

MEMORANDUM

To: Mayor and City Council

From: J. Gregory Wilson, P.E., Senior Stormwater Engineer

Date: November 30, 2020

Subject: Approval of Funding for Dunwoody Police Department On-Site Car Wash System at City Hall

ITEM DESCRIPTION

Request for Approval of Funding for construction of an on-site car wash system for the Dunwoody Police Department. The facility will be located adjacent to the police evidence garage near the southwest corner of City Hall. The cost for this project, including a 10% contingency, is \$64,409.40.

BACKGROUND

Car washing and detailing has the potential to contaminate stormwater drainage systems and downstream water bodies with detergents, petroleum products, nutrients, heavy metals, toxic hydrocarbons, organic compounds, and suspended solids. Discharging vehicle wastewater into the storm system is a violation of the City's Illicit Discharge Ordinance. Although it would be more economical and efficient to wash their fleet on-site, the Dunwoody Police Department (DPD) is aware of these regulations and currently cleans their vehicles at a commercial car wash. After exploring various locations and design options, Public Works and DPD staff finalized a plan to install an on-site car wash station at City Hall.

The construction details for this facility include a gravity-flow collection system that will capture wash water, filter it through an oil-grit separator, and discharge it into the sanitary sewer system. The structure will also have a dual-valve shutoff device that will direct surface runoff into the existing storm drainage system when the unit is not in use. Southern Premier Contractors, Inc. (SPC), an on-call City contractor, has provided high quality finished asphalt and concrete work for the City on numerous projects and is considered by staff to be best suited for this high visibility project.

The design is in compliance with all stormwater and sanitary sewer regulations and was reviewed and approved by the DeKalb County Watershed Management Department. The projected start date for this project is in late December. If approved by Council, this project will be funded from the FY2020 Stormwater Repairs and Maintenance Budget.

RECOMMENDED ACTION

Staff recommends approval of \$64,409.40 in funding for the Dunwoody Police On-Site Car Wash System at City Hall.



Proposed location of trench drain across rear driveway



Landscaped island location of underground oil-grit separator unit



Southern Premier Contractors, Inc.

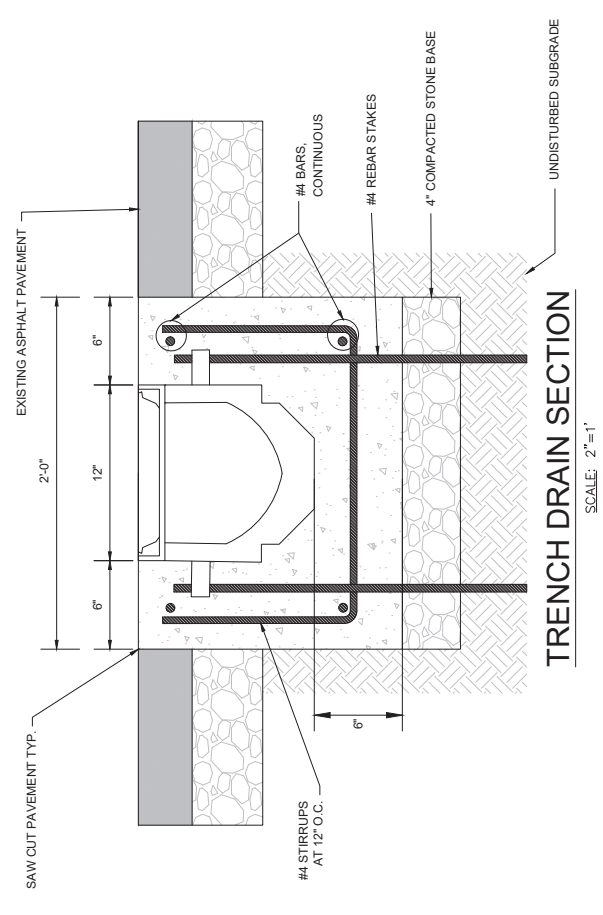
3951 Hidden Hills Dr
Gainesville, GA 30504

Estimate

Date	Estimate #
11/10/2020	DUN-376

Name / Address
CITY OF DUNWOODY 4800 ASHFORD DUNWOODY ROAD DUNWOODY, GA 30338

Description	Project
	DUNWOODY CAR WASH
	Total
PER DRAWINGS PROVIDED: SAWCUT/INSTALL TRENCH DRAIN AND MANHOLE ACROSS PARKING LOT WITH GREASE INTERCEPTOR TO SEPARATE STORMWATER FROM SEWER WHEN IN USE.	58,554.00
10% CONTINGENCY	5,855.40
Thank you for the opportunity to estimate this project.	Total \$64,409.40



TRENCH DRAIN NOTES:

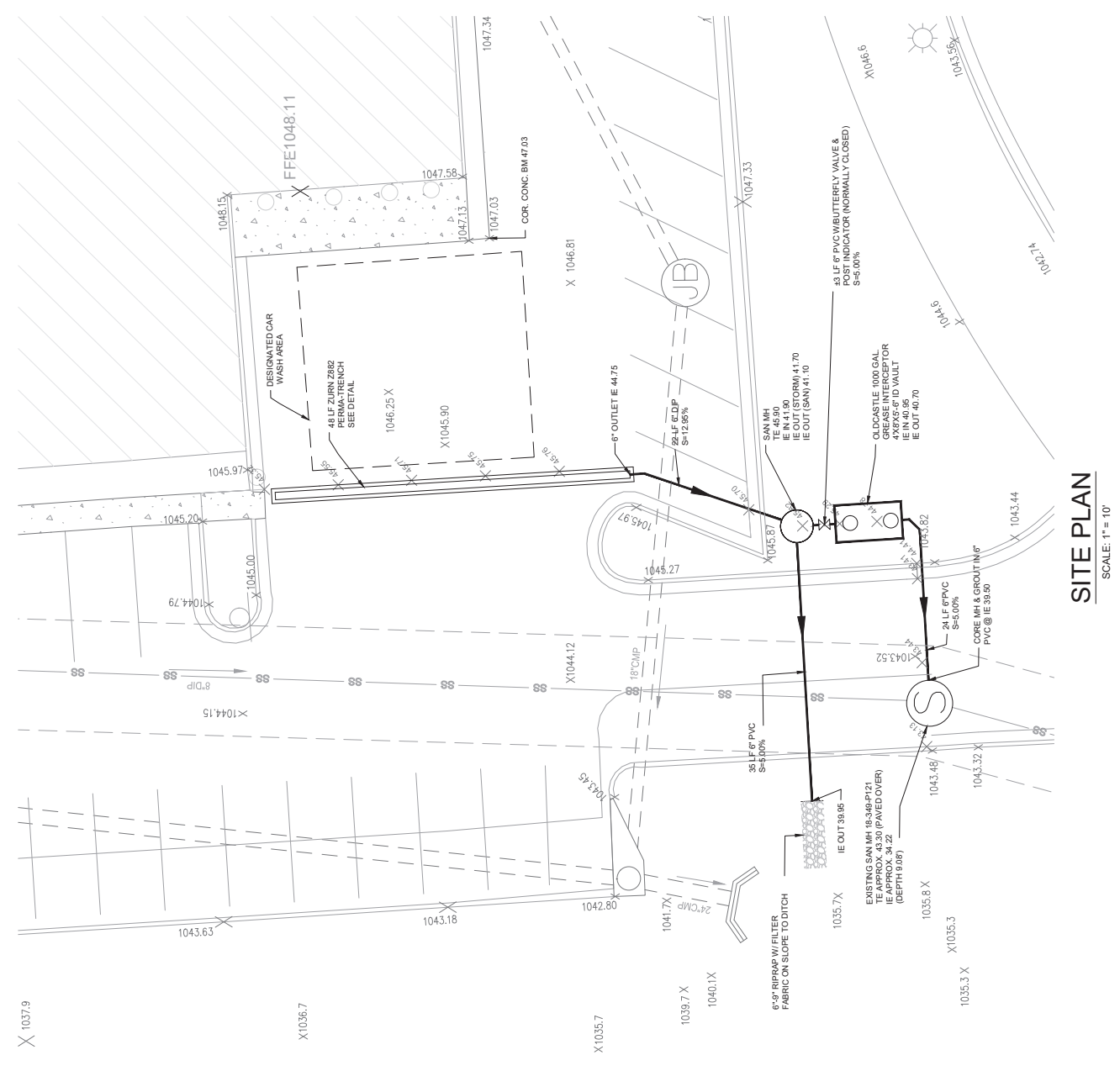
- TRENCH DRAIN SHALL BE ZURN Z882 PERMA-TRENCH HDPE 12" DRAIN SYSTEM WITH 25" THROAT & 1.04% BOW-IN SLOPE. PROVIDE 6" END OUTLETER FOR CURB CUT PAVEMENT. PROVIDE 12" HEAVY DUTY DUCTILE IRON GRATES, ADA COMPLIANT, 15.6 LB/FT., ZURN MODEL P12-ADA-USA.
- ALL REBAR SHALL BE GRADE 60.
- CONCRETE SHALL BE 4000 PSI @ 28 DAYS.
- VIBRATE CONCRETE TO REMOVE AIR VOIDS.

CAR WASH DRAINAGE SYSTEM OPERATION PROCEDURE

- THE CITY HALL CAR WASH DRAINAGE SYSTEM IS MADE OPERATIONAL WHEN A SINGLE VALVE IS OPENED. THIS VALVE MUST REMAIN NORMALLY CLOSED OTHERWISE SO THE TRENCH DRAIN AND PIPING SYSTEM CAN FUNCTION AS A STORM DRAIN DURING RAINFALL EVENTS. THIS VALVE MUST BE OPERATED AS INDICATED BELOW FOR THE CITY TO REMAIN IN COMPLIANCE WITH STORMWATER AND SANITARY SEWER ORDINANCES.
- CARS TO BE WASHED MUST BE IN THE DESIGNATED CAR WASH AREA TO ASSURE THAT ALL WASH WATER IS COLLECTED IN THE TRENCH DRAIN AND FLOWS INTO THE GREASE INTERCEPTOR. WASH WATER IS NOT PERMITTED TO ENTER THE STORM DRAIN SYSTEM OR TO DRAIN OFFSITE.
- PRIOR TO WASHING ANY VEHICLES, UNLOCK THE POST INDICATOR, ATTACH THE CRANK HANDLE TO THE TURNING NUT, AND OPEN THE VALVE BY TURNING THE HANDLE IN A COUNTER-CLOCKWISE DIRECTION UNTIL IT STOPS. THE POST INDICATOR WILL PROVIDE A VISIBLE INDICATION THAT THE VALVE IS OPEN. THIS WILL DIRECT ALL WASH WATER FROM THE TRENCH DRAIN INTO THE GREASE INTERCEPTOR AND THEN TO THE SANITARY SEWER. WASHING IS ALLOWED ONLY WHEN THE VALVE IS OPEN.
- WHEN CAR WASHING IS COMPLETE, THOROUGHLY RINSE THE PAVEMENT UNTIL ALL DIRTY OR SOAPY WATER HAS BEEN WASHED OFF THE PAVEMENT AND INTO THE TRENCH DRAIN. THEN RINSE OUT THE TRENCH DRAIN FROM THE UPSTREAM END TOWARD THE DOWNSTREAM END UNTIL THERE IS NO SOAPY WATER VISIBLE IN THE TRENCH DRAIN.
- WHEN ALL THE WATER HAS EMPTIED OUT OF THE TRENCH DRAIN, CLOSE THE VALVE BY TURNING THE CRANK HANDLE IN A CLOCKWISE DIRECTION UNTIL IT STOPS. THE POST INDICATOR SHOULD CONFIRM THAT THE VALVE IS CLOSED. PLACE THE CRANK HANDLE BACK IN ITS STORAGE POSITION AND LOCK THE VALVE. ANY WATER THAT RUNS INTO THE TRENCH DRAIN WHEN THE VALVE IS CLOSED WILL FLOW INTO THE STORM DRAINAGE CHANNEL ON THE FAR SIDE OF THE DRIVEWAY.

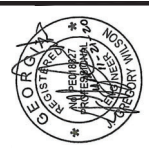
SITE PLAN NOTES:

- SAW CUT ASPHALT PAVEMENT @ EDGES OF TRENCH DRAIN & PIPE TRENCHES. PATCH PER DETAIL.
- SAW CUT CURBS IF RECD & REPLACE AS NEEDED.
- SUBMIT SHOP DRAWINGS OF ALL MATERIALS, PIPE, VALVES, STRUCTURES & APPURTENANCES FOR REVIEW PRIOR TO STARTING CONSTRUCTION.



811
 Know what's below.
 Call before you dig.

IF YOU DIG GEORGIA...
 CALL US FIRST!
 UTILITIES PROTECTION CENTER
 IT'S THE LAW



REVISONS

NO.	DATE	DESCRIPTION

