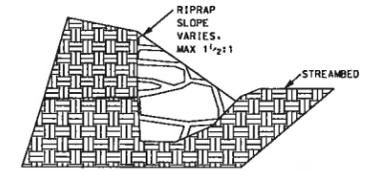
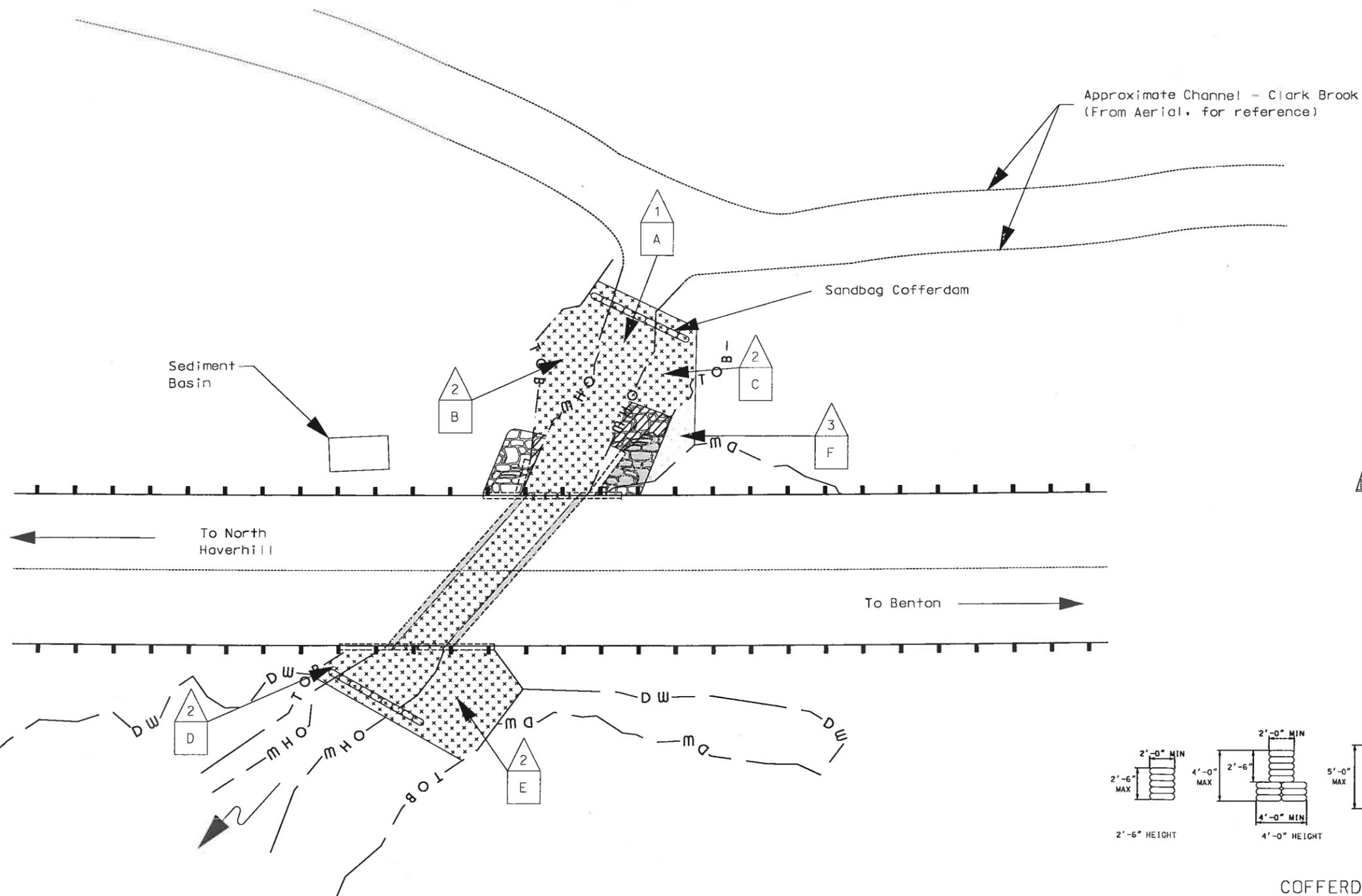
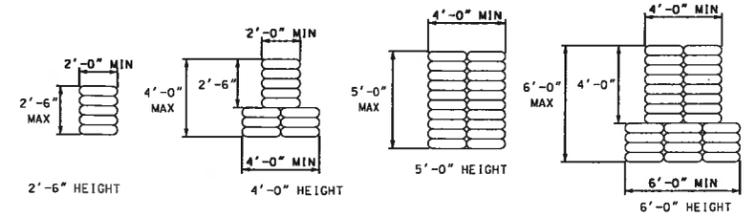




RIPRAP GRADATION
 D15 < 10.5"
 D50 < 14"
 D100 < 24"



SECTION A-A
 NOT TO SCALE



COFFERDAM DETAILS
 NOT TO SCALE

WETLAND IMPACTS
 SCALE: 1" = 20'-0"

WETLANDS DELINEATED BY SARAH LARGE AND MATT URBAN SEPTEMBER 2016



Steve W. Johnson
 5/19/18



| STATE OF NEW HAMPSHIRE | | | | | | | | | |
|---|-------------------------|--|--|------------|---------|-------------|---------------|--------------|--------------|
| DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE MAINTENANCE | | | | | | | | | |
| TOWN | HAVERHILL | | | BRIDGE NO. | 158/066 | | STATE PROJECT | 40557 | |
| LOCATION | NH 116 OVER CLARK BROOK | | | | | | | | |
| WETLAND IMPACTS | | | | | | | | | |
| REVISIONS AFTER PROPOSAL | | | | BY | DATE | BY | DATE | BRIDGE SHEET | |
| | | | | DESIGNED | SWJ | 5/14/17 | CHECKED | 1 OF 3 | |
| | | | | DRAWN | SWJ | 5/14/17 | CHECKED | FILE NUMBER | |
| | | | | QUANTITIES | | | CHECKED | HAVERHILL | |
| | | | | ISSUE DATE | | FISCAL YEAR | CREW | SHEET NO. | TOTAL SHEETS |
| SHEET SCALE | | | | REV. DATE | | 2017 | 10 | 1 | 3 |
| AS NOTED | | | | | | | | | |

| WETLAND IMPACT SUMMARY | | | | | | | | | | | |
|------------------------|------------------------|----------|------------------------|-----------|-------------------------------|-----------|-------------|------------|--------------------------------------|------------|----------|
| WETLAND NUMBER | WETLAND CLASSIFICATION | LOCATION | AREA IMPACTS | | | | | | LINEAR STREAM IMPACTS FOR MITIGATION | | |
| | | | PERMANENT | | | | TEMPORARY | | PERMANENT | | |
| | | | N.H.W.B. (NON WETLAND) | | N.H.W.B. & A.C.O.E. (WETLAND) | | | | BANK LEFT | BANK RIGHT | CHANNEL |
| | | | SF | LF | SF | LF | SF | LF | LF | LF | LF |
| 1 | R2UB12 | A | | | 70 | 35 | 648 | 85 | | | |
| 2 | BANK | B | 10 | 11 | | | 178 | 16 | | | |
| 2 | BANK | C | 43 | 8 | | | 123 | 20 | | | |
| 2 | BANK | D | | | | | 26 | 11 | | | |
| 2 | BANK | E | | | | | 237 | 15 | | | |
| 3 | PFO1E | F | | | 50 | | 58 | | | | |
| | | I | | | | | | | | | |
| | | J | | | | | | | | | |
| | | K | | | | | | | | | |
| | | L | | | | | | | | | |
| TOTAL | | | 53 | 19 | 120 | 35 | 1270 | 147 | 0 | 0 | 0 |

PERMANENT IMPACTS: 173 SF
 TEMPORARY IMPACTS: 1270 SF
 TOTAL IMPACTS: 1443 SF

| SUBTOTALS | | PERMANENT | | | | TEMPORARY | |
|-----------|-------------|------------------------|----|-------------------------------|----|-----------|----|
| | | N.H.W.B. (NON WETLAND) | | N.H.W.B. & A.C.O.E. (WETLAND) | | | |
| CLASS | DESCRIPTION | SF | LF | SF | LF | SF | LF |
| R2UB12 | RIVERINE | 0 | 0 | 70 | 35 | 648 | 85 |
| BANK | BANK | 53 | 19 | 0 | 0 | 564 | 62 |
| PFO1E | PALUSTRINE | 0 | 0 | 50 | 0 | 58 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 |

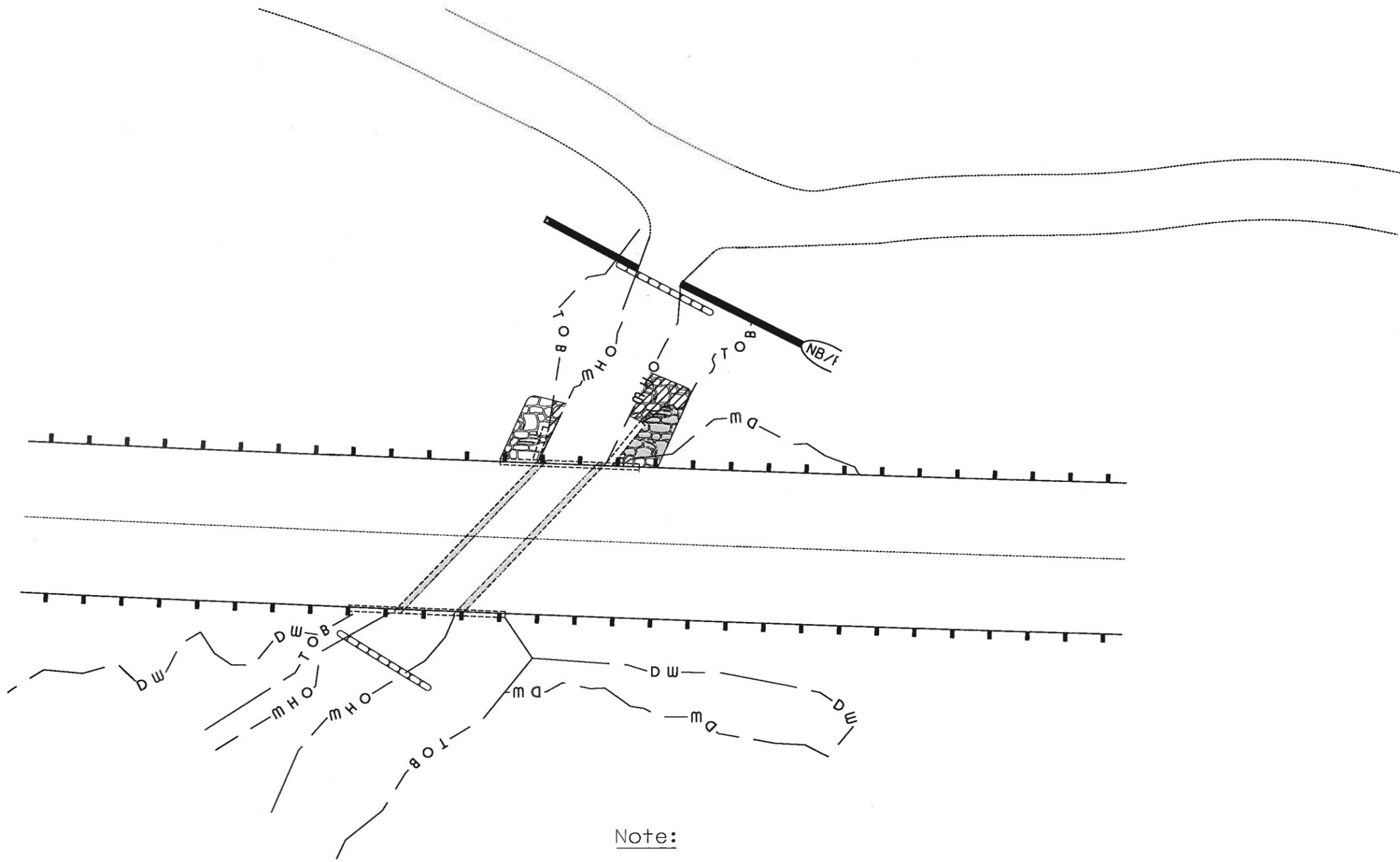
| WETLAND CLASSIFICATION CODES | |
|------------------------------|---|
| R2UB1.2 | RIVERINE, LOWER PERENNIAL, UNCONSOLIDATED BOTTOM, COBBLE GRAVEL, SAND |
| PFO1E | PALUSTRINE FORESTED BROAD-LEAVED DECIDUOUS |
| BANK | BANK |

LEGEND

| TYPE OF WETLAND IMPACT | SHADING/HATCHING | Symbol | Description |
|--|------------------|--------|----------------------------|
| NEW HAMPSHIRE WETLANDS BUREAU (PERMANENT NON-WETLAND) | Diagonal lines | # | WETLAND DESIGNATION NUMBER |
| NEW HAMPSHIRE WETLANDS BUREAU & ARMY CORP OF ENGINEERS (PERMANENT WETLAND) | Solid grey | # | WETLAND IMPACT LOCATION |
| TEMPORARY IMPACTS | Grid pattern | # | WETLAND MITIGATION AREA |
| | White box | | MITIGATION |

| STATE OF NEW HAMPSHIRE | | | | | | | | | |
|---|-------------------------|------------|-------------|---------------|-------|--------------|-----------|---|--|
| DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE MAINTENANCE | | | | | | | | | |
| TOWN | HAVERHILL | BRIDGE NO. | 158/066 | STATE PROJECT | 40557 | BRIDGE SHEET | | | |
| LOCATION | NH 116 OVER CLARK BROOK | | | | | 2 OF 3 | | | |
| WETLAND KEY AND SUMMARY | | | | | | | | | |
| DESIGNED | DBL | 2/5/18 | CHECKED | | | FILE NUMBER | 091/076 | | |
| DRAWN | DBL | 2/5/18 | CHECKED | | | TOTAL SHEETS | 3 | | |
| ISSUE DATE | | | FISCAL YEAR | 2016 | CREW | 10 | SHEET NO. | 2 | |
| REV. DATE | | | | | | | | | |

SHEET SCALE AS NOTED



| EROSION CONTROL PLAN LEGEND | |
|-----------------------------|---|
| | PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM |
| | NATURAL BUFFER/PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM |
| | CHANNEL PROTECTION STONE CHECK DAMS STRAW WATTLES CHANNEL MATTING CLASS D EROSION STONE CLASS C STONE |
| | CLEAN WATER BYPASS PUMP THROUGH PIPE DRAIN THROUGH PIPE OR CHANNEL |

Note:

Natural Buffer/Perimeter Control measures shall installed to protect outside the dewatered area if access or work in a non-jurisdictional area causes earth disturbance.

Quadrants without earth disturbance shall be protected with appropriate Best Management Practices as needed.

| STATE OF NEW HAMPSHIRE | | | | | | | | | |
|---|-----------|-------------|---------|---------------|-------|-----------------------|---------|--------|--|
| DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE MAINTENANCE | | | | | | | | | |
| TOWN | HAVERHILL | BRIDGE NO. | 158/066 | STATE PROJECT | 40557 | BRIDGE SHEET | | | |
| LOCATION NH 116 OVER CLARK BROOK | | | | | | EROSION CONTROL PLANS | | 3 OF 3 | |
| DESIGNED | DBL | 2/5/18 | CHECKED | | | FILE NUMBER | 091/076 | | |
| DRAWN | DBL | 2/5/18 | CHECKED | | | BROOKLINE | 091/076 | | |
| QUANTITIES | | | CHECKED | | | TOTAL SHEETS | | | |
| ISSUE DATE | | FISCAL YEAR | 2016 | CREW | 14 | SHEET NO. | 3 | 3 | |
| REV. DATE | | | | | | | | | |
| SHEET SCALE | AS NOTED | | | | | | | | |