DOCUMENT 00 90 00
ADDENDUM

ADDENDUM NO. [1] Date: March 28, 2018

RE: **WITC – SUPERIOR CAMPUS**
SUPERIOR INTERIOR AND EXTERIOR MAINTENANCE & REMODEL
600 N 21ST STREET
SUPERIOR, WI 54880
HSR PROJECT NO. 17063-1

FROM: HSR Associates, Inc
100 Milwaukee Street
La Crosse, WI 54603
(608) 784-1830

To: Prospective Bidders

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated March 2018. Acknowledge receipt of this Addendum in the space provided on the bid form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of [3] pages, [1] Revised Bid Form, [1] specification section, [1] document, and [11] 30 x 42 drawings.

CHANGES TO BIDDING REQUIREMENTS AND CONDITIONS OF THE CONTRACT:

1. Section 00 11 15 PREQUALIFIED CONTRACTORS
    a. Replace Section with new, attached hereto, with additional contractors added.
2. Section 00 41 00 BID FORM
    a. Revised bid Form attached hereto.

GENERAL REQUIREMENTS:

1. Section 01 23 00 ALTERNATES
    a. Add Alternate No. 8 as follows: Alternate No. 8: Colonnade Fabrication
    The following Work shall be priced under Alternate No. 8: State the amount to be added to the base bid to fabricate the steel portion of the colonnade as shown on 2A310 and related details. Concrete piers and installation of steel colonnade shall not be included in alternate pricing.
2. Section 01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS
    a. 3.07 Cutting and Patching, D: Add the following to the end of the sentence; “unless noted otherwise on the Drawings.”

CHANGES TO SPECIFICATIONS:

3. Section 07 24 00 – EXTERIOR INSULATION AND FINISH SYSTEM
    a. 1.07: Mock-up shall include cleaning of existing surface. Demonstrate cleaning methods, type of tools/process being used and the cleaning agents selected. Cleaning areas may be at more and different locations than application of new coating mock-up to deal with difficult appearing circumstances to confirm cleaning agent selection. Also include feathering of finish coat from reinforcing mesh area to adjacent recoat areas.

b. 3.04: At locations where reinforcing mesh is installed, finish coat shall be feathered to adjacent surface to prevent a visible transition line.

c. Attached to this addendum is the "dryvitCARE" recommendations for cleaning, repair of damage, replacement of sealant at joints and application of new coating over existing surfaces. This document is the intended guide for the Work on this project. Not all information in this document applies to the project. It is intent and direction that the processes outlined be followed, yet it is acceptable for equal products and processes from other EIFS manufacturer's to be utilized. Products and systems shall be submitted for approval.

4. Section 09 51 00 ACOUSTICAL CEILINGS
   a. 2.02: Delete paragraph A. Provide the following acoustical tiles.
   b. ACT-1, 2 x 2, Armstrong Cortega 704.
      i. Location: Pharmacy Tech 113 and replacement tiles as required at renovation areas.
   c. ACT-2, 4 x 4 x 1 1/8", Hunter Douglas, Techstyle.
      i. Location: Southwest corner of Commons 100 and replacement tiles as required at renovation areas.

CHANGES TO DRAWINGS

5. Sheet A104R WORK ROOM AND PHARMACY TECH PLANS AND DETAILS 30 x 42 attached hereto
   a. Revisions clouded on Drawing
6. Sheet A201R BUILDING ELEVATIONS 30 x 42 attached hereto
   a. Revisions clouded on Drawing
7. Sheet A202R BUILDING ELEVATIONS 30 x 42 attached hereto
   a. Revisions clouded on Drawing
8. Sheet P112 PLUMBING PLANS – PHARM TECH AREA 30 x 42 attached hereto
   a. Add Drawing as part of Contract Documents.
9. Sheet M001R MECHANICAL TITLE SHEET 30 x 42 attached hereto
   a. Revisions clouded on Drawing.
10. Sheet M111R MECHANICAL NEW AND DEMOLITION PLANS – 1ST FLOOR 30 x 42 attached hereto
    a. Revisions clouded on Drawing.
11. Sheet M121R MECHANICAL PLANS – 2ND AND 3RD FLOORS 30 x 42 attached hereto
    a. Revisions clouded on Drawing.
12. Sheet M131 MECHANICAL PLANS – PHARM TECH AREA 30 x 42 attached hereto
    a. Add Drawing as part of Contract Documents.
13. Sheet E001R ELECTRICAL – NOTES, LEGENDS AND ABBREVIATIONS 30 x 42 attached hereto
    a. Revisions clouded on Drawing.

14. Sheet E411 PHARM TECH LIGHTING PLAN 30 x 42 attached hereto
    a. Add Drawing as part of Contract Documents.
15. Sheet E421 PHARM TECH POWER AND SYSTEMS PLAN 30 x 42 attached hereto
    a. Add Drawing as part of Contract Documents

END OF DOCUMENT 00 90 00

Page Intentionally Left Blank

DOCUMENT 00 41 00

BID FORM - Revised

BIDDER:_____

BID FOR SINGLE PRIME CONTRACT

PROJECT: **WITC – SUPERIOR CAMPUS**
SUPERIOR INTERIOR AND EXTERIOR MAINTENANCE & REMODEL
600 N 21ST STREET
SUPERIOR, WI 54880
HSR PROJECT NO. 17063-1

TO: **WISCONSIN INDIANHEAD TECHNICAL COLLEGE**
505 PINE RIDGE DR
SHELL LAKE, WI 54871
ATT: KRISTI FOUST

BASE BID

The undersigned, having examined the site where the Work is to be executed and become familiar with local conditions affecting the cost of the Work and carefully examined the Project Manual, the Project Drawings, all other Bidding Documents and Addenda thereto prepared by the AE, HSR Associates, Inc., hereby agrees to provide all labor, materials, equipment and services necessary for the complete and satisfactory execution of the ENTIRE WORK, in the time frame stipulated in these contract documents, for the Base Bid stipulated sum of:

_____

_____ Dollars ($_____.00)

ALTERNATE BIDS

The undersigned further agrees to perform the alternative portions of the Work as described in the Project Manual, Section 01 23 00 Alternates, for the following additions to or deductions from the Base Bid sum stipulated above:

Alternate No. 1 Pharmacy Tech and Office Remodels

Add _____ Dollars ($_____.00)

Alternate No. 2 West and North Storefront Replacement

Add _____ Dollars ($_____.00)

Page Intentionally Left Blank

Alternate No. 3 Gabion Benches

Add _____ Dollars ($_____.00)

Alternate No. 4 Lighting Replacement at Exterior Soffits

Add _____ Dollars ($_____.00)

Alternate No. 5 Rain Gardens

Add _____ Dollars ($_____.00)

Alternate No. 6 Wave Graphics at New Storefront Glass

Add _____ Dollars ($_____.00)

Alternate No. 7 Safety Film at Interior Atrium Glass

Add _____ Dollars ($_____.00)

Alternate No. 8 Colonnade Fabrication

Add _____ Dollars ($_____.00)

UNIT PRICES

The undersigned agrees to add or deduct portions of the Work from the Contract as described in the Project Manual, Section 01 22 00 Unit Prices, for the following Unit Price amounts:

A. Unit Price UP-1: (Excess Excavation)

Per cubic yard _____Dollars ($_____.00)

B. Unit Price UP-2: (Compacted Fill)

Per cubic yard _____Dollars ($_____.00)

C. Unit Price UP-3: (Exterior Cast Concrete Wall Repair)

Per square foot _____ Dollars ($_____.00)

Page Intentionally Left Blank

D. Unit Price UP-4: (Re-seal Vertical Concrete Joints at Precast Panels)

Per linear foot _____ Dollars ($_____.00)

E. Unit Price UP-5: (Re-seal Horizontal Cast Concrete Reveals)

Per linear foot _____ Dollars ($_____.00)

F. Unit Price UP-6: (Removal/Replacement of Damaged EIFS)

Per square foot _____ Dollars ($_____.00)

G. Unit Price UP-7: (Concrete Crack Epoxy Injection Repair)

Per lineal foot _____ Dollars ($_____.00)

H. Unit Price UP-8: (Stainless Steel Pin Installation at Concrete Repair)

Per pin _____ Dollars ($_____.00)

I. Unit Price UP-9: (Cleaning and Painting Concrete Walls)

Per square foot_____ Dollars ($_____.00)

BIDDER'S CHOICE SUBSTITUTIONS

The following Bidder's Choice Substitution is proposed for your consideration subject to the requirements set forth in Document 00 22 13 Supplementary Instructions to Bidders, Subparagraph 3.3.4:

Substitution No. S1:

For substituting_____

_____

Type, Brand, Catalog No._____

Manufacturer_____

Deduct from BASE BID _____ Dollars ($_____.00)

Page Intentionally Left Blank

In submitting this Bid, the undersigned agrees to:

1. Hold this Bid open for **60** days.
2. Accept the provisions of Instructions to Bidders regarding disposition of Bid Security.
3. Enter into and execute an Agreement, if awarded on the basis of this Bid, and to furnish Performance and Labor and Material Payment Bonds according to the Supplementary Conditions.
4. Accomplish work according to the Contract Documents.
5. Complete the work by the time stated in Section 01 10 00 Summary of the Work.

Receipt of the following Addenda and inclusion of their provisions in this Bid is hereby acknowledged:

Addendum No._____ Dated_____

Addendum No._____ Dated_____

Addendum No._____ Dated_____

Addendum No._____ Dated_____

Attached hereto are the required:

a. ( ) Bid Security

FIRM NAME: _____

(Affix seal if Corporation)

By: _____

Title: _____

By: _____

Title: _____

Date: _____

Official Address: _____

_____

Telephone: _____

END OF DOCUMENT 00 41 00

Page Intentionally Left Blank

SECTION 00 11 15

PREQUALIFIED CONTRACTORS

PART 1: GENERAL

1.01 THE FOLLOWING LIST REPRESENTS APPROVED CONTRACTORS AND SUBCONTRACTORS FOR 2018 PROJECTS:

A. GENERAL CONTRACTORS

1. Angelo Luppino, Inc.
   a. 11434 N. Island Lake Road, Iron Belt, WI 54536
   b. Contact: Angelo Luppino
   c. Phone: 715-561-4906
   d. Email: aluppinoinc@yahoo.com
2. Arnie Mackey Construction*
   a. 407 E. Lakeshore Drive, Ashland, WI 54806
   b. Contact: Scott Sandor Sr.
   c. Phone: 715-682-9128
   d. Email: sandorsr@hotmail.com

   *Approved for projects $500,000 or less in scope
3. Derrick Building Solutions
   a. 1505 Highway 65, New Richmond, WI 54017
   b. Contact: Mark Johnson
   c. Phone: 715-246-2320
   d. Email: mjohnson@derrickbuilt.com
4. Howard Immel, Inc.
   a. 1820 Radisson Street, Green Bay, WI 54302
   b. Contact: Laura Reed
   c. Phone: 920-406-0148
   d. Email: laurare@immel-builds.com
5. Johnson Wilson Constructors, Inc.
   a. 4431 West Michigan Street, PO Box 16006, Duluth, MN 55816
   b. Contact: Shane Johnson
   c. Phone: 218-628-0202
   d. Email: sjohnson@johnsonwilson.com
6. Market & Johnson, Inc.
   a. 2350 Galloway Street, PO Box 630, Eau Claire, WI 54702
   b. Contact: Dean Griffith
   c. Phone: 715-834-1213
   d. Email: dgriffith@market-johnson.com
7. Max Gray Construction
   a. 2501 5th Avenue West, Hibbing, MN 55746
   b. Contact: Jim Abrahamson
   c. Phone: 218-262-6622
   d. Email: jabrahamson@maxgrayconst.com
8. Miron Construction Co., Inc.
   a. 500 First Street, Suite 4000, Wausau, WI 54403
   b. Contact: Tim Andrew
   c. Phone: 715-841-4000
   d. Email: tim.andrew@mironconstruction.com

9. Olympic Builders General Contractors
    a. 405 North Star Road, Holmen, Wi 54636
    b. Contact: William Yahnke
    c. Phone: 608-526-4622
    d. Email: office@olympicbuildersgc.com
10. R. J. Jurowski Construction, Inc.
    a. 36385 Jurowski Drive, PO Box 335, Whitehall, WI 54773
    b. Contact: Wayne Brown
    c. Phone: 715-538-4661
    d. Email: wayneb@rjjurowskiconstruction.com
11. Rhom Construction, LLC*
    a. 2105 N Clairemont Avenue, Eau Claire, WI 54703
    b. Contact: Nicholas Mohr
    c. Phone: 715-514-4172
    d. Email: nmohr@rhomconstruction.com
    *Approved for projects $500,000 or less in scope
12. Thomas Grace Construction
    a. 5605 Memorial Avenue North, Stillwater, MN 55082
    b. Contact: Mike Behrens
    c. Phone: 651-342-1298
    d. Email: mike.behrens@thomas-grace.com
13. V & S Construction Services, Inc.
    a. 2019 22 ½ Avenue, PO Box 557, Rice Lake, WI 54868
    b. Contact: Todd Schieffer
    c. Phone: 715-234-9174
    d. Email: todds@vscontractors.com

B. PLUMBING CONTRACTORS

1. A.G. O'Brien Plumbing & Heating Company
    a. 4907 Lightning Drive, Hermantown, MN 55811
    b. Contact: Derrill J. Adatte
    c. Phone: 218-729-9662
    d. Email: derrill@agobrien.com
2. Badger State, Inc.
    a. 2507 Fortune Drive, Eau Claire, WI 54703
    b. Contact: Fred Gardner
    c. Phone: 715-874-7777
    d. Email: fred@badgerstateinc.com
3. Bartingale Mechanical, Inc.
    a. 43213 Louis Avenue, Suite G, Eau Claire, WI 54703
    b. Contact: Chuck Falch
    c. Phone: 715-835-3169
    d. Email: chuckfalch@bartingalemechanical.com
4. Belknap Plumbing & Heating, Inc.
    a. 1414 Belknap Street, Superior, WI 54880
    b. Contact: Chris Scharte
    c. Phone: 715-394-7754
    d. Email: cscharte@belknapsd.com

5. Blakeman Plumbing & Heating, Inc.
    a. 44941 State Hwy 13, Ashland, WI 54806
    b. Contact: Dean Blakeman
    c. Phone: 715-682-6050
    d. Email: dean@blakemanplumbing.com
6. Certified, Inc.
    a. 350 Sunday Drive, Altoona, WI 54720
    b. Contact: Russ Ryan
    c. Phone: 715-834-5409
    d. Email: russr@certified-plumbing-heating.com
7. Countryside Plumbing & Heating, Inc.
    a. 321 Wisconsin Drive, New Richmond, WI 54017
    b. Contact: David Wilcox
    c. Phone: 715-246-2660
    d. Email: dave@countrysideph.com
8. Halverson Brothers, Inc. Plumbing & Heating
    a. 1020 North Broadway, Menomonie, WI 54751
    b. Contact: Mark Dahms
    c. Phone: 715-235-0651
    d. Email: halbros@wwt.net
9. J.F. Ahern
    a. 5315 Freitag Drive, Menomonie, WI 54751
    b. Contact: Dave Leisses
    c. Phone: 715-233-1841
    d. Email: dleisses@jfahern.com
10. KBK Services
    a. 1207 Lakeshore Drive East, PO Box 546, Ashland, WI 54806
    b. Contact: Chris Kontny
    c. Phone: 715-682-3002
    d. Email: ckontny@kbkservices.com
11. Rogers Plumbing, Inc.
    a. E4457 Hwy 12, Menomonie, WI 54751
    b. Contact: Kevin Lannon
    c. Phone: 715-235-1132
    d. Email: themail@rogersplumbing.com
12. The Jamar Company
    a. 4701 Mike Colalillo Drive, Duluth, MN 55807
    b. Contact: Scott Torvinen
    c. Phone: 218-628-1027
    d. Email: scott.torvinen@jamarcompany.us

C. MECHANICAL CONTRACTORS

1. A.G. O'Brien Plumbing & Heating Company
    a. 4907 Lightning Drive, Hermantown, MN 55811
    b. Contact: Derrill J. Adatte
    c. Phone: 218-729-9662
    e. Email: derrill@agobrien.com

2. Badger State, Inc.
    a. 2507 Fortune Drive, Eau Claire, WI 54703
    b. Contact: Fred Gardner
    c. Phone: 715-874-7777
    d. Email: fred@badgerstateinc.com
3. Bartingale Mechanical, Inc.
    a. 43213 Louis Avenue, Suite G, Eau Claire, WI 54703
    b. Contact: Chuck Falch
    c. Phone: 715-835-3169
    d. Email: chuckfalch@bartingalemechanical.com
4. Belknap Plumbing & Heating, Inc.
    a. 1414 Belknap Street, Superior, WI 54880
    b. Contact: Chris Scharte
    c. Phone: 715-394-7754
    d. Email: cscharte@belknapsd.com
5. Blakeman Plumbing & Heating, Inc.
    a. 44941 State Hwy 13, Ashland, WI 54806
    b. Contact: Dean Blakeman
    c. Phone: 715-682-6050
    d. Email: dean@blakemanplumbing.com
6. Certified, Inc.
    a. 350 Sunday Drive, Altoona, WI 54720
    b. Contact: Russ Ryan
    c. Phone: 715-834-5409
    d. Email: russr@certified-plumbing-heating.com
7. Countryside Plumbing & Heating, Inc.
    a. 321 Wisconsin Drive, New Richmond, WI 54017
    b. Contact: David Wilcox
    c. Phone: 715-246-2660
    d. Email: dave@countrysideph.com
8. Halverson Brothers, Inc. Plumbing & Heating
    a. 1020 North Broadway, Menomonie, WI 54751
    b. Contact: Mark Dahms
    c. Phone: 715-235-0651
    d. Email: halbros@wwt.net
9. J.F. Ahern
    a. 5315 Freitag Drive, Menomonie, WI 54751
    b. Contact: Dave Leisses
    c. Phone: 715-233-1841
    d. Email: dleisses@jfahern.com
10. KBK Services
    a. 1207 Lakeshore Drive East, PO Box 546, Ashland, WI 54806
    b. Contact: Chris Kontny
    c. Phone: 715-682-3002
    d. Email: ckontny@kbkservices.com
11. Paul's Sheet Metal, Inc.
    a. 1017 Haugen Avenue, PO Box 247, Rice Lake, WI 54868
    b. Contact: Michael Paul
    c. Phone: 715-234-7707
    d. mike@paulssheetmetal.com

12. Sheet Metal Enterprises
    a. 601 Knapp Street, Chetek, WI 54728
    b. Contact: Ryan Hoefer
    c. Phone: 715-924-4499
    d. Email: ryan@smewi.com
13. The Jamar Company
    a. 4701 Mike Colalillo Drive, Duluth, MN 55807
    b. Contact: Scott Torvinen
    c. Phone: 218-628-1027
    d. Email: scott.torvinen@jamarcompany.us

D. ELECTRICAL CONTRACTORS

1. B & B Electric, Inc.
    a. 1303 Western Avenue, Eau Claire, WI 54703
    b. Contact: Michael Bergh
    c. Phone: 715-832-1676
    d. mb@b-belectricinc.com
2. Belknap Electric, Inc.
    a. 1513 Belknap Street, Superior, WI 54880
    b. Contact: Chris Krook
    c. Phone: 715-394-7769
    d. Email: chriskrook@belknapelectric.com
3. Benson Electric Company
    a. 1102 North Third Street, Superior, WI 54880
    b. Contact: Nathan Sapik
    c. Phone: 715-394-5547
    d. Email: nate@becotm.com
4. Meyers Electric Service, LLC
    a. 900 Lindy Street, Rice Lake, WI 54868
    b. Contact: Dale Meyers
    c. Phone: 715-234-3901
    d. Email: dale@meyerselectricllc.com
5. Neo Electrical Solutions, LLC
    a. 2365 Willis Miller Drive, Hudson, WI 54016
    b. Contact: Kyle Pheneger
    c. Phone: 715-808-0463
    d. Email: kylep@neoelectrical.com
6. NEI Electric
    a. 605 Industrial Parkway, St. Croix Falls, WI 54024
    b. Contact: John Gerlach
    c. Phone: 715-481-3854
    d. Email: jgerlach@neielectric.com
7. Simon Electric Construction Company, Inc.
    a. 345 St. Croix Avenue, New Richmond, WI 54017
    b. Contact: Judy Simon
    c. Phone: 715-246-3873
    d. Email: judy@simon-electric.com

8. TJ Electric, Inc.
    a. 1049 Starr Avenue, Eau Claire, WI 54703
    b. Contact: Jordan Burch
    c. Phone: 715-834-0400
    d. Email: jordan@tjelectricinc.com
9. Van Ert Electric Company, Inc.
    a. 7019 Stewart Avenue, Wausau, WI 54401
    b. Contact: Tim Jones
    c. Phone: 715-845-4308
    d. Email: tjones@vanert.com

E. LOW VOLTAGE CONTRACTORS

1. B & B Electric, Inc.
    a. 1303 Western Avenue, Eau Claire, WI 54703
    b. Contact: Michael Bergh
    c. Phone: 715-832-1676
    d. Email: mb@b-belectricinc.com
2. Belknap Electric, Inc.
    a. 1513 Belknap Street, Superior, WI 54880
    b. Contact: Chris Krook
    c. Phone: 715-394-7769
    d. Email: chriskrook@belknapelectric.com
3. Benson Electric Company
    a. 1102 North Third Street, Superior, WI 54880
    b. Contact: Nathan Sapik
    c. Phone: 715-394-5547
    d. Email: nate@becotm.com
4. Eau Claire Communications
    a. 1060 Western Avenue, Suite 3, Eau Claire, WI 54703
    b. Contact: John Kirscht
    c. Phone: 715-835-3722
    d. Email: johnk@eauclairecommunications.com
5. NEI Electric
    a. 605 Industrial Parkway, St. Croix Falls, WI 54024
    b. Contact: John Gerlach
    c. Phone: 715-481-3854
    d. Email: jgerlach@neielectric.com
6. Neo Electrical Solutions, LLC
    a. 2365 Willis Miller Drive, Hudson, WI 54016
    b. Contact: Kyle Pheneger
    c. Phone: 715-808-0463
    d. Email: kylep@neoelectrical.com
7. Simon Electric Construction Company, Inc.
    a. 345 St. Croix Avenue, New Richmond, WI 54017
    b. Contact: Judy Simon
    c. Phone: 715-246-3873
    d. Email: judy@simon-electric.com

8. Van Ert Electric Company, Inc.
    a. 7019 Stewart Avenue, Wausau, WI 54401
    b. Contact: Tim Jones
    c. Phone: 715-845-4308
    d. tjones@vanert.com

F. ROOFING CONTRACTORS

1. Arnie Mackey Construction*
    a. 407 E. Lakeshore Drive, Ashland, WI 54806
    b. Contact: Scott Sandor Sr.
    c. Phone: 715-682-9128
    d. Email: sandorsr@hotmail.com
    *Approved for projects $500,000 or less in scope
2. Lake Area Roofing and Construction, Inc.
    e. 2141 107th Ln NE, Minneapolis, MN 55449
    f. Contact: Gene Hollister
    g. Phone: 763-786-5187
    h. Email: genehollister@lakearearoofing.com
3. Nieman Central Wisconsin Roofing Co.
    a. N2599 24th Avenue, Lyndon Station, WI 53944
    b. Contact: Larry Hadac
    c. Phone: 608-666-3342
    d. Email: larry@niemancwroofing.com
4. Paul's Sheet Metal, Inc.
    a. 1017 Haugen Avenue, PO Box 247, Rice Lake, WI 54868
    b. Contact: Michael Paul
    c. Phone: 715-234-7707
    d. mike@paulssheetmetal.com
5. The Jamar Company
    a. 4701 Mike Colalillo Drive, Duluth, MN 55807
    b. Contact: Scott Torvinen
    c. Phone: 218-628-1027
    d. Email: scott.torvinen@jamarcompany.us

PART 2: PRODUCTS – NOT USED.

PART 3: EXECUTION – NOT USED.

END OF SECTION 00 11 15

dryvitCARE™ EIFS Repair Procedures DS498

Index of Documents

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

Recommendations for Periodic Cleaning of Dryvit Finishes and Coatings DC001

Introduction

The long-term appearance of any exterior wall depends primarily on the attention given to periodic cleaning. Dryvit's DPR and other textured acrylic finishes offer many advantages for ease of cleaning and maintenance compared to other types of exterior wall claddings. Brick, for example, requires the use of strong acidic cleaners to remove even the accumulation of routine dirt that works its way into the pores of the brick. Use of such acidic cleaners can cause many problems. It is strongly recommended that you contact the manufacturer of any cladding material for proper cleaning instructions.

Testing has verified that Dryvit DPR finishes are most effectively and safely cleaned with the use of general cleaning compounds, followed by a mildly pressurized water rinse. Acidic cleaners are not recommended for routine cleaning of Dryvit finishes. The only condition that MAY warrant use of acidic cleaners is efflorescence, which is discussed later.

The following products are general-purpose cleaners the manufacturers of which indicate are suitable for cleaning of Dryvit finishes:

Company	General Purpose Cleaner
Prosoco 3741 Greenway Circle Lawrence, KS 66046 (800) 255-4255	Enviro Klean® EIFS Clean 'N Prep
Shore Corporation 2917 Spruce Way Pittsburgh, PA 15210 (800) 860-4978	2600 EIFScrub
ABR Products, Inc. 9720 S. 60th Street Franklin, WI 53132 (414) 421-4125	Building Wash 3
The Clean-Up Group 3000 Gulf Shore Blvd. N. Naples, FL (239) 455-2225	CitraShield BioCide

Choice of Cleaning Compounds

The above list should be considered a starting point in selection of the appropriate cleaning compound. Every building will have its own set of specific challenges and requirements. These general-purpose cleaners will be satisfactory for many buildings coated with Dryvit finishes. However, some environments may present unique circumstances and require

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

dryvit

more specialized cleaning agents. In these cases, Dryvit recommends consulting the cleaning product manufacturer for suggestions specific to the job at hand. Testing the cleaning compound on a small and isolated area of the actual finish surface is always advised prior to commencing on a large scale.

Usage instructions from manufacturers of cleaning solutions for general cleaning of Dryvit finishes typically include the following information:

Preparation

Protect people, vehicles, property and all surfaces not intended for cleaning from splash, residue, fumes, rinse and wind drift. Read the cleaning solution manufacturer's instructions for the proper dilution appropriate for the surface cleanliness/condition of the textured finish. Mix cleaning solution in accordance with those manufacturer's instructions. Test the prepared mixture on all surfaces that may come into contact with it during application and rinsing. Contact the manufacturer of the cleaning solution for more information and cautions for use. Check all equipment for compatibility with the type of cleanser used.

Surface and Air Temperatures

Cleaning effectiveness is diminished when surface and air temperature falls below 50 °F (10 °C). For best results, allow wall surface to warm to a temperature above 50 °F (10 °C), prior to initiating cleaning.

Protection

Protect grass and plantings by covering or with spray from sprinklers. Adjacent surfaces may need additional protection as well. Always contact the cleaning product manufacturer for more information about protection precautions they recommend.

Garden Hoses and Pressurized Water Cleaning Equipment – General Information

Leaning a ladder against any wall coated with Dryvit finishes can cause damage. It is normally most economical and efficient to use pressurized water for the cleaning/rinsing operation. The simplest method of delivering pressurized water is to use a garden hose. This is sufficient on most residential applications to both prewet the wall surface and rinse away applied cleaning solutions. Some commercially available pressurized water delivery systems feature a pressure gun and nozzle equipped with a control switch.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

This setup permits the operator to apply cleaning solutions to a wall over 100 ft (30.5 m) from the base unit. Other systems have two separate hoses - one with plain water and the other with a cleaning solution. Portable equipment has many advantages for cleaning building exteriors. Units may be on wheels, skids, trailers, or pick-up truck beds. More elaborate systems include pumps, engines, and water storage tanks fixed on truck beds. Whatever method you select, it is safest and least potentially damaging to the Dryvit finish and the wall surface if both equipment and personnel are kept on the ground.

The tip angle of the nozzle should be appropriate for the distance between the area being cleaned and the nozzle tip. A 10° angle tip may be appropriate when the surface being cleaned is 100 ft (30.5 m) above the nozzle, but not when the surface being cleaned is 2 - 5 ft (.61 – 1.5 m) away from the tip of the nozzle. For close proximity cleaning, tip angles of 45° or greater must be used to prevent damage to the finish. Water used for rinsing must be cold. Hot or even warm water will cause softening of the finish, and may result in damage to or removal of finish. The pressurized water rinse must not be harsh enough to erode the finish. Such degradation will reduce the long-term performance of the finish. Seek the equipment manufacturer's advice and use care when using this type of pressure near sealant joints and wood trim as well. Misdirected, high-pressure spray can damage most materials and surfaces! Caution should be taken regarding high pressure rinsing with specialty applications such as Custom Brick™.

Cleaning solutions used with this method should be compatible with the equipment. Some equipment manufacturers are careful to recommend that only specific cleaning compounds be pumped through their equipment. Many proprietary cleaning solutions may be subject to periodic change in formulation. It is suggested, therefore, that each product being considered be **sample tested** on a panel or inconspicuous wall area and judged on a trial basis before being used more extensively.

Water Presoak

It is necessary to thoroughly wet the area to be cleaned prior to the application of the cleaning solution itself. The wall surface to be cleaned must be wet when the cleaning solution is applied. Lower elevations should also be saturated with water in order to prevent absorption of run-off from above, which can cause "clean streaking".

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

dryvit CARE

Cleaning Solution Application

Application of cleaning solutions can be accomplished using a low-pressure sprayer, 200 to 350 kPa (30 to 50 psi), or through a pressurized water cleaning unit. The pressure used must be adequate to coat the finish surface with the cleaning solution and not more. **Chemicals in the cleaner provide the cleaning action, not the force of the water spray used to apply the cleaner.** Light scrubbing with a soft bristle brush may be necessary. Follow the cleaning solution manufacturer's instructions for application and scrubbing. Some solution manufacturers recommend application from the bottom, upward, to avoid "clean streaking". Application in vertical sections is also typically recommended, because this allows re-rinsing clean sections below the vertical section being cleaned. Follow the solution manufacturer's recommendations for dwell time on the wall surface prior to rinsing. (Dwell time is the period of time the cleaning solution is left on the wall prior to rinsing off.) Heat, direct sunlight and wind will affect the drying time and reaction rate of cleaning solutions. Ideally, the cleaning crew should be working on shaded areas to avoid rapid evaporation. **Caution: Never use high pressure to apply cleaning solutions, as the solution may be driven through the finish and into the base coat, and become the source of future staining.** Wear protective goggles, rubber gloves, and NIOSH-approved dust-mist respirator as needed to avoid breathing mists. Read SDS on all cleaning products for specific protection information.

Pressurized Water Rinsing

Rinse the wall with large amounts of clean, pressurized water from top to bottom before the cleaning solution can dry. All wall areas below the cleaned area must also be rinsed down thoroughly in a vertical section. Failure to completely flush the cleaned area and all wall areas below of the cleaning solution may leave residues that may emerge upon exposure to precipitation. Rinse all equipment thoroughly after each use. Higher pressures should be used for this pressurized water rinse, as long as it does not damage the finish. Pressure should normally be kept below 600 psi. The higher pressure is needed to remove surface contaminants that have been lifted by the chemical action of the cleaning solution, and also to remove any residue of the cleaning solution itself. This is why it is important not to use high pressure unit the cleaning solution has been applied (by low pressure or mild scrubbing) and allowed to act for the appropriate dwell time. Use of pressurized clean water alone to clean a finish will require higher water pressures to remove the surface contaminants, which increases the likelihood of damaging the finish. Without application of a cleaning solution, the pressure required to clean the finish will usually require such force that the surface of

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

dryvit

the finish is abraded or removed. This must be avoided. Finish damaged by such "power washing" techniques alone can void product performance warranties.

Cleaning of Mildew and Algae Growth

Mildew and algae are commonly found on dirty, exterior wall surfaces that receive little sunlight. These organisms can grow wherever food (dirt) and favorable temperatures and humidity are found. Some cleaners work on mildew only. Others can also be effective on algae. Still others can effectively clean both organisms, while also being effective for general purpose cleaning. It is safe to assume that if there is mildew and algae, there is also dirt. In such cases, the more comprehensive cleaner is necessary to effectively clean the wall surface. **If recoating is planned, such cleaning MUST be performed. Caution: Never add ammonia to a bleach solution.** Read manufacturer's SDS prior to use.

Company	Mildew & Algae Cleaner
Prosoco, Inc. (800) 255-4255	Contact Prosoco for best choice; several products available
The Clean-Up Group (239) 455-2225	CitraShield BioCide

Other Common Stains

Many manufacturers of cleaning products offer compounds that are specifically formulated for removal of other common sources of staining. This includes mud, various metals, egg, efflorescence, oil, grease, and smoke/soot. Dryvit recommends contacting a manufacturer of cleaning products for their suggestions on cleaners appropriate for Dryvit finishes with these less common stains.

Unknown Stains

Unknown stains present unique challenges. As discussed, effective cleaning products and techniques are specific to the type of stain being cleaned. Laboratory tests of unknown stains may be necessary to determine their composition. Experimental cleaning without laboratory analysis in such cases may aggravate the initial stain, or result in other stains that are also difficult to remove. Bottom line is that if you do not know the nature of a stain, it is best to consult a qualified expert who can determine what it is, prior to proceeding further.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

dryvit CARE

Removal of Efflorescence

Efflorescence can occur whenever the substrate beneath the Dryvit finish contains cement. It is caused by the migration of water through the cementitious material and interaction with salts present in it. The water containing the salts works its way to the surface of the finish where the water evaporates and leaves the salts – efflorescence - behind. It is more easily noticed on darker surfaces. Efflorescence on the finish surface is more an aesthetic than a performance issue for the finish. However, the source of the water migration should be determined since it can mean a more serious problem exists elsewhere. It can be unsightly. It is preferable to use general cleaning compounds and pressurized water to remove light efflorescence deposits. In rare instances, an **extremely** dilute (1 part in 20) acidic cleaning solution may be required to remove heavy efflorescence. Consult a manufacturer for their recommendations under such circumstances. As with all cleaning solutions, prewet the finish with water prior to application of the diluted acid cleaner. Light scrubbing with a soft bristle brush may be necessary as well, to remove heaviest accumulation.

NEVER APPLY ACID SOLUTIONS BY HIGH PRESSURE SPRAY APPLICATION.

Rinse cleaned areas as quickly as possible with pressurized clean water, as described previously under Pressurized Water Rinsing. All acid residue must be completely rinsed away to avoid the possibility of adhesion problems of primers, paints/finishes, or sealants. Read cleaning solution manufacturer's SDS prior to use.

Summary

All buildings need to be cleaned and the exterior inspected periodically for damage and deterioration. This is an expected part of the life cycle cost of any structure. Buildings coated with Dryvit acrylic finishes are no exception. An advantage to Dryvit products is that they can generally be cleaned from the ground, and with non-caustic cleaning compounds, thereby resulting in less exposure to harsh or potentially harmful cleaners for other building components, occupants and landscaping.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

dryvit

EIFS Repair – Small Holes or Impact/Hail Damage Repair Using RapidPatch™ DC002

General:

Holes or other damage less than 3 in x 3 in (76 mm x 76 mm) in size can be easily repaired using Dryvit RapidPatch product. The product needs to be applied at a thickness of 3/4 in – 1 in (19 mm – 25 mm) to allow proper heat generation for rapid cure. Under normal conditions, finish can be applied the same day.

Procedure:

1. With a sharp utility knife, cut through and remove the lamina, exposing a neat uniform-sized area of insulation slightly larger than the damaged area. Using a disk grinder or belt sander with a 20 grit aluminum oxide disk or belt, remove the finish around the cut, exposing the reinforced base coat approximately 3 in (76 mm) around the damage area.
2. Cut out the loose, damaged foam to reveal fresh foam. **Cutting off the foam all the way to substrate is not recommended**. When foam in the damaged area is well bonded to the substrate, care must be taken to expose as little of the substrate as possible and prevent rupturing the surface of the substrate. The area to be patched should be round or rectangular in shape and between 3/4 in – 1 in (19 mm – 25 mm) in depth. Deeper patches should be filled with a piece of EPS so the patch thickness is within this range. RapidPatch material may be used to adhere the EPS filler to the substrate.
3. Precisely mask the surrounding finish with masking tape.
4. Mix the RapidPatch and apply the mixture to the damaged area with a margin trowel to a depth of approximately 1/8 in (3.2 mm) below the existing base coat surface. Also add a thin layer of material on the exposed base coat surrounding the patch. Cut a piece of Detail Mesh® to the proper size and place over the wet RapidPatch overlapping the existing base coat a minimum of 1 in (25 mm). Add additional RapidPatch material to completely fill the damaged area, cover the mesh and feather onto the surrounding base coat. If the material appears initially loose, wait a short time until it stiffens up and level off any imperfections with additional RapidPatch mixture as needed.
5. When the patching material in the damaged area is stiff enough, use a clean, damp margin trowel to smooth out the surface. This may be repeated until a satisfactory surface is achieved. The trowel must be clean and damp prior to each smoothing.
6. Let RapidPatch set for at least 60 minutes, depending on ambient conditions.
7. If necessary, again, precisely mask the surrounding existing finish with masking tape.
8. Apply the new finish over the patched area and texture to match the surrounding finish.
   NOTE: Do not sand the patched area prior to finish application.
9. If the entire wall is to be refinished, it is not necessary to mask off and apply finish at this stage. Refer to the procedure for repairing texture variations for complete details.
   NOTE: Because RapidPatch is specifically designed to compensate for drying shrinkage, it may b used to repair damaged areas up to 3 in x 3 in x 1 in (76 mm x 76 mm x 25 mm).

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair –Impact Damage DC003

General:

This procedure describes the method to repair impact damage. Impact damage can result from landscaping activities, vandalism, severe hail, etc.

Procedures:

1. Mask off an area slightly larger than the damaged area. Using a sharp utility knife, hand or circular saw with a carborundum blade, cut into the EIFS down to the substrate, outside of damaged area. Remove the damaged EIFS exposing a neat uniform size area slightly larger than the damage area.
2. Grind off finish a minimum 3 in (76 mm) to expose the existing base coat layer. **CAUTION: Care should be taken not to damage the reinforcing mesh with the grinder.** The edges of the finish should be sharp, clean and non-tapered beyond the cut out area.
3. Using the appropriate fasteners and/or adhesive install EPS. Ensure overall tightness at the cut line and sliver if necessary.
4. Apply new base coat (cementious/noncementious) and mesh overlapping onto existing exposed base coat layer approximately 2 1/2 in (64 mm). Ensure that the newly applied base coat is flat and is seated approximately 1/16 in (1.6 mm) below the surface of the existing finish. Allow to fully dry (minimum. 24 hours).
5. If necessary again precisely mask off the existing finish. Apply new finish and blend new finish into existing finish. While the finish is still wet, remove the masking tape and feather the edges of the patch so they will blend with the surrounding area. Use a brush, nail, toothpick or similar tool to blend the edges of the patch and to precisely match the texture of the patch with the surrounding area. Proper execution of this step is critical to the success of the patch.

NOTE: Environmental conditions, dirt, and exposure will alter the existing color slightly. A final coating of Weathercoat™ is recommended on the total wall surface to ensure color uniformity between patched areas and existing finish coat. If patched areas are acceptable or Weathercoat is not specified, then color matching the existing finish coat is recommended.

ALTERNATIVE REPAIR METHOD (Using Noncementitious Base Coat)

To avoid the grinding procedure outlined in #2 and avoid a visible patch, complete #3 and:

1. Ensure that the existing finish coat is clean, dry and firmly bonded to the base coat.
2. Apply NCB; in conjunction with reinforcing mesh, onto newly installed insulation board and overlap onto existing finish coat a minimum of 2 1/2 in (64 mm). **Only a noncementitious base coat can be used with this procedure.** Allow patch locations to completely dry.
3. NCB is not recommended for applications on surfaces that will receive sealant. Any of Dryvit's cementitious base coats may be used in those locations.
4. Apply a tight coat of Freestyle finish or NCB over existing texture and blend in patch locations with skim coat. The wall will need to be skimmed and refinished to a natural break. Allow to fully dry.
5. Apply new finish coat and texture to match existing.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair –Corner Damage DC004

General:

Corner damage may be caused by impact from objects such as carts, cars or vandalism. Repair involves removing and replacement of materials in the affected area.

Procedure:

1. Using a sharp utility knife, hand or circular saw with a carborundum blade, cut approximately 3 in (76 mm) along each side of the corner down to the substrate. With a margin trowel or similar tool, carefully remove the sections.
2. Examine the piece removed to determine if there is any damaged to the sheathing.
3. If any damage to the substrate is present, repair prior to EIFS application.
4. Grind off excessive finish coat minimum 3 in (76 mm) on each side of the cut out section to expose the existing base coat layer. **Do not cut into reinforcing mesh with grinder**. The edges of the finish should be sharp, clean and non-tapered from the finish down to the base coat layer.
5. Install new insulation board to the substrate tight against EPS with the appropriate adhesive or fasteners. Sliver all gaps to ensure there is no space between EPS boards. **Do not use base coat to fill gaps between EPS board joints.**
6. Mask off the existing finish coat. Apply a layer of Dryvit Corner Mesh™ embedded in base coat over newly installed EPS section overlapping minimum 2 1/2 in (64 mm) onto existing base coat.
7. Install a continuous piece of reinforcing mesh (Standard or Standard Plus™) wrapping around the corner and extended past opposite side exposed EPS and lap onto existing base coat and mesh minimum 2 1/2 in (64 mm). Ensure that the base coat between the old and the new is flat and seated approximately 1/16 in (1.6 mm) below the surface of the existing finish coat. Allowing a 1/16 in (1.6 mm) recess is necessary so the finish coat, when applied, will become overall flush with the existing finish coat. Allow to fully dry.
8. Precisely mask off the existing finish. Apply new finish and blend new texture into existing texture.

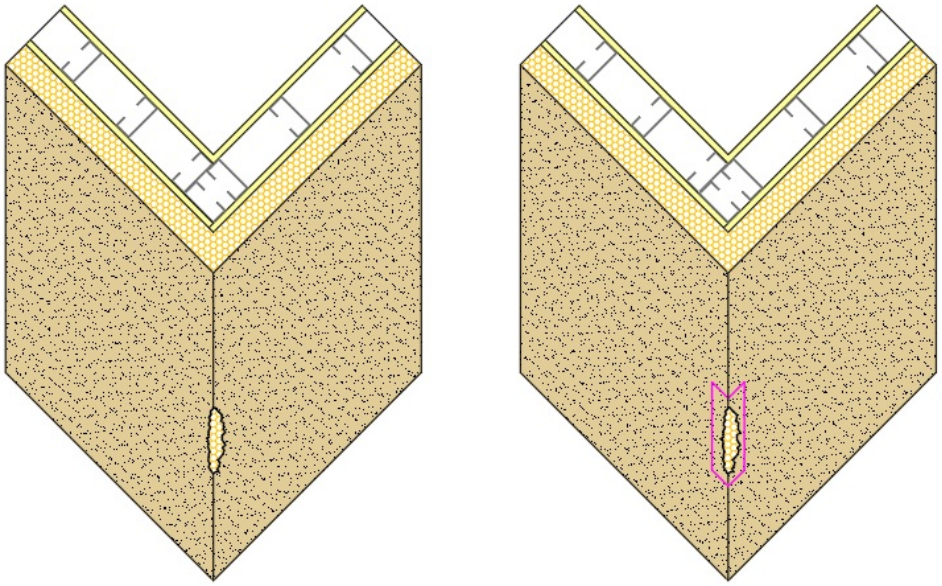
NOTE: Environmental conditions, dirt and exposure will alter the existing color slightly. A final coating of Weathercoat™ is recommended on the total wall surface to ensure color uniformity between patched areas and existing finish coat. If patched areas are acceptable or Weathercoat not specified, then color matching the existing finish coat is recommended.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

ALTERNATIVE REPAIR METHOD (Using Noncementitious Base Coat)

To avoid the grinding procedure outlined in #4 and avoid a visible patch, complete #5 and:

1. Ensure that the existing finish coat is clean, dry and firmly bonded to the base coat.
2. Apply NCB™; in conjunction with reinforcing mesh, onto newly installed insulation board and overlap onto existing finish coat a minimum of 2 1/2 in (64 mm). **Only a noncementitious base coat can be used with this procedure**. Allow patch locations to completely dry.
3. NCB is not recommended for applications on surfaces that will receive sealant. Any of Dryvit's cementitious base coats may be used in those locations.
4. Apply a tight coat of Freestyle® finish or NCB over existing texture and blend in patch locations with skim coat. The wall will need to be skimmed and refinished to a natural break. Allow to fully dry.
5. Apply new finish coat and texture to match existing.

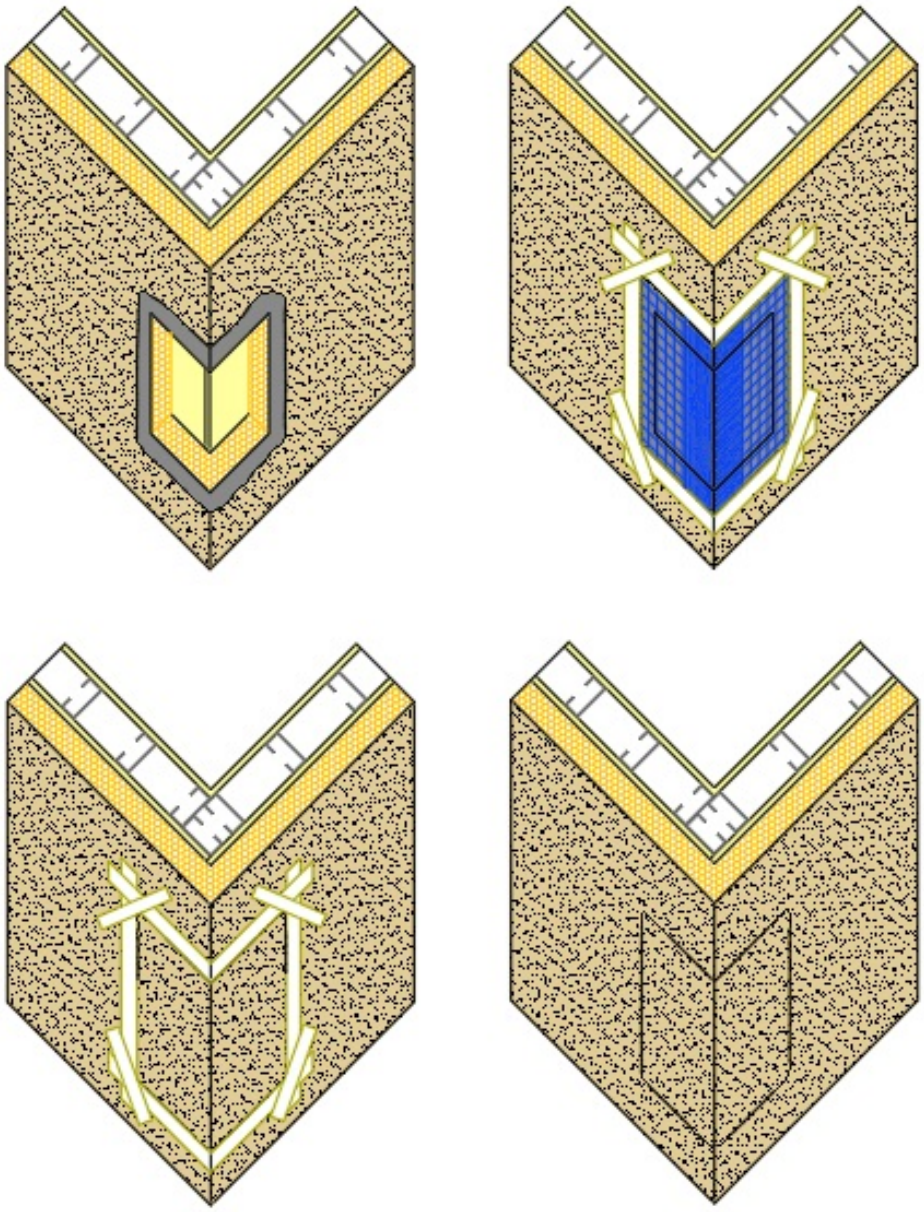


Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair –Corner Damage

DC004

dryvit CARE



Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

dryvit

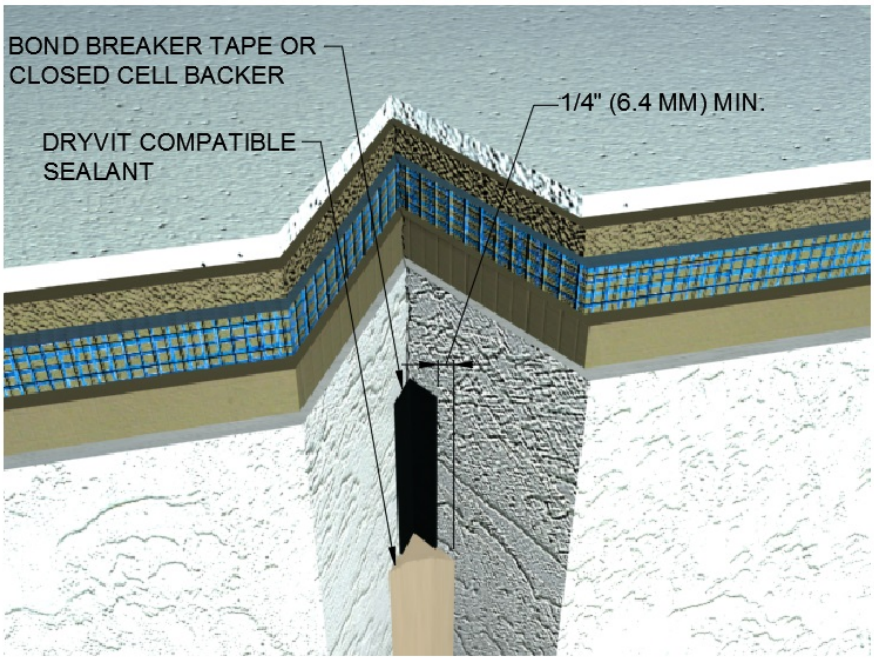
EIFS Repair –Cracks in Aesthetic Reveals DC005

General:

Cracks at the base of aesthetic reveals can sometimes occur. Some of the possible reasons may include substrate movement, excessive build up of base coat or accidental cutting of the mesh during installation. Generally, these cracks can be repaired easily by adding sealant along the base of the groove. This provides a weather seal as well as stress relief at those locations.

Procedure:

1. Clean the area to remove all dust, dirt, algae or other surface contamination as well as any loose material. A general all-purpose cleaner is usually adequate. For specific recommendations refer to DryvitCARE published cleaning procedures (DC#001) for EIFS surfaces.
2. Install a small closed cell backer rod or bond breaker tape along the base of the groove, to provide the proper sealant joint geometry and to avoid 3-sided adhesion. Small intermittent dabs of sealant may be used to maintain position until the sealant is applied.
3. Apply the specified sealant primer to each surface and allow it to dry.
4. Install and properly tool the sealant in accordance with the sealant manufacturer's instructions. A minimum 1/4 in (6.4 mm) contact area to the EIFS surface along each side of the groove is recommended.
5. Protect the joint from weather until sealant has achieved adequate cure.



Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair –Cracks DC006

General:

Cracks can sometimes occur as a result of structural movement, water penetration or improper application. Repair involves removal and replacement of materials in the affected area. Before proceeding, the exact cause of cracks should be determined.

Procedure:

1. Using a sharp utility knife, hand or circular skill saw with a carborundum blade, cut an approximate 3 in x 3 in (76 mm x 76 mm) square into EIFS at crack location, down to the substrate. With a margin trowel or similar tool, carefully remove the section in one piece.
2. Verify that the substrate is undamaged and structurally sound.
3. Cut out minimum 3 in (76 mm) on each side of crack down to substrate.
4. Grind off finish minimum 3 in (76 mm) on each side of the cut out section to expose the existing base coat layer. **Do not cut into reinforcing mesh with grinder**. The edges of the finish should be sharp, clean and non-tapered from the finish down to the base coat layer.
5. Install new insulation board to the substrate tight against EPS with the appropriate adhesive or fasteners. Sliver all gaps to ensure there is no space between EPS boards**. Do not use base coat to fill gaps between EPS board joints.**
6. Mask off the existing finish, apply base coat and mesh on new insulation board and overlap onto existing exposed base coat layer approximately 2 1/2 in (64 mm). Ensure that the base coat between the old and the new is flat and seated approximately 1/16 in (1.6 mm) below the surface of the existing finish coat. Allowing a 1/16 in (1.6 mm) recess is necessary so the finish coat, when applied, will become overall flush with the existing finish coat. Allow to fully dry.
7. Precisely mask off the existing finish. Apply new finish and blend new texture into existing texture.

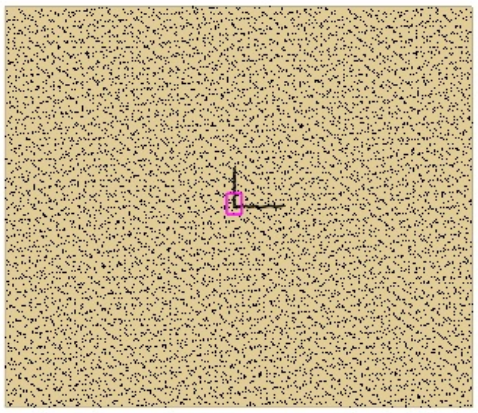
NOTE: Environmental conditions, dirt and exposure will alter the existing color slightly. A final coating of Weathercoat™ is recommended on the total wall surface to ensure color uniformity between patched areas and existing finish coat. If patched areas are acceptable or Weathercoat not specified, then color matching the existing finish coat is recommended.

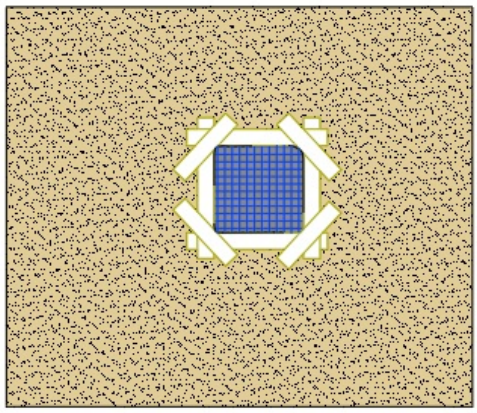
Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

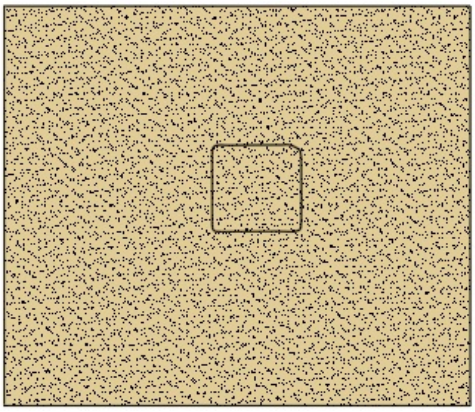
ALTERNATIVE REPAIR METHOD (Using Noncementitious Base Coat)

To avoid the grinding procedure outlined in #4 and avoid a visible patch, complete #5 and:

1. Ensure that the existing finish coat is clean, dry and firmly bonded to the base coat.
2. Apply NCB™ in conjunction with reinforcing mesh, onto newly installed insulation board and overlap onto existing finish coat a minimum of 2 1/2 in (64 mm). **Only a noncementitious base coat can be used with this procedure**. Allow patch locations to completely dry.
3. NCB is not recommended for applications on surfaces that will receive sealant. Any of Dryvit's cementitious base coats may be used in those locations.
4. Apply a tight coat of Freestyle® finish or NCB over existing texture and blend in patch locations with skim coat. The wall will need to be skimmed and refinished to a natural break. Allow to fully dry.
5. Apply new finish coat and texture to match existing.







Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair –Cracks at Corners of Doors, Windows, Air Conditioners, Etc. DC007

General:

Cracks can sometimes occur as a result of structural movement, water penetration or improper application. Repair involves removal and replacement of materials in the affected area. Before proceeding, the exact cause of the cracks should be determined.

Procedure:

1. Using a sharp utility knife, hand or circular saw with a carborundum blade, cut into EIFS down to substrate approximately 6 in (152 mm) along jamb and sill or jamb and head depending on crack location. These cuts should be long enough to totally remove the cracked area. Make vertical and horizontal cuts so that a square piece of EPS is removed.
2. With a margin trowel or similar tool, carefully remove the section in one piece.
3. Verify that the substrate is undamaged and structurally sound.
4. Grind off finish minimum 3 in (76 mm) on each side of the cut out section to expose the existing base coat layer. **Do not cut into reinforcing mesh with grinder**. The edges of the finish should be sharp, clean and non-tapered from the finish down to the base coat layer.
5. Attach pieces of Detail Mesh® to the substrate for EPS edge wrap.
6. Install a new continuous “L” shaped piece of insulation board tight against the existing EIFS. Attach the new EPS to the substrate using the appropriate adhesive or fasteners. Sliver all gaps to ensure overall tightness and hold EPS back minimum 3/4 in (19 mm) from frame to allow for proper sealant joint application.
7. Mask off the existing finish coat. Install a 9 in x 12 in (229 mm x 300 mm) piece of Detail Mesh embedded in base coat at a 45-degree angle. Apply base coat and Standard mesh overlapping onto existing exposed base coat layer approximately 2 1/2 in (64 mm). Ensure that the base coat between the old and the new is flat and seated approximately 1/16 in (1.6 mm) below the surface of the existing finish coat. Allowing a 1/16 in (1.6 mm) recess is necessary so the finish coat, when applied, will become overall flush with the existing finish coat. Allow to fully dry.
8. Precisely mask off the existing finish. Apply new finish and blend new texture into existing texture.

NOTE: Environmental conditions, dirt and exposure will alter the existing color slightly. A final coating of Weathercoat™ is recommended on the total wall surface to ensure color uniformity between patched areas and existing finish coat. If patched areas are acceptable or Weathercoat not specified, then color matching the existing finish coat is recommended.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

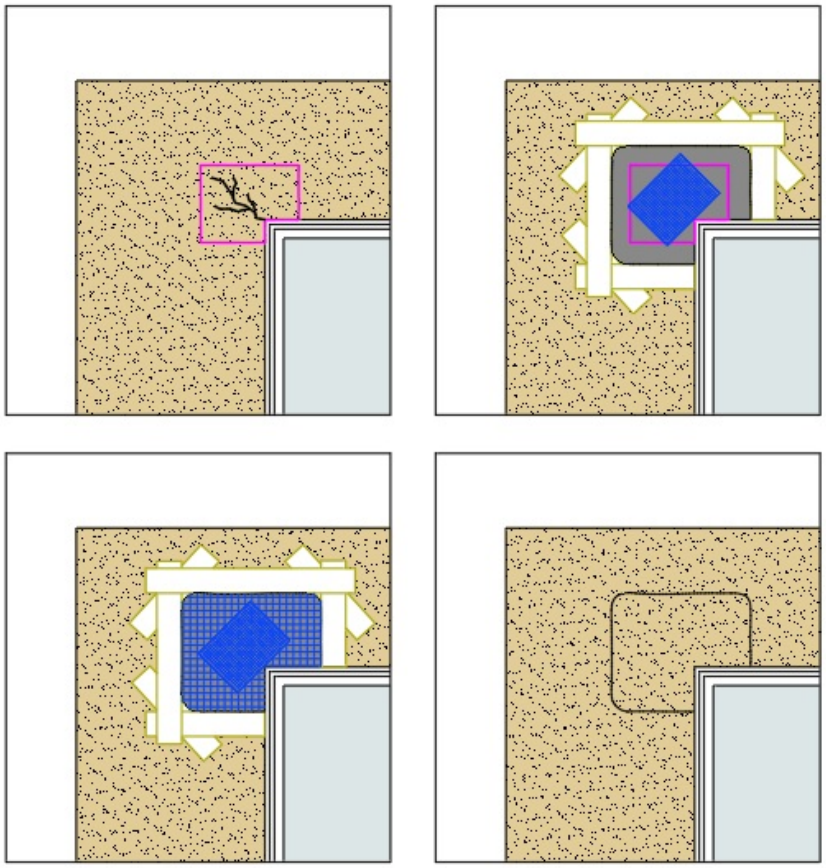
EIFS Repair –Cracks at Corners of Doors, Windows, Air Conditioners, Etc. DC007

ALTERNATIVE REPAIR METHOD (Using Non-Cementitious Base Coat)

NOTE: This procedure does not apply when sealant joint repair is involved.

To avoid the grinding procedure outlined in #4 and avoid a visible patch, complete #5 and #6 and:

1. Ensure that the existing finish coat is clean, dry and firmly bonded to the base coat.
2. Apply NCB™; in conjunction with reinforcing mesh, onto newly installed insulation board and overlap onto existing finish coat a minimum of 2 1/2 in (64 mm). **Only a non-cementitious base coat can be used with this procedure**. Allow patch locations to completely dry.
3. NCB is not recommended for applications on surfaces that will receive sealant. Any of Dryvit's cementitious base coats may be used in those locations.
4. Apply a tight coat of Freestyle finish or NCB over existing finish texture and blend in patch locations with skim coat. The wall will need to be skimmed and refinished to a natural break. Allow to fully dry.
5. Apply new finish coat and texture to match existing.



Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair – Floor Line Location in Wood Frame Construction DC008

General:

Delamination bulges or cracks at or near the floor line in wood frame construction are generally caused by cross grain shrinkage in dimensional lumber. Structural or other movement not attributable to cross grain shrinkage can also cause floor line cracking. Repair generally involves removal and replacement of materials. If structural movement is expected to be present, an expansion joint should be incorporated.

Procedure:

1. Cut into the EIFS horizontally a minimum 3 in (76 mm) above and below the floor line down to the substrate using a circular saw with a carborundum blade. Remove the cut area.
2. Grind off the existing finish approximately 3 in (76 mm) minimum on each side of the cut out section to expose the existing base coat layer. **Do not cut into the reinforcing mesh with the grinder.** The edge of the finish should be sharp, clean, and non-tapered.
3. Examine the substrate at the floor line. If an expansion gap exists, continue with step 4. If the substrate is not gapped, go to step 5 for repair without a gap in the EIFS.
4. Using appropriate adhesive or fasteners, install new insulation board to the substrate tight against the existing EPS. Ensure overall tightness at the cut line and sliver, if necessary. A minimum 3/4 in (19 mm) space should be maintained between the top and bottom EPS at the floor line. EPS edges at the 3/4 in (19 mm) gap must be wrapped with Detail Mesh® embedded in base coat. You can either install two pieces of Detail Mesh horizontally and install insulation board on top, or install pre-wrapped pieces of insulation board and add pieces of Detail Mesh where the individual pieces abut.
5. Cut insulation board to fit tightly into the repair area. Sand the edges of the insulation board for a precise fit. Attach the insulation board to the substrate using the appropriate adhesive or fasteners. Make sure that the face of the new insulation board is flush with the existing insulation board.
6. Mask off the existing finish. Apply base coat and mesh on the face of new insulation board and overlap on existing exposed base coat layer approximately 2 1/2 in (64 mm). Ensure that the newly applied base coat that overlaps the existing is flat and is seated approximately 1/16 in (1.6 mm) below the surface of the existing finish coat. Allowing a 1/16 in (1.6 mm) inches recess is necessary so the finish, when applied, will become overall flush with the existing finish. Allow to fully dry.
7. Precisely mask off the existing finish. Apply new finish and blend new texture into existing texture. **DO NOT APPLY TEXTURED FINISH ONTO RETURN**. Apply Weathercoat™ or Weatherprime® to the return edges of base coat that will receive sealant.
8. Install closed cell backer rod, sealant primer, and Dryvit compatible sealant in accordance with manufacturer's instructions.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair – Terminations at Sealants Joints DC009

General:

This procedure involves correcting and preparing the EIFS surface for installation of new sealant.

Procedure:

1. Using an appropriate tool, cut the sealant as close as possible to the EIFS surface without damaging it.
2. You should be able to grasp the sealant and backer rod in one hand and with constant tension, slice the sealant away from the EIFS.
3. Remove any remaining sealant (wire brushing or grinding may be necessary) and inspect EIFS surface.
4. Surfaces should be clean and sound with reinforcing mesh embedded in the base coat. It is recommended that any existing textured finish be removed from areas to receive sealant.
5. Improperly embedded reinforcing mesh should be skimmed with the base coat, to achieve proper coverage. Broken or damaged mesh can be repaired by addition of new mesh, properly embedded in base coat and lapped a minimum 2 1/2 in (64 mm) over the existing adjacent base coat.
6. Apply Weatherprime® or Weathercoat® along EIFS edge to receive sealant and allow to dry for a minimum of 72 hours.
7. Install closed cell backer rod, EIFS compatible primer, and sealant following manufacturer's specifications.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair – Overlay Sealant Joints using Sealant DC009A

General:

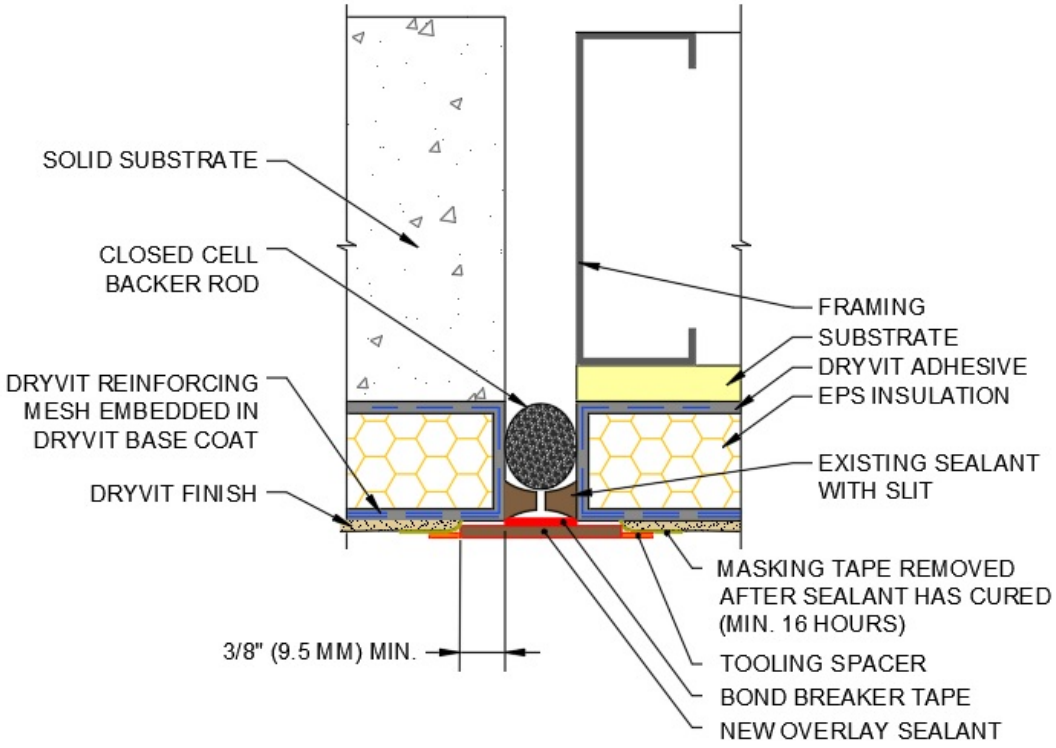
This procedure involves correcting and preparing the EIFS surface and installation of new sealant (overlay sealant joint) over existing sealant joints.

Procedure:

1. Using an appropriate tool, cut the existing sealant down the middle to the backer rod without damaging it.
2. Grind back and remove a minimum of 3/8 in (9.5 mm) of EIFS existing textured finish along both sides of joint to expose the base coat. Clean any dust/debris from EIFS surface areas about to receive sealant.
3. Provide a means of protecting the existing EIFS textured finish beyond the exposed base coat for the overlay joint. Install overlay sealant gauge minimum of 1/4 in (6.4 mm) thickness extending out to both sides of sealant joint. Masking tape and thickness gauges may be used to achieve the proper sealant depth if necessary.
4. Apply a bond breaker tape over the existing sealant joint.
5. Apply Weatherprime® or Weathercoat™ along EIFS base coat surface to receive sealant and allow to dry for a minimum of 72 hours.
6. Apply sealant primer and sealant per product specification (See DS153). Tool sealant as necessary to obtain a uniform flat strip over old joint and onto each side of joint a minimum of 3/8 in (9.5 mm). Sealant depth after tooling should be a minimum of 1/4 in (6.4 mm) thick and a maximum depth of 3/8 in (9.5 mm). Allow sealant to tack up prior to removal of thickness gauges and masking tape if used.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair – Overlay Sealant Joints using Sealant DC009A



Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair – Adding Expansion Joints Around Windows DC010

General:

Dryvit Systems, Inc. recommends an expansion joint of a minimum of 19 mm (3/4 in) be left between the EIF system and penetrations to the system such as windows and doors. A sealant joint accommodates differential movement between dissimilar materials while maintaining a weather seal.

Depending on the actual geometry of abutting materials, various options are available to provide a proper weather seal including rectangular, fillet, etc. Rectangular joints with sealant and backer rod provide optimal contour and the most movement capability. This procedure describes a method for cutting back the EIFS to allow installation of a rectangular joint. Angle beads with bond breaker tape or triangular backer rod allow for some movement but are primarily intended to function as weather seals in joints with minimal movement.

Procedure:

1. Cut into the EIFS a minimum 6 in (152 mm) away from the perimeter of the window frame down to the substrate and remove the cut area.
2. Grind off existing finish coat to expose the existing base coat layer approximately 3 in (76 mm) minimum from the cut edge. **Do not cut into the reinforcing mesh with the grinder**. To maintain a constant minimum overlap of 2 1/2 in (64 mm), cutting into the mesh forces you to extend the grinding further out. The edges of the finish should be sharp, clean, and non-tapered from the finish down to the base coat layer.
3. Reinstall new insulation board tight against the existing EPS with the appropriate adhesive or fasteners. Ensure overall tightness at the cut line by sanding the EPS edges for a precise fit and sliver if necessary. A 3/4 in (19 mm) minimum width space should be maintained between the newly installed EPS and the window frame. EPS edges at the 3/4 in (19 mm) gap must be wrapped with Detail Mesh® embedded in base coat. You can either install a piece of Detail Mesh first and install insulation board on top, or install pre-wrapped pieces of insulation board and add pieces of Detail Mesh where the individual pieces abut.
4. NCB is not recommended for applications on surfaces that will receive sealant. Any of Dryvit's cementitious base coats may be used in those locations.
5. Mask off the existing finish coat. Apply base coat and mesh on the face of new insulation board and overlap on existing exposed base coat layer approximately 2 1/2 in (64 mm). Ensure that the newly applied base coat that overlaps the existing is flat and is seated approximately 1/16 in (1.6 mm) below the surface of the existing finish coat. Allowing a 1/16 in (1.6 mm) recess is necessary so the finish coat, when applied, will become overall flush with the existing finish coat. Allow to fully dry. **DO NOT APPLY TEXTURED FINISH ONTO RETURN.** Apply Weathercoat™ or Weatherprime® to the return edges of base coat that will receive sealant.
6. Precisely mask off the existing texture. Apply new finish coat and blend new texture into existing texture.

NOTE: Environmental conditions, dirt and exposure will alter the existing color slightly. A final coating of Weathercoat is recommended on the total wall surface to ensure color uniformity between patched areas and existing finish coat. If patched areas are acceptable, or Weathercoat not specified, then color matching the existing finish coat is recommended.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair – EIFS System Installed Tight to Shingles DC011

General:

This procedure describes the method for obtaining the required minimum 2 in (51 mm) clearance of the EIFS termination to roof assembly, when it has been installed tight to the shingles and not properly back wrapped. Dryvit recommends that the system be held up from the shingles by a minimum of 2 in (51 mm) to allow repairs to the roof without damage occurring to the system (See Figure 1).

Procedure:

1. Cut into the EIFS a minimum 6 in (152 mm) above the roofline, using a circular saw with a carborundum blade. The blade should be set to a depth that is slightly less than the combined thickness of the lamina and EPS to avoid damaging underlying materials. Remove cut area. (See Figure 2). **NOTE: Allow for a minimum of 2 in (51 mm) clearance between the EIFS termination and the roof assembly.**
2. Verify adequacy of existing flashing and correct as necessary. Ensure appropriate overlap of EIFS onto flashing is maintained.
3. Grind off existing finish coat approximately 3 in (76 mm) minimum above the cut out section to expose the existing base coat layer. **Do not cut into the reinforcing mesh with the grinder**. Accidentally cutting into the reinforcing mesh while grinding the finish off will make a small patch become larger. As you are trying to maintain a constant minimum overlap of 2 1/2 in (64 mm), cutting into the mesh forces you to extend the grinding outward further. The edges of the finish should be sharp, clean, and non-tapered from the finish down to the base layer.
4. Install a piece of Detail Mesh® parallel to the roof first and install insulation board on top. Install new insulation board tight against the existing with the appropriate adhesive or fasteners. Sliver all gaps to ensure overall tightness. A minimum 2 in (51 mm) space should be maintained between roof and the new insulation. All insulation board must be properly back wrapped. You can either install a piece of Detail Mesh parallel to the roof first and install insulation board on top, or install pre-wrapped pieces of insulation board and add pieces of Detail Mesh where the individual pieces butt. (See Figure 3).
5. Mask off the existing finish coat. Apply base coat and mesh on new insulation board and overlap on existing exposed base coat layer approximately 2 1/2 in (64 mm). Ensure that the base coat between the old and the new is flat and is seated approximately 1/16 in (1.6 mm) below the surface of the finish coat. Allowing a 1/16 in (1.6 mm) recess is necessary so the finish coat, when applied, will become overall flush with the existing finish coat. Allow to fully dry.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

6. Precisely mask off the existing texture. Apply new finish coat and blend new texture into existing texture.

NOTE: Environmental conditions, dirt and exposure will alter the existing color slightly. A final coating of Weathercoat is recommended on the total wall surface to ensure color uniformity between patched areas and existing finish coat. If patched areas are acceptable, or Weathercoat not specified, then color matching the existing finish coat is recommended.

ALTERNATIVE REPAIR METHOD (Using Noncementitious Base Coat)

To avoid the grinding procedure outlined in #3 and avoid a visible patch, complete #4 and:

1. Ensure that the existing finish coat is clean, dry and firmly bonded to the base coat.
2. Apply NCB; in conjunction with reinforcing mesh, onto newly installed insulation board and overlap onto existing finish coat a minimum of 2 in (51 mm). **Only a noncementitious base coat can be used with this procedure**. Allow patch locations to completely dry.
3. NCB is not recommended for applications on surfaces that will receive sealant. Any of Dryvit's cementitious base coats may be used in those locations.
4. Apply a tight coat of Freestyle finish or NCB over existing texture and blend in patch locations with skim coat. The wall will need to be skimmed and refinished to a natural break. Allow to fully dry.
5. Apply new finish coat and texture to match existing.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair – EIFS System Installed Tight to Shingles DC011

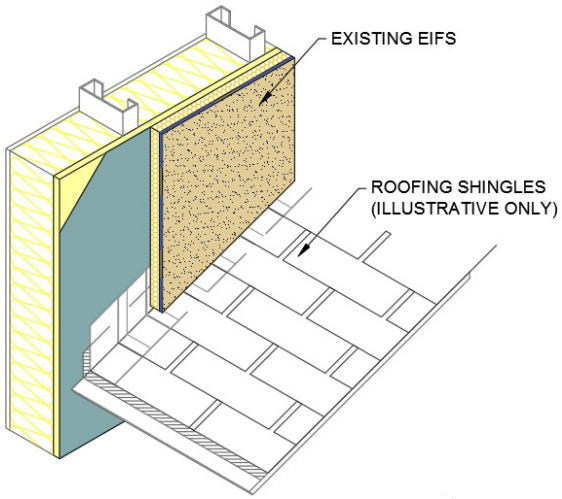


Figure 1

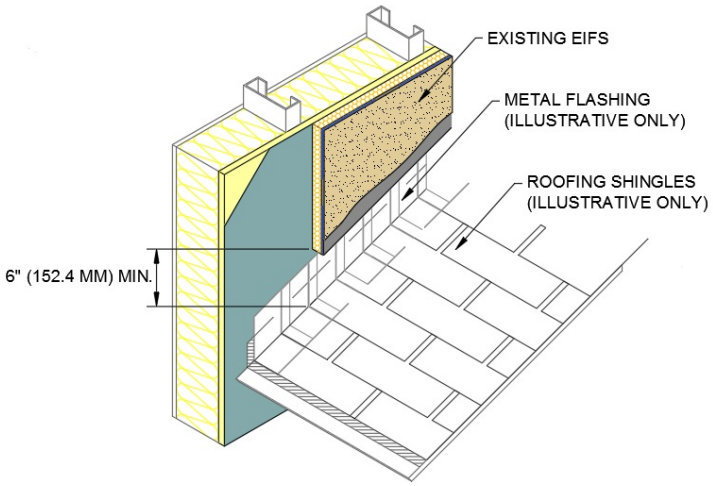


Figure 2

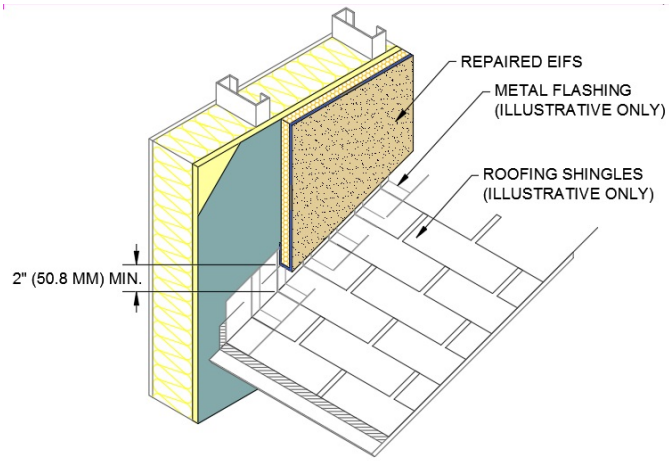


Figure 3

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair – Reattachment of EIFS DC012

General:

This procedure describes a method to reattach an EIFS cladding that may have become separated from the underlying substrate. This can occur when substrates are not properly prepared or have otherwise become compromised during the service life of the building.

Repair involves adding mechanical fasteners to anchor the EIFS back to the substrate and refinishing the affected areas. The fastening schedule will need to resist structural loads (i.e. wind) and has to be properly evaluated for the specific building. The contractor should verify that the proposed fastening method and schedule meets specific building and local code requirements. It may be necessary to engage an engineer familiar with local requirements.

Procedure:

1. Thoroughly evaluate existing conditions to ensure the complete extent of the problem is known and causes determined and properly addressed prior to proceeding with reattachment. This procedure should only be used when it is determined that the EIFS and underlying materials are sound and in serviceable condition. Extensive cracking, delamination or other severe condition may indicate a different solution.
2. The fasteners must be installed into a structural substrate. When the sheathing is gypsum, cement board or other non nail-base material, the fasteners must be installed into the underlying framing. In this case the first step is to locate and mark the location of the framing members.
3. Using Wind Devil plates (Wind-lock Corp.) with a fastener of appropriate length and type for the substrate, reattach the existing EIF system at a minimum pattern of 16 in x 16 in (406 mm x 406 mm). This may need to be adjusted depending on design wind loads as well as whether the wall surface lays flat. If fasteners are spaced too far apart, some “pillowing” may be visible between attachment points. Power driven fasteners are also available.
4. Install the fasteners so that the washer surface is slightly below the plane of the finish surface but not more than 1/16 (1.6 mm).
5. Over each fastener, embed a piece of Detail Mesh® minimum 9 in x 9 in (229 mm x 229 mm) in NCB™ base coat material and feather out edges onto surrounding surface. Allow the material to fully dry (minimum 24 hours).

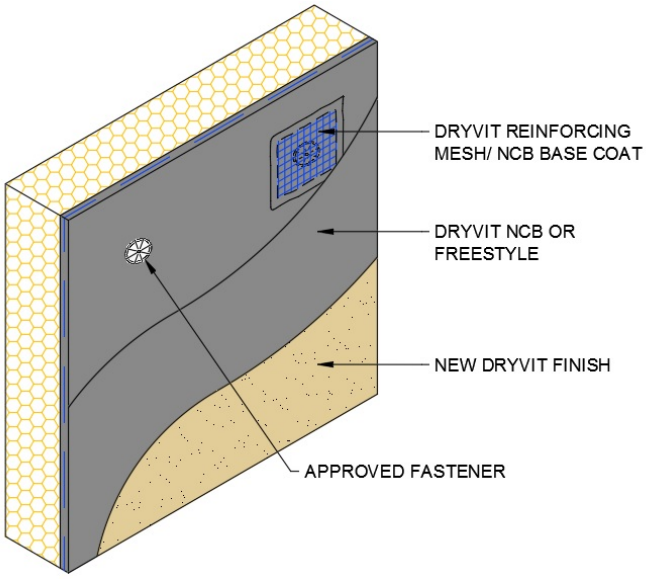
Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

6. Apply a tight coat of Freestyle® finish or NCB over the entire wall surface to a natural break (corner, reveal, sealant joint, etc.). This application fills in the existing texture to provide a flat, smooth surface for application of new finish. The skim coat should only be applied at the minimum thickness required to fill the texture. Excessively thick layers may result in poor curing and potential blistering.

NOTE: Cementitious materials are not recommended for skimming over existing acrylic finishes. Dryvit recommends that only NCB or Freestyle products be used.

7. Allow material to fully dry and inspect the surface for any imperfections that may show through the finish (such as dimpling at fasteners heads, trowel marks, etc.) and correct as needed.
8. Apply new finish to match surrounding areas as specified. If adjacent colors and texture need to be matched, it is recommended that samples of the existing material be submitted to get the best possible match.
9. This procedure should yield a wall surface without any visible repair patches.
10. For some finely textured finishes such as Sandblast® and Sandpebble® Fine, it may be possible to apply new finish directly over the existing finish without skimming, however, trial areas should be applied to verify acceptability.
11. Colored aggregated finishes such as Stone Mist® and Ameristone™ can be over sprayed with additional material without re-skimming, after the patch areas are properly primed.

NOTE: Exact matches to existing finishes on adjacent wall areas are not always possible because of the effects of weathering and texture variations. Repairs should always be extended to a natural break to minimize this effect.



Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair – Correcting Finish Textures Irregularities DC013

General:

Undesirable texture inconsistencies in the EIFS finish can result from a variety of conditions including use of different tools, mechanic or floating technique, weather conditions, substrate conditions, scaffold lines, etc. Although applying a colored coating, Weathercoat™, will help correct color variations, it will not hide texture variations. To completely hide unwanted texture variations, it is generally best to skim the surface to fill in the existing texture and reapply the textured finish to a natural break.

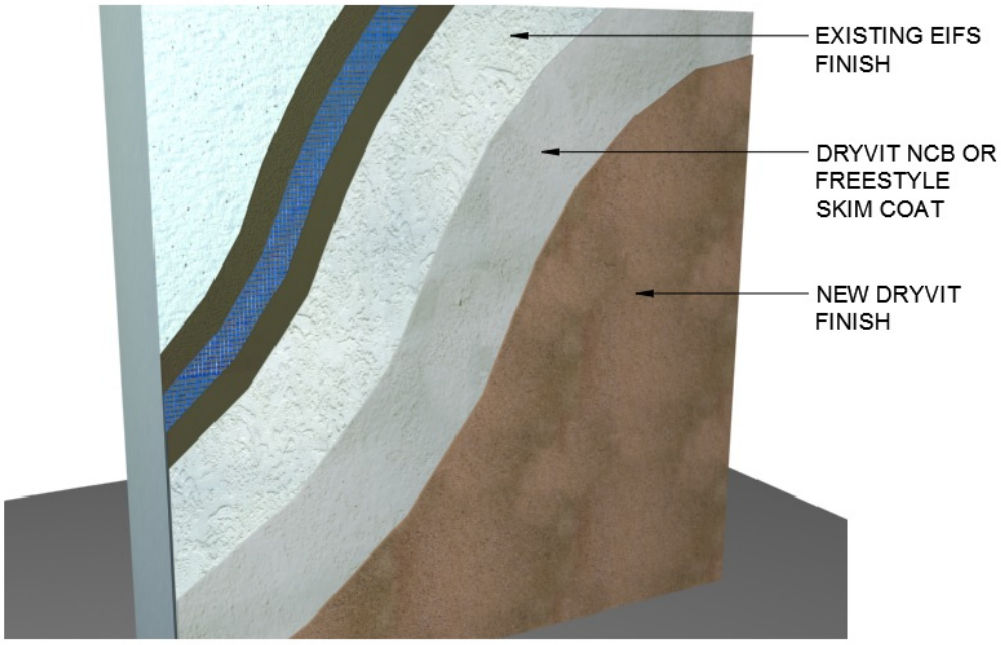
Procedure:

1. Clean the existing surface to remove any dirt, mold, mildew, or other contaminants that may interfere with adhesion of a coating. Use an appropriate cleaner in accordance with DryvitCARE published cleaning procedures (DC#001) for EIFS surfaces.
2. Inspect the wall surface and perform any needed repairs (cracks, sealant repair, damage, etc.).
3. Apply a tight coat of Freestyle® finish or NCB™ over the entire wall surface to a natural break (corner, reveal, sealant joint, etc.). This application fills in the existing texture to provide a flat, smooth surface for application of new finish. The skim coat should only be applied at the minimum thickness required to fill the texture. Excessively thick layers may result in poor curing and potential blistering. **NOTE: Cementitious materials are not recommended for skimming over existing acrylic finishes. Dryvit recommends that only NCB or Freestyle products be used.**
4. Allow material to fully dry and inspect the surface for any imperfections that may show through the finish (such as dimpling at fastener heads, trowel marks, etc.) and correct as needed.
5. Apply new finish to match surrounding areas as specified. If adjacent colors and texture need to be matched, it is recommended that samples of the existing material be submitted to get the best possible match.
6. For some finely texture finishes such as Sandblast® and Sandpebble® Fine, it may be possible to apply new finish directly over the existing finish without skimming. Trial areas should be applied to verify acceptability.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

7. Although it may be sometimes possible to overspray colored aggregated finishes such as, Stone Mist® and Ameristone™ without re-skimming, a trial area should always be applied to verify acceptability. If necessary, the existing surface may be skimmed with a tight coat of Freestyle or NCB.

NOTE: Exact matches to existing finishes on adjacent wall areas are not always possible because of the effects of weathering to color and texture. Repairs should always be extended to a natural break to minimize this effect.



Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair – Frozen and Delaminating Finish DC014

General:

Localized spalling, blistering or delamination of finish can occur for a number of reasons including application outside recommended procedures, improper curing or inadequate substrate preparation. Repair involves removal of damaged materials and application of new finish.

Procedure:

1. Using a power washer, remove the existing finish to expose the base coat layer. You may encounter areas of finish that may be difficult to remove. These areas should be thoroughly saturated with hot water until soft and then scrape away finish with margin trowel or similar tool.
2. Examine the exposed areas of base coat for damage such as holes, breaks, excessive mesh pattern, etc. and repair per Dryvit's recommended repair procedure for penetration-type damage.
3. If efflorescence is present on the base coat it must be removed. To remove efflorescence, use an appropriate cleaner in accordance with DryvitCARE published cleaning procedures (DC#001) for EIFS surfaces.
4. If the repair extends onto existing finish the wall may need to be skimmed with NCB™ or Freestyle® to a natural break. This provides a smooth level surface for the application of finish.
5. Apply new finish and texture to match existing finish.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

EIFS Repair – Hot Knife Procedure DC015

General:

This procedure describes a method to provide the required edge wrap for the EPS when repairing a system termination in an existing EIFS wall. By not disturbing the surrounding base coat and finish, a visible patch is avoided. This simplifies patching/repairs by eliminating the task of removing the original finish from the area surrounding the patch and thus avoiding texture variations on the face of the wall that may be objectionable. This procedure may also be used for repairing holes or installing/repairing expansion joints in EIFS.

A certain amount of care and judgment is necessary with this method and may not be appropriate for all situations and personnel. **Caution: Minor cracking may occur at corners when the hot knife procedure is used at penetrations.**

Procedure:

1. Precisely mark the area to be removed. All lines should be straight and true.
2. Using a circular saw with a carborundum blade precisely cut along the marked lines through the lamina and EPS. Use a straightedge as a guide to maintain neat, straight and true cuts.
3. Remove the lamina and insulation board taking care not to damage the substrate.
4. Insert the hot knife blade just behind the lamina and carefully melt out a cavity in the insulation board approximately 3 in (76 mm) deep by 1/8 in - 3/16 in (3.2 mm - 4.8 mm) wide for placing the base coat and reinforcing mesh behind the original lamina. (See Figure 1)

NOTE: Take care not to disturb the flat plane of the existing lamina, as this may result in a bulge in the final repair.

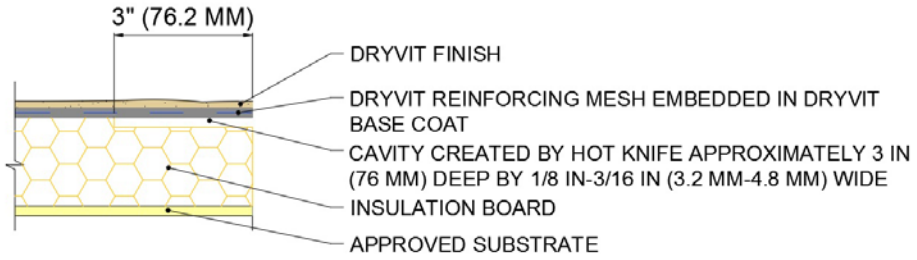


Figure 1

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

5. When repairing an opening in an existing wall or repairing an expansion joint, cut a piece of reinforcing mesh of sufficient size to ensure a 2 1/2 in (64 mm) minimum lap behind the original lamina and returning onto the edge of the insulation board and substrate. When repairing holes, cut a piece of reinforcing mesh of sufficient size to ensure a 2 1/2 in (64 mm) minimum lap behind the original lamina and onto the face of the insulation board in the patch surface.
6. For patches, cut a piece of insulation board and sand to fit as tight as possible into the opening. Apply adhesive to the back of the insulation board. Place it into the opening so that the surface is flush and level with the surface of the surrounding insulation board. Install EPS slivers as required to fill any gaps.

NOTE: Do <u>not</u> apply adhesive on the edges of the insulation board.
Procedure:

7. Precisely mask the surrounding finish to protect it from damage. For best results, ensure that the masking tape precisely follows the cut edge of the remaining lamina.
8. Use a margin trowel or similar tool to work a sufficient amount of base coat into the void created by the hot knife to allow full reinforcing mesh embedment.
9. NCB is not recommended for applications on surfaces that will receive sealant. Any of Dryvit's cementitious base coats may be used in those locations.
10. Carefully insert one edge of reinforcing mesh into the void and embed into the base coat.
11. Repeat the above steps for the remaining sides of the patch, opening or expansion joint. Ensure that the existing basecoat is pressed flat around the perimeter of the patch so that it is flat and level with the surrounding surface.
12. Fully embed the reinforcing mesh into the base coat on the remainder of the patch, leaving the surface smooth and free of trowel marks or rough areas.
13. Allow the base coat to completely cure, usually a minimum of 24 hours.
14. Check to ensure masking is in place and that it will protect the surrounding finish coat.

NOTE: Base coat surfaces that will receive sealant should be coated with either Weatherprime® or Weathercoat™ prior to sealant application. For patches in visible areas, the final finish should be color matched to the surrounding finish.

Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

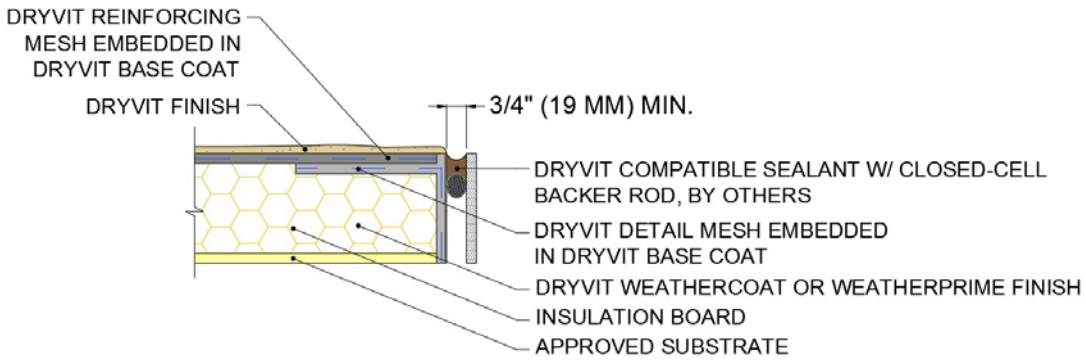


Figure 2

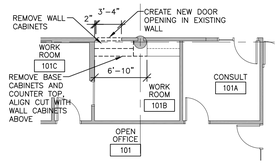
15. Apply the finish coat to the face of the patch. Do not apply textured finish over the base coat in areas where sealant/caulking will be installed; refer to DS153.

16. While the finish is still wet, remove the masking tape and feather the edges of the patch so they will blend with the surrounding area. Use a brush, nail, toothpick or similar tool to blend in the edges of the patch, and match the texture with the surrounding area. Proper execution of this step is critical to the success of the patch.
17. A slight color variation **will** exist after the patch has dried. This should become less noticeable over time as environmental conditions take control.

For more information on Dryvit Systems or Continuous Insulation, visit these links.

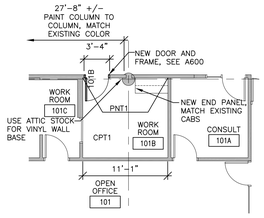
Dryvit Systems, Inc.
One Energy Way
West Warwick, RI 02893 USA
1-888-275-3629
401-822-4100
www.dryvit.com

Issued: 02-15-17



1 WORK ROOM REMOVAL PLAN
1/8" = 1'-0"

NORTH



3 WORK ROOM REMODEL PLAN
1/8" = 1'-0"

NORTH

ALL WORK THIS SHEET IS AN AN ALTERNATE BID.

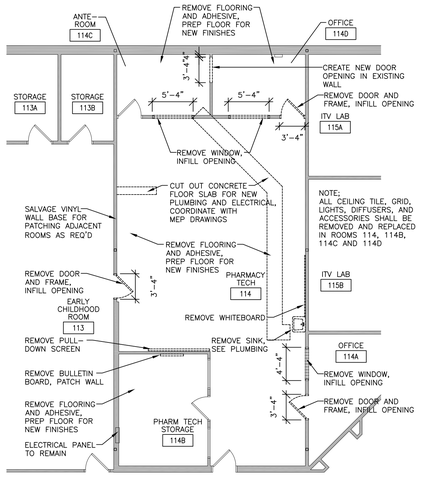
ALL DETAILS HAVE BEEN REVISED.

INTERIOR MATERIAL LEGEND

PNT1	STANDARD PAINT SHERWIN WILLIAMS MACADAMIA SW6142
VWB1	STANDARD WALL BASE MANNINGTON EDGE TYPE TV TOFFEE 921
CPT1	CARPET TILE J&J FLOORING FLYING TRAPEZE DAREDEVIL 390
LVT1	RESILIENT FLOORING ARMSTRONG PARALLEL, PATINA
PLAM1	ALL CABINETRY WILSONART CANYON ZEPHYR 4842-60
PLAM3	ALL COUNTERTOPS WILSONART GRAPHITE NEBULA 4623-60

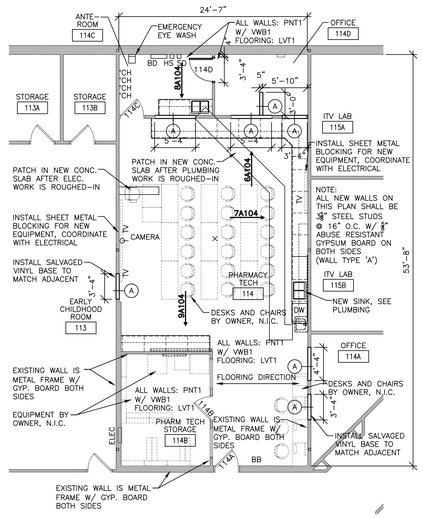
ACCESSORY SCHEDULE

ABBREVIATION	ITEM	MOUNTING HEIGHT UNO
BB	BULLETIN BOARD	CONFIRM W/ OWNER
BD	BULK DISPENSER	BOT. @ 3'-6" A.F.F.
HS	HAND SANITIZER DISPNSER	BOT. @ 3'-6" A.F.F.
LSD	LIQUID SOAP DISPENSER	BOT. @ 3'-6" A.F.F.
PTD	PAPER TOWEL DISPENSER	BOT. @ 3'-6" A.F.F.
SD	SHARPS DISPOSAL	TOP @ 4'-6" A.F.F.
TV	TELEVISION/MONITOR	CONFIRM W/ OWNER



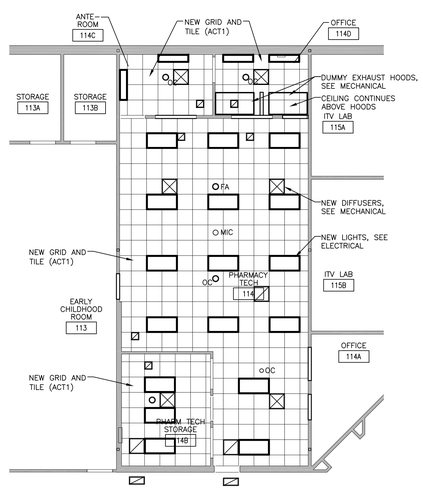
2 PHARMACY TECH. REMOVAL PLAN
1/8" = 1'-0"

NORTH



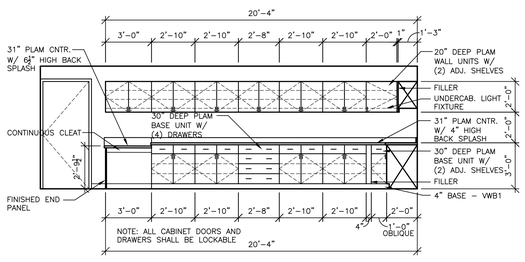
4 PHARMACY TECH. REMODEL PLAN
1/8" = 1'-0"

NORTH

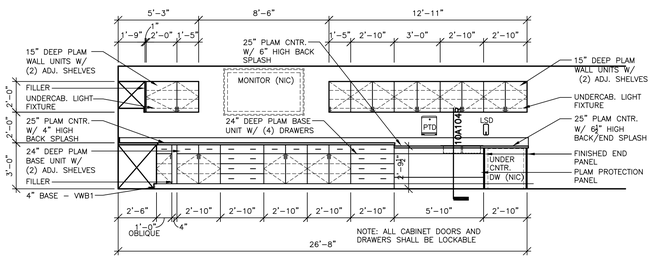


5 PHARMACY TECH. RC PLAN
1/8" = 1'-0"

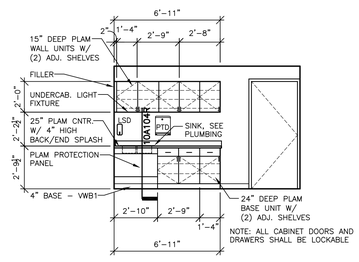
NORTH



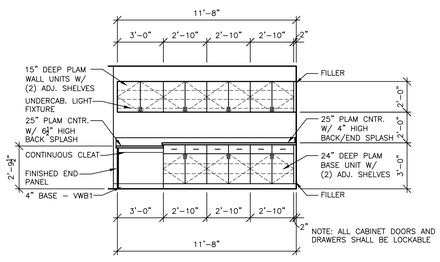
6 CASEWORK ELEVATION
1/4" = 1'-0"



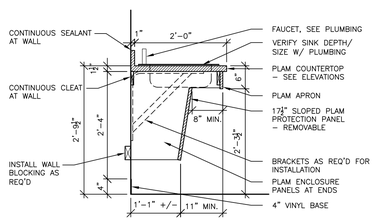
7 CASEWORK ELEVATION
1/4" = 1'-0"



8 CASEWORK ELEVATION
1/4" = 1'-0"



9 CASEWORK ELEVATION
1/4" = 1'-0"



10 CASEWORK SINK SECTION
3/4" = 1'-0"

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
WEB SITE: www.hsrassociates.com

Consultant:

Project Title: **WITC - SUPERIOR CAMPUS**
SUPERIOR INTERIOR AND EXTERIOR
MAINTENANCE & REMODEL

Project Location: **600 N. 21st Street**
Superior, Wisconsin 54880

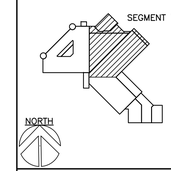
Sheet Title: **WORK ROOM & PHARMACY TECH PLANS AND DETAILS**

HSR Project Number: **17063-1**

Project Date: **MARCH 2018**

Drawn By: **M.ZETTLER**

Key Plan:



Revisions:

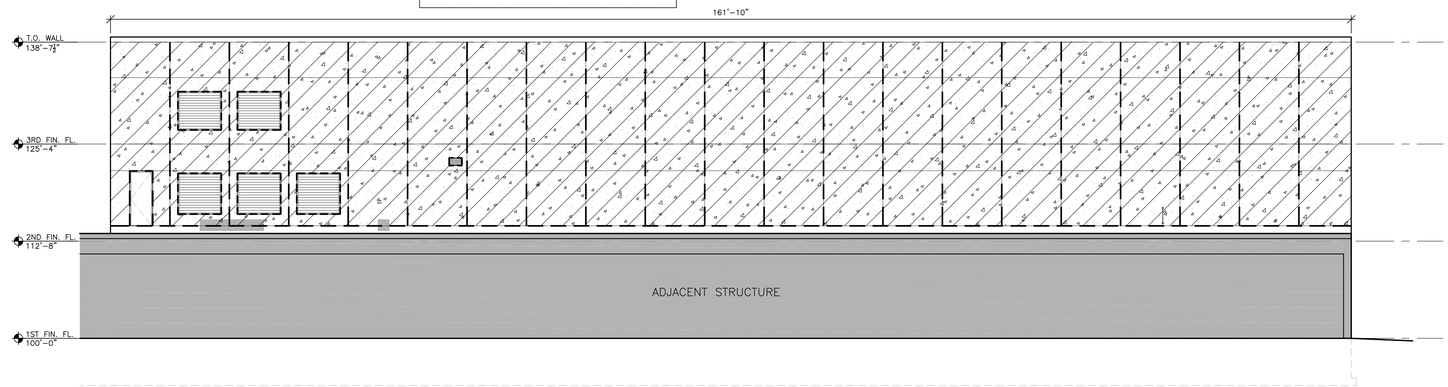
No.	Description	Date
A1	ADDENDUM 1	03-27-18

Graphic Scale: **VARIES**

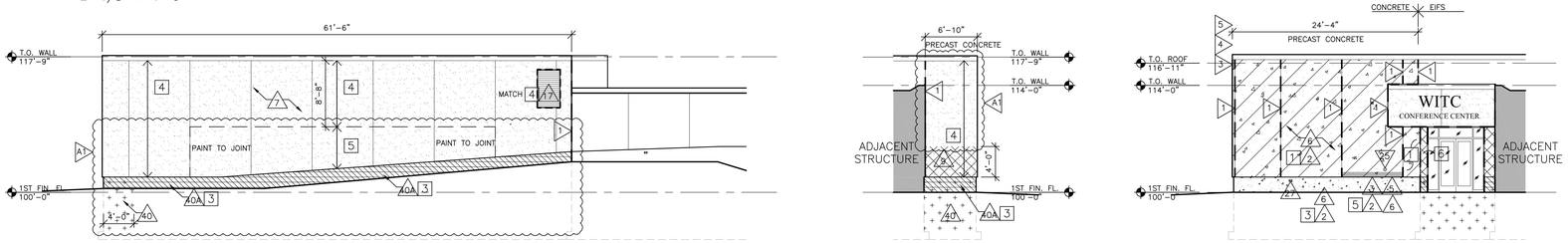
Last Update: **03/27/2018**

A104R

NO WORK THIS ELEVATION



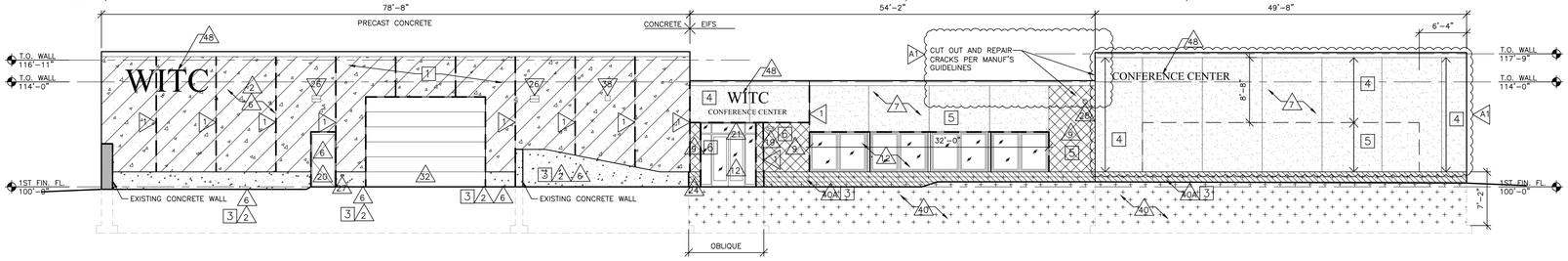
1 MAIN EAST ELEVATION
1/8" = 1'-0"



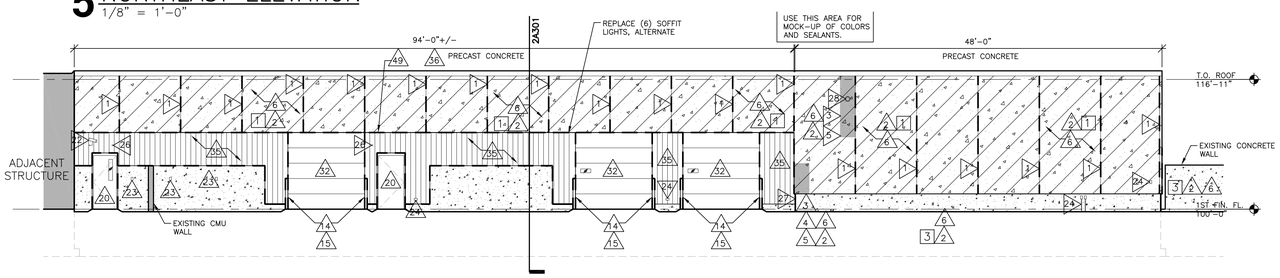
2 NORTHWEST CONFERENCE ELEVATION
1/8" = 1'-0"

3 SE CONF. ELEVATION
1/8" = 1'-0"

4 NW AUTO LAB ELEVATION
1/8" = 1'-0"

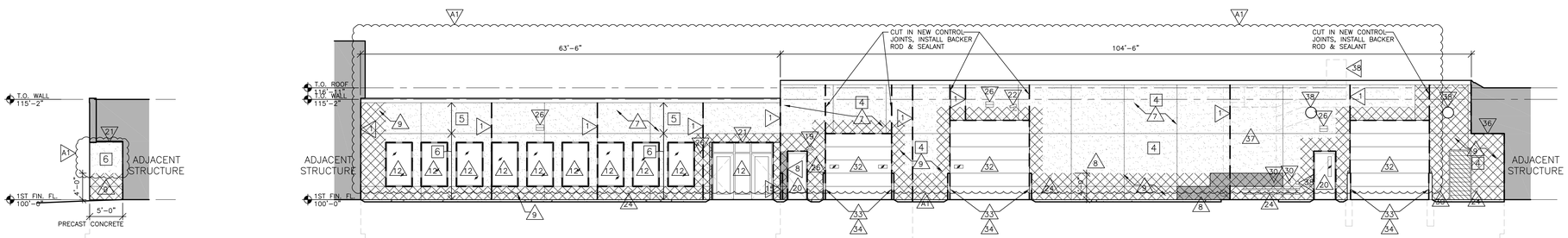


5 NORTHEAST ELEVATION
1/8" = 1'-0"



6 SOUTHEAST ELEVATION
1/8" = 1'-0"

7 SE TRADES ELEVATION
1/8" = 1'-0"



8 NW TRADES ELEVATION
1/8" = 1'-0"

9 NORTHEAST TRADES ELEVATION
1/8" = 1'-0"

MATERIAL LEGEND:

- CAST IN PLACE CONCRETE
- PRECAST CONCRETE PANEL
- CONCRETE MASONRY UNITS (SINGLE WYTHE CMU)
- EXTERIOR INSULATION FINISH SYSTEM (EIFS)
- METAL PANEL
- VISION GLASS
- REMOVE EXISTING BACKER ROD & SEALANT, PREP JOINT, INSTALL NEW BACKER ROD & SEALANT
- REMOVE DAMAGED/SPALLED CONCRETE, CLEAN SURFACE & REPAIR
- NEW CEMENTICIOUS PARGE COAT WITH DAMPROOFING
- REPAIR/REPLACE DAMAGED INSULATION ON EIFS
- NEW ABUSE RESISTANT MESH AND TOP COAT ON EIFS

COLOR LEGEND:

1	CONCRETE PAINT COLOR 1 MATCH COLOR 4	UMBER
2	CONCRETE PAINT COLOR 2 MATCH COLOR 5	LT. TAN
3	CONCRETE PAINT COLOR 3 MATCH COLOR 6	GREY
4	EIFS TOPCOAT COLOR 1	UMBER
5	EIFS TOPCOAT COLOR 2	LT. TAN
6	EIFS TOPCOAT COLOR 3	GREY

BUILDING ELEVATION GEN. NOTES:

A. FIELD VERIFY EXISTING CONDITIONS, BRING ANY DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS TO THE ARCHITECT'S ATTENTION.

B. REMOVE ALL BACKER ROD & SEALANT, REMOVE ALL DEBRIS & LOOSE SUBSTRATE, CLEAN & PREP ALL JOINTS FOR NEW BACK ROD & SEALANT.

C. REMOVE EXISTING WINDOWS PER A092, REMOVE ALL BACKER ROD & SEALANT, PAINT, LOOSE SUBSTRATE AND PREP JAMB TO RECEIVE NEW WINDOW FRAMES.

D. VERIFY SIZE/LOCATIONS OF ALL MECHANICAL, ELECTRICAL AND PLUMBING OPENINGS/PENETRATIONS. GENERAL CONTRACTOR TO SEAL PERIMETER OF OPENINGS W/ BACKER ROD & SEALANT.

E. GENERAL CONTRACTOR SHALL SEAL PERIMETER OF ALL LOUVERS ON FACADES RECEIVING WORK AND PAINT LOUVER.

F. GENERAL CONTRACTOR SHALL PROVIDE CONCRETE EQUIPMENT PADS/CURBS AS REQUIRED FOR MECHANICAL/ELECTRICAL EQUIPMENT, VERIFY SIZE/PROFILE/LOCATION WITH MECHANICAL & ELECTRICAL DRAWINGS.

G. GENERAL CONTRACTOR SHALL INSTALL COMPRESSIBLE FILLER AT ALL MASONRY WALL CONTROL/EXPANSION JOINTS AND SEAL BOTH SIDES. WALL REINFORCING TO BE DISCONTINUING AT JOINTS, TYPICAL.

H. REMOVE ALL VEGETATIVE GROWTH, MISC. ANCHORS, BOLTS, FASTENERS, FORMWORK, SIGN REMNANTS FROM THE EXTERIOR, PATCH MASONRY TO MATCH ADJACENT.

4A J. FEATHER THE TOP COAT ON ALL EIFS WHERE TRANSITIONS OCCUR BETWEEN MESH AND NON-MESH AREAS.

BUILDING ELEVATION KEY NOTES:

1> CUT OUT AND CLEAN SEALANT JOINT, PREP JOINT AND INSTALL NEW BACKER ROD & SEALANT, SEE SPECIFICATIONS. NOTE: JOINTS IN EIFS OR DIRECTLY ADJACENT SHALL BE COMPLETED UNDER SPEC SECTION 07 24 00. ALL NEW STOREFRONT PERIMETER SEALING SHALL BE COMPLETED UNDER SPEC SECTION 08 43 13. ALL OTHER SEALING SHALL BE COMPLETED UNDER SPEC SECTION 07 92 00.

2> CLEAN CONCRETE FOR NEW FINISHES. SEE SPEC.

3> REMOVE SPALLED AND/OR DAMAGED CONCRETE BACK TO FIRM SUBSTRATE

4> CLEAN EXPOSED REBAR AND COAT W/ CORROSION INHIBITING PRIMER

5> INSTALL CONCRETE PATCH WITH STAINLESS STEEL PINS, RUB FINISH TO MATCH ADJACENT

6> PREP, PRIME AND PAINT SURFACE

7> NEW COLORED TOPCOAT ON EXISTING EIFS. PREP AS REQURIED; SEE OTHER SPECIFIC COMMENTS AT ELEVATIONS.

8> REPLACE DAMAGED INSULATION

9> INSTALL NEW ABUSE RESISTANT MESH AND COLORED TOPCOAT ON EXISTING EIFS. PREP AS REQUIRED; SEE OTHER SEE SPECIFIC COMMENTS AT ELEVATIONS.

10> NEW THERMALLY BROKEN ALUMINUM STOREFRONT SYSTEM, SEE A600

11> NEW THERMALLY BROKEN ALUMINUM ENTRY DOOR SYSTEM, SEE A600

12> EXISTING WINDOWS/ALUM DOOR SYSTEM TO REMAIN, RESEAL PERIMETER

13> NEW DECORATIVE STEEL TRUSS. SEE DETAILS AND STRUCTURAL SHEETS.

14> NEW PIPE BOLLARD

15> NEW METAL CORNER GUARD

16> NEW CULTURED STONE VENEER OVER SCRATCH COAT, OVER LATH, OVER FILTER FABRIC & DRAINAGE MAT, OVER EXISTING CONCRETE

17> CLEAN, PRIME & PAINT EXISTING HVAC LOUVER, RESEAL PERIMETER

18> EXISTING FIRE DEPT. CONNECTION.

19> EXISTING FIRE ALARM DEVICE

20> EXISTING DOOR AND FRAME, RESEAL PERIMETER

21> PATCH AND REPAINT EXISTING STUCCO SOFFIT, SEE ELECTRICAL FOR LIGHTING REQUIREMENTS

22> EXISTING SECURITY CAMERA

23> EXISTING ELECTRICAL EQUIPMENT

24> EXISTING CONDUIT/OUTLET

25> EXISTING AUTOMATIC DOOR OPERATOR

26> EXISTING EXTERIOR LIGHT

27> EXISTING HOSE BIB

28> EXISTING LAMBS TONGUE

29> EXISTING ROOF SCUPPER

30> EXISTING DRAIN DISCHARGE

31> EXISTING GAS LINE

32> EXISTING OVERHEAD DOOR TO REMAIN

33> REPAINT EXISTING CORNER GUARD, RESEAL PERIMETER

34> REPAINT EXISTING PIPE BOLLARD

35> REMOVE AND REPLACE METAL WALL PANELS

36> REMOVE AND REPLACE METAL SOFFIT, SEE ELECTRICAL FOR LIGHTING REQUIREMENTS

37> EXISTING HVAC EQUIPMENT TO REMAIN

38> EXISTING HVAC DUCTWORK TO REMAIN, RESEAL PERIMETER

39> REMOVE AND REPLACE PRE-FINISHED METAL INSULATION COVER WITH NEW 18G PREFINISHED METAL. CORNERS AND JOINTS SHALL BE LAPPED & RIVETED.

40> AFTER EXCAVATION CLEAN, PREP AND TUCKPOINT CMU, INSTALL NEW WATERPROOFING MEMBRANE AND AND 2" RIGID INSULATION TO 4" ABOVE GRADE. CAP INSULATION W/18G PREFINISHED J-CAP (TO 2" BELOW GRADE).

40A> CLEAN, PREP AND TUCKPOINT CMU, PROVIDE NEW ½" PARGE COAT WITH METAL EDGE TRIM OVER THE ENTIRE EXPOSED AREA AND APPLY CONCRETE SEALER TOPCOAT.

41> NEW METAL CHANNEL OR BENT PLATE ACCENT BAND. FLASHING REQUIRED AT TOP AND SEALANT BELOW. SEE DETAILS.

42> NEW METAL ANGLE OR BENT PLATE EDGE STOP. SEALANT REQUIRED AT STONE SIDE. SEE DETAILS.

43> BREAKMETAL FINISH TO MATCH STOREFRONT FRAMES.

44> WAVE GRAPHICS AT THE UPPER WINDOW BAND, SEE DETAIL AT ELEVATION 1A200. THIS IS AN ALTERNATE BID ITEM.

45> NEW METAL WALL PANEL SYSTEM. SEE SECTIONS AND DETAILS.

46> LOCATION OF ENDWALL CONDITION BEHIND THE GLAZING. SEE THE PLAN SHEETS.

47> SEE ELECTRICAL SHEETS FOR ELECTRICAL WORK AND LIGHTING.

48> EXISTING SIGNAGE TO BE REMOVED FOR WALL REFINISHING THEN REINSTALLED BY THE CONTRACTOR. CONTRACTOR TO FINISH / SEAL ALL OLD AND NEW PENETRATIONS.

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
WEB SITE: www.hsrassociates.com

Consultant:

Project Title: **WITC - SUPERIOR CAMPUS SUPERIOR INTERIOR AND EXTERIOR MAINTENANCE & REMODEL**

Project Location: **600 N. 21st Street Superior, Wisconsin 54880**

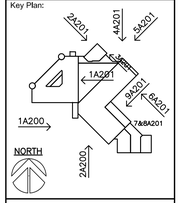
Sheet Title: **BUILDING ELEVATIONS**

HSR Project Number: **17063-1**

Project Date: **MARCH 2018**

Drawn By: **M.ZETTLER**

Key Plan:

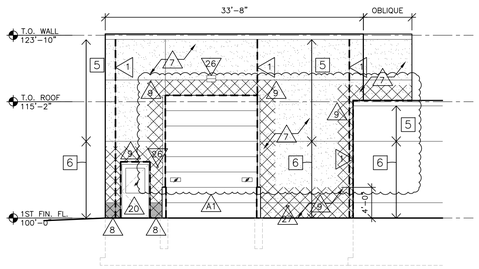


Revisions:		
No.	**Description**	**Date**
A1	ADDENDUM 1	03-27-18

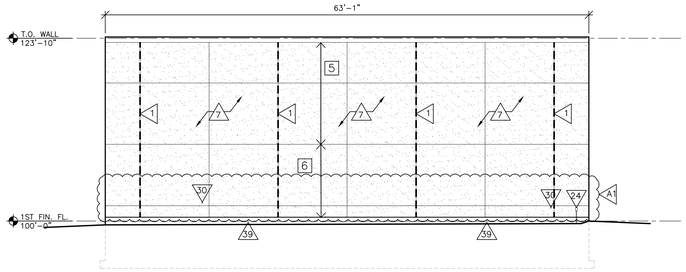
Graphic Scale: **VARIES**

Last Update: **03/27/2018**

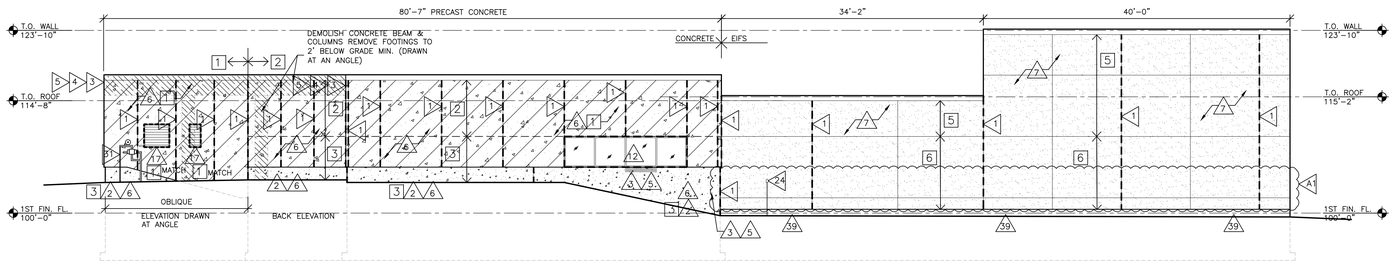
A201R



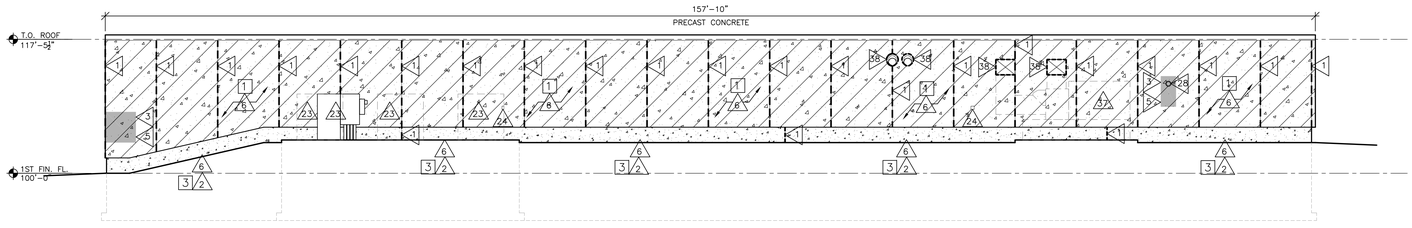
1 NORTH TRADES ELEVATION
1/8" = 1'-0"



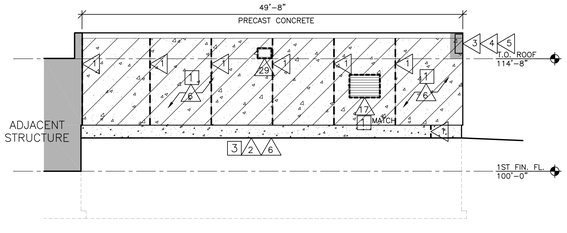
2 EAST TRADES ELEVATION
1/8" = 1'-0"



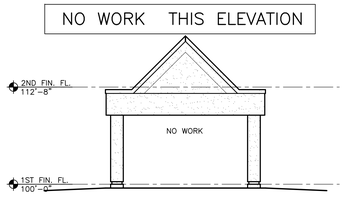
3 SOUTH TRADES ELEVATION
1/8" = 1'-0"



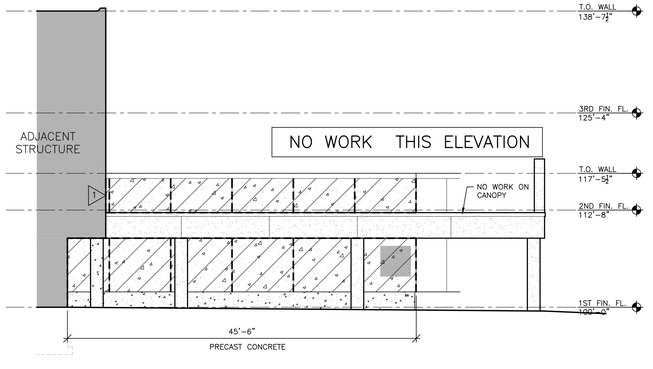
4 SOUTHWEST TRADES ELEVATION
1/8" = 1'-0"



5 WEST TRADES ELEVATION
1/8" = 1'-0"



6 FRONT CANOPY ELEVATION
1/8" = 1'-0"



7 WEST TRADES ELEVATION
1/8" = 1'-0"

MATERIAL LEGEND:

- CAST IN PLACE CONCRETE
- PRECAST CONCRETE PANEL
- CONCRETE MASONRY UNITS (SINGLE WYTHE CMU)
- EXTERIOR INSULATION FINISH SYSTEM (EIFS)
- METAL PANEL
- VISION GLASS
- REMOVE EXISTING BACKER ROD & SEALANT, PREP JOINT, INSTALL NEW BACKER ROD & SEALANT
- REMOVE DAMAGED/SPALLED CONCRETE, CLEAN SURFACE & REPAIR
- NEW CEMENTICIOUS PARGE COAT WITH DAMPROOFING
- REPAIR/REPLACE DAMAGED INSULATION ON EIFS
- NEW ABUSE RESISTANT MESH AND TOP COAT ON EIFS

COLOR LEGEND:

1	CONCRETE PAINT COLOR 1 MATCH COLOR 4	UMBER
2	CONCRETE PAINT COLOR 2 MATCH COLOR 5	LT. TAN
3	CONCRETE PAINT COLOR 3 MATCH COLOR 6	GREY
4	EIFS TOPCOAT COLOR 1	UMBER
5	EIFS TOPCOAT COLOR 2	LT. TAN
6	EIFS TOPCOAT COLOR 3	GREY

A1

BUILDING ELEVATION GEN. NOTES:

A. FIELD VERIFY EXISTING CONDITIONS, BRING ANY DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS TO THE ARCHITECT'S ATTENTION.

B. REMOVE ALL BACKER ROD & SEALANT, REMOVE ALL DEBRIS & LOOSE SUBSTRATE, CLEAN & PREP ALL JOINTS FOR NEW BACK ROD & SEALANT.

C. REMOVE EXISTING WINDOWS PER A092, REMOVE ALL BACKER ROD & SEALANT, PAINT, LOOSE SUBSTRATE AND PREP JAMB TO RECEIVE NEW WINDOW FRAMES.

D. VERIFY SIZE/LOCATIONS OF ALL MECHANICAL, ELECTRICAL AND PLUMBING OPENINGS/PENETRATIONS. GENERAL CONTRACTOR TO SEAL PERIMETER OF OPENINGS W/ BACKER ROD & SEALANT.

E. GENERAL CONTRACTOR SHALL SEAL PERIMETER OF ALL LOUVERS ON FACADES RECEIVING WORK AND PAINT LOUVER.

F. GENERAL CONTRACTOR SHALL PROVIDE CONCRETE EQUIPMENT PADS/CURBS AS REQUIRED FOR MECHANICAL/ELECTRICAL EQUIPMENT, VERIFY SIZE/PROFILE/LOCATION WITH MECHANICAL & ELECTRICAL DRAWINGS.

G. GENERAL CONTRACTOR SHALL INSTALL COMPRESSIBLE FILLER AT ALL MASONRY WALL CONTROL/EXPANSION JOINTS AND SEAL BOTH SIDES. WALL REINFORCING TO BE DISCONTINUING AT JOINTS, TYPICAL.

H. REMOVE ALL VEGETATIVE GROWTH, MISC. ANCHORS, BOLTS, FASTENERS, FORMWORK, SIGN REMNANTS FROM THE EXTERIOR, PATCH MASONRY TO MATCH ADJACENT.

A1 J. FEATHER THE TOP COAT ON ALL EIFS WHERE TRANSITIONS OCCUR BETWEEN MESH AND NON-MESH AREAS.

BUILDING ELEVATION KEY NOTES:

1 CUT OUT AND CLEAN SEALANT JOINT, PREP JOINT AND INSTALL NEW BACKER ROD & SEALANT, SEE SPECIFICATIONS. NOTE: JOINTS IN EIFS OR DIRECTLY ADJACENT SHALL BE COMPLETED UNDER SPEC SECTION 07 24 00. ALL NEW STOREFRONT PERIMETER SEALING SHALL BE COMPLETED UNDER SPEC SECTION 08 43 13. ALL OTHER SEALING SHALL BE COMPLETED UNDER SPEC SECTION 07 92 00.

2 CLEAN CONCRETE FOR NEW FINISHES. SEE SPEC.

3 REMOVE SPALLED AND/OR DAMAGED CONCRETE BACK TO FIRM SUBSTRATE

4 CLEAN EXPOSED REBAR AND COAT W/ CORROSION INHIBITING PRIMER

5 INSTALL CONCRETE PATCH WITH STAINLESS STEEL PINS, RUB FINISH TO MATCH ADJACENT

6 PREP, PRIME AND PAINT SURFACE

7 NEW COLORED TOPCOAT ON EXISTING EIFS. PREP AS REQURIED; SEE OTHER SPECIFIC COMMENTS AT ELEVATIONS.

8 REPLACE DAMAGED INSULATION

9 INSTALL NEW ABUSE RESISTANT MESH AND COLORED TOPCOAT ON EXISTING EIFS. PREP AS REQUIRED; SEE OTHER SEE SPECIFIC COMMENTS AT ELEVATIONS.

10 NEW THERMALLY BROKEN ALUMINUM STOREFRONT SYSTEM, SEE A600

11 NEW THERMALLY BROKEN ALUMINUM ENTRY DOOR SYSTEM, SEE A600

12 EXISTING WINDOWS/ALUM DOOR SYSTEM TO REMAIN, RESEAL PERIMETER

13 NEW DECORATIVE STEEL TRUSS. SEE DETAILS AND STRUCTURAL SHEETS.

14 NEW PIPE BOLLARD

15 NEW METAL CORNER GUARD

16 NEW CULTURED STONE VENEER OVER SCRATCH COAT, OVER LATH, OVER FILTER FABRIC & DRAINAGE MAT, OVER EXISTING CONCRETE

17 CLEAN, PRIME & PAINT EXISTING HVAC LOUVER, RESEAL PERIMETER

18 EXISTING FIRE DEPT. CONNECTION.

19 EXISTING FIRE ALARM DEVICE

20 EXISTING DOOR AND FRAME, RESEAL PERIMETER

21 PATCH AND REPAINT EXISTING STUCCO SOFFIT, SEE ELECTRICAL FOR LIGHTING REQUIREMENTS

22 EXISTING SECURITY CAMERA

23 EXISTING ELECTRICAL EQUIPMENT

24 EXISTING CONDUIT/OUTLET

25 EXISTING AUTOMATIC DOOR OPERATOR

26 EXISTING EXTERIOR LIGHT

27 EXISTING HOSE BIB

28 EXISTING LAMBS TONGUE

29 EXISTING ROOF SCUPPER

30 EXISTING DRAIN DISCHARGE

31 EXISTING GAS LINE

32 EXISTING OVERHEAD DOOR TO REMAIN

33 REPAINT EXISTING CORNER GUARD, RESEAL PERIMETER

34 REPAINT EXISTING PIPE BOLLARD

35 REMOVE AND REPLACE METAL WALL PANELS

36 REMOVE AND REPLACE METAL SOFFIT, SEE ELECTRICAL FOR LIGHTING REQUIREMENTS

37 EXISTING HVAC EQUIPMENT TO REMAIN

38 EXISTING HVAC DUCTWORK TO REMAIN, RESEAL PERIMETER

39 REMOVE AND REPLACE PRE-FINISHED METAL INSULATION COVER WITH NEW 18G PREFINISHED METAL. CORNERS AND JOINTS SHALL BE LAPPED & RIVETED.

40 AFTER EXCAVATION CLEAN, PREP AND TUCKPOINT CMU, INSTALL NEW WATERPROOFING MEMBRANE AND AND 2" RIGID INSULATION TO 4" ABOVE GRADE. CAP INSULATION W/18G PREFINISHED J-CAP (TO 2" BELOW GRADE).

40A CLEAN, PREP AND TUCKPOINT CMU, PROVIDE NEW ¼" PARGE COAT WITH METAL EDGE TRIM OVER THE ENTIRE EXPOSED AREA AND APPLY CONCRETE SEALER TOPCOAT.

41 NEW METAL CHANNEL OR BENT PLATE ACCENT BAND, FLASHING REQUIRED AT TOP AND SEALANT BELOW. SEE DETAILS.

42 NEW METAL ANGLE OR BENT PLATE EDGE STOP. SEALANT REQUIRED AT STONE SIDE. SEE DETAILS.

43 BREAKMETAL FINISH TO MATCH STOREFRONT FRAMES.

44 WAVE GRAPHICS AT THE UPPER WINDOW BAND, SEE DETAIL AT ELEVATION 1A200. THIS IS AN ALTERNATE BID ITEM.

45 NEW METAL WALL PANEL SYSTEM. SEE SECTIONS AND DETAILS.

46 LOCATION OF ENDWALL CONDITION BEHIND THE GLAZING. SEE THE PLAN SHEETS.

47 SEE ELECTRICAL SHEETS FOR ELECTRICAL WORK AND LIGHTING.

48 EXISTING SIGNAGE TO BE REMOVED FOR WALL REFINISHING THEN REINSTALLED BY THE CONTRACTOR. CONTRACTOR TO FINISH / SEAL ALL OLD AND NEW PENETRATIONS.

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
WEB SITE: www.hsrassociates.com

Consultant:

Project Title: **WITC - SUPERIOR CAMPUS SUPERIOR INTERIOR AND EXTERIOR MAINTENANCE & REMODEL**

Project Location: **600 N. 21st Street Superior, Wisconsin 54880**

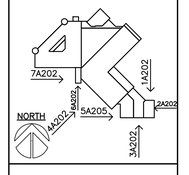
Sheet Title: **BUILDING ELEVATIONS**

HSR Project Number: **17063-1**

Project Date: **MARCH 2018**

Drawn By: **M.ZETTLER**

Key Plan:



Revisions:

No.	Description	Date
A1	ADDENDUM 1	03-27-18

Graphic Scale: **VARIES**

Last Update: **03/27/2018**

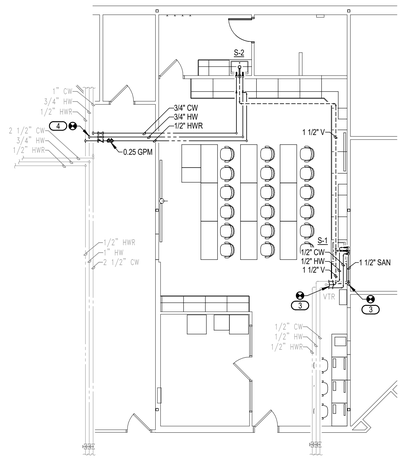
A202R

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	MANUFACTURER	MODEL	MOUNT	ROUGH-IN SCHEDULE				FITTINGS AND REMARKS
					COLD	HOT	WASTE	VENT	
S-2	DOUBLE COMPARTMENT SINK	ELKAY	DLR-3322-3	COUNTER	1/2"	(2)1/2"	(2)1 1/2"	1/1/2"	PROVIDE CHICAGO 786-GN8AE29VPXKABCP FAUCET, MCGUIRE 8912 P-TRAP, MCGUIRE 151A STRAINER AND MCGUIRE H2165CCLK STOPS. PROVIDE ADDITIONAL HW AND SANITARY ROUGH IN TO SERVE DISHWASHER.
S-3	DOUBLE COMPARTMENT SINK W/ EYEWASH	ELKAY	DLR-3322-3	COUNTER	1/2"	1/2"	1 1/2"	1/1/2"	PROVIDE SPEAKMAN SEF-1816 EYEWASH FAUCET W/ LAWLER 911E MIXING VALVE, MCGUIRE 8902 P-TRAP, MCGUIRE 151A STRAINER AND MCGUIRE H2165CCLK STOPS.

KEYED NOTES

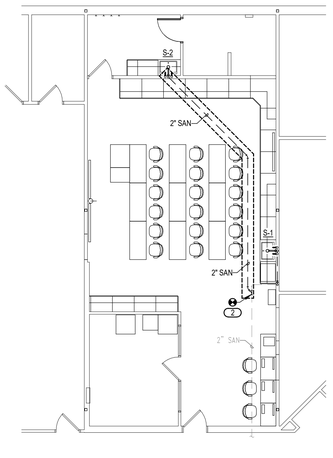
1. REMOVE EXISTING WALL MOUNTED LAVATORY AND ASSOCIATED PIPING. CAP PIPING AS REQUIRED BY PLAN. LEAVE EXISTING SANITARY PIPING IN WALL FOR CONNECTION TO NEW SINK.
2. CONNECT NEW 2" SANITARY TO EXISTING SANITARY PIPING. GENERAL CONTRACTOR SHALL CUT FLOOR CONCRETE FOR IN-FLOOR PLUMBING REQUIREMENTS. PLUMBING CONTRACTOR SHALL COORDINATE LOCATIONS.
3. CONNECT NEW 1/2" HOT WATER, 1/2" COLD WATER, 1 1/2" SANITARY AND 1 1/2" VENT TO EXISTING PLUMBING PIPING.
4. CONNECT NEW 3/4" HOT WATER, 3/4" COLD WATER AND 1/2" HOT WATER RETURN TO EXISITNG WATER PIPING.



3 ABOVE GRADE PLUMBING PLAN

1/8" = 1'-0"

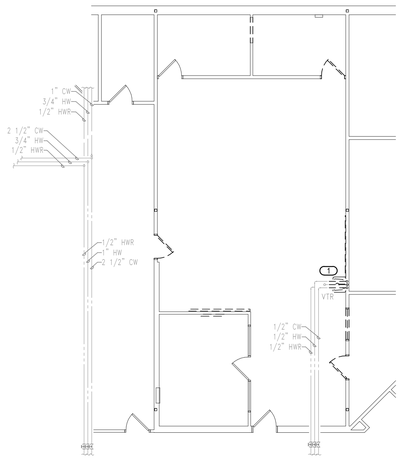
NORTH



2 BELOW GRADE PLUMBING PLAN

1/8" = 1'-0"

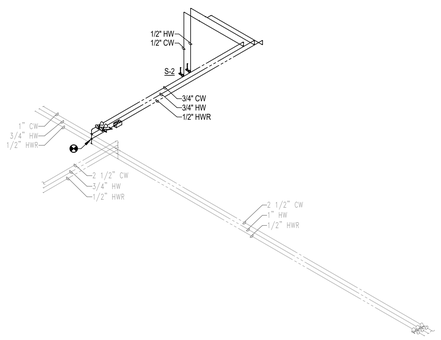
NORTH



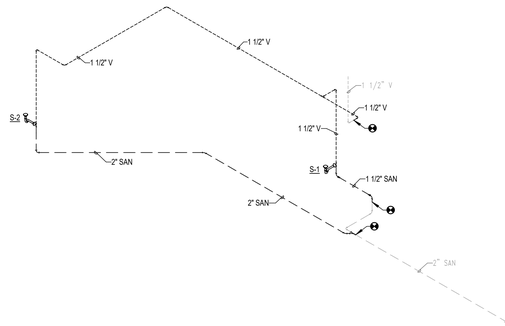
1 ABOVE GRADE PLUMBING DEMOLITION PLAN

1/8" = 1'-0"

NORTH



5 WATER PLUMBING ISOMETRIC



4 SANITARY PLUMBING ISOMETRIC

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
www.hsrassociates.com

Consultant:

Project Title: **WITC - SUPERIOR CAMPUS SUPERIOR INTERIOR AND EXTERIOR MAINTENANCE & REMODEL**

Project Location:

Sheet Title: **PLUMBING PLANS - PHARM TECH AREA**

HSR Project Number: **17063-1**

Project Date: **MARCH 2018**

Drawn By: **Author**

Key Plan:

CONSTRUCTION DOCUMENTS

Revisions:

No.	Description	Date
	ADDENDUM #1	3/27/2018

Graphic Scale: **VARIES**

Last Update: **3/28/2018 11:52:48 AM**

P112

GENERAL MECHANICAL NOTES

1. ALL WORK SHALL BE IN COMPLIANCE WITH STATE AND LOCAL CODES.
2. THE CONTRACTOR SHALL PAY FOR ALL FEES, PERMITS, LICENSES, ETC., NECESSARY FOR PROPER COMPLETION OF THE WORK.
3. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
4. VERIFY ALL EXISTING CONDITIONS. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN CONTRACT DRAWINGS AND ACTUAL CONDITIONS.
5. EXISTING UTILITIES TO BE ABANDONED SHALL BE PROPERLY DISCONNECTED AND CAPPED AS REQUIRED BY CODE OR LOCAL ORDINANCE.
6. THESE DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. ADDITIONAL DATA SHALL BE FROM THE ENGINEER THROUGH WRITTEN CLARIFICATION ONLY. VERIFY ALL EXISTING CONDITIONS, ELEVATIONS, AND DIMENSIONS BEFORE PROCEEDING WITH ANY PORTION OF ANY WORK. THE CONTRACTOR SHALL PROVIDE ALL OFFSETS AND TRANSITIONS REQUIRED TO MEET EXISTING CONDITIONS.
7. THE CONTRACTOR SHALL PERFORM WORK IN A SKILLED AND PROFESSIONAL MANNER.
8. ALL CONTRACTORS ARE RESPONSIBLE TO FIELD COORDINATE WORK SCHEDULE WITH OWNER REPRESENTATIVE.
9. THE CONTRACTOR SHALL WORK AND COORDINATE WITH THE OTHER TRADES.
10. ALL EQUIPMENT SHALL BE NEW AND IN UNDAMAGED CONDITION. ANY EQUIPMENT FOUND DEFECTIVE SHALL BE IMMEDIATELY REMOVED FROM THE PROJECT.
11. PROVIDE 3 COPIES OF AN OPERATION AND MAINTENANCE MANUAL FOR ALL MAJOR EQUIPMENT REQUIRING SERVICE. MAJOR EQUIPMENT INCLUDES BUT IS NOT LIMITED TO COILS, FANS, AND CONTROL WIRING DIAGRAMS. EACH PIECE OF EQUIPMENT SHALL STATE THE CONTRACT DATE AND THE NAME, ADDRESS AND PHONE NUMBER FOR THE PRIME CONTRACTOR, SUBCONTRACTOR PERFORMING THE INSTALLATION, AND THE LOCAL VENDOR FOR SPARE PARTS. THE MANUALS SHALL CONTAIN MAINTENANCE INSTRUCTIONS REQUIRED FOR THE INSTALLED EQUIPMENT. MANUALS SHALL BE BOUND IN A THREE RING HARD COVER BINDER. O & M MANUALS SHALL BE SUBMITTED TO THE OWNER PRIOR TO FINAL WALK THROUGH OF THE PROJECT.
12. PROVIDE 2 HOURS OF OWNER TRAINING FOR THE INSTALLED EQUIPMENT. TRAINING SHALL BE HELD ONLY AFTER ALL OF THE EQUIPMENT IS INSTALLED AND PROPER OPERATION IS VERIFIED.
13. CONTRACTOR SHALL SUBMIT A CERTIFIED REPORT INDICATING SYSTEM PERFORMANCE INCLUDING, BUT NOT LIMITED TO, VOLTAGE AND AMPERAGE MEASUREMENTS OF ALL EQUIPMENT GREATER THAN 1/3 H.P. WATER BALANCE MEASUREMENTS OF EACH COIL AND PUMP. AIR BALANCE MEASUREMENTS OF OUTSIDE AIR DELIVERY, AIR HANDLING UNIT SUPPLY, SUPPLY DIFFUSERS, EXHAUST AND RETURN GRILLES. AIR BALANCE SHALL BE WITHIN 10% OF DESIGN CONDITIONS. THE REPORT CERTIFICATION SHALL BE AS FOLLOWS:
    I (name) of (company) CERTIFY THAT ALL MEASUREMENTS, FIGURES AND STATEMENTS INDICATED IN THIS REPORT WERE TAKEN BY ME OR UNDER MY SUPERVISION AND ARE ACCURATE AS OF (date). DESIGN FLOWS WERE BASED UPON PLANS DATED (xx/xx/xx).
14. DUCT MATERIAL SHALL BE GALVANIZED OR ALUMINUM CONSTRUCTED IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARD 2005 AND SMACNA HVAC AIR DUCT LEAKAGE MANUAL 2012 FOR THE PRESSURE AND SEAL CLASS LISTED IN THE PROJECT DUCTWORK/INSULATION SCHEDULE.
15. DUCT SIZES LISTED ON PLANS ARE THE REQUIRED CLEAR INTERIOR DIMENSIONS.
16. SUPPLY AND RETURN BRANCH DUCTS MAY BE INSULATED FLEX DUCT IF THE RUN IS LESS THAN 5 FEET IN LENGTH. ANY LENGTHS OVER 5 FEET SHALL BE RIGID DUCTWORK, DUCT SHALL BE THE SAME SIZE AS THE LISTED DIFFUSER THROAT UNLESS NOTED OTHERWISE.
17. PROVIDE VOLUME CONTROL DAMPERS WHERE INDICATED AND AT ALL TAKEOFFS, BOTH SUPPLY AND RETURN SYSTEMS, AND MAJOR DUCT RUNS. DAMPERS SHALL BE FACTORY-FABRICATED WITH ZINC-PLATED, DIE-CAST CONTROL HARDWARE. CONTROL HARDWARE SHALL INCLUDE HEAVY GAUGE DIAL AND HANDLE WITH ELEVATED PLATFORM FOR INSULATED DUCT MOUNTING.
18. PROVIDE TURNING VANES IN ALL RECTANGULAR ELBOWS CONFORMING TO SMACNA HVAC DUCT CONSTRUCTION STANDARD 2005 FIG. 4-2 TYPE RE-3 WITH STANDARD RADIUS. WHERE SPACE PERMITS, PROVIDE RADIUSED ELBOWS IN ACCORDANCE WITH FIGURES 4-2, TYPE RE-1.
19. ALL RECTANGULAR MAIN TO RECTANGULAR BRANCH CONNECTIONS, BOTH CONVERGING AND DIVERGING CONFIGURATIONS, SHALL HAVE A 45 DEG. ENTRY TAP CONSTRUCTED IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARD 2005 FIG. 4-6.
20. DIFFUSER PATTERN 4-WAY UNLESS OTHERWISE INDICATED. PROVIDE FIBERGLASS DUCT INSULATION WITH VAPOR BARRIER AS SCHEDULED UNLESS NOTED OTHERWISE.
21. MECHANICAL CONTRACTOR TO REPAIR ANY DAMAGE DONE TO THE FIRE PROOFING WHILE INSTALLING THE MECHANICAL TRADES. SEAL ALL PENETRATIONS THROUGH RATED STRUCTURES WITH UL LISTED FIRE SEAL DESIGNED FOR THE SPECIFIED APPLICATION.
22. EXHAUST FLUE PIPE AND FITTINGS MATERIAL SHALL BE 24 GA AL 29#C HEAT FAB CHIMNEY AND FLUE CONNECTIONS.
23. HEATING SYSTEM INSULATION TO BE 1 1/2" THICK RIGID FIBERGLASS INSULATION.
    23.A. MINIMUM NOMINAL DENSITY OF 3 lbs. PER cu. ft. AND THERMAL CONDUCTIVITY OF NOT MORE THAN 0.23 AT 75° F. MINIMUM COMPRESSIVE STRENGTH OF 25 PSF AT 10% DEFORMATION RATED FOR SERVICE TO 450° F.
    23.B. PIPING: WHITE KRAFT REINFORCED FOIL VAPOR BARRIER ALL SERVICE JACKET, FACTORY APPLIED TO INSULATION WITH A SELF SEALING PRESSURE SENSITIVE ADHESIVE LAP. MAXIMUM PERMEANCE OF .02 PERMS AND MINIMUM BEACH PUNCTURE RESISTANCE OF 50 UNITS.
24. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES TO PROTECT THE PUBLIC AND ADJACENT PROPERTIES FROM DAMAGE THROUGHOUT CONSTRUCTION.
25. THE CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION OR AS OTHERWISE REQUIRED IN THE SPECIFICATIONS.
26. MECHANICAL CONTRACTOR TO INSTALL ON THE BOILERS WATER LINE FLEX CONNECTORS, MUFFLERS AND VIBRATION PADS. FLEX CONNECTORS, MUFFLERS AND VIBRATION ARE PADS PROVIDED BY THE BOILER MANUFACTURER.
27. MECHANICAL CONTRACTOR TO INCLUDE THE TEST AND BALANCE, AND ANY PERMIT FEES IN THEIR BID.
28. MECHANICAL CONTRACTOR SHALL VERIFY ALL ROOFTOP EQUIPMENT WEIGHTS, SIZES, LOCATIONS AND OPENINGS REQUIRED AND SHALL COORDINATE ANY CHANGES WITH THE ARCHITECT.
29. UPON PROJECT COMPLETION, RECORD (AS-BUILT) DRAWINGS SHALL BE PROVIDED BY THE CONTRACTOR TO THE OWNER AND ENGINEER. ALL CHANGES IN PIPING AND DUCTWORK ARRANGEMENTS SHALL BE NOTED ON THE RECORD DRAWINGS.

MECHANICAL HVAC LEGEND

- EXHAUST AIR DUCT (DOWN)
- EXHAUST AIR DUCT (UP)
- RETURN AIR DUCT (DOWN)
- RETURN AIR DUCT (UP)
- OUTSIDE OR SUPPLY AIR DUCT (UP)
- OUTSIDE OR SUPPLY AIR DUCT (DOWN)
- 24x12 DUCT SIZE
- NEW DUCTWORK
- FLEX DUCT
- EXISTING DUCTWORK
- DEMOLITION LINETYPE
- SUPPLY AIR CEILING DIFFUSER
- CEILING DIFFUSER W/BLANKOFF
- RETURN AIR GRILLE
- EXHAUST AIR GRILLE

DIFFUSER, GRILLE, AND REGISTER CALL-OUTS

CALL-OUT CFM OR CALL-OUT CFM

- MANUAL BALANCING DAMPER
- PIPE PENETRATION THROUGH FIRE RATED WALL
- FIRE DAMPER (X=F) SMOKE DAMPER (X=S) FIRE/SMOKE DAMPER (X=C)
- MOTORIZED DAMPER
- SCHEDULED EQUIPMENT TAG
- (T) THERMOSTAT
- (H) HUMIDISTAT
- (S) REMOTE SENSOR
- DUCT SMOKE DETECTOR
- NEW TO EXISTING

ACC	AIR COOLED CHILLER
AD	ACCESS DOOR
AF	AIR FILTER
AHU	AIR HANDLING UNIT
B	BOILER
BDD	BACK DRAFT DAMPER
BT	BUFFER TANK
CD	CEILING DIFFUSER
CR	CEILING REGISTER
EF	EXHAUST FAN
EG	EXHAUST GRILLE
ERV	ENERGY RECOVERY VENTILATOR
ET	DIAPHRAGM EXPANSION TANK
FD	FIRE DAMPER
H	HUMIDIFIER
HX	HEAT EXCHANGER
L	LOUVER
MD	MOTOR OPERATED DAMPER
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTSIDE AIR
OED	OPEN END DUCT
RA	RETURN AIR
RF	RETURN FAN
RG	RETURN AIR GRILLE
RH	HOT WATER RE-HEAT
RTU	ROOFTOP UNIT
SA	SUPPLY AIR
SAT	SOUND ATTENUATORS
SF	SUPPLY FAN
SG	SUPPLY GRILLE
SR	SUPPLY REGISTER
TG	TRANSFER GRILLE
UH	UNIT HEATER

MECHANICAL PIPING LEGEND

- DOUBLE ELBOW DOWN
- ELBOW DOWN
- TEE
- ELBOW
- ELBOW DOWN TO TEE
- TYPICAL TEE CONNECTION (PLANS ONLY)
- AUTOMATIC AIR VENT
- WATER FLOW MEASURING DEVICE
- PIPE ANCHOR
- PIPE GUIDE / SLEEVE
- BALANCING VALVE
- CIRCUIT SETTER
- PRESSURE REDUCING VALVE
- BALL VALVE/SHUT-OFF VALVE
- SILENT CHECK VALVE
- GLOBE VALVE
- TWO-WAY VALVE
- THREE-WAY VALVE
- BUTTERFLY VALVE
- TRIPLE DUTY VALVE
- SHUT-OFF COCK
- STRAINER
- STRAINER WITH BLOWDOWN
- SUCTION DIFFUSER W/ STRAINER AND BLOWDOWN
- BASKET STRAINER
- DRAIN VALVE
- VACUUM BREAKER
- FLOW CONTROL VALVE W/ PRESSURE DIFFERENTIAL SENSOR
- DIFFERENTIAL PRESSURE SENSOR
- DOUBLE ELBOW DOWN (AT CORNER)
- ELBOW UP
- TEE DOWN
- TEE UP
- END CAP
- REDUCER
- NEW TO EXISTING PIPE CONNECTION
- FLOW DIRECTION ARROW
- MANUAL AIR VENT (MAV)
- PRESSURE GAUGE
- UNION
- PRESSURE RELIEF VALVE
- PRESSURE/TEMPERATURE PORT
- AIR SEPARATOR
- PUMP OR PUMP
- FLEX CONNECTION
- THERMOMETER
- STEAM GAUGE SIPHON
- STEAM TRAP & DRIP ASSEMBLY
- COIL
- PIPE VIEW
- (AI) ANALOG INPUT
- (AO) ANALOG OUTPUT
- (DI) DIGITAL INPUT
- (DO) DIGITAL OUTPUT

ABBREVIATIONS

A	AMP
ADD	ADDENDUM
ADDL	ADDITIONAL
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AHU	AIR HANDLER UNIT
AI	ANALOG INPUT
ALT	ALTERNATE
ANNC	ANNUNCIATOR
AO	ANALOG OUTPUT
APPRX	APPROXIMATE
ARCH	ARCHITECT, ARCHITECTURAL
BDD	BACK DRAFT DAMPER
BLDG	BUILDING
BI	BLACK IRON
BOD	BOTTOM OF DUCTWORK
BOP	BOTTOM OF PIPE
BOT	BOTTOM
BSMT	BASEMENT
BTUH	BRITISH THERMAL UNIT PER HOUR
BTWN	BETWEEN
C	CENTER
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CHAR	CHARACTERISTICS
CI	CAST IRON
CIRC	CIRCUIT
CL OR ℄	CENTERLINE
CLR	CLEAR
CO	CLEAN OUT
COL	COLUMN
COMP	COMPRESSOR
CONC	CONCRETE
COND	CONDENSATE
CONT	CONTINUOUS
COP	COEFFICIENT OF PERFORMANCE
CR	CEILING REGISTER
CW	CHILLED/COLD WATER
CWR	COLD WATER RETURN
CWS	COLD WATER SUPPLY
DB	DRY BULB
DEG	DEGREE
DEPT	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DG	DOOR GRILLE
DI	DIGITAL INPUT
DIA OR ⌀	DIAMETER
DIM	DIMENSION
DN	DOWN
DO	DIGITAL OUTPUT
DW	DEIONIZED WATER
DWG	DRAWING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
ECM	ELECTRONIC CONTROL MODULE
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EG	EXHAUST GRILLE
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
ELT	ENTERING LIQUID TEMPERATURE
EQ	EQUAL
EQUIP	EQUIPMENT
ERU	ENERGY RECOVERY UNIT
ESP	EXTERNAL STATIC PRESSURE
EST	ESTIMATE OR ESTIMATED
ET	DIAPHRAGM EXPANSION TANK
ETR	EXISTING TO REMAIN
EWT	ENTERING WATER TEMPERATURE
EXIST	EXISTING
F&T	FLOAT AND THERMOSTATIC
FA	FRESH AIR
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FLR	FLOOR
FPM	FEET PER MINUTE
FT	FOOT (FEET)
FURN	FURNACE
GA	GAUGE/GAGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
GYP	GYPSUM
HB	HOSE BIB
HORIZ	HORIZONTAL
HP	HORSEPOWER
HT	HEIGHT
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
I/O	INPUT/OUTPUT
IA	INSTRUMENT AIR
IE	INVERT ELEVATION
IN	INCH
INSUL	INSULATION
J-BOX	JUNCTION BOX
LAT	LEAVING AIR TEMPERATURE
LB	POUND
LLT	LEAVING LIQUID TEMPERATURE
LOC	LOCATION
LPR	LOW PRESSURE RETURN
LPS	LOW PRESSURE STEAM
LV	LOW VOLTAGE
LWT	LEAVING WATER TEMPERATURE
MA	MAKE-UP AIR OR MIXED AIR
MAX	MAXIMUM
MBH	1000 BTU PER HOUR
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPS
MECH	MECHANICAL
MIN	MINIMUM
MFR	MANUFACTURER
NC	NURSE CALL
NFC	NOT FOR CONSTRUCTION
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OC	ON CENTER
OED	OPEN END DUCT
OPNG	OPENING
OPP	OPPOSITE
P	PUMP
PC	PLUMBING CONTRACTOR
PERP	PERPENDICULAR
PLBG	PLUMBING
PNL	PANEL
PPH	POUNDS PER HOUR
PRES	PRESSURE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PWR	POWER
QTY	QUANTITY
R	RADIUS
RA	RETURN AIR
RD	ROOF DRAIN
REL	RELIEF
REQD	REQUIRED
REV	REVERSE OR REVISION
RG	RETURN AIR GRILLE
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SAN	SANITARY
SCH	SCHEDULE
SECT	SECTION
SEP	SEPARATOR
SF	SQUARE FEET
SG	SUPPLY GRILLE
SHT	SHEET
SHWR	SHOWER
SIM	SIMILAR
SP	STATIC PRESSURE
SPEC	SPECIFICATIONS
SQ	SQUARE
SS	STAINLESS STEEL
STM	STEAM
T&B	TEST AND BALANCE OR TOP AND BOTTOM
T&P	TEMPERATURE AND PRESSURE RELIEF VALVE
TEMP	TEMPERATURE OR TEMPORARY
TG	TRANSFER GRILLE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOLT
VAR	VARIABLE OR VARIES
VEL	VELOCITY
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
VS	VENT STACK
VTR	VENT THRU ROOF
W	WITH
WIN	WITHIN
W/O	WITH OUT
WB	WET BULB
WC	WATER COLUMN (INCHES OF)
WCO	WALL CLEANOUT
WG	WATER GAUGE
WOG	WATER, OIL, GAS
WP	WEATHER PROOF
WP	WORKING PRESSURE
WT	WEIGHT

CABINET UNIT HEATER SCHEDULE

CUH #	LOCATION	WALL OR CEILING	MBH	RECESS DEPTH	CFM	GPM	WATER PRES. DROP	BLOWER MOTOR (HP)	RPM	ELEC. CHAR	AMPS	MANUFACTURER & MODEL NO.	NOTES
1	VESTIBULE	WALL	40.4	7.5"	600	2	0.3	1/10	1050	115/1/60	1.4	STERLING CUH-06	1

NOTES:
1. UNIT MOUNTED ELECTRICAL DISCONNECT PROVIDED BY M.C., INSTALLED BY E.C.

SPLIT SYSTEM COOLING UNIT SCHEDULE

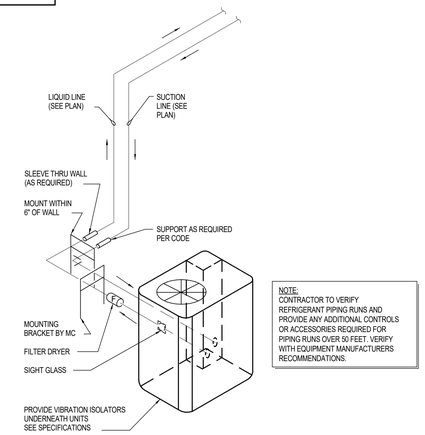
AC #			OUTDOOR CONDENSING UNIT (SCU)						INDOOR EVAPORATOR UNIT (SEU)						
	LOCATION	NOMINAL TONNAGE	ELEC. CHAR	MCA	S.E.E.R.	MOP	FAN CFM	MANUFACTURER & MODEL NO.	CFM	WEIGHT (LBS)	RLA	ELEC. CHAR	WATTS	MANUFACTURER & MODEL NO.	NOTES
1	ROOF/OFFICE	1.5	230/60/1	18	19	25	1355	LENNOX MLA018S4M-1P	410	27	0.13	208/60/1	58	LENNOX MWMA018S4-2P	1-8

NOTES:
1. CAPACITY BASED ON 80/67 °F (DB/WB) ENTERING AIR AT EVAPORATOR, 95/75 °F (DB/WB) AMBIENT OUTDOOR AIR AT CONDENSING UNIT.
2. WALL MOUNTED INDOOR UNIT. OUTDOOR UNIT TO BE MOUNTED ON THE EXISTING ROOF.
3. OUTDOOR UNIT TO BE CAPABLE OF OPERATING IN AMBIENT TEMPERATURES BETWEEN -22°F AND 122°F FOR YEAR-ROUND COOLING.
4. MECHANICAL CONTRACTOR TO INCLUDE PRE-CHARGE LINE KIT. INSULATE SUCTION LINE.
5. WIRELESS REMOTE CONTROLLER BY MANUFACTURER INCLUDED ON SPECIFIED MODEL.
6. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL DISCONNECT FOR INDOOR & OUTDOOR UNITS.
7. INTERCONNECTING POWER WIRING BY ELECTRICAL CONTRACTOR.
8. PROVIDE CONDENSATE PUMP FOR INDOOR UNIT. FOR ABOVE SCHEDULED UNIT USE MINI-SPLIT PUMP DIVERSITECH CONDENSATE PUMP WITH RESERVOIR SUPPLIED AS OPTION BY MANUFACTURER.

⚠1 GRILLE, REGISTER, AND DIFFUSER SCHEDULE

PLAN SYMBOL	DESCRIPTION	MANUFACTURER & MODEL NO.	MATERIAL	FINISH	NOISE CRITERIA	ACCESSORIES
SG-1	DOUBLE DEFLECTION SUPPLY GRILLE, INDIVIDUALLY ADJUSTABLE VANES, 3/4" O.C., FLAT FRAME WITH 1 1/4" MARGIN, VERTICAL FRONT.	KRUEGER 880V	STEEL	WHITE	-	-
TG-1	SQUARE PATTERN GRILLE, FIXED CORE OF 1/2"x1/2"x1/2" FABRICATED ALUMINUM SQUARES, FLAT FRAME WITH 1 1/4" MARGIN, FOR LAY-IN CEILING INSTALLATION.	KRUEGER EGC-5-TB	ALUMINUM	WHITE	-	-

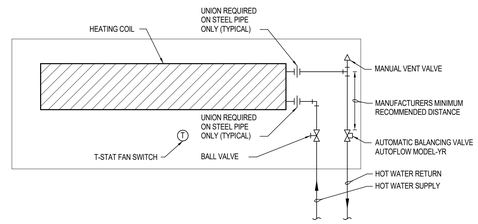
NOTES:



NOTE:
CONTRACTOR TO VERIFY REFRIGERANT PIPING RUNS AND PROVIDE ANY ADDITIONAL CONTROLS OR ACCESSORIES REQUIRED FOR PIPING RUNS OVER 50 FEET. VERIFY WITH EQUIPMENT MANUFACTURERS RECOMMENDATIONS.

1 CONDENSING UNIT PIPING DETAIL
NOT TO SCALE

MECHANICAL SHEET INDEX



2 HOT WATER CABINET UNIT HEATER PIPING DETAIL
NOT TO SCALE (TWO-WAY VALVE)

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
www.hsrassociates.com

Consultant:

Project Title: WITC - SUPERIOR CAMPUS
SUPERIOR INTERIOR AND EXTERIOR MAINTENANCE & REMODEL

Project Location: 600 N. 21st Street
Superior, WI 54880

Sheet Title: MECHANICAL TITLE SHEET

HSR Project Number: 17063-1

Project Date: MARCH 2018

Drawn By: Author

Key Plan:

CONSTRUCTION DOCUMENTS

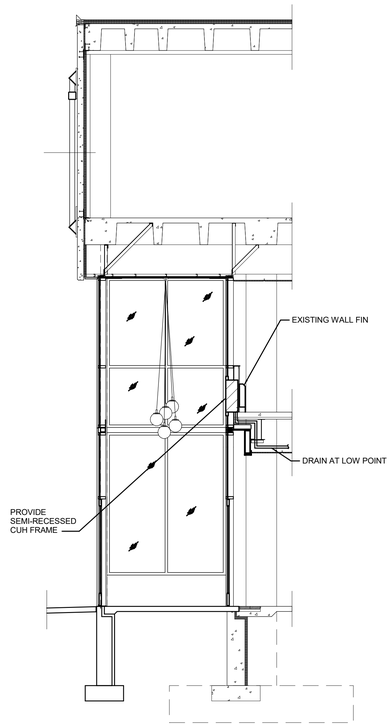
Revisions:

No.	Description	Date
	ADDENDUM #1	3/27/2018

Graphic Scale: VARIES

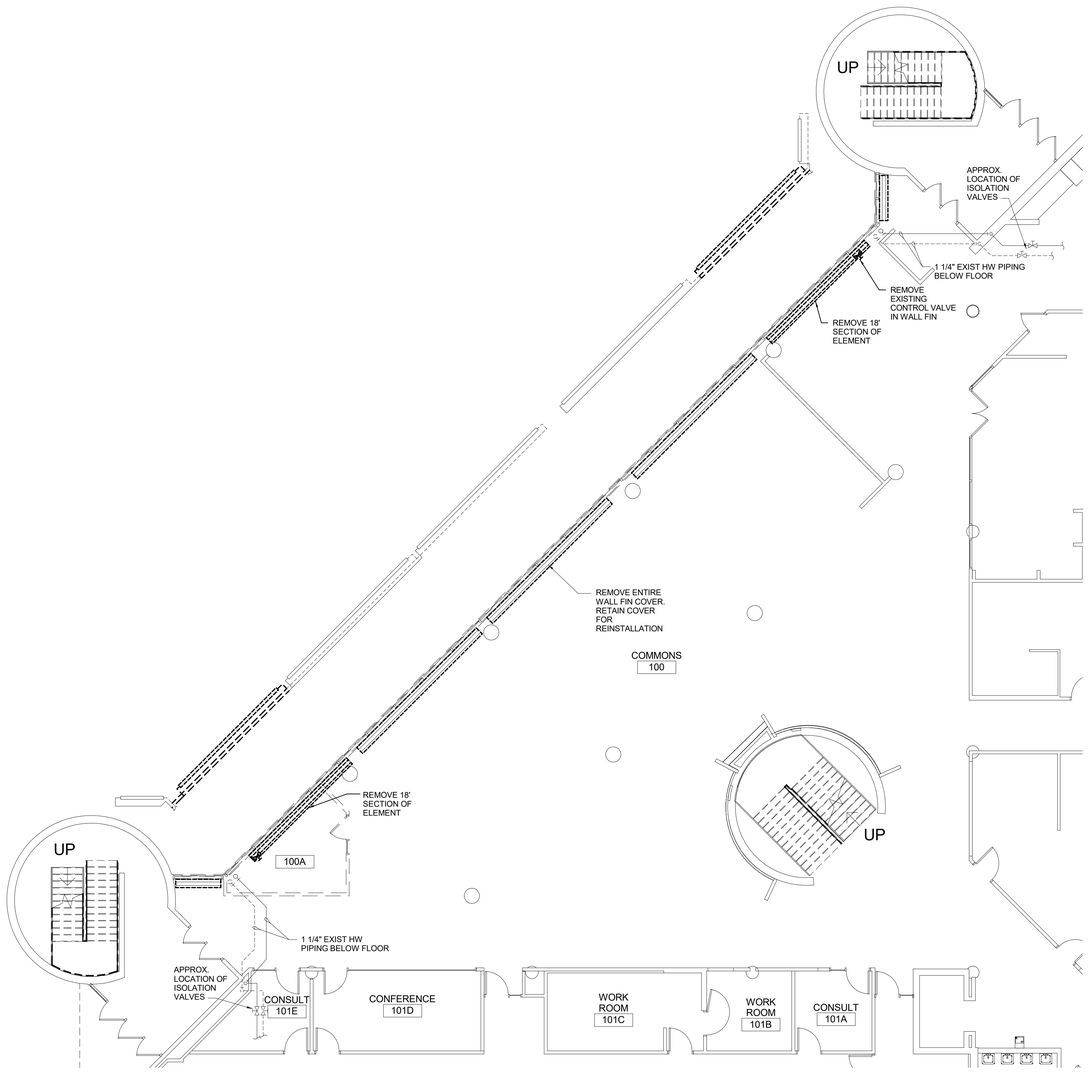
Last Update: 3/27/2018 11:00:48 AM

M001R



3 MECHANICAL SECTION

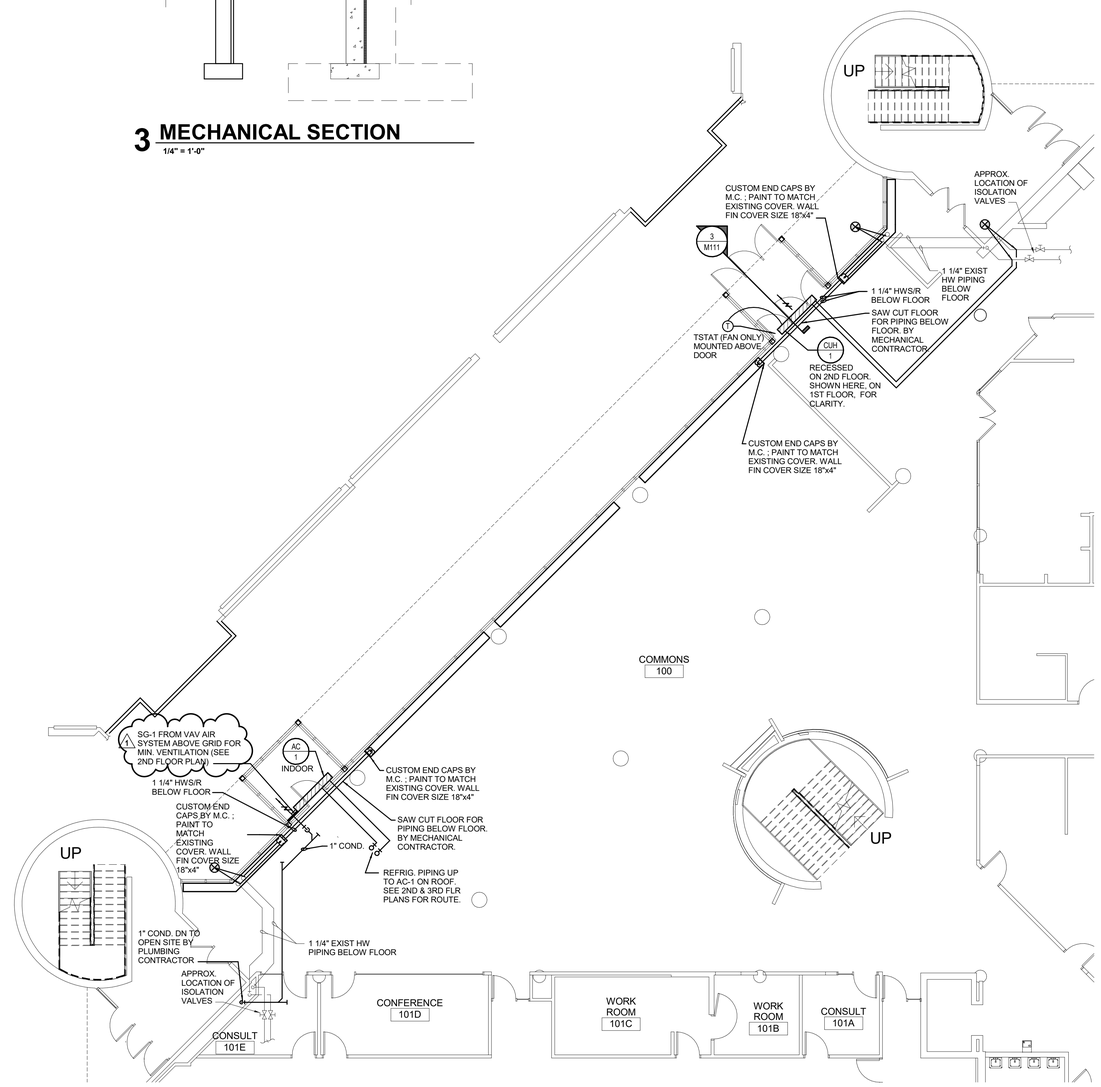
1/4" = 1'-0"



2 MECHANICAL DEMOLITION PLAN - FIRST FLOOR

1/8" = 1'-0"

NORTH



1 MECHANICAL PLAN - FIRST FLOOR

1/8" = 1'-0"

NORTH

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
www.hsrassociates.com

Consultant:

Project Title: **WITC - SUPERIOR CAMPUS SUPERIOR INTERIOR AND EXTERIOR MAINTENANCE & REMODEL**

Project Location:

Sheet Title: **MECHANICAL NEW & DEMOLITION PLANS - 1ST FLOOR**

HSR Project Number: **17063-1**

Project Date: **MARCH 2018**

Drawn By: **CMB**

Key Plan:

CONSTRUCTION DOCUMENTS

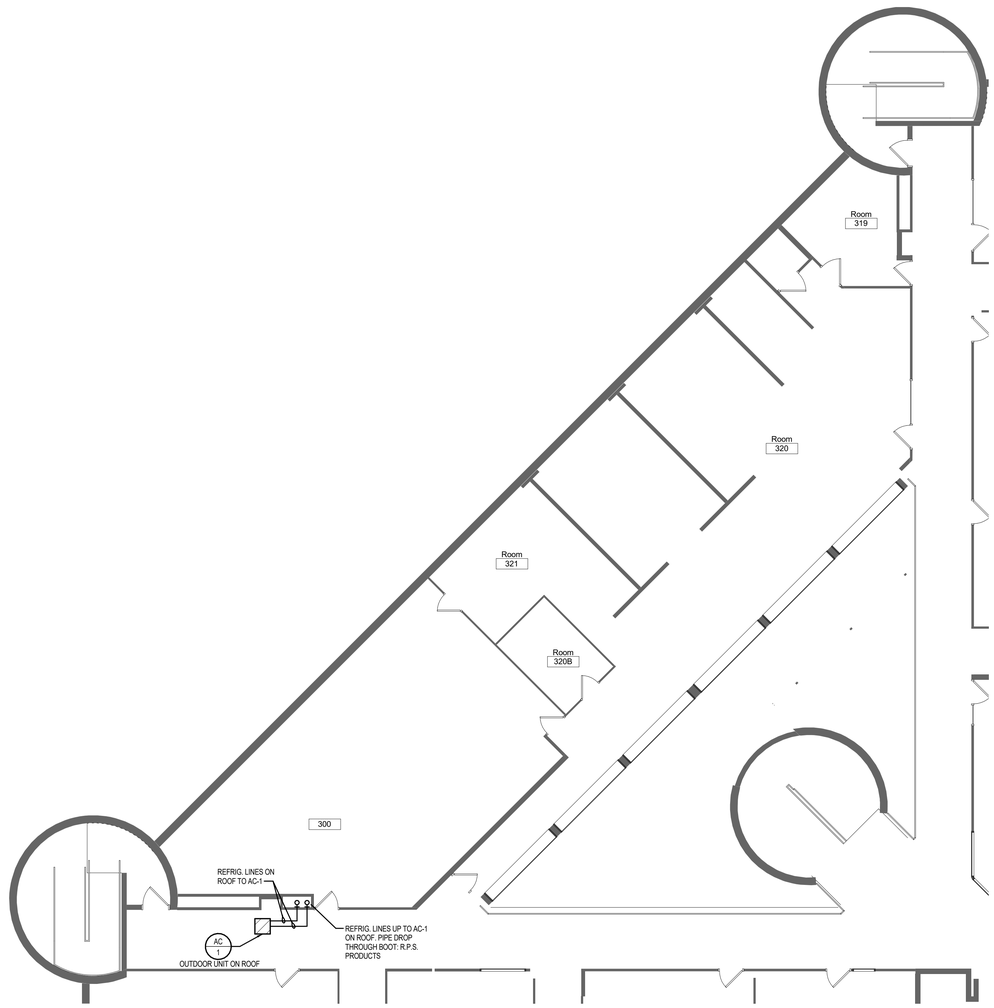
Revisions:

No.	Description	Date
	ADDENDUM #1	3/27/2018

Graphic Scale: **VARIES**

Last Update: **3/27/2018 11:00:48 AM**

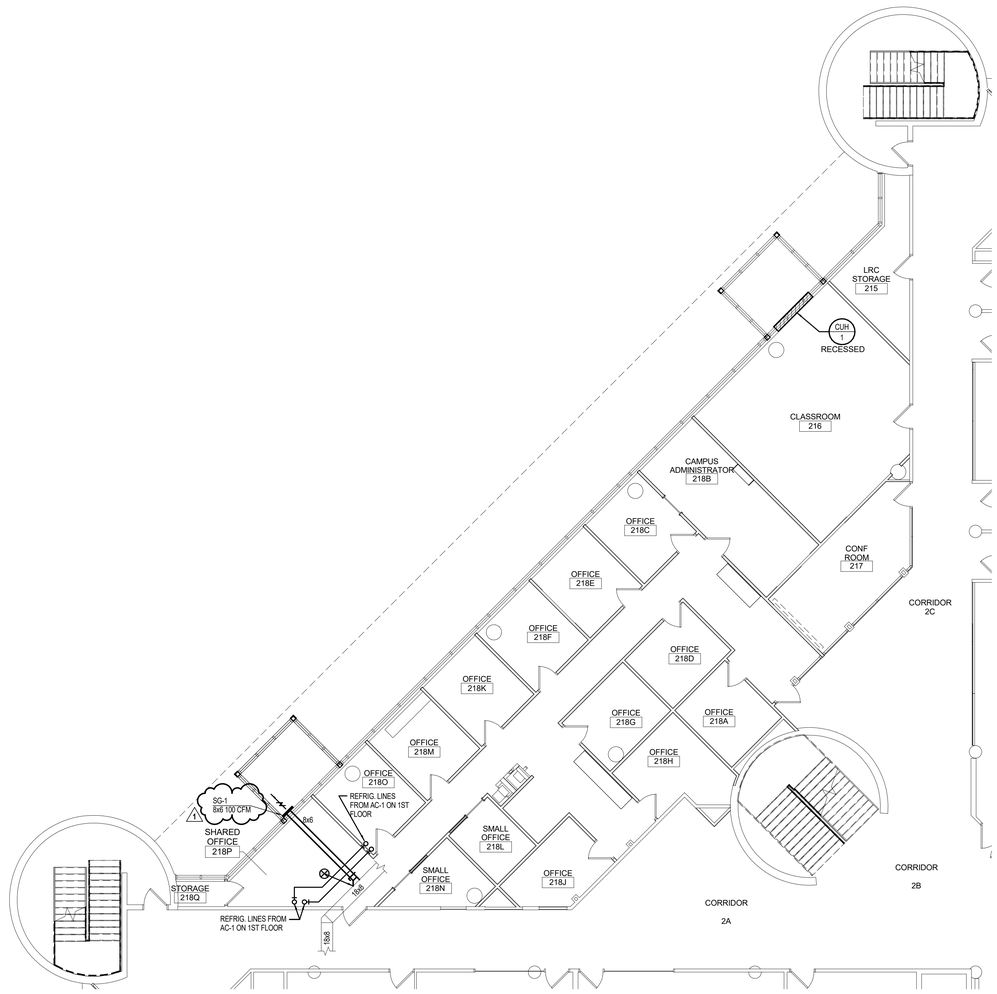
M111R



2 MECHANICAL PLAN - THIRD FLOOR

1/8" = 1'-0"

NORTH



1 MECHANICAL PLAN - SECOND FLOOR

1/8" = 1'-0"

NORTH

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
www.hsrassociates.com

Consultant:

Project Title: WITC - SUPERIOR CAMPUS
SUPERIOR INTERIOR AND EXTERIOR MAINTENANCE & REMODEL

Project Location:

Sheet Title: MECHANICAL PLANS - 2ND & 3RD FLOOR

HSR Project Number: 17063-1

Project Date: MARCH 2018

Drawn By: CMB

Key Plan:

CONSTRUCTION DOCUMENTS

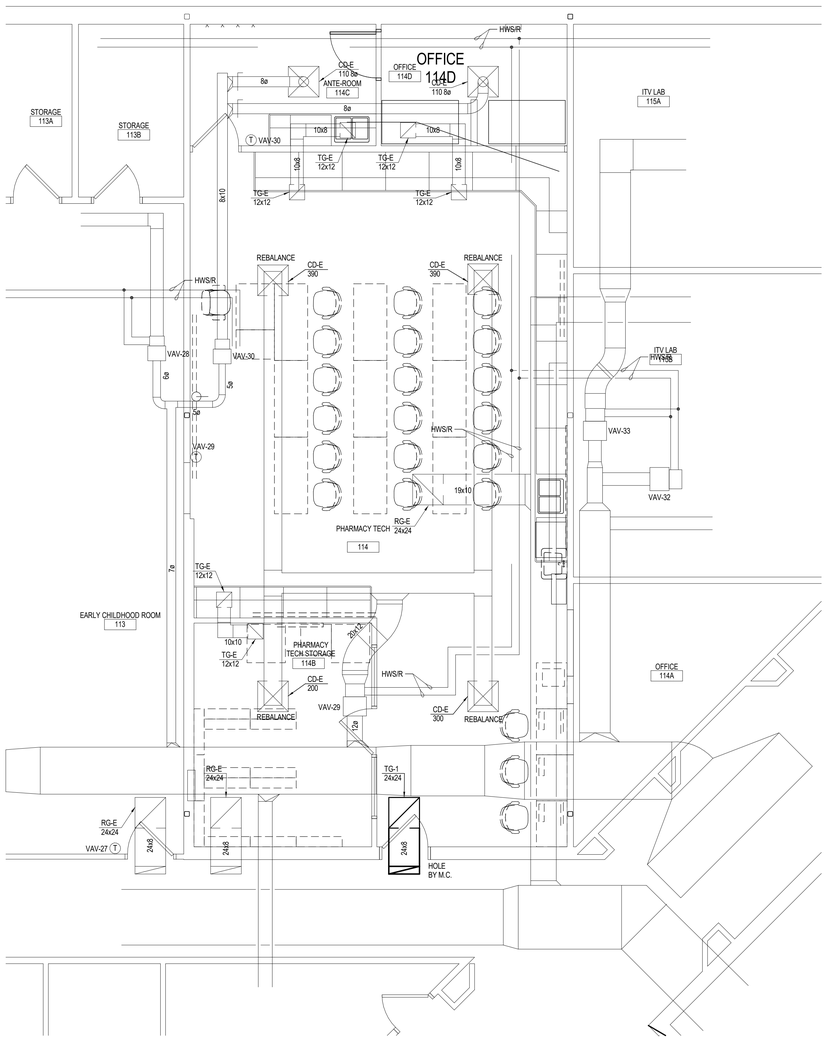
Revisions:

No.	Description	Date
	ADDENDUM #1	3/27/2018

Graphic Scale: VARIES

Last Update: 3/27/2018 11:00:49 AM

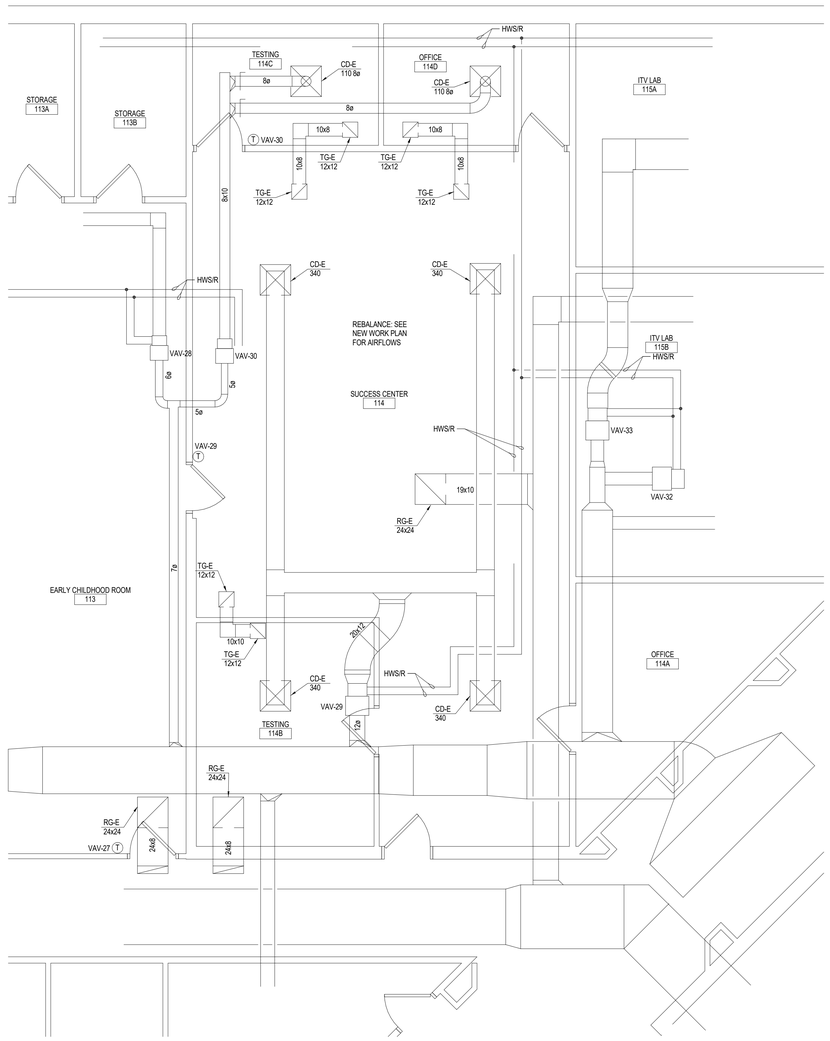
M121R



2 MECHANICAL PLAN - PHARM TECH AREA

1/4" = 1'-0"

ALL WORK ON THIS DRAWING SHALL BE ALTERNATE BID



1 MECHANICAL DEMOLITION PLAN - PHARM TECH AREA

1/4" = 1'-0"

ALL WORK ON THIS DRAWING SHALL BE ALTERNATE BID

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
www.hsrassociates.com

Consultant:

Project Title: **WITC - SUPERIOR CAMPUS SUPERIOR INTERIOR AND EXTERIOR MAINTENANCE & REMODEL**

Project Location:

Sheet Title: **MECHANICAL PLANS - PHARM TECH AREA**

HSR Project Number: **17063-1**

Project Date: **MARCH 2018**

Drawn By: **CMB**

Key Plan:

CONSTRUCTION DOCUMENTS

Revisions:

No.	Description	Date
	ADDENDUM #1	3/27/2018

Graphic Scale: **VARIES**

Last Update: **3/28/2018 11:39:39 AM**

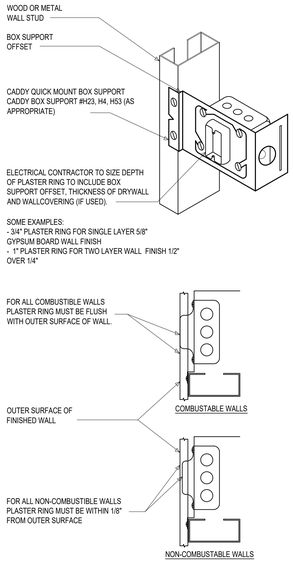
M131

EQUIPMENT COORDINATION SCHEDULE - MECHANICAL

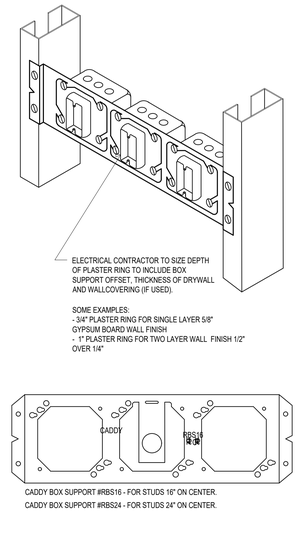
TAG	DESCRIPTION	HP / KW	MCA RLA/FLA	VOLTS	CONDUCTORS			CONDUIT	LOCATION	PANEL	CIRCUIT	BREAKER SIZE	STARTER			DISCONNECT			NOTE
					PH	N	GND						TYPE	FURNISHED BY	INSTALLED BY	TYPE	FURNISHED BY	INSTALLED BY	
AC-1	SPLIT SYSTEM OUTDOOR CONDENSING UNIT		0.75 FLA	230/1	(2) #10	-	#10	3/4 "	ROOF/OFFICE	LP2	10,12	25/2	INT	EQM	EQM	NF/3R	EC	EC	2,3
AC-1	SPLIT SYSTEM INDOOR EVAPORATOR UNIT		0.38 FLA	230/1	(2) #10	-	#10	3/4 "	ROOF/OFFICE	LP2	10,12		INT	EQM	EQM	NF	EC	EC	1,3
CUH-1	CABINET HEATER			115/1	#12	#12	#12	3/4 "	VESTIBULE	LP2	14	15/1	INT	EQM	EQM	INT	MC	EC	

GENERAL NOTES:
A. COORDINATE INSTALLATION OF MOTORS WITH MECHANICAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS.
B. CONTROL WIRING SHALL BE BY MECHANICAL CONTRACTOR UNLESS NOTED OTHERWISE.
C. MCA=MINIMUM CIRCUIT AMPS; MOCP=MINIMUM OVER-CURRENT PROTECTION; RLA=RATED LOAD AMPS; FLA=FULL LOAD AMPS
D. EC=ELECTRICAL CONTRACTOR; MC=MECHANICAL CONTRACTOR; INT=INTERGRAL TO UNIT; EQM=EQUIPMENT MANUFACTURER

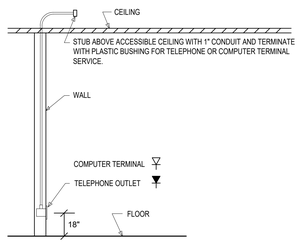
MOTOR SCHEDULE NOTES:
1. PROVIDE HP RATED TOGGLE SWITCH AT UNIT AS DISCONNECTING MEANS.
2. PROVIDE WATERPROOF (NEMA 3R) DISCONNECT SWITCH AT UNIT.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE CONNECTION FROM THE OUTDOOR UNIT TO THE INDOOR UNIT. INDOOR UNIT SHALL GET POWER FROM THE OUTDOOR UNIT. COORDINATE WITH THE MECHANICAL CONTRACTOR.



1 BOX SUPPORT DETAIL
NO SCALE



2 MULTIPLE BOX SUPPORT DETAIL
NO SCALE



3 VOICE/DATA ROUGH-IN
NO SCALE

PANEL "XYZ"

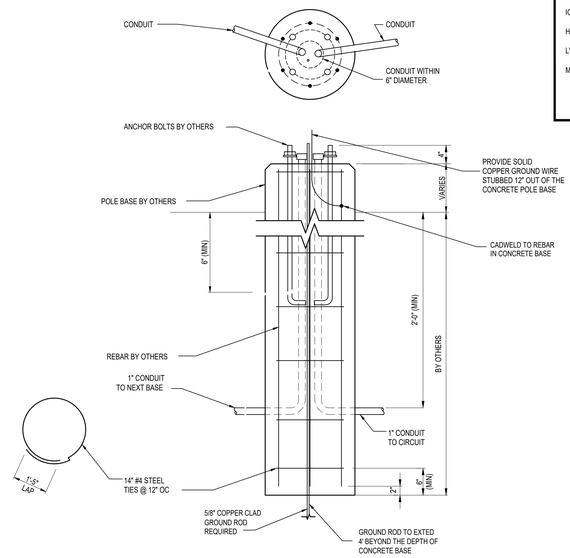
480Y/277 VOLT, 3Φ, 4W, 400A/3P MCB
18KAIC RATING
FED FROM XXXXX IN ROOM XXXX
INSTALLED DD/MM/YYYY

ALL NEW PANELBOARDS SHALL BE IDENTIFIED USING AN ENGRAVED 2-PLEX ACRYLIC LABEL.

EQUIPMENT NAMEPLATES SHALL BE 2" TALL x 5" WIDE CUSTOM ENGRAVED TILE, 2-PLEX ACRYLIC, WHITE ON BLACK CORE TO INCLUDE THE FOLLOWING INFORMATION.
1. EQUIPMENT NAME IN 3/8" MINIMUM HEIGHT LETTERING.
2. VOLTAGE, AMPACITY RATING AND TYPE IN 1/8" MINIMUM HEIGHT LETTERING.
3. EQUIPMENT AIC RATING IN 1/8" MINIMUM HEIGHT LETTERING.
4. FEEDER SOURCE OFF SUPPLY DESCIPTION AND LOCATION IN 1/8" MINIMUM HEIGHT LETTERING.
5. INSTALLATION DATE MM/DD/YYYY IN 1/8" MINIMUM HEIGHT LETTERING.

MOUNTING SHALL BE MADE UTILIZING STAINLESS STEEL SCREWS.
MOUNTING HOLES SHALL BE SEALED WITH SILICONE RUBBER.

4 PANEL LABEL
NO SCALE



5 STANDARD BASE DETAIL
NO SCALE

ELECTRICAL SYMBOLS LEGEND

RECEPTACLES
- 20A, 120V, 2P, 3W GROUNDING DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE - (1 SWITCHED & 1 UNSWITCHED)
- SINGLE-PLEX RECEPTACLE
- QUADPLEX RECEPTACLE
- GFCI RECEPTACLE
- RECEPTACLE MTD. 6" ABOVE COUNTER OR HGT SHOWN
- TAMPER RESISTANT RECEPTACLE
- WEATHER-PROOF GFCI RECEPTACLE
- 120V, 15A CLOCK OUTLET

POWER
- PANEL BOARD
- J-BOX
- PUSH BUTTON STATION AS NOTED
- ELECTRICAL EQUIPMENT CONNECTION
- DISCONNECT

COMMUNICATIONS
- WALL MOUNTED SPEAKER
- TELEPHONE
- TELEPHONE/DATA
- DATA ONLY
- COMMUNICATION DEVICE MTD. 6" ABOVE COUNTER OR HGT SHOWN

SECURITY
- CLOSED CIRCUIT CAMERA (CCC)

LIGHTING
- TROFFER STYLE FIXTURE, TYPE AS NOTED (FIXTURE TYPE PER SCHEDULE; SWITCH LEGS)
- FIXTURE ON EMERGENCY POWER
- STRIP LIGHT SUSPENDED DIRECT/INDIRECT
- SURFACE MTD FIXTURE
- TRACK LIGHTING
- PENDANT/SURFACE MTD UP/DOWN LIGHT
- RECESSED/DOWNLIGHT FIXTURE
- ACCENT FIXTURE
- WALL MOUNTED FIXTURE
- EXIT SIGN (ARROWS INDICATED AS SHOWN) - (SHADING INDICATES # OF FACES)
- CLG MTD EMERGENCY FIXTURE
- EMERGENCY FIXTURE
- COMBO EMERGENCY/EXIT LIGHT - (ARROW INDICATES DIRECTION) - (SHADING INDICATES # OF FACES)
- BOLLARD/SIDEWALK LIGHT
- FLOOD LIGHT
- SINGLE HEAD FIXTURE/POLE

SWITCHING
- $ 20A, 120/277V SPST SWITCH
- $3 20A, 120/277V 3-WAY SWITCH
- $4 20A, 120/277V 4-WAY SWITCH
- $D DIMMER SWITCH
- PC PHOTOCELL

FIRE ALARM
- MANUAL PULL STATION 46" A.F.F. CENTER
- STROBE ONLY 84" A.F.F. TO CENTER 15CD, 30CD, 75CD, 110CD
- HORN/STROBE 84" A.F.F. TO CENTER 15CD, 30CD, 75CD, 110CD
- SMOKE DETECTOR (NR - INDICATES ELEVATOR RECALL)
- HEAT DETECTOR
- DUCT DETECTOR

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	REFERENCE CATALOG #	LAMPS	VOLTS
A	LED WALL PACK FIXTURE. 4000K, 4000 LUMENS, 0-10V DIMMING, WITH NARROW DISTRIBUTION AND VISOR.	INSIGHT OR APPROVED EQUAL	9SP 30 40K 10 TR INT VS	LED 4000K 30W	UNV
B	LED WALL PACK FIXTURE, 4000K 4000 LUMENS, WITH TYPE V MEDIUM DISTRIBUTION.	LITHONIA OR APPROVED EQUAL	DSXO LED P1 40K T3M MVOLT WBA	LED 4000K 38W	UNV
C	ROUN LED WALL WASH FIXTURE, 4000K, WITH DARK BRONZE FINISH.	LITHONIA OR APPROVED EQUAL	OLSS DBB	LED 4000K 9W	UNV
D	6" LED DOWNLIGHT FIXTURE, 4000K, 2000 LUMENS, WITH MEDIUM DISTRIBUTION.	LITHONIA OR APPROVED EQUAL	EVO 40/20 6BR MD LD MVOLT EZ1 EVO 40/20 8BR MD LD MVOLT EZ1	LED 4000K 48W	UNV
F	SAME AS TYPE "D" EXCEPT 4000 LUMENS.	LITHONIA OR APPROVED EQUAL	EVO 40/40 6BR MD LD MVOLT EZ1	LED 4000K 48W	UNV
G1	2 HEADED DECORATIVE PENDANT FIXTURE.	VISTOSI OR APPROVED EQUAL	SM[UL|SP]FUTUR[GR/FU[P]D2]E26	LED 83W	120V
G2	2 HEADED DECORATIVE PENDANT FIXTURE.	VISTOSI OR APPROVED EQUAL	SM[UL|SP]FUTUR[GR/FU[M]D2]E26	LED 83W	120V
H	2X4 LED TROFFER, 4000 LUMENS, 4000K, CURVED LINEAR PRISMATIC LENSE.	LITHONIA OR APPROVED EQUAL	2BLT4 40L ADP EZ1 LP840	LED 4000K 34W	UNV
J	LED SINGLE HEAD POLE FIXTURE, POLE TOP MOUNTED , 4000K, 3000 LUMENS, TYPE III DISTRIBUTION.	PHILIPS OR APPROVED EQUAL	CAND2 40W42LED45 G2 PC C	LED 4000K 50W	UNV
K	LED FLAGPOLE BEACON, 3000K, 500 LUMENS, POLE TOP MOUNTED.	FLAGPOLE WAREHOUSE APPROVED EQUAL	ORN-750026	LED 3000K	120V
M	LED WALL PACK, 4000K, , 6000 LUMENS, WITH TYPE III DISTRIBUTION AND INTEGRAL PHOTOCELL	LITHONIA OR APPROVED EQUAL	TWN LED 20C 1000 40K T3M MVOLT	LED 4000K 52W	UNV
N	1X4 LED SURFACE MOUNT CORNER FIXTURE, 4000K, 3500 LUMENS.	FAIL-SAFE OR APPROVED EQUAL	FCC-S-4-LD4-1HI-40-UNV-EDD1	LED 4000K 52W	UNV
P	3' LED UNDERCABINET FIXTURE, 4000K, 2500 LUMENS WITH ROCKER SWITCH.	FAIL-SAFE OR APPROVED EQUAL	UCL-3-LD4-40-EDD1-UNV-RSW	LED 4000K 40W	UNV
	EDGE LIT EXIT SIGN WITH RED LETTERS, MIRRORED FINISH, AND INTERNAL BATTERY. PROVIDE WITH NUMBER OF FACES AND CHEVRONS AS SHOWN ON PLANS.	LITHONIA OR APPROVED EQUAL	EDGR SERIES	LED	UNV

GENERAL NOTES:
1. NO SUBSTITUTIONS WITHOUT TEN DAY PRIOR APPROVAL.

ELECTRICAL ABBREVIATIONS

AC	ABOVE COUNTERTOP	MCA	MINIMUM CIRCUIT AMPS
AFF	ABOVE FINISH FLOOR	MDP	MAIN DISTRIBUTION PANEL
AFG	ABOVE FINISH GRADE	MTD	MOUNTED
ANNC	ANNUNICIATOR	OCC	OCCUPANCY
CC	CONTROLS CONTRACTOR	PC	PLUMBING CONTRACTOR
CCT	CIRCUIT	PE	PHOTOELECTRIC CELL
DPST	DOUBLE POLE SINGLE THROW	PNL	PANEL
EC	ELECTRICAL CONTRACTOR	SPST	SINGLE POLE SINGLE THROW
EM	EMERGENCY	TC	TIME CLOCK
EX	EXISTING	TPC	TIME CLOCK - PHOTOCELL
EXR	EXISTING RELOCATED	TR	TAMPER RESISTANT
GC	GENERAL CONTRACTOR	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
GFCI	GROUND FAULT CIRCUIT INTERRUPT	UNO	UNLESS NOTED OTHERWISE
IBC	INTERNATIONAL BUILDING CODE	WP	WEATHER PROOF
IG	ISOLATED GROUND	20A	20 AMP
HP	HORSEPOWER	Ø	PHASE
LV	LOW VOLTAGE	3W	3 WIRE
MC	MECHANICAL CONTRACTOR	20/1	20 AMP SINGLE PHASE

GENERAL ELECTRICAL NOTES

1. ALL WORK SHALL BE IN CONFORMANCE WITH NATIONAL, STATE, AND LOCAL CODES AND/OR ORDINANCES.
2. ELECTRICAL CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER CONTRACTORS.
3. SEE ARCHITECTURAL, MECHANICAL, & PLUMBING DRAWINGS FOR ADDITIONAL REQUIREMENTS.
4. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC ONLY. THEY ARE INTENDED TO GIVE APPROXIMATE LOCATIONS AND OVERALL DESIGN INTENT. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PRODUCTS, MATERIALS, AND ELECTRICAL METHODS WHICH HAVE NOT BEEN SHOWN OR INDICATED BUT ARE REQUIRED FOR A COMPLETE SYSTEM TO THE STANDARDS OF THE INDUSTRY.
5. INSTALL LIGHTING FIXTURES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PROVIDE SUPPORTING DEVICES FOR ADEQUATE SUPPORT OF FIXTURES FROM STRUCTURE.
6. UPON COMPLETION OF THE ELECTRICAL WORK, THE INSTALLATION SHALL BE TESTED FOR CONTINUITY, GROUNDS, AND SHORT CIRCUITS. THE ELECTRICAL CONTRACTOR SHALL DEMONSTRATE PROPER PERFORMANCE OF ALL SYSTEMS. ALL DEFECTIVE WORK OR MATERIALS SHALL BE REPLACED OR REPAIRED AS NECESSARY AND RETESTED.
7. ELECTRICAL RACEWAYS THAT PENETRATE FIRE RATED ASSEMBLIES SHALL BE SLEEVED AND SEALED AS PER THE LOCAL BUILDING CODE.
8. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A TEMPORARY ELECTRICAL SYSTEM FOR THE PROJECT. AT LEAST ONE 120 VOLT SINGLE PHASE RECEPTACLE SHALL BE PROVIDED FOR EACH 500 SQUARE FEET OF FLOOR SPACE. SUFFICIENT TEMPORARY LIGHTING SHALL BE PROVIDED TO ALLOW ALL CONTRACTORS TO COMPLETE THEIR WORK. TEMPORARY ELECTRICAL CIRCUITS SHALL BE EQUIPPED WITH COMBINATION GROUND FAULT INTERRUPTER AND CIRCUIT BREAKER PER NEC. TEMPORARY ELECTRICAL SYSTEM SHALL BE INCLUDED IN THIS BID. USAGE CHARGES SHALL BE PAID FOR BY THE GENERAL CONTRACTOR.
9. ELECTRICAL DEVICES/EQUIPMENT SHOWN AS DASHED AND BOLD ARE EXISTING TO BE REMOVED, ELECTRICAL DEVICES/EQUIPMENT SHOWN AS LIGHT AND SOLID ARE EXISTING TO REMAIN, AND ELECTRICAL DEVICES/EQUIPMENT SHOWN AS BOLD AND SOLID SHALL BE NEW.
10. ELECTRICAL CONTRACTOR SHALL PROVIDE COMMUNICATIONS DEVICES, INCLUDING 4" SQUARE, MINIMUM 2-1/8" DEEP BACKBOX WITH SINGLE GANG MUD RING AND 1" CONDUIT STUBBED INTO ACCESSIBLE CEILING WITH 90 DEGREE BEND INTO THE ROOM AND PLASTIC BUSHING.
11. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASSOCIATED COSTS AND SCHEDULING OF REQUIRED ELECTRICAL INSPECTIONS.
12. ELECTRICAL CONTRACTOR SHALL SALVAGE DEVICES BEING REMOVED FOR SPECIALIZED SYSTEMS, INCLUDING BUT NOT LIMITED TO CARD READERS ALONG WITH ASSOCIATED EQUIPMENT, CAMERAS, AND ASSOCIATED EQUIPMENT. THESE ITEMS SHALL BE RETURNED TO THE OWNER.
13. PROTECT TELEMETRY AND OTHER LOW VOLTAGE CABLE FROM DEMOLITION OPERATIONS. DO NOT DISRUPT WITHOUT WRITTEN OWNER APPROVAL UPON 5 DAY MINIMUM NOTICE.
14. EC SHALL INCLUDE IN BID AN ALLOWANCE FOR OWNER TO ADD (10) RECEPTACLES DURING CONSTRUCTION WALK THROUGH. ASSUME NOT MORE THAN (4) NEW CIRCUITS. CIRCUITS WILL BE PULLED FROM THE NEAREST AVAILABLE NORMAL POWER PANEL.
15. EC SHALL INCLUDE IN BID AN ALLOWANCE FOR THE OWNER TO ADD (5) DATA OUTLETS AND CABLING AT WALKTHROUGH. ASSUME AVERAGE CABLING DISTANCE TO BE 100'.
16. GENERAL CONTRACTOR SHALL CUT FLOOR CONCRETE FOR IN-FLOOR ELECTRICAL REQUIREMENTS. ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATIONS.
17. ALL LIGHTING CONTROLS SHALL BE LITHONIA NLIGHT COMPATIBLE.

SYMBOL LINEWEIGHT LEGEND

- LIGHT SOLID LINES = EXISTING DEVICE(S) TO REMAIN
- HEAVY, DASHED LINES = EXISTING DEVICE(S) TO BE REMOVED
- HEAVY, SOLID LINES = NEW DEVICE(S) TO BE INSTALLED

ELECTRICAL SHEET INDEX

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
WEB SITE: www.hsrassociates.com

Consultant:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
3720 Arbor Court | Eau Claire, WI 54701
P: 715.832.5683 | F: 715.832.5688 | mepassociates.com

Project Title: WITC - SUPERIOR CAMPUS
SUPERIOR INTERIOR AND EXTERIOR
MAINTENANCE & REMODEL

Project Location: 600 N. 21st Street
Superior, Wisconsin 54880

Sheet Title: ELECTRICAL - NOTES, LEGENDS, & ABBREVIATIONS

HSR Project Number: 17063-1

Project Date: MARCH 2018

Drawn By: JCN

Key Plan:

CONSTRUCTION DOCUMENTS

Revisions:

No.	Description	Date
1	ADDENDUM #1	03/27/18

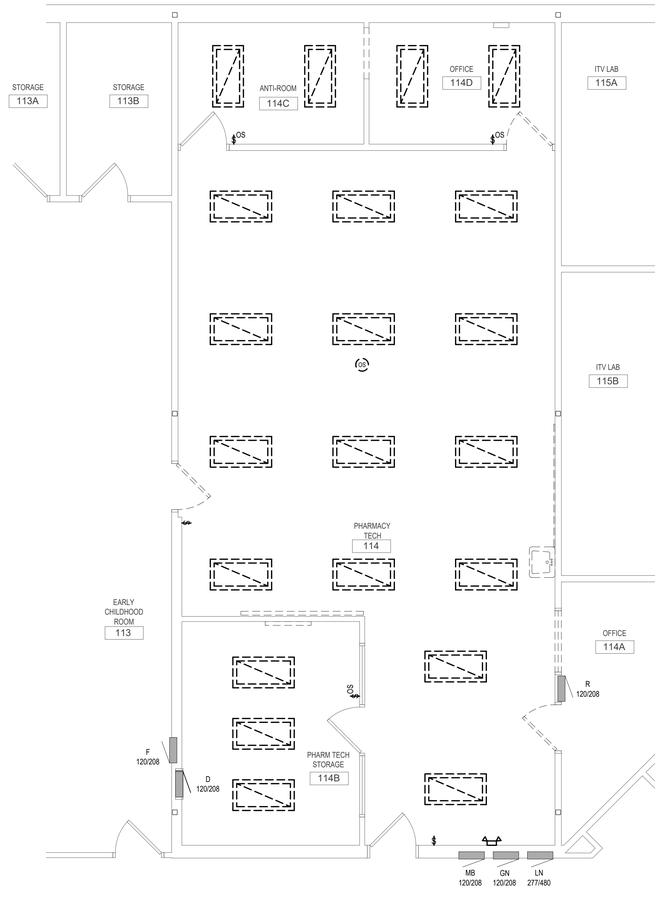
Graphic Scale: VARIES

Last Update: 3/26/18

E001R

GENERAL NOTES

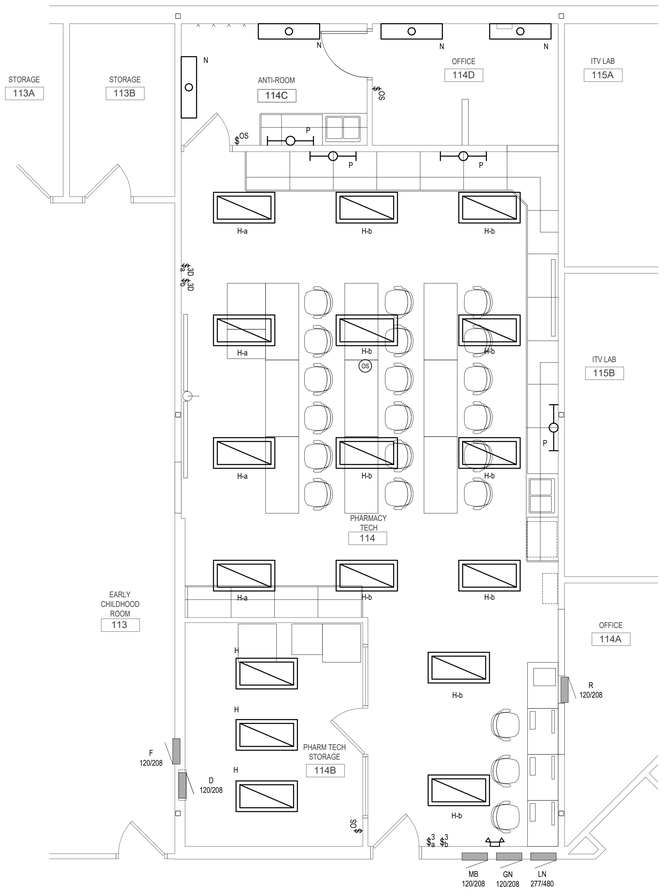
1. SALVAGE EXISTING LIGHTING CIRCUIT TO FEED NEW AREA LIGHTING.
2. PROVIDE NLIGHT POWER PACK TO CONTROL LIGHTING IN EACH ROOM SEPARATELY.



2 PHARM TECH DEMO LIGHTING PLAN

1/4" = 1'-0"

NORTH



1 PHARM TECH LIGHTING PLAN

1/4" = 1'-0"

NORTH

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
WEB SITE: www.hsrassociates.com

Consultant:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
2703 Arbor Court | Eau Claire, WI 54701
P: 715.832.9680 | F: 715.832.5658 | mepassociates.com

Project Title: **WITC - SUPERIOR CAMPUS**
SUPERIOR INTERIOR AND EXTERIOR MAINTENANCE & REMODEL

Project Location: **600 N. 21st Street**
Superior, Wisconsin 54880

Sheet Title: **PHARM TECH LIGHTING PLAN**

HSR Project Number: **17063-1**

Project Date: **MARCH 2018**

Drawn By: **JCN**

Key Plan:

CONSTRUCTION DOCUMENTS

Revisions:

No.	Description	Date
1	ADDENDUM #1	03/27/18

Graphic Scale: **VARIES**

Last Update: **3/26/18**

E411

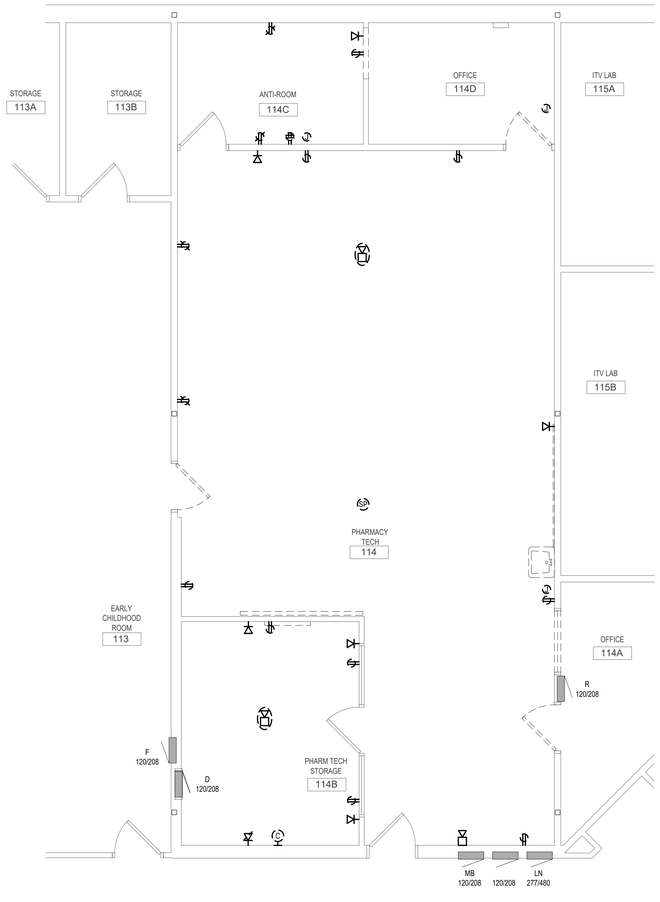
GENERAL NOTES

1. CIRCUIT TAGS ARE FOR GROUPING PURPOSES ONLY.
2. SALVAGE EXISTING RECEPTACLE CIRCUITS TO BE REUSED. ADDITIONAL REQUIRED CIRCUITS SHALL BE CONNECTED TO EXISTING PANEL "D".
3. PROVIDE NEW 20A/1 CIRCUIT BREAKERS IN EXISTING ITE PANEL "D" TO FEED NEW RECEPTACLE LOADS.

KEYED NOTES

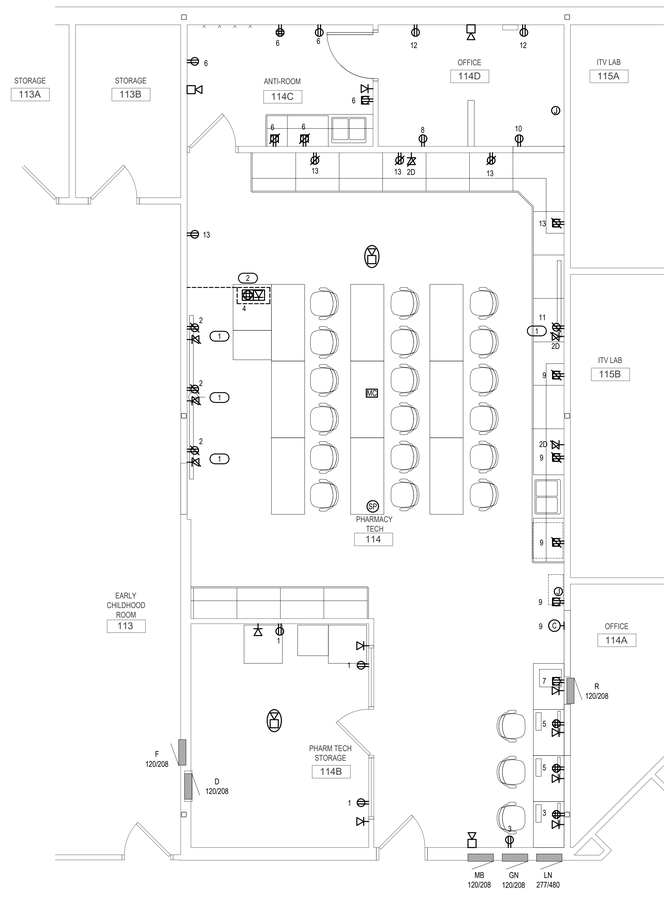
(1) POWER AND DATA ROUGH IN WITH 1.5" CONDUIT TO ABOVE THE FINISHED ACCESSIBLE CEILING. PROVIDE 4 11/16 " SQUARE BOX WITH 2 GANG MUD RING AND BLANK COVER FOR THE 1.5" CONDUIT. MOUNTED 6" BELOW FINISHED CEILING ON THE RIGHT HAND SIDE OF MONITOR.

(2) PROVIDE 2" CONDUIT TO EQUIPMENT OUTLET FROM TEACHER DESK STATION FOR OWNER'S RAPID RUN CABLING CONNECTION TO ITV SYSTEM.



2 PHARM TECH DEMO POWER & SYSTEMS PLAN
1/4" = 1'-0"

NORTH



1 PHARM TECH POWER & SYSTEMS PLAN
1/4" = 1'-0"

NORTH

ARCHITECTURE
ENGINEERING
INTERIOR DESIGN

HSR ASSOCIATES INC.
100 MILWAUKEE STREET
LA CROSSE, WISCONSIN
PHONE: 608.784.1830
FAX: 608.782.5844
WEB SITE: www.hsrassociates.com

Consultant:

MEP ASSOCIATES, LLC
engineers | consultants | commissioning
2725 Arbor Court | Eau Claire, WI 54701
P: 715.832.9680 | F: 715.832.5658 | mepassociates.com

Project Title: **WITC - SUPERIOR CAMPUS**
SUPERIOR INTERIOR AND EXTERIOR
MAINTENANCE & REMODEL

Project Location: **600 N. 21st Street**
Superior, Wisconsin 54880

Sheet Title: **PHARM TECH POWER & SYSTEMS PLAN**

HSR Project Number: **17063-1**

Project Date: **MARCH 2018**

Drawn By: **JCN**

Key Plan:

CONSTRUCTION DOCUMENTS

Revisions:

No.	Description	Date
1	ADDENDUM #1	03/27/18

Graphic Scale: **VARIES**

Last Update: **3/26/18**

△1 **E421**