

DISTRICT 10 - BRIDGE DEPARTMENT

MUSKINGUM DRIVE, BOX 658, MARIETTA OHIO 45750

COUNTY: GAL ROUTE: 218 SECTION: 8.56

SHEET 1 OF 3

WEARING COURSE REMOVED

$$(9')(20')/9 = 20 \text{ SQ YD}$$

CLASS BCI CONCRETE, RETAINING/WINGWALL

$$\text{INLET: } (9.92')(5.83')(1')/27 = 2.14 \text{ CY}$$

$$(9.92')(5.83')(1')/27 = 2.14 \text{ CY}$$

$$\underline{4.28 \text{ CY}}$$

$$\text{OUTLET: } (9.92')(5.83')(1')/27 = 2.14 \text{ CY}$$

$$(9.92')(5.83')(1')/27 = 2.14 \text{ CY}$$

$$\underline{4.28 \text{ CY}}$$

$$\text{TOTAL} = 4.28 + 4.28 = 8.56 \text{ CU YD}$$

CLASS BCI CONCRETE, FOOTING

$$\text{INLET: } (5.25')(29.33')(1.5')/27 = 8.55 \text{ CY}$$

$$(1.5')(29.33')(2.5')/27 = 4.07 \text{ CY}$$

$$(1.42')(9.33')(0.67)/27 = 0.33 \text{ CY}$$

$$\underline{12.95 \text{ CY}}$$

$$\text{OUTLET: } (5.25')(29.33')(1.5')/27 = 8.55 \text{ CY}$$

$$(1.5')(29.33')(2.5')/27 = 4.07 \text{ CY}$$

$$(1.42')(9.33')(0.67)/27 = 0.33 \text{ CY}$$

$$\underline{12.95 \text{ CY}}$$

$$\text{TOTAL} = 12.95 + 12.95 = 25.90 \text{ CU YD}$$

CLASS BCI CONCRETE, HEADWALL

$$\text{INLET: } (9.33')(1')(0.5')/27 = 0.35 \text{ CY}$$

$$\text{OUTLET: } (9.33')(1')(0.5')/27 = 0.35 \text{ CY}$$

$$\underline{0.70 \text{ CU YD}}$$

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SHEET 2 OF 3

SEALING OF CONCRETE SURFACES

$$\text{INLET} : \frac{1}{2}(5.17' + 0.5')(10')/9 = 3.15 \text{ SY}$$

$$(0.5')(1')/9 = 0.01 \text{ SY}$$

$$(0.5')(29.33')/9 = 0.54 \text{ SY}$$

$$\frac{1}{2}(5.17' + 0.5')(10')/9 = 3.15 \text{ SY}$$

$$(0.5')(1')/9 = 0.01 \text{ SY}$$

$$(29.33')(1')/9 = 1.09 \text{ SY}$$

$$(9.33')(0.5')/9 = 0.17 \text{ SY}$$

$$\text{BOX FACE} : (12.44 \text{ SQ FT})/9 = 1.38 \text{ SY}$$

$$\text{INSIDE BOX} : (22.50')(2')/9 = 5.00 \text{ SY}$$

$$\underline{14.50 \text{ SY}}$$

$$\text{OUTLET} : \frac{1}{2}(5.17' + 0.5')(10')/9 = 3.15 \text{ SY}$$

$$(0.5')(1')/9 = 0.01 \text{ SY}$$

$$(0.5')(29.33')/9 = 0.54 \text{ SY}$$

$$\frac{1}{2}(5.17' + 0.5')(10')/9 = 3.15 \text{ SY}$$

$$(0.5')(1')/9 = 0.01 \text{ SY}$$

$$(29.33')(1')/9 = 1.09 \text{ SY}$$

$$(9.33')(0.5')/9 = 0.17 \text{ SY}$$

$$\text{BOX FACE} : (12.44 \text{ SQ FT})/9 = 1.38 \text{ SY}$$

$$\text{INSIDE BOX} : (22.50')(2')/9 = 5.00 \text{ SY}$$

$$\underline{14.50 \text{ SY}}$$

$$\text{TOTAL} = 14.50 + 14.50 = 29 \text{ SQ YD}$$

TYPE 2 WATERPROOFING

$$2[(43')(5.33')/9] = 50.93 \text{ SQ YD}$$

TYPE 3 WATERPROOFING

$$(41')(9.33')/9 = 42.50 \text{ SQ YD}$$

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SHEET 3 OF 3

1" PEJF

$$\text{INLET} : (5.83')(1') \times 2 = 11.66 \text{ SF}$$

$$\text{OUTLET} : (5.83')(1') \times 2 = 11.66 \text{ SF}$$

$$\underline{\hspace{1.5cm}} \\ 23.32 \text{ SQ FT}$$

POROUS BACKFILL WITH GEOTEXTILE FABRIC

$$\text{INLET} : (4.33')(10')(1.5') / 27 = 2.41 \text{ CY}$$

$$(4.33')(10')(1.5') / 27 = 2.41 \text{ CY}$$

$$\underline{\hspace{1.5cm}} \\ 4.82 \text{ CY}$$

$$\text{OUTLET} : (4.33')(10')(1.5') / 27 = 2.41 \text{ CY}$$

$$(4.33')(10')(1.5') / 27 = 2.41 \text{ CY}$$

$$\underline{\hspace{1.5cm}} \\ 4.82 \text{ CY}$$

$$\text{TOTAL} = 4.82 + 4.82 = 9.64 \text{ (U) YD}$$

LOW STRENGTH MORTAR BACKFILL

$$(5.33')(2')(4') / 27 = 16.19 \text{ CY}$$

$$\frac{1}{2} (5.33')(5.33')(4') / 27 = 21.57 \text{ CY}$$

$$\underline{\hspace{1.5cm}} \\ 37.76 \times 2 = 75.52 \text{ (U) YD}$$

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