



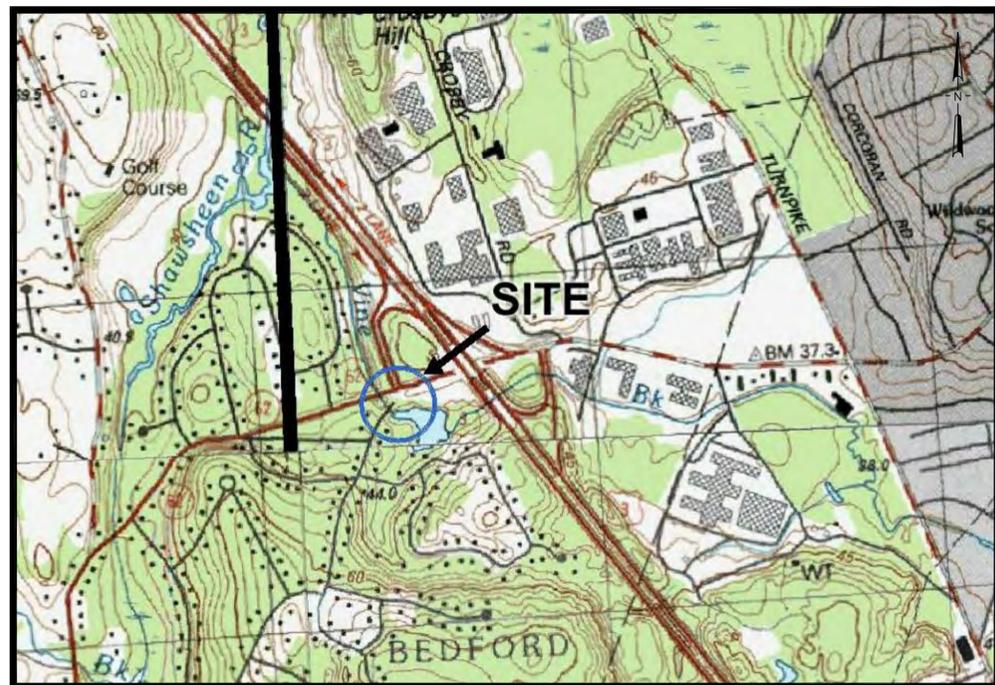
Permit Drawings Wilson Mill Dam

Bedford, Massachusetts

30 March 2010

for

Town of Bedford, Massachusetts

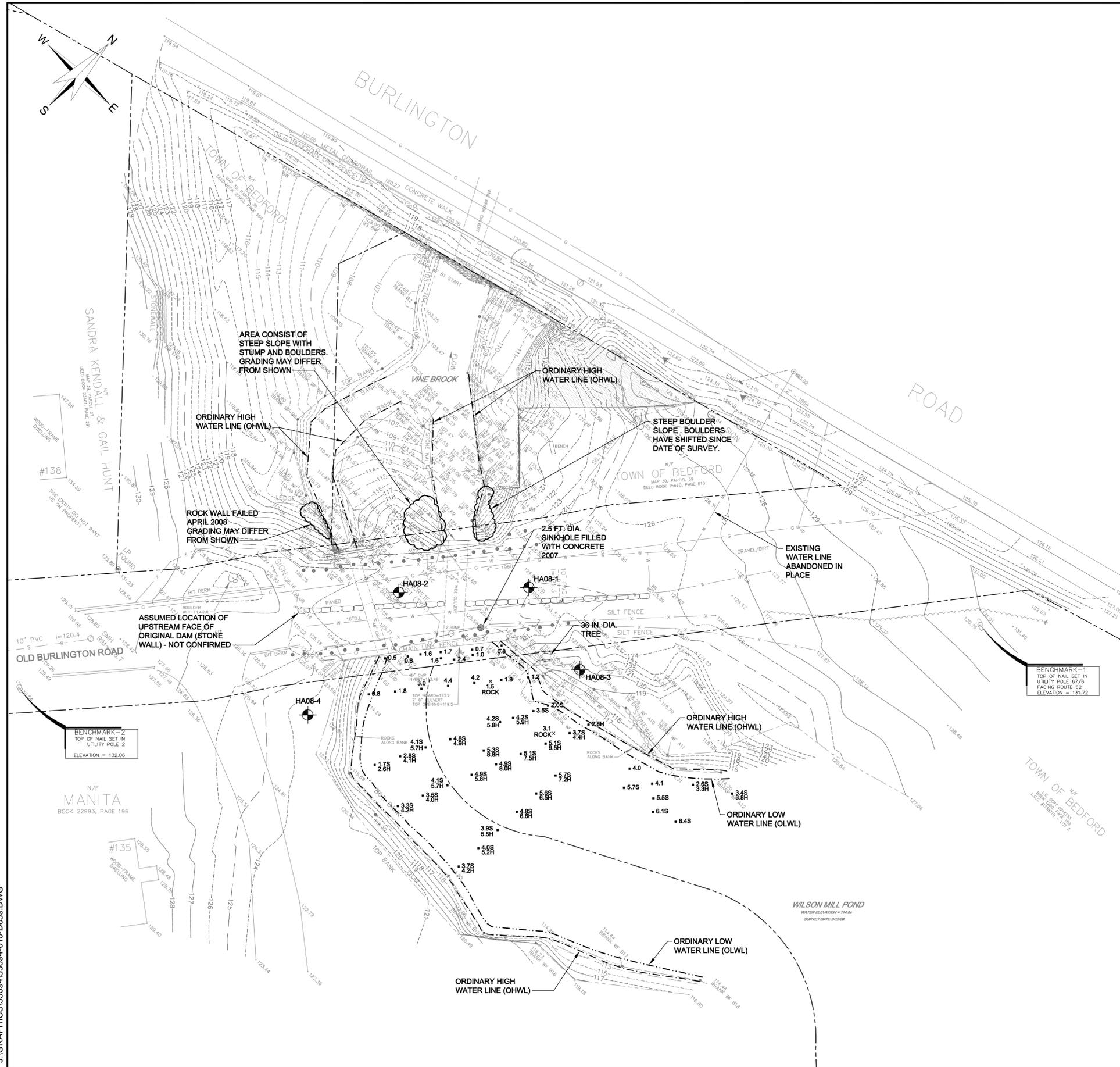


**HALEY &
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0 1000 2000
APPROXIMATE SCALE IN FEET

Index of Drawings		
Drawing	Sheet No.	Drawing Title
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LEGEND:

- HA08-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST BORING DRILL OF 2 FEBRUARY 2008, 31 DECEMBER 2008, AND 5 JANUARY 2009
- DESIGNATION AND APPROXIMATE LOCATION OF SOUNDING
- 1.6 DEPTH IN FEET FROM TOP OF WATER TO MUDLINE
- 4.2S DEPTH IN FEET FROM TOP OF WATER TO MUDLINE; SOFT BOTTOM
- 5.8H DEPTH IN FEET FROM TOP OF WATER TO MUDLINE; HARD BOTTOM USING SURVEY ROD AND HAND PRESSURE
- 3.1 ROCK* DEPTH IN FEET FROM TOP OF WATER TO ROCK

NOTES:

1. BASE PLAN WAS DEVELOPED FROM A SITE TOPOGRAPHIC SURVEY BY BRYANT ASSOCIATES, INC., DATED 11 MARCH 2008.
2. SITE SURVEY COMPLETED ON 8 FEBRUARY 2008.
3. VERTICAL DATUM IS NAVD 1988 VIA RTK GPS.
4. HORIZONTAL DATUM IS MASSACHUSETTS STATE PLANE COORDINATE SYSTEM NAD 1983 (1996).
5. ONLY SURFICIAL STRUCTURES OF UTILITIES SHOWN HAVE BEEN LOCATED BY FIELD SURVEY. LINWORK REPRESENTING UNDERGROUND STRUCTURES AND PIPES HAS BEEN SHOWN HEREON AS APPROXIMATE LOCATION BASED ON AVAILABLE RECORD PLANS. NO GUARANTEE OR WARRANTY IS MADE THAT THE UNDERGROUND UTILITIES SHOWN ARE ACCURATE OR COMPRISE ALL UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE UNDERGROUND UTILITIES SHOWN ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.
6. WETLAND DELINEATION PERFORMED BY DEROSA ENVIRONMENTAL.

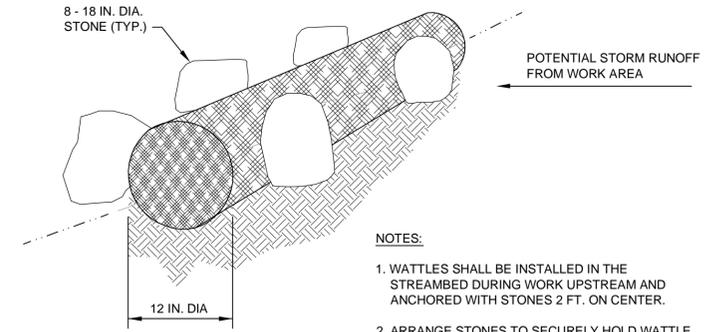
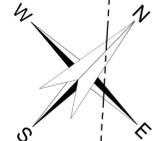
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Scale:	AS SHOWN
Date:	23 SEPTEMBER 2009
Autocad File:	35094-010-D059.DWG
Drawn By:	DTE
Designed By:	DJB
Checked By:	DJB
Approved By:	ADS

Rev.	Description	By	Date
2	REVISION 2	DJB	3/30/10
1	REVISION 1	DJB	10/23/09
0	PERMIT DRAWINGS	DJB	9/23/09

WILSON MILL DAM
 Bedford, Massachusetts

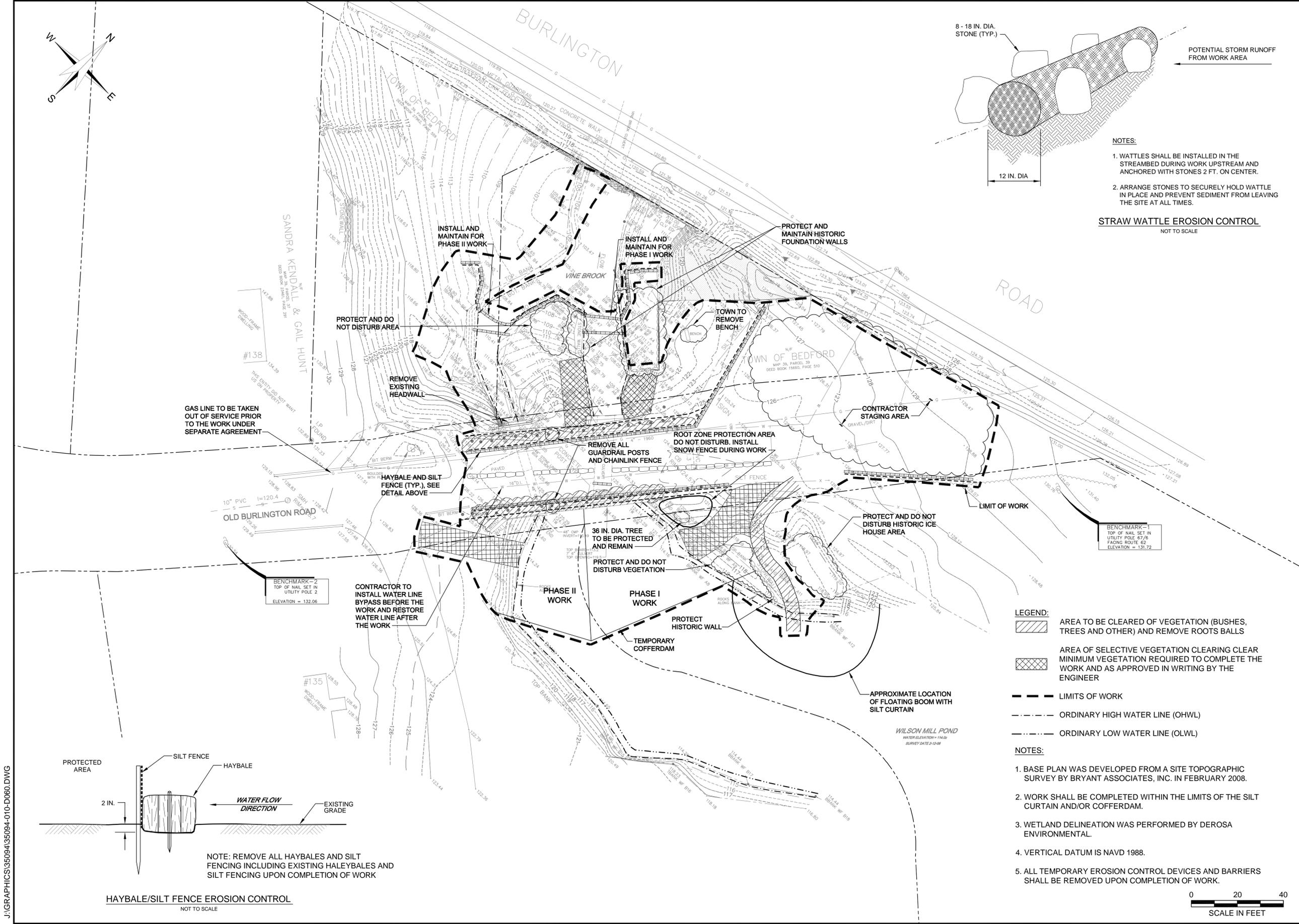
EXISTING CONDITIONS PLAN

C-2
 2 OF 16



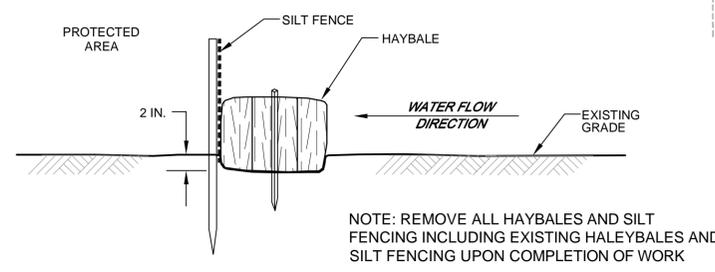
- NOTES:**
1. WATTLES SHALL BE INSTALLED IN THE STREAMBED DURING WORK UPSTREAM AND ANCHORED WITH STONES 2 FT. ON CENTER.
 2. ARRANGE STONES TO SECURELY HOLD WATTLE IN PLACE AND PREVENT SEDIMENT FROM LEAVING THE SITE AT ALL TIMES.

STRAW WATTLE EROSION CONTROL
 NOT TO SCALE



- LEGEND:**
- AREA TO BE CLEARED OF VEGETATION (BUSHES, TREES AND OTHER) AND REMOVE ROOTS BALLS
 - AREA OF SELECTIVE VEGETATION CLEARING CLEAR MINIMUM VEGETATION REQUIRED TO COMPLETE THE WORK AND AS APPROVED IN WRITING BY THE ENGINEER
 - LIMITS OF WORK
 - ORDINARY HIGH WATER LINE (OHWL)
 - ORDINARY LOW WATER LINE (OLWL)

- NOTES:**
1. BASE PLAN WAS DEVELOPED FROM A SITE TOPOGRAPHIC SURVEY BY BRYANT ASSOCIATES, INC. IN FEBRUARY 2008.
 2. WORK SHALL BE COMPLETED WITHIN THE LIMITS OF THE SILT CURTAIN AND/OR COFFERDAM.
 3. WETLAND DELINEATION WAS PERFORMED BY DEROSA ENVIRONMENTAL.
 4. VERTICAL DATUM IS NAVD 1988.
 5. ALL TEMPORARY EROSION CONTROL DEVICES AND BARRIERS SHALL BE REMOVED UPON COMPLETION OF WORK.



Project No.:	35094-010
Scale:	AS SHOWN
Date:	23 SEPTEMBER 2009
Autocad File:	35094-010-D060.DWG
Drawn By:	KBM
Designed By:	KBM
Checked By:	DJB
Approved By:	ADS

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3	REVISION 3	DJB	3/30/10
2	REVISION 2	DJB	10/28/09
1	REVISION 1	DJB	10/23/09
0	PERMIT DRAWINGS	DJB	9/23/09

WILSON MILL DAM
 Bedford, Massachusetts

EROSION CONTROL AND DEMOLITION PLAN

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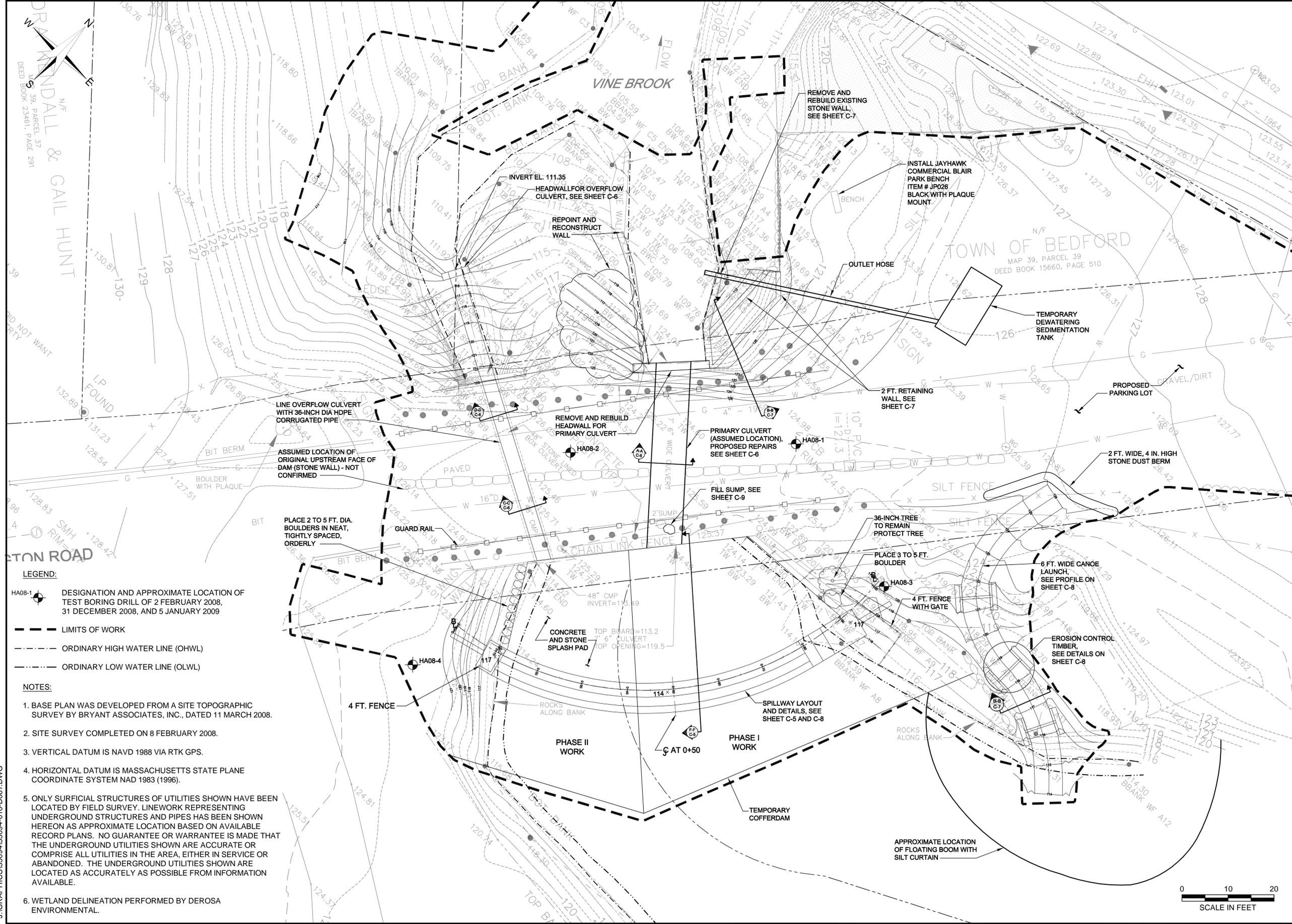
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Scale:	AS SHOWN
Date:	23 SEPTEMBER 2009
Autocad File:	35094-010-D061.DWG
Drawn By:	KBM
Designed By:	KBM
Checked By:	DJB
Approved By:	ADS

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3	REVISION 3	DJB	3/30/10
2	REVISION 2	DJB	10/28/09
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0	PERMIT DRAWINGS	DJB	9/23/09

WILSON MILL DAM
 Bedford, Massachusetts

SITE LAYOUT AND GRADING PLAN

C-4



LEGEND:

HA08-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST BORING DRILL OF 2 FEBRUARY 2008, 31 DECEMBER 2008, AND 5 JANUARY 2009

--- LIMITS OF WORK

--- ORDINARY HIGH WATER LINE (OHWL)

--- ORDINARY LOW WATER LINE (OLWL)

NOTES:

1. BASE PLAN WAS DEVELOPED FROM A SITE TOPOGRAPHIC SURVEY BY BRYANT ASSOCIATES, INC., DATED 11 MARCH 2008.
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6. WETLAND DELINEATION PERFORMED BY DEROSA ENVIRONMENTAL.

J:\GRAPHICS\35094\010-D061.DWG

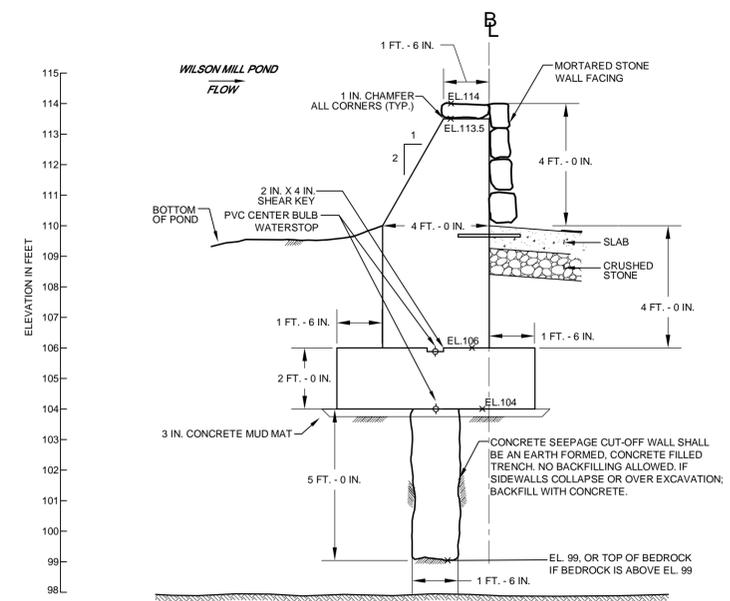
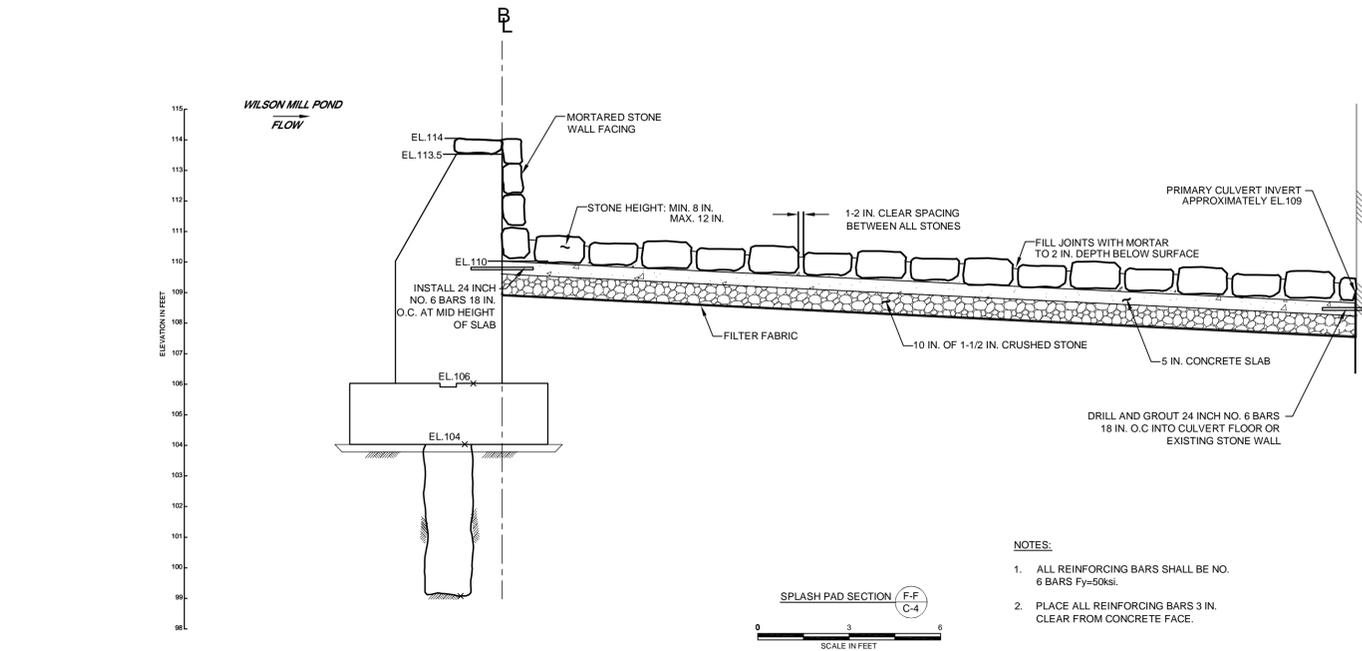
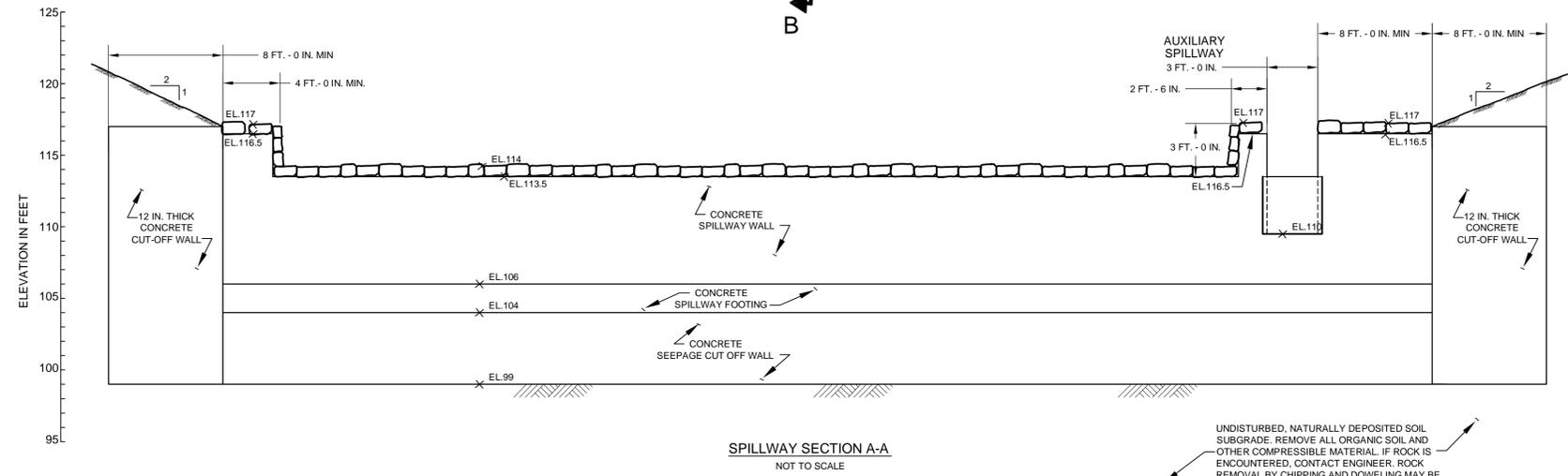
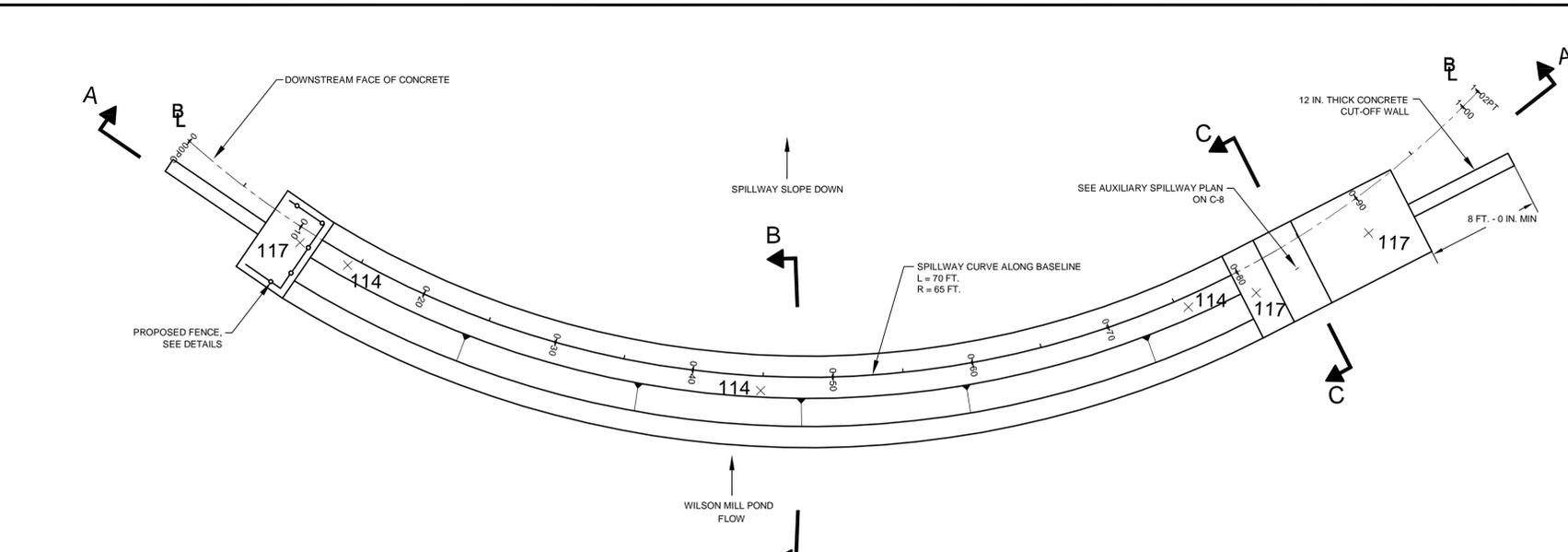
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Scale:	AS SHOWN
Date:	23 DECEMBER 2008
Autocad File:	35094-010-D063.DWG
Drawn By:	KBM
Designed By:	KBM
Checked By:	DBJ
Approved By:	ADS

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0	REVISION 1	DJB	10/23/09

WILSON MILL
 DAM
 Bedford, Massachusetts

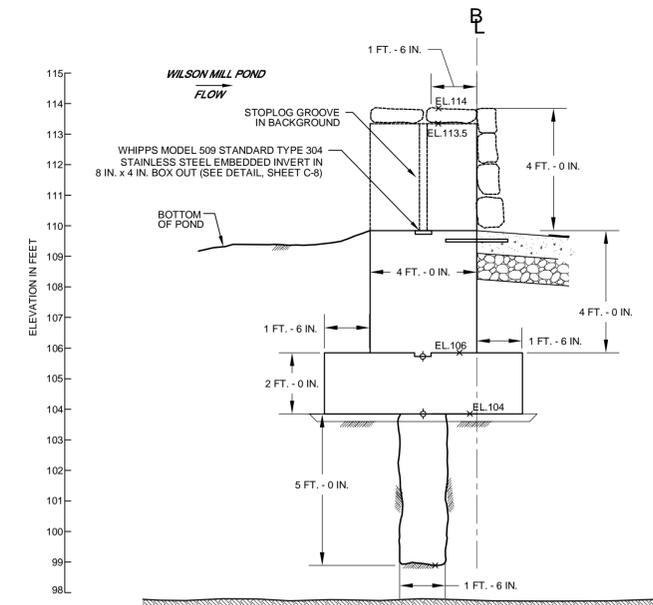
SPILLWAY
 PLAN

C-6



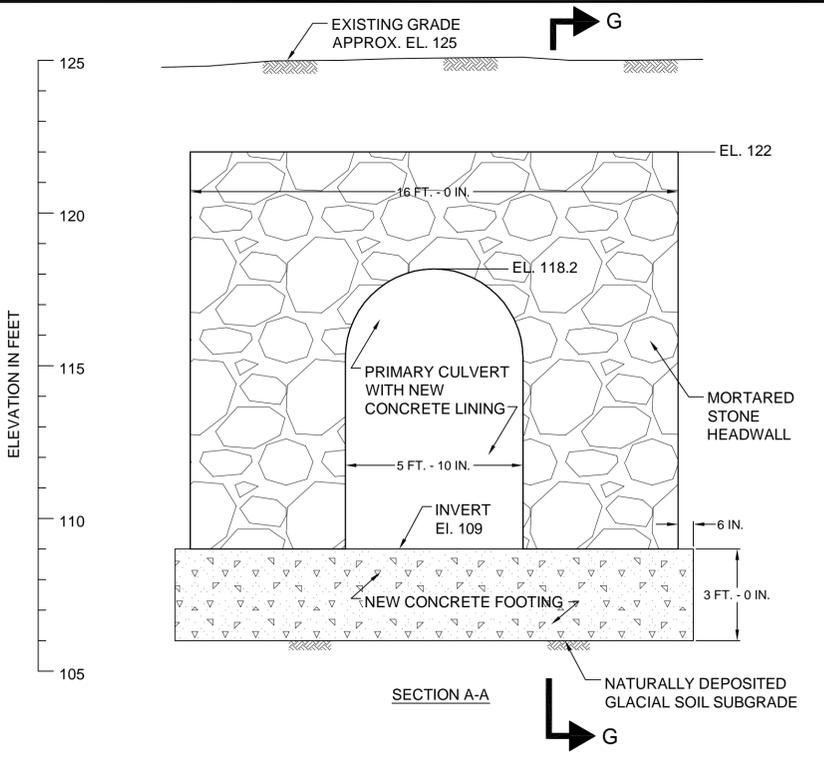
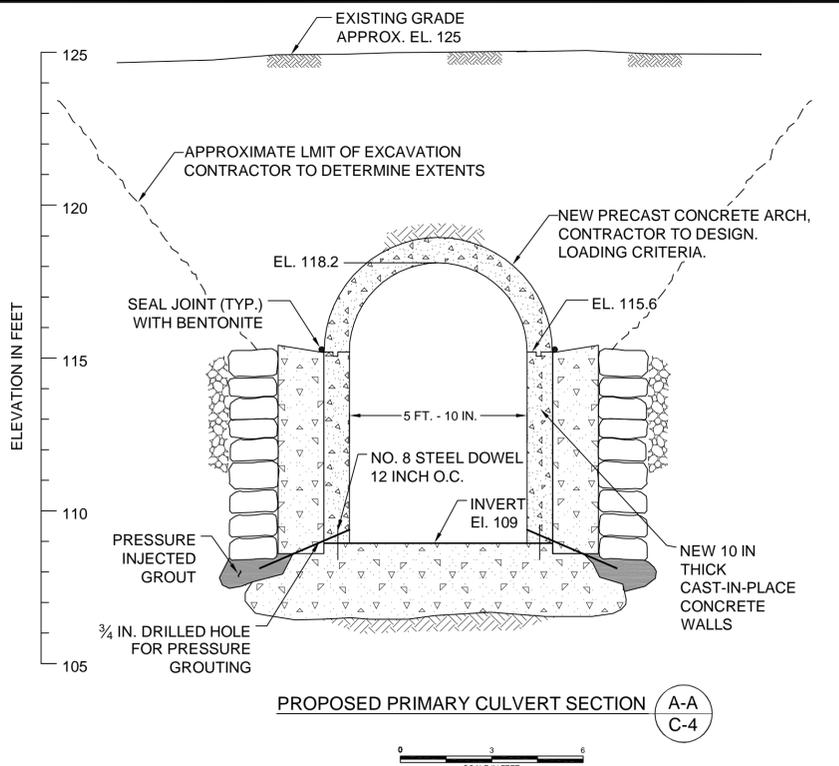
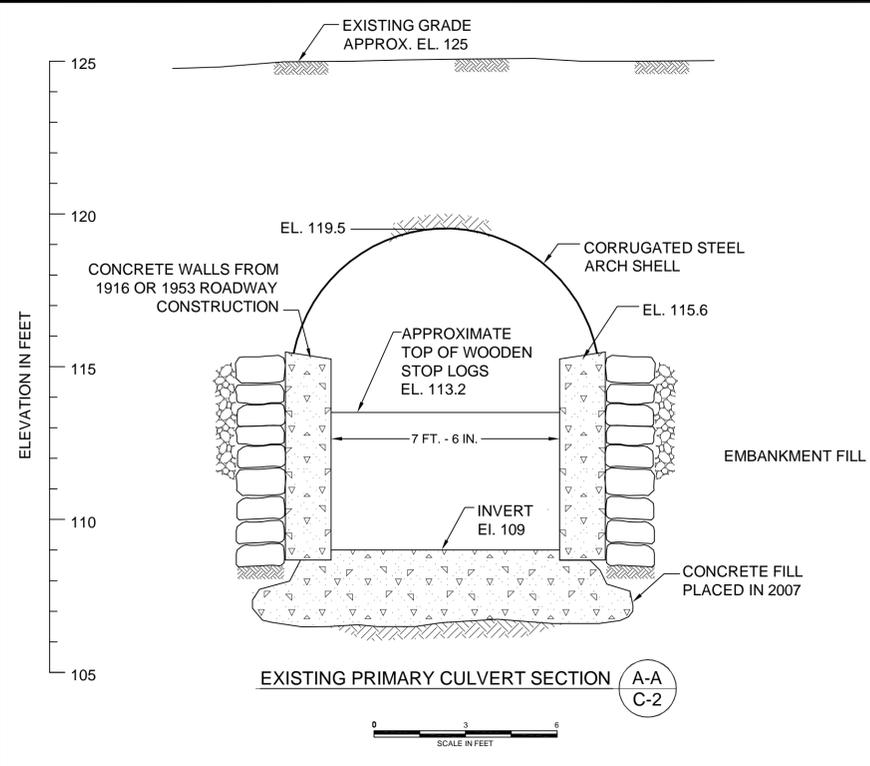
NOTES:
 1. ALL REINFORCING BARS SHALL BE NO. 6 BARS Fy=50ksi.
 2. PLACE ALL REINFORCING BARS 3 IN. CLEAR FROM CONCRETE FACE.

SPILLWAY WALL SECTION B-B
 SCALE IN FEET

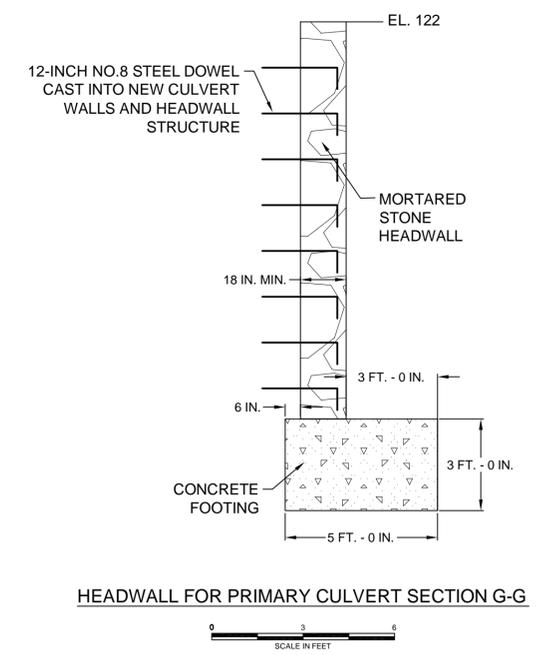
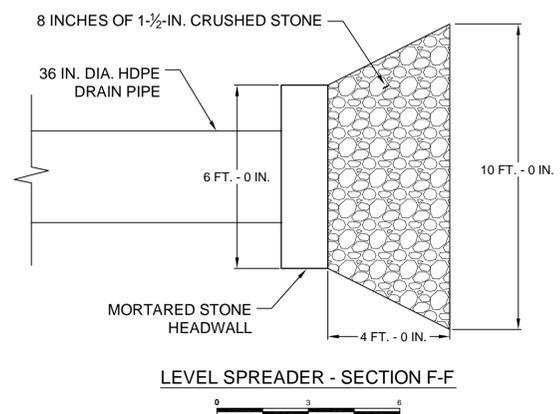
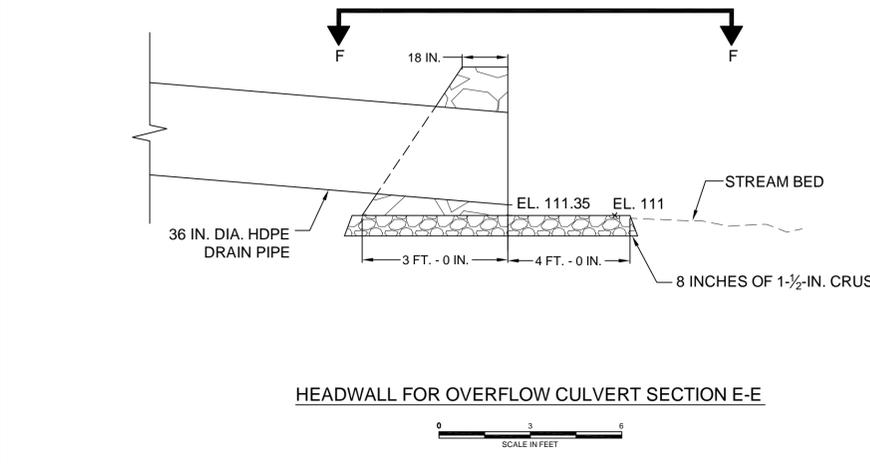
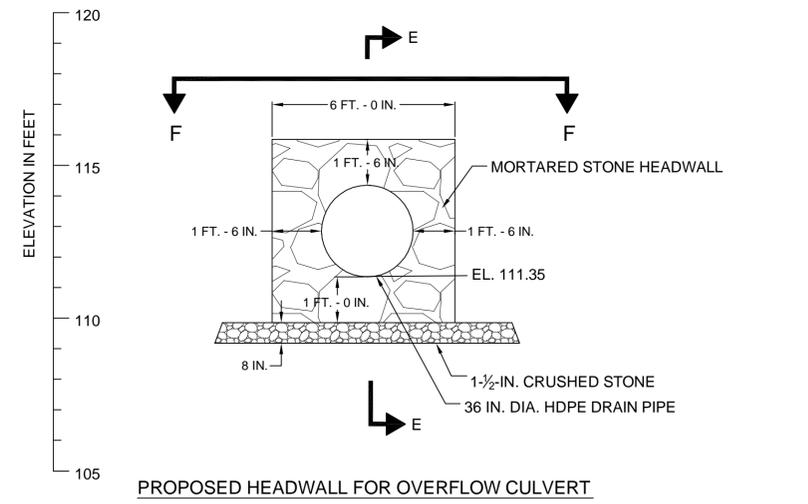
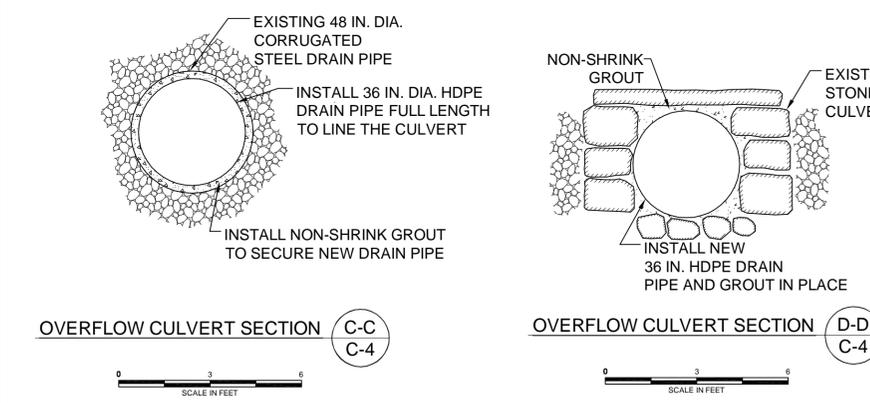


NOTES:
 1. ALL REINFORCING BARS SHALL BE NO. 6 BARS Fy=50ksi.
 2. PLACE ALL REINFORCING BARS 3 IN. CLEAR FROM CONCRETE FACE.

SPILLWAY WALL SECTION C-C
 SCALE IN FEET



NOTE: CONTRACTOR TO DRILL 3/4 IN. HOLES AT 18 IN. ON CENTER ALONG RIGHT AND LEFT SIDES OF CULVERT AT BASE. INSTALL 1/2 IN. DIAMETER GROUT TUBE AND PRESSURE GROUT VOID SPACE TO ENTIRELY FILL EXISTING VOID



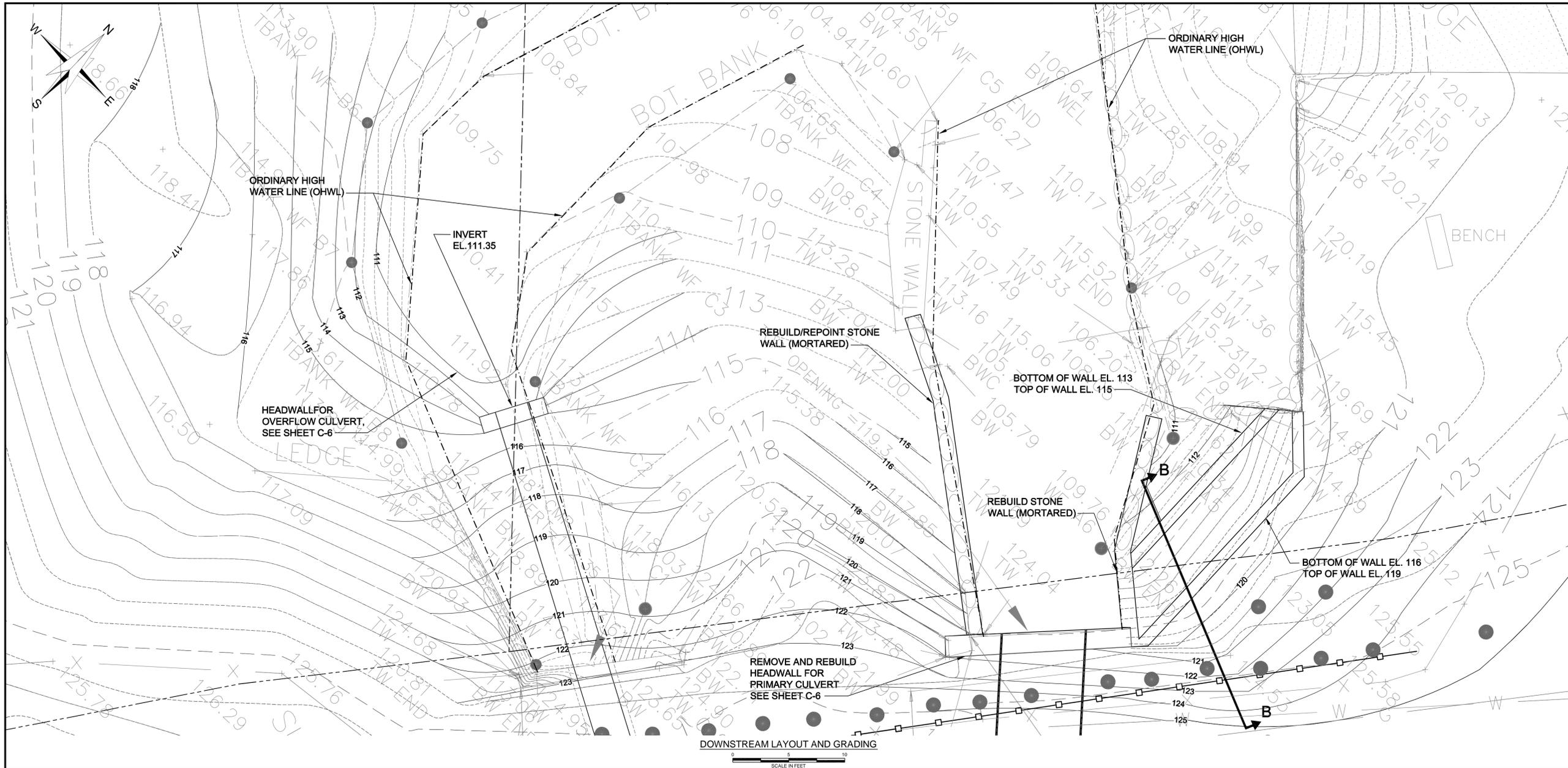
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Scale:	AS SHOWN
Date:	23 SEPTEMBER 2009
Autocad File:	35094-010-D064.DWG
Drawn By:	KBM
Designed By:	KBM
Checked By:	DJB
Approved By:	ADS

Rev.	Description	By	Date
1	REVISION 1	DJB	10/23/09
0	Permit Drawings	DJB	9/23/09

WILSON MILL DAM
 Bedford, Massachusetts

MAIN CULVERT PLAN

C-7
 7 OF 16



Project No.:	35094-010
Scale:	AS SHOWN
Date:	23 DECEMBER 2008
Autocad File:	35094-010-D065.DWG
Drawn By:	KBM
Designed By:	KBM
Checked By:	DJB
Approved By:	ADS

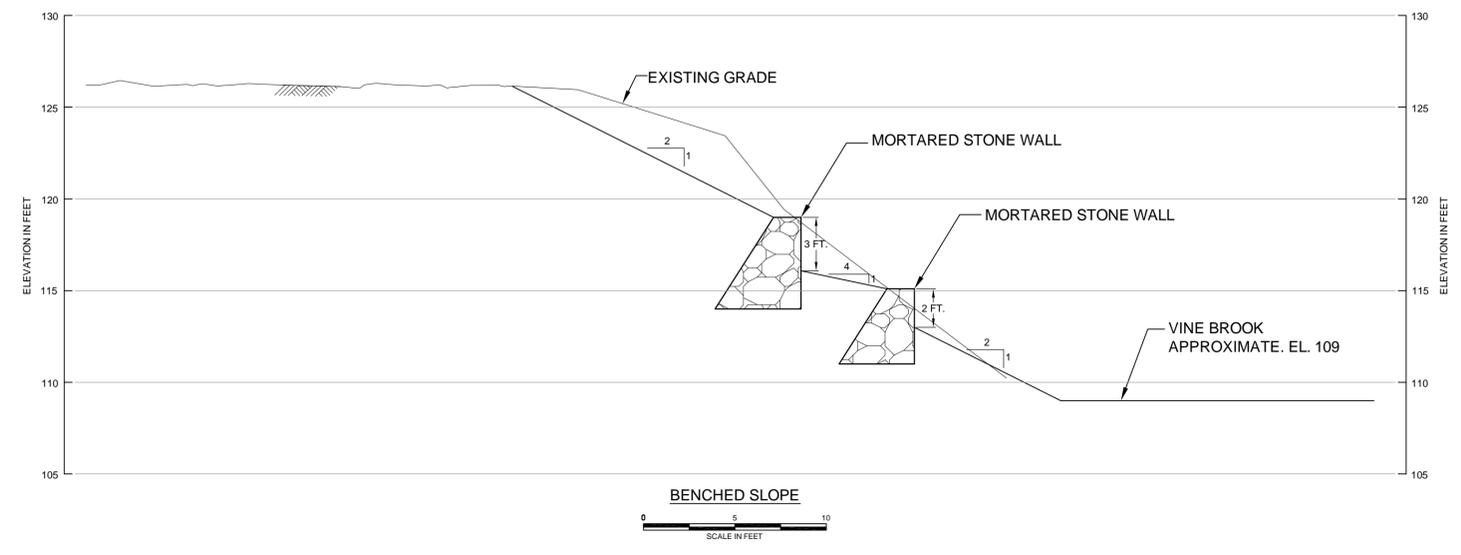
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0	REVISION 1	DJB	10/23/09

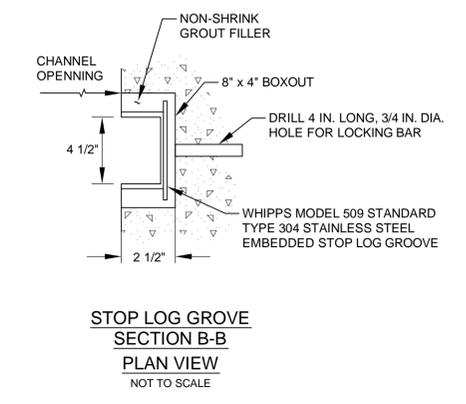
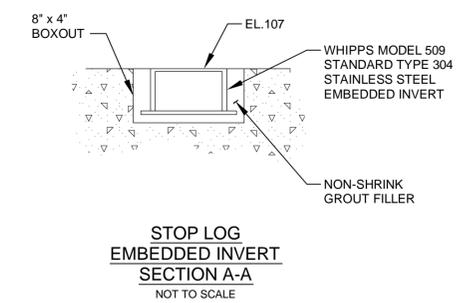
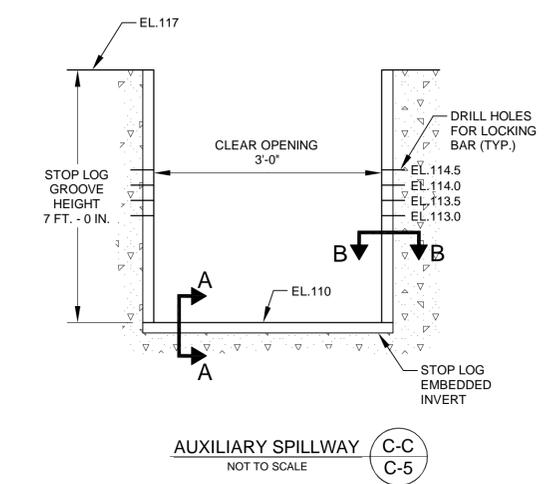
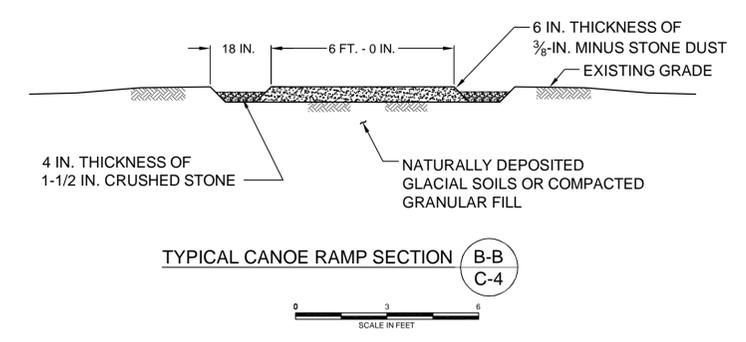
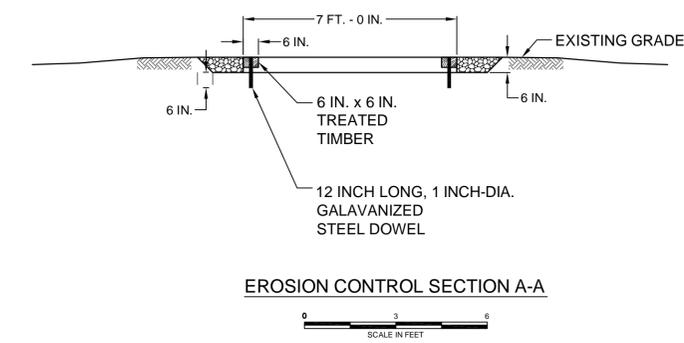
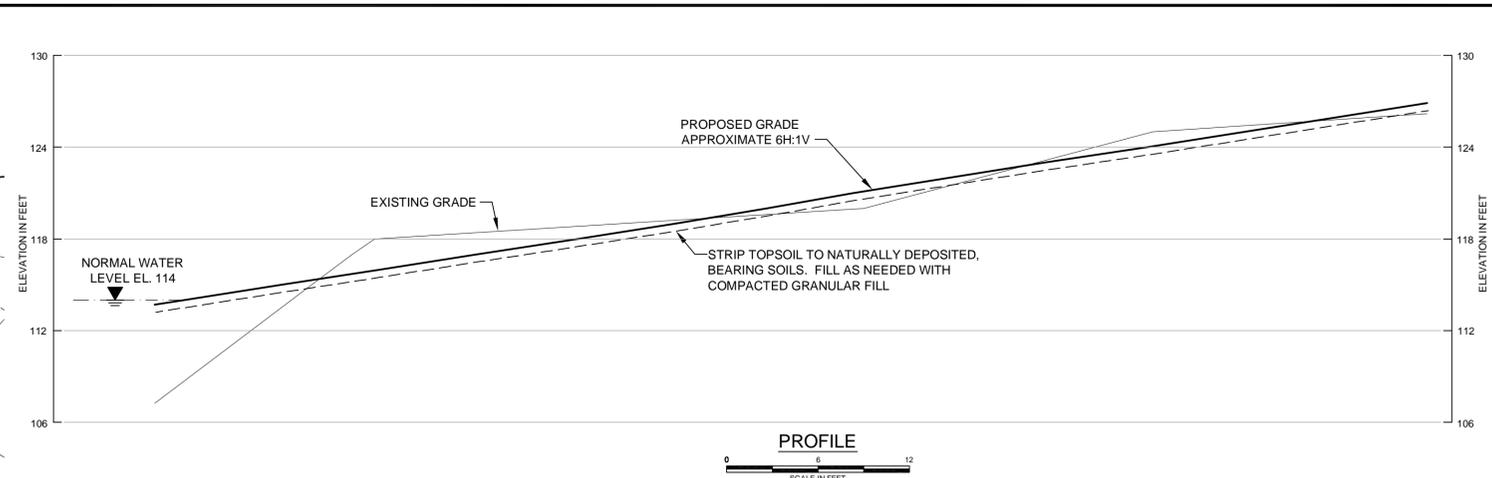
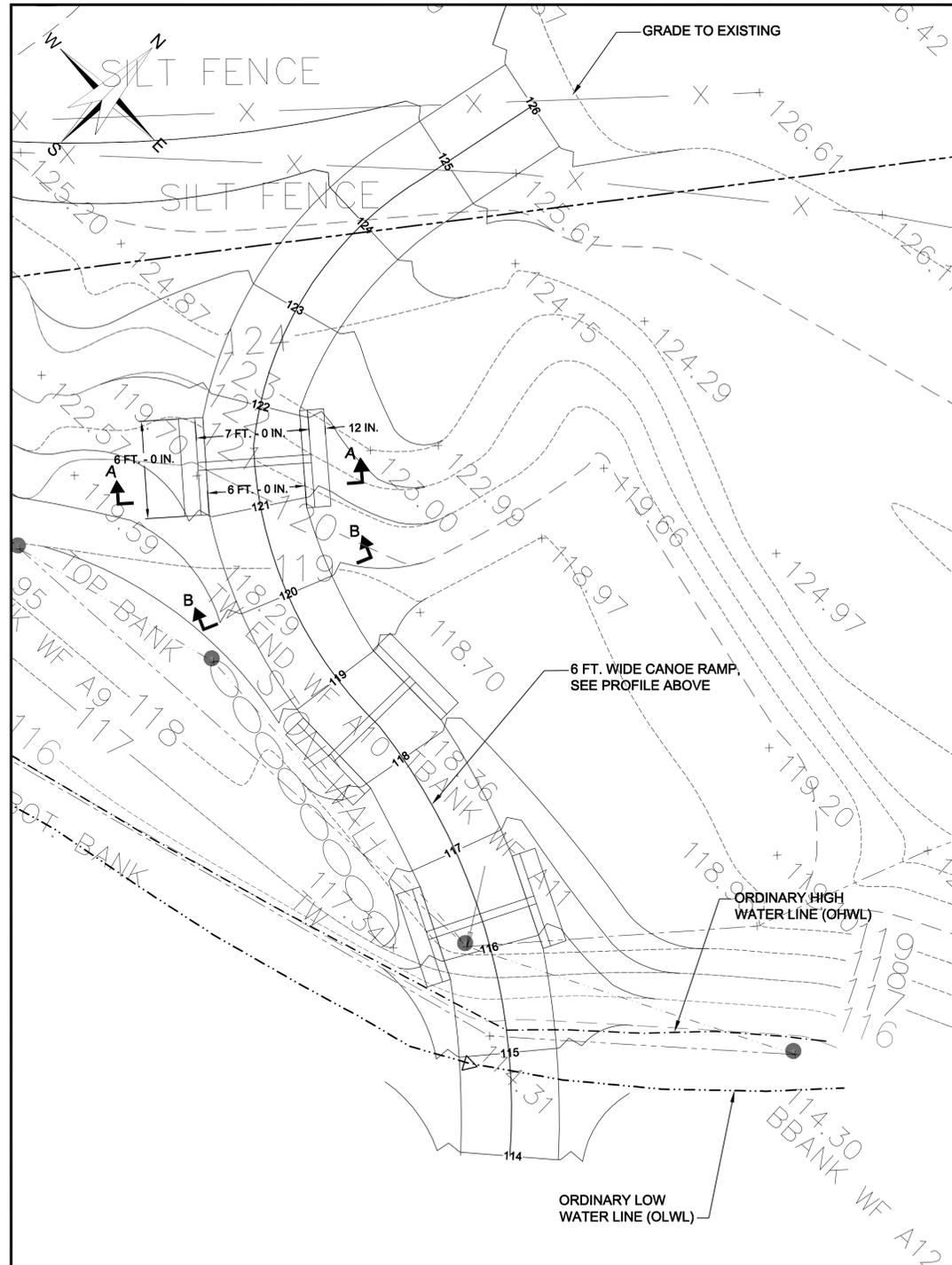
WILSON MILL DAM
 Bedford, Massachusetts

DOWNSTREAM LAYOUT AND DETAILS

C-8

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- NOTES:**
- CONTRACTOR TO WORK WITH OWNER TO IDENTIFY TREES TO REMAIN AND ADJUST LAYOUT AS NEEDED
 - ROOT ZONE PROTECTION PER BEDFORD REGULATIONS

CANOE LAUNCH GRADING AND LAYOUT
 SCALE IN FEET

Project No.:	35094-010
Scale:	AS SHOWN
Date:	23 SEPTEMBER 2009
Autocad File:	35094-010-D066.DWG
Drawn By:	KBM
Designed By:	KBM
Checked By:	DJB
Approved By:	DJB

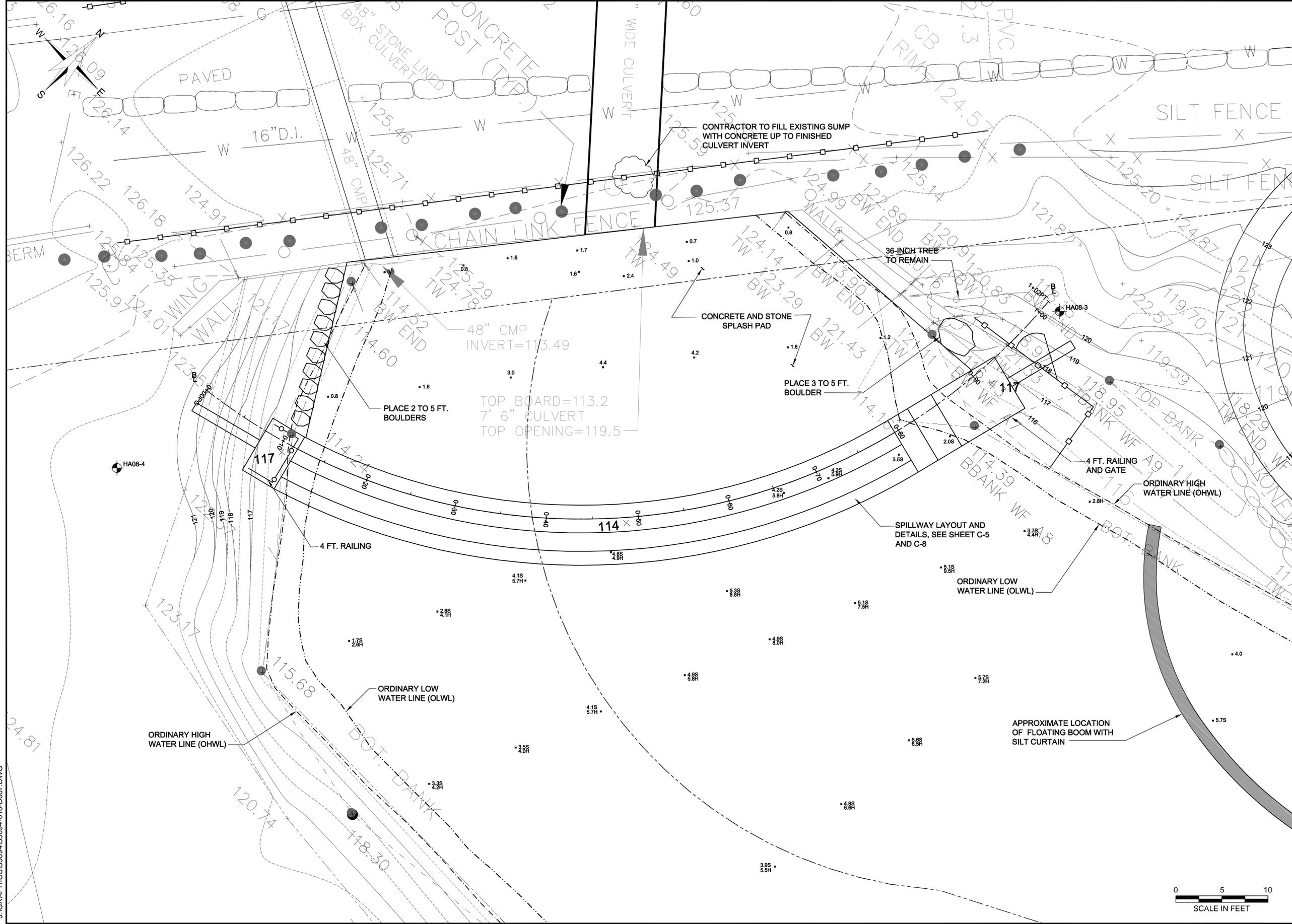
Rev.	Description	By	Date
0	Permit Drawings	DJB	9/23/09

WILSON MILL DAM
 Bedford, Massachusetts

CANOE LAUNCH LAYOUT AND DETAILS

C-9

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Project No.:	35094-010
Scale:	AS SHOWN
Date:	23 SEPTEMBER 2009
Autocad File:	35094-010-D067.DWG
Drawn By:	KBM
Designed By:	KBM
Checked By:	DJB
Approved By:	ADS

Rev.	Description	By	Date
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0	Permit Drawings	DJB	9/23/09

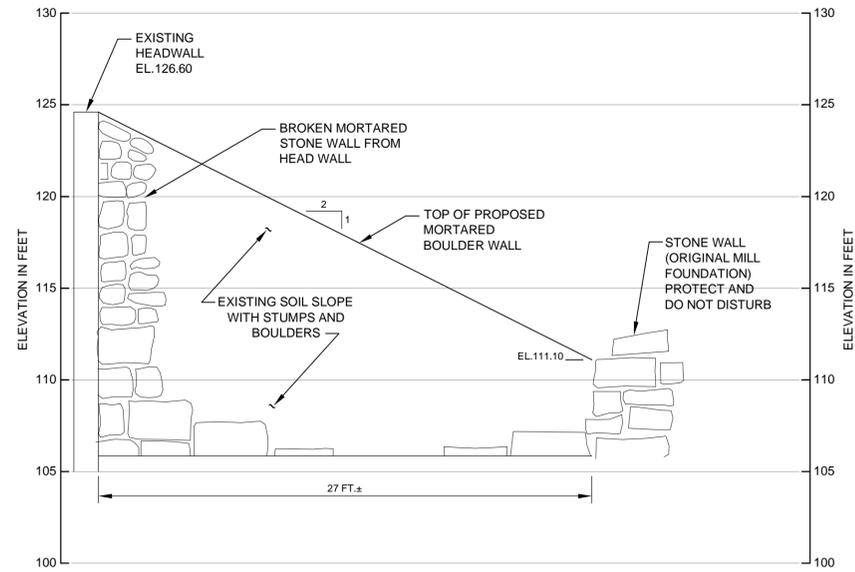
WILSON MILL DAM
 Bedford, Massachusetts

UPSTREAM LAYOUT AND GRADING

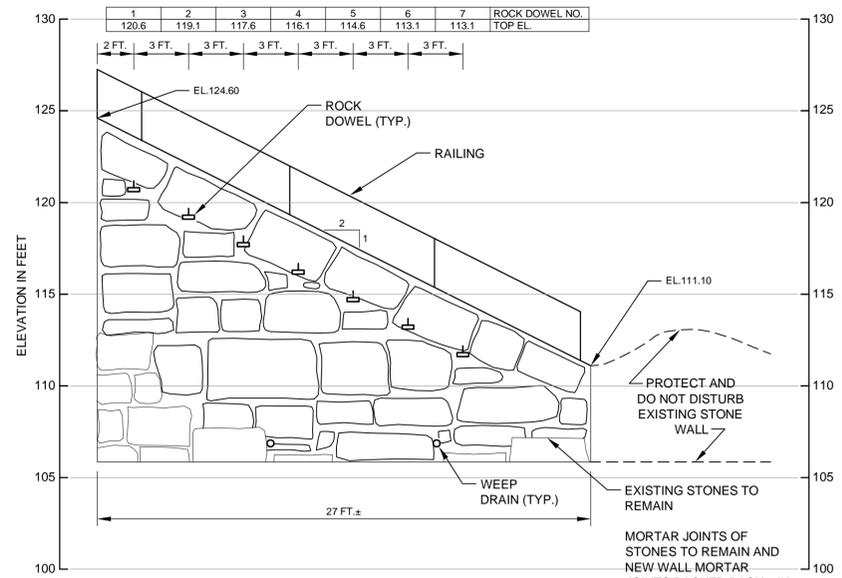
C-10
 10 OF 16



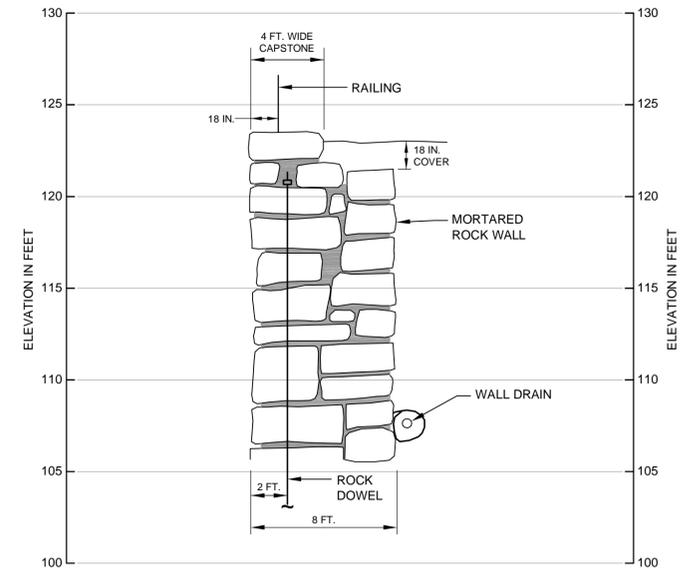
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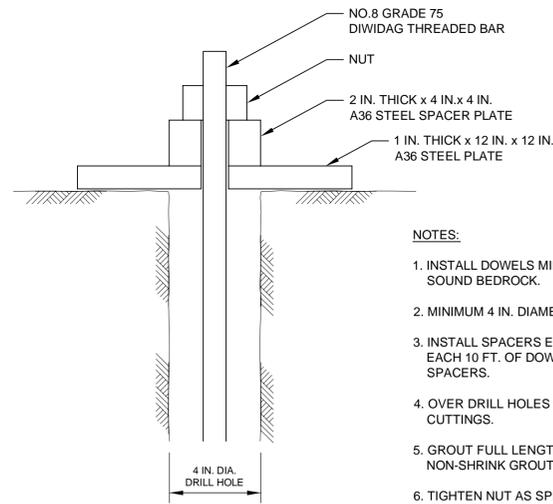
EXISTING CONDITIONS
LEFT DOWNSTREAM TRAINING WALL
 1 IN. = 5 FT.



PROPOSED
LEFT DOWNSTREAM TRAINING WALL
 1 IN. = 5 FT.



PROPOSED
LEFT DOWNSTREAM TRAINING WALL
SECTION A-A
 1 IN. = 5 FT.



NOTES:

1. INSTALL DOWELS MINIMUM 10 FT. INTO SOUND BEDROCK.
2. MINIMUM 4 IN. DIAMETER DRILL HOLE.
3. INSTALL SPACERS EVENLY SPACED EACH 10 FT. OF DOWEL, MINIMUM 2 SPACERS.
4. OVER DRILL HOLES 1 FT. FOR DRILL CUTTINGS.
5. GROUT FULL LENGTH WITH 5000 PSI NON-SHRINK GROUT AND INSTALL BAR.
6. TIGHTEN NUT AS SPECIFIED.

ROCK DOWEL DETAIL
 1 IN. = 4 IN.

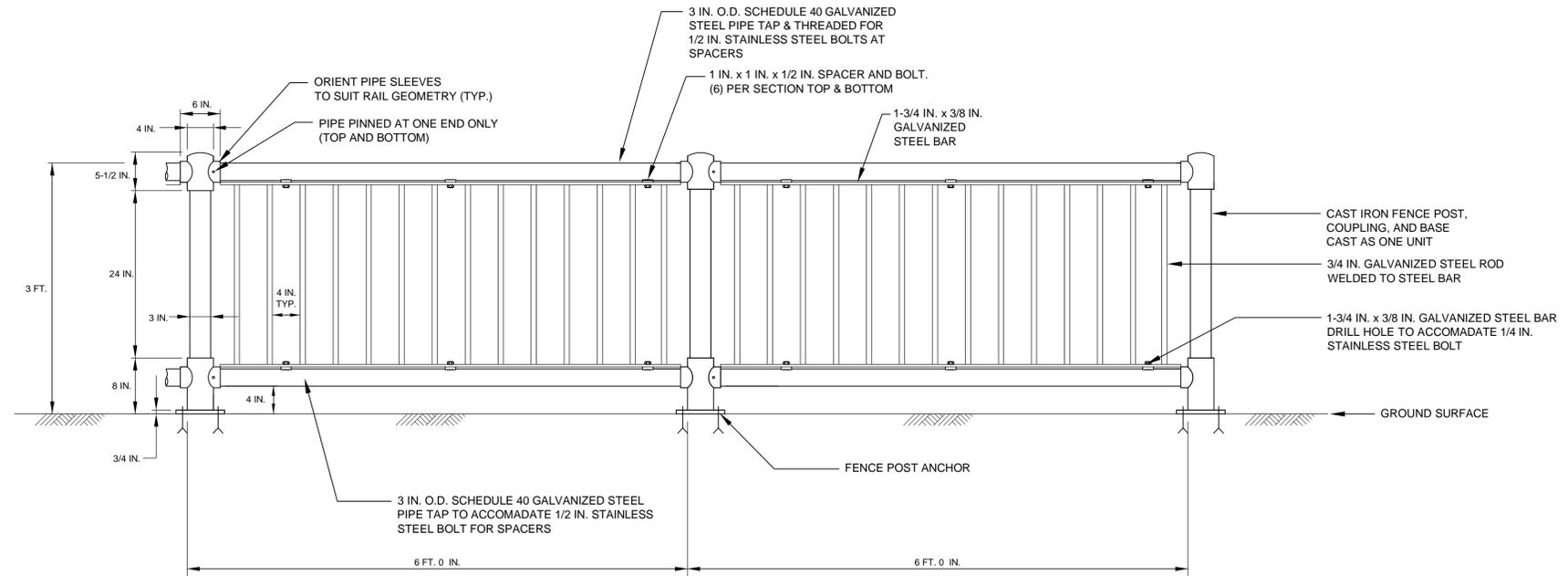
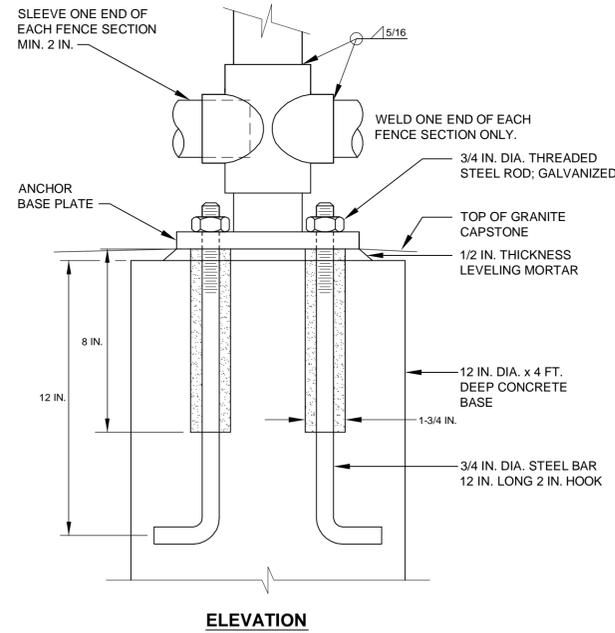
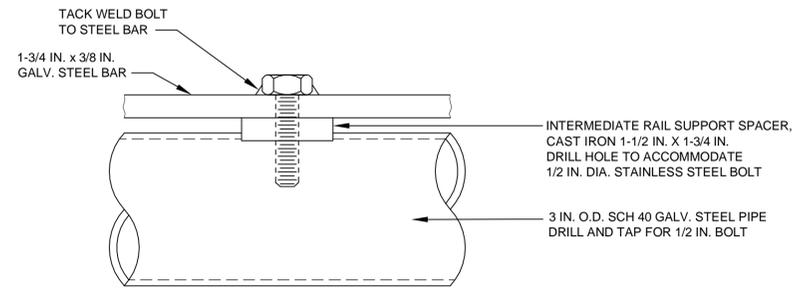
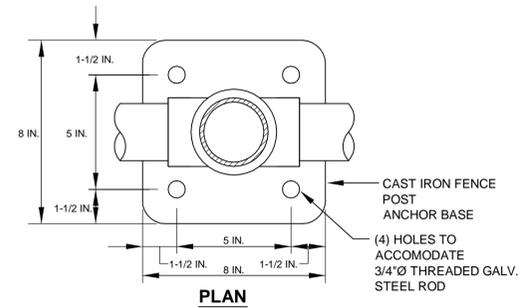
Project No.:	35094-010
Scale:	AS SHOWN
Date:	23 SEPTEMBER 2009
Autocad File:	35094-010-D068.DWG
Drawn By:	DTE
Designed By:	DJB
Checked By:	DJB
Approved By:	ADS

1	REVISION 1	DJB	3/30/10
0	PERMIT DRAWINGS	DJB	9/23/09
Rev.	Description	By	Date

WILSON MILL DAM
 Bedford, Massachusetts

DOWNSTREAM RETAINING WALL

C-11



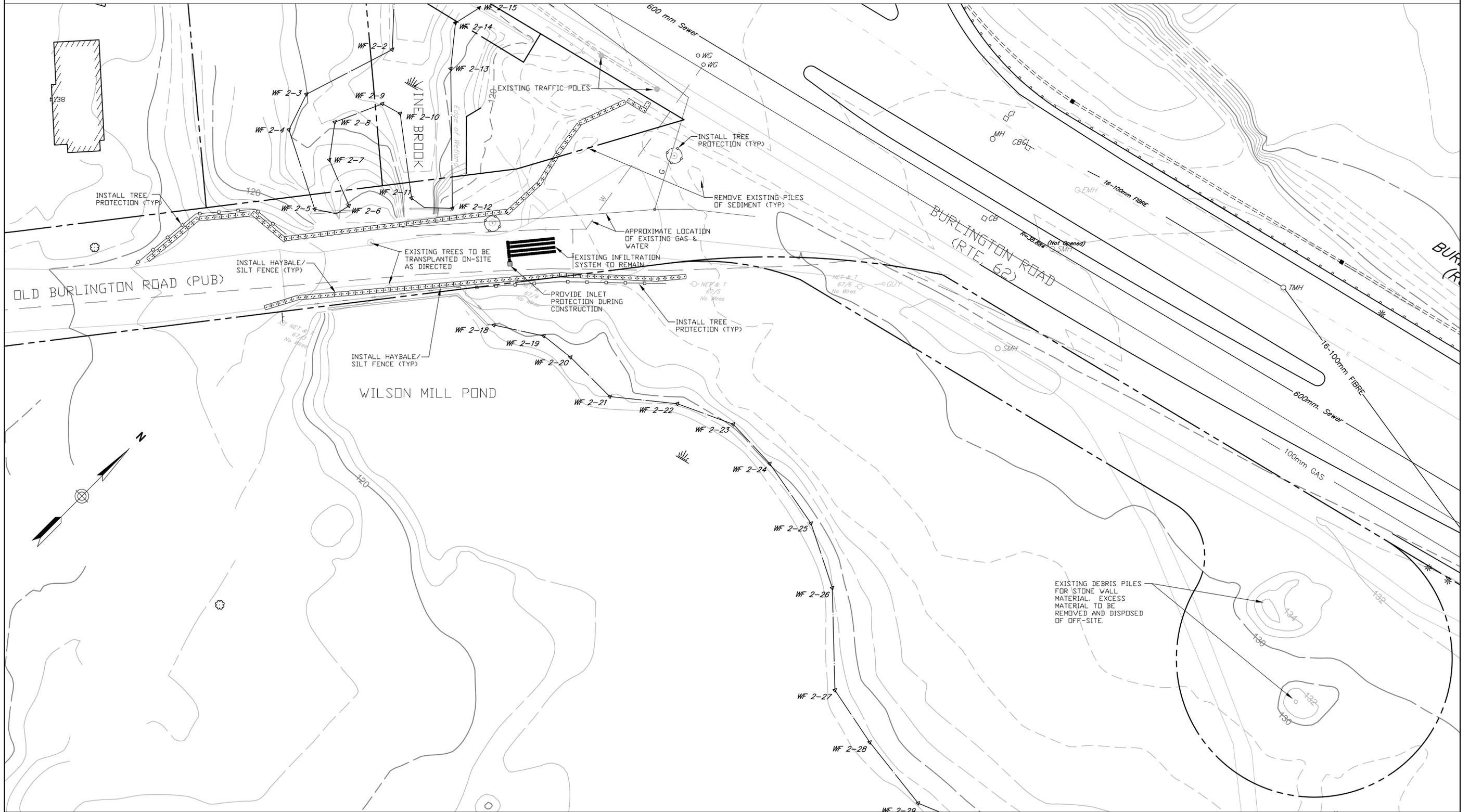
Project No.:	35094-010
Scale:	AS SHOWN
Date:	23 SEPTEMBER 2009
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Drawn By:	DTE
Designed By:	DJB
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Approved By:	ADS

Rev.	Description	By	Date
0	PERMIT DRAWINGS	DJB	9/23/09

WILSON MILL DAM
 Bedford, Massachusetts

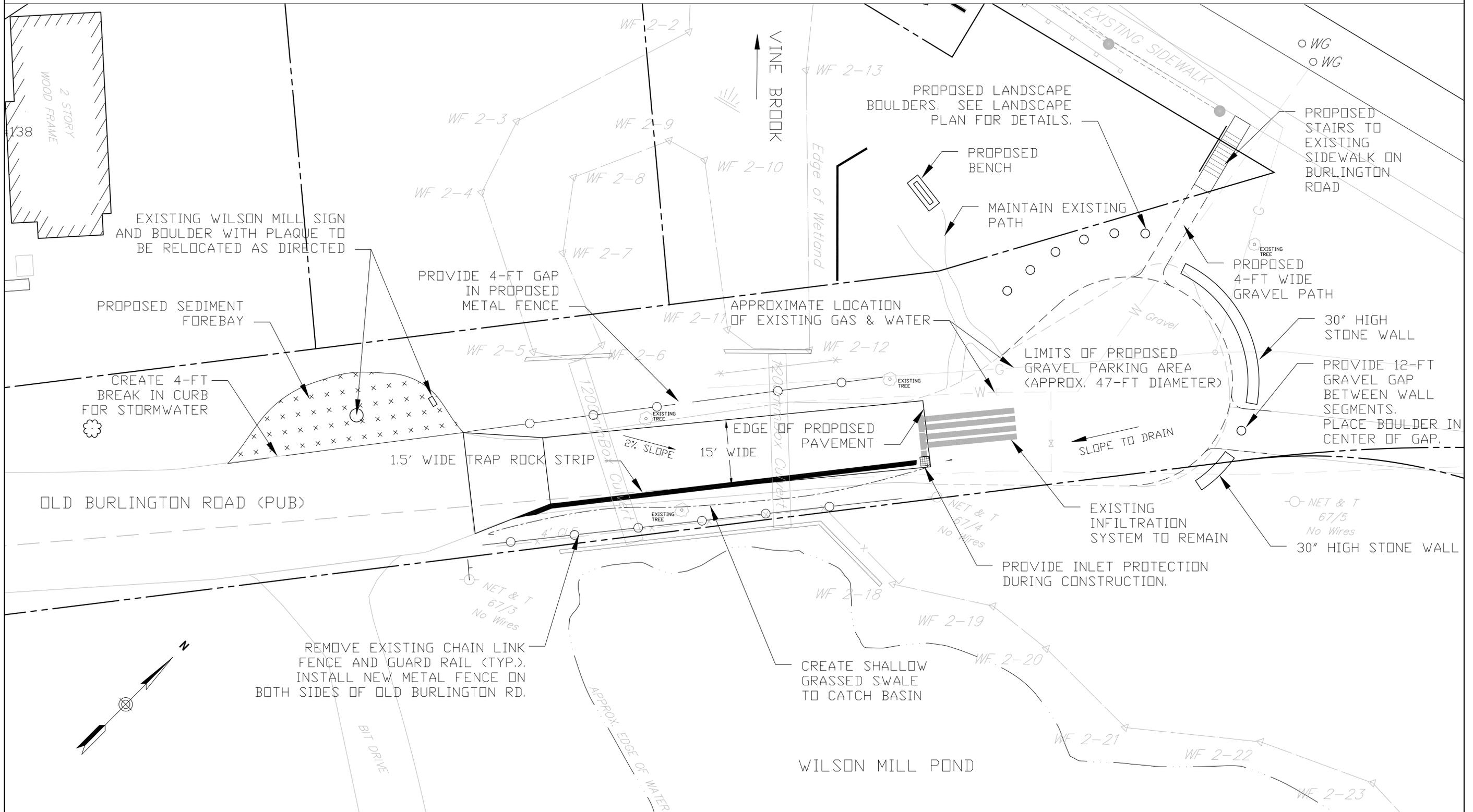
DETAILS

C-12



EXISTING DEBRIS PILES FOR STONE WALL MATERIAL. EXCESS MATERIAL TO BE REMOVED AND DISPOSED OF OFF-SITE.





EXISTING WILSON MILL SIGN AND BOULDER WITH PLAQUE TO BE RELOCATED AS DIRECTED

PROPOSED SEDIMENT FOREBAY

CREATE 4-FT BREAK IN CURB FOR STORMWATER

1.5' WIDE TRAP ROCK STRIP

OLD BURLINGTON ROAD (PUB)

REMOVE EXISTING CHAIN LINK FENCE AND GUARD RAIL (TYP.), INSTALL NEW METAL FENCE ON BOTH SIDES OF OLD BURLINGTON RD.

PROPOSED LANDSCAPE BOULDERS, SEE LANDSCAPE PLAN FOR DETAILS.

PROPOSED BENCH

MAINTAIN EXISTING PATH

APPROXIMATE LOCATION OF EXISTING GAS & WATER

LIMITS OF PROPOSED GRAVEL PARKING AREA (APPROX. 47-FT DIAMETER)

PROPOSED 4-FT WIDE GRAVEL PATH

30" HIGH STONE WALL

PROVIDE 12-FT GRAVEL GAP BETWEEN WALL SEGMENTS. PLACE BOULDER IN CENTER OF GAP.

EDGE OF PROPOSED PAVEMENT

SLOPE TO DRAIN

EXISTING INFILTRATION SYSTEM TO REMAIN

PROVIDE INLET PROTECTION DURING CONSTRUCTION.

CREATE SHALLOW GRASSED SWALE TO CATCH BASIN

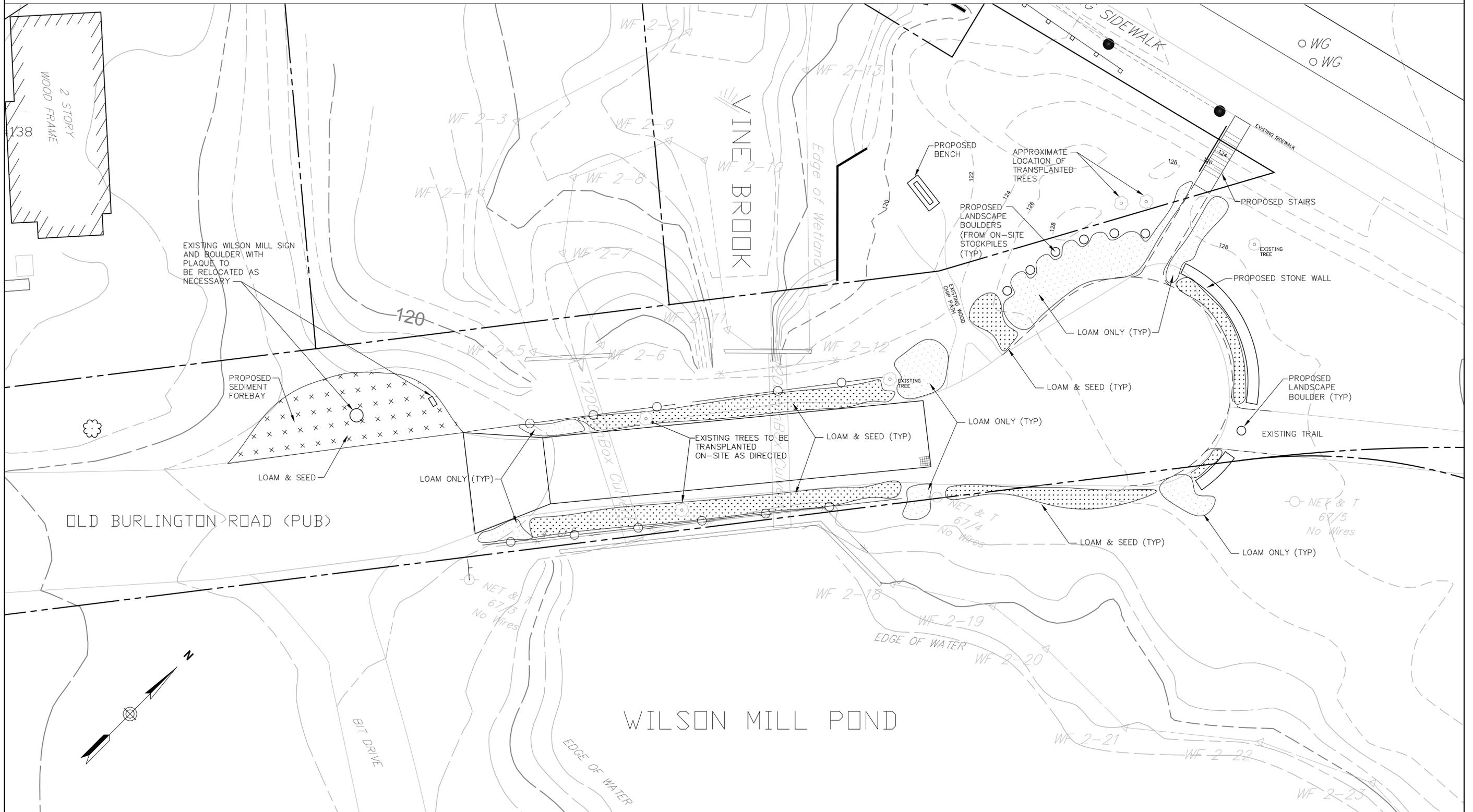
WILSON MILL POND

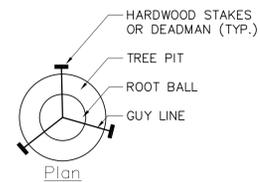
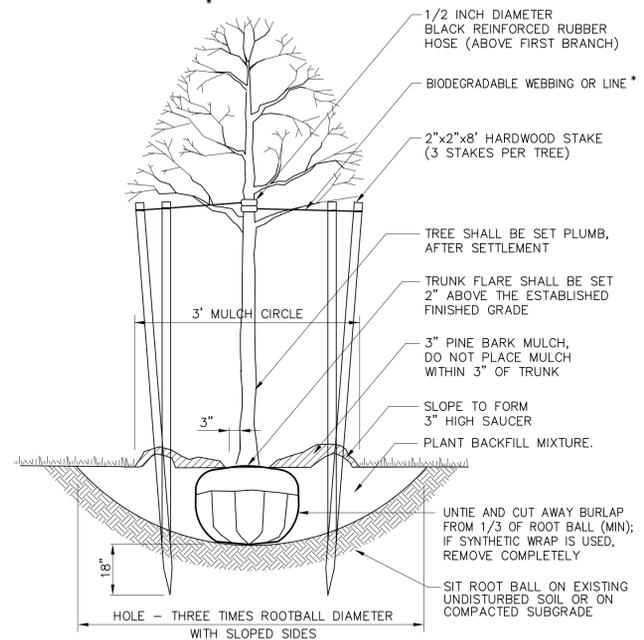
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NET & T 67/3 No Wires

NET & T 67/4 No Wires



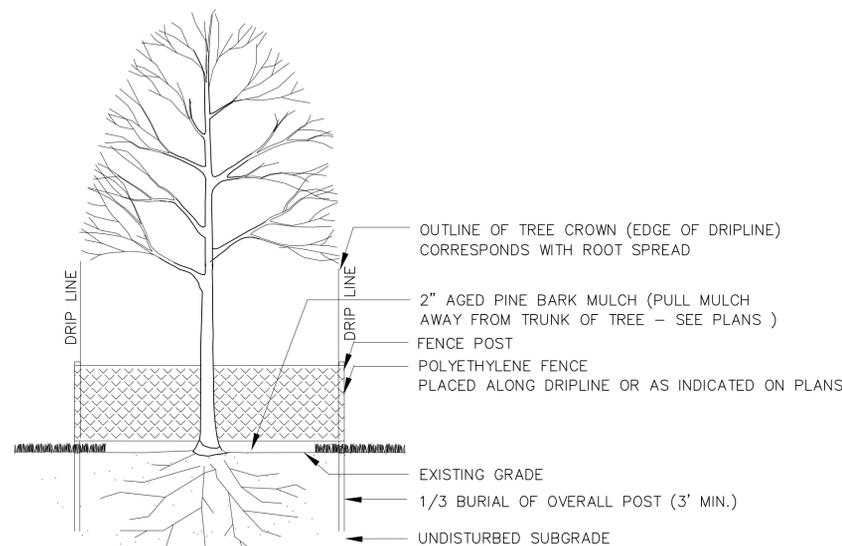




*STAKES AND BIODEGRADABLE WEBBING OR LINE SHALL BE USED FOR TREE PLANTINGS ON SLOPES GREATER THAN 3:1 AND AS REQUIRED BY THE ENGINEER

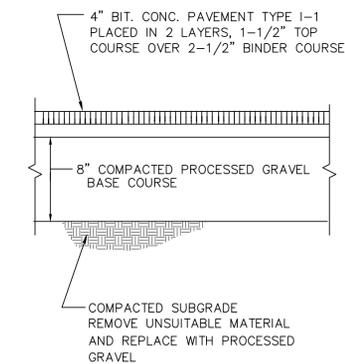
TREE PLANTING (FOR TREES UNDER 4" CALIPER)

SCALE: NOT TO SCALE



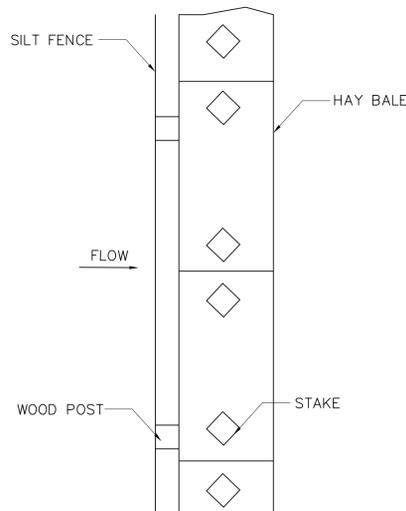
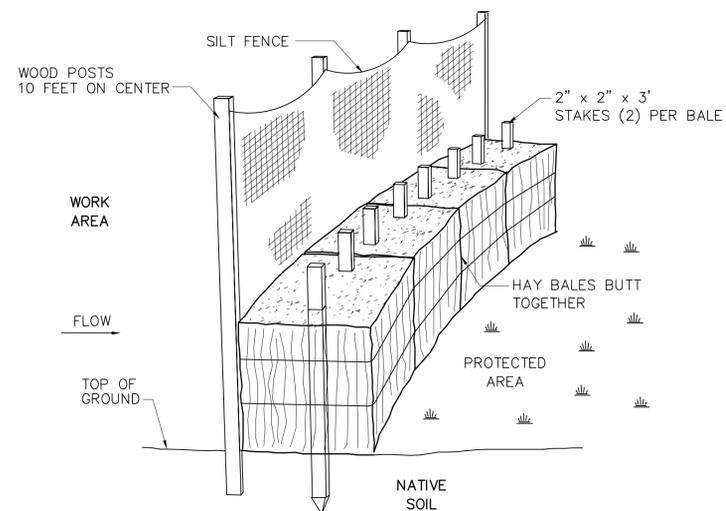
INDIVIDUAL TREE PROTECTION

SCALE: NOT TO SCALE
DATE: APRIL 2003



BITUMINOUS CONCRETE PAVEMENT SECTION

SCALE: NOT TO SCALE
DATE:



CROSS SECTION

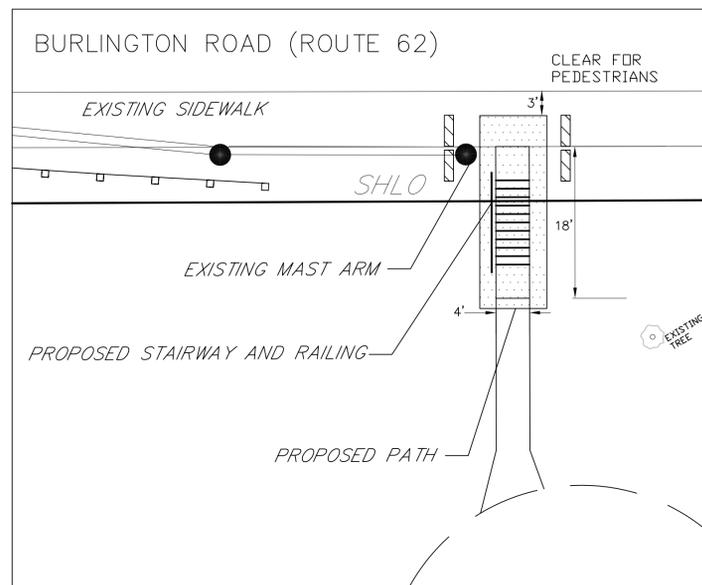
PLAN VIEW

CONSTRUCTION NOTES:

1. FILTER CLOTH SHALL BE FASTENED SECURELY TO POSTS WITH WIRE TIES OR STAPLES AND POSTS SHALL BE SPACED EVERY 10 FEET.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6 INCHES AND FOLDED.
3. ENTRENCH SILT FENCE BUT NOT HAY BALES.
4. INSPECTIONS SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED, OR WHEN SEDIMENT ACCUMULATES TO HALF THE HEIGHT OF FENCING.

HAYBALE/SEDIMENTATION FENCE

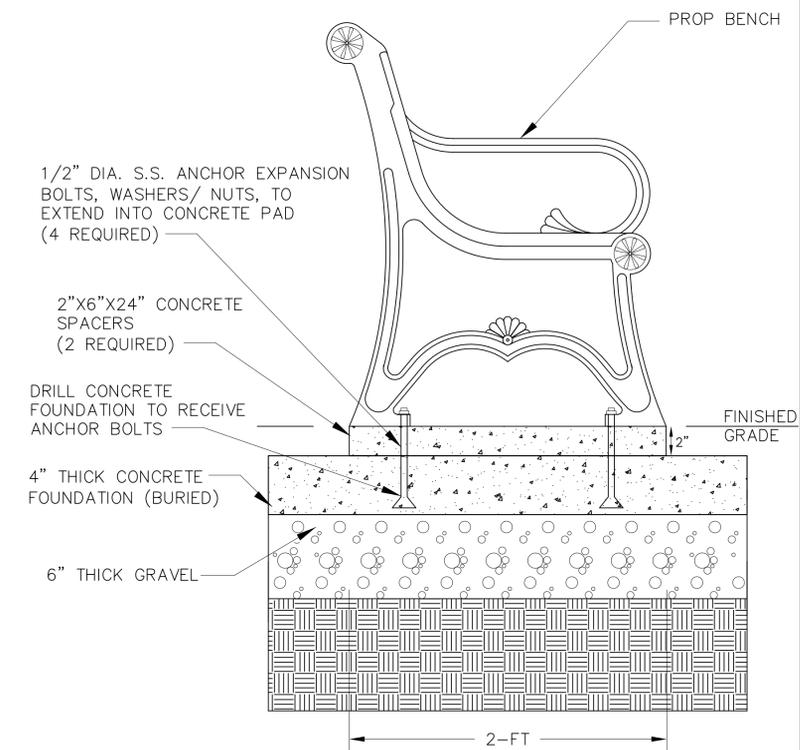
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- TYPE II BARRICADE
- WORK AREA PUBLIC ACCESS RESTRICTED

PEDESTRIAN SAFETY ALONG STATE HIGHWAY PER MHD ACCESS PERMIT

SCALE: NOT TO SCALE
DATE:



BENCH FOUNDATION DETAIL

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