



COUNTY OF HUMBOLDT

For the meeting of: 4/14/2020

File #: 20-422

To: Board of Supervisors

From: Public Works

Agenda Section: Consent

SUBJECT:

Purchase of One (1) Troxler 5850v2 Gyratory Compactor

RECOMMENDATION(S):

That the Board of Supervisors:

1. Authorize the purchase one (1) Troxler 5850v2 Gyratory Compactor;
2. Authorize the Purchasing Agent to enter into a purchase agreement with Troxler Electronic Laboratories, Inc.; and
3. Direct the Auditor-Controller to transfer \$40,058 from 1200321-2118 to 1200321-8986 per the attached appropriation transfer.

SOURCE OF FUNDING:

Road Fund (1200)

DISCUSSION:

The Humboldt County Materials Laboratory (Materials Lab) performs acceptance testing to provide assurance that materials incorporated into construction projects administered by the Department of Public Works (Public Works) are in conformance with the contract specifications, as required for receiving funding from the Federal Highway Administration. Materials Lab personnel are certified to collect samples and perform the required tests, and the laboratory test equipment is calibrated and certified at least once each year as part of a Quality Assurance Program.

The county has used a California Kneading Compactor to perform various laboratory tests, including compaction of asphalt and soil, since it was purchased on June 30, 1965, for a price of \$4,700. On Jan. 29, 2020, this equipment failed verification, and the Materials Lab is no longer certified to test asphalt quality characteristics. Consultations with materials laboratory staff at the California Department of Transportation (Caltrans), other California counties, and local consulting firms have not identified anyone with the expertise required to work on this equipment, and very few adjustments can be made to attain the tolerance required for verification due to the mechanical nature and age of the machine. In addition, Caltrans no longer uses the Kneading Compactor to create or verify hot mix asphalt (HMA) mix designs; therefore, HMA producers in Humboldt County no longer use mix designs created with

this equipment.

The Gyratory Compactor is now the most common compactor used in the United States and in California to create and verify mix designs for HMA. Public Works researched three gyratory compactor models and determined that the Troxler 5850v2 manufactured by Troxler Electronic Laboratories, Inc., is the most appropriate for the Materials Lab. Although, Caltrans uses and recommends the G2 Superpave Gyratory Compactor manufactured by Pine Test Equipment, Inc., technicians familiar with the operation of both compactors have reported that the Troxler equipment is easier to use. The purchase price of the Troxler 5850v2 (Attachment 2 - Quote No. 0012476 from Troxler Electronic Laboratories, Inc.), which includes freight, setup assistance, and training, is lower than the price of the Pine G2 (Attachment 3 - Quote No. Q070063 from Gilson Company, Inc.; Attachment 4 - Quote No. DAS12843 from Pine Test Equipment, Inc.), and Troxler provides service and support from an office in California. This equipment is only available direct from the manufacturer. The gyratory compactors made by Humboldt Manufacturing Co. require an industrial air compressor to operate, increasing the cost and complexity of the system, and were, therefore, eliminated from consideration.

This purchase cannot wait until fiscal year 2020-2021 because Materials Lab staff will need to receive the gyratory compactor and be trained and certified to use it before paving can occur on capital projects. Storm Damage Repairs to Alderpoint Road at Post Mile 0.22 is expected to be completed before June 30, 2020, and paving on Shelter Cove Road at Post Mile 7.60 is scheduled for early July.

Public Works recommends that the Board of Supervisors authorize the purchase one (1) Troxler 5850v2 Gyratory Compactor, authorize the Purchasing Agent to enter into a purchase agreement with Troxler Electronic Laboratories, Inc., and direct the Auditor-Controller to transfer \$40,058 from 1200321-2118 to 1200321-8986 per the attached appropriation transfer (Attachment 1 - Request for Budget Transfer).

FINANCIAL IMPACT:

The total cost to purchase one (1) Troxler 5850v2 Gyratory Compactor is \$40,058. Funds have been included in the approved fiscal year 2019-2020 budget for the Road Fund budget unit 321; therefore, this purchase will not impact the General Fund.

STRATEGIC FRAMEWORK:

This action supports your Board's Strategic Framework by managing our resources to ensure sustainability of services .

OTHER AGENCY INVOLVEMENT:

None

ALTERNATIVES TO STAFF RECOMMENDATIONS:

The Board of Supervisors may choose to deny the purchase. However, staff does not recommend this alternative because the gyratory compactor is required to verify the quality characteristics of HMA used to pave county roads, as required for receiving Federal Highway Administration funds.

ATTACHMENTS:

1. Request for Budget Transfer
2. Quote No. 0012476 from Troxler Electronic Laboratories, Inc.
3. Quote No. Q070063 from Gilson Company, Inc.
4. Quote No. DAS12843 from Pine Test Equipment, Inc.

PREVIOUS ACTION/REFERRAL:

Board Order No.: N/A

Meeting of: N/A

File No.: N/A