



Stewart Facility

5500 Snyder Avenue, Carson City, NV 89701

Request for Permission to Undertake Structural or Visual Alterations

In accord with the requirements set forth in existing covenants,
_____ State Public Works _____ (name of agency) is requesting written
permission to undertake visual or structural alterations as described below:

Building Number and Name:

Building #3 – Indian Museum
Building #12 – Dormitory (P.O.S.T.)
Building #13 – Dormitory (DMV & PS)
Building #57 – Housing
Building #65 – Housing
Building #67 – Housing
Building #107 – Fire Marshal

Building's Date of Construction:

Building #3 – 1930
Building #12 – 1941
Building #13 – 1941
Building #57 – 1939
Building #65 – 1937
Building #67 – 1939
Building #107 – 1963

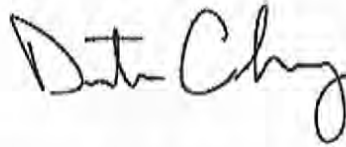
Supplementary Information:

Please indicate if you have submitted the following–

- ☒ Written description of proposed work (**required; see second page**)
- ☒ Photographs of existing conditions (**required**)
- ☒ Sketches, plans, or architectural drawings depicting the proposed work
- ☐ Sketch or site plan of project location
- ☐ Specs of materials to be used
- ☐ Historic photographs depicting past condition or design
- ☐ Other

Stewart Indian School Complex
Request for Permission to Undertake Structural or Visual Alterations

Request Submitted by:



Dustin Cheney

Print name

Signature

Agency – State Public Works

Title – Project Manager

Email address – dcheney@admin.nv.gov

Phone number – 775-684-4125

Date of Request: 1/26/23

Please allow up to 14 business days for this form to be processed. Proposed work must not begin until this form has been reviewed and approved by both the State Historic Preservation Office and the Nevada Indian Commission. In some cases, coordination with State Lands is also necessary. Per NRS 321.003, a state agency must also submit a Certification Request to the Nevada Division of State Lands before constructing a building or making other permanent improvements to state lands. This includes ground disturbance for site work and utilities. If your project requires a State Lands Certification, you will find the instructions on the Division of State Lands website under "Forms."

<http://www.lands.nv.gov/>

To expedite your project, the SHPO recommends coordinating with SHPO and State Lands concurrently.

Please submit request form and supplementary materials to the State Historic Preservation Office, 901 S. Stewart St., Ste. 5004, Carson City, NV 89701-5248 or by email to rlpalmer@shpo.nv.gov.

REQUEST APPROVED BY:

SHPO - Robin Reed, Deputy SHPO 2-24-2023
Print and sign name *Signature* *Date*

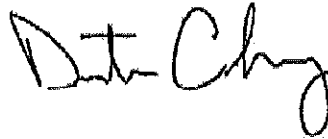
Nevada Indian Commission - _____
Print and sign name *Date*

* Nevada Division of State Lands - _____
Print and sign name *Date*

Stewart Indian School Complex

Request for Permission to Undertake Structural or Visual Alterations

Request Submitted by:



Dustin Cheney

Print name

Signature

Agency – State Public Works

Title – Project Manager

Email address – dcheney@admin.nv.gov

Phone number – 775-684-4125

Date of Request: 1/26/23

Please allow up to 14 business days for this form to be processed. Proposed work must not begin until this form has been reviewed and approved by both the State Historic Preservation Office and the Nevada Indian Commission. In some cases, coordination with State Lands is also necessary. Per NRS 321.003, a state agency must also submit a Certification Request to the Nevada Division of State Lands before constructing a building or making other permanent improvements to state lands. This includes ground disturbance for site work and utilities. If your project requires a State Lands Certification, you will find the instructions on the Division of State Lands website under "Forms."

<http://www.lands.nv.gov/>

To expedite your project, the SHPO recommends coordinating with SHPO and State Lands concurrently.

Please submit request form and supplementary materials to the State Historic Preservation Office, 901 S. Stewart St., Ste. 5004, Carson City, NV 89701-5248 or by email to rlpalmer@shpo.nv.gov.

REQUEST APPROVED BY:

SHPO - Robin Reed, Deputy SHPO 2-24-2023
Print and sign name Date

Nevada Indian Commission - J. Montoah 3-3-23
Print and sign name Date

* Nevada Division of State Lands - _____
Print and sign name Date

* (If required)

Description of Proposed Work:

Please provide a thorough written description of the proposed work, including–

- Location on building
- Approximate size of area affected
- Existing conditions
- Materials to be used
- Proposed methods (must follow the [Secretary of the Interior's Standards](#))

(Use as many pages as needed)

Detail Description:

This project will inspect (7) occupied building's crawl spaces at the Stewart Facility for hazardous materials. The identified hazardous materials will be remediated and a vapor barrier installed. Buildings 3, 57, 65, and 67 have been identified as having asbestos containing material within the plumbing pipe wrap insulation (building: 57, 65, 67) and wall tar on the basement foundation wall, approximately 40 square feet (building: 3). These materials will be abated through a qualified environmental contractor by means of proper negative air containments zones and selective demolition of identified materials. Plumbing pipe wrap insulation will be replaced with a high-performance fiberglass pipe insulation. Crawl spaces will be cleaned of any trash and debris and have a 10-mil polyethylene vapor barrier installed. Total crawl space and basement areas affected is approximately 77,857 square feet.

Project Justification:

Previous work at the site has identified hazardous materials in the crawl spaces. Buildings with uncontrolled hazardous materials must be closed off to untrained personnel and scheduled for remediation.

Background Information:

Previous projects have encountered hazardous materials which resulted in project delays and additional costs.

Fire Marshal Building 107, 32,832 sq. ft constructed in 1963.

Housing Building 67, 4862 sq. ft constructed in 1939.

Housing Building 65, 2102 sq. ft constructed in 1937.

Housing Building 57, 3000 sq. ft constructed in 1939.

Dorm Building 12, 14572 sq. ft constructed in 1941.

Dorm Building 13, 14572 sq. ft constructed in 1941.

Cultural Office Building 26, 1828 sq. ft constructed in 1937.

Museum Building 3, 5917 sq. ft constructed in 1930.

Stewart Indian School Complex
Request for Permission to Undertake Structural or Visual Alterations

Existing Conditions Photographs:

Building 3

Wall tar
containing 4%
asbestos



Building 57

Asbestos containing Thermal System Insulation (TSI)



Stewart Indian School Complex
Request for Permission to Undertake Structural or Visual Alterations

Building 65

Asbestos containing TSI



Building 67



Asbestos containing TSI

Air Quality and Vapor Barrier Various Buildings Stewart Facility SPWD Project Number 21-S06-3

State Public Works Division
515 East Musser Street, Suite 102
Carson City, Nevada 89701-4263



Design Development Submittal
December 14, 2022

Paul Cavin
Architect LLC

1575 Delucchi Lane, Suite 120
Reno, Nevada 89502

office: (775) 284-7083
mobile: (775) 842-0261

www.paulcavindesign.com
paul@paulcavindesign.com

professional seal

PRELIMINARY
NOT FOR CONSTRUCTION

consultant

project

Air Quality and Vapor Barrier
Various Buildings Stewart Facility
State Public Works Division
515 East Musser Street, Suite 102
Carson City, Nevada 89701-4263

revisions

No.	Description	Date

drawn by MLM

reviewed by PAC

date 12/14/2022

project number 22042

drawing name

Cover Sheet

sheet number

A000

- General Notes
1.

The General Notes and all other notes herein apply to all work described in the Contract Documents.

2.

The Contract Documents consist of the Agreement between the Owner and Contractor, the Conditions of the Contract (General, Supplementary, Invitation to Bid and other Conditions), Drawings, Project Manual, Specifications and Addenda issued prior to execution and all modifications issued after execution of the Contract.

3.

The Work includes the completed or partially completed construction required by the Contract Documents and includes all labor, materials, equipment, coordination, and services necessary to produce the Work described in the contract documents.

4.

The Contract Documents are complementary, the intent is to include all items and materials necessary for the proper execution and completion of the Work by the Contractor and any necessary sub-contractors.

5.

The Contractor shall carefully study and compare the Contract Documents and shall at once report to the Architect any error, inconsistency or omission that is discovered. The Contractor to submit a Request for Information (RFI) to the Architect prior to proceeding. The Contractor shall not perform any portion of the Work at any time without current and complete Contract Documents.

6.

The Contractor is required to visit the site as part of pre-bid preparation to compare the Drawings and Specifications and become familiar with any work in place and be informed of all conditions of the work environment including the Work being performed. Failure to visit the site will in no way relieve the Contractor from necessity of furnishing any materials or performing any Work in accordance with the Contract Documents that may be required to complete the Work. The Contractor shall report inconsistencies in the drawings, specifications, and site conditions to the Owner and Architect during the bid period. Failure to report inconsistencies does not relieve the Contractor from furnishing or providing the necessary material and/or labor to complete the work described in the Contract Documents.

7.

Drawings are not to be scaled for information or disassembled for convenience.

8.

In the event certain features of the Work are not fully shown in the Contract Documents, then the construction shall be of the same character as for similar conditions that are shown or called for and shall be reviewed by the Architect prior to execution.

9.

All Work shall be performed within strict conformance to the minimum standards of the current edition of the International Building Code (IBC) and all applicable national, state and local laws, regulations and ordinances.

10.

The Contractor shall comply with notices given and required by lawful orders of public authorities applicable to the performance of the Work.

11.

The Contractor shall coordinate locations of any and all items, including but not limited to: existing conditions, civil, landscape, structural, mechanical, plumbing, electrical, lighting, data, voice and audio/visual; including, but not limited to all structure, equipment, ductwork, piping and conduit. Coordinate all required clearances for installation and maintenance of the above items.

12.

The Contractor shall supervise and direct the Work, using the best skill and attention necessary and shall be solely responsible for all construction means, methods, techniques, sequences, procedures and for coordination of all portions of the Work described in the Contract Documents.

13.

The Contractor shall be responsible for the acts and omissions of the Contractor's employees, Sub-contractors, suppliers, vendors and their agents and employees and other persons or entities performing any portion of the Work under a Contract with the Contractor.

14.

The Contractor shall perform the Work in a continuous and diligent manner to ensure Substantial Completion of the Project within the Contract Time.

15.

The Contractor shall be responsible for the location and protection of all existing items and materials, all new construction items and materials, adjacent circulation paths (pedestrian and vehicular), and other improvements during the course of construction.

16.

Unless noted otherwise in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, machinery, water, heating, utilities, transportation and other facilities and services necessary for the proper execution and completion of the Work.

17.

Where conflicts are encountered within the Contract Documents that will effect the quality or extent of the work, such conflict shall be resolved to the satisfaction of the Owner and Architect before the affected items and materials are purchased, fabricated or installed.

18.

Where variance occurs between the drawings, specifications, site, and design disciplines, the more stringent requirements shall govern.

19.

Where conflicts occur at the Project site, coordinate the necessary layouts and exact locations of all elements of work in conflicting areas with the Architect in the field before proceeding with the Work.

20.

Where pre-manufactured items and materials are to be installed, the Contractor shall verify all necessary dimensions in the field prior to the purchase and/or fabrication of the items and materials.

21.

The Contractor warrants that materials and equipment furnished under the Contract will be of good quality and new unless identified otherwise in the Contract Documents.

22.

The Contractor shall guarantee and warranty all work and materials to the project to be free from defects for a minimum of one year from the date of substantial completion and promptly remedy such defects and any subsequent damage caused by the defects or repair thereof at no expense to the Owner. Guarantee and warranty periods greater than one year may be required elsewhere in the Contract Documents.

23.

Where any item or material is indicated in the Contract Documents and not necessarily detailed in each specific case, but are required for a complete and professional installation, such item or material shall be provided as if shown and detailed in full. Contractor to provide all necessary labor, materials, means and methods to furnish and install.

24.

The Contractor shall employ a competent Project Manager, Superintendent and necessary personnel for the Work. The Superintendent shall be in attendance at the Project site during execution of the Work.

25.

The Contractor shall comply with all sections of Chapter 33 of the 2018 I.B.C.

26.

The Contractor shall not employ (for the Project at hand) a proposed project manager and/or superintendent, to whom the Owner and/or Architect have made a reasonable and timely objection. The Contractor shall not change the Project Manager or Superintendent without the Owner's consent.

27.

The Contractor shall be responsible for initiating, maintaining and supervising all safety programs and precautions of the Project and Project site during the course of construction, all Work performed shall conform to applicable safety regulations.

28.

The Contractor and/or Sub-Contractor shall promptly remedy damage to the Owner's property caused by the Contractor and/or Sub-Contractor to existing conditions and/or new construction.

29.

The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by work operations. At the completion of the Work the Contractor shall remove all waste materials and rubbish associated with the Work as well as all tools, construction equipment, machinery and surplus materials.

30.

The Contractor shall provide the Owner and Architect access to the Project site and Work where ever located. The Contractor shall provide the necessary safety equipment to the Owner, Architect, Engineer or other design personnel visiting the site. Safety equipment shall include, but not be limited to: Hard hat, safety vest, safety glasses, face coverings, reading glasses, dust mask, and hearing protection.

31.

Existing conditions including material sizes, configurations and locations as shown in the Contract Documents may not be an exact illustration of existing conditions. The Contractor shall include in his bid the cost of furnishing, installing, modifying, existing and new materials required for a complete and professional installation that may be required by minor variation between existing conditions and actual conditions.

32.

The Contractor shall promptly correct Work rejected by the Architect that fails to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion.

33.

Shop drawings, submittals, product data and samples are not a part of the Contract Documents. The Architect will review such materials, but only for conformance with the design concept of the Work and with the information given in the Contract Documents. The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Architect's or Engineer's review of shop drawings, submittals, product data or samples.

34.

The Architect has the authority to order minor changes in the Work not involving adjustment to the Contract Sum or extension of the Contract Time. Such orders shall not be inconsistent with the intent of the Contract Documents. Such minor changes will be issued in written format, signed by the Architect.

35.

The existing building and the areas adjacent to the project scope of work will remain occupied during construction. Contractor to minimize disturbances, noise, dust and debris as much as reasonable in order for the building to remain an active and safe facility.

36.

The Contract Documents (drawings, project manual, etc.) will be issued to the General Contractor in electronic portable document format (pdf). The General Contractor, sub-contractors, and all others shall be responsible for reproduction (printing) and reproduction costs of the Contract Documents for their use before, during, and after construction operations.

Project Team

Owner

State Public Works Division
515 East Musser Street, Suite 102
Carson City, Nevada 89701-4263
Phone: (775) 684-4125
Contact: Dustin Cheney
e-mail: dcheney@admin.nv.gov

Architecture

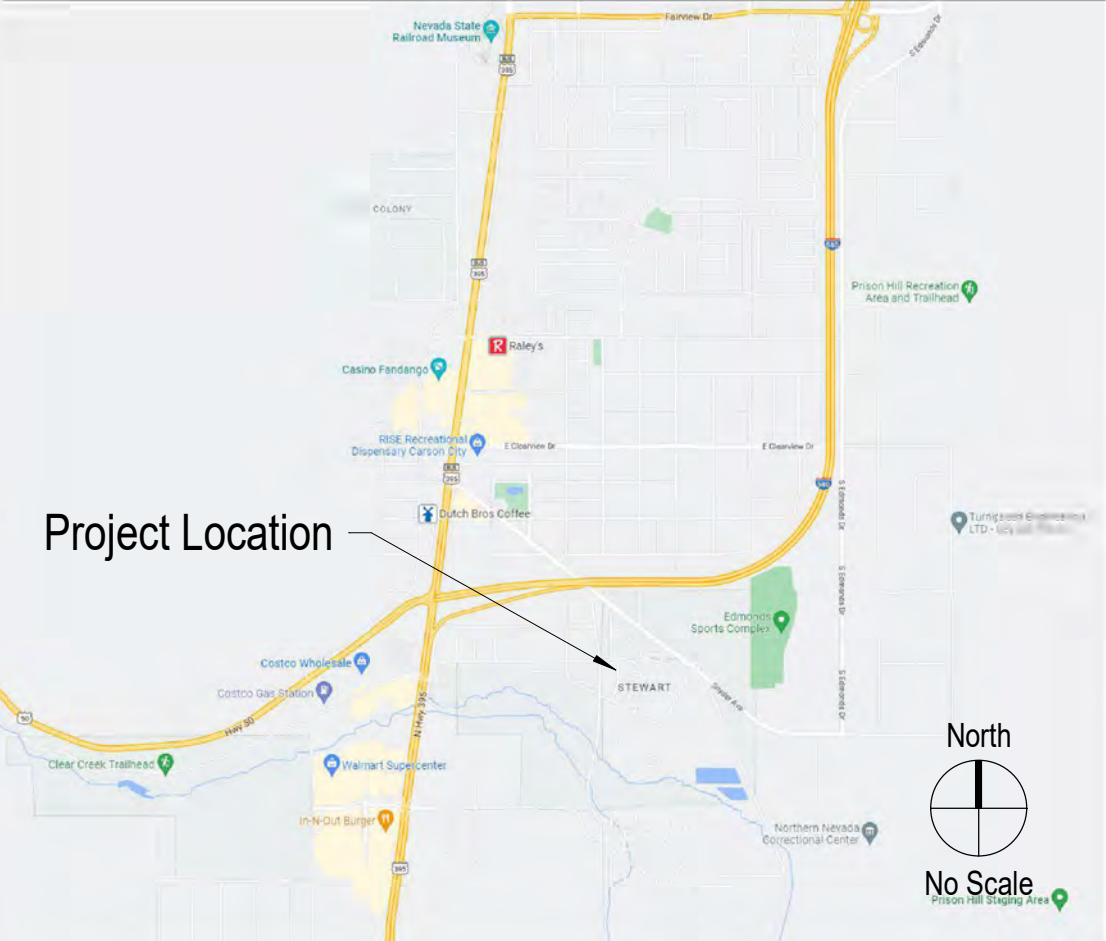
Paul Cavin Architect, LLC
1575 Delucchi Lane, Suite 120
Reno, Nevada 89502
Phone: (775) 842-0261
Contact: Paul Cavin, AIA
e-mail: paul@paulcavindesign.com
Contact: Mike Maddox
e-mail:mike@paulcavindesign.com

Scope of Work

The project consists of environmental abatement and installation of a plastic vapor barrier in the crawl spaces of each of the seven building.

Vicinity Map

Project Location



Abbreviations

@ # (e)	At Pound or Number Existing	In ID	Inches Inside Diameter
AC	Asphaltic Concrete	Lav	Lavatory
ACT	Acoustical Ceiling Tile	Lbs	Pounds
AFF	Above Finished Floor	LED	Light Emitting Diode
Alum	Aluminum	LF	Linear Feet (foot)
AV	Audio Visual	Max	Maximum
CF/CI	Contractor Furnished / Contractor Installed	Mfrs	Manufacturer's
CF/OI	Contractor Furnished / Owner Installed	Min	Minimum
CJ	Control Joint	Misc	Miscellaneous
CL	Center Line	MO	Masonry Opening
CMU	Concrete Masonry Unit	NIC	Not in Contract
Conc	Concrete	No	Number
Cont	Continuous	OC	On Center
CPT	Carpet	OD	Outside Diameter
CT	Ceramic Tile	OF/CI	Owner Furnished / Contractor Installed
CTV	Cable Television	OF/OI	Owner Furnished / Owner Installed
Deg	Degree		
Demo	Demolition	Plam	Plastic Laminate
DF	Drinking Fountain	PT	Paint
Dia	Diameter	PVC	Polyvinyl Chloride
Dim	Dimension		
Ea	Each	R	Radius
EJ	Expansion Joint	RCP	Reflected Ceiling Plan
EWC	Electric Water Cooler	Rev	Revision
		RO	Rough Opening
		RWL	Rain Water Leader
FD	Floor Drain		
FDC	Fire Department Connection	SF	Square Foot (Feet)
FE	Fire Extinguisher	Sim	Similar
FEC	Fire Extinguisher	SS	Stainless Steel
		T&G	Tongue and Groove
FF&E	Cabinet Furniture, Fixtures and Equipment	T	Tempered
FRP	Fiber Reinforced Plastic	TO	Top of
FT	Feet or Foot	TYP	Typical
		UNO	Unless Noted Otherwise
Ga	Gage		
Galv	Galvanized	VCT	Vinyl Composition Tile
Gyp bd	Gypsum Board	VIF	Verify in Field
HB	Hose Bib	WC	Water Closet
HC	Hollow Core	WD	Wood
HM	Hollow Metal	WH	Water Heater
HW	Hot Water		

Symbols

	North	North Arrow
Detail Number Sheet Number	xx xxxx	Detail Indicator
	xx xxxx	Detail Indicator
	xx xxxx	Detail Indicator
	xx xxxx	Detail Indicator
	xx xxxx	Detail Indicator
	xx xxxx	Building Section Indicator
	xx xxxx	Wall Section Indicator
	xx xxxx	Exterior Elevation Indicators
	xx xxxx	Interior Elevation Indicators
	xx xxxx	Grid Line
Room name	101	Room Tag
	101	Door Tag
	X	Window Tag
	X	Wall or Partition Type
	X	Accessory Tag



Sheet Index

General

A000
G100

Cover Sheet
General Information and Project Data

Architectural

A101
A102
A103
A104
A105
A106
A107

Foundation Plan - Building 3
Foundation Plan - Building 12
Foundation Plan - Building 13
Foundation Plan - Building 57
Foundation Plan - Building 65
Foundation Plan - Building 67
Foundation Plan - Building 107

Design Criteria

Applicable Codes and Regulations:

2018 International Building Code
2018 International Fire Code

Current Northern Nevada Amendments
2010 Americans with Disability Act Standards
2009 ICC/ANSI A117.1

Basis of Design

Project Address:

5500 Synder Ave.
Carson City, NV 89701
00-924-119
P

Building 3

Year Built:
(e) Construction Type:
(e) Occupancy Group:
(e) Square Footage:
Fire Sprinklers:
Fire Alarm:

1930
V-B
B
5,917
No
No

Building 12

Year Built:
(e) Construction Type:
(e) Occupancy Group:
(e) Square Footage:
Fire Sprinklers:
Fire Alarm:

1941
V-B
R-2
14,572
No
No

Building 13

Year Built:
(e) Construction Type:
(e) Occupancy Group:
(e) Square Footage:
Fire Sprinklers:
Fire Alarm:

1941
V-B
R-2
14,572
No
No

Building 57

Year Built:
(e) Construction Type:
(e) Occupancy Group:
(e) Square Footage:
Fire Sprinklers:
Fire Alarm:

1939
V-B
B
3,000
No
No

Building 65

Year Built:
(e) Construction Type:
(e) Occupancy Group:
(e) Square Footage:
Fire Sprinklers:
Fire Alarm:

1937
V-B
B
2,102
No
No

Building 67

Year Built:
(e) Construction Type:
(e) Occupancy Group:
(e) Square Footage:
Fire Sprinklers:
Fire Alarm:

1939
V-B
B
4,862
No
No

Building 107

Year Built:
(e) Construction Type:
(e) Occupancy Group:
(e) Square Footage:
Fire Sprinklers:
Fire Alarm:

1963
V-B
B
32,832
No
No

revisions

No.	Description	Date

drawn by

Author

reviewed by

PAC

date

12/14/2022

project number

22042

drawing name

General Information and Project Data

sheet number

G100

Paul Cavin Architect LLC

1575 Delucchi Lane, Suite 120
Reno, Nevada 89502

office: (775) 284-7083
mobile: (775) 842-0261

www.paulcavindesign.com
paul@paulcavindesign.com

professional seal

PRELIMINARY
NOT FOR CONSTRUCTION

consultant

Air Quality and Vapor Barrier
Various Buildings Stewart Facility

State Public Works Division
515 East Musser Street, Suite 102
Carson City, Nevada 89701-4263

revisions

No.	Description	Date

drawn by

Author

reviewed by

PAC

date

12/14/2022

project number

22042

drawing name

General Information and Project Data

sheet number

G100



Building 57

Building 65

Building 67

Building 3

Building 12

Building 13

Building 107

**Paul Cavin
Architect LLC**

1575 Delucchi Lane, Suite 120
Reno, Nevada 89502

office: (775) 284-7083
mobile: (775) 842-0261

www.paulcavindesign.com
paul@paulcavindesign.com

professional seal

PRELIMINARY
NOT FOR CONSTRUCTION

consultant

project

**Air Quality and Vapor Barrier
Various Buildings Stewart Facility**

State Public Works Division
515 East Musser Street, Suite 102
Carson City, Nevada 89701-4263

revisions

No.	Description	Date

drawn by MLM
reviewed by PAC
date 12/14/2022
project number 22042
drawing name

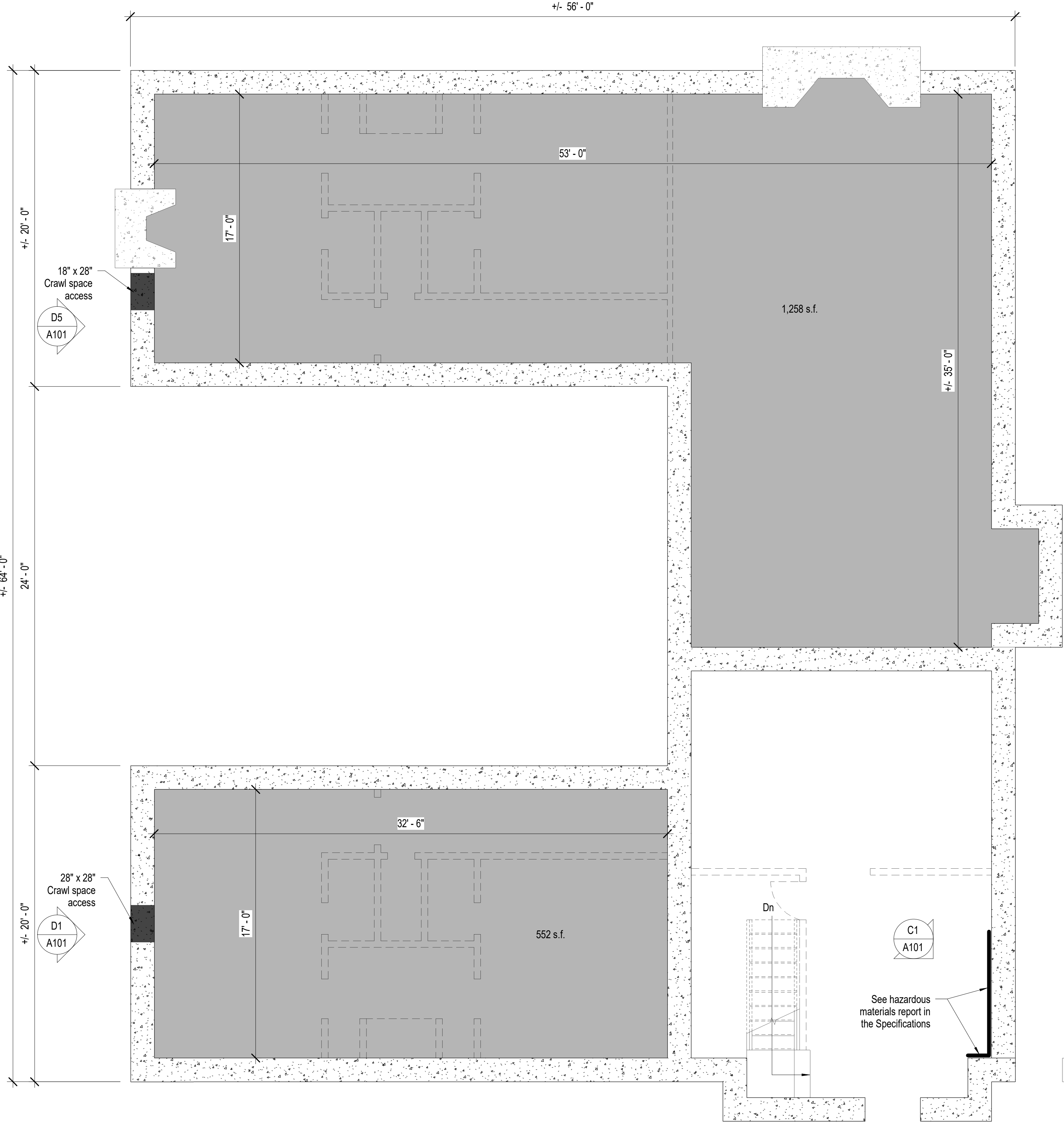
Facility Site Map

sheet number

A001



D5 Photo of Existing Conditions



D4 Foundation Plan - Building 3
1/4" = 1'-0"

Foundation Plan Notes

1. Coordinate construction operations, schedule, and sequencing with State Public Works Project Manager and Stewart Facility staff.
2. A hazardous materials report has been completed under a separate contract with SPWD and a copy of the report and work performed is available in the specifications.
3. All dimensions are from face of finish, unless noted otherwise. Contractor to verify all necessary dimensions in order to execute the work.
4. The Contractor will be responsible for setting the exact limits of construction required in order to perform the work.
5. The Contractor shall maintain a clean environment during all constructions operations, and shall conduct a final cleaning of entire area of work at the conclusion of the project.
6. The Contractor shall protect existing finishes from construction traffic, cutting, and all construction activities.
7. See Project Manual and Specifications for additional information and requirements.
8. Contractor shall remove any miscellaneous debris not mentioned in the hazardous materials report and level out any soil mounds in the crawl space prior to installation of the new vapor.

Foundation Legend

- Existing foundation wall
- Existing walls above existing sub-floor
- Clear heavy duty 10 mil. polyethylene vapor barrier in crawl space, approximately 1,810 s.f. All joints shall be sealed with a minimum 4" overlap. The vapor barrier shall be continuous applied to the perimeter concrete foundation walls 12" minimum, installed per manufactures recommendations.
- Existing crawl space access



B1 Photo of Existing Conditions



C1 Photo of Existing Conditions



D1 Photo of Existing Conditions

Paul Cavin Architect LLC

1575 Delucchi Lane, Suite 120
Reno, Nevada 89502

office: (775) 284-7083
mobile: (775) 842-0261

www.paulcavindesign.com
paul@paulcavindesign.com

professional seal

PRELIMINARY
NOT FOR CONSTRUCTION

consultant

project

**Air Quality and Vapor Barrier
Various Buildings Stewart Facility**

State Public Works Division
515 East Musser Street, Suite 102
Carson City, Nevada 89701-4263

revisions

No.	Description	Date

drawn by	RBR/MLM
reviewed by	PAC
date	12/14/2022
project number	22042
drawing name	

**Foundation Plan -
Building 3**

sheet number

A101



D1 Photo of Existing Conditions

consultant

State Public Works Division
515 East Musser Street, Suite 102
Carson City, Nevada 89701-4263

[illegible]

drawn by	RBR/MLM
reviewed by	PAC
date	12/14/2022
project number	22042
drawing name	

Foundation Plan - Building 12

sheet number

A102



Foundation Plan Notes

- 1. Coordinate construction operations, schedule, and sequencing with State Public Works Project Manager and Stewart Facility staff.
- 2. A hazardous materials report has been completed under a separate contract with SPWD and a copy of the report and work performed is available in the specifications.
- 3. All dimensions are from face of finish, unless noted otherwise. Contractor to verify all necessary dimensions in order to execute the work.
- 4. The Contractor will be responsible for setting the exact limits of construction required in order to perform the work.
- 5. The Contractor shall maintain a clean environment during all constructions operations, and shall conduct a final cleaning of entire area of work at the conclusion of the project.
- 6. The Contractor shall protect existing finishes from construction traffic, cutting, and all construction activities.
- 7. See Project Manual and Specifications for additional information and requirements.
- 8. Contractor shall remove any miscellaneous debris not mentioned in the hazardous materials report and level out any soil mounds in the crawl space prior to installation of the new vapor.

Foundation Legend

- Existing foundation wall
- Existing walls above existing sub-floor
- Clear heavy duty 10 mil. polyethylene vapor barrier in crawl space, approximately 13,045 s.f. All joints shall be sealed with a minimum 4" overlap. The vapor barrier shall be continuous applied to the perimeter concrete foundation walls 12" minimum, installed per manufactures recommendations.
- Existing crawl space access
- Existing strip footing /sheer wall



B1 Photo of Existing Conditions



C1 Photo of Existing Conditions

Paul Cavin
Architect LLC

1575 Delucchi Lane, Suite 120
Reno, Nevada 89502

office: (775) 284-7083
mobile: (775) 842-0261

www.paulcavindesign.com
paul@paulcavindesign.com

professional seal

PRELIMINARY
NOT FOR CONSTRUCTION

consultant

project

**Air Quality and Vapor Barrier
Various Buildings Stewart Facility**

State Public Works Division
515 East Musser Street, Suite 102
Carson City, Nevada 89701-4263

revisions

No.	Description	Date

drawn by	RBR/MLM
reviewed by	PAC
date	12/14/2022
project number	22042
drawing name	

Foundation Plan -
Building 13

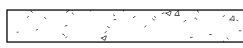
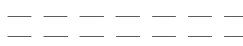


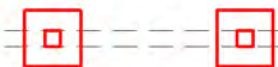
sheet number

A103

Foundation Plan Notes

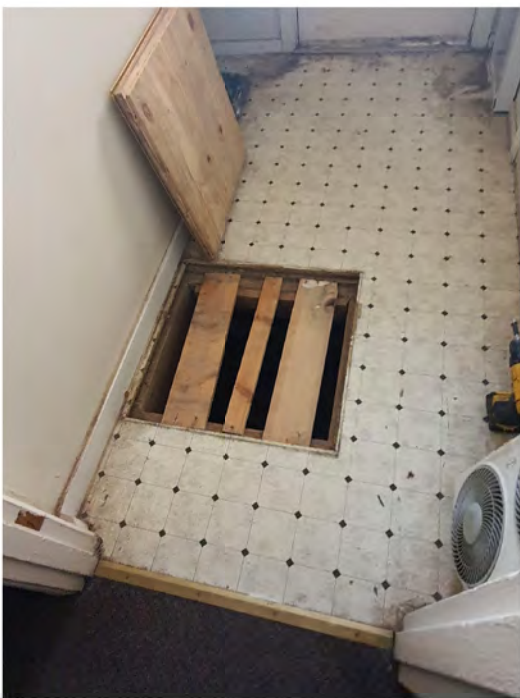
1. Coordinate construction operations, schedule, and sequencing with State Public Works Project Manager and Stewart Facility staff.
2. A hazardous materials report has been completed under a separate contract with SPWD and a copy of the report and work performed is available in the specifications.
3. All dimensions are from face of finish, unless noted otherwise. Contractor to verify all necessary dimensions in order to execute the work.
4. The Contractor will be responsible for setting the exact limits of construction required in order to perform the work.
5. The Contractor shall maintain a clean environment during all constructions operations, and shall conduct a final cleaning of entire area of work at the conclusion of the project.
6. The Contractor shall protect existing finishes from construction traffic, cutting, and all construction activities.
7. See Project Manual and Specifications for additional information and requirements.
8. Contractor shall remove any miscellaneous debris not mentioned in the hazardous materials report and level out any soil mounds in the crawl space prior to installation of the new vapor.

Foundation Legend

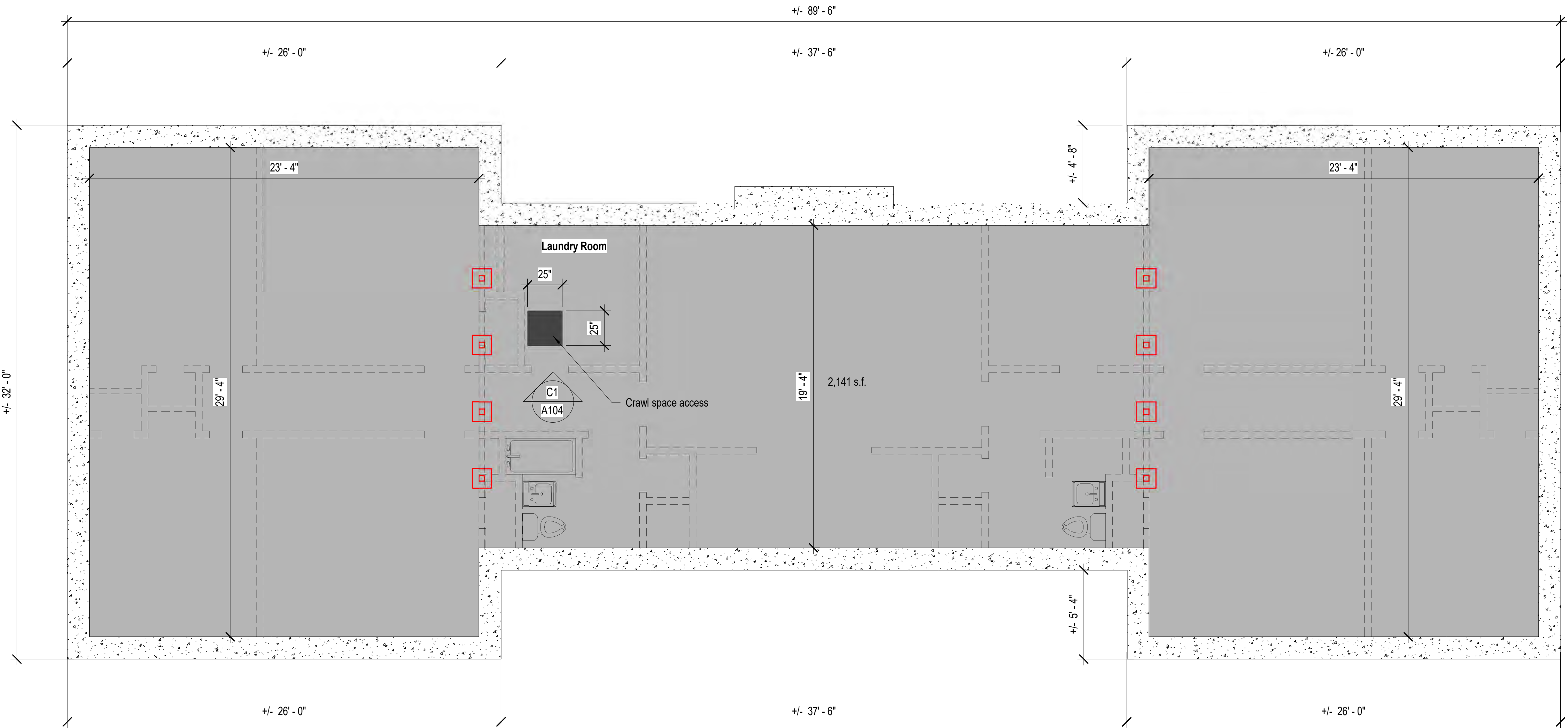
-  Existing foundation wall
-  Existing walls above existing sub-floor
-  Clear heavy duty 10 mil. polyethylene vapor barrier in crawl space, approximately 2,141 s.f. All joints shall be sealed with a minimum 4" overlap. The vapor barrier shall be continuous applied to the perimeter concrete foundation walls 12" minimum, installed per manufactures recommendations.
-  Existing crawl space access
-  Assumed existing post and pair blocks



B1 Photo of Existing Conditions



C1 Photo of Existing Conditions



Paul Cavin
Architect LLC

1575 Delucchi Lane, Suite 120
Reno, Nevada 89502

office: (775) 284-7083
mobile: (775) 842-0261

www.paulcavindesign.com
paul@paulcavindesign.com

professional seal

PRELIMINARY
NOT FOR CONSTRUCTION

consultant

project

Air Quality and Vapor Barrier
Various Buildings Stewart Facility

State Public Works Division
515 East Musser Street, Suite 102
Carson City, Nevada 89701-4263

revisions

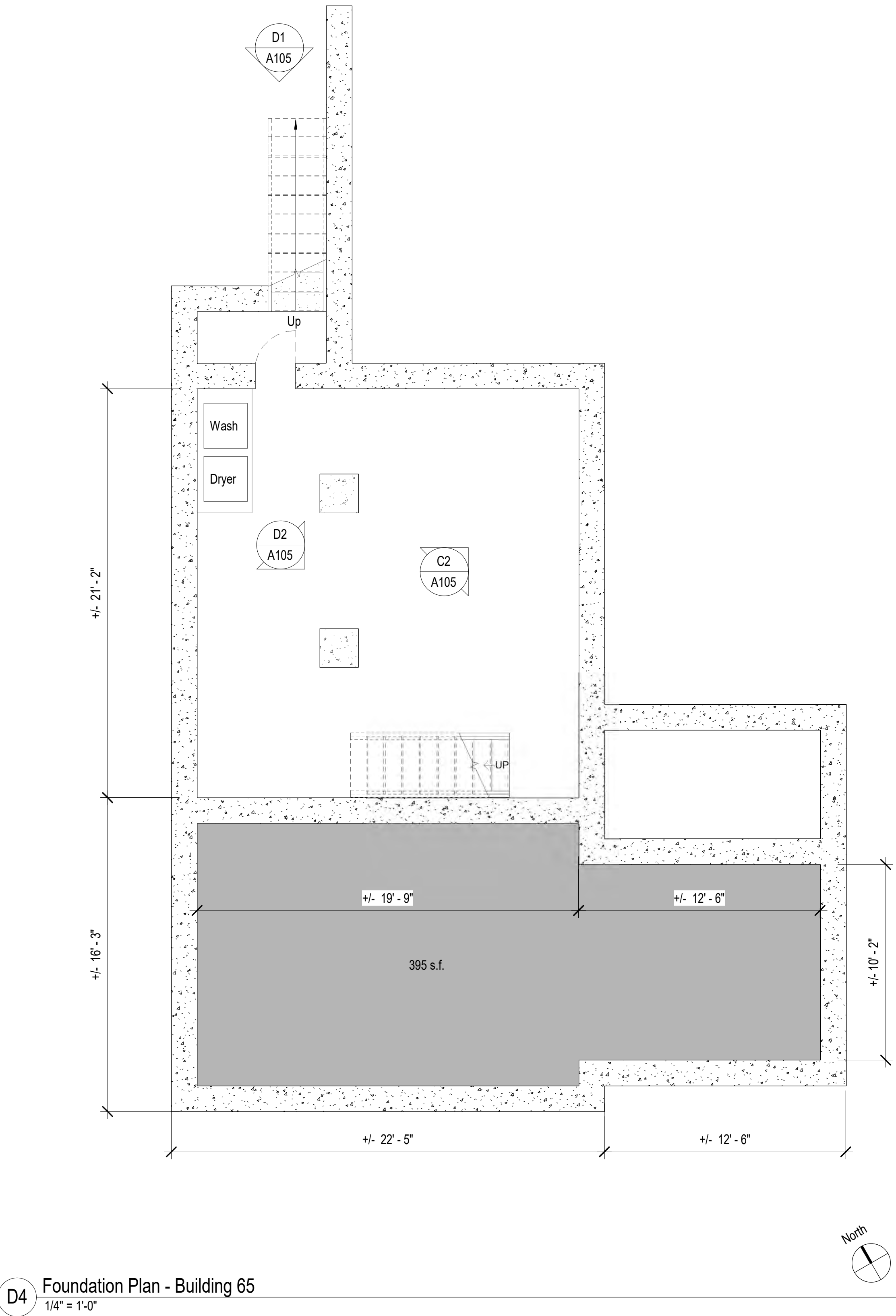
No.	Description	Date

drawn by	RBR/MLM
reviewed by	PAC
date	12/14/2022
project number	22042
drawing name	

Foundation Plan -
Building 57

sheet number

A104



Foundation Plan Notes

1. Coordinate construction operations, schedule, and sequencing with State Public Works Project Manager and Stewart Facility staff.
2. A hazardous materials report has been completed under a separate contract with SPWD and a copy of the report and work performed is available in the specifications.
3. All dimensions are from face of finish, unless noted otherwise. Contractor to verify all necessary dimensions in order to execute the work.
4. The Contractor will be responsible for setting the exact limits of construction required in order to perform the work.
5. The Contractor shall maintain a clean environment during all constructions operations, and shall conduct a final cleaning of entire area of work at the conclusion of the project.
6. The Contractor shall protect existing finishes from construction traffic, cutting, and all construction activities.
7. See Project Manual and Specifications for additional information and requirements.
8. Contractor shall remove any miscellaneous debris not mentioned in the hazardous materials report and level out any soil mounds in the crawl space prior to installation of the new vapor.

Foundation Legend

- Existing foundation wall
- Existing walls above existing sub-floor
- Clear heavy duty 10 mil. polyethylene vapor barrier in crawl space, approximately 395 s.f. All joints shall be sealed with a minimum 4" overlap. The vapor barrier shall be continuous applied to the perimeter concrete foundation walls 12" minimum, installed per manufactures recommendations.
- Existing crawl space access

Paul Cavin Architect LLC

1575 Delucchi Lane, Suite 120
Reno, Nevada 89502

office: (775) 284-7083
mobile: (775) 842-0261

www.paulcavindesign.com
paul@paulcavindesign.com

professional seal

PRELIMINARY
NOT FOR CONSTRUCTION

consultant

project

Air Quality and Vapor Barrier
Various Buildings Stewart Facility

State Public Works Division
515 East Musser Street, Suite 102
Carson City, Nevada 89701-4263

revisions

No.	Description	Date

drawn by	RBR/MLM
reviewed by	PAC
date	12/14/2022
project number	22042
drawing name	

Foundation Plan -
Building 65

sheet number

A105



C2 Photo of Existing Conditions



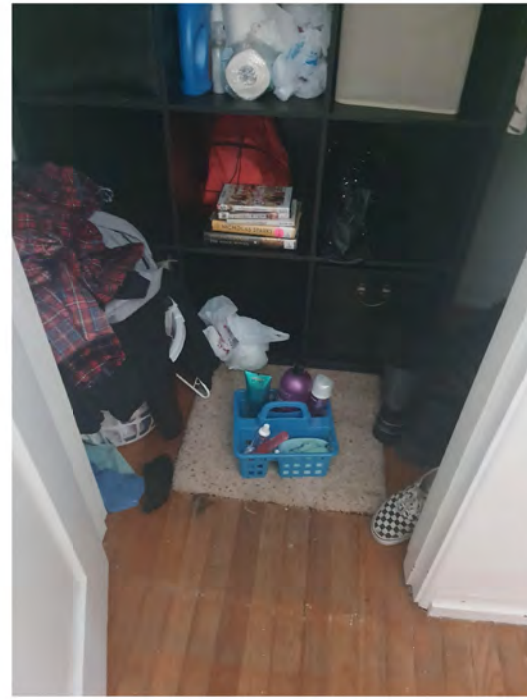
C1 Photo of Existing Conditions



D2 Photo of Existing Conditions



D1 Photo of Existing Conditions



A3 Photo of Existing Conditions



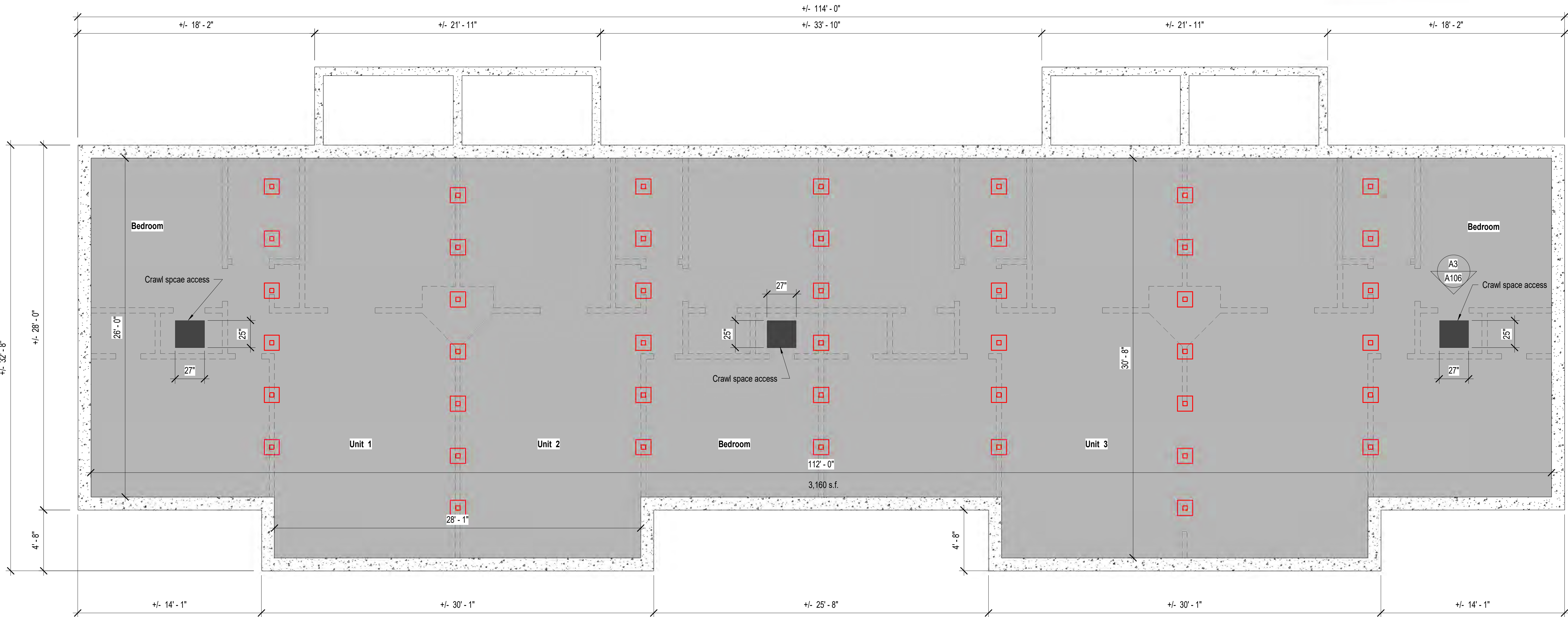
A2 Photo of Existing Conditions

Foundation Plan Notes

- 1. Coordinate construction operations, schedule, and sequencing with State Public Works Project Manager and Stewart Facility staff.
- 2. A hazardous materials report has been completed under a separate contract with SPWD and a copy of the report and work performed is available in the specifications.
- 3. All dimensions are from face of finish, unless noted otherwise. Contractor to verify all necessary dimensions in order to execute the work.
- 4. The Contractor will be responsible for setting the exact limits of construction required in order to perform the work.
- 5. The Contractor shall maintain a clean environment during all constructions operations, and shall conduct a final cleaning of entire area of work at the conclusion of the project.
- 6. The Contractor shall protect existing finishes from construction traffic, cutting, and all construction activities.
- 7. See Project Manual and Specifications for additional information and requirements.
- 8. Contractor shall remove any miscellaneous debris not mentioned in the hazardous materials report and level out any soil mounds in the crawl space prior to installation of the new vapor.

Foundation Legend

- Existing foundation wall
- Existing walls above existing sub-floor
- Clear heavy duty 10 mil. polyethylene vapor barrier in crawl space, approximately 3,160 s.f. All joints shall be sealed with a minimum 4" overlap. The vapor barrier shall be continuous applied to the perimeter concrete foundation walls 12" minimum, installed per manufactures recommendations.
- Existing crawl space access
- Assumed existing post and pair blocks



D5 Foundation Plan - Building 67

1/4" = 1'-0"

Paul Cavin Architect LLC

1575 Delucchi Lane, Suite 120
Reno, Nevada 89502

office: (775) 284-7083
mobile: (775) 842-0261

www.paulcavindesign.com
paul@paulcavindesign.com

professional seal

PRELIMINARY
NOT FOR CONSTRUCTION

consultant

project

Air Quality and Vapor Barrier
Various Buildings Stewart Facility

State Public Works Division
515 East Musser Street, Suite 102
Carson City, Nevada 89701-4263

revisions

No.	Description	Date

drawn by	RBR/MLM
reviewed by	PAC
date	12/14/2022
project number	22042
drawing name	

Foundation Plan -
Building 67

sheet number

A106



A4 Photo of Existing Conditions



A3 Photo of Existing Conditions

Foundation Legend

- Existing foundation wall
- Existing walls above existing sub-floor
- Clear heavy duty 10 mil. polyethylene vapor barrier in crawl space, approximately 30,355 s.f. All joints shall be sealed with a minimum 4" overlap. The vapor barrier shall be continuous applied to the perimeter concrete foundation walls 12" minimum, installed per manufactures recommendations.
- Existing crawl space access
- Assumed existing post and pair blocks

Foundation Plan Notes

- Coordinate construction operations, schedule, and sequencing with State Public Works Project Manager and Stewart Facility staff.
- A hazardous materials report has been completed under a separate contract with SPWD and a copy of the report and work performed is available in the specifications.
- All dimensions are from face of finish, unless noted otherwise. Contractor to verify all necessary dimensions in order to execute the work.
- The Contractor will be responsible for setting the exact limits of construction required in order to perform the work.
- The Contractor shall maintain a clean environment during all constructions operations, and shall conduct a final cleaning of entire area of work at the conclusion of the project.
- The Contractor shall protect existing finishes from construction traffic, cutting, and all construction activities.
- See Project Manual and Specifications for additional information and requirements.
- Contractor shall remove any miscellaneous debris not mentioned in the hazardous materials report and level out any soil mounds in the crawl space prior to installation of the new vapor.

Paul Cavin
Architect LLC

1575 Delucchi Lane, Suite 120
Reno, Nevada 89502

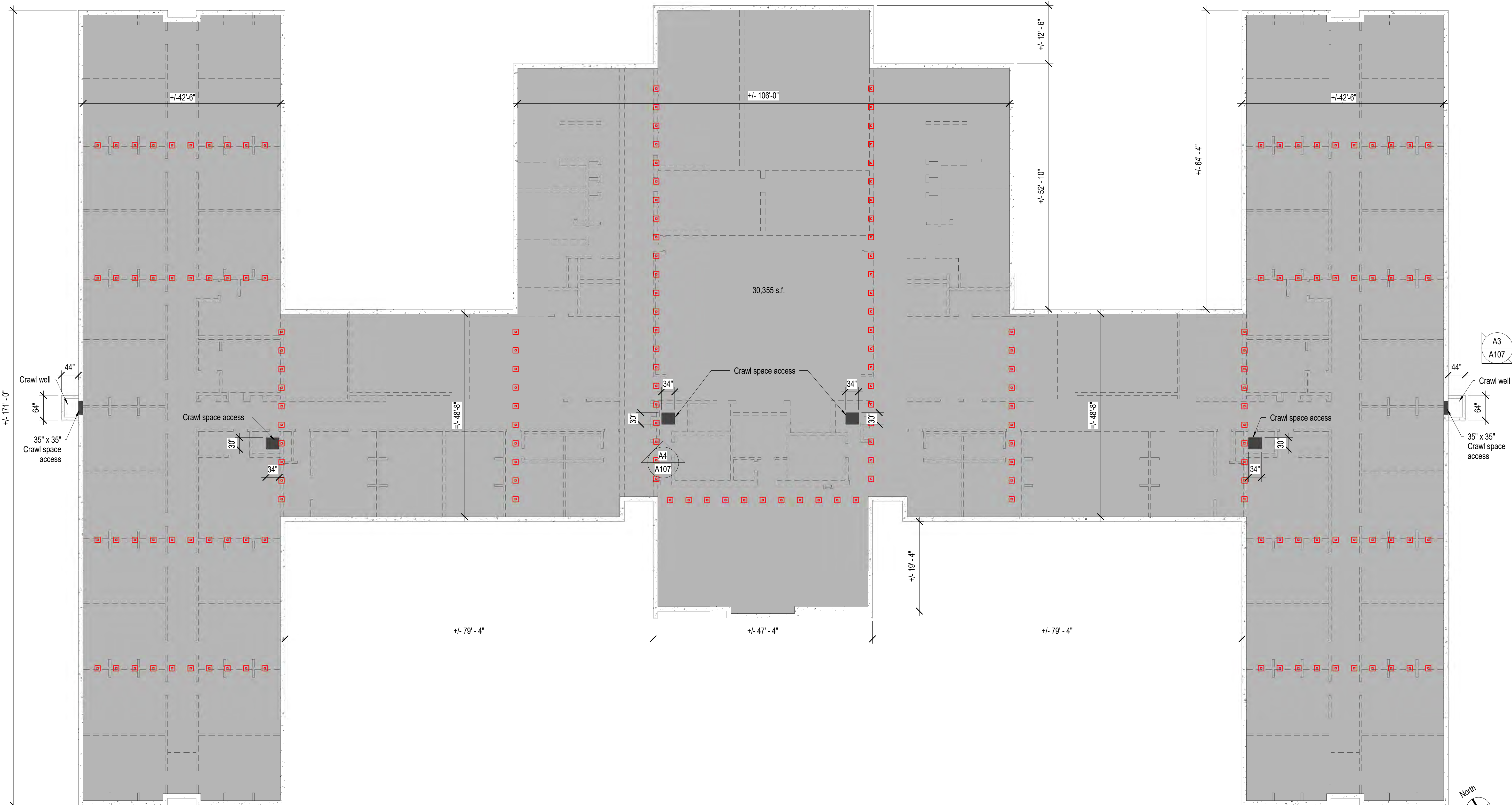
office: (775) 284-7083
mobile: (775) 842-0261

www.paulcavindesign.com
paul@paulcavindesign.com

professional seal

PRELIMINARY
NOT FOR CONSTRUCTION

consultant



D5 Foundation Plan - Building 107
3/32" = 1'-0"

project

**Air Quality and Vapor Barrier
Various Buildings Stewart Facility**

State Public Works Division
515 East Musser Street, Suite 102
Carson City, Nevada 89701-4263

revisions

No.	Description	Date

drawn by	RBR/MLM
reviewed by	PAC
date	12/14/2022
project number	22042
drawing name	

Foundation Plan -
Building 107

sheet number

A107

Rebecca Palmer

From: Dustin Cheney
Sent: Thursday, January 26, 2023 12:26 PM
To: Rebecca Palmer
Cc: Michael Maddox
Subject: 21-S06-3 Air Quality and Vapor Barrier (Stewart) Request for Permission
Attachments: 21-S06-3 Air Quality and Vapor Barrier Stewar Request for Permission.pdf

Rebecca,

Please see attached Permission application for the project listed above. A link to the drawings can be found below. Please let me know if any additional information is needed.

Thank you.

<https://www.dropbox.com/scl/fo/816enhr5fz85it4v8xhi6/h?dl=0&rlkey=zhqa0bltevhneelsmqiugaahh>

Dustin Cheney

***Project Manager, State Public Works Division
Statewide Environmental | Fire & Life Safety Programs***

515 E. Musser Street, Suite 102

Carson City, Nevada 89701

T: (775) 684-4125

C: (775) 400-0957

E: dcheney@admin.nv.gov

DESCRIPTION

* OR EQUAL

Micro-Lok HP fiberglass pipe insulation is a high-performance insulation made from biosoluble glass fibers bonded with a thermosetting resin and produced in 36" (0.92 m) lengths. Micro-Lok HP insulation is used to insulate standard iron pipe, plastic pipe and copper tubing. The 3' (0.92 m) sections are available plain or with a factory-applied vapor-barrier jacket. The all-service (ASJ) vapor-retarder jacket includes a longitudinal, self-sealing closure lap. The jacket system is adhered to each fiberglass section using a specially formulated adhesive to ensure jacket securement.

The factory-installed tape system permits installation at ambient temperatures down to 20°F (-7°C) and will not soften or separate when exposed to high ambient temperatures and humidity.

USES

Micro-Lok HP fiberglass pipe insulation is suitable for installation over hot, cold, concealed and exposed piping systems with operating temperatures up to 850°F (454°C). Weather-protective jacketing is required for outdoor applications. Pipes operating below ambient temperatures require all joints to be sealed with the factory-applied, self-seal lap and butt strips. Micro-Lok HP is UL listed and labeled over plastic pipes for air plenum applications when used at 1.0" thickness or greater.

PHYSICAL PROPERTIES

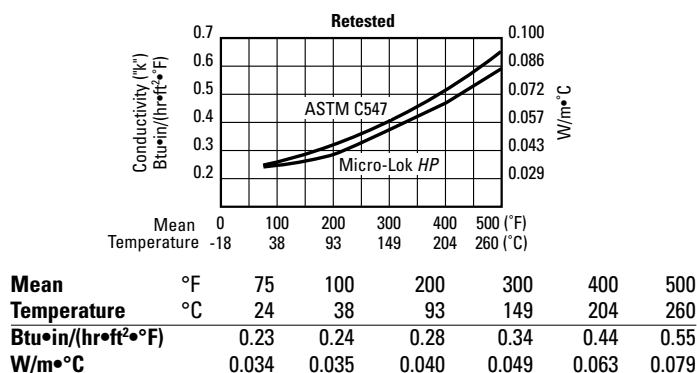
Service Temp. Range (ASTM C411)	0°F to 850°F (-18°C to 454°C)
Moisture Sorption	<5% by weight
Corrosivity (ASTM C1617)	<5 ppm chloride standard
Shrinkage (ASTM C356)	None
Microbial Growth (ASTM C1338)	Does not promote microbial growth
Surface Burning Characteristics	Composite FHC 25/50 per ASTM E84, NFPA 255, CAN/ULC S102.2
Limited Combustibility	NFPA 90A and 90B
Jacketing	ASTM C1136 (Type I & II)
Water Vapor Permeance (ASTM E96 – Procedure A)	0.02 perms max.
Burst Strength (ASTM D774)	55 lbs/in ² (4.6 Kg/cm ²)
Tensile Strength (ASTM D828)	45 lbs./in. (7.9N/mm) width min. (MD) 30 lbs./in. (5.23N/mm) width min. (CD)

SPECIFICATION COMPLIANCE

- ASTM C547 Type I (Replaces HH-I-558B, Form D, Type III, Class 12, Class 13 up to 850°F [454°C])
- ASTM C585 – Dimension Standard
- ASTM C1136 (Jacketing) (Replaces HH-B-100B, Type I & II)
- MIL-DTL-32585 Type 1, Form 4, Facing A ([unjacketed only](#))
- MIL-I-22344D, MIL-PRF-22344E
- Coast Guard/IMO Approved 164.109/56/0 (plain, unjacketed only – excluding 7/8 x 1/2 [22 mm x 13 mm], 1/2 x 1/2 [13 mm x 13 mm])
- Bureau of Household Goods and Services CA-T1039 (CO)
- Firestop Assemblies: Meets requirement for jacketed fiberglass pipe insulation product density at or above 3.5 pcf.
- ASTM E84, CAN ULC S102.2 – 25/50 listed and labeled Intertek testing laboratories, listed and labeled Underwriter Laboratories
- NRC 1.36, ASTM C795, MIL-I-24244C, MIL-DTL-24244D*

*When ordering material to comply with these specifications a statement of that fact must appear on the purchase order. Specific lot testing will be conducted and a certification of compliance can be provided.

Operating Temperature Limits: 0°F to 850°F (-18°C to 454°C)


THERMAL CONDUCTIVITY ("K") *


* Apparent thermal conductivity values are determined by applying procedures dictated per ASTM C1045 on test data obtained using ASTM Test Method C335. All values are based on nominal manufacturing and testing parameters, are subject to normal variation, and are not guaranteed for specification purposes or otherwise.

SUSTAINABLE BUILDING ATTRIBUTES

Manufacturing Location	Defiance, Ohio (43512)	
Recycled Content (glass only)	41%	
Recycled Content (total product)	28%	
Volatile Organic Compounds (ASTM D5116)	Total	0.22 g/l
(Analysis ASTM D6196 & ASTM D5197)		
Fiberglass Pipe Insulation	Formaldehyde	0.009 ppm
	Aldehydes	0.043 ppm
Volatile Organic Compounds (Calculated)	Total	<49 g/l
Self-Sealing Lap & Butt Strips		

SUSTAINABLE BUILDING CERTIFICATIONS

GREENGUARD®	Certified
GREENGUARD® GOLD	Certified
LEED® Credits	To see LEED info call technical support
LEED-NC	



SIZE AVAILABILITY

Insulation Thickness		Iron Pipe Size Range		Copper Tubing Size Range	
in.	mm	in.	mm	in.	mm
½	13	½–6	13–152	⅝–4⅞ [§]	16–105
1	25	½–24	13–610	⅝–6⅞	16–156
1½	38	½–24	13–610	⅝–6⅞	16–156
2	51	½–24	13–610	1⅞–6⅞	29–156
2½	64	1–24	25–610	1⅞–6⅞	35–156
3	76	1–24	25–610	1⅞–6⅞	35–156
3½	89	1½–24*	38–610	—	—
4	102	3–24**	76–610	—	—
4½	114	3–24†	76–610	—	—
5	127	3–20††	76–508	—	—

Notes:

*2½" and 23" IPS not available in this insulation thickness.

**22" and 23" IPS not available in this insulation thickness.

†21", 22" and 23" IPS not available in this insulation thickness.

††19" IPS not available in this insulation thickness.

§3⅝" CTS not available in this insulation thickness.

ACOUSTIC - INSERTION LOSS

Insertion loss data for Johns Manville pipe insulation acoustic treatments tested per ASTM E1222

Frequency	1-in Micro-Lok HP	1-in Micro-Lok HP with Zeston PVC (20 mil)	1-in Micro-Lok HP with MLV (1 psf)	2-in Micro-Lok HP	2-in Micro-Lok HP with Zeston PVC (20 mil)	2-in Micro-Lok HP with MLV (1 psf)
Hz	dB	dB	dB	dB	dB	dB
315	2	1	10	1	0	12
400	2	4	13	0	8	17
500	3	5	14	1	10	19
630	5	11	21	6	14	21
800	7	13	20	8	15	22
1000	9	19	25	13	20	29
1250	10	20	28	14	22	31
1600	13	24	33	17	26	37
2000	15	27	35	20	29	39
2500	17	29	36	21	30	38
3150	19	30	36	23	32	40
4000	20	29	36	26	34	41
5000	22	30	36	29	34	38

ACOUSTIC - TRANSMISSION LOSS

Transmission loss data and sound transmission class (STC) for Johns Manville pipe insulation acoustic treatments tested per ASTM E90

Frequency	1-in Micro-Lok HP	1-in Micro-Lok HP with Zeston PVC (20 mil)	1-in Micro-Lok HP with MLV (1 psf)	2-in Micro-Lok HP	2-in Micro-Lok HP with Zeston PVC (20 mil)	2-in Micro-Lok HP with MLV (1 psf)
Hz	dB	dB	dB	dB	dB	dB
125	4	7	15	6	8	15
250	4	7	18	6	8	20
500	4	11	23	7	15	29
1000	7	19	32	12	25	38
2000	14	25	38	20	32	45
4000	21	29	44	30	38	51
STC	8	16	28	12	19	31

MICRO-LOK® HP

HIGH-PERFORMANCE FIBERGLASS PIPE INSULATION

DATA SHEET

QUALIFICATIONS FOR USE

A sufficient thickness of insulation must be used to keep the maximum surface temperature of Micro-Lok HP insulation below 150°F (66°C). In addition, at operating temperatures above 500°F (260°C), Micro-Lok HP pipe insulation must be applied in a thickness ranging from 2" (51 mm) minimum to 6" (152 mm) maximum.

During initial heat-up to operating temperatures above 350°F (177°C), an acrid odor and some smoke may be given off as the organic binders used in the fiberglass pipe insulation begin to decompose. When this occurs, caution should be exercised to ventilate the area well. This loss of binder does not directly affect the thermal performance of the pipe insulation, but the compressive strength and resiliency of the product are reduced. For applications with excessive physical abuse or vibration at high temperatures, consult your local Insulation Systems Market Development Manager for alternate material recommendations.

CHILLED WATER SYSTEMS

For chilled water systems, see [3-Part Specification, MECH-261](#).

APPLICATION RECOMMENDATIONS*

MICRO-LOK HP PIPE INSULATION AND BUTT STRIPS

1. Do not apply Micro-Lok HP insulation if air temperature is below 20°F (-7°C) or above 130°F (54°C) due to the effect of temperature on tape performance. We recommend stapling when application falls outside this temperature range.

When stapling, we recommend mastic be applied over staples to prevent moisture penetration.

2. If stored below 20°F (-7°C) or above 130°F (54°C), insulation cartons should stand within the recommended temperature range for 24 hours prior to application.

3. Once release paper is removed, both adhesive and lap must be kept free of dirt and water, and the lap sealed immediately.

4. When adhered, the lap and butt strips must be pressurized by rubbing firmly with a plastic squeegee or the back of a knife blade to ensure positive closure.

**For complete application recommendations and installation instructions, see MECH-261 InsulSpec Specifications.*



North American Sales Offices, Insulation Systems

Eastern Region and Canada

P.O. Box 158
Defiance, OH 43512
800-334-2399
Fax: 419-784-7866

Western Region

P.O. Box 5108
Denver, CO 80217
800-368-4431
Fax: 303-978-4661

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of Micro-Lok HP listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with your customer service representative for current information.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit www.jm.com/terms-conditions or call (800) 654-3103.