



County of San Mateo

Inter-Departmental Correspondence

Department: PUBLIC WORKS

File #: 23-754

Board Meeting Date: 9/12/2023

Special Notice / Hearing: None
Vote Required: Majority

To: Honorable Board of Supervisors

From: Ann M. Stillman, Director of Public Works

Subject: **Measure K:** Increase the Not-to-Exceed Amount of the Agreement with Granite Rock Company for the Middlefield Road Improvement Project in the North Fair Oaks Area [County Project No. OD420, Project File No. E4931]

RECOMMENDATION:

Measure K: Adopt a resolution increasing the Director of Public Works' authority to execute change orders to the construction agreement with Granite Rock Company, for the Middlefield Road Improvement Project in the North Fair Oaks Area, to increase the not-to-exceed amount of \$23,544,550 by an additional amount of \$2,900,000 to a new not-to-exceed amount of \$26,444,550.

BACKGROUND:

On October 20, 2020, this Board adopted Resolution No. 077819, which adopted plans and specifications, including conformance with general prevailing wages, as established by the Department of Industrial Relations, in the locality in which said work is to be performed for each type of workman needed to execute the contract and calling for sealed bids for the Middlefield Road Improvement Project (Project).

On February 9, 2021, this Board adopted Resolution No. 078007, which authorized an agreement with Granite Rock Company (Graniterock) for construction of the Project in the amount of \$19,131,379 and authorized the Director of Public Works to execute contract change orders to grant time extensions for project completion and payment up to a maximum agreement amount not to exceed \$21,044,550.

On November 1, 2022, this Board adopted Resolution No. 079277, which increased the not-to-exceed amount of the agreement with Graniterock for construction of the Project in the amount of \$2,500,000 and authorized the Director of Public Works to execute contract change orders and payment up to a maximum agreement amount not to exceed \$23,544,550.

DISCUSSION:

The Project continues to progress, is large and complex in nature, has a long construction duration, involves a roadway that has been in existence for many years with several underground utilities, and

involves work in a business corridor and on a significant transportation corridor. Unanticipated underground conflicts encountered during construction of the Project and impacts of severe winter weather have led to a determination that the current “not-to-exceed” amount of the agreement will not be sufficient to appropriately compensate Graniterock for the Project based on the following factors:

- 1) Based on the experiences, issues, and conflicts that had been encountered during construction of this Project, Graniterock and the County agreed to modify a portion of the bid items (Schedule A) in the contract to Time and Materials (T&M) in April 2023 with the intent to improve collaboration and accelerate construction of this Project. The T&M payment method provides greater flexibility to adapt to issues that arise, changing requirements, and allows for quick adjustments as the Project progresses. The County permitted Graniterock to work on multiple phases or areas along the eastern side of the Project at the same time and with certain work under T&M. This allows Graniterock more flexibility and enables relocation of crews to different phases or work areas when conflicts are encountered that would otherwise delay or halt progress. Prior to the T&M approach, it had taken approximately four months to complete one phase of work. Currently, Graniterock is able to complete each phase of work in approximately two-and-a-half months and is working on multiple phases at the same time. It is estimated that the T&M approach will shorten the construction duration by approximately six months resulting in savings of the construction management and administration costs for the Project. Expediting the schedule under T&M has enabled Graniterock to work longer shifts or perform weekend work when needed to accommodate the businesses along the corridor, which increases the cost for the work. The cost increase for this modification is estimated to be approximately \$529,712.
- 2) The Project includes construction of underground utility infrastructure and the furnishing and installation of utility conduits and vaults (Joint Trench work) so the overhead utility lines can be placed underground after the Project is completed. The designed Joint Trench work required modifications during construction at several locations to avoid conflicts with the existing utility infrastructure, including California Water Service (Cal Water), Pacific Gas and Electric Company (PG&E), Fair Oaks Sewer Maintenance District (FOSMD) sanitary sewer lines, telecommunication lines, and fiber optic lines. The total cost for these necessary modifications and additional work amounted to approximately \$443,568.
- 3) During construction of the sanitary sewer and storm drainpipes along southbound Middlefield Road, Graniterock encountered unforeseen conflicts with underground utilities affecting their work. Notable conflicts affecting Graniterock’s production included: limiting the sewer pipe installation work to 20 feet of the pipe at a time to not adversely affect a live Cal Water asbestos cement pipe and conflicts with existing fiber optic cables at various locations while installing storm drainpipes. These issues severely impacted Graniterock’s work, resulting in substantial inefficiencies and loss of productivity with additional incurred cost of approximately \$418,000.
- 4) Modifications to the traffic control plan for the Joint Trench work near the railroad crossing (Phase 10) were necessary and resulted in additional costs. Graniterock had planned to set up traffic control measures that included protecting the work area by stationary measures (k-rail), but the Union Pacific Railroad did not approve this approach due to safety concerns. Therefore, the traffic control plan was modified to allow Graniterock to work under daily

closures, which affected production and increased the traffic control requirements for an increased cost of approximately \$104,500.

- 5) The utility vaults in Phase 10 (Pacific Avenue to Douglas Avenue) were designed to be within the sidewalk but required relocation during construction to avoid existing fiber optic cables and the FOSMD's sanitary sewer lines. Relocation of Joint Trench utility vaults in Phase 10 from the sidewalk to the roadway resulted in additional unanticipated cost of approximately \$105,599.
- 6) The Project includes "smart" amenities such as public Wi-Fi, traffic analytics, and information kiosks. The Department collaborated with the Information Services Department (ISD) from Project inception to install required infrastructure for these features. Subsequent discussions have determined that utilizing Graniterock to pull the power and fiber wires through new conduits would enhance efficiency, minimize community disruption, and be a cost-effective way to complete this work. The anticipated cost for this work is \$400,000, is recommended to be included in the Project, and will be reimbursed by ISD.
- 7) With the remaining work to be completed on the Project, it is expected that additional conflicts may be encountered, and additional work may need to be authorized to ensure the completed Project is appropriate. Middlefield Road presents numerous challenges, including unmarked, abandoned, and unforeseen underground conflicts. Graniterock, the Department, and the Office of Community Affairs have been working closely with affected businesses to limit the disturbance to their operations, but construction of a Project of this nature is impactful. The Department has approved extended working hours, weekend work, and additional mitigation measures to be responsive to business requests. Consideration is being given to night work for some operations if it expedites the work and minimizes impacts to the businesses. The Department plans to include additional paving and sidewalk replacement work that was not included in the original contract but should be included to ensure the completed Project is appropriate. The Department recommends an additional sum of \$898,621 be included in the requested increase to address future unforeseen issues, be responsive to business requests, expedite the Project schedule, and address the additional roadway paving and sidewalk replacements.

The Department recommends that this Board consider these unanticipated conditions and the identified future work for this Project, and approve the recommended contract increase amount to facilitate completion of the Project. Construction issues or conflicts arise during construction, which must be addressed immediately to keep the Project moving forward. In some cases, these issues require additional compensation. The Department is working diligently through construction of the Project to minimize additional costs and develop solutions that are timely, effective, and financially responsible.

County Attorney has reviewed and approved the resolution as to form.

FISCAL IMPACT:

The new not-to-exceed amount of Granite Rock Company construction contract is \$26,444,550. The recommended increase of the Project contract by \$2,900,000 will allow for payment to the Contractor for the above-described unanticipated work.

Several of the additional costs as identified above are shared between various utilities and funding sources. The Department will seek reimbursement of these costs based on existing cost share agreements.