

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

Eastern Region Office

4601 North Monroe St., Spokane, WA 99205-1295 • 509-329-3400

June 17, 2024

Leah Rohan, Environmental Engineer Public Works Dept. City of Walla Walla 55 E. Moore Street, Walla Walla, WA 99362

Re: Stormwater Management at the City of Walla Walla Post Office and 106 N 2nd Ave Buildings:

Site Name: Chevron Stillwater Holdings
Site Address: 7 East Rose Street, WA 99362

Cleanup Site ID: 16913Facility/Site ID: 70525886

Dear Leah Rohan:

On May 30, 2024, the Department of Ecology (Ecology) hydrogeologist Christer Loftenius visited the US Post office located on 2^{nd} Ave. The purpose of the visit was to understand the current roof stormwater management at this facility and if reported weather-related fluctuations of groundwater ingress in the adjacent 106 N 2^{nd} Ave (Building 106) basement could be caused by roof run-off entering groundwater.

The site visit consisted of the four tasks listed below:

- 1. Interview with Almadella Leader, postmaster
- 2. Interview with Matt White, custodian
- 3. Site inspection and identification of current stormwater conveyance system
- 4. Review of facility drawings (blueprints).

The visit to the post office revealed the following:

- Roof stormwater from the 1964 additions to the east of the main building appears to be collected in four roof drains and then diverted into a stormwater conveyance system that is routed through the basement wall (4-inch cast iron pipe) to the alley between the post office building and Building 106. According to a facility drawing (attached) this stormwater appears to discharge into a stormwater manhole in the 2nd Ave and Sumach St intersection. Note that the drawing predates the 2019 road work on 2nd Ave.
- Roof stormwater from the main post office/court likely discharges into a subsurface stormwater system running along 2nd Ave that according to a facility drawing (attached) converged into an 8-inch storm drain emptying into a stormwater manhole in the 2nd Ave and Sumach St intersection. Note that the drawing predates the 2019 road work on 2nd Ave.
- According to Matt White during the 2019 roadwork on 2nd Ave, the sewer line on the
 west side of the post office was blocked permanently and sewer backed up into the
 facility. The post office had to reroute the sewer line to a new outlet on 2nd Ave and
 Sumach St.
- Additionally, according to Matt White, when the post office had to close for vapor intrusion identified in the basement in September 2023, the configuration of the facility HVAC system was investigated. Matt thought the vapors originated somewhere from a crawl space in the southwest corner of the building facing 2nd Ave and Building 106.
- Stormwater from the loading dock canopy east of the 1964 facility extension likely discharges into two stormwater drywells on the post office hardtop backlot/vehicle yard. These two drywells likely collect stormwater from an approximate 26,000 sq. ft. area, including the loading dock canopy.

After a review of the post office drawings, drawings from Building 106, and drawings from the 2019 road construction work along the 2nd Avenue, the following conclusions were made:

- The last documented discharge point for roof stormwater from the post office building was a stormwater manhole in the 2nd Ave and Sumach St intersection (see attachments).
- The last documented discharge of roof stormwater from Building 106 was to the west toward 2nd Ave. It is unknown whether the stormwater was conveyed into the sanitary sewer or a separate stormwater sewer system (see attachments).
- During the 2019 road construction work the City had their contractor remove the stormwater manhole in the 2nd Ave and Sumach St intersection and install a new manhole. The contractor was instructed to plug incoming pipes with concrete. No

Leah Rohan June 17, 2024 Page 3

information was identified that of any stormwater drains were to be protected or rerouted from the old and removed manhole (see attachment).

The estimated area of the post office building including the 1964 extension is 20,000 sq ft, and the area of the Building 106 roof is approximately 6,000 sq ft, a total of 26,000 sq. feet. With an annual average precipitation in Walla Walla of approximately 15 inches (Walla Walla Conservation District map for 2021-2022), the total volume of rainwater collecting on the roofs is approximately 32,500 cu. ft. (243,100 gallons). If 10% is lost to evaporation then the total is approximately 218,000 gallons per year which is approximately 600 gallons per day. At this time, it is unknown where this stormwater ends up, whether it recharges to shallow groundwater or has been rerouted to a new discharge point elsewhere.

The post office backlot is of similar size (approximately 26,000 sq. feet); therefore, approximately 600 gallons of water likely enters groundwater from the two drywells in the post office back lot.

Ecology recommends the following action:

- 1. The City conduct a review of the drawings from the 2019 roadwork along 2nd Ave and other drawings from earlier work to determine whether the roof stormwater from the post office and Building 106 has been rerouted elsewhere.
- 2. If the City cannot identify the new discharge point(s) for the roof stormwater, that the current exit points for the roof stormwater from the post office and Building 106 be identified.
- 3. When the current roof stormwater exit points have been identified, conduct a video camera survey and a geophysical investigation to trace the route of the stormwater and the ultimate destination of the stormwater.
- 4. If the stormwater lines have been blinded or blocked and stormwater is discharging into groundwater, it is recommended that the lines be repaired and diverted to the current City stormwater conveyance system in 2nd Ave.

Leah Rohan June 17, 2024 Page 4

We appreciate your interest in this matter. If you have any questions or need additional information, please contact me at 509-385 8380 or e-mail me at christer.loftenius@ecy.wa.gov.

Sincerely,

Christer Loftenius, LG, LHG

the John the Life

Hydrogeologist

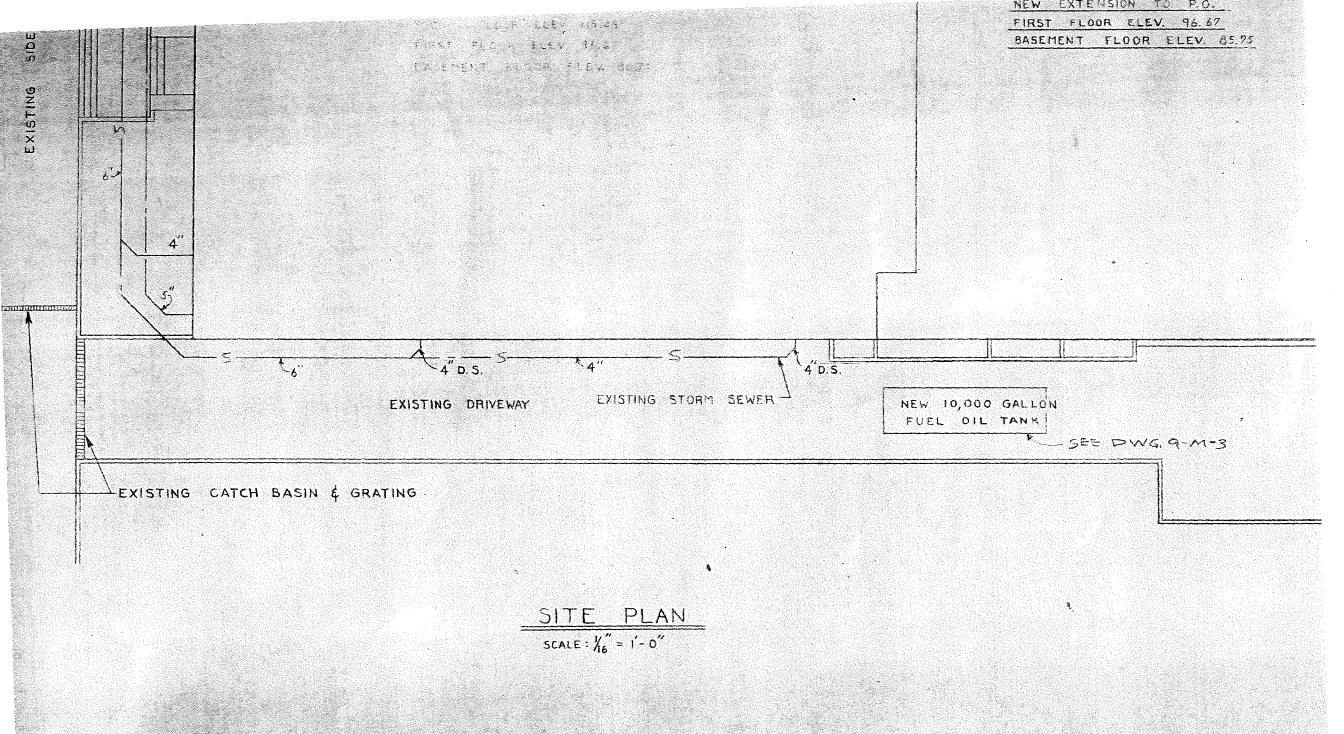
Attachments: Post Office drawings (1)

106 Building drawings (4)

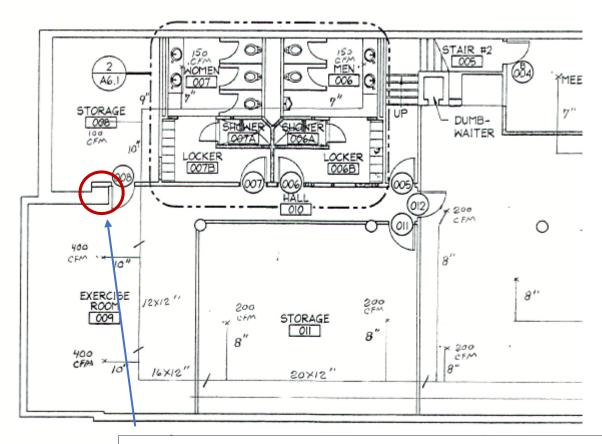
City drawings (1)

cc: Beth Kercher, Ecology

Nick Acklam, Ecology Ecology Site File



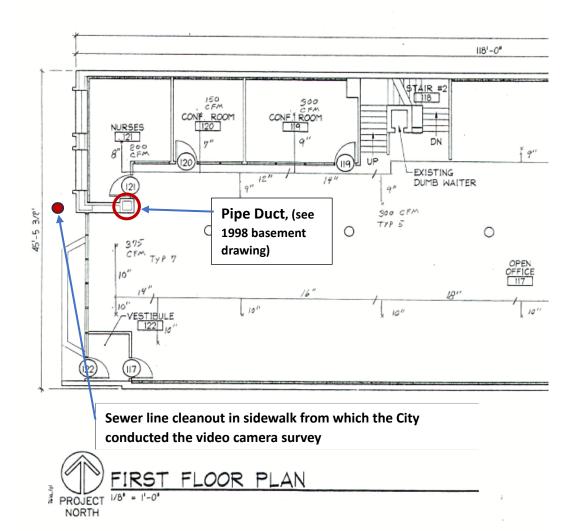
Pipe Duct from 1998 Renovation Drawings, Basement



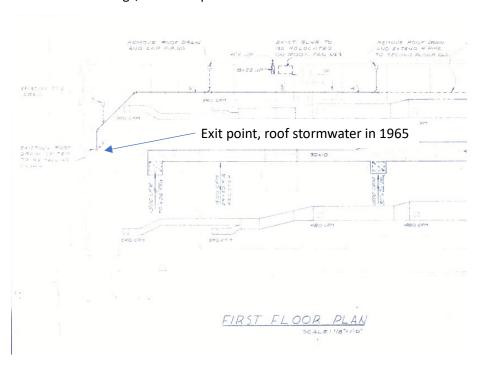
Pipe duct that in 1965 carried sewer and roof stormwater. Whether it is a single or dual sanitary/stormwater sewer system is unknown



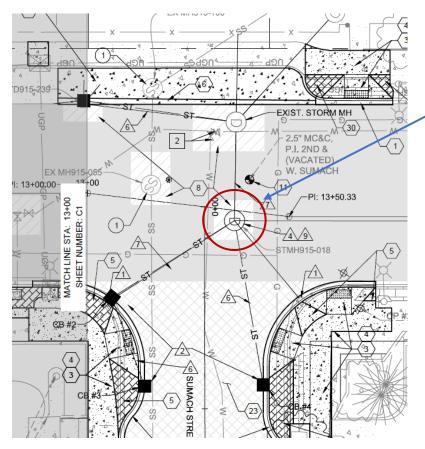
Pipe Duct from 1998 Renovation Drawings



1965 HVAC Drawings, first floor plan



2015 City Work in the 2nd Ave-Sumach Str Intersection



Check documentation what happened to the blinded pipes leading into the old manhole. Where any of the rerouted?

2015 Drawings Legend

STORM SYSTEM CONSTRUCTION NOTES:

,	Λ		
/	1	/	

REMOVE EXISTING CATCH BASIN. PLUG ABANDONED PIPE(S) WITH CONCRETE.



CATCH BASIN, SEE STD. PLAN 6-1 & 6-2



REMOVE EXISTING STORM MANHOLE. PLUG ABANDONED PIPE(S) WITH CONCRETE.



STORM PIPE 10" DIAM. PVC 3034 SDR 35



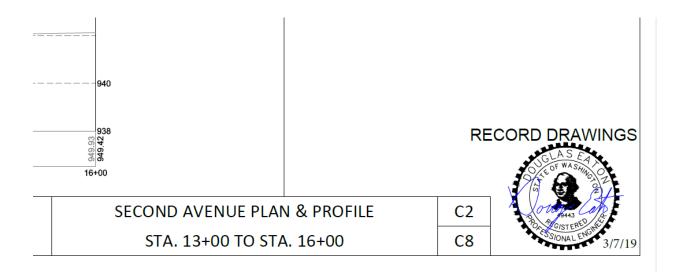
STORM PIPE 12" DIAM. PVC 3034 SDR 35



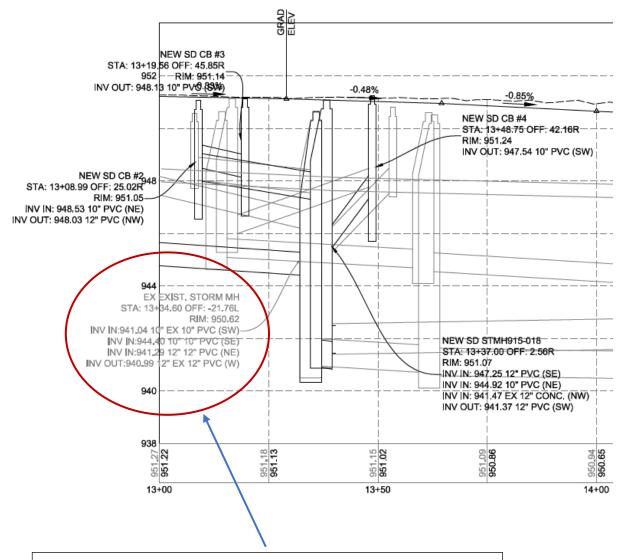
CONSTRUCT 60" STORM MANHOLE WITH MIN 24" SUMP BELOW INVERT WITH DEBRIS HOOD ON OUTGOING PIPE. SEE STD. PLANS 6-6.



CONSTRUCT 48" STORM MANHOLE (NO SUMP) PER STD. PLANS 3-1 & 3-2



Cross Section Manholes 2019 work on 2ns Ave-Sumach Str Intersection



What happened to the pipes leading into this stormwater manhole?