# CHI PSI LODGE BASEMENT STAIR RENOVATION 620 S. STATE ST., ANN ARBOR, MI 48104

#### **GENERAL NOTES:**

**BUILDING IS TYPE III A CONSTRUCTION** PROJECT. DIRECTLY. DRAWINGS. DO NOT SCALE DRAWINGS.

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PROJECT DESIGNED FOR 2015 MRCEB CODE

- BUILDING HAS NO FIRE SUPPRESSION SYSTEM ORIGINALLY BUILT IN 1919
- BUILDING USE GROUP CLASSIFICATION IS R-2: RESIDENTIAL 2 (310.1)
- BUILDING IS DESIGNED FOR MINIMUM 20 LB GROUND SNOW LOAD NOT SPECIFICALLY DESIGNED FOR WIND LOAD SINCE DESIGNED IN 1915, BUT ALL EXTERIOR WALLS ARE MINIMUM 13" SOLD BRICK AND CONCRETE ALL NEW HVAC SOFFITS HAVE A MINIMUM 7'-0" HEADROOM CLEARANCE
- ORIGINAL 1919 BUILDING WAS CONSTRUCTED TO BE FIREPROOF ALL EXTERIOR WALLS ARE MINIMUM 13" POURED CONCRETE WITH BRICK VENEER AND PLASTER INTERIOR, ALL INTERIOR WALLS ARE CONCRETE OR CMU WITH MIN. 1/2" PLASTER, ALL FLOORS ARE MINIMUM 4" CONCRETE, ALL CEILINGS ARE PLASTER. ROOF IS SLATE AND COPPER OVER WOOD TRUSSES. CEILING BELOW WOOD TRUSSES IS 3/4" PLASTER. 1954 ADDITION BUILT SIMILARLY, EXCEPT ROOF IS FLAT WITH STEEL TRUSSES.
- ALL CONSTRUCTION SHALL COMPLY WITH THE CODES REFERENCED HEREIN, AND ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS HAVING JURISDICTION. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY
- **REGULATORY AUTHORITIES.** ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES, LAWS, AND ORDINANCES APPLICABLE TO THIS
- THE CONTRACTOR SHALL VERIFY ALL SETBACKS, EASEMENTS, UTILITIES, AND MEASUREMENTS PRIOR TO THE START OF CONSTRUCITON.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, THE EXACT LOCATION OF UTILITY TAPS, THE CONNECTION OF UTILITY LINES FROM THE BUILDING TO SERVICE LINES, AND ALL FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL WORK DONE OUTSIDE THE PROPERTY LINES SHALL BE DONE IN ACCORDANCE WITH THE REGULATORY AUTHORITIES.
- ALL LANDSCAPE DESIGN, MECHANICAL, ELECTRICAL, AND PLUMBING ENGINEERING REQUIRED FOR THIS PROJECT IS BY OTHERS.
- CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS FROM SITE AS REQUIRED.
- ALL INTERIOR FINISHES SUCH AS CARPET, PAINT, TILE, HARDWOOD, ETC SHALL BE SELECTED BY THE OWNER WITH THE CONTRACTOR COORDINATING ALL SELECTIONS. CONTRACTOR SHALL SUBMIT SAMPLES TO THE OWNER FOR THESE SELECTIONS.
- ALL CABINETS, BUILT-INS, SHELVING, ETC. SHALL BE COORDINATED BY THE CONTRACTOR WITH THE OWNER
- THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION METHODS, TYP. ALL DRAWINGS INCLUDED IN THIS SET ARE THE EXCLUSIVE PROPERTY OF THE ARCHITECT AND ARE FULLY PROTECTED BY FEDERAL AND STATE COPYRIGHT LAWS. REPRODUCTIONS ARE ONLY ALLOWED WITH THE WRITTEN PERMISSION FROM THE DESIGNER. AUTHORIZED REPRODUCTIONS MUST BEAR THE NAME OF THE ARCHITECT AND INCLUDE THE ARCHITECT'S STATEMENT OF UNPUBLISHED WORK. ANY
- INFRINGEMENT ON THIS PROPERTY WILL BE VIGOROUSLY PROSECUTED. CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY BARRIERS, LIGHTING, COVERING AND FIRE PREVENTION NECESSARY FOR THE SAFETY OF ALL PERSONNEL AND THE PROPERTY THROUGHOUT THE DURATION OF THE CONSTRUCTION CONTRACT.
- CONTRACTOR SHALL PROTECT ALL IN PLACE CONSTRUCTION, LANDSCAPING, PAVING, UTILITIES, ETC. FROM DAMAGE DURING CONSTRUCTION. ALL DAMAGED PAVING, CONSTRUCTION, LANDSCAPING, ETC. TO BE RESTORED TO ORIGINAL CONDITION BY CONTRACTOR DAMAGING SAME.
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND STRUCTURAL MEMBER SIZES PRIOR TO CONSTRUCTION. CONTRACTOR TO VERIFY EXACT LOCATION OF ALL UTILITY LINES AND INTERCEPT AS REQUIRED TO KEEP ALL PIPING AS CLOSE TO WALLS AND AS HIGH TO UNDERSIDE OF STRUCTURE AS POSSIBLE. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL FLOOR AND WALL SLEEVES WITH ARCHITECTURAL
- CONTRACTOR TO COORDINATE PLACEMENT OF ALL CEILING ELEMENTS WITH ELECTRICAL INSTALLER. ALL EQUIPMENT, FIXTURES, AND MATERIALS SHALL BE LISTED BY UNDERWRITERS LABORATORIES.
- ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID MOLECULAR BREAKDOWN.
- A FINISH OR FIRE RATING INDICATION ON A WALL SHALL MEAN THE ENTIRE LENGTH OF WALL IS TO BE FINISHED OR FIRE-RATED AS INDICATED.
- NOTES APPEAR ON VARIOUS SHEETS FOR DIFFERENT SYSTEMS AND CONSTRUCTION MATERIALS. ALL SHEETS ARE TO BE REVIEWED AND NOTES ON ANY ONE SHEET ARE TO BE APPLIED TO ALL RELATED DRAWINGS AND SYSTEMS.
- DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE DETAILED.
- PROVIDE BLOCKING AS REQUIRED FOR CEILING AND WALL-MOUNTED ITEMS.
- MANUFACTURER'S NAMEPLATES, TRADEMARKS, LOGOS, OR THEIR IDENTIFICATION SHALL NOT BE VISIBLE IN PUBLIC AREAS.
- ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
  - TITLE SHEET
  - **BASEMENT DEMOLITION PLAN BASEMENT DEMOLITION RCP** FIRST FLOOR DEMOLITION PLAN
  - BASEMENT FLOOR PLAN
  - FIRST FLOOR PLAN
  - SECTIONS/ELEVATIONS
  - **PROPOSAL ANALYSIS**
  - SITE PHOTOS

# T1.0









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



BASEMENT DEMOLITION REFLECTED CEILING PLAN SCALE: 1/4" = 1'-0"





# FIRST FLOOR DEMOLITION PLAN SCALE: 1/4" = 1'-0"



![](_page_4_Figure_0.jpeg)

#### PROPOSED BASEMENT FLOOR PLAN

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

![](_page_5_Figure_0.jpeg)

ET

PROPOSED FIRST FLOOR PLAN SCALE: 1/4" = 1'-0"

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FLOOR PLANS	DATE 4/30/2025	SET VERSION 4.0	DRAWN BY	CHECKED BY	REMARKS	
CHI PSI LODGE RENOVATION			620 S. STATE ST., ANN ARBOR, MI 48104			
DWIGHT M. HERDRICH • ARCHITECTURE + DESIGN 801 Washtenaw Ave, Ann Arbor, MI 48104 207-274-1919 DMHarchitect.com						

![](_page_6_Figure_0.jpeg)

NEW STAIR-SECTION K SCALE: 1/2" = 1'-0"

![](_page_6_Picture_2.jpeg)

![](_page_6_Figure_3.jpeg)

![](_page_6_Picture_4.jpeg)

![](_page_6_Picture_5.jpeg)

NEW STAIR-SECTION E SCALE: 1/2" = 1'-0"

**STAIR SECTIONS / INTERIOR ELEVATIONS** SCALE: 1/2" = 1'-0"

![](_page_6_Picture_9.jpeg)

A4.0

STAIR NOTES: Min. stair and corridor width 36"; Max. solid Riser Height 7", Min. solid Tread Depth 10" with 3/4" nosing

Basement floor to First floor: 9'-8" (16R @ 7 1/4"; 14T @ 10" = 11'-8")

Handrails on both sides of stair shall meet requirements for height(34"-38" to top), size, shape and graspability. Both guards and handrails shall also meet requirements for structural strength. Handrails shall extend beyond top riser not less than 12" along landing and not less than one tread depth beyond the bottom riser, and shall be continuous around Center wall. Both shall return to wall at top & bottom of stair runs. Min. clear headroom shall be 80" (6'-8")

Nosing and riser profiles shall conform to IBC Section 1011 and confirm any specific requirements with City.

License 1301072	CHIC THIC THIC THIC THIC No 087 CHITES

![](_page_6_Picture_16.jpeg)

![](_page_6_Picture_17.jpeg)

ANN ARB( STATE ST., 620 S.

![](_page_6_Picture_19.jpeg)

### EXISTING PLAN

#### **STAIR NOTES:**

Basement floor to First floor height: 9'-8"

Existing Stairs built in 1919 have 14 risers @ 8 5/16" and 13 treads @ 9" with a 1/2" nosing for an incline angle of 43 degrees.

Stairs are constructed of steel pans with smooth steel nosings and concrete treads, are very steep, and have resulted in Countless falls and injuries over the past 100+ years. They are the main stairs used by occupants to the basement.

![](_page_7_Figure_5.jpeg)

![](_page_7_Picture_6.jpeg)

![](_page_7_Picture_7.jpeg)

**B** BASEMENT FLOOR PLAN

![](_page_7_Figure_9.jpeg)

![](_page_7_Picture_10.jpeg)

![](_page_7_Picture_11.jpeg)

![](_page_7_Picture_12.jpeg)

![](_page_7_Picture_15.jpeg)

![](_page_7_Picture_17.jpeg)

![](_page_7_Picture_18.jpeg)

4'-10" isers @ 7

![](_page_7_Picture_19.jpeg)

![](_page_7_Picture_20.jpeg)

![](_page_7_Picture_21.jpeg)

## PROPOSED VARIANCE PLAN

Basement floor to First floor height: 9'-8"

Code requirement: Min. stair and corridor width 36"; Max. solid Riser Height 7", Min. solid Tread Depth 11"

Proposed Stairs with Variance: Corridor width 44", solid Riser Height 7 1/4", solid Tread Depth 10" with 3/4" nosing, angle of incline 34 degrees.

The existing 1919 building was structurally built entirely out of solid poured concrete and steel beams so as to be completely fireproof. The floors are 8" solid concrete, the exterior walls are between 13-18" solid concrete with brick exterior and plaster interior, and interior walls are all either poured concrete or concrete masonry covered in plaster, 4-6" thick. This makes modifications to the plans extremely difficult. This proposed L shaped stair plan is designed to create much safer stairs by lowering the incline angle from 43 degrees to 34" with lower risers and wider treads than the existing stairs, along with providing a landing half way to both avoid unmovable structural beams, and break the path into 2 flights.

1 FIRST FLOOR PLAN A5.0 SCALE: 1/4 = 1'-0"

5'-10"

Treads @ 10" w/ 3/4" nosing

![](_page_7_Figure_29.jpeg)

**B** BASEMENT FLOOR PLAN (A5.0) SCALE: 1/4 = 1'-0"

![](_page_7_Figure_31.jpeg)

**E SECTION E A5.0 SCALE:** 1/4 = 1'-0"

![](_page_7_Figure_33.jpeg)

![](_page_7_Figure_34.jpeg)

 $\begin{array}{c|c} 1 & INTERIOR ELEVATION \\ \hline A5.0 & SCALE: 1/4 = 1'-0" \end{array}$ 

![](_page_7_Picture_36.jpeg)

#### **STAIR NOTES:**

Basement floor to First floor height: 9'-8"

Creating Code Compliant stairs within the restrictions of the existing conditions is impossible - the length of the run required results in another landing at the bottom of the stairs which would not have enough headroom because of both unmovable concrete beams along with newly installed copper tubing for the new HVAC system. In addition, the required headroom would cause the wall of the existing bathroom to be moved so far as to lose the toilet in the existing bathroom on the First Floor, and there would then not be enough room to move it to a new location, resulting in the loss of the only women's bathroom in the building. The proposed variance plan has a riser height of only 1/4" higher than the code required 7", has a 10" tread with 3/4" nosing, and has an incline angle of 34 degrees, just 2 degrees more than the compliant stair, and yet 9 degrees lower than the steep 43 degrees of the existing stair.

![](_page_7_Figure_41.jpeg)

![](_page_7_Figure_42.jpeg)

![](_page_7_Picture_43.jpeg)

## **REQUIRED CODE COMPLIANT PLAN**

Code requirement: Min. stair and corridor width 36"; Max. solid Riser Height 7", Min. solid Tread Depth 11"

Code compliant stair" Corridor width 44", solid Riser Height 6 13/16", Solid Tread Depth 11" with 3/4" nosing, angle of incline 32 degrees.

![](_page_7_Picture_47.jpeg)

A5.0

![](_page_8_Picture_0.jpeg)

## $\begin{array}{c|c} 1 & FIRST FLOOR PLAN \\ \hline A5.1 & SCALE: 1/4 = 1'-0" \end{array}$

![](_page_8_Picture_2.jpeg)

![](_page_8_Picture_3.jpeg)

A5.1 VIEW 1 View down existing stairs

![](_page_8_Picture_5.jpeg)

2 VIEW 2 A5.1 View of existing stairs towards stairwell door

![](_page_8_Picture_7.jpeg)

![](_page_8_Picture_8.jpeg)

5 VIEW 5 A5.1 View of newly installed HVAC piping and conduit along with existing structure and recent wall renovations

![](_page_8_Picture_10.jpeg)

![](_page_8_Picture_11.jpeg)

### PHOTO KEY

6 VIEW 6 A5.1 View of newly installed HVAC piping and conduit along with existing structure and recent wall renovations

![](_page_8_Picture_16.jpeg)

![](_page_8_Picture_17.jpeg)

![](_page_8_Picture_18.jpeg)

![](_page_8_Picture_19.jpeg)

![](_page_8_Picture_20.jpeg)

 7
 VIEW 7

 A5.1
 View of newly installed HVAC piping and conduit along with existing structure and recent wall renovations

![](_page_8_Picture_22.jpeg)

![](_page_8_Picture_23.jpeg)

![](_page_8_Picture_24.jpeg)

![](_page_8_Picture_25.jpeg)

A5.1 View up existing stairs towards proposed new stair location from basement

8 VIEW 8 A5.1 View of newly installed HVAC piping and conduit along with existing structure and recent wall renovations

![](_page_8_Picture_28.jpeg)