

Planning

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Memorandum Agenda Changes/Supplemental Packet

TO: PLANNING COMMISSION

FROM: ZACH PETTIT, DEPUTY CITY CLERK II

DATE: AUGUST 6, 2025 SUBJECT: SUPPLEMENTAL

10. PENDING BUSINESS

10. A. Capital Improvement Plan, Jenny Carroll, Special Projects & Communications Coordinator

1. Public Comment from Jan Keiser

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MEMORANDUM

To: Homer Planning Commission

From: Janette Keiser, PE Date: August 4, 2025

Re: Homer Proposed CIP – Slope Stability and Erosion Mitigation Program

Public Works Director Dan Kort is recommending removal of the project entitled "Slope Stability and Erosion Mitigation Program" from the City of Homer's Capital Improvement Plan – 2026- 2031. My first reaction was to bristle at this, but then, I read Director Kort's analysis. I found that I could not disagree with his reasoning. The purpose of this Memorandum is to provide additional context for the projects listed in the subject program because it could affect future decisions that come before this body.

The Slope Stability and Erosion Mitigation Program included four separate projects that would support storm water management and in the case of two of the projects, slope stability and erosion. Director Kort exercised due diligence in exploring each of the proposed projects and in each case, came to an impasse, which caused him to conclude the projects were unfeasible at this time. I agree with his conclusions.

1. Kachemak Sponge. This project involved conveying storm water from East End Road, Kachemak Drive and some adjacent properties into the wetlands south of the Homer Boatyard. Natural vegetation and bacteria in the wetlands would treat the water, mitigating silt and even hydrocarbons. The water would be absorbed in the natural peat and wetlands, like a sponge, slowly releasing it. This slow release would reduce water pressure and thus, erosion in various areas. Our strategy was to buy land to serve as the sponge and install storm water works to direct as much water into the sponge as possible. The Kachemak Bay National Estuarine Research Reserve ("KBNERR") successfully sought grant funding to buy some of the land. It is my understanding that these transactions are still on-going, and they should be encouraged.

We always knew the cost of the storm water works would be expensive and funding would be hard to come by. I figured the most promising funding source would be the Alaska State Revolving Loan Fund, which does fund stormwater works. Both the ADEC and NOAA were excited about this project, seeing it as a model for cold weather nature-based storm water management. Sadly, the current design is cost prohibitive at this time and hoping for federal/state funding is a fantasy. But, if all we did was buy the land, it would be helpful for the environment. Director Kort said he would not object to keeping the project on the books, if it would facilitate the land purchase or set the stage for future funding. I recommend we do this by refreshing the project's narrative and including it in the CIP.

- 2. Beluga Lake Property. Director Kort's correct. I did want to buy the big lot adjacent to Ben Walters Park, to protect the wetlands from development by adding it to the park. At that time, funding was available from various sources for ideas like this. The lakeside portion of this property is one of the last large pieces of undeveloped, privately-owned wetlands in the commercial core, which makes it potentially valuable for stormwater management in the City's big picture. Sadly, the price for the whole lot was prohibitively expensive. However, just before I left the City, I had some conversation with the owner, through local relator, Angie Newby, about him donating the wetland portion of his lot to the City. This was before Director Kort's time, but I recall discussing the idea with Julie Engebretsen. It's a wise investment to maintain wetlands as buffers for flooding triggered by storm water and other drainage. This project does not need to be in the CIP.
- 3. Baycrest Project. This project was inspired by then Mayor Castner to relieve a drainage problem in the Baycrest Subdivision. Storm water from the north side of the Sterling Highway is crossing the highway in a DOT-owned culvert and making its way through the east side of the Baycrest Subdivision, causing erosion and slope stability problems for various property owners. The City Council appropriated funding to explore a storm drain solution and we tried our best to engineer something that would work. We found there was no easy answer; each of the solutions we developed created worse conditions someplace else downstream. The only solution that did not do this was the one that captured storm water before it crossed the Sterling Highway and conveyed it all the way to Bidarki Creek where it could be dropped into a storm water manhole. That is the idea of the Baycrest Project. We thought the hydropower idea would be an added bonus, but we admittedly did not explore it thoroughly.

The whole project was very expensive and involved working in the AK DOT ROW, which would be problematic for a variety of reasons. We did not pursue it beyond the very conceptual phase. The fact is that while City-residents suffer the symptoms, the symptoms are caused by an AK DOT problem. Recognizing this, at its last meeting, the City Council passed a resolution directed at the AK DOT, asking that the AK DOT address this drainage issue as part of the upcoming Sterling Highway project. If the DOT does this, this problem will be alleviated. I have no confidence that they will, but that is a political game. I concur with Director Kort that the City should not expend any more of its resources to address this and it does not need to be in the CIP.

4. Bunnell Ave/Beluga Slough storm drain. This project was conceived because one day, I observed muddy water flowing in the ditch off the end of Bunnell Avenue. When I traced it back, I found it came from the Main Street Storm drain system, which the

Public Works crew had been flushing. I did not like the idea of this dirty water carrying silt and who knew what else, into the wetlands. The idea was to install a concrete stormwater intake structure at the end of Bunnell Avenue that would allow silt to settle out. Geoff Coble developed a design, and the City Council authorized us to purchase the component parts. The idea was to install the components using the Public Works crew, which they were more than capable of doing.

The green infrastructure element is the restoration of the wetlands. My dream was that someday, the gravel breakwater would be replaced with an elevated walkway thereby allowing water to flow freely and restore the wetlands. The Forest Service strongly supported this idea. I would like to see the City develop a green infrastructure project that makes sense for this area to restore the wetland and put it in the CIP at a later date.