHEDULE OFFICE SET WALL STOP GASKETING NOTE: FINISH BY OWNER

WALL TYPES

HARDWARE

RATING | HARDWARE SET

FINISH NOTES THIS AREA OF WORK:

AT EXISTING GYPSUM BOARD WALLS.

OFFICE

EXIST. WOMENS

TOILET

EXIST. MENS

TOILET

FLOOR PLAN LEGEND

NEW WALL

EXISTING WALL

WALL TYPE TAG - SEE WALL TYPES THIS SHEET

EXIST.

CORRIDOR

F1. GYPSUM BOARD TO BE PREPARED FOR PRIME AND PAINT; COLOR PER

F3. ALL HOLLOW METAL DOOR FRAMES TO BE PAINTED; COLOR PER FINISH SCHEDULE. ALL WOOD DOORS TO BE FINISHED TO MATCH EXISTING.

F2. ALL WALLS TO RECEIVE 4" RUBBER BASE PER FINISH SCHEDULE.

F4. OFFICE AND OPEN SPACE: CARPET TILES PER FINISH SCHEDULE.

BREAKROOM: LVT PANELS PER FINISH SCHEDULE.

FINISH SCHEDULE. VERIFY CONDITIONS OF ALL EXISTING WALLS AND

PROVIDE REQUIRED PREP AS NEEDED INCLUDING PATCHING AND SANDING

EXIST. CONFRENCE ROOM

EXIST.

STORAGE

STORAGE

OFFICE 118

5/8" TYPE 'X' GYPSUM BOARD ON EACH SIDE OF 3 5/8" METAL STUD @ 16" OC W/ SOUND BATT INSULATION

INFILL WALL: 5/8" TYPE 'X' GYPSUM BOARD ON METAL FRAMING TO MATCH EXISTING. ALIGN GYPSUM BOARD WITH ADJACENT EXISTING.

GENERAL NOTE:

GC TO SUPPLY TRANSITION STRIPS

EXIST.

STORAGE

BETWEEN NEW AND EXISTING

CARPET WHERE NEEDED.

FIRE EXTINGUISHER GENERAL NOTES

1. VERIFY FINAL LOCATIONS IN FIELD AND WITH LOCAL FIRE MARSHALL PRIOR TO INSTALLATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES.

2. MOUNTING HEIGHTS TO ACCOMMODATE A FINISHED HEIGHT OF 48" TOT HE HANDLE OF THE ACTUAL FIRE EXTINGUISHER.

FIRE EXTINGUISHER LOCATION - MOUNT EXTINGUISHER ON 2" HOOK MP-10, VERIFY WITH FIRE MARSHAL, BY LARSENS OR EQUAL

FLOOR PLAN NOTES

 \langle 1 \rangle NEW DOOR AND FRAME IN NEW OPENING WITHIN EXISTING WALL.

EXIST.

VESTIBULE

⟨ 2 ⟩ EXISTING EXTERIOR WINDOW. (3) ALIGN EDGE OF WALL WITH WINDOW OPENING.

4 ALIGN CENTER OF WALL WITH CENTER OF WINDOW JAMB.

 \langle 5 \rangle PATCH AND REPAIR WALL AT AREA OF DEMOLITION.

CONSULTANTS

ISSUE DATE

09.08.2023

BID AND PERMIT





114 EAST MAIN ST 3RD FLOOR NORTHVILLE, MICHIGAN 48167 PHONE 248.349.2708 marchitects.com

PROJECT NORTHVILLE CITY HALL

OFFICE ADDITION

PROJECT ADDRESS 215 W MAIN ST

NORTHVILLE, MI 48167

PROJECT NUMBER

SHEET NAME

21.31

SHEET NUMBER

PROPOSED FLOOR PLAN

PROPOSED FLOOR PLAN

COPYRIGHT © 2020

DOOR SCHEDULE

10' - 3"

OFFICE

122

10' - 3"

OFFICE

123

OFFICE 124

BREAKROOM

125

EXIST.

VESTIBULE

P1

ROOM NAME

119.A 119 OFFICE

MECHANICAL GENERAL NOTES (DESIGN-BUILD):

- M1. ALL WORK TO BE PREFORMED TO MEET ALL CODE REQUIREMENTS AND TO BE COORDINATED WITH THE BUILDING OWNER REPRESENTATIVE.
- M2. ALL EXISTING DUCT WORK TO BE REUSED WHERE POSSIBLE. PROVIDE NEW DUCT WORK AS REQUIRED. ALL EXISTING CONDITIONS TO BE VERIFIED PRIOR TO CONSTRUCTION AND COORDINATED WITH DESIGN
- M3. ALL CONTROL LOCATIONS AND TYPES TO BE COORDINATED WITH THE
- M4. LOCATION OF NEW SUPPLY DIFFUSERS OR RETURN GRILLES SHOWN IS FOR REFERENCE ONLY. VERIFY FINAL LOCATION WITH MECHANICAL CONTRACTOR AND FINAL CEILING GRID LAYOUT.

LIGHT FIXTURE SCHEDULE

- 24" x 48" LAY IN LED FIXTURE LITHONIA LIGHTING #2BLT4 48L ADSM EZI LP835 (OR EQUAL) COLOR TEMP: 4500K
- "A1" 24" x 48" LAY IN LED FIXTURE WITH EMERGENCY BALLAST AND BATTERY BACK UP LITHONIA LIGHTING #2BLT4 48L ADSM EZI LP835 (OR EQUAL) COLOR TEMP: 4500K
- 24" x 24" LAY IN LED FIXTURE LITHONIA LIGHTING #2BLT4 48L ADSM EZI LP835 (OR EQUAL) COLOR TEMP: 4500K
- 24" x 24" LAY IN LED FIXTURE WITH EMERGENCY BALLAST AND BATTERY BACK UP LITHONIA LIGHTING #2BLT4 48L ADSM EZI LP835 (OR EQUAL) COLOR TEMP: 4500K

REFLECTED CEILING PLAN LEGEND 24" X 24" ACOUSTIC CEILING TILE SYSTEM

24" X 48" ACOUSTIC CEILING TILE SYSTEM SUPPLY AIR DIFFUSER

RETURN AIR REGISTER 24" X 48" TROFFER LIGHT

MECHANICAL FIXTURE LEGEND

PROPOSED CEILING PLAN

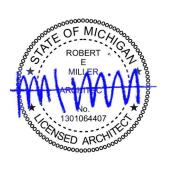
ALL DIFUSERS AND GRILLS TO BE WHITE COLOR

CONSULTANTS

ISSUE DATE

BID AND PERMIT

09.08.2023



ARCHITECTS

114 EAST MAIN ST 3RD FLOOR NORTHVILLE, MICHIGAN 48167 PHONE 248.349.2708 marchitects.com

PROJECT NORTHVILLE CITY HALL OFFICE ADDITION

PROJECT ADDRESS

215 W MAIN ST NORTHVILLE, MI 48167

PROJECT NUMBER

SHEET NAME

21.31

PROPOSED CEILING

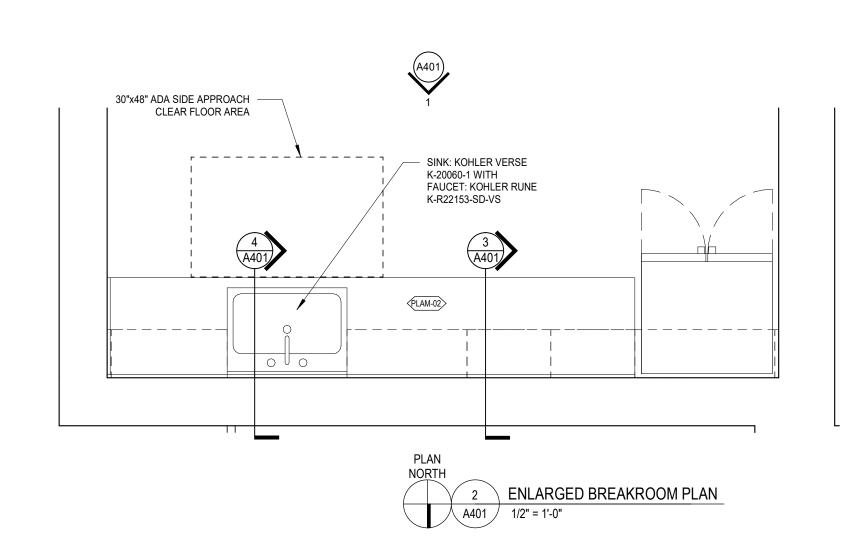
S H E E T N U M B E R

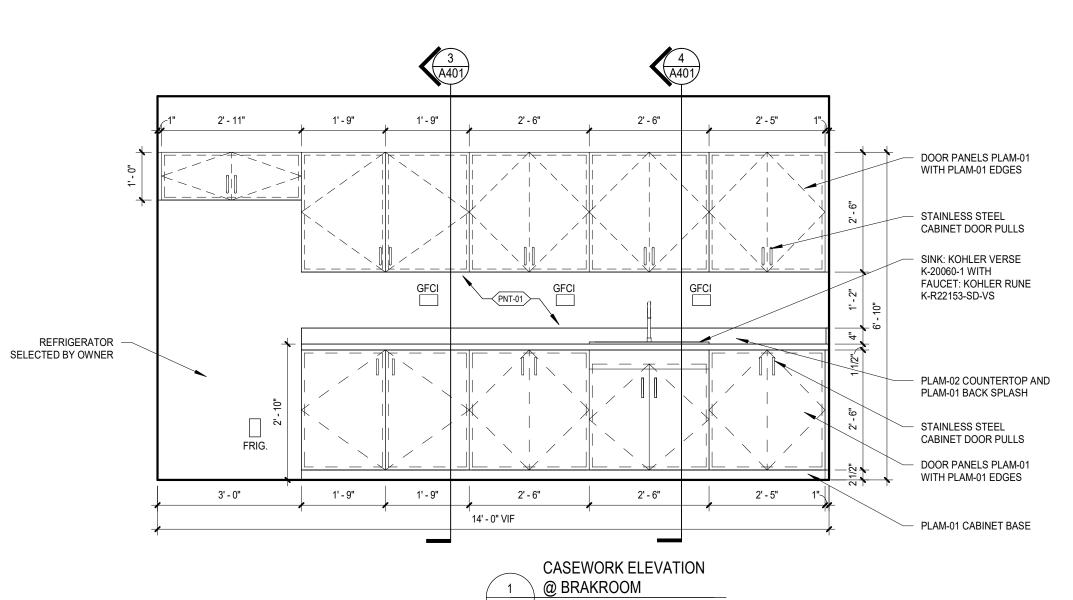
COPYRIGHT © 2020



COPYRIGHT © 2020

3/4" ADJUSTABLE MELAMINE -SHELVES TYP. OF 3 3/4" ADJUSTABLE MELAMINE -SHELVES TYP. OF 3 DOOR PANELS PLAM-01 DOOR PANELS PLAM-01 ----WITH PLAM-01 EDGES WITH PLAM-01 EDGES CABINET TOP BOTTOM — AND INTERIOR GABLES -CABINET TOP BOTTOM -AND INTERIOR GABLES -3/4" MELAMINE (TYP) 3/4" MELAMINE (TYP) CABINET DOOR PULLS - STANDARD SIZE STAINLESS STEEL (TYP) CABINET DOOR PULLS - — STANDARD SIZE STAINLESS STEEL (TYP) PLAM-02 BACKSPLASH — PLAM-02 BACKSPLASH -SINK: KOHLER VERSE – K-20060-1 WITH FAUCET: KOHLER RUNE K-R22153-SD-VS PLAM-02 ON (2) LAYERS 3/4"
PLYWOOD ATTACHED TO WOOD
BLOCKING AT TOP OF FRAMED PLAM-02 ON (2) LAYERS 3/4" —— PLYWOOD ATTACHED TO WOOD BLOCKING AT TOP OF FRAMED WALL CABINET DOOR PULLS - STANDARD SIZE STAINLESS CABINET DOOR PULLS - - STANDARD SIZE STAINLESS STEEL (TYP) STEEL (TYP) CABINET TOP BOTTOM — AND INTERIOR GABLES -3/4" ADJUSTABLE MELAMINE -SHELVES TYP. OF 3 3/4" MELAMINE (TYP) CABINET TOP BOTTOM -AND INTERIOR GABLES -3/4" ADJUSTABLE MELAMINE SHELVES TYP. OF 2 3/4" MELAMINE (TYP) NOTE: INTERIOR OF CABINETS TO BE WHITE MELAMINE DOOR PANELS PLAM-01 DOOR PANELS PLAM-01 -WITH PLAM-01 EDGES WITH PLAM-01 EDGES HINGES -HINGES -PLAM-01 CABINET BASE _________2 7/8" | 1' - 9 1/8" 1' - 9 1/8" PLAM-01 CABINET BASE —— 2' - 0" 4 SECTION @ BREAKROOM CASEWORK
A401 1 1/2" = 1'-0" SECTION @ BREAKROOM CASEWORK





CONSULTANTS

ISSUE DATE

ARCHITECTS

114 EAST MAIN ST 3RD FLOOR NORTHVILLE, MICHIGAN 48167 PHONE 248.349.2708 marchitects.com

PROJECT

NORTHVILLE CITY HALL OFFICE ADDITION

PROJECT ADDRESS 215 W MAIN ST

NORTHVILLE, MI 48167

PROJECT NUMBER 21.31

SHEET NAME

MILLWORK SECTIONS, ENLARGED PLAN, AND ELEVATIONS

SHEET NUMBER

ISSUE DATE

CONSULTANTS

A R C H I T E C T S

114 EAST MAIN ST 3RD FLOOR NORTHVILLE, MICHIGAN 48167 PHONE 248.349.2708 marchitects.com

PROJECT

NORTHVILLE CITY HALL

OFFICE ADDITION

PROJECT ADDRESS

215 W MAIN ST NORTHVILLE, MI 48167

PROJECT NUMBER
21.31

SHEET NAME

PROPOSED FINISH PLAN

SHEET NUMBER

NORTHVILLE CITY HALL FINISH SCHEDULE Project # 21.32 **MANUFACTURER** DISTRIBUTER REP / CONTACT PRODUCT COLOR / FINISH <u>NOTES</u> **LOCATION** <u>TAG</u> **DESCRIPTION** FLOOR FINISHES COLOR: MOUSSE A01611 VINYL PLANK INSTALLATION: ASHLAR YES LVT-01 CARA BOGOSIAN BRUSHED LINES BREAKROOM 248-214-2707 OAT CPT-01 CARPET TILE CARA BOGOSIAN OPEN AIR 407 INSTALLATION: HERRINGBONE RECEPTION YES 248-214-2707 OAT INSTALLATION: ASHLAR YES CARPET TILE CARA BOGOSIAN OPEN AIR 407 OFFICES 248-214-2707 SHERWIN WILLIAMS SNOWBOUND SW 7004 FINISH: SATIN PNT-01 PROMAR 200 ZERO VOC RECEPTION AND OFFICES YES DAWN CENOA 248-660-3067 NO IMAGE PNT-02 TO MATCH EXISTING SEE FINISH PLAN YES NO IMAGE PNT-03 PAINT TO MATCH EXISTING DOOR FRAMES YES PLASTIC LAMINATE ARBORITE COLOR: ELEMENTAL ORIGIN KELLY REICH KELLY.REICH@ARBORITE.COM P394-VL COLOR: ARCTIC SNOW EDGE : MITERED SELF EDGE YES PLAM-02 PLASTIC LAMINATE KELLY REICH KELLY.REICH@ARBORITE.COM HIGH PRESSURE LAMINATE BREAKROOM COUNTERTOP FINISH: VL CEILING NORTHVILLE CITY HALL FINISH SCHEDULE NORTHVILLE, MI Project # 21.32 MANUFACTURER SAMPLE REQ'D DISTRIBUTER SIZE PRODUCT COLOR / FINISH **NOTES LOCATION** <u>TAG</u> **DESCRIPTION** REP / CONTACT EDGE : SQUARE GRID : 9/16 TEGULAR CLG-01 ACOUSTCAL CEILING TILE THOMAS RYSDYK 24" X 24" MARS WHITE SEE CEILING PLAN YES MISCELLANEOUS NO IMAGE RUBBER WALL BASE HEIGHT: 4" COLOR: BURNT UMBER SEE FINISH PLAN WB-01 ELYSE BERTLING TRADITIONAL VINYL 248-346-8733 TR-01 FLOORING TRANSITION BY GENERAL CONTRACTOR SEE FINISH PLAN STAINLESS STEEL CORNER CG-01 CORNER GUARD KOFFER SALES STAINLESS STEEL TO RUN FLOOR TO CEILING SEE FINISH PLAN GENERAL NOTES;

1. ALL INFORMATION LISTED IS FOR <u>DESIGN INTENT & BUDGETING PURPOSES ONLY</u> - THIS IS NOT INTENDED TO BE A COMPLETE SPECIFICATION.

2. ALL FINAL SELECTIONS TO BE APPROVED BY OWNER.

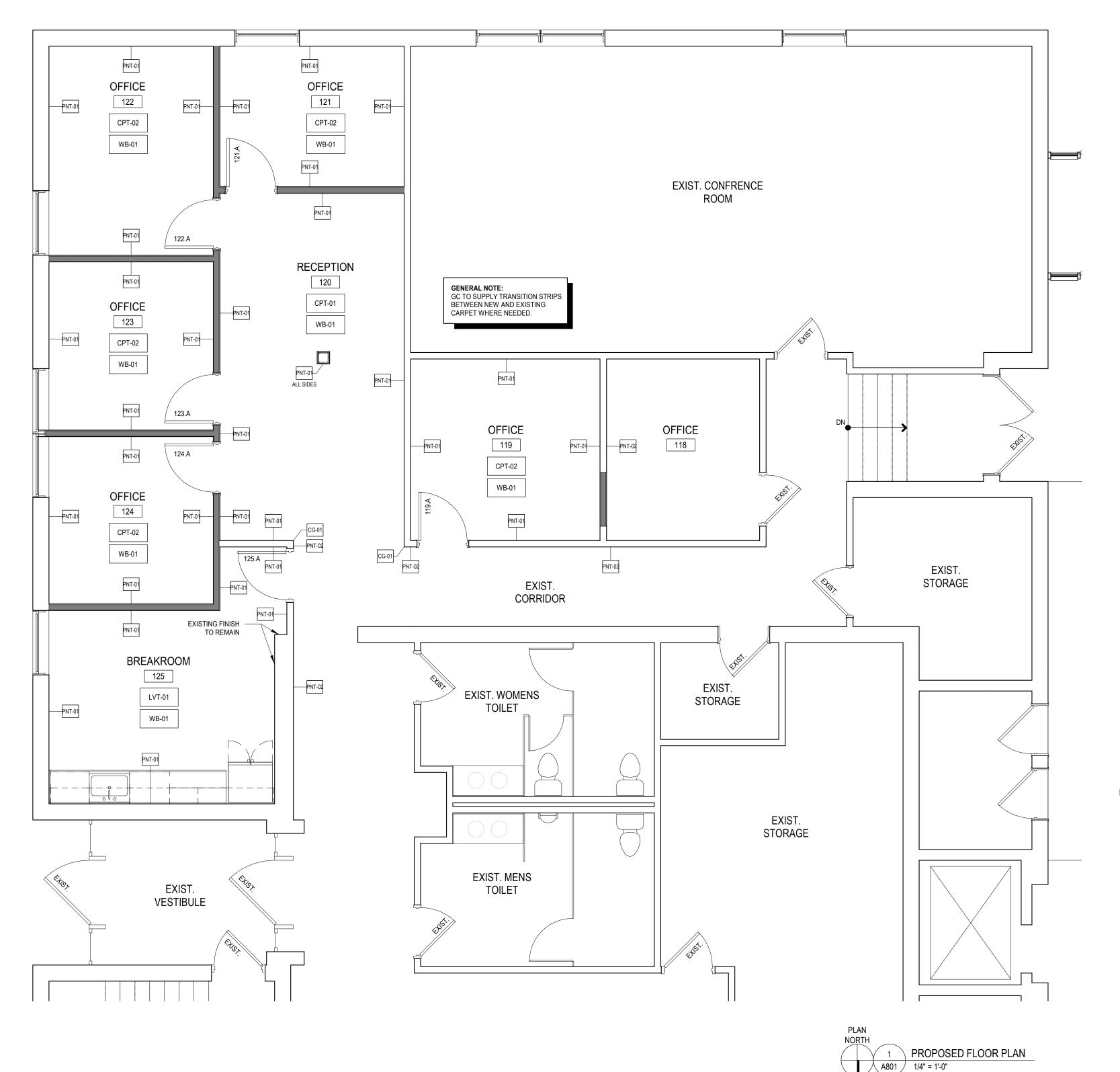
3. SUBMIT FINISH SAMPLES & SHOP DRAWINGS FOR OWNER & ARCHITECTS REVIEW & APPROVAL. ALL FINAL QUANTITIES, TAKE OFFS & LEAD TIME VERIFICATIONS ARE THE RESPONSIBILITY OF THE GC / VENDOR / CONTRACTOR. 4. ALL FINAL QUANTITIES, TARE OFFS A LEAD TIME VERTICATIONS ARE THE RESPONSIBILITY OF THE GOVERN

5. VERIFY ATTIC STOCK REQUIREMENTS WITH OWNER.

6. ALL INTERIOR FINSHES TO BE MINIMUM CLASS "B" FLAMESPREAD & SMOKE DEVELOPMENT INDEX.

7. ALL FINISHES TO BE INSTALLED PER MFR INSTALLATION INSTRUCTIONS / GUIDELINES - NO EXCEPTIONS

8. ALL FINISHES TO BE CLEANED AND MAINTAINED PER MFR GUIDELINES - NO EXCEPTIONS



ARCHITECTS

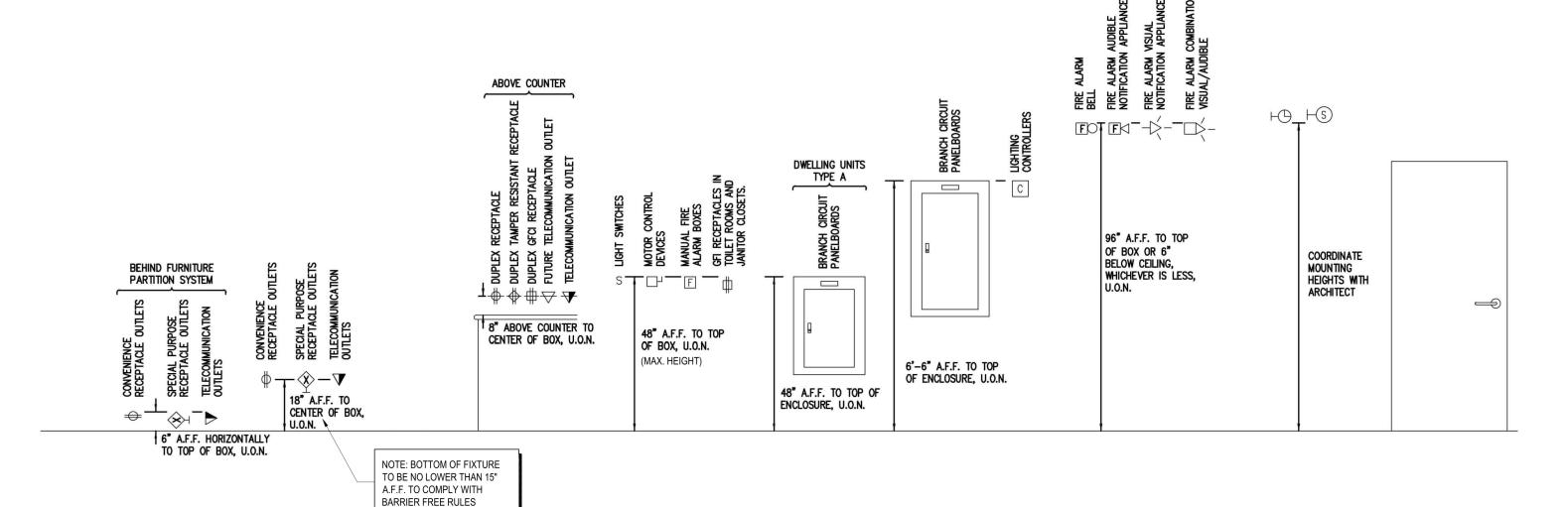
COPYRIGHT © 2020

A801

BID AND PERMIT

ISSUE DATE

STANDARD MOUNTING HEIGHTS



ELECTRICAL SPECIFICATIONS AND GENERAL NOTES

- 1. THE ELECTRICAL CONTRACTOR (E.C.) SHALL PROVIDE ALL LABOR AND MATERIALS NECESSARY FOR A COMPLETE AND FULLY OPERATIONAL ELECTRICAL SYSTEM/INSTALLATION.
- 2. MATERIALS AND INSTALLATION SHALL COMPLY WITH ALL CODES, LAWS, AND ORDINANCES OF FEDERAL, STATE, AND LOCAL GOVERNING BODIES HAVING JURISDICTION.
- 3. ALL MATERIALS AND EQUIPMENT SHALL BE LISTED AND/OR LABELED BY U.L., ETL, CSA, OR ANOTHER RECOGNIZED TESTING LABORATORY.
- 4. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, GOVERNMENTAL FEES, TAXES AND LICENSES NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF ALL ELECTRICAL WORK.
- 5. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO GOVERNMENTAL AGENCIES, UTILITY COMPANIES, AND LOCAL CODE OFFICIALS, SHOP DRAWINGS AND/OR INSTALLATION DETAILS WHICH ARE REQUIRED BY THESE AGENCIES FOR THEIR APPROVAL.
- 6. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT, ENGINEER, AND PROJECT MANAGER IN WRITING OF ANY MATERIALS OR APPARATUS BELIEVED TO BE INADEQUATE, UNSUITABLE, IN VIOLATION OF LAWS, ORDINANCES, RULES, OR REGULATIONS OF THE AUTHORITIES HAVING JURISDICTION.
- 7. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE FIRE PREVENTION BUREAU ALL DOCUMENTS, INCLUDING DRAWINGS AND SUBMITTALS, REQUIRED TO OBTAIN APPROVAL OF THE EMERGENCY LIGHTING, LIFE SAFETY, AND EXIT SIGN SYSTEM(S) FOR TYPES AND LOCATIONS. A COPY OF THE APPROVED DRAWINGS SHALL BE PROVIDED TO THE ARCHITECT AND ENGINEER PRIOR TO THE START OF CONSTRUCTION.
- 8. ALL NEW ELECTRICAL WORK OR MODIFICATIONS TO EXISTING ELECTRICAL DISTRIBUTION PANELS, PANELBOARDS, METERS, ETC. SHALL BE INSTALLED AS INDICATED ON THE ELECTRICAL CONSTRUCTION DOCUMENTS. E.C. SHALL SUBMIT SHOP DRAWINGS OF ALL EQUIPMENT TO BE INSTALLED INDICATING FLOOR PLAN LAYOUT, ELEVATIONS, AND ALL DIMENSIONS FOR APPROVAL OF THE ENGINEER PRIOR TO INSTALLATION. CODE REQUIRED CLEARANCES IN FRONT OF ALL ELECTRICAL EQUIPMENT SHALL BE MAINTAINED AT ALL TIMES.
- 9. THE CONTRACTOR SHALL INCLUDE IN BID AN ALLOWANCE FOR THE FOLLOWING ADDITIONAL LIFE SAFETY DEVICES, INCLUDING INSTALLATION AND ALL CONDUIT AND WIRE, FOR ADDITIONAL DEVICES AS MAY BE REQUIRED BY THE REVIEW OF THE AUTHORITY HAVING JURISDICTION: A. (1) EXIT SIGN FIXTURES
- B. (4) EMERGENCY LIGHTING FIXTURES CONTRACTOR SHALL PROVIDE A UNIT PRICE FOR EACH FOR QUANTITY ADJUSTMENT.
- 10. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE CONTRACT DOCUMENTS, MAKE A SCHEDULED ARRANGEMENT WITH THE PROJECT MANAGER TO VISIT THE SITE, AND THOROUGHLY BECOME FAMILIAR WITH THE BUILDING STANDARDS AND LOCAL CONDITIONS RELATING TO THE WORK. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS OF THE CONTRACT.
- 11. THE CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND WIRING FOR THE PERFORMANCE OF ALL TRADES FOR THE ENTIRE PERIOD OF CONSTRUCTION AND SHALL REMOVE ALL TEMPORARY WIRING AT THE COMPLETION OF CONSTRUCTION. ALL COSTS FOR ESTABLISHING AND REMOVING TEMPORARY POWER SHALL BE INCLUDED IN BID.
- 12. THE EXISTING POWER, SIGNAL, AND COMMUNICATIONS SYSTEMS ARE TO REMAIN IN SERVICE TO PROVIDE FOR THE OWNER'S EXISTING FUNCTIONS. SHOULD IT BECOME NECESSARY TO SHUT-DOWN ANY SYSTEM OR PORTION OF A SYSTEM, APPROVAL IN WRITING MUST BE OBTAINED FROM THE PROJECT MANAGER AND SHALL BE ONLY FOR THE PERIOD AND TIME AGREED UPON. THE BID IS TO INCLUDE THE COST OF ANY TEMPORARY WIRING AND PREMIUM TIME REQUIRED FOR THE
- 13. ALL MATERIALS AND EQUIPMENT SHALL BE ERECTED, INSTALLED, TOOLED, CONNECTED, CLEANED, ADJUSTED, TESTED, CONDITIONED, AND PLACED IN SERVICE IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND RECOMMENDATIONS.
- 14. ALL CUTTING, DRILLING, AND PATCHING OF MASONRY, DRYWALL, CONCRETE, STEEL, OR IRON WORK BELONGING TO THE BUILDING SHALL BE DONE BY THIS CONTRACTOR IN ORDER THAT WORK MAY BE PROPERLY INSTALLED. UNDER NO CONDITIONS MAY STRUCTURAL WORK BE CUT, EXCEPT AT THE DIRECTION OF THE ARCHITECT/ENGINEER OR THEIR REPRESENTATIVE.
- 15. SHOP DRAWINGS SHALL INCLUDE MANUFACTURER'S NAMES, CATALOG NUMBERS, CUTS, DIAGRAMS, AND OTHER SUCH DESCRIPTIVE DATA AS MAY BE REQUIRED TO IDENTIFY AND REVIEW THE EQUIPMENT. SUBMITTALS SHALL BE IN LOGICAL GROUPS (FOR EXAMPLE ALL LIGHTING FIXTURES). PARTIAL SUBMITTALS WILL NOT BE REVIEWED.
- 16. SUBMIT FOUR (2) COPIES OF THE FOLLOWING SHOP DRAWINGS FOR REVIEW: A. LIGHTING FIXTURES AND LAMPS
- B. WIRING DEVICES
- LOW VOLTAGE RELAYS AND SWITCHES D. DIMMERS AND CONTROLS
- 18. CONTRACTOR SHALL PROVIDE "AS-BUILT" DOCUMENTATION AND HARD COPY REPRODUCIBLE DRAWINGS AT THE COMPLETION OF THE PROJECT AND SUBMIT TO THE ARCHITECT AND THE ENGINEER. AS-BUILT DRAWINGS SHALL INDICATE EXACT CIRCUIT NUMBERS, LOCATIONS OF ALL DEVICES, CEILING FIXTURES, AND RACEWAY FOR LIGHTING, TELECOMMUNICATIONS AND POWER DISTRIBUTION SYSTEMS AS INSTALLED.
- 19. ALL MATERIAL, EQUIPMENT, WIRING DEVICES, ETC. SHALL BE NEW AND OF COMMERCIAL GRADE UNLESS SPECIFICALLY INDICATED AS EXISTING TO BE REUSED ON DRAWINGS.
- 20. EXCEPT AS NOTED OTHERWISE, ALL WORK REQUIRED FOR THE ELECTRICAL INSTALLATION AS SHOWN ON DRAWINGS SHALL INCLUDE ALL LABOR, INSTALLATION METHODS, EQUIPMENT, AND MATERIALS AND SHALL BE IN STRICT COMPLIANCE WITH ALL BUILDING STANDARDS.
- 21. PROVIDE A COMPLETE METAL RACEWAY SYSTEM, FITTINGS AND ENCLOSURES FOR ALL ELECTRICAL WIRING SYSTEMS TO BE INSTALLED FOR THE PROJECT. SYSTEMS SHALL INCLUDE, BUT NOT BE LIMITED TO POWER, COMMUNICATIONS, SECURITY, PAGING, TEMPERATURE CONTROL AND
- 22. MINIMUM CONDUIT SIZE SHALL BE 1/2 INCH FOR GENERAL LIGHTING AND POWER CIRCUITRY UNLESS OTHERWISE INDICATED AND/OR REQUIRED BY CODE.
- 23. FLEXIBLE CONDUIT CONNECTIONS TO RECESSED LIGHTING FIXTURES SHALL BE MADE WITH FLEXIBLE STEEL CONDUIT. 1/2 INCH MINIMUM, INCLUDING AN INSULATED COPPER GREEN EQUIPMENT GROUNDING CONDUCTOR OR SHALL BE MADE WITH METAL CLAD TYPE CABLE.

- 24. WIRE NUMBER 8 AND SMALLER FOR USE IN INTERIOR DRY LOCATIONS SHALL BE TYPE THWN THERMOPLASTIC 600 VOLT INSULATED COPPER CONDUCTORS. FEEDERS AND POWER WIRING NUMBER 6 AND LARGER SHALL BE TYPE THW 600 VOLT INSULATED COPPER. WIRE WHICH IS INSTALLED IN RACEWAY IN MOIST OR DAMP LOCATIONS SHALL BE THW, 600 VOLT INSULATED COPPER CONDUCTORS. NO WIRE SMALLER THAN NUMBER 12 AWG SHALL BE USED FOR LIGHTING
- 25. BRANCH CIRCUIT HOMERUN WIRING: A. GENERAL PURPOSE BRANCH CIRCUIT HOMERUNS CONSISTING OF TWO NETWORKS SHALL HAVE PHASE, NEUTRAL AND GROUND CONDUCTORS INCREASED TO NUMBER 10 AWG, THWN AS A MINIMUM. WHERE HOMERUN (ONE OR MORE NETWORKS) EXCEEDS 100 LINEAR FEET,
- CONDUCTOR SIZE SHALL BE INCREASED ONE TRADE SIZE. B. ALL BRANCH CIRCUITS, FEEDERS, AND HOMERUNS SHALL BE PROVIDED WITH AN INSULATED COPPER GREEN GROUNDING CONDUCTOR ROUTED IN THE SAME CONDUIT. GROUNDING
- CONDUCTOR SHALL BE SIZED PER THE REQUIREMENTS OF NEC SECTION 250. HOMERUN LENGTH SHALL BEGIN AT THE CENTRAL POINT OF ALL DISTRIBUTED CIRCUITS TO
- 26. ALL NEW CIRCUIT BREAKERS FOR EXISTING PANELBOARDS AND DISTRIBUTION PANELBOARDS SHALL MATCH EXISTING BUILDING PANELBOARD MANUFACTURER AND CIRCUIT BREAKER TYPE. ALL CIRCUIT BREAKERS SHALL BE BOLT ON TYPE. AIC RATING OF NEW CIRCUIT BREAKER SHALL MATCH AIC RATING OF PANELBOARD IN WHICH IT IS INSTALLED. WHERE SERIES RATED TYPE CIRCUIT BREAKERS ARE USED, NEW CIRCUIT BREAKERS SHALL BE INSTALLED SO AS TO MAINTAIN THE UL SERIES RATING OF THE ENTIRE SYSTEM. THE CONTRACTOR SHALL PROVIDE A NEW TYPEWRITTEN PANEL DIRECTORY FOR EACH PANEL CHANGED AT THE COMPLETION OF THE PROJECT. EACH CIRCUIT BREAKER SHALL BE LABELED TO IDENTIFY LOAD TYPE AND LOCATION.
- 27. THE CONTRACTOR SHALL VERIFY THE CEILING CONSTRUCTION TYPE WITH ARCHITECTURAL DETAILS BEFORE ORDERING LIGHTING FIXTURES IN ORDER TO CONFIRM PROPER MOUNTING.
- 28. EACH SWITCH, LIGHT, RECEPTACLE, OR OTHER MISCELLANEOUS DEVICE SHALL BE PROVIDED WITH A GALVANIZED OR SHERARDIZED PRESSED STEEL OUTLET BOX OF THE KNOCKOUT TYPE, OF NOT LESS THAN NUMBER 14 U.S. GAUGE STEEL. CONDUITS SHALL BE FASTENED WITH LOCKNUTS AND BUSHINGS AND ALL UNUSED KNOCKOUTS SHALL BE LEFT SEALED. THERE SHALL BE SUFFICIENT ROOM FOR WIRES AND BUSHINGS AND DEEP BOXES SHALL BE INSTALLED WHERE REQUIRED. BOXES SHALL BE SECURELY AND ADEQUATELY SUPPORTED.
- 29. IN SUSPENDED CEILINGS, SUPPORT CONDUITS AND JUNCTION BOXES DIRECTLY FROM THE STRUCTURAL SYSTEM, DECK OR FRAMING PROVIDED FOR THAT PURPOSE. LIGHTING BRANCH CIRCUIT CONDUITS SHALL NOT BE CLIPPED TO THE CEILING SUPPORT WIRES OR SPLINE UNLESS. THE CEILING SYSTEM HAS BEEN SPECIFICALLY DESIGNED FOR THAT PURPOSE AND APPROVAL HAS BEEN GRANTED BY THE ARCHITECT AND THE ENGINEER.
- 30. E.C. SHALL PROVIDE "3M" FIRESEAL SYSTEMS FOR ALL CORES AND RACEWAY PENETRATIONS IN FIRE RATED WALLS AND PARTITIONS. FIRE RATE WALL AND CEILING PENETRATIONS, ETC. USING "CP-25" CAULK. "303" PUTTY AND/OR "FLAMESEAL" PUTTY AS PER MANUFACTURER'S INSTRUCTIONS TO MAINTAIN EXISTING AND NEW FIRE RATINGS. VERIFY FIRE RATING CONDITIONS AND LOCATIONS. PRIOR TO FINAL BIDS. ALL OPEN SLEEVE PENETRATIONS SHALL BE FIRESEALED INSIDE AND OUTSIDE BY E.C. AFTER ALL CABLING IS COMPLETELY INSTALLED. SEALING METHODS SHALL BE PROVIDED BY E.C. AND SHALL BE SUBJECT TO THE APPROVAL OF THE CABLING CONTRACTOR.
- NUMBERED CIRCUITS SHOWN ON PLAN ARE FOR THE CONVEYANCE OF DESIGN INTENT ONLY. ACTUAL FIELD CONDITIONS WILL AFFECT CIRCUITRY. INDICATE THE ACTUAL CIRCUIT NUMBERS INSTALLED ON THE "AS-BUILT" DRAWINGS.
- 32. BUILDING STANDARDS A. ALL NEW CONDUIT RACEWAYS AND BOXES FOR ALL SYSTEMS SHALL BE INSTALLED TIGHT-UP
- TO THE BOTTOM OF THE STRUCTURAL BEAMS WHERE REQUIRED AND PROPERLY SUPPORTED FROM STRUCTURAL MEMBERS. B. ALL NEW CONDUIT RUNS SHALL BE INSTALLED ABOVE AND OVER THE TOP OF ALL NEW AND/OR EXISTING DUCTWORK, PIPING, CONDUITS, PULLBOXES, ETC. E.C. SHALL PROVIDE ALL
- NECESSARY ACCESSIBLE PULLBOXES. CONDUIT BENDS SHALL NOT EXCEED CODE REQUIREMENTS WITHIN A SINGLE RUN. E.C. SHALL PROVIDE ALL PULLBOXES AS REQUIRED. C. NEW CONDUIT RUNS OR PULLBOXES SHALL NOT BE INSTALLED LESS THAN 2 INCHES ABOVE RECESSED LIGHTING FIXTURES UNLESS APPROVED BY THE ENGINEER.
- ACCESS AND OPERATION OF NEW OR EXISTING HVAC EQUIPMENT, ACCESS DOORS, PIPING VALVES, JUNCTION BOXES, DUCT HEATERS, MAIN SUPPLY AND RETURN AIR DUCTS, PULLBOXES, CLEANOUTS, ETC E. NEW CONDUIT AND PULLBOXES TO BE INSTALLED BELOW NEW OR EXISTING DUCTWORK SHALL BE MOUNTED TIGHT UP TO BOTTOM OF DUCT WITH 90 DEGREE BENDS UP SIDEWALL OF DUCT

D. NEW CONDUIT RUNS OR PULLBOXES SHALL NOT BLOCK OR PREVENT FULL AND COMPLETE.

- TO MEET REQUIREMENTS OF LETTER C ABOVE. SUPPORTS SHALL NOT PENETRATE DUCTWORK, AND SHALL BE INDEPENDENT OF ALL DUCTWORK SUPPORTS. DIRECT CONTACT OF CONDUIT RACEWAY SYSTEMS WITH DUCTWORK OR PIPING SHALL BE PROVIDED WITH VIBRATION SEPARATION METHOD APPROVED BY THE ENGINEER. F. NEW CONDUIT AND BOXES TO BE INSTALLED WITHIN ALL EXISTING FINISHED BUILDING DRYWALL, FURRED BUILDING WALLS, PARTITIONS, AND COLUMNS SHALL BE INSTALLED WITH
- EMT AND FLEXIBLE RACEWAYS NOT MORE THAN 6'-0" LONG. ELECTRICAL CONTRACTOR SHALL INCLUDE ALL COSTS FOR DRYWALL ACCESS, CUTTING, PATCHING, PAINTING, ETC. IN BIDS FOR SUCH CONDITIONS. FIELD VERIFY ALL LOCATIONS ON SITE PRIOR TO FINAL BIDS. EXCEPTIONS DURING BIDS SHALL BE SUBMITTED IN WRITING. G. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL BE HELD RESPONSIBLE TO HAVE EXAMINED THE CONSTRUCTION SITE WITH RESPECT TO CONSTRUCTION DRAWINGS, ACTUAL
- FIELD CONDITIONS, DOOR FRAME HEIGHTS, PIPING OBSTRUCTIONS, DUCTWORK HEIGHTS AND LEVELS, FLOOR LEVELS, CEILING HEIGHTS, ETC, PRIOR TO FINAL BIDS. H. ALL NEW BUILDING STANDARD EQUIPMENT, DEVICES, AND MATERIALS SHALL BE EQUAL TO OR GREATER IN QUALITY TO EXISTING APPROVED BUILDING STANDARD MATERIALS PRESENTLY
- INSTALLED IN BUILDING. EQUIPMENT, DEVICES, AND MATERIALS SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, PROJECT MANAGER, AND THE ENGINEER. I. ALL EMERGENCY AND EXIT SIGN JUNCTION BOXES SHALL BE PAINTED RED. PANEL TAG AND CIRCUIT NUMBER FOR ALL WIRING WITHIN JUNCTION BOX SHALL BE INDICATED ON COVER ALL JUNCTION BOXES SERVING LIGHTING AND POWER SHALL HAVE CIRCUIT NUMBERS AND
- PANEL TAGS FOR ALL WIRING WITHIN JUNCTION BOX INDICATED ON COVERS. 33. A NEW PANELBOARD COPPER GROUND BUS SHALL BE INSTALL FOR EQUIPMENT GROUNDING REQUIREMENTS FOR ALL PANELBOARDS LACKING A GROUND BUS.
- 34. PERFORM ALL WORK OF A DEMOLITION NATURE THAT MAY BE REQUIRED OR NECESSARY FOR THE FULL AND COMPLETE EXECUTION OF THE WORK, WHETHER EXPLICITLY SHOWN AND/OR SPECIFIED OR NOT. EXACT EXTENT OF DEMOLITION WILL NOT BE FULLY INDICATED BY DRAWINGS. DETERMINE THE NATURE AND EXTENT OF DEMOLITION THAT WILL BE NECESSARY BY COMPARING THE CONTRACT DOCUMENTS WITH ARCHITECTURAL AND DEMOLITION DRAWINGS TO EXISTING CONDITIONS. ELECTRICAL EQUIPMENT WHICH WILL NOT BE REUSED SHALL BE TURNED OVER TO THE OWNER OR REMOVED FROM THE PREMISES AS DETERMINED BY THE PROJECT MANAGER.

- 35. ANY EXISTING ELECTRICAL MATERIAL AND EQUIPMENT WHICH INTERFERES WITH THE NEW ADDITION OR THE REMOVAL OF EXISTING WALLS SHALL BE REMOVED OR RELOCATED BY THE CONTRACTOR. VERIFY REMOVAL AND NEW LOCATION OF EQUIPMENT WITH THE PROJECT MANAGER AND THE
- PROCEEDING WITH CONSTRUCTION, COORDINATE USAGE OF AVAILABLE SPACE WITH ALL TRADES. IN THE EVENT OF CONFLICTS, NOTIFY THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH

36. VERIFY CLEARANCES FOR ALL NEW OR EXISTING RELOCATED ELECTRICAL WORK BEFORE

- WHERE EXISTING CONDUIT IS SHOWN ON THE DRAWINGS, IT IS SHOWN DIAGRAMMATICALLY. THE EXACT ROUTING OF THE EXISTING CONDUIT SHALL BE DETERMINED ON THE JOB SITE BY THE
- 38. ALL HANGER AND/OR ROD SUPPORT SYSTEMS SHALL BE SUPPORTED TO THE BOTTOM RIB OF THE METAL DECK, WHERE APPLICABLE.
- 39. PROVIDE A WRITTEN GUARANTEE THAT THE ELECTRICAL INSTALLATION IS FREE FROM MECHANICAL AND ELECTRICAL DEFECTS. CONTRACTOR AT THEIR COST SHALL REPLACE AND/OR REPAIR, TO THE SATISFACTION OF THE OWNER AND/OR THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, ANY PARTS OF THE INSTALLATION WHICH MAY FAIL WITHIN A PERIOD OF 12 MONTHS FROM CONSTRUCTION ACCEPTANCE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, PROVIDED THAT SUCH FAILURE IS DUE TO DEFECTS IN MATERIAL, WORKMANSHIP, OR FAILURE TO FOLLOW THE SPECIFICATIONS, MANUFACTURER'S INSTALLATION INSTRUCTIONS AND/OR DRAWINGS.
- 40. CONTRACTOR SHALL PROVIDE ALL NECESSARY PROPERLY SIZED WALL OR MILLWORK MOUNTED BOXES, RINGS, SUPPORTS, AND DEVICES AS REQUIRED VIA COORDINATION WITH ARCHITECTURAL WALL SECTIONS, AND MILLWORK DETAILS.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE DRAWINGS. WHERE MORE STRINGENT REQUIREMENTS THAN THOSE DESCRIBED HEREIN OR AS SET FORTH UNDER CODES, LAWS, AND ORDINANCES OF FEDERAL, STATE, AND LOCAL GOVERNING BODIES HAVING JURISDICTION, THOSE GREATER REQUIREMENTS SHALL BE ADHERED TO.
- 42. ALL NEW EMERGENCY LIGHTING FIXTURES AND EXIT SIGNS SHALL BE PROVIDED WITH AN INTEGRAL EMERGENCY BACKUP BALLAST TO ILLUMINATE THE FIXTURES IN THE EVENT OF A POWER FAILURE. ALL COMPONENTS SHALL BE IN COMPLIANCE WITH NFPA 101 AND NFPA 70 SECTION 700. BALLAST BATTERY SHALL MAINTAIN 87.5% OF THE NOMINAL BATTERY VOLTAGE AFTER 1.5 HOURS TO COMPLY WITH NEC SECTION 700 AND UL 924.
- 43. IDENTIFICATION OF ELECTRICAL ITEMS A. PROVIDE PERMANENT IDENTIFICATION MARKING AND NAMEPLATES FOR ALL CONDUCTORS AND EACH ITEM OF ELECTRICAL APPARATUS AND ASSOCIATED CONTROLLED EQUIPMENT, WITH THE SAME INSCRIPTIONS AS SHOWN ON THE DRAWINGS. ALL IDENTIFICATION MARKINGS SHALL BE CLEARLY AND NEATLY APPLIED.
- B. APPLY ENGRAVED PLASTIC LAMINATE NAMEPLATES WITH NON-CORRODING TYPE SCREW FASTENERS OR RIVETS TO ALL MOTOR STARTERS, DISCONNECT SWITCHES, RELAYS, REMOTE CONTROL PANELS, PUSH BUTTON STATIONS, PANELBOARDS, SWITCHBOARDS, TRANSFORMERS, AND OTHER ELECTRICAL APPARATUS. NAMEPLATES SHALL BE WHITE WITH BLACK CORE, 1 1/4" X 3" MINIMUM WITH 3/16" HIGH LETTERING. THE NAMEPLATE SHALL
- NAME OF DEVICE OR - LOAD THE DEVICE IS SERVING
- C. PROVIDE A TYPEWRITTEN DIRECTORY OF CIRCUITS IN LIGHTING AND POWER PANELS AND PROVIDE PANEL IDENTIFICATION IN BLACK ALKYD PAINT STENCILED INSCRIPTIONS ON THE INSIDE OF THE DOOR, DIRECTLY ABOVE THE CENTERLINE OF THE DIRECTORY FRAME, OR ON
- THE VERTICAL AND HORIZONTAL CENTERLINE OF DOORS WITHOUT DIRECTORY FRAMES. D. PROVIDE ON DEVICE PLATES FOR LOCAL TOGGLE SWITCHES, TOGGLE SWITCH MANUAL STARTERS. PILOT LIGHTS AND OTHER ELECTRICAL ITEMS. WHOSE FUNCTION IS NOT READILY APPARENT. ENGRAVED SUITABLE INSCRIPTIONS OR PLASTIC LAMINATE NAMEPLATES
- DESCRIBING THE EQUIPMENT CONTROLLED OR INDICATED E. EMBOSSED SELF-ADHERING PLASTIC TAPE LABELS WILL NOT BE ACCEPTED.
- 44. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL EXISTING OR NEW NON-ACCESSIBLE SYSTEM DEVICES, PULLBOXES, AND EQUIPMENT, ETC. FOR RELOCATION TO ACCESSIBLE CEILING AREAS. E.C. SHALL INCLUDE ALL COMPLETE COSTS FOR RELOCATION AND VERIFY SUCH CONDITIONS WITH ARCHITECTURAL CEILING PLANS PRIOR TO FINAL BIDS.
- 45. EXISTING CONDITIONS OF ALL EXISTING BUILDING EQUIPMENT, DEVICES, FIXTURES, AND SYSTEMS THAT REQUIRE REWIRING, REUSE, RELOCATION, OR REFURBISHING AS PER DRAWINGS AND SPECIFICATIONS SHALL BE FIELD VERIFIED BY THE E.C. PRIOR TO COMMENCEMENT OF ANY WORK TO BE COMPLETELY OPERATIONAL, E.C. SHALL SUBMIT A WRITTEN STATEMENT AND ITEMIZED LISTING OF ALL EXISTING CONDITIONS OF THE FOLLOWING. ALTHOUGH NOT LIMITED TO THOSE
- A. HVAC EQUIPMENT

GOOD WORKING ORDER AND CONDITION.

- B. EXIT SIGNS AND EMERGENCY LIGHTING FIXTURES C. LIFE SAFETY/FIRE ALARM SYSTEM DEVICES
- D. LIGHTING AND RECEPTACLE DEVICES. THE WRITTEN STATEMENT SHALL BE SUBMITTED TO THE PROJECT MGR., ARCHITECT, AND ENGINEER PRIOR TO WORK. IN THE EVENT THAT THE CONTRACTOR COMMENCES WORK WITHOUT SUBMITTAL THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY AND COST TO MAINTAIN THE ABOVE IN
- 46. E.C. SHALL REFER TO MECHANICAL AND PLUMBING ENGINEERING DRAWINGS FOR EXACT LOCATIONS OF ALL MECHANICAL AND PLUMBING EQUIPMENT.

GENERAL ELECTRICAL NOTES

- 1. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
- 2. ALL SERVICE REQUIREMENTS SHALL BE IN COMPLIANCE W/ LOCAL UTILITY COMPANY RULES AND REGULATIONS. VERIFY LOCATION OF ALL POWER SOURCES PRIOR TO SUBMITTING BID FOR INTENDED SERVICE REQUIREMENTS AS EVIDENCED BY RISER DIAGRAM SHOWN ON THE PLANS (SEE S.250.71 AND 250.72, NATIONAL ELECTRICAL CODE.).
- 3. CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY, LOCAL, NATIONAL AND OSHA CODE REQUIREMENTS, WHICHEVER IS MOST STRINGENT.
- 4. ELECTRICAL CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS AND UTILITY COMPANY CHARGES AND PAY FOR SAME. THE CHARGES SHALL BE INCLUDED IN HIS BID.
- 5. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR A COMPLETE AND PROPER OPERATING SYSTEM AS INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN AND/OR REQUIRED
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES AND SHALL BEAR THE INSPECTION LABEL WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH THE APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY A.N.S.I., N.E.M.A. AND N.S.F.D.
- MINIMUM WIRE SIZE FOR ALL WORK TO BE #12 COPPER WIRE. ALL WIRE SIZING IS BASED ON THE AMPACITY OF COPPER. ALL WIRE MUST BE COPPER UNLESS APPROVED OTHERWISE BY THE CITY INSPECTION DEPARTMENT AND THE ARCHITECT/ ENGINEER. ONLY MAIN SERVICE WIRING WILL BE PPROVED FOR ALLIMINUM CONDUCTOR SUBSTITUTION AND THAT IS DEPENDENT UPON JOB CONDIT
- 8. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANEL BOARD, PULLBOX, J-BOX, ETC. IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970.
- 9. ALL CONDUIT SHALL BE INSTALLED CONCEALED WHERE PHYSICALLY POSSIBLE. ALL EXPOSED CONDUIT

SHALL BE INSTALLED PARALLEL OR AT RIGHT ANGLES WITH THE BUILDING WALLS.

- 10. ALL EXIT LIGHTS, NIGHT LIGHTS AND EMERGENCY LIGHTS TO BE WIRED FROM COMMON LOCKED-ON
- A. EXIT LIGHTS SHALL BE ILLUMINATED INTERNALLY AND HAVE INTEGRAL BATTERY CHARGING CIRCUIT AND AUTOMATIC TRANSFER SWITCH.
- BATTERY CHARGING CIRCUIT AND AUTOMATIC TRANSFER SWITCH, INTENSITY OF FLOOR LIGHTING SHALL NOT BE LESS THAN 1 FOOTCANDLE. THE WIRING OF ALL EXIT LIGHTS, EMERGENCY LIGHTS AND NIGHT LIGHTS SHALL BE IN CONDUIT BUT

B. EMERGENCY LIGHTS SHALL BE WALL MOUNTED UNLESS NOTED OTHERWISE AND HAVE INTEGRAL

WITH NO RESTRICTION ON THE NUMBER OF OTHER CIRCUITS INCLUDED COMMENSURATE WITH

- 11. ELECTRICAL CONTRACTOR SHOULD REFER TO THE FOLLOWING DRAWINGS AND INCORPORATE ALL WORK TO MAKE THEIR CONTRACT COMPLETE IN EVERY DETAIL.
- A. MECHANICAL DRAWINGS: REVIEW ALL MECHANICAL EQUIPMENT AND CONFIRM ELECTRICAL POWER REQUIREMENTS WITH MECHANICAL CONTRACTOR TO INSURE THAT EQUIPMENT WILL MEET ELECTRICAL CHARACTERISTICS REQUIRED.
- B. REFER TO PLUMBING DRAWINGS AND PROVIDE WIRING FOR ALL PUMPS AND MOTORS THEREIN
- 12. THESE PLANS ARE DIAGRAMMATIC ONLY. FINAL LOCATION AND MOUNTING HEIGHTS OF ALL PLUGS, LIGHTS AND PHONE JACKS ARE SUBJECT TO OWNER APPROVAL. ELECTRICAL WORK SHALL MEET THE REQUIREMENTS OF THE BARRIER FREE DESIGN ACT AND AMERICANS WITH DISABILITIES ACT, AND NO SWITCHES OR CONTROLS SHALL BE MOUNTED MORE THAN 48" ABOVE FINISH FLOOR. NO RECEPTACLES SHALL BE MOUNTED LESS THAN 18" A.F.F. UNLESS NOTED OTHERWISE.
- 13. ROOFTOP EQUIPMENT SHALL HAVE AN ACCESSIBLE 110-120 VOLT GROUNDING-TYPE MAINTENANCE
- OUTLET ON THE ROOF WITHIN 25' OF SAID EQUIPMENT (B.O.C.A. CODE M-306.2.5) 14. ALL CIRCUIT BREAKERS SHALL BE 10,000 A.I.C., PLUG-IN, U.L. LABELED "SW" FOR ALL LIGHTING CIRCUIT BREAKERS SWITCH FROM THE PANEL.
- 15. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE BY OWNER. ANY WORK, MATERIALS OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION AT THE EXPENSE OF THE ELECTRICAL
- 16. PROVIDE THE OWNER WITH ONE SET OF COMPLETE ELECTRICAL "AS-BUILT" DRAWINGS AT THE COMPLETION OF JOB SHOWING ACTUAL DIMENSIONS.
- 17. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC., SHALL BE TURNED OVER TO THE OWNER AT JOB COMPLETION.
- 18. MINIMUM CIRCUIT TO BE 20 AMP BREAKER (2) #12 IN 1/2" CONDUIT, UNLESS NOTED OTHERWISE.
- 19. PROVIDE DISCONNECTING MEANS AT ALL MOTOR LOADS.
- MAKE ALL FINAL CONNECTIONS. 21. FUSE ALL MOTORS AND MOTOR ASSEMBLIES IN ACCORDANCE WITH N.E.C. 1990 AND MANUFACTURER'S
- WRITTEN RECOMMENDATIONS. 22. MAINTAIN A MAXIMUM VOLTAGE DROP OF 5% THROUGHOUT THE ENTIRE SYSTEM.
- 23. COORDINATE ALL WORK WITH ARCHITECTURAL, MECHANICAL AND PLUMBING TRADES IN THE FIELD.

CONSULTANTS



114 EAST MAIN ST 3RD FLOOR NORTHVILLE, MICHIGAN 48167 PHONE 248.349.2708 marchitects.com

PROJECT

NORTHVILLE CITY HALL OFFICE ADDITION

PROJECT ADDRESS

215 W MAIN ST NORTHVILLE, MI 48167

PROJECT NUMBER

SHEET NAME

21.31

ELECTRICAL NOTES

SHEET NUMBER

COPYRIGHT © 2020

ISSUE DATE

THE REQUIREMENTS AS SET FORTH UNDER GENERAL CONDITIONS, INSTRUCTIONS TO BIDDER AND GENERAL REQUIREMENTS

<u>VISIT TO SITE</u>
THIS CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS BEFORE SUBMITTING HIS BID. NO CLAIMS FOR "EXTRA" COMPENSATION DUE TO UNFAMILIARITY WITH EXISTING CONDITIONS AND/OR ARCHITECTURAL, STRUCTURAL AND ELECTRICAL PLANS AND SPECIFICATIONS WILL BE CONSIDERED.

INSTALL ALL WORK IN FULL ACCORDANCE WITH CODES, RULES AND REGULATIONS OF MUNICIPAL, COUNTY, STATE, PUBLIC UTILITY AND ALL OTHER AUTHORITIES HAVING JURISDICTION OVER THE PREMISES. THIS CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND CERTIFICATES OF INSPECTION INCIDENTAL TO HIS WORK REQUIRED BY THE FOREGOING AUTHORITIES.

WORK UNDER THIS DIVISION SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, ETC. NECESSARY FOR THE INSTALLATION OF A PLUMBING SYSTEM FOR THE TENANT, COMPLETE IN EVERY RESPECT, UNLESS SPECIFICALLY INDICATED OTHERWISE. THE WORK INCLUDED IN THIS SUBCONTRACT SHALL CONSIST OF INSTALLATION, TEST AND GUARANTEE OF THE FOLLOWING WORK:

- FURNISH AND INSTALL NEW WASTE AND VENT LINES AS REQUIRED TO ACCOMMODATE NEW FIXTURES. MODIFIED SANITARY SEWER SYSTEM COMPLETE WITH PLUMBING FIXTURES AND TRIM, WASTE AND VENT LINES WITH
- NEW HOT AND COLD WATER SYSTEM COMPLETE WITH PIPING AND VALVES COMPLETE WITH CONNECTIONS TO ALL PLUMBING FIXTURES. NEW COLD WATER SERVICE SHALL BE EXTENDED FROM EXISTING COLD WATER LINE WITH A NEW VALVED CONNECTION. PROVIDE REMOTE READER AND ALL VALVES AS REQUIRED.
- PIPE INSULATION AS SPECIFIED. ALL TESTS AND ADJUSTMENTS.

ALL PERMITS AND FEES.

 ALL WALL AND FLOOR OPENINGS WILL BE PROVIDED BY THE GENERAL CONTRACTOR BUT THIS CONTRACTOR SHALL INSTRUCT THE GENERAL CONTRACTOR AS TO THE EXACT SIZE AND LOCATION OF SUCH OPENINGS. ALL OPENINGS IN FLOORS TO BE SEALED WITH 3M FIRE BARRIER MASTIC.

ALL ELECTRICAL POWER AND WIRING WILL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.

EXTENSION TO EXISTING WASTE AND VENT STACKS AS SHOWN.

SANITARY SEWER PIPES SHALL BE CISPI 301-85 NO-HUB CAST-IRON PIPE WITH NO-HUB COUPLINGS. NO-HUB COUPLINGS SHALL BE AS MANUFACTURED BY CLAMP-ALL CORPORATION AND MADE OF 24-GAUGE TYPE 304 STAINLESS STEEL WITH HI- TORQUE CLAMPS TIGHTENED TO 100-125 INCH-PUNDS OF TORQUE. COUPLING GASKETS SHALL BE NEOPRENE AND INTERLOCK WITH THE ASSEMBLY TO MAKE A SLIP FREE JOINT.

SANITARY WASTE AND VENT STACKS 2-1/2" AND SMALLER ABOVE FLOOR SHALL BE SCHEDULE #40 GALVANIZED STEEL ASTM 120-83, DWV COPPER ASTM B306-83 OR SCHEDULE #40 PVC PLASTIC PIPE ASTM D1785-83 AND FITTINGS WITH SOLVENT WELDED DRAINAGE FITTINGS.

EXPOSED PLASTIC PIPE IN RETURN AIR PLENUMS IS NOT PERMITTED. ALL PVC LOCATED IN PLENUM SPACE SHALL BE ENCASED IN FIRE-RETARDANT MATERIAL.

COLD AND HOT WATER PIPING: ASTM B-88-83A TYPE "L" COPPER TUBING WITH WROUGHT DRAWN COPPER SOLDERED FITTINGS, 90-DEGREE ELLS ON PIPE 2-1/2-INCHES AND LARGER SHALL BE LONG RADIUS. UNDERGROUND DOMESTIC WATER SERVICE: TYPE "K" SOFT COPPER TUBING WITH BRAZED WROUGHT COPPER FITTINGS.

JOINTS IN COPPER TUBING: MADE WITH FLUX AND ASTM B32-83 95-5 TIN-ANTIMONY OR SOLDER AS RECOMMENDED BY MANUFACTURER FOR THE SERVICE, PRESSURE AND TEMPERATURE TO WHICH THE JOINT WILL BE SUBJECTED. BRAZING ALLOY: 93-7 COPPER-PHOSPHOROUS OR 45-25-30 SILVER-ZINC-COPPER.

SCREWED PIPE: ASSEMBLED WITH SHARP, CLEAN, TAPERED THREADS USING PIPE COMPOUND ON THE MALE THREAD ONLY. MILL CUT THREADS ARE NOT ACCEPTABLE. ALL CUT PIPE SHALL BE REAMED TO THE FULL INSIDE DIAMETER.

THIS SUBCONTRACTOR SHALL FURNISH & INSTALL AIR CHAMBERS AT EACH HOT & COLD WATER FIXTURE CONNECTION.

CHAMBER SHALL BE 18-INCHES HIGH & OF THE SAME DIAMETER AS THE FIXTURE CONNECTION, BUT NOT LESS THAN 1/2-INCH.

ALL PIPE PASSING THROUGH WALLS, FLOORS OR CEILINGS IN FINISHED ROOMS SHALL BE FITTED WITH STEEL OR BRASS ESCUTCHEONS WITH SET SCREW. WHERE SURFACE IS TO RECEIVE A PAINT FINISH, THE ESCUTCHEONS SHALL BE PRIME PAINED; OTHERWISE, THE ESCUTCHEONS SHALL BE A NICKEL PLATED CHROME FINISH.

THE PLUMBING DRAWINGS ARE INTENDED TO SHOW ALL FIXTURES AND ALL PIPING IN DIAGRAMMATIC FORM. LOCATIONS ARE APPROXIMATE ONLY AND MUST BE CHECKED ON THE JOB. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL AND/OR STATE

ITEMS SPECIFIED BY MANUFACTURER'S NAME AND/OR MODEL NUMBER INDICATES THE MINIMUM QUALITY, SIZE AND CAPACITY REQUIRED. OTHER MANUFACTURER'S PRODUCTS OF EQUAL SPECIFICATIONS WILL BE CONSIDERED BUT ONLY IF NOTED AT THE

TIME OF BIDDING AND WITH THE WRITTEN APPROVAL OF THE ARCHITECT PRIOR TO PURCHASING THE EQUIPMENT. PLUMBING FIXTURES, TRIM AND OTHER EQUIPMENT SHALL BE PROTECTED AGAINST DAMAGE OR INJURY. ALL FIXTURES AND EQUIPMENT DAMAGED BY ANY CAUSE AND ANY TRIM WITH MARRED OR SCRATCHED FINISH SHALL BE REPLACED AT NO

ADDITIONAL COST TO THE OWNER. THE FIXTURE PROTECTION SHALL BE REMOVED AT THE COMPLETION OF THE WORK OR FOR

FINAL INSPECTION. A CLEANOUT SHALL BE INSTALLED AT THE BASE OF EACH SOIL AND WASTE STACK, AND AT NOT MORE THAN 50'-0" INTERVALS ON HORIZONTAL RUNS AND AS REQUIRED BY CODE. CLEANOUTS SHALL BE THE SAME SIZE AS THE PIPE THEY SERVE, EXCEPT

THEY NEED NOT BE LARGER THAN 4-INCHES. ALL HORIZONTAL PIPE SHALL BE SUPPORTED ON ADJUSTABLE SPLIT STEEL RING CLEVIS HANGERS AND THREADED RODS SPACED NOT OVER 10'-0" ON CENTERS FOR PIPE 1-1/2" AND LARGER AND 6'-0" ON CENTERS FOR PIPE 1-1/4" AND SMALLER.

PIPE SIZES	ROD DIAMETER
Up to 2"	3/8"
2-1/2" and 3"	1/2"

CHAIN OR BAND IRON HANGERS WILL NOT BE ACCEPTABLE.

(3/8" RODS ARE PERMISSIBLE FOR ALL PLASTIC VENT LINES)

RODS, WHERE EXPOSED TO VIEW, SHALL BE GALVANIZED FINISH OR BE CLEANED AND PRIME PAINTED.

STANDARD MILL FINISH MAY BE USED IN AREAS ABOVE HUNG CEILINGS.

PROVIDE ADJUSTABLE PIPE SADDLE SUPPORTS, FEE & MASON FIG. 291, FOR SUPPORTING ANY PIPING WITHIN AN UNDERFLOOR

 IN CONCRETE: FEE & MASON FIG. 2570. • IN PRE-CAST CONCRETE: GRINNELL FIG. 117 OR PHILLIPS CONCRETE FASTENERS.

VALVES SHALL BE INSTALLED WHERE INDICATED ON DRAWINGS AND WHERE NECESSARY FOR PROPER AND SAFE OPERATION AND MAINTENANCE OF THE SYSTEM.

VALVES 3/4-INCH AND SMALLER AND ALL BYPASS AND THROTTLING VALVES SHALL BE GLOVE OR ANGLE PATTERN. UNLESS

OTHERWISE INDICATE OR SPECIFIED, ALL OTHER VALVES SHALL BE GATE VALVES.

ALL VALVES 2-1/2-INCH AND LARGER SHALL HAVE CAST-IRON BODIES BRONZE MOUNTED. SMALLER VALVES SHALL BE BRASS. ALL VALVES SHALL BE CRANE OR APPROVED EQUAL:

2-1/2-INCH AND LARGER 2-INCH AND SMALLER Globe 373

Check 37 Check 359 Ball (3 piece) 3800* Ball (Buna-N) G-3500* Butterfly (Stainless) SC 8201-3*

VALVES IN COPPER TUBING 1-INCH AND LARGER SHALL BE THE SAME AS STEEL AND SHALL BE INSTALLED WITH SCREWED OR FLANGED ADAPTORS AS REQUIRED.

THIS CONTRACTOR SHALL FURNISH AND INSTALL ALL UNIONS NECESSARY FOR THE INSTALLATION AND ALL UNIONS NECESSARY TO PERMIT THE REMOVAL OF EQUIPMENT.

UNIONS IN STEEL PIPE 1-1/2-INCHES AND SMALLER SHALL BE MALLEABLE IRON, GROUND JOINT UNIONS WITH BRASS TO IRON SEAT, GALVANIZED OR BLACK, AS REQUIRED.

PROVIDE DIELECTRIC UNIONS WHERE DISSIMILAR METALS ARE JOINED.

HOT WATER AND COLD WATER PIPING SHALL BE COVERED WITH 1-INCH THICK FIBERGLASS SECTIONAL INSULATION WITH 4-OZ. A.S.I. JACKET. ALL FITTINGS, VALVE BODIES, ETC., IN HOT WATER PIPING SHALL BE COVERED WITH INSULATING MATERIAL OF THE SAME COMPOSITION AS THE PIPE COVERING TO THE SAME TOTAL THICKNESS AS THE ADJOINING COVERING. COVERING ADJACENT TO FLANGES AND UNION SHALL BE NEATLY BEVELED ON A 45-DEGREE ANGLE. ALL FITTINGS, VALVE BODIES, ETC., SHALL BE COVERED WITH INSULATING MATERIAL OF THE SAME COMPOSITION AS THE PIPE COVERING WITH ZESTON PLASTIC JACKET.

INSULATION ON ALL PIPING SHALL ENCLOSE THE PIPE HANGER. ALL PARTS OF THE HANGARS SUBJECT TO SURFACE CONDENSATION SHALL BE INSULATED WITH MORTELL "NO-DRIP", BENJAMIN FOSTER NO. 60-24 INSULATION.

THIS CONTRACTOR SHALL SUBMIT FOUR (4) COPIES OF SHOP DRAWINGS AND/OR CUTS OF EQUIPMENT, CORRECT SUCH DRAWINGS AS DIRECTED BY THE ENGINEER AND RESUBMIT FOR FINAL APPROVAL.

THIS SUBCONTRACTOR SHALL FURNISH ALL TOOLS, INSTRUMENTS AND EQUIPMENT REQUIRED FOR TESTING AND SHALL MAKE

ALL TEMPORARY CONNECTIONS. ALL PARTS OF THE SOIL AND WASTE DRAINAGE SYSTEMS SHALL BE TESTED AS REQUIRED BY LOCAL PLUMBING CODES.

ALL WATER PIPING SHALL BE TESTED TO 125-LBS. HYDROSTATIC PRESSURE BEFORE IT IS CONCEALED. ALL DEFECTS WHICH DEVELOP UNDER TESTS SHALL BE REPAIRED PROMPTLY AND THE TESTS SHALL BE REPEATED. NO CAULKING OF SCREWED JOINTS, CRACKS OR HOLES WILL BE PERMITTED. LEAKS IN SCREWED JOINTS SHALL BE REPAIRED BY REPLACING THE PIPE OR THE FITTING OR BOTH WITH NEW MATERIAL. WHERE IT IS FOUND NECESSARY TO REPLACE A PIECE

LEAKS IN COPPER TUBING SHALL BE REPAIRED BY MELTING OUT THE JOINT, THOROUGHLY CLEANING BOTH THE TUBING AND

OF PIPE, THE REPLACEMENT PIECE SHALL BE OF THE SAME LENGTH AS THE DEFECTIVE PIECE.

THE SUBCONTRACTOR SHALL GUARANTEE THE ENTIRE INSTALLATION TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR. IF ANY DEFECTS DUE TO SUCH CAUSES DEVELOP WITHIN ONE (1) YEAR AFTER FINAL ACCEPTANCE OF OWNER, THE SUBCONTRACTOR SHALL REMEDY SUCH DEFECTS WITHOUT COST TO OWNER.

ALL DRAWINGS AND SPECIFICATIONS FOLLOW THE BASE BUILDING CRITERIA DRAWINGS AND SPECIFICATIONS. REFER TO THE LANDLORD'S BASE BUILDING DRAWINGS & SPECIFICATIONS FOR FURTHER INFORMATION AND DETAILS.

ELECTRIC	AL POWER SYMBOLS
SYMBOL	DESCRIPTION
Ф ^х "	DUPLEX RECEPTACLE - NEMA 5-20R, UNO (X" INDICATES DISTANCE ABOVE FINISHED FLOOR)
⊕ X"	DOUBLE-DUPLEX (QUAD) RECEPTACLE - NEMA 5-20R, UNO (X" INDICATES DISTANCE ABOVE FINISHED FLOOR)
GFCI	RECEP. LETTER DESIGNATIONS AS FOLLOWS: GFCI = GROUND FAULT CIRCUIT INTERRUPTER WP = WEATHERPROOF
A	TELEPHONE / DATA OUTLET - WALL MOUNTED (INSTALL TELE / DATA BOX AT SAME ELEVATION AS ADJACENT POWER RECEPTACLE, UNO
J	JUNCTION BOX
δ	VARIABLE SPEED DRIVE
TS	TIME SWITCH
LP-X	ELECTRICAL PANEL - 'X' DESIGNATES PANEL FOR SCHEDULE, SEE SHEET E201

KEYED NOTES: POWER PLAN

- COORDINATE WITH OWNER FOR REMOVAL OF ANY EXISTING DATA / PHONE OUTLETS. COORDINATE WITH OWNER TO THE WITH OWNER.
- EXISTING OUTLETS TO REMAIN WHERE POSSIBLE. REPLACE WITH GFCI OUTLETS WHERE REQUIRED; REMOVE OUTLETS AS NEEDED AND PROVIDE BLANK COVER PLATE
- OUTLET LOCATIONS SHOWN ARE FOR GENERAL LAYOUT ONLY; COORDINATE WITH OWNER AND ANY EXISTING OUTLETS.
- $\langle C \rangle$ NEW SWITCH / OUTLET / DATA IN EXISTING WALLS.
- ⟨ D ⟩ POWER AND LIGHTING THIS ROOM TO REMAIN.
- $\langle E \rangle$ EXISTING OUTLETS THIS ROOM TO REMAIN.
- F > NEW OUTLETS SHOWN ABOVE COUNTER TO BE VERIFIED WITH EXISTING.
- G REFRIGERATOR
- ⟨ H ⟩ NEW COMBINATION OCCUPANCY SENSOR / DIMMER SWITCH.
- \langle | \rangle ONE OUTLET IN EACH ROOM TO BE CONNECTED TO EXISTING GENERATOR.
- G.C. TO PROVIDE 4-PORT, CAT 6 WALL PLATES FOR LOW VOLTAGE LOCATIONS. LOW VOLTAGE WIRING BY OWNER.

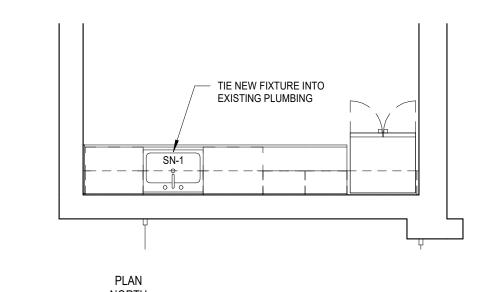
GENERAL NOTES: POWER PLAN

- 1. COORDINATE ALL DEVICE LOCATIONS, MOUNTING HEIGHTS, AND SPACING WITH OWNER AND ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.
- 2. IN GENERAL, DEVICES AT LOW HEIGHTS SHALL BE STACKED DIRECTLY BELOW DEVICES AT HIGHER ELEVATIONS. PROVIDE CONDUIT OFFSET AS
- 3. REUSE EXISTING CIRCUITING WHERE POSSIBLE.
- 4. MAINTAIN EXISTING OUTLETS WHERE POSSIBLE.
- 5. COORDINATE ALL OUTLET NEEDS AND LOCATIONS WITH OWNER AND
- OWNER'S EQUIPMENT. 6. COORDINATE ALL POWER REQUIREMENTS FOR SPECIFIC EQUIPMENT WITH
- OWNER INCLUDING ADDITIONAL, OR REDUCED, QUANTITIES OF OUTLETS. 7. PROVIDE CIRCUITS AND POWER TO NEW VAV ABOVE CEILING.
- 8. ALL LOW VOLTAGE BY OWNER.

GENERAL NOTES: LIGHTING PLAN

- 1. ALL EXIT SIGNS, AND EMERGENCY LIGHTING SHALL BE CONNECTED TO THE LINE SIDE OF SWITCH CONTROLLING AREA LIGHTING.
- 2. MULTIPLE SWITCH LOCATIONS SHALL HAVE A MULTI-GANG JUNCTION BOX WITH COMMON COVERPLATE.
- 3. ELECTRICAL CONTRACTOR MAY REUSE EXISTING BOXES AND RACEWAY FOR NEW LIGHTING CIRCUITING WHERE APPLICABLE.
- 4. COORDINATE FINAL LOCATIONS OF SWITCHING WITH TENANT PER INTENDED ENTRY INTO ROOMS AND SPACES.
- 5. OWNER TO REVIEW AND APPROVE ALL FIXTURES.

TYPE	FIXTURE	PIPE CON	NNECTION	SIZE		MANUFACTURER	MODEL	DESCRIPTION	FL. DEVICE/FAUCET/OTHER	NOTES	COMMENTS
		WASTE	VENT	CW	HW						
SN-1	SINK	1 1/2"	1 1/4"	1/2"	1/2"	KOHLER	VERSE K-20060-1	TOP MOUNT	KOHLER RUNE K-R22153-SD-VS	1,2,3	A
NOTE KEY	/. <u>·</u>				<u>(</u>	COMMENT KEY:	1			1	



PLUMBING PLAN @ BREAKROOM

CONSULTANTS





3RD FLOOR NORTHVILLE, MICHIGAN 48167 PHONE 248.349.2708 marchitects.com

NORTHVILLE CITY HALL OFFICE ADDITION

PROJECT

PROJECT ADDRESS 215 W MAIN ST

NORTHVILLE, MI 48167

PROJECT NUMBER

SHEET NAME

21.31

COPYRIGHT © 2020

PLUMBING, AND POWER / LIGHTING PLANS, AND GENERAL NOTES POWER / LIGHTING PLAN SHEET NUMBER

LIGHT FIXTURE SCHEDULE

24" x 48" LAY IN LED FIXTURE

COLOR TEMP: 4500K

BATTERY BACK UP

COLOR TEMP: 4500K

COLOR TEMP: 4500K

BATTERY BACK UP

COLOR TEMP: 4500K

 $\langle E \rangle$

24" x 24" LAY IN LED FIXTURE

LITHONIA LIGHTING #2BLT4 48L ADSM EZI LP835 (OR EQUAL)

24" x 48" LAY IN LED FIXTURE WITH EMERGENCY BALLAST AND

LITHONIA LIGHTING #2BLT4 48L ADSM EZI LP835 (OR EQUAL)

LITHONIA LIGHTING #2BLT4 48L ADSM EZI LP835 (OR EQUAL)

24" x 24" LAY IN LED FIXTURE WITH EMERGENCY BALLAST AND

LITHONIA LIGHTING #2BLT4 48L ADSM EZI LP835 (OR EQUAL)

 $\langle E \rangle$