ADDENDUM NO. 001

nbwarchitects p.a.
ARCHITECTURE / PLANNING / INTERIORS

Project Designation: 23009 – DPW 21-511 Idaho State Police District 6 Facility

To: Bidders for furnishing all labor and materials Date: February 19, 2025

This Addendum applicable to work designated herein shall be understood to be and is an Addendum and as such shall be part of and included in the Contract.

Failure to acknowledge receipt of this Addendum on the bid proposal form may result in rejection of your bid.

General Information:

1. The updated Pre-Bid Agenda has been attached.
2. The wall reinforcement scan report has been attached. This document is for reference purposes only.
3. NBW's Electronic Media Agreement has been attached. The Electronic Media Agreement must be signed and returned to NBW before files are released. Please indicate on the form what sheets or views you would like.
4. NBW's photos and 360° photos can be viewed with the link below. These images are for reference only. Please attend the scheduled walk-throughs on February 25th and March 4th at 2:pm to verify existing equipment and materials.
    a. https://photos.app.goo.gl/dbhTgM6bX1Lprfnx8

Specification Items:

1. **Table of Contents** and **Exhibit C** have been updated. See the attached files.
2. Section **09 5113** – Acoustical Panel Ceilings.
    a. Replace the entire section with the new attached section.
    b. Paragraphs 2.3.B and 2.3.C has been corrected.
3. Table of Contents **Division 10** – Specialties has been updated.
4. Section **10 5113** – Metal Lockers – Day Use Passback Lockers.
    a. Replace the entire section with the new attached section.
5. Section **10 5113.13** – Metal Evidence Lockers.
    a. Replace the entire section with the new attached section.
6. Section **10 5113.15** – Metal Lockers – Personal Welded Lockers – Locker Room.
    a. Replace the entire section with the new attached section.
7. Section **10 5613** – Metal Storage Shelving.
    a. Replace the entire section with the new attached section.
8. Section **10 5613.13** – Metal Storage Shelving – Wide Span Shelving – Evidence Room.
    a. Replace the entire section with the new attached section.
9. Section **10 5626** – Mechanical Assist Mobile Shelving – Records Room, Evidence Room.
    a. Replace the entire section with the new attached section.

Architectural Items:

10. See revised sheet **A1.1** – Main Floor Plan Part 1.
    a. Keynote #9 added to sheet stating, "PROVIDE PLYWOOD RAMP AND RAISED PLYWOOD FLOOR FOR THE ON-SLAB RAILS FOR THE BULK STORAGE SYSTEM."
    b. Keynote #10 added to sheet stating, "A RECESSED SLAB SHALL BE PLACED FOR THE BULK STORAGE SYSTEM. VERIFY RECESSED DEPTH WITH THE MANUFACTURER PRIOR TO PLACING THE SLAB. A TOPPING SLAB SHALL BE PLACED BETWEEN THE RAILS AFTER THEY HAVE BEEN SET AND LEVELED."
11. See revised sheet **A7.1** – Reflected Ceiling Plan Part 1 and sheet **A7.2** – Reflected Ceiling Plan Part 2.
    a. The Suspended Ceiling Seismic Details were modified per comments from IDOPL.
12. See revised sheet **AA00** – Rolling Assets Add Alternate #1

990 JOHN ADAMS PARKWAY / P.O. BOX 2212 / IDAHO FALLS, IDAHO 83403-2212 (P) 208.522.8779 (F) 208.522.8785 (W) nbwarchitects.com

a. Changes made to the plumbing fixture count schedule per comments from IDOPL.

Approved Substitution Request:

13. Section 07 4213.23 paragraph 2.2.A.1 – Alfrex Inc.
14. Section 08 3323 paragraph 2.2.A – Asta America.
15. Section 08 7100 – Schlage, Ives, Von Durprin, Falcon, LCN,
16. Section 09 8413 paragraph 2.3.A – Onnit System.

Questions:

17. A1.1, EA Line shows several places referenced as Keynote 6: CMU Infill and is referenced w/ a section cut 8/A3.4. 8/A3.4 shows what appears to be a steel stud furring wall for the exterior metal panels. Please give more information if this is a steel stud wall.
    a. There are two things happening in this section. First, any openings in the CMU walls (exterior or interior) need to be filled in with CMU. Second, the elevations call for metal panel siding to cover up some areas of the existing building which includes some window openings that will be filled in with CMU. In the infill window areas covered up by the metal panel siding, the contractor will need to provide additional framing to make up the thickness difference to match the adjacent sections of the wall. In this detail, we are showing metal studs to help make up the difference.
18. A1.1, EC Line between E1 & E2 lines to what appears to be another CMU wall infill w/ a steel stud furring wall but does not provide a section cut. Please provide more information if this is a steel stud furring wall.
    a. There are two things happening at this location. First, there is an existing door which shall be removed. The contractor will need to fill in this opening with CMU and Brick Veneer to match the existing materials. Please reference Keynote 5 which says Brick and CMU infill. Second, an internal furring wall will be framed around all exterior walls. See wall type 7.5A on sheet A0.0.
19. Ceiling Schedule Key on A 7.1 notes C1 as 2x4 Lay in Ceiling Tiles and C4 as 2x2 Lay in Ceiling Tiles. 095113 Acoustical Panel Ceilings are noted in 2.3 B ACT 1 & 2.3C ACT 2 and both are 2x2 w/ 9/16 suspension. Please confirm which 2x2 tile and suspension is to be used and also confirm what 2x4 tile and suspension is to be used.
    a. We will correct Section 09 5113 to show the correct 2x2 and 2x4 lay-in acoustic tile information.
20. I found that in rooms 116, 108, and 161 it calls for CPT2 and 5. There is no CPT5. I'm assuming that the accent carpets are CPT1, not 5.
    a. The flooring contractor is reading the finish tag incorrectly. These rooms do not call for CPT2 and 5. The finish tag shows that the carpet will be CP2 and the floor type has an additional note (this would be the 5 they are seeing). The flooring note #5 reads, “Multiple finishes – see finish plan for location.”
21. A0.0 shows 3 details on 4/A0.0. None of the wall types reference these details. Do these details apply to all sound batt insulated walls or just 9.3D/9.6D Acoustic Partition Wall Types?
    a. These details are generic details added to every project. The top two details shall apply to all sound batt insulated walls. The lower detail shall apply to all fire-rated wall assemblies.
22. Clarify if U1 is for long arms. See sheet A5.3.
    a. The U1 storage units are for long arms storage. It is anticipated that the long guns will be stored in cardboard boxes.

Attachments:

The Addendum consists of 02 page(s). The attached Documents consist of – Specification Sections: Table of Contents, Exhibit C, 09 5113, Division 10 Table of Contents, 10 5113, 10 5113.13, 10 5113.15, 10 5613, 10 5613.13, and 10 5626. Sheets A1.1, A7.1, A7.2, and AA00.

END OF ADDENDUM NO. 1

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ARCHITECTURE / PLANNING / INTERIORS

Pre-bid Conference
February 11, 2025 – 2:00 pm
DPW 22-511 ISP: District 6 Facility
1155 Foote Drive – Idaho Falls, Idaho 83402

Project Architect: Nick Hansen ph - 208-522-8779 fax - 208-522-8785 **Architect's Project Manager:** Tucker Haderlie ph - 208-522-8779 fax - 208-522-8785	**Project description:** The remodel and structural upgrade of an existing 36,000 square foot building. 24,000 square feet will be fully finished out into an office/headquarters building for the Idaho State Police. The other 12,000 square feet will be constructed as a warm grey shell. This project will also include a 3,600 square foot pre-engineered metal storage building.	
Building square footage: 36,000 sf **Estimated Cost:** 10,600,000.	**Bid submission date and time:** March 12, 2025, at 2:00 P.M.	**Bid submission location:** DPW Field Office 611 Wilson Ave. #1 Pocatello, Idaho 83201 208-417-9223
Building permits issued by: DOPL	**Construction Time:** Base Bid: 365 Calendar Days	**Liquidated damages/ day:** Base Bid: $1000.00
Addendum Items:		

1. **Project Representatives and Attendees:**

Name	Company	Phone # and Email
Nick Hansen	NBW Architects	208-522-8779 – nrh@nbwarchitects.com
Tucker Haderlie	NBW Architects	208-522-8779 – bth@nbwarchitects.com
Elaine Hill	DPW	208-332-1925 – elaine.hill@adm.idaho.gov
Kim Peterson	DPW	208-417-9223 – Kim.Peterson@adm.idaho.gov
Marc French	ISP	208-884-7010 – marc.french@isp.idaho.gov
Chris Weadick	ISP	Christopher.Weadick@isp.idaho.gov
Matt Bradley	Musgrove Engineering	208-589-5998 – mattb@musgrovepa.com
Mark Andrus	G&S Strutural	208-523-6918 – mark@gsengineers.net
James Monson	IMEG	208-552-9874 – James.O.Monson@imegcorp.com

Scott Sutter	TLC	407-487-1410 – scott.sutter@tlc-eng.com
Javier Ramirez	Horrocks	208-522-1223 – javier.ramirez@horrocks.com
Tim Townsend	Alpine Construction	208-286-1863 – ttownsend@buildwithacm.com
Mike Clements	Bateman-Hall	208-523-2681 – mikec@bateman-hall.com
Sterling Wiser	Big-D	208-270-1458 – sterling.wiser@big-d.com
Jess Johnson	ESI	208-430-2851 – jessjohnson@esiconstruction.com
Rob Fraser	Faber	208-960-9166 – robf@faberconstruction.com
Jacob Holden	Headwaters	208-932-5821 – jholden@headwaterscc.com
Nick Contos	Ormond Builders	208-524-1422 – ncontos@ormondbuilders.com
Steve Zambrano	Pac West	208-681-8424 – stevez@pwquality.com
Paul Gardner	Alliant	801-703-7827 – paulg@alliantsecurity.net
Travis Archer	ATS, Inc.	208-521-7049 – travisa@atsinlandnw.com
Austin Garrett	Barin Group	208-530-9727 – agarrett@barincg.com
Lonnie Jacobson	BFC Diversified	208-313-3183 – lucasj.bfc@gmail.com
Phil Williams	Convergint	208-392-7782 – phil.williams@convergint.com
Matthew Kirk	Fast Signs	208-522-1355 – matthew.kirk@fastsigns.com
Zachary Jullis	Grang Electric LLC.	208-966-2759 – zacht@cringcelectricllc.com
Aaron Muaughlan	Haddons Fence	208-785-3027 – aaron@haddonsfence.com
Matt Smith	Idaho Aggregate	208-240-2662 – matt.smith@idahoaggregate.com
Chris Franco	Integrated Security Resources	208-884-8562 – cfranco@isri.com
Jay Nagol	Intermountain Design / Aatronics	208-859-5923 – jay@idisuperstore.com
Dan Beck Scott Wanstrom	Mountain West Electrical	208-681-8460 – dbeck@mtnwestelec.com 208-681-5465 – swanstrom@mtnwestelec.com
Jean-Michal Knickerbocker	Orange Electric LLC	208-740-9501 – orangeelectric.knick@gmail.com
Jairo Orellana Selmir Alic	Petra Inc	jorellana@petrainc.net salic@petrainc.net
Chris Goodwin	Seasons West	208-970-1582 – chris@seasonswest.com
Jason Riley	Steel Vision	208-390-8812 – jason@steelvisionconstruction.com

2. **Bidding Information:**
   a. The successful bidder must supply:
      1)Workers Compensation Insurance*
      2)Commercial Liability Insurance*
      3)Automobile Liability Insurance*
      4)Performance and Payment Bonds * (100%)
      5)*The cost of the above to be included in the contractor's bid.*

   b. The following documents MUST be included with the Bid
      1)Bid Bond 5% including Power of Attorney.
      2)Affidavit Concerning Alcohol and Drug Free Workplace.
      3)Signed Bidder Acknowledgement statement
   c. Division of Public Works license is required before bidding.

3. **Addenda:**
   a. All addenda will be issued by the Architect, by email, if possible, no later than 4 days prior to bid opening.
   b. All verbal agreements or instructions must be confirmed by written addenda.
   c. Contractors are to bid the contract documents. Review documents carefully. Additional payments to the Contractor will not be made for items shown or specified in documents.
   d. Requests for clarification shall be in writing and received by the architect 7 working days minimum prior to bid opening.

4. **Bid Opening:**
   a. Sealed bids will be accepted up to the specified time. Bidding will be closed at the exact specified time. Any or all Bids may be rejected by the Owner without cause. Bids will be opened and reviewed in a meeting following the time for receipt of bids.
   b. Bids are to be submitted as outlined in the Project Manual. Be sure to execute and include additional documents required.
   c. The bid form used will be the form provided. Faxed or emailed bids are not acceptable.
   d. The Owner reserves the right to reject any or all bids and to waive any irregularity therein.
   e. If all addenda are not acknowledged by number (1,2,3, etc.), on the bid form or if the bid form is not signed, all blanks not filled in or otherwise improperly filled out, the bid will be considered non-responsive.
   f. The bid amount is to be listed in both written and numerical form. If there is a discrepancy between the two, the written amount will be used.

5. **Additional Items of Discussion:**
   a. No substitutions of materials or products not authorized by addendum.
   b. Review drawings and specifications.
   c. Builders Risk insurance to be carried by General Contractor.
   d. Additional sets of plans available.
      1)Association General Contractors www.idahoagc.org/plan-room
      2)Blueprints Specialties www.docuproject.com
      3)NBW www.nbw@nbwarchitecs.com
   e. Contact NBW office to be added to the bidders list.

6. **Pre-Bid meeting notes and questions:**
   a. Shared Photos from NBW Architects. These images will be shared and are for reference only. A link will be provided in Addendum #1.
   b. CAD drawings can be made available upon request. An Electronic Media Agreement must be signed and returned to NBW before files are released. This document will be issued in Addendum #1.
   c. We will have two scheduled walk-throughs.

1)February 25th at 2:pm
2)March 4th at 2:pm

d. Davis-Bacon or Prevailing Wages are not required on this project.
e. We will share the results of a wall reinforcement scan for the existing structure. This report will be for reference only.
f. There is currently power, water, and sewer to the building. The contractor may use these services during construction. These lines will be replaced or modified during construction. The contractor shall have resources in place while these services are unavailable.
g. Mail services to DPW's field office in Pocatello have experienced delays. If you are mailing your bid, send it early to avoid this issue.
h. If you need to correct your bid form, do not use whiteout. Cross it out, write the correction, and provide your initials near the correction.

Daily Inspection Report

Report Date: 11/02/2023

Atlas Technical Consultants, LLC - Boise Construction
2791 S. Victory View Way
Boise, ID 83709
Phone: 208-376-4748

Client:

State of Idaho DPW
502 North 4th Street
Boise, ID 83702

Project:

B231894c
GPR Testing, DPW 22511 ISP Dist. 6 HQ, 1155 Foote Dr., Idaho Falls, ID
1155 Foote Drive
Idaho Falls, ID 83402

Inspection Details

Date	Contractor	Inspector	Weather	Ambient Temperature (°F)	Permit Number
10/27/2023	nbw architects	Hall, Matthew	NA	NA	NA

Remarks

ATLAS has completed the limited Ground Penetrating Radar (GPR) survey of CMU building to identify structural elements. The building was generally found to have a vertical bar spacing at 32 inches on center with bond beams varying from 1 to 3 found in the walls. In the newer construction, the bond beams were fully grouted, however in the older construction, the bond beams were ungrouted below the rebar. The double T ceiling has a 2 set cable run that spans the beam straight without profile. In these short drop beams, the quantity of cables was difficult to determine, however there is a minimum of 4 cables, but possibly more in these beams. The mono wings contain 8 cables that drop with profile from the edges of the beam to the mid section of the beam. Attached are photos of the findings.

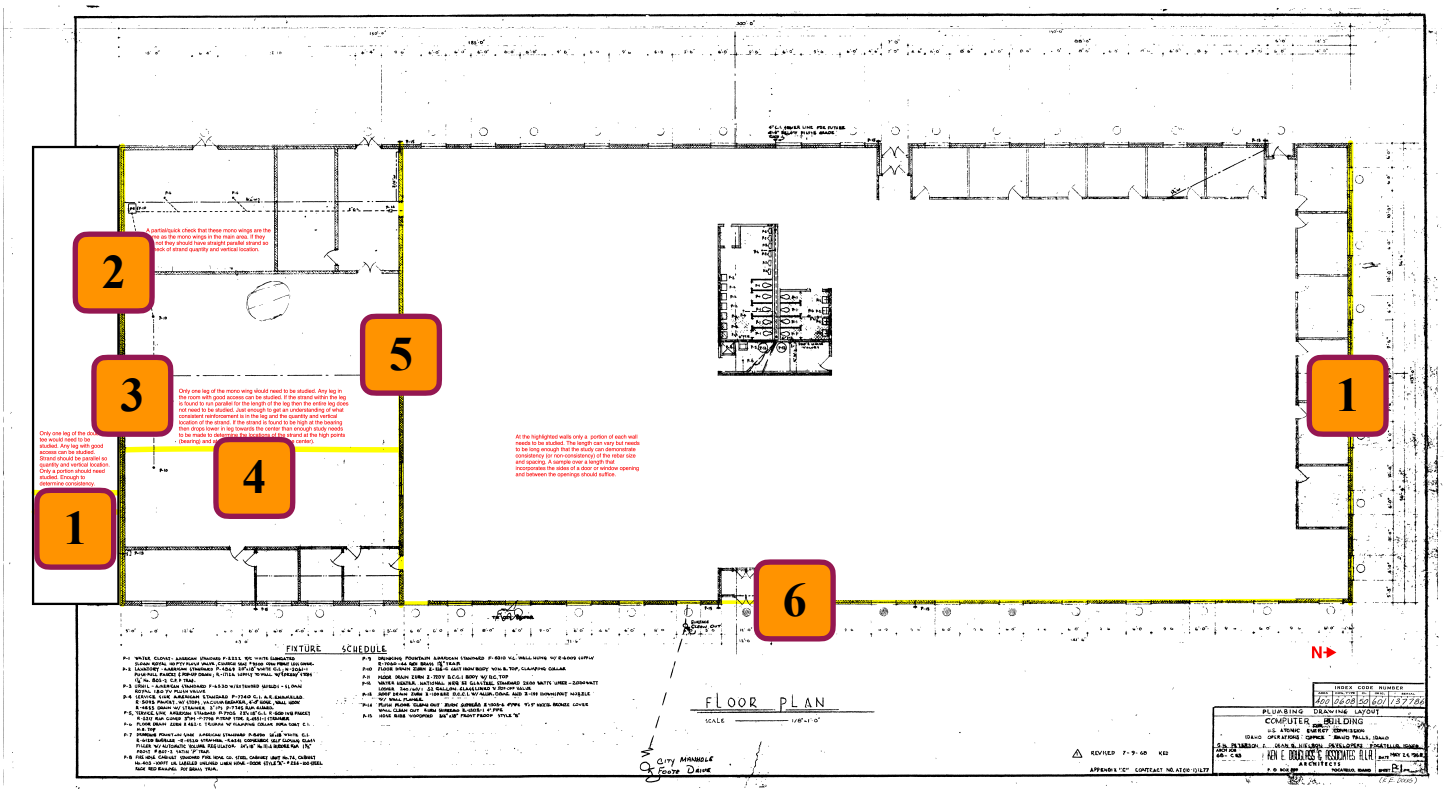
ATLAS used a GSSI StructureScan Optical GPR device equipped with a 2 GHz antenna and TerraSIRch SIR-4000 digital control unit, which is capable of locating and imaging rebar and other targets in concrete slabs, decks, walls and masonry. The dielectric constant for this concrete was measured to be roughly 6.25 (dielectric is unit-less). Sampling rate was 16 bits/sample, 256 samples/scan, and 90 scans/foot. Some limitations of the technology exist depending upon the situation. Though not a foolproof system, the technology provides information on the location and depth of objects accurate to within ¼ of the radar wavelength, which equates to a spatial resolution of roughly 1/4-inch for a 2 GHz system. As with any Non-Destructive Evaluation (NDE) technique, interpretation of data is key to achieving accurate results. Because of inherent limitations with GPR locating, ATLAS cannot warranty our findings and is providing this service for information purposes only.

ATLAS appreciates this opportunity to be of service and looks forward to a continuing relationship as your concrete and NDE expert. If you have questions concerning this report, please contact us at (208) 376-4748.

Documentation Below

See Atlas GPR Report DPW.pdf in the documents section at the end of this report.

Scan Locations



1. Double “T”
2. South side of dividing wall
3. North side of dividing wall
4. Mono wings
5. Dividing wall
6. East wall
7. North wall

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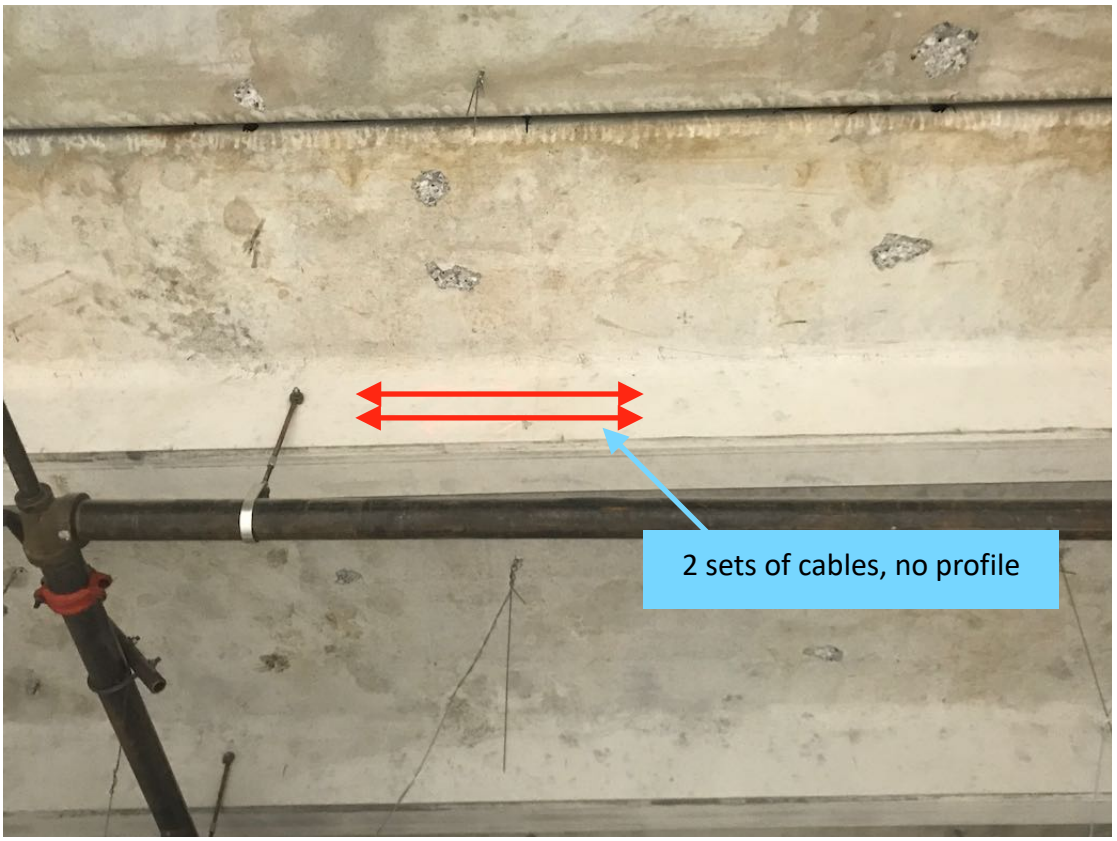
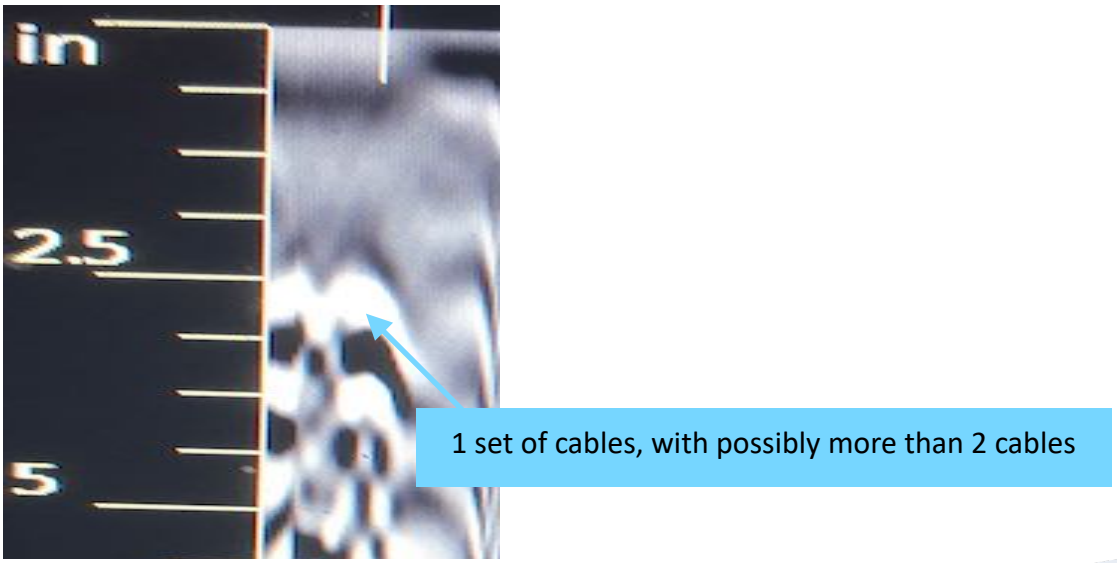
Double T



The double T's have at least 4 cables divided between 2 sets that are stacked approximately 3 inches apart and have no profile as they span the beam. The quantity of cables in each set is too tight to distinguish. There is a minimum of 4 cables total, but may be more.



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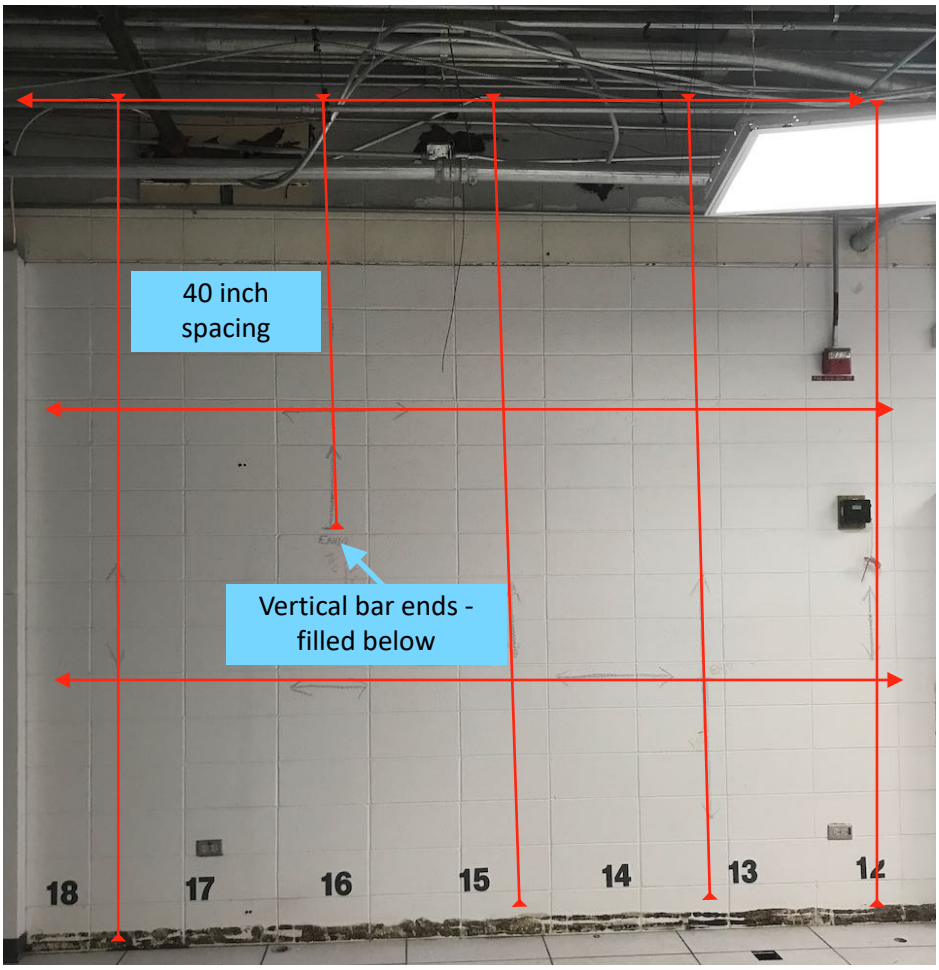
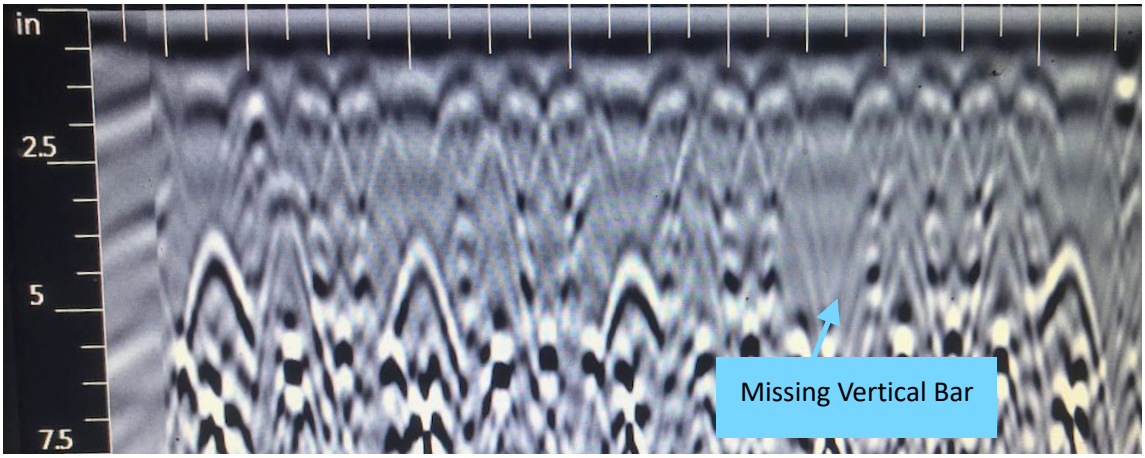
South Side Dividing Wall



The dividing wall between the new and old construction is a double wide CMU wall. This south side of the dividing wall generally had vertical bars at 32 inches on center with bond beams at 4 ft, 8ft, and 12.5ft. Found an ending vertical bar and a slightly larger 40 inch spacing in the vertical bar. The door frames of this wall also had jam bars along each side and a header bar above them.



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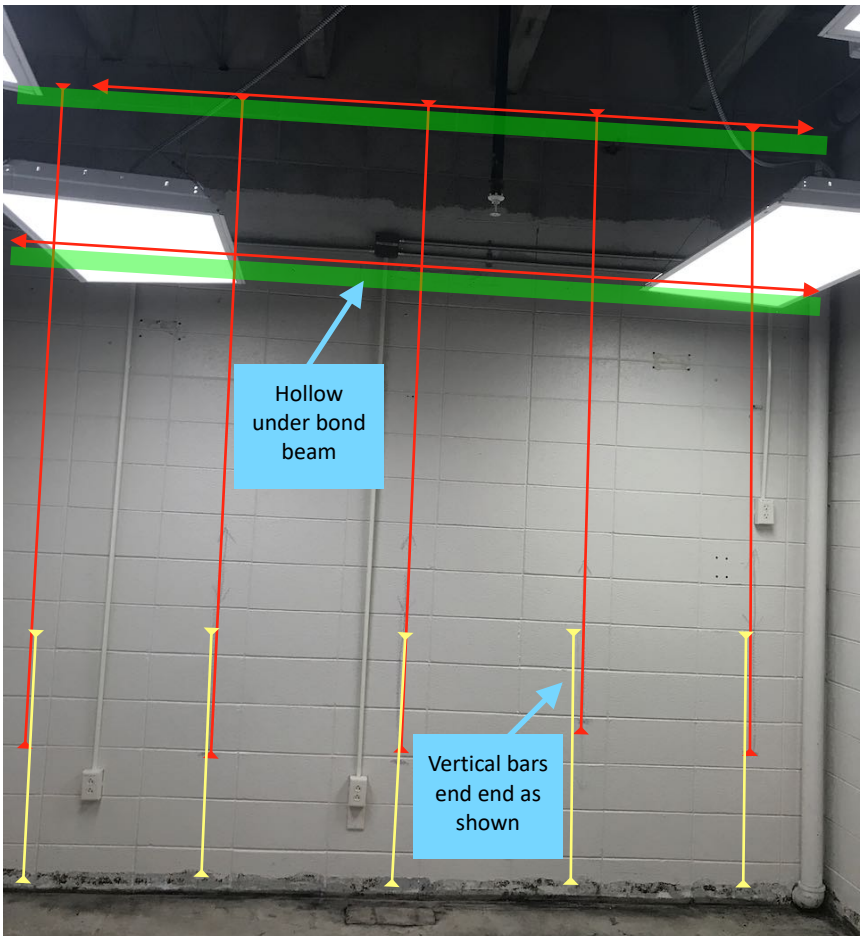
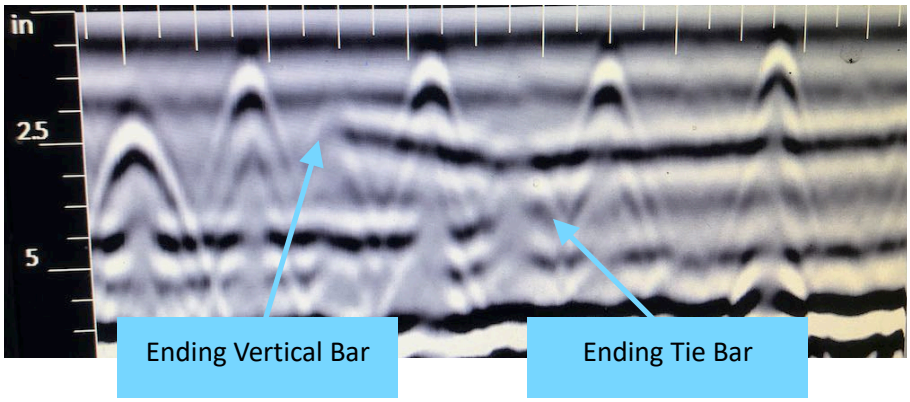
North Side of South Dividing Wall



The dividing wall to the north of the double CMU partition has vertical bars (red) at 32 inches on center that end after overlapping with the 4 foot long tie bars (yellow). This same construction technique with the vertical bars seems to be present though out the rest of the original exterior wall construction. There are 2 bond beams at 9+ feet and 12 feet, however the remainder of that row of cells is hollow under the bond beam bar.



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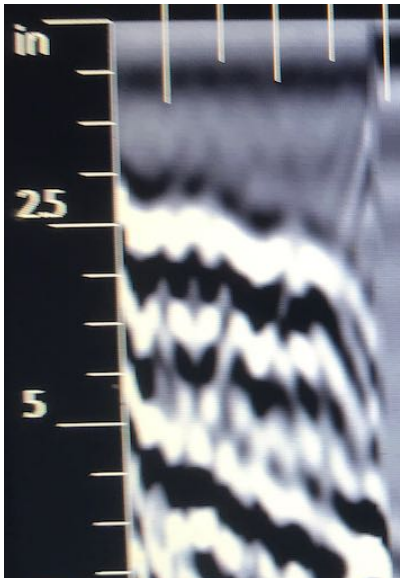
Mono Wings

The mono wings have 8 cables that descend from the ends with profile to form a group at mid beam.



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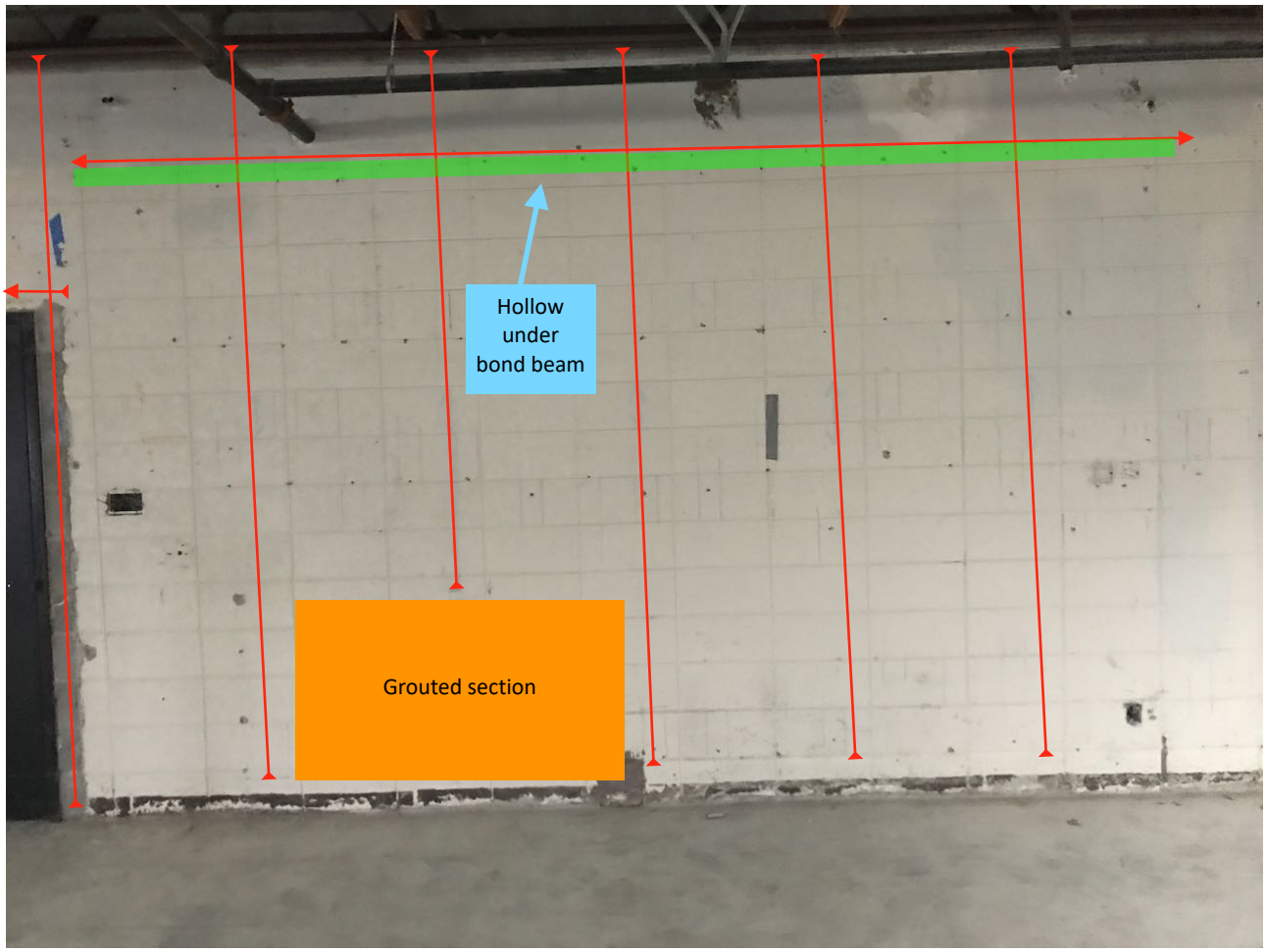
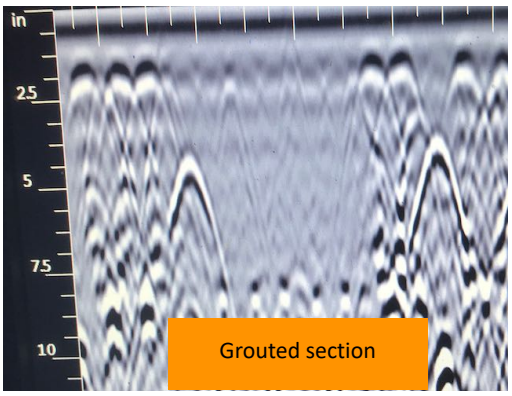
Dividing Wall



The dividing wall in the middle of the building has vertical bars (red) at 32 inches on center. Only 1 bond beam at 9+ feet was found, and the remainder of that row of cells is hollow under the bond beam bar. The door has jamb and header bars. Generally all cells in the wall are hollow unless rebar is present, however on occasion a section may be grouted out of pattern.



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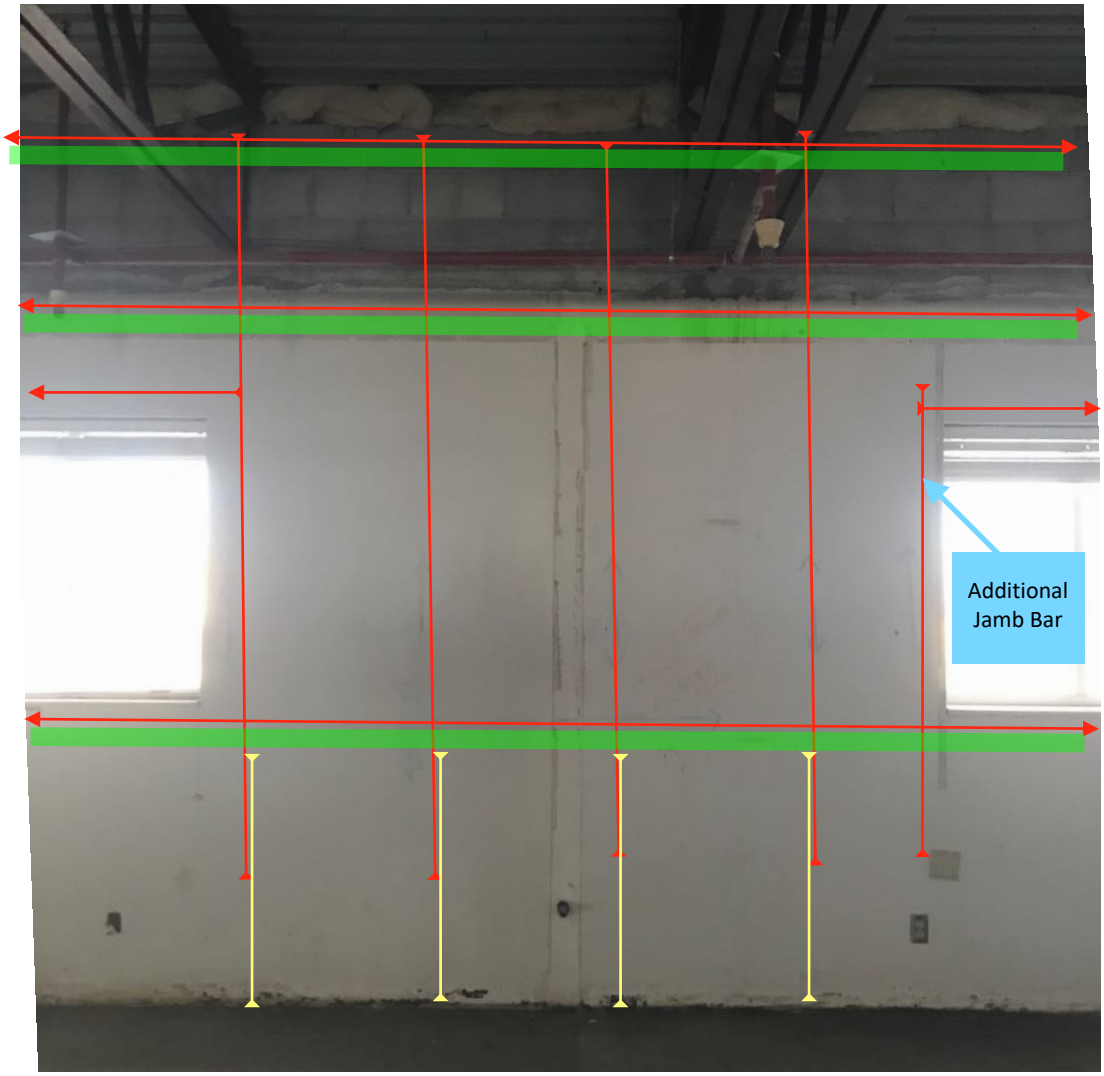
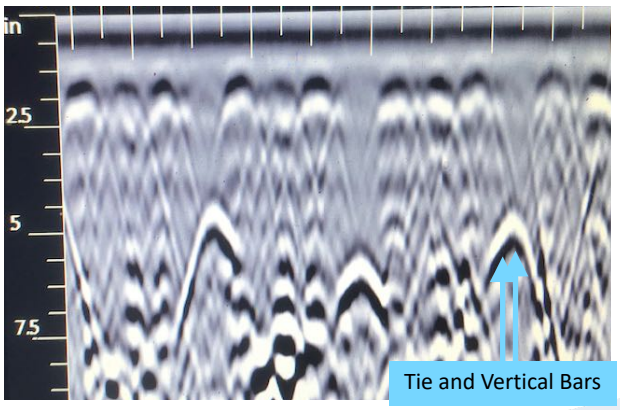
East Wall



The east wall has vertical bars (red) at 32 inches on center that end after overlapping with the 4 foot long tie bars (yellow). In addition there are additional jamb bars at windows. This same construction technique with the vertical bars seems to be present though out the rest of the original exterior wall construction. There are 3 bond beams at 4 feet, 9+ feet and 12 feet, however the remainder of that row of cells is hollow under the bond beam bar (green).



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North Wall

The north wall has identical bar characteristics as the east wall, however the 3 bond beams differ slightly in that the upper most bond beam is 1 row lower at 11 foot+.

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AGREEMENT CONCERNING DRAWING FILES ON ELECTRONIC MEDIA

NBW Architects, P.A. (the Architects) do not assume any responsibility for the accuracy of the information contained in these digital models. Any and all users are aware that differences may exist between the electronic files delivered and the printed hard-copy construction documents. In the event of a conflict between the signed and sealed hard-copy construction documents prepared by the Architect and the electronic files, the signed or sealed hard-copy construction documents shall govern.

Any and all users who may obtain these digital models from the Construction Manager/General Contractor under this agreement, including but not limited to; subcontractors, vendors, suppliers etc., agree to indemnify and hold harmless the Architect, its officers, directors, employees and sub-consultants against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, arising from any changes made by anyone other than the Architect or from any transfer or reuse of the electronic files without the prior written consent of the Architect.

Under no circumstances shall delivery of the electronic digital models be deemed a sale by the Architect, and the Architect makes no warranties, either express or implied, of merchantability and fitness for any particular purpose. In no event shall the Architect be liable for any loss of profit or any consequential damages as a result of the use or reuse of the electronic files.

The digital documents provided will contain information as provided on construction documents. The user shall remove all notes, text, detail cuts and member designations from the electronic file prior to use. If used as submittal documents, submittals will be rejected as non-compliant. The drawing files provided by NBW may not be reproduced or distributed to individuals outside the company or collective organization signing this agreement.

Project Name: **DPW 22-511 ISP: District 6 Facility**
NBW Project #**21034**

_____

ACCEPTANCE OF TERMS, CONDITIONS & LIMITATIONS:

_____	_____
Name of Company/Contractor	Signature of Company/Contractor Representative
_____	
Printed Name of Individual Signing	
_____	_____
Position/Title	Date

This agreement must be signed and returned to NBW prior to release of any electronic document.

TECHNICAL SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

DIVISION 2 – EXISTING CONDITIONS

DIVISION 3 - CONCRETE

DIVISION 4 – MASONRY

DIVISION 5 – METALS

DIVISION 23 – MECHANICAL

DIVISION 26 – ELECTRICAL

EXHIBIT C

LIST OF DRAWINGS AND SPECIFICATIONS

LIST OF DRAWINGS:

G1.0 General Information
G1.1 Code Analysis
G1.2 ANSI Standards

Civil

C.1.0 Cover Sheet
C.1.1 General Notes
C.1.2 Legend
C.2.0 Existing Conditions & Demo
C.3.0 Site Plan
C.3.1 Site Plan Details
C.4.0 Grading Plan
C.5.0 Utility & Drainage Plan
C.5.1 Utility & Drainage Plan Details
C.6.0 Erosion Control Plan

Landscape

L.1.0 Landscape Plan
L.2.0 Landscape Details
L.3.0 Irrigation Performance Specification

Site Design

SD1.1 Site Plan
SD1.2 Site Enlarged Plans
SD1.3 Site Details
SD1.4 Site Details

Architectural

A0.0 Wall Types & Specialty Assemblies Legend
A0.1 Existing Building
A0.2 Demolition Plan
A0.3 Demolition Roof plan and Elevations
A1.0 Main Floor Plan
A1.1 Main Floor Plan Part 1
A1.2 Main Floor Plan Part 2
A2.1 Building Elevations
A3.1 Building Sections
A3.2 Wall Sections
A3.3 Wall Sections

A3.4 Wall Sections
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SECTION 09 5113 - ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes acoustical panels and exposed suspension systems for ceilings.

B. Products furnished, but not installed under this Section, include anchors, clips, and other ceiling attachment devices to be cast in concrete.

1.2 PREINSTALLATION MEETINGS

A. Pre-installation Conference: Conduct conference at Project site.

1.3 SUBMITTALS

A. Product Data: For each type of product.

B. Samples for Verification: For each component indicated and for each exposed finish required, prepared on Samples of size indicated below.
   1. Acoustical Panel: Set of 6-inch- square Samples of each type, color, pattern, and texture.
   2. Exposed Suspension-System Members, Moldings, and Trim: Set of 6-inch- long Samples of each type, finish, and color.

C. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
   1. Suspended ceiling components.
   2. Structural members to which suspension systems will be attached.
   3. Size and location of initial access modules for acoustical panels.
   4. Items penetrating finished ceiling including the following:
      a. Lighting fixtures.
      b. Air outlets and inlets.
      c. Speakers.
      d. Sprinklers.
      e. Access panels.
   5. Perimeter moldings.

D. Qualification Data: For testing agency.

E. Product Test Reports: For each acoustical panel ceiling, for tests performed by manufacturer and witnessed by a qualified testing agency.

F. Maintenance Data: For finishes to include in maintenance manuals.

G. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Acoustical Ceiling Panels: Full-size panels equal to 2 percent of quantity installed.
   2. Suspension-System Components: Quantity of each exposed component equal to 2 percent of quantity installed.

1.4 QUALITY ASSURANCE

A. Testing Agency Qualifications: Qualified according to NVLAP for testing indicated.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver acoustical panels, suspension-system components, and accessories to Project site in original, unopened packages and store them in a fully enclosed, conditioned space where they will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.

B. Before installing acoustical panels, permit them to reach room temperature and stabilized moisture content.

C. Handle acoustical panels carefully to avoid chipping edges or damaging units in any way.

1.6 FIELD CONDITIONS

A. Environmental Limitations: Do not install acoustical panel ceilings until spaces are enclosed and weatherproof, wet work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
   1. Pressurized Plenums: Operate ventilation system for not less than 48 hours before beginning acoustical panel ceiling installation.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Seismic Performance: Acoustical ceiling shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.

B. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
   1. Flame-Spread Index: Comply with ASTM E 1264 for Class A materials.
   2. Smoke-Developed Index: 50 or less.

2.2 ACOUSTICAL PANELS, GENERAL

A. Source Limitations:

1. Acoustical Ceiling Panel: Obtain each type from single source from single manufacturer.
2. Suspension System: Obtain each type from single source from single manufacturer.

B. Acoustical Panel Standard: Provide manufacturer's standard panels of configuration indicated that comply with ASTM E 1264 classifications as designated by types, patterns, acoustical ratings, and light reflectance unless otherwise indicated.
1. Mounting Method for Measuring NRC: Type E-400; plenum mounting in which face of test specimen is 15-3/4 inches away from test surface according to ASTM E 795.

2.3 ACOUSTICAL PANELS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Armstrong World Industries, Inc.
2. CertainTeed Corp.
3. Rockfon.
4. USG Interiors, Inc.; Subsidiary of USG Corporation.

B. Acoustical Panel Ceilings (C1): Provide panels complying with ASTM E 1264, Type XX (Stone wool base with membrane-faced overlay), Pattern G. Fire Class A.
1. Basis of Design: Symphony m by CertainTeed.
2. Description: Stone wool (Mineral Wool).
3. Size: 24” x 48” x 3/4".
4. Edge Condition: 9/16” Beveled Tegular.
5. NRC: Minimum 0.80
6. CAC: Minimum 35
7. Light Reflectance: 0.86.
8. Sag resistant: Up to 100% (relative humidity).
9. Color: White.
10. Installation: 9/16” Exposed tee system.

C. Acoustical Panel Ceilings (C4): Provide panels complying with ASTM E 1264, Type XX (Stone wool base with membrane-faced overlay), Pattern G. Fire Class A.
1. Basis of Design: Symphony m by CertainTeed.
2. Description: Stone wool (Mineral Wool).
3. Size: 24” x 24” x 3/4".
4. Edge Condition: 9/16” Beveled Tegular.
5. NRC: Minimum 0.80
6. CAC: Minimum 35
7. Light Reflectance: 0.86.
8. Sag resistant: Up to 100% (relative humidity).
9. Color: White.
10. Installation: 9/16” Exposed tee system.

2.4 METAL SUSPENSION SYSTEMS, GENERAL

A. Metal Suspension-System Standard: Provide manufacturer's standard direct-hung metal suspension systems of types, structural classifications, and finishes indicated that comply with applicable requirements in ASTM C 635/C 635M.

B. Attachment Devices: Size for five times the design load indicated in ASTM C635, Table 1, “Direct Hung,” unless otherwise indicated. Comply with seismic design requirements.

C. Wire Hangers, Braces, and Ties: Provide wires complying with the following requirements:
   1. Zinc-Coated, Carbon-Steel Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper.
   2. Size: Select wire diameter so its stress at three times hanger design load (ASTM C 635/C 635M, Table 1, "Direct Hung") will be less than yield stress of wire, but provide not less than 0.106-inch- diameter wire.

D. Seismic Stabilizer Bars: Manufacturer's standard perimeter stabilizers designed to accommodate seismic forces.

E. Seismic Struts: Manufacturer's standard compression struts designed to accommodate seismic forces.

F. Seismic Clips: Manufacturer's standard seismic clips designed and spaced to secure acoustical panels in place.

2.5 METAL SUSPENSION SYSTEM

A. Basis-of-Design Product: Subject to compliance with requirements, provide products by one of the following:
   1. Armstrong World Industries, Inc
   2. CertainTeed Corp.
   3. Chicago Metallic Corporation.
   4. USG Interiors, Inc.; Subsidiary of USG Corporation.

B. Narrow-Face, Capped, Double-Web, Steel Suspension System: Main and cross runners roll formed from cold-rolled steel sheet; prepainted, electrolytically zinc coated, or hot-dip galvanized according to ASTM A 653, not less than G30 coating designation; with prefinished 9/16-inch-wide metal caps on flanges.
   1. Basis of Design Product: High Integrity (4200) by Chicago Metallic.
      a. Finish: White; as indicated on Finish Schedule.
   2. Structural Classification: Heavy-duty system.
   3. End Condition of Cross Runners: Override (stepped) type.
   4. Face Design: Flat, Flush.
   5. Cap Material: Steel cold-rolled sheet.
   6. Cap Finish: Painted white.

2.6 METAL EDGE MOLDINGS AND TRIM

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Armstrong World Industries, Inc.
   2. CertainTeed Corp.
   3. Chicago Metallic Corporation.
   4. Fry Reglet Corporation.

5. Gordon, Inc.
6. USG Interiors, Inc.; Subsidiary of USG Corporation.

B. Roll-Formed, Sheet-Metal Edge Moldings and Trim: Type and profile indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations that comply with seismic design requirements; formed from sheet metal of same material, finish, and color as that used for exposed flanges of suspension-system runners.
1. Provide manufacturer's standard edge moldings that fit acoustical panel edge details and suspension systems indicated and that match width and configuration of exposed runners unless otherwise indicated.
2. For lay-in panels with reveal edge details, provide edge moldings that match profile of face of suspension grid.
3. For circular penetrations of ceiling, provide edge moldings fabricated to diameter required to fit penetration exactly.

2.7 ACOUSTICAL SEALANT

A. Acoustical Sealant: Manufacturer's standard sealant complying with ASTM C 834 and effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.
1. Exposed and Concealed Joints: Non-sag, paintable, non-staining latex sealant.
2. Concealed Joints: Nondrying, non-hardening, non-skinning, non-staining, gunnable, synthetic-rubber sealant.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, including structural framing to which acoustical panel ceilings attach or abut, with Installer present, for compliance with requirements specified in this and other Sections that affect ceiling installation and anchorage and with requirements for installation tolerances and other conditions affecting performance of acoustical panel ceilings.

B. Examine acoustical panels before installation. Reject acoustical panels that are wet, moisture damaged, or mold damaged.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders, and comply with layout shown on reflected ceiling plans.

3.3 SUSPENDED PANEL INSTALLATION

A. General: Install acoustical panel ceilings to comply with ASTM C 636/C 636M and seismic design requirements indicated, according to manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."

B. Suspend ceiling hangers from building's structural members and as follows:
   1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structure or of ceiling suspension system.
   2. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.
   3. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers at spacings required to support standard suspension-system members, install supplemental suspension members and hangers in form of trapezes or equivalent devices.
   4. Secure wire hangers to ceiling-suspension members and to supports above with a minimum of three tight turns. Connect hangers directly either to structures or to inserts, eye screws, or other devices that are secure and appropriate for substrate and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures.
   5. Do not support ceilings directly from permanent metal forms or floor deck. Fasten hangers to cast-in-place hanger inserts, post-installed mechanical or adhesive anchors, or power-actuated fasteners that extend through forms into concrete.
   6. When steel framing does not permit installation of hanger wires at spacing required, install carrying channels or other supplemental support for attachment of hanger wires.
   7. Do not attach hangers to steel deck tabs.
   8. Do not attach hangers to steel roof deck. Attach hangers to structural members.
   9. Space hangers not more than 48 inches o.c. along each member supported directly from hangers unless otherwise indicated; provide hangers not more than 8 inches from ends of each member.
   10. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced standards and publications.

C. Secure bracing wires to ceiling suspension members and to supports with a minimum of four tight turns. Suspend bracing from building's structural members as required for hangers, without attaching to permanent metal forms, steel deck, or steel deck tabs. Fasten bracing wires into concrete with cast-in-place or post-installed anchors.

D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels.
   1. Apply acoustical sealant in a continuous ribbon concealed on back of vertical legs of moldings before they are installed.
   2. Screw attach moldings to substrate at intervals not more than 16 inches o.c. and not more than 3 inches from ends, leveling with ceiling suspension system to a tolerance of 1/8 inch in 12 feet. Miter corners accurately and connect securely.
   3. Do not use exposed fasteners, including pop rivets, on moldings and trim.

E. Install suspension-system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.

F. Install acoustical panels with undamaged edges and fit accurately into suspension-system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.
   1. For reveal-edged panels on suspension-system runners, install panels with bottom of reveal in firm contact with top surface of runner flanges.
   2. Paint cut edges of panel remaining exposed after installation; match color of exposed panel surfaces using coating recommended in writing for this purpose by acoustical panel manufacturer.

3.4 FIELD QUALITY CONTROL

A. Testing Agency: Engage a qualified testing agency to perform tests and inspections and prepare test reports.

B. Perform the following tests and inspections of completed installations of acoustical panel ceiling hangers and anchors and fasteners in successive stages. Do not proceed with installations of acoustical panel ceiling hangers for the next area until test results for previously completed installations show compliance with requirements.
   1. Extent of Each Test Area: When installation of ceiling suspension systems on each floor has reached 20 percent completion but no panels have been installed.
      a. Within each test area, testing agency will select one of every 10 power-actuated fasteners and postinstalled anchors used to attach hangers to concrete and will test them for 200 lbf of tension; it will also select one of every two postinstalled anchors used to attach bracing wires to concrete and will test them for 440 lbf of tension.
      b. When testing discovers fasteners and anchors that do not comply with requirements, testing agency will test those anchors not previously tested until 20 pass consecutively and then will resume initial testing frequency.

C. Acoustical panel ceiling hangers and anchors and fasteners will be considered defective if they do not pass tests and inspections.

D. Prepare test and inspection reports.

3.5 CLEANING

A. Clean exposed surfaces of acoustical panel ceilings, including trim, edge moldings, and suspension-system members. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage. Remove and replace ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION

DPW PROJECT NO. 22-511
NEW DISTRICT #6 FACILITY
IDAHO STATE POLICE
IDAHO FALLS, IDAHO

10 5113 - METAL LOCKERS – DAY USE PASSBACK LOCKERS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following: Passback Lockers.

1.2 REFERENCES

A. American National Standards Institute (ANSI) Standards:
   1. Applicable standards for fasteners used for assembly.

B. American Society for Testing and Materials (ASTM) Standards:
   1. Applicable standards for steel sheet materials used for fabrication
   2. Applicable standards for the testing of electrostatically applied Powder Coat Paint

C. American Institute Of Steel Construction (AISC) Standards:
   1. Applicable standards for steel materials used for fabrication.

1.3 DESCRIPTION

A. General: Metal Lockers with digital locks for shared use mode. Available in single door configuration.

B. Finishes:
   1. Fabricated Metal Components and Assemblies: All components to be painted with an electro-statically applied Powder Coat paint that can meet or exceed test requirements set out by ASTM standard D3451-06 Standard Guide for Testing Coating Powders and Powder Coatings.

C. Sizes:
   1. Duty Lockers: nominal frame height 72 inches, nominal width of 18 inches, and nominal depth of 24 inches. Single door configurations available.

1.4 PERFORMANCE REQUIREMENTS

A. Design Requirements:
   1. Limit overall width not to exceed specified nominal width; locker width designed for zero growth.

B. Seismic Performance: Provide Metal Lockers capable of withstanding the effects of earthquake movement when required by applicable building codes.

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's product literature and installation instructions for each type of metal locker required. Include data substantiating that products to be furnished comply with requirements of the contract documents.

B. Shop Drawings: Show fabrication, assembly, and installation details, including descriptions of procedures and diagrams. Show complete locker installation layout, including quantities, locations and types of accessory units required. Include notations and descriptions of all installation items and components.
   1. Show installation details at non-standard conditions, if any.
   2. Provide layout, dimensions, and identification of each unit, corresponding to sequence of installation procedures.
   3. Provide installation schedule and procedures to ensure proper installation.

C. Selection Samples: For initial selection of colors and textures, submit manufacturer's color charts, consisting of actual product pieces, showing full range of colors and textures available.

D. Warranty: Submit draft copy of proposed warranty for review by the Architect.

E. Maintenance Data: Provide written documentation of the manufacturer's statement, claiming the maintenance free nature of the product.

F. Reference List: Provide a list of recently installed metal lockers to be visited by owner, architect, and contractor. Intent of list is to aid in verifying the suitability of manufacturer's products and comparison with materials and product specified in this section. Include contact name, address, and phone numbers.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Engage an experienced manufacturer who is ISO 9001:2008 certified for the design, production, installation and service of metal lockers. Furnish certification attesting ISO 9001:2008 quality system registration.

B. Installer Qualifications: Engage an experienced installer who is the manufacturer's authorized representative for the specified products for installing metal lockers.
   1. Minimum Qualifications: 1-year experience installing metal lockers of comparable size and complexity to specified project requirements.

1.7 DELIVERY, STORAGE AND HANDLING

A. Follow manufacturer's instructions and recommendations for delivery, storage and handling requirements.

1.8 PROJECT CONDITIONS

A. Field Measurements: Verify quantities of metal locker units before fabrication. Indicate verified measurements on shop drawings. Coordinate fabrication and delivery to ensure no delay in progress of the work.

B. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating metal lockers units without field measurements. Coordinate construction to ensure actual dimensions correspond to established dimensions.

1.9 SEQUENCING AND SCHEDULING

A. Sequence metal lockers with other work to minimize possibility of damage and soiling, during remainder of construction period.

B. Schedule installation of specified metal lockers after finishing operations, including painting, have been completed.

C. Provide components which must be built in at a time, which causes no delays in the general progress of the work.

D. Pre-installation Conference: Schedule and conduct conference on project site to review methods and procedures for installing Metal Lockers including, but not limited to, the following:
   1. Recommended attendees include:
      a. Owner's Representative.
      b. Prime Contractor or representative.
      c. The Architect and Designer.
      d. Subcontractors or installers whose work may affect, or be affected by, the work of this section.

1.10 WARRANTY

A. Provide a written warranty, executed by Contractor, Installer, and Manufacturer, agreeing to repair or replace units, which fail in materials or workmanship within the established warranty period. This warranty shall be in addition to, and not a limitation of, other rights the Owner may have under General Condition’s provisions of the Contract Documents.

B. Limited Lifetime Warranty: Subject to the terms in the written warranty, warrant the original purchaser exclusively that the locker frames manufactured by it will be free from defects in materials and workmanship for the lifetime of the locker.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. General: Duty Lockers available in single door or multi-tier configurations. Based upon metal lockers manufactured by Spacesaver Corporation, 1450 Janesville Avenue, Fort Atkinson,

Wisconsin 53538-2798. Telephone: 800-492-3434.

2.2 BASIC MATERIALS

A. General: Provide materials and quality of workmanship, which meets or exceeds established industry standards for products specified. Use furniture grade sheet metal and fasteners for component fabrication unless indicated otherwise. Material thicknesses/gauges are manufacturer's option unless indicated otherwise.

2.3 LOCKER TYPES

A. Day Use Passback Locker. Provide metal storage lockers in single door and multi-tier configurations. Basis-of-Design: Spacesaver Corporation. Provide lockers equipped with accessories as requested.

2.4 MANUFACTURED COMPONENTS

A. Welded Frame:
   1. The welded frame must consist of top, bottom, back, and sides constructed of a minimum of 18-gauge or [1.214] millimeters steel. All frame components shall be joined using resistance welding.
      a. Reference drawings for arrangement of shelving and accessories.

B. Metal Doors
   1. Shall be formed from two (2) pieces of minimum 20-gauge [0.91] millimeter cold rolled steel box formed and riveted together. Door with inner and outer door panels shall have a combined steel thickness of no less than [0.075] inches or [1.9] millimeters thick. (2) panel door design optimizes structural integrity of locker door system over and above any single frame door design.
   2. Exterior door panel shall be constructed with formed flanges and return flanges to add stiffness.
   3. Doors shall be full overlay style.
   4. Hinge:
      a. Full overlay [1] inch hinge
      b. Soft close style
      c. One-piece wraparound hinge
      d. Steel, nickel-plated
      e. Minimum of 2 hinges per door.
         1) Door heights up to 27" require 2 hinges
         2) Door heights >= [28] inches and < [56] inches require 3 hinges
         3) Door heights >= [56] inches require 4 hinges
      f. Opens 110 degrees
   5. Locks
      a. Locks shall be centered vertically in door.
      b. Locks shall be available in assigned or unassigned usage to be specified at time of order.
      c. Digital lock – Shared Use Mode.
   6. Doors to remain closed when in unlocked mode.

C. Optional Interior/Accessory components Architect/Owner to specify:
   1. All interior components must be specified at time of order.
      a. Shelf

D. ACCESSORIES:
   1. Painted End Panel.
   2. Continuous Sloped Top. Provide manufacturer's standard.
   3. Locker Tag Numbers. Per customer requirement

2.5 FABRICATION

A. General: Coordinate fabrication and delivery to ensure no delay in progress of the work.

2.6 FINISHES

A. Colors: Provide in custom colors as selected by Architect.

B. Paint Finish: Textured (Standard) – Provide factory applied electrostatic powder coat paint. Meet or exceed specifications of the American Society for Testing and Materials (ASTM) Standards:

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine Lockers scheduled to receive accessories with Installer present for compliance with requirements for installation tolerances and other conditions affecting performance of specified accessory items.

B. Proceed with accessory installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General: Follow manufacturer's written instructions for installation of each type of accessory item specified.

3.3 FIELD QUALITY CONTROL

A. Verify accessory unit alignment and plumb after installation. Correct if required, following manufacturer's instructions.

B. Remove components that are chipped, scratched, or otherwise damaged and which do not match adjoining work. Replace with new matching units, installed as specified and in manner to eliminate evidence of replacement.

3.4 ADJUSTING

A. Adjust all accessories to provide smoothly operating, visually acceptable installation.

3.5 CLEANING

A. Immediately upon completion of installation, clean components and surfaces. Remove surplus materials, rubbish and debris, resulting from installation, upon completion of work and leave areas of installation in neat, clean condition.

3.6 DEMONSTRATION/TRAINING

A. Schedule and conduct demonstration of installed accessory items and features with Owner's personnel.

B. Schedule and conduct maintenance training with Owner's maintenance personnel. Training session should include lecture and demonstration of all maintenance and repair procedures that end-user personnel would normally perform.

3.7 PROTECTION

A. Protect system against damage during remainder of construction period. Advise owner of additional protection needed to ensure that system will be without damage or deterioration at time of substantial completion.

END OF SECTION

PART 1 - SECTION 10 5113.13 – METAL EVIDENCE LOCKERS

1.1 SUMMARY

A. This Section includes the following:
   1. Standard and Refrigerated Pass-thru Evidence Lockers

B. Related Work, Not Furnished:
   1. Finish floor covering materials and installation.

1.2 REFERENCES

A. American National Standards Institute (ANSI) Standards:
   1. Applicable standards for fasteners used for assembly.

B. American Society for Testing and Materials (ASTM) Standards:
   1. Applicable standards for steel sheet materials used for fabrication.
   2. Applicable standards for the testing of electrostatically applied Powder Coat Paint

C. American Institute Of Steel Construction (AISC) Standards:
   1. Applicable standards for steel materials used for fabrication.

1.3 DESCRIPTION

A. General: Metal Evidence Lockers

B. Finishes:
   1. Fabricated Metal Components and Assemblies: All components to be painted with an electrostatically applied Powder Coat paint that can meet or exceed test requirements set out by ASTM standard D3451-06 Standard Guide for Testing Coating Powders and Powder Coatings.

C. Sizes:
   1. Available in a nominal height of 82 inches.
   2. Available in nominal widths of 36 inches as noted on drawings.
   3. Available in a nominal depth of 24 inches as noted on drawings.

1.4 PERFORMANCE REQUIREMENTS

A. Design Requirements:

B. Limit overall width to 0.032 inches [0.793MM] greater or less than the nominal specified width.

C. Seismic Performance: Provide Metal Evidence lockers capable of withstanding the effects of earthquake movement when required by applicable building codes.

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's product literature and installation instructions for each type of evidence lockers required. Include data substantiating that products to be furnished comply with requirements of the contract documents.

B. Shop Drawings: Show fabrication, assembly, and installation details including descriptions of procedures and diagrams. Show complete extent of evidence lockers installation layout including quantities, locations and types of accessory units required. Include notations and descriptions of all installation items and components.
   1. Show installation details at non-standard conditions, if any.
   2. Provide layout, dimensions, and identification of each unit corresponding to sequence of installation procedures.
   3. Provide installation schedule and procedures to ensure proper installation.

C. Selection Samples: For initial selection of colors and textures, submit manufacturer's color charts consisting of actual product pieces, showing full range of colors and textures available.

D. Warranty: Submit draft copy of proposed warranty for review by the Architect.

E. Maintenance Data: provide written documentation of the manufacturer’s statement claiming the maintenance free nature of the product.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Engage an experienced manufacturer who is ISO 9001 certified for the design, production, installation and service of evidence lockers. Furnish certification attesting ISO 9001 quality system registration.

B. Installer Qualifications: Engage an experienced installer who is a manufacturer's authorized representative for the specified products for installing evidence lockers.
   1. Minimum Qualifications: 1-year experience installing evidence lockers of comparable size and complexity to specified project requirements.

1.7 DELIVERY, STORAGE AND HANDLING

A. Follow manufacturer’s instructions and recommendations for delivery, storage and handling requirements.

1.8 PROJECT CONDITIONS

A. Field Measurements: Verify quantities of evidence lockers before fabrication. Indicate verified measurements on Shop Drawings. Coordinate fabrication and delivery to ensure no delay in progress of the Work.

B. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating evidence lockers units without field

measurements. Coordinate construction to ensure actual dimensions correspond to established dimensions.

1.9 SEQUENCING AND SCHEDULING

A. Sequence evidence lockers units [with other work] to minimize possibility of damage and soiling during remainder of construction period.

B. Schedule installation of specified evidence lockers after finishing operations; including painting have been completed.

C. Provide components which must be built in at a time which causes no delays general progress of the Work.

1.10 WARRANTY

A. Provide a written warranty executed by Contractor, Installer and Manufacturer, agreeing to repair or replace units which fail in materials or workmanship within the established warranty period. This warranty shall be in addition to and not a limitation of other rights the Owner may have under the General Conditions provisions of the Contract Documents.

B. Limited Lifetime Warranty: Subject to the terms in the written warranty, warrant the original purchaser exclusively that the locker frames manufactured by it will be free from defects in materials and workmanship for the lifetime of the locker. Warrant the original purchaser exclusively that all moving parts manufactured by it will be free from defects in materials and workmanship for 5 years.

C. Warrants that all refrigeration units shall be free from defects in materials and workmanship for one (1) year from the date of the customer's written acceptance of installation. During the 1-year warranty period, all parts are included at no cost for 1 year. Labor is included at no cost during the first year of the 1-year warranty period. After the first year of the 1-year warranty, all labor will be charged at the current rate.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design: Products known as DSM Evidence Lockers are based upon evidence lockers manufactured by Spacesaver Corporation, 1450 Janesville Avenue, Fort Atkinson, Wisconsin 53538-2798. Telephone 866-276-0445.

2.2 BASIC MATERIALS

A. General: Provide materials and quality of workmanship, which meets or exceeds established industry standards for products specified. Use furniture grade sheet metal and fasteners for component fabrication unless indicated otherwise. Material thicknesses/gauges are manufacturer’s option unless indicated otherwise.

2.3 LOCKER TYPES

A. Pass-thru evidence lockers – ED3-P-04, ED3-P-07, ED3-P-07, ED#-P-17, ED3-P-39.

B. Pass-thru refrigerated evidence lockers – half height 6 door evidence refrigerator.

2.4 MANUFACTURED COMPONENTS, standard evidence lockers

A. Welded Frame:
1. The welded frame is structural and shall consist of top, bottom, back and sides constructed of a minimum of 18 gage (1.21MM) steel. All frame components shall be joined using resistance welding. Riveting or bolting of structural members will not be permitted.
2. Horizontal and vertical outer front flanges will be a minimum of 1.5 inches (38MM). Horizontal and vertical flanges will overlap with a minimum of 2 resistance welds per corner.
3. Center vertical lock housing is structural and will run the full height and depth of the locker. All locks will be completely enclosed by a full height removable panel. Pass-thru rear release mechanisms will be completely enclosed by the lock housing and accessible only when the rear door is open. Provide engagement points for the anti-pry tabs that are on all front doors.
4. Exposed lock mechanisms that can snag evidence and be obstructed by stored articles will not be permitted.

B. Welded Bases:
1. Each welded base shall be permanently affixed to each locker using modern Inert Gas Metal Arc Welding techniques for lateral unit stability. The base shall be a minimum of 14 gage (1.98MM) steel 4 inches (101MM) high with a 1.5 inch (38MM) return on the bottom for support.
2. Provide four 0.375 inch (9.5MM) mounting holes and four 0.375 inch (9.5MM) nuts welded in place for the mounting of floor levelers. Provide four appliance levelers per locker.
3. Provide removable access panels for access to mounting holes and leveling points.

C. Shelves:
1. Shall be a single-piece formed from a minimum of 18-gage (1.21MM) cold rolled steel with a double 90-degree bend on the rear of the shelf and a double 90-degree bend on the front of the shelf. Shelf sides shall be turned up 90-degrees for ease of cleaning and to prevent debris from becoming caught between the shelf and the sidewall.
2. All shelves shall be welded into place. Rivets, screws, bolts or other loose fasteners will not be permitted for the fastening of shelves to the locker frame.

D. Locks:
1. Patent Pending. Lock shall be push button locking with a stainless steel push button and alignment bezel. Locks shall be a one-piece removable design. Locks will secure the door with the single push of a button with no other action required by the user.
2. Locks will be deadbolt type locks with multi-point engagement. Rotary latches or cam locks will not be tolerated.
3. Pass-thru locks will be reset from the rear of the locker when the rear door is in the

open position only.

4. Provide documentation for cycle testing where locks are tested successfully to a minimum 40,000 cycles without failure.
5. Locks shall be pre-lubricated with no maintenance required for the lifetime of the unit (estimated at 20 years).

E. One Piece Welded Doors:

1. Shall be formed from two pieces of minimum 18-gauge (1.2MM) cold rolled steel box formed and welded together using modern GMAW techniques. The one piece door with inner and outer door skins shall have a combined steel thickness of no less than 0.096 inches (2.4MM) thick.
2. Each door shall have a nickel plated, flush mounted door handle installed with fasteners visible only in the unlocked position.
3. Provide neoprene silencers on each door.
4. Provide anti-pry tabs that engage with the Center Vertical Lock Housing when the door is locked.
5. Doors shall have no moving parts except the door and the hinge.
6. Provide stainless steel spring loaded hinges that are welded to prevent pin removal. Spring loaded hinges shall be capable of holding the door closed and flush with the door frame. Doors that hang ajar are a safety concern and will not be tolerated.

F. Rear Doors (Pass-thru lockers)

1. Shall be formed from two pieces of minimum 18-gauge (1.2MM) cold rolled steel box formed and welded together using modern Inert Gas Metal Arc Welding techniques. The one piece door with inner and outer door skins shall have a combined steel thickness of no less than 0.096 inches (2.4MM) thick.
2. Each locker module shall have one rear door each and allow evidence to be removed from all compartments at once.
3. Each rear door shall have multi-point engagement with a built-in L handle lock. Access to all lock mechanisms shall be hidden behind cover plates that are secured with tamperproof fasteners.

G. ACCESSORIES:

1. Front door lock out system: Provide manufacturer’s standard.

2.5 Manufactured components, refrigerated evidence lockers

A. Small Refrigerators

1. Half height Available with 6 compartments each individually locking without keys.
2. Non pass-thru is emptied and reset from the front with a keyed release mechanism.
3. Shall have a stainless steel interior with spring loaded door hinges to hold each door closed.
4. Shall have magnetic seals on outer door[s.]
5. Shall have circulation fans that can maintain a consistent temperature throughout the interior of the fridge.
6. Shall have digital controls with settings preset to maintain 38º to 42º Fahrenheit.
7. Shall have an audible alarm.

2.6 FABRICATION

A. General: Coordinate fabrication and delivery to ensure no delay in progress of the Work.

2.7 FINISHES

A. Colors: Provide in custom colors as selected by Architect.

B. Paint Finish: Provide factory applied electrostatic powder coat paint. Meet or exceed specifications of the American Society for Testing and Materials (ASTM) standards.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine evidence lockers scheduled to receive accessories with Installer present for compliance with requirements for installation tolerances and other conditions affecting performance of specified accessory items.

B. Proceed with accessory installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General: Follow manufacturer’s written instructions for installation of each type of accessory item specified.

3.3 FIELD QUALITY CONTROL

A. Verify accessory unit alignment and plumb after installation. Correct if required following manufacturer’s instructions.

B. Remove components that are chipped, scratched, or otherwise damaged and which do not match adjoining work. Replace with new matching units, installed as specified and in manner to eliminate evidence of replacement.

3.4 ADJUSTING

A. Adjust all accessories to provide smoothly operating, visually acceptable installation.

3.5 CLEANING

A. Immediately upon completion of installation, clean components and surfaces. Remove surplus materials, rubbish and debris resulting from installation upon completion of work and leave areas of installation in neat, clean condition.

3.6 DEMONSTRATION/TRAINING

A. Schedule and conduct demonstration of installed accessory items and features with Owner's personnel.

B. Schedule and conduct maintenance training with Owner's maintenance personnel. Training session should include lecture and demonstration of all maintenance and repair procedures that end user personnel would normally perform.

3.7 PROTECTION

A. Protect system against damage during remainder of construction period. Advise Owner of additional protection needed to ensure that system will be without damage or deterioration at time of substantial completion.

END OF SECTION

SECTION 10 5113.15 – METAL LOCKERS - PERSONAL WELDED LOCKERS – LOCKER ROOM

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
   1. Personal Storage Lockers, Personal Storage Lockers with built-in bench drawers, Personal Storage Lockers with built-in external access drawers and Personal Storage Lockers in Multi-tier Configuration

B. Related Work, Not Furnished:
   1. Finish floor covering material and installation.
   2. Finish floor covering materials and installation.

1.2 REFERENCES

A. American National Standards Institute (ANSI) Standards:
   1. Applicable standards for fasteners used for assembly.

B. American Society for Testing and Materials (ASTM) Standards:
   1. Applicable standards for steel sheet materials used for fabrication.
   2. Applicable standards for the testing of electrostatically applied Powder Coat Paint

C. American Institute Of Steel Construction (AISC) Standards:
   1. Applicable standards for steel materials used for fabrication.

1.3 DESCRIPTION

A. General: Welded Metal Lockers only with end-user reconfigurable interior. Specialized lances to provide the flexibility of on-site, end-user reconfiguration/addition of internal components anytime, anywhere, now or in the future.

B. Finishes:
   1. Fabricated Metal Components and Assemblies: All components to be painted with an electro-statically applied Powder Coat paint that can meet or exceed test requirements set out by ASTM standard D3451-06 Standard Guide for Testing Coating Powders and Powder Coatings.

C. Sizes:
   1. Personal Storage Lockers: nominal height of 72 inches, and nominal width of 18 inches

1.4 PERFORMANCE REQUIREMENTS

A. Design Requirements:

1. Limit overall width not to exceed specified nominal width; locker width designed for zero growth.

B. Seismic Performance: Provide Welded Metal Lockers capable of withstanding the effects of earthquake movement when required by applicable building codes.

C. ADA Requirements: Personal Storage Lockers with nominal height of 72 inches meet ADA requirements.

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's product literature and installation instructions for each type of welded metal locker required. Include data substantiating that products to be furnished comply with requirements of the contract documents.

B. Shop Drawings: Show fabrication, assembly, and installation details, including descriptions of procedures and diagrams. Show complete locker installation layout, including quantities, locations and types of accessory units required. Include notations and descriptions of all installation items and components.
1. Show installation details at non-standard conditions, if any.
2. Provide layout, dimensions, and identification of each unit, corresponding to sequence of installation procedures.
3. Provide installation schedule and procedures to ensure proper installation.

C. Selection Samples: For initial selection of colors and textures, submit manufacturer's color charts, consisting of actual product pieces, showing full range of colors and textures available.

D. Warranty: Submit draft copy of proposed warranty for review by the Architect.

E. Maintenance Data: Provide written documentation of the manufacturer’s statement, claiming the maintenance free nature of the product.

F. Reference List: Provide a list of recently installed welded metal lockers to be visited by owner, architect, and contractor. Intent of list is to aid in verifying the suitability of manufacturer's products and comparison with materials and product specified in this section. Include contact name, address, and phone numbers.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Engage an experienced manufacturer who is ISO 9001:2008 certified for the design, production, installation and service of welded metal lockers. Furnish certification attesting ISO 9001:2008 quality system registration.

B. Installer Qualifications: Engage an experienced installer who is the manufacturer's authorized representative for the specified products for installing welded metal lockers.
   1. Minimum Qualifications: 1-year experience installing welded metal lockers of comparable size and complexity to specified project requirements.

1.7 DELIVERY, STORAGE AND HANDLING

A. Follow manufacturer’s instructions and recommendations for delivery, storage and handling requirements.

1.8 PROJECT CONDITIONS

A. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating welded metal lockers units without field measurements. Coordinate construction to ensure actual dimensions correspond to established dimensions.

1.9 SEQUENCING AND SCHEDULING

A. Sequence welded metal lockers with other work to minimize possibility of damage and soiling, during remainder of construction period.

B. Schedule installation of specified welded metal lockers after finishing operations, including painting, have been completed.

C. Provide components which must be built in at a time, which causes no delays in the general progress of the work.

1.10 WARRANTY

A. Provide a written warranty, executed by Contractor, Installer, and Manufacturer, agreeing to repair or replace units, which fail in materials or workmanship within the established warranty period. This warranty shall be in addition to, and not a limitation of, other rights the Owner may have under General Condition’s provisions of the Contract Documents.

B. Limited Lifetime Warranty: Subject to the terms in the written warranty, warrant the original purchaser exclusively that the locker frames manufactured by it will be free from defects in materials and workmanship for the lifetime of the locker.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis of Design: Free**Style**™ Personal Storage Lockers, manufactured by Spacesaver Corporation, 1450 Janesville Avenue, Fort Atkinson, Wisconsin 53538-2798. Telephone: 800-492-3434.

2.2 BASIC MATERIALS

A. General: Provide materials and quality of workmanship, which meets or exceeds established industry standards for products specified. Use furniture grade sheet metal, solid hardwood benches and fasteners for component fabrication unless indicated otherwise. Material thicknesses/gauges are manufacturer's option unless indicated otherwise.

2.3 LOCKER TYPES

A. Personal Storage Lockers. Slope top. Provide standard personal storage lockers by Spacesaver Corporation.

2.4 MANUFACTURED COMPONENTS

A. Welded Frame:
1. The welded frame must consist of top, bottom, back, and sides constructed of a minimum of 18-gauge or 1.214 millimeters steel. All frame components shall be joined using resistance welding. Riveting of structural members will not be permitted.
2. Horizontal front flanges will be a minimum of 2 inches or 50.8 millimeters. Vertical front flanges will be a minimum of 1 inch or 25.4 millimeters. Horizontal and vertical flanges will overlap and be secured with a minimum two (2) resistance welds per corner.
3. Corner gussets shall be MIG and spot welded in each of the four front corners of the locker for increased stiffness and rigidity.
4. Provide side panel lances evenly spaced on 3 inch or 76.2-millimeter centers. Lances to provide the flexibility of on-site, end-user reconfiguration/addition of internal components anytime, anywhere, now or in the future.
5. Bench Housing for built-in bench drawer
    a. Welded frame construction shall consist of top, bottom, and side components joined by using resistance welding. Riveting of bench housing structural members will not be permitted.
    b. Corner gussets shall be welded in the two (2) front bottom corners of the bench housing for increased stiffness and rigidity.
    c. Horizontal front flanges will be a minimum of 1 inch or 25.4 millimeters
    d. Vertical front flanges will be a minimum of 1 inch or 25.4 millimeters
    e. Horizontal and Vertical front flanges will overlap and shall be secured with minimum of one (1) resistance weld per corner.
    f. Side panels – Lances symmetric and evenly spaced to provide optimum component locations (standard based on 3 inch or 76.2 millimeter on center vertical placement to match mating locker lance design).
    g. Return flanges on housing to securely fasten housing to welded frame of locker.
    h. Base of bench housing shall include four (4) 3/8"-16 UNC threaded weld-nuts and corresponding leveling feet.
    i. Top of bench housing shall include hole pattern for mating bench seat.
    j. Sides of bench housing shall include mounting holes in the event lockers are ganged together.
6. Provide four (4) 0.875 inch or 22.23-millimeter diameter electrical knock-outs per locker, two (2) located on top of the locker in both right and left rear corners, and two (2) located in the back of locker centered at a distance no greater than 24 inches or 609.6 millimeters from the top and bottom. Knock-outs allow end-user flexibility of adding electrical capability to lockers.

7. Lockers shall be prepared with mounting holes for use with the continuous sloped top system.
8. Lockers shall be prepared with mounting holes for attaching necessary trim components
9. Locker shall be prepared with mounting holes for ganging lockers back-to-back or side-by-side
10. End Panels: End Panels with no exposed fasteners shall be provided on the end of each locker run; thus providing a clean and aesthetically pleasing appearance.
11. All locker sizes and types to be specified by architect.
    a. Width:
        1) Personal Storage Locker: 18 inches
    b. Height:
        1) Personal Storage Locker: 72 inches
    c. Depth:
        1) All lockers 24 inches

B. Single-Piece Welded Doors (Single and Double Door Models):

1. Shall be formed from two (2) pieces of minimum 18-gauge 1.2 millimeter cold rolled steel box formed and welded together using modern GMAW techniques. Single-piece door with inner and outer door panels shall have a combined steel thickness of no less than 0.096 inches or 2.4 millimeters thick. Welded door design with inner panel optimizes structural integrity of locker door system over and above any single frame door design.
2. Exterior door panel shall be constructed with formed flanges and return flanges to add stiffness.
3. Internal door panel shall be constructed with formed flanges for added stiffness.
4. All inner door panel (except Multi-Tier) heights shall be minimum 70% of external door height.
5. Single-piece welded door frame shall consist of internal door panel nested inside exterior door panel and welded per the following requirements:
    a. Top / bottom. Exterior and Interior panels to be welded in a minimum of three (3) places with weld spacing not to exceed 6 inches or 152.4 millimeters between adjacent welds and 1 inch or 25.4 millimeters from any corner.
    b. Sides. Exterior and interior panels to be welded with spacing not to exceed 12 inches or 304.8 millimeters between adjacent welds and 1 inch or 25.4 millimeters from any corner.
6. Inner door panel to have peg board style hole pattern, allowing the attachment of Document Holder and any standard peg board accessory.
7. Inner door panel to have 4-inch rectangular slot centered towards the top of the locker.
8. External door panel shall have louvers to provide adequate air circulation throughout locker system.
    a. Louvered air vents shall be located at the bottom of the locker door to enhance circulation of mechanically extracted air from the bottom of the locker out of the top.
    b. Louvered air vents shall be approximately 3 inches or 76.2 millimeters in width and 0.75 inches or 19.05 millimeters in height and spaced on 1 inch or 25.4-millimeter centers.
9. All doors shall have neoprene silencers on each door for noise reduction
10. Door torsional deflection shall not exceed 0.1875 inch or 4.76 millimeter with a 20 lb

or 9.071-kilogram point load. (Test data to be provided by manufacturer upon request)

11. Hinge:
    a. Provide 16-gauge full length hinge for increased strength and security of locker system.
    b. Hinges to be welded to door frame with spot welds not to exceed 6 inch or 152.4-millimeter separation.
12. Door assembly to be riveted to door frame on factory pre-established hole pattern.
13. Locking Mechanism.
    a. Provide three locking options (all locking options have protective stainless steel cover plate for durability and scratch resistance):
        1) Padlock hasp only.

C. Interior/Accessory components (Architect/Owner to specify):
1. All interior components must be constructed of minimum 18-gauge or 1.214-millimeter steel (unless otherwise clarified in specification).
2. For added security, internal component can be secured utilizing blind rivets, threaded fasteners, or bending specially designed tab.
3. All interior components available at time of order and as post-installation upgrades in the future.
4. Shelves (available all locker models)
    a. Shelf with integral hanger bracket and modular shelf under hanger bracket.
        1) Size specified by locker width
        2) 3 hook bracket
        3) Hanger bracket designed with perforations on approximately 3 inch or 76.2-millimeter centers to insure clothing separation for optimum ventilation
        4) Performance: Uniform load rating 300 lbs or 136.08 kilograms

D. Locker Tag Numbers
1. Shall provide locker numbers on each locker per customer requirement

E. ACCESSORIES:
1. Trim and Fillers: Provide manufacturer's standard.

2.5 FABRICATION

A. General: Coordinate fabrication and delivery to ensure no delay in progress of the work.

2.6 FINISHES

A. Colors: Provide in custom colors as selected by Architect.

B. Paint Finish: Textured (Standard) – Provide factory applied electrostatic powder coat paint. Meet or exceed specifications of the American Society for Testing and Materials (ASTM) Standards:

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine Lockers scheduled to receive accessories with Installer present for compliance with requirements for installation tolerances and other conditions affecting performance of specified accessory items.

B. Proceed with accessory installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General: Follow manufacturer's written instructions for installation of each type of accessory item specified.

3.3 FIELD QUALITY CONTROL

A. Verify accessory unit alignment and plumb after installation. Correct if required, following manufacturer's instructions.

B. Remove components that are chipped, scratched, or otherwise damaged and which do not match adjoining work. Replace with new matching units, installed as specified and in manner to eliminate evidence of replacement.

3.4 ADJUSTING

A. Adjust all accessories to provide smoothly operating, visually acceptable installation.

3.5 CLEANING

A. Immediately upon completion of installation, clean components and surfaces. Remove surplus materials, rubbish and debris, resulting from installation, upon completion of work and leave areas of installation in neat, clean condition.

3.6 DEMONSTRATION/TRAINING

A. Schedule and conduct demonstration of installed accessory items and features with Owner's personnel.

B. Schedule and conduct maintenance training with Owner's maintenance personnel. Training session should include lecture and demonstration of all maintenance and repair procedures that end-user personnel would normally perform.

3.7 PROTECTION

A. Protect system against damage during remainder of construction period. Advise owner of additional protection needed to ensure that system will be without damage or deterioration at time of substantial completion.

END OF SECTION

SECTION 10 5613 – METAL STORAGE SHELVING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
   1. Four-post type metal shelving.

B. Related Work, Not Furnished:
   1. Finish floor covering materials and installation.

C. Related Sections:
   1. Sections in Division 9 – Finishes, relating to finish floor and base materials.

1.2 REFERENCES

A. American National Standards Institute (ANSI) Standards:
   1. Applicable standards for fasteners used for assembly.

B. American Society for Testing and Materials (ASTM) Standards:
   1. Applicable standards for steel sheet materials used for fabrication.

C. American Institute Of Steel Construction (AISC) Standards:
   1. Applicable standards for steel materials used for fabrication.

1.3 DESCRIPTION

A. General: Four-Post Type Metal Shelving.

B. Finishes:
   1. Fabricated Metal Components and Assemblies: All components to be painted with an electrostatically applied Powder Coat paint.
   2. Fabricated Laminate Components and Assemblies: Manufacturer's standard low-pressure or high-pressure laminate finishes.
   3. Fabricated Non-Porous Solid Surface Components and Assemblies: Manufacturer's standard.
   4. Fabricated Acrylic Components and Assemblies: Manufacturer's standard.

C. Sizes:
   1. Available in heights of [76.25] [88.25] [100.25] inches as noted on drawings (variable in 1.5-inch (38.1MM) increments as required).
   2. Available in nominal widths of [30] [42] [48] inches as noted on drawings.
   3. Available in nominal single-faced or double-faced depths of [24] inches as noted on drawings.

1.4 PERFORMANCE REQUIREMENTS

A. Design Requirements:
   1. Match elevations, depth, height, width as noted on drawings.

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's product literature and installation instructions for each type of four-post shelving required. Include data substantiating that products to be furnished comply with requirements of the contract documents.

B. Shop Drawings: Show fabrication, assembly, and installation details including descriptions of procedures and diagrams. Show complete extent of four-post shelving installation layout including quantities, locations and types of accessory units required. Include notations and descriptions of all installation items and components.
   1. Show installation details at non-standard conditions, if any.
   2. Provide layout, dimensions, and identification of each unit corresponding to sequence of installation and erection procedures.
   3. Provide installation schedule and complete erection procedures to ensure proper installation.

C. Samples: Provide minimum 3 inch (76MM) square example of each color and texture on actual substrate for each component to remain exposed after installation.

D. Selection Samples: For initial selection of colors and textures, submit manufacturer's color charts consisting of actual product pieces, showing full range of colors and textures available.

E. Warranty: Submit draft copy of proposed warranty for review by the Architect.

F. Maintenance Data: Provide in form suitable for inclusion in maintenance manuals for four-post shelving. Data shall include operating and maintenance instructions, parts inventory listing, purchase source listing, emergency instructions, and similar information.
   1. Submit manufacturer's instructions for proper maintenance materials and procedures.
   2. Submit manufacturer's printed instructions for maintenance of installed work, including methods and frequency recommended for maintaining optimum condition under anticipated use conditions. Include precautions against using materials and methods, which may be detrimental to finishes and performance.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Engage an experienced manufacturer who is ISO 9001 certified for the design, production, installation and service of four-post shelving. Furnish certification attesting ISO 9001 quality system registration.

B. Installer Qualifications: Engage an experienced installer who is a manufacturer's authorized representative for the specified products for installing four-post shelving.
   1. Minimum Qualifications: 1-year experience installing four-post shelving of comparable size and complexity to specified project requirements.

1.7 DELIVERY, STORAGE AND HANDLING

A. Follow manufacturer's instructions and recommendations for delivery, storage and handling requirements.

1.8 PROJECT CONDITIONS

A. Field Measurements: Verify quantities of four-post shelving units before fabrication. Indicate verified measurements on Shop Drawings. Coordinate fabrication and delivery to ensure no delay in progress of the Work.

B. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating four-post shelving units without field measurements. Coordinate construction to ensure actual dimensions correspond to established dimensions.

1.9 SEQUENCING AND SCHEDULING

A. Sequence four-post shelving units with other work to minimize possibility of damage and soiling during remainder of construction period.

B. Schedule installation of specified four-post shelving after finishing operations; including painting have been completed.

C. Provide components, which must be built in at a time, which causes no delays general progress of the Work.

D. Pre-installation Conference: Schedule and conduct conference on project site to review methods and procedures for installing four-post shelving units including, but not limited to, the following:
   1. Recommended attendees include:
      a. Owner's Representative.
      b. Prime Contractor or representative.
      c. The Architect.
      d. Manufacturer's representative.
      e. Subcontractors or installers whose work may affect, or be affected by, the work of this section.

1.10 WARRANTY

A. Provide a written warranty, executed by Contractor, Installer, and Manufacturer, agreeing to repair or replace units, which fail in materials or workmanship within the established warranty period. This warranty shall be in addition to, and not a limitation of, other rights the Owner may have under General Conditions provisions of the Contract Documents.

B. Limited Lifetime Warranty: Subject to the terms in the written warranty, warrant the original purchaser exclusively that the shelving manufactured by it will be free from defects in materials and workmanship for the lifetime of the shelving.

1.11 MAINTENANCE

A. Provide manufacturer's extended maintenance agreement, commencing on the day the

standard maintenance warranty ends.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. General: Products are based upon four-post shelving manufactured by Spacesaver Corporation.

2.2 BASIC MATERIALS

A. General: Provide materials and quality of workmanship, which meets or exceeds established industry standards for products specified. Use furniture grade sheet metal, wood panels, plastic laminate and fasteners for component fabrication unless indicated otherwise. Material thicknesses/gauges are manufacturer's option unless indicated otherwise.

2.3 MANUFACTURED COMPONENTS

A. Design:
1. Wedge-lock type consisting of uprights, shelves, and shelf supports, designed to be assembled without fasteners or clips. Shelves shall not have any holes on exposed surfaces. Front and back flanges shall be flush with outside faces of posts. Design shall permit individual shelf adjustment and/or removal anywhere along the entire height of uprights.

B. Materials and Workmanship:
1. Fabricate units from Class 1, cold-rolled steel sheet with all bends sharp and true and no exposed "knife" edges.
   a. All units shall be free of burrs, sharp edges and projecting hardware with smooth, non-abrasive surfaces and edges.
   b. After fabrication, shelving shall exhibit no dents, "oil canning", buckling or other surface irregularities.

C. Uprights:
1. Formed from steel sheet to a hollow "tee" shape for intermediate supports and formed angles for end supports. Uprights shall have keyhole slots on inner wall only. Provide with sheet steel panels full height and depth of end uprights. Provide intermediate "tee" uprights between adjacent units

D. Shelves:
1. Form from sheet steel with flanges on all sides and return hem on front and back flanges. Ends shall be formed to clear inside of upright offset panels. Shelves shall be independently adjustable. Provide all shelves with slots for file dividers.

E. Canopy Tops:
1. Same construction as shelf units.

F. Shelf Supports:

1. Form from heavy gauge steel sheet with four solid steel shoulder rivets, two per ear, that interlock with inner wall of uprights.

G. Nominal Shelf Dimensions:
1. Standard Width: 36 inches (914MM), with 30, 42, or 48 inch (762, 1067, or 1219MM) sections used to meet project requirements.
2. Shelf Edge Vertical Profile: 3/4 inch (19MM) maximum.
3. Vertical Adjustment Increment: 1-1/2 inches (38MM).
4. Width Of Intermediate Uprights: 2 inches (51MM).
5. Clearance Between Uprights: Nominal shelf section width minus 2 inches (51MM).
6. Levelness of Completed Shelf Units: Maximum 1/8 inch (3.2MM) between bottom shelf and canopy top, measured along the edge of any upright in any direction.
7. Number of Vertical Shelf Spaces: As indicated on the drawings.
8. Vertical Shelf-To-Shelf Spacing: As indicated on the drawings.

H. Load Carrying Capabilities:
1. Provide shelf units capable of supporting 40 pounds per lineal foot (18kg/305MM) with maximum deflection of L/140. Shelves shall exhibit no permanent deflection under fully loaded conditions.

I. Accessories:
1. File Dividers: Provide manufacturer's standard.
2. Center Stops: Provide manufacturer’s standard for records storage.
3. Back Stops: Provide manufacturer’s standard for records storage.
4. Backs: Provide manufacturer’s standard where applicable as indicated on drawings.
5. Bin Dividers: Provide manufacturer’s standard for records storage.

2.4 FABRICATION

A. General: Coordinate fabrication and delivery to ensure no delay in progress of the Work.

2.5 FINISHES

A. Colors: Provide in custom colors as selected by Architect.

B. Paint Finish: Provide factory applied electrostatic powder coat paint. Meet or exceed specifications of the American Library Association.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine shelving units scheduled to receive accessories [with Installer present] for compliance with requirements for installation tolerances and other conditions affecting performance of specified accessory items.

B. Verify that intended installation locations of sorter unit units will not interfere with or block established required exit paths or similar means of egress once units are installed.

C. Proceed with accessory installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General: Follow manufacturer's written instructions for installation of each type of accessory item specified.

3.3 FIELD QUALITY CONTROL

A. Verify accessory unit alignment and plumb after installation. Correct if required following manufacturer's instructions.

B. Remove components that are chipped, scratched, or otherwise damaged and which do not match adjoining work. Replace with new matching units, installed as specified and in manner to eliminate evidence of replacement.

3.4 ADJUSTING

A. Adjust all accessories to provide smoothly operating, visually acceptable installation.

3.5 CLEANING

A. Immediately upon completion of installation, clean components and surfaces. Remove surplus materials, rubbish and debris resulting from installation upon completion of work and leave areas of installation in neat, clean condition.

3.6 DEMONSTRATION/TRAINING

A. Schedule and conduct demonstration of installed accessory items and features with Owner's personnel.

B. Schedule and conduct maintenance training with Owner's maintenance personnel. Training session should include lecture and demonstration of all maintenance and repair procedures that end user personnel would normally perform.

3.7 PROTECTION

A. Protect system against damage during remainder of construction period. Advise Owner of additional protection needed to ensure that system will be without damage or deterioration at time of substantial completion.

END OF SECTION

SECTION 10 5613.13 – METAL STORAGE SHELVING - WIDE SPAN SHELVING – EVIDENCE ROOM

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
   1. Wide Span Shelving

B. Related Work, Not Furnished:
   1. Finish floor covering materials and installation.

1.2 REFERENCES

A. American National Standards Institute (ANSI) Standards:
   1. Applicable standards for fasteners used for assembly.

B. American Society for Testing and Materials (ASTM) Standards:
   1. Applicable standards for steel sheet materials used for fabrication
   2. Applicable standards for the testing of electrostatically applied Powder Coat Paint

C. American Institute Of Steel Construction (AISC) Standards:
   1. Applicable standards for steel materials used for fabrication.

1.3 DESCRIPTION

A. General: Wide Span Shelving

B. Finishes:
   1. Fabricated Metal Components and Assemblies: All components to be painted with an electro-statically applied Powder Coat paint that can meet or exceed test requirements set out by ASTM standard D3451-06 Standard Guide for Testing Coating Powders and Powder Coatings.
   2. Sizes can be described in paragraph below or in a SCHEDULE attached as the last page of the section.

C. Sizes:
   1. Uprights Welded
      a. Available in nominal heights of 88 1/2 inches as noted on drawings (variable in 1.5 inch [38.1MM] increments as required).
      b. Available in nominal depths of 47 inches as noted on drawings (variable in 1 inch [25.4MM] increments as required).
   2. Beams Standard Duty
      a. Available in nominal widths of 78 inches and 84 inches as noted on drawings (variable in 1 inch [25.4MM] increments as required).
   3. Decking Solid Steel
   4. Solid Steel Decking - Available in nominal widths of [12] [18] [24] [30] and [36] inches

([305MM] [457MM] [610MM] [762MM] and [914MM]) as noted on drawings. Available in nominal depths of [15] inches to [48] inches ([381MM] to [1219MM]) as noted on drawings (variable in 1 inch [25.4MM] increments as required).

1.4 PERFORMANCE REQUIREMENTS

A. Design Requirements:
1. Limit overall width to 78 inches and 84 inches.
2. Limit overall depth to 47 inches.
3. Limit overall height to 88 1/2 inches.

B. Seismic Performance: Provide wide span shelving capable of withstanding the effects of earthquake movement when required by applicable building codes.

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's product literature and installation instructions for each type of wide span shelving required. Include data substantiating that products to be furnished comply with requirements of the contract documents.

B. Shop Drawings: Show fabrication, assembly, and installation details, including descriptions of procedures and diagrams. Show complete wide span installation layout, including quantities, locations and types of accessory units required. Include notations and descriptions of all installation items and components.
1. Show installation details at non-standard conditions, if any.
2. Provide layout, dimensions, and identification of each unit, corresponding to sequence of installation procedures.
3. Provide installation schedule and procedures to ensure proper installation.

C. Selection Samples: For initial selection of colors and textures, submit manufacturer's color charts, consisting of actual product pieces, showing full range of colors and textures available.

D. Warranty: Submit draft copy of proposed warranty for review by the Architect.

E. Maintenance Data: Provide written documentation of the manufacturer’s statement, claiming the maintenance free nature of the product.

F. Reference List: Provide a list of recently installed wide span shelving to be visited by owner, architect, and contractor. Intent of list is to aid in verifying the suitability of manufacturer's products and comparison with materials and product specified in this section. Include contact name, address, and phone numbers.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Engage an experienced manufacturer who is ISO 9001:2008 certified for the design, production, installation and service of wide span shelving. Furnish certification attesting ISO 9001:2008 quality system registration.

B. Installer Qualifications: Engage an experienced installer who is the manufacturer's authorized representative for the specified products for installing wide span shelving.

1. Minimum Qualifications: 1-year experience installing wide span shelving of comparable size and complexity to specified project requirements.

1.7 DELIVERY, STORAGE AND HANDLING

A. Follow manufacturer's instructions and recommendations for delivery, storage and handling requirements.

1.8 PROJECT CONDITIONS

A. Field Measurements: Verify quantities of wide span shelving units before fabrication. Indicate verified measurements on shop drawings. Coordinate fabrication and delivery to ensure no delay in progress of the work.

B. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating wide span shelving units without field measurements. Coordinate construction to ensure actual dimensions correspond to established dimensions.

1.9 SEQUENCING AND SCHEDULING

A. Sequence wide span shelving with other work to minimize possibility of damage and soiling, during remainder of construction period.

B. Schedule installation of specified wide span shelving after finishing operations, including painting, have been completed.

C. Provide components which must be built in at a time, which causes no delays in the general progress of the work.

D. Pre-installation Conference: Schedule and conduct conference on project site to review methods and procedures for installing wide span shelving including, but not limited to, the following:
1. Recommended attendees include:
2. Owner's Representative.
3. Prime Contractor or representative.
4. The Architect.
5. Manufacturer's representative.
6. Subcontractors or installers whose work may affect, or be affected by, the work of this section.

1.10 WARRANTY

A. Provide a written warranty, executed by Contractor, Installer, and Manufacturer, agreeing to repair or replace units, which fail in materials or workmanship within the established warranty period. This warranty shall be in addition to, and not a limitation of, other rights the Owner may have under General Condition's provisions of the Contract Documents.

B. Limited Lifetime Warranty: Subject to the terms in the written warranty, warrant the original purchaser exclusively that the wide span shelving manufactured by it will be free from defects

in materials and workmanship for the lifetime of the wide span shelving.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design: RaptorRAC™ Wide Span Shelving; based upon wide span shelving manufactured by Spacesaver Corporation, 1450 Janesville Avenue, Fort Atkinson, Wisconsin 53538-2798. Telephone: 800-492-3434.

2.2 BASIC MATERIALS

A. General: Provide materials and quality of workmanship, which meets or exceeds established industry standards for products specified. Use furniture grade sheet and fasteners for component fabrication unless indicated otherwise. Material thicknesses/gauges are manufacturer's option unless indicated otherwise.

2.3 MANUFACTURED COMPONENTS

A. Uprights:

1. Welded Upright frames shall be a welded truss design similar to that used for pallet rack. Upright frame posts shall be 14-gauge (1.90 mm) steel, box-formed, 2" (50.8 mm) by 1-9/16" (39.69 mm), designed with notches on the front face of post, located on 1-1/2" (38.1 m) centers, to allow for easy adjustment of horizontal load bearing beams. Sides of post shall have notches, located on 1-1/2" (38.1 mm) centers, to accommodate anchor feet, supports, tie plates, and securing beams to post. Horizontal braces shall be 14-gauge (1.90 mm) steel, roll-formed 1-1/2" (38.1 mm) by 3/4" (19.05mm) tube MIG welded to posts. Diagonal braces shall be 14-gauge (1.90 mm) steel, roll-formed 1" (25.4 mm) by 3/4" (19.05mm) open channel MIG welded to posts. All welded upright frame construction shall meet AWS D1.3 certified welding standards.

B. Beams:

1. Standard Duty Beams shall be 14-gauge (1.90 mm) steel with "Z"-shaped structural design. Overall height of beam shall be 3-5/8" (92.1 mm) nominal. Each beam shall have slots punched along its length to accommodate front to back shelf supports; length and location of supports are dependent on shelving load requirements. Beam mounting end brackets shall be manufactured from 12-gauge (2.66 mm) material and welded to each end of the beam. All welded upright beam construction shall meet AWS D1.3 certified welding standards.

C. Decking:

1. Solid Steel Decking shall be 1-1/4" (31.75 MM) in height and be formed of 18-gauge (1.2 mm) cold rolled steel with flanges on all four sides. Side flanges of decking shall also be turned "down", "in", and "up" to form a "J" style bend. Decking shall be supported, front and rear, by two horizontal beams. Steel decking available in widths of 12" (304.8 mm), 18" (457.2 mm), 24" (609.6 mm), 30" (762.0 mm), and 36" (914.4 mm). Steel decking is also available in 1" (25.4 mm) increments in depths between 15" (381.0 mm) and 48" (1,219.2 mm).

2.4 FABRICATION

A. General: Coordinate fabrication and delivery to ensure no delay in progress of the work.

2.5 FINISHES

A. Colors: Provide in custom colors as selected by Architect.

B. Paint Finish: Provide factory applied electrostatic powder coat paint. Meet or exceed specifications of the American Society for Testing and Materials (ASTM) Standards:

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine wide span shelving scheduled to receive accessories [with Installer present] for compliance with requirements for installation tolerances and other conditions affecting performance of specified accessory items.

B. Proceed with accessory installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General: Follow manufacturer’s written instructions for installation of each type of accessory item specified.

3.3 FIELD QUALITY CONTROL

A. Verify accessory unit alignment and plumb after installation. Correct if required, following manufacturer’s instructions.

B. Remove components that are chipped, scratched, or otherwise damaged and which do not match adjoining work. Replace with new matching units, installed as specified and in manner to eliminate evidence of replacement.

3.4 ADJUSTING

A. Adjust all accessories to provide smoothly operating, visually acceptable installation.

3.5 CLEANING

A. Immediately upon completion of installation, clean components and surfaces. Remove surplus materials, rubbish and debris, resulting from installation, upon completion of work and leave areas of installation in neat, clean condition.

3.6 DEMONSTRATION/TRAINING

A. Schedule and conduct demonstration of installed accessory items and features with Owner's personnel.

B. Schedule and conduct maintenance training with Owner's maintenance personnel. Training

session should include lecture and demonstration of all maintenance and repair procedures that end-user personnel would normally perform.

3.7 PROTECTION

A. Protect system against damage during remainder of construction period. Advise owner of additional protection needed to ensure that system will be without damage or deterioration at time of substantial completion.

END OF SECTION

DPW PROJECT NO. 22-511
NEW DISTRICT #6 FACILITY
IDAHO STATE POLICE
IDAHO FALLS, IDAHO

PART 1 - 10 5626 MECHANICAL ASSIST MOBILE SHELVING – RECORDS ROOM, EVIDENCE ROOM

1.1 SUMMARY

A. This Section includes the following:
   1. Mechanically assisted, carriage mounted high-density mobile storage units, support rails, fabrication, and installation. The drawing represents the capacity requirements. If the capacity cannot be achieved as noted on the drawing, vendor is responsible for bringing this to the attention of the owner as part of the proposal document.
   2. Aisle Widths: Minimum high-density shelving aisle width shall be no less than "36" between carriages.

B. Related Work, Not Furnished:
   1. Structural floor system capable of supporting live and dead loads required by prevailing building codes, including rolling loads of storage units to be installed.
   2. Finish floor covering materials and installation on raised floors and ramps or when on concrete with recessed rail installation.

1.2 REFERENCES

A. American National Standards Institute (ANSI) Standards:
   1. Applicable standards for fasteners used for assembly.

B. American Society for Testing and Materials (ASTM) Standards:
   1. Applicable standards for steel materials used for fabrication.

C. American Institute Of Steel Construction (AISC) Standards:
   1. Applicable standards for steel materials used for fabrication.

1.3 SYSTEM DESCRIPTION

A. General: The system consists of manufactured storage units mounted on manufacturer's track-guided carriages to form a compact storage system. System design permits access to any single aisle by manually moving units until the desired aisle is opened. The carriage/rail system provides uniform carriage movement along the total length of travel, even with unbalanced loads.

B. Carriage System Design and Features: The carriage system consists of a formed structural steel frame with machined and balanced wheels riding on unleveled steel rails recessed or surface mounted to the floor. Reference drawings for locations. Rails shall be types selected by the manufacturer to ensure smooth operation and self-centering of mobile storage units during travel without end play or binding. Rail types, quantities and spacing shall be selected by the manufacturer to suit installation conditions and requirements. All bearings used in the drive mechanism shall be permanently shielded and lubricated.

C. Movement Controls: Triple arm operating wheels with rotating hand knobs shall be provided on the accessible (drive) ends of shelf units, centered on the stanchion, located approximately 40 inches (1051MM) from the base of each unit to permit units to be moved to create a single aisle opening. Turning the handle transmits power through chain drive to drive wheels on each carriage.

D. Drive System: The system shall be designed with a positive type mechanically-assisted drive which minimizes end play, ensures there is no play in the drive handle, and that carriages will stop without drifting.
   1. System shall include a chain sprocket drive system for each movable carriage to ensure that carriages move uniformly along the total length of travel, even with unbalanced loads. All system components shall be selected to ensure smooth, even movement along the entire carriage length. Drive system gearing shall be designed to permit 1 lb. of force applied to the drive handle to move a minimum of 4,000 lbs. of load.
   2. A tensioning device shall be provided on each chain drive with provision for adjusting tension without removing stanchion covers.
   3. All bearings used in the drive mechanism shall be permanently shielded and lubricated.

E. Safety Features:
   1. Color-coded visual indicators shall provide verification that carriages are in a locked or unlocked mode.

F. Finishes:
   1. Fabricated Metal Components And Assemblies: Manufacturer’s standard powder coat paint finish.
   2. Wilsonart laminate face panel.

1.4 PERFORMANCE REQUIREMENTS

A. Design Requirements:
   1. Reference drawings for all dimensions.

B. Ease of Movement: Provide mechanically assisted units capable of being moved by exerting a maximum horizontal force of 5 -10 pounds on the operating wheel.

C. Seismic Performance: Provide mobile storage units capable of withstanding the effects of earthquake movement when required by applicable buildingcodes.

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's product literature and installation instructions for each type of shelving, track and installation accessory required. Include data substantiating that products to be furnished comply with requirements of the contract documents.

B. Shop Drawings: Show fabrication, assembly, and installation details including descriptions of procedures and diagrams. Show complete extent of installation layout including clearances, spacings, and relation to adjacent construction in plan, elevation, and sections. Indicate clear exit and access aisle widths; access to concealed components; assemblies, connections, attachments, reinforcement, and anchorage; and deck details, edge conditions, and extent of finish flooring within area where units are to be installed.
   1. Show installation details at non-standard conditions. Furnish floor layouts, technical and installation manuals for every unit shipment with necessary dimensions for rail layout and system configuration at the project site. Include installed weight, load criteria, furnished specialties, and accessories.
   2. Provide layout, dimensions, and identification of each unit corresponding to sequence of installation and erection procedures. Specifically include the following:
      a. Location, position and configuration of tracks on all floors.
      b. Plan layouts of positions of carriages, including all required clearances.
      c. Details of shelving, indicating method and configuration of installation in carriages.
   3. Provide location and details of anchorage devices to be embedded in or fastened to other construction.
   4. Provide installation schedule and complete erection procedures to ensure proper installation.

C. Samples: Provide example of each color and texture on actual substrate for each component to remain exposed after installation.

D. Selection Samples: For initial selection of colors and textures, submit manufacturer's color charts consisting of actual product pieces, showing full range of colors and textures available.

E. Warranty: Submit draft copy of proposed warranty for review by the Architect. This warranty shall be in addition to and not a limitation of other rights the owner may have against the contractor under contract.

F. Maintenance Data: Provide in form suitable for inclusion in maintenance manuals for mobile storage units. Data shall include operating and maintenance instructions, parts inventory listing, purchase source listing, emergency instructions, and related information.
   1. Submit manufacturer's instructions for proper maintenance materials and procedures.
   2. Submit manufacturer's printed instructions for maintenance of installed work, including methods and frequency recommended for maintaining optimum condition under anticipated use conditions. Include precautions against using materials and methods which may be detrimental to finishes and performance.

G. Reference List: Provide a list of recently installed mobile storage units to be visited by owner, architect, and contractor. Intent of list is to aid in verifying the suitability of manufacturer's products and comparison with materials and product specified in this section.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Engage an experienced manufacturer who is ISO 9001 certified for the design, production, installation and service of carriage mounted high-density mobile storage units and support rails. Furnish certificate attesting manufacturer's ISO 9001 quality system registration.
   1. Manufacturer must be ISO 9001:2008 certified for a minimum of 5 years. Certification from ISO required with proposal. Other ISO certifications not acceptable. Or submit entire detailed manufacturer's quality control program.
   2. Manufacturer must have a local dedicated Area Contractor / Dealer / Distributor actively servicing the location, with a proven track record of installing and servicing the manufacturers mechanical operated high-density storage systems.
   3. Submit documentation outlining the manufacturer's servicing Area Contractor/ Dealer/ Distributor's long-term commitment to the area, confirming that Area Contractor/ Dealer/ Distributor has the business plan, and financial strength to continue to service the high density storage system installation over its service life.
   4. System must be manufactured in the USA.

B. Installer Qualifications: Engage an experienced installer who is a manufacturer's authorized representative for the specified products for installing carriages and anchoring shelving units to carriages.
   1. Minimum Qualifications: 2-year experience installing systems of comparable size and complexity to specified project requirements.
   2. Guaranteed 24-hour service response time.

1.7 DELIVERY, STORAGE AND HANDLING

A. Follow manufacturer's instructions and recommendations for delivery, storage and handling requirements.

1.8 PROJECT CONDITIONS

A. Field Measurements: Verify dimensions before fabrication. Indicate verified measurements on Shop Drawings. Coordinate fabrication and delivery to ensure no delay in progress of the Work.

B. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating mobile storage units. Coordinate construction to ensure actual dimensions correspond to established dimensions.

1.9 SEQUENCING AND SCHEDULING

A. Sequencing: Coordinate storage shelving system installation with other work to minimize possibility of damage and soiling during remainder of construction period.

B. Scheduling: Plan installation to commence after finishing operations, including painting have been completed.

C. Built-In Items: Provide components which must be built in at a time which causes no delays general progress of the Work.

D. Pre-installation Conference: Schedule and conduct conference on project site to review methods and procedures for installing mobile storage units including, but not limited to, the following:
   1. Review project conditions and levelness of flooring and other preparatory work performed under other contracts.
   2. Review and verify structural loading limitations.
   3. Recommended attendees include:
      a. Owner's Representative.
      b. Prime Contractor or representative.
      c. The [Architect] [Architect/Engineer] [Engineer/Architect] [Engineer] [Designer].
      d. Manufacturer's representative.
      e. Subcontractors or installers whose work may affect, or be affected by, the work of this section.

1.10 WARRANTY

A. Provide a written warranty, executed by Contractor, Installer, and Manufacturer, agreeing to repair or replace units which fail in materials or workmanship within the established warranty period. This warranty shall be in addition to, and not a limitation of, other rights the Owner may have under General Condition's provisions of the Contract Documents.

B. Warrant the entire movable compact shelving installation against defects in materials and workmanship for a period of one year from date of acceptance by the Owner.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. General: Products are based upon mobile shelving system products manufactured by Spacesaver Corporation. Contingent on meeting specification requirements, other acceptable manufacturers may be included.

2.2 BASIC MATERIALS

A. General: Provide materials and quality of workmanship which meet or exceed established industry standards for products specified. Material thicknesses/gauges are manufacturer's option unless indicated otherwise.

2.3 MANUFACTURED COMPONENTS

A. Rails Evidence Room:
   1. SURFACE MOUNT: Anti-Tip Rail shall be ASTM/AISI 1018 steel bar 4 1/2" (114mm) wide x 3/8" (9.5mm) high with black zinc finish. Rail edges shall be beveled down to a maximum of 3/16" (4.8mm) to allow for the rail to be transverse by material handling equipment. Rail shall disperse the wheel point loads to structural slab. Rail shall have two permanently mounted floor anchors maximum 15" (381mm) on center. Rails shall be installed on top of concrete slab. Rail and carriage design allows concrete slab to be unlevel at the following maximum variation of 3/16" (4.8mm) variation over any 2' (0.6m) rail run and 1/4" (6.4mm) maximum variation over any 10' (3.04m) rail run.

B. Rails Records Room:
   1. RECESSED MOUNT: Anti-Tip Rail shall be 1018 steel bar 3 1/2" (89mm) wide x 3/8" (9.5mm) high with black zinc finish. Rail shall disperse the wheel point loads to structural slab. Rail shall have two permanently mounted floor anchors maximum 15" (381mm) on center. Rail shall be installed recessed into concrete slab and flush to top of concrete slab. Rail and carriage design allows concrete slab to be unlevel at the following maximum variation of 3/16" (4.8mm) variation over any 2' (0.6m) rail run and 1/4" (6.4mm) maximum variation over any 10' (3.04m) rail run.

C. Carriages:
   1. Assembled structural steel carriage base will have a minimum capacity of 7,000 lbs. (3,175 kg) Each wheel assembly shall be equipped with two wheels, minimum 5" (127mm) diameter steel wheels. Wheels are equipped with two permanently lubricated and shielded radial ball bearings. Wheel capacity 3,500 lbs (1,587kg) each. Wheels have solid steel axles of 1" in (25.4mm) diameter. Wheels shall be dual flange, all wheel guided. All carriage sections between wheel assemblies have integral cross bracing to maintain accepted tolerances for function of systems. Side profiles shall provide and maintain wheel assembly alignment and squareness. These profiles shall be pre-drilled at the factory but are bolted and assembled on the job site as integral carriage members.
   2. Finish shall be powder coat paint.
   3. Provide manufacturer's design movable carriages fabricated or bolted steel construction. Galvanized structural components and/or riveted carriages are unacceptable.
   4. Provide fixed carriages of same construction and height as the movable carriages, anchored to rails. Setting fixed shelving directly on floors is not permitted.
   5. Full size laminate face panels on carriages and platforms.
   6. Provide non-mechanical safety sweeps.

D. Drive / Guide System:
   1. Design: Provide drive system which prevents carriage whipping, binding and excessive wheel/rail wear under normal operation.

a. If line shafts are used, all wheels on one side of carriage shall drive.
2. Shafts: Solid steel tube.
3. Shaft Connections: Secured couplings.
4. Bearing Surfaces: Provide rotating load bearing members with ball or roller bearings. Provide shafts with pillow block or flanged self-aligning type bearings.

E. Accessories:
1. BAT w/Floor and ramp: Provides leveled rail in Evidence Room.
2. BAT recessed in Records Room.

2.4 FABRICATION

A. General: Coordinate fabrication and delivery to ensure no delay in progress of the Work.

B. Wheels: Provide precision machined and balanced units with permanently shielded and lubricated bearings.

C. Shelving, Supports and Accessories: See individual descriptions in "Shelving" paragraphs.

2.5 SHELVING / RACK
A. 4-post and wide span

2.6 FINISHES

A. Colors: Provide in custom colors as selected by Architect.

B. Paint Finish: Provide factory applied electrostatic powder coat paint.

C. Solvent based wet-spray paint finishes on any components in the entire installation are unacceptable.

D. Wilsonart standard laminate for face panels.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine floor surfaces with Installer present for compliance with requirements for installation tolerances and other conditions affecting performance of mobile storage units.

B. Verify that building structural system is adequate for installing mobile storage units at locations indicated on approved shop drawings.

1. In new construction, ensure that recesses for rails in floors are at proper spacing and depths.
2. For installations on existing floors, ensure that rail spacings indicated on shop drawings are in proper locations so existing load-bearing structural members are not over stressed.

C. Verify that intended installation locations of mobile storage units will not interfere with nor block established required exit paths or similar means of egress once units are installed.

D. Prepare written report, endorsed by Installer, listing conditions detrimental to proper performance of mobile storage units, once installed.

E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Rails:
1. Install rail.
2. Permanently attach shelving units to carriages. Stabilize shelving units to comply with mobile storage unit manufacturer's written requirements. Reinforce shelving units to withstand the stress of movement where required and specified.
3. Install mobile storage systems, shelving, track, floors, and accessories after finishing operations, including painting have been completed. Install system to comply with final layout drawings, in strict compliance with manufacturer's printed instructions. Position unit's level, plumb; at proper location relative to adjoining units and related work.
4. Field Quality Control: Remove and replace components which are shipped, scratched, or otherwise damaged and which do not match adjoining work. Provide new matching units, installed as specified and in manner to eliminate evidence of replacement.
5. Adjust: Adjust components and accessories to provide smoothly operating, visually acceptable installation.
6. Cleaning: Immediately upon completion of installation, clean components and surfaces. Remove surplus materials, rubbish and debris resulting from installation upon completion of work and leave areas of installation in neat, clean condition.
7. Protection: Protect system against damage during remainder of construction period. Advise Owner of additional protection needed to ensure that system will be without damage or deterioration at time of substantial completion

3.3 FIELD QUALITY CONTROL

A. Verify shelving/racking unit alignment and plumb after installation. Correct if required following manufacturer's instructions.

B. Remove components which are chipped, scratched, or otherwise damaged and which do not match adjoining work. Replace with new matching units, installed as specified and in manner to eliminate evidence of replacement.

3.4 ADJUSTING

A. Adjust components and accessories to provide smoothly operating, visually acceptable installation.

3.5 CLEANING

A. Immediately upon completion of installation, clear components and surfaces. Remove surplus materials, rubbish and debris resulting from installation upon completion of work and leave areas of installation in neat, clean condition.

3.6 DEMONSTRATION/TRAINING

A. Schedule and conduct demonstration of installed equipment and features with Owner's personnel.

B. Schedule and conduct maintenance training with Owner's maintenance personnel. Training session should include lecture and demonstration of all maintenance and repair procedures that end user personnel would normally perform.

3.7 PROTECTION

A. Protect system against damage during remainder of construction period. Advise Owner of additional protection needed to ensure that system will be without damage or deterioration at time of substantial completion.

END OF SECTION

GENERAL NOTES

1. CONTRACTOR SHALL RESOLVE ALL DIMENSIONAL OR OTHER DISCREPANCIES, DURING LAYOUT WITH ARCHITECT, PRIOR TO BEGINNING CONSTRUCTION.
2. ALL WALL-MOUNTED CASEWORK, MILLWORK, GRAB BARS, HARDWARE, EQUIPMENT, ETC. SHALL BE ANCHORED TO WOOD BLOCKING BETWEEN STUDS, U.N.O. COORDINATE BLOCKING PRIOR TO WALL FINISHES, INCLUDING OWNER FURNISHED ITEMS.
3. CAULK ALL INTERIOR JOINTS, U.N.O.
4. ALL WORK TO BE IN ACCORDANCE WITH ALL CODES & ACCESSIBILITY REQUIREMENTS.
5. EXTEND NON-INSULATED STUD WALLS & GYP. BOARD 12" MIN. ABOVE SUSPENDED CEILING. U.N.O.
6. ALL INSULATED INTERIOR WALLS TO EXTEND TO UNDERSIDE OF SECOND FLOOR METAL DECK OR UNDERSIDE OF ROOF METAL DECK FOR SPEECH PRIVACY.
7. USE ISOLATION TAPE BETWEEN ALL DIS-SIMILAR METALS.
8. DIMENSION - FACE OF BRICK FOR EXTERIOR WALLS , DOORS, AND WINDOWS. FACE OF FRAMING FOR INTERIOR WALLS.

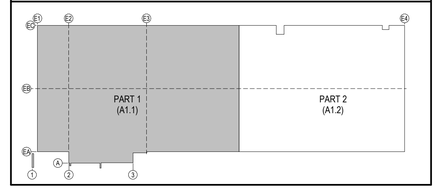
KEYNOTES

1. 48" TALL VINYL CORNER GUARD
2. 48" TALL STAINLESS STEEL CORNER GUARD
3. SEMI RECESSED FIRE EXTINGUISHER CABINETS
4. ROOF DRAIN CHASE - 12" X 12" MIN. INSIDE DIMENSION - 9.3B WALL TYPE
5. BRICK AND CMU INFILL
6. CMU INFILL
7. 6" CONCRETE HOUSE KEEPING PAD
8. SURFACE MOUNTED FIRE EXTINGUISHER CABINETS
9. PROVIDE PLYWOOD RAMP AND RAISED PLYWOOD FLOOR FOR THE ON-SLAB RAILS FOR THE BULK STORAGE SYSTEM.
10. A RECESSED SLAB SHALL BE PLACED FOR THE BULK STORAGE SYSTEM. VERIFY RECESSED DEPTH WITH THE MANUFACTURER PRIOR TO PLACING THE SLAB. A TOPPING SLAB SHALL BE PLACED BETWEEN THE RAILS AFTER THEY HAVE BEEN SET AND LEVELED.

MAIN LEVEL PART 1

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

REFERENCE PLAN



LICENSED ARCHITECT
AR-986218
10/30/2024
NICHOLAS R. HARRIS
STATE OF IDAHO

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REMODEL FOR:
DPW 22511 ISP NEW DISTRICT #6 FACILITY
1155 FOOTE DRIVE
IDAHO FALLS, IDAHO 83402

PROJECT:

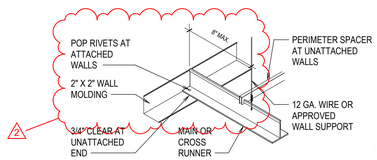
SHEET TITLE: MAIN FLOOR PLAN PART 1

REVISIONS

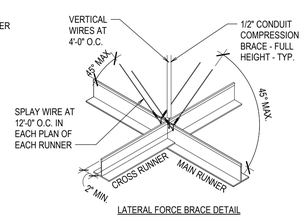
1	ADDENDUM #1	2025-02-19

PROJECT NO. 21034
DATE: OCTOBER 2024
DRAWN BY: NRH/BTH/JNH
CHECKED BY: NRH

DRAWING NO.: A1.1



WALL MOLDING DETAIL



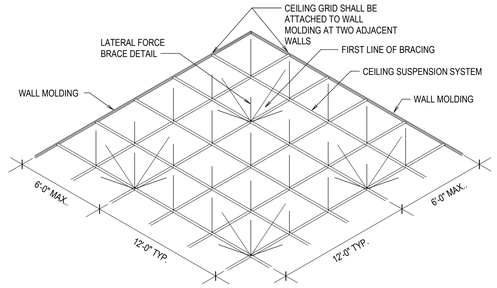
LATERAL FORCE BRACE DETAIL

LATERAL FORCED BRACING REQUIRED FOR CEILING AREAS OVER 1,000 S.F.
CEILING AREAS UNDER 1,000 S.F. ARE NOT.

RIDGED BRACES MAY BE USED INSTEAD OF DIAGONAL SPLAY WIRES.

A SEISMIC SEPARATION JOINT IS REQUIRED FOR CEILING AREAS GREATER THAN 2,500 S.F.

SUSPENDED CEILING SEISMIC DETAILS



SUSPENSION SYSTEM LAYOUT
NOT TO SCALE

GENERAL NOTES

1. CONTRACTOR SHALL RESOLVE ALL DIMENSIONAL OR OTHER DISCREPANCIES, DURING LAYOUT WITH ARCHITECT, PRIOR TO BEGINNING CONSTRUCTION.
2. CEILING PLANS ARE FOR COORDINATION PURPOSES ONLY - SEE ELECTRICAL AND MECHANICAL DRAWINGS.
3. BRACE SUSPENDED CEILINGS PER STANDARD SEISMIC BRACING DETAIL ON THIS SHEET.

C1 1'-0" CEILING SCHEDULE KEY

CEILING FINISH	CEILING FINISH
C1 2X4 LAY-IN ACOUSTICAL PANELS	C4 2X2 LAY-IN ACOUSTICAL PANELS
C2 SUSPENDED 5/8" GYP. BOARD	C5 METAL CEILING SYSTEM
C3 EXPOSED STRUCTURE - PAINTED	C6 5/8" GYP. BOARD ON METAL STUD

CEILING FIXTURE KEY

LIGHT FIXTURES - SEE ELECTRICAL DRAWINGS

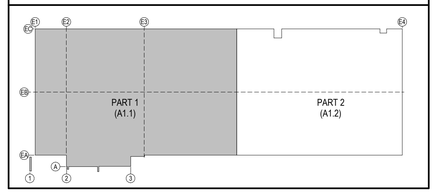
EXIT DEVICES - SEE ELECTRICAL DRAWINGS

MECHANICAL FIXTURES - SEE MECHANICAL DRAWINGS

MAIN LEVEL RCP PART 1

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

REFERENCE PLAN



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10/30/2024
REGISTERED ARCHITECT
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REMODEL FOR:
DPW 22511 ISP NEW DISTRICT #6 FACILITY
1155 FOOTE DRIVE
IDAHO FALLS, IDAHO 83402

PROJECT:

SHEET TITLE: REFLECTED CEILING PLAN PART 1

REVISIONS

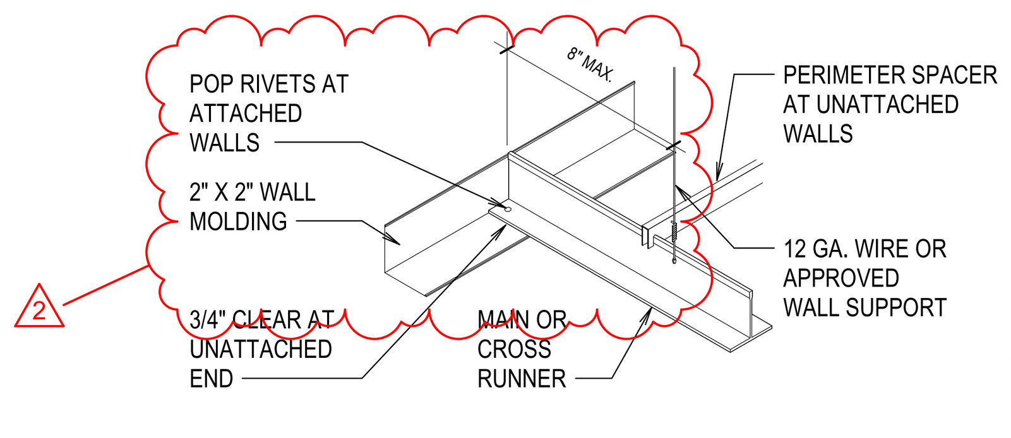
2	IDOPL COMMENTS	2025-02-06

PROJECT NO. 21034
DATE: OCTOBER 2024
DRAWN BY: NRH/BTH/JNH
CHECKED BY: NRH

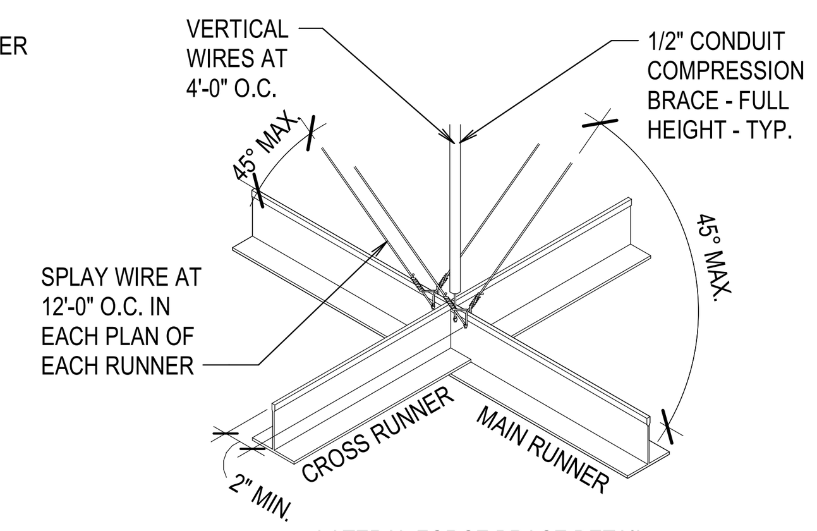
DRAWING NO.:

A7.1

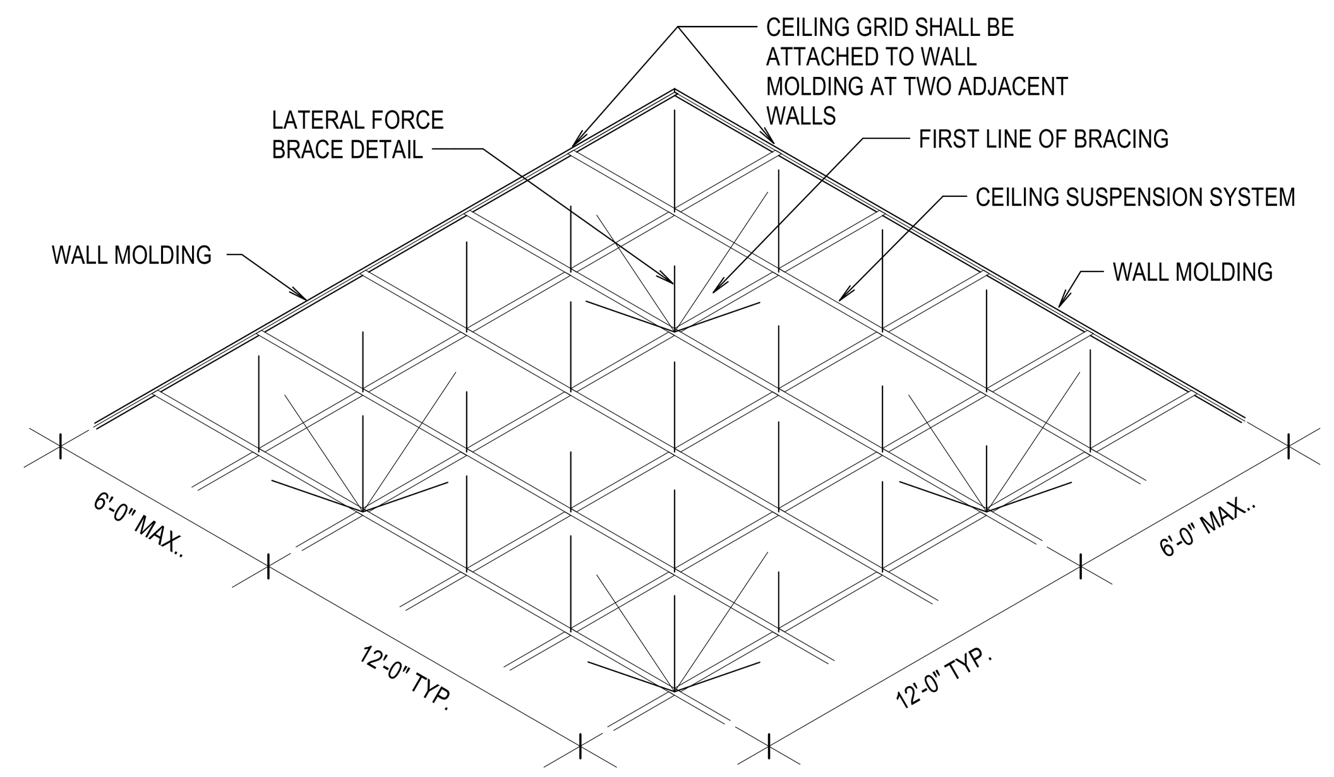
SUSPENDED CEILING SEISMIC DETAILS



WALL MOLDING DETAIL



LATERAL FORCE BRACE DETAIL

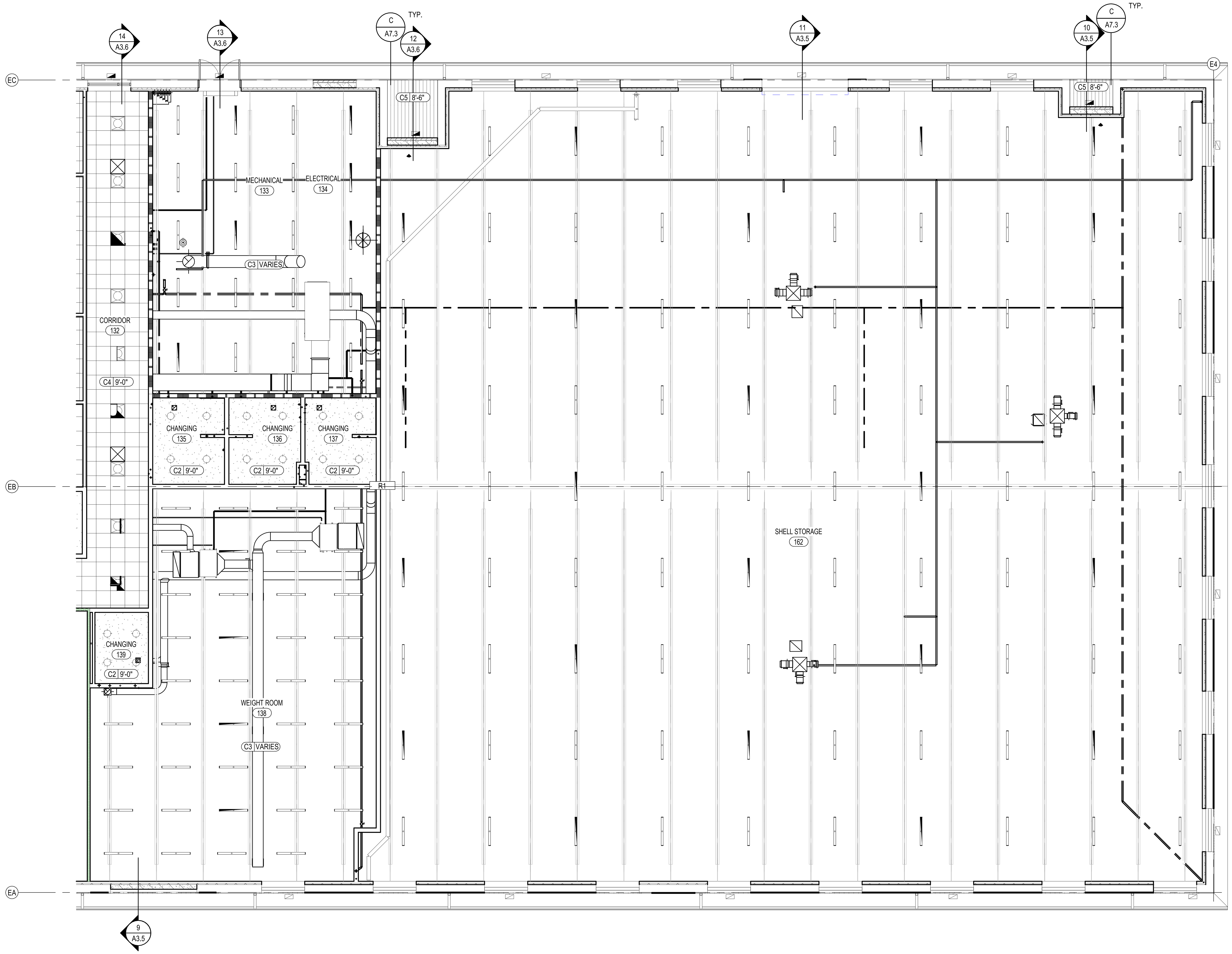


SUSPENSION SYSTEM LAYOUT
NOT TO SCALE

LATERAL FORCED BRACING REQUIRED FOR CEILING AREAS OVER 1,000 S.F.
CEILING AREAS UNDER 1,000 S.F. ARE NOT.

RIDGED BRACES MAY BE USED INSTEAD OF DIAGONAL SPLAY WIRES.

A SEISMIC SEPARATION JOINT IS REQUIRED FOR CEILING AREAS GREATER THAN 2,500 S.F.



MAIN LEVEL RCP AREA 2
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. CONTRACTOR SHALL RESOLVE ALL DIMENSIONAL OR OTHER DISCREPANCIES, DURING LAYOUT WITH ARCHITECT, PRIOR TO BEGINNING CONSTRUCTION.
2. CEILING PLANS ARE FOR COORDINATION PURPOSES ONLY - SEE ELECTRICAL AND MECHANICAL DRAWINGS.
3. BRACE SUSPENDED CEILINGS PER STANDARD SEISMIC BRACING DETAIL ON THIS SHEET.

CEILING SCHEDULE KEY

C1 1'-0"

CEILING FINISH	CEILING FINISH
C1 2X4 LAY-IN ACOUSTICAL PANELS	C4 2X2 LAY-IN ACOUSTICAL PANELS
C2 SUSPENDED 5/8" GYP. BOARD	C5 METAL CEILING SYSTEM
C3 EXPOSED STRUCTURE - PAINTED	C6 5/8" GYP. BOARD ON METAL STUD

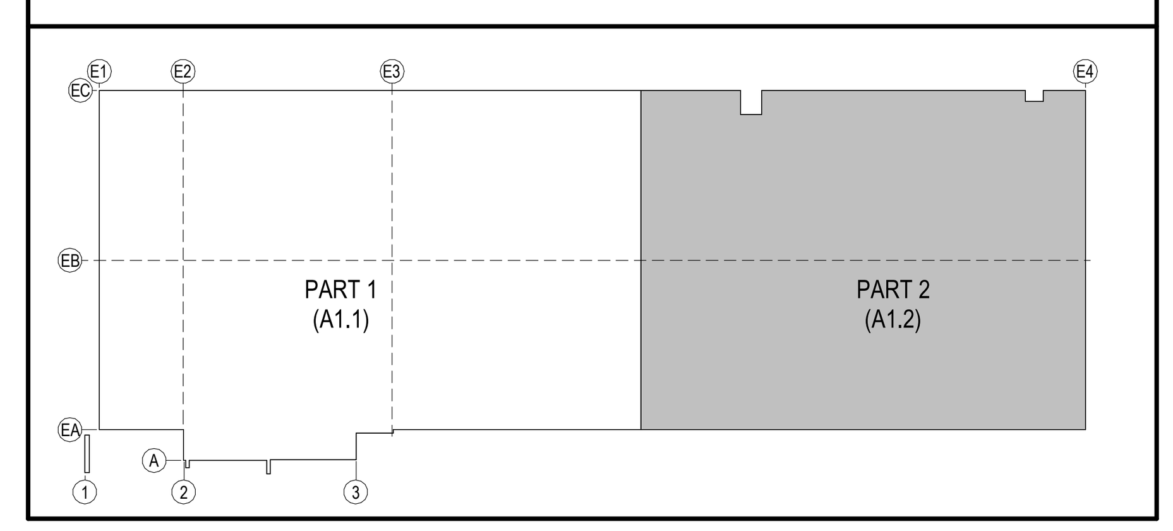
CEILING FIXTURE KEY

LIGHT FIXTURES - SEE ELECTRICAL DRAWINGS

EXIT DEVICES - SEE ELECTRICAL DRAWINGS

MECHANICAL FIXTURES - SEE MECHANICAL DRAWINGS

REFERENCE PLAN



2025-02-10 11:01:21 AM Autodesk Docs://DPW 22511 ISP District 6 HQ/DPW 22511 ISP 1155 FOOTE DRIVE Existing Building.rvt

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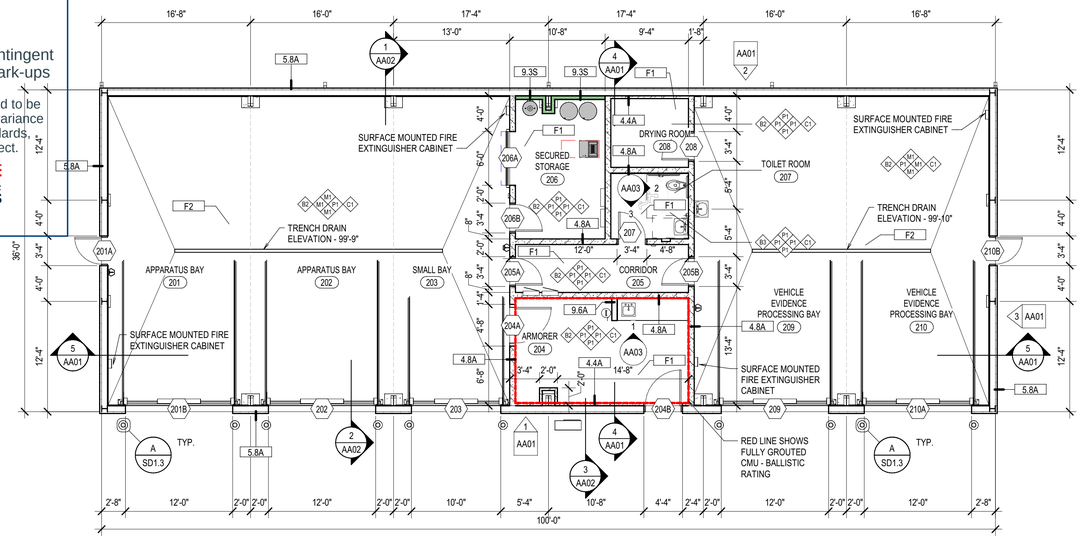
PROJECT:
REMODEL FOR:
DPW 22511 ISP NEW DISTRICT #6 FACILITY
1155 FOOTE DRIVE
IDAHO FALLS, IDAHO 83402

SHEET TITLE:
REFLECTED CEILING PLAN PART 2

REVISIONS

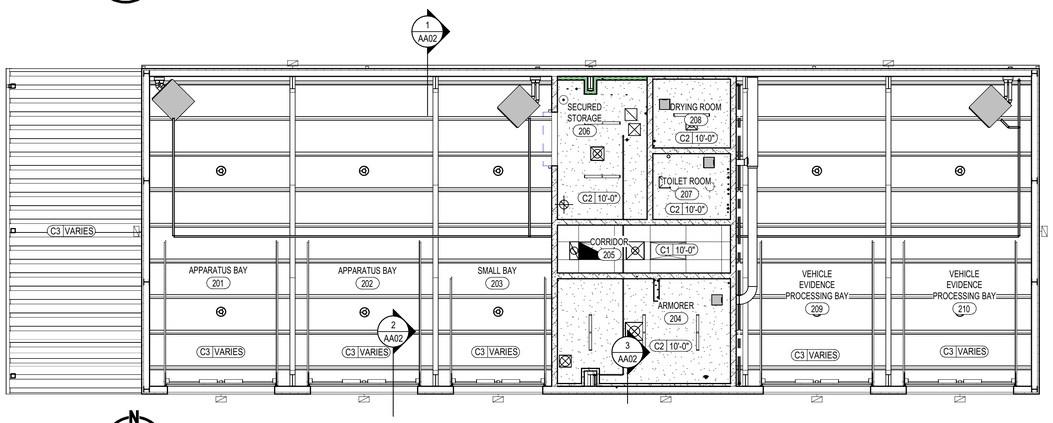
2	DOPL COMMENTS	2025-02-06

PROJECT NO.: 21034
DATE: OCTOBER 2024
DRAWN BY: NRH/BTH/JNH
CHECKED BY: NRH
DRAWING NO.:
A7.2



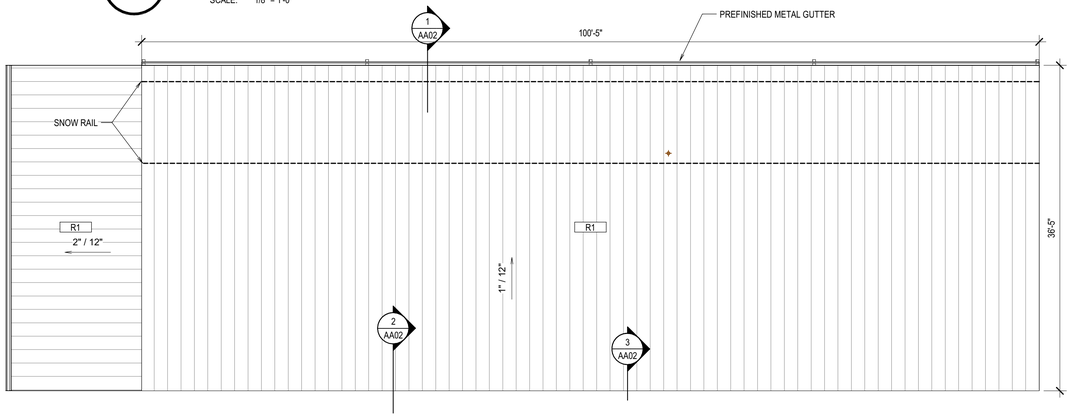
MAIN LEVEL

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



RCP ROLLING ASSETS

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



ROOF PLAN

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

CODE ANALYSIS

CODE ANALYSIS

INTERNATIONAL BUILDING CODE	2018 IBC
NATIONAL ELECTRICAL CODE:	2017 NEC
INTERNATIONAL MECHANICAL CODE:	2018 IMC
INTERNATIONAL FUEL GAS CODE:	2018
INTERNATIONAL ENERGY CONSERVATION CODE:	2018
INTERNATIONAL FIRE CODE:	2018
IDAHO STATE PLUMBING CODE:	2017

CONSTRUCTION TYPE:

TYPE II B, FIRE SPRINKLED

BUILDING OCCUPANCY:

S1 - STORAGE

DESIGN CATEGORY:

RISK CATEGORY IV (ESSENTIAL FACILITY)

AREA BY OCCUPANCY GROUP:

MAIN LEVEL

S1	3,600	SF
TOTAL	3,600	SF

NON SEPARATED USES PER SECTION 508.3

BUILDING AREA BASED ON NON-SEPARATED USES (SECTION 508.3)
ALLOWABLE AREA AND HEIGHTS ARE BASED ON THE MOST RESTRICTIVE

USE. DIFFERENT USES ARE NOT SEPARATED BY FIRE BARRIERS

S1 = MOST RESTRICTIVE USE

ALLOWABLE SQUARE FOOTAGE S1	70,000 SF
TOTAL ACTUAL SQUARE FOOTAGE	**3,600 SF**
ALLOWABLE HEIGHT	75'-0"
ACTUAL HEIGHT	**20'-0"**
ALLOWABLE NUMBER OF STORIES	3
ACTUAL NUMBER OF STORIES	**1**

OCCUPANCY SEPARATION:

NONSEPARATED PER SECTION 508.3

FIRE RESISTANCE HOUR-RATING FOR BUILDING ELEMENTS (TABLE 601):

TYPE II B, ALL ELEMENTS - 0 -HR

EXTERIOR WALL FIRE RESISTANCE HOUR-RATING BASED ON DISTANCE SEPARATION (TABLE 602:)

TYPE II B	X < 5'	FIRE SEPARATION DISTANCE	1 HR
TYPE II B	5' ≤ X < 10'	FIRE SEPARATION DISTANCE	1 HR
TYPE II B	10' ≤ X < 30'	FIRE SEPARATION DISTANCE	0 HR
TYPE II B	X ≥ 30'	FIRE SEPARATION DISTANCE	0 HR

BUILDING IS NO CLOSER THAN 35 FEET TO ANY PROPERTY LINE.

OCCUPANT LOAD:

	AREA	FACTOR	OCCUPANTS
STORAGE	3,600	300	12
BUILDING TOTAL			12

TRAVEL DISTANCE 300' MAXIMUM - 61'-0" ACTUAL

FIRE FLOW & FIRE HYDRANT CALCULATION:

REQUIRED: 1,000 GPM - 2 HOUR DURATION
2018 IFC SECTION B105.2, TABLE B105.2

REQUIRED: 1 FIRE HYDRANT FOR FIRE FLOW OF 1,750 GPM OR LESS

LOT & BLOCK DESCRIPTION

1400-1450 FOOTE DRIVE

LAND USE ZONE:

LIGHT MANUFACTURING AND HEAVY COMMERCIAL

BUILDING INFORMATION:

HEIGHT OF BUILDING: 20'-0"
NUMBER OF STORIES: 1

PLUMBING FIXTURE COUNT - 2017 ISPC

PLUMBING FIXTURE CALCULATION S-1

TOTAL OCCUPANT LOAD	WC MALE (1:1-100)	WC FEMALE (1: 1-100)	URINAL (NR)	LAV MALE (1: 1-200)	LAV FEMALE (1: 1-200)	DRINKING FOUNTAINS (1: 1-250)
6 MALE - 6 FEMALE	1	1	NR	1	1	*0
TOTAL REQUIRED	**1**	**1**	**NR**	**1**	**1**	***0**
TOTAL PROVIDED	**1**	**1**	**NR**	**3**	**3**	**0**

ALL LOADS DIVIDED IN HALF FOR MALE/FEMALE
**DRINKING FOUNTAINS SHALL NOT BE REQUIRED FOR AN OCCUPANT LOAD OF 30 OR LESS PER 2017 ISPC 415.2* Idaho amendments

FINISH SCHEDULE KEY

PAINT - SHERWIN WILLIAMS
P1 - SW7006 EXTRA WHITE

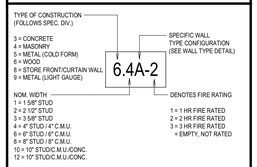
METAL BUILDING SYSTEMS
M1 - METAL LINER PANEL TO FIRST GIRT WITH VINYL SCRIM ABOVE
M2 - METAL LINER PANEL FULL HEIGHT

CONCRETE FLOOR
C1 - POLISHED/SEALED CONCRETE

TILE - AMERICAN OLEAN
T2 - COLOR STORY - MATTE STORM GRAY 0017 12X24

BASE - ROPPE
B2 - 4" COVE BASE - BLACK
B3 - 6" CERAMIC TILE WITH SCHULTER TRIM

WALL TAG KEY



GENERAL NOTES

1. THE CONTRACTOR OR PEMB MANUFACTURER IS RESPONSIBLE FOR THE DESIGN OF THE BUILDING STRUCTURE.
2. THE CONTRACTOR OR PEMB MANUFACTURER IS RESPONSIBLE FOR THE DESIGN OF ALL FOOTINGS, FOUNDATIONS, AND SLABS RELATED TO THE BUILDING STRUCTURE.

FLOOR, WALL, ROOF, AND CEILING TYPES

F1	4" CONCRETE SLAB-ON-GRADE
F2	6" CONCRETE SLAB-ON-GRADE
4.4A	4"X8"X16" CMU
4.8A	8"X8"X16" CMU
5.8A	BYPASS R-30 PRE-FINISHED 26 GA. METAL WALL PANEL VINYL REINFORCED FIBERGLASS BAG INSULATION 8" 'Z' GIRT BYPASS FRAMING SYSTEM VINYL FACED FIBERGLASS BATT INSULATION AND METAL STRAPPING INTERIOR LINER PANEL
9.3S	3 5/8" METAL STUD FRAMING EXPANDED METAL MESH 5/8" GYPSUM BOARD
9.6A	6" METAL STUD PARTITION WITH GYPSUM BOARD ON BOTH SIDES
C1	SUSPENDED ACOUSTICAL CEILING - 2X4 PANEL SIZE
C2	SUSPENDED GYPSUM CEILING
C3	EXPOSED STRUCTURE - PAINTED
R1	STANDING SEAM METAL ROOF - DOUBLE LOCK SEAM VINYL REINFORCED FIBERGLASS BAG INSULATION 8" 'Z' GIRT BYPASS FRAMING SYSTEM VINYL FACED FIBERGLASS BATT INSULATION AND METAL STRAPPING

LICENSED ARCHITECT
AR-986218
NICHOLAS R. HAVEN
STATE OF IDAHO
10/30/2024

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PROJECT: ROLLING ASSETS BUILDING FOR:
DPW 22511 ISP NEW DISTRICT #6 FACILITY
1155 FOOTE DRIVE
IDAHO FALLS, IDAHO 83402
ROLLING ASSETS ADD ALTERNATE #1

SHEET TITLE:

REVISIONS

2	IDOPL COMMENTS	2025-02-06

PROJECT NO.
21034
DATE:
OCTOBER 2024
DRAWN BY:
NRH/BTH/JNH
CHECKED BY:
NRH

DRAWING NO.:

AA00