

Office of University Building Official (OUBO)

Building Safety Month Training Series

Question & Answer Session with a Panel of Mason's Building and Compliance Stakeholders

Stakeholders: GMU Facilities, Contractors, & Registered Design Professionals

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Agenda

Question & Answer Session with a Panel of Mason's Building and Compliance Stakeholders

OUBO: HECO13.1ubo Document Introduction & Review

Risk, Safety, Resilience (RSR): Fire & Safety Inspections & Testing

Land Development: PALD e-Builder process

Planning, Design, & Construction (PDC): Organization Overview

Facilities IT: Support Request Webpage

HECO-13.1ubo Introduction & Review

- Developed from the existing HECO-13.1 Certificate of Completion by A/E or Project Manager
- References the HECO-13.1b Final Report of Structural & Special Inspections and the revised HECO-13.3b AE Checklist for Beneficial Occupancy formally the HECO-13.3b Checklist for Beneficial Occupancy submitted by A/E of record.
- The HECO-13.1ubo will also include (if required) the Testing & Air Balancing (TAB) report, Virginia Energy Conservation & Environmental Standards (VEES) documentation, and the ASHRAE 110 Test for Fume Hoods and Verification submitted by A/E record.

HECO-13.1ubo Introduction & Review

- NFPA 13 Test Certificate Form(s) and the NFPA 72 Record of Completion Form (if required) submitted by the General Contractor.
- Roofing Inspector's Final Report (if required) submitted by GMU CFR or Project Manager



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STATEMENT FOR SUBSTANTIAL COMPLETION & OCCUPANCY

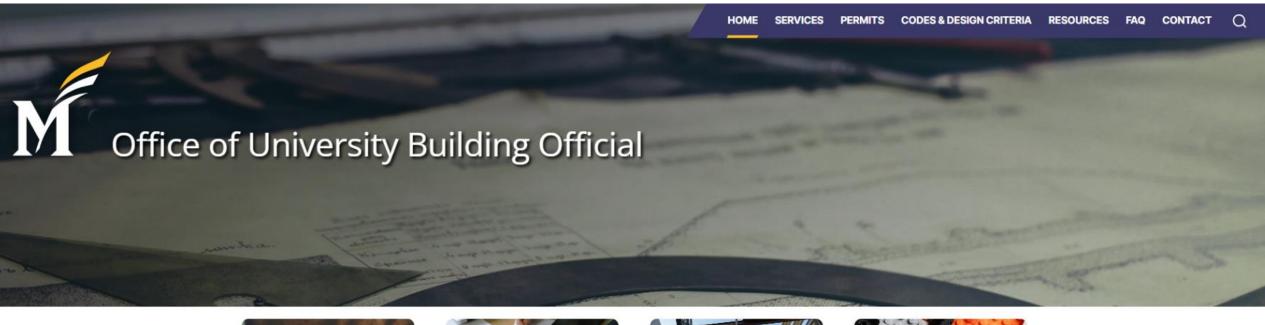
| Date: | |
|--|---|
| To: Office of University Building Official George Mason University 4400 University Drive, MSN 1E4 Fairfax, Virginia 22030 | |
| PROJECT TITLE: | |
| PROJECT NO: | 1 |
| knowledge gained through performance of University's CFR and testing entities. The | ts between the University and the A/E, and the the A/E Services provided and the reports of the undersigned hereby states portions of this Projecth the requirements of the Contract Documents. |
| Full Scope Partial Scope | |
| | regulatory inspections required by the Virginia C) for this Project, have been performed with ions of the Project except the following: |
| Verification of Completion by A/E of Reco | ord |
| A copy of the HECO-13.1b Final Report of certificate. Yes Not Required | Structural & Special Inspections is attached to this |
| A copy of the HECO-13.3b AE Checklist for Yes | Beneficial Occupancy is attached to this certificate. |
| A copy of the approved Testing and Air Bis attached to this certificate or pending futur Yes Pending submission Not F | |
| VEES documentation (if VEES is compliant Building Act). Yes Pending submission Not F | ce method selected to meet High Performance Required |

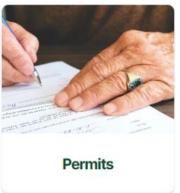


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| cont |
|--|
| A copy of the ASHRAE 110 Test for Fume Hoods and Verification is attached to this certificate of pending future submission with the TAB report before permit close-out. Yes Pending submission Not Required |
| A/E Firm Name: |
| Name: |
| Date: |
| Verification of Completion by Contractor A copy of the NFPA 13 Test Certificate Form(s) is attached to this certificate. Yes Not Required Contractor's Material and Test Certificate for Underground Piping Yes Not Required Contractor's Material and Test Certificate for Aboveground Piping A copy of the NFPA 72 Record of Completion Form is attached to this certificate. |
| Yes Pending submission Not Required |
| General Contractor: |
| Name: |
| Date: |
| Verification of Completion by CFR and Project Manager A copy of the Roofing Inspector's Final Report is attached to this certificate. Yes Not Required |
| GMU CFR: |
| GMU Project Manager:Date: |

Office of University Building Official - Office of the University Building Official (gmu.edu)











Inspections

HOME / SERVICES / INSPECTIONS

Construction projects are inspected for compliance with fire/life safety requirements, accessibility guidelines, and structural, mechanical, electrical, plumbing, and energy conservation codes. Specific inspection requirements are listed on the permit(s) when issued but may not be all-inclusive.

 OUBO Inspection Requests (UBOIR) are submitted through e-Builder by the Contractor. Instructions are available on e-Builder. Contact Mason's Project Manager if you need assistance. OUBO strives to perform inspections within two (2) business days after receiving requests.

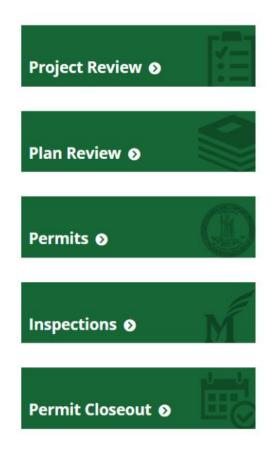
Once issued, permits shall be posted by the general contractor near the entrance to the site or otherwise conspicuous location. OUBO stamped approved construction documents (plans & specifications), OEM installation instructions, and any subsequent RFI, ASI, or shop drawing requiring OUBO approval, shall be available on-site for use by construction and inspection personnel. (USBC Sections 108.1, 109.5, and 110.5.)

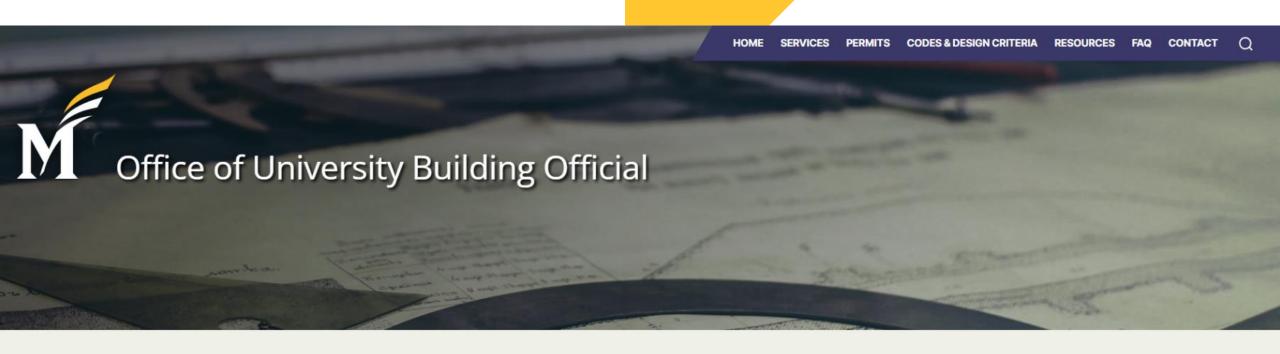
The OUBO fully supports all options available to ensure accurate and timely inspection services including 3rd party inspections if applicable.

Special Inspections

Inspection Procedures

Roofing System Permitting and Inspection





Special Inspections

HOME / SPECIAL INSPECTIONS

- Special Inspection Guidelines and Procedures
- HECO-6a6b Statement of USBC Special Inspections & 2018 USBC Special Inspections
- HECO-6c Statement of Contractor's Responsibility
- HECO-13.1b Final Report Of Structural And Special Inspections

| | | | HEC | O-13.1b |
|--|-------------------------------------|-------------------------------|--|------------|
| | | | DATE: | |
| ROJECT TITLE: | | | | |
| ROJECT NUMBER: | | | | |
| /E OF RECORD: | | | | |
| /E FIRM OF RECORD: | | | | |
| A BUSINESS LICENSE: | | | | |
| | ons listing attached to | | s required for this project, and itemi. f Structural and Special Inspections, | |
| ne discrepancies that remain ou e attached pages. | utstanding since the las | t interim report, dated | , have been corrected or resolved as | s noted in |
| | | | | |
| espectfully submitted, | | | | |
| | | | | |
| STRUCTUR ENGINEER OF R | | A/E of RECORD | Signature: | RDP |
| ate: | Date: | | Date: | |
| | Date. | | Date. | |
| | | | | |
| | | | | |
| AFFIX SEAL, SIGNATUR | RE, & DATE | AFFIX SEAL, SIGNATURE, & DATE | AFFIX SEAL, SIGNATURE | E, & DATE |
| | STRUCTION FIELD ESENTATIVE (CFR) | | UNIVERSITY PROJECT MANAGER | |
| Signature: | | Signature: | | |
| Date: | | Date: | | |
| | | | | |
| | | | | |



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AE CHECKLIST FOR BENEFICIAL OCCUPANCY

| То: | Facilities Administration George Mason University 4400 University Drive, MSN 1E4 Fairfax, Virginia 22030 |
|--------|---|
| PROJ | ECT TITLE: |
| PROJ | ECT NO: |
| Assur | ction by the A/E and Agency prior to OUBO inspection allows for earlier Beneficial Occupancy e that the following items are complete or do not apply to the project before scheduling a antial Completion Inspection. |
| Site / | Building Accessibility |
| | Route from the entrance to the public way |
| | Accessible fixtures, spaces, grab bars, and clearances |
| Mean | s of Egress |
| | Exit Access / Exit / Exit Discharge clear and unobstructed |
| | Delayed egress / Access controlled locks |
| | Door Hardware / types required |
| HVAC | |
| | Ventilation |
| | Exhaust Systems |
| | Special Systems (smoke control, dust collection) |
| | Testing and Balancing Report |
| Electr | ical |
| | Egress lighting with emergency power on and off |
| | Boxes (back, junction, and pull) covered |
| | Exit Signs |
| | Lightning Protection Certification |
| Plumb | ping |
| | Fixtures tested and properly functioning |
| | Lab gases |
| | Secondary Roof Drainage |
| | Potable Water Report |



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| Fire Safety |
|--|
| Fire alarm system accepted: NFPA 72 Record of Completion |
| Sprinkler system accepted: NFPA 13 13R 13D |
| Contractor's Material and Test Certificate for Underground Piping |
| Contractor's Material and Test Certificate for Aboveground Piping |
| Supervising Station Name |
| General Safety |
| Floor finishes complete |
| Elevator Acceptance inspections and Test Report |
| Contractor Clean up |
| Close Out Documents |
| A tentative list of unfinished Work and defective Work (Punch List) is attached |
| I have inspected for as noted above and conclude that the building is substantially complete and ready for beneficial occupancy. |
| Ву: |
| (Signature) (date) |
| Typed Name: |
| Title: |
| |

TAB REPORT

AIR BALANCE WATER BALANCE SYSTEM ANALYSIS ENERGY ANALYSIS INSPECTIONS



CERTIFIED REPORT

prepared by

ANNANDALE BALANCING COMPANY, INC



Engineering Consultants

HEATING
VENTILATING
AIR CONDITIONING
ENVIRONMENTAL CONTROL
BUILDING SYSTEM COMMISSIONING

Established 1974

6121 LINCOLNIA ROAD, SUITE 202 ALEXANDRIA, VA 22312 Telephone (703) 256-2097



Annandale Balancing Company, Inc. 6121 Lincolnia Road, Suite 202 Alexandria, Virginia 22312-2764



TERMINAL BOX TEST REPORT

| PROJECT: 2 | 023414 GMU | J VAN ME | TRE HA | | | | SRD FLO | | | | | | |
|------------------------------------|-------------|----------|---------|---------|----------|-------|-----------------|---------|--------|-------|---------|---------|-------|
| UNIT AHU-09 (EXISTING) SYSTEM HVAC | | | | | | | | | | | | | |
| LOCATION PLENUM | | | | | | SE | SERVICE VARIOUS | | | | | | |
| MANUFACTURER NAILOR | | | | | | TE | ST INSTR | UMENT | | MICRO | MANOMET | rer | |
| | | | | | | | | | | | | | |
| LOCATION | TERM | INAL BOX | < | MAX | XIMUM FI | LOW | MII | NIMUM F | LOW | | FAN FLO | W | CAL. |
| OR ADDRESS | NUMBER | TYPE | SIZE | DES. | ACT. | SETPN | DES. | ACT. | SETPNT | DES. | ACT. | SETPNT | FACT. |
| 26 | D-800 | E/COWH | 8" | 800 | 831 | | 350 | 335 | NA | NA | NA | NA | . 60 |
| 2 | E3-14 | E/COWH | 10" | 1200 | 1243 | | 360 | 357 | NA | NA | NA | NA | .70 |
| 25 | E-1200 | E/COWH | 10" | 1200 | 1195 | | 360 | 366 | NA | NA | NA | NA | . 75 |
| 3 | E3-13 | E/COWH | 10" | 1200 | 1209 | | 360 | 355 | NA | NA | NA | NA | . 75 |
| 4 | E3-15 | E/COWH | 10" | 1200 | 1265 | * | 360 | 359 | NA | NA | NA | NA | . 83 |
| 6 | E3-16 | E/COWH | 10" | 1200 | 1260 | * | 360 | 360 | NA | NA | NA | NA | .79 |
| 5 | D3-17 | E/COWH | 10" | 800 | 850 | * | 350 | 350 | NA | NA | NA | NA | . 62 |
| TOTAL | | | | 7600 | 7853 |] | 2500 | 2482 | | | | | |
| REMARKS: | THE SYSTEM | STATIO | : IS AT | 1.55" | w.c. | | | | | | | | |
| NEBB TRS 1 | 16-2001 UOM | 1: IP | TEST DA | TE: 09/ | 18/2023 | REA | DINGS BY | M.WIL | LIAMS | | | PAGE: 2 | |

Report is not valid unless it is submitted with an accompanying NEBB Certification form stamped with a National Environmental Balancing Bureau Certification Seal

NFPA Test Certificate Forms

PROCEDURE

| Contracto | r's M | ateria | al and | Test Cer | tificate for | Abo | vegrou | nd Pip | oing | | | | |
|--|---|-------------------------|------------------------|---------------------------------|------------------------|-----------|---|-----------|-------------------|-------------------------|------------|--|--|
| PROCEDURE Upon completion their authorized as | | | | | | | | | | | or | | |
| A certificate shall contractor. It is un workmanship, or f | derstood | the owne | r's represe | ntative's signatu | ire in no way preju | dices any | claim again | | | | , poor | | |
| Property name | | | | | | | | Date | | | | | |
| Property address | | | | | | | | 1 | | | - | | |
| | Accepted by approving authorities (names) | | | | | | | | | | | | |
| | Address | | | | | | | | | | | | |
| Plans | Installat | tion confo | rms to acce | epted plans | | | | | Yes | | No | | |
| | | ent used plain dev | is approved iations | i | | | | | Yes | | No | | |
| | to locat | ion of con new equip | trol valves | equipment bee and care and m | | | | | Yes | | No | | |
| Instructions | Have co | opies of th | e following | been left on the | premises? | | | Yes | | | No | | |
| | 2000 | | mponents i | Yes | | 100 | □ No □ No | | | | | | |
| | 10000000 | are and r IFPA 25 | naintenance | e instructions | | | | ☐ Yes ☐ M | | | | | |
| Location of system | Supplie | s building | 5 | | | | | | | | | | |
| | | Make | | Model | Year of manufacture | | Orifice size | | Quantity | | ture | | |
| Sprinklers | | | | | | | | | | | | | |
| 95 | | | | | | | | | | | | | |
| Pipe and fittings | Type of | | | | | | | | | | | | |
| | | | | eres es 137 | | | | | time to op | | | | |
| Alarm valve or | Type | | | Alarm device Make Model | | | through test connect Minutes | | ection Seconds | | | | |
| flow indicator | | 71 | | | | | | Williates | | Seconds | | | |
| | Dry valve | | | | | | | Q. O. D. | | | | | |
| | Make | | | Model | Serial no. | | Make | | Model | | Serial no. | | |
| Dry pipe | Time to trip through test connection ^{a,b} | | gh test | Water | Air pressure | | Trip point reached test outlet ^{a,b} | | ched | Alarm operated properly | | | |
| operating test | | Minutes | Seconds | psi | psi | | psi | Minutes | Seconds | Yes | No | | |
| | Without Q.O.D. With Q.O.D. | | | | | | | | | | | | |
| | If no, ex | plain | | 7 | | | | | | 1 | | | |
| © 2015 National F | ire Protec | tion Asso | ciation | | | | | | NF | PA 13 (p. | 1 of 3) | | |

| | r work, inspection and tests shall be made by the contractor's representative and defects shall be corrected and system left in service before contractor's personn | |
|---------------------------------|---|---|
| contractor. It is und | e filled out and signed by both representatives. Copies shall be prepared for app lerstood the owner's representative's signature in no way prejudices any claim a ilure to comply with approving authority's requirements or local ordinances. | |
| Property name | | Date |
| Property address | | |
| | Accepted by approving authorities (names) | |
| | Address | |
| Plans | Installation conforms to accepted plans | ☐ Yes ☐ No |
| | Equipment used is approved If no, state deviations | ☐ Yes ☐ No |
| | Has person in charge of fire equipment been instructed as to location of control valves and care and maintenance of this new equipment? If no, explain | ☐ Yes ☐ No |
| Instructions | Have copies of appropriate instructions and care and maintenance charts been left on premises? If no, explain | Yes No |
| Location | Supplies buildings | |
| Underground pipes and joints | Pipe types and class Pipe conforms to standard Fittings conform to standard If no, explain | Yes No |
| | Joints needing anchorage clamped, strapped, or blocked in accordance with standard If no, explain | Yes No |
| Test description | Flushing: Flow the required rate until water is clear as indicated by no collectic hydrants and blow-offs. Flush in accordance with the requirements of 10.10.2. Hydrostatic: All piping and attached appurtenances subjected to system work (13.8 bar) or 50 psi (3.4 bar) in excess of the system working pressure, whiche (0.34 bar) for 2 hours. Hydrostatic Testing Allowance: Where additional water is added to the system the amount of water shall be measured and shall not exceed the limits of the fe Le testing allowance (makeup water), in the control of the control of the feet of the control of the contro | 1.3. ing pressure shall be hydrostatically tested at 200 psi ing pressure shall be hydrostatically tested at 200 psi ever is greater, and shall maintain that pressure ±5 psi to maintain the test pressures required by 10.10.2.2.1, ollowing equation (for metric equation, see 10.10.2.2.6): in gallons per hour |
| | New underground piping flushed according to standard by (company) If no, explain | ☐ Yes ☐ No |
| Flushing | | what type opening Irant butt |
| tests | Lead-ins flushed according to standard by (company) If no, explain | Yes No |
| | ☐ Public water ☐ Tank or reservoir ☐ Fire pump ☐ Y co | n what type opening onnection to flange spigot Open pipe |
| © 2015 National Fire | Protection Association | NFPA 13 (p. 1 of |

Contractor's Material and Test Certificate for Underground Piping

 ^a Measured from time inspector's test connection is opened.
 ^b NFPA 13 only requires the 60-second limitation in specific sections.

NFPA 72 Record of Completion Form

SYSTEM RECORD OF COMPLETION

This form is to be completed by the system installation contractor at the time of system acceptance and approval.

| | Insert N/A | eeded to provide a more complete and/or clear record. in all unused lines. |
|---------------------------|-----------------------------------|--|
| | | ations as necessary to provide a complete record. |
| Form C | Completion Date: | Supplemental Pages Attached: |
| . PROPERTY INFORM | MATION | |
| Name of property: | | |
| Address: | | |
| Description of property | r: | |
| Name of property repre | esentative: | |
| Address: | | |
| Phone: | Fax: | E-mail: |
| 2. INSTALLATION, SEF | RVICE, TESTING, AND MONITO | ORING INFORMATION |
| Installation contractor: | : | |
| Address: | | |
| Phone: | Fax: | E-mail: |
| Service organization:_ | Service According | |
| Address: | | |
| Phone: | Fax: | E-mail: |
| Testing organization: _ | | 3 2 |
| Address: | | |
| | | E-mail: |
| Effective date for test a | and inspection contract: | ALL CONTROL DE CONTROL |
| | 5 | |
| Address: | | |
| Phone: | Fax: | E-mail: |
| Account number: | Phone line ! | 1: Phone line 2: |
| Means of transmission | | 3800: 57 1078-15900 (1875-1590) (1875-1590 |
| Entity to which alarms | are retransmitted: | Phone: |
| | | |
| . DOCUMENTATION | 1.1 | 10.00 |
| On-site location of the | required record documents and sit | te-specific software: |
| . DESCRIPTION OF S | YSTEM OR SERVICE | |
| This is a: New sys | stem Modification to existing | g system Permit number: |
| NFPA 72 edition: | | |
| 4.1 Control Unit | | |
| | | Model number: |
| | | |
| 4.2 Software and Fir | | |
| Firmware revision nun | nber: | |
| 4.3 Alarm Verificatio | on . | This system does not incorporate alarm verification |
| Number of devices sub- | ject to alarm verification: | Alarm verification set for seconds |

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SYSTEM RECORD OF COMPLETION (continued) 9. NOTIFICATION APPLIANCES Type Quantity Description Audible Visible Combination Audible and Visible 10. SYSTEM CONTROL FUNCTIONS Type Quantity Hold-Open Door Releasing Devices HVAC Shutdown Fire/Smoke Dampers Door Unlocking **Elevator Recall** Elevator Shunt Trip 11. INTERCONNECTED SYSTEMS ☐ This system does not have interconnected systems. ☐ Interconnected systems are listed on supplementary sheet _____. 12. CERTIFICATION AND APPROVALS 12.1 System Installation Contractor This system as specified herein has been installed according to all NFPA standards cited herein. Printed name: ____ Organization: Title: 12.2 System Operational Test This system as specified herein has tested according to all NFPA standards cited herein. Printed name: _____ Date: __ Title:__ Organization:____ Phone: 12.3 Acceptance Test Date and time of acceptance test:_ Installing contractor representative: Testing contractor representative:

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NFPA 72 (p. 1 of 3)

Property representative:___ AHJ representative:

NFPA 72 (p. 3 of 3)

Roofing Inspectors Final Report



FROEHLING & ROBERTSON, INC.

Engineering Stability Since 1881

1734 Seibel Drive, NE Roanoke, Virginia 24012-5624 T 540.344.7939 I F 540.344.3657

Project No. 62S-0207

October 10, 2016

Virginia Military Institute Institute Planning Office 320 South Institute Hill Lexington, VA 24450

Attention: COL Keith Jarvis (jarvistk@vmi.edu)

Subject: Summary of Roofing Inspections and Survey

Corps Physical Training Facility - Phase 1

Lexington, Virginia

Dear COL Jarvis:

The purpose of this report is to summarize the results of the roofing inspections and survey performed on the low slope roof for the Corps Physical Training Facility - Phase 1 (CPTF-1).

Project Information

The CPTF-1 roof consists of three separate roofing systems. The main roof or barrel roof is a standing seam metal roof that consists of Fabral Stand N Seam®, 16 in wide, 22 gauge, metal panels. The metal roof covers an area of approximately 90,000 square feet (sf) when measured in a plan view. The low slope roofing system consists of two roofs located on the north and west perimeters of the CPTF and cover an area of approximately 21,000 sf. The low slope roofing system consists of a 60-mil reinforced, white, PVC membrane, over polyiso insulation which was fully adhered to a concrete deck. The third roofing system consists of a Carlisle Hydropak Roof Garden, vegetative roof, system and gravel setting beds. The vegetative roof system was installed over the PVC membrane roofing system. The roofing contractor was Don Largent Roofing. Installation of the metal roofing system began on December 30, 2015. Installation of the single membrane (PVC) roof system began on July 8, 2016 and was completed on September 9, 2016. During this period F&R's roofing inspector was on site to observe the installation of both metal and PVC roofing systems. In addition, F&R personnel visited the site to verify the completion of the vegetative roofing system on October 3 and 5, 2016. The installation of the vegetative roof was completed on October 4, 2016. Daily field reports summarizing roofing activities were issued by F&R during the installation of the metal and PVC roof systems. Pictures showing the completed roof have been included in this report.

GOLDEN SEAL TOTAL ROOFING SYSTEM WARRANTY



EDGE-TO-EDGE WITH LIMITED COVERAGE FOR HAIL AND ACCIDENTAL PUNCTURES

WARRANTY NO.:
BUILDING OWNER:
NAME OF BUILDING:
BUILDING ADDRESS:
DATE OF COMPLETION OF THE CARLISLE TOTAL ROOFING SYSTEM:
DATE OF ISSUE:

Carlisle Roofing Systems, Inc., (Carlisle) warrants to the Building Owner (Owner) of the above described building, that; subject to the terms, conditions, and limitations stated in this warranty, Carlisle will repair any leak in the Carlisle Roofing System (Carlisle Total Roofing System) installed by a Carlisle Authorized Roofing Applicator for a period of — years, commencing with the date of Carlisle's acceptance of the Carlisle Total Roofing System installation. However, in no event shall Carlisle's obligations extend beyond — years, subsequent to the date of substantial completion of the Carlisle Total Roofing System. See below for exact date of warranty expiration.

The Carlisle Total Roofing System is defined as the following newly installed Carlisle brand materials; Membrane, Flashings, Adhesives and Sealants, Insulation, Cover Boards, Fasteners, Fastener Plates, Fastening Bars, Edge Metal, Insulation Adhesives and any other newly installed Carlisle brand products utilized in this installation.

TERMS, CONDITIONS, LIMITATIONS

- 1. Owner shall provide Carlisle with written notice via letter, fax or email within thirty (30) days of any leak in the Carlisle Total Roofing System. Owner should send written notice of a leak to Carlisle's Warranty Services Department at the address set forth at the bottom of this warranty. By so notifying Carlisle, the Owner authorizes Carlisle or its designee to investigate the cause of the leak. Should the investigation reveal the cause of the leak to be outside the scope of this Warranty, investigation and repair costs for this service shall be paid by the Owner.
- 2. If, upon inspection, Carlisle determines that the leak is caused by a defect in the Carlisle Total Roofing System's materials, or workmanship of the Carlisle Authorized Roofing Applicator in installing the same, Owner's remedies and Carlisle's liability shall be limited to Carlisle's repair of the leak. Carlisle shall have sole responsibility in determining the method of repair of the area.
- 3. This warranty shall not be applicable if, upon Carlisle's inspection, Carlisle determines that any of the following has occurred:
- (a) The Carlisle Total Roofing System is damaged by: natural disasters, lightning, fire, insects, animals, windblown debris or objects, earthquakes, tornados, hail, hurricanes, and winds of (3 second) peak gust speeds of -- mph or higher measured at 10 meters above ground and hail greater than -- inches in diameter (as reported by the National Climatic Data Center). Carlisle shall not be responsible for any changes in appearance or surface imperfections caused by hail incidents.
- (b) Loss of integrity of the building envelope and/or structure, including, but not limited to, partial or complete loss of roof decking, wall siding, windows, roof top units, doors or other envelope components; or
- (c) All associated building components, including but not limited to the deck substrate, joists, columns and foundation, must also meet wind speed design requirements.
- (d) The Carlisle Total Roofing System is damaged by any acts, accidents, misuse, abuse, vandalism, civil disobedience or the like, however, this warranty does provide limited coverage to provide for the repair of any leaks in the Carlisle Total Roofing System caused by accidental punctures (but not including punctures caused by snow removal or other trades during new construction). The extent of this limited warranty to repair punctures shall not exceed 0 man hours per year during the life of the



David Farris Risk, Safety, & Resilience 29 May 2024

Emergency Management & Fire Safety

Prepares the campus community for potential emergency and manages the response operations. Inspects and maintains fire and life safety systems.

Employee Health & Well-Being

Offers medical services to Mason employees (vaccines, travel consultation, physicals) and manages the institution Medical Surveillance Program.

Environmental Health & Safety

Manages laboratory safety, occupational safety, and environmental compliance programs. Offers training, conducts inspections, and supports university research.

Operational Risk Management

Administers the state Risk Management Plan, manages the Accident and Incident Program, Driver Safety Program, and university insurance plans and procedures

Enterprise Risk Management

Identifies threats and opportunities that affect the achievement of the University's mission and strategic objectives and develops plans/solutions to address challenges



Fire Safety Systems Inspections/Testing

Table 2: Fire Suppression Equipment Testing

Documented in Mason's Fire Safety Plan

- Fire alarm system
- Sprinkler system
- Fire pumps
- Backflow preventers
- Standpipes
- Fire and Roll-up Doors
- Kitchen hood systems

| Equipment | Inspection Frequency | Resp. Party | Testing Frequency | Resp. Party |
|---|-----------------------------------|--------------------------|--------------------------|-----------------|
| Automatic Fire Doors/Curtains/ Rollup Doors | Semi-Annually | Facilities Management | Annually | EHS |
| Back Flow Preventers | Monthly | EHS | Annually | EHS |
| Commercial Cooking Hood Systems | As Necessary. Dependent on Use | EHS | Semi-Annually | EHS |
| Control Valves (sealed or unmonitored) | Weekly | EHS | Quarterly | EHS |
| Control Valves (locked or tampered) | Monthly | EHS | Quarterly | EHS |
| Dry / Pre-action systems | Monthly | EHS | Annually | EHS |
| Elevator Hoistways | | | Annually | EHS |
| Emergency Exit Signs | | | Monthly | Occupant |
| Fire Department Connections | Quarterly | EHS | 5- Year | EHS / Fire Dept |
| Fire Alarm Systems | Weekly | Facilities Management | Annually | EHS |
| Fire Extinguishers | Monthly | EHS | Annually | EHS |
| Fire Pumps | Weekly / Monthly | EHS | Annually | EHS |
| Internal Pipe Inspection | | | 5-Year | EHS |
| Pressure Gauges | Monthly | EHS | 5-Year | EHS |

Safety Inspections

- Occupant issues:
 - o Blocked egress
 - Storage
 - Obstructed sprinkler heads
 - Improper wiring
 - Appliances
- Damage to life safety systems
- Missing fire extinguishers
- Post Occupancy walk through
- Building orientation tours for First Responders



Safety Concerns During Construction & Renovation

Outside of construction areas

- Crane lifts/swings
- Environmental impacts
- Impacts community/pedestrian/employee/student safety
- Impact on university operations

Accident & Incident Investigations

- Involving Mason employees, students, or visitors
- OSHA reportable incidents
- Assist third parties as necessary to conduct internal/external investigations

Large Events

- Assistance with occupancy calculations
- Ingress and egress safety
- Help stakeholders comply with OUBO, HECO, EHS, and University standards, procedures, and policies
- Crowd Manager and Fire Safety Training
- Identification of required permits
- Observed fire safety issues





Asbestos and Lead

EHS Conducts Inspections, Testing, and/or Sampling

- Small projects performed by Mason employees
- Small projects that require a contractor (e.g., pulling cable, installing fixtures, or repairs) that are not part of a larger renovation/construction project.
- Examples floor in office suite, telecom installation, light fixture repair.

Project/Contractor Conducts Testing and/or Sampling

- Renovation or construction projects performed by contractors
- Examples projects that required demolition, space renovations, building system upgrades.

Consultation

- Initial investigation into potential lead or asbestos issues
- Understand potential impacts on campus operations
- Scheduling projects and engaging stakeholders
- Review designs and project plans
- Assess safety risks
- Required training
- Emergency response planning





Questions

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LAND DEVELOPMENT PROGRAM PALD PROCESS OVERVIEW

By Zhongyan Xu/Brenda Claudio



OUBO Safety Month

ROLES AND RESPONSIBILITIES

- ✓ Serve as the VSMP authority on behalf of DEQ for land disturbing projects and ensure compliance with the VAR10 Permit.
 - Manage, implement, improve, and evaluate the GMU Annual Standards and Specifications for ESC and SWM
 - Oversee site inspections and compliance with the VAR10 Permit

VSMP: Virginia Stormwater Management Program

DEFINITION OF LAND DISTURBANCE

- 9VAC25-870-10. Definitions
- "a manmade change to the land surface that potentially changes its runoff characteristics including clearing, grading or excavation, except that the terms shall not include those exemptions specified in 62.1-44.15:34 of the Code of Virginia"

VSMP: Virginia Stormwater Management Program

MASON PERMIT APPLICATION

- Mason Land Disturbance Permit: Local Permit
- Land disturbance > 2,500 sq ft
- PALD Process in e-builder

DEQ PERMIT APPLICATION

- Construction General Permit: State Permit
- Land disturbance > 1 acre
- Registration Statement, Fee and other.

GEORGE MASON UNIVERSITY

MASON VSMP PROGRAM

Plan Review and Permit Application

Apply to all design, construction, and maintenance activities on Mason

- Start the PALD process in ebuilder as soon as concept stage
 - ✓ PM initiates the process
- Mason LD will determine if a LD permit is required or not.
- If the Mason LD permit is not required



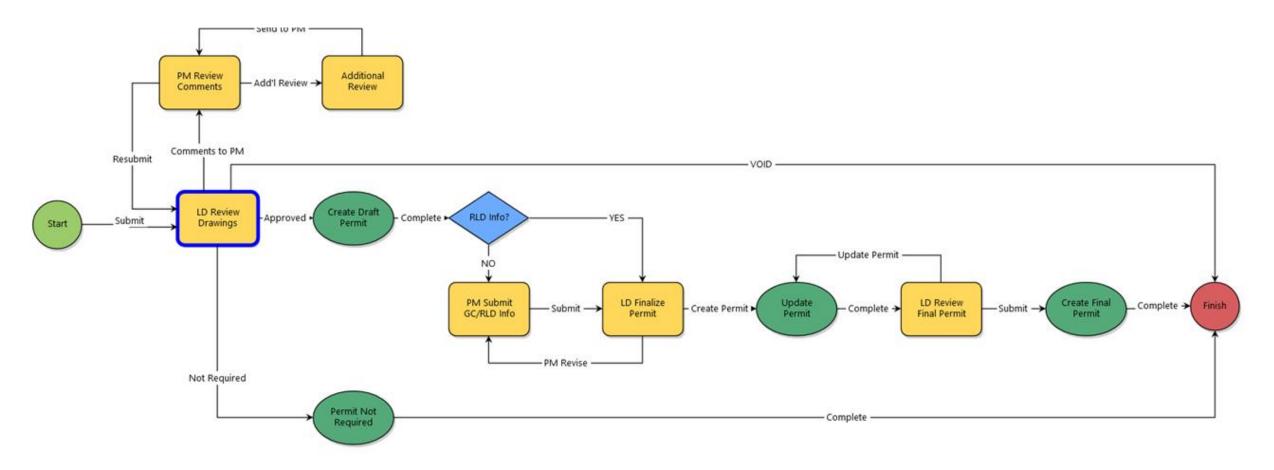
Land Disturbance Permit NOT REQUIRED

Date: March 31, 2021
Annual Standards and Specification Edition: 2020 Version

MASON VSMP PROGRAM

- Plan review (e-builder PALD)
 - ✓ Iterative
 - Need to build the review time into project schedule
 - ✓ Detailed submittal requirements and checklist in AS&S (Section 4 and Appendix C)
 - AS&S is reviewed and approved by DEQ annually
 - Complaint with Virginia Law and Regulations
 - Available at stormwater.gmu.edu
 - ✓ A stand-alone submittal package for site development, ESC, SWM, SWPPP

E-BUILDER PALD PROCESS



QUESTIONS? CONTACTS

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- Brenda Claudio Senior Environmental Specialist bclaudio@gmu.edu
- Ebuilder Support <u>ebuilder@gmu.edu</u>



Alex Iszard
Facilities: Planning,
Design, & Construction
29 May 2024

Planning, Design, & Construction (PDC)

WHO WE ARE

 Planning, Design, and Construction is a team of architects, engineers, project managers, and inspectors. We manage the full life-cycle of a variety of projects ranging from wayfinding signage to new buildings.







DESIGNING FOR THE PRESENT

The overall appearance of campus, the ability for people to find their way around, and the functionality and comfort of our furniture all contribute to a positive experience for our students, employees, and visitors.

Projects in this area can be as small as office furniture for a new professor or as large as planning the interior design for a new building. Signage projects are similarly wide-ranging and include everything from a new directory sign in a lobby to the renaming of an entire building (we did two of these last year). This group manages design standards on campus, ensuring aesthetic consistency and cohesion university-wide.

WHAT WE DO

- · Environmental Engineering
- Interior Design
- Move Coordination
- Project Inspections
- Project Management
- Signage and Graphics

Facilities IT



IT Support for Facilities Staff

HOME / IT SUPPORT FOR FACILITIES STAFF





MISSION POSSIBLE MAY 2024

buildingsafetymonth.org



OFFICE OF UNIVERSITY BUILDING OFFICIAL

Building Safety Month is an international campaign celebrated in May to raise awareness about building safety.

For more than 43 years, Building Safety Month has reinforced the need for the adoption of modern, regularly-updated building codes, and helps individuals, families and businesses understand what it takes to create safe and sustainable structures.

In support of Building Safety Month George Mason's Office of University Building Official is hosting the following online training from 11:30 a.m. to 12:30 p.m.:

May 15, 2024 Building Code Updates and American Disabilities Act Compliance

May 22, 2024 Roofing and Special Inspections

May 29, 2024 Question & Answer Session with a Panel of Mason's Building, and Compliance Stakeholders

TO ATTEND REGISTER ON OUR WEBSITE OR SCAN THE OR CODE

OUBO CONTACT INFORMATION

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