Item: 202- Structure Removed, Over 20 Foot Span, As Per Plan

Units: LUMP

LUMP

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd. SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE 9/24/2020
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 202- Wearing Course Removed

Units: SY

$= (140.36')(22.29') = 3128.6\ SF \cdot \frac{1\ SY}{9\ SF} = 348\ SY$

$= \underline{348\ SY}$

348 SY

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE 9/24/20
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 208 - Vibration Control and Monitoring, As Per Plan

Units: LUMP

LUMP

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 503- Cofferdams and Excavation Bracing

Units: LUMP

LUMP

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE 9/24/20
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 503- Unclassified Excavation, As Per Plan

Units: LUMP

LUMP

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE 9/24/20
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 505- Pile Driving Equipment Mobilization

Units: LUMP

LUMP

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE 9/24/20
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

ITEM: 507 - 12" Cast-in-Place Reinforced Concrete Piles,

Driven, As Per Plan UNITS: FT

Rear Abutment

Length = (24 piles)(50') = 1200 ft

Forward Abutment

Length = (22 piles)(40') = 880 ft

Preboring

Length = 150 ft

Total = 2230 ft

2230 ft

BURGESS & NIPLE COMPUTATION SHEET

JOB NO. 57030 JOB NAME OLD ROCKSIDE RD SHEET ___ OF ___ SHEETS

SUBJECT ESTIMATED QUANTITIES PREPARED BY KMA DATE 8-24-21

SCALE ___ CHECKED BY JAA DATE 9/3/2021

ITEM: 507 - 14" Cast-in-Place Reinforced Concrete Piles, Driven, As Per Plan UNITS: FT

Pier 1

Length = (16 piles)(85') = 1360 ft

Pier 2

Length = (16 piles)(80') = 1280 ft

Preboring

Length = 150 ft

Total = 2790 ft

2790 ft

BURGESS & NIPLE COMPUTATION SHEET

JOB NO 57030 JOB NAME OLD ROCKSIDE RD SHEET ___ OF ___ SHEETS

SUBJECT ESTIMATED QUANTITIES PREPARED BY KMA DATE 8-24-21

SCALE ___ CHECKED BY JAA DATE 9/3/2021

Item: 507- Prebored Holes, As Per Plan

Units: FT

= 300 ft

300 ft

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE 9/24/20
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

ITEM: 509 - Epoxy Coated Reinforcing Steel, As Per Plan

UNITS: LB

Total = 1612 + 30882 + 80549 + 9819 = 132862 LB

132862 LB

BURGESS & NIPLE COMPUTATION SHEET

JOB NO. 57030 JOB NAME OLD ROCKSIDE RD SHEET ___ OF ___ SHEETS

SUBJECT ESTIMATED QUANTITIES PREPARED BY KMA DATE 4-5-21

SCALE ___ CHECKED BY JAA DATE 5/14/2021

Item: 511- Semi-Integral Diaphragm Guide

Units: EACH

2 EACH

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE 9/24/20
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 511 - Class QC2 Concrete with QC/QA, Bridge Deck, As Per Plan

Units: CY

$= (247'-0")[(16.5")(2.13") + (40'-0")(8.75")(6)] + (2)[(52.15" + 43.15")/12](3)(40')$

$= 9471.9\,CF \cdot \frac{1\,CY}{27\,CF} = 351\,CY$

351 CY

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 511 - Class QC1 Concrete with QC/QA, Pier Above Footings, As Per Plan

Units: CY

$$= \left[\frac{(30')(2.5') + (3.5')(5')}{2}\right] \times (22.37' + 22.25') + (39.33')(5.83')(3.22' + 3.25')$$

$$= 7451.5CF \cdot \frac{1CY}{27CF} = 276CY$$

276 CY

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

ITEM: 511 - Class QC1 Concrete With QC/QA, Abutment Including Footing, As Per Plan UNITS: CY

## Abutment Footings

Volume = $(47.83' + 9' + 9')(6')(3') + (45.25' + 9')(6')(3')$

= 261.44 $ft^3$

## Abutment Breastwalls

Volume = $(40.33')(2.89')(3') + (40.33')(2.89')(3')$ = 699.32 $ft^3$

## Wingwalls

Volume = $(12.5')(1.67')(7.72') + (4.5')(1.17')(7.89') + (1.25')(1.83')(6.23') + (2)[(12.5')(1.67') + (2.08')(1.67')](9.42')$

= 675.67 $ft^3$

Total Volume = 3536.43 $ft^3$ => 132 CY

132CY

BURGESS & NIPLE COMPUTATION SHEET

JOB NO. 57030 JOB NAME OLD ROCKSIDE RD SHEET ___ OF ___ SHEETS

SUBJECT ESTIMATED QUANTITIES PREPARED BY KMA DATE 4-5-21

SCALE ___ CHECKED BY JAA DATE 5/14/2021

Item: 511 - Class QC1 Concrete with QC/QA, Footing, As Per Plan

Units: CY

$= (35'\text{-}0")(4'\text{-}0")(10'\text{-}0") = 1400\,CF \times 2 = 2800\,CF$

$= 2800\,CF \cdot \frac{1\,CY}{27\,CF} = 104\,CY$

104CY

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 511 - Class QC2 Concrete with QC/QA, Sidewalk,

As Per Plan

Units: CY

$= (8.33')(297')(9") = 1856.25CF \cdot \frac{1CY}{27CF} = 69\ CY$

69CY

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

ITEM: S11 - Concrete, Misc.: Architectural Treatment

UNITS: SF

North Barrier/Deck

Area = $[(3')(283.33') + (4.5')(10.5') + (4.083')(3.5')](2)$ = 1823.08 SF

South Barrier/Deck

Area = $[(2')(279') + (3.5')(5.25') + (3.083')(1.75')](2)$ = 1163.54 SF

Piers

Area = $(771.77\ ft^2 + 83.89\ ft^2 + 767.63\ ft^2 + 83.44\ ft^2)(2)$ = 3413.46 SF

Abutments

Area = $(12.5')(7.72') + (4.5')(7.89') + (2)(10.5 + 2.083 + .71)(609.5 - 600.08)$ = 382.45 SF

Total Area = 6782.53 SF -> 6785 SF

6785 SF

BURGESS & NIPLE COMPUTATION SHEET

JOB NO. 57030 JOB NAME OLD ROCKSIDE RD SHEET ___ OF ___ SHEETS

SUBJECT ESTIMATED QUANTITIES PREPARED BY KMA DATE 5-14-21

SCALE ___ CHECKED BY JAA DATE 5/14/2021

Item: 512- Sealing of Concrete Surfaces (Non-Epoxy).

Units: SY

$= (7'\text{-}0")(286'\text{-}0") + (7'\text{-}4")(13'\text{-}0") = 2097.33SF$

$= 2098SF \cdot \frac{1SY}{9SF} = 233SY$

233SY

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE ___
SCALE Penn Bridge CHECKED BY KMA DATE 10/20/2020

Item: 512 - Type A Waterproofing

Units: SY

Abutments

$=(7.03')[(40.33')+(38.5')]=554.2\,SF$

Wingwalls

$=(9.5')[(6.40')+(6.47')+(6.28')]+(1.83')(6.23')=193.33\,SF$

$=554+194=748\,SF\cdot\frac{1\,SY}{9\,SF}=84\,SY$

84 SY

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE ___
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: Type B Waterproofing

Units: SY

$= (59.33')(3') + (51.33')(3') + (25')(3') + (17.33')(3') = 459\ SF$

$= 459SF \cdot \frac{1SY}{9SF} = 51SY$

51SY

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE ___
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: Special-Sealing: Elastomeric Protective and Decorative Concrete Coating

Units: SY

Barrier and Deck Overhang

$= (2"-0")(583'-4") + (242'-0")[(1'-0") + (1'-0")] + (2)(242'-0")\left(\frac{1.81.25}{12}\right) = 1723.8\ SF$

Abutments and Wingwalls

$= (65')(80') + (3)(12.5')(1.5') + (4.5')(1.5') + (1.5')(43.33')(2) = 713\ SF$

Pier Caps

$= (2)(133.19SF + 19.92SF) + 227.5SF + (2)(133.38SF + 19.95SF) + 227.5SF = 1067.9SF$

$= 1723.8 + 713 + 1067.9 = 3505SF \cdot \frac{1SY}{9SF} = 391\ SY$

391 SY

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rodeside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE ___
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 513 - Structural Steel Members, Level UF

Units: LUMP

LUMP

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 513 - Structural Steel Members, Level 3

Units: LB

Beams

$= (246'\text{-}0")(262\ plf)(6) = 386{,}712\ lb$

Cross Frames

$= [(2)(7.75" \cdot \frac{1'}{12"})(34" \cdot \frac{1'}{12"})(0.375" \cdot \frac{1'}{12"}) + (4)(9.75" \cdot \frac{1'}{12"})(9" \cdot \frac{1'}{12"})(0.375" \cdot \frac{1'}{12"})]\ 490\ pcf +$

$(11.3\ plf)(4)(5.71' + 6.37') = 301.81\ lb/frame \cdot 75\ frames = 22632.6\ lb$

Splices

$= [(16.5"/12)(0.875"/12)(2.21')(2) + (6.25"/12)(1.25"/12)(2.21')(4) +$

$(14.5"/12)(0.75"/12)(2.33')(2) - (0.89in^2/144)(3.565"/12)(64) - (0.89in^2/144)(2.34"/12)(32)]$

$\times 490 + (64/100)(190) + (32/100)(162) = 721.75\ lb/splice \cdot 12\ splices =$

$= 8660.95\ lbs$

418,100 lbs

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 513- Welded Stud Shear Connectors

Units: EACH

$= [(27+42+12+70+12+42+27+3)3] \times 6 = 4230$ EACH

4230 EACH

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 514 - Field Painting Structural Steel, Intermediate Coat

Units: LB

= 418,100 lb

418,100 lb

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE ___
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 514 - Field Painting Structural Steel, Finish Coat

Units: LB

= 418,100 lb

418,100 lb

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 516 - Armorless Preformed Joint Seal

Units: FT

= 39ft x 2 = 78 ft

78 ft

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE ___
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 516 - 1" Preformed Expansion Joint Filler

Units: SF

$=(2'-0")(1'-4")(2)+(3'-0")(1'-4")(2)=14\,SF$

14SF

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 516-2" Preformed Expansion Joint Filler

Units: SF

$= (2')(3')(3')(2) + (12.5')(1.5')(3) + (4.5')(1.25') + (3.48')(3')(4) + (1.83')(1.25') +$

$(4.42')(1.5') + (1.5')(3') + (1.75')(7') = 156\ SF$

156 SF

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 516 - Semi-Integral Abutment Expansion Joint Seal

Units: FT

= 40ft + 40.33ft = 81 ft

81 ft

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 516- Elastomeric Bearing with Laminates and Load Plate (Neoprene)(Bearing- 1'-10" x 1'-6½" x 2 13/16", Load Plate- 1'-7½" x 1'-11" x 1 13/16"), As Per Plan

Units: EACH

=6+6=12

12 EACH

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE ___
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 516 – Elastomeric Bearing with Internal Laminates and Load Plate (Neoprene)(Bearing - 1'-2" x 1'-0" x 3 3/16", Load plate - 1'-3" x 1'-1" x 1 1/2"), As Per Plan Units: EACH

= 6 + 6 = 12

12 EACH

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE ___
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 517 - Railing (Concrete Parapet with Twin Steel Tube Railing),

As Per Plan

Units: FT

=(296'-4")+(285'-8") = 582 ft

582 ft

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 518 - Porous Backfill with Geotextile Fabric, As Per Plan

Units: CY

Forward Abutment

$= (40')(2')(6.72') + (7.5')(2')(6.47') = 634.7\,CF$

Rear Abutment

$= (40')(2')(6.72') + (7.5')(2')(6.40') + (7.5')(2')(6.28') = 727.8\,CF$

$= 727.8 + 634.7 = 1363\,CF \cdot \frac{1\,CY}{27\,CF} = 51\,CY$

51 CY

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57050 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 518 - 6" Perforated Corrugated Plastic Pipe

Units: FT

$=[(12'-6")-(3'-0")-6"](3)+[(43'-4")-(3'-0")-(2'-0")](2)=104\,ft$

104 ft

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE ___
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: Special - 6" Non-Perforated Corrugated Plastic Pipe, Including Specials

Units: FT

= 40' + 20' = 60ft

60ft

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

ITEM: 523 - Dynamic Load Testing, As Per Plan

UNITS: Each

1 per substructure = 4 Each

4 Each

BURGESS & NIPLE COMPUTATION SHEET

JOB NO. 57030 JOB NAME OLD ROCKSIDE RD SHEET ___ OF ___ SHEETS

SUBJECT ESTIMATED QUANTITIES PREPARED BY KMA DATE 9-2-21

SCALE ___ CHECKED BY JAA DATE 9/3/2021

ITEM: S23 - Restrike, As Per Plan

UNITS: Each

1 per Substructure = 4 Each

4 Each

BURGESS & NIPLE COMPUTATION SHEET

JOB NO. 57030 JOB NAME OLD ROCKSIDE RD SHEET ___ OF ___ SHEETS

SUBJECT ESTIMATED QUANTITIES PREPARED BY KMA DATE 9-2-21

SCALE ___ CHECKED BY JAA DATE 9/3/2021

Item: 526- Reinforced Concrete Approach Slabs (T= 15"), As Per Plan

Units: SY

$= (25'\text{-}0")(40'\text{-}0")(2) = 2000\ SF$

$= 2000\ SF \cdot \frac{1\ SY}{9\ SF} = 223\ SY$

223 SY

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: 526 - Type C Installation

Units: FT

=40 ft + 38 ft = 78 ft

78 ft

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE ___
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: Special - Structures: Protection of Facilities

Units: LUMP

LUMP

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE ___
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: Special - Structures: Preconstruction Condition Survey

Unit: LUMP

LUMP

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

ITEM: Special - Structures: Proposed Gas Line Pipe Sleeves

UNITS: Lump

Lump

BURGESS & NIPLE COMPUTATION SHEET

JOB NO. 57030 JOB NAME OLD ROCKSIDE RD SHEET ___ OF ___ SHEETS

SUBJECT ESTIMATED QUANTITIES PREPARED BY KMA DATE 8-24-21

SCALE ___ CHECKED BY JAA DATE 9/3/2021

Item: 601 – Crushed Aggregate Slope Protection

Unit: SY

$= \frac{\pi (4')^2}{4} (2) = 25.13 SF \cdot \frac{1 SY}{9 SF} = 3 SY$

3 SY

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS
SUBJECT Estimated Quantities PREPARED BY DBH DATE ___
SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

ITEM: 601 - Articulating Concrete Block Revetment System, Type 3, As Per Plan UNITS: SY

## Rear Abutment

Area = 3348.20 ft² (CADD)

Check Area = (43.33')(31+25 STA − 30+65 STA)
+ (6')(31+25 − 30+65) + (6')(31+25 − 30+65)
= 3319.8 ft²

Total Area = (3348.2) + (2)(+3125 − 3065)(2×1.5')
+ (43.33')(4×1.5') = 3968.18 ft²

## Forward Abutment

Area = 3713.14 ft² (CADD)

Check Area = (40')(3310 − 3250) + (8')(18'×2.16') + (38')(18')
+ (8')(48') = 3779.04 ft²

Total Area = (3713.14) + (2×1.5')(18') + (2)(30')(3×1.5)
+ (48')(2×1.5') + (50')(4×1.5') = 4481.14 ft²

Total = 8449.32 ft² => 940 SY

940 SY

BURGESS & NIPLE COMPUTATION SHEET

JOB NO. 57030 JOB NAME OLD ROCKSIDE RD SHEET ___ OF ___ SHEETS
SUBJECT ESTIMATED QUANTITIES PREPARED BY KMA DATE 3-14-21
SCALE ___ CHECKED BY JAA DATE 5/14/2021

ITEM: 601 - Rock Channel Protection, Type A Without Filter, As Per Plan UNITS: CY

Rear Abutment

CADD Area = 1366.31 ft²

(Check Area = (18')(50') + (4')(2)(25') + (2)(½)(13')(6'+15') = 1375 ft²)

Volume = (1366.31 ft²)(3') = 4098.93 ft³

Forward Abutment

CADD Area = 1332.53 ft²

(Check Area = (17.5')(50' + 30') = 1400 ft²)

Volume = (1332.53 ft²)(3') = 3997.59 ft³

Total Volume = 8096.52 ft³ => 299.87 CY

Use

305 CY

305 CY

BURGESS & NIPLE COMPUTATION SHEET

JOB NO. 57030 JOB NAME OLD ROCKSIDE RD SHEET ___ OF ___ SHEETS

SUBJECT ESTIMATED QUANTITIES PREPARED BY KMA DATE 3-14-21

SCALE ___ CHECKED BY JAA DATE 5/14/2021

Item: 625 - Structure Grounding System

Units: EACH

1 EACH

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE

SCALE Perm Bridge CHECKED BY KMA DATE 10/20/2020

Item: Special - Misc.: Contractor Access

Units: LUMP

LUMP

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. _____ JOB NAME _____ SHEET ___ OF ___ SHEETS

SUBJECT _____ PREPARED BY _____ DATE _____

SCALE _____ CHECKED BY KMA DATE 10/20/2020

Item: Special - Misc.: Work Involving Asbestos Containing Materials

Units: LUMP

LUMP

**BURGESS & NIPLE COMPUTATION SHEET**

JOB NO. 57030 JOB NAME Old Rockside Rd SHEET ___ OF ___ SHEETS

SUBJECT Estimated Quantities PREPARED BY DBH DATE ___

SCALE Perm. Bridge CHECKED BY KMA DATE 10/20/2020