

3/11/19 ✓

STAHL SHEAFFER ENGINEERING

1401 South Main Street, Suite 203
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Project: GEA-166-1.08
Subject: ESTIMATED QUANTITIES
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202E110000 STRUCTURE REMOVED

Unit price based on 102 ft of pipe over 24" diameter removed @ \$30.00/ft = \$3,060

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503E21301 UNCLASSIFIED EXCAVATION, AS PER PLAN

Unit price based on UNCLASSIFIED EXCAVATION @ \$53.00/CY = \$18,870

INLET FTG EXC PLAN AREA PER CAD = 188.25sf

INLET AVG EXC. DEPTH = 7.54'

INLET EXCAVATION = 53 CY

OUTLET FTG EXC PLAN AREA PER CAD = 219.26 sf

OUTLET AVG EXC. DEPTH = 9.05

OUTLET EXCAVATION = 74 CY

CULVERT BED EXCAVATION = 186.25 SF x 33.19 FT = 229 CY

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509E10000

EPOXY COATED REINFORCING STEEL

INLET = 1484 LB

OUTLET = 1891 LB

TOTAL = 3375 LB

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511E46010 CLASS QCI CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING

INLET WINGWALL ELEVATION AREA (FOUND IN CAD) = 37.84 SF

INLET WW VOL, $2 \times 37.84 \text{ SF} \times 1 \text{ FT} / 27 = 2.80 \text{ CY}$

OUTLET WINGWALL ELEVATION AREA (FOUND IN CAD) = 57.89 SF

INLET WW VOL, $2 \times 57.89 \text{ SF} \times 1 \text{ FT} / 27 = 4.29 \text{ CY}$

511E46510 CLASS QCI CONCRETE, FOOTING

INLET FOOTING PLAN AREA (FOUND IN CAD) = 121.33 SF

INLET FTG VOL = 1.5'X121.33 SF = 182.00 CF

INLET CUTOFFF WALL LENGTH (AVG) =24.19 FT

INLET CUTOFFF WALL VOL =24.19 FT x 1.17 FT x 2.5 FT = 70.76 CF

INLET APRON VOL = 0.75 FT x 1.5 FT X 10.5 FT = 11.81 CF

TOTAL INLET VOLUME = 10 CY

OUTLET FOOTING PLAN AREA (FOUND IN CAD) = 146.62 SF

OUTLET FTG VOL = 1.5'X146.62 SF = 219.93 CF

OUTLET CUTOFFF WALL LENGTH (AVG) =26.40 FT

OUTLET CUTOFFF WALL VOL =26.40 FT x 1.5 FT x 2.5 FT = 99.00 CF

OUTLET APRON VOL = 0.75 FT x 1.5 FT X 10.5 FT = 11.81 CF

TOTAL OUTLET VOLUME = 13 CY

511E46610 CLASS QCI CONCRETE, HEADWALL

INLET HEADWALL = 1 FT X 10.5 FT X 0.83 FT /27 = 0.32 CY

OUTLET HEADWALL = 1.25 FT X 10.5 FT X 2.00 FT /27 =0.97 CY

TOTAL = 1.3 CY

512E10100 SEALING OF CONCRETE SURFACES, EPOXY-URETHANE

INLET HEADWALL = 1.83 FT X 10.5 FT = 19.21 SF

INLET WINGWALLS (ELEVATION PER CAD) = 2 (37.84 SF) = 75.68 SF

INLET WINGWALLS (PERIMETER) = 2 (1.5 FT x 11.51FT) = 34.53 SF

CULVERT END AREA = 0.75FT x 29 FT + 2FT x 26 FT = 73.75 SF

TOTAL INLET SEALED AREA = 23 SY

OUTLET HEADWALL = 3.25 FT X 10.5 FT = 34.13 SF

OUTLET WINGWALLS (ELEVATION PER CAD) = 2 (57.89 SF) = 115.78 SF

OUTLET WINGWALLS (PERIMETER) = 2 (1.5 FT x 14.60FT) = 43.80 SF

CULVERT END AREA = 0.75FT x 29 FT + 2FT x 26 FT = 73.75 SF

TOTAL OUTLET SEALED AREA = 30 SY

512E33000

TYPE 2 WATERPROOFING

CULVERT TOP = 12.5FT x 42 FT = 525 SF

CULVERT SIDES = 2 x 5.5 FT x 44 FT = 484 SF

INLET WW CORNER = 2(3.00 FT X 6.33 FT) = 38 SF

OUTLET WW CORNER = 2(3.00 FT X 7.5 FT) = 45 SF

FORESLOPE WALL CORNER = 2(10.5 FT X 3.00 FT) = 63 SF

TOTAL = 129 SY

516E13600 1" PREFORMED EXPANSION JOINT FILLER

INLET = 2 x 1 FT X 6.33 FT = 12.66 SF

OUTLET = 2 x 1.25 FT X 7.5 FT = 18.75 SF

TOTAL = 32 SF

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518E21200 POROUS BACKFILL WITH GEOTEXTILE FABRIC

INLET = $2 \times 1.5 \text{ FT} \times 7.66 \text{ FT} \times 4.04 \text{ FT} = 92.84 \text{ CF}$

OUTLET = $2 \times 1.5 \text{ FT} \times 9.27 \text{ FT} \times 5.72 \text{ FT} = 159.07 \text{ CF}$

CULVERT WALLS = $2 \times 1.5 \text{ FT} \times 5.5 \text{ FT} \times 39.75 \text{ FT} = 655.88 \text{ CF}$

TOTAL = 34CY

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518E40000 PERFORATED CORRUGATED PLASTIC PIPE

CADD LENGTH = 112 FT

TOTAL = 112 FT

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518E40010

NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS

CADD LENGTH = 18.75 FT

TOTAL = 19 FT

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611E99910 9' x 4' CONDUIT, CLASS A

UNIT PRICE BASED ON AVERAGE ODOT BID HISTORY FOR 8'X5' AND 10'X5' BOXES @ \$760 / FT

42 FT