Change of Occupancy in Existing Structures

1

Objective

- Review the plans for a change of group in accordance with the State of CT. building codes and Fire codes with information related to zoning and health.

2

Objective

- This program is an interactive program between the audience and the two presenters. We will be asking a number of questions that need to be answered in order to continue with the program. There is no grading at the end of the program we hope to learn as much as you do.

3

Application

- Review plans for the conversion of a 2 story Group B dentist Office to a Group M Jewelry Store on the first floor and Business second floor.
- The structure is a two story wood framed construction with a total net square footage of approximately 1,700 on the first floor and 1,700 sq. ft. second floor.
- The structure is undergoing alterations and additions.

4

Where to Start in the Code

- First Question Where do we start, Chapter 1 Administration, Section 101 General, paragraph 101.2 Scope as supplement by the 2009 CT. amendments, or do we go directly to Chapter 34 Existing Structures, Section 3401 General, paragraph 3401.1 scope.

5

Answer

- Always start with chapter 1 Administration, paragraph 101.2 Scope exception 2, allows for use of the Existing Building code or the 2003 IBC code. As always it is the applicants choice. In this case the applicant decided, based on the extent of the proposal, to comply with the 2003 IBC chapter 34 Existing Structures.

6

Question

- Is a zoning permit required for the proposed change of use?

7

Answer

- Yes/No/Maybe

8

Chapter 34 Existing Structures

- 3401.1 Scope-The provisions of this chapter shall control the alteration, repair, addition and *Change of Occupancy* of existing Structures.
- CT. Supplement-3401.3 Compliance with other codes- In addition to the requirements of the IBC alterations, repairs, additions and Change of Occupancy to existing structures shall comply with 05 CFSC, 03 IPC, 03 IMC, and 05 NEC.

9

Chapter 34

- 3406.1 Conformance- No change in the use or occupancy of any building that would place the building in a different division of the same group or occupancy or in a different group or occupancy, unless the building is made to comply with the requirements of this code for such division or group of occupancy.

10

Chapter 34 Existing Structures

- CT. Supplement-3406.1.1 Determination of hazard- For the purpose of section 3406.1, the determination of hazard category shall be made in accordance with 812.4.1 of the IEBC.

11

New Occupancy

- The new proposed occupancy is Group M Mercantile in accordance with:
- 309.1 Mercantile Group M-a building, structure or portion thereof for the display and sale of merchandise, involving stocks of goods, wares or merchandise incidental to such purpose and accessible to the public.

12

Chapter 34 Existing Structures

- The change is to a new group. Going back to 812.4.1 of the IECB, table 812.4.1.1 the relative hazard of the M is 4 and the relative hazard of the B is 3 which in accordance with 3406.1 must comply with the requirements of the code for new construction.

13

Determine Height and Area

- In accordance with table 503 Allowable Height and Building Area-The existing Group B built with type VB construction is allowed 9,000 Square feet in area and two stories in height not to exceed 40 feet. The new Group M built with VB construction is allowed 9,000 square feet in area and one story in height not to exceed 40 feet.

14

Question

- Can the proposed Group M using Type VB construction go into a two story structure?

15

Answer

- YES/NO

16

Question

- Can it be a non-separated use?

17

Answer

- YES/NO

18

Question

- Is the basement area required to be separated from the Group M on the first floor?

19

Answer

- Yes/No

20

Plan Review

- 702.2 Fire-resistance ratings- shall be determined in accordance with the test procedures set forth in ASTM E119 or in accordance with 703.3

21

Plan Review

- 703.3 Alternative methods for determining fire-resistance- The required fire resistance of a building element shall be permitted to be established by any of the following methods or procedures.
- 1) Fire-resistance design documented in approved sources.
- 2) Prescriptive designs of fire-resistance-rated building elements as prescribed in 720.

22

Plan Review

- 3) Calculations in accordance with 721
- 4) Engineering analysis based on a comparison of building element design having fire-resistance ratings as determined by ASTM E119.
- Alternative protection methods as allowed by 104.11

23

Question

- The plan shows a floor ceiling assembly of 2 hours noted as a UL L 501 (modified as partial existing). Is this in accordance with 703.2 or 703.3?

24

Answer

- 703.2/703.3

25

Question

- How is the separation between the M & B constructed?

26

Answer

- 706.3.6 Separation of Mixed occupancies- Where the provisions of 302.3.2 are applicable, the fire barrier separating mixed occupancies shall have a fire-resistance rating of not less than that indicated in 302.3.2 based on the occupancies being separated.
- 706.5 Horizontal Fire Barriers-shall be constructed in accordance with 711 Horizontal Assemblies.

27

Plan Review

- 711.4 Continuity- Assemblies shall be continuous. The supporting construction shall be protected to afford the required fire-resistance rating of the horizontal assembly supported.

28

Plan Review

- 715.3 Fire Doors and Shutter assemblies- requires doors and shutters to meet NFPA or UL standards and installed in accordance with NFPA 80.
- Table 715.3 Fire Door and Fire shutter protection ratings-requires a 1 ½ Hr. rated door in a 2 Hr. rated assembly and a 1 Hr. door rated door in a 1 Hr. rated assembly.

29

Question

- What is the required rating of the doors?
- 1) In the exterior walls, two for the stairways?
- 2) For the exit stairways?

30

Answer

- 2 HR./1 Hr./Both

31

Interior Finishes

- Table 803.5 Interior wall and ceiling finish-requirements by occupancy- Group B & M non-sprinkled requires class A in vertical exits & exit passageways, class A in exit access corridors and class B in rooms and enclosed spaces.
- Note that foot note (b) allows vertical exits less than 3 stories to be class B

32

Plan Review

- 1003.4 Floor surface-walking surfaces of the means of egress shall have a slip-resistant surface and be securely attached.

33

Question

- How is the occupant load determined?
- 1) Actual Number
- 2) Number by table 1004.1.2
- 3) Number by Combination

34

Answer

- Any combination of all three

35

Plan Review

- Table 1005.1 Egress width per occupant served- requires stairs to be 0.3” and other egress components to be 0.2” per occupant for buildings without a sprinkler system.

36

Plan Review

- 1005.2 Door encroachment- Doors opening into the path of egress travel shall not reduce the required width to less than ½ during the course of the swing. When fully open, the door shall not project more than 7” into the required width.

37

Plan Review

- 1006.1 Illumination required-the means of egress, including the exit discharge, shall be illuminated at all times the building or building space served by the means of egress is occupied.

38

Plan Review

- 1006.3 Illumination emergency power- In the event of a power failure, an emergency electrical system shall automatically illuminate the following:
- 1) Exit corridors, passageways and aisles in rooms or spaces which require two or more means of egress.
- 2) Exit access corridors and exit stairways located in buildings required to have two or more exits.

39

Plan Review

- 3) Exterior egress components at other than the level of exit discharge until exit discharge is accomplished for buildings required to have two or more exits.
- 4) Interior exit discharge elements, as permitted in 1023.1, in buildings required to have two or more exits.
- 5) The portion of the exterior exit discharge immediately adjacent to exit discharge doorways in buildings required to have two or more exits.

40

Plan Review

- 1007.1 Accessible means of egress required-accessible spaces shall be provided with not less than one accessible means of egress.
- Exception:
- 1) Accessible means of egress not required in alterations in existing buildings.

41

Plan Review

- 1008.1.2 Door Swing-egress doors shall be side-hinged swinging. Shall swing in the direction of egress travel where serving and occupant load of 50 or more.
- The question here is how can the plans show a pocket door in the Group M workroom/office.

42

Answer

43

Question

- Do the front and rear entry doors meet the requirements of 1008.1.7 Door arrangement?

44

Answer

- Yes/No
- .

45

Plan Review

- 1008.1.8 Door operation-doors shall be readily open able without the use of a key or special knowledge.
- 1008.1.8.1 Hardware-on doors required to be accessible tight grasping, tight pinching or twisting of the wrist is not allowed to operated the door handle.

46

Question

- Is panic or fire exit hardware required in Group M and B.

47

Answer

- Yes/No

48

Question

- Can the stairway means of egress doors be locked from ingress and egress sides?

49

Answer

- Yes/No

50

Plan Review

- 1009.1 Stairway width-determined by the minimum required width but not less than 44" with exceptions.

51

Plan Review

- 1009.3 Stair treads and risers-requires 7” maximum and 4” minimum rise with less than 3/8” difference in the flight. Minimum tread depth is 11” with less than 3/8” difference.

52

Question

- Are the walking surfaces of treads and landings allowed to be of open grate material?

53

Answer

- Yes/No

54

Question

- Are the exterior stairs required to be protected?

55

Answer

- Yes/No

56

Plan Review

- 1009.11 Handrails-requires handrails on both sides of the stairway, 34 to 38” high measured from the nosing of the tread, graspable, continuous, with extensions.

57

Question

- How is the minimum width of a means of egress ramp determined?
- 1) By 1005.1 Minimum required egress width.
- 2) By 1016.2 Corridor width.

58

Answer

59

Plan Review

- 1010.7.1 Ramp Surface-shall be of slip-resistant materials, solid and in compliance with 302.3 of ICC/ANSI A117.1.

60

Plan Review

- 1010.7.2 Outdoor Conditions-same as 1009.5.2.

61

Question

- Do the guardrails meet the opening limitations allowed?

62

Answer

- Yes/No

63

Question

- Are exit signs required in?
- 1) Group M
- 2) Group B

64

Answer

- Yes/No

65

Question

- Are accessible exit signs required in?
- 1) Group M
- 2) Group B

66

Answer

- Yes/No

67

Plan Review

- 1011.3 Tactile exit signs-stating exit and complying with ICC A117.1 shall be provided adjacent to each door to an egress stairway, exit passageway and the exit discharge.

68

Question

- What is the allowable common path of travel for?
- 1) Group M
- 2) Group B

69

Answer

- 75/100

70

Question

- How is the minimum clear aisle width determined in?
- 1) Group M
- 2) Group B
- Is it determined by
- 1) 1005.1
- 2) 1016.2

71

Answer

- 1005.1/1016.2

72

Question

- Will the spaces in the Group M and B require more than one exit or exit access doorway?

73

Answer

- Yes/No

74

Question

- Is the required remoteness of exits met for?
- 1) Group M
- 2) Group B.

75

Answer

- Yes/No

76

Plan Review

- 1015.1 Travel distance limitations-exits shall be located on each story such that the maximum length of exit access travel, measured from the most remote point within a story to the entrance to an exit along the natural and unobstructed path of travel, shall not exceed the distances in table 1015.1

77

Question

- Is there a dead end corridor in the existing Group B on the second floor?

78

Answer

- Yes/No

79

Question

- Back to a question we asked earlier. How many exits required from?
- 1) Group M
- 2) Group B

80

Answer

- 1 or 2

81

Plan Review

- 1017.3 Mercantile occupancies-CT supplement-Where the only means of Customer Entrance is through one exterior wall, the exit width shall be sufficient to allow not less than 2/3's but not less than the total width of all means of egress leading to those exits. The remaining exits shall provide at least ½ of the total required exit capacity.

82

Question

- What is the hourly rating of the required exit stairway from the Group B?
- 1) 1 Hour
- 2) 2 Hours

83

Answer

- 1 Hour/2 Hours

84

Plan Review

- 1019.1.2 Penetrations-Through exit enclosures are prohibited except for required exit doors, equipment and ductwork necessary for independent pressurization, sprinkler piping stand piping, electrical raceways for fire department communication systems and electrical raceway serving the exit enclosure and terminating at a steel box not exceeding 16. sq. inches.

85

Plan Review
Accessibility of Existing Buildings

- 3409.1 Scope-as amended by CT.-The provisions of 3409.1 through 3409.8 apply to maintenance, Change of Occupancy, additions and alterations to existing buildings.

86

Plan Review

- 3409.3 Change of Occupancy-as amended by CT.-Existing buildings, or portions there of, that undergo a change of group or occupancy shall have all of the following accessible features:
- 1) At least one accessible building entrance.
- 2) At least one accessible route from an accessible entrance to the primary function areas.

87

Plan Review

- 3) Signage complying with 1110.
- 4) Accessible parking spaces, where parking is provided.
- 5) At least one accessible passenger loading zone, where provided.
- 6) At least one accessible route to parking and loading zone to an accessible entrance.

88

Plan Review

- 7) At least one accessible toilet room or toilet bathing facility per gender complying with 1109.2
- 8) At least one accessible means of egress complying with 1007.
- 9) Type A & B units as required by 1107.

89

Plan Review

- Where technically infeasible the items above shall conform to the maximum extent technically feasible. Change of group that incorporates alterations or additions must comply with 3409.4, 3409.5 3409.6 and 3409.7.

90

Question

- Will the bathroom meet the requirements for a single occupancy bathroom?

91

Answer

- Yes/No

92

Plan Review

- 1109.2.1.6 Clear floor space-Where doors swing into the unisex toilet or bathing room, a clear floor space not less than 30x48” shall be provided, within the room, beyond the area of the door swing.

93

Plan Review

- 1109.2.1.7 Privacy-Doors to unisex toilet and bathing rooms shall be securable from within the room.

94

Plan Review

- 1109.2.4-Additional grab bar-as amended by CT.-A separate additional swing away grab bar.
- 1109.2.2.1 Pull handle-as amended by CT-compartments or single occupancy toilet rooms shall have a pull handle mounted 6” from the hinge side and 26 to 36” from the floor unless the doors are self-closing and self-latching.

95

Plan Review

- 1109.2.5 Faucets and controls-as amended by CT.-at least one lavatory in each handicap toilet room must have its faucet and controls located 13” from the face of the fixture.

96

Question

- The plans show sound transmission materials between the groups is this required by code?

97

Answer

98

Question

- What is the required height off of the floor for non-absorbent surfaces in toilet rooms?

99

Answer

- 6 inches or 48 inches or both

100

Question

- Does the requirements of the 2009 International Energy Conservation Code for a change of use need to be meet?

101

Answer

- Yes/No

102

Plan Review

- Table 502.2(1) requires R-38 in the ceiling, R-13 plus R-3.8 continuous in the walls and R-30 in the floors

103

Plan Review

- Table 1607.1-requires a 50 pound per sq. ft. floor load for the office areas with a concentrated load of 2,000 pounds. The retail first floor requires 100 pounds per sq. ft. floor load and 1,000 pounds concentrated load.

104

Question

- Are any special inspections required for this project?

105

Answer

- Yes/No/Maybe

106

Plan Review

- 2902.2-Separate facilities-requires separate facilities shall be provided for each sex with exceptions.

107

Question

- Are fire dampers required where ducts penetrate the two hour floor/ceiling assemble between uses and the one hour from the basement?

108

Answer

- Yes/No

109

Answer

110

Inspection

111

What's Wrong

112

Inspection

113

Inspection

114

Inspection

115

Inspection

116

Inspection

117

Inspection

118

What's Wrong

119

What's Wrong

120

Inspection

121

Inspection

122

What's Wrong

123

What's Wrong

124

What's Wrong

125

What's Wrong

126

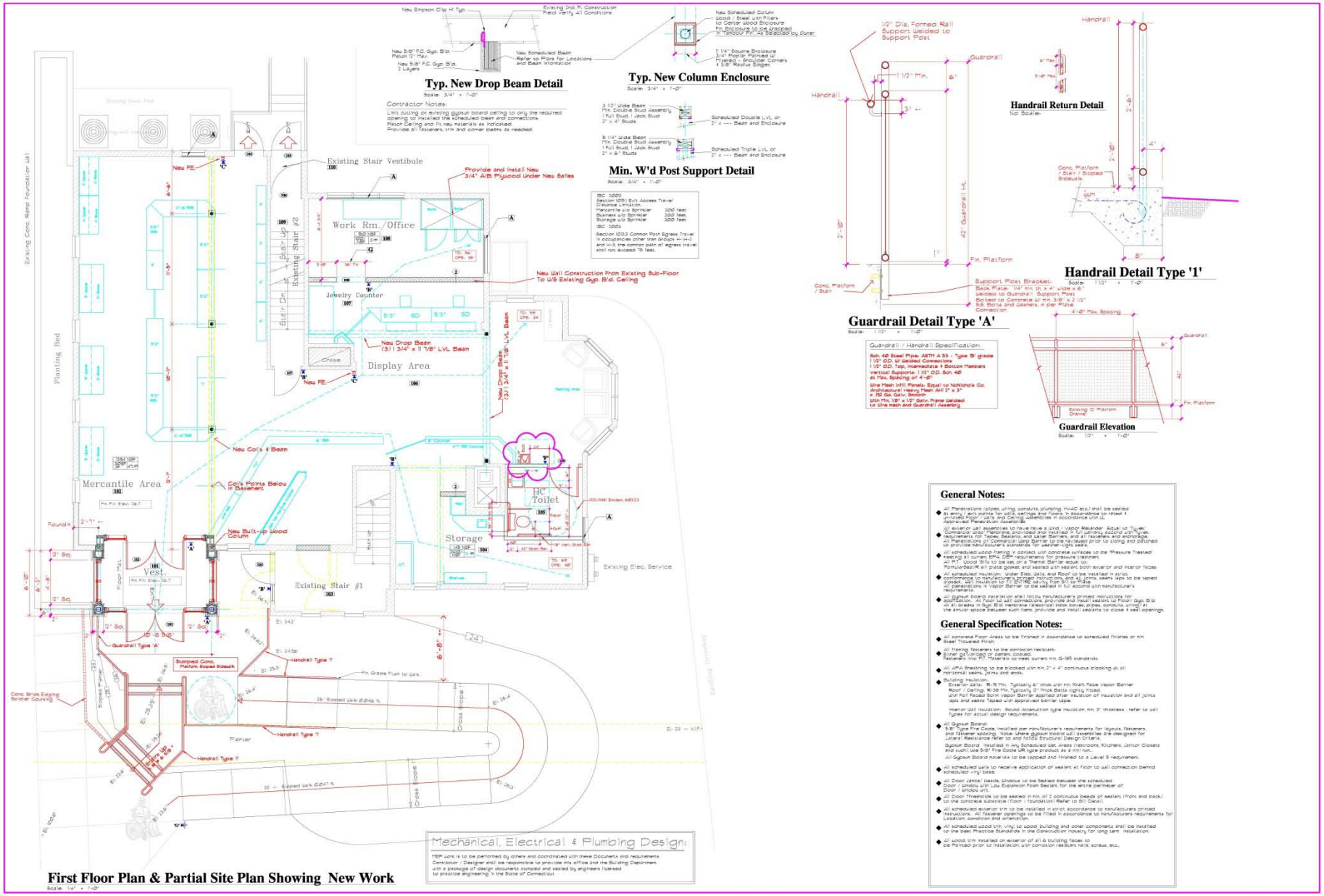
Final

- 3406.2 Certificate of occupancy-Shall be issued where it has been determined that the requirements for the new occupancy classification have been met.

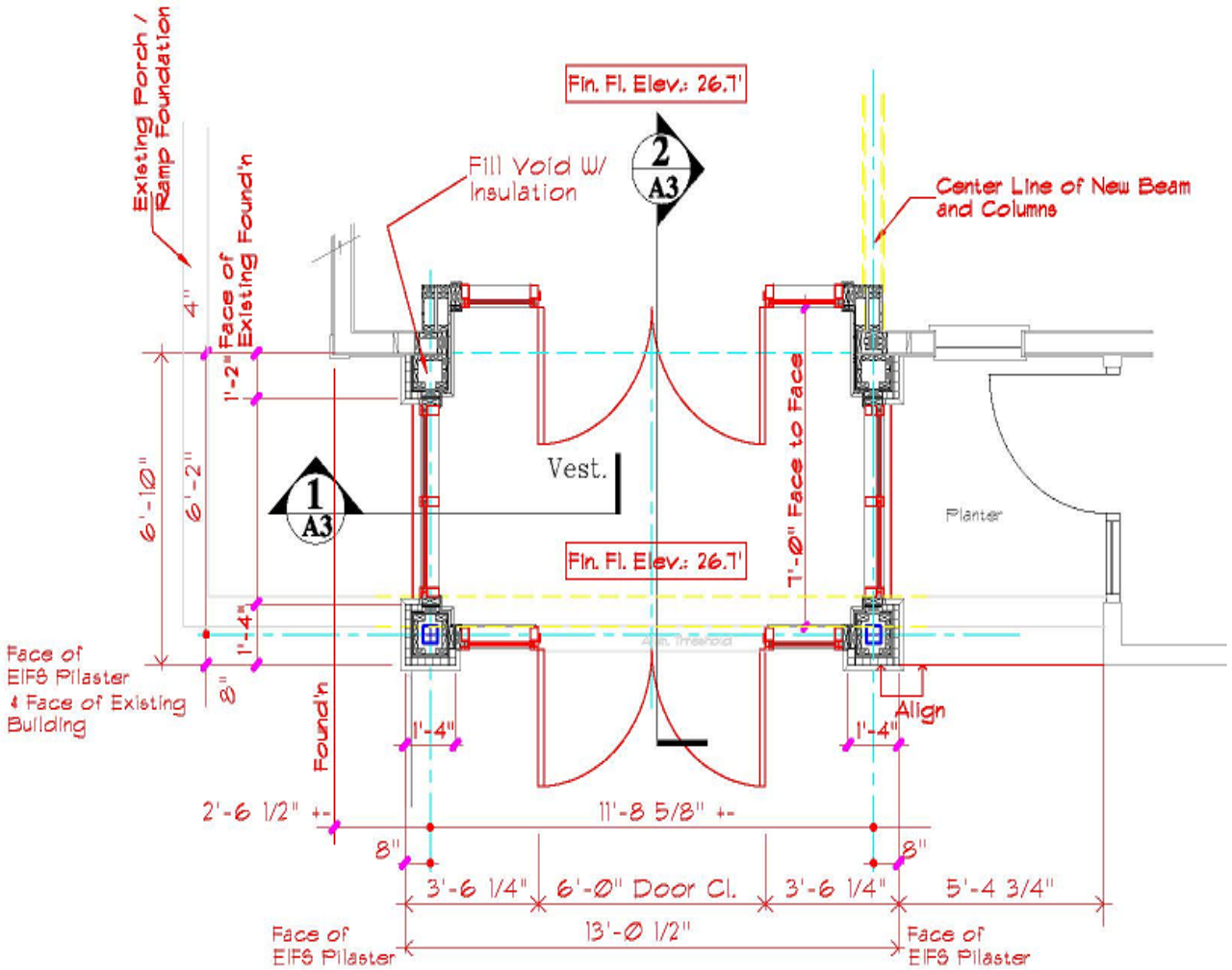
127

THE END

128

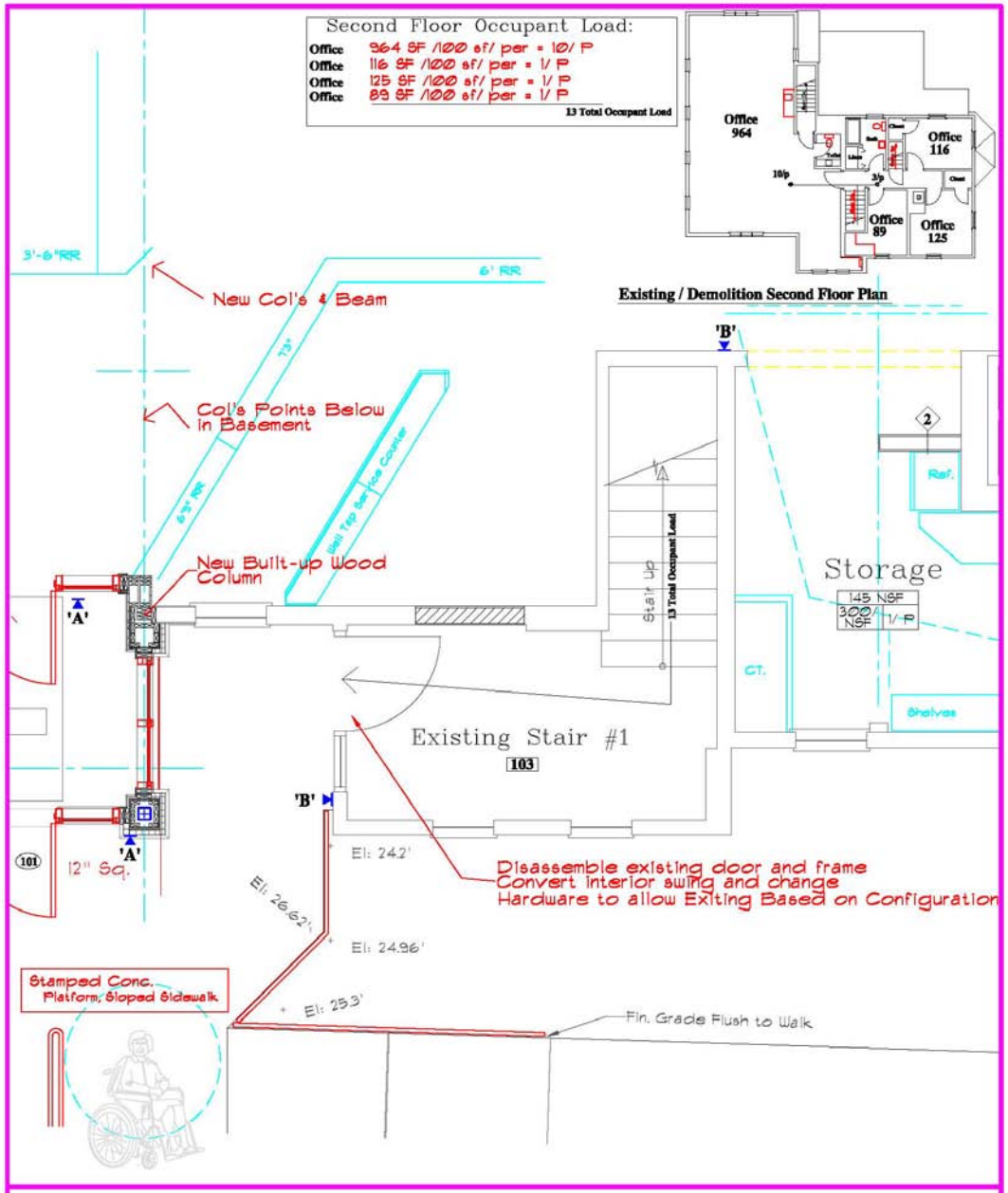


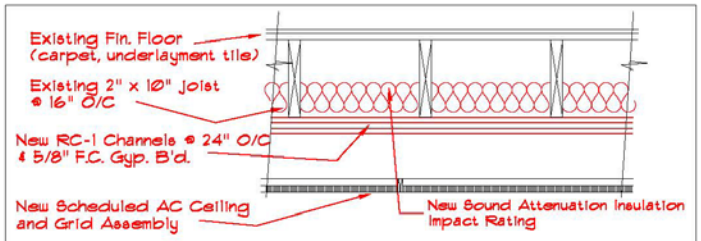
First Floor Plan & Partial Site Plan Showing New Work



Plan Detail @ New Entrance

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

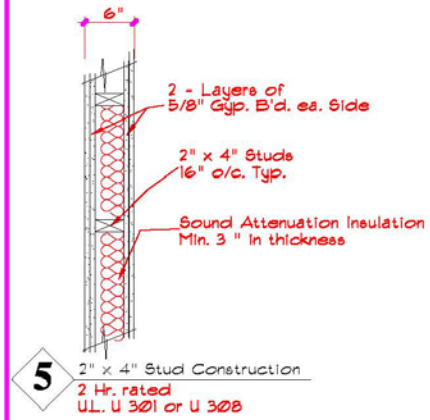

Second Floor Occupant Load:
Office 964 SF /100 sf/ per = 10/ P
Office 116 SF /100 sf/ per = 1/ P
Office 125 SF /100 sf/ per = 1/ P
Office 89 SF /100 sf/ per = 1/ P
13 Total Occupant Load
Office 964
Office 116
Office 89
Office 125
Existing / Demolition Second Floor Plan
3'-6"RR
6' RR
New Col's & Beam
Col's Points Below in Basement
New Built-up Wood Column
'A'
'B'
Stair Up
13 Total Occupant Load
Storage
145 NSF
300/ NSF
1/ P
Ref.
CT.
Shelves
Existing Stair #1
103
101
12" Sq.
El: 24.2'
El: 26.62'
El: 24.96'
El: 25.3'
Disassemble existing door and frame
Convert interior swing and change
Hardware to allow Exiting Based on Configuration
Stamped Conc.
Platform; Sloped Sidewalk
Fin. Grade Flush to Walk



2 Hr. Fl. / Ceiling Assembly

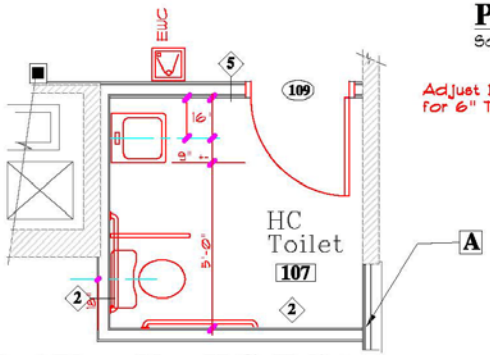
No Scale:

UL L 511 (Modified as Partial Existing)

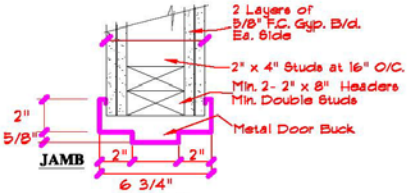


Part Plan - Work Rm. /Office

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



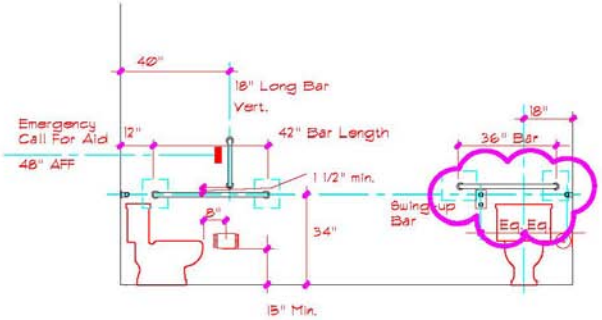
Adjust Door Buck Detail
for 6" Throat Opening



Part Plan - New H.C. Toliet

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

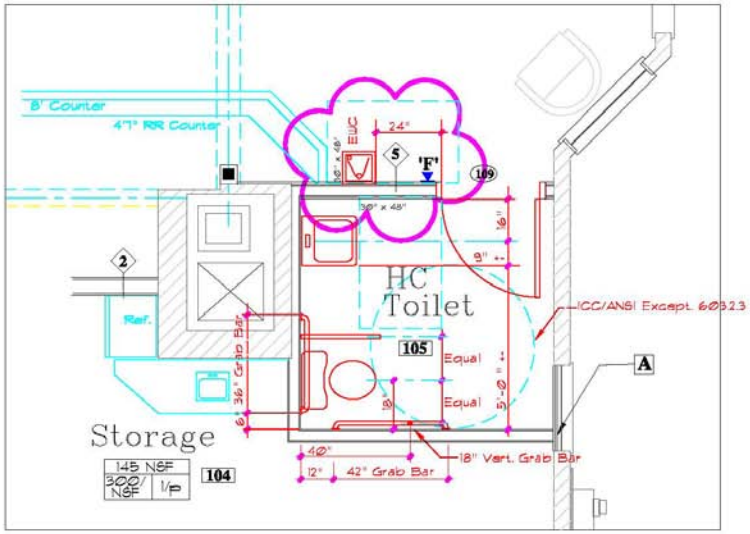
MB-3a



Water Closet Accessories

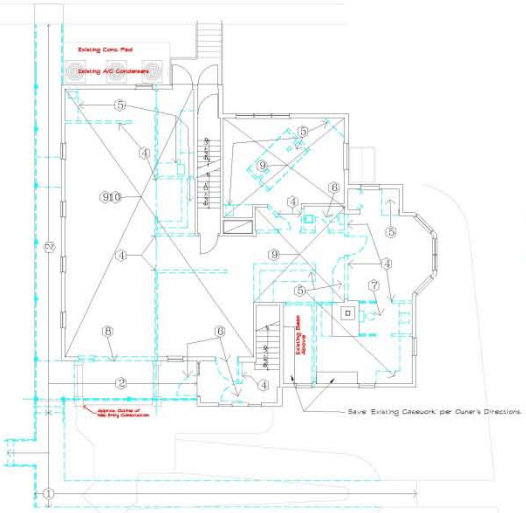
Typ. Restroom Accessories & Clearances

No Scale

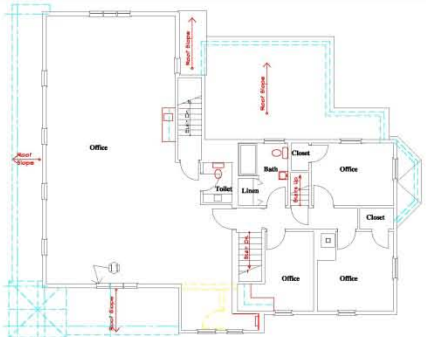


Added Electric Water Cooler (EWC)

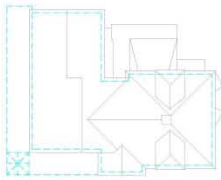
Scale: 1/4" = 1'-0"



Existing / Demolition First Floor Plan
Scale: 1/8" = 1'-0"



Existing / Demolition Second Floor Plan
Scale: 1/8" = 1'-0"



Approx. Existing Roof Plan
Scale: 1/8" = 1'-0"

Demolition Work Notes:

1. Cut up and remove existing conc. sidewalk and stairs and sub grade to the to the limit indicated. Coordinate with final Architectural.
2. Carefully cut and remove existing covered walkway roof construction, wood columns wood and metal railing assembly, concrete sidewalk, from entry door to bottom of existing ramp. Include concrete saw cutting of existing slab of foundation to a minimum of 1' below scheduled finish grade, or as indicated in documents.
3. Saw cut and remove existing concrete floor slab (4" +/-) as indicated to allow installation of new scheduled concrete footings and new steel column. Revise and coordinate with Structural Drawings and associated details.
4. Dismantle and remove existing wood stud and Gyp. Bd. wall construction. Clean and remove all components of existing construction and review new Scheduled Architectural and Structural drawings.
5. Dismantle and remove all existing casework, cabinets (base and uppers) to the limit indicated. Patch and repair wall surfaces and substrates. Review and coordinate New Scheduled Architectural and Structural work.
6. Dismantle and remove existing door, frame and hardware. Contact the Owner, to verify if Owner wants to store the material for later. If unwanted by Owner, properly dispose of all materials in accordance to all rules regulations and codes pertinent in the State of Connecticut.
7. Dismantle and remove existing plumbing fixtures, piping and drainage piping. Cut and cap all un-used or temporarily not used piping of what ever description. Dispose of all materials removed in full accordance with all rules regulations and codes required by the State of Connecticut.
8. Saw Cut Existing 10" Conc. Foundation for New Access Door. Coordinate with Architectural / New Foundation Plans.
9. Saw Cut and Remove Existing Conc. Sidewalk / Ramp Foundation to the Limits Indicated to Allow Scheduled New Entry Foundation Installation. Coordinate with Architectural's and Foundation Plans
9. Cut and removed all exiting Floor finish (carpeting, tile, VCT ecc.) Down to wood sub-strate. Patch existing wood substrate as necessary to allow scheduled new floor finishes.
10. Carefully remove existing acoustical ceiling and grid, including all handing wires and supported devices. Prepare exposed wood joist for new RC-1 Channel and 5/8" Gyp. Brd. Ceiling assembly.
11. Remove existing window & trim in its entirety. Prepare opening for new studs wall in fill.
12. Saw Cut and Remove Existing Conc. Sidewalk / Ramp Foundation to the Limits Indicated to Allow Scheduled New Entry Foundation Installation. Coordinate with Architectural's and Foundation Plans
13. Disconnect and relocated exiting fuel tank to allow new scheduled New Column, Footing and Beam to be installed.

Demolition Work Notes General:

All items of work in these "CONTRACT DRAWINGS" (Plans and Specifications) either drawn noted of otherwise implied shall be considered a part of these documents. For any areas or items in question, the General Contractor shall contact the ARCHITECT in writing before submitting their bid. Otherwise the ARCHITECT's interpretation/ interpolation has the assumed. Written clarification shall follow procedures prior to bidding as covered in the Project Manual.

The Contractor shall coordinate with subcontractors, suppliers, and other trades so as and furnishes and and finishes items for a complete assembled job. Categorizing the Contract Documents by trades/ facilities services (trades) does not relieve the General Contractor of their responsibilities.

The listing and compiling of "GENERAL NOTES" shall pertain to all documents, sheets, and / or plans entailing the

" Contract Documents".

The work described within these Contract Documents, outlines the intended demolition work to make ready for scheduled the new work as shown on drawings. The Contractor shall be responsible for the indicated new construction work.

The Contractor shall be responsible for field review dimensions of scheduled new construction, verifying that scheduled new work will properly fit into indicated surroundings.

Should discrepancies be found in drawing areas, the Architect shall be immediately notified for direction, and or coordination prior to performing the work. Commencement of work without notification to the Architect will constitute acceptance of existing conditions and scheduled work, without request of Extras for the conflict of work.

All penetrations, through floors, walls and ceilings shall be kept to which the required dimensions of the items making the penetration, and shall be sealed with approved materials around the penetration. All penetration sealing materials including at the line of smoke rated barriers shall be sealing materials meeting the requirements of the rated items and U.L. requirements of acceptable listings for penetrations.

The Contractor and his sub-contractor shall provide protection to adjacent finishes, equipment, furnishings, etc. while their respective work is in progress to avoid damage to the adjacent item(s).

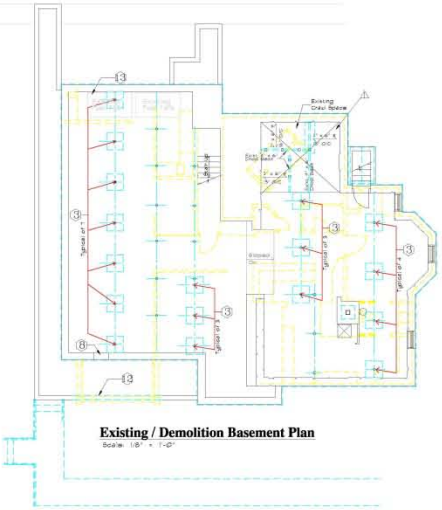
The Contractor is to be aware that new work required has line of size or shape that is will not be possible to deliver thru the building (s) through doors, if the item (s) are fully assembled. Sectionalizing for erection within the building will be required as well as removing any and all warranties, listings, labels etc.

Mechanical, Electrical, Plumbing, etc. work will be required to be installed thru walls, these Contract Documents and these General Notes.

For Doors, Frames, and Hardware Scheduled work, the Contractor shall field verify all doors, transom panels and glass sizes prior to ordering. Special Attention on field verification of existing bays is IMPERATIVE.

In all areas of scheduled work (i.e. doors, walls, floors ceilings, etc.) the Contractor shall field review and layout all components of the scheduled work prior to the actual construction work scheduled to field verify the ability to provide and install scheduled work. Should interferences occur which could affect the installation of scheduled work, the Contractor shall notify the ARCHITECT 10 days in advance of scheduled work for direction and or corrective actions.

The Contractor shall be responsible to field verify all existing conditions against scheduled work, and report all discrepancies conflicts and potential problems to the ARCHITECT at least 24 hrs prior to commencement of scheduled work. Contractor shall be responsible for the cost of the work, if the work is not installed properly and requires reconstruction. For Temporarily installed work to be removed at a few intervals, This work is to be incorporated and coordinated the Contractor as addressed within and for additional cost of time will be forwarded to Owner. the Contractor accepts the constraints and construction requirements.


Existing Crawl Space
Slab Below
Slab Below
Slab Below

CODE DATA:

Connecticut State Building Code

2003 International Building Code
2003 International Mechanical Code
2003 International Plumbing Code
2006 International Energy Conversation Code
(Changes - effective August 1, 2005)
ICC / ANSI A117.1-2003 Accessible and Usable Building and Facilities
2005 National Electrical Code (NFPA-70)
CSFSC - Connecticut State Fire Safety Code

IBC 2003 & 2005 and 2009 Ct. Supplement

Use Group: M & Business B-1 Mixed Use
Construction Type: 5B (Change of Use First Floor)
Existing Building & Scheduled Addition and Renovations
Building Height: Existing Building 2 Stories
Non- Sprinkled Building

Section 504: Height Modifications:
504.2 Automatic Sprinkler System Increase: NON- SPRINKLERED BUILDING No Adjustments
506.1 Area Modifications % of Open Perimeter
506.2 Frontage Increase 100 % open perimeter

Building Analysis Data:

Area Modification $A_a = A_t + \frac{A_t I_f}{100}$

Open Perimeter $I_f = 100 \left[\frac{F}{P} - .025\right] \frac{W}{30}$

$I_f = 100 \left[\quad - .025 \right] \frac{30}{30}$ $I_f = 100$ (.75) (2/3) = 50 % area Increase

Building Breakout:
(VB) Construction Allowable Tabulated / Open Perimeter / Adjusted Allowable: Aa = 17500 + 8750 = 26250 SF ≥ 6,000 Scheduled

Occupant Load Design
Mercantile 'M' Group: = 30 Gross
Business 'B' Group = 100 Gross

Table 601
Fire-Resistance Rating Requirements for Building Elements (hours)

Building Element	Type I A	Type I B	Type II A	Type II B	Type III A	Type III B	Type IV	Type V A	Type V B
Structural Frame: Including columns, girders, trusses	3	2	1	0	1	0	HT	1	0
Bearing Walls: Exterior / Interior	1 / 1	0 / 0	1 / 1	0 / 0	2 / 1	2 / 0	2 / 1/HT	1 / 1	0 / 0
Non-Bearing walls and partitions: Exterior	See Table 602								
Non-Bearing walls and partitions: Interior	0	0	0	0	0	0	Sect. 602.4.6	0	0
Floor Construction: Including supporting beams and joist	2	2	1	0	1	0	HT	1	0
Roof Construction: Including supporting beams and joist	1 1/2	1	1	0	1	0	HT	1	0

This Project (Type V B)

Table 602
Fire-Resistance Rating Requirements for Exterior Walls Based on Fire Separation Distance

Fire-Separation Distance	Type of Construction	Group H	Group F-1, M, S-1	Group A, B, E, F-2, R, S-2, U
≤ 5	All	3	2	2
≥ 5 < 10	IA / Others	3 / 2	2 / 1	2 / 1
≥ 10 < 30	IA, IB / IIB, VB / Others	2 / 1 / 1	1 / 0 / 1	1 / 0 / 1
≥ 30	All	0	0	0

This Project (Group F-1, M, S-1)

Table 803.5
Interior Wall and Ceiling Finish Requirements by Occupancy

GROUP	SPRINKLED: Vertical exits and exit & passageways	SPRINKLED: Exit access corridors and other exit ways	SPRINKLED: Rooms and enclosed spaces	NON-SPRINKLERED: Vertical exits and exit & passageways	NON-SPRINKLERED: Exit access corridors and other exit ways	NON-SPRINKLERED: Rooms and enclosed spaces
A-1 & A-2	A	B	C	A	A	B
A-3, A-4, A-5	B	B	C	A	A	C
B, E, (M), R-1, R-4	B	C	C	A	B	C
F	C	C	C	B	C	C
H	B	B	C	A	A	B
I-1	B	C	C	A	A	B
I-2	B	B	B	A	A	B
I-3	A	C	C	A	A	B
I-4	B	A	C	A	A	B
R-2	C	C	C	B	C	C
R-3	C	C	C	B	B	C
S	C	C	C	C	C	C
U	NO RESTRICTIONS			NO RESTRICTIONS		

This Project (B, E, (M), R-1, R-4 — Non-Sprinklered)

Summary of Occupancy-Related Automatic Sprinkler Thresholds
Figure 903.2

Use Group / Occupancy	Exceptions	Exceptions
All Occupancies	Buildings with floor level ≥ 55 feet above access and occupant load ≥ 30	Airport control towers, open parking structures, F-2, R-3, U
Assembly (A-1, A-3, A-4)	Fire area > 12,000 sq. ft. of fire area occupant load > 300 or fire area above (below) level of exit discharge. Multi-theater complex (A-1 only)	None. 903.2 Exception 1: A-4 Group one story - 10 [illegible]
Assembly (A-2)	Fire area > 5,000 sq. ft. of fire area occupant load > 300 or fire area above (below) level of exit discharge	None
Assembly (A-5)	Accessory areas > 1,000 sq. ft.	None
Educational (E)	Fire areas > 20,000 sq. ft. or level of exit discharge	Each classroom has exterior door at grade
Factory (F-1), Mercantile (M), Storage (S-1)	Fire area > 12,000 sq. ft., or building > 3 stories of Combined fire area > 24,000 sq. ft. Woodworking > 2,500 sq. ft. (F-1 only). Bulk storage of tires > 20,000 cu. ft. (S-1 only)	None
High Hazard (H-1, H-2, H-3, H-4, H-5)	Sprinklers required	None
Institutional (I-1, I-2, I-3, I-4)	Sprinklers required	None
Residential (R)	Sprinklers required	None
Repair Garages (S-1)	Fire areas > 12,000 sq. ft. only, 2 stories (including basement) with fire area > 10,000 sq. ft. of repair garage servicing vehicles in basement	None
Parking garage (S-2)	Enclosed automobile parking ---- Sprinklers Required. Commercial trucks/buses parking area > 5,000 sq. ft.	None
Covered malls (402.8)	Sprinklers required	Attached open parking structures
High rises (403.2, 403.3)	> 75 feet above vehicle access	Airport traffic control towers, open garages, A-5
Unlimited area buildings (507)	A-3, A-4, B, E, F, M, S, 1 story. B, F, M, S 1 story	one story F-2, or S-2

Occupancy - Based on table 1004.1.2

Occupancy	Floor Area in Sq. Ft. Per Occupant
Assembly	
Agricultural Buildings	300 Gross
Aircraft hangers	500 Gross
Airport Terminal: Baggage Claim / Baggage Handling / Concourse / Waiting	20 Gross / 300 Gross / 100 Gross / 15 Gross
Assembly: Gaming floors (keno, slots, etc.)	11 Gross
Assembly with fixed seats	per Sect. 1004.7
Assembly (without fixed seats): Concentrated (chairs only - not fixed) / Standing / Un-concentrated (tables and chairs)	7 net / 5 net / 15 net
Bowling Centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	
Business	100 gross
Courtrooms - other than fixed seating areas	40 gross
Educational: Classroom / Shops and other vocational room areas	20 net / 50 net
Exercise rooms	50 gross
H-5 Fabrication and manufacturing areas	200 gross
Industrial areas	100 gross
Institutional areas: Inpatient treatment areas / Outpatient areas / Sleeping areas	240 gross / 100 gross / 120 gross
Kitchen, Commercial	200 gross
Library: Reading rooms / Stack areas	50 gross / 100 gross
Locker rooms	50 gross
Mercantile: Areas on other floors / Basement and grade floor areas / Storage, stock, shipping areas	60 gross / 30 gross / 300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools: Rink and pool / decks	50 gross / 15 gross
Stages and Platforms	15 net
Accessory storage areas, mechanical equipment rooms	300 gross
Warehouses	500 gross

Table 706.3.7
Fire-Resistance Rating Requirements for Fire Barrier Assemblies Between Fire Areas

Occupancy	Fire-Resistance Rating (hours)
H-1, H-2	4
F-1, H-3, H, S-1	3
A, B, E, F-2, H-4, H-5, I, (M), R, S-2	2 * Exception 60 feet open perimeter
U	1

This Project 1st. floor

Table 1015.1 Exit Access Travel Distance

Occupancy	without sprinklers	with sprinklers
A, E, F-1, I-1, M, R, S-1	200 ft.	250 ft.
B	200 ft.	300 ft.
F-2, S-2, U	300 ft.	400 ft.
H:	200 ft.	300 ft.
H-1	Not Permitted	75 ft.
H-2	Not Permitted	100 ft.
H-3	Not Permitted	150 ft.
H-4	Not Permitted	200 ft.
H-5	Not Permitted	200 ft.
I-2, I-3, I-4	150 ft.	200 ft.

GENERAL NOTES and INFORMATION

All items of work in these "CONTRACT DRAWINGS" (Plans and Specifications) either drawn, noted of otherwise implied shall be considered a part of these documents. For any areas or items in question, the General Contractor shall contact the ARCHITECT in writing before submitting their bid. Otherwise, the ARCHITECT'S interpretation/ interpolation must be accepted. Written clarification shall follow procedures prior to bidding as covered in the Project Manual.

This Contractor shall coordinate with subcontractors, suppliers, and other trades as to who furnishes and who finishes items for a complete assembled job. Categorizing the Contract Documents by related facilities services (trades) does not relieve the General Contractor of their coordination.

This listing and compiling of "GENERAL NOTES" shall pertain to all documents, sheets, and / or plans entailing the " Contract Documents".

The work described within these Contract Documents, outlines the work to construct the new work as shown on drawings. This Contractor shall be responsible for the indicated new construction work.

This Contractor shall be responsible to field review dimensions of scheduled new construction, verifying that scheduled new work will properly fit into indicated surroundings.

Should discrepancies be found in drawing areas, the Architect shall be immediately notified for directions, and or coordination prior to performing the work. Commencement of work without notification to the Architect will constitute acceptance of existing conditions and scheduled work, without request of Extra's for the conflict or work.

All penetrations, through floors, walls and ceilings shall be kept to within the required tolerances of the items making the penetration, and shall be sealed with approved materials around the penetration. All penetration sealing material's occurring at the fire or smoke rated barriers shall be sealing materials meeting the requirements of the rated items and UL requirements of acceptable ratings for penetrations.

This Contractor and his sub-contractor shall provide protection to adjacent finishes, equipment, furnishings, etc., while their respective work is in progress to avoid damage to the adjacent item (s)

This Contractor is to be aware that new work required may be of size or shape that it will not be possible to deliver into the building (s) through doors, if the item (s) are fully assembled. Sectionalizing for erection within the building will be required as well as maintaining any and all warrantees, ratings, labels etc.

Mechanical, Electrical, Plumbing, etc., work will be required to be installed into walls, these Contract Documents and these General Notes.

For Doors, Frames, and Hardware Scheduled work, this Contractor shall field verify all doors, transom panels and glass sizes prior to ordering. Special attention on field verification of existing items is IMPERATIVE.

In all areas of scheduled work (i.e. doors, walls, floors ceilings, etc.) this Contractor shall field review and layout all components of the scheduled work prior to the actual construction work scheduled to field verify the ability to provide and install scheduled work. Should interference's occur which could affect the installation of scheduled work, this Contractor shall notify the ARCHITECT 10 days in advance of scheduled work for direction and or corrective actions.

This Contractor shall be responsible to field verify all existing conditions against scheduled work, and report all discrepancies conflicts and potential problems to the ARCHITECT at least 24 hrs. prior to commencement of scheduled work. commencement of scheduled work without notification to ARCHITECT indicates acceptance of conditions and construction. for future, counters, ceilings etc. to mention a few instances. This work is to be fully coordinated by the Contractor as addressed within and no additional cost or time will be forwarded to Owner , the Contractor accepts the conditions and construction requirements.

Wood studs and gypsum board walls dimensioning are to center of wall based on actual thickness

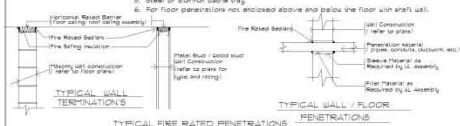
Coordinate final height of tenant walls and tenant separation walls for termination's

Fire stop all penetrations through all walls

TYPICAL FLOOR / CEILING / ROOF & WALL PENETRATION UL TYPES

FLOOR / Wall	METAL CONDUIT	CABLE TRAY	CABLES	NON-INSUL'N METAL PIPE	INSUL'N	FR POLYPROPYLENE PIPE	INSUL'N METAL DUCT
GWB / STUD WALL UP TO 2 hr. RATING	UL 1078	UL 4005 / UL 4004	UL 3004	UL 1008		UL 2079	UL 5033
CMU WALL UP TO 2 hr. RATING	CAJ 1079	UJ 4009 / CAJ 4020	CAJ 3043	CAJ 1079		CAJ 2063 / CAJ 2105	CAJ 5056
CONCRETE FLOOR 1 hr. RATED T-RATING	CAJ 1008	CAJ 4008	CAJ 3001	CAJ 1008		CAJ 2063 / CAJ 2105	CAJ 7009
CONCRETE FLOOR 2 hr. RATED T-RATING	CAJ 1008	CAJ 4008	CAJ 3001	CAJ 1008		CAJ 2063 / CAJ 2105	CAJ 7009
CONCRETE FLOOR 2 hr. RATED	CAJ 1079	CAJ 4020	CAJ 3043	CAJ 1079		CAJ 2063 / CAJ 2105	CAJ 7008

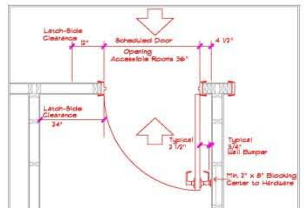
KEY NOTES:
1. Penetration within wall cavity
3. The fire stopping system for this combination of penetrant, wall, floor assembly and fire rating is an engineering judgment by the fire stopping manufacturer based upon UL system listed.
4. Aluminum cable tray
5. Steel or aluminum cable tray.
6. For floor penetrations not enclosed above and below the floor with shaft wall.



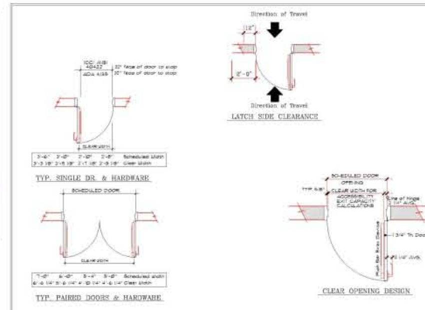
TYPICAL FIRE RATED PENETRATIONS

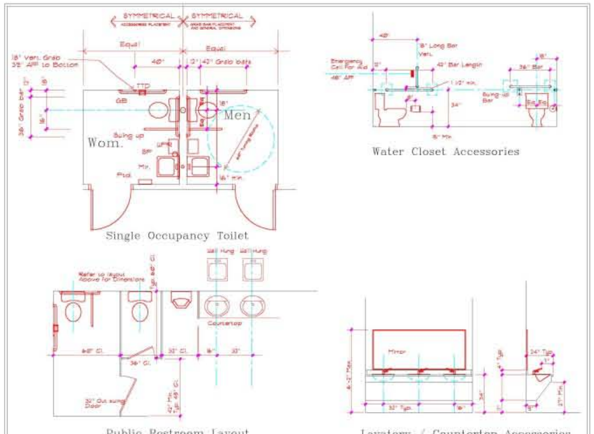
NO SCALE
NOTE: Adjust details as required to obtain UL ratings, for indicated construction. Follow manufacturer's recommendations for approved assemblies.

GENERAL NOTE:
The above indicated assemblies are generic only, and are provided for typical conditions. This Contractor and his subcontractors shall be responsible to review the complete set of "Contract Documents" for each penetration condition, identifying each type of construction to be penetrated and each type of material (piping, ductwork, plumbing, electrical conductors, etc.) that is to pass through rated rated assemblies. Provide the proper approved UL rated Firestops to meet the construction and rating. This Contractor shall submit for review a copy of the selected manufacturer's drawing showing all the proper installation requirements and materials to meet the rating needs, and construction.

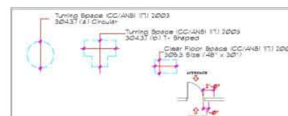


Typ. Accessible Door Clearance
No Scale





Typ. Restroom Accessories & Clearances
No Scale



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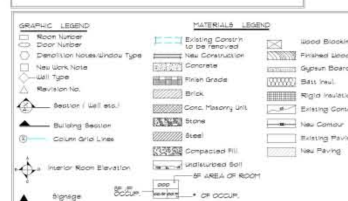
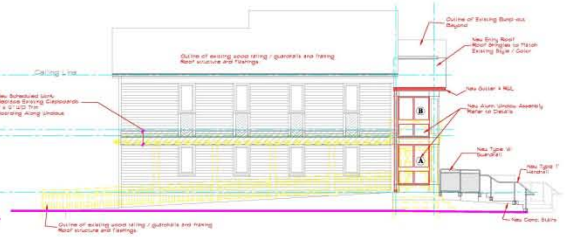


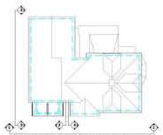
South Elevation

Scale: 1/8" = 1'-0"

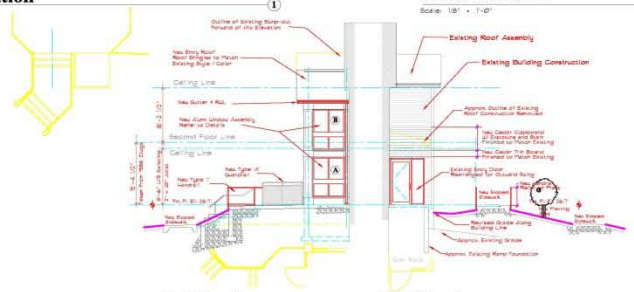


West Elevation

Scale: 1/8" = 1'-0"



Key Plan for Elevations

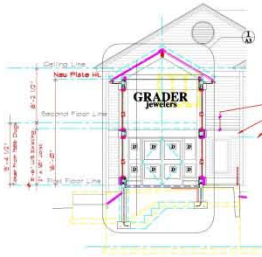


East Elevation

Scale: 1/8" = 1'-0"

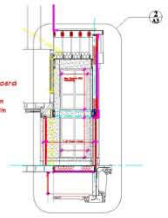
West Elevation

Scale: 1/8" = 1'-0"



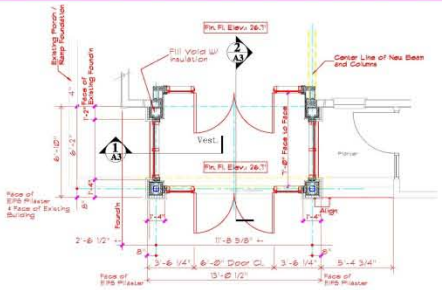
Building Section '1' - '1'

Scale: 1/8" = 1'-0"



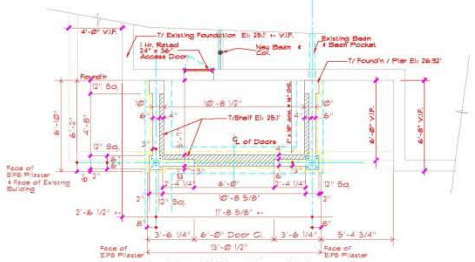
Building Section '2' - '2'

Scale: 1/8" = 1'-0"



Plan Detail @ New Entrance

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

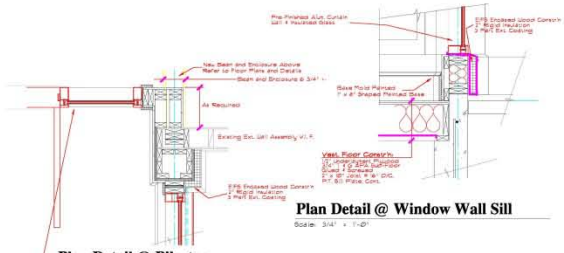


Plan Detail New Foundation at Entry

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

Impact Glazing:
IBC- 2003
IBC- 2001 Section 1609.1.4 Protection of Openings.
In wind-borne debris region. -------
Exception:
1. Wood panels with a minimum thickness of 7/16" shall be permitted for opening in one and two story buildings. Panels shall be pre-cut to cover the glazed openings with attachment hardware provided.

Table 1609.1.4 Wind-Borne Debris Protection fastening schedules for wood structural panels.

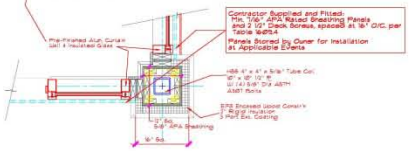


Plan Detail @ Pilaster

Scale: 3/4" = 1'-0"

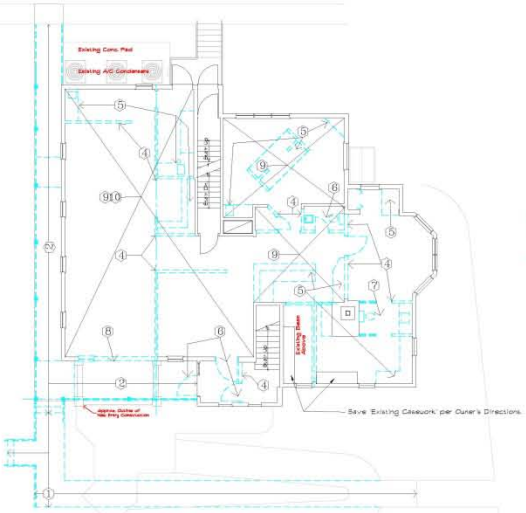
Plan Detail @ Window Wall Sill

Scale: 3/4" = 1'-0"

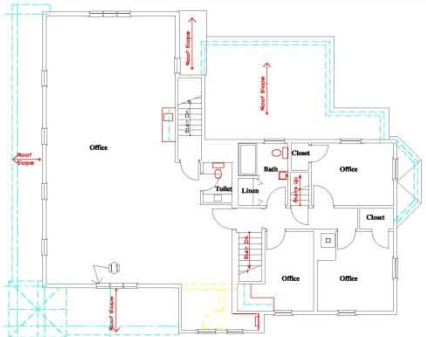


Plan Detail @ Column

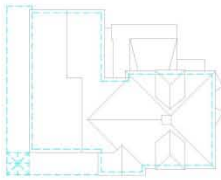
Scale: 3/4" = 1'-0"



Existing / Demolition First Floor Plan
Scale: 1/8" = 1'-0"



Existing / Demolition Second Floor Plan
Scale: 1/8" = 1'-0"



Approx. Existing Roof Plan
Scale: 1/8" = 1'-0"

Demolition Work Notes:

1. Cut up and remove existing conc. sidewalk and stairs and sub grade to the to the limit indicated. Coordinate with final Architectural.
2. Carefully cut and remove existing covered walkway roof construction, wood columns wood and metal railing assembly, concrete sidewalk, from entry door to bottom of existing ramp. Include concrete saw cutting of existing slab of foundation to a minimum of 1' below scheduled finish grade, or as indicated in documents.
3. Saw cut and remove existing concrete floor slab (4" +/-) as indicated to allow installation of new scheduled concrete footings and new steel column. Revise and coordinate with Structural Drawings and associated details.
4. Dismantle and remove existing wood stud and Gyp. Bd. wall construction. Clean and remove all components of existing construction and review new Scheduled Architectural and Structural drawings.
5. Dismantle and remove all existing casework, cabinets (base and uppers) to the limit indicated. Patch and repair wall surfaces and substrates. Review and coordinate New Scheduled Architectural and Structural work.
6. Dismantle and remove existing door, frame and hardware. Contact the Owner, to verify if Owner wants to store the material for later. If unwanted by Owner, properly dispose of all materials in accordance to all rules regulations and codes pertinent in the State of Connecticut.
7. Dismantle and remove existing plumbing fixtures, piping and drainage piping. Cut and cap all un-used or temporarily not used piping of what ever description. Dispose of all materials removed in full accordance with all rules regulations and codes required by the State of Connecticut.
8. Saw Cut Existing 10" Conc. Foundation for New Access Door. Coordinate with Architectural / New Foundation Plans.
9. Saw Cut and Remove Existing Conc. Sidewalk / Ramp Foundation to the Limits Indicated to Allow Scheduled New Entry Foundation Installation. Coordinate with Architectural's and Foundation Plans
9. Cut and removed all exiting Floor finish (carpeting, tile, VCT ecc.) Down to wood sub-strate. Patch existing wood substrate as necessary to allow scheduled new floor finishes.
10. Carefully remove existing acoustical ceiling and grid, including all handing wires and supported devices. Prepare exposed wood joist for new RC-1 Channel and 5/8" Gyp. Brd. Ceiling assembly.
11. Remove existing window & trim in its entirety. Prepare opening for new studs wall in fill.
12. Saw Cut and Remove Existing Conc. Sidewalk / Ramp Foundation to the Limits Indicated to Allow Scheduled New Entry Foundation Installation. Coordinate with Architectural's and Foundation Plans
13. Disconnect and relocated exiting fuel tank to allow new scheduled New Column, Footing and Beam to be installed.

Demolition Work Notes General:

All items of work in these "CONTRACT DRAWINGS" (Plans and Specifications) either drawn noted of otherwise implied shall be considered a part of these documents. For any areas or items in question, the General Contractor shall contact the ARCHITECT in writing before submitting their bid. Otherwise the ARCHITECT's interpretation/ interpolation has the assumed. Written clarification shall follow procedures prior to bidding as covered in the Project Manual.

The Contractor shall coordinate with subcontractors, suppliers, and other trades so as and furnishes and and finishes items for a complete assembled job. Categorizing the Contract Documents by trades/ facilities services (trades) does not relieve the General Contractor of their responsibilities.

The listing and compiling of "GENERAL NOTES" shall pertain to all documents, sheets, and / or plans entailing the

" Contract Documents".

The work described within these Contract Documents, outlines the intended demolition work to make ready for scheduled the new work as shown on drawings. The Contractor shall be responsible for the indicated new construction work.

The Contractor shall be responsible for field review dimensions of scheduled new construction, verifying that scheduled new work will properly fit into indicated surroundings.

Should discrepancies be found in drawing areas, the Architect shall be immediately notified for direction, and or coordination prior to performing the work. Commencement of work without notification to the Architect will constitute acceptance of existing conditions and scheduled work, without request of Extras for the conflict of work.

All penetrations, through floors, walls and ceilings shall be kept to which the required dimensions of the items making the penetration, and shall be sealed with approved materials around the penetration. All penetration sealing materials including at the line of smoke rated barriers shall be sealing materials meeting the requirements of the rated items and U.L. requirements of acceptable listings for penetrations.

The Contractor and his sub-contractor shall provide protection to adjacent finishes, equipment, furnishings, etc. while their respective work is in progress to avoid damage to the adjacent item(s).

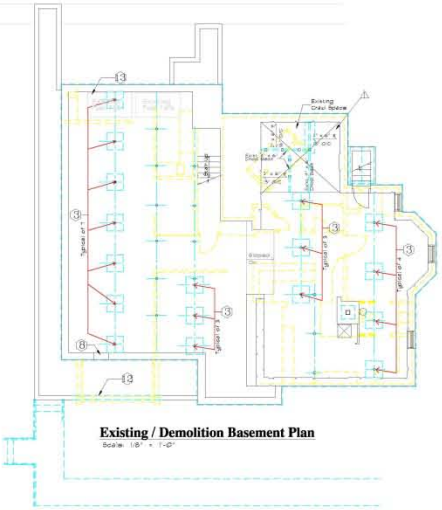
The Contractor is to be aware that new work required has line of size or shape that is will not be possible to deliver thru the building (s) through doors, if the item (s) are fully assembled. Sectionalizing for erection within the building will be required as well as removing any and all warranties, listings, labels etc.

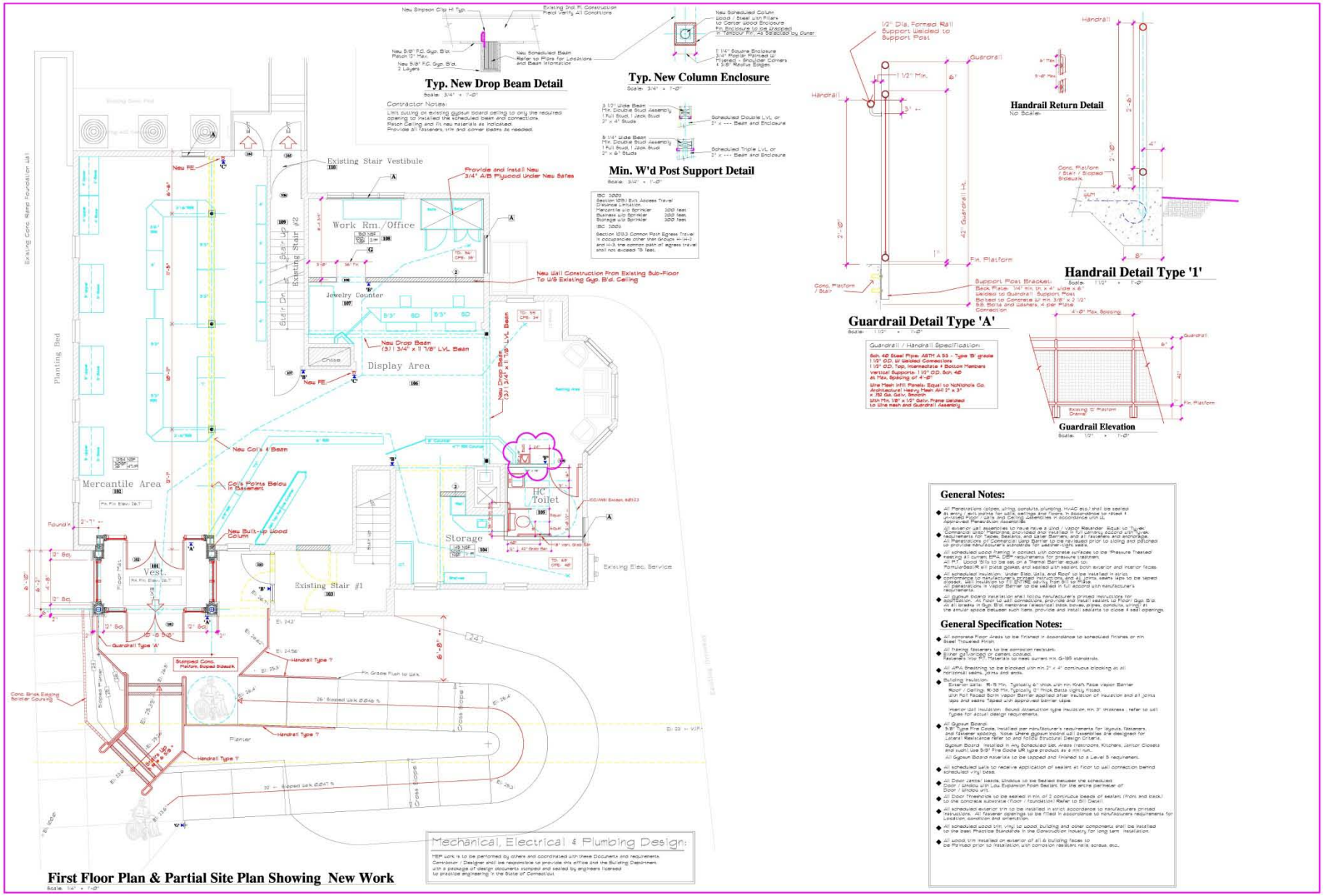
Mechanical, Electrical, Plumbing, etc. work will be required to be installed thru walls, these Contract Documents and these General Notes.

For Doors, Frames, and Hardware Scheduled work, the Contractor shall field verify all doors, transom panels and glass sizes prior to ordering. Special Attention on field verification of existing bays is IMPERATIVE.

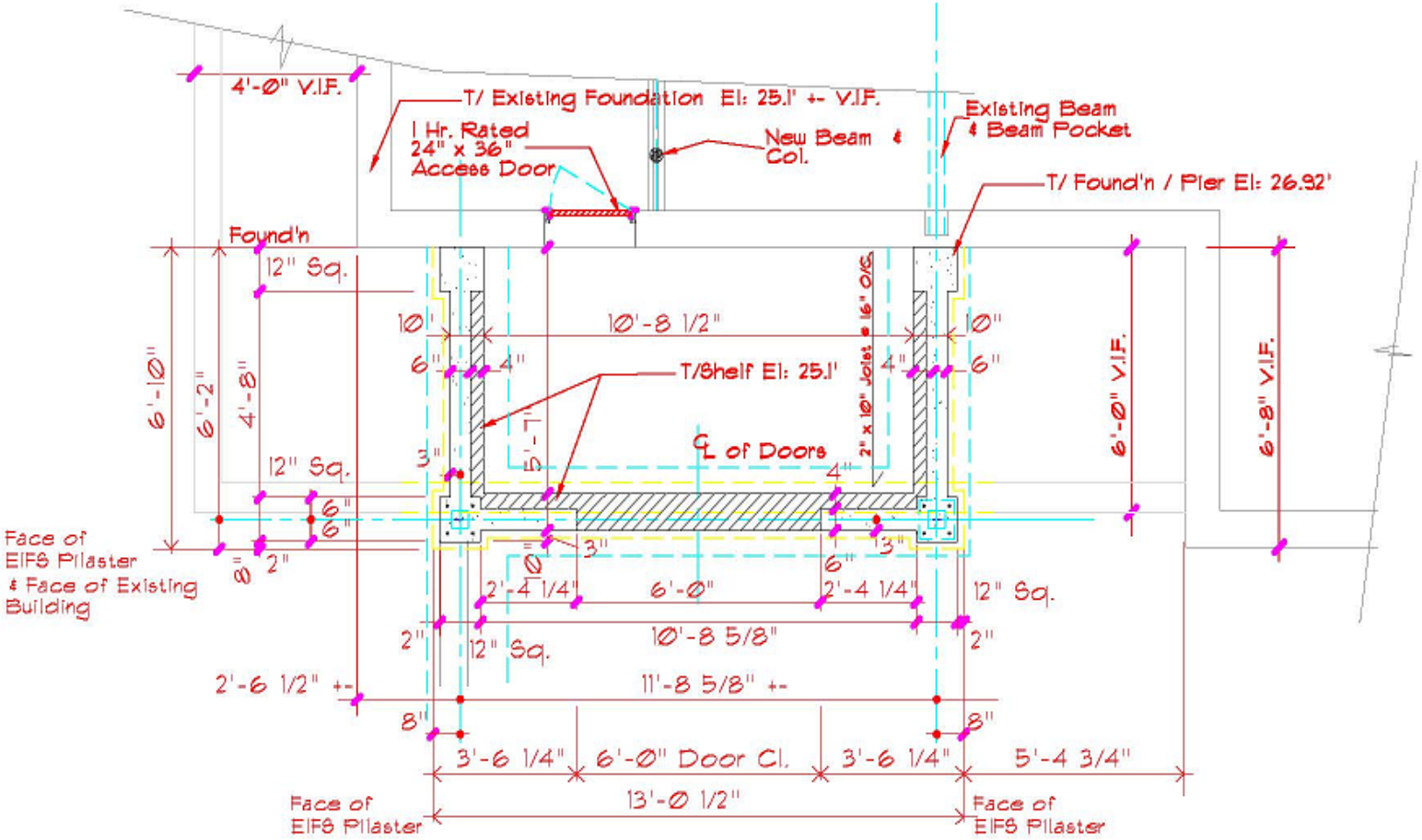
In all areas of scheduled work (i.e. doors, walls, floors ceilings, etc.) the Contractor shall field review and layout all components of the scheduled work prior to the actual construction work scheduled to field verify the ability to provide and install scheduled work. Should interferences occur which could affect the installation of scheduled work, the Contractor shall notify the ARCHITECT 10 days in advance of scheduled work for direction and or corrective actions.

The Contractor shall be responsible to field verify all existing conditions against scheduled work, and report all discrepancies conflicts and potential problems to the ARCHITECT at least 24 hrs prior to commencement of scheduled work. Contractor shall be responsible for the cost of the work, if the work is not installed properly and requires reconstruction. For Temporarily installed work to be removed at a few intervals, This work is to be incorporated and coordinated the Contractor as addressed within and for additional cost of time will be forwarded to Owner. the Contractor accepts the constraints and construction requirements.


Existing Crawl Space
Slab Below
Slab Below
Slab Below

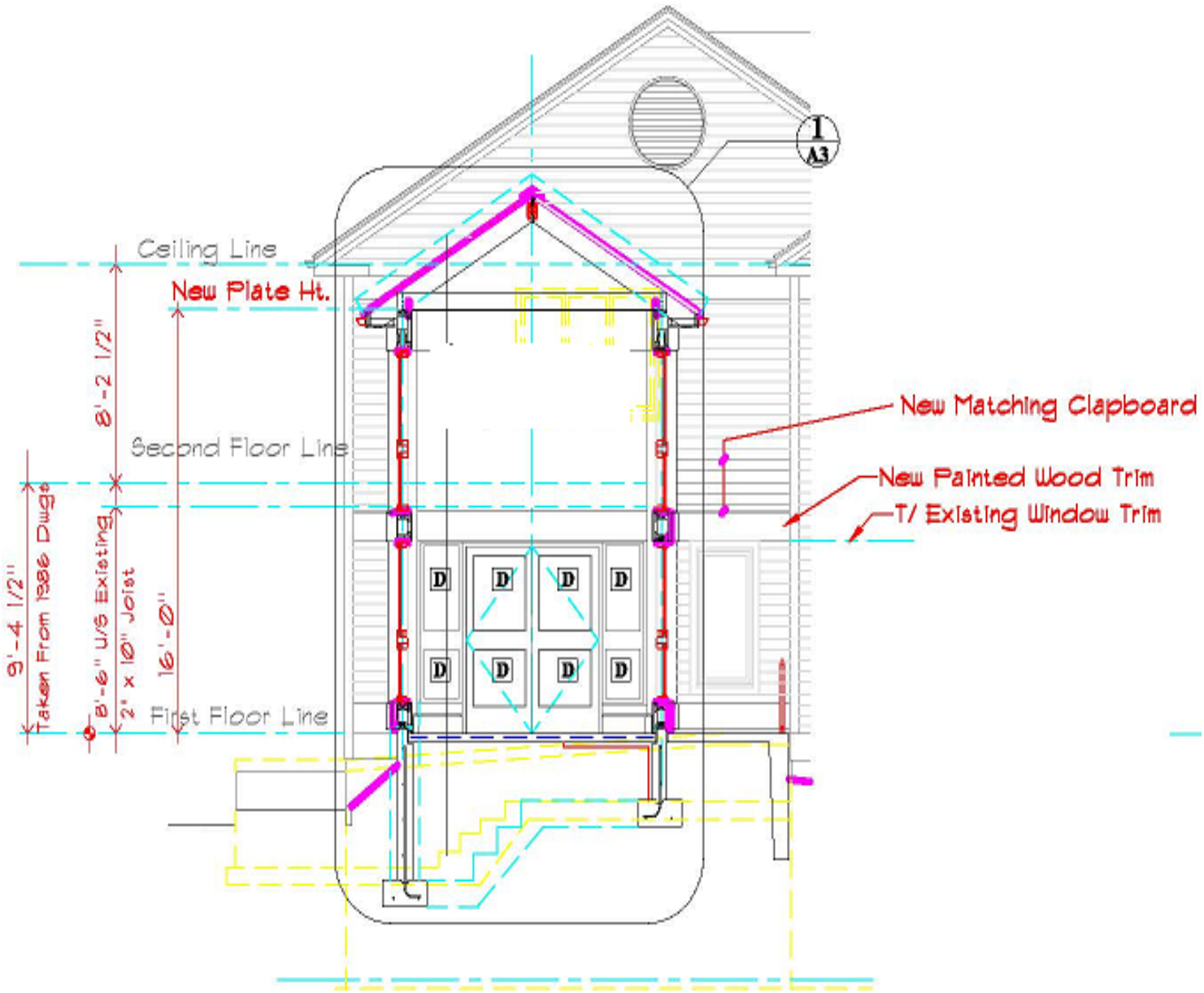


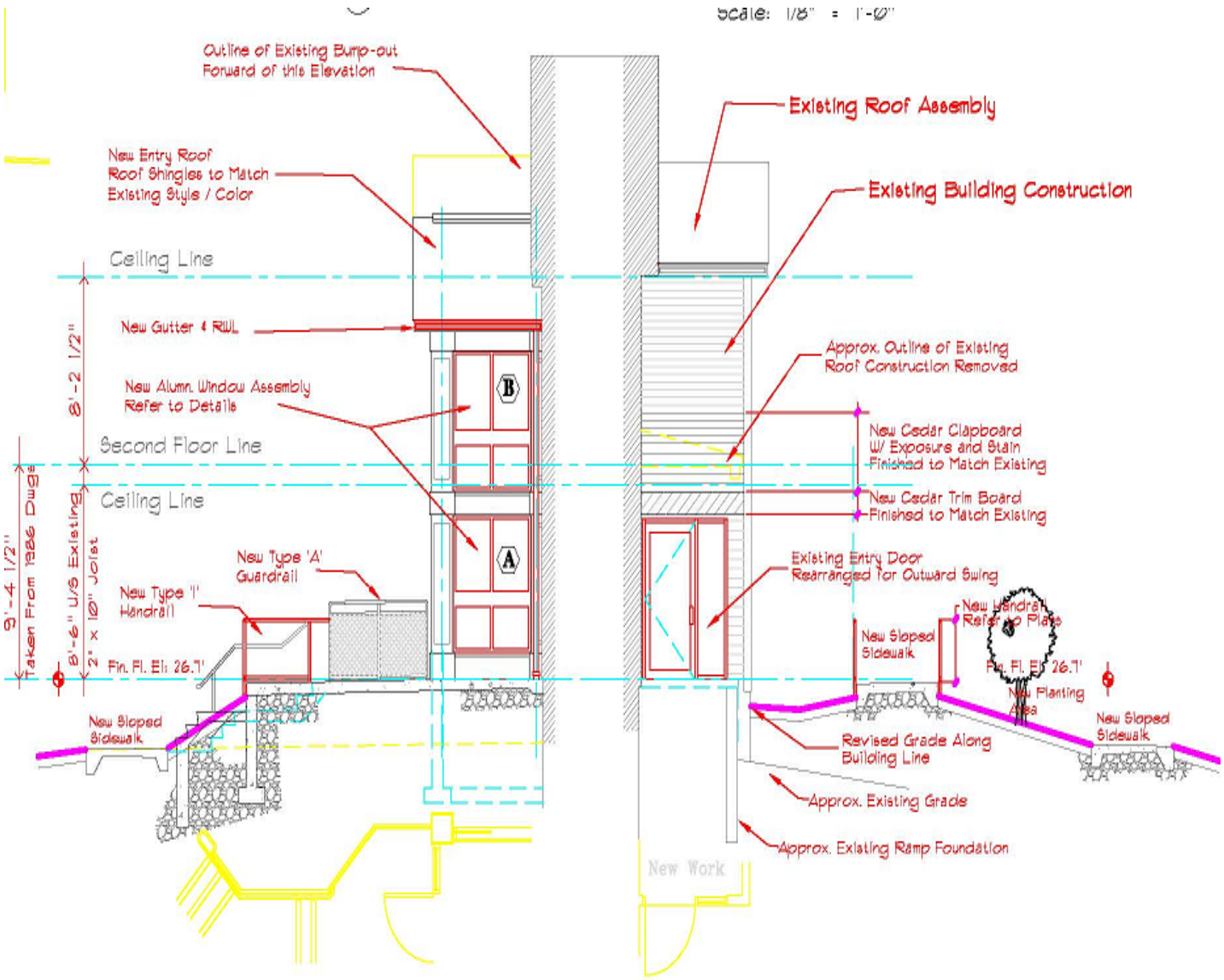
First Floor Plan & Partial Site Plan Showing New Work



Plan Detail New Foundation at Entry

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

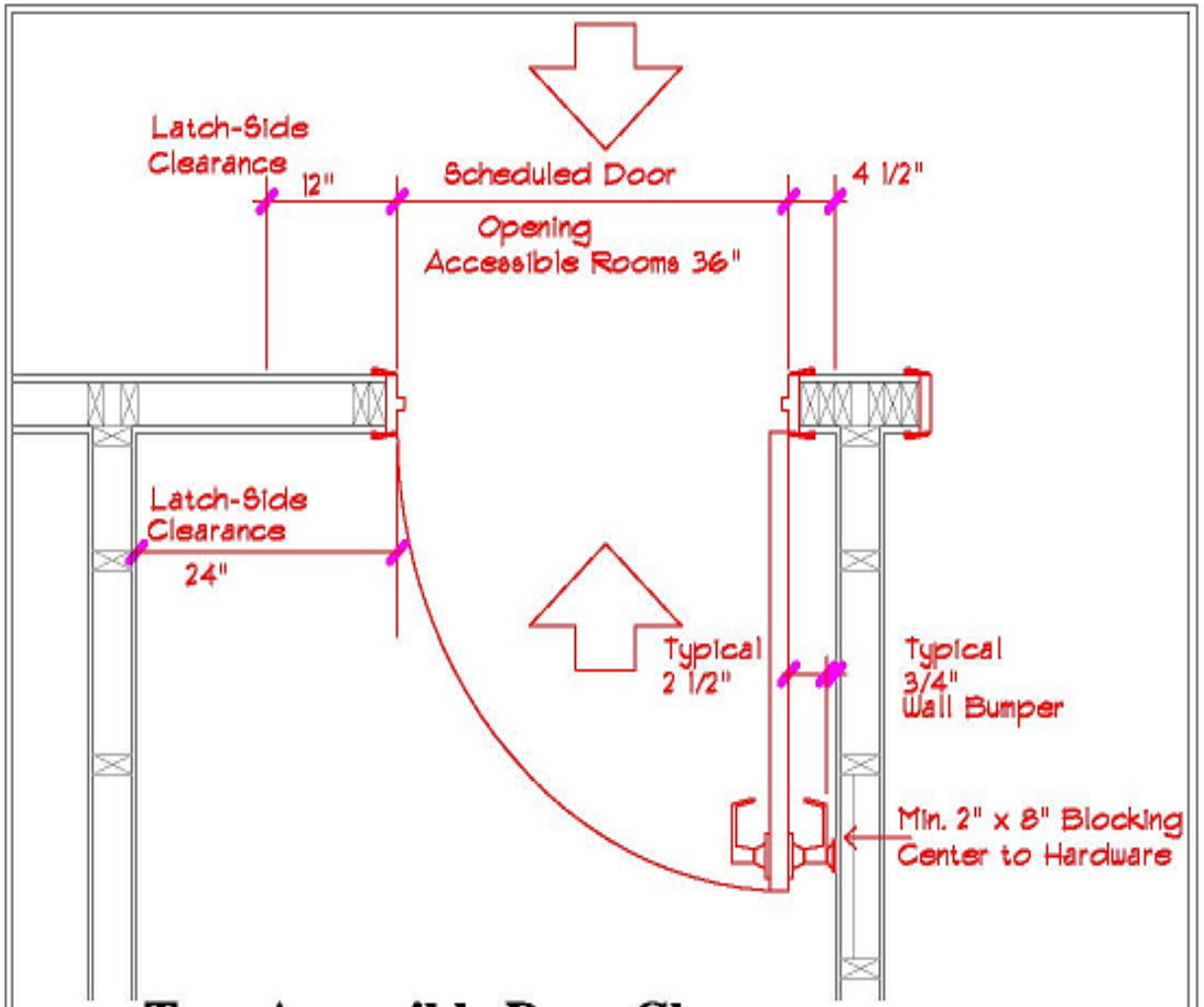

1
A3
Ceiling Line
New Plate Ht.
8'-2 1/2"
Second Floor Line
9'-4 1/2"
Taken From 1986 Dwgs
8'-6" U/S Existing
2" x 10" Joist
16'-0"
First Floor Line
D
New Matching Clapboard
New Painted Wood Trim
T/ Existing Window Trim



West Elevation

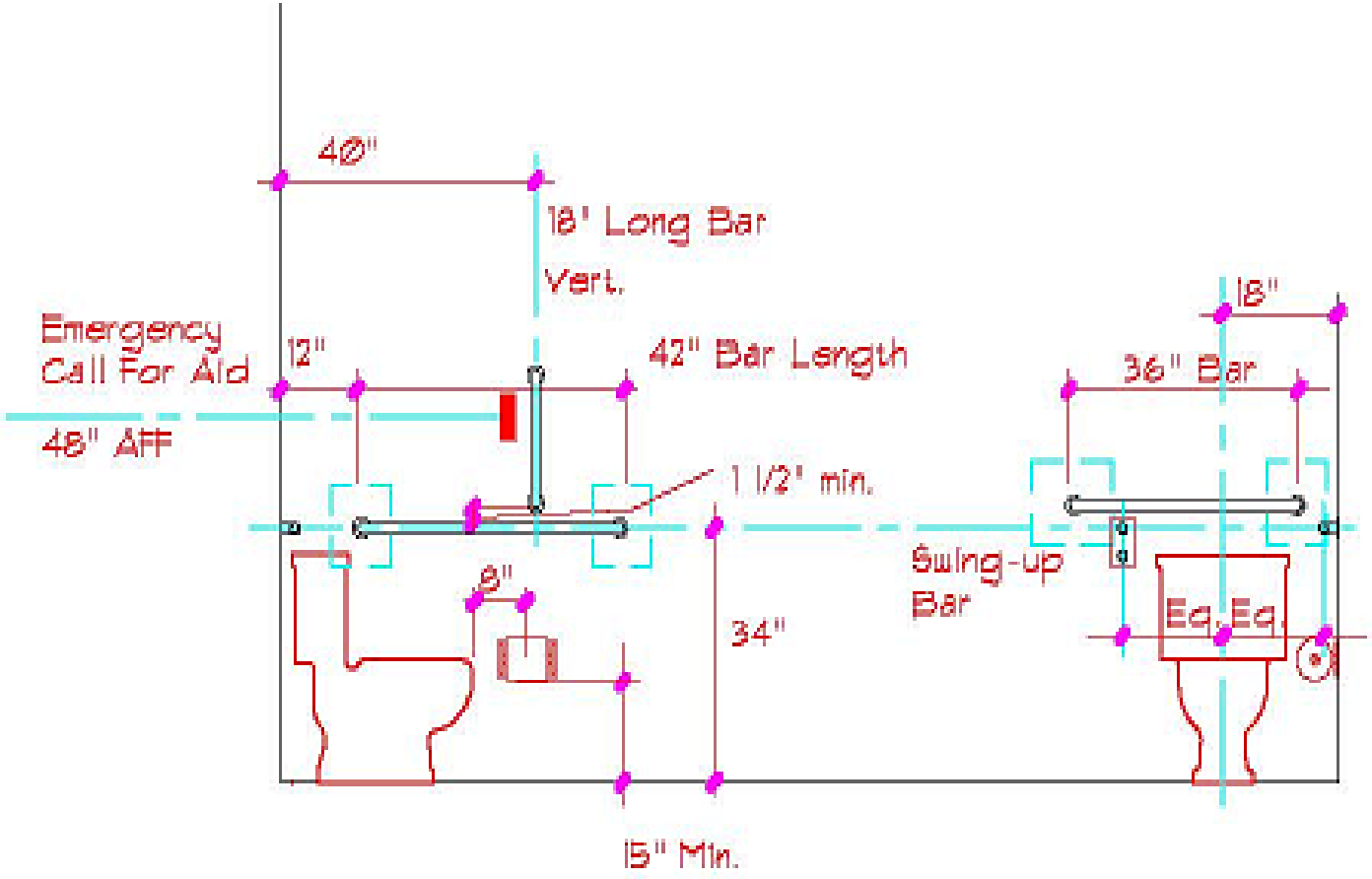
4

Scale: 1/8" = 1'-0"

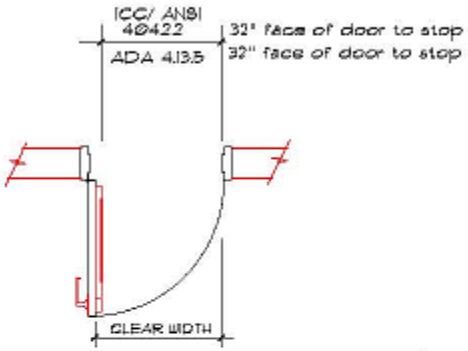


Typ. Accessible Door Clearance

No Scale

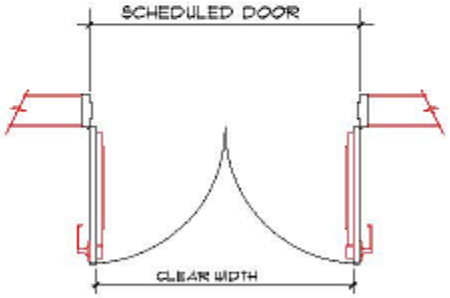


Water Closet Accessories



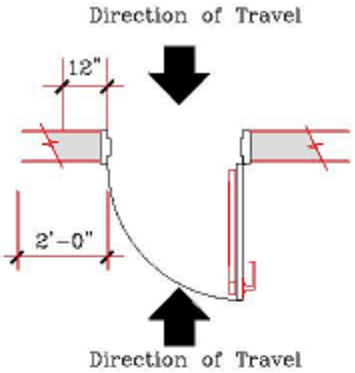
3'-6"	3'-0"	2'-10"	2'-8"	Scheduled Width
3'-3 1/8"	2'-9 1/8"	2'-7 1/8"	2'-5 1/8"	Clear Width

TYP. SINGLE DR. & HARDWARE

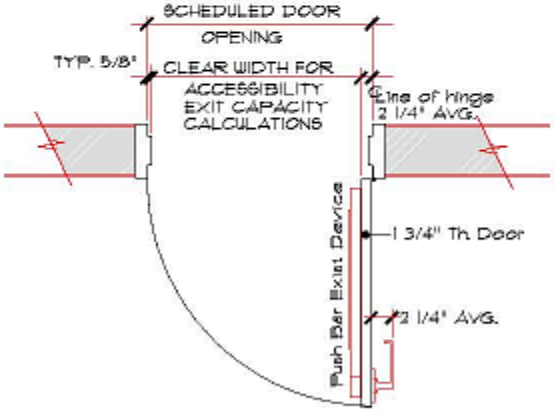


7'-0"	6'-0"	5'-4"	5'-0"	Scheduled Width
6'-6 1/4"	5'-6 1/4"	4'-10 1/4"	4'-6 1/4"	Clear Width

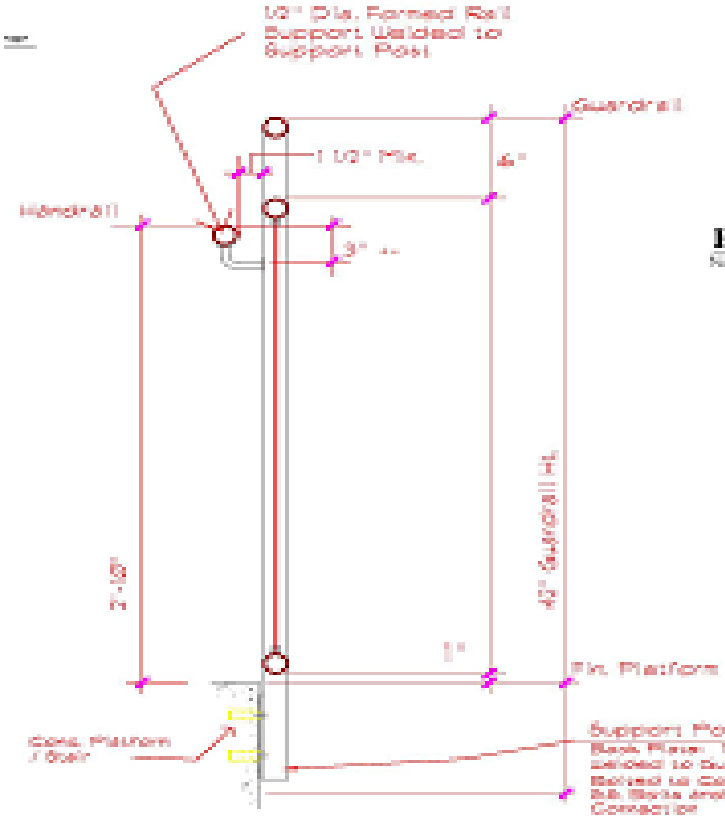
TYP. PAIRED DOORS & HARDWARE



LATCH SIDE CLEARANCE



CLEAR OPENING DESIGN



Guardrail Detail Type 'A'

Scale: 1 1/2" = 1'-0"

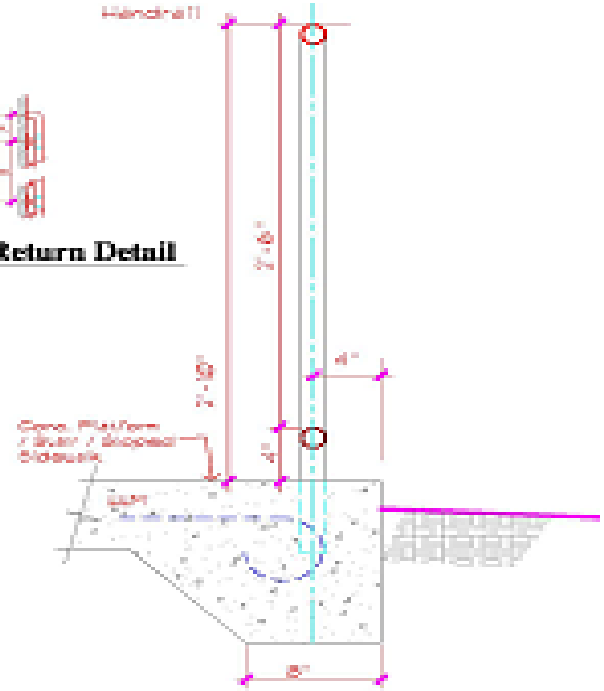
Guardrail / Handrail Specification:

Sch. 40 Steel Pipe, ASTM A 53 - Type 'B' grade
1 1/2" O.D. W/ Welded Connections
1 1/2" O.D. Top, Intermediate + Bottom Members
Vertical Supports: 1 1/2" O.D. Sch. 40
at Max. Spacing of 4'-0"

Wire Mesh Infill Panels: Equal to McNichols Co. Architectural Heavy Mesh Jet 2" x 3" x .750 Gal. Galv. Sealtek
With Min. 1/8" x 1/2" Galv. Frame Welded to Wire mesh and Guardrail Assembly

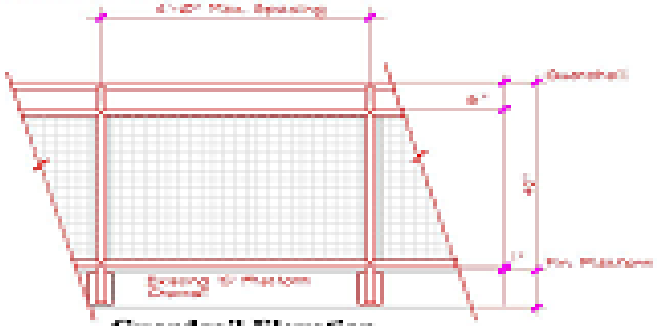
Handrail Return Detail

No Scale



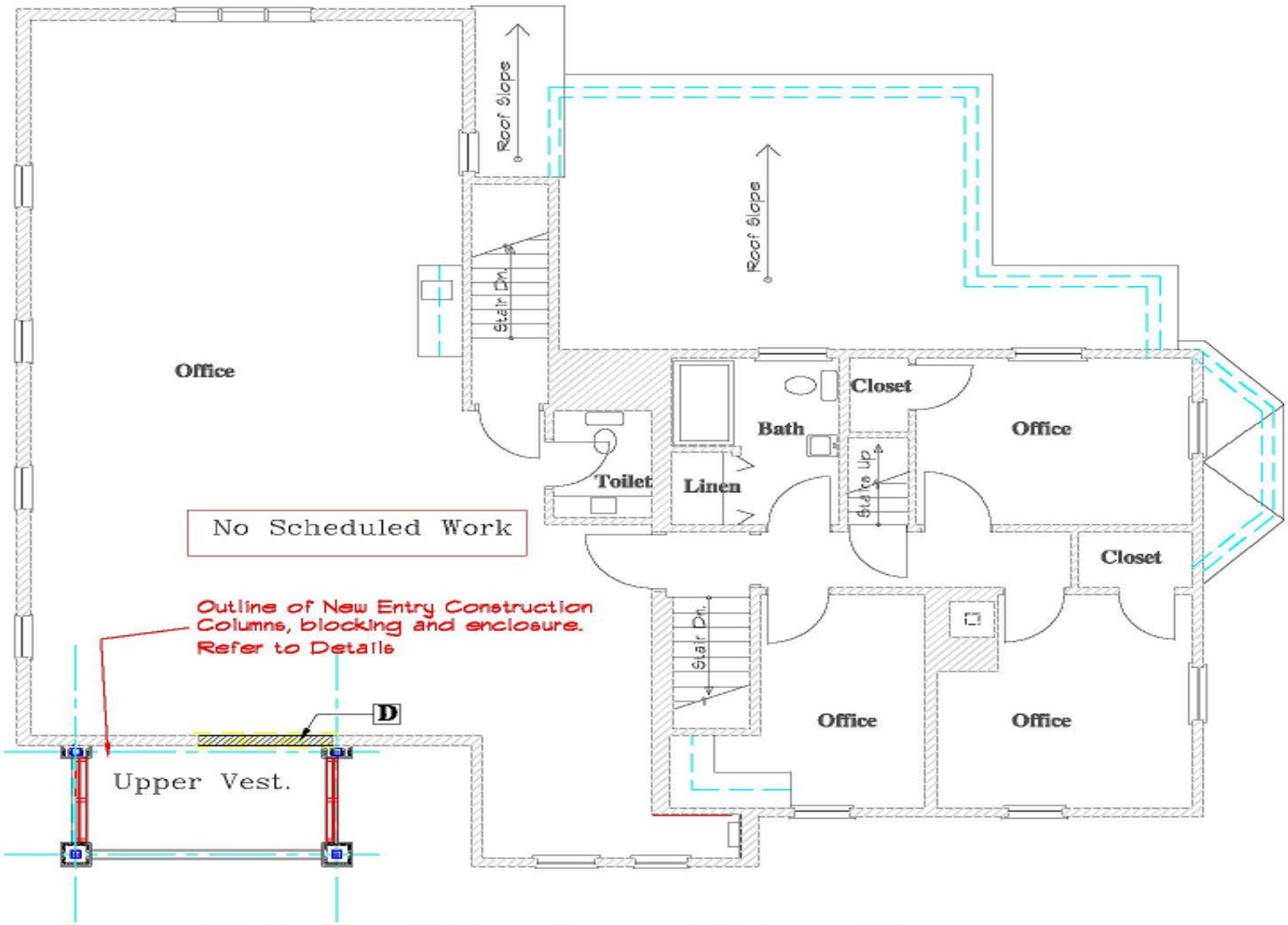
Handrail Detail Type '1'

Scale: 1 1/2" = 1'-0"



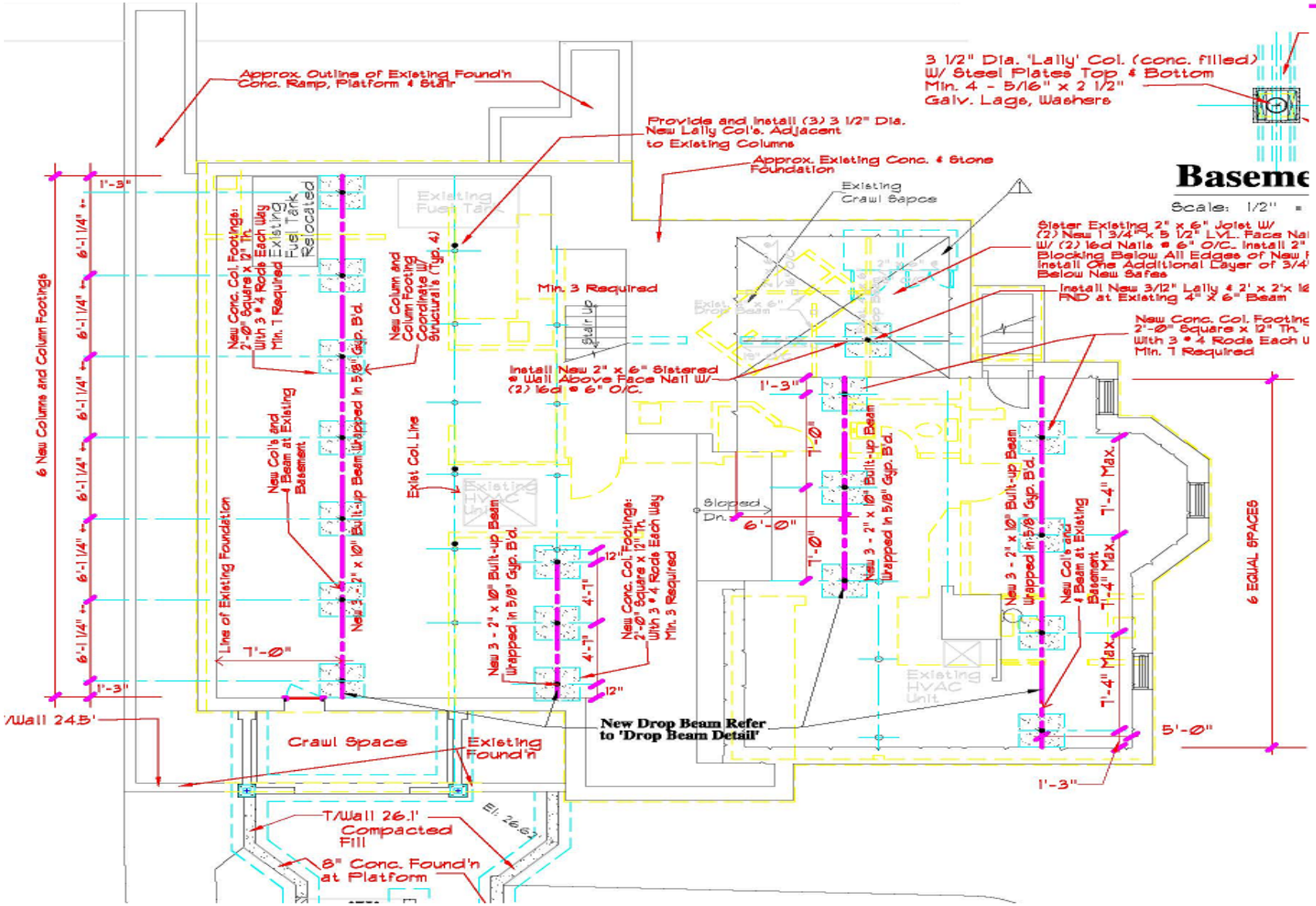
Guardrail Elevation

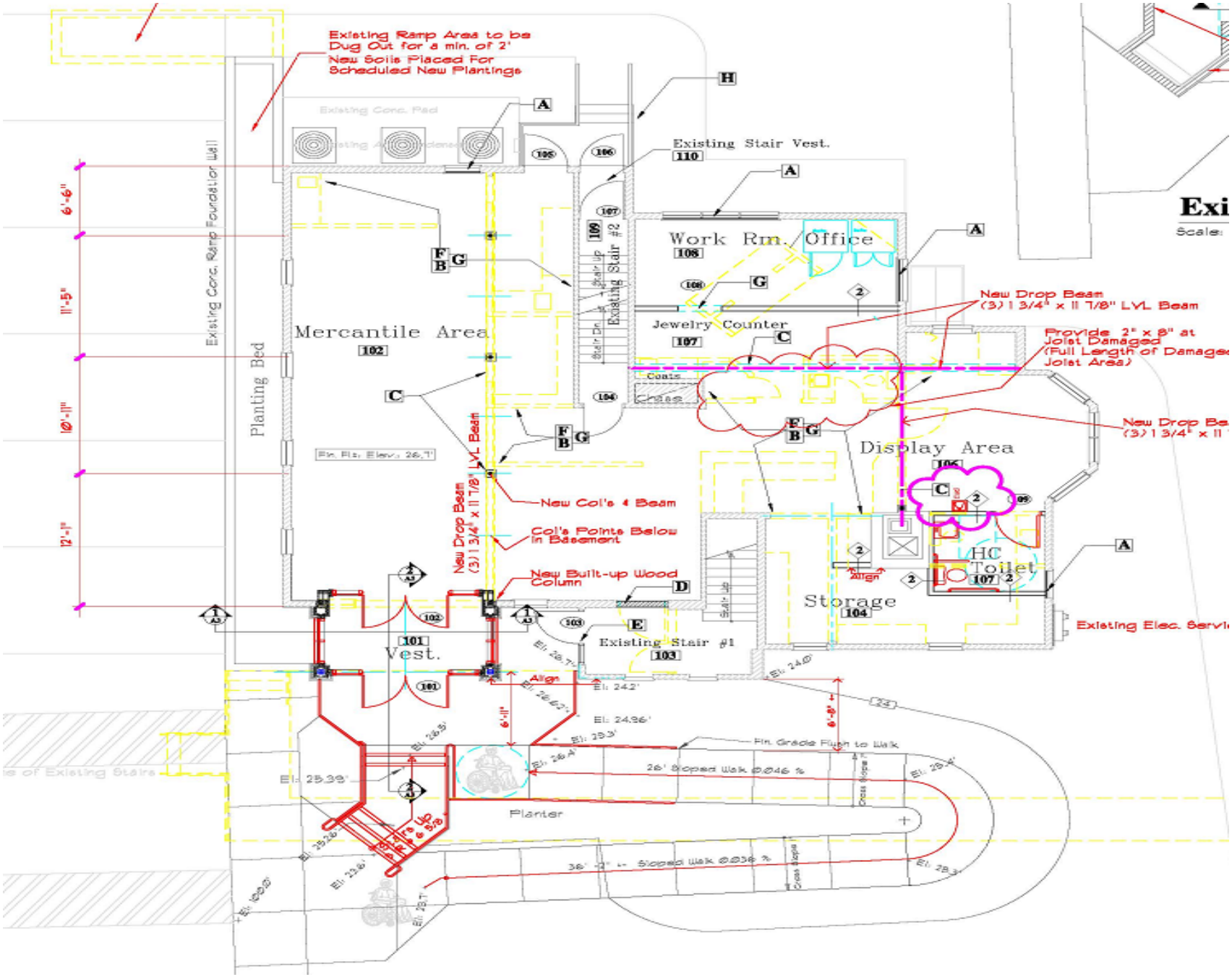
Scale: 1/2" = 1'-0"



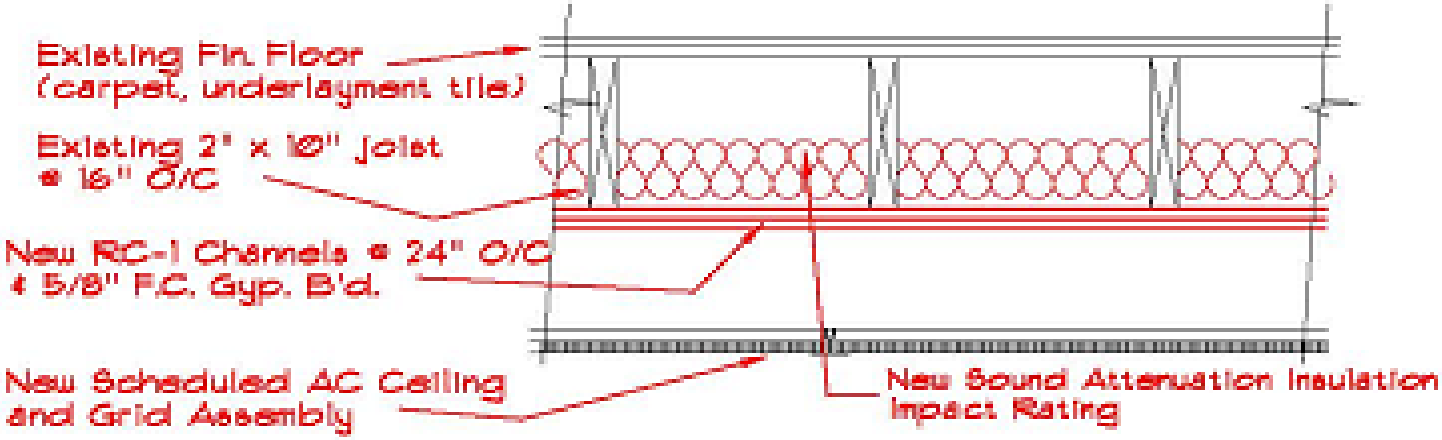
Existing / New Second Floor Plan

Scale: 1/8" = 1'-0"


Approx. Outline of Existing Found'n Conc. Ramp, Platform & Stair
Provide and Install (3) 3 1/2" Dia. New Lally Col's. Adjacent to Existing Columns
Approx. Existing Conc. & Stone Foundation
3 1/2" Dia. 'Lally' Col. (conc. filled) W/ Steel Plates Top & Bottom Min. 4 - 5/16" x 2 1/2" Galv. Lage, Washers
Baseme
Scale: 1/2"
Existing Crawl Space
Existing Fuel Tank
Existing Fuel Tank Relocated
New Conc. Col. Footings: 2'-0" Square x 12" Th. With 3 # 4 Rods Each Way Min. 7 Required
New Column and Column Footing Coordinate W/ Structurals (Typ. 4)
Min. 3 Required
Stair Up
Install New 2" x 6" Sistered @ Wall Above Face Nail W/ (2) 16d @ 6" O/C.
Sister Existing 2" x 6" Joist W/ (2) New 1 3/4" x 5 1/2" LVL. Face Nail W/ (2) 16d Nails @ 6" O/C. Install 2" Blocking Below All Edges of New Install One Additional Layer of 3/4" Below New Safes
Install New 3/12" Lally & 2' x 2'x 12 PAD at Existing 4" X 6" Beam
New Conc. Col. Footing 2'-0" Square x 12" Th. With 3 # 4 Rods Each U Min. 7 Required
6 New Columns and Column Footings
New Col's and 4 Beam at Existing Basement
Exist Col. Line
Line of Existing Foundation
New 3 - 2" x 10" Built-up Beam Wrapped in 5/8" Gyp. Bd.
New 3 - 2" x 10" Built-up Beam Wrapped in 5/8" Gyp. Bd.
New Conc. Col. Footings: 2'-0" Square x 12" Th. With 3 # 4 Rods Each Way Min. 3 Required
Sloped Dn.
6'-0"
7'-0"
7'-4" Max.
6 EQUAL SPACES
5'-0"
1'-3"
T/Wall 24.5'
Crawl Space
Existing Found'n
New Drop Beam Refer to 'Drop Beam Detail'
Existing HVAC Unit
T/Wall 26.1'
Compacted Fill
8" Conc. Found'n at Platform
El. 26.67



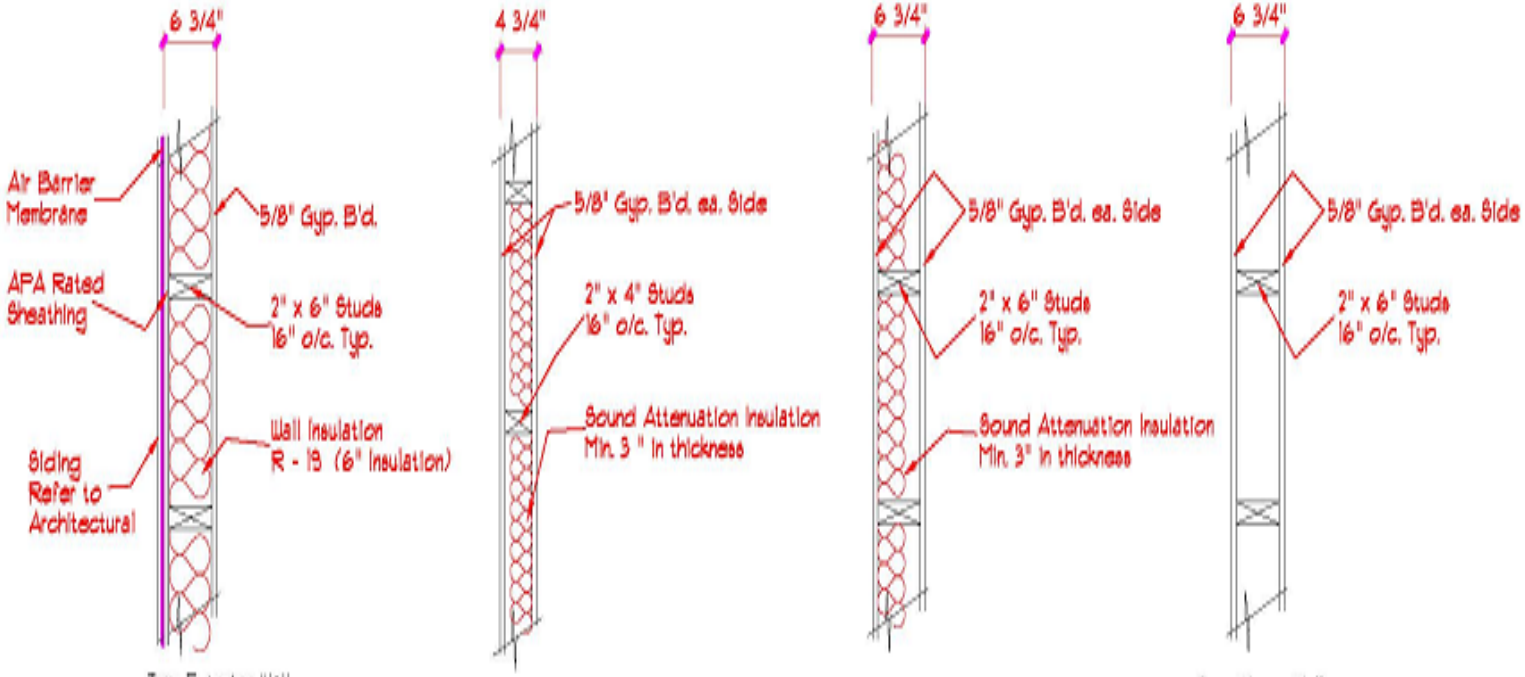
Existing Ramp Area to be Dug Out for a min. of 2'
New Soils Placed For Scheduled New Plantings
Existing Conc. Pad
Existing Stair Vest.
110
Work Rm. Office
108
Jewelry Counter
107
Mercantile Area
102
Planting Bed
Existing Conc. Ramp Foundation Wall
Existing Stair #2
Stair Up
Stair Dn.
Coats
Chase
New Drop Beam (3) 1 3/4" x 11 7/8" LVL Beam
Provide 2" x 8" at Joist Damaged (Full Length of Damaged Joist Area)
Display Area
106
HC Toilet
107
Storage
104
Existing Elec. Servi
Fin. Flr. Elev. 26.7'
New Col's 4 Beam
Col's Points Below in Basement
New Drop Beam (3) 1 3/4" x 11 7/8" LVL Beam
New Built-up Wood Column
Vest.
101
Existing Stair #1
103
Align
El: 24.2'
El: 24.96'
El: 25.39'
Fin. Grade Flush to Walk
26' Sloped Walk @ 0.046 %
Planter
36' -2" ← Sloped Walk @ 0.036 %
Stairs Up
6'-6"
11'-5"
10'-11"
12'-1"
6'-11"
6'-8"
Exi
Scale:



1 Hr. Fl. / Ceiling Assembly

No Scale:

UL L 502 (Modified as Partial Existing)



1 Typ. Exterior Wall
2" x 6" Stud Construction

2 2" x 4" Stud Construction
Un-Rated

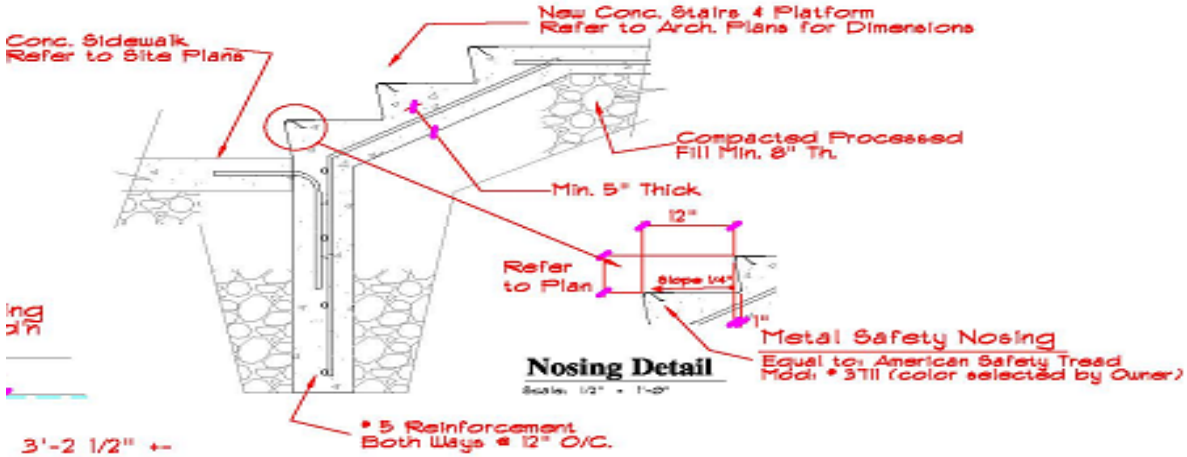
2a 2" x 4" Stud Construction
1 Hr. rated
U.L. U 305 or U 314

3 2" x 6" Stud Construction

Typ. 1 Hr. Rated Wall
3a 2" x 6" Stud Construction
1 Hr. rated
U.L. U 305 or U 314

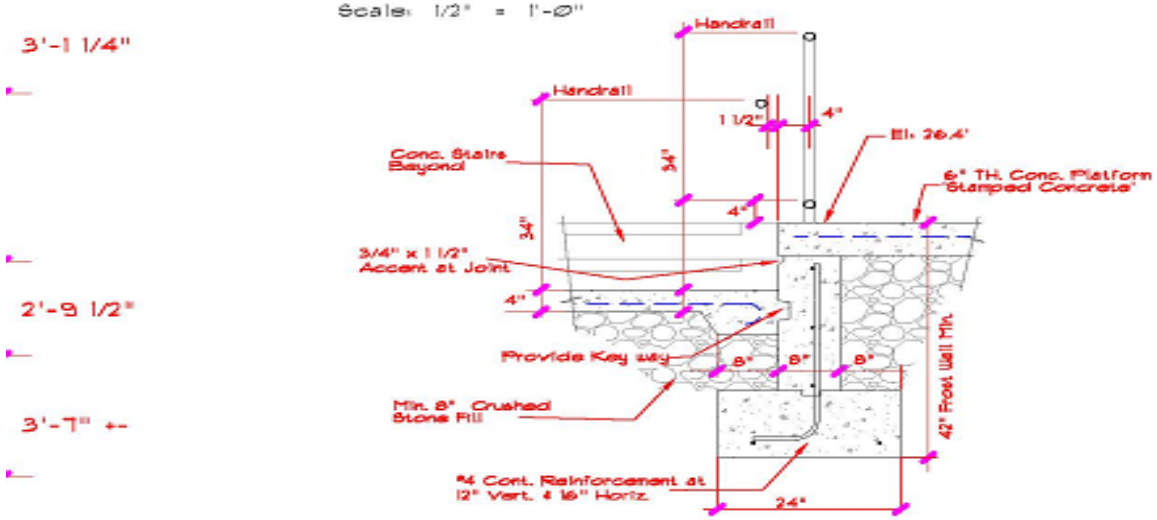
4 Typ. Chase Wall
2" x 6" Stud Construction

Wall Types



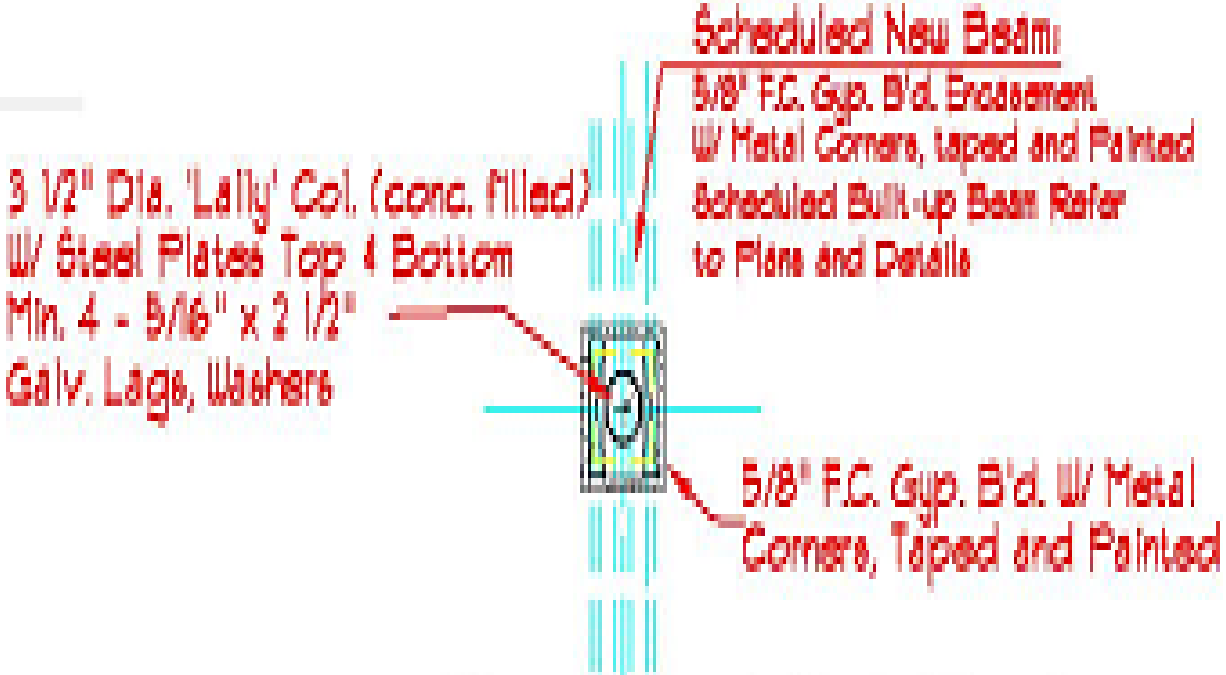
Exterior Conc. Stair Detail

Scale: 1/2" = 1'-0"

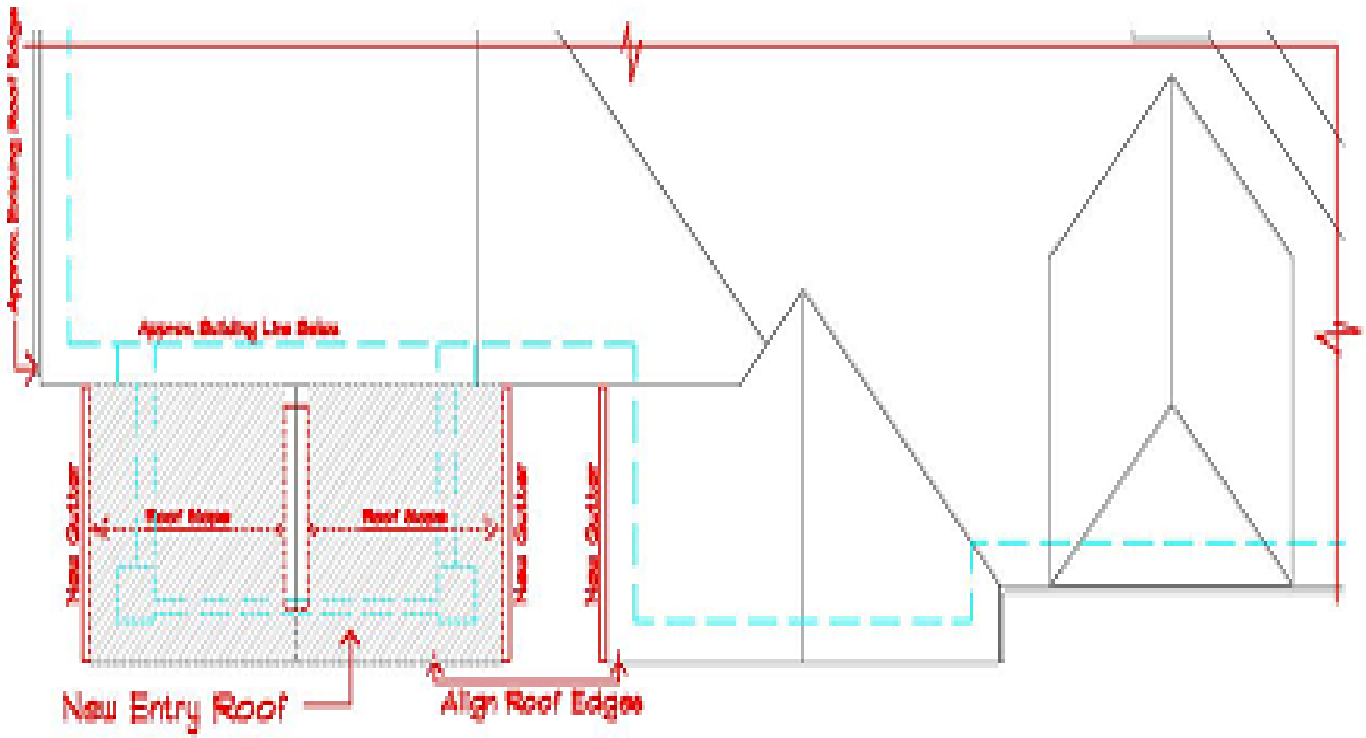


Section 'X'

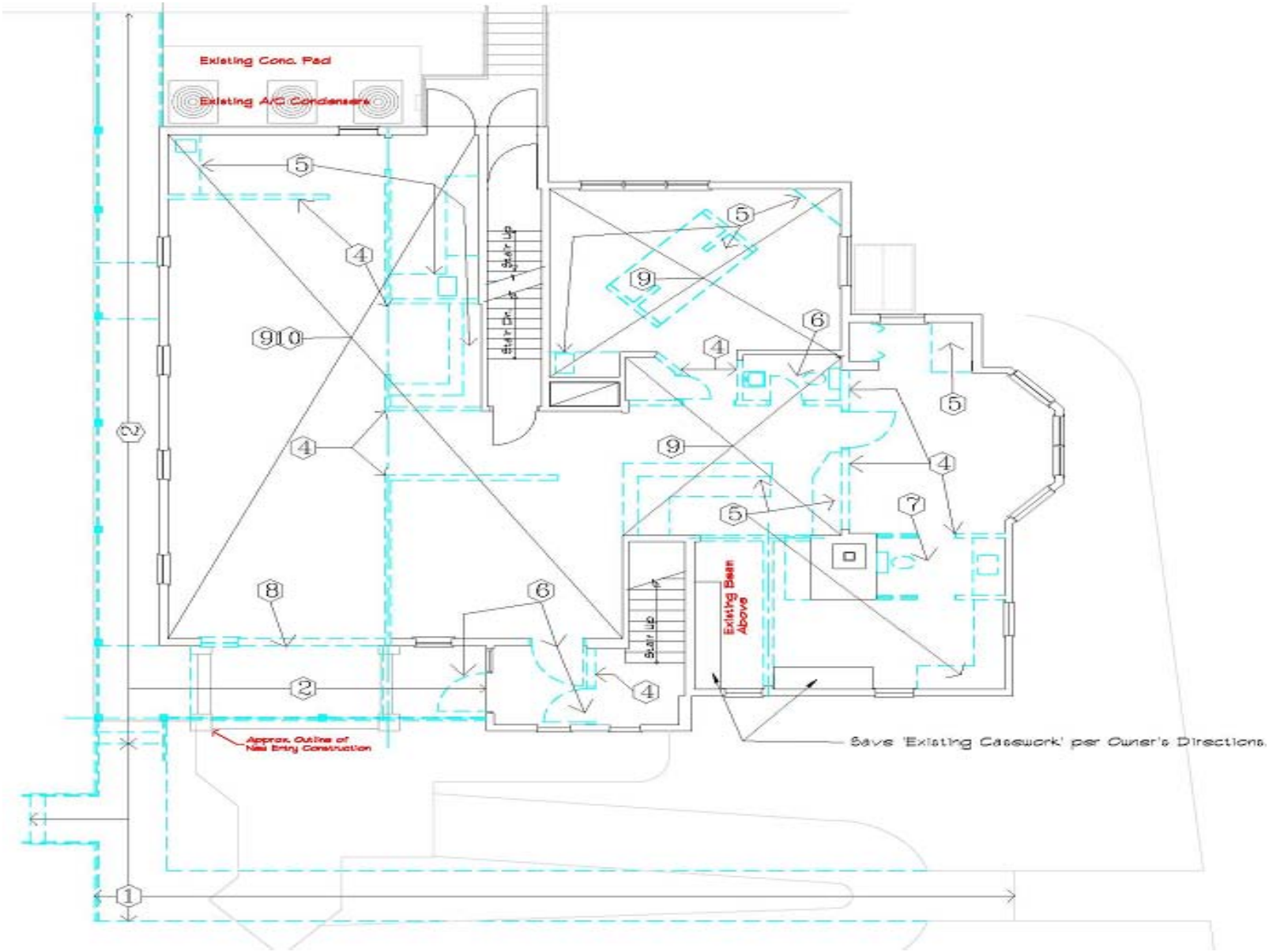
Scale: 1/2" = 1'-0"

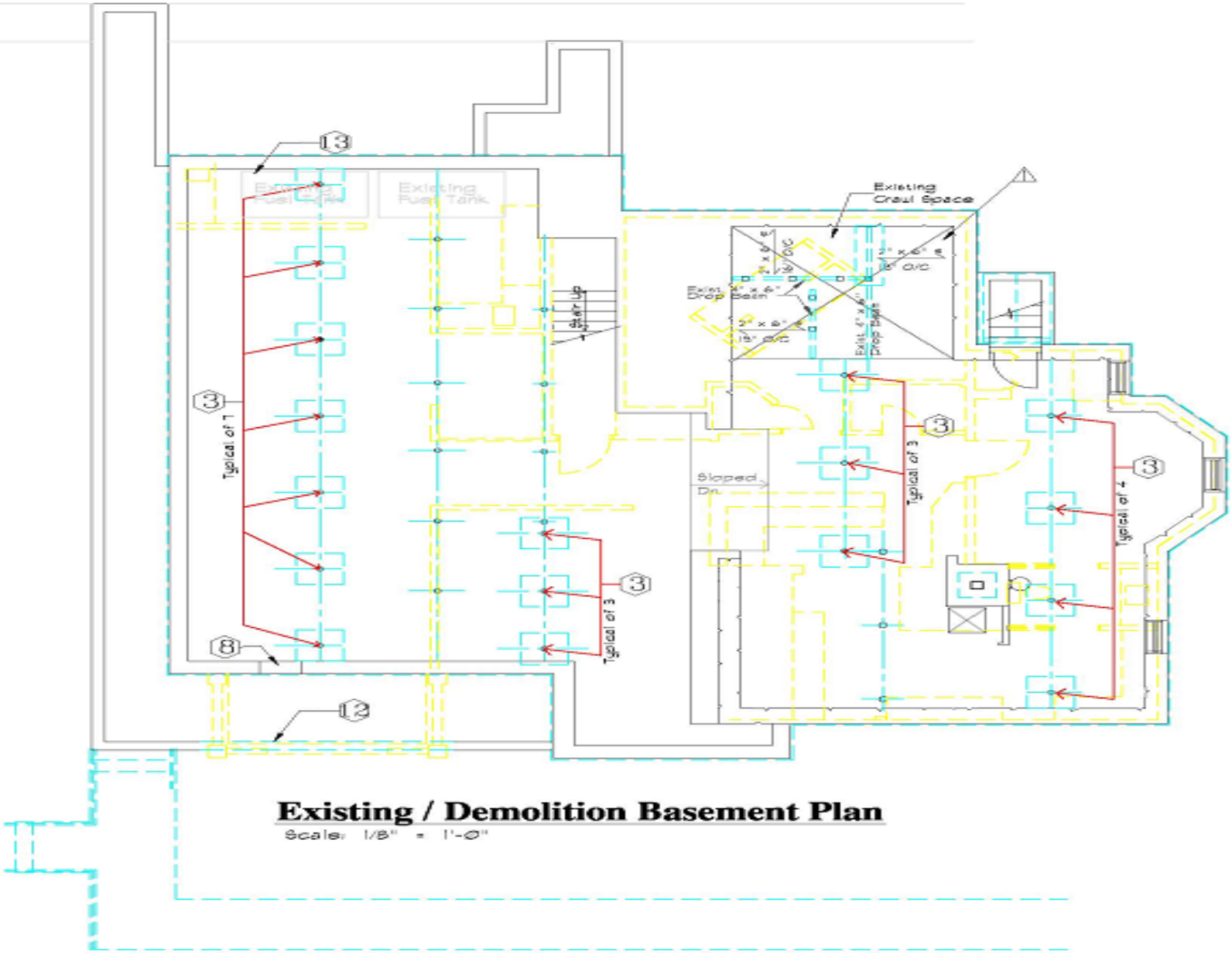


Basement Col. Enclosure



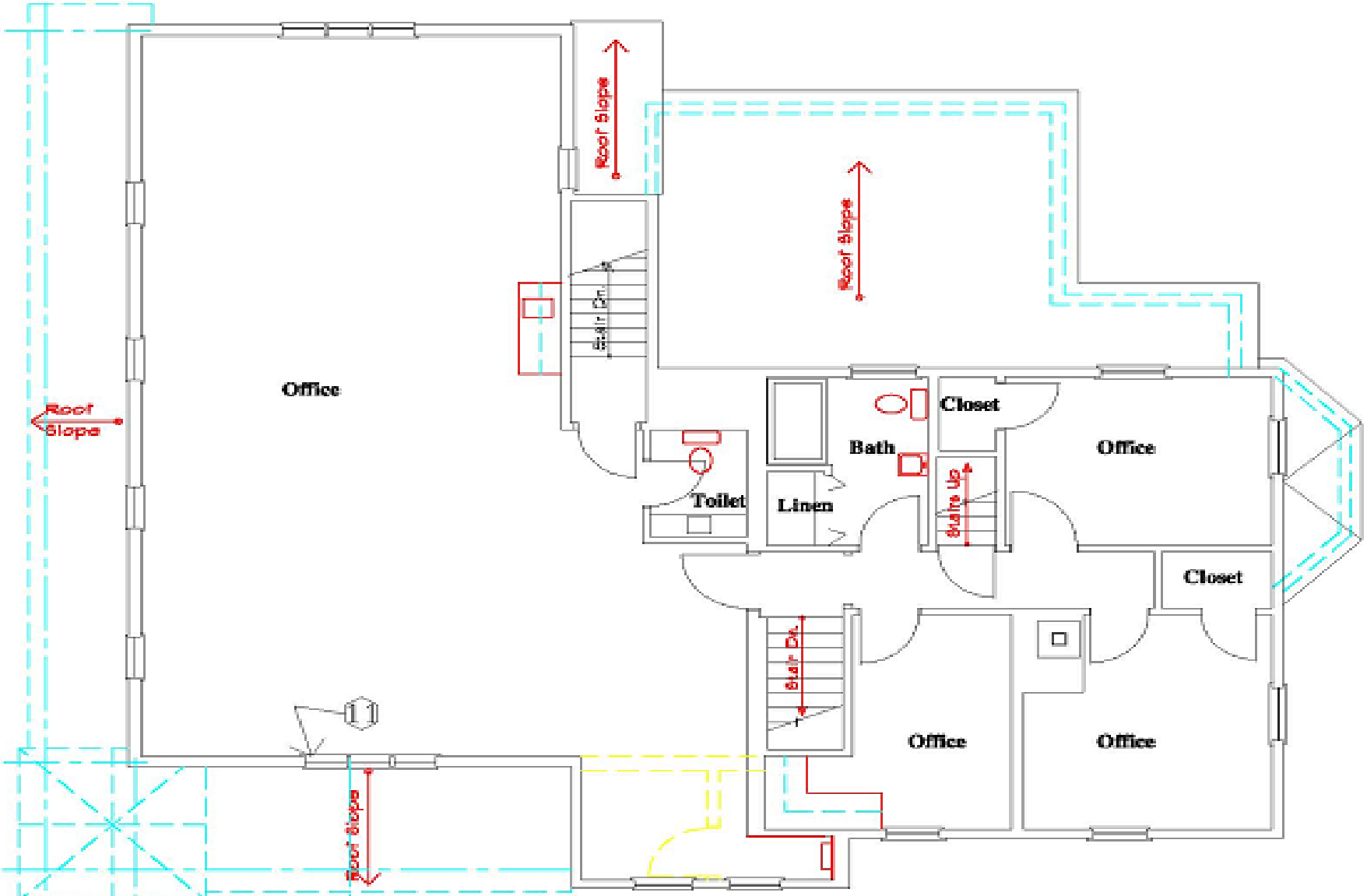
Approx. Roof Plan (New & Existing)


Existing Conc. Pad
Existing A/C Condensers
Stair Up
Stair Dn
Stair Up
Existing Beam Above
Approx. Outline of New Entry Construction
Save 'Existing Casework' per Owner's Directions.
1
2
4
5
6
7
8
9
10



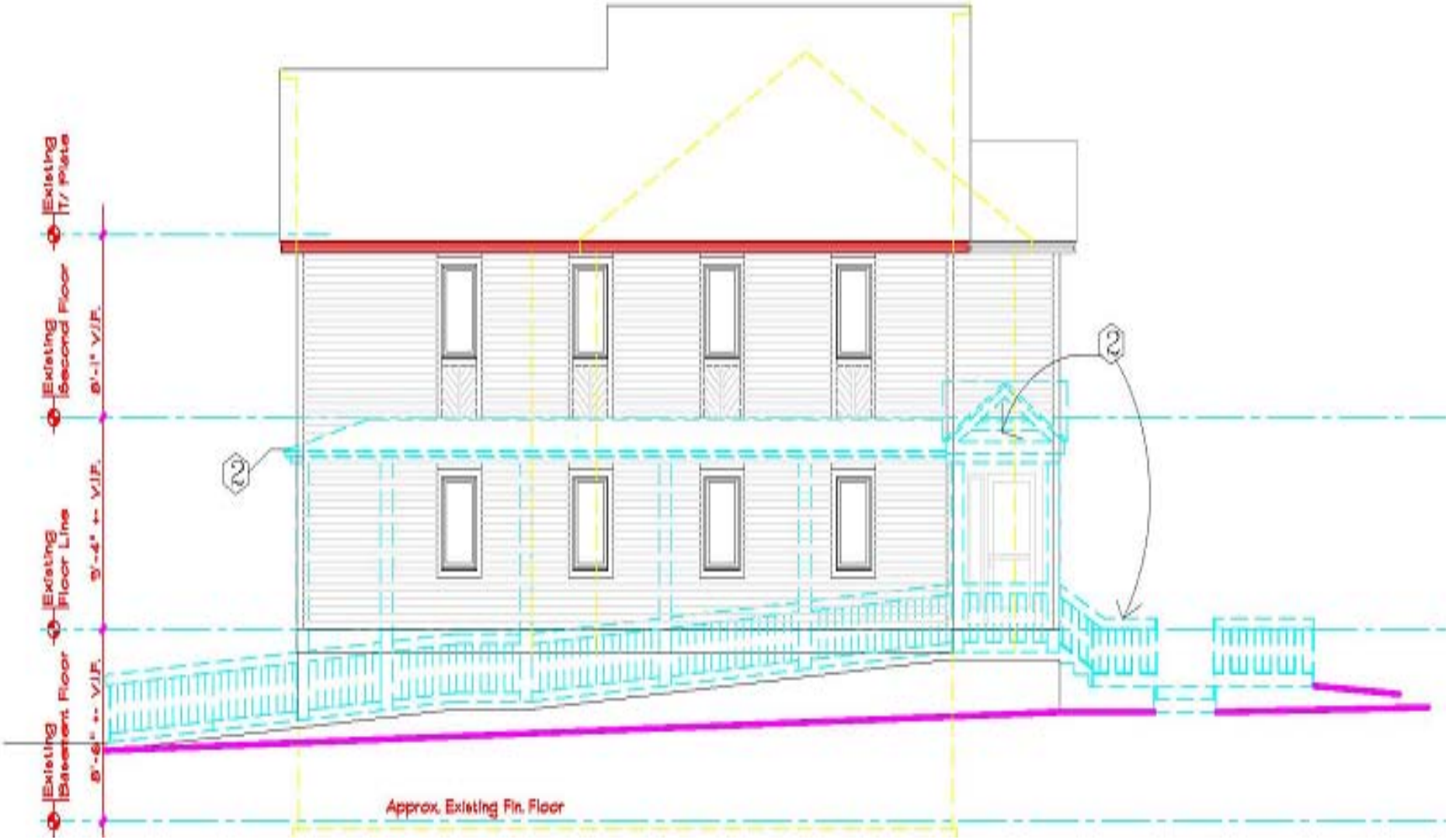
Existing / Demolition Basement Plan

Scale: 1/8" = 1'-0"



Existing / Demolition Second Floor Plan

Scale: 1/8" = 1'-0"


Existing T/ Plate
Existing Second Floor
8'-1" V.I.F.
Existing Floor Line
9'-4" +- V.I.F.
Existing Basement Floor
8'-6" +- V.I.F.
2
2
Approx. Existing Fin. Floor

2
2
Approx. Existing Fin. Floor
Approx. Existing Fin. Floor