



FIELD OBSERVATION #23

Project: Washington Fire Station
Washington, Iowa

Date: October 16, 2019
Time: 1:00 p.m.

Weather: Overcast
Temperature: 51°

Present:	Brent Hinson	City of Washington
	Tom Wide	City of Washington
	Keith Henkel	City of Washington
	Mike Fleming	Bushong Construction
	Tyler Luttenegger	MODUS
	Kristofer Orth	Farnsworth Group, Inc./ Design Alliance, Inc.

The purpose of this field observation was to conduct the Substantial Completion Review.

1. It was determined the work is not sufficiently complete for the project to be considered Substantially Complete. Contractors were still working on multiple items throughout the project. Many items remain incomplete or in progress.
2. The group reviewed the project with Mike Fleming, who generated a handwritten list for contractors to utilize to complete the work.
3. It was noted the urinals in Restroom [115] and Restroom [116] were installed at 2'-0" from floor to rim. Kristofer noted ADA requires urinals to be mounted at 1'-5" maximum from the floor to the rim. Chief Wide acknowledged he had a conversation with the plumber and requested they be installed higher. Kristofer recommended the urinals be installed at the height listed in the construction documents and Brent Hinson agreed. Tyler stated he will review to determine if an alternative fixture may be available which could provide a compliant installation.
4. Kristofer noted the control valve and head of the showers, as well as the shower seats, in Restrooms [115] and [116] are installed on the opposite wall for ADA compliance. The horizontal shower grab bar is on the correct wall. The vertical shower grab bar needs to be moved along with the control valve, shower head and seat.
 - a. Subsequent to the meeting Kristofer conveyed an exception in the 2010 ADA requirements which allows 50% of "clustered" toilet & shower rooms to be accessible. The City of Washington is considering if they will accept this suggestion.
5. Chief Wide expressed concern regarding the lighting levels in the Apparatus Bay and the Gear area. Tyler agreed to investigate to determine what the design light levels were intended to be.
6. Chief Wide agreed the light switch for the Gear Room could be relocated to the opposite side of the masonry wall, so it is not within the gear locker on the southwest corner of Gear Room [117].
7. It was noted the horizontal grab bar in Restroom [113] shall be mounted on the north and east walls in accordance with Plan Drawing 5/A4.1 and 15 & 16/A2.2.
8. Chief Wide requested the A/V monitor on the south wall in Training [103] be raised so the bottom of the monitor is at +48".
9. No carpeting has been installed throughout the project.

10. The gypsum board walls and ceilings have not been finished or painted in Vestibule [101].
11. The Room Finish Schedule notes that walls in Mech/Elec [106] and Water Sprinkler [114] are to be painted.
12. Snow guards and metal walkways have not been installed on the roof.
13. The striping installed on the floors in the Apparatus Bay was peeling off. Contractors indicated the concrete floor sealer had been installed and no other preparation work had been completed where the striping occurred.
14. Chief Wide asked if ¼" steel plate could be installed on the walls in Storage [123] to resolve the structural issues in lieu of opening up and reinforcing & grouting the CMU walls.
15. Chief Wide noted the triple-basin sink bowls are potentially blocked behind the commercial cooler and freezer units. It was determined larger sink bowls with a smaller drain board were provided than what was indicated in the drawings. Chief also noted the cooler and freezer units are 7' high and do not currently fit between the Captive Air Hood Utility Cabinet and the triple-basin sink unit. Chief agreed to investigate restocking the commercial cooler and freezer units and purchasing a combination unit, which would only be 4'-6" long and would fit between the utility cabinet and the triple-basin sink. He will also investigate a smaller profile caster for the units.
16. Chief Wide inquired if vertical blinds are to be provided on the interior Type C windows in Fire Chief [107]. Kristofer indicated he did not believe they were included in the construction documents.
17. General cleaning needs to occur prior to Substantial Completion.
18. MODUS generated the attached Punch List #1 of Mechanical and Plumbing items to be resolved.
19. Tyler indicated the electrical work is not sufficiently complete to generate a Punch List at this time.

Respectfully Submitted,

FARNSWORTH GROUP, INC. formerly Design Alliance, Inc.



Kristofer J. Orth, AIA
KJO:bv

Cc: Brent Hinson, City of Washington (for distribution)
Nathan Kress, PE, kpff
John Bushong, Bushong Construction
Job Book

Steve Soupier PE, Fox Engineering
Tyler Luttenegger PE, MODUS
Mike Fleming, Bushong Construction

Enclosures

Project:	City of Washington Fire Station Phase 2	Project Number:	17-113	Date:	October 28, 2019
To:	Design Alliance				
From:	Tyler J. Luttenegger, P.E.	Observation Date:	October 17, 2019		

Note { It is the contractor's responsibility to provide a completely finished, properly operating, mechanical/electrical system, complying with all law and safety requirements, even if not specifically mentioned in this checklist.

General Items:

- Submit as-built drawings as required by the specifications.
- Submit operation and maintenance manuals for mechanical and plumbing as required by the architectural specifications.
- Instruct owner in operation and maintenance of mechanical and plumbing as required by the architectural specifications.
- Fire caulk and seal all rated wall and floors to maintain fire rating. Refer to state fire marshal's comment for additional requirements.
- Ensure equipment warranty information has been completed and given to the owner as required by the architectural specifications.

Mechanical Items:

- Adjust sprinkler head cover plates to conceal rough-in opening in ceiling tile. Replace ceiling tile as required.
- Clean all plumbing fixtures per Specification Section 22 4000.
- Clean out all sanitary sewers to remove any debris prior to substantial completion.
- Submit balancing report as per Specification Section 23 0593.
- Clean all unit cabinets and clean filters per Specification Section 23 8101.

Plumbing Items

General:

- Hot water handles on faucets need to be adjusted. They turn ahead of water coming out.
- All piping needs to be labeled per the specifications.
- All gas unit heater condensate neutralization kits are missing.
- Verify that all PVC sanitary and vent piping located in air plenums above ceilings is fully insulated.

Kitchen #104:

- Remove protective cover from metal grid strainer on sink S-1.
- Natural gas emergency shutoff valve and associated cabinet are missing. See note 19 on P1.1.
- Hot and cold water piping located underneath sink S-2 needs to be insulated.

Restroom #115 & 116:

- Urinals are not installed at ADA height. Urinals shall be lowered to ADA height.
- Showers do not meet ADA requirements. Adjust showerhead, controls and seat to meet ADA requirements. Showerhead and controls shall be on East wall.

Punch List #1 – (Mechanical Only)

Mech / Elec #106:

- Hot water recirculation pump HCP-1 is not wired.
- Repair section of missing insulation on refrigerant piping serving furnace F-2. See photo on right.



Gear Room #117:

- Contractor to verify what the intent for this section of pipe is. See photo on right.



Apparatus Bay #120:

- Owner furnished, contractor installed pressure washer hose missing.
- Condensate pipe serving unit heater near south wall needs to be supported properly from structure above. It is currently being supported by the adjacent unit heater. See photo Unit Heater Condensate Drain.
- Stainless steel drain pan and associated condensate drain piping serving mini-split condensing unit MSCU-1 is missing.



Decon / Hose Room #124:

- 4" standpipes serving Owner furnished equipment not 4 feet tall as noted on the contract documents.

Storage #201:

- Floor penetration around vent on west side of room needs to be patched to match pipe size.

Mechanical Items

Vestibule #101:

- Electric unit heater ECUH-1 and associated thermostat are missing.

Kitchen #104:

- Jelly jar lights in kitchen hood are missing.

Mech / Elec #106:

- Furnace F-3 is leaking air between the furnace and coil sections on the front side.

Sleeping Room #112:

- Supply diffuser missing.

Apparatus Bay #120:

- Verify that roof level temperature sensors have been installed for the high-volume low speed fans.
- Verify that the high-volume low speed fans have been integrated into the fire alarm system.
- Northern most vehicle exhaust rail on the east side is missing the end device on the hose.
- Vehicle exhaust rail is missing elbow connection from hard duct to flexible hose connection on middle bay on East side.
- Two (2) sidewall gas unit heater flues on the south wall and one (1) gas unit heater flue on the east wall need to be relocated so that they are a minimum of 10 feet away from outside air intakes. Existing terminations can still be used for intake to prevent having to patch exterior façade and a new penetration, preferably a matching termination, can be used for exhaust.

Air Room #121:

- Thermostat serving exhaust fan EF-4 not installed.

Decon / Hose Room #124:

- Dryer exhaust ducts and associated thru-wall penetrations are missing.

Wash Bay #126:

- Splash guard is missing for the gas detection sensors located on the south wall.
- Verify that manual control switch for exhaust fan EF-1 is installed.

Roof:

- Gas pipe penetration serving make-up air unit MAU-1 is located in section of roof panel. The roof panels are flexible, and foot traffic might loosen the seal around the pipe over time.
- All equipment roof curbs have a piece of metal on the up-slope side. Verify that up-slope side of curb is watertight. See photo Equipment Curb.
- Connection point of vehicle exhaust ductwork to roof curb appears to be sealed with tape. Connection needs to be revised to be as shown in Detail 4 on Sheet M5.1 of the contract documents. See photo Equipment Curb.