Reviewer

248-841-2491

Assessing

Building

Engineering ·

Engineering

Natural Resource\$

Planning

Assessing

Mark Artinian 248-841-2446

Jason Boughton 248-841-2490
BoughtonJ@RochesterHills.org

City of Rochester Hills Planning & Economic **Development** 

Yes

Approved

With Conditions

Yes With Conditions

**YES**Date:12/06/2024

1111 Horizon CT

**24**8.656.46**5**0

Rochester Hills, MI 48309

**Site Plan Review** 

# Reviewed for compliance with City Ordinance, Building and Fire Codes Conditions and mark-ups noted throughout plan set must be addressed prior to fina

# **EPOCHESTER HILLS - FIRE STATION 1**

1111 HORIZON CT.

FIRE TRAINING TOWER Rochester Hills, Michigan

Contingent on Building Departmen AHJ approval. Refer to Building Code Analysis on Sheet A-1.



A3C Collaborative Architecture
Architect -- Project Number: 23092
115 1/2 East Liberty St.
Ann Arbor, MI 48104
PH: 734.663.1910 FX: 866.732.2168



A.R. Brouwer Construction Manager 2830 Baker Rd Dexter, MI 48130 734.426.9980

Next Steps: Site plan to be considered at January 14, 2025 Planning Co

Capt. Ann Echols 248-841-2701

EcholsA@RochesterHills.org

Chris McLeod 248-841-2572

Height modifications for projects located on sites with five or more acres of land are subject to Planning

The application does not require conditional use

approval since the site is 5.2 acres.

24084 G0.01

Washtenaw Engineering Company

HARPER DR.

NO SCALE

REF'D FROM:

23092 G0.01

্বতchester Hills Fire Department

Civil Engineer 3526 W. Liberty Rd, Suite 400 P.O. Box 1128 Ann Arbor, MI 48106 734.761.8800

Shymanski & Associates, L.L.C.

Shymanski & Associates, LLC Structural Engineer 33426 Five Mile Rd Livonia, MI 48154

734.855.4810



WHP Training Towers

Training Tower Supplier 519 Duck Rd Grandview, MO 64030 1-800-351-2525

24084 G0.01 DICKSON LN. PROJECT SITE DOWNHILL LN. HAMLIN RD.

**VICINITY MAP** 

ABOVE FINISH FLOOR MAX MAXIMUM MECHANICAL ARCHITECT(URAL) MANUFACTURER BLDG BUILDING CENTER TO CENTER MASONRY OPENING **CONTROL JOINT** CLG NOT APPLICABLE CEILING NOT IN CONTRACT CONC **CONCRETE** CONTINUOUS NOT TO SCALE DIAMETER DS ON CENTER **DOWNSPOUT** DWG **OUTSIDE DIAMETER** DRAWING OPG **EXISTING** OPENING **OPPOSITE** EΑ EACH **EXPANSION JOINT** PAIR **PROVIDED ELECTRICAL ELEVATION ELEV** REFER (TO) **ELEVATOR EQUIPMENT REQUIRED ROOF DRAIN ELECTRIC WATER COOLER** EXT **EXTERIOR ROUGH OPENING** FLOOR DRAIN **SQUARE FEET** SIM FOF FACE OF FINISH SIMILAR FOS FACE OF STUD **SPECIFICATIONS** STAINLESS STEEL FIRE-RETARDANT STD STANDARD GAUGE OR GAGE GENERAL CONTRACTOR STRUCTURAL TREAD **GALVANIZED IRON** THIS SHEET GYPSUM BOARD TOP OF CONCRETE **HOLLOW METAL** TOS HORIZ TOP OF STEEL **HORIZONTAL HEIGHT** TOP OF MASONRY TYP INTERIOR UNLESS NOTED OTHERWISE **INSIDE DIAMETER** JOINT WATER CLOSET NOTE: SEE DOOR, WINDOW AND INTERIOR FINISH SCHEDULES FOR ADDITIONAL WATER RESISTANT **ABBREVIATIONS** WWF WELDED WIRE FABRIC

ABBREVIATIONS LIST

**ROCHESTER HILLS FIRE STATION 1 CONSULTANT TEAM:** Primary Site Contact: Civil - Washtenaw Engineering Company Joseph K. Maynard Matt Exley exleym@rochesterhills.com Ph:734.761.8800 jkm@wengco.com ARCHITECT: Structural - Shymanski & Associates, LLC Ted Shymanski A3C Collaborative Architecture Ph: 734.855.4810 Project Manager ted@sastructuralengineers.com F. Edward Alonso Ph: 734.663.1910 WHP Training Towers ealonso@a3c.com Joe Kirchner Ph: 913.343.0446 **CONSTRUCTION MANAGER:** joek@trainingtowers.com A.R. Brouwer **Project Director** Ken Westfall Ph: 734.426.9980 kenwestfall@arbrouwer.com 23092 G0.01 NO SCALE PROJECT DIRECTORY PLAN LETTER/ DETAIL NUMBER DRAWING/ DETAIL NUMBER AND DIRECTION SHEET NUMBER WHERE DRAWN SHEET NUMBER WHERE DRAWN DRAWING/ DETAIL NUMBER AND DIRECTION ELEVATION LETTERS AND DIRECTION SHEET NUMBER WHERE DRAWN DRAWING/ DETAIL NUMBER SHEET NUMBER WHERE DRAWN DRAWING/ DETAIL NUMBER ELEVATION LETTER SHEET NUMBER WHERE REFERENCED FROM **ELEVATION TITLE** (TS DESIGNATES REFERENCE FROM 'THIS SHEET') DRAWING SCALE DRAWING TITLE 24084 G0.01 NÓ SCALE SYMBOLS LEGEND REE'D FROM: NA

PROJECT TITLE REF'D FROM: DRAWING INDEX KEY: ISSUED FOR REFERENCE ONLY O ISSUED FOR REVIEW ① ISSUED FOR BID/PERMIT • SHT. # SHEET NAME GENERAL G0.01 TITLE SHEET C1.0 EXISTING CONDITIONS C2.0 SITE PLAN ARCHITECTURAL A-1 EXISTING AND NEW ELEVATIONS WHP TRAINING TOWER SUPPLIER FIRST FLOOR PLAN 2 SECOND FLOOR PLAN THIRD FLOOR PLAN FOURTH FLOOR PLAN (OPTIONAL) ROOF FLOOR PLAN FRONT SIDE AND LEFT SIDE ELEVATIONS REAR SIDE AND RIGHT ELEVATIONS PROJECT DESCRIPTION:

THE EXISTING ROCHESTER HILLS FIRE DEPARTMENT FIRE TRAINING TOWER WILL BE REMOVED BY

RECONFIGURABLE MAZE SYSTEM, FLAT ROOF AREAS, SLOPED VENT CHOP OUTS, STAIRS, VERTICAL

LADDER, HATCH AND RAPPELLING ANCHORS. THE GROSS FLOOR SQUARE FOOTAGE WILL BE 1,920

OTHERS. THE NEW FIRE TRAINING TOWER WILL HAVE 4 FLOORS WITH BURN ROOMS,

SF. THE BUILDING FOOTPRINT WILL BE 800 SF (20'x40').



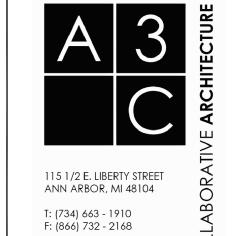
ADMIN REVIEW

DRN: KLJ

11/20/24

CHK'D: FEA

NUMBER



www.a3c.com

DRAWING INDEX REF'D FROM: NA

NO SCALE

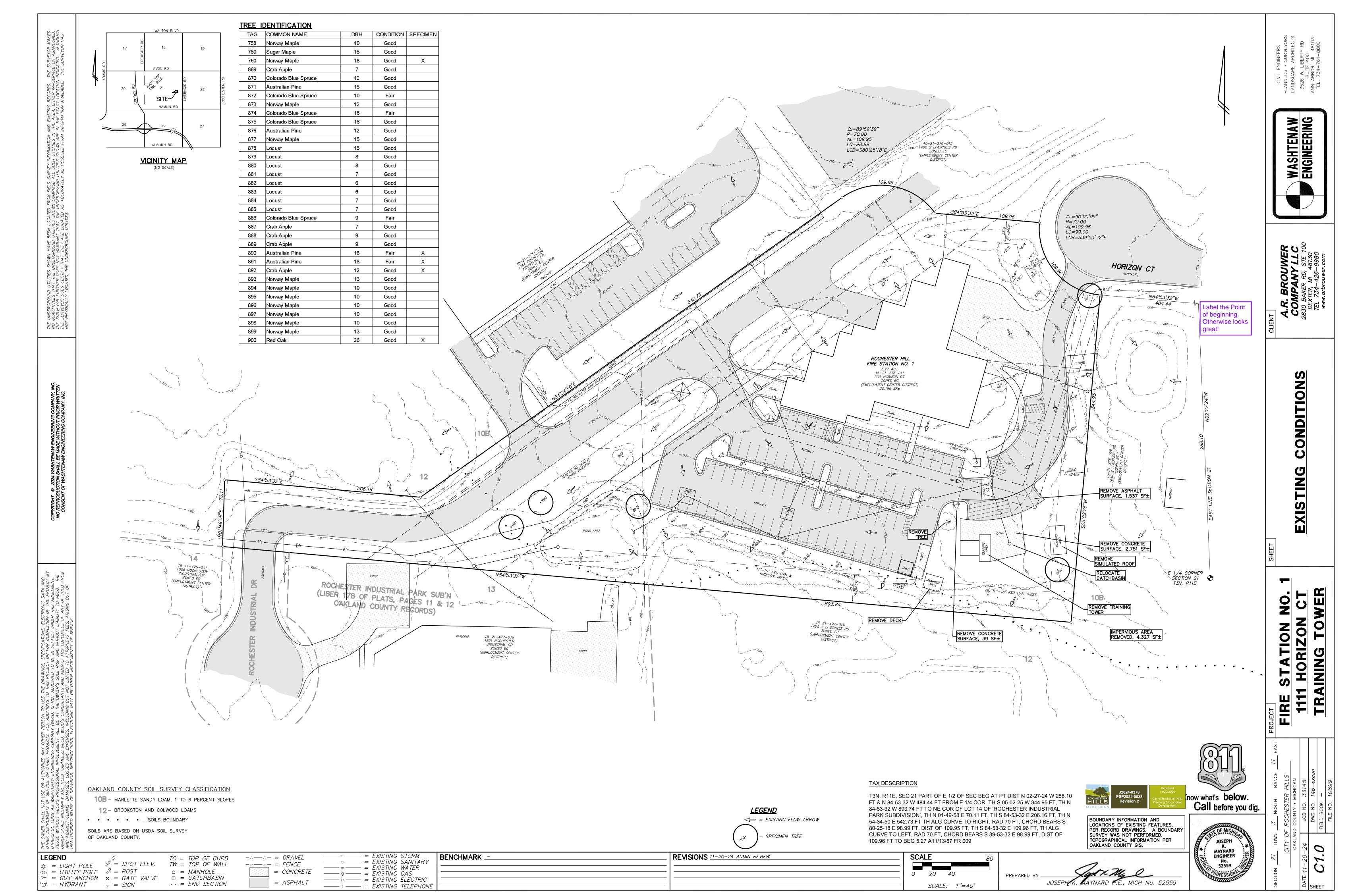
he applicant will not need to submit for a Land Improvement Permit (LIP) application, unless other departments significantly change the scope of the work with their requirements

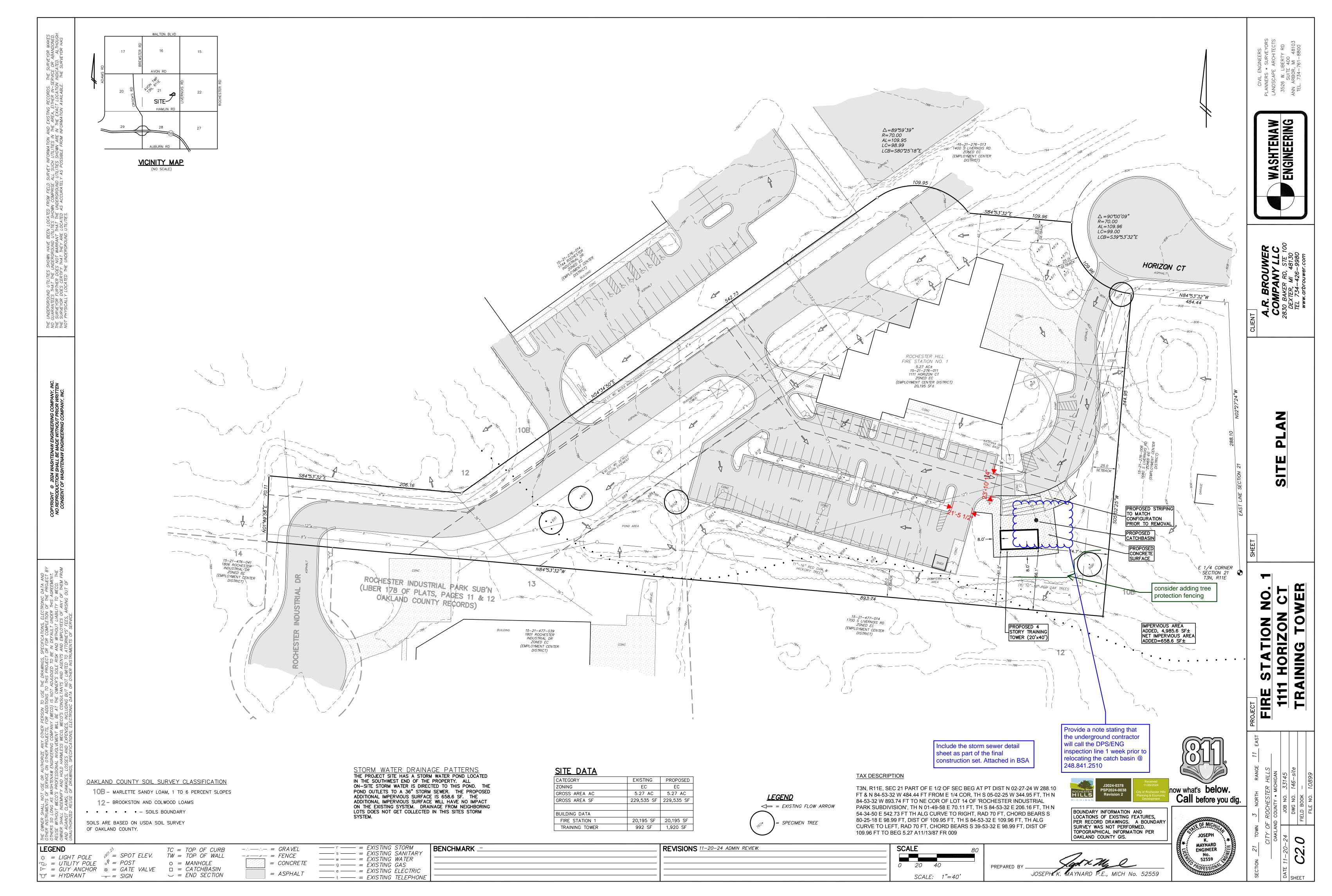
24084-G0.01

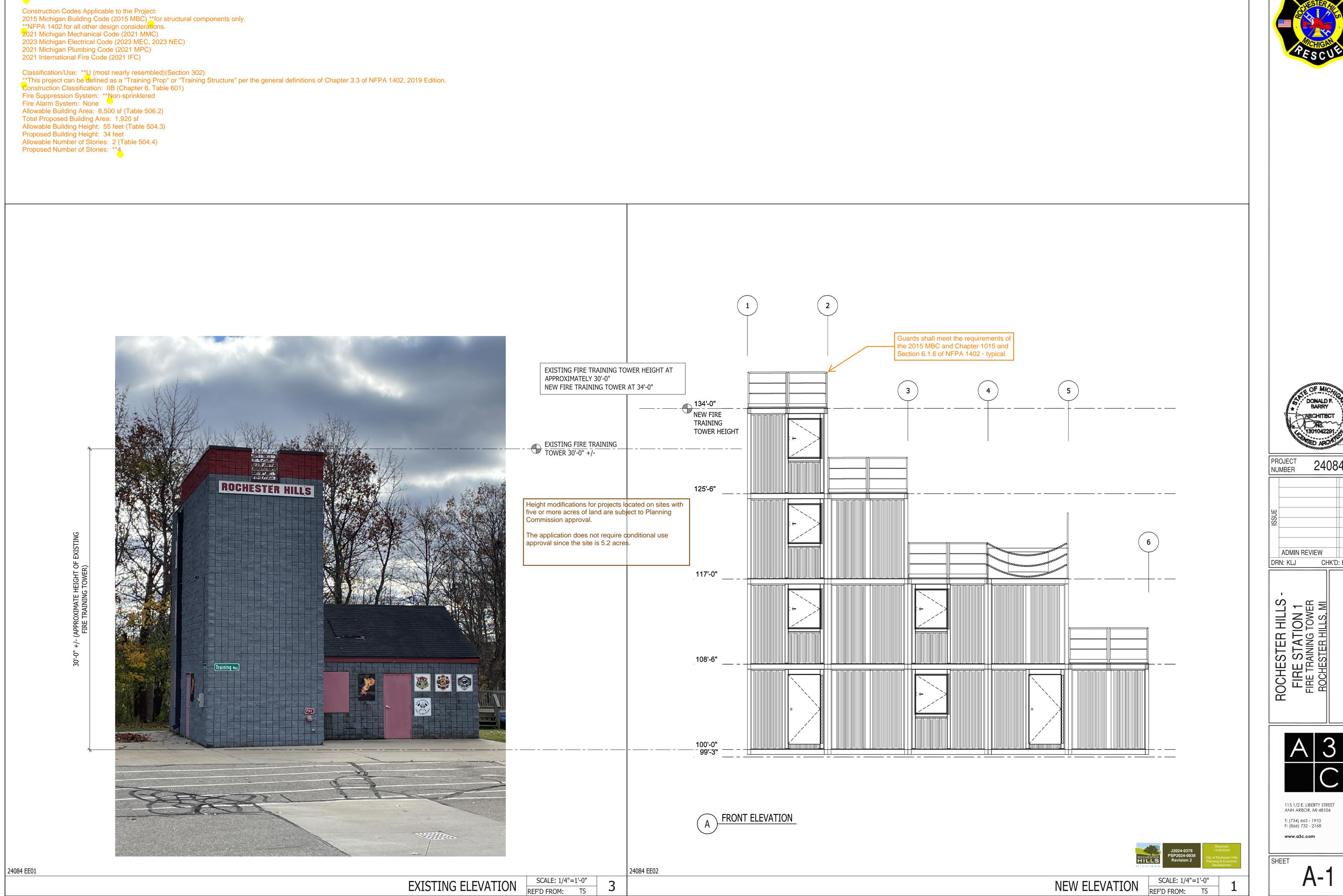
**BUILDING CODE ANALYSIS:** 

REFER TO SHEET A-1.

City File #24-0378 Section #21 in the lower right hand corner of each sheet

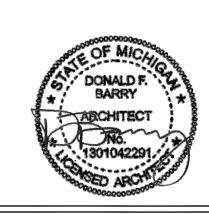




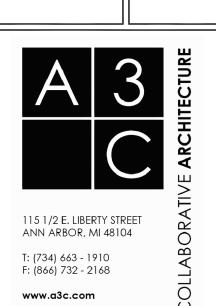


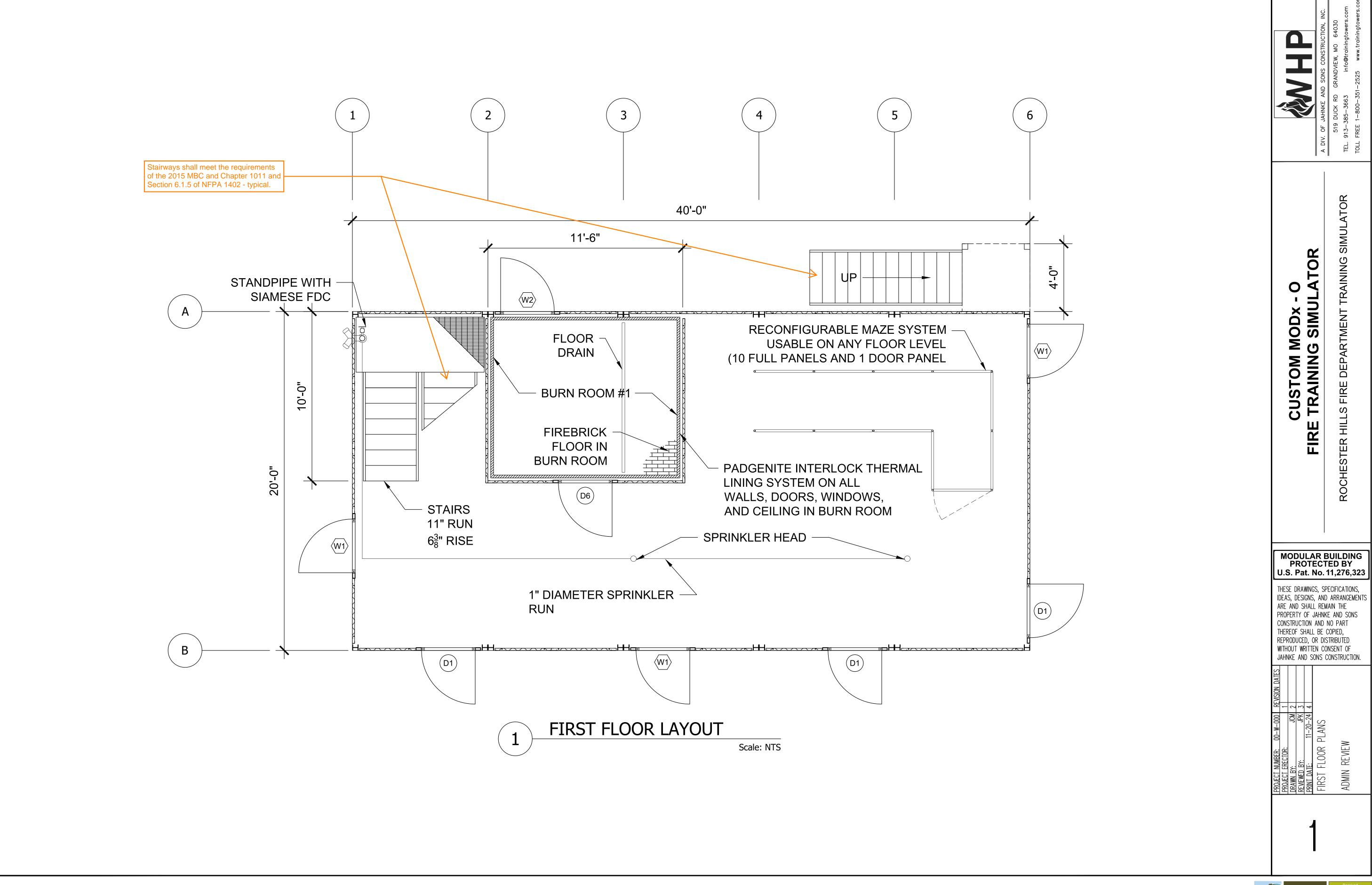
**BUILDING CODE ANALYSIS:** 

(\*\*) Items to be approved by the Building Department Authority Having Jurisdiction (AHJ)



CHK'D: FEA

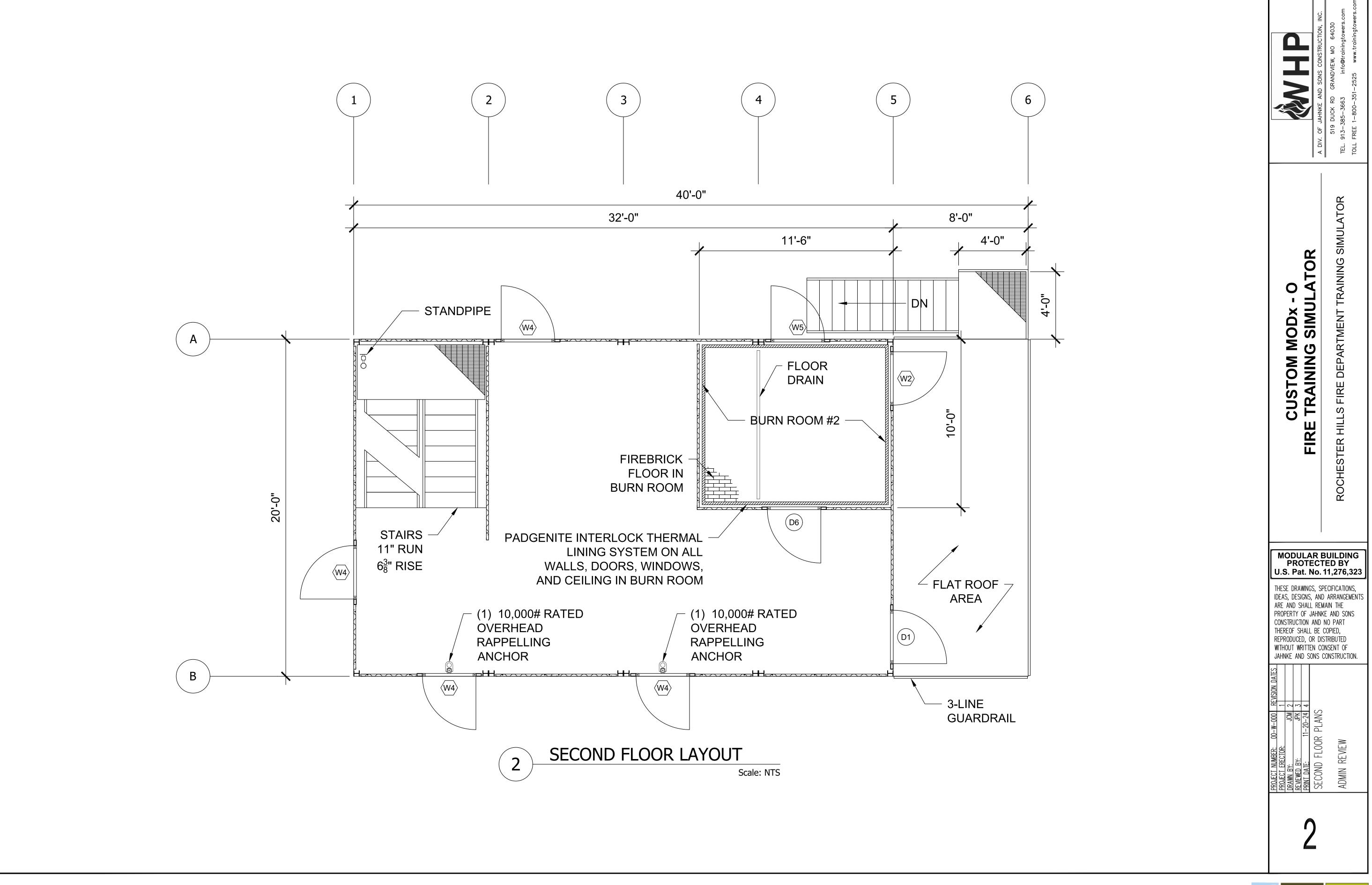








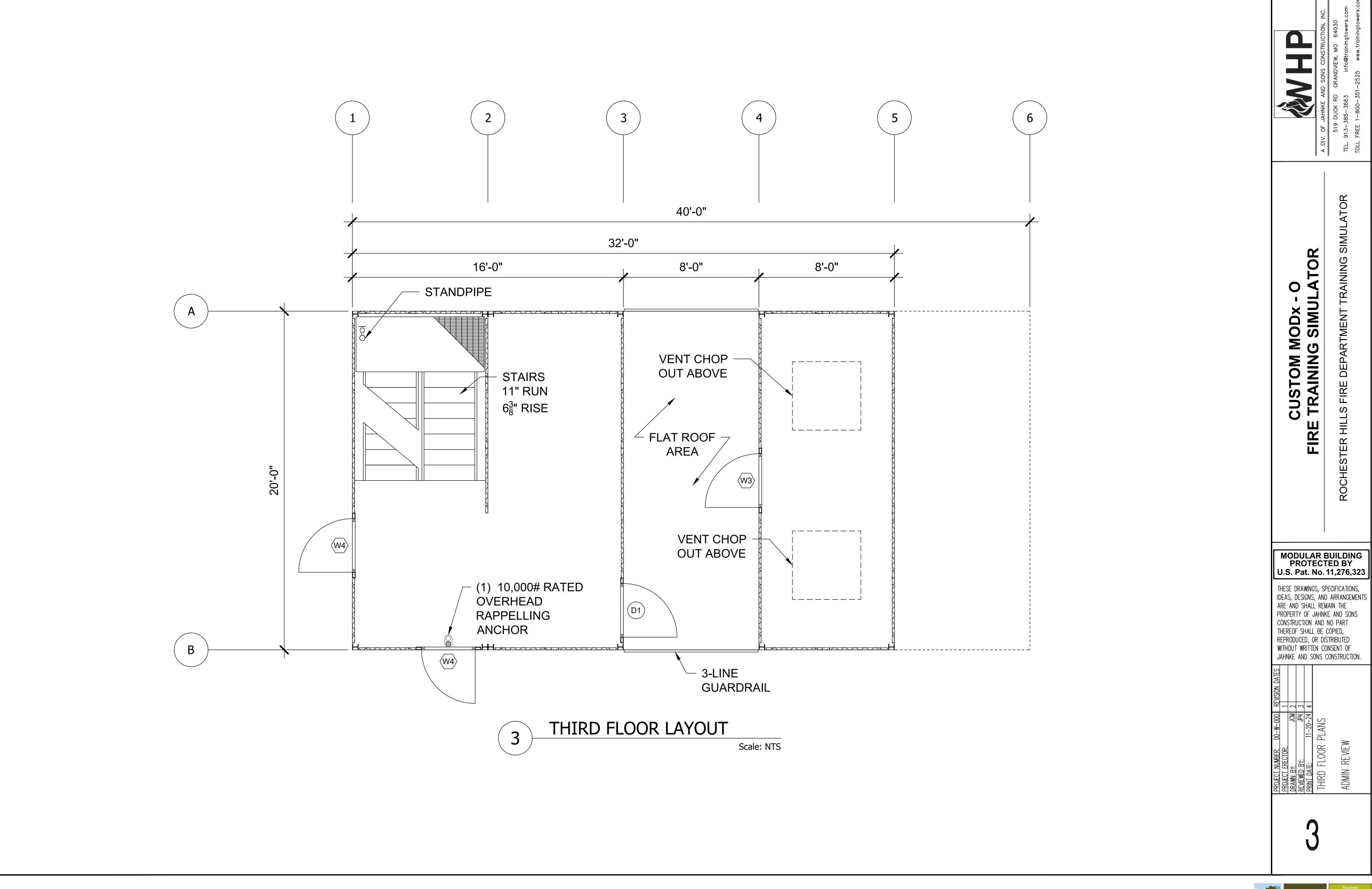








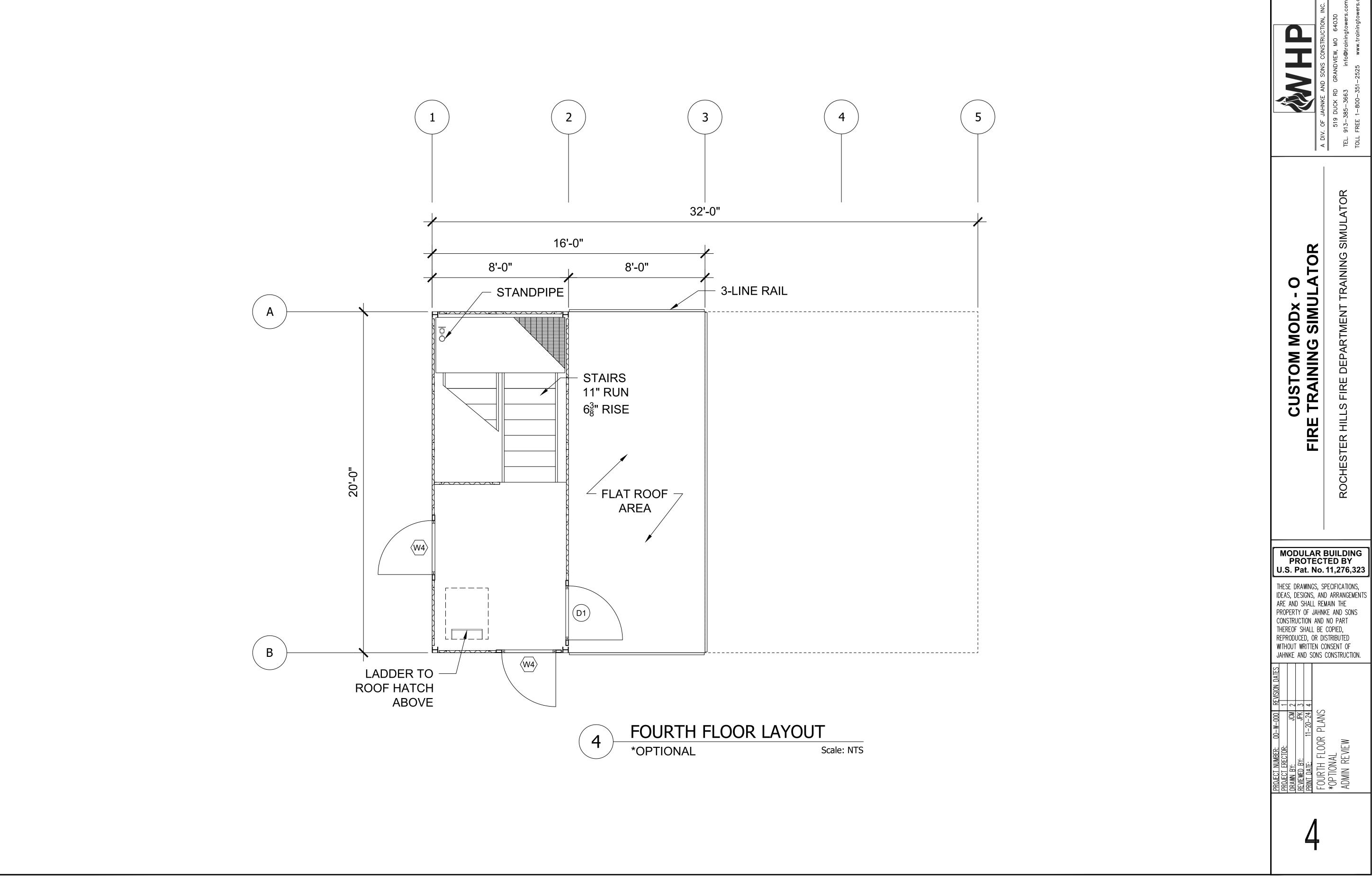








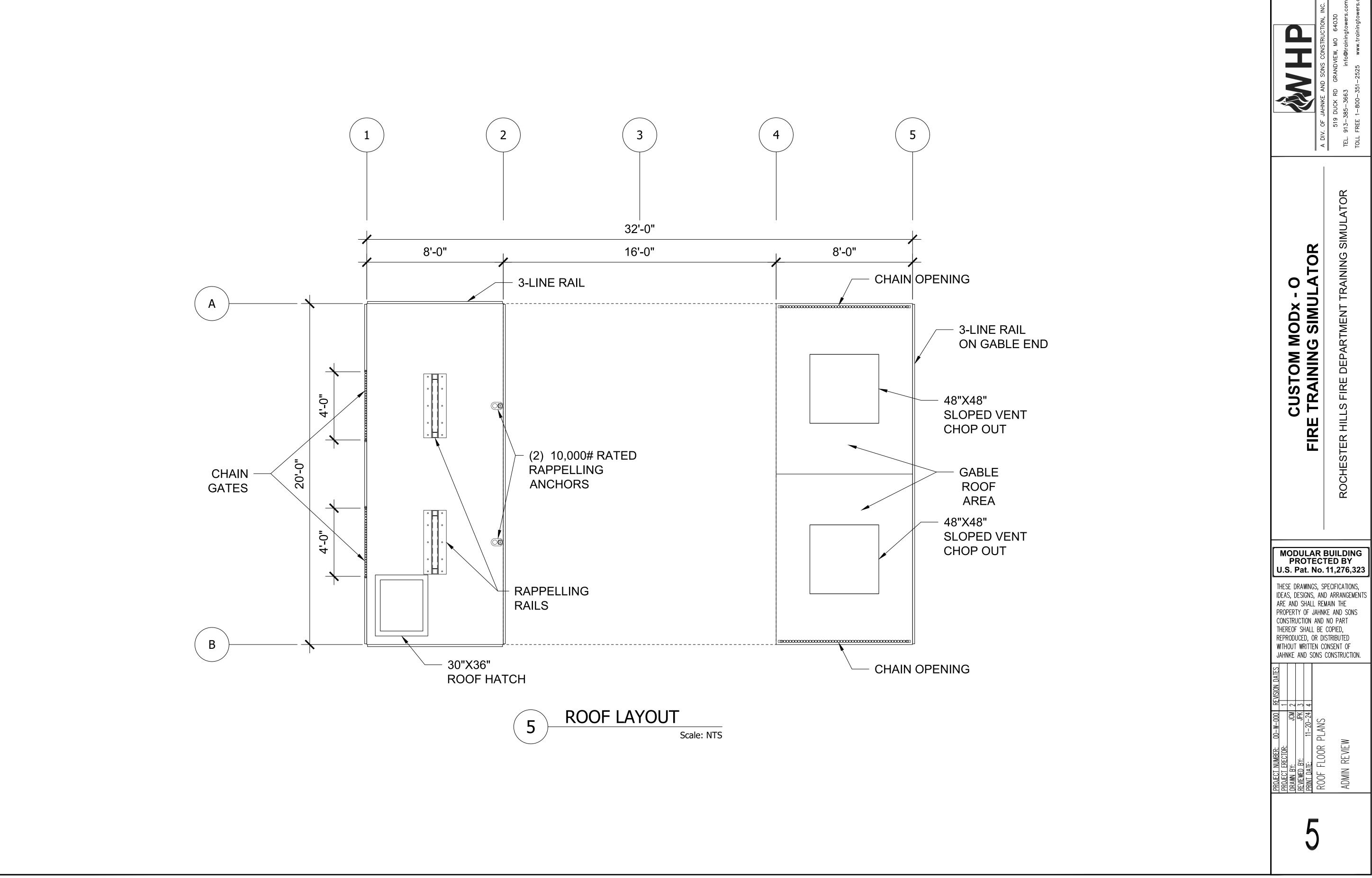
















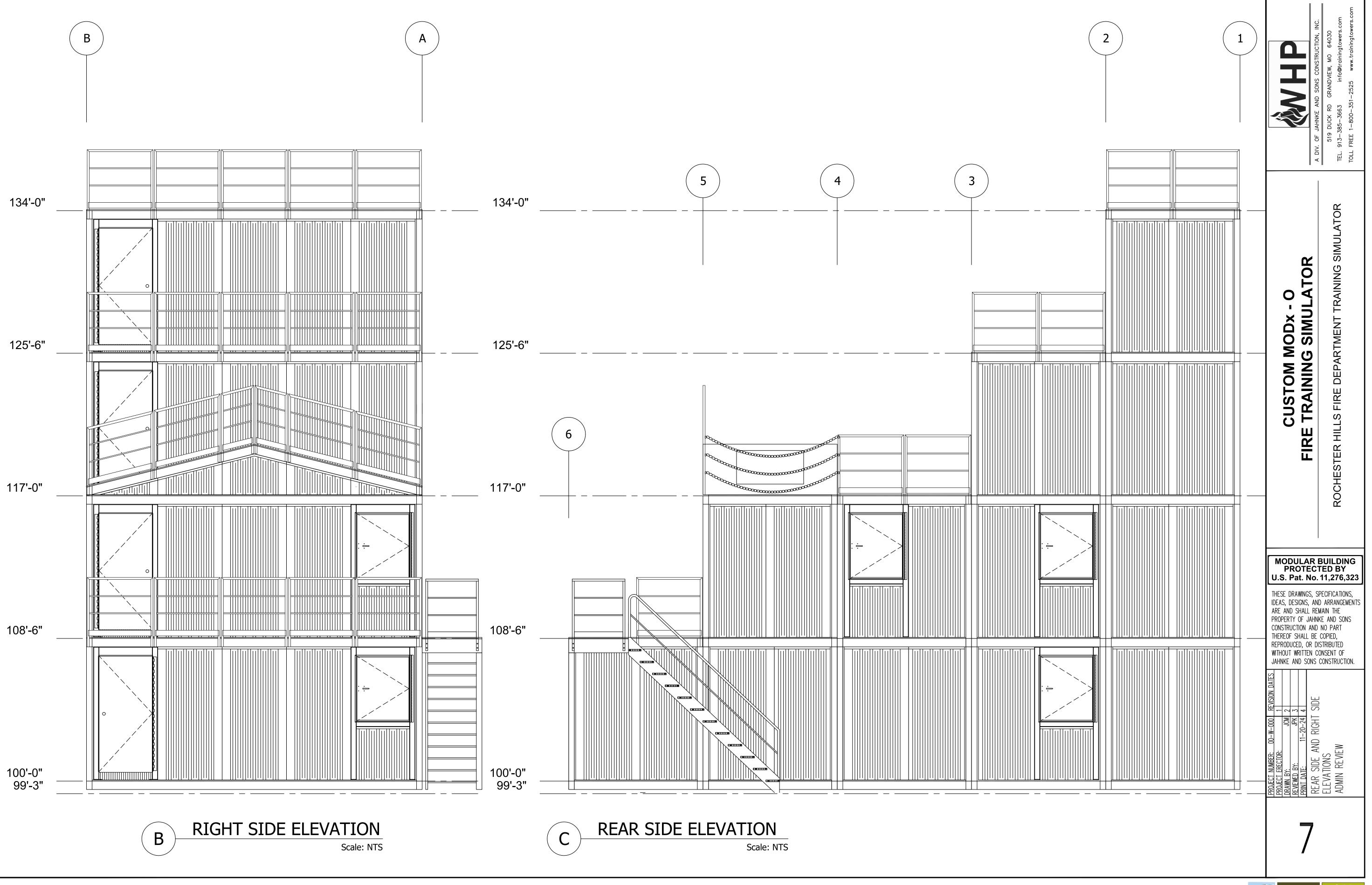








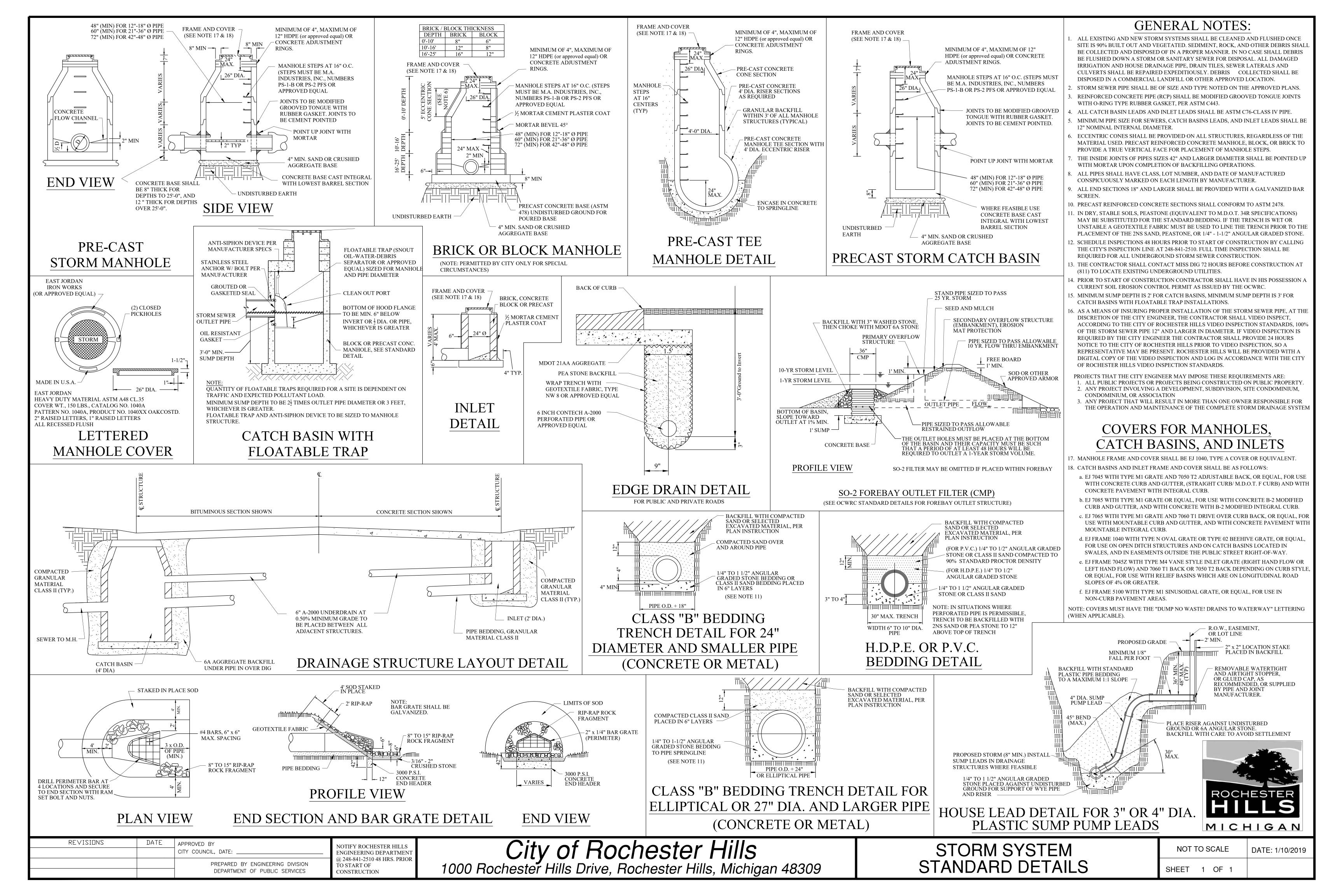












# SITE PLAN.pdf Markup Summary

#### 21'-5 1/2" (1) Subject: Fire Department 21'-5 1/2" Author: Ann Echols Date: 11/21/2024 2:02:25 PM Status: <del>23'-</del>10 1/4" (1) Subject: Fire Department 23'-10 1/4" Author: Ann Echols Date: 11/21/2024 2:02:15 PM Status: 1111 HORIZON CT. (1) Subject: Building Department 1111 HORIZON CT. Author: Mark Artinian ₹ HILLS - FIRE Date: 12/11/2024 1:00:46 PM FIRE TRAINING TOWER Status: APPROVED BY (1) Subject: APPROVED BY Author: AutoCAD SHX Text APPROVED BY Date: CITY COUNCIL, D Status: Assessing Yes (1) Subject: Planning Department Assessing Yes Author: C.McLeod Date: 12/12/2024 9:15:43 AM Status: BP (1) Subject: Group BP Author: C.McLeod Date: 12/12/2024 9:42:56 AM Status: **BUILDING CODE ANALYSIS: (1)** OTHERS. THE NEW FIRE TRAINING TO RECONFIGURABLE MAZE SYSTEM, FLA LADDER, HATCH AND RAPPELLING AN SF. THE BUILDING FOOTPRINT WILL E Subject: Building Department **BUILDING CODE ANALYSIS: Author:** Mark Artinian Date: 12/11/2024 10:44:44 AM Status:

### BUILDING CODE ANALYSIS: (\*\*) Items to be approved by the Building Department Authority Having Jurisdiction (AHJ) Construct

Subject: Text Box Author: Mark Artinian

Date: 12/11/2024 1:17:29 PM

**BUILDING CODE ANALYSIS:** 

(\*\*) Items to be approved by the Building Department Authority Having Jurisdiction (AHJ)

Construction Codes Applicable to the Project: 2015 Michigan Building Code (2015 MBC) \*\*for structural components only.

\*\*NFPA 1402 for all other design considerations. 2021 Michigan Mechanical Code (2021 MMC) 2023 Michigan Electrical Code (2023 MEC, 2023

2021 Michigan Plumbing Code (2021 MPC) 2021 International Fire Code (2021 IFC)

Classification/Use: \*\*U (most nearly resembled)(Section 302).

\*\*This project can be defined as a "Training Prop" or "Training Structure" per the general definitions of Chapter 3.3 of NFPA 1402, 2019 Edition. Construction Classification: IIB (Chapter 6, Table

Fire Suppression System: \*\*Non-sprinklered

Fire Alarm System: None

Allowable Building Area: 8,500 sf (Table 506.2) Total Proposed Building Area: 1,920 sf

Allowable Building Height: 55 feet (Table 504.3)

Proposed Building Height: 34 feet

Allowable Number of Stories: 2 (Table 504.4)

Proposed Number of Stories: \*\*4

#### CITY COUNCIL, DATE: (1)



Subject:

Author: AutoCAD SHX Text

Date: Status: CITY COUNCIL, DATE:

#### City File #24-0378 Section #21 in the lower right hand corner of each sheet (1)



Subject: Engineering Department

Author: Jason Boughton Date: 11/21/2024 10:08:11 AM

Status:

City File #24-0378 Section #21 in the lower right

hand corner of each sheet

#### City of Rochester Hills Planning & Economic Development (1)



Subject: Group Author: macdonaldi

Date: 11/20/2024 3:03:47 PM

Status:

City of Rochester Hills Planning & Economic Development

#### consider adding tree protection fencing (1)



Subject: Natural Resources Author: Matt Einheuser Date: 12/5/2024 3:23:27 PM

Status:

consider adding tree protection fencing

#### Contingent on Building Department AHJ approval. Refer to Building Code Analysis on Sheet A-1. (1)

NOCH

Subject: Building Department Author: Mark Artinian Date: 12/11/2024 11:59:17 AM

Contingent on Building Department AHJ approval. Refer to Building Code Analysis on Sheet A-1.

Rochester Hills Fire Department

DATE (1)



Subject:

Status:

Author: AutoCAD SHX Text

Date: Status: DATE

DEPARTMENT OF PUBLIC SERVICES (1)

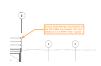


Subject:

Author: AutoCAD SHX Text

Date: Status: DEPARTMENT OF PUBLIC SERVICES

Guards shall meet the requirements of the 2015 MBC and Chapter 1015 and Section 6.1.6 of NFPA 1402 - typical. (1)



Subject: Building Department

Author: Mark Artinian

Date: 12/11/2024 11:57:44 AM

Status:

Guards shall meet the requirements of the 2015 MBC and Chapter 1015 and Section 6.1.6 of NFPA

1402 - typical.

Height modifications for projects located on sites with five or more acres of land are subject to Planning Commission approval. The



**Subject:** Planning Department

Author: C.McLeod

Date: 12/12/2024 9:43:41 AM

Status:

Height modifications for projects located on sites with five or more acres of land are subject to Planning Commission approval.

The application does not require conditional use

approval since the site is 5.2 acres.



Subject: Planning Department

Author: C.McLeod

Date: 12/12/2024 9:32:43 AM

Status:

Height modifications for projects located on sites with five or more acres of land are subject to Planning Commission approval.

The application does not require conditional use approval since the site is 5.2 acres.

Include the storm sewer detail sheet as part of the final construction set. Attached in BSA (1)



**Subject:** Underground Utilities **Author:** Jason Boughton **Date:** 11/21/2024 10:09:54 AM

Status:

Include the storm sewer detail sheet as part of the final construction set. Attached in BSA

Label the Point of beginning. Otherwise looks great! (1)

Label the Point of beginning. Otherwise looks great!

Subject: Engineering Legal Review

Author: Seth Bucholz Date: 12/6/2024 8:07:20 AM

Status:

Label the Point of beginning. Otherwise looks

great!

#### Mark Artinian 248-841-2446 ArtinianM@RochesterHills (1)

Subject: Building Department Author: Mark Artinian Date: 12/10/2024 3:59:14 PM

Status:

Mark Artinian 248-841-2446 ArtinianM@RochesterHills

### PREPARED BY ENGINEERING DIVISION (1)

ED BY

Subject:

Author: AutoCAD SHX Text

Date: Status: PREPARED BY ENGINEERING DIVISION

Provide a note stating that the underground contractor will call the DPS/ENG inspection line 1 week prior to relocating the catch ba



Subject: Underground Utilities Author: Jason Boughton Date: 11/21/2024 10:09:26 AM

Status:

Provide a note stating that the underground contractor will call the DPS/ENG inspection line 1 week prior to relocating the catch basin @

248.841.2510

## Received 11/20/2024 City of Rochester Hills Planning & Economic Development (10)

STILLE STREET, STANFOR AND LOCATIONS OF PERSONS OF PERS

**Subject**: Group **Author**: C.McLeod

Date: 12/12/2024 11:16:25 AM

Status:

Received 11/20/2024

City of Rochester Hills Planning & Economic

Development

DOUBLAN'S NETGRANDON AND LOCATION GOVERNMENT A ROUNDWAY PER RECORD REAWNESS. A ROUNDWAY FIRE RECORD REAWNESS. A ROUNDWAY

Subject: Group Author: C.McLeod

Date: 12/12/2024 11:16:18 AM

Status:

Received 11/20/2024

City of Rochester Hills Planning & Economic

Development



**Subject:** Group **Author:** C.McLeod

Date: 12/12/2024 11:16:10 AM

Status:

Received 11/20/2024

City of Rochester Hills Planning & Economic

Development



Subject: Group Author: C.McLeod

Date: 12/12/2024 11:16:04 AM

Status:

Received 11/20/2024

City of Rochester Hills Planning & Economic

Development



**Subject:** Group **Author:** C.McLeod

Date: 12/12/2024 11:15:59 AM

Status:

Received 11/20/2024

City of Rochester Hills Planning & Economic

Development



Subject: Group Author: C.McLeod

Date: 12/12/2024 11:15:55 AM

Status:

Received 11/20/2024

City of Rochester Hills Planning & Economic

Development

Subject: Group Received Author: C.McLeod 11/20/2024 Date: 12/12/2024 11:15:49 AM Status: City of Rochester Hills Planning & Economic Development Subject: Group Received Author: C.McLeod 11/20/2024 Date: 12/12/2024 11:15:44 AM Status: City of Rochester Hills Planning & Economic Development Subject: Group Received Author: C.McLeod 11/20/2024 Date: 12/12/2024 11:15:39 AM Status: City of Rochester Hills Planning & Economic Development Subject: Group Received Author: C.McLeod 11/20/2024 Date: 12/12/2024 11:15:29 AM Status: City of Rochester Hills Planning & Economic Development REFER TO SHEET A-1. (1) Subject: Building Department REFER TO SHEET A-1. Author: Mark Artinian REFER TO SHEET A-1. Date: 12/11/2024 10:44:37 AM Status: **REVISIONS (1)** Subject: **REVISIONS** Author: AutoCAD SHX Text REVISIONS Date: Status: SP (1)



Subject: Group Author: C.McLeod

Date: 12/12/2024 9:42:43 AM

Status:

SP

Stairways shall meet the requirements of the 2015 MBC and Chapter 1011 and Section 6.1.5 of NFPA 1402 - typical. (1)



Subject: Building Department

Author: Mark Artinian

Date: 12/11/2024 12:03:27 PM

Status:

Stairways shall meet the requirements of the 2015 MBC and Chapter 1011 and Section 6.1.5 of NFPA

1402 - typical.

The applicant will not need to submit for a Land Improvement Permit (LIP) application, unless other departments significantly chan



Subject: Engineering Department Author: Jason Boughton Date: 11/21/2024 10:08:19 AM

Status:

The applicant will not need to submit for a Land Improvement Permit (LIP) application, unless other departments significantly change the scope of the work with their requirements.

With Conditions (1)

With Conditions

With Conditions

Subject: Underground Utilities Author: Jason Boughton

Date: 11/21/2024 10:10:42 AM

Status:

With Conditions

Yes With Conditions (1)

Subject: Building Department

Author: Mark Artinian Date: 12/10/2024 4:00:10 PM

Status:

Yes

With Conditions

(17)



Subject: Traffic Author: Keith

Date: 11/20/2024 4:15:50 PM

Status:

Washter



Subject: Engineering Department

Author: Jason Boughton Date: 11/21/2024 10:10:29 AM

Status:



Subject: Fire Department Author: Ann Echols

Date: 11/27/2024 8:50:12 AM

Status:



Subject: Natural Resouces Author: Matt Einheuser Date: 12/5/2024 3:23:38 PM

Status:



Subject: Jenny McGuckin - YES

Author: Seth Bucholz Date: 12/6/2024 8:07:35 AM

Status:



Subject: Building Department Author: Mark Artinian

Date: 12/11/2024 10:43:26 AM

Status:



**Subject:** Planning Department

Author: C.McLeod

Date: 12/12/2024 9:34:52 AM

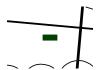
Status:



Subject: Group Author: C.McLeod

Date: 12/12/2024 9:42:01 AM

Status:



**Subject:** Natural Resources **Author:** Matt Einheuser **Date:** 12/5/2024 3:22:30 PM

Status:



Subject: Natural Resources Author: Matt Einheuser Date: 12/5/2024 3:22:53 PM

Status:

Subject: Highlight Author: Mark Artinian

Date: 12/11/2024 11:50:23 AM

Status:

Subject: Highlight Author: Mark Artinian

Date: 12/11/2024 11:50:32 AM

Status:

Cubicat: Liabliaht

Subject: Highlight Author: Mark Artinian

Date: 12/11/2024 11:50:41 AM

Status:

.....

.....

Subject: Highlight Author: Mark Artinian

**Date:** 12/11/2024 11:50:49 AM

Status:

Subject: Highlight
Author: Mark Artinian

Date: 12/11/2024 11:50:56 AM

Status:

Subject: Highlight Author: Mark Artinian

Date: 12/11/2024 11:51:03 AM

Status:

**Subject:** Highlight **Author:** Mark Artinian

Date: 12/11/2024 1:17:09 PM

Status: