

Document Type: Purchase Order Memorandum
Subject: Over/Under Runs and Additional Work Items
Project: 0912-31-304; CR 58

This memo and attached change order documents are intended to describe the final construction cost increase for the CR 58 widening project.

The contract plans, designed by Austin Mclean, P.E., of McDonough Engineering, provide for the reconstruction and widening of CR 58 from CR 48 to the Savannah Development. The Contractor, ICON, remains on-site and continues to perform the contract according to the plans and the 2014 Texas Standard Specifications. All change order work is within the project limits.

A. OVERRUNS

Line Item 0004, REMOVING CONC (PAV) has overrun the original project estimate by 22% or **\$2,778.64**. The PS&E estimate fell short, and all removal quantities were verified and measured in the field to ensure accuracy.

Line Item 0007, REMOVING DRIVEWAYS (ALL TYPES) has overrun the original project estimate by 20% or **\$3,355.35**. The PS&E estimate fell short, and all removal quantities were field-measured and verified.

Line Item 0008, REMOVING CONC (CURB) has overrun the original project estimate by 2745% or **\$6,779.50**. All removal quantities were field-measured and verified. Additional curb removals were required in June and July 2024 to accommodate TCP construction detours. These locations were not identified in the original plans.

Line Item 0010, REMOVING STAB BASE & ASPH has overrun the original project estimate by 7% or **\$1,084.16**. All removal quantities were field-measured and verified. Additional roadway demolition was required to match existing grades such as those at Apollo Ln.

The line item number 022, 260-6012 "LIME (HYD, COM or QK)(SLRY)OR QK(DRY)" has overrun the original project estimate by 37% or **\$54,946.50**. Due to site conditions encountered at the start of the project—specifically, the existing soil exhibited high plasticity index and liquid limit characteristics—the lime content for subgrade stabilization was increased from 6% to 8%.

Line Item 0025, CEM TRT (PLNT MX)(8") has overrun the original project estimate by 7% or **\$11,106.43**. The PS&E estimate fell short, and all installed quantities were field-measured and verified per delivery tickets.

Line Item 0027, SALV, HAUL & STKPL has overrun the original project estimate by 6% or **\$1,824.55**. Additional material haul-off and stockpiling were required as a result of the increased roadway demolition.

Line items 028 and 029 are for CONC PAV (CONT REINF – CRCP 8") and CONC PVMT (CONT REINF CRCP)(HES)(8"), respectively. To remove drop offs and open the intersection at CR 48 and CR 58 quicker, a portion of approximately 1,000 ft was placed utilizing the high early strength mix. The contractors price for this mix is \$10.00/SY higher than the traditional pavement. Due to this large area and the crossovers between the east and westbound lanes, the high early strength mix has overrun and the traditional pavement has underrun for a net overrun of **\$34,417.81** for these items.

Line Item 0030, 400-6005 "CEM STABIL BKFL (6") has overrun the original project estimate by 253% or **\$1,266.40**. This was the result of additional fast-track paving at the CR 48 and N. Central intersections in September 2024, undertaken to expedite the roadway opening.

Line items 045 through 053 are for the Safety End Treatments (SETs) used for drainage on the project. The SETs were used for driveway drainage end treatments and detention pond end treatments. The standard design calls for their use either in cross drainage or parallel drainage applications. For this project, the correct SET was placed for the correct application, which resulted in over and under runs of specific SET items. In total, there is a net underrun of **-\$3,640.00** for these items.

Line Item 0055, REMOVE STR (MANHOLE) has overrun the original project estimate by 100% or **\$1,000**. The manhole removal shown on Plan Sheet 112 near Sta. 78+09 EB, was not accounted for in the plan quantity summary.

Line Item 0060, BARRICADES has overrun the original project estimate by 67% or **\$45,000**, per project extension as approved by Brazoria County.

Line Item 0069, PORT CTB (FUR & INSTALL) has overrun the original project estimate by 517% or **\$10,540.00**. Additional Type 2 concrete traffic barriers were required at multiple driveway egress points throughout various work zones. These additions were approved by AECOM, Brazoria County, and TxDOT.

Line Item 0073, PORT CTB (REMOVE) has overrun the original project estimate by 517% or **\$10,540.00**. Additional removals were required as a result of furnish and install quantity overruns

Line Item 0083, REMOVE OR RELOCATE EXISTING MAILBOX has overrun the original project estimate by 6% or **\$170.00**. Mailboxes were adjusted due to works associated with Change Order #6, Angelina Driveways.

Line Item 0084, WK ZN PAV MRK REMOV (W)(4 IN)(SLD) has overrun the original project estimate by 18% or **\$260.80**. Removal quantities were measured in the field according to the TCP work zones.

Line Item 0085, WK ZN PAV MRK REMOV has overrun the original project estimate by 100% or **\$280.00**. Removal quantities were measured in the field according to the TCP work zones.

Line Item 0087, WK ZN PAV MRK REMOV (Y)(4 IN)(SLD) has overrun the original project estimate by 75% or **\$3,909.60**. Additional TCP was required for the final phase of the project, and this increase was approved by AECOM, Brazoria County and TxDOT.

Line Item 0110, WATER MAIN PIPE has overrun the original project estimate by 28% or **\$6,048.00**. The PS&E estimate fell short, and all install quantities were field-measured and verified.

OVERRUN COST	\$191,667.74
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UNDERRUNS (CONTRACT ITEMS)

Line No.	Item No.	Description	Under (%)	Under (\$)
0009	104-6036	REMOVING CONC (SIDEWALK...)	-33%	(\$426.00)
0021	260-6006	LIME TRT (EXST MATL...)	-10%	(\$9,419.75)
0023	260-6027	LIME TRT (EXST MATL) (8")	-17%	(\$5,557.50)
0024	276-6224	CEM TRT (PLNT MX)(CL N)(TY...)	-8%	(\$37,070.54)
0031	402-6001	TRENCH EXCAVATION PROTECTION	-52%	(\$33.13)
0036	464-6005	RC PIPE (CL III)(24 IN)	-5%	(\$10,300.00)
0037	464-6007	RC PIPE (CL III)(30 IN)	-4%	(\$1,470.00)
0038	464-6008	RC PIPE (CL III)(36 IN)	-32%	(\$9,648.00)
0054	496-6002	REMOV STR (INLET)	-50%	(\$550.00)
0056	496-6007	REMOV STR (PIPE)	-4%	(\$1,355.00)
0057	496-6041	REMOV STR (LARGE)	-100%	(\$15,000.00)
0058	496-6042	REMOV STR (SMALL)	-100%	(\$3,850.00)
0061	506-6003	ROCK FILTER DAMS (INST...)	-11%	(\$8,098.41)
0062	506-6011	ROCK FILTER DAMS (REMOVE)	-11%	(\$1,958.68)
0065	506-6038	TEMP SEDMT CONT FENCE (INS...)	-68%	(\$13,258.80)
0066	506-6039	TEMP SEDMT CONT FENCE (REM...)	-74%	(\$7,252.50)
0067	506-6047	TEMP SEDMT CONT FENCE (IN...)	-100%	(\$4,147.20)
0068	512-6009	PORT CTB (FUR & INSTALL)(LO...)	-9%	(\$2,000.00)
0070	512-6033	PORT CTB (MOVE)(LOW PROF)(TY1)	-20%	(\$1,284.00)
0071	512-6034	PORT CTB (MOVE)(LOW PROF)(TY2)	-13%	(\$80.00)
0072	512-6057	PORT CTB (REMOVE)(LOW PRO...)	-9%	(\$2,000.00)
0075	529-6012	CONC CURB (SLOTTED)	-100%	(\$114.00)
0086	662-6090	WK ZN PAV MRK REMOV (W...)	-50%	(\$140.00)
0107	2415-COP	SANITARY SEWER (TRENCHLESS)	-23%	(\$2,948.00)
0108	2417-COP	WATER MAIN (TRENCHLESS)	-100%	(\$5,290.00)

UNDERRUN COST (\$137,961.51)

NET OVER/UNDER COST \$53,706.23

B. OVERRUNS via CHANGE ORDERS

CO #6 – Angelina Driveways

During construction, it was discovered that multiple culverts were installed along Angelina Dr. that were not depicted in the plans. This Change Order compensated the contractor for removing and replacing cross culverts at the following stations:

STA 7+04 to 7+28	Cost = \$7,218.69
STA 22+84 to 23+02	Cost = \$5,194.40
STA 23+66 to 23+82	Cost = \$5,154.40
TOTAL = \$17,567.49	

CO #7 – Potential Overlay of Angelina

At the request of Brazoria County, a 2-inch Type D asphalt overlay was added to Angelina Drive. The existing unit price for the bond breaker bid item was used as the basis for estimating the cost of the Change Order. Angelina Drive encompasses 6,002 square yards, requiring approximately 693.23 tons of material. At a unit cost of \$150.00 per ton, the total estimated cost for this Change Order is **\$109,134.21**.

CO #9 – Rip Rap Overrun

Line Item number 032, 292-6017 "RIPRAP (CONC)(4IN)" has overrun the original project estimate by 56% or **\$145,000**. This overrun was due to a quantity bust in the concrete lined ditch on the south side of CR 58. The Brazoria Drainage District used a registered surveyor to verify the final placed quantity.

OVERRUNS via C.O. COST \$271,701.70

C. ADDITIONAL WORK via CHANGE ORDERS

CO #1

New line item 0112, 400-6005 CEM STABIL BKFL was added to the project for the storm sewer placements. The change order was approved for 1660 CY at a unit price of \$71.19/CY for a total of **\$118,175.40**. This pricing was negotiated using an item breakdown from the contractor and the TxDOT 12-month average low bid unit pricing.

C1. CO #2 (No Federal Funding)

Line item 113, UNIQUE CHANGE ORDER ITEM 1 was added due to an old septic system and well discovered in the detention pond excavation. These were removed for a total of **\$5,943.39**. Please note that this item will not have federal funding participation.

CO #3 (ALVIN ISD)

Line item 114, SANITARY SEWER (12 IN STEEL CASING) is for steel casing to be placed around the 6" sanitary sewer line that feeds the Alvin ISD School System. This Change Order was executed in accordance with the Alvin ISD interlocal agreement.

CO #4

New line items 115 and 116 for RIPRAP (CONC)(5 IN) – BDD4 were added to construct a concrete apron around the SETs within the detention ponds. This work was performed according to the drainage district standard design sheet for a total of **\$55,261.22**.

CO #5

Line Item 117, UNIQUE CHANGE ORDER ITEM 2 was executed to modify the 6'x3' culvert box pond outfall to match existing slopes. The saw cut and removal was performed for a total of **\$8,517.66**.

CO #8

Line item 119, UNIQUE CHANGE ORDER ITEM 3 was added to place parking blocks in the daycare parking lot located at CR 48 and Angelina Drive. This parking lot and drainage was reconstructed as part of the project for a total of **\$5,010.60**. The parking blocks are provided for the safety of the public.

CO #10 (Alvin ISD)

Line Item 120, PAYMENT ADJUSTMENT was added to the contract to complete sanitary sewer work on the project. This Change Order was executed in accordance with the Alvin ISD interlocal agreement.

CO #11

Line item 121, TY C1 CURB (RW) was added to accommodate a small retaining wall. The retaining wall is required since the elevation at the Right-of-Way (ROW) line is approximately 3 feet higher than the sidewalk according to the design cross sections. The natural land after the ROW line has landscaping that is maintained by the local Homeowners association. This wall allows for a reasonable slope to be maintained both on and off the ROW at this location. The contractor has agreed to perform the work under the current statewide 12-month average low bid unit price, which is \$153.36/LF. The total line item will add **\$39,180.41** to the contract.

***TOTAL COST \$226,145.29**

*Total does not include cost for CO #3 and CO #10 as these change orders are included as part of the Alvin ISD interlocal agreement.

*Total does not include cost for CO #2 as this change order does not have federal funding participation.

PURCHASE ORDER INCREASE

	Description	Total FINAL Cost
A.	Construction Net Over/Under	\$ 53,706.23
B.	Construction Overruns via Change	\$ 271,701.70
C.	Construction Add. Work via Change	\$ 226,145.29
C1.	Construction CO#2 Septic Removal	\$ 5,943.39
	PO Increase Subtotals	\$ 557,496.61

No amended or additional environmental clearance, permits or authorizations are required for the work stated above.

ATTACHMENTS

- Change Order Memorandums

NAME Aaron Garza

DATE 6/17/25

SIGNATURE 