



Item No. 1 Town of Atherton

CITY COUNCIL STAFF REPORT – STUDY SESSION

TO: HONORABLE MAYOR AND CITY COUNCIL
GEORGE RODERICKS, CITY MANAGER

FROM: ROBERT OVADIA, PUBLIC WORKS DIRECTOR

DATE: JANUARY 22, 2025

SUBJECT: EL CAMINO REAL STORMWATER AND DRAINAGE
IMPROVEMENTS PROJECT

RECOMMENDATION

It is recommended that the Council review and provide direction and feedback regarding conceptual solutions for the El Camino Real Stormwater and Drainage Improvements Project.

BACKGROUND

Existing drainage infrastructure along El Camino Real is limited. Though it includes some drainage inlets, culverts and some storm drain infrastructure, there are limited points of connection to outfalls or downstream conveyances. Parts of the storm drain system were constructed along the El Camino Real by Caltrans in the mid-1940s and outfall directly to the Atherton Channel. Other portions were either not connected or disconnected from downstream conveyances, creating localized flooding particularly at side street intersections.

The El Camino Real Drainage Improvements Project is intended to identify and design drainage improvements along El Camino Real that reduce flooding at the side street intersections and along the corridor while maintaining the integrity of the most significant regional arterial through the Town of Atherton.

The City Council approved a professional services agreement with Freyer & Laureta, Inc. on June 19, 2024, to develop potential drainage solutions for El Camino Real. It is intended that these solutions be compatible with future improvements to El Camino Real, which are currently being envisioned in the El Camino Real Complete Streets Study, which is currently under development.

ANALYSIS

Freyer & Laureta, Inc. (F&L), has completed its initial data collection and evaluation, including review of the topographical survey collected as part of the El Camino Real Complete Streets Study and has used that information to develop potential solutions to address localized flooding on El

Camino Real. Based on existing Caltrans As-builts and topographic survey, there is no existing storm drain system north of Isabella Ave, apart from ditches along El Camino Real and culverts under some of the lateral streets. A proposed storm drain south of Maple Avenue discharging into Atherton Channel was not built due to conflicting utilities. South of the Atherton Channel, there is a storm drain system collecting stormwater through a number of drainage inlets along El Camino Real and discharging into the Atherton Channel. F&L has been developing potential solutions to localized flooding throughout the corridor – from Redwood City to Menlo Park.

The majority of issues lay from the northern Town Limits to the Atherton Channel, located between Isabella Avenue and Alejandra Avenue. The preliminary concepts are focused in this area and splits the collection of stormwater in two segments: 1) Stockbridge Avenue, south to Isabella Avenue, and 2) Stockbridge Avenue, north to the Town Limits north of Selby Lane. The solutions are summarized as follows:

1) Stockbridge Avenue, south to Isabella Avenue:

The natural drainage pattern of this section of El Camino Real is northward, away from the Atherton Channel. The proposal includes the installation of catch basins at each intersection, connected to a 12-inch High-Density Polyethylene (HDPE) pipe, directed southward towards Isabella Avenue, where it is collected at a de-watering pump station for discharge into the Atherton Channel. There would be intermediary manholes at approximate 300-foot intervals for maintenance access, and potential future connection of bio-treatment and drainage required to support the ECR Complete Streets project. As the natural drainage path is northward, the proposed pipeline would be installed at a progressive grade that would ultimately reach approximately 25 feet in depth.

The design of the dewatering system allows water to draw down localized flooded areas and convey the flows via the pump station into the Atherton Channel. The pump system would include dual pumps for redundancy and adequate pumping capacity. The pumps would be sized to dewater ponded flooding within about 60 minutes from the end of a storm event. The pumps would be connected to a float or other measuring device to prevent discharge when the channel is full, and there would be one-way valves that would prevent flows from the Atherton Channel to enter the system.

It is anticipated that the dewatering line trunk line would be installed in segments via directional boring to avoid existing and future utility work and roadway improvements. Most work will be conducted in the rightmost southbound travel lane. Additionally, localized re-grading would improve existing areas of flooding that occur mid-block.

2) Stockbridge Avenue, north to Selby Lane and the Town limit with Redwood City:

The F&L team continue to investigate localized flooding and drainage issues along this stretch of the El Camino Real, particularly at Selby Lane. There is an inlet located at the southwest corner of El Camino Real and Selby Lane. A closed-circuit television camera inspection of the inlet and any connected lines is scheduled towards the end of January.

Once closed-circuit television cameras explore the underground infrastructure at this intersection, additional solutions in this area will be developed. This could include rehabilitating any underground infrastructure at Selby Lane, tie-ins to existing storm drains, French drain improvements, and improving grading of the shoulder landscaping and more pronounced overland drainage pathways, and drywells.

The conceptual level cost estimate for the proposed improvements, including all soft costs, is approximately \$5,100,000. A more refined estimate will be provided once final design documents are drafted.

Staff is soliciting feedback on the proposed design solutions along El Camino Real to address localized flooding along El Camino Real. Upon receipt of comments, the design team will complete its evaluation of the northern segment and finalize the conceptual design. As the current agreement with F&L is phased, a subsequent contract is needed for the development of final plans, specifications, and estimates (PS&E) documents for construction bidding purposes, permitting coordination and environmental support.

FISCAL IMPACT

None at this time.

GOAL ALIGNMENT

This Report and its contents are in alignment with the following Council Policy Goals:

- Goal Area B – Preserve Small Town Character and Quality of Life
- Goal Area D – Manage Circulation and Improve Safety
- Goal Area F – Be Forward-Thinking, Well-Managed, and Well-Planned
- Goal Area G – Emergency Preparedness – Be Prepared

POLICY FOCUS

The Council's General Fund Goals/Mission include preserving and maintaining the public right of way to allow for safe travel, as well as implementing drainage improvement projects that will improve intersection drainage and minimize localized flooding.

PUBLIC NOTICE

Public notification was achieved by posting the agenda, with this agenda item being listed, at least 72 hours prior to the meeting in print and electronically. Information about the project is also disseminated via the Town's electronic News Flash and Atherton Online. There are approximately 1,200 subscribers to the Town's electronic News Flash publications. Subscribers include residents as well as stakeholders –to include, but be not limited to, media outlets, school districts, Menlo Park Fire Protection District, service providers (water, power, and sewer), and regional elected officials.

COMMISSION/COMMITTEE FEEDBACK/REFERRAL

This item has not been before a Town Committee or Commission

ATTACHMENTS

1. ECR Drainage Improvements – Conceptual Design Layout