

DISTRICT 10 - BRIDGE DEPARTMENT

MUSKINGUM DRIVE, BOX 658, MARIETTA OHIO 45750

COUNTY: NOB ROUTE: 146 SECTION: 8.01

SHEET 1 OF 6

ITEM 202 - WEARING COURSE REMOVED

$$(88.55')(24)/9 = 236.13 \text{ SY}$$

$$(15')(22')/9 = 36.67 \text{ SY} \leftarrow \text{AP SLAB}$$

ITEM 511 - CLASS RC2 CONCRETE, SUPER

$$(95.99')(30')(1.54')/27 = 164.25 \text{ CY}$$

$$\text{AT REAR ABUT: } (3.10')(1.73')(2.25')/27 = 0.45 \text{ CY}$$

$$\frac{1}{2}(1.56' + 1.77')(17.32')(2.25')/27 = 2.40 \text{ CY}$$

$$\frac{1}{2}(1.77' + 1.50')(17.32')(2.25')/27 = 2.36 \text{ CY}$$

$$(3.04')(1.73')(2.25')/27 = 0.44 \text{ CY}$$

$$\text{AT FWD ABUT: } (3.04')(1.73')(2.25')/27 = 0.44 \text{ CY}$$

$$\frac{1}{2}(1.50' + 1.77')(17.32')(2.25')/27 = 2.36 \text{ CY}$$

$$\frac{1}{2}(1.77' + 1.56')(17.32')(2.25')/27 = 2.40 \text{ CY}$$

$$(3.10')(1.73')(2.25')/27 = 0.45 \text{ CY}$$

$$\underline{175.55 \text{ CY}}$$

$$\text{PIERS: } \pi(1.5)^2(2')/27 = 0.52 \text{ CY}$$

$$\frac{1}{2}(2' + 2.24')(14.83')(3')/27 = 3.49 \text{ CY}$$

$$\frac{1}{2}(2.24' + 2')(14.83')(3')/27 = 3.49 \text{ CY}$$

$$\underline{7.50 \times 2 = 15.00 \text{ CY}}$$

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SHEET 2 OF 6

ITEM 511 - CLASS QCI CONCRETE ABUTMENT

$$\text{REAR: } (3')(3')(55.75') / 27 = 18.58 \text{ CY}$$

$$\frac{1}{2}(2.68' + 5.38')(6.75')(2.25') / 27 = 2.27 \text{ CY}$$

$$(5.38')(1.42')(2.25') / 27 = 0.64 \text{ CY}$$

$$(2.28')(38.30')(2.25') / 27 = 7.28 \text{ CY}$$

$$(5.32')(2.79')(2.25') / 27 = 1.24 \text{ CY}$$

$$\frac{1}{2}(5.32' + 2.72')(6.5')(2.25') / 27 = 2.19 \text{ CY}$$

$$\underline{32.19 \text{ CY}}$$

$$\text{FORWARD: } (3')(3')(55.75') / 27 = 18.58 \text{ CY}$$

$$\frac{1}{2}(2.73' + 5.33')(6.50')(2.25') / 27 = 2.18 \text{ CY}$$

$$(5.33')(1.45')(2.25') / 27 = 0.64 \text{ CY}$$

$$(2.29')(38.30')(2.25') / 27 = 7.31 \text{ CY}$$

$$(5.39')(2.75')(2.25') / 27 = 1.24 \text{ CY}$$

$$\frac{1}{2}(5.39' + 2.69')(6.75')(2.25') / 27 = 2.27 \text{ CY}$$

$$\underline{32.22 \text{ CY}}$$

$$\text{TOTAL} = 32.19 + 32.22 = 64.41 \text{ CY}$$

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SHEET 3 OF 6

ITEM S12 - SEALING OF CONCRETE SURFACES

SUPER = $(1.54' + 0.5') (91.94') / 9 \times 2 = 41.67 \text{ SY}$

AT REAR ABUT: $(1.73') (2.25') / 9 = 0.43 \text{ SY}$

$(1.73') (2.25') / 9 = 0.43 \text{ SY}$

$(3.10') (1.73') / 9 = 0.60 \text{ SY}$

$\frac{1}{2} (1.48' + 1.69') (17.32') / 9 = 3.05 \text{ SY}$

$\frac{1}{2} (1.69' + 1.42') (17.32') / 9 = 2.99 \text{ SY}$

$(2.96') (1.73') / 9 = 0.57 \text{ SY}$

AT FWD ABUT: $(1.73') (2.25') / 9 = 0.43 \text{ SY}$

$(1.73') (2.25') / 9 = 0.43 \text{ SY}$

$(2.96') (1.73') / 9 = 0.57 \text{ SY}$

$\frac{1}{2} (1.42' + 1.69') (17.32') / 9 = 2.99 \text{ SY}$

$\frac{1}{2} (1.69' + 1.48') (17.32') / 9 = 3.05 \text{ SY}$

$(3.02') (1.73') / 9 = 0.58 \text{ SY}$

57.79 SY

PIERS : $2\pi (1.5') (2') / 9 = 2.09 \text{ SY}$

$\pi (1.5^2) / 9 = 0.79 \text{ SY}$

$(29.67') (3') / 9 = 9.89 \text{ SY}$

$\frac{1}{2} (2' + 2.24') (14.83') / 9 \times 2 = 6.99 \text{ SY}$

$\frac{1}{2} (2.24' + 2') (14.83') / 9 \times 2 = 6.99 \text{ SY}$

26.75 $\times 2 = 53.50 \text{ SY}$

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SHEET 4 OF 6

ITEM 512 - SEALING OF CONCRETE SURFACES

REAR ABUTMENT :

$$\frac{1}{2}(1.40' + 7.10')(6.75') / 9 = 2.06 \text{ SY}$$

$$(4.10')(0.77') / 9 = 0.35 \text{ SY}$$

$$(1.0')(38.30') / 9 = 4.26 \text{ SY}$$

$$(4.04')(3.44') / 9 = 1.54 \text{ SY}$$

$$\frac{1}{2}(4.04' + 1.44')(6.50') / 9 = 1.98 \text{ SY}$$

$$(1.40')(2.25') / 9 = 0.35 \text{ SY}$$

$$(7.27' + 1.42')(2.25') / 9 = 2.17 \text{ SY}$$

$$(8.82')(1') / 9 = 0.98 \text{ SY}$$

$$(1.44')(2.25') / 9 = 0.36 \text{ SY}$$

$$(7.00' + 2.79')(2.25') / 9 = 2.45 \text{ SY}$$

$$(8.64')(1') / 9 = 0.96 \text{ SY}$$

17.46 SY

FWD ABUTMENT :

$$\frac{1}{2}(1.70' + 4.30')(6.50') / 9 = 2.17 \text{ SY}$$

$$(4.70')(0.80') / 9 = 0.38 \text{ SY}$$

$$(1.26')(38.30') / 9 = 5.36 \text{ SY}$$

$$(4.36')(3.40') / 9 = 1.65 \text{ SY}$$

$$\frac{1}{2}(4.36' + 1.66')(6.75') / 9 = 2.26 \text{ SY}$$

$$(1.70')(2.25') / 9 = 0.43 \text{ SY}$$

$$(7.00' + 1.75')(2.25') / 9 = 2.11 \text{ SY}$$

$$(8.60')(1') / 9 = 0.96 \text{ SY}$$

$$(1.66')(2.25') / 9 = 0.42 \text{ SY}$$

$$(7.27' + 2.75')(2.25') / 9 = 2.51 \text{ SY}$$

$$(8.85')(1') / 9 = 0.98 \text{ SY}$$

19.23 SY

TOTAL = 17.46 + 19.23 = 36.69 SY

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ITEM 516 - 1/2" PEUF

$$\text{REAR ABUTMENT: } (0.75')(38.11') = 28.58 \text{ SF}$$

$$\text{FWD ABUTMENT: } (0.75')(38.11') = 28.58 \text{ SF}$$

$$\underline{\hspace{1.5cm}} \\ 57.16 \text{ SF}$$

ITEM 516 - 1" PEUF

$$\text{REAR ABUTMENT: } (0.66')(38.11') = 25.15 \text{ SF}$$

$$(3.10')(2.60') = 8.06 \text{ SF}$$

$$(3.04')(2.60') = 7.90 \text{ SF}$$

$$\underline{\hspace{1.5cm}} \\ 41.11 \text{ SF}$$

$$\text{FWD ABUTMENT: } (0.66')(38.11') = 25.15 \text{ SF}$$

$$(3.04')(2.60') = 7.90 \text{ SF}$$

$$(3.10')(2.60') = 8.06 \text{ SF}$$

$$\underline{\hspace{1.5cm}} \\ 41.11 \text{ SF}$$

$$\text{TOTAL} = 41.11 + 41.11 = 82.22 \text{ SF}$$

ITEM 516 - NYLON REINFORCED NEOPRENE SHEETING

$$\text{REAR ABUTMENT: } (55.75')(3') = 167.25 \text{ SF}$$

$$(4.60')(3') = 13.80 \text{ SF}$$

$$(4.54')(3') = 13.62 \text{ SF}$$

$$\underline{\hspace{1.5cm}} \\ 194.67 \text{ SF}$$

$$\text{FWD ABUTMENT: } (55.75')(3') = 167.25 \text{ SF}$$

$$(4.54')(3') = 13.62 \text{ SF}$$

$$(4.60')(3') = 13.80 \text{ SF}$$

$$\underline{\hspace{1.5cm}} \\ 194.67 \text{ SF}$$

$$\text{TOTAL} = 194.67 + 194.67 = 389.34 \text{ SF}$$

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SHEET 6 OF 6

ITEM 518 - POROUS BACKFILL

$$\text{REAR ABUTMENT: } \frac{1}{2}(4.18' + 6.88')(6.75')(2') / 27 = 2.77 \text{ CY}$$

$$(6.88')(3.90')(2') / 27 = 1.99 \text{ CY}$$

$$(6.84')(34.64')(2') / 27 = 17.55 \text{ CY}$$

$$(6.82')(3.96')(2') / 27 = 2.00 \text{ CY}$$

$$\frac{1}{2}(6.82' + 4.22')(6.50')(2') / 27 = 2.66 \text{ CY}$$

$$\underline{26.97 \text{ CY}}$$

$$\text{FWD ABUTMENT: } \frac{1}{2}(4.23' + 6.83')(6.50')(2') / 27 = 2.66 \text{ CY}$$

$$(6.83')(3.93')(2') / 27 = 1.99 \text{ CY}$$

$$(6.79')(34.64')(2') / 27 = 17.42 \text{ CY}$$

$$(6.89')(3.93')(2') / 27 = 2.01 \text{ CY}$$

$$\frac{1}{2}(6.89' + 4.19')(6.75')(2') / 27 = 2.77 \text{ CY}$$

$$\underline{26.85 \text{ CY}}$$

$$\text{TOTAL} = 26.97 + 26.85 = 53.82 \text{ CY}$$

ITEM 526 - APPROACH SLABS

$$(25')(30') / 9 \times 2 = 166.67 \text{ SY}$$

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