



CITY OF SAN MATEO

City Hall
330 W. 20th Avenue
San Mateo CA 94403
www.cityofsanmateo.org

Agenda Report

Agenda Number: 2

Section Name: {{section.name}}

File ID: {{item.tracking_number}}

TO: Planning Commission
FROM: Ronald Munekawa, Chief of Planning
PREPARED BY: Community Development Department, Planning Division
MEETING DATE: August 27, 2019

SUBJECT:
Underground Flow Equalization System (UFES), 2495 S. Delaware St. SUP (PA-2018-010)

RECOMMENDATION:

That the Planning Commission review the proposed project, receive public comments, and provide input on the proposed project.

BACKGROUND:

This study session is intended provide updates to, and receive further comment from, the Commission and the public regarding the proposed Underground Flow Equalization System (UFES). The primary focus of this study session relates to the method of construction to be used for this project.

The key areas of community concern expressed by the public and Planning Commission are:

- Impacts due to piling method and duration
- Impacts due to shoring method
- Impacts due to construction traffic impacts including those of concurrent construction projects
- Impacts due to street closures and interruptions to pedestrian and bicycle accessibility
- The need for management, monitoring, liability and mitigation of noise, dust, vibrations, settlement and traffic impacts
- The need for contractor oversight and feasible mitigation measures during construction
- Impacts on property value

The City completed a constructability review to better define construction methods. No impact pile driving will be used as it is not technically feasible for this project. For excavation shoring around the perimeter of the holding structure, the City will limit bidders to options that will not require pile driving. For the foundation piles, the City is requiring that micropiles be used, a low-noise method – these would be drilled rather than driven.

This construction information was presented at a community meeting held at the San Mateo County Event Center on May 21, 2019, which was attended by over 90 members of the public.

Project Description

The City of San Mateo is implementing a series of capital projects, referred to collectively as the Clean Water Program (CWP), to replace aging wastewater infrastructure, build wet weather capacity, comply with regulatory requirements, and align with the City's sustainability goals. In adopting the 2016 Final Program EIR for the CWP, the City Council selected the "In-System Storage Program" alternative. On July 17, 2017, the City Council selected the San Mateo County Event Center parking lot as the preferred location for the project.

The Project consists of a concrete holding structure, pump station, diversion sewers and force main, and an odor control equipment room (see [Attachment 1](#) showing the layout of proposed facilities). These facilities would be located underground. Access hatches, an emergency backup generator, and an electrical building and vents for treated air would be located at ground level.

Site Description

The project would be in the southeast corner of the San Mateo County Event Center (Event Center) parking lot along Saratoga Drive, approximately 800 feet southeast from the Event Center buildings (see [Attachment 2](#)). Single- and multi-family residences are situated east and south of the Project site across Saratoga Drive and 28th Avenue, and the Bay Meadows Community Park is adjacent to the south side of the Project site. The closest homes in Fiesta Park are approximately 150 feet from the site, across Saratoga Drive. The closest residential buildings to the south are over 350 feet from the site, with Bay Meadows Park separating them. The Nueva School Bay Meadows Campus is located approximately 1,000 feet southwest of the Project site. The location of the holding structure was situated in an area that would optimize reduction of sanitary sewer overflows in a portion of the collection system where hydraulic bottlenecks frequently occurs.

Construction Methods/Issues

The refined project information described below results in no increase in impacts to surrounding properties and reduces impacts in the case of noise. Public comments also requested information about how these “expected” effects would be monitored and how the public would be able to access the monitoring data. The City has further developed its approach to construction monitoring.

Shoring Installation and Dewatering

Shoring would need to be installed around the perimeter of the area requiring excavation to support the construction of the holding structure. The City received extensive public comments regarding the potential for property damage as a result of ground settlement caused by dewatering and from vibration caused by impact pile driving.

Prior to the start of excavation, up to 15 dewatering wells would be installed approximately 50 feet apart within the limits of the holding structure excavation to reduce groundwater intrusion during excavation. The wells would lower the groundwater as the excavation proceeds. Monitoring wells would also be installed to monitor groundwater levels surrounding the project site during dewatering. Once the bottom of the excavation is reached, a concrete pad would be poured to limit groundwater inflow from the bottom of the excavation for the holding structure. The purpose of the concrete pad would be to block the temporary flow of groundwater, although the pad would be left in place as the base for the construction of the concrete structure. For excavation shoring around the perimeter of the holding structure, the City is now limiting bidders to one of three water-tight options: slurry wall, cement deep soil mixing, or secant piles – none of which require pile driving. Duration of this phase is expected to take four months.

The City received extensive comments about the potential for property damage as a result of ground settlement, which is typically caused by the drawdown of groundwater expanding significantly beyond the excavation site. Because of the water-tight shoring design and local groundwater conditions, drawdown is not expected to be noticed outside of a 10-foot distance around the excavation. To ensure that this is the case, the following monitoring protocols will be implemented:

- Additional groundwater monitoring wells will be installed around and near the excavation area, including adjacent to the Fiesta Gardens and Bay Meadows neighborhoods. The monitoring wells would include automatic data loggers, allowing the construction managers access to groundwater elevation conditions during dewatering activities.
- Settlement monitoring would consist of visual inspections before, during and after the construction to assess apparent structural deficiencies (e.g., cracks) at nearby homes. Settlement monitoring would continue for up to 1 year after construction is complete.

Piling Method and Duration

The City has refined the project so that no pile driving will be used. Impact driven piles are no longer considered feasible for shoring, but it is important to note that driven piles are a feasible option for the foundation piles and is expected to be

the least expensive option. For the sole purpose of reducing construction noise and vibration levels, the City is committing to spend more and use drilled micropiles. Duration of this phase is expected to take two months.

The City received extensive comments about the potential for property damage as a result of vibration caused by impact pile driving. To ensure that noise and vibration impacts are minimized, the following monitoring protocols will be implemented:

- A minimum of two stationary noise monitoring devices will be installed along the north and east site boundaries that will send alarms to the City's inspectors if the noise levels exceed 90 dBA at the property line. The construction manager and City will work with the contractor to address the levels.
- Vibration monitoring instruments will be installed at two locations adjacent to the construction site – one on the north side and one on the east side. Vibration data will be collected prior to construction to establish a baseline condition, which are expected due to traffic, nearby construction activities, and other sources. Understanding the baseline vibration conditions will aid in determining if the vibrations from the construction activities are excessive compared to normal conditions.

For all monitoring protocols, the City will prepare regular construction update memos to be posted on the UFES website. The specific format will likely consist of a summary of construction activities, a table showing monitoring data, and a discussion about any exceedances and the corrective actions taken.

Construction Traffic

The initial project description indicated that construction traffic would access the site from Saratoga Drive coming from South Delaware Street and State Route 92; truck traffic exiting the site would use Saratoga Drive to Hillsdale Boulevard to access U.S. Route 101 (US 101). Construction workers would park in a temporary construction easement area at the Event Center. Average daily construction activities would require 20 to 30 workers onsite and two to three major pieces of equipment (crane, excavators, pile installation equipment, or concrete pumpers). It is expected that as many as 206 vehicle trips could occur cumulatively each day during construction. "Peak" traffic levels will occur only during a few months of the overall construction schedule.

Due to concerns regarding traffic impacts, the City initiated further dialogue with the San Mateo County Events Center regarding site access. As a result, it is now expected that construction traffic will access the site from Delaware Street via a new easement through the Event Center. Saratoga Drive will still be used to some extent, primarily during large events like the San Mateo County Fair. However, construction traffic on Saratoga Drive is expected to be much less than described in the Draft EIR.

It is expected that project construction would begin in April of 2020. The UFES and diversion pipelines would be constructed simultaneously over a 2.5-year period. It is assumed that all work would be conducted Monday through Friday, within a normal 8 to 10-hour shift between 7:00 a.m. and 7:00 p.m. and no construction activities would occur during the evening or weekends without prior approval by the City.

ENVIRONMENTAL DETERMINATION:

A Draft Environmental Impact Report (Draft EIR) has been prepared to specifically identify and analyze the anticipated environmental impacts of the Underground Flow Equalization System (UFES or Project) at the San Mateo County Event Center site. Several types of impacts have the potential to occur during the construction and operation of the proposed project. Most potential impacts are not significant or can be mitigated to a less-than-significant level by following the detailed mitigation measures presented in the Draft EIR. A Planning Commission meeting, for the purpose of receiving public comment on the Draft EIR, was held on April 9, 2019. Because of the extent of community interest, the comment period was extended from May 7 to May 31, 2019.

The impacts that cannot be mitigated to less-than-significant level are those from noise and vibration due to construction. Mitigation measures, including implementing construction noise minimization measures, operating a construction noise hot line, and resolving construction noise complaints, are proposed to reduce these impacts but they are anticipated to remain significant after mitigation.

As discussed above, the project has been refined to further reduce project impacts. The refined project information will be addressed in the Final EIR and results in no increase in impacts, and reduced impacts in the case of noise. In addition to the major topics discussed above, the City received numerous comments on various other topics, including dust control, odor, and the selection of alternatives. These topics were studied, and the City determined that no changes to the project were required. All topics will be addressed in the Final EIR responses to comments.

The City Council will consider the economic, legal, technical, social and environmental benefits, risks and challenges when determining whether to approve the project.

ENTITLEMENTS

As proposed, the project requires the following planning application approvals:

Special Use Permit (SUP) to allow the use of the site for a public facility in the "A" Agricultural District.

Site Plan and Architectural Review (SPAR) for the construction of any new buildings or walls/fences over six feet in height.

Sample Findings for Approval for the above planning application types are included in [Attachment 3](#).

NOTICE PROVIDED

In accordance with Government Code Section 65091 and the City's Municipal Code noticing requirements, this study session was noticed to the following parties more than ten days in advance of the neighborhood and Planning Commission meetings:

- Property owners, residential tenants and business tenants within 1,000 feet of the project site.
- The City's "900 List" which contains nearly 100 Homeowner Associations, Neighborhood Associations, local utilities, media, and other organizations interested in citywide planning projects;
- The City's Planning "Notify Me" email list; and,
- The interested parties list, which includes interested individuals who contacted the City and requested to be added to the project notification list.

SUMMARY AND NEXT STEPS

The Final EIR, containing responses to the comments received, as well as any amendments needed to the DEIR in response to comments, will be released early September 2019. The following updates from the Draft EIR are expected:

- Updates to construction methods, including the decision to not use pile driving for the storage structure
- Clarification and additional commitments to construction monitoring and public outreach
- Reduction in noise and vibration levels as pile driving will not be used
- The lack of changes to soils and geology due to new information and the commitment to monitoring
- Greater detail regarding construction traffic timing and access

The Final EIR will be available for review for 10 days. This application will come before the Planning Commission on September 24, 2019, for consideration of a recommendation to the City Council. The City Council will consider certification of the Environmental Impact Report and take action on the project on October 21, 2019. The anticipated construction start is Spring 2020.

ATTACHMENTS

Att 1 – Project Location

Att 2 – Project Plans

Att 3 – Sample Findings for Project Approvals and Denials

STAFF CONTACT

Richard Patenaude, Contract Planner
rpatenaude@cityofsanmateo.org
(650) 522-7258 ext. 6

Deryk Daquigan, Engineering Manager
ddaquigan@cityofsanmateo.org
(650)522-7287