

1. Agenda

Documents: [HISTORIC DISTRICT COMMISSION MEETING AGENDA OCTOBER 27, 2015 \(PDF\).PDF](#)

2. Agenda Packet

Documents: [HISTORIC DISTRICT COMMISSION MEETING AGENDA PACKET OCTOBER 27, 2015 \(PDF\).PDF](#)

3. Freight House Plans

Documents: [FREIGHT HOUSE PLANS OCTOBER 27, 2015 \(PDF\).PDF](#)

**CITY OF YPSILANTI**  
**Historic District Commission**  
**Regular Meeting Agenda**

**Tuesday, October 27, 2015**  
**7:00 p.m.**

*The Ypsilanti Historic District Commission works to safeguard Ypsilanti's built heritage by guiding development and renovation within the Historic District. Enabled by federal, state, and local legislation, the HDC seeks to stabilize and improve property values, to promote preservation education, and to develop the Ypsilanti Historic District as a vital living area.*

*An audio recording of the meeting will be made for the purpose of assisting in the preparation of official minutes only. Once the official minutes are approved the audio recording will be destroyed.*

**I. CALL TO ORDER AND ROLL CALL**

|                         |   |   |
|-------------------------|---|---|
| Anne Stevenson, Chair   | P | A |
| Hank Prebys, Vice Chair | P | A |
| Ron Rupert              | P | A |
| Michael Condon          | P | A |
| Alex Pettit             | P | A |
| Jane Schmiedeke         | P | A |
| Erika Lindsay           | P | A |

**II. APPROVAL OF AGENDA**

**III. PUBLIC COMMENTS ON AGENDA ITEMS**

**IV. PUBLIC HEARING – None**

**V. BUSINESS SESSION**

A. OLD BUSINESS

|    |                            |                                                                      |
|----|----------------------------|----------------------------------------------------------------------|
| B. | <b>1. 214 S Washington</b> | Storm window installation                                            |
|    | <b>2. 58 E Forest</b>      | Fence, driveway, shutter & flowerbox installation; porch replacement |

C. NEW BUSINESS

|                              |                                      |
|------------------------------|--------------------------------------|
| <b>3. 605 N River</b>        | Roof installation                    |
| <b>4. 6-12 S. Washington</b> | Storefront installation              |
| <b>5. 116 Maple</b>          | Reroof and gutter installation       |
| <b>6. 100 Market Place</b>   | Bollard, stair and door installation |
| <b>7. 302 N Hamilton</b>     | Painting                             |

D. STUDY ITEMS- None

E. ADMINISTRATIVE APPROVALS

|                            |        |
|----------------------------|--------|
| <b>8. 314 S Huron</b>      | Reroof |
| <b>9. 211 E Forest Ave</b> | Reroof |

F. OTHER BUSINESS

**10. Property Monitoring**

**VI. AUDIENCE PARTICIPATION ON NON-AGENDA ITEMS**

**VII. HOUSEKEEPING BUSINESS**

Approval of the minutes of October 13, 2015

**VIII. ADJOURNMENT**

# Secretary of the Interior's Standards for the Rehabilitation of Historic Structures

*Developed by the U.S. Department of the Interior, the Standards provide a framework that guides protective decisions regarding historic structures. The Historic District Commission is required to cite applicable Standards with each formal decision it renders. It may also cite HDC Fact Sheets as part of its decision-making process.*

## **1. Use property for original purpose or provide compatible use with minimal alteration.**

*A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.*

## **2. Do not destroy original character. Do not remove or alter historic material or features.**

*The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.*

## **3. Do not imitate earlier styles.**

*Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.*

## **4. Preserve significant changes acquired over time.**

*Changes to a property that have acquired historic significance in their own right will be retained and preserved.*

## **5. Preserve distinctive features.**

*Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.*

## **6. Repair, don't replace. Replacements shall match original.**

*Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.*

## **7. Clean building gently—no sandblasting.**

*Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.*

## **8. Preserve archaeological resources.**

*Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.*

## **9. Contemporary designs shall be compatible and shall not destroy significant original material.**

*New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.*

## **10. New work shall be removable.**

*New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

**CITY OF YPSILANTI**  
**Historic District Commission**  
**Regular Meeting Agenda**

**Tuesday, October 27, 2015**  
**7:00 p.m.**

*The Ypsilanti Historic District Commission works to safeguard Ypsilanti's built heritage by guiding development and renovation within the Historic District. Enabled by federal, state, and local legislation, the HDC seeks to stabilize and improve property values, to promote preservation education, and to develop the Ypsilanti Historic District as a vital living area.*

*An audio recording of the meeting will be made for the purpose of assisting in the preparation of official minutes only. Once the official minutes are approved the audio recording will be destroyed.*

**I. CALL TO ORDER AND ROLL CALL**

|                         |   |   |
|-------------------------|---|---|
| Anne Stevenson, Chair   | P | A |
| Hank Prebys, Vice Chair | P | A |
| Ron Rupert              | P | A |
| Michael Condon          | P | A |
| Alex Pettit             | P | A |
| Jane Schmiedeke         | P | A |
| Erika Lindsay           | P | A |

**II. APPROVAL OF AGENDA**

**III. PUBLIC COMMENTS ON AGENDA ITEMS**

**IV. PUBLIC HEARING – None**

**V. BUSINESS SESSION**

A. OLD BUSINESS

|    |                            |                                                                      |
|----|----------------------------|----------------------------------------------------------------------|
| B. | <b>1. 214 S Washington</b> | Storm window installation                                            |
|    | <b>2. 58 E Forest</b>      | Fence, driveway, shutter & flowerbox installation; porch replacement |

C. NEW BUSINESS

|                              |                                      |
|------------------------------|--------------------------------------|
| <b>3. 605 N River</b>        | Roof installation                    |
| <b>4. 6-12 S. Washington</b> | Storefront installation              |
| <b>5. 116 Maple</b>          | Reroof and gutter installation       |
| <b>6. 100 Market Place</b>   | Bollard, stair and door installation |
| <b>7. 302 N Hamilton</b>     | Painting                             |

D. STUDY ITEMS- None

E. ADMINISTRATIVE APPROVALS

|                            |        |
|----------------------------|--------|
| <b>8. 314 S Huron</b>      | Reroof |
| <b>9. 211 E Forest Ave</b> | Reroof |

F. OTHER BUSINESS

**10. Property Monitoring**

**VI. AUDIENCE PARTICIPATION ON NON-AGENDA ITEMS**

**VII. HOUSEKEEPING BUSINESS**

Approval of the minutes of October 13, 2015

**VIII. ADJOURNMENT**



## Secretary of the Interior's Standards for the Rehabilitation of Historic Structures

*Developed by the U.S. Department of the Interior, the Standards provide a framework that guides protective decisions regarding historic structures. The Historic District Commission is required to cite applicable Standards with each formal decision it renders. It may also cite HDC Fact Sheets as part of its decision-making process.*

### **1. Use property for original purpose or provide compatible use with minimal alteration.**

*A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.*

### **2. Do not destroy original character. Do not remove or alter historic material or features.**

*The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.*

### **3. Do not imitate earlier styles.**

*Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.*

### **4. Preserve significant changes acquired over time.**

*Changes to a property that have acquired historic significance in their own right will be retained and preserved.*

### **5. Preserve distinctive features.**

*Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.*

### **6. Repair, don't replace. Replacements shall match original.**

*Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.*

### **7. Clean building gently—no sandblasting.**

*Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.*

### **8. Preserve archaeological resources.**

*Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.*

### **9. Contemporary designs shall be compatible and shall not destroy significant original material.**

*New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.*

### **10. New work shall be removable.**

*New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*



Ypsilanti Historic District  
**Work Permit Application**

Date filed 10/5 for HDC meeting date 10/13

Action item ☒

Study item ☐

Action items require payment of the application fee. There is no fee to submit a study item for discussion.

**Property Address** 214 S. Washington

**Applicant** ☐ Owner ☐ Architect ☒ Contractor

Name Sears Home Improvement

Address 12874 Westmore

City Livonia

State Mi

Zip 48150

Phone 800-468-6617

Fax \_\_\_\_\_

E-mail frank@antonelli1.com

Owner Nancy Heine

(If different than applicant)

**Who will perform the work?** ☐ Owner ☒ Contractor

Contractor Sears Home Improvement

(Name, address, phone)

12874 Westmore Livonia, Mi 48150 800-468-6617

*Action Items only:*

Construction Cost 4933.94

**Permit Application Fee** \_\_\_\_\_

The fee is \$35 for the first \$3,000 in construction cost plus \$5 for every additional or portion of \$3,000 of construction cost. An additional fee of \$50 applies to HDC work started without the applicable permit.

**To complete this application:**

1. On the reverse side, summarize the work proposed, list the main materials to be used, and (if relevant) indicate the color scheme planned.
2. Attach the following documents:
  - a. Photo(s) showing all locations where work is proposed
  - b. Paint color chips (if relevant)
  - c. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components
  - d. Dimensioned drawings of any new construction or modifications to existing structures
  - e. A site plan, if proposal is for work on the grounds and not just the structure (e.g., installing an air conditioning system compressor). For fences, new structures, or work that will alter the footprint of existing structures, a photocopy of the mortgage survey with proposed changes indicated is required.

Submit the completed application to the City of Ypsilanti Building Department, 1 South Huron Street, along with the application fee if you wish the HDC to consider the proposal as an action item, not a study item.

***Incomplete applications will not be considered.***

For additional information, or if you have questions, contact the City of Ypsilanti Planning and Development Department, 734.483.9646, [hintern@cityofypsilanti.com](mailto:hintern@cityofypsilanti.com).

# Ypsilanti Historic District Work Permit Application

Date filed \_\_\_\_\_ for HDC meeting date \_\_\_\_\_

Property Address 214 S. Washington

Applicant Sears Home Improvement

## Description of proposed work (see sample applications)

REMOVE AND REPLACE (10) STORM WINDOWS

## Materials

ALUMINUM STORM WINDOWS MODEL #696  
ON BROCHURE INCLUDED. CUSTOMER PREFERRED  
COLOR IS CAFE CREAM.

## Colors (Attach color chips or samples)

Body \_\_\_\_\_

Accent 1 \_\_\_\_\_

Trim \_\_\_\_\_

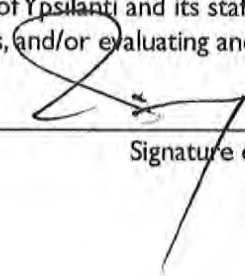
Accent 2 \_\_\_\_\_

Roof \_\_\_\_\_

Other \_\_\_\_\_

- ☐ This property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.  
(Compliance with this act must be certified to complete this application.)

I hereby attest that the above information is accurate. I am authorized to and hereby grant permission to the City of Ypsilanti and its staff to be on my property for the purposes of preparing reports, taking photographs, and/or evaluating and reviewing this application.

  
\_\_\_\_\_  
Signature of Applicant

10-2-15  
\_\_\_\_\_  
Date





## HDC Work Permit Staff Review

*Property address:* 214 S Washington

*Date of Review:* 10/23/2015

*Date of Meeting:* 10/27/2015

*Proposed work:* Storm window installation

*Materials:* Aluminum storm windows, model #696 in café cream

*Staff review:*

1. Staff spoke with the owner and advised of the need to attend the meeting/ Owner plans to attend the meeting.
2. Owner states that she is only seeking to place the aluminum storm windows in the opening that do not have any storms present.
3. Staff took photos and noted the locations of missing storm windows on the property:
  - Front: 2 on upper level missing
  - Right side: 1 on each side of the bay window & 1 right behind the bay window on the lower level are missing
  - Left side: 1 on front upper level, 1 on each side of the bay window & 1 right behind and in front of the bay window on the lower level are missing
  - Rear: 2 on the lower level and 3 on upper level
4. Building department approval is needed prior to work commencing.

*Relevant Secretary of the Interior's Standards:*  
#6 or #9

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

**6. Repair, don't replace. Replacements shall match original.**

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

**9. Contemporary designs shall be compatible and shall not destroy significant original material.**

10. New work shall be removable.



**WEATHERBEATER™**  
EXTERIOR PROTECTION SYSTEMS

# STORM WINDOWS

- *Improve the energy efficiency of your home*
- *Improvement on your Historic, Traditional, or Contemporary home*
- *Custom built to your specifications*
- *Constructed of heavy-duty, extruded aluminum for long life and structural integrity*
- *Complement your home with one of 13 beautiful colors*
- *Tinting and other glazing options available*
- *Lifetime Limited Transferable Warranty*



Wrap around marine glazing seals glass firmly into sash & makes glass replacement easy



Anti-bow pins ensure sashes will resist bowing under wind loads (double hung only)



Nylon pivot pins ensure smooth sash operation (double hung only)



Heavy-duty sash interlock seals out the elements (double hung & sliders)



Adjustable 1" bottom expander simplifies installation for out of square openings and is weeped for drainage

**Minimize  
Maintenance  
& Maximize  
Energy  
Savings!**

**Sears**

## Finishes



Snow Mist



Café Cream



Chateau



Sandpiper Beige



Sandstone



Sterling Gray



Clay



Geneva Blue



Forest Green



Mountain Berry



Rustic Bronze



Tudor Brown



Coal Black

Our oven-baked polyester finishes are backed by a Lifetime Limited Warranty for lasting beauty and low maintenance.

These finishes are also available on Sears entry and storm doors.



# STORM WINDOWS SPECIAL FEATURES

## #696 Double Hung Window

### FEATURES & BENEFITS

- Our triple track windows feature an *inside operating half screen* (also available with optional external full screen)
- Keeping out the cold & heat with *full perimeter weatherstrip*
- Additional structural strength with the *mid-window stabilizer bar*
- Cleaning is made easy with the *removable tilt-in sashes and half screen*
- Safely adjust the amount of ventilation with *ratcheted sash stops every 1"*
- Teflon® coated spring and electrostatic coating on latch bolts create a *smooth latch operation*.

Butt frame corners give this window maximum strength. The **square frame** also creates a clean contemporary look.

## #423 Exterior Three-Lite Slider Window

(Also available in #422 two-lite slider)

### FEATURES & BENEFITS

- *Mitered frame corners* provide superior strength & beauty
- Available in *two or three-lite* models (3-lite available in  $\frac{1}{4}$ - $\frac{1}{2}$ - $\frac{1}{4}$ ,  $\frac{1}{3}$ - $\frac{1}{3}$ - $\frac{1}{3}$  or custom)
- *Hollow sill construction* for additional strength and drainage control
- *Full length pull rail with spring loaded latches*
- Long-life *Delrin®* rollers with stainless steel housing provide long-lasting smooth operation

## #240 Outside Removable Picture Window

(Also available in #630 inside removable)

### FEATURES & BENEFITS

- *Mitered frame corners* provide superior strength
- Available in *inside or outside-removable sash*
- Available in *1, 2, 3, or 4 lite units* (#240 only)

## ADVANTAGES at a GLANCE

|                            | Double Hung<br>696   | 2-Lite Slider<br>422 | 3-Lite Slider<br>423 | Outside<br>Removable<br>240 | Inside<br>Removable<br>630 |
|----------------------------|----------------------|----------------------|----------------------|-----------------------------|----------------------------|
| Corner Construction        | Butted & Screwed     | Mitered & Screwed    | Mitered & Screwed    | Mitered & Screwed           | Mitered & Staked           |
| Installation Screws        | Color Matched        | Color Matched        | Color Matched        | Color Matched               | Color Matched              |
| Frame Profile              | Square               | Square               | Square               | Square                      | Contoured                  |
| Glazing                    | Wrap-Around Marine   | Wrap-Around Marine   | Wrap-Around Marine   | Wrap-Around Marine          | Wrap-Around Marine         |
| Fiberglass Screen          | Half (Full optional) | Half                 | Two                  | Full Optional               | Full                       |
| Weatherstripping           | Full Perimeter       | Full Perimeter       | Full Perimeter       | Full Perimeter              | Full Perimeter             |
| Mid-Window Stabilizing Bar | Horizontal           | Vertical             | Vertical             | N/A                         | N/A                        |

✓ PROPOSED FOR INSTALLATION

## WINDOW ORDER ADDENDUM

| NO         | DESCRIPTION                                                                                                       | QTY | SIZE        |                                                                                       |
|------------|-------------------------------------------------------------------------------------------------------------------|-----|-------------|---------------------------------------------------------------------------------------|
| 1          | STORM WINDOWS - Double Hung Storm<br>CAFE CREAM<br>CLEAR<br>TEMPERED<br>TEMPERED BOTTOM<br>HALF SCREEN FIBERGLASS | 2   | 36 W X 65 H |    |
| 2          | STORM WINDOWS - Double Hung Storm<br>CAFE CREAM<br>CLEAR<br>TEMPERED<br>TEMPERED BOTTOM<br>HALF SCREEN FIBERGLASS | 1   | 42 W X 65 H |    |
| 3          | STORM WINDOWS - Double Hung Storm<br>CAFE CREAM<br>CLEAR<br>TEMPERED<br>TEMPERED BOTTOM<br>HALF SCREEN FIBERGLASS | 2   | 36 W X 65 H |    |
| 4          | STORM WINDOWS - Double Hung Storm<br>CAFE CREAM<br>CLEAR<br>TEMPERED<br>TEMPERED BOTTOM<br>HALF SCREEN FIBERGLASS | 1   | 48 W X 65 H |   |
| 5          | STORM WINDOWS - Double Hung Storm<br>CAFE CREAM<br>CLEAR<br>TEMPERED<br>TEMPERED BOTTOM<br>HALF SCREEN FIBERGLASS | 2   | 36 W X 65 H |  |
| 6          | STORM WINDOWS - Double Hung Storm<br>CAFE CREAM<br>CLEAR<br>TEMPERED<br>TEMPERED BOTTOM<br>HALF SCREEN FIBERGLASS | 1   | 48 W X 65 H |  |
| 7          | STORM WINDOWS - Double Hung Storm<br>CAFE CREAM<br>CLEAR<br>TEMPERED<br>TEMPERED ALL<br>HALF SCREEN FIBERGLASS    | 1   | 36 W X 53 H |  |
| TOTALS: 10 |                                                                                                                   |     |             |                                                                                       |

COMMENT:





10/22/2015



10/22/2015

214 S. Washington





214 S. Washington





214 S. Washington





## Ypsilanti Historic District Work Permit Application

Date filed 10/6/15 for HDC meeting date 10-13-15

Action item ☒

Study item ☐

Action items require payment of the application fee. There is no fee to submit a study item for discussion.

Property Address 58 E FOREST

Applicant ☒ Owner ☐ Architect ☐ Contractor

Name Pamela Herzog

Address 58 E FOREST

City Ypsilanti State MI Zip 48198

Phone 516734526 Fax \_\_\_\_\_

E-mail ptherzog@email.com

Owner \_\_\_\_\_

(If different than applicant)

Who will perform the work? ☐ Owner ☒ Contractor

Contractor  
(Name, address,  
phone)

Midwest Construction, Concrete  
6315 E Michigan Ave Saline MI

Action Items only:

Construction Cost ~4,000 - Permit Application Fee \$40

The fee is \$35 for the first \$3,000 in construction cost plus \$5 for every additional or portion of \$3,000 of construction cost. An additional fee of \$50 applies to HDC work started without the applicable permit.

### To complete this application:

1. On the reverse side, summarize the work proposed, list the main materials to be used, and (if relevant) indicate the color scheme planned.
2. Attach the following documents:
  - a. Photo(s) showing all locations where work is proposed
  - b. Paint color chips (if relevant)
  - c. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components
  - d. Dimensioned drawings of any new construction or modifications to existing structures
  - e. A site plan, if proposal is for work on the grounds and not just the structure (e.g., installing an air conditioning system compressor). For fences, new structures, or work that will alter the footprint of existing structures, a photocopy of the mortgage survey with proposed changes indicated is required.

Submit the completed application to the City of Ypsilanti Building Department, 1 South Huron Street, along with the application fee if you wish the HDC to consider the proposal as an action item, not a study item.

**Incomplete applications will not be considered.**

For additional information, or if you have questions, contact the City of Ypsilanti Planning and Development Department, 734.483.9646, [hintern@cityofypsilanti.com](mailto:hintern@cityofypsilanti.com).



## Ypsilanti Historic District Work Permit Application

Date filed 10 6 15 for HDC meeting date \_\_\_\_\_

Property Address 58 E FOREST

Applicant Pamela Herzog

### Description of proposed work (see sample applications)

Exhibit A - flower boxes + shutters

Exhibit B - fence

Exhibit C - driveway + approach

Exhibit D - side porch removal

Please see building permit + plan review app + Fence app

### Materials

Exhibit A ① wood

Exhibit B - wood

Exhibit C - concrete

Exhibit D - concrete

### Colors (Attach color chips or samples)

Body \_\_\_\_\_

Accent 1 \_\_\_\_\_

Trim \_\_\_\_\_

Accent 2 \_\_\_\_\_

Roof \_\_\_\_\_

Other \_\_\_\_\_



This property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.  
(Compliance with this act must be certified to complete this application.)

I hereby attest that the above information is accurate. I am authorized to and hereby grant permission to the City of Ypsilanti and its staff to be on my property for the purposes of preparing reports, taking photographs, and/or evaluating and reviewing this application.

P. Herzog

Signature of Applicant

10 6 15

Date



## HDC Work Permit Staff Review

*Property address:* 58 E Forest

*Date of Review:* 10/23/2015

*Date of Meeting:* 10/27/2015

*Proposed work:* Fence, driveway, shutters & flowerbox installation; porch replacement

*Materials:* Wood and concrete, precast concrete for porch steps

*Staff review:*

1. The applicant is applying to replace the existing porch with concrete steps, install a concrete driveway, a fence and shutters and flowerboxes.
2. Precast concrete steps will be utilized on the west side of the house. The applicant will be removing the current wood porch that is in poor condition. The new steps will be turned so that they are in an east-west direction.
3. Applicant has decided to pull the gate from the application and has decided to install a picket fence instead of the privacy fence at the rear of the property.
4. Staff advised the owner to attend to answer any questions and provide current photos of the house.
5. ROW and Building permits need to be approved prior to commencing work.

*Relevant Secretary of the Interior's Standards:*

# 6, # 9

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

**6. Repair, don't replace. Replacements shall match original.**

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

**9. Contemporary designs shall be compatible and shall not destroy significant original material.**

10. New work shall be removable.



**Describe in detail all work to be done on this permit application.**

Note: In addition to plans, a copy of a certified survey is also required for construction of all new buildings, additions, garages, carports, pole barns, fences, sheds, parking lots, etc. Permits will not be issued without the required certified survey.

- ① TEAR down of existing 2 step side porch + poor condition.  
Replace w 3 step concrete step forms (preformed see attached. no more than 48" wide
- ② Drive way cut + approach off of ~~Forest~~ Ave.  
Drive way 9' leaving 2' from neighbor lot line.

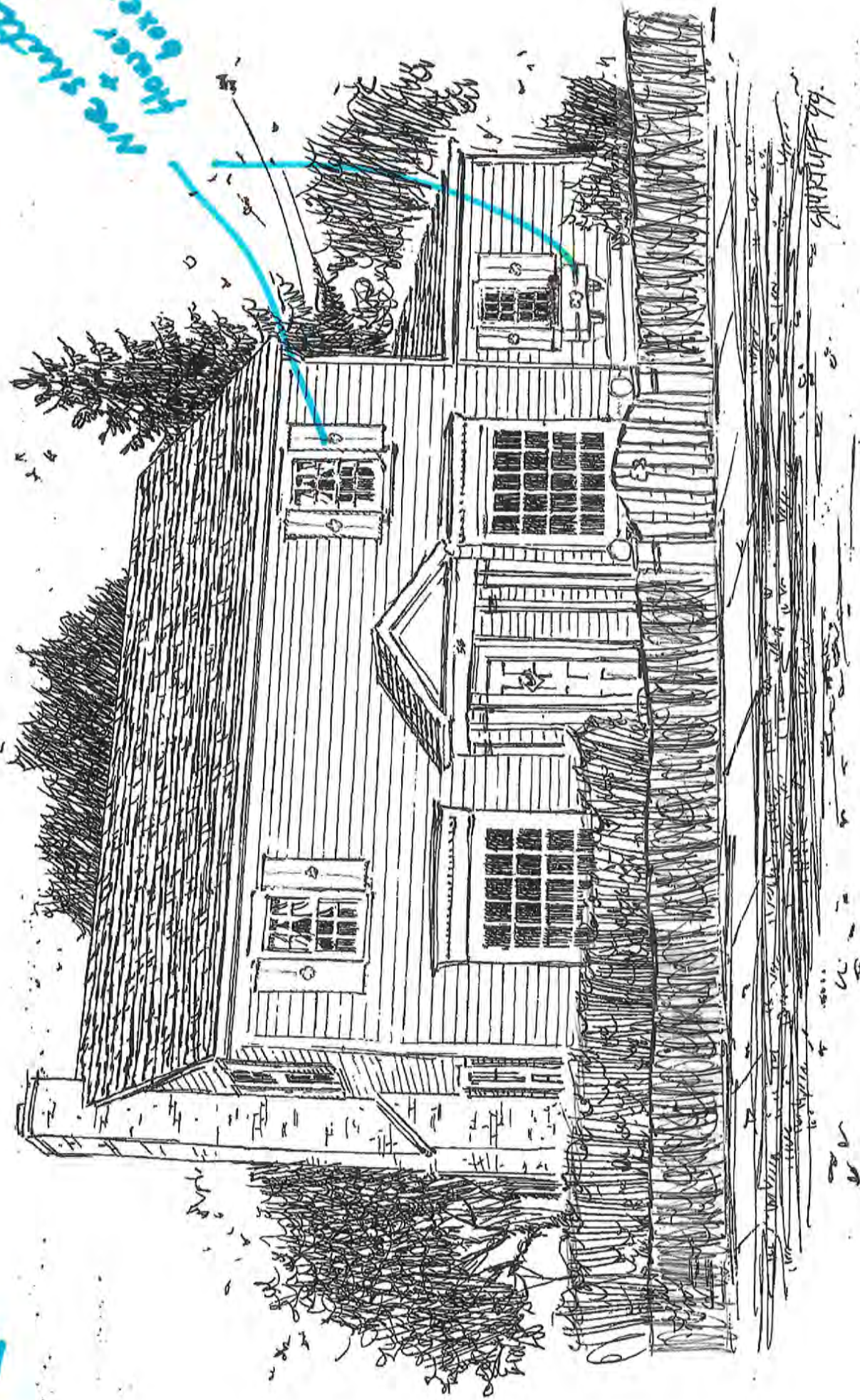
See also fence installation App + Historic District Permit App

Bids in process of being obtained.



A

New Shutter  
Boxes



A





# FENCE APPLICATION FOR ZONING COMPLIANCE

CITY OF YPSILANTI BUILDING DEPARTMENT  
One South Huron, Ypsilanti, MI 48197  
Phone (734) 482-1025 • Fax (734) 483-7444  
www.cityofypsilanti.com

Faxed applications can not be accepted

Address/

Location of Work (Please Print) 58 E Forest Zoning District: ✓ Historic District: ✓  
Contractor MI-10 WEST CONSTRUCTION COMPANY (still record) City Reg. # 734 448 0776  
Mailing Address 6315 E MICHIGAN SALINE State MI Zip 48197  
Property Owner's Name 58 E Forest City Ypsilanti Phone # 517 673 4526  
Mailing Address " State MI Zip 48197

Street Address

City

State

Zip

## Complete Detailed Description of Work to be Done

Note: A certified survey of lot to be fenced must be submitted with application. An application review will not be conducted without the required survey of the property. Survey must show house, accessory structures, fences, etc. Fences to be installed on property lines must have a notarized letter from adjacent property owner(s) and must be submitted with this application.

### Application Information:

#### Select Type of Fence to be Constructed

30 Inch Chain Link  
4 ft. Chain Link  
5 or 6 ft. Chain Link  
4 ft. Wood Privacy  
5 ft. Wood Privacy

Other\* (specify)

picket 42" + 6' privacy

\*Building Permit Required For Fences Over 6 Feet

#### Property Information

Corner Lot  
Interior Lot  
Cul-de-Sac  
Property Received  
Final Grade?

Vanessa Henry 10 6 15  
Applicant/ Contractor Signature Date

City Planner Approval Signature

Date

Building Official Signature (if required)

Date

Zoning Review Fee \$70.00

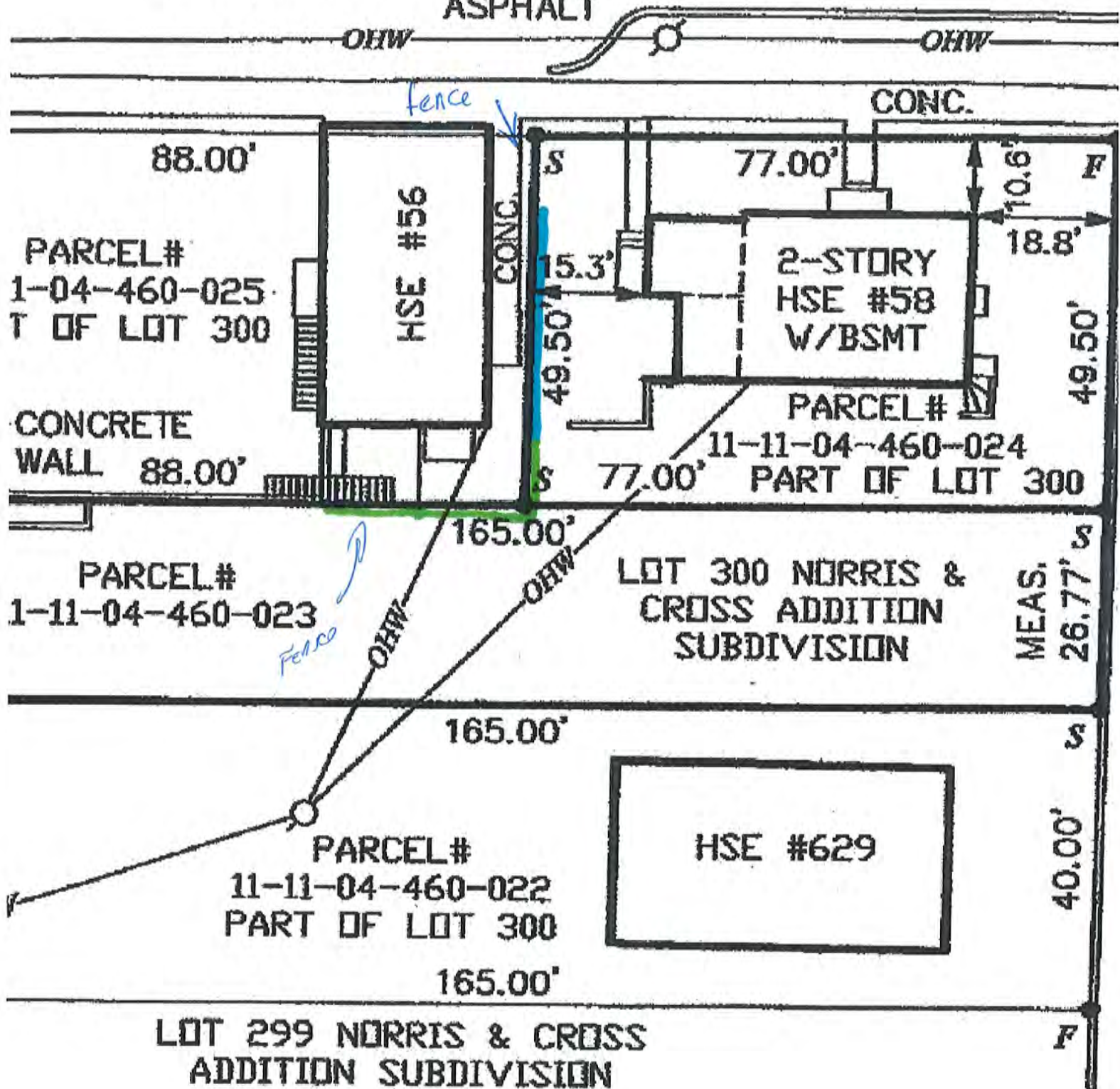
Notes/Comments:

A approx 25' of 42" wood picket fence see survey detail in blue  
B approx 15' of 6' wood fence see survey detail in green  
will paint fence to match house. installation to be 2"  
off of property line.

Note: Posts 42 inches deep recommended.



E. FOREST AVENUE  
ASPHALT



TION PARCEL# 11-11-04-460-024  
0 FEET OF LOT 300 OF NORRIS AND CROSS ADDITION SUBDIVISION, CT  
HTENAW COUNTY, MICHIGAN. EXCEPT THE WEST 88.00 FEET THEREC



FENCE  
A

Your Store:  
Ann Arbor, MI

Your Store: Ypsilanti, MI

### Wood Fencing Spaced Picket French Gothic 42" x 8' Pressure Treated

Item #: 53960 | Model #: 53960

Be the first to

**\$26.97**



 Facebook

 Pinterest

 Twitter

 Google+

 Email

#### Description

Spaced Picket French Gothic 42" x 8' Pressure Treated

- Posts sold separately
- Doubled nailed pickets
- Heavy-duty 4" Boards
- Easy to install
- Stylish French Gothic look

#### Installation Services

**FREE**

#### Store Pickup

Your order can be available for pickup in Lowe's Of Ann Arbor, MI today.

#### Lowe's Truck Delivery

Your order will be ready for delivery to you from your selected store.

#### Parcel Shipping

**Unavailable for This Order**

Sent by carriers like UPS, FedEx, USPS, etc.

**Wood Fencing  
Spaced Picket  
French Gothic 42" x  
8' Pressure Treated** **\$26.97**

C

**MIDWEST CONSTRUCTION, CONCRETE  
& GENERAL CONTRACTORS, INC./  
SAM'S CUSTOM CARPENTRY**

6315 E. Michigan Ave., Saline, Michigan 48176

Ph: 734-972-5566 ♦ Fax: 734-448-0776 ♦ Email: admin@midwestconcrete1.com  
www.midwestconcrete1.com

**CONCRETE ESTIMATE REQUEST**

**CUSTOMER CONTACT INFORMATION:**

|          |                            |         |                                |
|----------|----------------------------|---------|--------------------------------|
| NAME:    | <u>Pamela Herzog</u>       | PHONE:  | <u>517-673-4526</u>            |
| ADDRESS: | <u>58 E Forest</u>         | EMAIL : | <u>pamelaherzog1@gmail.com</u> |
|          | <u>Ypsilanti, MI 48198</u> |         |                                |

**SCOPE OF WORK:**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <p>OPTION 1, INSTALL A NEW DRIVEWAY, 4" thick:</p> <p>Install a new driveway, 9' x 27.5'. Prep ground, form, compact base and pour 4" thick concrete, 4000 psi, 6 sacks and reinforced with fiber mesh. Remove forms. Price includes a permit from City of Ypsilanti Public Work.</p> <p>Unforeseen cost; additional fill material to ensure a solid base under the new pads.</p> <p>Curing compound, optional.</p> <p>NOTE: New driveway has to be a minimum 2' away from property line on the right side.</p>           | <p>Regular price \$1,912.00<br/><i>Discounted price \$1,662.00</i></p> <p>\$125 to \$250</p> <p>\$50.00</p> |
| <p>OPTION 2, CITY SIDEWALK AND APRON, 6" thick:</p> <p>Tear out 4" thick of existing city sidewalk to make a new 6" thick sidewalk, 14'11" x 5'. Tear out curb, asphalt and prep ground for a new apron, 9' x 9.5'. Form, compact and pour 6" thick concrete, 4000 psi, 6 sacks and reinforced with fiber mesh. Remove forms. Price includes a permit from City of Ypsilanti Public Work.</p> <p>Unforeseen cost; repairing asphalt on neighbor and roadside and curb on left side.</p> <p>Curing compound, optional.</p> | <p>Regular price \$1,791.00<br/><i>Discounted price \$1,611.00</i></p> <p>\$425 to \$695</p> <p>\$36.00</p> |

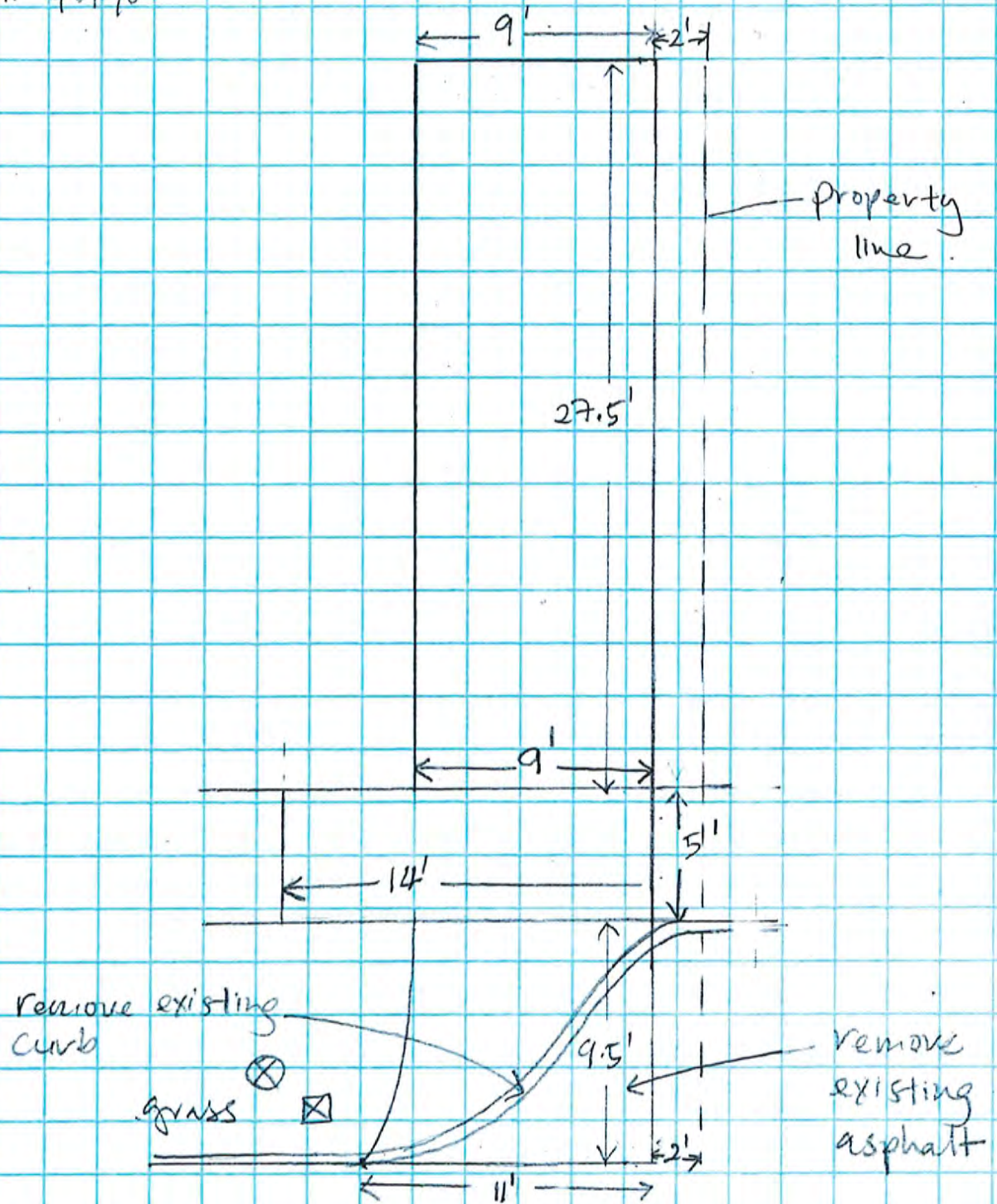
Curing compound provides a premium-grade membrane that optimizes water retention. The white pigment reflects the sun's rays to help keep the concrete surface cooler and prevent excessive heat buildup.

**NOTES:**

- 1) All work shall be done in a workmanlike manner, in accordance with Michigan Concrete Association guidelines.
- 2) When wire mesh is used it will be properly install by placing wire mesh below the depth centerline of the concrete for maximum effect.
- 3) Michigan recommends that a curing compound be applied the day of installation.
- 4) Unforeseen cost; there is no way of knowing what type of existing fill was used and what it was placed on (such as clay or organic material). In order to properly warranty our work we would remove any unacceptable material and replace it with a compacted 21AA crushed concrete or gravel base (we use sand for interior job). Though there would be no extra charge for the labor there would be for the extra sand/gravel.
- 5) The prices given are for tearing out 4" or 6" thick of existing concrete, if applicable. If the existing pad requires more than 4" or 6" tear out as specified, there will be extra charge according to the extra work needed.



Pamela Herzog  
58 Forest  
Ypsilanti, MI 48198



Scale : 2'



**TION PARCEL# 11-11-04-460-024  
0 FEET OF LOT 300 OF NORRIS AND CROSS ADDITION SUBDIVISION, CT  
HTENAW COUNTY, MICHIGAN. EXCEPT THE WEST 88.00 FEET THEREC**





**NATIONAL  
READY MIX  
INC.**



**MENU**

[Home](#)

[About Us](#)

[Fire Rating Certificate](#)

[Gallery](#)

[National Advantage](#)

[National Policies](#)

[Questions](#)

[Tools & Supplies](#)

[Blog](#)

[Contact Us](#)

**BUSINESS HOURS**

Monday: 7 am - 5 pm

Tuesday: 7 am - 5 pm

Wednesday: 7 am - 5 pm

Thursday: 7 am - 5 pm

Friday: 7 am - 5 pm

Saturday: 8 am - 12 pm

Sunday: Closed

## Steps

### Precast Concrete Steps

Precast concrete steps are made in a variety of widths to accommodate the size you need for your entry. The concrete steps can be also purchased in 6", 7", and 8" heights with the 3' width only. This will help you to achieve the proper footstep when the height of the porch varies. As a rule of thumb, you should measure the top of your porch to the sidewalk. For example, let's assume that this distance is 21" from top to bottom. Thus, it would require two steps 7 inches high with a two step riser to provide the proper stepping.

### Availability and Pricing

Click on any thumbnail to see a larger version.

#### Steps



3ft.  
wide/6"  
high

**\$42.00**



3 ft.  
wide/7"  
high

**\$42.00**



3ft.  
wide/8"  
high

**\$42.00**



3.5ft.  
wide/7"  
high

**\$46.00**



4ft  
wide/7"  
high

**\$53.00**



5ft  
wide/7"  
high

**\$64.00**



6ft  
wide/7"  
high

**\$82.00**

#### Risers



2 step set **\$15.00**



3 step set **\$20.00**



4 step set **\$27.00**



5 step set **\$33.00**

#### SEARCH

Search

**National Block Company**  
39000 Ford Road  
Westland, Michigan 48185  
Phone: 734-721-4056  
Fax: 734-721-2080

#### LOCATION



## GALLERY



#### FOLLOW US!





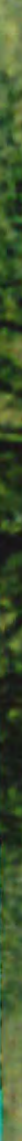


Each Step   
Riser 7" 



An aerial photograph of a residential neighborhood. A red rectangle highlights a specific property. The property is labeled '58 E Forest' and '631 N River'. The surrounding area includes a street labeled 'E Forest Ave' and various houses and trees.

## 58 E Forest



631 N River





58 E Forest





58 E Forest





58 E Forest





# Ypsilanti Historic District Work Permit Application

Date filed \_\_\_\_\_ for HDC meeting date \_\_\_\_\_

Action item ☐ Study item ☐ Action items require payment of the application fee. There is no fee to submit a study item for discussion.

Property Address 605 N. River St.

## Applicant

☐ Owner ☐ Architect ☒ Contractor

Name R.D. Kleinschmidt, Inc.

Address 19860 Sharon Valley Rd.

City Manchester State MI Zip 48158

Phone 734-428-8836 Fax 734-428-1030

E-mail Shelley@rdkleinschmidtinc.com

Owner Lvi Flanders

(If different than applicant)

## Who will perform the work?

☐ Owner ☒ Contractor

Contractor R.D. Kleinschmidt, Inc. 734-428-8836

(Name, address, phone) 19860 Sharon Valley Rd. Manchester, MI 48158

### Action Items only:

Construction Cost 2,665.00

Permit Application Fee \$35

The fee is \$35 for the first \$3,000 in construction cost plus \$5 for every additional or portion of \$3,000 of construction cost. An additional fee of \$50 applies to HDC work started without the applicable permit.

## To complete this application:

1. On the reverse side, summarize the work proposed, list the main materials to be used, and (if relevant) indicate the color scheme planned.
2. Attach the following documents:
  - a. Photo(s) showing all locations where work is proposed
  - b. Paint color chips (if relevant)
  - c. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components
  - d. Dimensioned drawings of any new construction or modifications to existing structures
  - e. A site plan, if proposal is for work on the grounds and not just the structure (e.g., installing an air conditioning system compressor). For fences, new structures, or work that will alter the footprint of existing structures, a photocopy of the mortgage survey with proposed changes indicated is required.

Submit the completed application to the City of Ypsilanti Building Department, 1 South Huron Street, along with the application fee if you wish the HDC to consider the proposal as an action item, not a study item.

**Incomplete applications will not be considered.**

For additional information, or if you have questions, contact the City of Ypsilanti Planning and Development Department, 734.483.9646, [hintern@cityofypsilanti.com](mailto:hintern@cityofypsilanti.com).

# Ypsilanti Historic District Work Permit Application

Date filed \_\_\_\_\_ for HDC meeting date \_\_\_\_\_

Property Address

605. N. River St.

Applicant

R.D. Kleinschmidt, Inc.

## Description of proposed work (see sample applications)

Tear off existing roofing on 2 porches  
Installed fibered insulation board, aluminum drip  
metal, EPDM roofing + flashings

## Materials

### Colors (Attach color chips or samples)

Body \_\_\_\_\_

Accent 1 \_\_\_\_\_

Trim \_\_\_\_\_

Accent 2 \_\_\_\_\_

Roof \_\_\_\_\_

Other \_\_\_\_\_

- ☐ This property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.  
(Compliance with this act must be certified to complete this application.)

I hereby attest that the above information is accurate. I am authorized to and hereby grant permission to the City of Ypsilanti and its staff to be on my property for the purposes of preparing reports, taking photographs, and/or evaluating and reviewing this application.

Michelle L. Stace

Signature of Applicant

7-24-15

Date





## HDC Work Permit Staff Review

*Property address:* 605 N River

*Date of Review:* 10/23/2015

*Date of Meeting:* 10/27/2015

*Proposed work:* Reroof on two porches

*Materials:* fiber insulation board, aluminum drip edge, EPDM roofing and flashings

*Staff review:*

1. Staff emailed the contractor for more info and advised of the need to attend the meeting
2. Staff also advised that if the applicant is to place the EPDM on visible roofs, that the HDC may not consider this appropriate and to bring an additional roofing option to the meeting.
3. Staff review of previous HDC minutes reveals that the HDC did see this property as a study item this past June for a deck addition but a reroof was not mentioned at that time.
4. Building department approval is needed prior to work commencing.

*Relevant Secretary of the Interior's Standards:*  
#5, #10

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

**5. Preserve distinctive features.**

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

**10. New work shall be removable.**





605 N. River





605 N. River







# Ypsilanti Historic District Work Permit Application

Date filed 10/21/2015 for HDC meeting date 10/27/2015

Action item ☐ Study item ☐

*Action items require payment of the application fee. There is no fee to submit a study item for discussion.*

**Property Address** 6 -12 S. Washington

**Applicant** ☒ Owner ☐ Architect ☐ Contractor

Name Birdscolors LLC/ Andrew Epstein

Address 4631 Midway Drive

City Ann Arbor State MI Zip 48103

Phone 734-231-4318

Fax \_\_\_\_\_

E-mail birdscolors@gmail.com

Owner \_\_\_\_\_

(If different than applicant)

**Who will perform the work?** ☐ Owner ☒ Contractor

Contractor Amrhein Construction/Fingerle Lumber

(Name, address,  
phone) \_\_\_\_\_

**Action Items only:**

Construction Cost 12,000 **Permit Application Fee** 140

The fee is \$35 for the first \$3,000 in construction cost plus \$5 for every additional or portion of \$3,000 of construction cost. An additional fee of \$50 applies to HDC work started without the applicable permit.

**To complete this application:**

1. On the reverse side, summarize the work proposed, list the main materials to be used, and (if relevant) indicate the color scheme planned.
2. Attach the following documents:
  - a. Photo(s) showing all locations where work is proposed
  - b. Paint color chips (if relevant)
  - c. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components
  - d. Dimensioned drawings of any new construction or modifications to existing structures
  - e. A site plan, if proposal is for work on the grounds and not just the structure (e.g., installing an air conditioning system compressor). For fences, new structures, or work that will alter the footprint of existing structures, a photocopy of the mortgage survey with proposed changes indicated is required.

Submit the completed application to the City of Ypsilanti Building Department, 1 South Huron Street, along with the application fee if you wish the HDC to consider the proposal as an action item, not a study item.

***Incomplete applications will not be considered.***

For additional information, or if you have questions, contact the City of Ypsilanti Planning and Development Department, 734.483.9646, [hintern@cityofypsilanti.com](mailto:hintern@cityofypsilanti.com).



# Ypsilanti Historic District Work Permit Application

Date filed 10/21/2015 for HDC meeting date 10/27/2015

**Property Address** 6-12 S. Washington

**Applicant** Birdscolors LLC/ Andrew Epstein

## Description of proposed work (see sample applications)

Create a store front for our building with five large windows.

## Materials

Brick and wood. With barn-style gooseneck lights in a bronze.

## Colors (Attach color chips or samples)

Body Dark red/burgundy

Accent 1 Dark Beige

Trim Beige

Accent 2 \_\_\_\_\_

Roof \_\_\_\_\_

Other \_\_\_\_\_

- ☐ This property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.  
(Compliance with this act must be certified to complete this application.)

I hereby attest that the above information is accurate. I am authorized to and hereby grant permission to the City of Ypsilanti and its staff to be on my property for the purposes of preparing reports, taking photographs, and/or evaluating and reviewing this application.

  
\_\_\_\_\_  
Signature of Applicant

10/21/2015  
Date





## HDC Work Permit Staff Review

*Property address:* 6-12 S Washington

*Date of Review:* 10/23/2015

*Date of Meeting:* 10/27/2015

*Proposed work:* Storefront installation, painting, lighting

*Materials:* brick, wood, gooseneck style lights in bronze

*Staff review:*

1. Applicant was seen earlier in the year regarding an issue with the awning and was approved for the following:  
*The removal of the awning and replacement with the proviso that the exterior trim that is metal or enameled metal will be reused in the replacement awning.*
2. Applicant was advised via email of the need to attend the meeting.
3. Applicant is proposing there rebuilding of the storefront including bronze gooseneck lighting over a signboard, wood casement windows and painting.
5. Building department approval is needed prior to work commencing.

*Relevant Secretary of the Interior's Standards:*  
#9

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

**9. Contemporary designs shall be compatible and shall not destroy significant original material.**

10. New work shall be removable.

**LED**MSRP: ~~\$284.99~~On Sale **\$199.97** 

(You save \$85.02)

Item SKU: ADLXSV925-BRZ

**Bulb:**☒ 120V 12W Energy Star Soft White LED BR30☐ 120v 15w Warm White LED PAR30 Short Neck

No Bulb Included

☐ No Bulb Included (-\$20.00)☐ 120V 55w Energy Saver Halogen Shortneck PAR30 (-\$6.99)☐ 120V 75w Wide Spot Halogen PAR38 (-\$6.99)☐ 120V 70w Energy Saver Halogen PAR38 (-\$6.25)☐ 120V 120w Halogen PAR38 (-\$2.95)☐ 120v 3w LED Cool White Short Neck PAR30 (+\$9.99)☐ 120V 11w Energy Star Warm White Dimmable LED BR30 Reflector Light Bulb (+\$10.00)☐ 120V 13w Warm White LED Reflector BR30 (+\$1.96)☐ 120V 13w LED Natural Daylight BR30 (+\$1.96)☐ 120v 15w Cool White LED PAR30 Short Neck☐ 120v 20w Warm White LED PAR38 (+\$24.99)☐ 120V 17w Warm White LED Reflector BR40 (+\$24.99)☐ 120V 16w LED Natural Daylight BR40 (+\$24.99)



### Solid Cast Swivel & Weather Proof Design

Shine your light where you need it under any weather circumstances!

#### Solid Cast Swivel and Head Piece:

AQL's revolutionary Gooseneck head & shade design is weather proof and won't flex, move or break over time. Industry competitors use a standard threaded ceramic socket with a plastic keeper nut and a fender washer to hold the hood of the gooseneck light in place, the result is elements will always end up winning against this type of fixtures. Ours will last forever...



#### Recessed UL Certified Medium Base Socket:

Our in house recessed socket design allows the bulb to go about 2 inches deeper into the shade vs our competitors. This small feature drastically improves the aesthetics of the fixture and greatly diminishing the glare of the bulb. Why is our design better? Simply because our competitors have the socket supporting the weight of the shade, rapidly deteriorating the integrity of the fixture.



#### Solid Cast Canopy:

Ingenious solid cast canopy with 1/2" threaded knockouts. Our exclusive solid cast canopy was built for strength and stability resulting in no flexing of the gooseneck arm and no breaking during strong winds. Our competitors use stamped metal canopies which cause the gooseneck arm to flex and break over time and during windy conditions.



### Need a Photocell or Motion Detector?

Our Gooseneck Lights come with two 1/2" threaded knockouts in the cast wall canopy which allows you to mount a photocell or a motion detector (Call to Order) to the fixture enabling a retro look with modern features on your antique bronze gooseneck barn light.

### Bulbs

Our gooseneck lights use PAR30 or PAR38 bulbs for both 120v and 12v incandescent and LED lighting and MR16 for 12v only LED lighting applications. Visit our incandescent bulbs or our LED bulbs page.

### Voltage

We offer two different voltages: 120V and 12V. The 12v option turns this fixture into the first Eco-friendly bronze Gooseneck Barn Light and uses an MR16 bulb. For 120v Eco-friendly option choose our high output PAR30 or PAR38 LED bulb to save energy at equivalent light output.

### Free Items Included!

These items come free with our Gooseneck Lights:

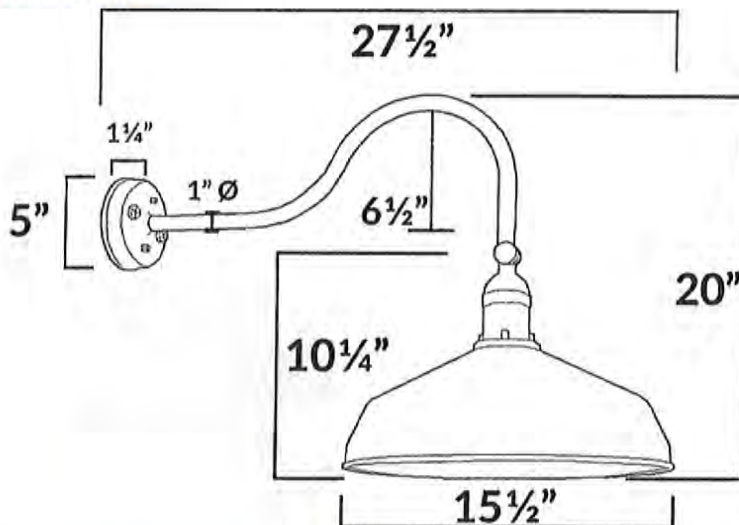
- 5 x Shade Screws
- 3 x Wire Nuts
- 1 x Shade Gasket
- 1 x Shade Washer



### Warranty

Lifetime warranty against rust and corrosion.

### Dimensions



### Why Affordable Quality Lighting?

Affordable Quality Lighting started with a great reputation, great reviews and the best customer service in the lighting industry. As the company has grown over the years the quality and customer service has also. Have questions, simply call and speak with a licensed electrician and he will be happy to answer based on a



# WOOD ULTIMATE CASEMENT/PUSH OUT CASEMENT

|                 |               |               |                |               |               |               |               |                |                |                |
|-----------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|
| M.O. (mm)       | 1-7 5/8 (498) | 1-9 5/8 (549) | 1-11 5/8 (600) | 2-3 5/8 (702) | 2-5 5/8 (752) | 2-7 5/8 (803) | 2-9 5/8 (854) | 2-11 5/8 (905) | 3-3 5/8 (1006) | 3-7 5/8 (1057) |
| R.O. (mm)       | 1-5 (431)     | 1-7 (482)     | 1-9 (533)      | 2-1 (655)     | 2-3 (685)     | 2-5 (736)     | 2-7 (787)     | 2-9 (838)      | 3-1 (939)      | 3-5 (1041)     |
| Frame Size (mm) | 1-4 (406)     | 1-6 (457)     | 1-8 (508)      | 2-0 (609)     | 2-2 (660)     | 2-4 (711)     | 2-6 (762)     | 2-8 (812)      | 3-0 (914)      | 3-4 (1016)     |
| Glass Size (mm) | 11 9/32 (287) | 13 9/32 (337) | 15 9/32 (388)  | 19 9/32 (490) | 21 9/32 (541) | 23 9/32 (591) | 25 9/32 (642) | 27 9/32 (693)  | 31 9/32 (795)  | 35 9/32 (897)  |

|                                                                         |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 6-1 7/8 (1876)<br>6-9/16 (1843)<br>6-1/16 (1830)<br>66 13/32 (1687)     |    |    |    |    |    |    |    |    |    |    |    |
|                                                                         | WUCA1672 T<br>WUPCA1672 T                                                           | WUCA1872 T<br>WUPCA1872 T                                                           | WUCA2072 T<br>WUPCA2072 T                                                           | WUCA2472 T<br>WUPCA2472 T                                                           | WUCA2672 T<br>WUPCA2672 T                                                           | WUCA2872 ET<br>WUPCA2872 ET                                                         | WUCA3072 ET<br>WUPCA3072 ET                                                          | WUCA3272 ET<br>WUPCA3272 ET                                                           | WUCA3672 ET<br>WUPCA3672 ET                                                           | WUCA4072 ET<br>WUPCA4072 ET                                                           | WUCA4472 ET<br>WUPCA4472 ET                                                           |
| 6-7 7/8 (2029)<br>6-6 9/16 (1995)<br>6-6 1/16 (1983)<br>72 13/32 (1839) |    |    |    |    |    |    |    |    |    |    |    |
|                                                                         | WUCA1678 T<br>WUPCA1678 T                                                           | WUCA1878 T<br>WUPCA1878 T                                                           | WUCA2078 T<br>WUPCA2078 T                                                           | WUCA2478 T<br>WUPCA2478 T                                                           | WUCA2678 T<br>WUPCA2678 T                                                           | WUCA2878 ET<br>WUPCA2878 ET                                                         | WUCA3078 ET<br>WUPCA3078 ET                                                          | WUCA3278 ET<br>WUPCA3278 ET                                                           | WUCA3678 ET<br>WUPCA3678 ET                                                           | WUCA4078 ET<br>WUPCA4078 ET                                                           | WUCA4478 ET<br>WUPCA4478 ET                                                           |
| 7-1 7/8 (2181)<br>7-9/16 (2148)<br>7-1/16 (2135)<br>78 13/32 (1992)     |    |    |    |    |    |    |    |    |    |    |    |
|                                                                         | WUCA1684 T<br>WUPCA1684 T                                                           | WUCA1884 T<br>WUPCA1884 T                                                           | WUCA2084 T<br>WUPCA2084 T                                                           | WUCA2484 T<br>WUPCA2484 T                                                           | WUCA2684 T<br>WUPCA2684 T                                                           | WUCA2884 ET<br>WUPCA2884 ET                                                         | WUCA3084 ET<br>WUPCA3084 ET                                                          | WUCA3284 ET<br>WUPCA3284 ET                                                           | WUCA3684 ET<br>WUPCA3684 ET                                                           | WUCA4084 ET<br>WUPCA4084 ET                                                           | WUCA4484 ET<br>WUPCA4484 ET                                                           |
| 7-9 7/8 (2384)<br>7-8 9/16 (2351)<br>7-8 1/16 (2338)<br>86 13/32 (2195) |  |  |  |  |  |  |  |  |  |  |  |
|                                                                         | WUCA1692 T<br>WUPCA1692 T                                                           | WUCA1892 T<br>WUPCA1892 T                                                           | WUCA2092 T<br>WUPCA2092 T                                                           | WUCA2492 T<br>WUPCA2492 T                                                           | WUCA2692 T<br>WUPCA2692 T                                                           | WUCA2892 ET<br>WUPCA2892 ET                                                         | WUCA3092 ET<br>WUPCA3092 ET                                                          | WUCA3292 ET<br>WUPCA3292 ET                                                           | WUCA3692 ET<br>WUPCA3692 ET                                                           | WUCA4092 ET<br>WUPCA4092 ET                                                           | WUCA4492 ET<br>WUPCA4492 ET                                                           |
| 8-1 7/8 (2486)<br>8-9/16 (2453)<br>8-1/16 (2440)<br>90 13/32 (2296)     |  |  |  |  |  |  |  |  |  |  |  |
|                                                                         | WUCA1696 T<br>WUPCA1696 T                                                           | WUCA1896 T<br>WUPCA1896 T                                                           | WUCA2096 T<br>WUPCA2096 T                                                           | WUCA2496 T<br>WUPCA2496 T                                                           | WUCA2696 T<br>WUPCA2696 T                                                           | WUCA2896 ET<br>WUPCA2896 ET                                                         | WUCA3096 ET<br>WUPCA3096 ET                                                          | WUCA3296 ET<br>WUPCA3296 ET                                                           | WUCA3696 ET<br>WUPCA3696 ET                                                           | WUCA4096 ET<br>WUPCA4096 ET                                                           | WUCA4496 ET<br>WUPCA4496 ET                                                           |

## NOTES:

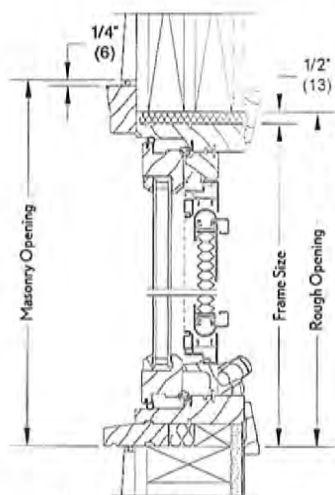
- Marvin® exclusive wash mode is not available on Ultimate Awnings, Ultimate Casement Round Tops or Ultimate Casement Windows less than 20" in width.

E These windows meet national egress codes for fire evacuation. Local codes may differ.

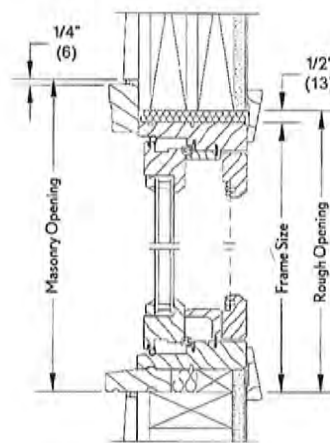
T For safety and/or code requirements, Marvin recommends tempered glass in all units with a frame size height of 72 1/16" or larger and units with a frame size of 25.2 sq. ft. and larger.

# WOOD ULTIMATE CASEMENT/PUSH OUT CASEMENT

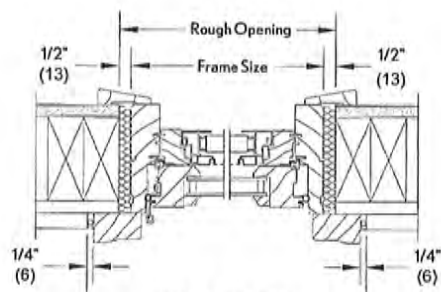
## CONSTRUCTION DETAILS



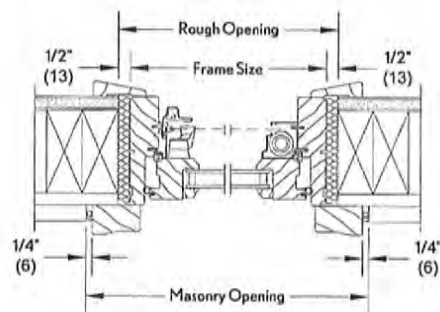
HEAD JAMB AND SILL - OPERATOR  
WITH OPTIONAL INTERIOR SHADES



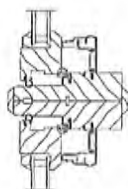
PUSH OUT  
HEAD JAMB AND SILL - OPERATOR



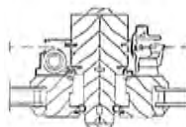
JAMB - OPERATOR



PUSH OUT  
JAMB - OPERATOR



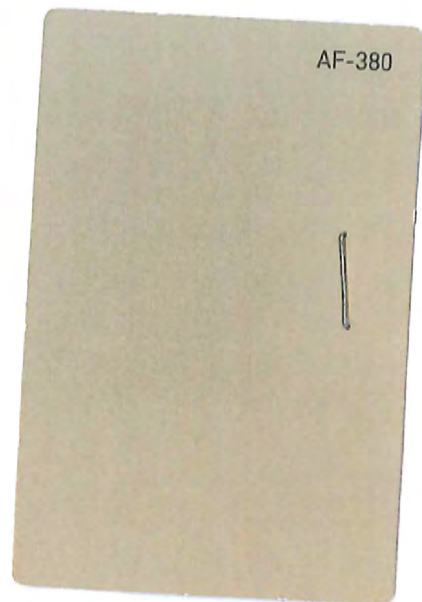
HORIZONTAL MULLION  
OPERATOR



VERTICAL MULLION  
OPERATOR











6 S. Washington





## Ypsilanti Historic District

# Work Permit Application

Date filed 10-8-15 for HDC meeting date 10/27/15

Action item ☐ Study item ☐

Action items require payment of the application fee. There is no fee to submit a study item for discussion.

Property Address 116 MAPLE YPSILANTI MI

Applicant ☐ Owner ☐ Architect ☒ Contractor

Name BRIMAR EXTERIORS LLC

Address P. O. BOX 973066

City YPSILANTI State MI Zip 48197

Phone 734-929-7344 Fax N/A

E-mail BRIMAREXTERIORS@LIVE.COM

Owner \_\_\_\_\_

(If different than applicant)

Who will perform the work? ☐ Owner ☒ Contractor

Contractor BRIMAR EXTERIORS LLC

(Name, address, phone) P. O. BOX 973066 YPSILANTI, MI 48197 (734-929-7344)

Action Items only:

Construction Cost \$9450.00

Permit Application Fee 850

The fee is \$35 for the first \$3,000 in construction cost plus \$5 for every additional or portion of \$3,000 of construction cost. An additional fee of \$50 applies to HDC work started without the applicable permit.

### To complete this application:

1. On the reverse side, summarize the work proposed, list the main materials to be used, and (if relevant) indicate the color scheme planned.
2. Attach the following documents:
  - a. Photo(s) showing all locations where work is proposed
  - b. Paint color chips (if relevant)
  - c. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components
  - d. Dimensioned drawings of any new construction or modifications to existing structures
  - e. A site plan, if proposal is for work on the grounds and not just the structure (e.g., installing an air conditioning system compressor). For fences, new structures, or work that will alter the footprint of existing structures, a photocopy of the mortgage survey with proposed changes indicated is required.

Submit the completed application to the City of Ypsilanti Building Department, 1 South Huron Street, along with the application fee if you wish the HDC to consider the proposal as an action item, not a study item.

**Incomplete applications will not be considered.**

For additional information, or if you have questions, contact the City of Ypsilanti Planning and Development Department, 734.483.9646, [hintern@cityofypsilanti.com](mailto:hintern@cityofypsilanti.com).



# Ypsilanti Historic District Work Permit Application

Date filed \_\_\_\_\_ for HDC meeting date \_\_\_\_\_

Property Address 116 MAPLE YPSILANTI, MI

Applicant \_\_\_\_\_

## Description of proposed work (see sample applications)

REMOVE THE EXISTING ROOF  
REPLACE THE ROTTEN WORK AT  
BUILDING A WOOD CRICKET AT THE BACK OF THE DUNE ROOF  
INSTALL DRY EDGE  
INSTALL ICE GUARD  
INSTALL ATLAS-SO SUMMIT CO UNDERLAYMENT  
INSTALL GAF SIENNA DESIGNED SHINGLES  
INSTALL GAF SNOW COUNTRY RIDGE VENT  
INSTALL PIPE STACK FLASHING  
INSTALL GAF LIBERTY DOTE + CAP SHEET (GARAGE ROOF)  
PAINT CROWN ON THE CONE ROOF  
INSTALL FLASHING AT CHIMNEY

## Materials

GAF SIENNA LUXURY SHINGLES

## Colors (Attach color chips or samples)

Body \_\_\_\_\_

Accent 1 \_\_\_\_\_

Trim \_\_\_\_\_

Accent 2 \_\_\_\_\_

Roof \_\_\_\_\_

Other \_\_\_\_\_

- ☐ This property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended. (Compliance with this act must be certified to complete this application.)

I hereby attest that the above information is accurate. I am authorized to and hereby grant permission to the City of Ypsilanti and its staff to be on my property for the purposes of preparing reports, taking photographs, and/or evaluating and reviewing this application.

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Date



## HDC Work Permit Staff Review

*Property address:* 116 Maple

*Date of Review:* 10/23/2015

*Date of Meeting:* 10/27/2015

*Proposed work:* reroof and gutter installation

*Materials:* GAF Sienna luxury shingles

*Staff review:*

1. Applicant is looking to replace the current three tab roof with diamond shaped asphalt shingles in the same color, including the tower portion of the roof.
2. Applicant is planning on doing the front half of the house, including the tower and the flat garage roof in the spring.
3. Gutters and downspouts will be added to the back of the roof to help with drainage for the higher roof line.
4. House currently has k-style gutters and downspouts in two different colors, red and beige to blend in with the house.
5. Building department approval is needed prior to work commencing.

*Relevant Secretary of the Interior's Standards:*  
#5, #10

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

**5. Preserve distinctive features.**

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

**10. New work shall be removable.**





**Representative:**  
 Brian Benn  
 Cell: 734-929-7344  
 brimarexteriors@live.com

**Office/Payments:**  
 P.O.BOX 973066  
 Ypsilanti, MI 48197

**Estimate For Services**  
 Job #: 7657-2765

**Estimate Created On:** October 6, 2015  
**Installation Date:** October 6, 2015

**Customer:**  
 Katherine Besemer  
 116 Maple  
 Ypsilanti, MI 48197  
 (616) 218-5935

**Description of Services:**

Re-roof house and garage

|                                                                          | Qty. | Unit | Price      |
|--------------------------------------------------------------------------|------|------|------------|
| 1.Remove the existing roof down to the roof deck.                        | 0.0  | ea   | \$0.00     |
| 2.Replace rotted wood at the roof deck.                                  | 0.0  | ea   | \$0.00     |
| 3.Build a wood cricket to divert water around the base of the cone roof. | 0.0  | ea   | \$0.00     |
| 4.Install aluminum drip edge at the roof perimeter.                      | 0.0  | ea   | \$0.00     |
| 5.Install Snow and Ice Guard at the roof eaves and valleys.              | 0.0  | ea   | \$0.00     |
| 6.Install Atlas Summit 60 underlayment on the roof deck.                 | 0.0  | ea   | \$0.00     |
| 7.Install Architectural Shingle(TBD) <i>GAF SIENNA LUXURY SHINGLE</i>    | 0.0  | ea   | \$0.00     |
| 8.Install GAF Ridge Vent for attic ventilation.                          | 0.0  | ea   | \$0.00     |
| 9.Install Pipe Stack Flashing at the roof exhaust stacks.                | 0.0  | ea   | \$0.00     |
| 10.Install GAF Liberty Base and Cap Sheet at the low slope garage roof.  | 0.0  | ea   | \$0.00     |
| 11.Paint the crown at the top of the cone roof.                          | 0.0  | ea   | \$0.00     |
| 12.Install Counterflashing at the chimney.                               | 0.0  | ea   | \$0.00     |
| 13.Clean and remove all roofing debris from the property.                | 0.0  | ea   | \$0.00     |
| 14.Permit                                                                | 0.0  | ea   | \$0.00     |
| 15.JOB TOTAL                                                             | 1.0  | ea   | \$9,450.00 |
| Back half of house only and front repairs - \$3500.00                    | 0.0  | ea   | \$0.00     |
| For Gutters add: <del>\$450.00</del>                                     | 0.0  | ea   | \$0.00     |
| Payment: 50% down & 50% at completion                                    | 0.0  | ea   | \$0.00     |
| Wood replacement: After 3 shts add - \$38/sht                            | 0.0  | ea   | \$0.00     |

*Add = \$1600*

Subtotal: \$9,450.00  
 Sales Tax (0.00%): \$0.00

Total: \$9,450.00

*1600.00*  
*\$ 11,050.00*

NOTE: WILL DO THE BACK HALF OF THE HOUSE THIS YEAR  
 FRONT HALF SPRING 2016



More saving.  
More doing.

Your Store: **Ann Arbor #2721**  
Use **Current Location** or **find store**

GAF | Model # 0689106 | Internet # 204382436 | Store SKU # 1000053480

## Sienna Harbor Mist Value Collection Lifetime Shingle (25 sq. ft. per Bundle)

☆☆☆☆ Write the First Review | Questions & Answers (2)



**\$36.87** /bundle

- Classic old world elegance at an incredibly affordable price
- Lifetime Limited Warranty
- Designed with Advanced Protection Shingle Technology

Open Expanded View

Click Image to Zoom



### PRODUCT OVERVIEW Model # 0689106 | Internet # 204382436 | Store SKU # 1000053480

Sienna Shingles are a great alternative to standard architectural shingles. Their unique diamond shape and stylish color palette are designed to complement virtually any exterior color scheme. As part of GAF's Value Collection, Sienna Shingles offer the beauty of a luxury designer shingle at an affordable price.

California residents: see [Proposition 65 information](#)

- Micro Weave Core offers a strong foundation that helps resist cracking and splitting
- Dura Grip Adhesive seals each shingle tightly and reduces the risk of shingle blow-off
- UV Blocker (granules) protects against damaging sunlight for durability and long life
- SpecSelect Grading System offers fine-quality asphalt to help improve weathering in harsh conditions
- Dura grip adhesive seals each shingle tightly and reduces the risk of shingle blow-off (130 MPH wind warranty with special installation, see GAF Shingle & Accessory Ltd. warranty for complete coverage and restrictions)
- UV blocker (granules) protects against damaging sunlight, which improves the durability and extends the life of the shingle
- Advanced protection technology results in a high-performance shingle, providing superior protection for your home while reducing the use of precious natural resources
- FiberTech components (Core) incorporate fibers that are non-combustible, providing a UL class A fire rating, the highest rating possible - and safer than wood shakes or some plastic/synthetic shingles, which carry only a class C fire rating
- Style Guide:





10/23/2015

116 Maple



10/23/2015



4



# Ypsilanti Historic District Work Permit Application

Date filed 10/13/15 for HDC meeting date 10/27/15

Action item ☒

Study item ☐

*Action items require payment of the application fee. There is no fee to submit a study item for discussion.*

**Property Address** 100 Market Place- Freighthouse

**Applicant** ☒ Owner ☐ Architect ☐ Contractor

Name City of Ypsilanti- Cynthia Kochanek

Address 1 S Huron St

City Ypsilanti State MI Zip 48197

Phone 734-483-9646 Fax \_\_\_\_\_

E-mail hintern@cityofypsilanti.com

Owner same as above

(If different than applicant)

**Who will perform the work?** ☐ Owner ☒ Contractor

Contractor Envision Builders, Inc

(Name, address, phone) 28036 Oakland Oaks Court, Wixom, MI 48393, (248) 305-8181

*Action Items only:*

Construction Cost 242,800

**Permit Application Fee** 0

The fee is \$35 for the first \$3,000 in construction cost plus \$5 for every additional or portion of \$3,000 of construction cost. An additional fee of \$50 applies to HDC work started without the applicable permit.

## To complete this application:

1. On the reverse side, summarize the work proposed, list the main materials to be used, and (if relevant) indicate the color scheme planned.
2. Attach the following documents:
  - a. Photo(s) showing all locations where work is proposed
  - b. Paint color chips (if relevant)
  - c. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components
  - d. Dimensioned drawings of any new construction or modifications to existing structures
  - e. A site plan, if proposal is for work on the grounds and not just the structure (e.g., installing an air conditioning system compressor). For fences, new structures, or work that will alter the footprint of existing structures, a photocopy of the mortgage survey with proposed changes indicated is required.

Submit the completed application to the City of Ypsilanti Building Department, 1 South Huron Street, along with the application fee if you wish the HDC to consider the proposal as an action item, not a study item.

***Incomplete applications will not be considered.***

For additional information, or if you have questions, contact the City of Ypsilanti Planning and Development Department, 734.483.9646, [hintern@cityofypsilanti.com](mailto:hintern@cityofypsilanti.com).



## Ypsilanti Historic District Work Permit Application

Date filed 10/13/15 for HDC meeting date 10/27/15

**Property Address** 100 Market Place

**Applicant** City of Ypsilanti

### Description of proposed work *(see sample applications)*

Exterior work to include the installation of a bollard at the southwest ramp to protect mechanical equipment and 44" wide wood egress stair on the west side. Stairs to match the existing deck in dimension and finish. Egress door on the west side of the building.

### Materials

Concrete and pressure treated wood. Doors and stairs will be painted to match the existing.

### Colors *(Attach color chips or samples)*

Body \_\_\_\_\_

Accent 1 \_\_\_\_\_

Trim \_\_\_\_\_

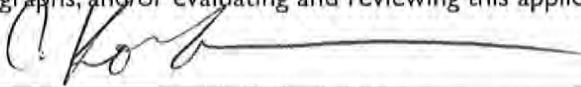
Accent 2 \_\_\_\_\_

Roof \_\_\_\_\_

Other \_\_\_\_\_

- ☒ This property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.  
(Compliance with this act must be certified to complete this application.)

I hereby attest that the above information is accurate. I am authorized to and hereby grant permission to the City of Ypsilanti and its staff to be on my property for the purposes of preparing reports, taking photographs, and/or evaluating and reviewing this application.

  
\_\_\_\_\_  
Signature of Applicant

10/13/15  
Date



## HDC Work Permit Staff Review

*Property address:* 100 Market Place (Freighthouse)

*Date of Review:* 10/23/2015

*Date of Meeting:* 10/27/2015

*Proposed work:* install 1 bollard to protect mechanical equipment, 44" wide egress stair to match existing and egress door on the west side of the structure.

*Materials:* concrete and pressure treated wood, doors and stairs will be painted to match the existing

*Staff review:*

1. Staff is presenting this application.
2. Plans were originally brought to and approved by the HDC in 2013 however the work was never performed.
3. Staff's review of previous plans for the Freighthouse indicates work and materials are the same as the plans approved in 2013 with the exception of the bollard.

*Relevant Secretary of the Interior's Standards:*  
#9

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

7. Clean building gently—no sandblasting.

8. Preserve archaeological resources.

**9. Contemporary designs shall be compatible and shall not destroy significant original material.**

10. New work shall be removable.









## Ypsilanti Historic District

# Work Permit Application

Rec 19844

Date filed 10/21/15 for HDC meeting date 10/27/15

Action item ☒ Study item ☐ Action items require payment of the application fee. There is no fee to submit a study item for discussion.

Property Address 302 North Hamilton

Applicant ☒ Owner ☐ Architect ☐ Contractor

Name William J. Godfrey

Address P.O. Box 8307

City Ann Arbor State MI Zip 48107

Phone 734.645.6731 Fax \_\_\_\_\_

E-mail bill@three-oaks.com

Owner Eastern Oaks LLC  
(If different than applicant)

Who will perform the work? ☐ Owner ☒ Contractor

Contractor AJ's Custom Painting (Al Navarre)  
(Name, address, 5697 Cary Drive, Ypsilanti, MI 48197  
phone) 734.334.6825

Action Items only:

Construction Cost TBD Permit Application Fee \_\_\_\_\_

The fee is \$35 for the first \$3,000 in construction cost plus \$5 for every additional or portion of \$3,000 of construction cost. An additional fee of \$50 applies to HDC work started without the applicable permit.

### To complete this application:

1. On the reverse side, summarize the work proposed, list the main materials to be used, and (if relevant) indicate the color scheme planned.
2. Attach the following documents:
  - a. Photo(s) showing all locations where work is proposed
  - b. Paint color chips (if relevant)
  - c. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components
  - d. Dimensioned drawings of any new construction or modifications to existing structures
  - e. A site plan, if proposal is for work on the grounds and not just the structure (e.g., installing an air conditioning system compressor). For fences, new structures, or work that will alter the footprint of existing structures, a photocopy of the mortgage survey with proposed changes indicated is required.

Submit the completed application to the City of Ypsilanti Building Department, 1 South Huron Street, along with the application fee if you wish the HDC to consider the proposal as an action item, not a study item.

**Incomplete applications will not be considered.**

For additional information, or if you have questions, contact the City of Ypsilanti Planning and Development Department, 734.483.9646, [hintern@cityofypsilanti.com](mailto:hintern@cityofypsilanti.com).



# Ypsilanti Historic District Work Permit Application

Date filed 10/21/15 for HDC meeting date 10/27/15

Property Address 302 North Hamilton

Applicant Eastern Oaks LLC

## Description of proposed work (see sample applications)

Scrape paint  
Repair wood/caulk  
Repaint

## Materials

Paint  
Wood  
Caulk

Staff note:  
will not use  
maroon color  
to frame in windows  
only cream color

## Colors (Attach color chips or samples)

Same as 316/318 Washtenaw (see pix)

Body Green

Accent 1 Maroon

Trim Cream

Accent 2 \_\_\_\_\_

Roof \_\_\_\_\_

Other \_\_\_\_\_



This property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended. (Compliance with this act must be certified to complete this application.)

I hereby attest that the above information is accurate. I am authorized to and hereby grant permission to the City of Ypsilanti and its staff to be on my property for the purposes of preparing reports, taking photographs, and/or evaluating and reviewing this application.

William J. Godley  
Signature of Applicant

10/21/15  
Date



## HDC Work Permit Staff Review

*Property address:* 302 N Hamilton

*Date of Review:* 10/23/2015

*Date of Meeting:* 10/27/2015

*Proposed work:* painting

*Materials:* green, cream and maroon paint

*Staff review:*

1. Applicant is looking to paint the structure to match the color scheme at 316 Washtenaw. Applicant will not be using the maroon color on the window frames as 316 Washtenaw does, just the cream color.
2. Staff spoke with the applicant and advised of no power washing and cleaning standards.

*Relevant Secretary of the Interior's Standards:*  
#7, #10

1. Use property for original purpose or provide compatible use with minimal alteration.

2. Do not destroy original character. Do not remove or alter historic material or features.

3. Do not imitate earlier styles.

4. Preserve significant changes acquired over time.

5. Preserve distinctive features.

6. Repair, don't replace. Replacements shall match original.

**7. Clean building gently—no sandblasting.**

8. Preserve archaeological resources.

9. Contemporary designs shall be compatible and shall not destroy significant original material.

**10. New work shall be removable.**





302  
North Hamilton



316/318

Washtenaw





316/318  
Washtenaw



# Ypsilanti Historic District Work Permit Application

Date filed 10/7/15 for HDC meeting date 10/27/15

Action item ☒ Study item ☐

Action items require payment of the application fee. There is no fee to submit a study item for discussion.

Property Address 314 S Huron

Applicant ☐ Owner ☐ Architect ☒ Contractor

Name William A. Houle

Address 8933 High Creek Ct.

City Saline State MI Zip 48176

Phone 734-754-3286 Fax \_\_\_\_\_

E-mail salinerooter2@frontier.com

Owner Elaine Sharp  
(If different than applicant)

Who will perform the work? ☐ Owner ☒ Contractor

Contractor William Houle

(Name, address, phone) 8933 High Creek Ct. Saline MI 48176 734-754-3286

Action Items only:

Construction Cost \_\_\_\_\_ Permit Application Fee \_\_\_\_\_

The permit fee is \$30 plus \$5 for each \$3,000 of construction cost, and is due at the time of application. An additional administrative fee of \$50 applies to HDC work started without the issuance of applicable permit.

## To complete this application:

1. On the reverse side, summarize the work proposed, list the main materials to be used, and (if relevant) indicate the color scheme planned.
2. Attach the following documents:
  - a. Photo(s) showing all locations where work is proposed
  - b. Paint color chips (if relevant)
  - c. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components
  - d. Dimensioned drawings of any new construction or modifications to existing structures
  - e. A site plan, if proposal is for work on the grounds and not just the structure (e.g., installing an air conditioning system compressor). For fences, new structures, or work that will alter the footprint of existing structures, a photocopy of the mortgage survey with proposed changes indicated is required.

Submit the completed application to the City of Ypsilanti Building Department, 1 South Huron Street, along with the application fee if you wish the HDC to consider the proposal as an action item, not a study item.

**Incomplete applications will not be considered.**

For additional information, or if you have questions, contact the City of Ypsilanti Planning and Development Department, 734.483.9646, [hintern@cityofypsilanti.com](mailto:hintern@cityofypsilanti.com).



## Ypsilanti Historic District Work Permit Application

Date filed 10/7/15 for HDC meeting date \_\_\_\_\_

Property Address 314 S. Huron

Applicant William Houle

### Description of proposed work (see sample applications)

Installation of a new roof. Shingle color will be Atlas Pristine Sienna, which very closely matches Existing Color.

### Materials

Atlas Pristine Sienna Architectural Shingles

Staff Note: No new gutters, downspouts or vents

### Colors (Attach color chips or samples)

Body \_\_\_\_\_

Accent 1 \_\_\_\_\_

Trim \_\_\_\_\_

Accent 2 \_\_\_\_\_

Roof Atlas Pristine Sienna

Other \_\_\_\_\_

- ☐ This property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.  
(Compliance with this act must be certified to complete this application.)

I hereby attest that the above information is accurate. I am authorized to and hereby grant permission to the City of Ypsilanti and its staff to be on my property for the purposes of preparing reports, taking photographs, and/or evaluating and reviewing this application.

William A Houle  
Signature of Applicant

10/7/15  
Date



*Signature* PLATINUM SHINGLE *Series*

# **LIFETIME PINNACLE®**

**PRISTINE ARCHITECTURAL SHINGLE**

*Featuring*



# ***THE COLOR OF CLEAN***



[www.ATLASROOFING.com](http://www.ATLASROOFING.com)



# WHAT MAKES **PINNACLE®** SUCH A GREAT CHOICE?

## Atlas Pristine Shingles Featuring Scotchgard™ Protector

There is simply no greater algae resistance than Scotchgard™ protection, and we incorporate regular independent third-party laboratory testing to validate even spread of copper granules, ensuring maximum algae resistance is built into every shingle.



## Lifetime\* Limited Warranty Against Algae Growth

Simply put, once you choose Pinnacle® featuring Scotchgard™ Protector, you will never need to worry about algae growth on your roof ever again.



## Lifetime\* Limited Warranty

Lasting protection against shingle manufacturing defects.



## Up To 130 MPH Limited Wind Warranty

Provides superior resistance against wind and wind driven rain.



## Up To 15 Year Peace of Mind

Premium Protection Period is the initial non-prorated labor and material coverage for your new roof. With an Atlas Signature Select® system, you get unprecedented coverage for your new roof.



**DEMAND THE BEST, PINNACLE® FEATURING  
SCOTCHGARD™ PROTECTOR.**



[www.AtlasRoofing.com](http://www.AtlasRoofing.com)

\* See Atlas Limited Warranty for all system and coverage requirements. Atlas Pro-Cut® Hip & Ridge featuring Scotchgard™ Protector must be installed on the roof ridge for the Lifetime Limited Warranty against algae growth to be valid.



Pristine Black

Pristine Desert

Pristine Dove

Pristine Green

Pristine Hearstone

Pristine Heather

Pristine Hickory

Pristine Oyster

Pristine Pewter

Pristine Sienna

Pristine Tan

Pristine Weathered

Pristine Weathered Shadow

**FINAL COLOR SELECTIONS  
SHOULD BE MADE USING  
ACTUAL SHINGLES**

Because of their size, swatches cannot accurately depict the color clarity. Please consult your Atlas distributor for specific color availability. Colors and shadow lines in the photos and the sample boards should be used as a guideline for your color selection.





Rec 19809 3

# Ypsilanti Historic District Work Permit Application

Date filed 10/13 for HDC meeting date 10/27

Action item ☐ Study item ☐ Action items require payment of the application fee. There is no fee to submit a study item for discussion.

Property Address 211 East Forest ave

Applicant ☐ Owner ☐ Architect ☒ Contractor

Name Modern Exterior Improvement

Address 12725 Stark rd

City Livonia State MI Zip 48150

Phone 734-367-4867 Fax 734-293-2624

E-mail MXILLC@yahoo.com

Owner ~~Bill Hunt~~  
(If different than applicant)

Who will perform the work? ☐ Owner ☒ Contractor

Contractor Modern Exterior Improvement  
(Name, address, phone) 12725 Stark rd Livonia (734) 367-4867

Action Items only:

Construction Cost 2271 Permit Application Fee \_\_\_\_\_

The permit fee is \$30 plus \$5 for each \$3,000 of construction cost, and is due at the time of application. An additional administrative fee of \$50 applies to HDC work started without the issuance of applicable permit.

## To complete this application:

1. On the reverse side, summarize the work proposed, list the main materials to be used, and (if relevant) indicate the color scheme planned.
2. Attach the following documents:
  - a. Photo(s) showing all locations where work is proposed
  - b. Paint color chips (if relevant)
  - c. Catalog cut sheets or similar details for windows, doors, light fixtures, and any other manufactured or preassembled components
  - d. Dimensioned drawings of any new construction or modifications to existing structures
  - e. A site plan, if proposal is for work on the grounds and not just the structure (e.g., installing an air conditioning system compressor). For fences, new structures, or work that will alter the footprint of existing structures, a photocopy of the mortgage survey with proposed changes indicated is required.

Submit the completed application to the City of Ypsilanti Building Department, 1 South Huron Street, along with the application fee if you wish the HDC to consider the proposal as an action item, not a study item.

**Incomplete applications will not be considered.**

For additional information, or if you have questions, contact the City of Ypsilanti Planning and Development Department, 734.483.9646, [hintern@cityofypsilanti.com](mailto:hintern@cityofypsilanti.com).



## Ypsilanti Historic District Work Permit Application

Date filed \_\_\_\_\_ for HDC meeting date \_\_\_\_\_

Property Address 211 East Forest ave

Applicant Modern Exterior Improvement

### Description of proposed work (see sample applications)

Tear off Flat roof in rear of home  
and reapply all roofing materials

### Materials

Certain-teed Flintastic base + cap sheet  
3" aluminum Drip edge  
roof color: Colonial Slate

Staff note: drip edge color = white

### Colors (Attach color chips or samples)

Body \_\_\_\_\_

Accent 1 \_\_\_\_\_

Trim \_\_\_\_\_

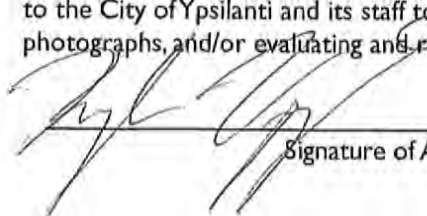
Accent 2 \_\_\_\_\_

Roof \_\_\_\_\_

Other \_\_\_\_\_

- ☐ This property has, or will have before the proposed work is completed, a fire alarm system or smoke alarm complying with the Stille-DeRossett-Hale single-state construction code, PA 230 of 1972, as amended.  
(Compliance with this act must be certified to complete this application.)

I hereby attest that the above information is accurate. I am authorized to and hereby grant permission to the City of Ypsilanti and its staff to be on my property for the purposes of preparing reports, taking photographs, and/or evaluating and reviewing this application.

  
\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Date



# LANDMARK<sup>®</sup>

**Best Buy**

As ranked by a leading  
Consumer Magazine

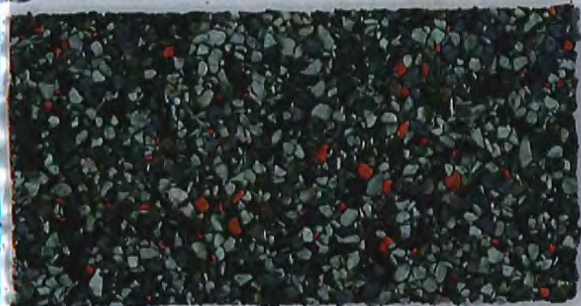
**CertainTeed**  
SAINT-GOBAIN



Moire Black



Weathered Wood



Colonial Slate



Resawn Shake



Burnt Sienna



Cobblestone Gray



Driftwood



Atlantic Blue



Pewter



Georgetown Gray



**CITY OF YPSILANTI**  
**HISTORIC DISTRICT COMMISSION**  
**MINUTES OF OCTOBER 13, 2015**

**CALL TO ORDER AND ROLL CALL**

Anne Stevenson                      Chair    7:05 PM

Meeting Location:                  Council Chambers, City Hall

Commissioners Present:          Anne Stevenson, Jane Schmiedeke, Erika Lindsay, Alex Pettit

Commissioners Absent:          Hank Prebys, Ron Rupert, Michael Condon

Staff Present:                      Cynthia Kochanek, Associate Planner

**APPROVAL OF AGENDA**

Motion:                      Pettit (second: Schmiedeke) moves to approve the agenda as amended to include 320 N Washington and 220 S Huron as study items and the review of Thompson Block plans as other business.

Approval:                      Unanimous. Motion carries.

**PUBLIC COMMENT ON AGENDA ITEMS - none**

**PUBLIC HEARING- none**

**OLD BUSINESS**

**36 N Huron**

*\*Application is for sign installation.*

Applicant:                      Heather Freeling - owner (present)

Discussion:                      Freeling: States that the sign is ok as far as she knows with the building department. There was some confusion with the measurements. The applicant states that the entire sign will go within the existing signboard. The letters for the word "salon" will be suspended less than 1" out underneath the Rebel Heart portion. She will attach the sign with the brackets have been affixed to the back of the sign and then will use nails or screws to attach the sign to the signboard. She will be painting the inside of the signboard frame possibly black or white. She would prefer black.

Stevenson: States that black may make the sign and letters less visible. She suggests grey for behind the sign.

Motion: Pettit (second: Schmiedeke) moves to approve the application for work at 36 N Huron St to include the installation of a sign, the sign and cut letters are made of steel. The sign will be attached using brackets that are attached to the back of the sign and screws will be used to attached the sign to the signboard. The signboard will be painted a shade of grey as decided by the applicant.

Secretary of the Interior Standard:  
#10- New work shall be removable.

Approval: Unanimous. Motion carries.

### **316 Pearl**

*\*Application is for reroof and gutter installation.*

Applicant: Chandler Metal Roofing, Al Hensel - contractor (present)

Discussion: Stevenson: States that they wanted a little more info about the product and about roof venting. She advises that the HDC does not like to approve materials that replicate another material. She states that the HDC makes decisions that are based on the Secretary of the Interior's Standards for the Rehabilitation of Historic Structures. One of those is to not imitate earlier styles. She also states that asphalt shingles are essentially imitating an earlier style but that asphalt shingles have been installed the historic district since the 1930s so they are themselves a material that is now somewhat historic in their own right. She states that she advised the commission to research the product.

Hensel: States that they do ridge venting. Ridge venting will work for the entire house. The straps will not work with this roof system; they will be using hidden hangers for the gutters. They will install the same style and color gutters and downspouts that are there currently. He also forgot to mention that the applicant would like the gutter protection installed in the gutters and that it will not be seen since it will be placed inside the gutter.

Stevenson: States that she looked at a property that has this type of roof installed and that she could not tell the difference.

Pettit: States that to him asphalt shingles are an imitation of another material already.

Hensel: States that he will need to install the roof to wall flashing under the wood siding at two spots where the porch roof meets the siding, this wood siding is actually not in the best shape and he would need to install a trim board to place the flashing under and that board will be painted to match the house. It will be a piece of wood that will run parallel to the porch roof line and will match the 2" siding.

Pettit: Inquires as to whether it would protrude any farther than the siding or window trim.



Hensel: States that it would not. The drip edge will be white to match the fascia. He states that the roof will have a 1" stone coated gable edge piece that will go above the gable edges.

Motion: Pettit (second: Schmiedeke) moves to approve the application for work at 316 Pearl to include the removal of the existing roof and the replacement with a Decra metal roof in the color midnight eclipse. All venting to be ridge vents. There will be an edge piece along the gable ends that extends about a 1"-1 1/2" above the roof deck to be the same color and material as the roof itself, drip edge to be white. New k-style gutters in white and downspouts to be in the same locations as current. In areas where the porch roof meets the wall of the house, there will be a 2" board set along the edge, similar to the window casing in profile, to cover the roof to wall flashing and will be painted to match the body of the house.

Secretary of the Interior Standard:

- #9- Contemporary designs shall be compatible and shall not destroy significant original material.
- #10- New work shall be removable.

Approval: Unanimous. Motion carries.

## **NEW BUSINESS**

### **219 N Huron**

*\*Application is for porch installation.*

Applicant: Kathryn Deyo - owner (present)

Discussion: Stevenson: States that the porch looks really good. Her only comment is that the lattice skirting on the sides of the porch steps needs to be framed in with an additional bottom rail piece.

Motion: Lindsay (second: Pettit) moves to approve the application for 219 N Huron as completed; to replace the front porch and railings according the HDC porch standards with one addition; the lattice on the sides of the porch steps needs to be framed in at the bottom and painted to match.

Secretary of the Interior Standard:

- #9- Contemporary designs shall be compatible and shall not destroy significant original material.

Approval: Unanimous. Motion carries.

### **306 N River**

*\*Application is for window installation. Application came in to the previous meeting as a study item.*

Applicant: Daniel Kubera and Alex Mers- owners (present)

Discussion: Stevenson: States that nothing deviated from the study item that was brought in before.

Kubera: States that he would like to go over the door options. He inquires if the door needs to be painted to match the existing doors and if the window configuration on the proposed door is ok?

Schmiedeke: Advises that the door needs to be painted to protect it.

Stevenson: Confirms that it should be painted green and the proposed door is fine.

Lindsay: Inquires about the window installation since the window proposed is flat on top but the window opening has an arch. She would like to know how that will be dealt with.

Kubera: States that they will match the current windows and fill the arch with wood just like the existing windows.

Motion: Lindsay (second: Pettit) moves approval for the application at 306 N River to include the replacement of windows and a door to open up the previously blocked in openings. The windows will be an Anderson 400 series TW21062 and a Simpson #7944 entrance door in Douglas fir. The door and windows will be painted green to match the existing.

Secretary of the Interior Standard:

#9- Contemporary designs shall be compatible and shall not destroy significant original material.

Approval: Unanimous. Motion carries.

## **214 S Washington**

*\*Application is for storm window installation.*

Applicant: Sears Home Improvement; Mike Enright - contractor (present)

Discussion: Stevenson: Asks the applicant to advise if any of the storms are there or if they are missing. States that staff went out to document the property and the staff member felt that the storms that are there are wood. States that the HDC would prefer the storms be replaced with in kind materials.

Enright: States that he is unsure of the materials that are there. The new storms would be all aluminum and they can be painted to match the existing. States that the current storms are leaking air and they will replace all of them so that they all look alike.

Stevenson: States that if new wood storms could be clad in aluminum, if possible, that would be better. States that better photos are needed to prove that the storms really are unrepairable.



Pettit: Advises to repair the storms if possible and advises that the HDC would prefer a wood storm.

Lindsay: States that with only 10 storms being replaced it would create a mismatch from one window to another.

Stevenson: Reiterates that the HDC would need to see some up close photos.

Motion: Pettit (second: Schmiedeke) moves to table the application for additional information to include more detailed photos of the windows in question that the owner is aiming to replace.

Secretary of the Interior Standard:  
n/a

Approval: Unanimous. Motion carries.

### **25 S Huron**

*\*Application is for painting.*

Applicant: Credit Bureau, Craig Annas - owner (not present)

Discussion: The HDC discussed the color that the applicant is looking to paint the side of the building. HDC requests that the staff advise the applicant that power washing is not allowed as it will damage the bricks and create spalling from water freezing that can be forced behind the bricks during power washing.

Motion: Schmiedeke (second: Lindsay) moves to approve the application for 25 S Huron for the painting of the south façade in Boston Brick and the trim in American White.

Secretary of the Interior Standard:  
#10- New work shall be removable.

Approval: Unanimous. Motion carries.

### **58 E Forest**

*\*Application is for fence, driveway, shutters and flowerbox installation and porch replacement.*

Applicant: Pamela Herzog - owner (present)

Discussion: Herzog: States that she probably should not have submitted all the pieces of this application at once but that a lot of the work hinges on each other. She addresses the flowerboxes, shutters and a gate with a shamrock on it first. She will have them made out of wood and they are handcrafted. The shutters will go the length of the windows and will be three 5½ inch boards put together. The flower boxes would be wood and painted in the same color of the house trim.

Schmiedeke: States that the shutters need to be sized correctly so that they would appear to be able to close over the window even though they will not be functional.

Herzog: Advises that two shutters are already up. She would like to put a picket fence between 58 E Forest and 56 E Forest and along the back of 631 N River and 56 E Forest. She states that currently there is a fence up but it just needs to be lengthened about 25'. The fence would be a few inches off of the property line on her side.

Pettit: States that the placement of the exact fence would be up to the building department.

Schmiedeke: Seeks clarification on the placement of the fence.

Herzog: She would like the picket fence between the two houses and the privacy fence at the back. She states that she would paint the fence to match the house or white.

Stevenson: States that the white fence would get dirty.

Lindsay: Asks whether there is a third fence in the front since the drawing is unclear.

Herzog: States that there is not a third type of fencing and that the gate would meet the height of the proposed fencing.

Stevenson: Seeks clarification on where the fence will be going. She would like the applicant to clarify that she is placing fencing at the rear of the 56 E Forest property.

Herzog: States that the parcel at the back is also her property and she would like the fencing for boundary definition. She states that currently she does not have any parking on the parcel. States that she would like a driveway to make things accessible since the current parking is far away. The driveway will be concrete and it will match city specs. She states that the City engineering states that the driveway needs to be 9 feet. She states that the proposed driveway will be about 2 feet away from the picket fence she is planning on installing. She states that she will replace the entire current porch that is in poor condition and replace it with steps that face the opposite direction. The new steps will project only 36" away from the house to help provide clearance for the driveway.

Pettit: Asks if there is a drawing of the plans for the new steps or the entire project since it is difficult for the HDC to approve concepts.

Herzog: States that she does not have a drawing of the entire house with the porch and driveway.

Pettit: Asks about whether the City signs in the ROW will still remain.



Herzog: States that she has not seen a drawing that leaves the signs in place.

Schmiedeke: States that she has a problem with the curing compound in the concrete since it makes the concrete bright white. She advises to do a different curing compound or to use a dye so that the concrete is not a bright white.

Herzog: States that the gate would be the same height as the picket fence. The gate will be the same width as the city sidewalk. The shrubs at the front of the house will be part of another project. She did not realize that landscaping was a piece that the HDC would look at.

Pettit: States that the HDC is concerned with landscaping. States that he would need a specific drawing or specs for the gate since the drawing seems to not be to scale. He advises that the person building the gate should be able to provide a drawing that is closer to a spec sheet since the drawing could be interpreted incorrectly.

Stevenson: States that there is some uncertainty about the gate and the size of it.

*Chairperson Stevenson opens public comment*

Kathy Tally, 56 E Forest:

States that she has been at that address for 17 years and she has added the landscaping at the edge of her property since there was none when she moved in. She states that that she is unsure as to how a driveway could be added to this area of the property without a retaining wall or other site modification due to a grade change at the rear of the property. She states that none of the neighbors in the area have fencing and with this proposal she will now have fencing within 10 to 15 feet from her back door.

Marcia Cohen, 59 E Forest

She states that there is not enough space for the driveway. She states that the older gentleman that lived there prior was denied a driveway he proposed in the same area. She states that the other side of the house may be a better option and the applicant could even place a garage on that side.

Herzog: States that there are several issues that she would like to address. She states that grading has been discussed and the drainage will be addressed as well so that any additional water runoff will not be forced onto the other properties. She states that she does not want to intrude on her neighbors in anyway. States that she does not see a problem with a fence that is on her property.

Stevenson: States that the HDC is not here to debate any neighbor disputes but that the HDC is here to decide if the changes are appropriate for the district.

Herzog: States that the hosta plants on her neighbor's property will not be touched since the property line is skewed. States that the neighbor has stuff on her property that needs to be moved. She states that she spoke with Janice at DPS and that they are reviewing the application for the driveway.

Pettit: Advises that overall the HDC is charged to make sure that this is right for the property.

Stevenson: States that the HDC would like visit the property and asks permission to come on to the property.

Herzog: Confirms that coming onto the property is ok.

Herzog: *(Returns later in the meeting)* States that she would be ok with the picket fence at the back instead of the taller 6' privacy fence.

Motion: Pettit (second: Schmiedeke) moves to table the application for work at 58 E Forest pending further information regarding the gate detail, an as built drawing for the gate and pending a site visit to gather more info. Also, further info from the building department regarding the proposals that are under consideration.

Secretary of the Interior Standard:  
n/a

Approval: Unanimous. Motion carries.

## **STUDY ITEMS**

### **320 N Washington**

Applicant: Chris Janowiak- owner (present)

Discussion: Janowiak: States that they will match the shutters and will work with the windows. The garage doors do not meet OSHA standards and they cannot find any replacement parts. He brought in a spec sheet from Abbey door for options. These garages doors are causing problems. He is looking for info on whether the HDC would like windows in the garage doors. The old doors are wood and are uninsulated. States that the exterior framing would stay the same.

Schmiedeke: States that she would like to see the windows in the new garage doors.

Stevenson: States that the modern type door should not replicate the historic door. Advised of the recessed framed door with windows as a possibility. Advised of what the application process will entail.

### **220 S Huron**

Applicant: Marla and Joe Queen- owner (present)



Discussion: States that there is an issue with the front steps. They are slate underneath the Trex material that was placed over them about one year ago. The slate underneath the Trex is flaking off. They attempted to repair them. States that new slate steps would cost too much and the fix and the Trex over then only lasted one year. They are looking for suggestions for new options for the steps. They would like to retine the cheek walls around the steps.

Schmiedeke: States that the real issue is that moisture seems to be an issue for this part of the property and they may want to look into that.

Stevenson: States that the options for concrete, sandstone or wood are possible but that the actual product is up to the applicant.

### **ADMINISTRATIVE APPROVALS- None**

### **OTHER BUSINESS**

#### **Thompson Block Review**

The HDC discusses the final plans for the Thompson Block that were submitted to the building department. The HDC originally approved the plans back in 2014 and the building department is looking for the HDC to confirm that the plans are the same. Staff advises that the plans appear to be the same other than the doors at the rear of the property no longer appear to have windows but seem to be solid doors now. Stevenson: confirms that is the HDC is satisfied.

#### **Property Monitoring**

Staff advises that there are no updates on property monitoring at this time.

### **AUDIENCE PARTICIPATION ON NON-AGENDA ITEMS –none**

### **HOUSEKEEPING BUSINESS**

#### **Approval of the minutes of September 8, 2015**

Motion: Pettit (second: Lindsay) moves to approve the minutes as submitted.

Approval: Unanimous. Motion carries.

### **ADJOURNMENT**

Motion: Pettit (second: Lindsay) moves to adjourn.

Approval: Unanimous. Motion carries.

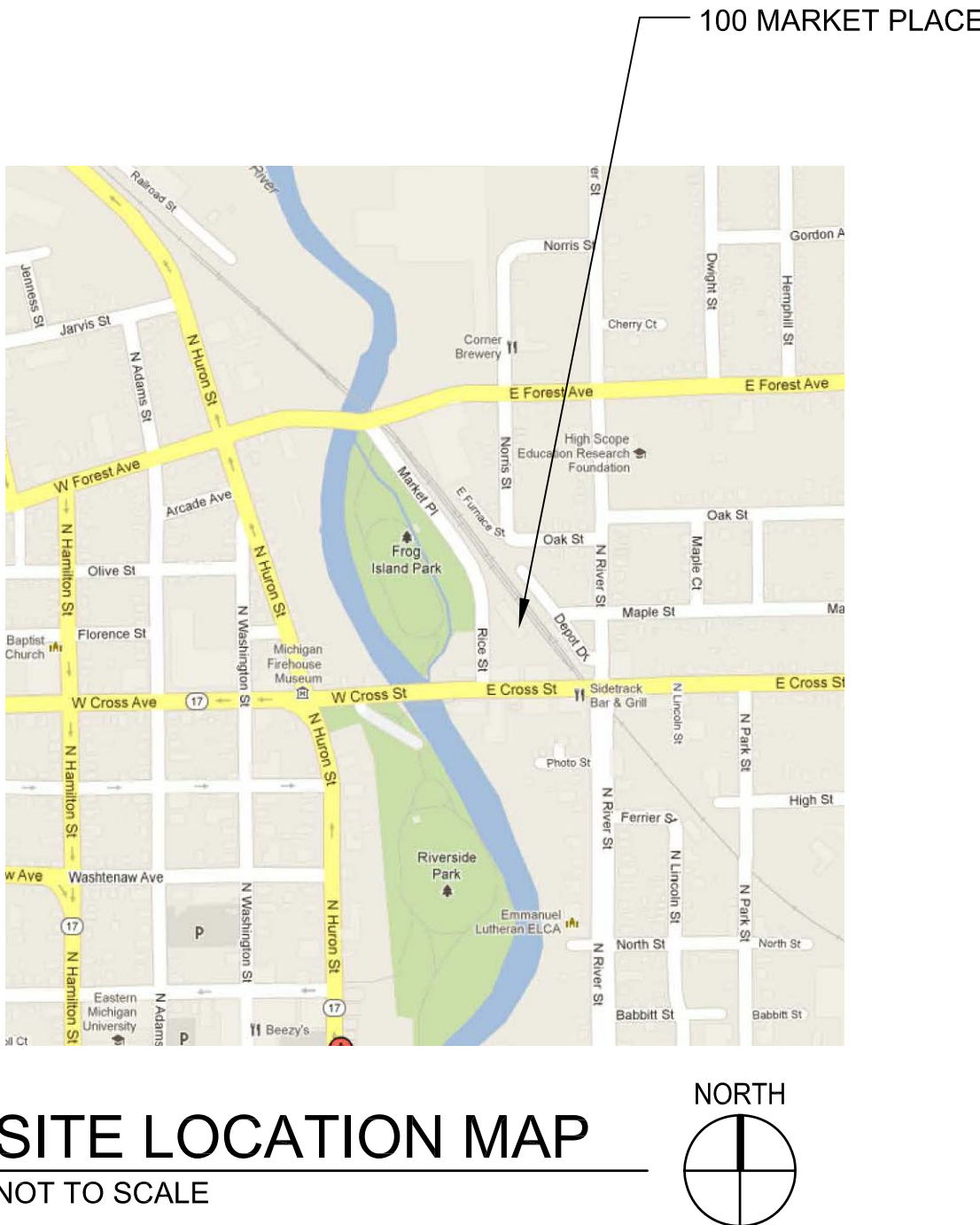
### **MEETING ADJOURNED AT 9:26 pm**



# YPSILANTI FREIGHT HOUSE

YPSILANTI, MICHIGAN  
QEA PN 31300600

CONSTRUCTION DOCUMENTS  
30 APRIL 2015



## DRAWING LIST

| ARCHITECTURAL |                                              | MECHANICAL |                                    |
|---------------|----------------------------------------------|------------|------------------------------------|
| G001          | GENERAL NOTES, ABBREVIATION LEGEND & SYMBOLS | M101       | FLOOR PLAN - PLUMBING              |
| A101          | FLOOR PLAN, ENLARGED FLOOR PLAN              | M201       | MECHANICAL SCHEDULES               |
| A102          | ROOF PLAN & DETAILS                          | M301       | MECHANICAL SCHEDULES               |
| A200          | BUILDING SECTION                             | ELECTRICAL |                                    |
| A701          | INTERIOR ELEVATIONS & DOOR SCHEDULE          | E101       | FLOOR PLAN - ELECTRICAL DEMOLITION |
|               |                                              | E201       | FLOOR PLAN - ELECTRICAL            |
|               |                                              | E301       | ELECTRICAL SPECIFICATIONS          |
|               |                                              | PLUMBING   |                                    |
|               |                                              | P101       | FLOOR PLANS - PLUMBING             |
|               |                                              | P201       | PLUMBING SCHEDULES AND DETAILS     |

### CODE SUMMARY

APPLICABLE CODES:

MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS 2012, LEVEL 2 ALTERATION

CONSTRUCTION TYPE: IIIB

BUILDING HEIGHT: 28 FEET ACTUAL, 75 FEET ALLOWABLE PER 504.2 MBC 2012

BUILDING STORIES: 1 STORY ACTUAL, 3 STORIES ALLOWABLE PER 504.2 MBC 2012

USE GROUP: A-2

TOTAL BUILDING AREA: 5884 SF ACTUAL, 9,500 SF ALLOWABLE PER TABLE 503, ADDITIONAL INCREASES NOT CALCULATED AS ADDITIONAL SQUARE FOOTAGE IS NOT REQUIRED.

TYPE IIIB - EXTERIOR WALLS ARE MADE OF NON-COMBUSTIBLE MATERIALS.

TABLE 601 MBC 2009 - EXTERIOR BEARING WALLS SHALL HAVE 2 HR FIRE RESISTANCE RATING

EXTERIOR MASONRY BEARING WALLS ARE CONSTRUCTED OF THREE WYTHES OF BRICK AND MEET THE 2 HR FIRE-RESISTANCE RATING REQUIREMENT BASED ON TABLE 722.4.1(1) MBC 2012

FIRE SUPPRESSION: CURRENTLY UNSPRINKLERED, WILL BE 100% SPRINKLERED (NFPA-13)

MEANS OF EGRESS: TWO MEANS OF EGRESS ARE REQUIRED AND PROVIDED. MAX TRAVEL DISTANCE = 200 FT

DESIGN OCCUPANT LOAD:

GREAT HALL = 340 OCCUPANTS

VESTIBULE = 42 OCCUPANTS

CAFÉ = 51 OCCUPANTS

SERVING AREA = 1 OCCUPANT

TOTAL = 434 OCCUPANTS

| Plumbing Fixture Requirements: Michigan Plumbing Code 2012     |               |               |            |       |                       |                       |                    |
|----------------------------------------------------------------|---------------|---------------|------------|-------|-----------------------|-----------------------|--------------------|
| Provisioning Requirements by Occupancy (MBC 2012, Table 403.1) |               |               |            |       |                       |                       |                    |
| Use Group                                                      | Water Closets |               | Lavatories |       | Bathrooms/<br>Showers | Drinking<br>Fountains | Other              |
|                                                                | Men           | Women         | Men        | Women |                       |                       |                    |
| A-2 (Restaurant/Banquet Hall)                                  | 1 per 75      | 1 per 75      | 1 per 200  |       | NR                    | 1 per 500             | 1 service sink     |
| Occupant Loads Per Floor, By Use Group                         |               |               |            |       |                       |                       |                    |
| Floor                                                          | Use Group     | Occupant Load | Men        | Women | Men                   | Women                 | Drinking Fountains |
| Great Hall (Banquet Hall)                                      | A-2           | 340           | 2.27       | 2.27  | 0.85                  | 0.85                  | 0.88               |
|                                                                | A-2           | 42            | 0.28       | 0.28  | 0.105                 | 0.105                 | 0.08               |
| Lobby                                                          | A-2           | 52            | 0.35       | 0.35  | 0.13                  | 0.13                  | 0.10               |
| Café (Restaurant)                                              | A-2           | 52            | 0.35       | 0.35  | 0.13                  | 0.13                  | 0.10               |
| Minimum Requirements for Plumbing Fixtures                     |               |               |            |       |                       |                       |                    |
| Floor                                                          | Water Closets |               | Lavatories |       | Bathrooms/<br>Showers | Drinking<br>Fountains | Other              |
|                                                                | Men/Unl       | Women         | Men        | Women |                       |                       |                    |
| Totals                                                         | 3             | 3             | 2          | 2     | NR                    | 1                     | 1 service sink     |

## PROJECT TEAM

### CLIENT:

PETER MURDOCK  
CITY OF YPSILANTI  
1 SOUTH HURON STREET  
YPSILANTI, MI 48197

### ARCHITECT:

QUINN EVANS / ARCHITECTS  
219 1/2 N. MAIN STREET  
ANN ARBOR, MICHIGAN 48104  
PH: 734.663.5888  
FAX: 734.663.5044

### M/E/P ENGINEER:

MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS  
1415 GOLDSMITH  
PLYMOUTH, MI 48170  
PH: 734.454.5516  
FAX: 734.454.5517



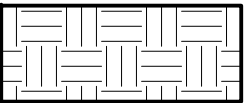
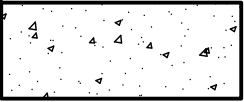
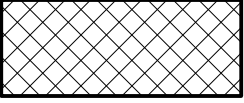
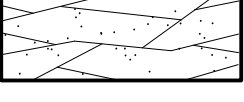
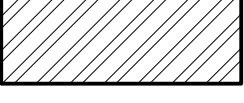
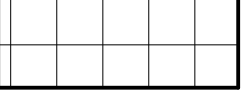
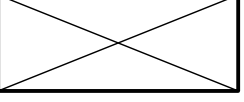
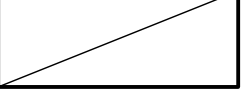
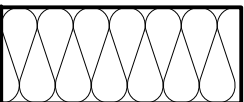
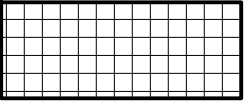
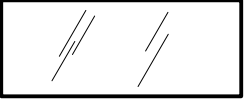
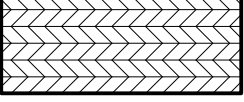
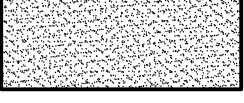
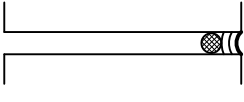
QUINN EVANS  
ARCHITECTS



|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| P |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| N |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| M |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| L |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| K |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| J |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| H |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| G |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| F |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| E |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| D |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| C |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| B |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| A |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |

MATERIALS LEGEND

(as necessary)

|                                                                                     |                                      |
|-------------------------------------------------------------------------------------|--------------------------------------|
|    | EXISTING STRUCTURE                   |
|    | EARTH                                |
|    | CONCRETE                             |
|    | CMU                                  |
|    | MASONRY                              |
|    | STONE                                |
|    | CERAMIC TILE                         |
|    | WOOD - CONT. FRAMING                 |
|    | WOOD - BLOCKING INTERRUPTED OR SHIMS |
|    | INSULATION - BATT                    |
|    | INSULATION - RIGID                   |
|    | GLASS                                |
|  | PLYWOOD, PARTICLE BD, OSB            |
|  | GYPSUM WALL BOARD OR GROUT           |
|  | WOOD - FINISH                        |
|  | SEALANT AND BACKER ROD               |
|  | CARPET                               |

ABBREVIATIONS

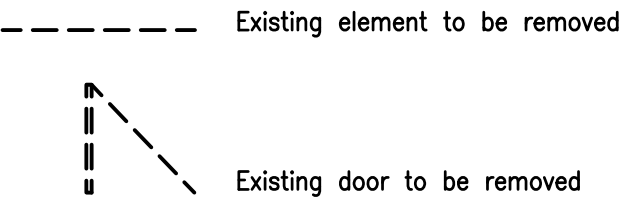
|        |                              |
|--------|------------------------------|
| ACP    | Acoustical Ceiling Panel     |
| AFF    | Above Finish Floor           |
| ADA    | American w/Disabilities Act  |
| ARCH   | Architect(ural)              |
| A/V    | Audio/Visual                 |
| BF     | Barrier Free                 |
| BFLD   | Barrier Free Lifting Device  |
| BTWN   | Between                      |
| BLDG   | Building                     |
| CJ     | Control Joint                |
| CLG    | Ceiling                      |
| CLR    | Clear                        |
| CONC   | Concrete                     |
| CORR   | Corridor                     |
| CONST  | Construction                 |
| CONT   | Continuous                   |
| CPT    | Carpet                       |
| CT     | Ceramic Tile                 |
| DIA    | Diameter                     |
| DS     | Downspout                    |
| DN     | Down                         |
| DWG    | Drawing                      |
| (E)    | Existing                     |
| EA     | Each                         |
| EJ     | Expansion Joint              |
| ELEC   | Electrical                   |
| EL     | Elevation                    |
| ELEV   | Elevator                     |
| EQUIP  | Equipment                    |
| EQ     | Equal                        |
| EXIST  | Existing                     |
| EW     | Electric Water Cooler        |
| FD     | Floor Drain                  |
| FEXT   | Fire Extinguisher            |
| FEC    | Fire Extinguisher Cabinet    |
| FRR    | Fire Resistance Rating/Rated |
| GA     | Gauge or Gage                |
| GC     | General Contractor           |
| GI     | Galvanized Iron              |
| GWB    | Gypsum Wallboard             |
| GYP BD | Gypsum Board                 |
| HC     | Hollow Core                  |
| HM     | Hollow Metal                 |
| HORIZ  | Horizontal                   |
| HT     | Height                       |
| ID     | Inside Diameter              |
| JT     | Joint                        |
| LAM    | Laminate                     |
| LAV    | Lavatory                     |
| LINO   | Linoleum                     |
| LVL    | Laminated Veneer Lumber      |
| MAX    | Maximum                      |
| MECH   | Mechanical                   |
| MFR    | Manufacturer                 |
| MIN    | Minimum                      |
| MO     | Masonry Opening              |
| (N)    | New                          |
| NA     | Not Applicable               |
| NIC    | Not in Contract              |
| NOM    | Nominal                      |
| NTS    | Not to Scale                 |
| OC     | On Center                    |
| OD     | Outside Diameter             |
| OPG    | Opening                      |
| OPP    | Opposite                     |
| PLAS   | Plaster                      |
| PR     | Pair                         |
| PRE    | Prefinished                  |
| PT     | Point                        |
| PTD    | Painted                      |
| R      | Riser                        |
| (R)    | Remove                       |
| RB     | Resilient Base               |
| RD     | Roof Drain                   |
| RE     | Refer (to)                   |
| REFIN  | Refinish                     |
| REQD   | Required                     |
| RES    | Resilient                    |
| RO     | Rough Opening                |
| RTU    | Roof Top Unit                |
| SC     | Solid Core                   |
| SF     | Square Feet                  |
| SIM    | Similar                      |
| SND    | Sanitary Napkin Disposal     |
| SPEC   | Specifications               |
| SS     | Stainless Steel              |
| ST     | Stain                        |
| STD    | Standard                     |
| STL    | Steel                        |
| STN    | Stone                        |
| STR    | Structural                   |
| SAC    | Suspended Acoustical Ceiling |
| T      | Tread                        |
| TOB    | Top of Beam - Steel          |
| TOC    | Top of Concrete              |
| TOW    | Top of Wall                  |
| TYP    | Typical                      |
| UNO    | Unless Noted Otherwise       |
| UL     | Underwriters Laboratory      |
| UNFIN  | Unfinished                   |
| VCT    | Vinyl Composition Tile       |
| VIF    | Verify in Field              |
| VTR    | Vent Through Roof            |
| W/     | With                         |
| WC     | Water Closet                 |
| WR     | Water Resistant              |
| WWF    | Welded Wire Fabric           |

PLAN LEGENDS

DEMOLITION PLAN  
(refer to D series drawings)

GENERAL NOTE(S)

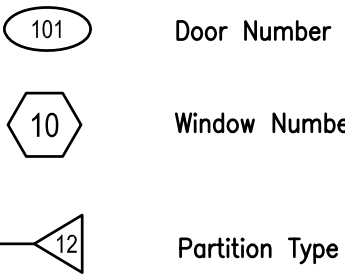
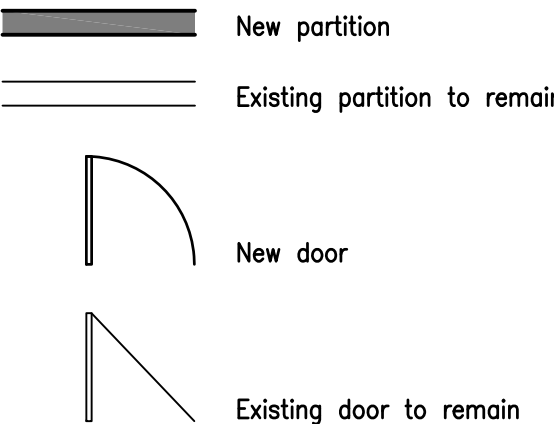
If necessary.



FLOOR PLAN  
(refer to A1 series drawings)

GENERAL NOTE(S)

Refer to specifications for all schedules.



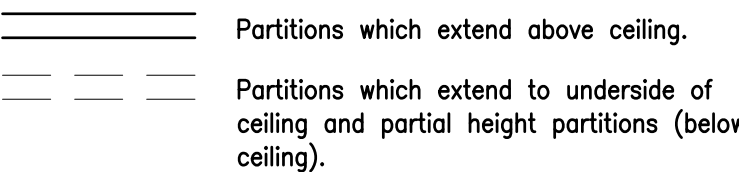
REFLECTED CEILING & LIFE SAFETY PLANS  
(refer to A & G series drawings)

GENERAL NOTE(S)

Items shown on the architectural drawings are to be located per the architectural drawings. Not all items are shown on the architectural drawings. Coordinate with mechanical & electrical drawings for location, mounting conditions, quantities and types of all lights, grilles, diffusers, exist signs, and all miscellaneous items.

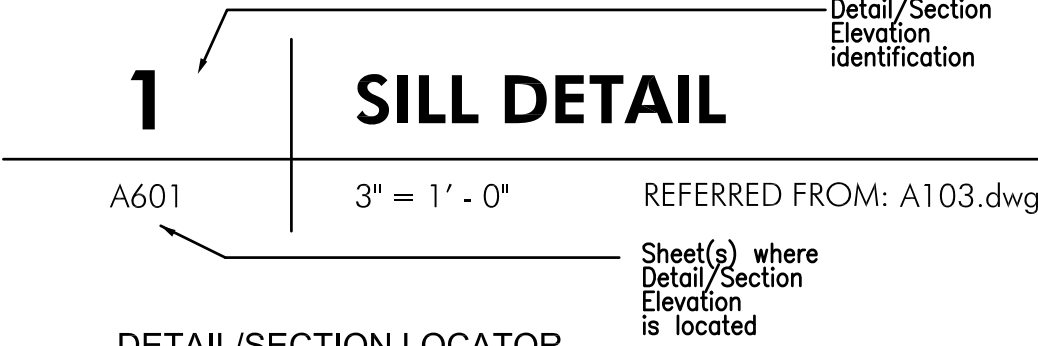
Refer to specifications for schedules.

PARTITION HEIGHT INDICATOR

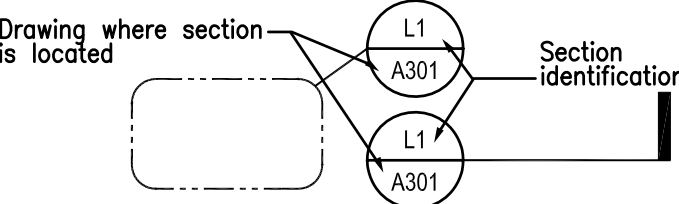


SYMBOL LEGEND

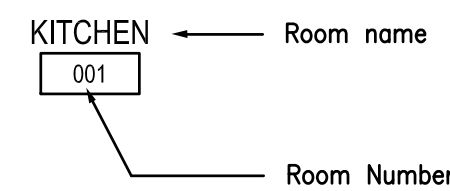
DETAIL/SECTION/ELEVATION TITLE



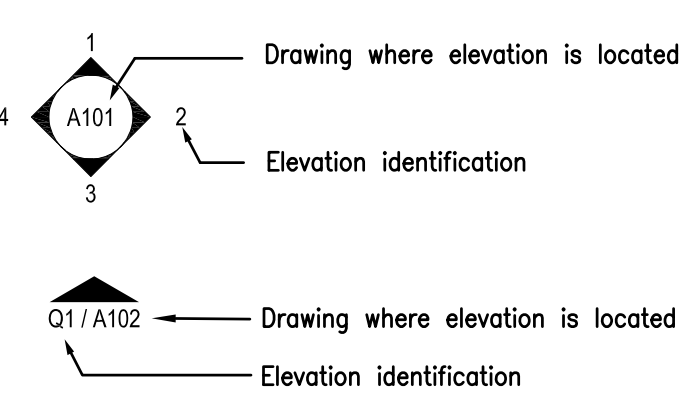
DETAIL/SECTION LOCATOR



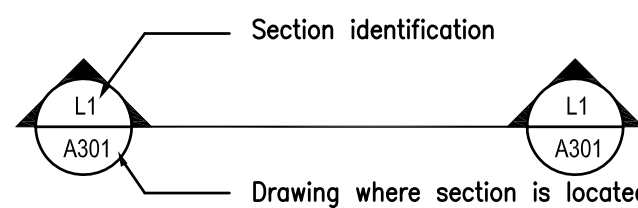
ROOM TAG



ELEVATION INDICATOR



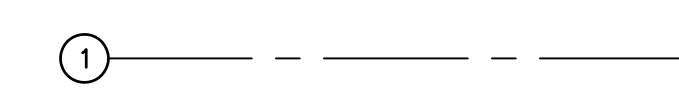
BUILDING SECTION LOCATOR



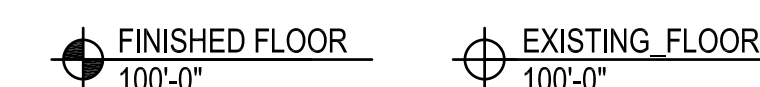
KEYNOTE INDICATOR



COLUMN CENTER LINE/IDENTIFIER

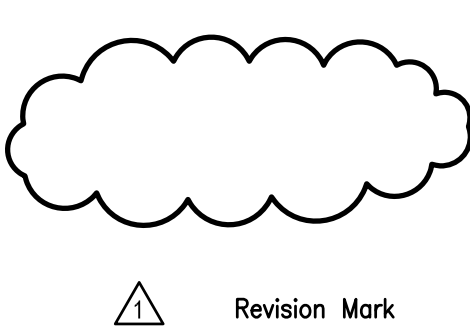


ELEVATION INDICATOR



GENERAL LEGEND

REVISION INDICATION



GENERAL NOTES

- THIS PROJECT INVOLVES THE REHABILITATION OF A HISTORIC BUILDING. TREAT THE BUILDING RESPECTFULLY. CAREFULLY RESPECT EXISTING CONDITIONS AND TREAT EXISTING MATERIALS AS IRREPLACEABLE. DO NOT REMOVE, ALTER OR DISFIGURE ANY EXISTING MATERIALS, ELEMENTS OR FINISHES UNLESS INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, OR DIRECTED BY THE ARCHITECT.
- CONTRACTOR IS RESPONSIBLE FOR ALL FEES AND PERMITS.
- DO NOT SCALE THE DRAWINGS. OBTAIN ANY REQUIRED DIMENSIONAL INFORMATION WHICH CANNOT BE INFERRED FROM INFORMATION GIVEN IN THE CONSTRUCTION DOCUMENTS FROM THE ARCHITECT.
- DO NOT SEPARATE DRAWINGS. THE SCOPE OF WORK FOR ALL TRADES IS DOCUMENTED BY THE COMPREHENSIVE INFORMATION SHOWN THROUGHOUT THE CONSTRUCTION DOCUMENTS.
- ALL BIDDERS SHALL VISIT THE PROJECT SITE TO OBTAIN FIRSTHAND FAMILIARITY WITH EXISTING CONDITIONS PRIOR TO SUBMITTING A BID.
- VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WITH WORK. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES FROM THE CONSTRUCTION DOCUMENTS DUE TO EXISTING CONDITIONS, HIDDEN CONDITIONS OR FOUND CONDITIONS WHICH WILL AFFECT THE WORK AND OBTAIN DIRECTION PRIOR TO PROCEEDING WITH WORK.
- PROVIDE ALL TEMPORARY SHORING, PROTECTION, AND SAFETY MEASURES REQUIRED TO PROTECT THE GENERAL PUBLIC, EXISTING CONSTRUCTION TO REMAIN, AND PERSONNEL DURING CONSTRUCTION. VERIFY STRUCTURAL SYSTEMS AND BEARING STRUCTURES PRIOR TO REMOVAL OF EXISTING CONSTRUCTION, AND PROVIDE TEMPORARY SUPPORTS TO PREVENT MOVEMENT OR COLLAPSE OF EXISTING CONSTRUCTION TO REMAIN. DO NOT REMOVE TEMPORARY SUPPORTS UNTIL FINAL STRUCTURAL SUPPORT SYSTEMS ARE IN PLACE AND READY TO ASSUME LOADS.
- ASSUME ALL WORK SHOWN TO BE NEW UNLESS OTHERWISE INDICATED.
- ASSUME ALL ANGLES IN NEW CONSTRUCTION TO BE 90 DEGREES UNLESS OTHERWISE INDICATED.

DIMENSIONING KEY

DIMENSIONING CRITERIA

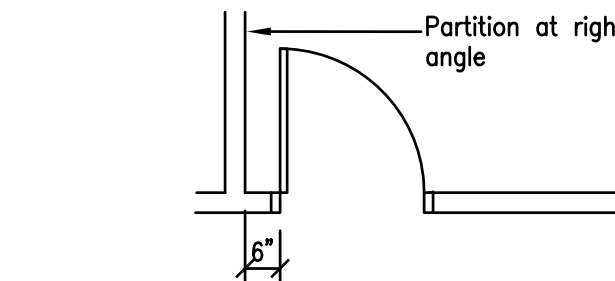
Dimensions for locating partitions and openings are generally established by the following criteria.

For openings in partitions and/or walls:

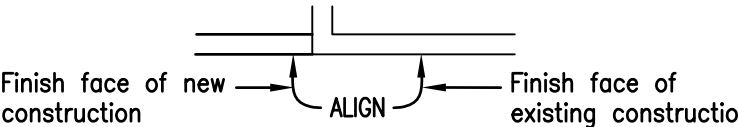
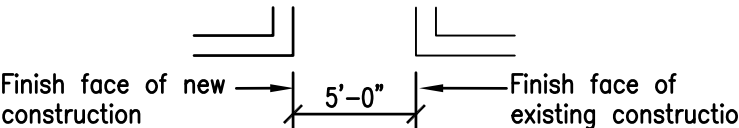
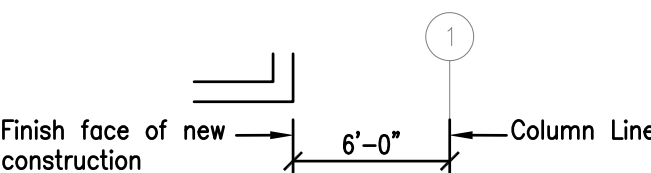
When an opening occurs at a column or grid line, no dimensions will be shown on the plans. The opening width will be established by either criteria or schedules.

When neither the jamb of a door or opening occurs at a column or gridline, or adjacent to a partition at a right angle, one jamb will be located dimensionally.

When one jamb is located by a partition at a right angle the following diagram applies. ONLY EXCEPTIONS TO THESE CRITERIA WILL BE DIMENSIONED.



DIMENSIONING SYSTEM (UNLESS OTHERWISE NOTED)



219 1/2 N MAIN STREET  
ANN ARBOR, MI 48104

V 734 663 5888  
F 734 663 5044

WWW.QUINNEVANS.COM

Ypsilanti  
Freight  
House

Ypsilanti, Michigan

QEA No. 31300600;  
Owner No. XXXX

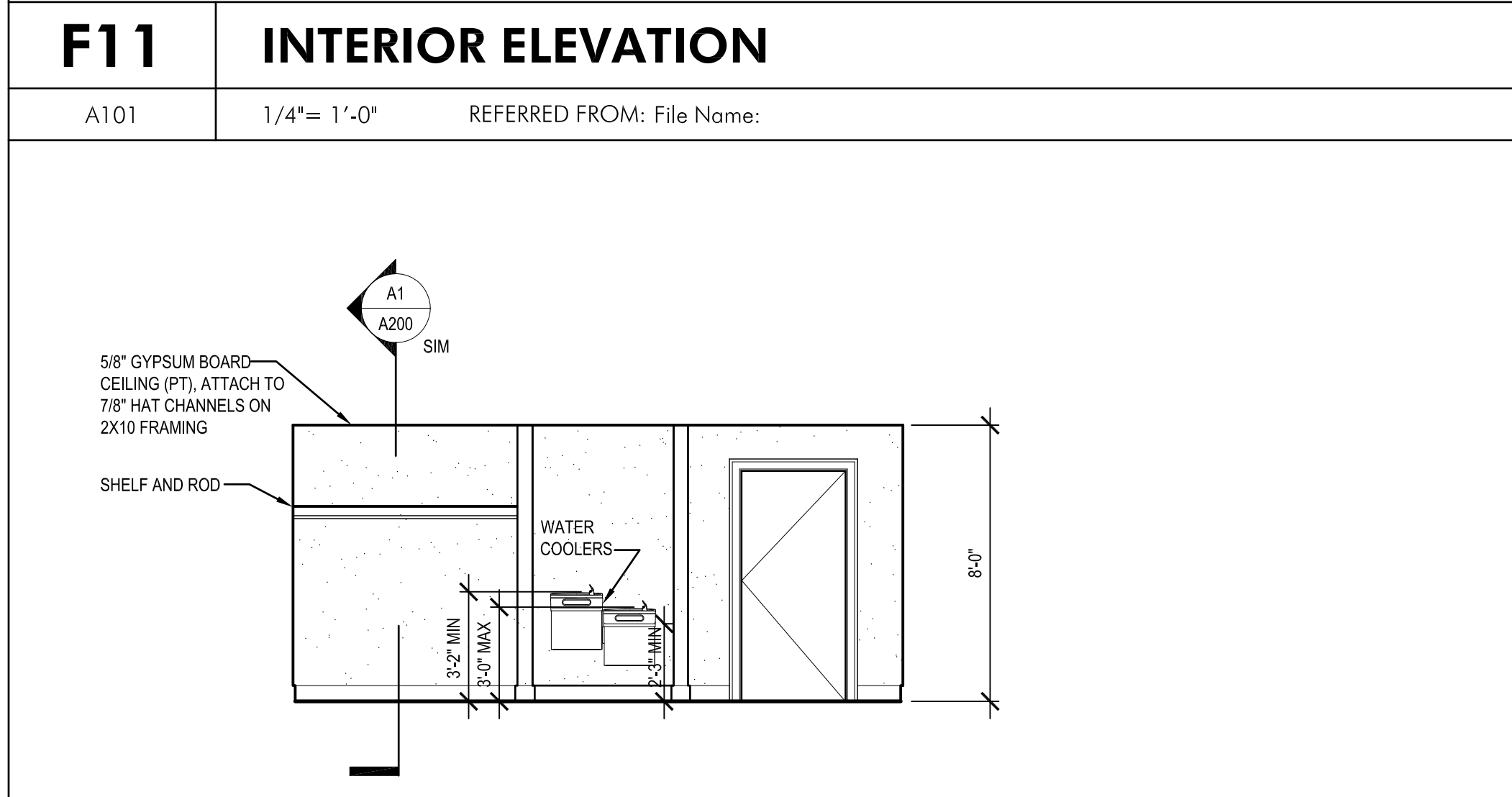
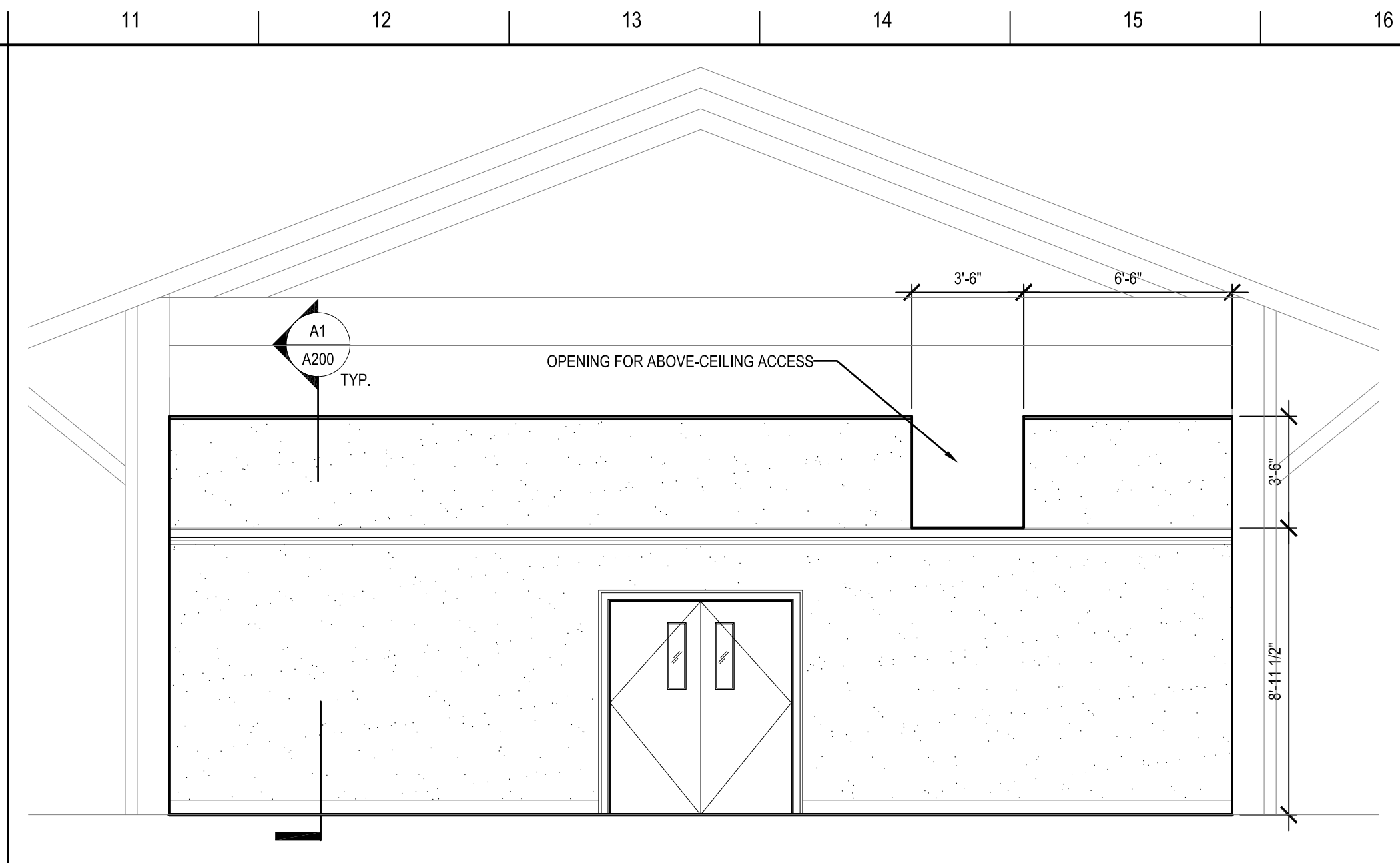
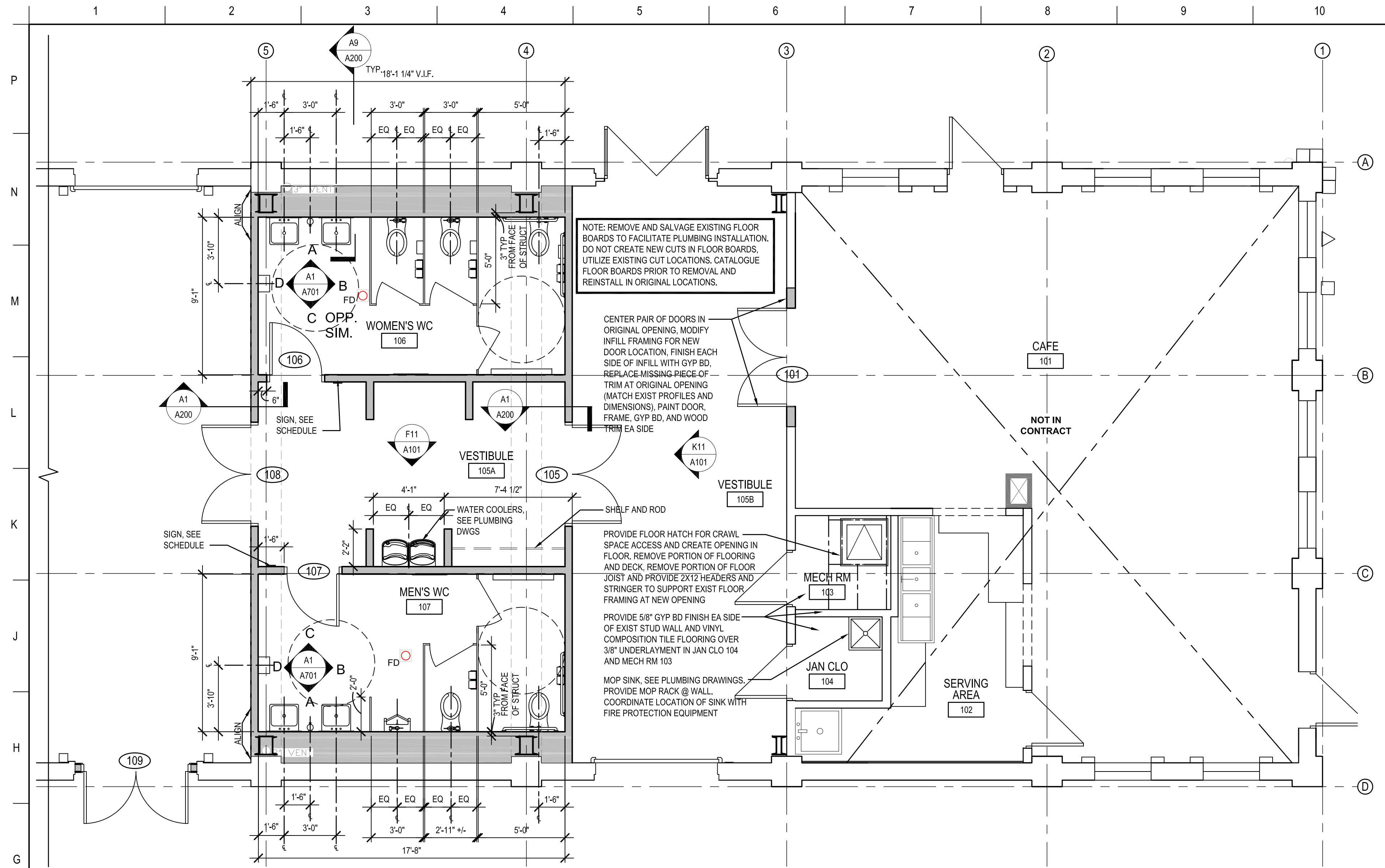
GENERAL  
NOTES  
ABBREVIATION  
LEGEND &  
SYMBOLS

|     |                  |         |
|-----|------------------|---------|
| NO. | TITLE            | DATE    |
| ___ | CONSTRUCTION SET | 4-30-15 |
| ___ |                  |         |
| ___ |                  |         |
| ___ |                  |         |
| ___ |                  |         |
| ___ |                  |         |
| ___ |                  |         |
| ___ |                  |         |

FILE NAME: File Name:

G001



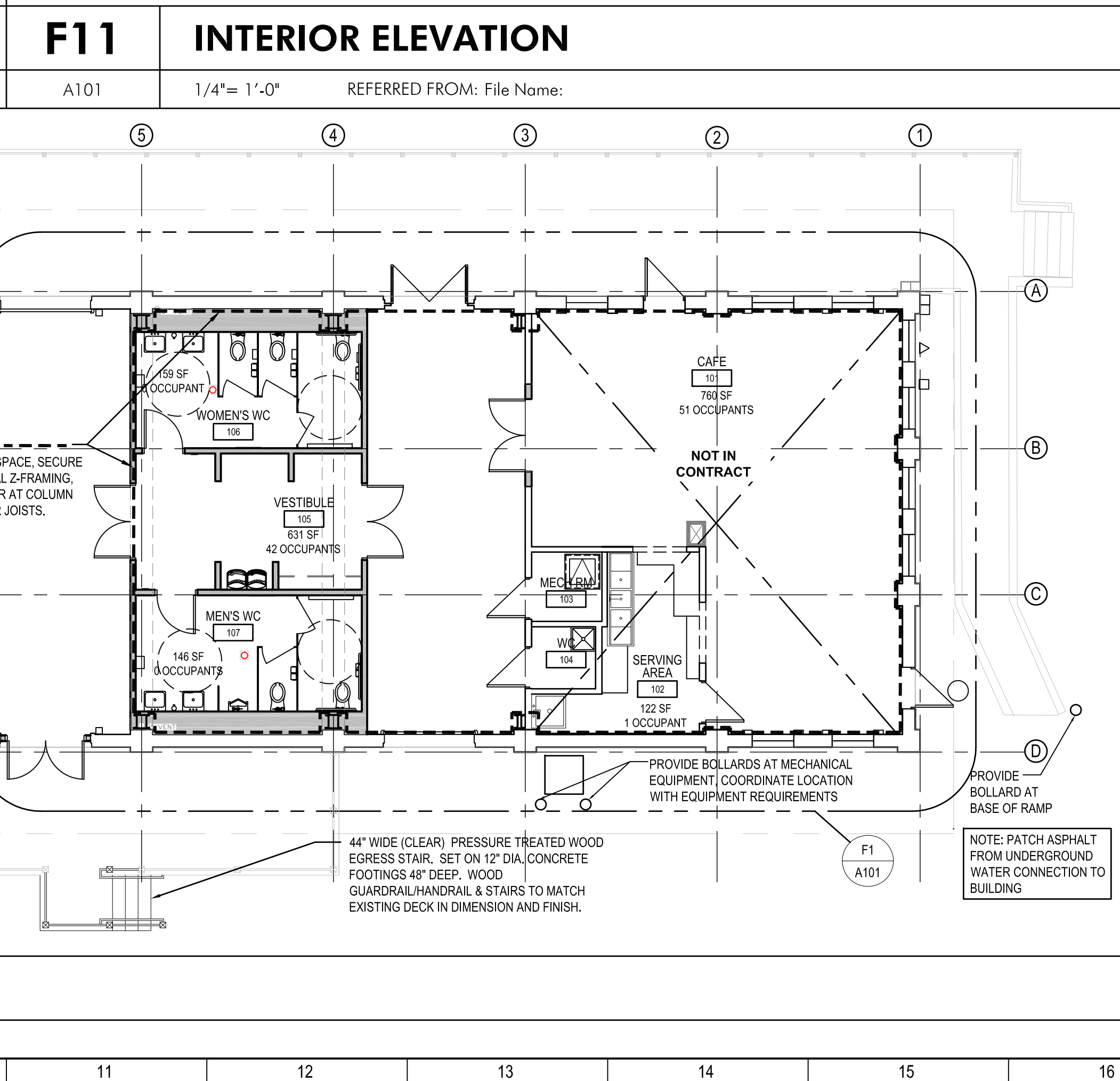
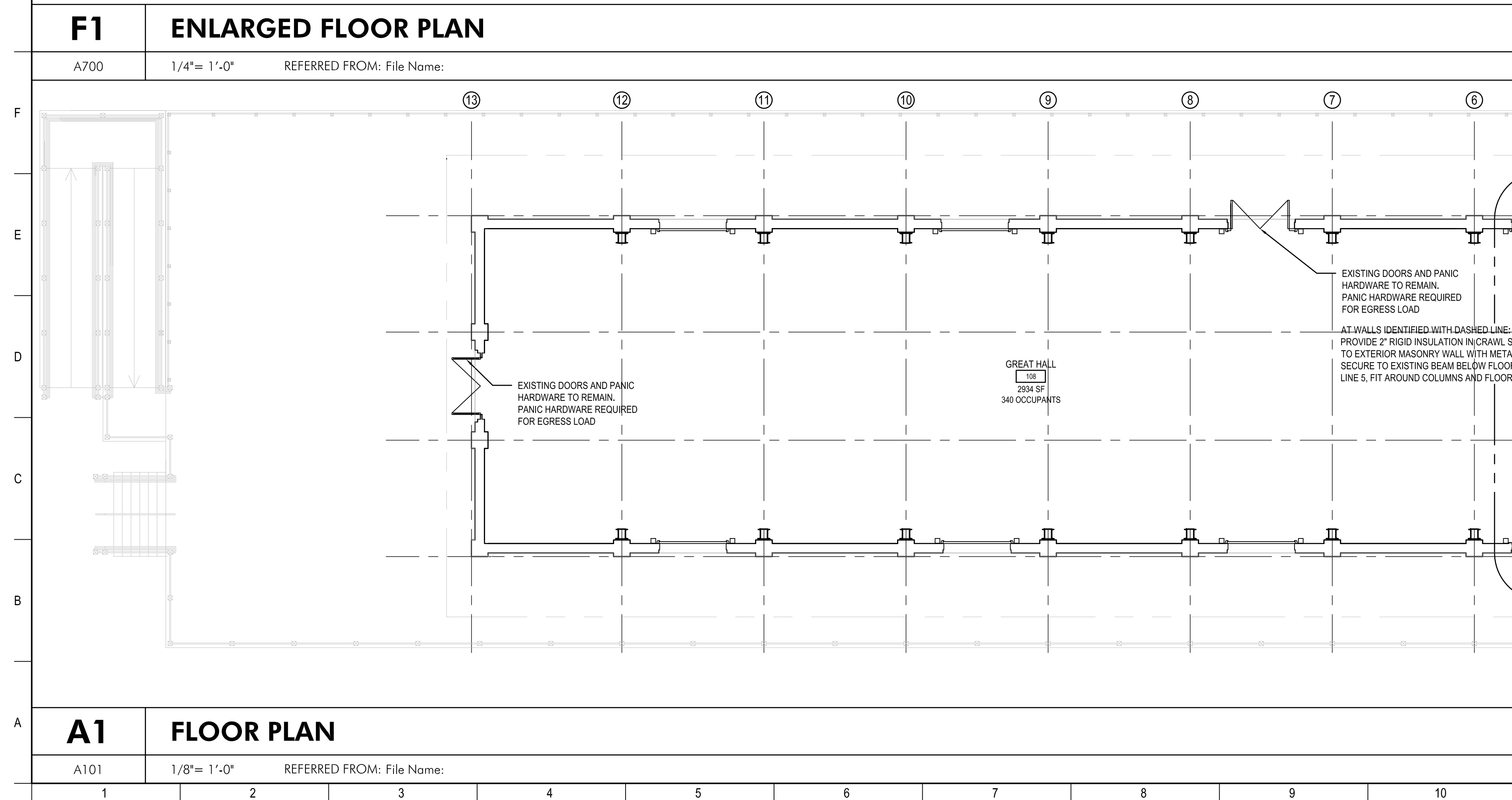


## Ypsilanti Freight House

Ypsilanti, Michigan

QEA No. 31300600;  
Owner No. XXXX

## FLOOR PLAN, ENLARGED PLAN

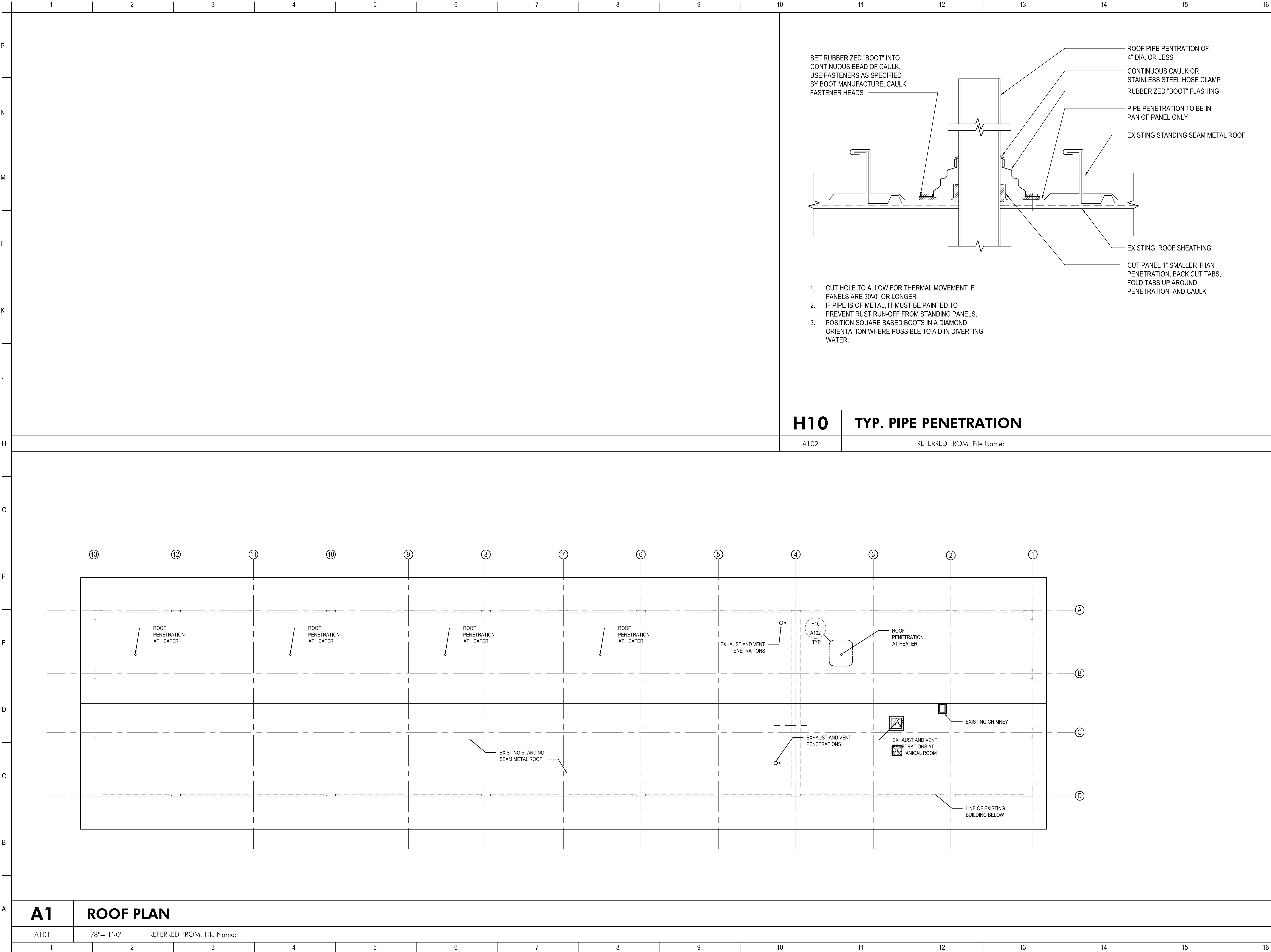


| NO. | TITLE            | DATE    |
|-----|------------------|---------|
| 1   | COSNTRUCTION SET | 4-30-15 |
| 2   |                  |         |
| 3   |                  |         |
| 4   |                  |         |
| 5   |                  |         |
| 6   |                  |         |
| 7   |                  |         |
| 8   |                  |         |
| 9   |                  |         |
| 10  |                  |         |
| 11  |                  |         |
| 12  |                  |         |
| 13  |                  |         |
| 14  |                  |         |
| 15  |                  |         |
| 16  |                  |         |

FILE NAME: File Name:

# A101





# Ypsilanti Freight House

Ypsilanti, Michigan

QEA No. 31300600;  
Owner No. XXXX

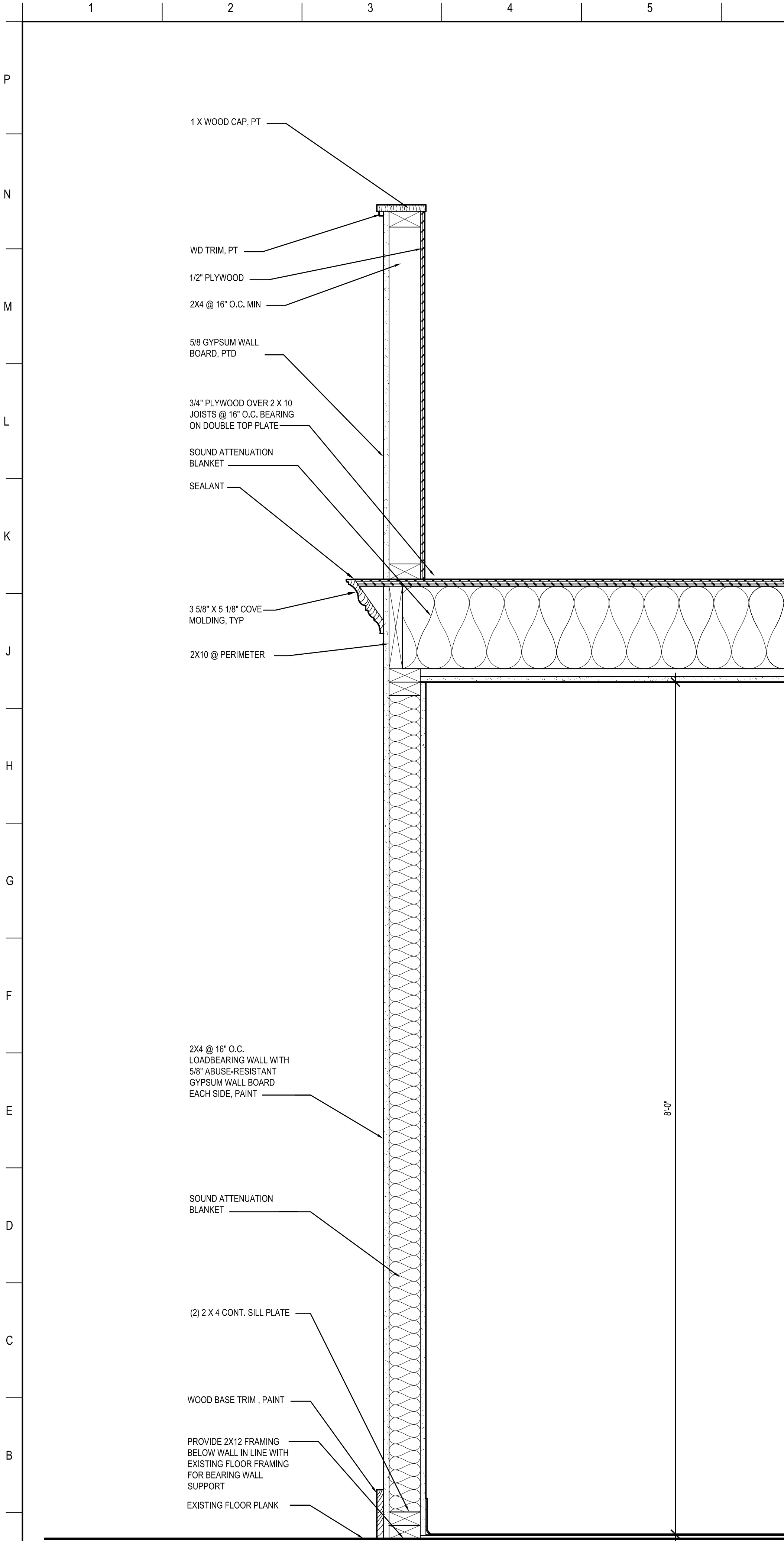
## ROOF PLAN & DETAILS

| NO. | TITLE            | DATE    |
|-----|------------------|---------|
|     | CONSTRUCTION SET | 4-30-15 |
|     |                  |         |
|     |                  |         |
|     |                  |         |
|     |                  |         |
|     |                  |         |

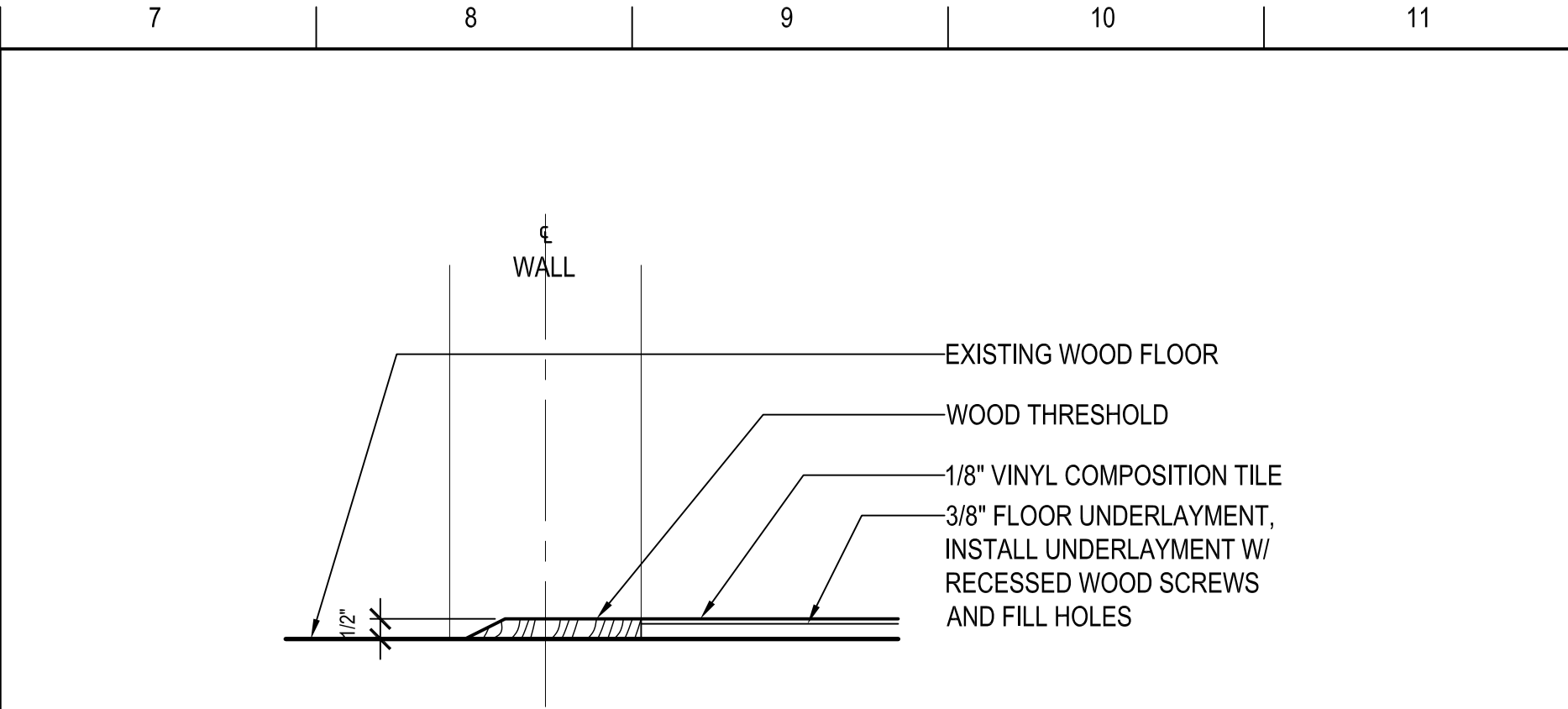
FILE NAME: File Name:

# A102

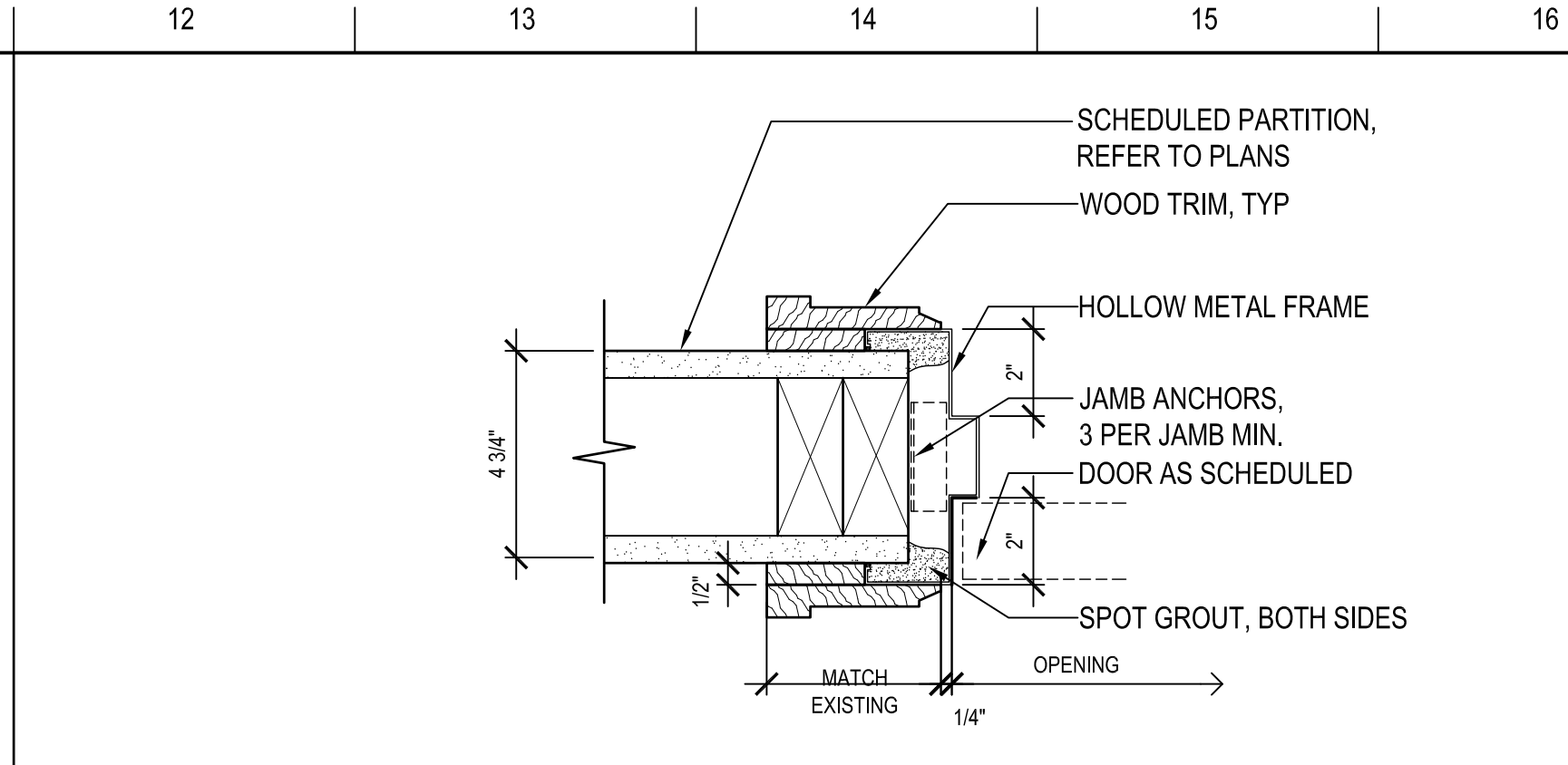




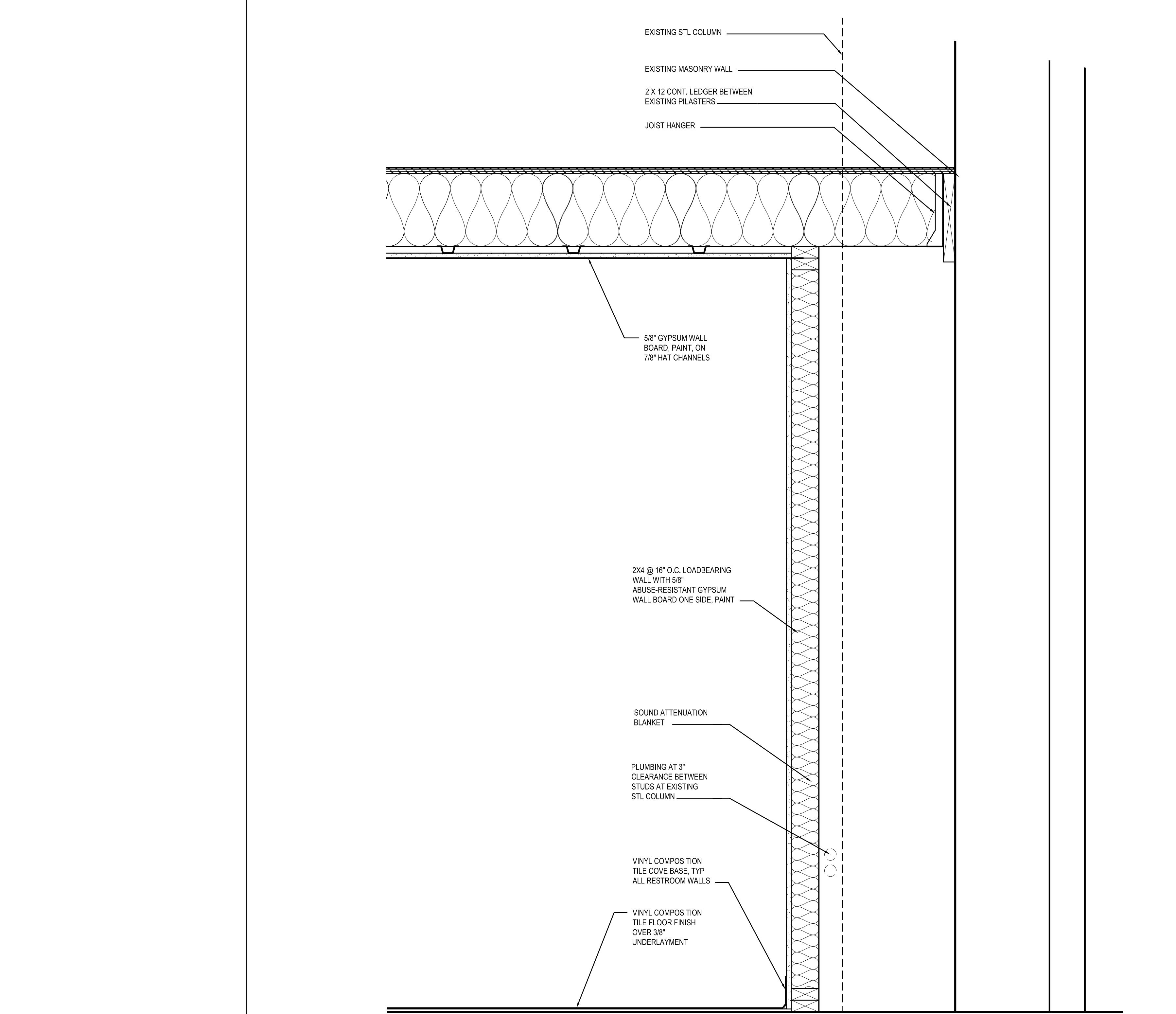
|           |                                         |
|-----------|-----------------------------------------|
| <b>A1</b> | <b>BUILDING SECTION</b>                 |
| A200      | 1 1/2"= 1'-0" REFERRED FROM: File Name: |



|           |                                     |
|-----------|-------------------------------------|
| <b>M7</b> | <b>THRESHOLD DETAIL @ RESTROOMS</b> |
| A200      | 3"= 1'-0" REFERRED FROM: File Name: |



|            |                                     |
|------------|-------------------------------------|
| <b>M12</b> | <b>JAMB DETAIL, TYP - HEAD, SIM</b> |
| A200       | 3"= 1'-0" REFERRED FROM: File Name: |



|           |                                         |
|-----------|-----------------------------------------|
| <b>A9</b> | <b>BUILDING SECTION</b>                 |
| A200      | 1 1/2"= 1'-0" REFERRED FROM: File Name: |

# Ypsilanti Freight House

Ypsilanti, Michigan

QEA No. 31300600;  
Owner No. XXXX

## BUILDING SECTION

| NO. | TITLE            | DATE    |
|-----|------------------|---------|
| ___ | CONSTRUCTION SET | 4-30-15 |
| ___ |                  |         |
| ___ |                  |         |
| ___ |                  |         |
| ___ |                  |         |
| ___ |                  |         |
| ___ |                  |         |

FILE NAME: A200.DWG



P

N

M

L

K

J

H

G

F

E

D

C

B

A

| DOOR AND FRAME SCHEDULE |                              |      |          |        |            |              |           |          |            |      |                     |                               |
|-------------------------|------------------------------|------|----------|--------|------------|--------------|-----------|----------|------------|------|---------------------|-------------------------------|
| GENERAL                 |                              |      |          |        |            |              | DOOR      |          | FRAME      |      | HARD<br>WARE<br>SET | REMARKS                       |
| DOOR NO.                | NEW/<br>MODIFIED<br>EXISTING | FROM | TO       | RATING | WIDTH      | HEIGHT       | THICKNESS | TYPE     | FINIS<br>H | TYPE | FINISH              |                               |
| 101                     | NEW                          | 101  | 105      | N.A.   | 2 @ 3'-0"  | 6'-8"        | 1-3/4"    | HM/FLUSH | PNT        | HM   | PNT                 | 3 6"x24" VISION PANEL EA LEAF |
| 105                     | NEW                          | 108A | 108B     | N.A.   | 2 @ 2'-10" | 6'-8"        | 1-3/4"    | HM/FLUSH | PNT        | HM   | PNT                 | 3 6"x24" VISION PANEL EA LEAF |
| 106                     | NEW                          | 105  | 106      | N.A.   | 3'-0"      | 6'-8"        | 1-3/4"    | HM/FLUSH | PNT        | HM   | PNT                 | 2                             |
| 107                     | NEW                          | 105  | 107      | N.A.   | 3'-0"      | 6'-8"        | 1-3/4"    | HM/FLUSH | PNT        | HM   | PNT                 | 2                             |
| 108                     | NEW                          | 105  | 108      | N.A.   | 2 @ 2'-6"  | 6'-8"        | 1-3/4"    | HM/FLUSH | PNT        | HM   | PNT                 | 3 6"x24" VISION PANEL EA LEAF |
| 109                     | EXISTING                     | 108  | EXTERIOR | N.A.   | 2 @ 3'-0"  | 7'-0" V.L.F. | 2-1/4"    | WOOD     | PNT        | WD   | PNT                 | 4                             |

General notes:

- Contractor shall verify all existing field conditions and notify architect immediately if that which exists differs from that which is shown on drawings.
- All work to comply with current Federal, State and Local codes, laws and ordinances. The requirements of ICC/ANSI A117.1 and the Americans with disabilities act (ADA) are to be fully satisfied. All work shall meet the most stringent requirements of both including, but not limited to clearances, limitations, accessories, etc.
- These drawings are prepared in accordance with the limited services for which the architect was contracted. The architect makes no representation that the interpretation of these documents will result in complete compliance with the ADA.
- All doors required to be labeled shall be set in labeled frames and identified with UL label and be provided with approved self-closing devices and positive latching hardware.
- All designated exit doors shall be equipped with the required egress hardware.
- Furnish hardware as scheduled without substitution, alternates only as approved by owner.
- Provide Marshall Best Security Cylinders, Combined IC Cores and keys; keyed to Master System. Include key conference and key system schedule. Where "IC7" is indicated, furnish a keyed core and two cut keys for each locking device specified; plus six master keys and two control keys.
- Furnish and provide all necessary reinforcements, brackets, fasteners, spacers and fillers to provide a complete functioning opening.
- Provide complete shop drawings, submittals and cut sheets complying with DHI prescribed methods and vertical format double spaced hardware schedule.
- Hardware Sets:

Hardware Set 1-Non-rated door w/ push + pull set & Standard Deadbolt [Lock / Unlock]  
+Selective Hold Open Closer

- 3 ea. Butt Hinge BB81 4 ½ x 4 ½ NRP

1 ea. Pull Plate 1014-3B (mount prior to push plate)

1 ea. Push Plate 1001-3 (Mount over Pull fasteners)

1 ea. Door Closer 44CI x 44-2022 HO (Push side mount)

1 ea. Deadbolt MBT-K x IC7

1 ea. Wall stop 1298

1 ea. Kickplate K0050 10 x 1 ½' LDW B4E

Note: Mount Pull Plate prior to Push Plate to conceal thru-bolt fasteners
- 10B International

10B Trimco

10B Trimco

DB International

10B Trimco

10B Trimco

10B Trimco

Hardware Set 2-Non-rated door w/ push + pull set & Classroom Deadbolt [Lock / Unlock]

- 3 ea. Butt Hinge BB81 4 ½ x 4 ½ NRP

1 ea. Pull Plate 1014-3B (mount prior to push plate)

1 ea. Push Plate 1001-3 (Mount over Pull fasteners)

1 ea. Deadbolt MBT-S x IC7

1 ea. Door Closer 44CI RA (Pull side mount)

1 ea. Wall stop 1298

1 ea. Kickplate K0050 10 x 1 ½' LDW B4E

Note: Mount Pull Plate prior to Push Plate to conceal thru-bolt fasteners
- 10B International

10B Trimco

10B Trimco

DB International

10B Trimco

10B Trimco

10B Trimco

Hardware Set 3-Non-rated out-swing pair w/ SVR Panic Devices [Lock / Unlock]  
+Selective Hold Open Closers

- 6 ea. Butt Hinge BB81 4 ½ x 4 ½ NRP

1 ea. SVR Panic Device 5530S-EO

1 ea. SVR Panic Device 5530S-NL

1 ea. Cylinder MBS-ICR x IC7 (For NL operation)

2 ea. Offset Pull HG121 x A Mounting

2 ea. Door Closer 44CI x 44-2022 HO (Push side mount)

2 ea. Wall stop 1298

2 ea. Kickplate K0050 10 x 1 ½' LDW B4E

Note: Coordinate pull mounting and vertical rod mounting to avoid conflict. Minimum Side Width 3 ½'
- 10B International

10B International

10B International

10B Marshall Best

10B Hiawatha

DB International

10B Trimco

10B Trimco

Hardware Set 4-Non-rated out-swing pair w/ SVR Panic Devices [Lock / Unlock]

- 6 ea. Butt Hinge BB51 4 ½ x 4 ½ NRP

1 ea. SVR Panic Device 5530S-EO

1 ea. SVR Panic Device 5530S-NL

1 ea. Cylinder MBS-ICR x IC7 (For NL operation)

2 ea. Offset Pull HG121 x A Mounting

2 ea. Door Closer 44CI x 44-2023 (Push side mount)

2 ea. Floor stop 1209

2 ea. Kickplate K0050 10 x 1 ½' LDW B4E

1 ea. Threshold S205

2 ea. Sweep 353

1 set Perimeter Weatherstrip 807A

2 ea. Astragal Weatherstrip 103 x Door Height

Note: Coordinate pull mounting and vertical rod mounting to avoid conflict. Minimum Side Width 3 ½'
- 10B International

10B International

10B International

10B Marshall Best

10B Hiawatha

DB International

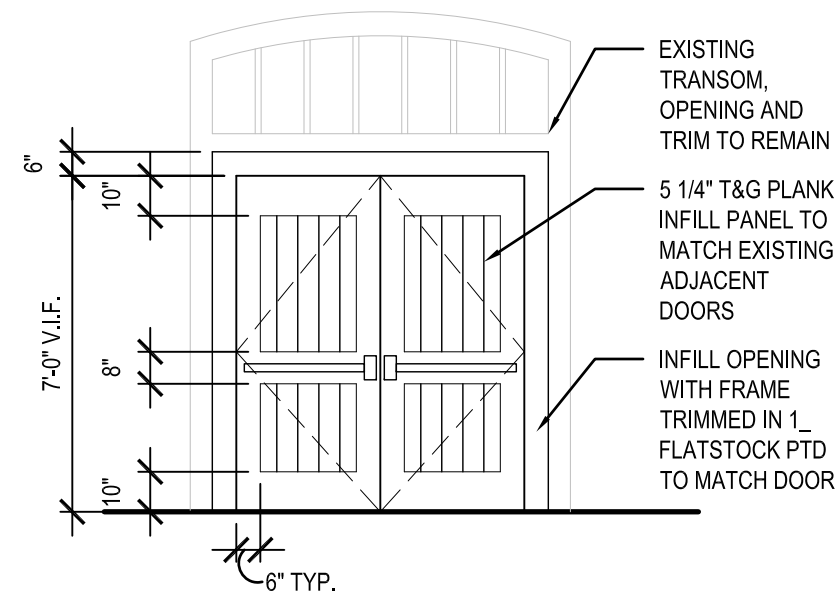
10B Trimco

DB Reese

DB Reese

DB Reese

DB Reese



DOOR 109

## F1 DOOR SCHEDULE

A700 REFERRED FROM:

| SIGN SCHEDULE |            |                                     |
|---------------|------------|-------------------------------------|
| TEXT          | GRAPHIC    | NOTE                                |
| WOMEN         | WOMEN, ADA | CENTERLINE OF SIGN TO BE 60" A.F.F. |
| MEN           | MEN, ADA   | CENTERLINE OF SIGN TO BE 60" A.F.F. |

### GENERAL NOTES:

- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO BEGINNING WORK.
- ALL FRAMING IS NEW (UNO).
- ALL DOOR/OPENING HEADERS TO BE (1) 4X12 WITH (2) JACK STUDS EACH END.
- PAINT COLORS TO BE SELECTED BY OWNER.

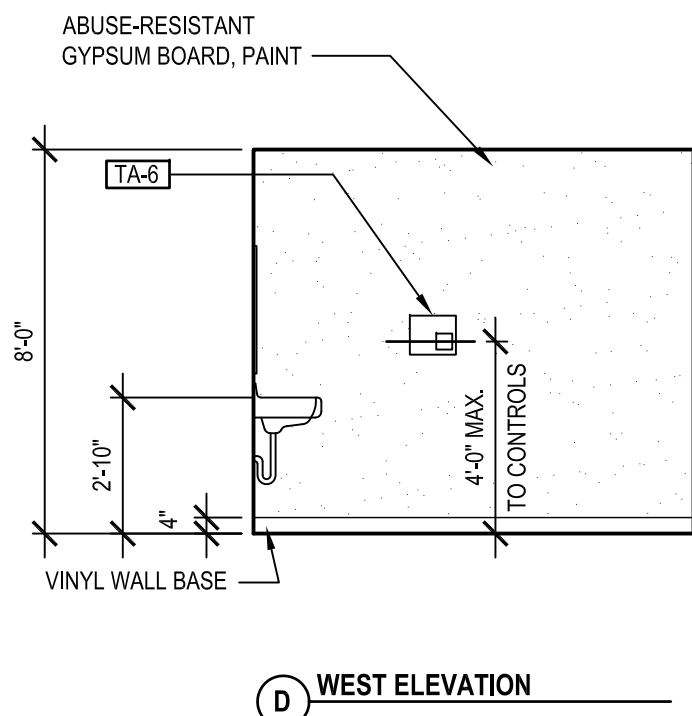
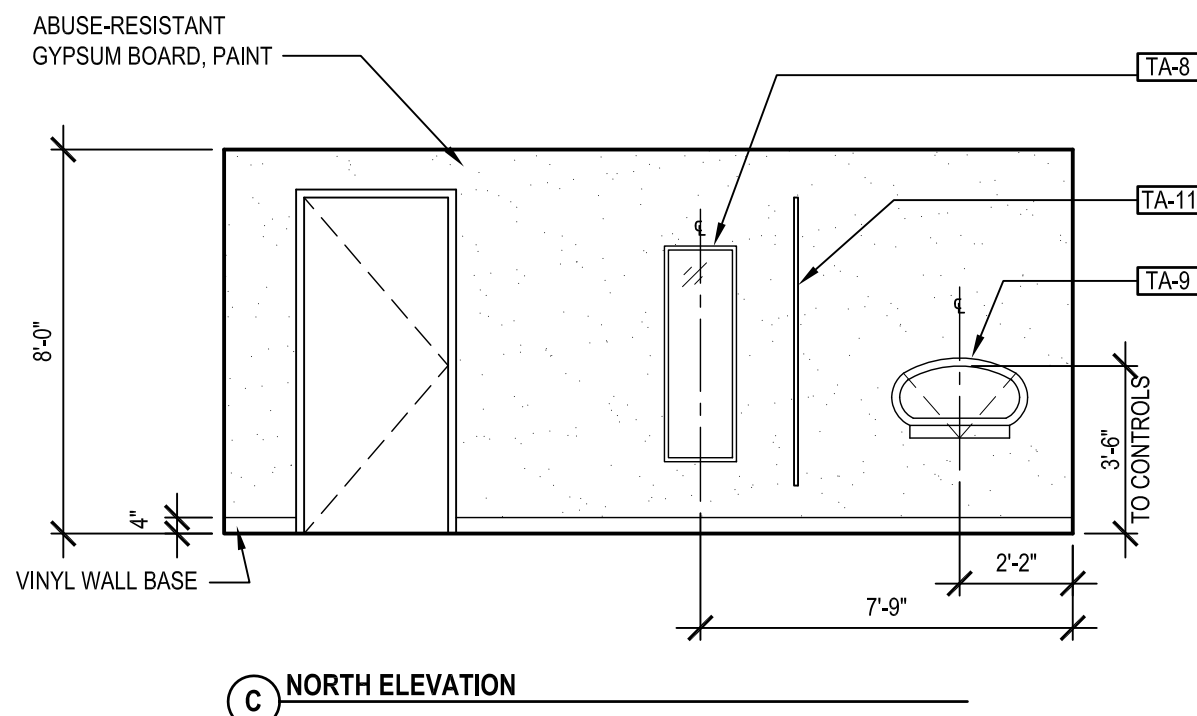
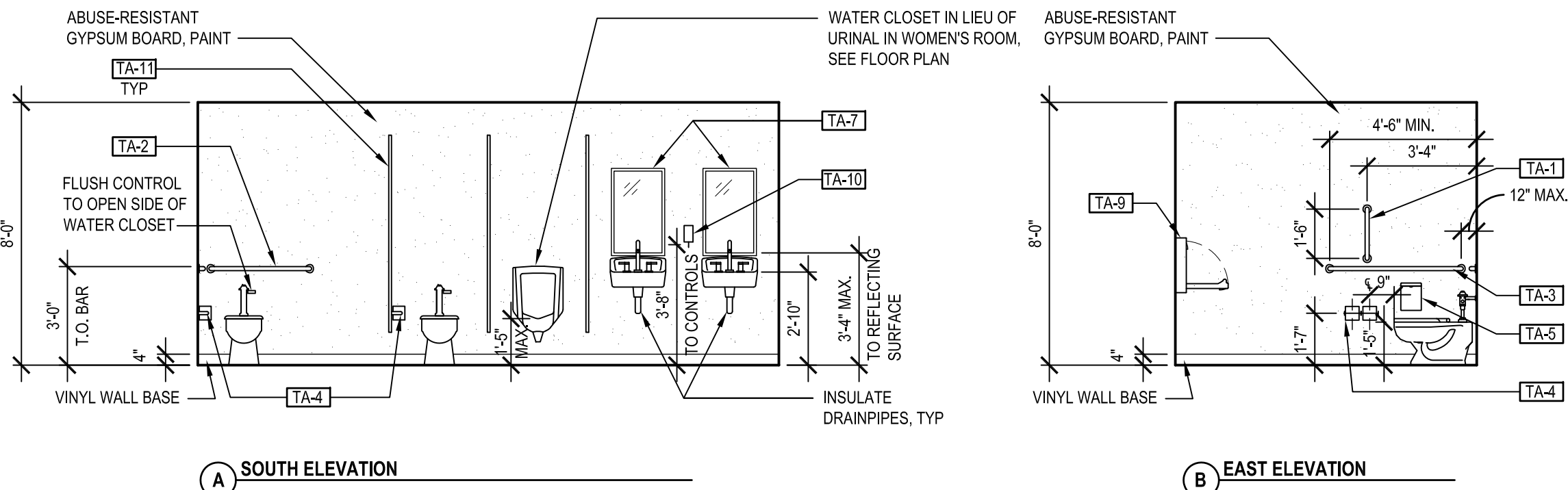
## N10 SIGN SCHEDULE

A701 REFERRED FROM:

| TOILET ACCESSORY SCHEDULE |                                     |              |                                     |                                                                                    |
|---------------------------|-------------------------------------|--------------|-------------------------------------|------------------------------------------------------------------------------------|
| MARK                      | DESCRIPTION                         | MANUFACTURER | MODEL/ FINISH                       | COMMENTS                                                                           |
| TA-1                      | VERTICAL GRAB BAR                   | BOBRICK      | B-5806 X 18                         | CONCEALED MOUNTING WITH 4 SET SCREWS, 1 1/4" DIA., PEENED GRIP; ONLY IN ADA STALLS |
| TA-2                      | 36" HORIZONTAL GRAB BAR             | BOBRICK      | B-5806 X 36                         | CONCEALED MOUNTING WITH 4 SET SCREWS, 1 1/4" DIA., PEENED GRIP; ONLY IN ADA STALLS |
| TA-3                      | 42" HORIZONTAL GRAB BAR             | BOBRICK      | B-5806 X 42                         | CONCEALED MOUNTING WITH 4 SET SCREWS, 1 1/4" DIA., PEENED GRIP; ONLY IN ADA STALLS |
| TA-4                      | DOUBLE ROLL TOILET TISSUE DISPENSER | BOBRICK      | B-2740 / SATIN FINISH               | SURFACE MOUNTED TOILET PAPER HOLDER FOR TWO ROLLS                                  |
| TA-5                      | SANITARY NAPKIN DISPOSAL            | BOBRICK      | B-254                               | SURFACE MOUNTED WITH SELF-CLOSING DOOR AND LOCK                                    |
| TA-6                      | HAND DRYER                          | XLERATOR     | XL-W                                | SURFACE MOUNTED AUTOMATIC WHITE EPOCY PTD COVER                                    |
| TA-7                      | MIRROR                              | BOBRICK      | B-293 2436 / STAINLESS STEEL FRAMED | TILT SERIES MIRROR, STANDARD SIZE 24"W X 36" H (SUPPLIED BY OWNER)                 |
| TA-8                      | MIRROR                              | BOBRICK      | B-290 2472 / STAINLESS STEEL FRAMED | STANDARD SIZE 24"W X 72" H (SUPPLIED BY OWNER)                                     |
| TA-9                      | BABY CHANGING STATION               | KOALA KARE   | KB208/01                            | OVAl WALL MOUNTED                                                                  |
| TA-10                     | SOAP DISPENSER                      | BOBRICK      | B-40 / BLACK AND GRAY               | SURFACE MOUNTED SOAP DISPENSER                                                     |
| TA-11                     | TOILET PARTITION                    |              | STAINLESS STEEL                     | FLOOR MOUNTED                                                                      |

## F10 ACCESSORIES SCHEDULE

A700 REFERRED FROM:



## A1 RESTROOM ELEVATIONS

A701 1/4"= 1'-0" REFERRED FROM: File Name:



QUINN EVANS  
ARCHITECTS

219 ½ N MAIN STREET  
ANN ARBOR, MI 48104

V 734 663 5888  
F 734 663 5044

WWW.QUINNEVANS.COM

Ypsilanti  
Freight  
House

Ypsilanti, Michigan

QEA No. 31300600;  
Owner No. XXXX

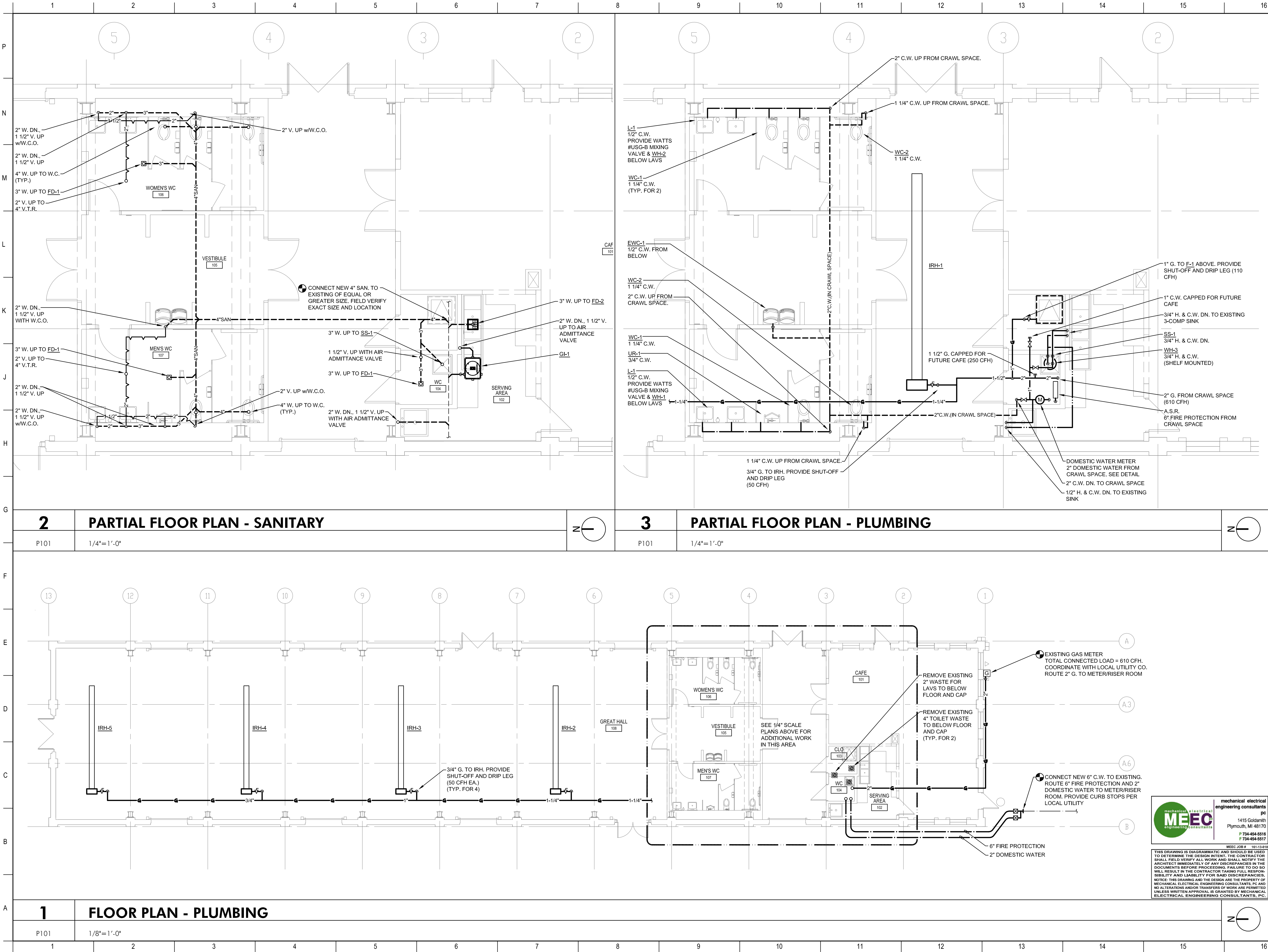
INTERIOR  
ELEVATIONS  
& DOOR  
SCHEDULE

| NO. | TITLE            | DATE    |
|-----|------------------|---------|
| —   | CONSTRUCTION SET | 4-30-15 |
| —   |                  |         |
| —   |                  |         |
| —   |                  |         |
| —   |                  |         |
| —   |                  |         |
| —   |                  |         |

FILE NAME: File Name:

A701





Ypsilanti  
Freight  
House

Ypsilanti, Michigan

QEA No. 31300600;  
Owner No. XXXX

FLOOR PLANS -  
PLUMBING

| NO. | TITLE        | DATE    |
|-----|--------------|---------|
| 1   | CONSTRUCTION | 4-30-15 |
| 2   |              |         |
| 3   |              |         |
| 4   |              |         |
| 5   |              |         |
| 6   |              |         |
| 7   |              |         |
| 8   |              |         |
| 9   |              |         |
| 10  |              |         |
| 11  |              |         |
| 12  |              |         |
| 13  |              |         |
| 14  |              |         |
| 15  |              |         |
| 16  |              |         |

FILE NAME:

P101



</

| PLUMBING FIXTURE SCHEDULE |                                              |     |                                                                                                   |                                                                                                                                                                                                                                          |                       |        |      |      |       |
|---------------------------|----------------------------------------------|-----|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------|------|------|-------|
| MARK                      | ITEM                                         | ADA | DESCRIPTION                                                                                       | ACCESSORIES                                                                                                                                                                                                                              | PIPE CONNECTION SIZES |        |      |      | NOTES |
|                           |                                              |     |                                                                                                   |                                                                                                                                                                                                                                          | W                     | V      | CW   | HW   |       |
| WC-1                      | FLOOR MOUNTED<br>FLUSH VALVE<br>WATER CLOSET |     | American Standard<br>MADERA Elongated<br>Low Consumption Toilet<br>#3451.001                      | Flush Valve: Sloan #111-ROYAL<br>Seat: American Standard #5905.110<br>Flange                                                                                                                                                             | 4"                    | 2"     | 1"   | ---  |       |
| WC-2                      | FLOOR MOUNTED<br>FLUSH VALVE<br>WATER CLOSET | X   | American Standard<br>MADERA Elongated<br>16-1/2" (420mm) high<br>Low Consumption Toilet #3461.001 | Flush Valve: Sloan #111-ROYAL<br>Seat: American Standard #5905.110<br>Flange                                                                                                                                                             | 4"                    | 2"     | 1"   | ---  |       |
| UR-1                      | WALL HUNG<br>URINAL                          |     | American Standard<br>WASHBROOK FloVise<br>High Efficiency (HEU) Urinal (1/2 GPF)<br>#6590.005     | Flush Valve: Sloan #186-0.5 ROYAL (0.5 gal.)<br>Strainer: American Standard #047068-0070A<br>Cleanout: Jay R. Smith #SQ4-1819<br>Carrier: Jay R. Smith #0637                                                                             | 2"                    | 1-1/2" | 3/4" | ---  |       |
| L-1                       | WALL MOUNTED<br>LAVATORY                     |     | American Standard<br>#0355.012 "LUCERNE" Basin                                                    | Faucet: American Standard #7385.004VA.002<br>Aerator: American Standard #V05<br>Drain: McGuire #155A<br>Supply: McGuire #H170BV-LR 1/4 turn<br>p-Trap: McGuire #8872C-17T 1-1/2" Chrome<br>Plated Brass<br>Carrier: Jay R. Smith #0700-Z | 1-1/2"                | 1-1/2" | 1/2" | 1/2" | 1     |
| SS-1                      | SERVICE<br>SINK                              |     | FIAT<br>Mop Sink #MSB2424                                                                         | Faucet: FIAT #830-AA with Integral Check Valves<br>Bracket: FIAT #832-AA<br>Mop Hanger: FIAT #889-CC<br>Drain Gasket: FIAT #QDC3-2<br>Splash Panel: FIAT #MSG                                                                            | 3"                    | 1-1/2" | 1/2" | 1/2" |       |

APPROVED PLUMBING FIXTURE MANUFACTURERS: AMERICAN STANDARD, CRANE, TOTO, ELKAY, KOHLER, ZURN, FIAT, FLORESTONE, MUSTEE.  
APPROVED PLUMBING HARDWARE MANUFACTURERS: AMERICAN STANDARD, DELTA, KOHLER, CHICAGO, SLOAN, ZURN, TOTO.  
(FIXTURES TO BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF "THE BARRIER FREE DESIGN REQUIREMENTS OF THE MICHIGAN CONSTRUCTION CODE".)

NOTES:  
1. PROVIDE PLASTIC TYPE PIPE COVERS EQUAL TO TRUEBRO "LAV GUARD" ON ALL ACCESSIBLE LAVATORIES AND SINKS.

| ELECTRIC DOMESTIC WATER HEATER SCHEDULE |                |                 |           |              |                 |                   |                 |            |       |
|-----------------------------------------|----------------|-----------------|-----------|--------------|-----------------|-------------------|-----------------|------------|-------|
| MARK                                    | MANUFACTURER   | MODEL NUMBER    | LOCATION  | CAPACITIES   |                 |                   | ELECTRICAL DATA |            | NOTES |
|                                         |                |                 |           | RECOVERY GPM | STORAGE GALLONS | TEMP. RISE DEG. F | KW INPUT        | VOLT/PHASE |       |
| WH-1 & 2                                | BRADFORD WHITE | EFC-5500-4-S-10 | SEE PLANS | 1            | 0               | 37.5              | 5.5             | 240/1      | 1 - 3 |
| WH-3                                    | BRADFORD WHITE | LD-WH30L3-1     | SEE PLANS | 25           | 30              | 100               | 6.0             | 208/1      | 3 - 6 |

(APPROVED EQUAL: LOCHINVAR, A.O. SMITH, BRADFORD WHITE)

NOTES:  
1. INSTANTANEOUS WATER HEATER  
2. 1/2" CONNECTIONS  
3. U.L. LISTED  
4. TEMPERATURE AND PRESSURE RELIEF VALVE  
5. MAGNESIUM TANK SAVER ANODE ROD  
6. PROVIDE MOUNTING SHELF

| ELECTRIC WATER COOLER SCHEDULE |              |              |           |                           |                  |                    |            |        |              |        |
|--------------------------------|--------------|--------------|-----------|---------------------------|------------------|--------------------|------------|--------|--------------|--------|
| MARK                           | MANUFACTURER | MODEL NUMBER | FINISH    | TYPE                      | ADA              | CAPACITY<br>G.P.H. | ELECTRICAL |        |              | NOTES: |
|                                |              |              |           |                           |                  |                    | WATTS      | F.L.A. | VOLT / PHASE |        |
| EW-1                           | ELKAY        | LZSTL8C      | STAINLESS | WALL MOUNT<br>(TWO-LEVEL) | ADULT &<br>CHILD | 8                  | 370        | 4.0    | 120 / 1      | 1, 2   |

(APPROVED EQUAL: SUNROC, HALSEY-TAYLOR, ACORN AQUA)

NOTES:  
1. PROVIDE OPTIONAL STAINLESS STEEL CABINET  
2. NO LEAD DESIGN

| FLOOR DRAIN SCHEDULE |              |              |          |                |           |               |          |                 |        |
|----------------------|--------------|--------------|----------|----------------|-----------|---------------|----------|-----------------|--------|
| MARK                 | MANUFACTURER | MODEL NUMBER | LOCATION | BODY MATERIAL  | GRATE     |               | STRAINER | PIPE SIZE (IN.) | NOTES: |
|                      |              |              |          |                | TYPE      | FINISH        |          |                 |        |
| FD-1                 | J.R. SMITH   | 2005         | SEE PLAN | DUCO CAST IRON | 6" DIA.   | NICKEL BRONZE | NONE     | 3"              | 1      |
| FD-2                 | J.R. SMITH   | 3100         | SEE PLAN | DUCO CAST IRON | 1/2 GRATE | NICKEL BRONZE | DOME     | 3"              | 2      |

(APPROVED EQUAL: JOSAM, ZURN, SIOUX CHIEF, MIFAB)

NOTES:  
1. PROVIDE "SURESEAL" IN LINE TRAP SEAL.  
2. MOUNTED 1" A.F.F.

| GREASE INTERCEPTOR SCHEDULE |              |              |          |                          |                 |                       |               |         |
|-----------------------------|--------------|--------------|----------|--------------------------|-----------------|-----------------------|---------------|---------|
| MARK                        | MANUFACTURER | MODEL NUMBER | LOCATION | INLET, OUTLET SIZE (IN.) | FLOW RATE (GPM) | GREASE CAPACITY (LBS) | SETTING       | NOTES:  |
| GI-1                        | SCHIER       | GB-15        | SEE PLAN | 2                        | 15              | 74                    | FLOOR MOUNTED | 1, 2, 3 |

(APPROVED EQUAL: J.R. SMITH, JOSAM, ZURN, PROCEPTOR)

NOTES:  
1. 2,000 L.B. LOAD RATED, BOLTED GAS/WATER TIGHT 24"x3" COMPOSITE COVER.  
2. TELECLIDE (SHORT 3'-5"-22") (LONG 22'-37") ADJUSTABLE RISER.  
3. HIGH WATER TABLE 304 STAINLESS ANCHOR KIT.

mechanical

electrical

engineering consultants

mechanical electrical

engineering consultants

pc

1415 Goldsmith

Plymouth, MI 48170

P 734-454-5516

F 734-454-5517

THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR SHALL FIELD VERIFY ALL WORK AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCIES.

NOTICE: THIS DRAWING AND THE DESIGN ARE THE PROPERTY OF MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, PC AND NO ALTERATIONS AND/OR TRANSFERS OF WORK ARE PERMITTED UNLESS WRITTEN APPROVAL IS GRANTED BY MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, PC.

QUINN EVANS

ARCHITECTS

219½ N MAIN STREET

ANN ARBOR, MI 48104

V 734 663 5888

F 734 663 5044

WWW.QUINNEVANS.COM

Ypsilanti  
Freight  
House

Ypsilanti, Michigan

QEA No. 31300600;  
Owner No. XXXX

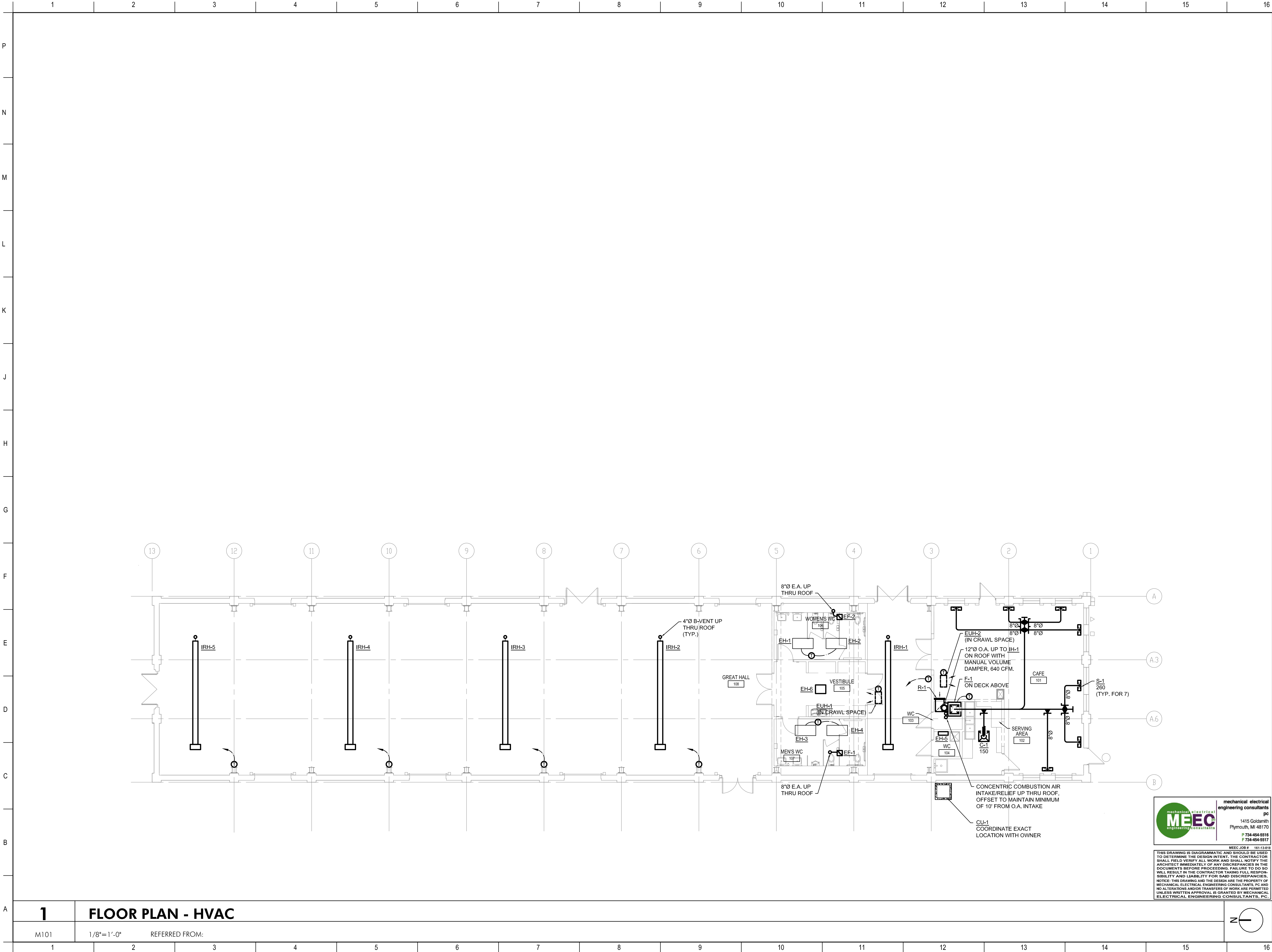
PLUMBING  
SCHEDULES  
AND DETAILS

| NO. | TITLE        | DATE    |
|-----|--------------|---------|
| ___ | CONSTRUCTION | 4-30-15 |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |

FILE NAME:

P201







QUINN EVANS  
ARCHITECTS

219½ N MAIN STREET  
ANN ARBOR, MI 48104

V 734 663 5888  
F 734 663 5044

WWW.QUINNEVANS.COM

Ypsilanti  
Freight  
House

Ypsilanti, Michigan

QEA No. 31300600;  
Owner No. XXXX

FLOOR PLAN -  
HVAC

| NO. | TITLE        | DATE    |
|-----|--------------|---------|
| 1   | CONSTRUCTION | 4-30-15 |
|     |              |         |
|     |              |         |
|     |              |         |
|     |              |         |
|     |              |         |
|     |              |         |
|     |              |         |

FILE NAME:

M101



|                                          | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2                        | 3                                 | 4                                          | 5                                | 6                                    | 7                                      | 8                                           | 9                                    | 10                                             | 11                                       | 12                                             | 13                                         | 14                                        | 15          | 16                                       |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------|--------------------------------------------|----------------------------------|--------------------------------------|----------------------------------------|---------------------------------------------|--------------------------------------|------------------------------------------------|------------------------------------------|------------------------------------------------|--------------------------------------------|-------------------------------------------|-------------|------------------------------------------|----------------------|------|-------|--|--|--|--|--|--|------|--------------|--------------|-----------|---------------|------------|--------------------|-------------------|-----------------------------------|--------------------------------------------|----------------------------------|--------------------------------------|----------------------------------------|---------------------------------------------|--------------------------------------|------------------------------------------------|------------------------------------------|------------------------------------------------|--------------------------------------------|-------------------------------------------|--------------|-----------------|--------|--------|--------|-----------------------------|-----------------|-------------------|-----------------|-------------|--------------|-------------|---------------|-------------|---------|---------------------|----------------|---------|---------------|------|------------------|--------|--------|-------|---------|-----|-------|-----|-----|----------|---------------|-------|------|--------|--------|--------------------------|---------|-------|---------------|---|-----|--|--|--|--|-----------------------------|--|--|--|--|-----------------------------|--|--|--|--|-----|--|--|--|--|--|--|--|--|--|--|
| P                                        | <table><tr><th colspan="15">OUTDOOR AIR CALCULATION SCHEDULE</th></tr><tr><th>UNIT TAG</th><th>ROOM NAME / NUMBER</th><th>AREA SQ. FT. (Az)</th><th>2009 MMC OCCUPANCY CLASSIFICATION</th><th>AREA OUTDOOR AIRFLOW RATE (Ra) CFM/SQ. FT.</th><th>AREA OUTDOOR AIR (Ra) x (Az) CFM</th><th>OCCUPANT DENSITY RATE #/1000 SQ. FT.</th><th>ZONE POPULATION (Pz=Az(#/1000)) PEOPLE</th><th>PEOPLE OUTDOOR AIRFLOW RATE (Rp) CFM/PERSON</th><th>OCCUPANT OUTDOOR AIR (Rp) x (Pz) CFM</th><th>BREATHING ZONE OUTDOOR AIR (Vbz=RpPz+RaAz) CFM</th><th>ZONE AIR DISTRIBUTION EFFECTIVENESS (Ez)</th><th>ZONE OUTDOOR AIRFLOW REQUIRED (Voz=Vbz/Ez) CFM</th><th>TOTAL OUTDOOR AIR REQUIRED WITHIN ZONE CFM</th><th>TOTAL OUTDOOR AIR PROVIDED BY UNIT(S) CFM</th></tr><tr><td>F-1</td><td>CAFE 101</td><td>732</td><td>DINING</td><td>.18</td><td>131</td><td>70</td><td>51</td><td>7.5</td><td>382</td><td>513</td><td>0.8</td><td>640</td><td>640</td><td>640</td></tr></table> |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             | OUTDOOR AIR CALCULATION SCHEDULE         |                      |      |       |  |  |  |  |  |  |      |              |              |           |               | UNIT TAG   | ROOM NAME / NUMBER | AREA SQ. FT. (Az) | 2009 MMC OCCUPANCY CLASSIFICATION | AREA OUTDOOR AIRFLOW RATE (Ra) CFM/SQ. FT. | AREA OUTDOOR AIR (Ra) x (Az) CFM | OCCUPANT DENSITY RATE #/1000 SQ. FT. | ZONE POPULATION (Pz=Az(#/1000)) PEOPLE | PEOPLE OUTDOOR AIRFLOW RATE (Rp) CFM/PERSON | OCCUPANT OUTDOOR AIR (Rp) x (Pz) CFM | BREATHING ZONE OUTDOOR AIR (Vbz=RpPz+RaAz) CFM | ZONE AIR DISTRIBUTION EFFECTIVENESS (Ez) | ZONE OUTDOOR AIRFLOW REQUIRED (Voz=Vbz/Ez) CFM | TOTAL OUTDOOR AIR REQUIRED WITHIN ZONE CFM | TOTAL OUTDOOR AIR PROVIDED BY UNIT(S) CFM | F-1          | CAFE 101        | 732    | DINING | .18    | 131                         | 70              | 51                | 7.5             | 382         | 513          | 0.8         | 640           | 640         | 640     |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| OUTDOOR AIR CALCULATION SCHEDULE         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| UNIT TAG                                 | ROOM NAME / NUMBER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | AREA SQ. FT. (Az)        | 2009 MMC OCCUPANCY CLASSIFICATION | AREA OUTDOOR AIRFLOW RATE (Ra) CFM/SQ. FT. | AREA OUTDOOR AIR (Ra) x (Az) CFM | OCCUPANT DENSITY RATE #/1000 SQ. FT. | ZONE POPULATION (Pz=Az(#/1000)) PEOPLE | PEOPLE OUTDOOR AIRFLOW RATE (Rp) CFM/PERSON | OCCUPANT OUTDOOR AIR (Rp) x (Pz) CFM | BREATHING ZONE OUTDOOR AIR (Vbz=RpPz+RaAz) CFM | ZONE AIR DISTRIBUTION EFFECTIVENESS (Ez) | ZONE OUTDOOR AIRFLOW REQUIRED (Voz=Vbz/Ez) CFM | TOTAL OUTDOOR AIR REQUIRED WITHIN ZONE CFM | TOTAL OUTDOOR AIR PROVIDED BY UNIT(S) CFM |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| F-1                                      | CAFE 101                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 732                      | DINING                            | .18                                        | 131                              | 70                                   | 51                                     | 7.5                                         | 382                                  | 513                                            | 0.8                                      | 640                                            | 640                                        | 640                                       |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| N                                        | 1. PER THE 2009 MICHIGAN MECHANICAL CODE TABLE 403.3 THE SPACES WITHIN THIS SCHEDULE MEET OR EXCEED THE REQUIREMENTS FOR OUTDOOR AIR FLOW RATE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| M                                        | <table><tr><th colspan="10">GRILLES REGISTERS AND DIFFUSERS SCHEDULE</th></tr><tr><th>MARK</th><th>MANUFACTURER</th><th>MODEL NUMBER</th><th>NECK SIZE</th><th>DIFFUSER SIZE</th><th>FINISH</th><th>MOUNTING TYPE</th><th>CONSTRUCTION</th><th>ACCESSORY</th><th>NOTES</th></tr><tr><td>C-1</td><td>PRICE</td><td>8" / 24"x24" /SPD/31/B12</td><td>8" Ø</td><td>24"x24"</td><td>WHITE</td><td>LAY + IN</td><td>STEEL</td><td>-</td><td>1</td></tr><tr><td colspan="10"></td></tr><tr><td>R-1</td><td>PRICE</td><td>530D</td><td>24"x24"</td><td>26"x26"</td><td>WHITE</td><td>SURFACE</td><td>STEEL</td><td>SQUARE O.B.D.</td><td>1, 2</td></tr><tr><td colspan="10"></td></tr><tr><td>S-1</td><td>PRICE</td><td>520D</td><td>12"x5"</td><td>14"x7"</td><td>WHITE</td><td>SURFACE</td><td>STEEL</td><td>SQUARE O.B.D.</td><td>1</td></tr></table>                                                                                                                       |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             | GRILLES REGISTERS AND DIFFUSERS SCHEDULE |                      |      |       |  |  |  |  |  |  | MARK | MANUFACTURER | MODEL NUMBER | NECK SIZE | DIFFUSER SIZE | FINISH     | MOUNTING TYPE      | CONSTRUCTION      | ACCESSORY                         | NOTES                                      | C-1                              | PRICE                                | 8" / 24"x24" /SPD/31/B12               | 8" Ø                                        | 24"x24"                              | WHITE                                          | LAY + IN                                 | STEEL                                          | -                                          | 1                                         |              |                 |        |        |        |                             |                 |                   |                 |             | R-1          | PRICE       | 530D          | 24"x24"     | 26"x26" | WHITE               | SURFACE        | STEEL   | SQUARE O.B.D. | 1, 2 |                  |        |        |       |         |     |       |     |     |          | S-1           | PRICE | 520D | 12"x5" | 14"x7" | WHITE                    | SURFACE | STEEL | SQUARE O.B.D. | 1 |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| GRILLES REGISTERS AND DIFFUSERS SCHEDULE |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| MARK                                     | MANUFACTURER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | MODEL NUMBER             | NECK SIZE                         | DIFFUSER SIZE                              | FINISH                           | MOUNTING TYPE                        | CONSTRUCTION                           | ACCESSORY                                   | NOTES                                |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| C-1                                      | PRICE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 8" / 24"x24" /SPD/31/B12 | 8" Ø                              | 24"x24"                                    | WHITE                            | LAY + IN                             | STEEL                                  | -                                           | 1                                    |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| R-1                                      | PRICE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 530D                     | 24"x24"                           | 26"x26"                                    | WHITE                            | SURFACE                              | STEEL                                  | SQUARE O.B.D.                               | 1, 2                                 |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| S-1                                      | PRICE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 520D                     | 12"x5"                            | 14"x7"                                     | WHITE                            | SURFACE                              | STEEL                                  | SQUARE O.B.D.                               | 1                                    |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| L                                        | (APPROVED EQUAL: TITUS, PRICE)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| K                                        | <p>NOTES:</p> <p>1. REFER TO REFLECTED CEILING PLAN FOR LOCATIONS. PROVIDE ALL ACCESSORIES NEEDED TO PROPERLY MOUNT DEVICES.</p> <p>2. 1/2"x1/2"x1/2" ALUMINUM EGGGRATE GRID.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| J                                        | <table><tr><th colspan="15">CONDENSING UNIT SCHEDULE</th></tr><tr><th rowspan="2">MARK</th><th rowspan="2">MANUFACTURER</th><th rowspan="2">MODEL NUMBER</th><th rowspan="2">SYSTEM SERVED</th><th rowspan="2">CAPACITY (MBH)</th><th colspan="5">COMPRESSORS</th><th colspan="2">CONDENSER FAN</th><th colspan="4">ELECTRICAL</th><th rowspan="2">WEIGHT</th><th rowspan="2">NOTES:</th></tr><tr><th>NUMBER</th><th>TYPE</th><th>CAPACITY (COMP-1)</th><th>R.L.A. (COMP-1)</th><th>CAPACITY (COMP-2)</th><th>R.L.A. (COMP-2)</th><th>#</th><th>HP (EA)</th><th>F.L.A. (EA)</th><th>VOLTS / PHASE</th><th>M.C.A.</th><th>MOCP</th><th>IPLV</th></tr><tr><td>CU-1</td><td>TRANE</td><td>4THB3060D1</td><td>F-1</td><td>60</td><td>1</td><td>SCROLL</td><td>60</td><td>26.8</td><td>-</td><td>-</td><td>1</td><td>1/5</td><td>.93</td><td>230/1</td><td>35</td><td>60</td><td>-</td><td>226</td><td>1 - 9</td></tr></table>                                               |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             | CONDENSING UNIT SCHEDULE                 |                      |      |       |  |  |  |  |  |  |      |              |              |           |               | MARK       | MANUFACTURER       | MODEL NUMBER      | SYSTEM SERVED                     | CAPACITY (MBH)                             | COMPRESSORS                      |                                      |                                        |                                             |                                      | CONDENSER FAN                                  |                                          | ELECTRICAL                                     |                                            |                                           |              | WEIGHT          | NOTES: | NUMBER | TYPE   | CAPACITY (COMP-1)           | R.L.A. (COMP-1) | CAPACITY (COMP-2) | R.L.A. (COMP-2) | #           | HP (EA)      | F.L.A. (EA) | VOLTS / PHASE | M.C.A.      | MOCP    | IPLV                | CU-1           | TRANE   | 4THB3060D1    | F-1  | 60               | 1      | SCROLL | 60    | 26.8    | -   | -     | 1   | 1/5 | .93      | 230/1         | 35    | 60   | -      | 226    | 1 - 9                    |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| CONDENSING UNIT SCHEDULE                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| MARK                                     | MANUFACTURER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | MODEL NUMBER             | SYSTEM SERVED                     | CAPACITY (MBH)                             | COMPRESSORS                      |                                      |                                        |                                             |                                      | CONDENSER FAN                                  |                                          | ELECTRICAL                                     |                                            |                                           |             | WEIGHT                                   | NOTES:               |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            | NUMBER                           | TYPE                                 | CAPACITY (COMP-1)                      | R.L.A. (COMP-1)                             | CAPACITY (COMP-2)                    | R.L.A. (COMP-2)                                | #                                        | HP (EA)                                        | F.L.A. (EA)                                | VOLTS / PHASE                             | M.C.A.      |                                          |                      | MOCP | IPLV  |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| CU-1                                     | TRANE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4THB3060D1               | F-1                               | 60                                         | 1                                | SCROLL                               | 60                                     | 26.8                                        | -                                    | -                                              | 1                                        | 1/5                                            | .93                                        | 230/1                                     | 35          | 60                                       | -                    | 226  | 1 - 9 |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
|                                          | (APPROVED EQUAL: TRANE, CARRIER, YORK, LENNOX)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| H                                        | <p>NOTES:</p> <p>1. DATA BASED ON 95°F AMBIENT AIR.</p> <p>2. CONCRETE SUPPORT PAD, SUPPORT RAILS.</p> <p>3. HAIL GUARDS</p> <p>4. DISCHARGE AND LIQUID LINE SERVICE VALVES.</p> <p>5. NONFUSED DISCONNECT</p> <p>6. 5-YEAR COMPRESSOR WARRANTY</p> <p>7. U.L. LISTED</p> <p>8. LIQUID LINE FILTER/DRYER.</p> <p>9. 410A REFRIGERANT</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| G                                        | <table><tr><th colspan="17">FURNACE SCHEDULE</th></tr><tr><th rowspan="2">MARK</th><th rowspan="2">MANUFACTURER</th><th rowspan="2">MODEL NUMBER</th><th rowspan="2">UNIT TYPE</th><th rowspan="2">SUPPLY AIR FLOW (CFM)</th><th rowspan="2">OUTDOOR AIRFLOW (CFM)</th><th rowspan="2">E.S.P. (IN)</th><th colspan="3">COOLING DATA</th><th colspan="4">HEATING DATA</th><th colspan="3">ELECTRICAL DATA</th><th rowspan="2">NOTES:</th></tr><tr><th>COIL TYPE</th><th>SIZE (TONS)</th><th>REFRIGERANT</th><th>TYPE</th><th>INPUT (MBH)</th><th>OUTPUT (MBH)</th><th>AFUE</th><th>FAN (HP)</th><th>VOLTS/PH/Hz</th></tr><tr><td>F-1</td><td>TRANE</td><td>TUH1D120A9601A</td><td>UP-FLOW</td><td>1970</td><td>640</td><td>.5</td><td>A-COIL</td><td>5.0</td><td>R-410</td><td>NATURAL</td><td>110</td><td>104.5</td><td>95%</td><td>3/4</td><td>120/1/60</td><td>1, 2, 3, 4, 5</td></tr></table>                                                                        |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             | FURNACE SCHEDULE                         |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    | MARK              | MANUFACTURER                      | MODEL NUMBER                               | UNIT TYPE                        | SUPPLY AIR FLOW (CFM)                | OUTDOOR AIRFLOW (CFM)                  | E.S.P. (IN)                                 | COOLING DATA                         |                                                |                                          | HEATING DATA                                   |                                            |                                           |              | ELECTRICAL DATA |        |        | NOTES: | COIL TYPE                   | SIZE (TONS)     | REFRIGERANT       | TYPE            | INPUT (MBH) | OUTPUT (MBH) | AFUE        | FAN (HP)      | VOLTS/PH/Hz | F-1     | TRANE               | TUH1D120A9601A | UP-FLOW | 1970          | 640  | .5               | A-COIL | 5.0    | R-410 | NATURAL | 110 | 104.5 | 95% | 3/4 | 120/1/60 | 1, 2, 3, 4, 5 |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| FURNACE SCHEDULE                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| MARK                                     | MANUFACTURER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | MODEL NUMBER             | UNIT TYPE                         | SUPPLY AIR FLOW (CFM)                      | OUTDOOR AIRFLOW (CFM)            | E.S.P. (IN)                          | COOLING DATA                           |                                             |                                      | HEATING DATA                                   |                                          |                                                |                                            | ELECTRICAL DATA                           |             |                                          | NOTES:               |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            |                                  |                                      | COIL TYPE                              | SIZE (TONS)                                 | REFRIGERANT                          | TYPE                                           | INPUT (MBH)                              | OUTPUT (MBH)                                   | AFUE                                       | FAN (HP)                                  | VOLTS/PH/Hz |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| F-1                                      | TRANE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | TUH1D120A9601A           | UP-FLOW                           | 1970                                       | 640                              | .5                                   | A-COIL                                 | 5.0                                         | R-410                                | NATURAL                                        | 110                                      | 104.5                                          | 95%                                        | 3/4                                       | 120/1/60    | 1, 2, 3, 4, 5                            |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| F                                        | (APPROVED EQUAL: TRANE, CARRIER, LENNOX, ARMSTRONG)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| E                                        | <p>NOTES:</p> <p>1. PROVIDE 2" THICK PLEATED FILTER RACK AND FILTER.</p> <p>2. UNIT SHALL HAVE ELECTRIC IGNITION (NO STANDING PILOT)</p> <p>3. PROVIDE 7-DAY AUTOMATIC CHANGEOVER PROGRAMMABLE THERMOSTAT WITH SUB-BASE.</p> <p>4. UNIT SHALL BE U.L. LISTED AND A.G.A. CERTIFIED.</p> <p>5. COOLING COIL CASING SHALL BE INSULATED AND DRAINED TO NEAREST FLOOR DRAIN.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| D                                        | <table><tr><th colspan="12">EXHAUST FAN SCHEDULE</th><th colspan="3" rowspan="16"></th></tr><tr><th>MARK</th><th>MANUFACTURER</th><th>MODEL NUMBER</th><th>AREA SERVED</th><th>LOCATION</th><th>AIRFLOW (CFM)</th><th>EXTERNAL S.P.</th><th>FAN (RPM)</th><th>FAN (BHP)</th><th>FAN (HP)</th><th>ELECTRICAL</th><th>NOTES</th></tr><tr><td>EF-1, 2</td><td>GREENHECK</td><td>SP-A250</td><td>TOILET ROOMS</td><td>CEILING</td><td>225</td><td>0.2</td><td>1000</td><td>-</td><td>83 WATTS</td><td>115/1/60</td><td>1,2,3,4</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             | EXHAUST FAN SCHEDULE                     |                      |      |       |  |  |  |  |  |  |      |              |              |           |               | MARK       | MANUFACTURER       | MODEL NUMBER      | AREA SERVED                       | LOCATION                                   | AIRFLOW (CFM)                    | EXTERNAL S.P.                        | FAN (RPM)                              | FAN (BHP)                                   | FAN (HP)                             | ELECTRICAL                                     | NOTES                                    | EF-1, 2                                        | GREENHECK                                  | SP-A250                                   | TOILET ROOMS | CEILING         | 225    | 0.2    | 1000   | -                           | 83 WATTS        | 115/1/60          | 1,2,3,4         |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| EXHAUST FAN SCHEDULE                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| MARK                                     | MANUFACTURER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | MODEL NUMBER             | AREA SERVED                       | LOCATION                                   | AIRFLOW (CFM)                    | EXTERNAL S.P.                        | FAN (RPM)                              | FAN (BHP)                                   | FAN (HP)                             | ELECTRICAL                                     | NOTES                                    |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| EF-1, 2                                  | GREENHECK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SP-A250                  | TOILET ROOMS                      | CEILING                                    | 225                              | 0.2                                  | 1000                                   | -                                           | 83 WATTS                             | 115/1/60                                       | 1,2,3,4                                  |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| C                                        | (APPROVED EQUAL: GREENHECK, ACME, COOK, PENN VENTILATOR)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| B                                        | <p>NOTES:</p> <p>1. FAN SHALL HAVE AMCA SEAL &amp; BE U.L. CERTIFIED.</p> <p>2. SLOPED METAL ROOF DISCHARGE CAP.</p> <p>3. SAFETY DISCONNECT SWITCH.</p> <p>4. PROVIDE DUCT MOUNTED GRAVITY BACKDRAFT DAMPER.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| A                                        | <table><tr><th colspan="15">DUCTWORK APPLICATION SCHEDULE</th></tr><tr><th colspan="5">AIR SYSTEM</th><th colspan="5">MATERIAL</th><th colspan="5">DESIGN PRESSURE CLASSIFICATION (INCHED. WG.)</th></tr><tr><td colspan="5">SUPPLY AIR</td><td colspan="5">GALVANIZED STEEL, INSULATED</td><td colspan="5">+ 2</td></tr><tr><td colspan="5">TOILET ROOM EXHAUST</td><td colspan="5">GALVANIZED STEEL</td><td colspan="5">- 2</td></tr><tr><td colspan="5">RETURN AIR</td><td colspan="5">GALVANIZED STEEL - LINED</td><td colspan="5">- 2</td></tr><tr><td colspan="5">OUTSIDE AIR INTAKE DUCTWORK</td><td colspan="5">GALVANIZED STEEL, INSULATED</td><td colspan="5">- 2</td></tr></table>                                                                                                                                                                                                                                                                           |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             | DUCTWORK APPLICATION SCHEDULE            |                      |      |       |  |  |  |  |  |  |      |              |              |           |               | AIR SYSTEM |                    |                   |                                   |                                            | MATERIAL                         |                                      |                                        |                                             |                                      | DESIGN PRESSURE CLASSIFICATION (INCHED. WG.)   |                                          |                                                |                                            |                                           | SUPPLY AIR   |                 |        |        |        | GALVANIZED STEEL, INSULATED |                 |                   |                 |             | + 2          |             |               |             |         | TOILET ROOM EXHAUST |                |         |               |      | GALVANIZED STEEL |        |        |       |         | - 2 |       |     |     |          | RETURN AIR    |       |      |        |        | GALVANIZED STEEL - LINED |         |       |               |   | - 2 |  |  |  |  | OUTSIDE AIR INTAKE DUCTWORK |  |  |  |  | GALVANIZED STEEL, INSULATED |  |  |  |  | - 2 |  |  |  |  |  |  |  |  |  |  |
| DUCTWORK APPLICATION SCHEDULE            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| AIR SYSTEM                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            | MATERIAL                         |                                      |                                        |                                             |                                      | DESIGN PRESSURE CLASSIFICATION (INCHED. WG.)   |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| SUPPLY AIR                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            | GALVANIZED STEEL, INSULATED      |                                      |                                        |                                             |                                      | + 2                                            |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| TOILET ROOM EXHAUST                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            | GALVANIZED STEEL                 |                                      |                                        |                                             |                                      | - 2                                            |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| RETURN AIR                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            | GALVANIZED STEEL - LINED         |                                      |                                        |                                             |                                      | - 2                                            |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| OUTSIDE AIR INTAKE DUCTWORK              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                          |                                   |                                            | GALVANIZED STEEL, INSULATED      |                                      |                                        |                                             |                                      | - 2                                            |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
|                                          | * PITCH DUCTWORK TO LOW POINTS AS INDICATED ON THE DRAWINGS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
|                                          | <table><tr><td>1</td><td colspan="14">MECHANICAL SCHEDULES</td></tr><tr><td>M201</td><td>N.T.S.</td><td colspan="13">REFERRED FROM:</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             | 1                                        | MECHANICAL SCHEDULES |      |       |  |  |  |  |  |  |      |              |              |           |               | M201       | N.T.S.             | REFERRED FROM:    |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| 1                                        | MECHANICAL SCHEDULES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                          |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
| M201                                     | N.T.S.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | REFERRED FROM:           |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |             |                                          |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |
|                                          | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2                        | 3                                 | 4                                          | 5                                | 6                                    | 7                                      | 8                                           | 9                                    | 10                                             | 11                                       | 12                                             | 13                                         | 14                                        | 15          | 16                                       |                      |      |       |  |  |  |  |  |  |      |              |              |           |               |            |                    |                   |                                   |                                            |                                  |                                      |                                        |                                             |                                      |                                                |                                          |                                                |                                            |                                           |              |                 |        |        |        |                             |                 |                   |                 |             |              |             |               |             |         |                     |                |         |               |      |                  |        |        |       |         |     |       |     |     |          |               |       |      |        |        |                          |         |       |               |   |     |  |  |  |  |                             |  |  |  |  |                             |  |  |  |  |     |  |  |  |  |  |  |  |  |  |  |

| <table><tr><th colspan="10">ELECTRIC HEATER SCHEDULE</th></tr><tr><th>MARK</th><th>MANUFACTURER</th><th>MODEL NUMBER</th><th>AREA SERVED</th><th>AIRFLOW CFM</th><th>KW OUTPUT</th><th>HEAT OUTPUT (BTUH)</th><th>FAN (HP)</th><th>VOLTAGE</th><th>PHASE</th><th>AMPS</th><th>NOTES</th></tr><tr><td>EH-1-4</td><td>MARKEL</td><td>RCP127</td><td>TOILE ROOMS</td><td>-</td><td>.75</td><td>2560</td><td>-</td><td>120</td><td>1</td><td>6.2</td><td>3, 4, 5</td></tr><tr><td>EH-5</td><td>MARKEL</td><td>E3035WBW</td><td>METER ROOM</td><td>-</td><td>1.5</td><td>5120</td><td>-</td><td>120</td><td>1</td><td>12.5</td><td>1, 2, 4</td></tr><tr><td>EH-6</td><td>MARKEL</td><td>H3482</td><td>VESTIBULE 105</td><td>425</td><td>2.0</td><td>6826</td><td>-</td><td>240</td><td>1</td><td>8.3</td><td>1,2,3,4,7</td></tr><tr><td>EUH-1, 2</td><td>MARKEL</td><td>21UH5</td><td>CRAWL SPACE</td><td>400</td><td>5.0</td><td>17,065</td><td>6 WATTS</td><td>240</td><td>1</td><td>20.8</td><td>1, 2, 4, 6</td></tr></table> |              |              |               |             |             |                                   |          |                 |                  |      |            |  |  |  | ELECTRIC HEATER SCHEDULE       |  |  |  |  |  |  |  |  |  | MARK | MANUFACTURER | MODEL NUMBER | AREA SERVED | AIRFLOW CFM | KW OUTPUT   | HEAT OUTPUT (BTUH) | FAN (HP) | VOLTAGE | PHASE  | AMPS | NOTES           | EH-1-4  | MARKEL       | RCP127   | TOILE ROOMS | -      | .75    | 2560                              | -       | 120 | 1                | 6.2 | 3, 4, 5 | EH-5 | MARKEL | E3035WBW | METER ROOM | - | 1.5 | 5120 | - | 120 | 1 | 12.5 | 1, 2, 4 | EH-6 | MARKEL | H3482 | VESTIBULE 105 | 425 | 2.0 | 6826 | - | 240 | 1 | 8.3 | 1,2,3,4,7 | EUH-1, 2 | MARKEL | 21UH5 | CRAWL SPACE | 400 | 5.0 | 17,065 | 6 WATTS | 240 | 1 | 20.8 | 1, 2, 4, 6 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|---------------|-------------|-------------|-----------------------------------|----------|-----------------|------------------|------|------------|--|--|--|--------------------------------|--|--|--|--|--|--|--|--|--|------|--------------|--------------|-------------|-------------|-------------|--------------------|----------|---------|--------|------|-----------------|---------|--------------|----------|-------------|--------|--------|-----------------------------------|---------|-----|------------------|-----|---------|------|--------|----------|------------|---|-----|------|---|-----|---|------|---------|------|--------|-------|---------------|-----|-----|------|---|-----|---|-----|-----------|----------|--------|-------|-------------|-----|-----|--------|---------|-----|---|------|------------|
| ELECTRIC HEATER SCHEDULE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |              |               |             |             |                                   |          |                 |                  |      |            |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| MARK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | MANUFACTURER | MODEL NUMBER | AREA SERVED   | AIRFLOW CFM | KW OUTPUT   | HEAT OUTPUT (BTUH)                | FAN (HP) | VOLTAGE         | PHASE            | AMPS | NOTES      |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| EH-1-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | MARKEL       | RCP127       | TOILE ROOMS   | -           | .75         | 2560                              | -        | 120             | 1                | 6.2  | 3, 4, 5    |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| EH-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | MARKEL       | E3035WBW     | METER ROOM    | -           | 1.5         | 5120                              | -        | 120             | 1                | 12.5 | 1, 2, 4    |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| EH-6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | MARKEL       | H3482        | VESTIBULE 105 | 425         | 2.0         | 6826                              | -        | 240             | 1                | 8.3  | 1,2,3,4,7  |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| EUH-1, 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | MARKEL       | 21UH5        | CRAWL SPACE   | 400         | 5.0         | 17,065                            | 6 WATTS  | 240             | 1                | 20.8 | 1, 2, 4, 6 |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| (APPROVED EQUAL: MARKEL, INDEECO, BRASCH, Q MARK)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |              |               |             |             |                                   |          |                 |                  |      |            |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| <p>NOTES:</p> <p>1. BUILT-IN THERMOSTAT.</p> <p>2. UNIT MOUNTED DISCONNECT SWITCH.</p> <p>3. RECESSED MOUNT.</p> <p>4. U.L. LISTED.</p> <p>5. REMOTE 120V. THERMOSTAT INSTALLED BY ELECTRICAL CONTRACTOR.</p> <p>6. SUPPORT BRACKET.</p> <p>7. PLASTER FRAME.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |              |               |             |             |                                   |          |                 |                  |      |            |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| <table><tr><th colspan="10">INFRA-RED TUBE HEATER SCHEDULE</th></tr><tr><th rowspan="2">MARK</th><th rowspan="2">MANUFACTURER</th><th rowspan="2">MODEL NUMBER</th><th rowspan="2">LOCATION</th><th rowspan="2">TYPE</th><th rowspan="2">UNIT LENGTH</th><th rowspan="2">MOUNTING HEIGHT</th><th colspan="2">GAS DATA</th><th rowspan="2">NOTES:</th></tr><tr><th>TYPE</th><th>MBH (HIGH FIRE)</th></tr><tr><td>IRH-1-5</td><td>RE-VERBA-RAY</td><td>LS 20-50</td><td>SEE PLANS</td><td>VENTED</td><td>20'-0"</td><td>2 FOOT ABOVE BOTTOM SIDE OF TRUSS</td><td>NATURAL</td><td>50</td><td>1, 2, 3, 4, 5, 6</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                               |              |              |               |             |             |                                   |          |                 |                  |      |            |  |  |  | INFRA-RED TUBE HEATER SCHEDULE |  |  |  |  |  |  |  |  |  | MARK | MANUFACTURER | MODEL NUMBER | LOCATION    | TYPE        | UNIT LENGTH | MOUNTING HEIGHT    | GAS DATA |         | NOTES: | TYPE | MBH (HIGH FIRE) | IRH-1-5 | RE-VERBA-RAY | LS 20-50 | SEE PLANS   | VENTED | 20'-0" | 2 FOOT ABOVE BOTTOM SIDE OF TRUSS | NATURAL | 50  | 1, 2, 3, 4, 5, 6 |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| INFRA-RED TUBE HEATER SCHEDULE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |              |               |             |             |                                   |          |                 |                  |      |            |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| MARK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | MANUFACTURER | MODEL NUMBER | LOCATION      | TYPE        | UNIT LENGTH | MOUNTING HEIGHT                   | GAS DATA |                 | NOTES:           |      |            |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |              |               |             |             |                                   | TYPE     | MBH (HIGH FIRE) |                  |      |            |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| IRH-1-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | RE-VERBA-RAY | LS 20-50     | SEE PLANS     | VENTED      | 20'-0"      | 2 FOOT ABOVE BOTTOM SIDE OF TRUSS | NATURAL  | 50              | 1, 2, 3, 4, 5, 6 |      |            |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| (APPROVED EQUAL: SOLARONICS, SPACERAY)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |              |               |             |             |                                   |          |                 |                  |      |            |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |
| <p>NOTES:</p> <p>1. DIRECT SPARK IGNITION</p> <p>2. 24V HEATING THERMOSTAT</p> <p>3. WEATHERPROOF ROOF EXHAUST CAP</p> <p>4. A.G.A. CERTIFIED</p> <p>5. 16 GA. HEAT EXCHANGER TUBE</p> <p>6. MANUFACTURER TO PROVIDE EGG CRATE DROP IN CEILING AS REQUIRED.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |              |               |             |             |                                   |          |                 |                  |      |            |  |  |  |                                |  |  |  |  |  |  |  |  |  |      |              |              |             |             |             |                    |          |         |        |      |                 |         |              |          |             |        |        |                                   |         |     |                  |     |         |      |        |          |            |   |     |      |   |     |   |      |         |      |        |       |               |     |     |      |   |     |   |     |           |          |        |       |             |     |     |        |         |     |   |      |            |

mechanical electrical  
engineering consultants  
MEEC

mechanical electrical  
engineering consultants  
pc

1415 Goldsmith  
Plymouth, MI 48170

P 734-464-5516  
F 734-464-5517

MEEC JOB # 161-13-018

THIS DRAWING IS DIAGNAMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR SHALL FIELD VERIFY ALL WORK AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCIES. NOTICE: THIS DRAWING AND THE DESIGN ARE THE PROPERTY OF MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, PC AND NO ALTERATIONS AND/OR TRANSFERS OF WORK ARE PERMITTED UNLESS WRITTEN APPROVAL IS GRANTED BY MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, PC.

1

M201

N.T.S.

REFERRED FROM:

z



QUINN EVANS  
ARCHITECTS

219½ N MAIN STREET  
ANN ARBOR, MI 48104

V 734 663 5888  
F 734 663 5044

WWW.QUINNEVANS.COM

Ypsilanti  
Freight  
House

Ypsilanti, Michigan

QEA No. 31300600;  
Owner No. XXXX

MECHANICAL  
SCHEDULES

| NO. | TITLE        | DATE    |
|-----|--------------|---------|
| ___ | CONSTRUCTION | 4-30-15 |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |
| ___ |              |         |

FILE NAME:

M201

mechanical electrical  
**MEEC**  
engineering consultants

mechanical electrical  
engineering consultants  
**pc**  
1415 Goldsmith  
Plymouth, MI 48170  
P 734-454-5516  
F 734-454-5517  
MEEC JOB # 151-13-616

THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR SHALL FIELD VERIFY ALL WORK AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENT'S BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCIES. NOTICE: THIS DRAWING AND THE DESIGN ARE THE PROPERTY OF MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, PC AND NO ALTERATIONS AND/OR TRANSFERS OF WORK ARE PERMITTED UNLESS WRITTEN APPROVAL IS GRANTED BY MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, PC.



|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |                                                                                                                                                           |   |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|----|----|----|----|----|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|   | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2 | 3 | 4                                                                                                                                                         | 5 | 6 | 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
| P | GENERAL NOTES: MECHANICAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |   |   |                                                                                                                                                           |   |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | 1. PROVIDE MATERIALS AND EQUIPMENT AND EXECUTE THE WORK, INCLUDING ALL TESTING AND INSPECTIONS, IN COMPLIANCE WITH THE APPLICABLE PROVISIONS OF FEDERAL, STATE AND LOCAL GOVERNMENT LAWS, ORDINANCES, REFERENCED CODES AND STANDARDS CURRENT AS OF THE ISSUE DATE OF THESE DRAWINGS. ALL MORE STRINGENT REQUIREMENTS OF THE CONTRACT DOCUMENTS SHALL MODIFY, SUPPLEMENT AND SUPERSEDE APPLICABLE PORTIONS OF GOVERNING LAWS, ORDINANCES, CODES AND STANDARDS.                                                                                                                                                                                                                                                                                                                                    |   |   | 2) REFRIGERANT PIPING AND FITTINGS SHALL BE INSULATED WITH A MINIMUM 1/2" THICK CLOSED CELL ELASTOMERIC THERMAL INSULATION WITH A BUILT IN VAPOR BARRIER. |   |   | 3) PIPE INSULATION SHALL HAVE A FLAME SPREAD AND SMOKE DENSITY RATING NOT EXCEEDING 25/50, AS TESTED PER ASTM STANDARD E_84.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| N | 2. CONTRACTOR SHALL PRESENT CERTIFICATE TO THE OWNER THAT ALL APPLICABLE BUILDING PERMITS HAVE BEEN SECURED PRIOR TO STARTING ANY WORK, AND PROVIDE THE OWNER WITH ALL REQUIRED CERTIFICATES OF FINAL APPROVAL FROM THE GOVERNING JURISDICTIONS AT COMPLETION OF THE WORK. PROVIDE ALL SHOP DRAWINGS AS REQUIRED IN FOLLOWING SECTIONS.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |   |   |                                                                                                                                                           |   |   | 5. PIPING SHALL BE SUPPORTED FROM HANGERS AT AN ADEQUATE DISTANCE WITH SUPPORTING HANGER RODS FASTENED TO THE BUILDING FRAMING WHENEVER POSSIBLE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |   |   |    |    |    |    |    |    | 3) HORNS AND HORN/ STROBES:                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |
|   | 3. MAKE ALL CONNECTIONS TO EXISTING SYSTEMS DURING DESIGNATED PERIODS UPON APPROVAL OF THE OWNER AND AT NO INCREASE IN CONTRACT SUM.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |                                                                                                                                                           |   |   | 6. ALL SERVICES SHALL BE PROPERLY SLEEVED WHEN ROUTED THROUGH FLOORS AND WALLS. CONTRACTOR TO PROVIDE FIRE RESISTANT ROPE PACKING FOR ALL PIPES PENETRATING FIRE RATED WALLS. CONTRACTOR SHALL OBTAIN A COPY OF THE ARCHITECTURAL DRAWINGS TO IDENTIFY FIRE RATED WALLS. CONTRACTOR SHALL PROVIDE A WEATHERPROOF SEAL FOR PIPING PENETRATING EXTERIOR WALLS AND SHALL PROVIDE A WATER TIGHT SEAL, SIMILAR TO "LINK SEAL", FOR ALL PIPING PENETRATING BASEMENT WALLS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |   |   |    |    |    |    |    |    | a) THE HORNS SHALL HAVE TWO SELECTABLE TONE OPTIONS, TWO AUDIBILITY OPTIONS, AND THE OPTION TO SWITCH BETWEEN TEMPORAL 3 PATTERN AND A NON-TEMPORAL PATTERN. THE HORNS SHALL MOUNT ON 4" SQUARE X 2-1/8" DEEP BOX WITH 1-1/2" EXTENSION RING.                                                                                                                                                                                                                    |  |  |
|   | 4. EXISTING FACILITIES:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |   |   |                                                                                                                                                           |   |   | 7. FURNISH AND INSTALL ISOLATION VALVES AT ALL SERVICE POINTS OR EQUIPMENT CONNECTIONS. PROVIDE VACUUM BREAKERS AND ANTI-SIPHON FITTINGS ON WATER PIPING SYSTEMS BEFORE EQUIPMENT CONNECTIONS, AND AT ALL HOSE END SPOIGOTS AND HOSE CONNECTIONS, ETC. INSTALL REDUCED PRESSURE BACKFLOW PREVENTERS ON ALL MAKE-UP WATER LINES TO MECHANICAL EQUIPMENT AND ON BUILDING DOMESTIC WATER SERVICE WHERE LOCAL CODE REQUIRES. THE INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH LOCAL CODES AND/OR AUTHORITIES FOR THE PROTECTION OF THE WATER SUPPLY SYSTEM. INSTALL STRAINER UP STREAM OF REDUCED PRESSURE BACKFLOW PREVENTER.                                                                                                                                                                                                                                                                                                                              |   |   |    |    |    |    |    |    | b) VISUAL SIGNAL SHALL BE MINIMUM OF 15 CANDELA. ACTUAL STROBE COVERAGE SHALL BE CALCULATED BASED ON NFPA 72-93/1096.                                                                                                                                                                                                                                                                                                                                            |  |  |
| M | A. DO NOT INTERRUPT EXISTING UTILITIES UTILIZED BY THE OWNER EXCEPT AS SPECIFIED OR WHEN APPROVED IN WRITING, AND THEN ONLY AFTER TEMPORARY UTILITY SERVICES HAVE BEEN APPROVED AND PROVIDED. INTERRUPTIONS MUST BE SCHEDULED TO SUIT THE OWNER'S REQUIREMENTS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |                                                                                                                                                           |   |   | 8. CLEANING OF WATER PIPING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |   |   |    |    |    |    |    |    | c) THE HORN/STROBES SHALL MOUNT ON 4" SQUARE X 2-1/8" DEEP BOX WITH 1-1/2" EXTENSION RING.                                                                                                                                                                                                                                                                                                                                                                       |  |  |
|   | B. VERIFY ALL EXISTING WORK, WHERE EXISTING CONNECTIONS ARE PARTIAL, PROVIDE ALL NECESSARY MATERIALS, LABOR AND EQUIPMENT REQUIRED TO MODIFY EXISTING WORK. IN ADDITION, MAINTAIN INTEGRITY OF THE EXISTING SYSTEMS. RECTIFY ANY CONTAMINATION, DEGRADATION OF CLEANLINESS OR DAMAGE TO THE EXISTING SYSTEMS, TO THE SATISFACTION OF THE OWNER. PROVIDE ALL WORK SO REQUIRED AT NO INCREASE IN THE CONTRACTOR'S ORIGINAL PROPOSAL.                                                                                                                                                                                                                                                                                                                                                               |   |   |                                                                                                                                                           |   |   | A. BEFORE BEING PLACED IN SERVICE, ALL NEW DOMESTIC WATER DISTRIBUTION LINES SHALL BE CHLORINATED. AFTER THE PRESSURE TEST, AND BEFORE CHLORINATION, ALL DIRT AND FOREIGN MATTER SHALL BE REMOVED BY A THOROUGH FLUSHING WITH CLEAN POTABLE WATER THROUGH THE LINES, DISCHARGING THE FLOW FROM THE END OF THE LINES UNTIL DIRTY WATER DOES NOT APPEAR AT THE POINTS OF OUTLET.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |    |    |    |    |    |    | d) FIRE ALARM CONTRACTOR SHALL SELECT CANDELA RATINGS FOR ALL VISUAL DEVICES BASED ON NFPA REQUIREMENTS.                                                                                                                                                                                                                                                                                                                                                         |  |  |
|   | 5. COORDINATE EXACT LOCATION OF CONSTRUCTION TO PRECLUDE ANY INTERFERENCES BETWEEN PIPING, WIRING, LIGHTING FIXTURES, DUCTWORK, BUILDING EQUIPMENT, PROCESS EQUIPMENT AND OTHER CONSTRUCTION.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |   |   |                                                                                                                                                           |   |   | B. THE SYSTEM SHALL BE THOROUGHLY STERILIZED USING THE PROCEDURE REQUIRED BY THE AUTHORITIES HAVING JURISDICTION.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |   |   |    |    |    |    |    |    | 4) EXTERIOR ALARM DEVICE SHALL BE A WEATHERPROOF HORN/STROBE DEVICE AND SHALL OPERATE AT 120 VOLTS.                                                                                                                                                                                                                                                                                                                                                              |  |  |
| L | 6. PROVIDE LABOR, INCLUDING FIELD ERECTION AND SUPERVISION, MATERIALS, EQUIPMENT AND ANCILLARIES, AND COORDINATE, PROCURE, FABRICATE, DELIVER, ERECT OR INSTALL, INTERFACE WITH EXISTING WORK, START, DEBUG AND TEST ALL SYSTEMS AS NECESSARY TO PROVIDE THE OWNER WITH A COMPLETE, OPERATING FACILITY IN CONFORMANCE WITH THE CONSTRUCTION BID DOCUMENTS.                                                                                                                                                                                                                                                                                                                                                                                                                                       |   |   |                                                                                                                                                           |   |   | 9. IDENTIFICATION:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |   |   |    |    |    |    |    |    | GENERAL:                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |
|   | 7. ALL CUTTING AND PATCHING THAT MAY BE NECESSARY FOR THE INSTALLATION OF THE MECHANICAL CONTRACTOR'S WORK SHALL BE PERFORMED AND REPAIRED BY THE TRADE WHOM NORMALLY PERFORMS THAT WORK AND PAID FOR BY THE MECHANICAL CONTRACTOR. NO CUTTING OF THE BUILDING STRUCTURAL SYSTEM SHALL BE PERFORMED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT BEING PREVIOUSLY OBTAINED.                                                                                                                                                                                                                                                                                                                                                                                                                      |   |   |                                                                                                                                                           |   |   | A. TAG ALL VALVES WITH STAMPED OR ENGRAVED BRASS TAGS AND PROVIDE A COMPLETE VALVE CHART INDICATING LOCATION, FUNCTION AND EQUIPMENT SERVED. CHART SHALL BE TYPED AND MOUNTED IN A GLAZED FRAME.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |   |    |    |    |    |    |    | 1) THE SYSTEM SHALL INCORPORATE AN INTEGRAL STANDBY POWER SUPPLY CAPABLE OF PROVIDING POWER FOR ALL SYSTEM SUPERVISORY FUNCTIONS FOR A PERIOD OF 24 HOURS WITH SUFFICIENT CAPACITY REMAINING AT THE END OF THAT PERIOD TO POWER THE SYSTEM IN A FULL MODE FOR FIVE MINUTES. CALCULATION VERIFYING COMPLIANCE WITH THE ABOVE SHALL BE PROVIDED AS PART OF THE SUBMISSION; CALCULATIONS SHALL INCLUDE ALARM INITIATION CIRCUITS WITH SMOKE DETECTORS AS INDICATED. |  |  |
| K | 8. THE MECHANICAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING HIS BID TO FAMILIARIZE HIMSELF WITH THE ACTUAL PROJECT CONDITIONS AND TO CHECK FOR ANY INTERFERENCES BETWEEN HIS WORK AND THAT OF THE OTHER TRADES, AND/OR ANY APPARENT VIOLATIONS OF LOCAL OR STATE CODES, LAWS, ORDINANCES AND REGULATIONS. SHOULD ANY VIOLATIONS OR INTERFERENCES APPEAR AND DEPARTURE FROM THE DESIGN INTENT OF THE CONTRACT DOCUMENTS IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT PRIOR TO ENTERING INTO A CONTRACT WITH THE OWNER. FAILURE TO PROVIDE THE ARCHITECT WITH THE AFOREMENTIONED NOTIFICATION SHALL RESULT IN THE CONTRACTOR BEING HELD RESPONSIBLE TO COMPLETE ALL WORK TO MEET THE INTENT OF THE CONTRACT DOCUMENTS WITH NO ADDITIONAL EXPENSES BEING INCURRED BY THE OWNER. |   |   |                                                                                                                                                           |   |   | B. LABEL ALL PIPING SYSTEMS WITH MANUFACTURED SELF ADHESIVE OR PRE-TENSIONED PIPE MARKERS. MARKERS SHALL INDICATE SERVICE AND DIRECTION OF FLOW, MARK PIPE NEAR VALVES, BRANCH CONNECTIONS, PENETRATIONS, ACCESS DOORS AND NEAR MAJOR PIECES OF EQUIPMENT. MARKER SPACING SHALL NOT EXCEED 50'.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |   |    |    |    |    |    |    | 2) THE SYSTEM SHALL AUTOMATICALLY TRANSFER TO STANDBY POWER ON TOTAL FAILURE OR LOW VOLTAGE CONDITION OF THE PRIMARY POWER SUPPLY. THE SYSTEM SHALL INCLUDE AN AUTOMATIC CHARGER CAPABLE OF RESTORING FULLY DISCHARGED BATTERIES TO FULL CAPACITY WITHIN A 48 HOUR PERIOD.                                                                                                                                                                                       |  |  |
| J | 9. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL LOCATIONS AND ARRANGEMENTS OF ALL THE EQUIPMENT AND PIPING. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS BUILDING CONSTRUCTION AND ALL OTHER WORK WILL PERMIT. DO NOT SCALE DRAWINGS FOR EXACT MEASUREMENTS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |   |                                                                                                                                                           |   |   | 10. FLOOR DRAINS SHALL BE SIMILAR TO THE FOLLOWING:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |   |   |    |    |    |    |    |    | WIRING: ALL WIRING SHALL BE INSTALLED IN A COMPLETELY SEPARATE CONDUIT SYSTEM. TYPE AND SIZE SHALL COMPLY WITH THE FIRE ALARM EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.                                                                                                                                                                                                                                                                                          |  |  |
|   | 10. DEMOLITION OF MECHANICAL EQUIPMENT SHALL INCLUDE ALL EXISTING PIPING, VALVES, CONTROLS, SUPPORTS, FLUES AND EQUIPMENT WHERE SUCH ITEMS ARE NOT REQUIRED FOR THE PROPER OPERATION OF THE REVISED SYSTEM. REMOVE, RECONNECT, CAP, PLUG AND REPLACE EXISTING PIPING AND DUCTWORK.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |                                                                                                                                                           |   |   | A. SHOWERS, MECHANICAL ROOMS, AND TOILET ROOMS: ZURN MODEL ZN_415 FLOOR DRAIN, DURA COATED CAST IRON BODY WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP, TRAP-PRIMER CONNECTION AND ADJUSTABLE TYPE "B" NICKEL BRONZE STRAINER.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |   |   |    |    |    |    |    |    | CUTION:                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |
| H |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |                                                                                                                                                           |   |   | 11. THE PLUMBING AND PIPING CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PITCH OF PIPE FOR DRAINAGE AND AIR VENTING OF PIPING SYSTEMS AND SHALL PROVIDE DRAINS TO RECEIVE THE PIPING SYSTEMS CONNECTIONS OF INDIRECT WASTE AND CONDENSATE DRAINAGE FROM ALL MECHANICAL DRAINS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |   |    |    |    |    |    |    | THE FIRE SPRINKLER CONTRACTOR SHALL PROVIDE AND INSTALL IN ACCORDANCE WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES, THE MANUFACTURER'S RECOMMENDATIONS, AND THE PLANS AND SPECIFICATIONS, ALL EQUIPMENT, WIRING, CONDUIT AND OUTLET BOXES REQUIRED FOR THE ERECTION OF A COMPLETE AND PROPERLY OPERATING SYSTEM.                                                                                                                                              |  |  |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |                                                                                                                                                           |   |   | 12. THE PLUMBING AND PIPING CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND PROVIDE ROUGH-INS FOR ALL EQUIPMENT FURNISHED BY OTHER CONTRACTORS, AFTER ALL EQUIPMENT HAS BEEN INSTALLED BY OTHER CONTRACTORS. THE PLUMBING AND PIPING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS AND SHALL INCLUDE IN HIS BASE BID ALL VALVES, UNIONS, COUPLINGS, VACUUM BREAKERS, ETC., THAT ARE REQUIRED TO MAKE FINAL CONNECTIONS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |   |   |    |    |    |    |    |    | THE MANUFACTURER'S AUTHORIZED TECHNICAL REPRESENTATIVE SHALL BE PRESENT DURING ALL TESTS AND INSPECTIONS CONDUCTED BY THE LOCAL FIRE OFFICIALS AND CODE AUTHORITIES. THE MANUFACTURER'S AUTHORIZED REPRESENTATIVE SHALL PROVIDE SUPERVISION OF FINAL CONNECTIONS TO THE SYSTEM PANEL AND SUBMIT A WRITTEN REPORT TO THE CONTRACTOR ATTESTING TO THE PROPER OPERATION OF THE COMPLETED SYSTEM.                                                                    |  |  |
| G | GENERAL NOTES: PLUMBING AND PIPING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |                                                                                                                                                           |   |   | 13. THE PLUMBING AND PIPING CONTRACTOR SHALL OBTAIN OTHER TRADES DRAWINGS AND COORDINATE HIS WORK WITH THE TOTAL PROJECT AS IT RELATES TO ALL TRADES AND VISIT THE PROJECT SITE PRIOR TO SUBMITTING HIS BID TO FAMILIARIZE HIMSELF WITH THE ACTUAL PROJECT CONDITIONS AND TO CHECK FOR ANY INTERFERENCES BETWEEN HIS SCOPE OF WORK AND THAT OF THE OTHER TRADES, AND/OR ANY APPARENT VIOLATIONS OF LOCAL OR STATE BUILDING CODES, LAWS, ORDINANCES, AND REGULATIONS. IF ANY INTERFERENCES OR VIOLATIONS APPEAR AND DEPARTURE FROM THE DESIGN INTENT OF THE CONSTRUCTION BID DOCUMENTS IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT PRIOR TO ENTERING INTO A CONTRACT WITH THE OWNER. FAILURE TO PROVIDE THE ARCHITECT WITH THE AFOREMENTIONED NOTIFICATION SHALL RESULT IN THE CONTRACTOR BEING HELD RESPONSIBLE TO COMPLETE ALL WORK TO MEET THE INTENT OF THE CONSTRUCTION BID DOCUMENTS WITH NO ADDITIONAL COSTS BEING INCURRED BY THE OWNER. |   |   |    |    |    |    |    |    | UPON SATISFACTORY COMPLETION OF ALL SYSTEM TESTS, THE MANUFACTURER'S REPRESENTATIVE SHALL PRESENT TO THE OWNER A PROPOSAL TO PROVIDE A SEMI-ANNUAL INSPECTION AND TESTING OF THE SYSTEM. THIS PROPOSAL SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE SECTIONS OF NFPA 72, AND INTERNATIONAL FIRE CODE AND 2009 MINIMUM BUILDING CODE.                                                                                                                      |  |  |
|   | 1. ALL PIPING SHALL BE CONCEALED UNLESS OTHERWISE NOTED. EXPOSING OF ANY PIPING MUST HAVE APPROVAL OF THE ARCHITECT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |                                                                                                                                                           |   |   | 14. THE CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS OF ALL EQUIPMENT FURNISHED BY THIS CONTRACTOR WITH THE ELECTRICAL CONTRACTOR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | 2. PROVIDE BRANCH LINE SHUT-OFF VALVES ON DOMESTIC WATER PIPING EACH PLUMBING FIXTURE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |   |                                                                                                                                                           |   |   | 15. FURNISH AND INSTALL AN INDIVIDUAL COMBINATION PRESSURE-BALANCING AND THERMOSTATIC CONTROL VALVE THAT CONFORMS TO A.S.S.E. # 1070 WITH TEMPERED WATER PIPING CONNECTIONS FOR THE FOLLOWING OCCUPANCIES AND/OR FIXTURES:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | 3. THE PLUMBING AND PIPING SYSTEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL STATE AND LOCAL PLUMBING CODES. THE PLUMBING AND PIPING CONTRACTOR SHALL OBTAIN ALL PERMITS, PAY FOR ALL FEES, AND ARRANGE FOR ALL INSPECTIONS FOR HIS WORK. AT THE COMPLETION OF THE PROJECT, THE PLUMBING CONTRACTOR SHALL FURNISH THE OWNER WITH CERTIFICATES OF FINAL INSPECTIONS AND APPROVALS.                                                                                                                                                                                                                                                                                                                                                                                                         |   |   |                                                                                                                                                           |   |   | A. ACCESSIBLE PLUMBING FIXTURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| F | 4. PIPING SHALL BE AS FOLLOWS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |   |                                                                                                                                                           |   |   | SET VALVE FOR A MAXIMUM OF 110 DEGREES F.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | A. SANITARY AND VENT PIPING:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |   |                                                                                                                                                           |   |   | 16. THE CONTRACTOR SHALL SUBMIT EQUIPMENT SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW PRIOR TO INSTALLATION OF ANY OF THE FOLLOWING EQUIPMENT:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | 1) ALL 1-1/2" AND LARGER WASTE AND VENT PIPING ABOVE GROUND SHALL BE SERVICE WEIGHT CAST IRON SOIL PIPE WITH NO_HUB FITTINGS OR SCHEDULE 40 PVC FITTINGS WHERE LOCAL CODE PERMITS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |                                                                                                                                                           |   |   | A. PLUMBING FIXTURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | 2) ALL WASTE PIPING BELOW GRADE SHALL BE SERVICE WEIGHT CAST IRON SOIL PIPE WITH COMPRESSION TYPE FITTINGS, OR SCHEDULE 40 PVC WHERE LOCAL CODE PERMITS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |   |   |                                                                                                                                                           |   |   | B. DOMESTIC WATER HEATERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | 3) RUN ALL UNDERGROUND SANITARY AND STORM PIPING LARGER THAN 2" AT 1/8" PER FOOT MINIMUM PITCH UNLESS NOTED OTHERWISE. SANITARY PIPING LESS THAN 2" SHALL BE PITCHED AT 1/4" PER FOOT MINIMUM UNLESS NOTED OTHERWISE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |   |                                                                                                                                                           |   |   | C. PLUMBING VALVES, HANGERS & ACCESSORIES.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | B. DOMESTIC WATER PIPING:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |   |   |                                                                                                                                                           |   |   | D. PLUMBING INSULATION.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | 1) ALL ABOVE GROUND DOMESTIC WATER PIPING SHALL BE TYPE "L" HARD DRAWN COPPER TUBING WITH WROUGHT COPPER OR CAST RED BRONZE FITTINGS. ALL SOLDERED FITTINGS SHALL BE MADE WITH SIL-FOS SOLDER OR AN APPROVED NON-TOXIC SOLDER. IN GENERAL, MECHANICAL TYPE FITTINGS EQUAL TO "PROGRESS" OR "APOLLO EXPRESS" ARE APPROVED IN LIEU OF SOLDERED FITTINGS.                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |   |                                                                                                                                                           |   |   | E. FLOOR DRAINS, CLEANOUTS, ROOF DRAINS, ETC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | 2) ALL UNDERGROUND PIPING 2" AND SMALLER SHALL BE TYPE "K" COPPER. PIPE FITTINGS ARE NOT ALLOWED BELOW FLOOR SLAB. UNDERGROUND WATER SERVICE 3" AND LARGER SHALL BE DUCTILE IRON WITH FITTINGS APPROVED BY LOCAL JURISDICTION.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |   |                                                                                                                                                           |   |   | 17. THE CONTRACTOR SHALL GUARANTEE ALL WORK INSTALLED UNDER THIS CONTRACT TO BE FREE FROM DEFECTIVE WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER THE ACCEPTANCE OF THE BUILDING BY THE OWNER, AND SHOULD DEFECTS OCCUR WITHIN THAT PERIOD, REPAIR AND/OR REPLACE DEFECTIVE ITEMS AND ANY DAMAGE RESULTING FROM FAILURE OF THESE ITEMS, AT NO EXPENSE TO THE OWNER.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| E | C. HEATING HOT WATER PIPING:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |   |                                                                                                                                                           |   |   | 18. THE CONTRACTOR SHALL COORDINATE LOCATIONS OF HIS EQUIPMENT AND WORK WITH OTHER BUILDING TRADES TO AVOID ANY INTERFERENCES BETWEEN HIS WORK AND THE WORK OF OTHER TRADES.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | 1) ALL UNDERGROUND PIPING SHALL BE TYPE "K" COPPER. PIPE FITTINGS ARE NOT ALLOWED BELOW FLOOR SLAB.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |   |   |                                                                                                                                                           |   |   | 19. ANY CUTTING AND/OR PATCHING, THAT MAY BE REQUIRED FOR THE INSTALLATION OF THE PLUMBING AND PIPING SYSTEMS, SHALL BE PERFORMED BY THE ARCHITECTURAL TRADES AND PAID FOR BY THIS CONTRACTOR. NO CUTTING OF THE BUILDING STRUCTURAL SYSTEM SHALL BE PERFORMED WITHOUT WRITTEN APPROVAL OF THE ARCHITECT BEING OBTAINED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | D. GAS PIPING:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |   |                                                                                                                                                           |   |   | 20. WATER HAMMER ARRESTORS OR 15" HIGH AIR CHAMBERS SHALL BE INSTALLED ON BOTH COLD AND HOT WATER LINES. INSTALL IN AN UPRIGHT POSITION AT ALL QUICK CLOSING VALVES, SOLENOIDS, AND PLUMBING FIXTURES. MANUFACTURED WATER HAMMER ARRESTORS SHALL BE SIOUX CHIEF 650/660 SERIES PISTON TYPE LOCATED, SIZED, AND INSTALLED IN ACCORDANCE WITH PLUMBING AND DRAINAGE INSTITUTE STANDARD NO.WH201.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| D | 1) GAS PIPING SHALL BE SCHEDULE 40, BLACK STEEL WITH THREADED OR WELDED FITTINGS AS REQUIRED. PROVIDE SHUT-OFF COCKS ON ALL OUTLETS WHERE SHOWN. WRAP ALL UNDERGROUND PIPING WITH "3_M SCOTCH WRAP" OR "TAPECOAT" PIPE WRAP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |   |                                                                                                                                                           |   |   | 21. THE CONTRACTOR SHALL COORDINATE HIS ROUGH-IN WORK WITH THE DIMENSIONED DRAWINGS FURNISHED BY THE FOOD SERVICE EQUIPMENT CONTRACTOR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | 2) VALVES SHALL NOT BE LOCATED IN ANY AIR PLENUM. PORTIONS OF A GAS PIPING SYSTEM INSTALLED IN CONCEALED LOCATIONS SHALL NOT HAVE UNIONS, TUBE FITTINGS, OR RUNNING THREADS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |   |                                                                                                                                                           |   |   | 22. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL NEW PLUMBING FIXTURES.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | CHECK VALVES SHALL BE SWING CHECK WITH BRONZE DISC, CLASS 150, ASTM B62, Y PATTERN DESIGN WITH THREADED OR SOLDERED ENDS, RATED FOR 300 PSIG CWP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |   |   |                                                                                                                                                           |   |   | 23. COORDINATE ALL NEW LOCATIONS, SIZES AND ELEVATIONS OF SLEEVES THROUGH WALL SLABS AND FOUNDATIONS WITH STRUCTURAL DRAWINGS AND EXISTING FIELD CONDITIONS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| C | GATE VALVES SHALL BE CLASS 150 RISING STEM WITH BRONZE BODY, WEDGE AND BONNET, COPPER-SILICONE BRONZE STEM, SCREW IN BONNET WITH THREADED ENDS. RATED FOR 300 PSIG CWP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |   |   |                                                                                                                                                           |   |   | 24. SEAL ALL PENETRATIONS THROUGH WALLS AND FLOORS AIR AND WATER TIGHT. COORDINATE LOCATIONS AND ELEVATIONS OF ALL NEW UNDERGROUND UTILITIES WITH CIVIL SITE PLANS PRIOR TO START OF CONSTRUCTION.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | GAS VALVE SHALL BE LUBRICATED TYPE CAST IRON OR U.L. LISTED TWO PIECE BRONZE BALL VALVE WITH RPTFE SEALS AND SEAT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |                                                                                                                                                           |   |   | 25. CONTRACTOR SHALL MAINTAIN ADEQUATE CLEARANCES (PER N.E.C.) ABOVE AND AROUND ANY NEW ELECTRICAL PANELS, EQUIPMENT AND TRANSFORMERS WHEN ROUTING OVERHEAD DOMESTIC WATER AND STORM PIPING.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| B | F. PIPING INSULATION:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |   |                                                                                                                                                           |   |   | 26. FAUCETS AND PLUMBING FIXTURES SHALL BE OF WATER CONSERVATION TYPE AND COMPLY WITH THE STATE ENERGY STANDARDS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | 1) DOMESTIC HOT & COLD WATER PIPING SHALL BE INSULATED WITH MINIMUM 1" THICK FIBERGLASS INSULATION, WITH A FIRE RETARDANT JACKET, HAVING AN AVERAGE R VALUE OF 3.45. COLD WATER PIPING INSULATION SHALL BE PROVIDED WITH A VAPOR BARRIER, PROVIDE PREFORMED SECTIONS WITH PVC COVERS AT ALL FITTINGS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |   |                                                                                                                                                           |   |   | GENERAL NOTES: HVAC SYSTEM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |   |                                                                                                                                                           |   |   | 1. EXISTING UNIT HEATERS, DUCTWORK, DIFFUSERS, GRILLES, REGISTERS, ETC. SHALL BE REMOVED UNLESS OTHERWISE NOTED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| A | 1 MECHANICAL NOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |   |                                                                                                                                                           |   |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|   | M301 N.T.S. REFERRED FROM:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |   |   |                                                                                                                                                           |   |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |   |    |    |    |    |    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |



QUINN EVANS  
ARCHITECTS

219½ N MAIN STREET  
ANN ARBOR, MI 48104  
V 734 663 5888  
F 734 663 5044  
WWW.QUINNEVANS.COM

Ypsilanti  
Freight  
House

Ypsilanti, Michigan

QEA No. 31300600;  
Owner No. XXXX

MECHANICAL  
SCHEDULES

| NO. | TITLE        | DATE    |
|-----|--------------|---------|
| —   | CONSTRUCTION | 4-30-15 |



mechanical electrical  
engineering consultants

1415 Goldsmith  
Plymouth, MI 48170  
P 734-454-5516  
F 734-454-5517

THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR SHALL VERIFY THE WORK AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR ANY DISCREPANCIES. NOTICE: THIS DRAWING AND THE DESIGN ARE THE PROPERTY OF MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, P.C. NO ALTERATIONS AND/OR TRANSFERS OF WORK ARE PERMITTED WITHOUT WRITTEN APPROVAL. AS GRANTED BY MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, P.C.

FILE NAME:



M301

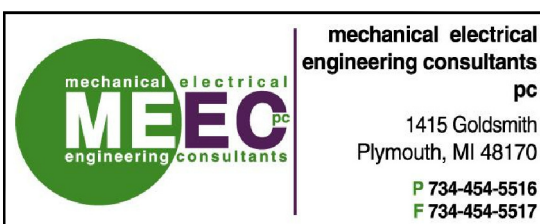
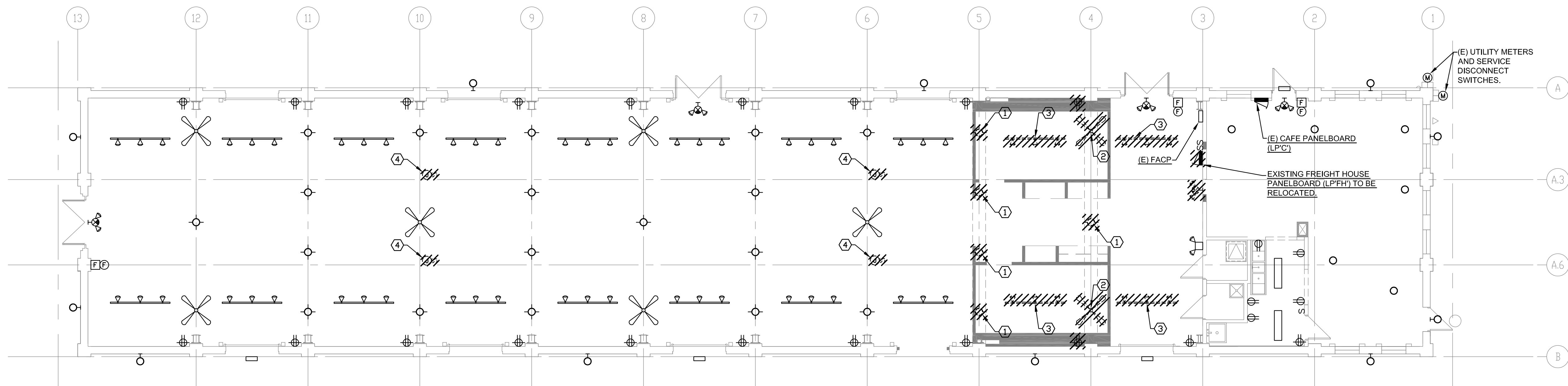


## ELECTRICAL ABBREVIATIONS

- |  |                                                                                                   |
|--|---------------------------------------------------------------------------------------------------|
|  | WALL MOUNTED LUMINAIRE, HEIGHT AS NOTED                                                           |
|  | SINGLE FACE EXIT SIGN, ARROWS AS INDICATED                                                        |
|  | DOUBLE FACE EXIT SIGN, ARROWS AS INDICATED                                                        |
|  | BATTERY OPERATED EMERGENCY LIGHT                                                                  |
|  | EMERGENCY LIGHT                                                                                   |
|  | CEILING FAN                                                                                       |
|  | TRACK LIGHT                                                                                       |
|  | SURFACE MOUNTED LIGHT FIXTURE                                                                     |
|  | PENDANT MOUNTED LIGHT FIXTURE                                                                     |
|  | SINGLE POLE TOGGLE SWITCH, 1/480 A.F.F.                                                           |
|  | WALL SWITCH SENSOR WITH MINIMUM FAN RUN-TIME, 2-POLE, LINE VOLTAGE, SENSOR SWITCH #WSD PDT 2P FAN |
|  | WALL SWITCH SENSOR LINE VOLTAGE, (MANUAL ON) SENSOR SWITCH #WSD PDT SA                            |
|  | DUPLEX RECEPTACLE, 120V, 20A, GROUNDING TYPE, 1/180 A.F.F., OR AS NOTED                           |
|  | DUPLEX RECEPTACLE, GFCI TYPE, 120V, 20A, GROUNDING TYPE, 1/480 A.F.F., OR 90 ABOVE COUNTER        |
|  | DOUBLE DUPLEX RECEPTACLE, 120V, 20A, GROUNDING TYPE 1/180 A.F.F., OR AS NOTED                     |
|  | DOUBLE DUPLEX RECEPTACLE 120V, 20A, GROUNDING TYPE 1/480 A.F.F., OR 90 ABOVE COUNTER              |
|  | DUPLEX RECEPTACLE, 120V, 20A, GROUNDING TYPE 1/480 A.F.F., OR 90 ABOVE COUNTER                    |
|  | WEATHERPROOF RECEPTACLE, 1/240 A.F.F.                                                             |
|  | JUNCTION BOX - CEILING MOUNTED                                                                    |
|  | JUNCTION BOX - WALL MOUNTED, HEIGHT AS NOTED                                                      |
|  | FUSIBLE DISCONNECT SWITCH - UPPER NUMERAL DENOTES SWITCH SIZE, LOWER NUMERAL DENOTES FUSE SIZE    |
|  | NON-FUSIBLE DISCONNECT SWITCH - NUMERAL DENOTES SWITCH SIZE                                       |
|  | MOTOR CONNECTION                                                                                  |
|  | LIGHTING PANELBOARD                                                                               |
|  | CONTROL PANEL                                                                                     |
|  | FIRE ALARM MANUAL PULL STATION 1/480 A.F.F.                                                       |
|  | FIRE ALARM AUDIBLE/VISUAL COMBINATION DEVICE 1/800 A.F.F.                                         |
|  | FIRE ALARM #WSD DEVICE 1/800 A.F.F.                                                               |
|  | CONDUIT RUN IN WALL OR ABOVE CEILING                                                              |
|  | CONDUIT RUN BELOW GRADE OR CONCRETE SLAB                                                          |
|  | BRANCH CIRCUIT HOMERUN                                                                            |
|  | EXISTING TO BE DEMOLISHED                                                                         |

- |           |                                    |
|-----------|------------------------------------|
| A.C.      | ALTERNATING CURRENT                |
| AC        | ABOVE COUNTERTOP                   |
| AFCI      | ARC FAULT CIRCUIT INTERRUPTER      |
| AFF       | ABOVE FINISHED FLOOR TO CENTERLINE |
| AFG       | ABOVE FINISHED GRADE TO CENTERLINE |
| C         | CONDUIT                            |
| CKTC/CIRC | CIRCUIT                            |
| CTC       | CURRENT TRANSFORMER CABINET        |
| DP        | DISTRIBUTION PANEL                 |
| (E)       | EXISTING                           |
| EC        | ELECTRICAL CONTRACTOR              |
| EF        | EXHAUST FAN                        |
| EWC       | ELECTRIC WATER COOLER              |
| FURN      | FURNICE                            |
| GRD       | GROUND                             |
| HWH       | HOT WATER HEATER                   |
| MDP       | MAIN DISTRIBUTION PANEL            |
| PP        | POWER PANEL                        |
| RTU       | ROOFTOP UNIT                       |
| UC        | UNDER COUNTER                      |
| UON       | UNLESS OTHERWISE NOTED             |
| WP        | WEATHERPROOF                       |

- ① EXISTING PENDANT LIGHT TO BE REMOVED AND RELOCATED. REFER TO SHEET E201. REMOVE FEEDERS AND CONDUIT BACK TO SOURCE.
- ② EXISTING CEILING FAN TO BE REMOVED AND TURNED OVER TO OWNER. REMOVE FEEDERS AND CONDUIT BACK TO SOURCE.
- ③ EXISTING TRACK LIGHT TO BE REMOVED AND TURNED OVER TO OWNER. REMOVE FEEDERS AND CONDUIT BACK TO SOURCE.
- ④ REMOVE EXISTING UNIT HEATER, FEEDERS AND CONDUIT BACK TO SOURCE.



THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT, THE CONTRACTOR SHALL FIELD VERIFY ALL WORK AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCIES. NOTICE: THIS DRAWING AND THE DESIGN ARE THE PROPERTY OF MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, PC AND NO ALTERATIONS AND/OR TRANSFERS OF WORK ARE PERMITTED UNLESS WRITTEN APPROVAL IS GRANTED BY MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, PC.



QEA No. 31300600;  
Owner No. XXXX

# FLOOR PLAN - ELECTRICAL DEMOLITION

[illegible]

FILE NAME:

# E101







|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| P |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| N |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| M |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| L |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| K |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| J |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| H |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| G |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| F |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| E |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| D |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| C |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| B |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| A |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |

ELECTRICAL SPECIFICATIONS

GENERAL CONDITIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section. The Electrical Contractor shall assume all obligations contained therein that affect this work. The Electrical Engineer shall be consulted in case of any disputes and his decision shall be final.
- B. The Electrical Contractor shall examine the Architectural, Plumbing and Mechanical Drawings and Specifications and shall familiarize himself with all conditions of work affecting the contract. Size and capacity of all equipment shall be as shown or as indicated herein.
- C. Furnish labor and materials to provide a complete electrical system as required by the plans and specifications.
- D. Any item appearing on the drawings and not in the specification or vice versa, and any items appearing in neither but necessary to accomplish the intent of these specifications, shall be furnished by the Electrical Contractor.
- E. Where equipment specifications or descriptions include a specific manufacturer and catalog number, any substituted equipment or equipment requested to be provided by an alternate manufacturer must be approved in writing by the Engineer. The requirements of the specified equipment in all respects. Alternate manufacturers shall refer to product literature published by the manufacturer of the equipment specified to determine equivalency of their proposed alternate product to that specified.

WORK INCLUDED

- A. These specifications and accompanying drawings contemplate the provisions by the Electrical Contractor of all labor and materials required to install a complete system of electrical work as indicated on the drawings and/or herein specified. Without restricting the generality of the foregoing, the following shall be included:
1. Modifications to existing panelboards.
  2. Feeders, safety switches, branch circuit wiring, outlets and connection complete.
  3. Grounding of complete electrical system per Article 250 of N.E.C. and specifications.
  4. Emergency egress lighting and exit lighting systems complete.
  5. Service and connections of equipment as specified.
  6. Lighting fixtures complete with lamps.
  7. Automatic lighting control systems.
  8. Disconnect switches which are not an integral part of equipment.

WORK BY OTHERS

- A. The following work is specified under other sections of these specifications.

1. All motor control equipment, including thermostats, control wiring for motor operated mechanical equipment such as dampers and damper motors (unless noted otherwise) will be furnished by the Mechanical Contractor. Power wiring, motor starters, and disconnect switches shall be furnished and installed by the Electrical Contractor.

ELECTRICAL SUBMITTALS

- A. Submittal of shop drawings, product data, and samples will be accepted only when submitted by The Contractor. Data submitted from subcontractors and material suppliers directly to the Architect/Engineer will not be processed.
- B. When some errors in the shop drawings are detected and others are overlooked, this does not grant the contractor permission to proceed in error. Regardless of any information contained in the shop drawings, the requirements of the drawings and specifications must be followed and are not waived or superseded in any way by the shop drawing review.
- C. The Electrical Contractor shall be responsible for final coordination of all electrical feeders and over current protection devices (circuit breakers and/or fuses) with the manufacturers written data for each mechanical device prior to submittal of any electrical equipment for review. No additional compensation will be allowed for any changes to electrical feeders or over current protection devices required for any mechanical devices.
- D. Alternate manufacturer's electrical equipment shall be similar in performance, physical appearance and construction to be considered as equal to equipment specified.
- E. Alternate manufacturer's electrical equipment proposed to be substituted by bidding contractor must be pre-approved during bidding. Contractor, or equipment representative shall be at all such meetings with equipment code to Engineer at least one week prior to submitting bids. Engineer will review the proposed alternate equipment and issue a written acceptance or denial by return fax. VERBAL APPROVAL WILL NOT BE ACCEPTABLE.
- F. All equipment shop drawings, future cuts, etc., submitted after award of contract for electrical equipment which was not pre-approved will be rejected.
- G. In the event substitutions are proposed to the Engineer after the contract has been awarded, the Engineer will record all time spent by him in the evaluation of each proposed substitution.
- H. Whether or not the Engineer approves the proposed substitution, the Contractor agrees to promptly upon receipt of the Engineer's letter, reimburse the Engineer at the rate of two and three-quarter times the direct cost to the Engineer for all time spent by him in the evaluation of the proposed substitution.

REGULATIONS

- A. All work shall be installed in accordance with the local electrical code, the requirements of the local utility companies, and the requirements and recommendations of the National Electrical Code.
- B. Where conflict exists between codes or utility company requirements and contract documents, the more stringent shall apply.
- C. The installation of telephone service entrance conduit systems shall be as shown and shall comply with the requirements of the local telephone company. Contractor shall verify the exact point of service with the telephone company representative before commencing with the installation of the service entrance conduit.

STANDARDS OF MATERIAL AND WORKMANSHIP

- A. All work shall be done at such times and in such a manner as will least interfere with the maintenance and operation of all related or affected systems.
- B. All materials and equipment shall bear the label of approval of the National Board of Fire Underwriter's Laboratories.
- C. The Electrical Contractor shall effectively protect, at his own expense, such of his work, materials or equipment as is liable to injury during the construction period.
- D. All openings into any part of the conduit system as well as associated fixtures, equipment, etc., both before and after being set in place, must be securely covered or otherwise protected to prevent obstruction of the conduit, or injury due to carelessness or recklessly dropped tools or materials, gels, dirt or any foreign matter. The Electrical Contractor shall be held responsible for all damage so done until his work is fully and finally accepted. Conduit ends shall be covered with capped bushings. All electrical equipment shall be grounded.
- E. It is not intended that the drawings of this specification indicate or specify such place of conduit, fittings, etc., required for the installation. Where items are required for the satisfactory operation of the installation and are not indicated on the drawings, they shall be considered to be both specified and indicated.
- F. General requirements and details of equipment are shown. Dimensions or scales shown are approximate and must be checked at job prior to installation of equipment or any other plans for fabrication.
- G. Electrical Contractors shall have competent foremen on the premises at all times to superintend and check and lay out all work, give information to General Contractor regarding chases and openings, and be responsible for such locations. This Contractor shall cooperate with other contractors where chases, openings, pipes, foundations, etc., are in proximity to the work of other trades and arrange the work to fit. This Contractor shall study where other trades have connectors and outlets to be connected, so that all work and appliances shall be properly arranged for and connected ready to use.

INSPECTION OF SITE

- A. The Contractor shall visit the site and verify the conditions under which his work must be conducted before submitting his proposal. The submitting of a proposal implies that the Contractor has visited the site, is conversant with all site conditions, including existing services and equipment, obstructions and all conditions, which will be encountered in the removal and/or relocation of present materials and equipment, installation of new materials and outfitting and patching, etc., for a complete installation. If any interference or relations appear and departure from the design intent of the bid documents is required, the contractor shall notify the Architect prior to entering into contract with the Owner. Failure to provide the Architect with the aforementioned notification will result in the contractor being held responsible to complete all work to meet the design intent of the bid documents with no additional expenses (EXTRAS) being incurred by the Owner, Architect or Engineer.

OWNER TESTS AND INSPECTIONS

- A. The Owner reserves the right to inspect and test any portion of the equipment during the progress of its erection. The Contractor shall afford the Owner or Owner's representative every facility for evaluating the skill and competence of the mechanics and to examine the materials and installation. Concoated work shall be repeated when so directed during his periodic visits.
- B. The Contractor shall notify the Architect or Engineer before any electrical work is concealed by a concrete pour, covering of a wall or installation of a ceiling. This notification shall be received from the Contractor at least 72 hours prior to concealment.
- C. The Electrical Contractor shall test the entire system in the presence of the Owner or his representative when the work is fully completed to insure that all portions are free from short circuits and grounds and are in good and intended working condition. Power for final tests where all erections are completed will be furnished by the Owner. All equipment necessary to conduct the above tests shall be furnished at the expense of the Electrical Contractor.

INSPECTION, TESTING AND START-UP

- A. Scope:
1. Interest. The intent of the inspection, testing, and check-out work specified herein, or required, is to insure that all electrical workmanship and equipment, whether Owner furnished or Contractor furnished, is installed and performs in accordance with the design specifications, drawings, manufacturer's instructions and all applicable codes and requirements. Also, it is intended to provide, insure, or to determine the following:
    - a. If the equipment or installation has been subjected to damage during shipment or installation.
    - b. If the equipment is in accordance with the purchase orders and specifications.
    - c. Provide initial acceptance tests and recorded data that can be used as a bench mark for future routine maintenance and trouble shooting by Owner's maintenance forces.
    - d. Insure a successful start-up with a minimum of last minute interruptions and problems.
    - e. Determine the suitability of the equipment and systems for energization and placing into operating service.
    - f. Provide assurance that each system component is not only installed satisfactorily but performs, and will continue to perform, its function in the system with reasonable reliability throughout the life of the project.
  2. Contractor Responsibility: The Contractor shall provide all necessary labor, materials, tools, test instruments or other equipment or service and expenses required to inspect, test, adjust, set, calibrate, functionally and operationally check all work and components of the various electrical systems and circuitry shall include the installation.

CHARACTER OF MATERIALS AND EQUIPMENT

- A. All materials and equipment shall be new and conform to standards specified herein, defined to include conduits, cable, wiring materials and devices, etc.
- B. All materials and equipment shall be of an approved design. Similar material shall be of one manufacturer whenever possible.
- C. All equipment offered under these specifications shall be limited to products regularly produced and recommended for service ratings in accordance with manufacturer's catalogs, engineering data or other comprehensive literature made available to the public and in effect at the time of opening bids.
- D. Equipment shall be installed in strict accordance with manufacturer's instructions for type, capacity and suitability of each piece of equipment used.
- E. The Electrical Contractor shall obtain the instructions which shall be considered as a part of these specifications.

- B. The Electrical Contractor shall be responsible for final coordination of all electrical feeders and over current protection devices (circuit breakers and/or fuses) with the manufacturers written data for each mechanical device prior to submittal of any electrical equipment for review. No additional compensation will be allowed for any changes to electrical feeders or over current protection devices required for any mechanical devices.
- C. Failure of the subcontractor to submit shop drawings in ample time for checking shall not entitle him to an extension of contract time, and no claim for extension by reason of such default will be allowed.

AS-BUILT DRAWINGS

- A. The construction drawings shall be revised during construction to indicate the "as-built" condition. At the completion of the project, they shall serve as final "as-built" drawings. Submit to the Architect/Engineer the revised "as-built" drawings and one set of blue ink plans.

STRUCTURAL DIFFICULTIES

- A. Should any structural difficulties prevent wiring of cabinets, running conductors, etc., at points shown on plans, the necessary minor deviations, therefore, as determined by the Architect, may be permitted and must be made without additional cost.

COOPERATION WITH OTHER CONTRACTORS

- A. The Electrical Contractor shall arrange all parts of his work in proper relation to the work of others and to the architectural finish.
- B. Where interferences occur, the Electrical Contractor shall, before installing the work involved, consult with the Architect as to the exact location and level of his work. The Architect's decision shall be final.
- C. The Electrical Contractor shall be responsible for the arrangement of his work, and equipment and maintenance of proper headroom under this work. Should work installed by him require modification to avoid interference with other work, as determined by the General Contractor, such changes shall be made without additional cost. The General Contractor's decision as to determination or allocation of responsibility, where conditions require changing of work, shall be final.
- D. If any work of the Electrical Contractor is dependent for its proper execution on continuous work not executed by him, the Electrical Contractor shall examine such work and report in writing any defects thereon or conditions rendering it unsuitable. The beginning of work, without making such report, shall constitute an acceptance of such work, and any defects in his own work consequently shall be his responsibility.
- E. The Electrical Contractor shall provide the General Contractor with the locations and sizes of all electrical sleeve penetrations for the coordination sleeve shop drawing.

DRAWINGS AND SPECIFICATIONS

- A. The drawings are intended to show the general arrangement of outlets. Door swings shall be checked for final arrangement and switches installed on the knob side. The Electrical Contractor shall check all structural and mechanical details and specifications so that he may coordinate his work with these trades.
- B. All outlets shall be located uniformly with respect to beams, partitions, duct openings, etc., and the general locations shall be checked with the plans and specifications before installing. Should there be any interference between electrical outlets and other trades, the Electrical Contractor shall notify the Architect so that the proper location may be decided upon. No outlets shall be installed on back of such, gables, or inaccessible places.

CODES, PERMITS AND FEES

- A. Obtain and pay for all permits, licenses, inspections, approvals and fees required and ensure that the entire electrical installation conforms to codes and regulations required by authority or agency having jurisdiction over the entire installation or construction of work included. All fees shall be included in the base proposal.
- B. The Electrical Contractor shall, at his expense, have an inspection made by the local electrical inspection department of the complete electrical installation and shall deliver certificate of approval of the complete work to the Owner before receiving his final payment.
- C. Whenever the requirements of these specifications and drawings exceed the requirements of governing codes, laws, regulations and ordinances, these specifications and drawings shall govern.
- D. Should any change in the drawings and specifications be required to conform to these codes, ordinances, laws of regulations, notify the Architect/Engineer at time of submitting proposal. After entering into a contract, Contractor shall complete all work necessary to meet code, laws, regulations and ordinance requirements without extra expense to the Owner.

FLASHING

- A. Where the work included under the following sections of the specifications requires conduit to pass through the roof or any other waterproofing, the conduit shall be flashed under the section concerned, and the joint made waterproof in full conformance with waterproofing warranty requirements.

PAINTING AND CLEANING

- A. See "Finishing and Painting" in Architectural Specifications.
- B. Electrical metal conduit installed in earth or below vapor barrier shall be given two coats of black asphaltum.
- C. Electrical luminaire support systems shall be painted with two coats of paint to match fixture.
- D. Factory finish as damaged shall be touched up or replaced to satisfaction of Architect and Owner.

CUTTING AND PATCHING

- A. Cutting and patching of walls, floors, ceilings, roofs, etc., shall be done at the expense of the Contractor installing equipment and appliances, subject to the approval of the Architect and the Engineer. Contractor shall be careful to prevent injury, disfigurement or delamination to finished materials and shall not fix or cut finished materials other than his own without specific instructions. Structural members shall not be cut without obtaining written permission.
- B. Drilling and patching for expansion bolts, shields, hangers and other SUPPORTS shall be subject to approval of the Architect. Labor and materials required to replace or refinish parts cut or injured shall be done at the expense of the Contractor performing the work, subject to the Engineer's and Architect's approval.
- C. Chases and grooves installed in walls and partitions shall be determined in advance of building construction.
- D. Conduits passing through roofs or outside walls exposed to weather shall be carefully flashed and counter flashed.
- E. Conduit in finished areas shall be concealed. Contractor shall notify Architect before installing exposed conduit, piping, etc.

CLEAN UP

- A. The Contractor shall keep the premises free of debris and unusable materials resulting from his work and immediately upon completion of this work, he shall remove such debris and materials from the Owner's property and he shall leave all floors broom clean in areas affected by his work.

GROUNDING

- A. Furnish and install a complete grounding system in accordance with the National Electrical Code and local codes and ordinances.
- B. Grounding path from circuits, equipment, and conductor enclosures shall be permanent and continuous; have capacity to conduct safely any fault currents likely to be imposed on it; and shall have a resistance to ground of less than 5 ohms.
- C. All branch circuit conductors shall include a separate conductor, insulated (green), equipment grounding conductor sized per Article 250 of the National Electrical Code.
- D. Piping systems and exposed structural steel that may become energized shall be bonded to the service equipment enclosure, the grounded conductor at the service, the grounding electrode conductor where of sufficient size, or to the one or more grounding electrodes used. Bonding shall be per NEC Art. 250-104.

CONDUIT

- A. General:
1. Minimum size conduit shall be 3/4", except switch legs and drops to individual light fixtures may be 1/2" conduit.
  2. Install exposed conduit runs parallel to or at right angles with principal structural members and with adjacent walls.
  3. Install vertical runs perpendicular to finish floors and ceilings.
  4. Concealed runs may take most direct route between outlets.
  5. Fasten and support conduit at least every 10 ft. and within 3 ft. of outlet box, junction box, cabinet, or fitting.
  6. Rasm out ends to remove rough edges.
  7. Where conduit is threaded in field, use conduit thread cutting die with taper.
  8. Run of conduit between outlet and outlet, fitting and fitting, or outlet and fitting shall not contain more than equivalent of three quarter bends (270 deg. total), including bends located immediately at outlet or fitting.
  9. Conduit runs, including boxes, fittings, cabinet, and wireways, shall be electrically continuous throughout.
  10. Install conduits entering boxes and cabinet with two locknuts, one inside and one outside, with bushing termination on inside.
  11. Install conduit runs concealed within finished areas.
  12. Fasten and support conduit with malleable iron or galvanized steel conduit straps.
  - a. Attach hangers and SUPPORTS to dry wall construction with toggle bolts.
  - b. Attach hangers and SUPPORTS to concrete or masonry construction with expansion shields and screws or bolts.
  - c. Attach hangers and SUPPORTS to structural steel shapes with beam clamps and bolts.
- B. Rigid Steel and Intermediate Metal Conduit:
1. Install rigid steel or intermediate metal conduit when used as follows:
    - a. Conduit runs larger than 4".
    - b. Exposed interior runs in mechanical spaces below 8 feet.
    - c. For runs where installation is subject to physical damage during construction or afterwards.
  2. Where conduit is installed in poured concrete floors with turn out of floor, conceal radius bend completely within floor with only vertical run exposed.
  3. Fitting shall be galvanized threaded type.
- C. Electrical Metallic Tubing (EMT):
1. Install EMT when used for lighting, receptacle, appliance branch circuit wiring, auxiliary systems wiring, and HVAC control wiring concealed above finish ceilings and in partitions within finished areas.
  2. EMT conduit may also be used for feeders run through the building.
  3. Do not install EMT where during installation or afterwards, it will be subject to physical damage.
  4. Fittings shall be steel, set-screw type.

Flexible Metal Conduit:

1. Install 1/2 inch minimum length as final conduit connection to motors, rotating, and vibrating machinery and equipment, and dry type transformers.
2. Install separate grounding conductor in each length of flexible conduit and provide bonding at each end.
3. Fittings shall be squeeze type, malleable iron.
  - a. Flexible Metal Tubing:
    - i. Flexible metal tubing (FMT) may be used in 6 foot maximum length as final conduit connection to recessed lighting fixtures in plenums and furled spaces which are not subject to physical damage.
    - a.2. Install 4 foot minimum length as final conduit connection to recessed lighting fixtures in plenums and furled spaces which are not subject to physical damage.
    - a.3. Fittings shall be case machined type.
  - b. Liquidtight Flexible Conduit:
    - i. Install in place of flexible metal conduit in wet locations or where subject to oil, gasoline, or other materials having a deteriorating effect on rubber.
    - b.2. Install separate grounding conductor on outside of flexible conduit and fitting to provide bonding as required.
    - b.3. Fittings shall be steel or malleable iron with external grounding lug.

Aluminum Conduit:

1. The use of aluminum conduit shall not be allowed.

WIRE AND CABLE (600 Volts)

- A. All wiring shall be run in conduit, EMT or ENT.
- B. Wire shall be as manufactured by Anaconda, Walker, General Cable, or Southwire, and shall be copper, minimum conductivity of 98 percent.
- C. Feeders and branch circuit wiring shall be 600 volt rated, 75 deg. C insulated type XHHW, THW or THWN.
- D. Conductors installed in runs within 6 inches of heating pipes shall be type AVA. No conductors shall be drawn into conduit until all work which may cause cable damage is completed.
- E. No wiring smaller than No. 12 AWG gauge shall be used unless otherwise noted, and all wire No. 10 AWG gauge and larger shall be stranded, unless otherwise specified.
- F. Home runs to panelboards 75 feet in length or over shall be not less than No. 10 AWG gauge, whether shown or not shown on the drawings.
- G. Conductors shall be color coded per the National Electrical Code.
- H. All conductors shall be copper.
- I. Armored Cable (AC) and Metal Gage (MC) Cable:

1. When approved by local authorities, armored cable and metal clad cable may be used for branch circuit wiring within partition walls.
  2. The use of AC or MC cable for circuit homeruns to branch breakers in panelboards shall not be allowed. All such homeruns shall be via EMT, type IMC or rigid steel conduit.
- J. Branch circuit wiring for lighting and receptacle shall be installed in accordance with layout shown on the Drawings and shall be divided and approximately balance about the neutral.
1. Branch circuits shall be grouped and consist of one neutral in each three circuits. The three hot and wires (each) will be distributed across the hot busbars for the lighting panel and the white (neutral) wire connected to the neutral bus.
  2. Phasing for all feeder and branch circuit wiring shall be color coded.
  3. 20 ampere branch circuit homeruns to panelboards 6 feet in length to 100 feet shall be No. 10 AWG, 101 feet to 150 feet shall be No. 8 AWG, or larger as necessary to maintain a maximum voltage drop of 3 percent, based upon a load current of 15 amperes whether or not shown on the drawings.

OUTLET BOXES

- A. Outlet boxes shall be zinc-coated and shall be of the size and type to accommodate:
1. Structural conditions
  2. Size and number of conductors and conduit entering
  3. Devices or fixtures for which required.
- B. Outlet boxes shall be firmly anchored in place and shall be provided with approved fixture supports. Outlet boxes for switches, convenience outlets, etc., shall be set flush with finished walls.
- C. Outlet boxes shall be not less than 1-1/2 inches deep unless shallow boxes are required by structural conditions. Ceiling and trackout boxes shall be not less than 4 inch octagonal except that smaller boxes may be used when required by the particular fixture installed. Flush or recessed fixtures shall be provided with separate junction boxes when required by the fixture terminal requirements. Switch and receptacle boxes shall be approximately 4 inches. Telephone outlet boxes shall be 4 inches square.

WIRING DEVICES

- A. Switches shall be 20 amperes, 277/120 volts. They shall be single pole, three-way or four-way as required. Switches shall be equal to Hubbell 1221, 1223 or 1224.
- B. General use receptacles shall be specification grade, duplex type with the mechanism enclosed in a cup body, rated 20 amperes, 125 volt. Receptacles shall be equal to Hubbell 5362.
- C. Ground fault receptacles shall be specification grade, duplex type, rated 20 ampere, 125 volt, UL listed under 498 Receptacle Requirements and 343 Class A Requirements, shall conform to NEC requirements, and equal to Hubbell series #260, PAS, or Arrow-Hart.
- D. Device colors shall be as selected by Architect.

WEATHERPROOF BOXES AND COVERS

- A. Wiring devices installed at exterior locations shall be installed in a single gang, deep weatherproof box with white-lac cover per 2002 NEC Section 408.30(1). Boxes and covers shall be constructed of polycarbonate and shall be fully gasketed. The translucent cover shall include a pack-holdable, break-resistant bulbouse and black. Pass 8 Seymour IWU1C10-DC or equal.

DEVICE PLATES

- A. Device plates shall be stainless steel type 302, Hubbell "S" series, or as selected by the architect or Owner.

CONNECTION OF MECHANICAL EQUIPMENT

- A. The Electrical Contractor is cautioned to note carefully other sections of these specifications describing electrical equipment to be furnished under those sections in order that he may fully understand the wiring requirements.
- B. The Electrical Contractor shall be responsible for final coordination of all electrical feeders and over current protection devices (circuit breakers and/or fuses) with the manufacturers written data for each mechanical device prior to submittal of any electrical equipment for review. No additional compensation will be allowed for any changes to electrical feeders or over current protection devices required for any mechanical devices.
- C. All power wiring and feeders for mechanical equipment shall be furnished and installed by the Electrical Contractor.
- D. Motor or disconnect switches where indicated or required shall be furnished and installed by the Electrical Contractor.
- E. Motor control wiring and equipment will be furnished and installed by the Mechanical Contractor unless otherwise noted or indicated on the drawings.

SAFETY DISCONNECT SWITCHES

- A. Switches shall be quick-make, quick-break type, horsepower rated. All switches shall be NEMA type HD (heavy duty).
- B. In-door enclosures shall be NEMA 1, indoor; outdoor enclosures shall be NEMA 3R, raintight.
- C. Equip fusible switches with Class R, rejection type fuse clips.
- D. Safety disconnect switches shall be manufactured by: Square D Company, General Electric, Siemens Energy & Automation, or Cutler-Hammer.

EMERGENCY LIGHTING

- A. The Electrical Contractor shall install an emergency lighting system as shown on the drawings, conforming to the 2006 International Fire Code.
- B. Branch circuit conductors for emergency lights shall not run in raceway with other branch circuit conductors, nor shall they enter an outlet box with other wires.
- C. The system shall be independent of all other wiring beyond the point where emergency service is secured. Connect emergency lights to emergency panel.

EMERGENCY LIGHTING UNITS

- A. Furnish and install battery operated emergency lighting units at locations indicated on the plans of types scheduled on plans.
- B. Emergency lighting units shall include a suitable shelf or wall mounting bracket and shall contain all necessary modules, ready and high charge indicator pilot lights, test switch, lamps, and suitable terminal boards for connection of normal electrical supply cables.
- C. Batteries shall be lead calcium type, or re-lead type, as scheduled.
- D. Battery charger shall be designed as to maintain the batteries fully charged on the trickle rate.
- E. Emergency lighting units utilizing incandescent lamps or halogen lamps rated less than scheduled on the drawings will not be acceptable. Consult Lighting Fixture Schedule for minimum acceptable equipment ratings. Any equipment submitted not meeting the minimum requirements will be rejected.

LIGHTING FIXTURES

- A. The Electrical Contractor shall furnish, install and connect complete to the building wiring system ready for satisfactory operation. All lighting fixtures for the building as shown on the schedule of fixtures.
- B. All lighting fixtures shall bear Underwriter's Inspection label, 48-52 watt fluorescent ballasts shall be electronic type, T8's THD, CRI and ETL approved High power factor, energy saving type. Ballasts shall be sound-rated and shall not exceed 90 degrees C in continuous operation and shall be protected internally with resettable thermal protector to conform to UL's class "T" for ballasts. Refer to Light Fixture Schedule for variations.
- C. Each fixture shall be supplied with the necessary screws, supports, hangers, or other miscellaneous materials and devices to install them in a satisfactory manner and to conform to the architectural treatment in the areas in which they are to be installed. The Electrical Contractor shall consult all architectural plans in order that he may familiarize himself with all of the necessary details for the various units to be installed throughout the building. Failure to do this will not relieve him of the responsibility of furnishing complete all necessary materials, etc., to perform the function intended for the lighting system shown on the drawings.
- D. All fixtures shall have installed by the Electrical Contractor, lamps of the wattage specified on the plans. Incandescent lamps shall be inside frosted type. Fluorescent lamps shall be as specified in light fixture schedule. High Intensity Discharge lamps shall be as specified in light fixture schedule. All lamps shall be furnished and installed by the Electrical Contractor.
- E. All fixtures shall be cleaned prior to final acceptance by Owner. All used lamps shall be replaced with new lamps at time of final inspection.
- F. All ballasts shall be as indicated on drawings.
- G. Installation:
1. Light fixtures shall be installed in accordance with manufacturer's recommendations.
  2. Surface-mounted incandescent fixtures shall be mounted directly to outlet box equipped fixture stud or mounting bar.
  3. Surface-Mounted Fluorescent Fixtures:
    - a. Mount with support rail attached to ceiling suspension support system provided ceiling system has been certified to be suitable to support weight of fixture.
    - b. Where ceiling system has not been certified to support weight of fixtures, fixture not exceeding 12 inches in width may be supported at two points near ends of fixture.
- H. Architectural drawings, where applicable, shall be used for exact location of light fixtures.

GUARANTEE

- A. The Electrical Contractor shall leave the electrical installation in proper working order and shall, without charge, replace any work or materials which develop defects, within one (1) year from date of final inspection and acceptance by the Owner.

DEMOLITION WORK

- A. Certain portions of the existing electrical installation shall be modified to suit the new requirements.
- B. Work shall include the disconnection, removal, relocation and reconnection complete in all respects of all items required to suit the design intent. It shall be the responsibility of the contractor to visit the project site to correctly ascertain the scope of services and to include all pertinent costs in his bid. No extras will be allowed.
- C. All electrical work interfering with and requiring modification for the new requirements shall be relocated as directed by Lakes building management and reinstated and retested as necessary to their satisfaction.
- D. All equipment affected by the new work shall be reconnected as required for a complete working system.
- E. Abandoned and inactive conduits, wire, devices, equipment, etc., shall be removed in their entirety. In addition to these items, the Contractor shall remove all items as indicated on the plans, or as required to clean up the entire area of unused, abandoned, or inactive materials. Conduit and wiring to be removed shall be removed with the Electrical Contractor.
- F. The contractor shall remove and deliver to a place designated by the Lakes building management representative all existing electrical equipment no longer intended for use. This equipment remains the property of the Lakes.
- G. Any equipment, devices, materials, etc., the Lakes building management representative elects not to retain shall be legally disposed of by the contractor off the Lakes premises.



QUINN EVANS  
ARCHITECTS

219 1/2 N MAIN STREET  
ANN ARBOR, MI 48104

V 734 663 5888  
F 734 663 5044

WWW.QUINNEVANS.COM

# Ypsilanti Freight House

Ypsilanti, Michigan

QEA No. 31300600;  
Owner No. XXXX

# ELECTRICAL SPECIFICATION

| NO. | TITLE        | DATE    |
|-----|--------------|---------|
| ___ | CONSTRUCTION | 4-30-15 |
| ___ | ___          | ___     |
| ___ | ___          | ___     |
| ___ | ___          | ___     |
| ___ | ___          | ___     |
| ___ | ___          | ___     |
| ___ | ___          | ___     |
| ___ | ___          | ___     |
| ___ | ___          | ___     |
| ___ | ___          | ___     |

FILE NAME:

# E301



mechanical electrical  
engineering consultants  
pc

1415 Goldsmith  
Plymouth, MI 48170  
P 734-454-5516  
F 734-454-5517

MEOC JOB # 1513-0415

THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR SHALL FIELD VERIFY ALL WORK AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENT'S BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SUCH DISCREPANCIES. NOTICE: THIS DRAWING AND THE DESIGN ARE THE PROPERTY OF MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, PC AND NO ALTERATIONS AND/OR TRANSFERS OF WORK ARE PERMITTED UNLESS WRITTEN APPROVAL IS GRANTED BY MECHANICAL ELECTRICAL ENGINEERING CONSULTANTS, PC.