

DOCUMENT A00802

DETAIL SHEETS

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THE COMMONWEALTH OF MASSACHUSETTS
MassDOT - HIGHWAY DIVISION
TEN PARK PLAZA, BOSTON, MA

PRELIMINARY ESTIMATE OF QUANTITIES - DETAIL SHEETS

| | | | |
|-----------------|-----------|---------------|---------------------------|
| Town: | Harvard | Road: | Ayer Road (Route 110/111) |
| Station: | | Class: | Resurfacing |
| Beginning | 8+69.90 | | |
| Ending | 100+74.80 | Date: | May 4, 2026 |

PROPOSED HMA MILL & OVERLAY

AREA = 23,380 SY

SURFACE: 1¾" SUPERPAVE SURFACE COURSE - 12.5 POLYMER (SSC - 12.5 - P) OVER
2¼" SUPERPAVE INTERMEDIATE COURSE – 19.0 (SIC – 19.0) OVER
2¼" (MIN) PAVEMENT FINE MILLING

PROPOSED HMA MILL & OVERLAY TRANSITIONS

AREA = 198 SY

SURFACE: 1¾" SUPERPAVE SURFACE COURSE - 12.5 POLYMER (SSC - 12.5 - P) OVER
1¾" PAVEMENT FINE MILLING

PROPOSED FULL DEPTH PAVEMENT

AREA = 7,972 SY

SURFACE: 1¾" SUPERPAVE SURFACE COURSE - 12.5 POLYMER (SSC - 12.5 - P) OVER
2¼" SUPERPAVE INTERMEDIATE COURSE – 19.0 (SIC – 19.0) OVER

BASE: 4" SUPERPAVE BASE COURSE – 37.5 (SBC – 37.5) OVER

SUBBASE: 4" DENSE GRADED CRUSHED STONE
8" GRAVEL BORROW TYPE b

PROPOSED FULL DEPTH PAVEMENT LESS THAN 4' WIDE

AREA = 49 SY

SURFACE: 1¾" SUPERPAVE SURFACE COURSE - 12.5 POLYMER (SSC - 12.5 - P) OVER
2¼" SUPERPAVE INTERMEDIATE COURSE – 19.0 (SIC – 19.0) OVER

BASE: 6" HIGH EARLY STRENGTH CEMENT CONCRETE BASE COURSE OVER

SUBBASE: 8" GRAVEL BORROW, TYPE b

PROPOSED PERMANENT PAVEMENT TRENCH PATCH**AREA = 944 SY**

SURFACE: 1¾" SUPERPAVE SURFACE COURSE – 12.5 POLYMER (SSC – 12.5 – P) OVER
2¼" SUPERPAVE INTERMEDIATE COURSE – 19.0 (SIC – 19.0) OVER
VARIABLE DEPTH SUPERPAVE INTERMEDIATE COURSE – 19.0 (SIC – 19.0)
(COMPACTED IN 2" (MAX) LIFTS) TO MATCH EXISTING PAVEMENT THICKNESS

PROPOSED TEMPORARY PAVEMENT TRENCH PATCH**AREA = 2,852 SY**

SURFACE: 3½" HMA FOR TEMPORARY ASPHALT PATCHING
BASE: EXISTING MATERIAL SUITABLE FOR RE-USE (SEE VARIOUS TRENCH DETAILS)

PROPOSED HMA DRIVEWAYS (TO MATCH EXISTING) – RESIDENTIAL**AREA = 1,492 SY**

SURFACE: 1½" SUPERPAVE SURFACE COURSE – 9.5 (SSC - 9.5) OVER
2½" SUPERPAVE SURFACE COURSE – 12.5 (SSC - 12.5) OVER
BASE: 8" SUITABLE EXISTING GRAVEL;
ADD GRAVEL BORROW, TYPE b AS REQUIRED

PROPOSED HMA DRIVEWAYS (TO MATCH EXISTING) – COMMERCIAL**AREA = 2,936 SY**

SURFACE: 1½" SUPERPAVE SURFACE COURSE – 12.5 (SSC - 12.5) OVER
2½" SUPERPAVE SURFACE COURSE – 12.5 (SSC - 12.5) OVER
BASE: 8" SUITABLE EXISTING GRAVEL;
ADD GRAVEL BORROW, TYPE b AS REQUIRED

PROPOSED HMA SHARED USE PATH / HMA ISLAND**AREA = 7,883 SY**

SURFACE: 1½" SUPERPAVE SURFACE COURSE - 9.5 (SSC – 9.5) OVER
2½" SUPERPAVE SURFACE COURSE – 12.5 (SSC – 12.5) OVER
BASE: 8" GRAVEL BORROW, TYPE b

PROPOSED HMA SHARED USE PATH – STA 154+76 TO STA 158+31**AREA = 388 SY**

SURFACE: 1½" SUPERPAVE SURFACE COURSE - 9.5 (SSC – 9.5) OVER
2½" SUPERPAVE SURFACE COURSE – 12.5 (SSC – 12.5) OVER
BASE: 12" GRAVEL BORROW, TYPE b

PROPOSED HMA SIDEWALK

AREA = 65 SY

SURFACE: 1¼" SUPERPAVE SURFACE COURSE - 9.5 (SSC - 9.5) OVER
1¾" SUPERPAVE SURFACE COURSE - 12.5 (SSC - 12.5) OVER

BASE: 8" GRAVEL BORROW, TYPE b

**PROPOSED CEMENT CONCRETE SIDEWALKS / PEDESTRIAN CURB RAMPS /
BIKE RAMPS**

AREA = 761 SY

SURFACE: 4" CEMENT CONCRETE (AIR ENTRAINED, 4000 PSI, ¾", 610)

BASE: 8" GRAVEL BORROW, TYPE b

GENERAL PAVEMENT NOTES

1. ASPHALT EMULSION FOR TACK COAT SHALL BE APPLIED BETWEEN ALL ASPHALT SURFACES AND SAWCUT JOINTS BEFORE PAVING. HMA JOINT ADHESIVE SHALL BE APPLIED TO ALL COLD JOINTS (LONGITUDINAL AND TRANSVERSE) BEFORE PAVING SURFACE COURSE. ASPHALT EMULSION FOR TACK COAT SHALL BE APPLIED AT A RATE CONSISTENT WITH STANDARD SPECIFICATION 450.43.G.2. ALL SURFACES SHALL BE CLEAN OF ALL ORGANICS, DEBRIS, AND SAND PRIOR TO PAVING.
2. ALL HMA SHALL BE IN ACCORDANCE WITH SECTION 450.
3. ASPHALT EMULSION FOR TACK COAT SHALL BE RS-1H TO RESIST TRACKING OF TACK BY HAUL VEHICLES.
4. HMA FOR WALKS AND DRIVEWAYS SHALL BE IN ACCORDANCE WITH SECTION 700.
5. ALL GRAVEL BORROW MEETING SPECIFICATION SHALL BE RETAINED IN PLACE, COMPACTED, AND LEVELED AS REQUIRED.

ITEM 101.**CLEARING AND GRUBBING**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 18+60 to 20+33 | LT |
| 24+28 to 26+96 | RT |
| 32+22 to 33+17 | LT |
| 34+22 to 34+52 | RT |
| 35+15 to 36+55 | RT |
| 37+63 to 37+85 | RT |
| 43+67 to 45+01 | LT |
| 46+99 to 48+69 | LT |
| 49+85 to 52+47 | LT |
| 54+79 to 54+94 | LT |
| 61+74 to 61+91 | RT |
| 63+98 to 65+17 | RT |
| 64+47 to 67+71 | LT |
| 70+22 to 71+92 | LT |
| 73+11 to 76+01 | RT |
| 78+91 to 80+66 | RT |
| 82+42 to 83+61 | LT |
| 83+47 to 83+51 | RT |
| 84+03 to 85+89 | RT |
| 83+90 to 85+08 | LT |
| 86+74 to 87+48 | RT |
| 87+72 to 88+56 | RT |
| 88+55 to 89+63 | LT |
| 89+18 to 89+69 | RT |
| 91+62 to 92+38 | RT |
| 95+01 to 95+79 | LT |
| 95+96 to 96+54 | LT |
| 96+89 to 98+92 | LT |

Gebo Lane

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 115+34 to 115+42 | LT |

Shared Use Path

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 147+59 to 153+56 | LT/RT |
| 153+56 to 154+44 | LT/RT |
| 154+80 to 155+50 | RT |

ITEM 102.1**TREE TRIMMING**

To be used as directed by the Engineer for tree trimming for overhead wire relocations.

ITEM 102.511

TREE PROTECTION – ARMORING AND PRUNING

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Size (in)</u> |
|----------------|---------------|------------------|
| 12+26 | 30' LT | 20 |
| 19+99 | 58' LT | 18 |
| 20+38 | 85' LT | 18 |
| 23+89 | 30' LT | 24 |
| 54+34 | 21' LT | 24 |
| 55+71 | 21' RT | 24 |
| 61+56 | 38' LT | 10 |
| 62+08 | 29' RT | 30 |
| 62+21 | 36' LT | 15 |
| 66+55 | 28' RT | 13 |
| 66+58 | 30' RT | 18 |
| 74+05 | 35' LT | 24 |
| 75+22 | 31' LT | 20 |
| 90+42 | 24' RT | 12 |
| 90+45 | 20' RT | 8 |
| 92+80 | 24' RT | 36 |
| 93+48 | 33' LT | 40 |
| 94+62 | 31' LT | 36 |
| 94+91 | 30' LT | 36 |

Gebo Lane

| <u>Station</u> | <u>Offset</u> | <u>Size (in)</u> |
|----------------|---------------|------------------|
| 111+59 | 16' RT | 30 |

ITEM 102.521

TREE AND PLANT PROTECTION FENCE

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 15+60 to 16+15 | LT |
| 46+75 to 46+95 | RT |
| 76+66 to 77+32 | LT |

Gebo Lane

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 110+93 to 115+38 | RT |

ITEM 102.55

ARBORIST

To be used for making recommendations regarding protecting high priority trees, removal of diseased, damaged, or otherwise unhealthy trees, evaluating effects of construction on future health of trees close to proposed work, and recommending and/or overseeing tree work and care.

ITEM 103. **TREE REMOVED – DIAMETER UNDER 24 INCHES**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Size (in)</u> |
|----------------|---------------|------------------|
| 16+05 | 33' LT | 18 |
| 16+62 | 29' LT | 20 |
| 43+38 | 24' LT | 15 |
| 44+26 | 19' RT | 20 |
| 61+88 | 33' LT | 12 |
| 61+93 | 34' LT | 20 |
| 62+00 | 30' LT | 15 |
| 66+58 | 21' RT | 15 |
| 66+62 | 22' RT | 14 |
| 68+86 | 22' RT | 15 |
| 68+93 | 19' RT | 12 |

ITEM 104. **TREE REMOVED – DIAMETER 24 INCHES AND OVER**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Size (in)</u> |
|----------------|---------------|------------------|
| 71+08 | 11' RT | 60 |

ITEM 105. **STUMP REMOVED**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 16+51 | 28' LT |
| 16+69 | 31' LT |
| 37+36 | 38' LT |
| 45+24 | 23' RT |
| 56+79 | 25' LT |
| 56+96 | 25' LT |
| 57+21 | 35' LT |
| 73+42 | 29' LT |

Gebo Lane

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 110+48 | 2' LT |

ITEM 141. **CLASS A TRENCH EXCAVATION**

To be used for excavation for proposed headwalls

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 20+72 | 47' LT |
| 20+71 | 23' RT |
| 20+74 | 46' LT |
| 27+03 | 22' RT |
| 29+15 | 24' RT |
| 44+66 | 38' LT |

ITEM 141. (Continued)Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 65+18 | 43' LT |
| 65+33 | 40' LT |
| 65+30 | 21' RT |

ITEM 146.**DRAINAGE STRUCTURE REMOVED**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 12+56 | 26' LT | CB |
| 14+34 | 25' LT | CB |
| 15+82 | 26' LT | CB |
| 17+25 | 20' LT | CB |
| 18+86 | 22' LT | CB |
| 24+64 | 19' LT | CB |
| 30+24 | 21' RT | CB |
| 33+37 | 14' RT | CB |
| 34+68 | 12' RT | CB |
| 37+22 | 11' RT | DI |
| 37+74 | 20' RT | CB |
| 38+66 | 12' RT | DI |
| 59+85 | 17' RT | DI |
| 74+46 | 25' LT | CB |
| 81+61 | 15' RT | CB |
| 85+67 | 6' RT | CB |
| 88+48 | 10' RT | CB |
| 91+12 | 13' RT | CB |
| 92+60 | 26' LT | CB |
| 92+79 | 15' RT | CB |
| 95+40 | 26' LT | CB |
| 95+75 | 10' RT | DMH |

Gebo Lane

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 115+44 | 35' LT | CB |

ITEM 184.1**DISPOSAL OF TREATED WOOD PRODUCTS**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 79+25 to 81+06 | LT |

and as directed by the Engineer for disposal of wood fence and posts.

ITEM 201.**CATCH BASIN**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> |
|----------------|---------------|--------------------|
| 11+31 | 25' LT | 1 |
| 14+28 | 12' RT | 4 |
| 14+31 | 23' LT | 3 |
| 15+77 | 23' LT | 6 |
| 18+86 | 23' LT | 9 |
| 23+89 | 20' LT | 17 |
| 26+65 | 13' LT | 19 |
| 26+65 | 12' RT | 20 |
| 26+85 | 12' LT | 22 |
| 30+63 | 13' LT | 27 |
| 33+37 | 14' RT | 29 |
| 33+43 | 13' LT | 30 |
| 35+76 | 12' RT | 32 |
| 35+81 | 13' LT | 33 |
| 38+75 | 13' LT | 35 |
| 52+61 | 13' LT | 42 |
| 55+61 | 13' LT | 45 |
| 58+29 | 13' LT | 47 |
| 58+38 | 12' RT | 48 |
| 61+03 | 13' LT | 50 |
| 61+11 | 12' RT | 51 |
| 64+03 | 13' LT | 53 |
| 66+50 | 12' RT | 62 |
| 68+82 | 12' RT | 64 |
| 68+88 | 13' LT | 65 |
| 71+43 | 12' RT | 67 |
| 71+50 | 13' LT | 68 |
| 76+82 | 13' LT | 69 |
| 83+41 | 13' LT | 73 |
| 83+50 | 12' RT | 74 |
| 85+59 | 13' LT | 77 |
| 87+12 | 13' LT | 80 |
| 88+73 | 13' LT | 82 |
| 92+72 | 13' LT | 85 |
| 95+53 | 13' LT | 87 |

Gebo Lane

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> |
|----------------|---------------|--------------------|
| 115+48 | 27' LT | 90 |

ITEM 201.3**SPECIAL CATCH BASIN**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> |
|----------------|---------------|--------------------|
| 20+64 | 23' LT | 11 |
| 37+76 | 21' RT | 94 |
| 44+75 | 13' LT | 38 |
| 45+00 | 13' LT | 40 |
| 74+46 | 28' LT | 93 |

ITEM 202.**MANHOLE**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> |
|----------------|---------------|--------------------|
| 11+36 | 18' LT | 2 |
| 12+56 | 26' LT | 2A |
| 17+70 | 29' LT | 8 |
| 18+89 | 29' LT | 10 |
| 20+50 | 29' LT | 12 |
| 23+93 | 12' LT | 18 |
| 24+64 | 24' LT | 92 |
| 29+54 | 21' RT | 25 |
| 30+51 | 9' RT | 26 |
| 33+32 | 6' RT | 28 |
| 35+72 | 4' RT | 31 |
| 38+65 | 4' RT | 34 |
| 44+83 | 13' LT | 39 |
| 52+72 | 6' RT | 43 |
| 54+35 | 6.5' RT | 44 |
| 55+75 | 6.5' RT | 46 |
| 58+41 | 6' RT | 49 |
| 61+14 | 6' RT | 52 |
| 64+14 | 6.5' RT | 54 |
| 65+00 | 6.5' RT | 55 |
| 66+47 | 5.5' RT | 61 |
| 68+77 | 4.5' RT | 63 |
| 71+40 | 3.5' RT | 66 |
| 76+93 | 5.5' RT | 70 |
| 79+00 | 4.5' RT | 71 |
| 80+60 | 4.5' RT | 72 |
| 83+51 | 4.5' RT | 75 |
| 84+59 | 6' RT | 76 |
| 85+65 | 6' RT | 78 |
| 86+59 | 6' RT | 79 |
| 87+20 | 6' RT | 81 |
| 88+85 | 9.6' RT | 83 |
| 95+75 | 9.6' RT | 88 |

ITEM 203.5 **SPECIAL MANHOLE – 5 FOOT DIAMETER**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> |
|----------------|---------------|--------------------|
| 65+32 | 27' LT | 57 |

ITEM 203.6 **SPECIAL MANHOLE – 6 FOOT DIAMETER**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> |
|----------------|---------------|--------------------|
| 26+71 | 6' LT | 21 |

ITEM 204. **GUTTER INLET**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> |
|----------------|---------------|--------------------|
| 37+81 | 21' RT | 95 |

ITEM 209.1 **DROP INLET, TYPE DF**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> |
|----------------|---------------|--------------------|
| 38+74 | 19' RT | 36 |
| 45+05 | 21' RT | 41 |

Gebo Lane

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> |
|----------------|---------------|--------------------|
| 115+38 | 30' LT | 89 |

ITEM 220. **DRAINAGE STRUCTURE ADJUSTED**

Existing structures within full depth pavement limits will be adjusted twice (once to intermediate grade and once to finished grade) and proposed structures once.

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 14+34 | 16' LT | Exist DMH |
| 15+80 | 17' LT | Exist DMH |
| 23+74 | 23' LT | Exist CB |
| 25+95 | 30' LT | Exist CB |
| 76+39 | 31' LT | Exist CB |
| 77+32 | 30' LT | Exist CB |
| 91+20 | 8' RT | Exist DMH |
| 92+89 | 12' RT | Exist DMH |
| 95+63 | 16' RT | Exist CB |
| 99+18 | 12' RT | Exist DMH |
| 14+31 | 23' LT | Prop CBCI |
| 15+77 | 23' LT | Prop CBCI |
| 17+70 | 29' LT | Prop DMH |
| 18+86 | 23' LT | Prop CBCI |
| 18+89 | 29' LT | Prop DMH |

ITEM 220. (Continued)Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|--------------|
| 20+50 | 29' LT | Prop DMH |
| 20+64 | 23' LT | Prop SP CBCI |
| 23+65 | 20' LT | Prop CBCI |
| 23+72 | 13' LT | Prop DMH |
| 33+32 | 6' RT | Prop DMH |
| 33+37 | 14' RT | Prop CB |
| 35+72 | 4' RT | Prop DMH |
| 35+76 | 12' RT | Prop CB |
| 38+65 | 4' RT | Prop DMH |
| 52+72 | 6' RT | Prop DMH |
| 54+35 | 6.5' RT | Prop DMH |
| 55+75 | 6.5' RT | Prop DMH |
| 58+38 | 12' RT | Prop CB |
| 58+41 | 6' RT | Prop DMH |
| 61+11 | 12' RT | Prop CB |
| 61+14 | 6' RT | Prop DMH |
| 64+14 | 6.5' RT | Prop DMH |
| 65+00 | 6.5' RT | Prop DMH |
| 65+32 | 27' LT | Prop DMH |
| 66+47 | 5.5' RT | Prop DMH |
| 66+50 | 12' RT | Prop CB |
| 68+77 | 4.5' RT | Prop DMH |
| 68+82 | 12' RT | Prop CB |
| 71+40 | 3.5' RT | Prop DMH |
| 71+43 | 12' RT | Prop CB |
| 76+93 | 5.5' RT | Prop DMH |
| 79+00 | 4.5' RT | Prop DMH |
| 80+60 | 4.5' RT | Prop DMH |
| 83+50 | 12' RT | Prop CB |
| 83+51 | 4.5' RT | Prop DMH |
| 84+59 | 6' RT | Prop DMH |
| 85+65 | 6' RT | Prop DMH |
| 86+59 | 6' RT | Prop DMH |
| 87+20 | 6' RT | Prop DMH |
| 88+85 | 9.6' RT | Prop DMH |
| 95+75 | 9.6' RT | Prop DMH |

Gebo Lane

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 115+43 | 20' LT | Exist DMH |

ITEM 222.3**FRAME AND GRATE (OR COVER) MUNICIPAL STANDARD**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> | <u>Type</u> | |
|----------------|---------------|--------------------|-------------|---------------|
| 11+31 | 25' LT | 1 | CB | FRAME & GRATE |
| 14+28 | 12' RT | 4 | CB | FRAME & GRATE |
| 14+31 | 23' LT | 3 | CBCI | FRAME & GRATE |
| 15+77 | 23' LT | 6 | CBCI | FRAME & GRATE |
| 18+86 | 23' LT | 9 | CBCI | FRAME & GRATE |
| 20+64 | 23' LT | 11 | SP CBCI | FRAME & GRATE |
| 23+89 | 20' LT | 17 | CBCI | FRAME & GRATE |
| 26+65 | 13' LT | 19 | CBCI | FRAME & GRATE |
| 26+65 | 12' RT | 20 | CB | FRAME & GRATE |
| 26+85 | 12' LT | 22 | CBCI | FRAME & GRATE |
| 30+63 | 13' LT | 27 | CBCI | FRAME & GRATE |
| 33+37 | 14' RT | 29 | CB | FRAME & GRATE |
| 33+43 | 13' LT | 30 | CBCI | FRAME & GRATE |
| 35+76 | 12' RT | 32 | CB | FRAME & GRATE |
| 35+81 | 13' LT | 33 | CBCI | FRAME & GRATE |
| 37+81 | 21' RT | 95 | GI | FRAME & GRATE |
| 38+74 | 19' RT | 36 | DI | FRAME & GRATE |
| 38+75 | 13' LT | 35 | CBCI | FRAME & GRATE |
| 44+75 | 13' LT | 38 | SP CBCI | FRAME & GRATE |
| 45+00 | 13' LT | 40 | SP CB | FRAME & GRATE |
| 45+05 | 21' RT | 41 | DI | FRAME & GRATE |
| 52+61 | 13' LT | 42 | CBCI | FRAME & GRATE |
| 55+61 | 13' LT | 45 | CBCI | FRAME & GRATE |
| 58+29 | 13' LT | 47 | CBCI | FRAME & GRATE |
| 58+38 | 12' RT | 48 | CB | FRAME & GRATE |
| 61+03 | 13' LT | 50 | CBCI | FRAME & GRATE |
| 61+11 | 12' RT | 51 | CB | FRAME & GRATE |
| 64+03 | 13' LT | 53 | CBCI | FRAME & GRATE |
| 66+50 | 12' RT | 62 | CB | FRAME & GRATE |
| 68+82 | 12' RT | 64 | CB | FRAME & GRATE |
| 68+88 | 13' LT | 65 | CBCI | FRAME & GRATE |
| 71+43 | 12' RT | 67 | CB | FRAME & GRATE |
| 71+50 | 13' LT | 68 | CBCI | FRAME & GRATE |
| 74+46 | 28' LT | 93 | SP CB | FRAME & GRATE |
| 76+82 | 13' LT | 69 | CBCI | FRAME & GRATE |
| 83+41 | 13' LT | 73 | CBCI | FRAME & GRATE |
| 83+50 | 12' RT | 74 | CB | FRAME & GRATE |
| 85+59 | 13' LT | 77 | CBCI | FRAME & GRATE |
| 87+12 | 13' LT | 80 | CBCI | FRAME & GRATE |
| 88+73 | 13' LT | 82 | CBCI | FRAME & GRATE |
| 92+72 | 13' LT | 85 | CBCI | FRAME & GRATE |
| 95+53 | 13' LT | 87 | CBCI | FRAME & GRATE |

ITEM 222.3 (Continued)Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> | <u>Type</u> | |
|----------------|---------------|--------------------|-------------|---------------|
| 11+36 | 18' LT | 2 | DMH | FRAME & COVER |
| 12+56 | 26' LT | 2A | DMH | FRAME & COVER |
| 17+70 | 29' LT | 8 | DMH | FRAME & COVER |
| 18+89 | 29' LT | 10 | DMH | FRAME & COVER |
| 20+50 | 29' LT | 12 | DMH | FRAME & COVER |
| 23+96 | 12' LT | 18 | DMH | FRAME & COVER |
| 23+75 | 24' LT | | EX CB | FRAME & COVER |
| 24+64 | 24' LT | 92 | DMH | FRAME & COVER |
| 26+71 | 6' LT | 21 | DMH (6') | FRAME & COVER |
| 29+54 | 21' RT | 25 | DMH | FRAME & COVER |
| 30+51 | 9' RT | 26 | DMH | FRAME & COVER |
| 33+32 | 6' RT | 28 | DMH | FRAME & COVER |
| 35+72 | 4' RT | 31 | DMH | FRAME & COVER |
| 37+76 | 21' RT | 94 | SP CB | FRAME & COVER |
| 38+65 | 4' RT | 34 | DMH | FRAME & COVER |
| 44+83 | 13' LT | 39 | DMH | FRAME & COVER |
| 52+72 | 6' RT | 43 | DMH | FRAME & COVER |
| 54+35 | 6.5' RT | 44 | DMH | FRAME & COVER |
| 55+75 | 6.5' RT | 46 | DMH | FRAME & COVER |
| 58+41 | 6' RT | 49 | DMH | FRAME & COVER |
| 61+14 | 6' RT | 52 | DMH | FRAME & COVER |
| 64+14 | 6.5' RT | 54 | DMH | FRAME & COVER |
| 65+00 | 6.5' RT | 55 | DMH | FRAME & COVER |
| 65+32 | 27' LT | 57 | DMH (5') | FRAME & COVER |
| 66+47 | 5.5' RT | 61 | DMH | FRAME & COVER |
| 68+77 | 4.5' RT | 63 | DMH | FRAME & COVER |
| 71+40 | 3.5' RT | 66 | DMH | FRAME & COVER |
| 76+93 | 5.5' RT | 70 | DMH | FRAME & COVER |
| 79+00 | 4.5' RT | 71 | DMH | FRAME & COVER |
| 80+60 | 4.5' RT | 72 | DMH | FRAME & COVER |
| 83+51 | 4.5' RT | 75 | DMH | FRAME & COVER |
| 84+59 | 6' RT | 76 | DMH | FRAME & COVER |
| 85+65 | 6' RT | 78 | DMH | FRAME & COVER |
| 86+59 | 6' RT | 79 | DMH | FRAME & COVER |
| 87+20 | 6' RT | 81 | DMH | FRAME & COVER |
| 88+85 | 9.6' RT | 83 | DMH | FRAME & COVER |
| 95+75 | 9.6' RT | 88 | DMH | FRAME & COVER |

Gebo Lane

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> | <u>Type</u> | |
|----------------|---------------|--------------------|-------------|---------------|
| 115+38 | 30' LT | 89 | DI | FRAME & GRATE |
| 115+48 | 27' LT | 90 | CB | FRAME & GRATE |

ITEM 223.2**FRAME AND GRATE (OR COVER) REMOVED AND DISCARDED**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|---------------|
| 23+74 | 23' LT | FRAME & GRATE |
| 37+75 | 19' RT | FRAME & GRATE |
| 37+75 | 22' RT | FRAME & GRATE |

ITEM 224.12**12 INCH HOOD**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> |
|----------------|---------------|--------------------|
| 11+31 | 25' LT | 1 |
| 14+28 | 12' RT | 4 |
| 14+31 | 23' LT | 3 |
| 15+77 | 23' LT | 6 |
| 18+86 | 23' LT | 9 |
| 20+64 | 23' LT | 11 |
| 23+89 | 20' LT | 17 |
| 26+65 | 13' LT | 19 |
| 26+65 | 12' RT | 20 |
| 26+85 | 12' LT | 22 |
| 30+63 | 13' LT | 27 |
| 33+37 | 14' RT | 29 |
| 33+43 | 13' LT | 30 |
| 35+76 | 12' RT | 32 |
| 35+81 | 13' LT | 33 |
| 38+74 | 19' RT | 36 |
| 38+75 | 13' LT | 35 |
| 44+75 | 13' LT | 38 |
| 45+00 | 13' LT | 40 |
| 45+05 | 21' RT | 41 |
| 52+61 | 13' LT | 42 |
| 55+61 | 13' LT | 45 |
| 58+29 | 13' LT | 47 |
| 58+38 | 12' RT | 48 |
| 61+03 | 13' LT | 50 |
| 61+11 | 12' RT | 51 |
| 64+03 | 13' LT | 53 |
| 66+50 | 12' RT | 62 |
| 68+82 | 12' RT | 64 |
| 68+88 | 13' LT | 65 |
| 71+43 | 12' RT | 67 |
| 71+50 | 13' LT | 68 |
| 74+46 | 28' LT | 93 |
| 76+82 | 13' LT | 69 |
| 83+41 | 13' LT | 73 |
| 83+50 | 12' RT | 74 |
| 85+59 | 13' LT | 77 |
| 87+12 | 13' LT | 80 |
| 88+73 | 13' LT | 82 |
| 92+72 | 13' LT | 85 |

ITEM 224.12 (Continued)Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> |
|----------------|---------------|--------------------|
| 95+53 | 13' LT | 87 |

Gebo Lane

| <u>Station</u> | <u>Offset</u> | <u>Struct. #</u> |
|----------------|---------------|------------------|
| 115+48 | 27' LT | 90 |
| 115+38 | 30' LT | 89 |

ITEM 242.15**15 INCH REINFORCED CONCRETE PIPE FLARED END**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Structure #</u> |
|----------------|---------------|--------------------|
| 65+48 | 44' LT | 60 |

ITEM 258.**STONE FOR PIPE ENDS**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 20+47 to 20+53 | LT |
| 27+02 to 27+09 | RT |
| 29+10 to 29+15 | RT |
| 43+49 to 43+54 | RT |
| 43+87 to 43+92 | RT |
| 44+62 to 44+69 | LT |
| 65+15 to 65+23 | LT |
| 65+27 to 65+39 | LT |
| 65+43 to 65+50 | LT |

ITEM 271.121**12 INCH AND UNDER PIPE REMOVED AND DISCARDED**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 12+56 to 14+34 | LT | 12" CMP |
| 14+34 to 14+35 | LT | 12" HDPE |
| 15+79 to 15+82 | LT | 12" HDPE |
| 24+64 to 24+64 | LT/RT | 12" CMP |
| 30+23 to 35+55 | RT | 12" CMP |
| 85+67 to 91+52 | LT/RT | 12" CMP/RCP |
| 91+14 to 91+19 | RT | 12" RCP |
| 92+60 to 92+70 | LT | 12" RCP |
| 92+80 to 92+88 | RT | 12" RCP |
| 95+39 to 95+75 | LT/RT | 12" RCP |

ITEM 271.181 **18 INCH PIPE REMOVED AND DISCARDED**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 15+80 to 18+86 | LT | 18" CMP/RCP |
| 29+54 to 30+23 | RT | 18" CMP |

ITEM 271.241 **24 INCH PIPE REMOVED AND DISCARDED**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 18+86 to 20+66 | LT | 24" CMP |

ITEM 271.301 **30 INCH PIPE REMOVED AND DISCARDED**

Gebo Lane

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|------------------|---------------|-------------|
| 110+69 to 110+86 | LT | 30" CMP |

ITEM 451. **HMA FOR PATCHING**

To be used for mill & overlay areas that are in disrepair and cannot be milled out, and for permanent pavement trench patches.

ITEM 470.2 **HOT MIX ASPHALT BERM, TYPE A - MODIFIED**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 9+34 to 11+78 | RT |
| 11+75 to 12+04 | RT |
| 28+65 to 29+04 | LT |

Shared Use Path

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 154+90 to 155+39 | LT |

ITEM 472. **TEMPORARY ASPHALT PATCHING**

To be used for temporary patching for access and drainage at driveways, temporary utility patching, and temporary traffic control.

ITEM 477.2

MILLED RUMBLE STRIP (TYPE C)

Ayer Road (Route 110/111)

Station

8+69 to 9+05
8+69 to 9+05
9+48 to 10+53
9+48 to 10+53
10+78 to 12+05
10+78 to 12+05
13+02 to 20+78
15+10 to 16+73
21+79 to 23+33
21+79 to 23+33
23+69 to 25+43
23+69 to 25+43
26+00 to 29+50
30+09 to 30+24
30+44 to 37+38
37+58 to 37+70
38+21 to 42+10
43+02 to 48+80
49+95 to 57+39
58+26 to 62+14
62+34 to 74+08
74+63 to 77+23
78+06 to 85+65
86+42 to 96+28
97+08 to 100+06
100+26 to 100+73

ITEM 482.5

SAWCUTTING ASPHALT PAVEMENT FOR BOX WIDENING

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|-----------------|---------------|
| 11+98 to 20+40 | LT |
| 22+00 to 25+40 | LT |
| 28+28 to 29+02 | RT |
| 30+95 to 32+81 | LT |
| 32+81 to 37+69 | RT |
| 38+10 to 41+10 | RT |
| 42+00 to 85+87 | RT |
| 86+39 to 100+49 | RT |

ITEM 506.**GRANITE CURB TYPE VB - STRAIGHT**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 12+20 to 12+44 | LT |
| 12+65 to 12+69 | RT |
| 12+78 to 12+89 | LT |
| 12+79 to 12+89 | LT |
| 12+89 to 12+89 | LT |
| 13+03 to 13+09 | RT |
| 13+05 to 14+50 | LT |
| 15+50 to 20+71 | LT |
| 16+97 to 17+00 | RT |
| 16+99 to 17+04 | RT |
| 17+04 to 17+06 | RT |
| 21+84 to 23+11 | LT |
| 23+86 to 25+34 | LT |
| 26+30 to 27+51 | LT |
| 27+91 to 28+59 | LT |
| 29+10 to 30+22 | LT |
| 30+51 to 30+55 | RT |
| 30+55 to 35+84 | LT |
| 36+79 to 37+35 | LT |
| 37+34 to 37+39 | RT |
| 37+56 to 37+65 | RT |
| 37+82 to 37+82 | RT |
| 37+64 to 42+10 | LT |
| 38+29 to 38+34 | RT |
| 43+02 to 44+80 | LT |
| 45+49 to 46+61 | LT |
| 47+21 to 48+80 | LT |
| 49+95 to 57+39 | LT |
| 58+26 to 59+36 | LT |
| 59+93 to 60+05 | LT |
| 60+79 to 62+10 | LT |
| 62+12 to 62+17 | RT |
| 62+29 to 62+39 | RT |
| 62+35 to 62+81 | LT |
| 63+41 to 64+06 | LT |

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 64+64 to 69+19 | LT |
| 69+57 to 69+80 | LT |
| 70+41 to 71+96 | LT |
| 72+36 to 72+47 | LT |
| 72+89 to 74+02 | LT |
| 74+69 to 77+20 | LT |
| 78+07 to 78+81 | LT |
| 79+35 to 81+23 | LT |
| 81+90 to 81+95 | LT |
| 82+49 to 83+52 | LT |
| 83+98 to 84+98 | LT |
| 85+46 to 85+62 | LT |
| 85+58 to 85+65 | RT |

ITEM 506. (Continued)

| | |
|------------------|----|
| 85+88 to 85+95 | LT |
| 86+51 to 87+18 | LT |
| 87+70 to 88+01 | LT |
| 88+70 to 90+04 | LT |
| 90+50 to 90+96 | LT |
| 91+46 to 92+84 | LT |
| 93+26 to 93+89 | LT |
| 94+35 to 95+64 | LT |
| 96+14 to 96+28 | LT |
| 96+78 to 96+78 | LT |
| 97+08 to 100+02 | LT |
| 100+00 to 100+04 | RT |
| 100+21 to 100+27 | RT |
| 100+25 to 100+28 | LT |

Gebo Lane

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 115+51 to 115+52 | LT |

ITEM 506.1**GRANITE CURB TYPE VB - CURVED**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 12+69 to 12+74 | RT |
| 16+97 to 16+99 | RT |
| 17+00 to 17+04 | RT |
| 17+04 to 17+06 | RT |
| 23+69 to 23+86 | LT |
| 25+93 to 26+30 | LT |
| 35+84 to 35+91 | LT |
| 36+75 to 36+79 | LT |
| 42+10 to 42+14 | LT |
| 42+94 to 43+02 | LT |
| 44+80 to 44+87 | LT |
| 45+44 to 45+49 | LT |
| 47+14 to 47+21 | LT |
| 48+80 to 48+87 | LT |
| 49+85 to 49+95 | LT |
| 58+22 to 58+26 | LT |
| 59+36 to 59+40 | LT |
| 60+75 to 60+79 | LT |
| 64+06 to 64+10 | LT |
| 64+58 to 64+64 | LT |
| 69+80 to 69+86 | LT |
| 70+38 to 70+41 | LT |
| 78+81 to 78+85 | LT |
| 81+23 to 81+27 | LT |
| 81+83 to 81+90 | LT |
| 81+95 to 82+00 | LT |
| 82+45 to 82+49 | LT |
| 83+52 to 83+55 | LT |
| 83+93 to 83+98 | LT |
| 85+43 to 85+46 | LT |
| 85+85 to 85+95 | RT |

ITEM 506.1 (Continued)

| | |
|----------------|----|
| 85+95 to 85+97 | LT |
| 86+44 to 86+51 | LT |
| 87+63 to 87+70 | LT |
| 88+01 to 88+05 | LT |
| 88+63 to 88+70 | LT |
| 90+46 to 90+50 | LT |
| 91+40 to 91+46 | LT |
| 96+08 to 96+14 | LT |
| 96+78 to 96+79 | LT |
| 97+02 to 97+08 | LT |

Gebo Lane

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 110+42 to 110+58 | RT |
| 110+42 to 110+58 | LT |
| 115+52 to 115+52 | LT |

Poor Farm Road

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 120+11 to 120+37 | LT |

ITEM 509.**GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS – STRAIGHT**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 12+14 to 12+20 | LT |
| 12+99 to 13+05 | LT |
| 12+96 to 13+03 | RT |
| 13+09 to 13+15 | RT |
| 14+50 to 14+57 | LT |
| 20+71 to 20+75 | LT |
| 23+11 to 23+18 | LT |
| 23+64 to 23+69 | LT |
| 25+34 to 25+41 | LT |
| 27+51 to 27+57 | LT |
| 27+85 to 27+91 | LT |
| 28+59 to 28+65 | LT |
| 29+04 to 29+10 | LT |
| 30+22 to 30+29 | LT |
| 30+25 to 30+31 | RT |
| 30+36 to 30+51 | RT |
| 30+40 to 30+55 | LT |
| 30+55 to 30+62 | RT |
| 37+28 to 37+34 | RT |
| 37+37 to 37+43 | LT |
| 37+39 to 37+46 | RT |
| 37+51 to 37+56 | RT |

ITEM 509. (Continued)

| | |
|----------------|----|
| 37+53 to 37+64 | LT |
| 37+65 to 37+67 | RT |
| 37+79 to 37+83 | RT |
| 38+20 to 38+29 | RT |
| 38+34 to 38+41 | RT |
| 62+10 to 62+19 | LT |
| 62+17 to 62+21 | RT |
| 62+26 to 62+29 | RT |
| 62+29 to 62+35 | LT |
| 69+19 to 69+21 | LT |
| 69+51 to 69+57 | LT |
| 72+87 to 72+89 | LT |
| 74+02 to 74+08 | LT |
| 74+65 to 74+69 | LT |
| 77+20 to 77+23 | LT |
| 78+06 to 78+07 | LT |

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 84+98 to 85+00 | LT |
| 85+04 to 85+06 | LT |
| 85+52 to 85+58 | RT |
| 85+62 to 85+70 | LT |
| 85+65 to 85+72 | RT |
| 85+81 to 85+88 | LT |
| 85+96 to 85+96 | RT |
| 92+84 to 92+98 | LT |
| 93+20 to 93+26 | LT |
| 93+89 to 94+03 | LT |
| 94+28 to 94+35 | LT |
| 95+64 to 95+65 | LT |
| 99+93 to 100+00 | RT |
| 100+02 to 100+11 | LT |
| 100+04 to 100+13 | RT |
| 100+18 to 100+21 | RT |
| 100+21 to 100+25 | LT |
| 100+28 to 100+32 | LT |
| 100+27 to 100+32 | RT |

Gebo Lane

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 115+50 to 115+51 | LT |

ITEM 509.1**GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS – CURVED**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 12+44 to 12+49 | LT |
| 12+74 to 12+91 | RT |
| 14+57 to 14+69 | LT |
| 14+80 to 14+80 | LT |
| 15+24 to 15+27 | LT |
| 15+37 to 15+50 | LT |
| 20+75 to 20+90 | LT |
| 21+70 to 21+84 | LT |
| 25+91 to 25+92 | LT |
| 35+91 to 36+01 | LT |
| 36+61 to 36+75 | LT |
| 37+67 to 37+72 | RT |
| 37+78 to 37+83 | RT |
| 38+14 to 38+20 | RT |
| 42+13 to 42+24 | LT |
| 42+84 to 42+94 | LT |
| 44+87 to 44+96 | LT |
| 45+36 to 45+44 | LT |
| 46+61 to 46+70 | LT |
| 47+04 to 47+14 | LT |

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 48+87 to 49+00 | LT |
| 49+74 to 49+85 | LT |
| 57+39 to 57+52 | LT |
| 58+13 to 58+22 | LT |
| 59+40 to 59+49 | LT |
| 59+84 to 59+93 | LT |
| 60+05 to 60+16 | LT |
| 60+68 to 60+75 | LT |
| 62+08 to 62+12 | RT |
| 62+39 to 62+44 | RT |
| 62+81 to 62+90 | LT |
| 63+32 to 63+41 | LT |
| 64+10 to 64+19 | LT |
| 64+51 to 64+58 | LT |
| 69+21 to 69+26 | LT |
| 69+46 to 69+51 | LT |
| 69+86 to 69+95 | LT |
| 70+26 to 70+38 | LT |
| 71+96 to 72+05 | LT |
| 72+27 to 72+36 | LT |
| 72+47 to 72+55 | LT |
| 72+80 to 72+87 | LT |
| 74+08 to 74+12 | LT |
| 74+59 to 74+65 | LT |
| 77+23 to 77+30 | LT |
| 77+97 to 78+06 | LT |
| 78+85 to 78+93 | LT |

ITEM 509.1 (Continued)

| | |
|----------------|----|
| 79+27 to 79+35 | LT |
| 81+26 to 81+36 | LT |
| 81+76 to 81+83 | LT |
| 82+00 to 82+10 | LT |
| 82+38 to 82+45 | LT |
| 83+55 to 83+63 | LT |
| 83+86 to 83+93 | LT |
| 85+00 to 85+04 | LT |
| 85+36 to 85+43 | LT |
| 85+77 to 85+85 | RT |
| 85+95 to 85+96 | RT |
| 85+97 to 86+05 | LT |
| 86+37 to 86+44 | LT |
| 87+18 to 87+27 | LT |
| 87+56 to 87+63 | LT |
| 88+05 to 88+16 | LT |
| 88+55 to 88+63 | LT |
| 90+04 to 90+15 | LT |
| 90+39 to 90+46 | LT |

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 90+96 to 91+07 | LT |
| 91+32 to 91+40 | LT |
| 95+65 to 95+78 | LT |
| 96+01 to 96+08 | LT |
| 96+28 to 96+45 | LT |
| 96+79 to 96+80 | LT |
| 96+88 to 96+98 | LT |

Gebo Lane

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 110+37 to 110+42 | RT |
| 110+37 to 110+42 | LT |
| 110+58 to 110+64 | LT |
| 110+58 to 110+64 | RT |
| 115+47 to 115+52 | LT |

Poor Farm Road

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 120+37 to 120+43 | LT |

ITEM 514.**GRANITE CURB INLET – STRAIGHT**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 14+31 | 24' LT |
| 15+77 | 24' LT |
| 18+86 | 24' LT |
| 20+64 | 24' LT |
| 23+89 | 21' LT |
| 26+65 | 14' LT |
| 26+85 | 13' LT |
| 30+63 | 14' LT |
| 33+43 | 14' LT |
| 35+81 | 14' LT |
| 38+75 | 14' LT |
| 44+75 | 14' LT |
| 52+61 | 14' LT |
| 55+61 | 14' LT |
| 58+29 | 14' LT |
| 61+03 | 14' LT |
| 64+03 | 14' LT |
| 68+88 | 14' LT |
| 71+50 | 14' LT |
| 76+82 | 14' LT |
| 83+41 | 14' LT |
| 85+59 | 14' LT |

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 87+12 | 14' LT |
| 88+73 | 14' LT |
| 92+72 | 14' LT |
| 95+53 | 14' LT |

ITEM 570.2**HOT MIX ASPHALT CURB TYPE 2**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 16+54 to 16+73 | RT |
| 52+65 to 52+72 | RT |
| 52+98 to 53+05 | RT |
| 53+23 to 53+33 | RT |
| 53+66 to 53+76 | RT |
| 74+19 to 74+27 | LT |
| 74+45 to 74+50 | LT |
| 77+45 to 77+53 | LT |
| 77+77 to 77+84 | LT |

ITEM 570.3

HOT MIX ASPHALT CURB TYPE 3

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 76+48 to 76+53 | RT |

ITEM 620.12

GUARDRAIL, TL-2 (SINGLE FACED)

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 19+39 to 21+14 | RT |
| 24+35 to 26+73 | RT |
| 26+59 to 27+09 | LT |
| 28+35 to 28+48 | LT |

ITEM 620.131

GUARDRAIL, DEEP POST (SINGLE FACED)

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 20+38 to 21+00 | LT |
| 28+21 to 29+19 | RT |
| 64+34 to 65+84 | RT |
| 64+59 to 67+22 | LT |

ITEM 620.32

GUARDRAIL – CURVED, TL-2 (SINGLE FACED)

Gebo Lane

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 110+39 to 111+34 | LT |

ITEM 627.1

TRAILING ANCHORAGE

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 20+28 | 39' LT |
| 64+49 | 31' LT |

ITEM 627.82

GUARDRAIL TANGENT END TREATMENT, TL-2

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 19+14 | 14' RT |
| 21+14 | 14' RT |
| 24+10 | 13.5' RT |
| 26+34 | 15' LT |
| 64+09 | 13.5' RT |
| 65+84 | 13.5' RT |
| 67+22 | 31' LT |

Gebo Lane (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 111+34 | 15' LT |

ITEM 627.93

GUARDRAIL FLARED END TREATMENT, TL-3

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 28+48 | 18' LT |
| 29+19 | 18' RT |

ITEM 628.21

TRANSITION TO NCHRP 350 GUARDRAIL

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 27+07 | 14' RT |
| 27+43 | 14' LT |
| 27+86 | 13' RT |
| 28+00 | 14' LT |

ITEM 628.314

TEMPORARY IMPACT ATTENUATOR, REDIRECTIVE, TL-2

To be used as directed by the Engineer during construction of culvert at STA 27+72 and culvert extension at STA 65+30.

ITEM 628.4

TEMPORARY IMPACT ATTENUATOR, REMOVED AND RESET

To be used as directed by the Engineer during construction of culvert at STA 27+72 and culvert extension at STA 65+30.

ITEM 629.01

CONCRETE BARRIER REMOVED AND STACKED

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 57+85 | 35' LT |
| 57+85 | 48' LT |

ITEM 630.2**HIGHWAY GUARD REMOVED AND DISCARDED**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 20+45 to 20+95 | LT |
| 20+50 to 21+01 | RT |
| 24+30 to 27+32 | RT |
| 27+21 to 27+57 | LT |
| 27+85 to 28+22 | LT |
| 27+60 to 29+34 | RT |
| 64+31 to 67+59 | RT |
| 64+56 to 65+59 | LT |

ITEM 655.3**POST AND RAIL WOOD FENCE**Shared Use Path

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 156+13 to 157+95 | RT |
| 156+14 to 158+14 | LT |

ITEM 669.**FENCE REMOVED AND STACKED**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 86+68 to 86+70 | LT |

ITEM 690.11**STONE MASONRY WALL REMOVED AND STACKED**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 84+99 to 85+13 | LT |
| 85+41 to 86+01 | LT |
| 86+34 to 86+69 | LT |

ITEM 691.**BALANCE STONE WALL REMOVED AND REBUILT**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 35+20 to 35+96 | LT |
| 37+63 to 39+28 | LT |
| 39+88 to 40+63 | RT |
| 41+66 to 43+49 | RT |
| 42+70 to 44+65 | LT |
| 47+26 to 48+65 | LT |
| 55+50 to 56+27 | LT |
| 56+34 to 57+52 | LT |
| 58+17 to 59+45 | LT |
| 61+82 to 61+87 | RT |
| 70+22 to 71+34 | LT |
| 73+62 to 74+12 | LT |
| 83+88 to 84+99 | LT |

ITEM 691. (Continued)

| | |
|----------------|----|
| 88+66 to 89+53 | LT |
| 90+98 to 91+09 | LT |
| 91+32 to 92+42 | LT |
| 91+62 to 92+00 | RT |

ITEM 691.1 **BALANCE STONE WALL REMOVED AND STACKED**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 42+25 to 42+34 | LT |

Gebo Lane

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 110+26 to 110+71 | LT |

Shared Use Path

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 153+36 to 153+59 | LT/RT |

ITEM 697. **SEDIMENTATION FENCE**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 17+50 to 22+11 | LT |

ITEM 698.3 **GEOTEXTILE FABRIC FOR SEPARATION**

To be used below stone for pipe ends.

ITEM 698.4 **GEOTEXTILE FABRIC FOR PERMANENT EROSION CONTROL**

To be used for streambed restoration areas.

ITEM 707.011 **PLANTER REMOVED AND STACKED, LOCATION 1**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 45+81 to 46+02 | LT |

ITEM 707.012**PLANTER REMOVED AND STACKED, LOCATION 2**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 62+44 to 62+50 | LT |

ITEM 707.03**BOULDER REMOVED AND STACKED**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 33+27 to 33+45 | LT |
| 61+50 to 61+82 | LT |
| 62+86 | LT |
| 63+86 | LT |
| 75+95 to 76+23 | LT |
| 76+23 to 77+26 | LT |
| 82+04 | LT |
| 86+69 to 87+17 | LT |
| 91+95 | LT |

ITEM 707.82**POST REMOVED AND STACKED**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 21+29 | 24' LT |
| 31+50 | 22' LT |
| 41+39 | 18' LT |
| 90+36 | 27' LT |

ITEM 711.**BOUND REMOVED AND RESET**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 40+09 | 20' RT |
| 41+37 | 30' LT |
| 48+85 | 30' LT |
| 90+98 | 29' LT |

ITEM 711.01**IRON PIN REMOVED AND RESET**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 67+79 | 30' LT |

ITEM 712.

BOUND REMOVED AND STACKED

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 88+18 | 32' LT |

ITEM 715.

RURAL MAILBOX REMOVED AND RESET

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 9+63 | 41' LT |
| 9+69 | 40' LT |
| 33+94 | 16' RT |
| 34+78 | 16' RT |
| 36+66 | 14' RT |
| 44+69 | 11' RT |
| 44+73 | 11' RT |
| 46+29 | 17' RT |
| 46+63 | 27' LT |
| 46+65 | 27' LT |
| 49+73 | 12' RT |
| 49+75 | 12' RT |
| 49+77 | 12' RT |
| 49+80 | 12' RT |
| 58+20 | 19' RT |
| 59+43 | 17' RT |
| 60+78 | 16' RT |
| 61+88 | 17' RT |
| 64+31 | 15' RT |
| 68+10 | 20' RT |
| 72+94 | 15' RT |
| 73+22 | 14' RT |
| 73+25 | 14' RT |
| 78+96 | 18' RT |
| 83+49 | 15' RT |
| 85+57 | 9' RT |
| 87+33 | 7' RT |
| 87+37 | 7' RT |
| 89+20 | 14' RT |
| 89+22 | 13' RT |
| 89+92 | 14' RT |
| 91+51 | 12' RT |
| 93+48 | 17' RT |
| 93+53 | 18' RT |

ITEM 751.7**COMPOST BLANKET**

To be used for wetland replication areas.

ITEM 765.415**NATIVE SHORT GRASSLAND MIX**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|-----------------|---------------|
| 12+74 to 14+82 | LT |
| 15+24 to 15+32 | LT |
| 15+39 to 112+30 | LT |
| 19+03 to 27+32 | RT |
| 27+58 to 29+52 | RT |
| 27+88 to 28+64 | LT |
| 29+09 to 33+00 | LT |
| 63+97 to 67+86 | RT |
| 64+44 to 69+26 | LT |

Gebo Lane

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 112+30 to 115+50 | RT |

ITEM 767.121**SEDIMENT CONTROL BARRIER**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|-----------------|---------------|
| 17+50 to 19+60 | LT |
| 19+03 to 27+06 | RT |
| 25+92 to 27+56 | LT |
| 27+09 to 27+20 | RT |
| 27+63 to 29+09 | RT |
| 29+01 to 36+14 | LT |
| 63+97 to 64+68 | RT |
| 64+45 to 65+26 | LT |
| 65+35 to 67+86 | RT |
| 65+37 to 67+50 | LT |
| 77+60 to 85+86 | RT |
| 99+30 to 100+70 | RT |
| 99+30 to 100+70 | LT |

Gebo Lane

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 111+24 to 112+33 | LT |

Shared Use Path

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 149+80 to 153+51 | LT |
| 154+76 to 157+87 | RT |
| 155+41 to 158+22 | LT |

ITEM 767.122**SEDIMENT BARRIER – COIR LOG**

To be used where required in streambed restoration areas, as directed by the Engineer and in wetland replication areas.

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 19+60 to 21+15 | LT |
| 19+62 to 20+47 | LT |
| 20+53 to 20+68 | LT |
| 64+68 to 65+24 | RT |

Gebo Lane

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 110+49 to 111+24 | LT |

ITEM 767.9**JUTE MESH**

To be used where required in streambed restoration areas, as directed by the Engineer.

ITEM 804.3**3 INCH ELECTRICAL CONDUIT TYPE NM – PLASTIC - (UL)**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|------------------|---------------|
| 12+96 to 13+31 | RT |
| 13+09 to 13+09 | RT/LT |
| 12+88 to 13+09 | LT |
| 20+94 to 20+96 | RT/LT |
| 20+94 to 21+57 | RT |
| 20+96 to 21+57 | LT |
| 21+57 to 21+57 | RT/LT |
| 30+31 to 30+67 | RT |
| 30+40 to 30+40 | RT/LT |
| 37+46 to 37+66 | RT |
| 37+54 to 37+58 | RT/LT |
| 61+77 to 62+22 | RT |
| 62+15 to 62+15 | RT/LT |
| 62+15 to 62+30 | LT |
| 85+72 to 85+86 | RT |
| 85+80 to 85+86 | RT |
| 85+86 to 85+82 | RT/LT |
| 99+84 to 100+22 | LT |
| 100+06 to 100+06 | RT/LT |
| 100+06 to 100+14 | RT |

ITEM 811.31

PULL BOX 12 X 12 INCHES – SD2.031

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 13+09 | 17' RT |
| 13+09 | 36' LT |
| 20+94 | 18' RT |
| 20+96 | 39' LT |
| 21+57 | 39' LT |
| 21+57 | 18' RT |
| 30+38 | 19' RT |
| 37+58 | 19' RT |
| 37+58 | 19' LT |
| 62+14 | 16' LT |
| 62+14 | 18' RT |
| 85+85 | 21' RT |
| 94+78 | 26' LT |
| 94+96 | 26' LT |
| 100+06 | 19' RT |
| 100+06 | 16' LT |

ITEM 813.811

ELECTRIC SERVICE RISER RELOCATION LOCATION NO. 1

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 34+15 | 21' LT |

ITEM 813.812

ELECTRIC SERVICE RISER RELOCATION LOCATION NO. 2

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 36+76 | 24' LT |

ITEM 813.813

ELECTRIC SERVICE RISER RELOCATION LOCATION NO. 3

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 47+42 | 26' LT |

ITEM 813.814

ELECTRIC SERVICE RISER RELOCATION LOCATION NO. 4

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 53+82 | 16' RT |

ITEM 813.815

ELECTRIC SERVICE RISER RELOCATION LOCATION NO. 5

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 55+24 | 21' LT |

ITEM 813.816

ELECTRIC SERVICE RISER RELOCATION LOCATION NO. 6

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 56+32 | 20' LT |

ITEM 813.817

ELECTRIC SERVICE RISER RELOCATION LOCATION NO. 7

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 60+01 | 20' LT |

ITEM 813.818

ELECTRIC SERVICE RISER RELOCATION LOCATION NO. 8

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 72+43 | 25' LT |

ITEM 813.819

ELECTRIC SERVICE RISER RELOCATION LOCATION NO. 9

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 83+21 | 22' LT |

ITEM 813.820

ELECTRIC SERVICE RISER RELOCATION LOCATION NO. 10

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 88+84 | 26' LT |

ITEM 813.821

ELECTRIC SERVICE RISER RELOCATION LOCATION NO. 11

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 94+78 | 22' LT |

ITEM 825.101

RECTANGULAR RAPID FLASHING BEACON (AC POWER) LOCATION 1

1

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 12+88 | 33' LT |
| 12+94 | 19' RT |

ITEM 825.102 **RECTANGULAR RAPID FLASHING BEACON (AC POWER) LOCATION 2**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 30+34 | 18' RT |
| 30+41 | 14' LT |

ITEM 825.103 **RECTANGULAR RAPID FLASHING BEACON (AC POWER) LOCATION 3**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 37+48 | 18.5' RT |
| 37+54 | 16' LT |

ITEM 825.104 **RECTANGULAR RAPID FLASHING BEACON (AC POWER) LOCATION 4**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 62+24 | 17.5' RT |
| 62+32 | 14' LT |

ITEM 825.105 **RECTANGULAR RAPID FLASHING BEACON (AC POWER) LOCATION 5**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 85+72 | 18' RT |
| 85+82 | 15' LT |

ITEM 825.106 **RECTANGULAR RAPID FLASHING BEACON (AC POWER) LOCATION 6**

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 100+16 | 18' RT |
| 100+22 | 15' LT |

ITEM 831. **ROADSIDE GUIDE SIGN (D6/D8) – ALUMINUM PANEL (TYPE A)**

Ayer Road (Route 110/111)

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|-------------|----------------|---------------|
| MA-D1-7 | 19+76 | 43' LT |
| MA-D1-6 | 67+72 | 33' LT |

ITEM 832.**WARNING-REGULATORY AND ROUTE MARKER - ALUMINUM PANEL
(TYPE A)**Ayer Road (Route 110/111)

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|----------------|----------------|---------------|
| D11-11 | 100+50 | 17' LT |
| MA-M1-5 (2) | 12+02 | 30' LT |
| MA-M1-5a (110) | 35+11 | 17' RT |
| | 35+83 | 17' LT |
| MA-M1-5a (111) | 35+11 | 17' RT |
| | 35+83 | 17' LT |
| M2-1 | 12+02 | 30' LT |
| M2-2 | 99+28 | 19' RT |
| M3-1 | 35+11 | 17' RT |
| M3-2 | 35+11 | 17' RT |
| M3-3 | 35+83 | 17' LT |
| M3-4 | 35+83 | 17' LT |
| M6-2P | 100+50 | 17' LT |
| R1-1 | 86+28 | 24' RT |
| R1-1 | 100+09 | 17' LT |
| R1-2 | 12+77 | 31' LT |
| R3-7L | 14+57 | 26' LT |
| | 17+02 | 15' RT |
| | 20+63 | 17' RT |
| R5-11 | 28+67 | 19' LT |
| | 28+99 | 38' LT |
| R7-1b | 29+05 | 54' LT |
| R8-3a | 9+31 | 30' RT |
| | 11+96 | 25' RT |
| | 17+63 | 26' LT |
| | 19+21 | 26' LT |
| W1-1L | 83+00 | 17' LT |
| W1-1R | 76+01 | 17' RT |
| W1-8R | 78+22 | 29' LT |
| | 79+34 | 16' LT |
| | 80+37 | 16' LT |
| | 81+22 | 16' LT |
| W1-8L | 78+22 | 29' LT |
| | 79+35 | 16' LT |
| | 80+38 | 16' LT |
| | 81+23 | 17' LT |
| W11-3 | 13+90 | 17' RT |
| | 97+70 | 17' LT |
| W11-15 | 83+97 | 17' RT |
| | 87+76 | 17' LT |
| | 98+32 | 15' RT |
| W16-9P | 83+97 | 17' RT |
| | 87+76 | 17' LT |
| | 98+32 | 15' RT |

Gebo Lane

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|-------------|----------------|---------------|
| R1-1 | 110+45 | 25' LT |
| SP-2 | 115+46 | 18' RT |

ITEM 832. (Continued)Shared Use Path

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|-------------|----------------|---------------|
| R1-1 | 154+78 | 4' RT |
| R5-3 | 155+32 | 14' LT |
| W1-1R | 152+76 | 13' LT |
| W1-1L | 154+26 | 11' LT |
| | 157+39 | 3' RT |
| W14-1 | 153+61 | 26' LT |

ITEM 841.2**SUPPORTS FOR GUIDE SIGN (D6-5 INCH TUBULAR POST) STEEL**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Sign</u> | <u>Type</u> |
|----------------|---------------|-------------|-------------|
| 67+72 | 33' LT | MA-D1-6 | NEW |

ITEM 841.81**SUPPORTS FOR GUIDE SIGN (MA-D1-7) STEEL**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Sign</u> | <u>Type</u> |
|----------------|---------------|-------------|-------------|
| 19+76 | 43' LT | MA-D1-7 | NEW |

ITEM 847.1**SIGN SUP (NOT GUIDE)+RTE MKR W/1 BRKWAY POST ASSEMBLY – STEEL**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 9+31 | 30' RT | NEW |
| 9+61 | 32' RT | R&R |
| 9+82 | 33' LT | R&R |
| 9+92 | 32' RT | R&R |
| 10+28 | 32' LT | R&R |
| 11+31 | 29' LT | R&R |
| 11+96 | 25' RT | NEW |
| 12+02 | 30' LT | NEW |
| 12+77 | 31' LT | NEW |
| 13+90 | 17' RT | NEW |
| 14+57 | 26' LT | NEW |
| 14+78 | 43' LT | R&R |
| 15+60 | 26' LT | R&R |
| 17+63 | 26' LT | NEW |
| 17+02 | 15' RT | NEW |
| 19+21 | 26' LT | NEW |
| 20+63 | 17' RT | NEW |
| 25+90 | 17' RT | R&R |
| 27+90 | 15' LT | R&R |

ITEM 847.1 (Continued)Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 28+67 | 19' LT | NEW |
| 28+99 | 38' LT | NEW |
| 29+05 | 54' LT | NEW |
| 35+11 | 17' RT | NEW |
| 35+83 | 17' LT | NEW |
| 38+08 | 27' RT | R&R |
| 47+69 | 16' RT | R&R |
| 49+13 | 34' LT | NEW |
| 51+06 | 17' LT | R&R |
| 69+25 | 17' RT | R&R |
| 72+50 | 17' RT | R&R |
| 72+93 | 16' LT | R&R |
| 76+01 | 17' RT | NEW |
| 77+65 | 16' RT | R&R |
| 78+20 | 29' LT | NEW |
| 78+22 | 29' LT | NEW |
| 79+34 | 16' LT | NEW |
| 79+35 | 16' LT | NEW |
| 80+09 | 16' RT | R&R |
| 80+37 | 16' LT | NEW |
| 80+38 | 16' LT | NEW |
| 81+22 | 16' LT | NEW |
| 81+23 | 17' LT | NEW |
| 83+00 | 17' LT | NEW |
| 83+97 | 17' RT | NEW |
| 86+28 | 24' RT | NEW |
| 87+76 | 17' LT | NEW |
| 90+79 | 17' LT | R&R |
| 95+17 | 17' LT | R&R |
| 96+50 | 34' LT | R&R |
| 97+67 | 15' RT | R&R |
| 97+70 | 17' LT | NEW |
| 98+32 | 15' RT | NEW |
| 98+75 | 17' LT | R&R |
| 99+42 | 17' LT | R&R |
| 100+09 | 17' LT | NEW |
| 100+50 | 17' LT | NEW |

Poor Farm Road

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 120+22 | 33' LT | R&R |

Gebo Lane

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 110+45 | 25' LT | NEW |
| 115+42 | 17' RT | R&R |
| 115+46 | 18' RT | NEW |

ITEM 847.1 (Continued)

Shared Use Path

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 152+76 | 13' LT | NEW |
| 153+61 | 26' LT | NEW |
| 154+26 | 11' LT | NEW |
| 154+78 | 4' RT | NEW |
| 155+32 | 14' LT | NEW |
| 157+39 | 3' RT | NEW |

ITEM 848.1

SIGN SUP (NOT GUIDE)+RTE MKR W/2 BRKWAY POST ASSEMBLIES – STEEL

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 99+28 | 19' RT | NEW |

Gebo Lane

| <u>Station</u> | <u>Offset</u> | <u>Type</u> |
|----------------|---------------|-------------|
| 115+49 | 34' RT | NEW |

ITEM 853.2

TEMPORARY BARRIER (TL-2)

To be used as directed by the Engineer during construction of culvert at STA 20+72 and culvert extension at STA 65+30.

ITEM 853.21

TEMPORARY BARRIER REMOVED AND RESET

To be used as directed by the Engineer during construction of culvert at STA 20+72 and culvert extension at STA 65+30.

ITEM 862.506

FAST DRY MULTI-COMPONENT PAVEMENT MARKINGS, RECESSED, WET REFLECTIVE (6 INCH WHITE LINE)

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Type</u> |
|----------------|-------------|
| 8+70 to 12+00 | SWL |
| 8+70 to 12+84 | SWL |
| 13+02 to 20+78 | SWL |
| 13+02 to 15+10 | SWL |
| 13+02 to 29+41 | SWL |
| 15+10 to 16+48 | DWLEx |
| 15+58 to 16+98 | DWLEx |
| 16+98 to 20+78 | SWL |
| 21+84 to 23+18 | SWL |
| 23+86 to 25+41 | SWL |
| 26+16 to 30+24 | SWL |
| 30+44 to 37+38 | SWL |
| 30+44 to 37+38 | SWL |
| 37+58 to 37+63 | SWL |
| 37+58 to 42+10 | SWL |
| 38+21 to 62+14 | SWL |

ITEM 862.506 (Continued)Ayer Road (Route 110/111)

| <u>Station</u> | <u>Type</u> |
|------------------|-------------|
| 43+02 to 48+80 | SWL |
| 49+95 to 57+39 | SWL |
| 58+26 to 62+14 | SWL |
| 62+34 to 74+08 | SWL |
| 62+34 to 85+66 | SWL |
| 74+63 to 77+23 | SWL |
| 78+06 to 85+65 | SWL |
| 85+86 to 96+28 | SWL |
| 86+41 to 100+06 | SWL |
| 97+08 to 100+06 | SWL |
| 100+26 to 100+75 | SWL |
| 100+26 to 100+71 | SWL |

ITEM 863.506**FAST DRY MULTI-COMPONENT PAVEMENT MARKINGS, RECESSED,
WET REFLECTIVE (6 INCH YELLOW LINE)**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Type</u> |
|------------------|-------------|
| 8+70 to 12+05 | DBYL |
| 9+05 to 9+48 | DYLEx |
| 9+48 to 10+53 | DBYL |
| 10+53 to 10+78 | DYLEx |
| 10+78 to 12+05 | DBYL |
| 13+02 to 20+78 | DBYL |
| 15+10 to 16+73 | DBYL |
| 21+79 to 23+33 | DBYL |
| 23+33 to 23+69 | DYLEx |
| 23+69 to 25+43 | DBYL |
| 26+00 to 29+50 | DBYL |
| 30+09 to 30+24 | DBYL |
| 30+44 to 37+38 | DBYL |
| 37+58 to 37+70 | DBYL |
| 38+21 to 42+10 | DBYL |
| 43+02 to 48+80 | DBYL |
| 49+38 to 49+38 | DBYL |
| 49+95 to 57+39 | DBYL |
| 58+26 to 62+14 | DBYL |
| 62+34 to 74+08 | DBYL |
| 74+63 to 77+23 | DBYL |
| 78+06 to 85+65 | DBYL |
| 86+42 to 96+28 | DBYL |
| 97+08 to 100+06 | DBYL |
| 100+26 to 100+73 | DBYL |

Gebo Lane

| <u>Station</u> | <u>Type</u> |
|------------------|-------------|
| 110+43 to 112+30 | DBYL |

ITEM 863.506 (Continued)Poor Farm Road

| <u>Station</u> | <u>Type</u> |
|------------------|-------------|
| 120+23 to 120+76 | DBYL |

ITEM 864.04**PAVEMENT ARROWS AND LEGENDS REFLECTORIZED WHITE (THERMOPLASTIC)**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Type</u> |
|----------------|-------------|
| 13+09 | LEFT ARROW |
| 13+51 | ONLY |
| 14+65 | LEFT ARROW |
| 15+05 | ONLY |
| 17+03 | ONLY |
| 17+42 | LEFT ARROW |
| 18+05 | ONLY |
| 18+48 | LEFT ARROW |
| 19+10 | ONLY |
| 19+52 | LEFT ARROW |
| 20+14 | ONLY |
| 20+56 | LEFT ARROW |

Shared Use Path (Route 110/111)

| <u>Station</u> | <u>Type</u> |
|----------------|-------------|
| 154+67 | LEFT ARROW |

ITEM 866.112**12 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC)**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Type</u> |
|----------------|-------------|
| 12+80 to 13+00 | CW |
| 12+80 to 13+00 | CW |
| 14+64 to 15+42 | CW |
| 14+64 to 15+42 | CW |
| 14+82 to 15+08 | SL |
| 29+85 to 30+12 | SL |
| 30+28 to 30+40 | CW |
| 30+28 to 30+40 | CW |
| 36+01 to 36+60 | CW |
| 36+11 to 36+49 | CW |
| 36+01 to 36+60 | CW |
| 36+01 to 36+60 | CW |
| 37+42 to 37+54 | CW |
| 37+42 to 37+54 | CW |
| 37+66 to 38+15 | CW |
| 37+67 to 38+16 | CW |
| 37+74 to 38+06 | CW |
| 37+93 to 38+05 | SL |
| 42+23 to 42+86 | CW |

ITEM 866.112 (Continued)Ayer Road (Route 110/111)

| <u>Station</u> | <u>Type</u> |
|------------------|-------------|
| 42+33 to 42+72 | CW |
| 42+33 to 42+72 | CW |
| 42+33 to 42+86 | CW |
| 48+89 to 48+89 | SL |
| 49+17 to 49+38 | SL |
| 49+00 to 49+74 | CW |
| 49+00 to 49+74 | CW |
| 49+00 to 49+74 | CW |
| 49+00 to 49+74 | CW |
| 49+84 to 49+84 | SL |
| 57+50 to 58+15 | CW |
| 57+58 to 58+07 | CW |
| 57+58 to 58+07 | CW |
| 57+50 to 58+15 | CW |
| 62+18 to 62+30 | CW |
| 62+18 to 62+30 | CW |
| 74+14 to 74+56 | CW |
| 74+21 to 74+46 | CW |
| 74+21 to 74+46 | CW |
| 74+14 to 74+56 | CW |
| 77+33 to 77+95 | CW |
| 77+33 to 77+95 | CW |
| 77+33 to 77+95 | CW |
| 77+48 to 77+82 | CW |
| 85+69 to 85+82 | CW |
| 85+69 to 85+82 | CW |
| 86+10 to 86+25 | SL |
| 96+54 to 96+66 | SL |
| 96+54 to 96+78 | CW |
| 96+45 to 96+87 | CW |
| 96+54 to 96+78 | CW |
| 96+50 to 96+82 | CW |
| 100+10 to 100+22 | CW |
| 100+10 to 100+22 | CW |
| 100+11 to 100+16 | SL |

Gebo Lane

| <u>Station</u> | <u>Type</u> |
|------------------|-------------|
| 110+27 to 110+27 | CW |
| 110+40 to 110+40 | CW |
| 110+27 to 110+40 | CW |
| 110+27 to 110+40 | CW |
| 110+46 to 110+46 | SL |
| 115+41 to 115+41 | SL |
| 115+46 to 115+46 | CW |
| 115+46 to 115+59 | CW |
| 115+59 to 115+59 | CW |

ITEM 866.112 (Continued)Shared Use Path

| <u>Station</u> | <u>Type</u> |
|------------------|-------------|
| 154+23 to 154+23 | SL |
| 154+37 to 154+83 | CW |
| 154+37 to 154+83 | CW |
| 154+37 to 154+83 | CW |
| 154+45 to 154+75 | CW |
| 154+58 to 154+75 | SL |
| 154+88 to 154+88 | SL |

ITEM 867.112**12 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC)**Ayer Road (Route 110/111)

| <u>Station</u> | <u>Type</u> |
|----------------|-------------|
| 8+70 to 11+94 | LT |
| 15+42 to 16+51 | LT |
| 21+80 to 25+43 | LT |

ITEM 874.**STREET NAME SIGN**Ayer Road (Route 110/111)

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|-------------|----------------|---------------|
| MA-D3-1a | 21+05 | 45' LT |
| MA-D3-1a | 21+05 | 45' LT |
| MA-D3-1b | 49+13 | 34' LT |
| MA-D3-1b | 49+13 | 34' LT |
| MA-D3-1c | 21+05 | 45' LT |
| MA-D3-1c | 21+05 | 45' LT |

Gebo Lane

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|-------------|----------------|---------------|
| MA-D3-1d | 115+49 | 34' RT |
| MA-D3-1d | 115+49 | 34' RT |
| MA-D3-1a | 115+49 | 34' RT |
| MA-D3-1a | 115+49 | 34' RT |

ITEM 874.2**TRAFFIC SIGN REMOVED AND RESET**Ayer Road (Route 110/111)

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|----------------|----------------|---------------|
| W2-2 | 9+71 | 32' RT |
| R8-3a | 9+87 | 40' LT |
| R2-1(45) | 9+91 | 32' RT |
| W6-1 | 10+06 | 40' LT |
| R8-3a | 11+61 | 31' LT |
| R1-1 | 14+69 | 31' LT |
| W2-2 | 15+44 | 29' LT |
| "EXIT" | 23+29 | 35' LT |
| "EXIT ONLY" | 23+72 | 31' LT |
| R5-1 | 23+80 | 24' LT |
| "BOWERS BROOK" | 25+88 | 19' RT |
| "BOWERS BROOK" | 27+89 | 15' LT |
| R1-1 | 38+09 | 33' RT |

ITEM 874.2 (Continued)Ayer Road (Route 110/111)

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|---------------------------|----------------|---------------|
| "SO. SHAKER RD" | 38+23 | 14' RT |
| "NO ACCESS TO DEVENS" | 47+55 | 14' RT |
| R1-1 | 49+21 | 54'LT |
| "NO ACCESS TO DEVENS" | 51+06 | 24' LT |
| POST WITH MILE MARKER | 69+25 | 14' RT |
| R2-1(35) | 72+52 | 13' RT |
| R2-1(40), "HARVARD GROWN" | 73+87 | 23' LT |
| MA-W13-4 | 77+66 | 16' RT |
| POST WITH MILE MARKER | 80+12 | 16' RT |
| "MYRICK LN" | 86+50 | 15' RT |
| R2-1(35) | 90+76 | 22' LT |
| MA-W13-4 | 95+08 | 22' LT |
| "CORTLAND LANE" | 96+42 | 30' LT |
| "LIONS INTERNATIONAL" | 97+63 | 14' RT |
| "LIONS INTERNATIONAL" | 98+73 | 23' LT |
| "HARVARD GROWN" | 99+50 | 22' LT |

Gebo Lane

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|-------------|----------------|---------------|
| R1-1 | 115+30 | 14' RT |

Poor Farm Road

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|-------------|----------------|---------------|
| R1-1 | 120+45 | 21' LT |

ITEM 874.4**TRAFFIC SIGN REMOVED AND STACKED**Ayer Road (Route 110/111)

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|-----------------------------|----------------|---------------|
| R8-3a | 10+18 | 32' RT |
| R8-3a | 11+37 | 28' RT |
| R8-3a | 14+45 | 32' LT |
| R8-3a | 15+77 | 29' LT |
| R8-3a | 17+02 | 20' LT |
| R8-3a | 17+91 | 22' LT |
| "2 WEST", "2 EAST" | 18+15 | 24' LT |
| R8-3a | 19+27 | 25' LT |
| R1-1 | 19+59 | 32' LT |
| "GEBO LANE" | 20+17 | 20' LT |
| "JCT 2" | 20+46 | 21' LT |
| "LANCASTER COUNTY ROAD" | 28+12 | 23' LT |
| "EAST 110", "HARVARD GROWN" | 35+16 | 12' RT |
| "NORTH 111" | 35+17 | 15' RT |
| "WEST 110" | 35+80 | 22' LT |
| "SOUTH 111" | 35+80 | 26' LT |

ITEM 874.4 (Continued)Ayer Road (Route 110/111)

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|---------------------|----------------|---------------|
| "SHAKER HILLS GOLF" | 38+52 | 12' RT |
| "ENTER" | 46+85 | 20' RT |
| "ENTER" | 47+41 | 15' RT |
| "OLD MILL ROAD" | 48+94 | 29' LT |
| "EXIT" | 49+17 | 13' RT |
| "EXIT" | 49+69 | 14' RT |
| "ROUTE 2 EXITS" | 67+92 | 28' LT |
| W1-8R | 79+47 | 20' LT |
| W1-8R | 80+21 | 23' LT |
| W1-8R | 81+03 | 22' LT |
| W1-8L | 83+45 | 16' RT |
| W1-8L | 85+00 | 12' RT |
| R1-1 | 86+25 | 51' RT |
| "JUNCTION" | 97+20 | 15' RT |

Gebo Lane

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|-------------|----------------|---------------|
| "GEBO LANE" | 115+53 | 34' RT |

Shared Use Path

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|----------------------------|----------------|---------------|
| R1-1 | 154+78 | 3' RT |
| "WE NEED YOU TO BUCKLE UP" | 154+78 | 3' RT |
| R1-1 | 157+74 | 7' RT |
| R7-1b | 157+95 | 20' LT |
| R7-1b | 158+57 | 35' LT |

ITEM 874.7**MISCELLANEOUS SIGNS REMOVED AND STACKED**Ayer Road (Route 110/111)

| <u>Sign</u> | <u>Station</u> | <u>Offset</u> |
|-----------------------|----------------|---------------|
| "FOR LEASE" | 41+03 | 29' LT |
| "FOXGLOVE APARTMENTS" | 42+20 | 29' LT |
| "310" | 70+78 | 15' RT |
| "313" | 72+80 | 24' LT |

ITEM 904.**4000 PSI, 3/4 INCH, 610 CEMENT CONCRETE**

To be used for proposed headwalls.

ITEM 910.**STEEL REINFORCEMENT FOR STRUCTURES**

To be used for proposed headwalls.

ITEM 983.521

STREAMBED RESTORATION

Ayer Road (Route 110/111)

| <u>Station</u> | <u>Offset</u> |
|----------------|---------------|
| 20+54 to 20+72 | LT |
| 20+72 to 20+72 | LT/RT |
| 20+63 to 20+79 | RT |
| 65+21 to 65+35 | RT |
| 65+26 to 65+38 | LT |

ITEM 991.11

CONTROL OF WATER – LOCATION NO. 1

To be used for culvert construction near STA 20+72, as directed by Engineer.

ITEM 991.12

CONTROL OF WATER – LOCATION NO. 2

To be used for culvert construction near STA 65+30, as directed by Engineer.

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