

STA. 1011+00 TO STA. 1021+00

Boring #2 (1973)

Boring #3 (1973)

Boring #4 (1973)

Boring #5 (1973)

Boring #6 (1973)

No. 4 - CURVE DATA RAMP B
P.I. Sta. 1026+39.21
70.10' Rt. & I.R. 70
 $\Delta = 3^\circ 52' 08''$
 $D_c = 1^\circ 30' 00''$
 $R = 3819.72'$
 $L_c = 257.93'$
 $T = 129.01'$
 $E = 2.18'$

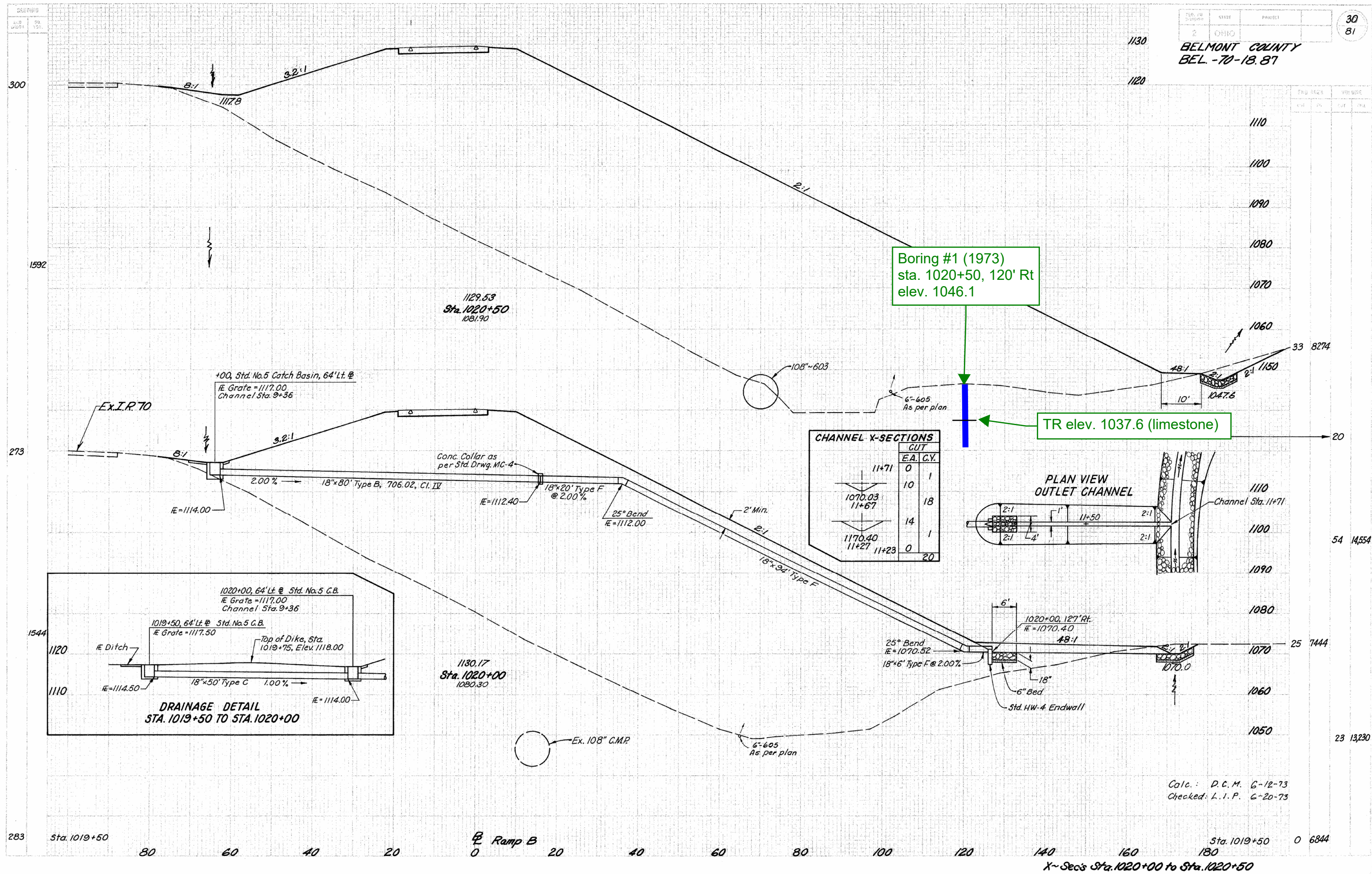
See Pavement Detail

Excavation 24,706 Cu. Yds.
Embankment 60,964 Cu. Yds.
Seed & Mulch 13,699 Sq. Yds.

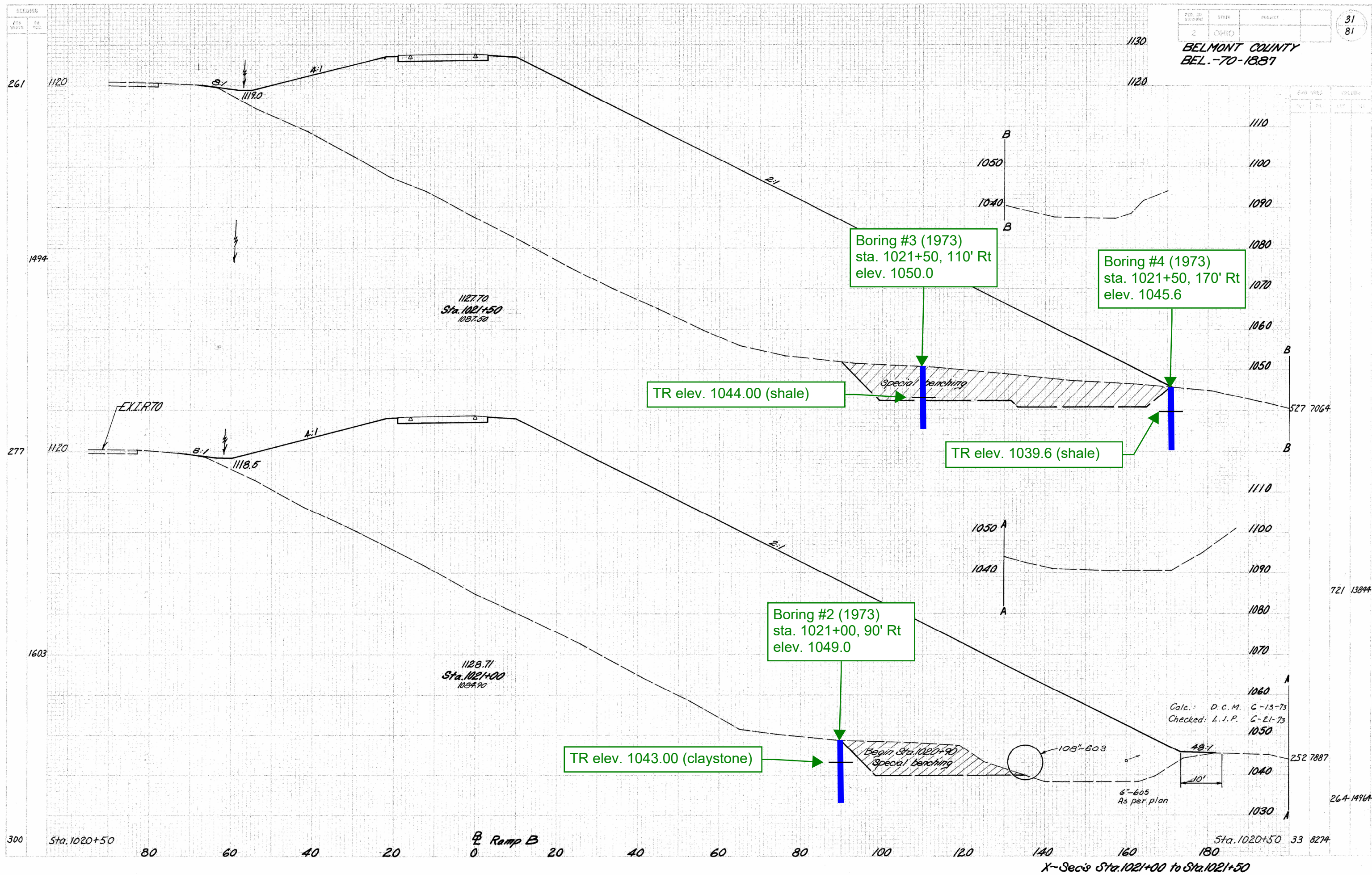
Calc.: L.I.P. 6-8-73
Checked: C.C.C. 6-11-73

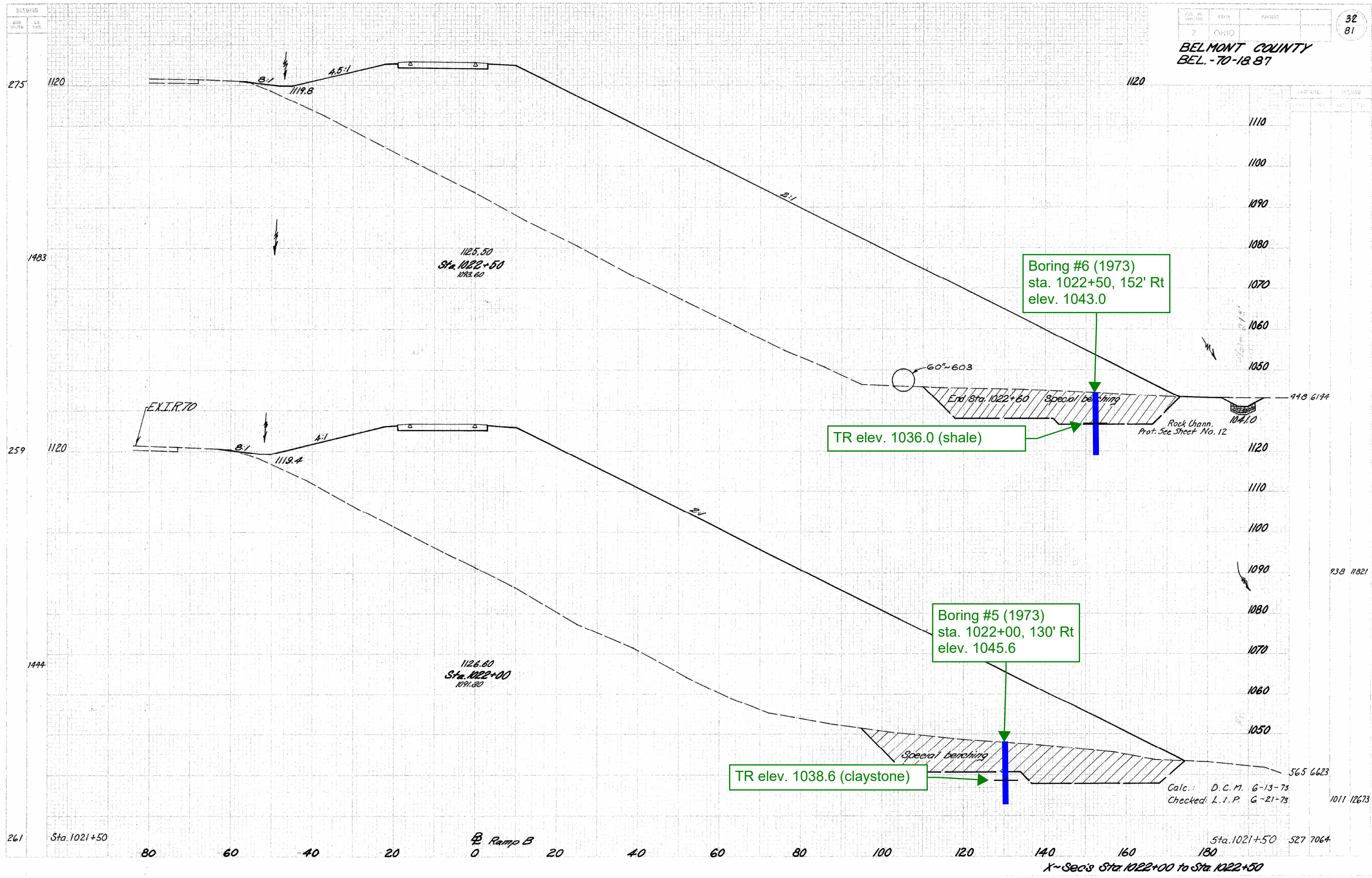
| STATION | As Per Plan | As Per Plan | ESTIMATED QUANTITIES | | | | Bends |
|------------|-------------|-------------|----------------------|----------|----------|---------|-------|
| | | | 601 | 602 | 603 | 605 | |
| 1 1021+00 | 1022+00 | 1023+00 | Root Guard Rail | Concrete | Concrete | Deep | 6" |
| 2 1022+00 | 1023+00 | 1024+00 | Concrete | Concrete | Concrete | Shallow | 6" |
| 3 1023+00 | 1024+00 | 1025+00 | Concrete | Concrete | Concrete | Deep | 6" |
| 4 1024+00 | 1025+00 | 1026+00 | Concrete | Concrete | Concrete | Shallow | 6" |
| 5 1025+00 | 1026+00 | 1027+00 | Concrete | Concrete | Concrete | Deep | 6" |
| 6 1026+00 | 1027+00 | 1028+00 | Concrete | Concrete | Concrete | Shallow | 6" |
| 7 1027+00 | 1028+00 | 1029+00 | Concrete | Concrete | Concrete | Deep | 6" |
| 8 1028+00 | 1029+00 | 1030+00 | Concrete | Concrete | Concrete | Shallow | 6" |
| 9 1029+00 | 1030+00 | 1031+00 | Concrete | Concrete | Concrete | Deep | 6" |
| 10 1030+00 | 1031+00 | 1032+00 | Concrete | Concrete | Concrete | Shallow | 6" |

1021+00 TO 1031+00



Calc.: D.C.M. 6-12-73
 Checked: L.I.P. 6-20-73





State of Ohio
Department of Transportation
Division of Highways
Testing Laboratory

LOG OF BORING

Date Started 3-22-73 Sampler Type SS Dia 1 3/8" Water Elev 1039.1'
Date Completed 3-22-73 Casing Length 8.0' Dia 3 1/2"

| Boring No. 1 | | | Station & Offset | | 1020+50, 120'RE | | Surface Elev. 1046.1' | | | | | | | | | | | | |
|--------------|-------|-------------|------------------|----------|---|-----------|-----------------------|--------------------------|--------|--------|--------|--------|------|------|------|--|--|------------|--|
| Elev. | Depth | S/G Pen (N) | Rec. ft. | Loss ft. | Description | Field No. | Lab. Nos. | Physical Characteristics | | | | | | | | | | SHTL Class | |
| | | | | | | | | % Agg. | % C.S. | % F.S. | % Silt | % Clay | L.L. | P.I. | W.C. | | | | |
| 1046.1 | 0 | | | | | | | | | | | | | | | | | | |
| | 2 | | | | | | | | | | | | | | | | | | |
| 1043.6 | 4 | 9/12 | | | BROWN GRAVEL WITH SAND | 1 | 63503 | 39 | 19 | 17 | 14 | 11 | NP | NP | 30 | | | A-1-b | |
| 1041.1 | 6 | 2/4 | | | GRAY GRAVEL | 2 | 63504 | - | - | - | - | - | - | - | 14 | | | M.O* | |
| 1038.6 | 8 | 2/10 | | | BROWN GRAVEL WITH SAND AND SILT | 3 | 63505 | 38 | 9 | 18 | 22 | 13 | NP | NP | 17 | | | A-2-a | |
| 1037.6 | 10 | | 1.3 | 0.2 | 2' TOP OF ROCK | | | | | | | | | | | | | | |
| 1035.7 | 12 | | | | LIMESTONE, GRAY, HARD, DENSE WITH CLAY SEAMS. CORE LOSS 10% | | | | | | | | | | | | | | |
| | 14 | | 4.5 | 0.5 | SANDY SHALE, HARD, DENSE, MICACEOUS, FIRM. CORE LOSS 11% | | | | | | | | | | | | | | |
| 1031.1 | | | | | | | | | | | | | | | | | | | |

↑ BOTTOM OF BORING

*M.O = MOISTURE ONLY

State of Ohio
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Testing Laboratory

LOG OF BORING

Date Started 3-21-73 Sampler Type SS Dia 1 3/8" Water Elev
Date Completed 3-22-73 Casing Length Dia

| Boring No. <u>2</u> Station & Offset: | | | <u>1021+00, 90' Rt.</u> | | | Surface Elev. <u>1049.0'</u> | | | | | | | | | | | | |
|---------------------------------------|-------|-------------|-------------------------|------|---|------------------------------|-----------|--------------------------|------|--------|--------|--------|------|------|------|----|--|------------|
| Elev. | Depth | Std Pen (N) | Rec. H. | Loss | Description | Field No. | Lab. Nos. | Physical Characteristics | | | | | | | | | | SHTL Class |
| | | | | | | | | % Agg. | % S. | % F.S. | % Silt | % Clay | L.L. | P.I. | W.C. | | | |
| 1049.0 | 0 | | | | | | | | | | | | | | | | | |
| 1046.5 | 2 | | | | | | | | | | | | | | | | | |
| 1044.0 | 4 | 8/9 | | | BROWN SANDY CLAYEY SILT | 1 | 63542 | 4 | 5 | 24 | 33 | 34 | 28 | 8 | 21 | | | A-4a |
| 1043.0 | 6 | 50 (0.2) | | | BROWN GRAVEL | 2 | 63543 | - | - | - | - | - | - | - | - | 17 | | VIS |
| | 8 | | 3.5 | 0.5 | TOP OF ROCK | | | | | | | | | | | | | |
| | 10 | | | | CLAY STONE, GRAY, SOFT WITH CLAY SEAMS. CORE LOSS 15% | | | | | | | | | | | | | |
| 1037.8 | 12 | | | | | | | | | | | | | | | | | |
| | 14 | | 4.7 | 0.3 | SILT SHALE, HARD, GRAY, MICACEOUS, SANDY WITH TWO THIN LIMESTONE STRINGERS. NO CORE LOSS. | | | | | | | | | | | | | |
| 1034.0 | | | | | | | | | | | | | | | | | | |

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Date Started 3-22-73 Sampler Type SS Dia 1 3/8" Water Elev
Date Completed 3-22-73 Casing Length Dia

| Boring No. <u>3</u> | | Station & Offset | | <u>102+450, 110' Rte.</u> | | Surface Elev. <u>1050.0'</u> | | | | | | | | | | | | |
|---------------------|-------|------------------|---------------|---------------------------|--|------------------------------|-----------|--------------------------|------|--------|--------|--------|------|------|------|--|--|------------|
| Elev. | Depth | Sgt. Pen. (N) | Rec. H. (ft.) | Loss (ft.) | Description | Field No. | Lab. Nos. | Physical Characteristics | | | | | | | | | | SHTL Class |
| | | | | | | | | % Agg. | % S. | % F.S. | % Silt | % Clay | L.L. | P.I. | W.C. | | | |
| 1050.0 | 0 | | | | | | | | | | | | | | | | | |
| 1047.5 | 2 | | | | | | | | | | | | | | | | | |
| 1045.0 | 4 | 4/8 | | | BROWN SANDY SILTY CLAY | 1 | 63546 | 3 | 5 | 12 | 32 | 48 | 37 | 16 | 27 | | | A-6b |
| 1044.0 | 6 | 50 (0.9) | | | TOP OF ROCK BROWN SANDY CLAY WITH SHALE FRAGMENTS | 2 | 63547 | 30 | 6 | 14 | 27 | 23 | 33 | 12 | 26 | | | A-6a |
| 1041.0 | 8 | | 0.9 | 2.1 | CLAY SHALE, WEATHERED, WITH CLAY SEAMS, CALCAREOUS, SOFT. CORE LOSS 70% | | | | | | | | | | | | | |
| 1039.0 | 10 | | 2.0 | 0.0 | LIMESTONE, IMPURE, GRAY, ARGILLACEOUS. NO CORE LOSS. | | | | | | | | | | | | | |

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Date Started 3-22-73 Sampler Type SS Dia 1 3/8" Water Elev
Date Completed 3-22-73 Casing Length Dia

| Boring No. <u>4</u> Station & Offset: <u>1021+50, 170' E</u> | | | | | Surface Elev. <u>1045.63</u> | | | | | | | | | | | | | |
|--|-------|---------------|---------------|------------|---|-----------|-----------|--------------------------|------|--------|--------|--------|------|------|------|--|--|------------|
| Elev. | Depth | Std. Pen. (N) | Rec. H. (ft.) | Loss (ft.) | Description | Field No. | Lab. Nos. | Physical Characteristics | | | | | | | | | | SHTL Class |
| | | | | | | | | % Agg. | % S. | % F.S. | % Silt | % Clay | L.L. | P.I. | W.C. | | | |
| 1045.6 | 0 | | | | | | | | | | | | | | | | | |
| 1043.1 | 2 | | | | | | | | | | | | | | | | | |
| 1040.6 | 4 | 10/20 | | | BROWN SILTY CLAY | 1 | 63544 | 0 | 1 | 4 | 32 | 63 | 42 | 16 | 38 | | | A-7-6 |
| 1039.6 | 6 | 50 (0.5) | | | GRAY CLAY SHALE | 2 | 63545 | 0 | 2 | 4 | 55 | 39 | 31 | 12 | 16 | | | VISUAL |
| | 8 | | 3.9 | 0.1 | | | | | | | | | | | | | | |
| 1034.6 | 10 | | | | CLAY SHALE, BLUE-GRAY, MEDIUM-SOFT GRADING TO SILTY MICACEOUS SHALE IN BOTTOM ONE HALF WITH A HARD 6" LIMESTONE STRINGER FROM 1037.6' TO 1037.1'. CORE LOSS 22% | | | | | | | | | | | | | |

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LOG OF BORING

Date Started 3-22-73 Sampler Type SS Dia 1 3/8" Water Elev 1039.6'
Date Completed 3-22-73 Casing Length 7.0' Dia 3 1/2"

| Boring No. | | 5 | Station & Offset | | 102+00, 130' Rt. | | Surface Elev | | 1045.6' | | | | | | | | | |
|------------|-------|-------------|------------------|-------------|------------------|-----------|--------------------------|--------|---------|--------|------|------|------|--|--|--|------------|--|
| Elev. | Depth | S/G Pen (N) | Rec. Loss (ft.) | Description | Field No. | Lab. No.s | Physical Characteristics | | | | | | | | | | SHTL Class | |
| | | | | | | | % Agg. | % F.S. | % Silt | % Clay | L.L. | P.I. | W.C. | | | | | |
| 1045.6 | 0 | | | | | | | | | | | | | | | | | |
| 1043.1 | 2 | | | | | | | | | | | | | | | | | |
| | | 4/5 | | | | | | | | | | | | | | | | |
| 1040.6 | 4 | | | | | | | | | | | | | | | | | |
| | 6 | 6/11 | | | | | | | | | | | | | | | | |
| 1038.6 | 6 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| 1036.8 | 8 | | 2.4 | 0.6 | | | | | | | | | | | | | | |
| | 10 | | | | | | | | | | | | | | | | | |
| | 12 | | | | | | | | | | | | | | | | | |
| | 14 | | 5.0 | 0.0 | | | | | | | | | | | | | | |
| 1030.6 | | | | | | | | | | | | | | | | | | |

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Date Started 3-22-73 Sampler Type SS Dia 1 3/8" Water Elev
Date Completed 3-22-73 Casing Length Dia

| Boring No. 6 Station & Offset | | | | 1022+50, 152' Rt. | | Surface Elev. 1043.0' | | | | | | | | | | | | |
|-------------------------------|----------|---------------|---------------|-------------------|---|-----------------------|-----------|--------------------------|------|--------|--------|--------|------|------|------|------|--|------------|
| Elev. | Depth | Sgt. Pen. (N) | Rec. H. (ft.) | Loss (ft.) | Description | Field No. | Lab. Nos. | Physical Characteristics | | | | | | | | | | SHTL Class |
| | | | | | | | | % Agg. | % S. | % F.S. | % Silt | % Clay | L.L. | P.I. | W.C. | | | |
| 1043.0 | 0 | | | | | | | | | | | | | | | | | |
| 1040.5 | 2 | | | | | | | | | | | | | | | | | |
| | 4 | 4/4 | | | BROWN SILTY GRAVELLY SAND | 1 | 63533 | 24 | 12 | 24 | 25 | 15 | 29 | 10 | 18 | A-4a | | |
| 1038.0 | 6 | | | | | | | | | | | | | | | | | |
| | 50 (0.5) | | | | BROWNISH-GRAY SANDY CLAYEY SILT | 2 | 63534 | 9 | 6 | 10 | 39 | 36 | 27 | 7 | 16 | A-4a | | |
| 1036.0 | 8 | | | | TOP OF ROCK | | | | | | | | | | | | | |
| 1034.5 | 8 | | | | CLAY SHALE, FIRM, GRAY, MICACEOUS WITH CLAY SEAMS. NO CORE LOSS. | | | | | | | | | | | | | |
| 1033.0 | 10 | | 3.5 | 0.5 | LIMESTONE, HARD, GRAY, DENSE, FIRM IN UPPER IN 6", ARGILLACEOUS IN BASAL 14 FEET. NO CORE LOSS. | | | | | | | | | | | | | |
| 1032.0 | 12 | | | | CLAY SHALE WITH CLAY SEAMS. CORE LOSS 50% | | | | | | | | | | | | | |

↑ BOTTOM OF BORING

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - TESTING LABORATORY
1600 WEST BROAD STREET COLUMBUS, OHIO 43223

SUBSURFACE FOUNDATION INVESTIGATION
BELMONT COUNTY
WEIGH STATION
BEL-70-18.87

BORING DATA

| TYPED BY | CHECKED BY | REVIEWED BY | DATE |
|----------|------------|-------------|------|
|----------|------------|-------------|------|