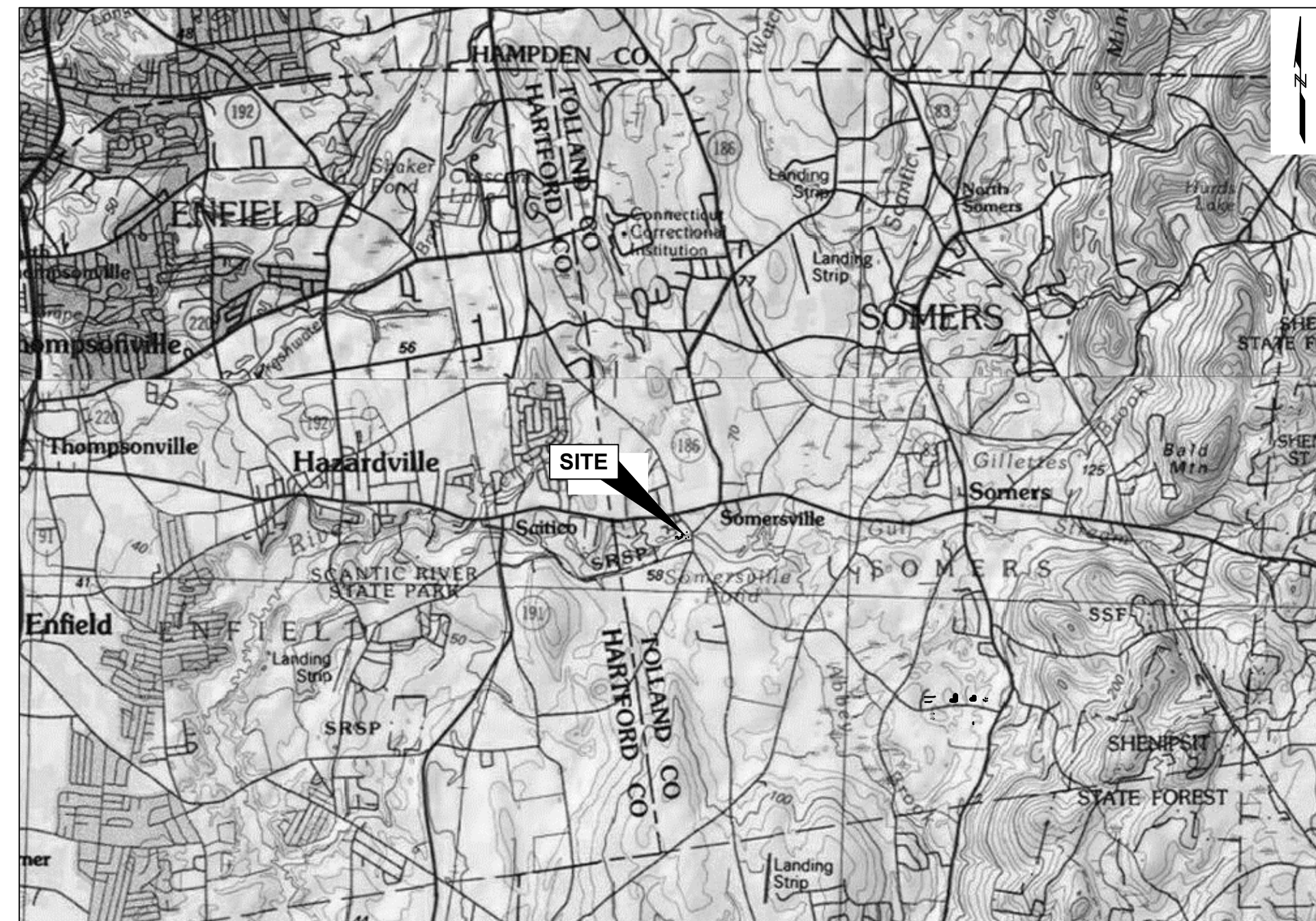


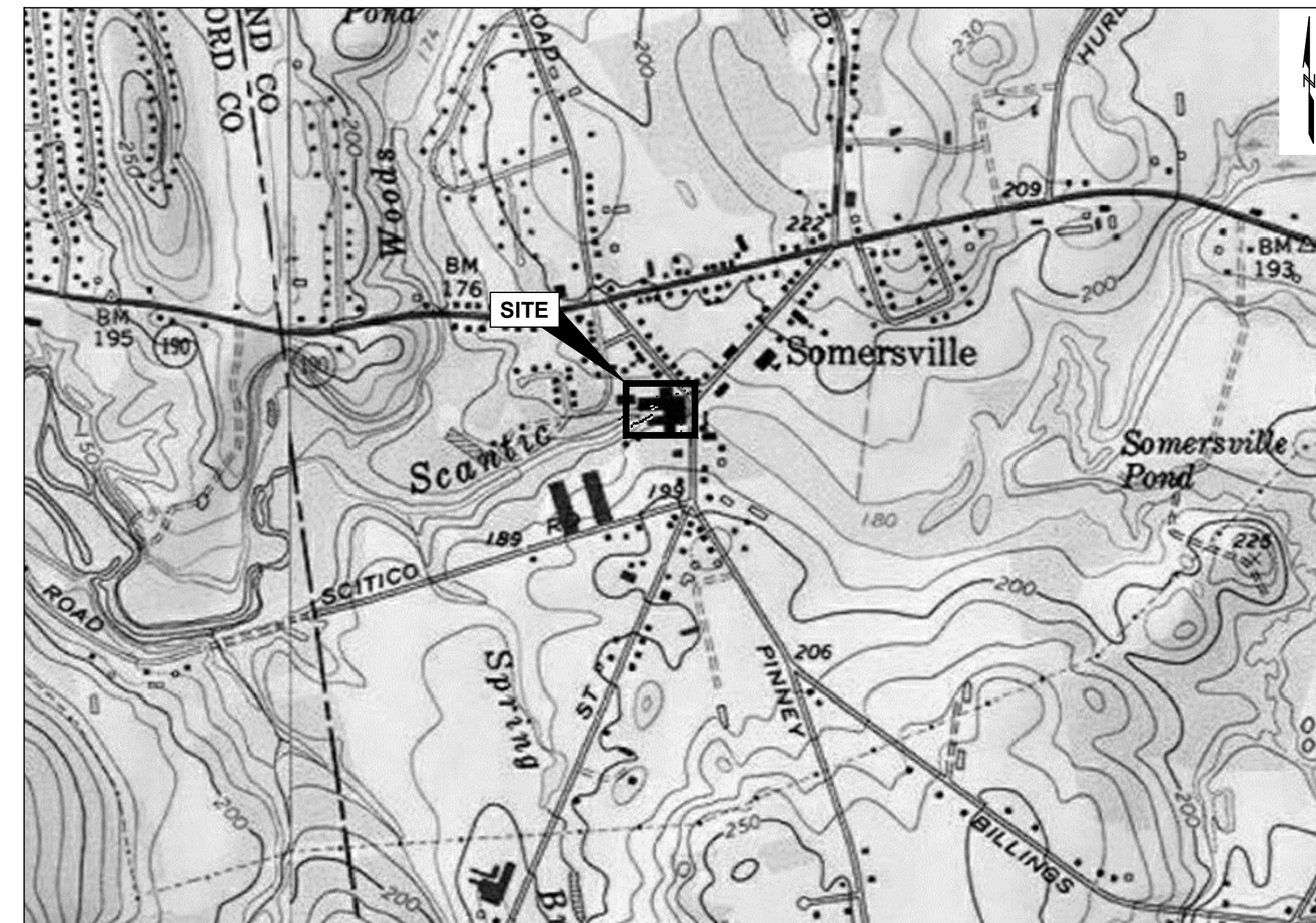
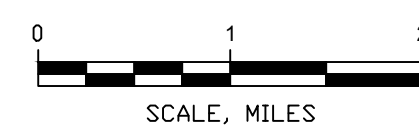
DEMOLITION AND SITE RESTORATION

FORMER SOMERSVILLE MILL FACILITY SOMERS, CONNECTICUT



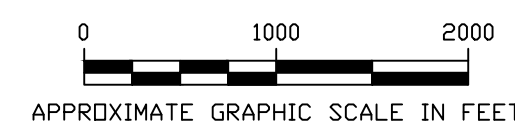
SOURCE:
MAP CREATED WITH ARCGIS PLUGIN FOR AUTOCAD.

REGIONAL MAP



SOURCE:
MAP CREATED WITH ARCGIS PLUGIN FOR AUTOCAD.

SITE LOCATION



APPROXIMATE GRAPHIC SCALE IN FEET
PREPARED FOR:



TOWN OF SOMERS SOMERS, CONNECTICUT



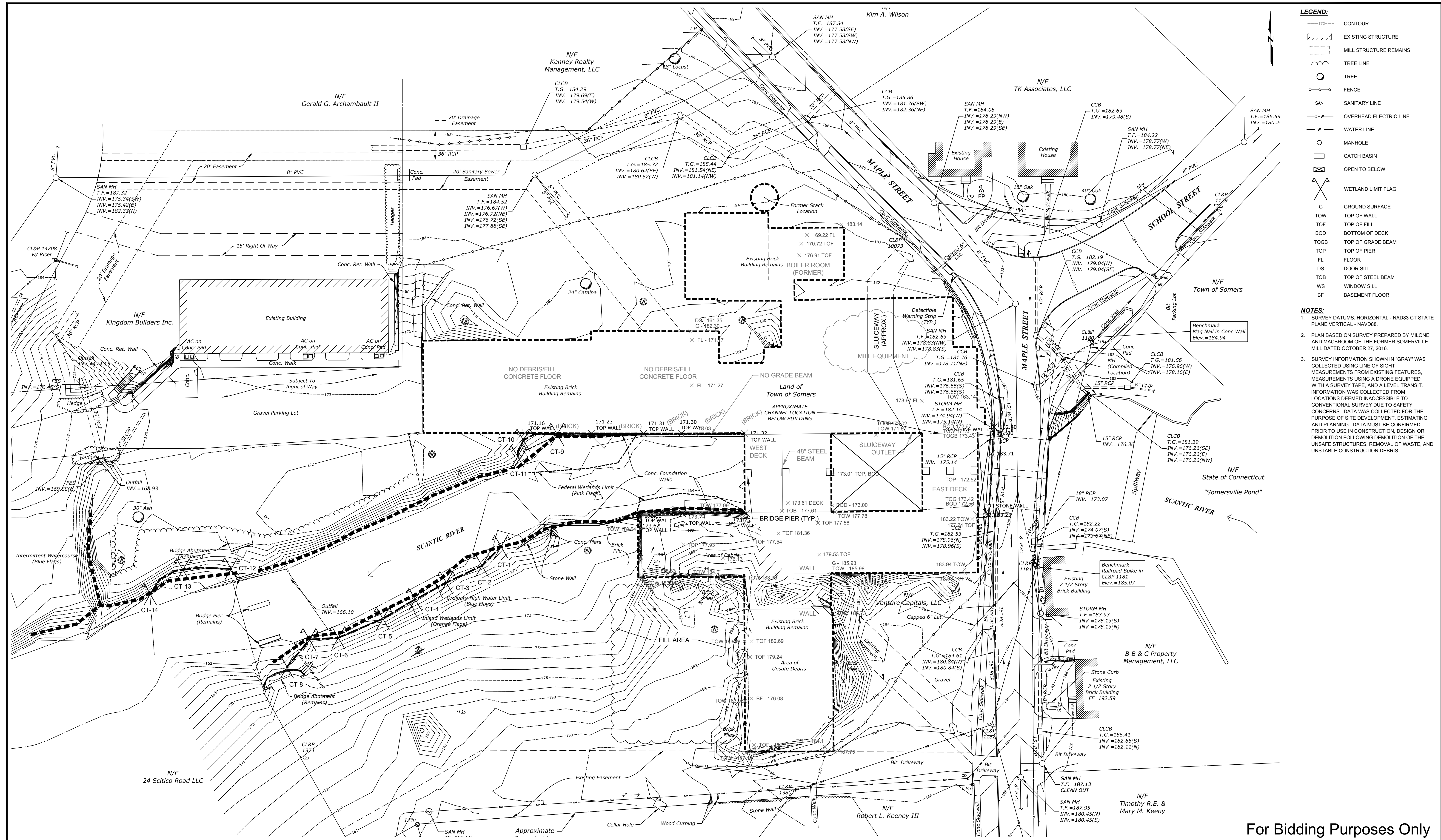
SCHEDULE OF DRAWINGS

- 1 TITLE SHEET
- 2 EXISTING CONDITIONS PLAN
- 3 TRAFFIC MANAGEMENT PLAN
- 4 SEDIMENT AND EROSION CONTROL PLAN
- 5 MATERIAL SALVAGE PLAN
- 6 DEMOLITION PLAN
- 7 MATERIAL DISPOSAL FLOW CHART
- 8 RIVER BYPASS AND CLEANING PLAN
- 9 EXISTING BULKHEAD CROSS SECTIONS
- 10 RESTORATION GRADING PLAN
- 11 RESTORATION GRADING CROSS SECTIONS
- 12 RETAINING WALL PLAN AND PROFILES
- 13 RETAINING WALL DETAILS
- 14 RESTORATION COVER PLAN
- 15 SITE MANAGEMENT DETAILS

PROJECT NUMBER: 1610349
APRIL 2017

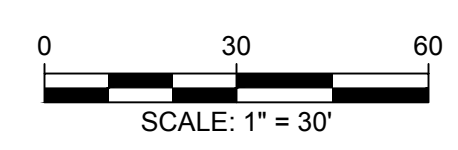
For Bidding Purposes Only

PROFESSIONAL ENGINEER		LIC. NO. 27740	
Christopher R. Pray		EXP. DATE: 01/31/2018	
C	4/3/2017	For Bidding Purposes Only	CRP
B	3/13/2017	95% Design	CRP
A	1/27/2017	65% Design	CRP
NO.	DATE	ISSUE/REVISION	APP



- LEGEND:**
- 172— CONTOUR
 - ▨ EXISTING STRUCTURE
 - ▤ MILL STRUCTURE REMAINS
 - TREE LINE
 - TREE
 - FENCE
 - SAN SANITARY LINE
 - OHW OVERHEAD ELECTRIC LINE
 - W WATER LINE
 - MANHOLE
 - CATCH BASIN
 - ⊠ OPEN TO BELOW
 - ⊠ WETLAND LIMIT FLAG
 - G GROUND SURFACE
 - TOW TOP OF WALL
 - TOF TOP OF FILL
 - BOD BOTTOM OF DECK
 - TOGB TOP OF GRADE BEAM
 - TOP TOP OF PIER
 - FL FLOOR
 - DS DOOR SILL
 - TOB TOP OF STEEL BEAM
 - WS WINDOW SILL
 - BF BASEMENT FLOOR

- NOTES:**
- SURVEY DATUMS: HORIZONTAL - NAD83 CT STATE PLANE VERTICAL - NAVD88.
 - PLAN BASED ON SURVEY PREPARED BY MILONE AND MACROBORG OF THE FORMER SOMERVILLE MILL DATED OCTOBER 27, 2016.
 - SURVEY INFORMATION SHOWN IN "GRAY" WAS COLLECTED USING LINE OF SIGHT MEASUREMENTS FROM EXISTING FEATURES. MEASUREMENTS USING A DRONE EQUIPPED WITH A SURVEY TAPE, AND A LEVEL TRANSIT. INFORMATION WAS COLLECTED FROM LOCATIONS DEEMED INACCESSIBLE TO CONVENTIONAL SURVEY DUE TO SAFETY CONCERNS. DATA WAS COLLECTED FOR THE PURPOSE OF SITE DEVELOPMENT, ESTIMATING AND PLANNING. DATA MUST BE CONFIRMED PRIOR TO USE IN CONSTRUCTION, DESIGN OR DEMOLITION FOLLOWING DEMOLITION OF THE UNSAFE STRUCTURES, REMOVAL OF WASTE, AND UNSTABLE CONSTRUCTION DEBRIS.



NO.	DATE	ISSUE/REVISION	APP
C	4/3/2017	For Bidding Purposes Only	CRP
B	3/13/2017	95% Design	CRP
A	1/27/2017	65% Design	CRP

Designed:	C. PRAY
Checked:	M. O'NEIL
Drawn:	D. EDDY
Submitted By:	C. PRAY
P.E. Number:	27740



GEI Project 1610349

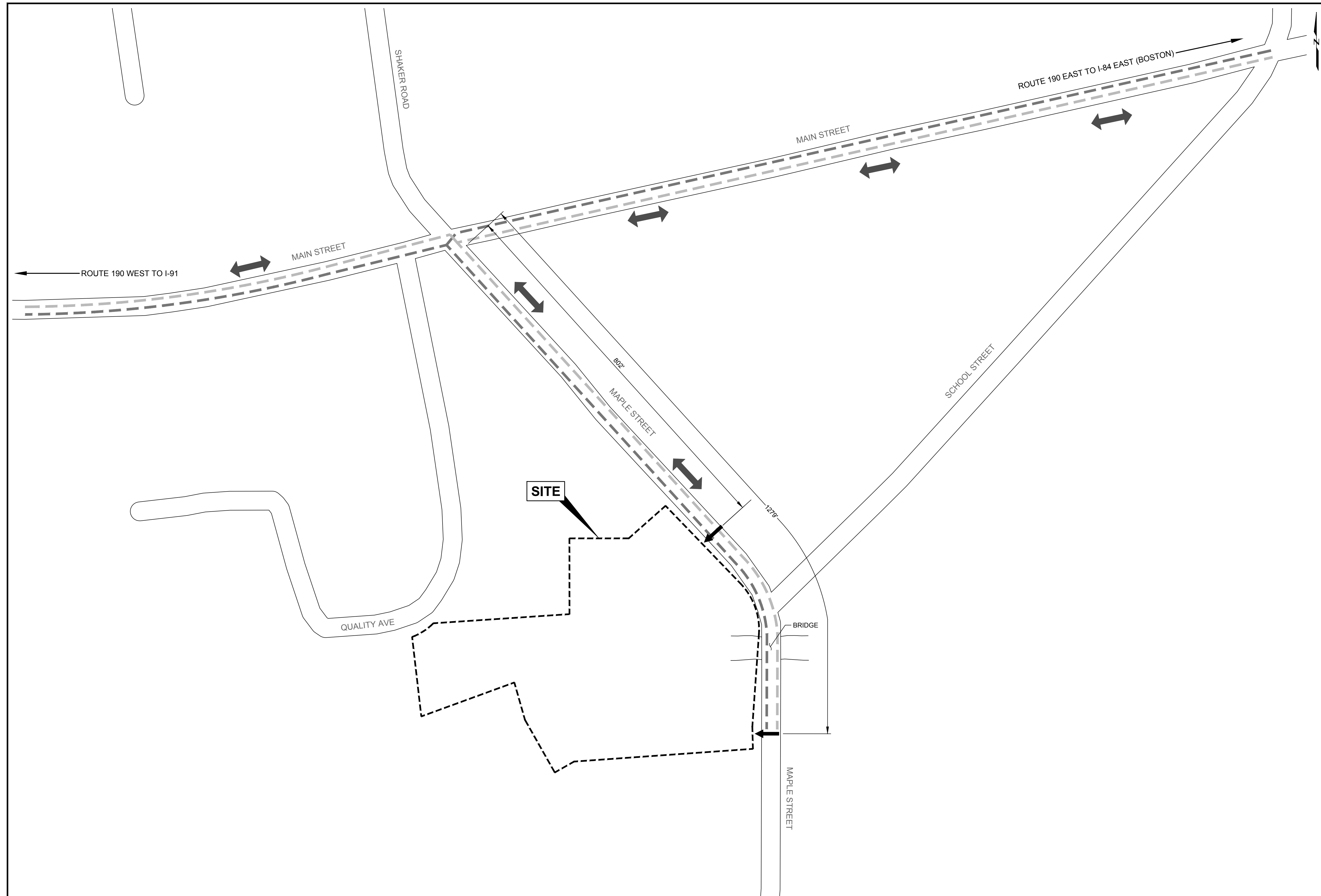
Somersville Mill
Somers, Connecticut

EXISTING CONDITIONS

DWG. NO.
2

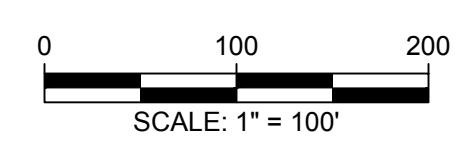
SHEET NO.
2 OF 15

For Bidding Purposes Only



- LEGEND:**
- PROJECT LIMITS
 - ENTERING PROJECT TRUCK ROUTE
 - EXITING PROJECT TRUCK ROUTE
 - TRAFFIC FLOW DIRECTION
 - SITE ACCESS POINT

- NOTES:**
1. CONSTRUCTION VEHICLES MAY ONLY USE HIGHWAYS AND THE PROJECT TRUCK ROUTE.
 2. DO NOT QUEUE TRUCKS AND EQUIPMENT OFF-SITE, OR INHIBIT THE USE OF DRIVEWAYS AND PARKING SPACES FOR LOCAL BUSINESSES OR RESIDENCES.
 3. MAINTAIN TRAFFIC FLOW AND TRAFFIC CONTROLS IN ACCORDANCE WITH TOWN/COUNTY/STATE REQUIREMENTS AND TO THE SATISFACTION OF THE TOWN'S REPRESENTATIVE.
 4. PROVIDE FLAG SERVICES FOR ALL CONSTRUCTION RELATED TRAFFIC.
 5. SWEEP TRUCK ROUTE A MINIMUM OF ONCE PER DAY OR AS DIRECTED BY THE TOWN'S REPRESENTATIVE.
 6. THE CONTRACTOR IS RESPONSIBLE FOR EVALUATING AND RESOLVING WIRES, CLEARANCES, AND TURNING RADII ALONG THE PROPOSED TRUCK ROUTE.



NO.	DATE	ISSUE/REVISION	APP
C	4/3/2017	For Bidding Purposes Only	CRP
B	3/13/2017	95% Design	CRP
A	1/27/2017	65% Design	CRP

Designed: C. PRAY
 Checked: M. O'NEIL
 Drawn: D. EDDY
 Submitted By: C. PRAY
 P.E. Number: 27740



Somersville Mill
 Somers, Connecticut
 TRAFFIC MANAGEMENT PLAN

DWG. NO.
3
 SHEET NO.
3 OF 15

For Bidding Purposes Only

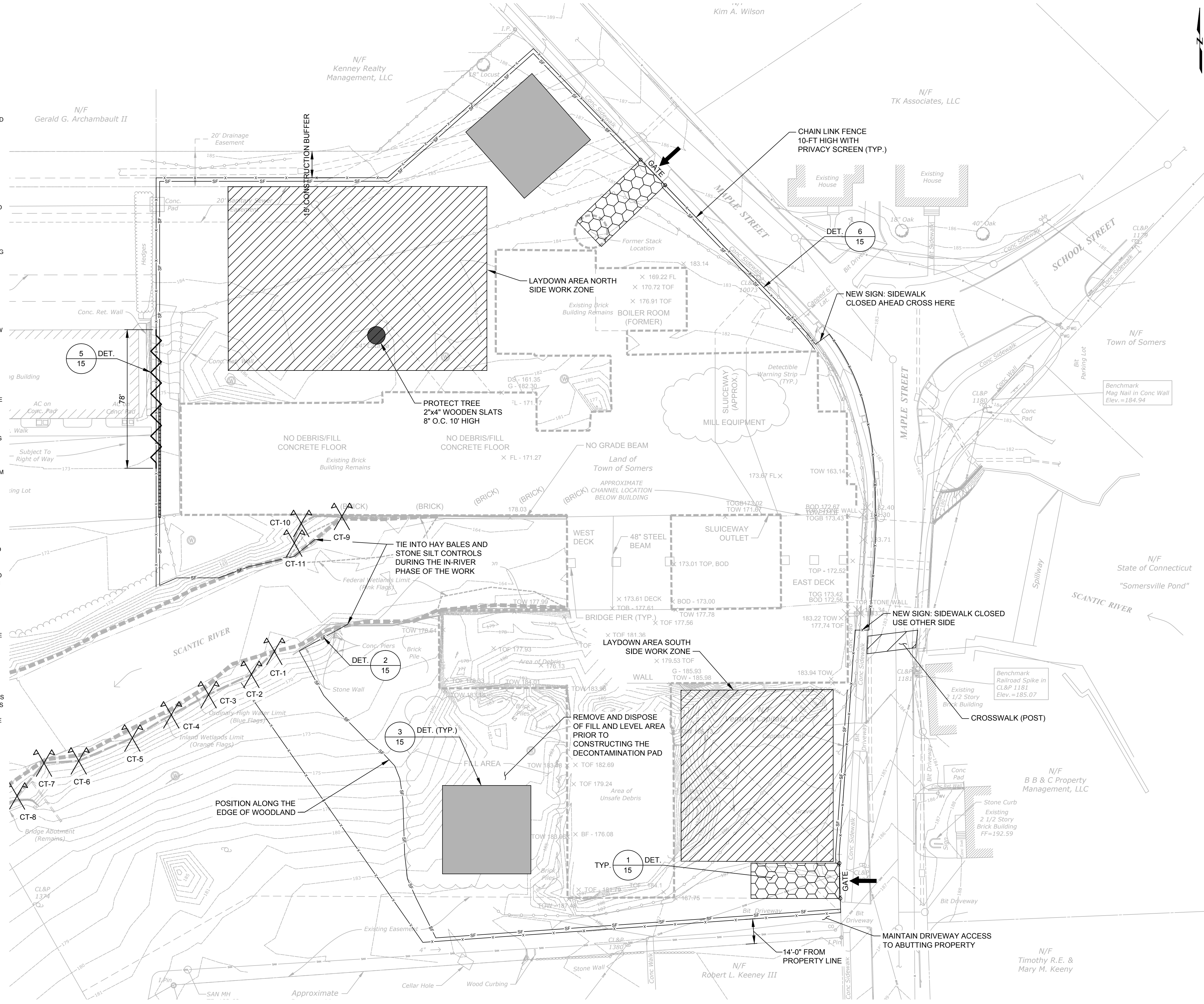
EROSION AND SEDIMENT CONTROL NARRATIVE

GENERAL

1. SEDIMENTATION AND EROSION CONTROL MEASURES ARE PROPOSED TO ADEQUATELY CONTROL THE ACCELERATED EROSION AND SEDIMENTATION AND REDUCE THE ADVERSE IMPACTS FROM STORMWATER RUNOFF AT THE SITE. THE RUNOFF SHALL BE CONTROLLED BY THE INTERCEPTION, DIVERSION AND FILTRATION OF PRECIPITATION. RUNOFF SHALL ALSO BE CONTROLLED BY STAGING CONSTRUCTION ACTIVITY AND PRESERVING NATURAL VEGETATION WHENEVER POSSIBLE.
2. EXISTING VEGETATION SHALL BE PROTECTED AND ONLY THAT CLEARING AND GRUBBING ABSOLUTELY NECESSARY FOR THE PROPOSED EXCAVATION SHALL BE PERFORMED. ALL DISTURBED AREA SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND CONTOUR, UNLESS OTHERWISE INDICATED ON THE PLANS. THE CONTRACTOR SHALL TAKE SPECIAL CARE WITH HIS WORK METHODS AND SHALL COMPLY WITH THE FOLLOWING GUIDELINES TO THE EROSION AND SEDIMENT CONTROL SPECIFICATIONS:
3. REFERENCE IS MADE TO THE "CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL" (2002), AS AMENDED. THE GUIDELINES CAN BE OBTAINED FROM THE CONNECTICUT COUNCIL OF SOIL AND WATER CONSERVATION, STATE OFFICE BUILDING, HARTFORD, CONNECTICUT 06106, AND SHALL BE USED AS A REFERENCE IN CONSTRUCTING THE EROSION AND SEDIMENT CONTROLS INDICATED ON THESE PLANS.

SEDIMENTATION CONTROL

4. ALL AREAS SHALL BE PROTECTED FROM SEDIMENTATION DURING AND AFTER DISTURBING SOIL AND THE CORRESPONDING STORAGE AND HANDLING OF SOIL AND DEMOLITION DEBRIS. SOIL STOCKPILES MUST BE ADEQUATELY PROTECTED WITH STRAW BALES AND/OR SILT FENCE.
5. SURFACE WATER THAT IS TEMPORARILY DIVERTED OR REMOVED FROM WORK AREAS BY PUMPING SHALL BE FILTERED PRIOR TO DISCHARGE TO REMOVE SEDIMENTS.
6. EROSION AND SEDIMENTATION CONTROL PLAN
7. THE SEDIMENTATION CONTROL SYSTEM SHALL INCLUDE SILT FENCE AND STAKED STRAW BALES. THE SILT FENCE AND STRAW BALES SHALL BE INSTALLED IMMEDIATELY AFTER SOIL IS DISTURBED. THE SYSTEM IS DESIGNED TO INTERCEPT SILT AND SEDIMENT BEFORE IT REACHES THE WETLANDS OR RIVER, AS APPLICABLE. DEPOSITS OF SEDIMENT AND SILT ARE TO BE PERIODICALLY REMOVED FROM THE UPSTREAM SIDE OF THE CONTROL SYSTEM. THE REMOVED MATERIAL IS TO BE SPREAD AND STABILIZED IN AREA NOT SUBJECT TO EROSION, OR IN AREAS WHICH ARE PROVIDED PROPER FILTERING ACTION. THE SYSTEM IS TO REMAIN IN PLACE AND BE MAINTAINED TO ENSURE EFFECTIVE SILTATION CONTROL UNTIL ALL AREAS ABOVE THE FENCE ARE STABILIZED AND VEGETATION HAS BEEN ESTABLISHED. BALES SHALL ONLY BE USED AS A TEMPORARY BARRIER FOR A MAXIMUM OF 60 DAYS. WHEN GROUND CONDITIONS PREVENT THE PROPER TRENCHING OR ANCHORING OF STRAW BALES, A STONE CHECK DAM SHALL BE USED TO ANCHOR THE HAY BALES.
8. A STONE STABILIZED VEHICLE ANTI-TRACKING PAD SHALL BE LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS FROM THE CONSTRUCTION SITE TO REDUCE TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHTS-OF-WAY. THE AREA OF THE ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL. FILTER FABRIC SHALL BE PLACED ON SUBGRADE PRIOR TO PLACEMENT OF STONE. STONE SHALL BE PLACED TO THE DIMENSIONS SHOWN ON THE PLAN. PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH, AS CONDITIONS DEMAND MAY BE REQUIRED TO ENSURE THAT THE ENTRANCE FUNCTIONS AS INTENDED. PUBLIC ROADWAYS SHALL BE CLEANED OF DIRT AND DEBRIS AS NECESSARY, OR AS DIRECTED BY THE ENGINEER.
9. IN ALL AREAS, REMOVAL OF TREES, BUSHES AND OTHER VEGETATION, AND DISTURBANCE OF THE SOIL, IS TO BE KEPT TO AN ABSOLUTE MINIMUM WHILE ALLOWING PROPER COMPLETION OF THE WORK. THE AREA AND DURATION OF DISTURBED SOIL SHALL BE MINIMIZED, AND THE SEQUENCE OF OPERATIONS SHALL ACT TO MINIMIZE THE EXPOSURE.
10. SEDIMENTATION AND EROSION CONTROL MAINTENANCE PROCEDURES
11. ALL SEDIMENTATION AND EROSION CONTROL DEVICES SHALL BE INSPECTED DURING THE WORK ON A WEEKLY BASIS AND FOLLOWING ALL PRECIPITATION EXCEEDING 0.5 INCHES IN 24 HOURS BY THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN AND MAKE REPAIRS AND REMOVE SEDIMENT IF IT HAS ACCUMULATED BEHIND THE SEDIMENT CONTROLS TO A DEPTH OF 1/4 THE HEIGHT OF THE STRAW BALES OR SILT FENCE. THE CONTRACTOR SHALL IN ADDITION MAINTAIN AND MAKE REPAIRS AND REMOVE SEDIMENT AS REQUESTED BY THE ENGINEER. THIS WORK SHALL BE PERFORMED WITH 24 HOURS OF THE REQUESTS AND THERE SHALL BE NO SEPARATE PAYMENT FOR THIS MAINTENANCE. AFTER BACKFILL AND GRADING ACTIVITIES HAVE CEASED, STABILIZATION SHALL BE IMPLEMENTED WITH SEVEN DAYS.
12. FOLLOWING COMPLETION OF THE WORK, THE CONTRACTOR SHALL CLEAN SEDIMENT AND DEBRIS FROM ALL DRAINAGE STRUCTURES AND PIPES, REPAIR ALL ERODED AREAS AND ENSURE A GOOD STAND OF VEGETATION IS ESTABLISHED THROUGHOUT. THE CONTRACTOR SHALL REPAIR ALL ERODED OR DISPLACED SOIL.



LEGEND:

- LAYDOWN AREA
- DECONTAMINATION PAD
- TEMPORARY SECURITY FENCE
- ANTI-TRACKING PAD
- ACCESS POINT
- GATE
- SILT FENCE
- HAY BALES
- PROTECT TREE
- DEMOLITION SHIELDING

- NOTES:**
1. LAYOUT SHOWN IS CONCEPTUAL. ACTUAL LAYOUT IS TO BE BASED ON THE CONTRACTORS MEANS AND METHODS AND APPROVED BY THE TOWNS REPRESENTATIVE.
 2. ALL CHAIN LINK FENCE TO CONSIST OF 10-FOOT TALL SECTIONS WITH EMBEDDED LINE AND CORNER POSTS WITH THE EXCEPTION OF THE SIDEWALK TAKING SECTION, WHICH IS TO USE ANCHOR BLOCKS.
 3. ATTACH PRIVACY SCREEN TO THE FULL HEIGHT OF FENCE AND ANCHOR TO RESIST WIND LOADS.
 4. ALL VEHICLES EXISTING THE SITE MUST BE DECONTAMINATED ON A DECONTAMINATION PAD AND EXIT OVER THE FULL LENGTH OF THE ANTI-TRACKING PAD.
 5. CONSTRUCT SOIL STOCKPILES AS SHOWN IN DETAIL 4/15

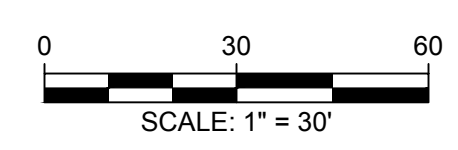
SIDEWALK CLOSED

← USE OTHER SIDE →

SIDEWALK CLOSED AHEAD

← CROSS HERE →

SIGN SCHEDULE
SCALE: N.T.S.



Attention:				
	C	4/3/2017	For Bidding Purposes Only	CRP
	B	3/13/2017	95% Design	CRP
	A	1/27/2017	65% Design	CRP
	NO.	DATE	ISSUE/REVISION	APP

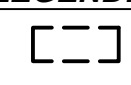
Designed:	C. PRAY
Checked:	M. O'NEIL
Drawn:	D. EDDY
Submitted By:	C. PRAY
P.E. Number:	27740



GEI Project 1610349

For Bidding Purposes Only

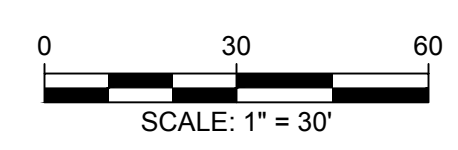
Somersville Mill Somers, Connecticut	DWG. NO. 4
SEDIMENT AND EROSION CONTROL PLAN	SHEET NO. 4 OF 15

LEGEND:
 APPROXIMATE LOCATION OF KNOWN ITEM TO BE SALVAGED

- NOTES:**
1. SALVAGE THE ITEMS SHOWN AND TAKE PRECAUTIONS TO AVOID DAMAGE TO THE ITEMS DURING REMOVAL.
 2. SALVAGE BROWN STONES (LOCATIONS NOT SHOWN) AS THE WORK PROGRESSES.
 3. PALLETIZE BROWN STONES AND DELIVER TO THE TOWN OF SOMERS FACILITY IDENTIFIED IN THE SPECIFICATIONS.



For Bidding Purposes Only



Attention:			
NO.	DATE	ISSUE/REVISION	APP
C	4/3/2017	For Bidding Purposes Only	CRP
B	3/13/2017	95% Design	CRP
A	1/27/2017	65% Design	CRP
NO.	DATE	ISSUE/REVISION	APP

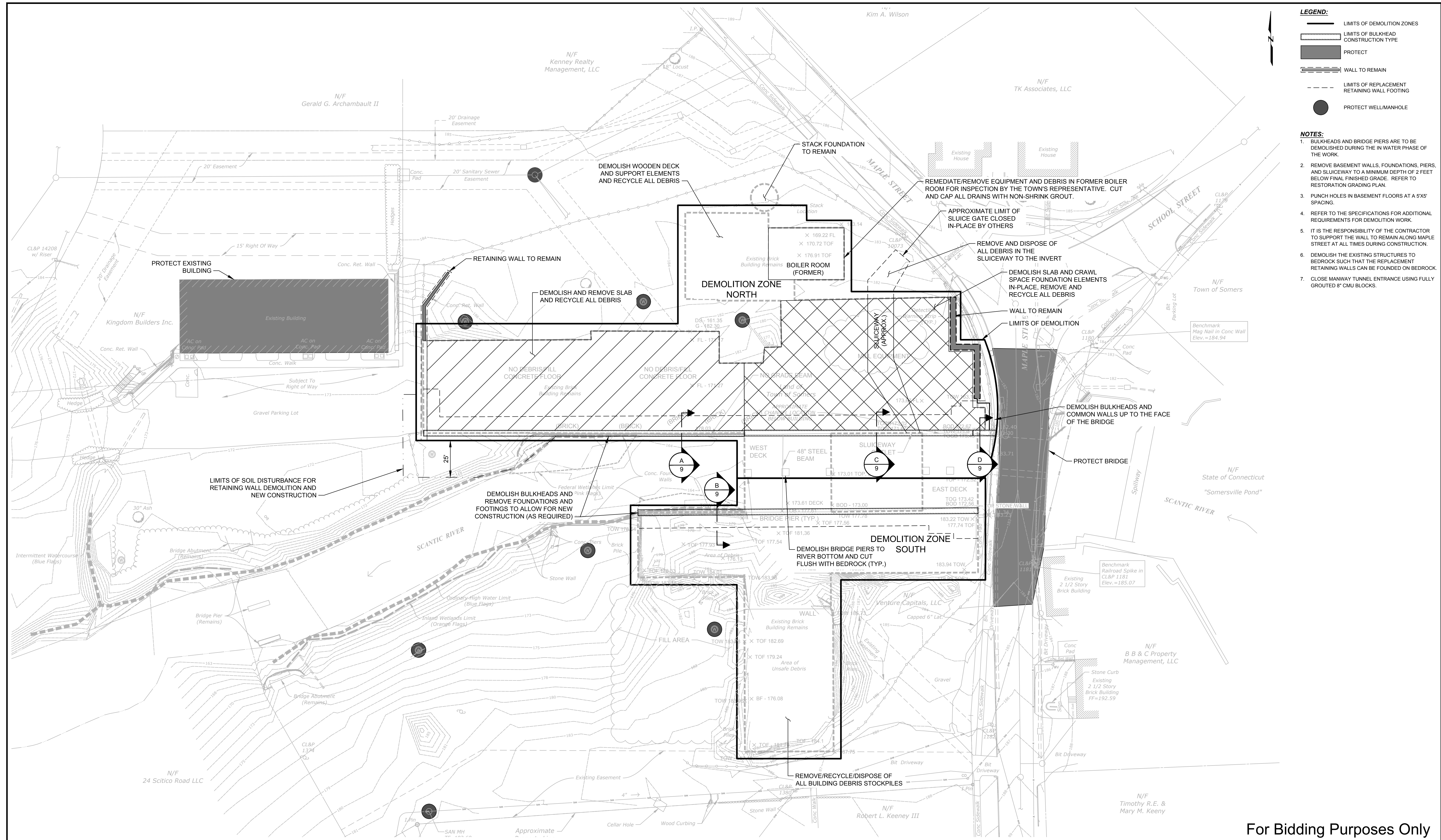
Designed:	C. PRAY
Checked:	M. O'NEIL
Drawn:	D. EDDY
Submitted By:	C. PRAY
P.E. Number:	27740

GEI Consultants
 455 WINDING BROOK DRIVE
 SUITE 201
 GLASTONBURY, CT 06033
 (860) 368-5300



GEI Project 1610349

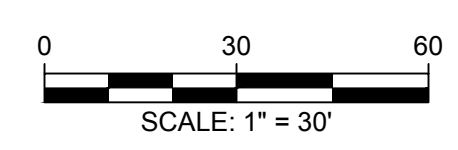
Somersville Mill Somers, Connecticut	DWG. NO.	5
	SHEET NO.	5 OF 15
MATERIAL SALVAGE PLAN		



- LEGEND:**
- LIMITS OF DEMOLITION ZONES
 - LIMITS OF BULKHEAD CONSTRUCTION TYPE
 - PROTECT
 - WALL TO REMAIN
 - LIMITS OF REPLACEMENT RETAINING WALL FOOTING
 - PROTECT WELLMANHOLE

- NOTES:**
1. BULKHEADS AND BRIDGE PIERS ARE TO BE DEMOLISHED DURING THE IN WATER PHASE OF THE WORK.
 2. REMOVE BASEMENT WALLS, FOUNDATIONS, PIERS, AND SLUICeway TO A MINIMUM DEPTH OF 2 FEET BELOW FINAL FINISHED GRADE. REFER TO RESTORATION GRADING PLAN.
 3. PUNCH HOLES IN BASEMENT FLOORS AT A 5'x5' SPACING.
 4. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR DEMOLITION WORK.
 5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPORT THE WALL TO REMAIN ALONG MAPLE STREET AT ALL TIMES DURING CONSTRUCTION.
 6. DEMOLISH THE EXISTING STRUCTURES TO BEDROCK SUCH THAT THE REPLACEMENT RETAINING WALLS CAN BE FOUNDED ON BEDROCK.
 7. CLOSE MANWAY TUNNEL ENTRANCE USING FULLY GROUTED 8" CMU BLOCKS.

For Bidding Purposes Only



Attention:			
C	4/3/2017	For Bidding Purposes Only	CRP
B	3/13/2017	95% Design	CRP
A	1/27/2017	65% Design	CRP
NO.	DATE	ISSUE/REVISION	APP

Designed:	C. PRAY
Checked:	M. O'NEIL
Drawn:	D. EDDY
Submitted By:	C. PRAY
P.E. Number:	27740



GEI Project 1610349

Somersville Mill
Somers, Connecticut

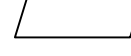

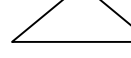
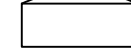
DEMOLITION PLAN

DWG. NO.
6

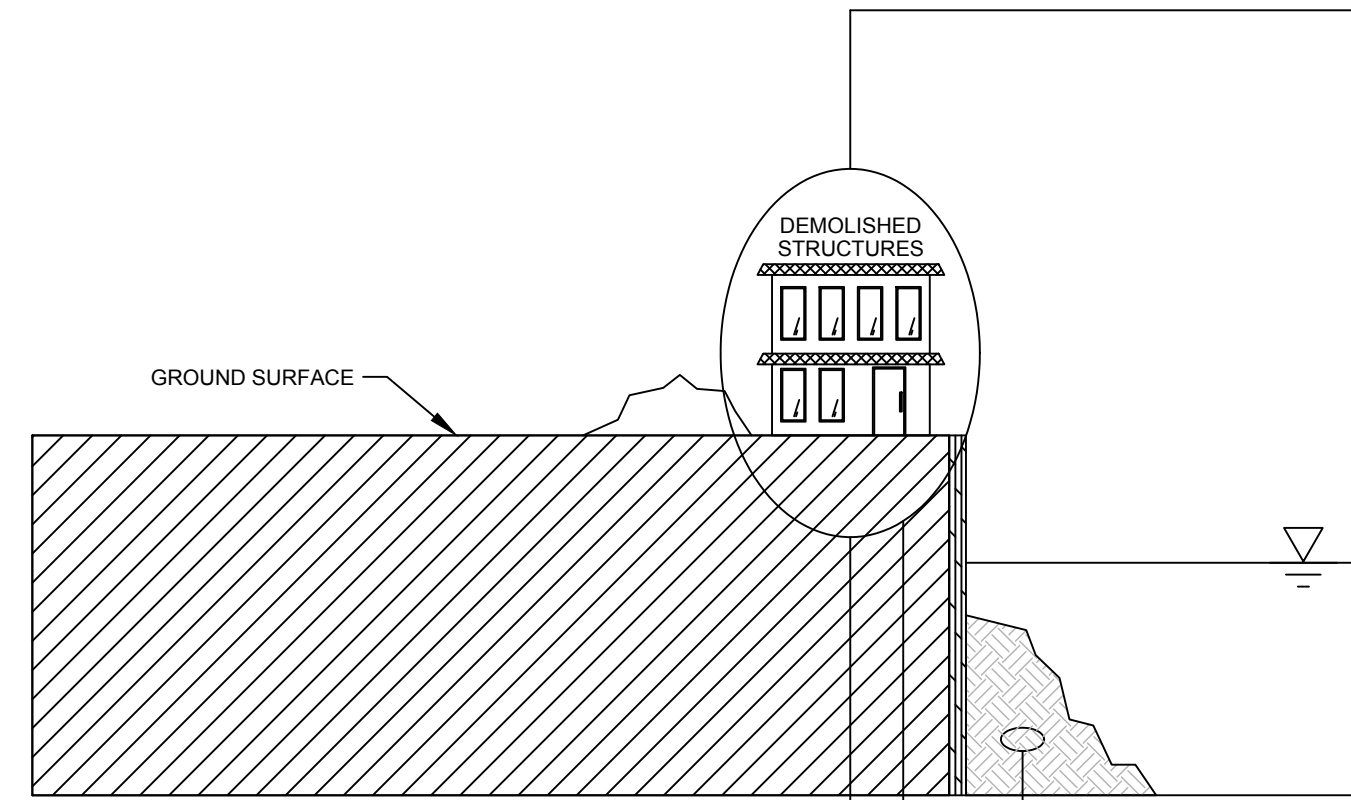
SHEET NO.
6 OF 15

NOTE:
 1. ACTIVITY IN A SHADED SHAPE TO BE PERFORMED AND/OR APPROVED BY THE TOWN'S REPRESENTATIVE.

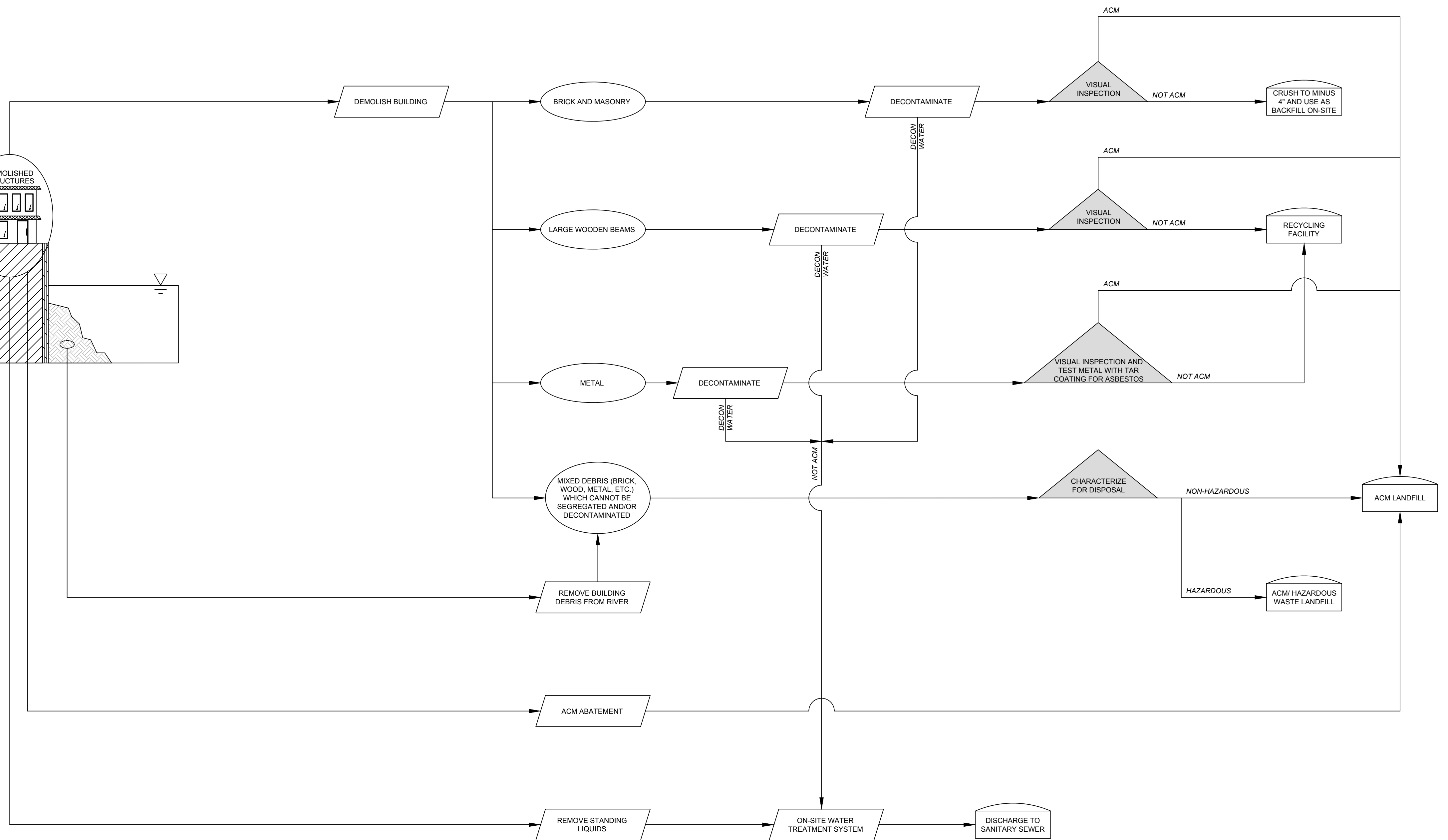
FLOW CHART LEGEND:

-  REMEDIATION ACTIVITY
-  SOIL/MATERIAL STOCKPILE
-  SAMPLING ACTIVITY
-  FINAL DISPOSITION

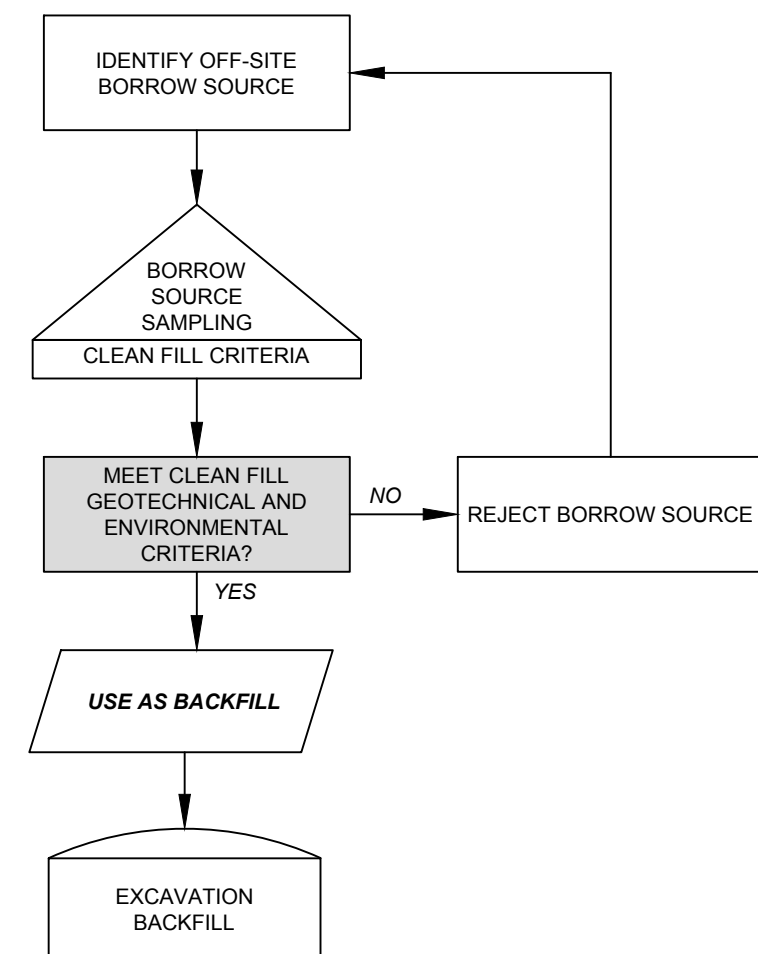
CONCEPTUAL PROFILE



MATERIAL MANAGEMENT FLOW CHART



BORROW SOURCE EVALUATION FLOW CHART



Attention:				
	C	4/3/2017	For Bidding Purposes Only	CRP
	B	3/13/2017	95% Design	CRP
	A	1/27/2017	65% Design	CRP
	NO.	DATE	ISSUE/REVISION	APP

Designed: C. PRAY
 Checked: M. O'NEIL
 Drawn: D. EDDY
 Submitted By: C. PRAY
 P.E. Number: 27740



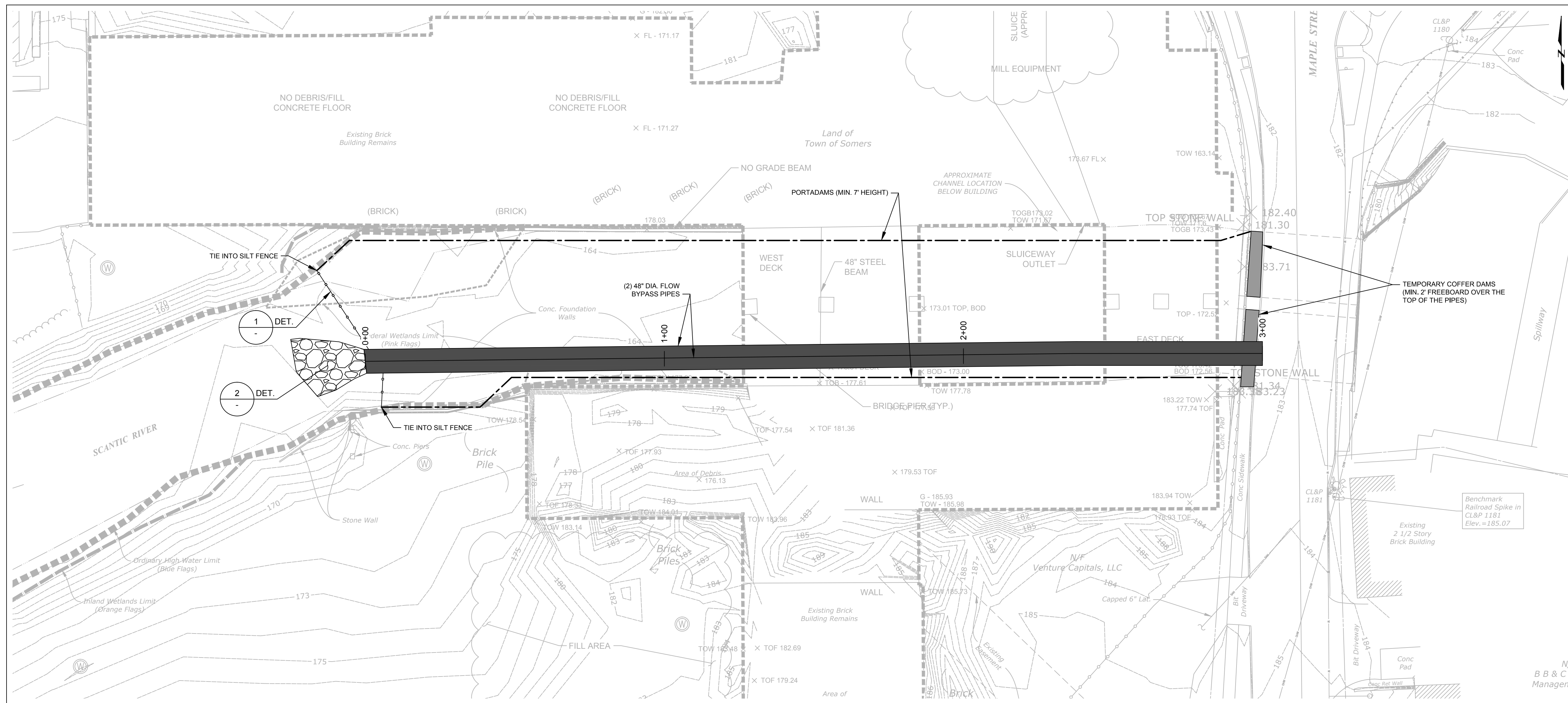
GEI Project 1610349

For Bidding Purposes Only

Somersville Mill
 Somers, Connecticut

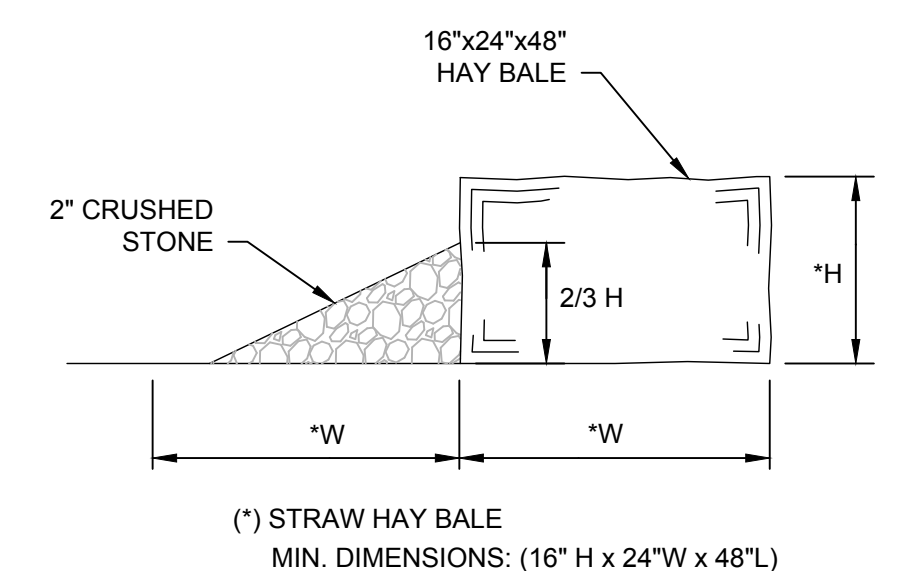
MATERIAL DISPOSAL
 FLOW CHART

DWG. NO.
7
 SHEET NO.
7 OF 15

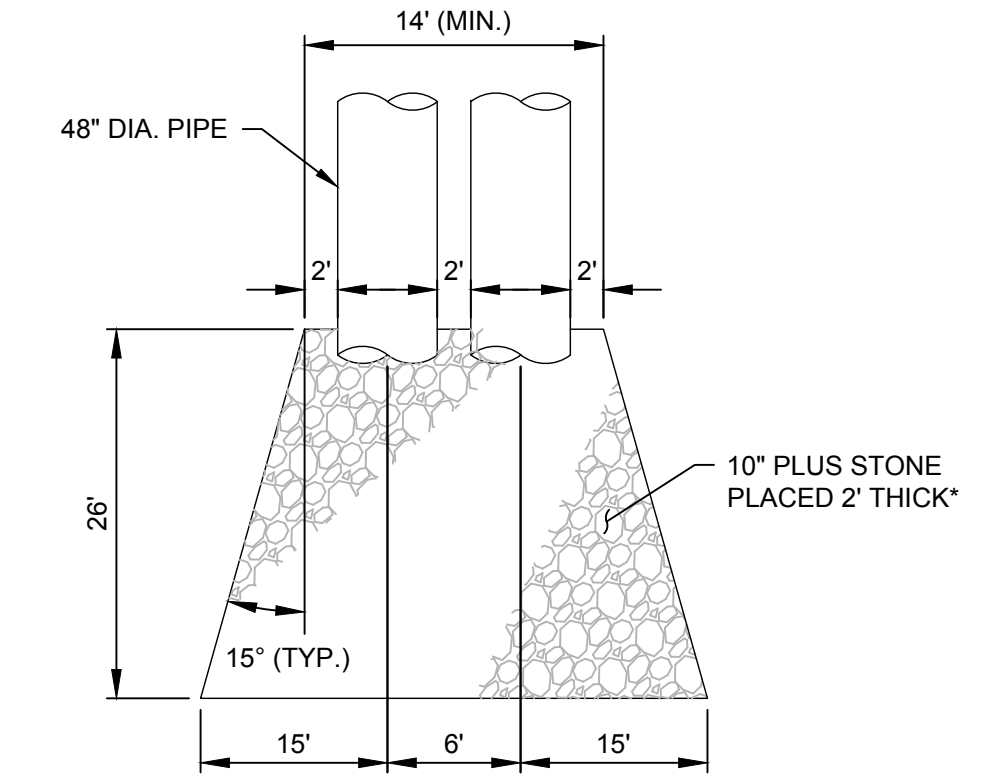


- LEGEND:**
- PORTADAM
 - FLOW DIFFUSER
 - HAY BALES AND STONE SILT CONTROL
 - BYPASS PIPES
 - TEMPORARY COFFERDAMS
- NOTES:**
1. REMOVE ALL DEBRIS AND SEDIMENTS TO THE TOP OF COMPETENT BEDROCK WITHIN THE RIVER.
 2. CONSTRUCT TEMPORARY COFFERDAM AND HEADWALL OUT OF SUPER SACKS OR TOWN REPRESENTATIVE APPROVED EQUIVALENT.
 3. PERFORM THE RIVER CLEANING AND DEMOLITION WORK WHILE THE RIVER DIVERSION IS IN PLACE.
 4. INSTALL THE PORTADAMS AND REMOVE THE RIVER DIVERSION FOR THE RETAINING WALL CONSTRUCTION AND RESTORATION PHASE OF THE WORK.

A PARTIAL PLAN
 SCALE: 1" = 20'



1 DETAIL
 HAY BALE SILT FENCE (IN-RIVER)



2 DETAIL
 DIFFUSER OUTFALL APRON CONFIGURATION

For Bidding Purposes Only

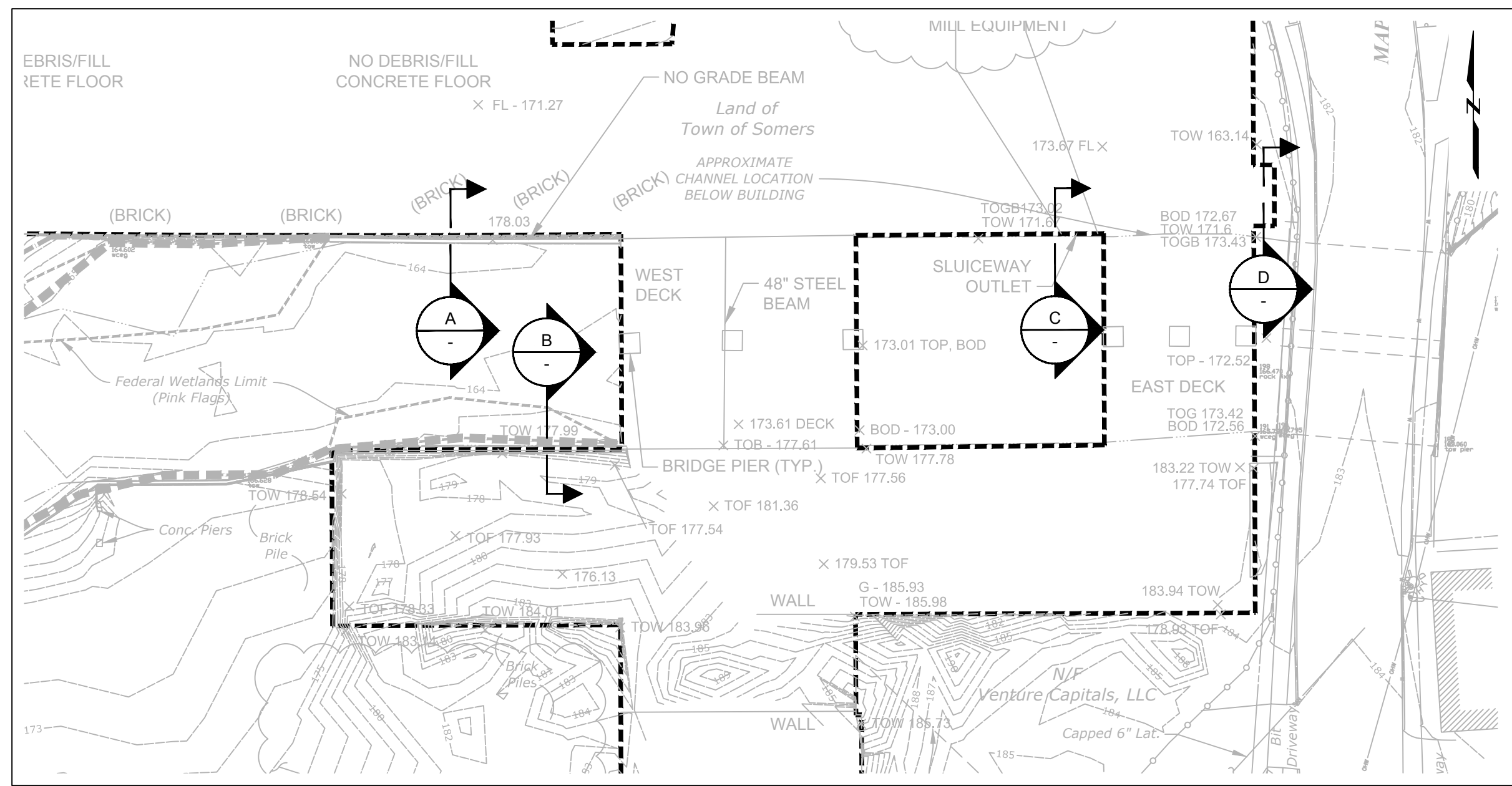
NO.	DATE	ISSUE/REVISION	APP
C	4/3/2017	For Bidding Purposes Only	CRP
B	3/13/2017	95% Design	CRP
A	1/27/2017	65% Design	CRP

Designed: C. PRAY
 Checked: M. O'NEIL
 Drawn: D. EDDY
 Submitted By: C. PRAY
 P.E. Number: 27740

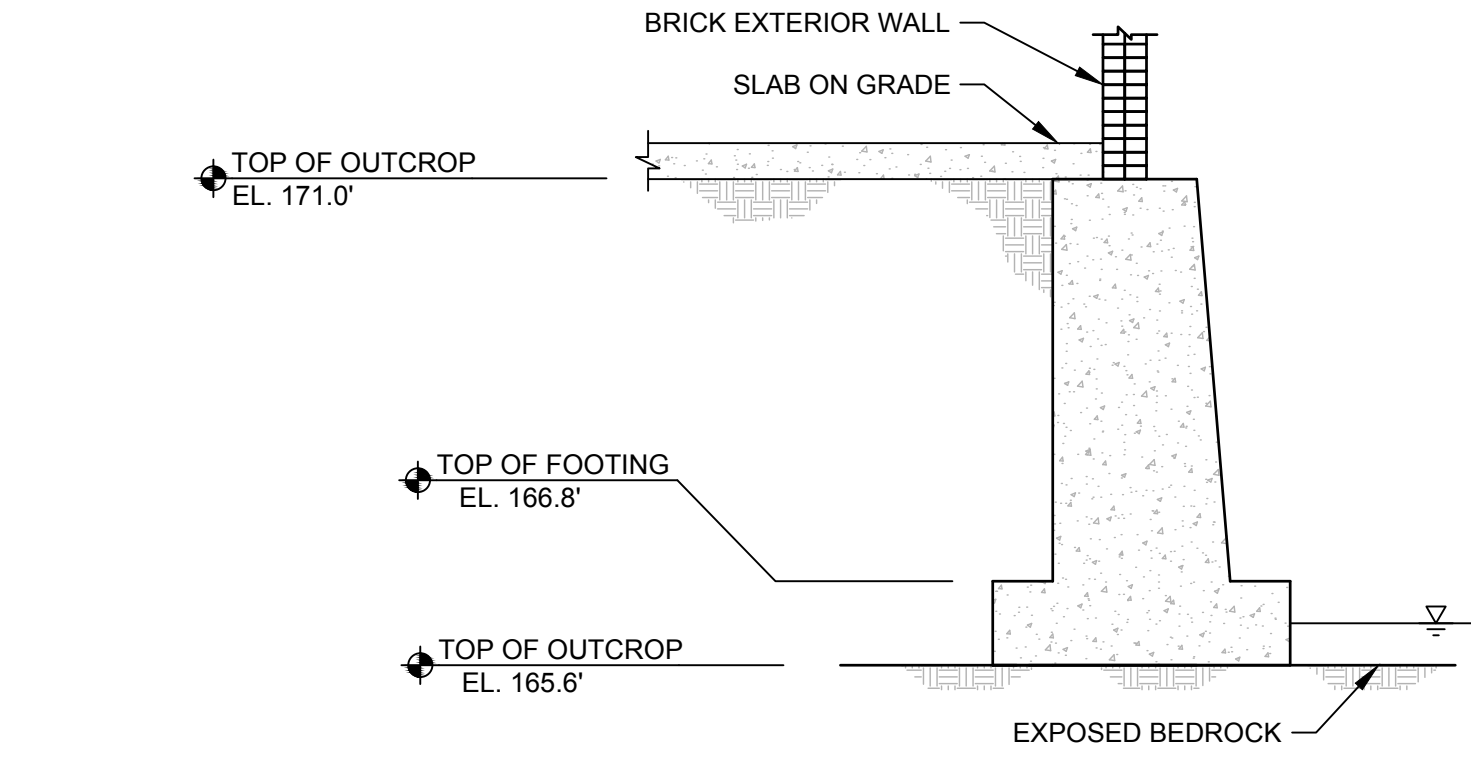


Somersville Mill
 Somers, Connecticut
 RIVER BYPASS AND
 CLEANING PLAN

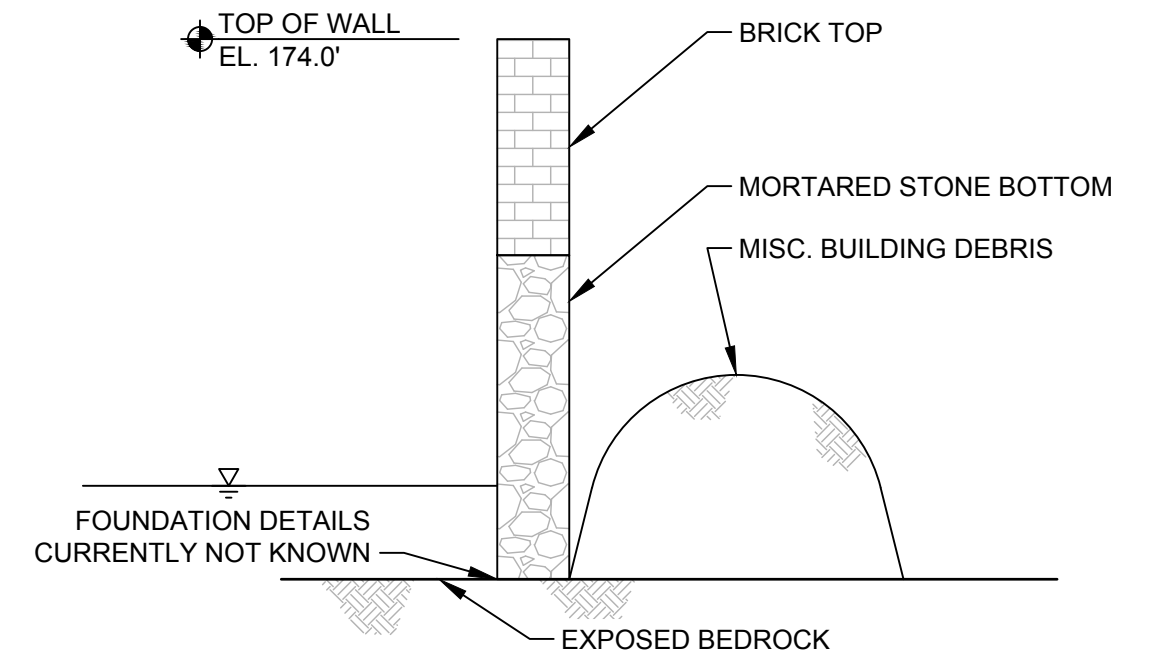
DWG. NO.
8
 SHEET NO.
8 OF 15



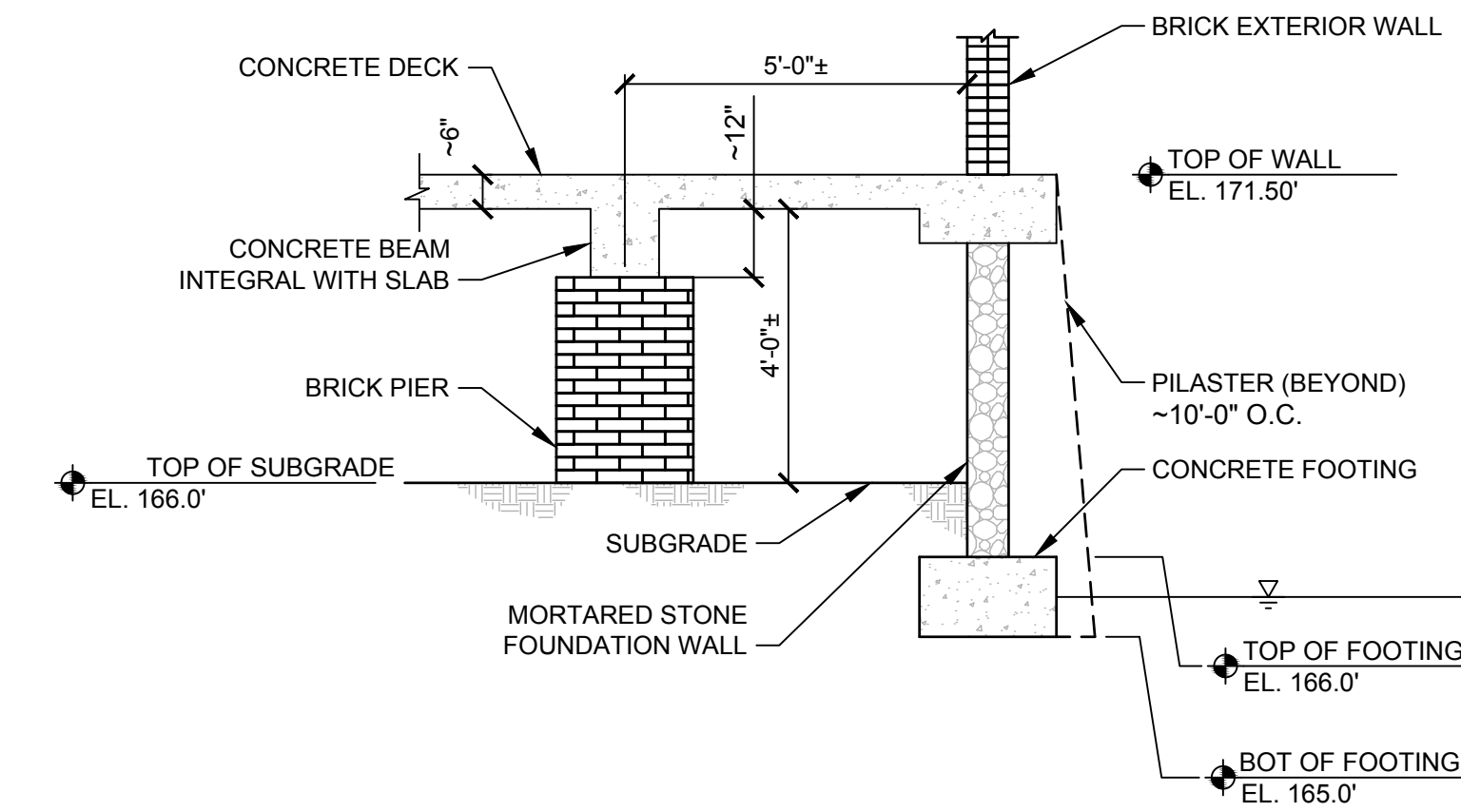
1 PLAN
KEY PLAN
SCALE: 1" = 30'



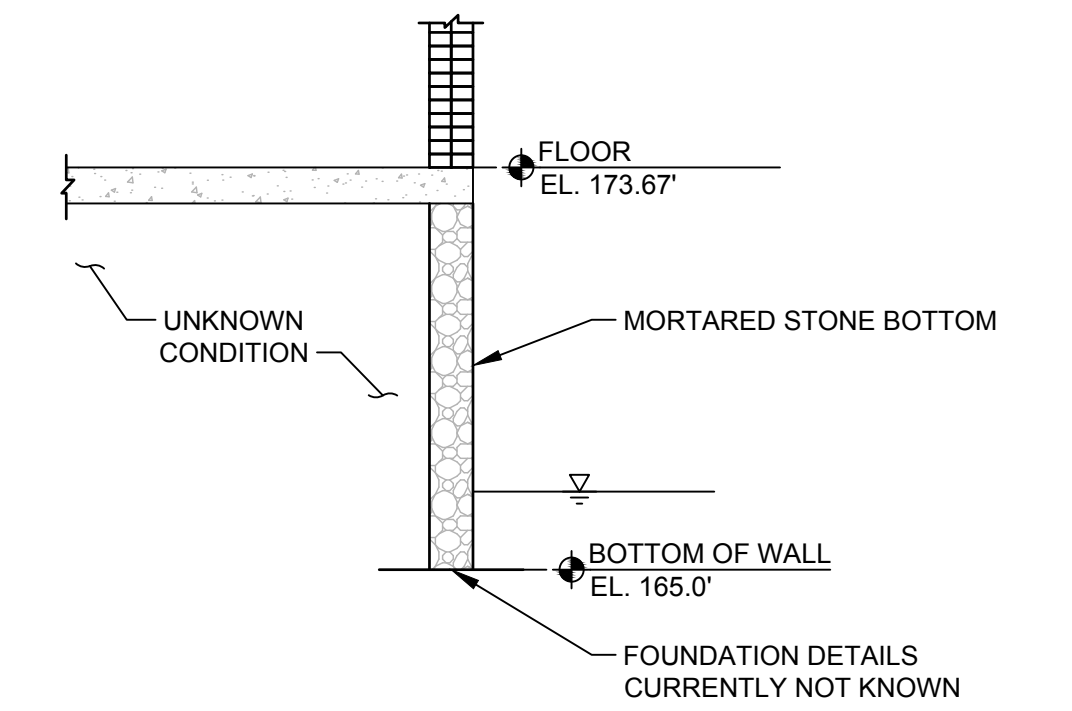
A SECTION
EXISTING FOUNDATION WALLS - NORTH
SCALE: N.T.S.



B SECTION
EXISTING FOUNDATION WALLS - SOUTH
SCALE: N.T.S.



C SECTION
EXISTING FOUNDATION WALLS - NORTH
SCALE: N.T.S.



D SECTION
EXISTING WALL AT BRIDGE ABUTMENT
SCALE: N.T.S.

NOTE:
1. DISTANCES WITHOUT MEASUREMENTS WERE NOT ACCESSIBLE AND REPRESENT AN ESTIMATE AS TO CONSTRUCTION TYPE.
2. ELEVATIONS SHOWN IN SECTIONS ARE APPROXIMATE.

NO.	DATE	ISSUE/REVISION	APP
C	4/3/2017	For Bidding Purposes Only	CRP
B	3/13/2017	95% Design	CRP
A	1/27/2017	65% Design	CRP
			APP

Designed: C. PRAY
Checked: M. O'NEIL
Drawn: D. EDDY
Submitted By: C. PRAY
P.E. Number: 27740



GEI Project 1610349

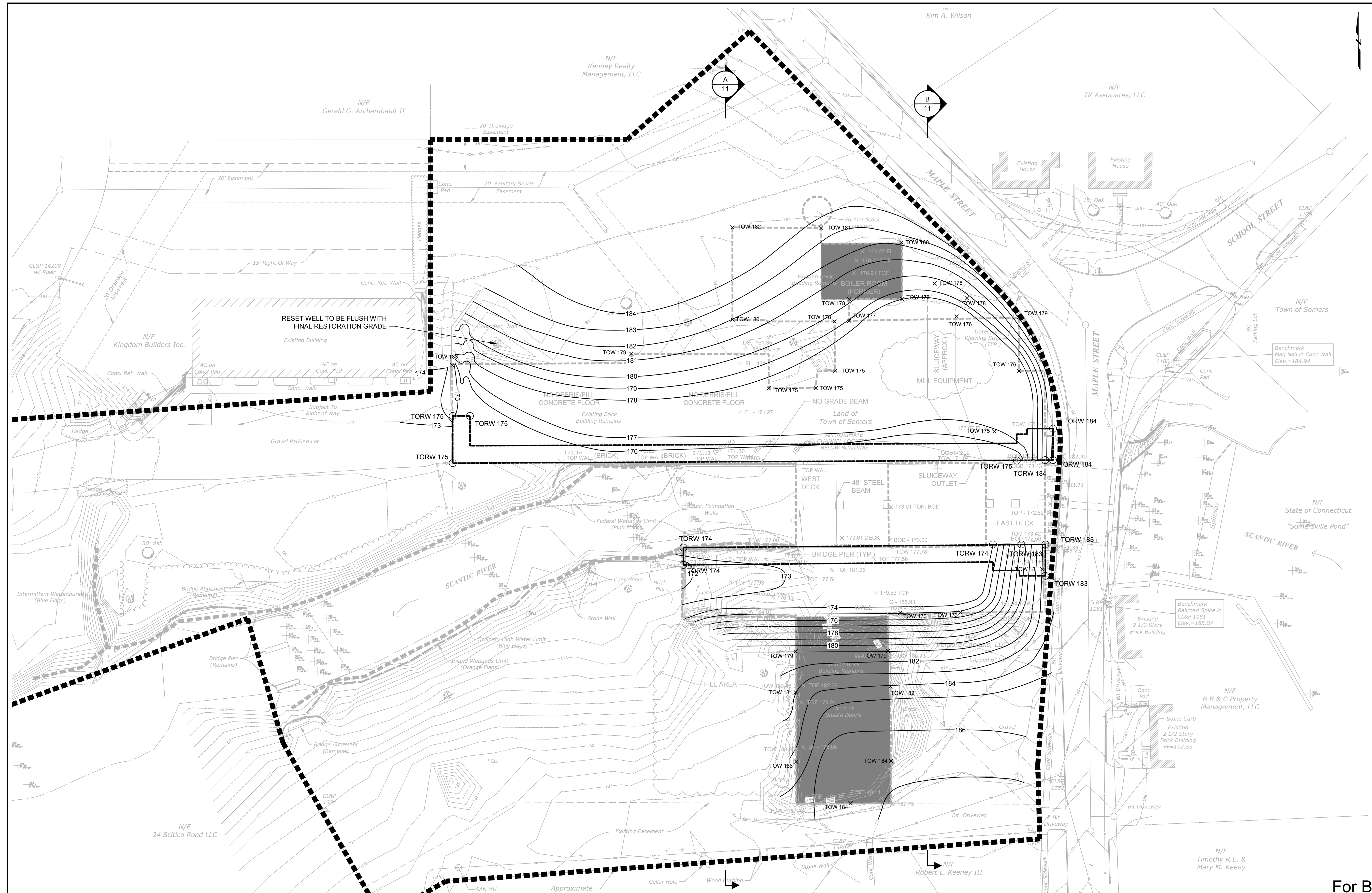
For Bidding Purposes Only

Somersville Mill
Somers, Connecticut

EXISTING BULKHEAD
CROSS SECTIONS

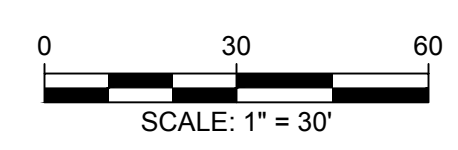
DWG. NO.
9

SHEET NO.
9 OF 15



- LEGEND:**
- 170— RESTORATION CONTOUR
 - X TOW TOP OF WALL (DEMOLITION ELEVATION)
 - O TORW TOP OF RETAINING WALL
 - REPLACEMENT RETAINING WALL FOOTING
 - ON-SITE RECYCLED BUILDING MATERIAL FILL AREAS

- FILL SEQUENCE NOTES:**
1. PLACE ON-SITE RECYCLED BUILDING MATERIAL ABOVE THE GROUNDWATER TABLE.
 2. REUSE ON-SITE NATIVE SOIL AS COVER MATERIAL.
 3. FILL DESIGNATED ON-SITE REUSE AREAS WITH RECYCLED BUILDING MATERIALS BEFORE FILLING THE SLUCEWAY AND CRAWL SPACES WITH RECYCLED BUILDING MATERIALS.
 4. ALL ON-SITE NATIVE SOIL NOT DESIGNATED FOR DISPOSAL MUST BE REUSED ON-SITE.



Attention:			
NO.	DATE	ISSUE/REVISION	APP
C	4/3/2017	For Bidding Purposes Only	CRP
B	3/13/2017	95% Design	CRP
A	1/27/2017	65% Design	CRP
NO.	DATE	ISSUE/REVISION	APP

Designed:	C. PRAY
Checked:	M. O'NEIL
Drawn:	D. EDDY
Submitted By:	C. PRAY
P.E. Number:	27740

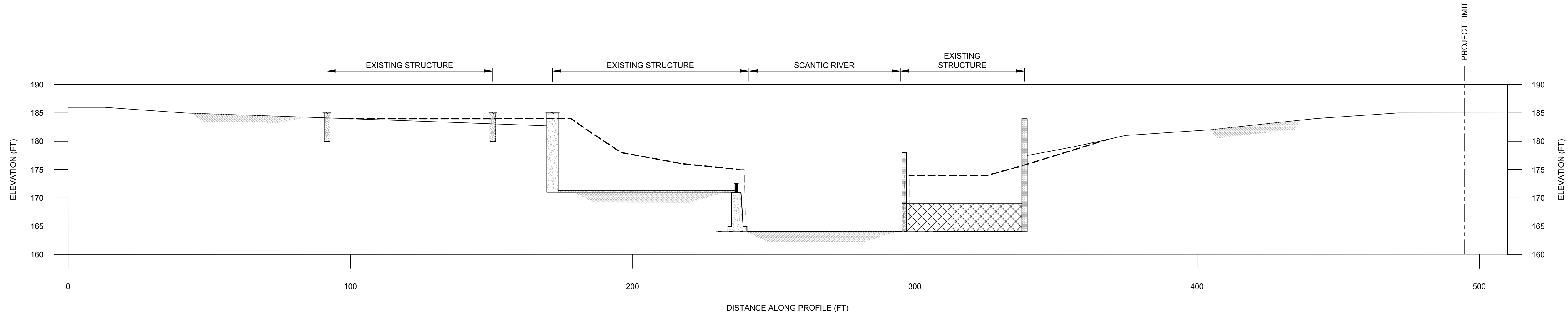


GEI Project 1610349

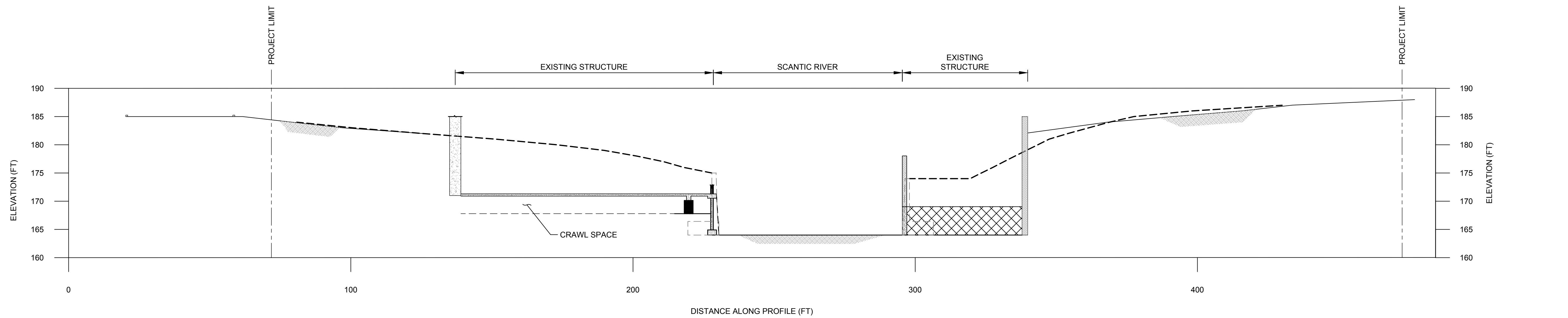
Somersville Mill Somers, Connecticut	DWG. NO. 10
	SHEET NO. 10 OF 15
RESTORATION GRADING PLAN	

For Bidding Purposes Only

LEGEND:
 ——— EXISTING GRADE
 - - - - PROPOSED GRADE
 ▨ DEBRIS PILES
 □ REPLACEMENT RETAINING WALLS



A SECTION
 10 EXISTING AND RESTORATION GRADES
 SCALE: 1" = 20'



B SECTION
 10 EXISTING AND RESTORATION GRADES
 SCALE: 1" = 20'

For Bidding Purposes Only

NOTE:
 1. CONSTRUCTION TYPES AND THICKNESSES ARE SHOWN IN SECTION VIEW TO SHOW CUT/FILL LINES ALONG SECTION ONLY AND ARE NOT ACTUAL REPRESENTATIONS OF FIELD CONDITIONS.

NO.	DATE	ISSUE/REVISION	APP
C	4/3/2017	For Bidding Purposes Only	CRP
B	3/13/2017	95% Design	CRP
A	1/27/2017	65% Design	CRP
			APP

Designed: C. PRAY
 Checked: M. O'NEIL
 Drawn: D. EDDY
 Submitted By: C. PRAY
 P.E. Number: 27740

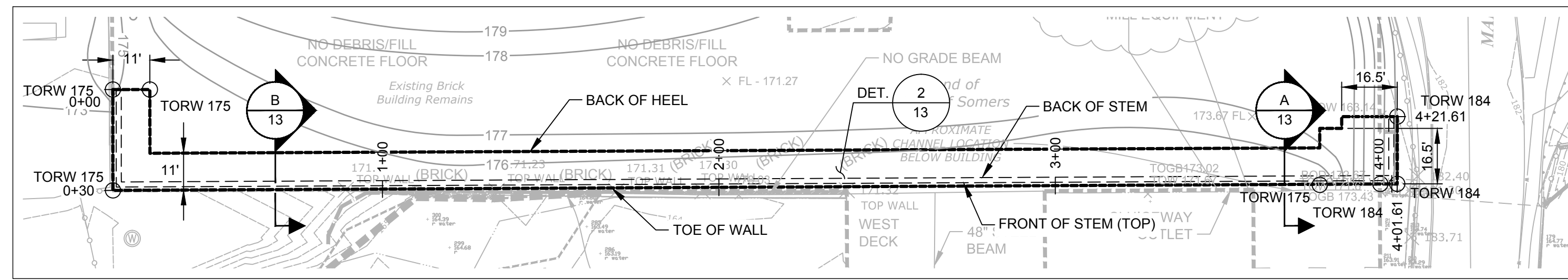


GEI Project 1610349

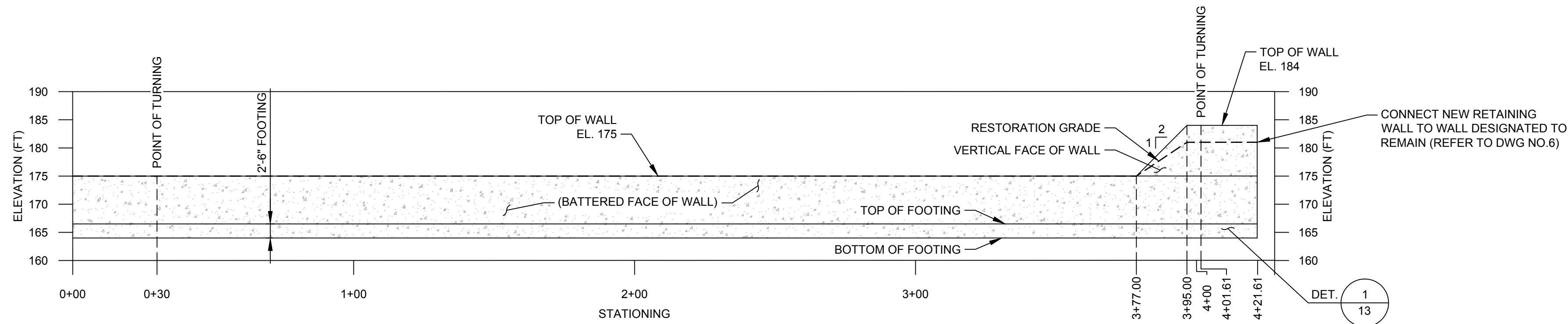
Somersville Mill
 Somers, Connecticut
**RESTORATION GRADING
 CROSS SECTIONS**

DWG. NO.
11
 SHEET NO.
11 OF 15

NORTH WALL		
STATION #	NORTHING	EASTING
0+00	918949.88	1070797.87
0+30	918919.88	1070797.89
1+00	918920.28	1070878.02
2+00	918920.79	1070978.02
3+00	918921.30	1071078.02
4+00	918921.81	1071178.02
4+01.61	918921.82	1071179.63
4+21.61	918941.82	1071179.63

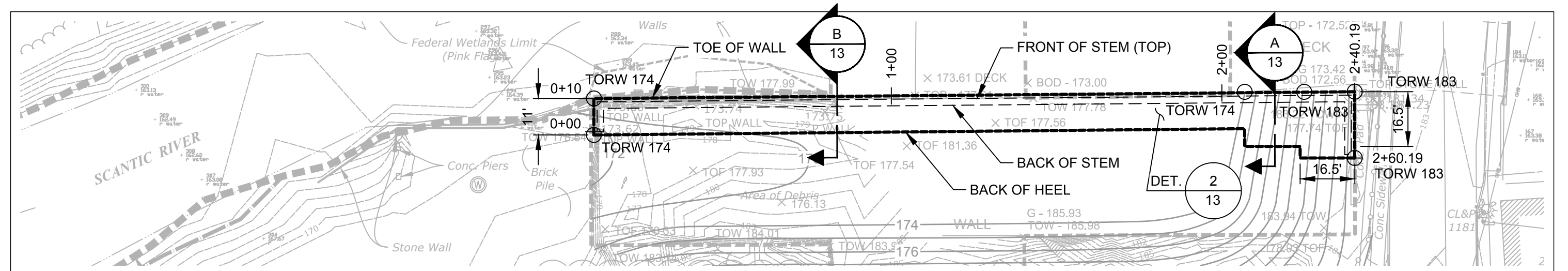


PARTIAL PLAN - NORTH RETAINING WALL LAYOUT
SCALE: 1" = 30'

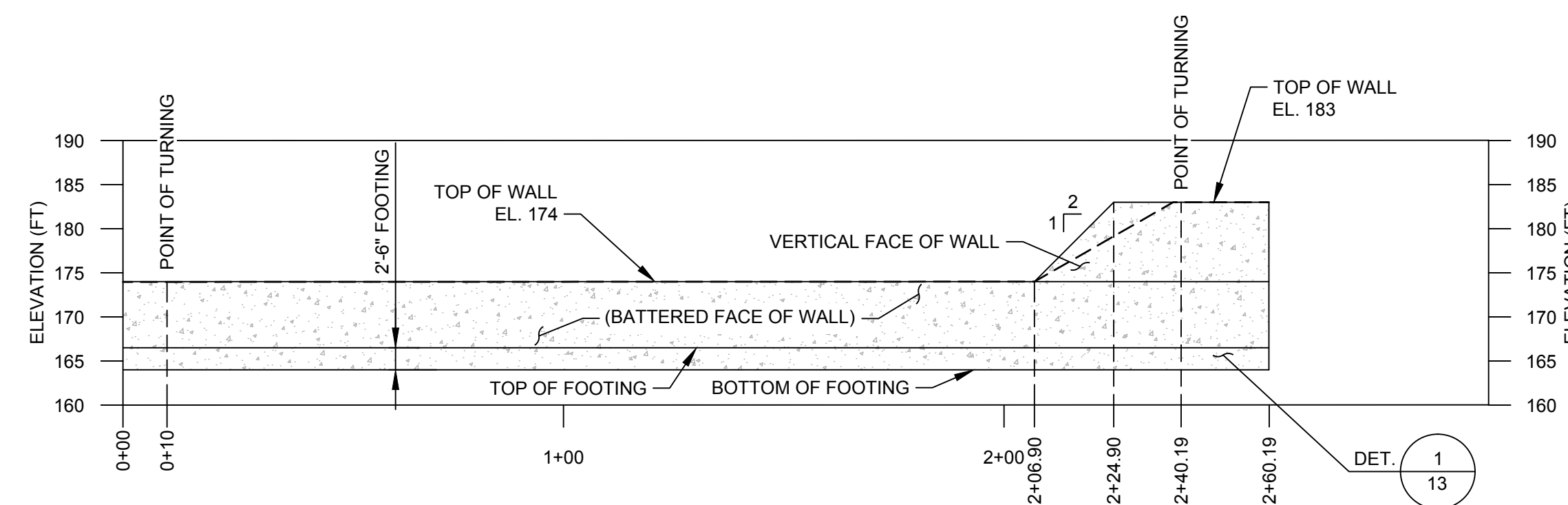


PROFILE - NORTH RETAINING WALL
SCALE: 1" = 30'

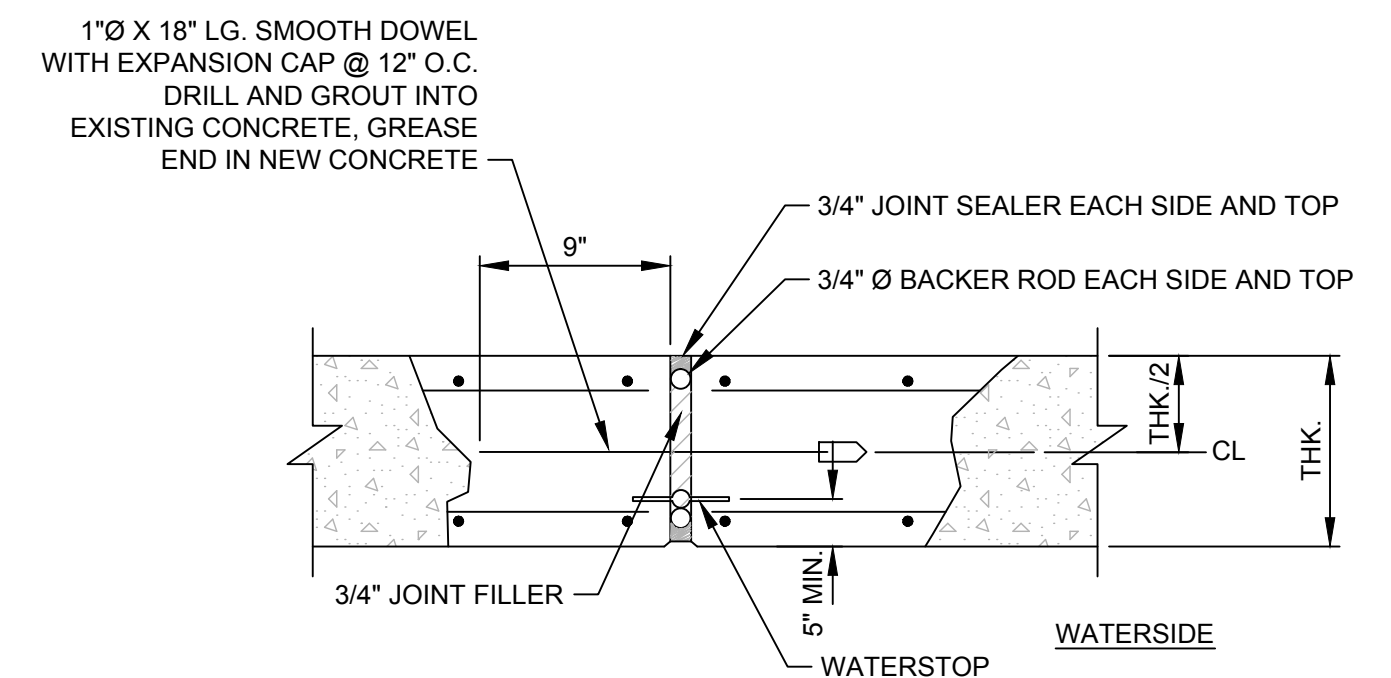
SOUTH WALL		
STATION #	NORTHING	EASTING
0+00	918856.16	1070944.55
0+10	918866.16	1070944.55
1+00	918866.95	1071034.55
2+00	918867.86	1071134.54
2+40.19	918868.22	1071174.73
2+60.19	918848.22	1071174.73



PARTIAL PLAN - SOUTH RETAINING WALL LAYOUT
SCALE: 1" = 30'

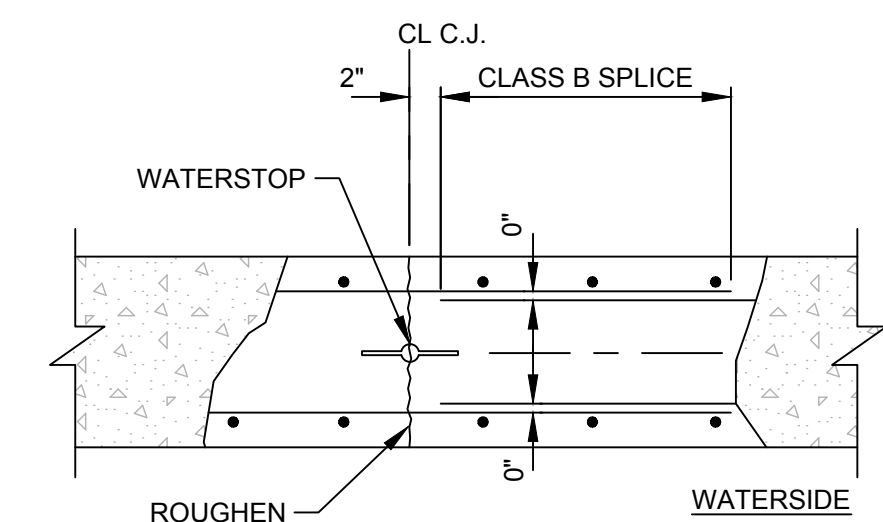


PROFILE - SOUTH RETAINING WALL
SCALE: 1" = 30'

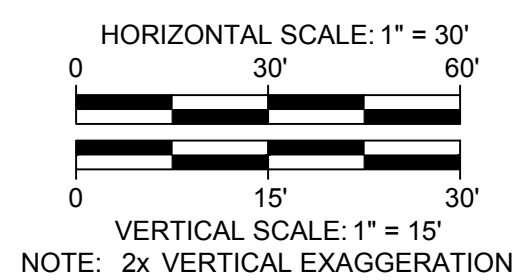


- NOTES:**
- ELIMINATE JOINT SEALER AND BACKER ROD AT BOTTOM OF FOOTINGS AND SLABS.
 - FURNISH AND INSTALL SIKAFLEX - 2CNS ELASTOMERIC SEALANT.

TYPICAL E.J. AT WALL & FOOTING
SCALE: NOT TO SCALE



TYPICAL C.J. AT WALL & FOOTING
SCALE: NOT TO SCALE



Attention:				
NO.	DATE	ISSUE/REVISION	APP	
C	4/3/2017	For Bidding Purposes Only	CRP	
B	3/13/2017	95% Design	CRP	
A	1/27/2017	65% Design	CRP	

Designed: C. PRAY
Checked: M. O'NEIL
Drawn: D. EDDY
Submitted By: C. PRAY
P.E. Number: 27740



GEI Project 1610349

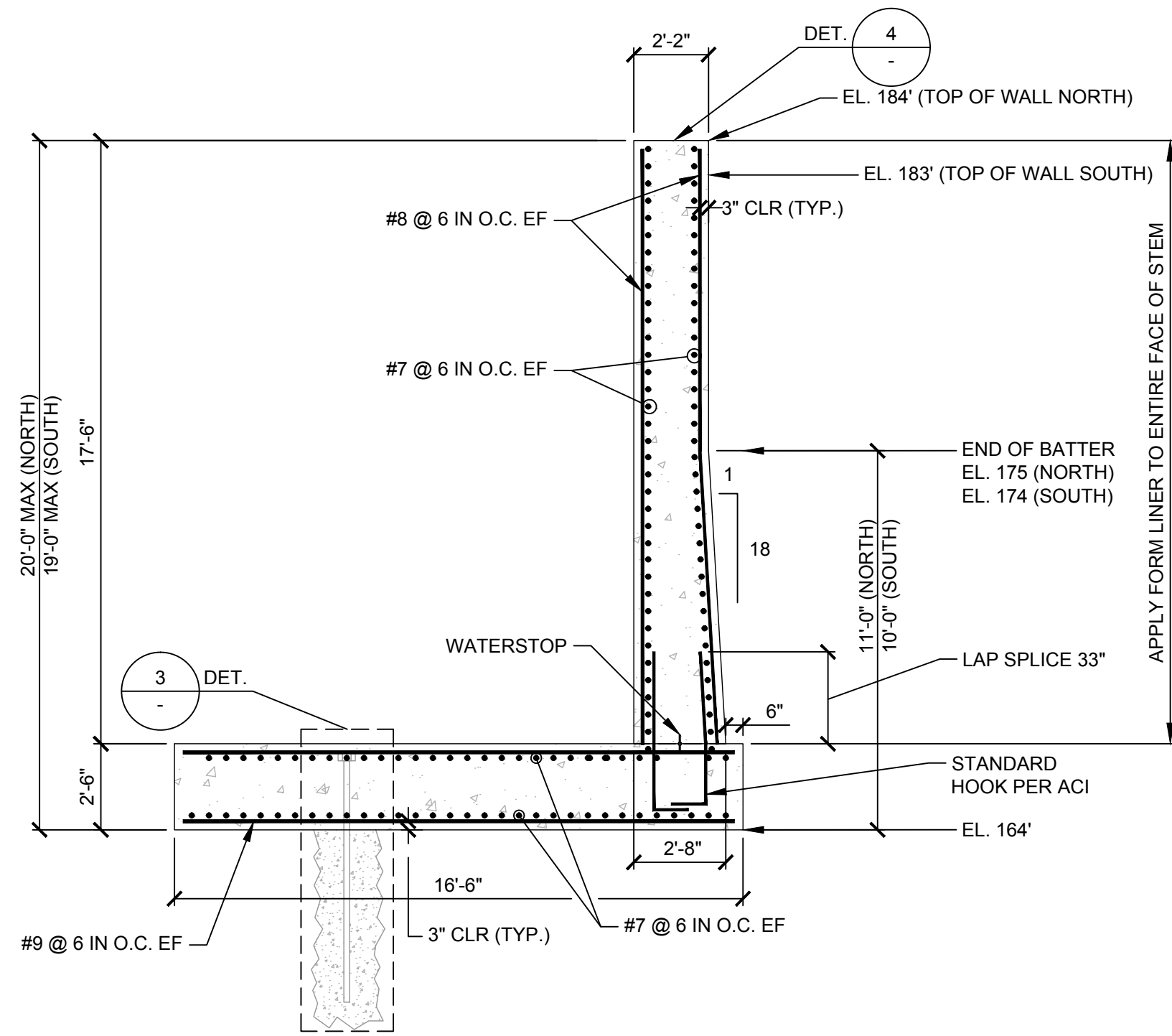
Somersville Mill
Somers, Connecticut

**RETAINING WALL
PLAN AND PROFILES**

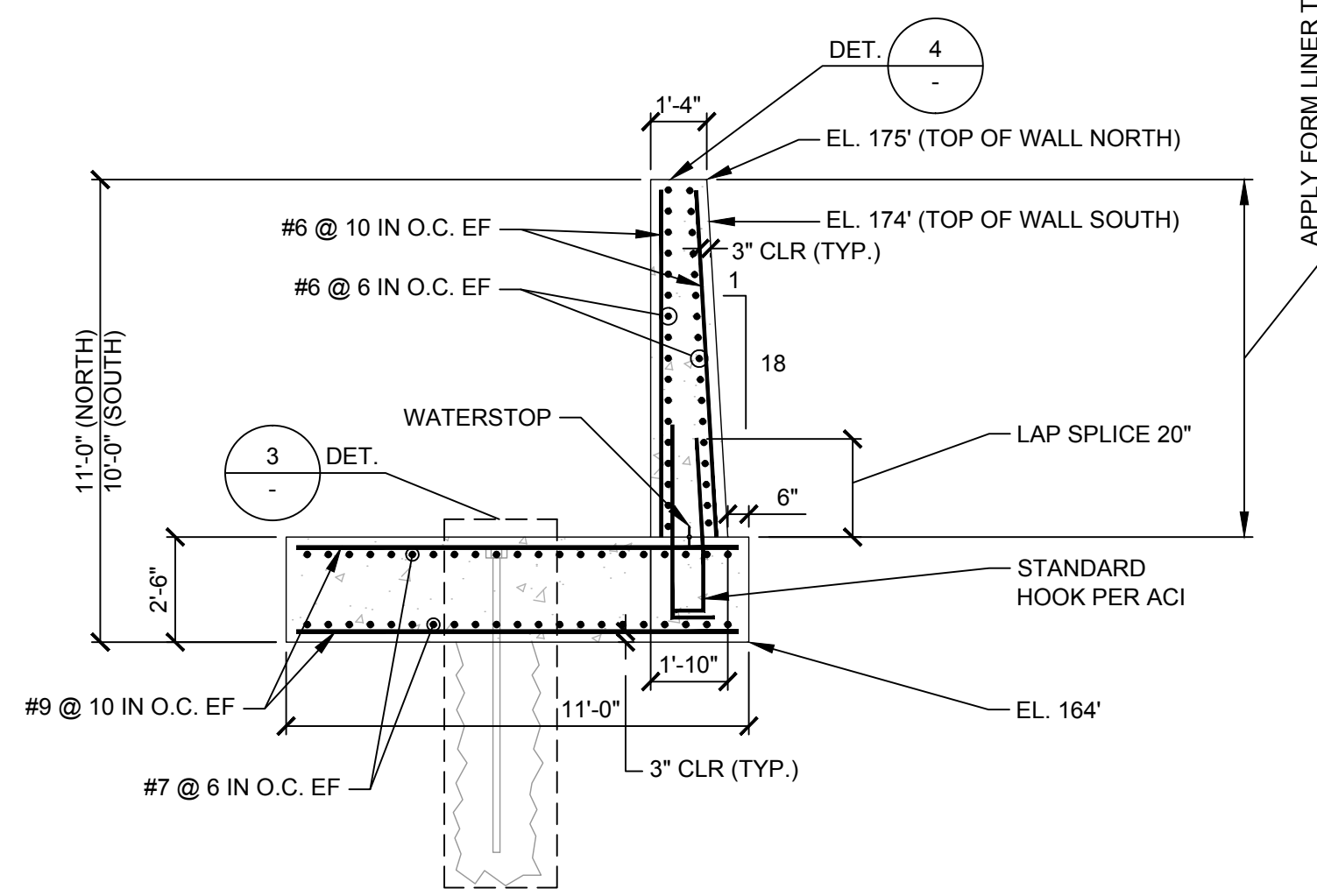
DWG. NO.
12

SHEET NO.
12 OF 15

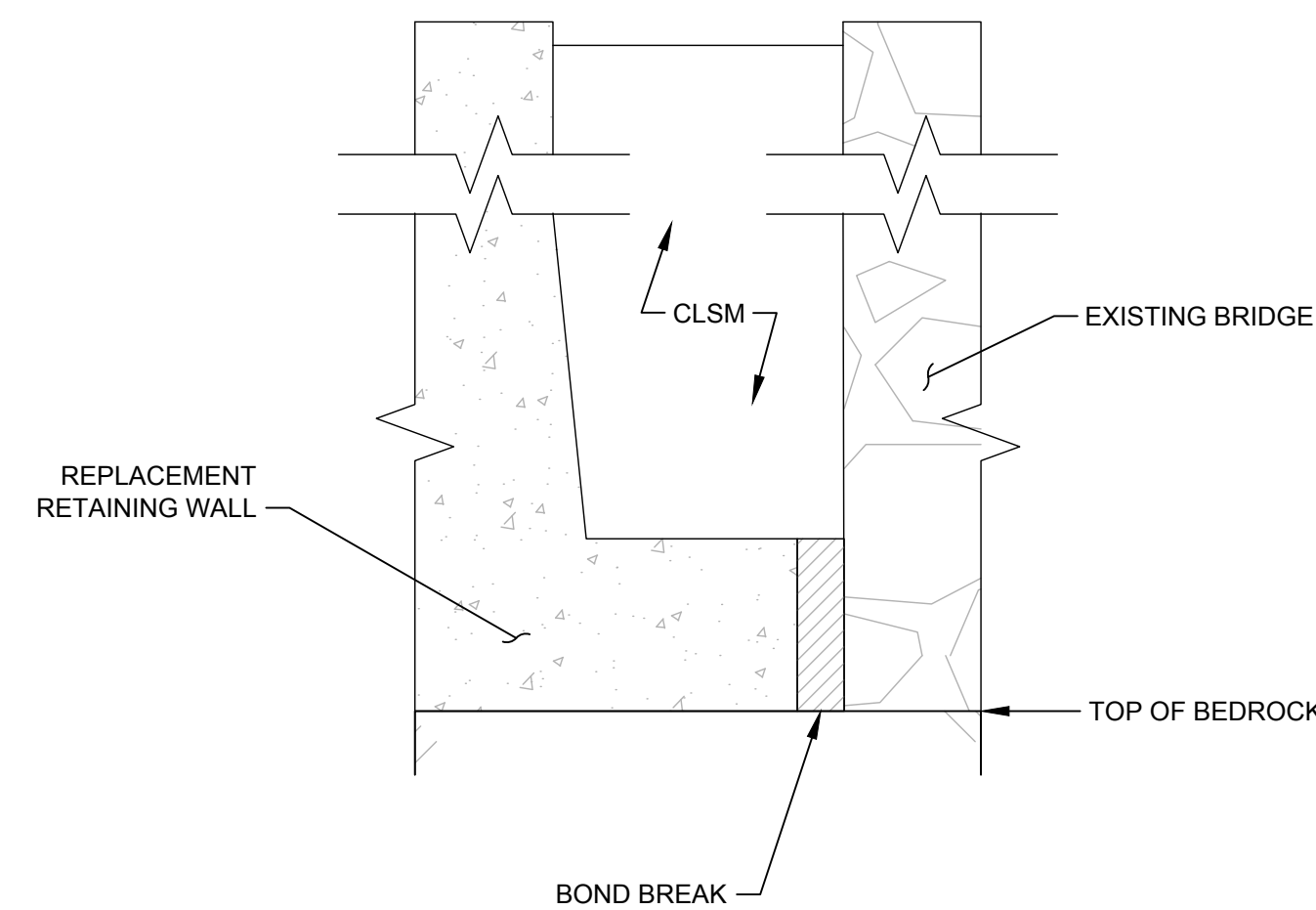
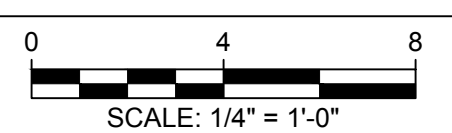
For Bidding Purposes Only



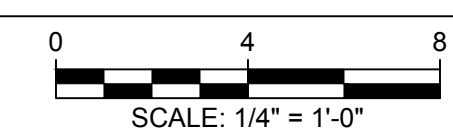
A SECTION
RETAINING WALL SECTION
19-FT AND 20-FT HEIGHT



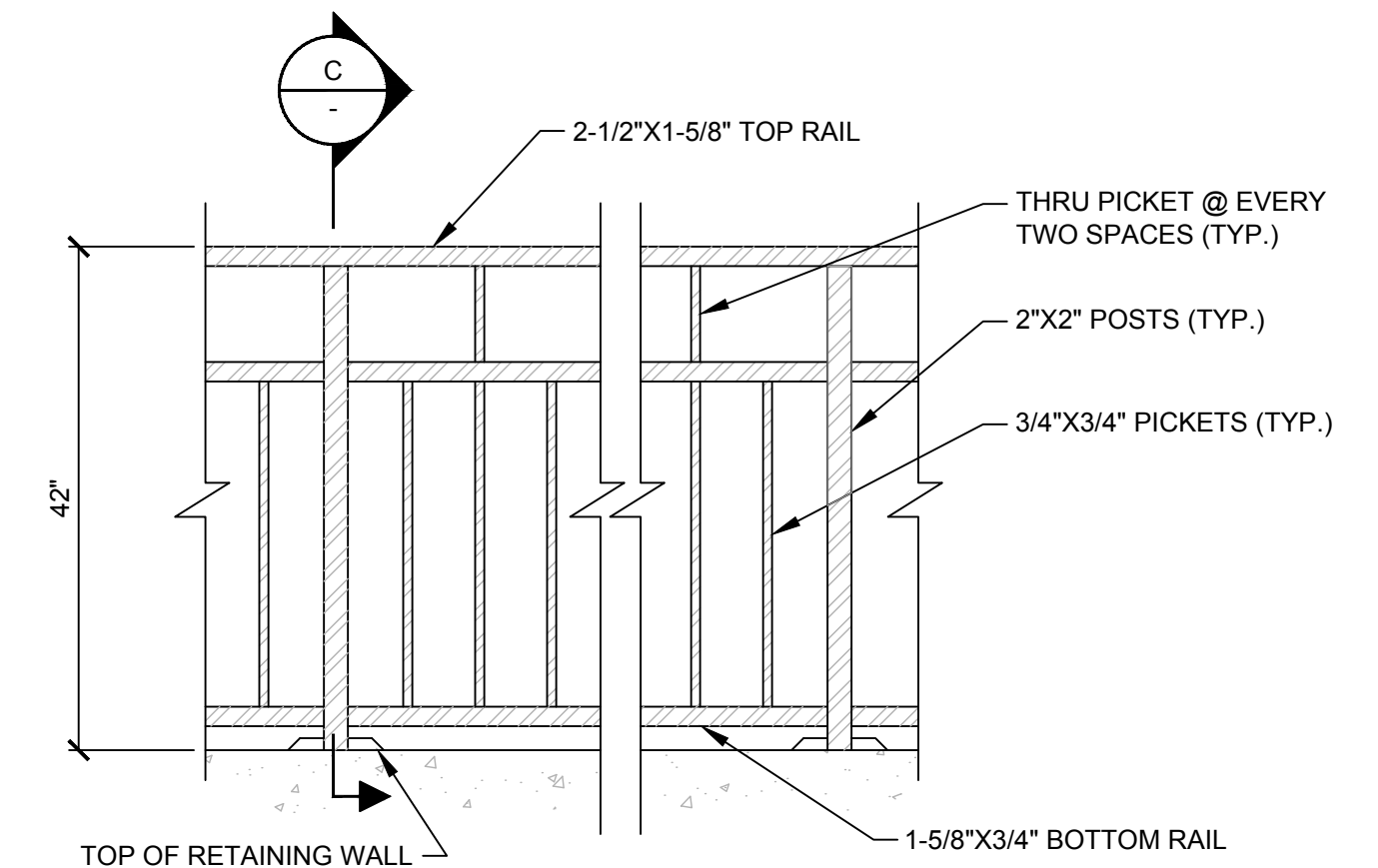
B SECTION
RETAINING WALL SECTION
10-FT AND 11-FT HEIGHT



1 DETAIL
12 BOND BREAK

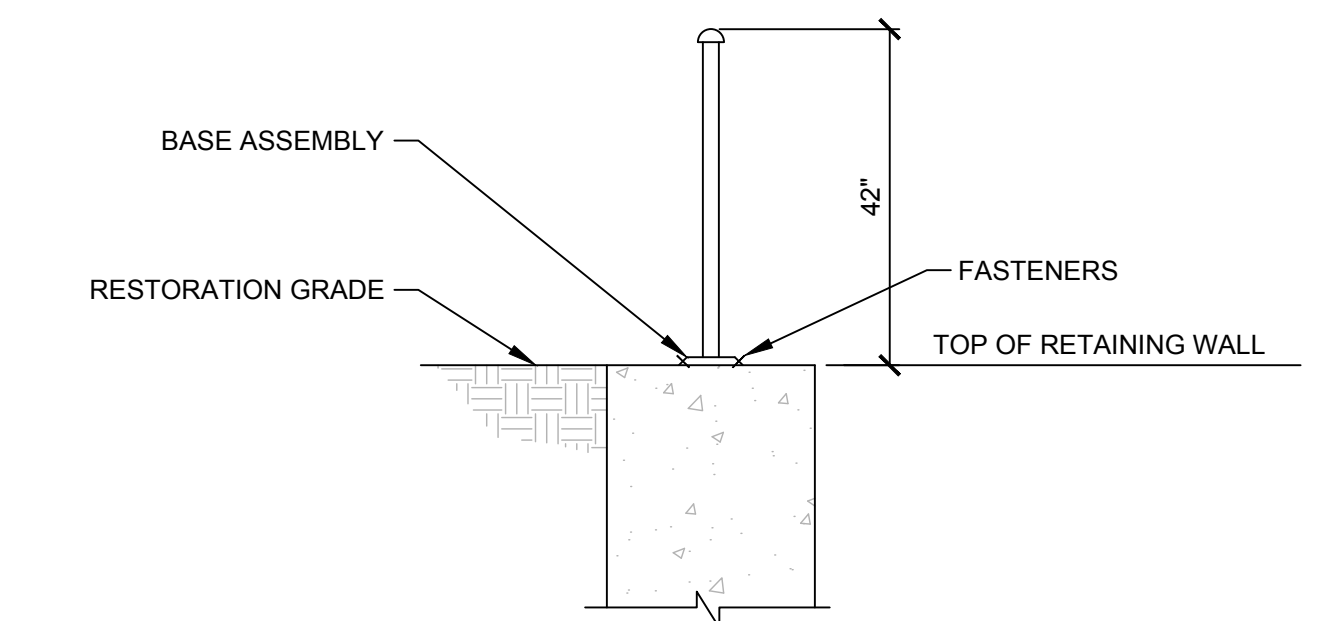
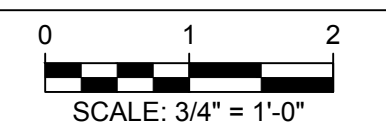


NOTES:
1. BOND BREAK TO CONSIST OF FOAM BOARD OR ENGINEER OF RECORD APPROVED EQUIVALENT.

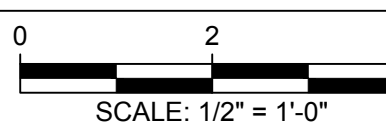


NOTES:
1. RAILING SYSTEM SHOWN IS SERIES 9100 ARCHITECTURAL RAILING AS MANUFACTURED BY SUPERIOR ALUMINUM PRODUCTS, INC.
2. STYLE: DOUBLE TOP RAIL WITH THROUGH PICKETS
3. COLOR: BLACK
4. MANUFACTURER PARTS LIST:
A. 901 TOP RAIL
B. 903 BOTTOM RAIL
C. 2" SQUARE POSTS
D. 3/4" SQUARE PICKETS
E. 968 BASE ASSEMBLY
5. INSTALL THE RAILING SYSTEM SHOWN ALONG THE ENTIRE LENGTH OF THE RETAINING WALLS ON THE NORTH AND SOUTH SIDES OF THE RIVER (INCLUSIVE OF HEIGHT TRANSITION ZONES.)
6. ANY SUBSTITUTIONS TO THE RAILING SYSTEM SHOWN MUST BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND ACCEPTANCE.

4 DETAIL
FENCE



C SECTION
FENCE



SUBMITTALS:
1. SUBMIT CONCRETE MIX DESIGN IN ACCORDANCE WITH SECTION 03 30 00 - CAST-IN-PLACE CONCRETE.
2. SUBMIT SHOP DRAWINGS FOR CONCRETE STRUCTURES IN ACCORDANCE WITH SECTION 03 30 00 - CAST-IN-PLACE CONCRETE.
3. SUBMIT SHOP DRAWINGS FOR RAILING INSTALLATION IN ACCORDANCE WITH SECTION 05 52 00 METAL RAILINGS.

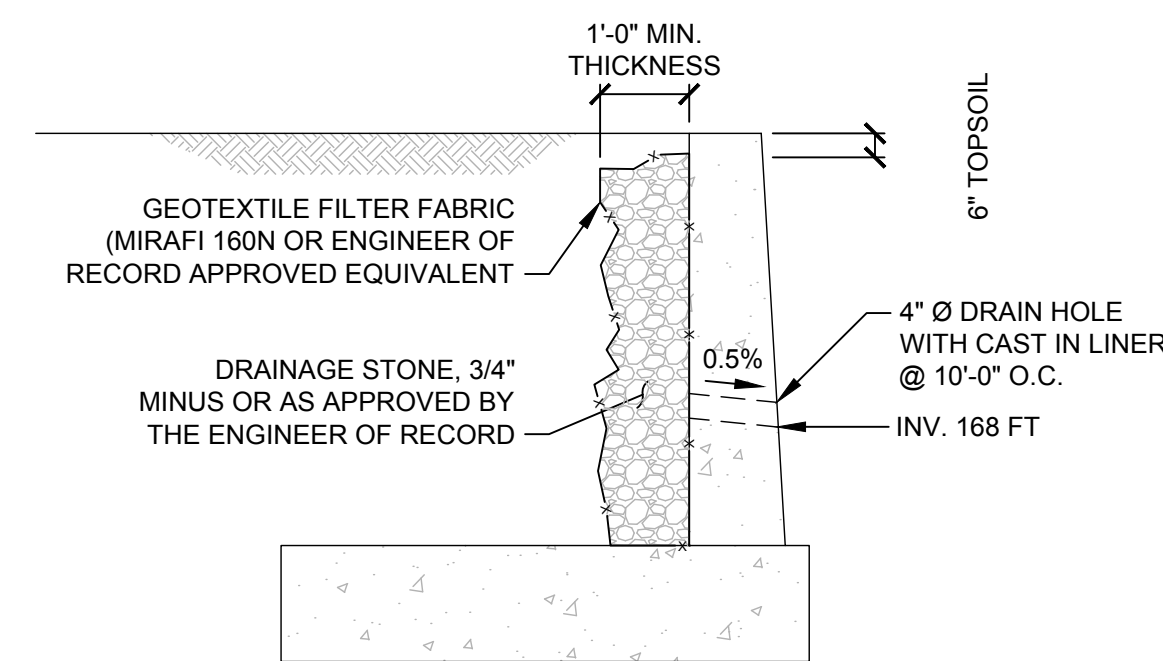
QUALITY ASSURANCE:
1. CONCRETE SHOP DRAWINGS AND PRODUCT DATA TO BE REVIEWED BY ENGINEER OF RECORD OR HIS DESIGNATED REPRESENTATIVE.
2. PREPARATION OF RETAINING WALL SUBGRADE TO BE OBSERVED BY ENGINEER OF RECORD OR HIS DESIGNATED REPRESENTATIVE PRIOR TO BUILDING OF FORMS OR TYING OF REINFORCING STEEL.
3. REINFORCING STEEL TO BE OBSERVED BY ENGINEER OF RECORD OR HIS DESIGNATED REPRESENTATIVE PRIOR TO PLACEMENT OF CONCRETE.
4. LAYOUT AND CONSTRUCTION OF FORMS TO BE OBSERVED BY TOWNS REPRESENTATIVE.
5. CONCRETE MIX DESIGN TO BE REVIEWED BY ENGINEER OF RECORD.

PRODUCTS - CONCRETE:
1. COMPRESSIVE STRENGTH (28-DAY) 5,000 PSI.
2. NORMAL-WEIGHT AGGREGATE.
3. MAXIMUM SIZE AGGREGATE: 3/4 INCH.
4. OTHER REQUIREMENTS PER IN SECTION 03 30 00 - CAST IN PLACE CONCRETE.

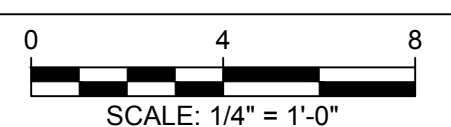
EXECUTION - CONCRETE:
1. REMOVE STANDING WATER FROM SUBGRADE BEFORE CONCRETE IS PLACED.
2. CONSTRUCT AND PERFORM ALL OTHER ACTIVITIES RELATED TO THE CONSTRUCTION OF THE STRUCTURE FORMWORK, PLACE REINFORCEMENT AND OTHER EMBEDDED ITEMS. PLACE AND CURE CONCRETE STRIP FORM/REINFORCED CONCRETE CANTILEVER RETAINING WALL IN ACCORDANCE WITH SECTION 03 30 00 - CAST-IN-PLACE CONCRETE.
3. HORIZONTAL REINFORCEMENT IS TO BE CONTINUOUS THROUGH TURNING POINTS FOR A FULL CLASS B LAP SPLICE LENGTH ON EACH SIDE.
4. STEM REINFORCING TO CONSIST OF SCHEDULE SHOWN IN SECTION A IN THE WALL HEIGHT TRANSITION ZONES.

DRAIN HOLES:
1. INSTALL 4" Ø DRAIN HOLES @ 10'-0" O.C. WITH A MINIMUM OF 0.5% GRADE TOWARD RIVER.
2. INSTALL DRAIN HOLES @ EL. 168' ALONG THE ENTIRE LENGTH OF WALL.
3. SUBMIT A CUT SHEET FOR THE CAST IN DRAIN HOLE LINER TO THE ENGINEER OF RECORD FOR REVIEW AND ACCEPTANCE PRIOR TO INCORPORATING INTO THE WORK.

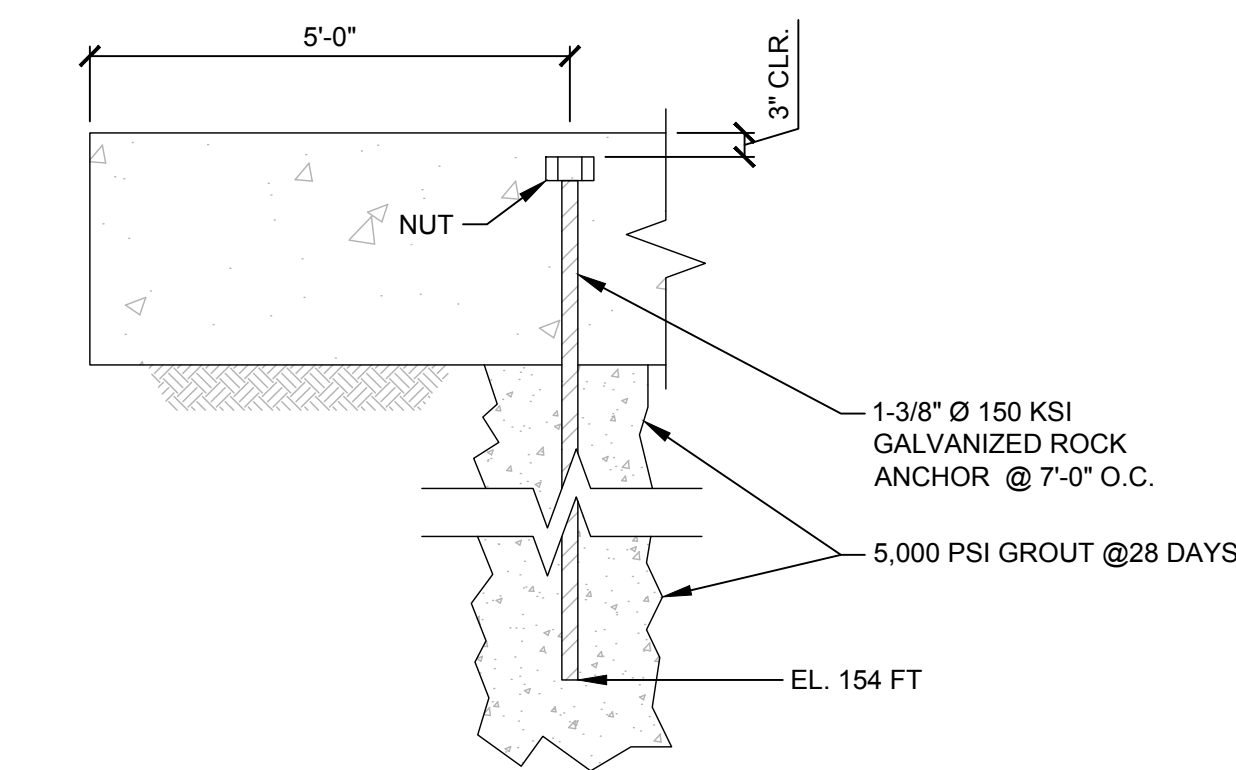
WATERSTOP:
1. FURNISH ADEKA KM-3030 AND ADEKA ULTRASEAL P-201 WATERSTOP OR ENGINEER OF RECORD APPROVAL EQUIVALENT.
2. INSTALL WATERSTOP PER ALL MANUFACTURER RECOMMENDED PROCEDURES AND REQUIREMENTS.



2 DETAIL
12 RETAINING WALL DRAINAGE



NOTES:
1. RETAINING WALL REINFORCEMENT AND ROCK ANCHORS OMITTED FOR CLARITY.
2. DRAINAGE STONE TO BE FULLY WRAPPED ON ALL SIDES IN GEOTEXTILE WITH A MINIMUM 1" LAP AT ALL SEAMS.
3. STAGGER SPLICES AND LOCATE WEEP HOLES AWAY FROM SPLICES.



3 DETAIL
ROCK ANCHOR



NOTES:
1. RETAINING WALL REINFORCING STEEL OMITTED FOR CLARITY.

NO.	DATE	ISSUE/REVISION	APP
C	4/3/2017	For Bidding Purposes Only	CRP
B	3/13/2017	95% Design	CRP
A	1/27/2017	65% Design	CRP
NO.	DATE	ISSUE/REVISION	APP

Designed: C. PRAY
Checked: M. O'NEIL
Drawn: D. EDDY
Submitted By: C. PRAY
P.E. Number: 27740



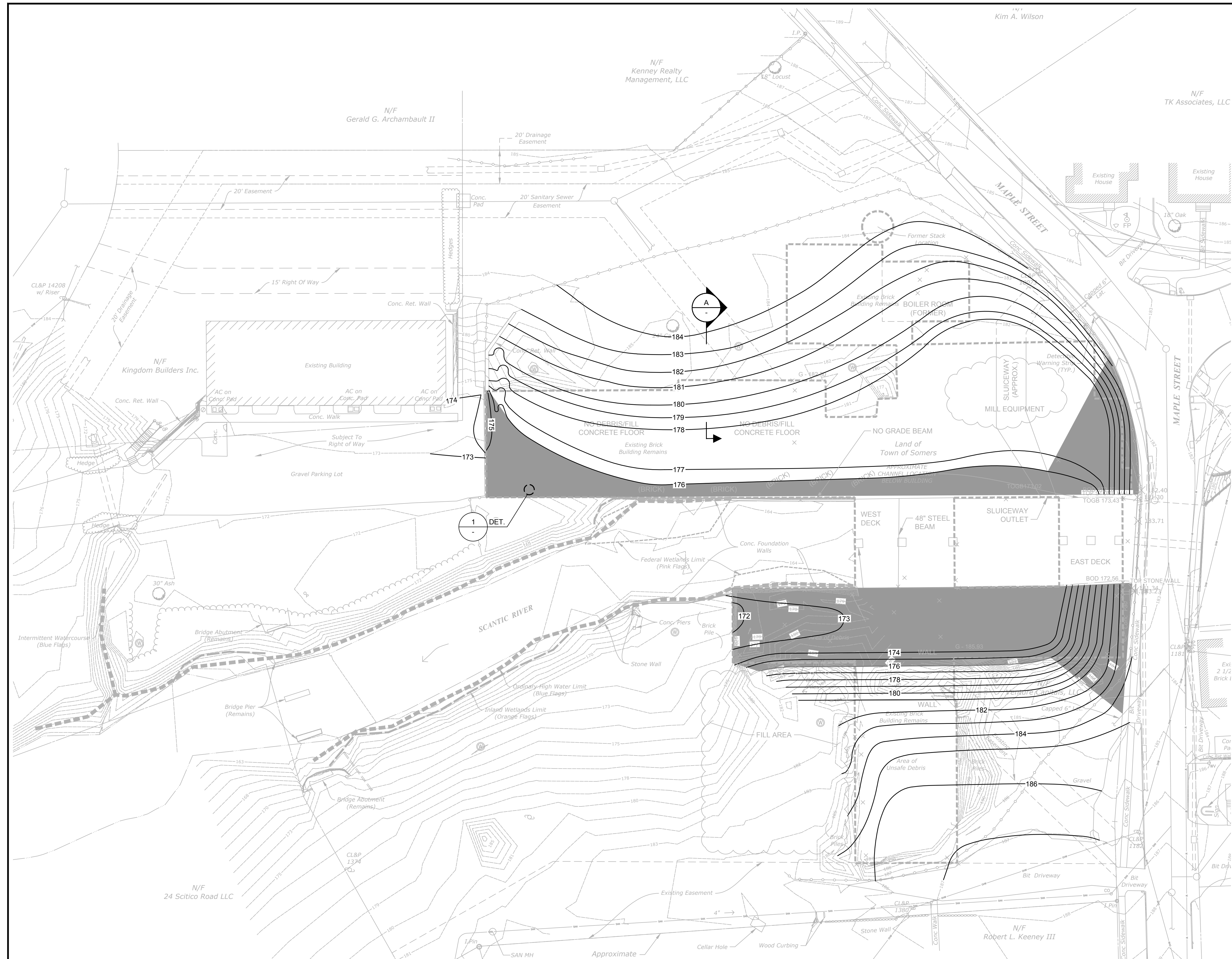
GEI Project 1610349

For Bidding Purposes Only

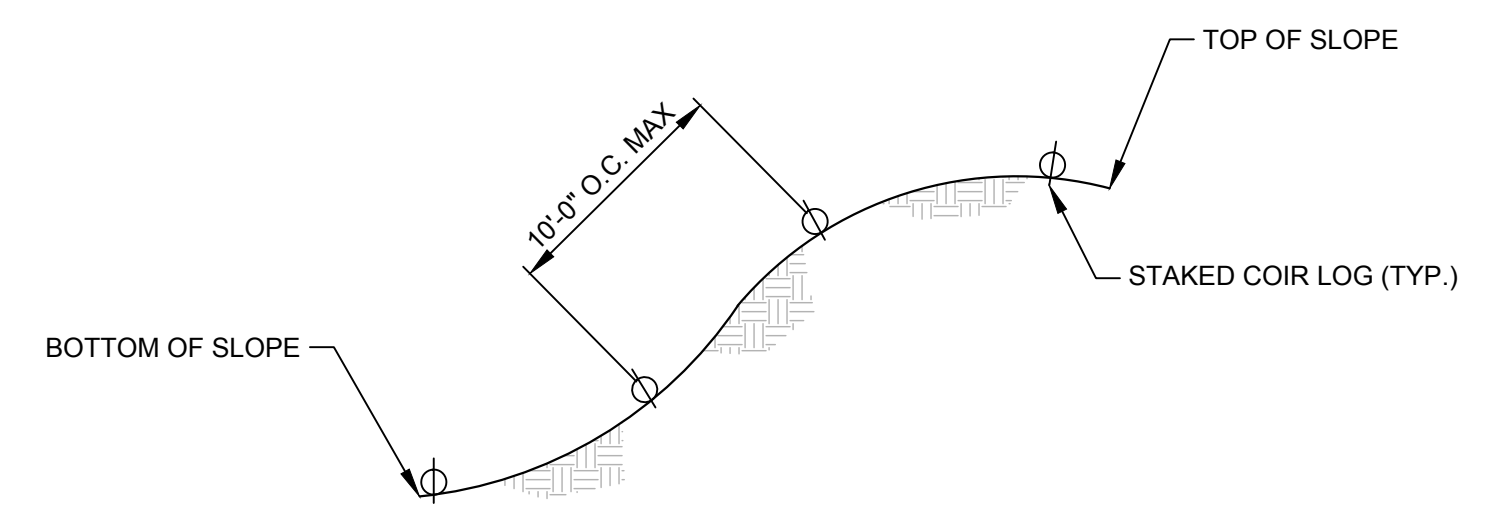
Somersville Mill
Somers, Connecticut

RETAINING WALL
DETAILS

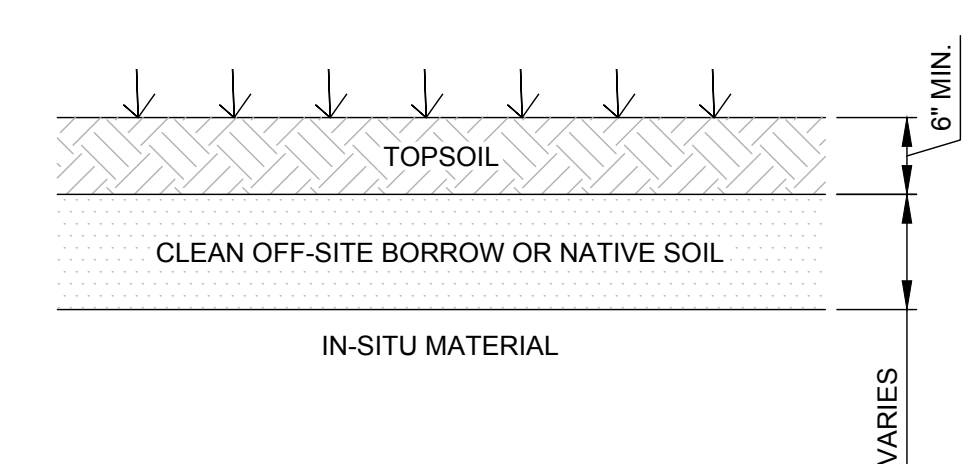
DWG. NO.
13
SHEET NO.
13 OF 15



- LEGEND:**
- RESTORATION CONTOUR
 - MIRAMAT EROSION CONTROL BLANKET
- NOTES:**
- PLACE MIRAMAT OR TOWN REPRESENTATIVE APPROVED EQUIVALENT AT THE LOCATIONS NOTED.
 - COVER ALL SEEDED AREAS WITH HAY AND JUTE MESH.
 - PLACE COIR LOGS ALONG THE FULL WIDTH OF THE SLOPE AT THE FOLLOWING LOCATIONS:
 - BOTTOM OF SLOPE
 - TOP OF SLOPE
 - 10' O.C. BETWEEN THE TOP AND BOTTOM OF THE SLOPE.
 - STAKE ALL COIR LOGS AND JUTE MESH AS DIRECTED BY THE TOWN'S REPRESENTATIVE.



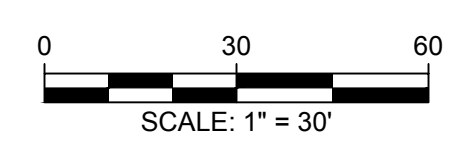
A SECTION
COIR LOG PLACEMENT
SCALE: N.T.S.



1 DETAIL
SURFACE RESTORATION

NOTES:
1. MIRAMAT COVER NOT SHOWN FOR CLARITY.

For Bidding Purposes Only



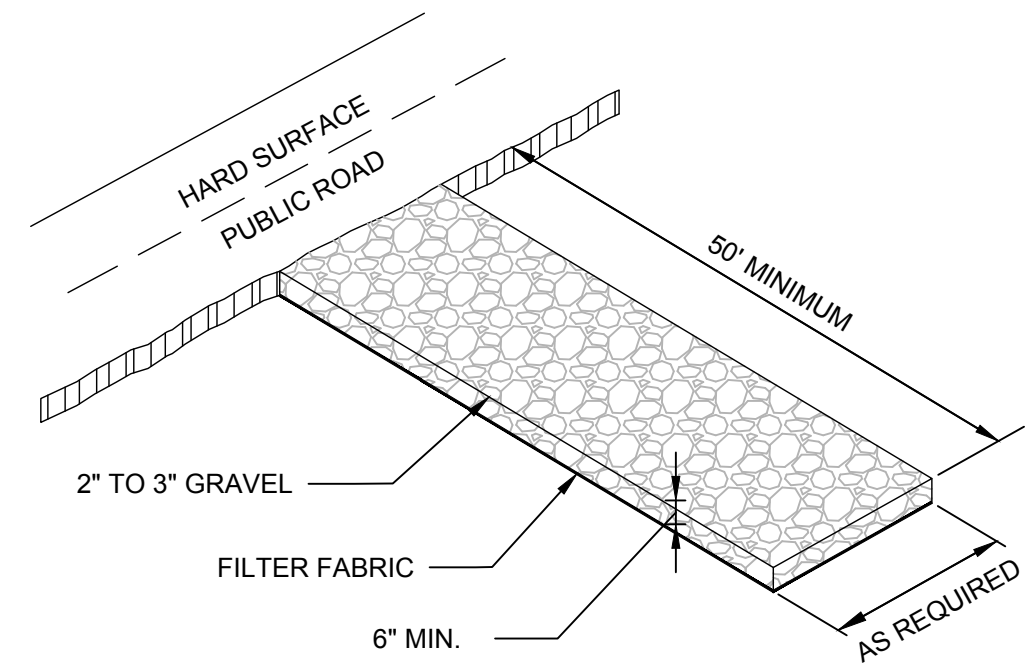
Attention:				
	C	4/3/2017	For Bidding Purposes Only	CRP
	B	3/13/2017	95% Design	CRP
	A	1/27/2017	65% Design	CRP
	NO.	DATE	ISSUE/REVISION	APP

Designed:	C. PRAY
Checked:	M. O'NEIL
Drawn:	D. EDDY
Submitted By:	C. PRAY
P.E. Number:	27740

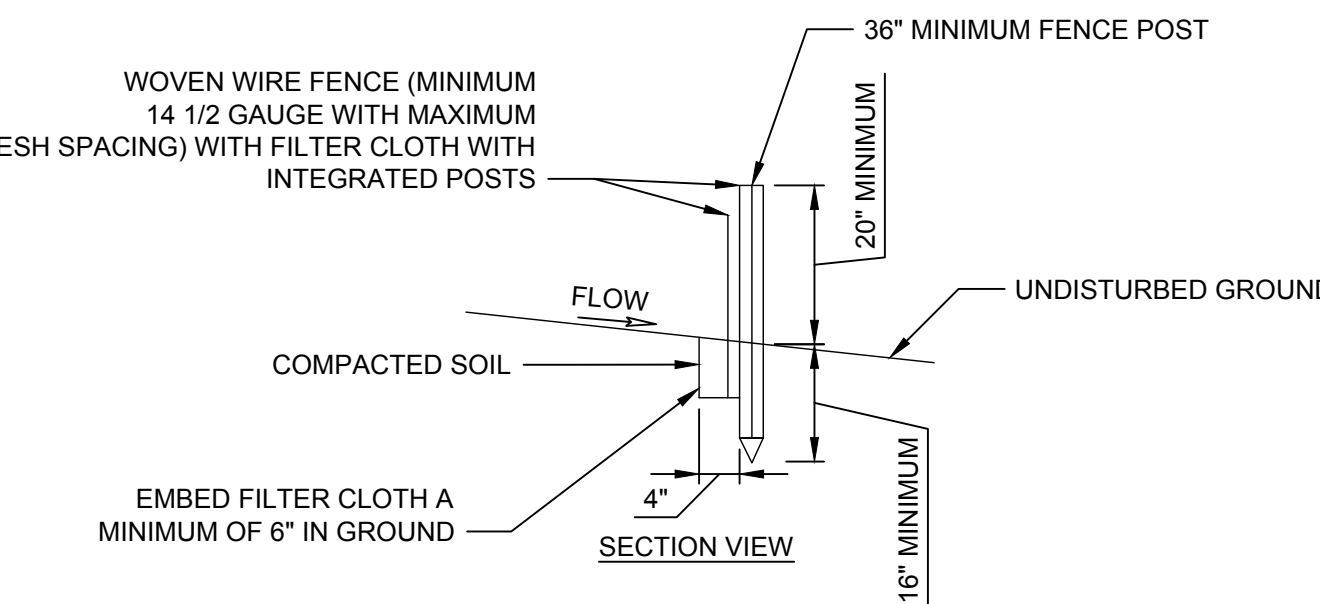
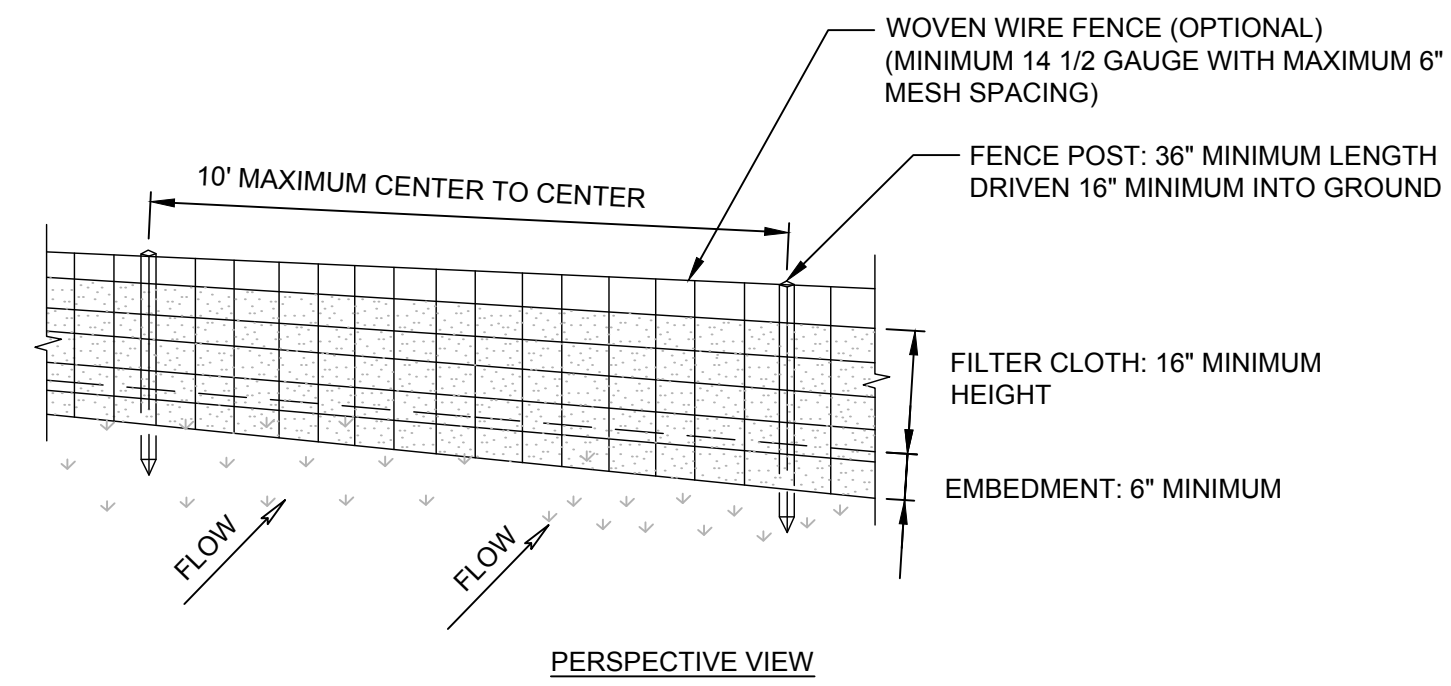


GEI Project 1610349

Somersville Mill Somers, Connecticut	DWG. NO. 14
RESTORATION COVER PLAN	SHEET NO. 14 OF 15



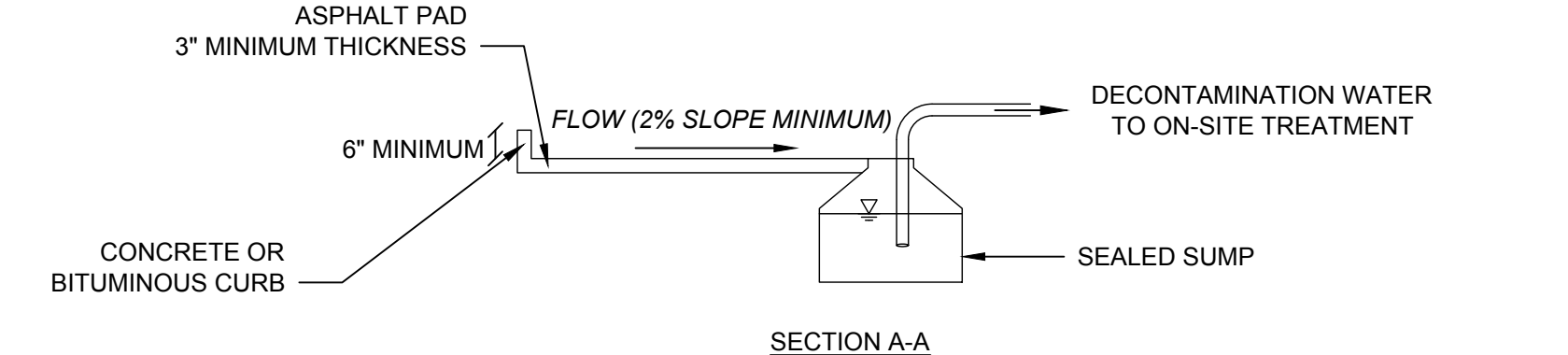
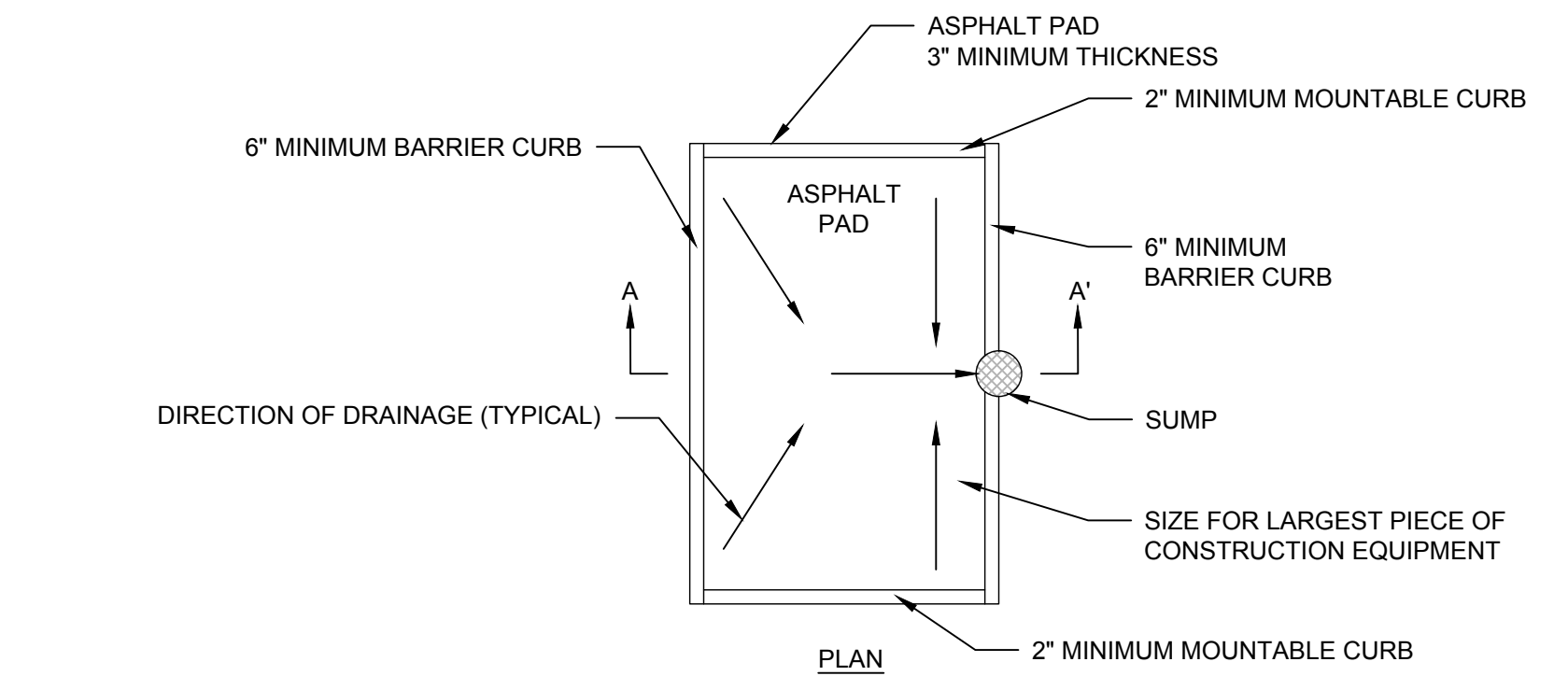
1 **DETAIL**
4 **ANTI-TRACKING PAD**
SCALE: N.T.S.



2 **DETAIL**
4 **WOVEN SILT FENCE / TURTLE BARRIER**
SCALE: N.T.S.

WOVEN SILT FENCE NOTES:

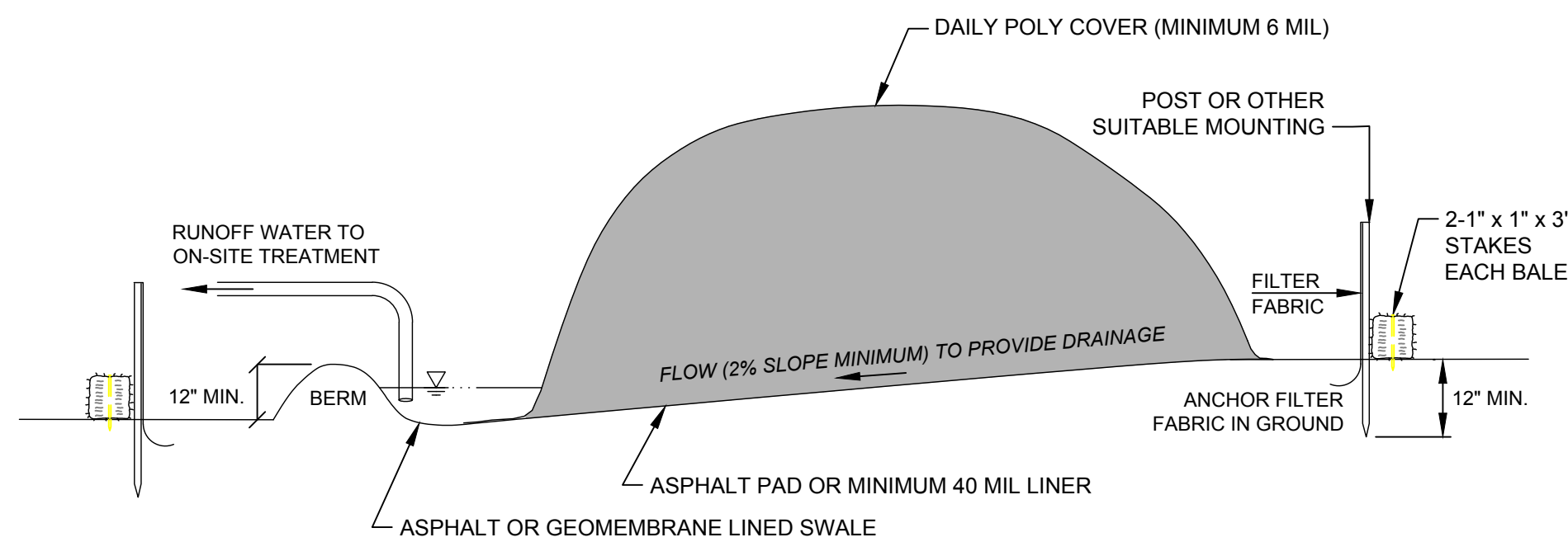
1. FASTEN WOVEN WIRE FENCE SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FASTEN FILTER CLOTH SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24-INCHES AT TOP AND MID-SECTION. FENCE SHALL BE WOVEN WIRE, 14 1/2 GAUGE, 6-INCH MAXIMUM MESH OPENING.
3. OVERLAP ADJACENT FILTER CLOTH SIX INCHES AND FOLD. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. PERFORM MAINTENANCE AS NEEDED AND REMOVE MATERIAL WHEN "BULGES" DEVELOP.
6. FILTER FABRIC WITH INTEGRATED STAKES MAY BE USED INSTEAD OF WIRE FENCE.



3 **DETAIL**
4 **EQUIPMENT DECONTAMINATION PAD**
SCALE: N.T.S.

DECONTAMINATION NOTES:

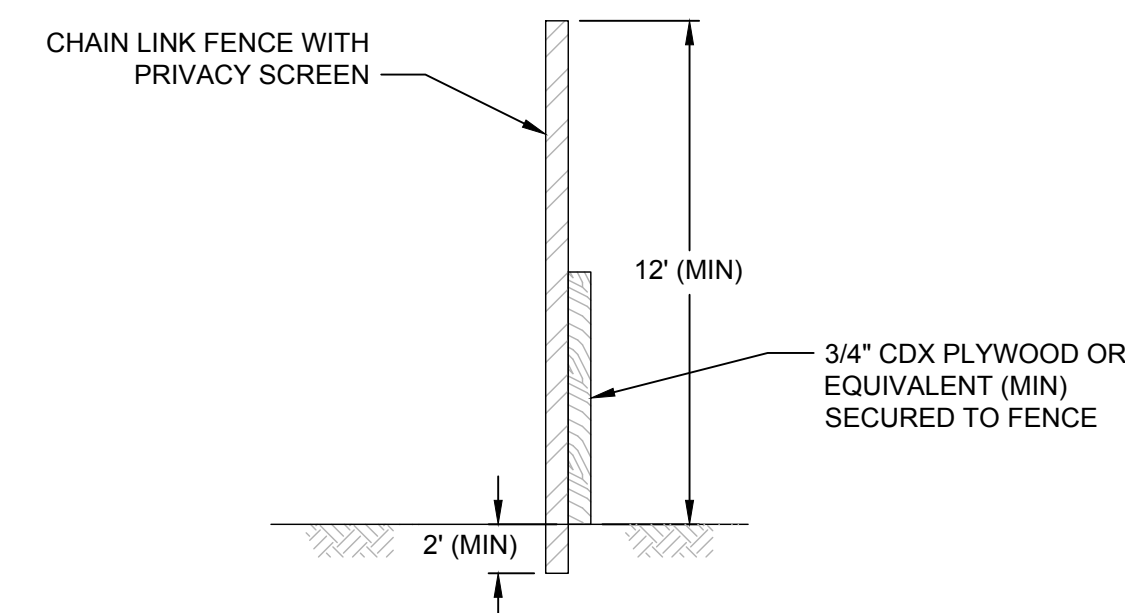
1. ALL VEHICLES EXITING EXCLUSION ZONE MUST PASS THROUGH THE CONTAMINANT REDUCTION ZONE. USE EQUIPMENT DECONTAMINATION PAD AS REQUIRED BY THE TOWN'S REPRESENTATIVE. CONTROL OVER SPRAY.



4 **DETAIL**
4 **STOCKPILE PAD**
SCALE: N.T.S.

PAD NOTES:

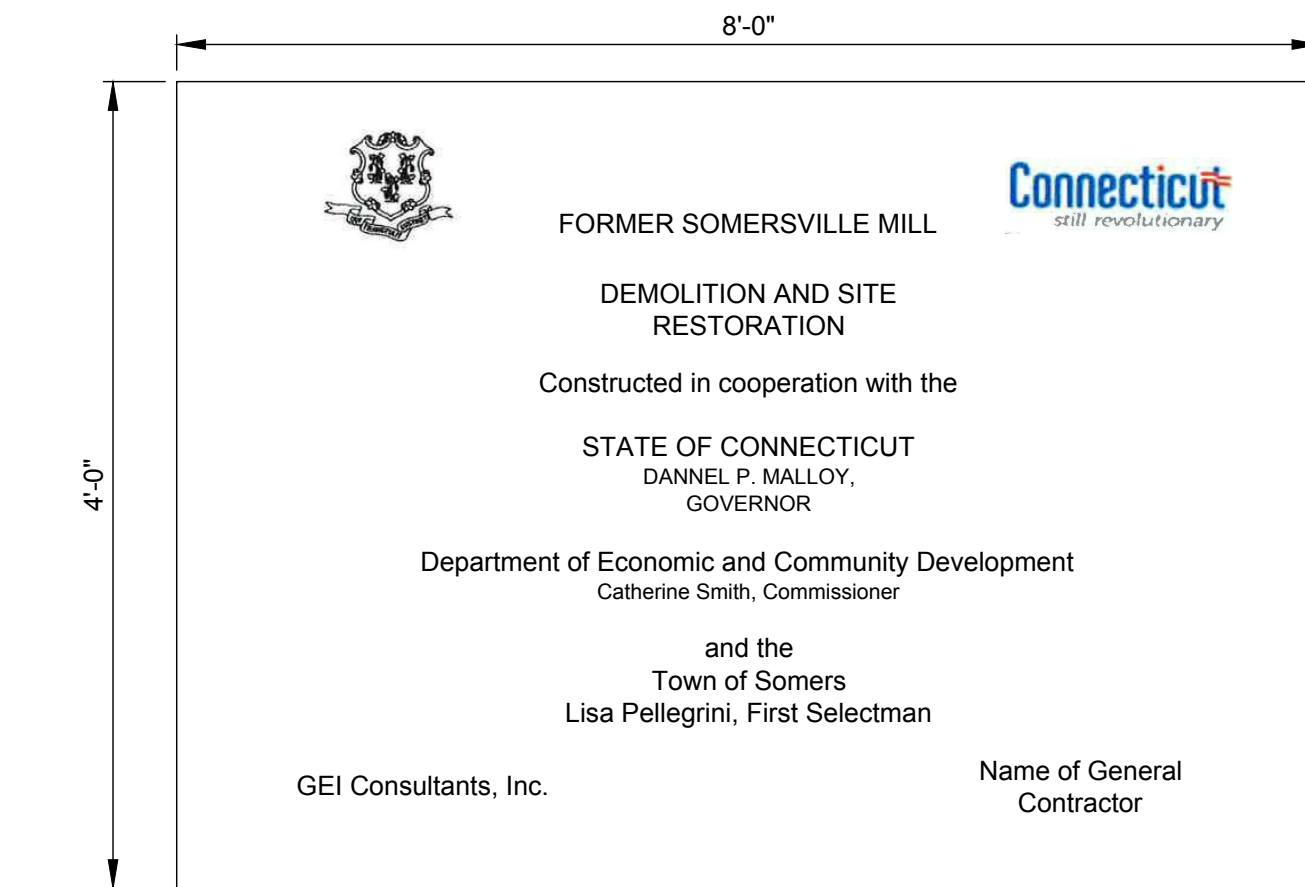
1. SOIL/DEBRIS STOCKPILE PAD DESIGN IS CONCEPTUAL. FINAL DESIGN WILL MEET THE INTENT OF THE CONCEPT, AS APPROVED BY THE TOWN'S REPRESENTATIVE.
2. STOCKPILE PAD LOCATIONS MUST BE APPROVED IN ADVANCE BY THE TOWN'S REPRESENTATIVE.
3. DO NOT CONSTRUCT STOCKPILES WITHIN 50 FEET OF THE WETLAND AREA.



5 **DETAIL**
4 **DEMOLITION SHIELDING**
SCALE: N.T.S.

DEMOLITION SHIELDING NOTES:

1. CONSTRUCT DEMOLITION SHIELD WITH 11 GAUGE FABRIC (ASTM A-392) AND 16 GAUGE FRAMEWORK (>2").
2. THE REQUIREMENTS FOR SHIELDING ARE TO BE REGARDED AS A MINIMUM AND THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL NECESSARY MEASURES TO PROTECT ADJACENT STRUCTURES/FEATURES FROM DAMAGE.



6 **DETAIL**
4 **PROJECT SIGN - ECONOMIC & COMMUNITY DEVELOPMENT**
SCALE: N.T.S.

SIGN NOTES:

- SIGN PANEL: 3/4" MDO-EXT-APA PLYWOOD SUPPORTED WITH (2) 4x4 TREATED WOOD COLUMNS AND SECURED 4" INTO GRADE. TOP OF SIGN AT 8'-0" ABOVE GRADE.
- COLORS: ALL LETTERS AND SYMBOLS ARE TO BE ROYAL BLUE. THE BACKGROUND WILL BE WHITE ENAMEL. BACK OF PLYWOOD AND SUPPORT STRUCTURE SHALL BE PAINTED MATTE BLACK.
- TYPEFACE: HELVETICA MEDIUM
- LOCATION: SIGN MUST BE LOCATED TO BE CLEARLY VISIBLE TO THE PUBLIC.
- TIMING: INSTALL AT THE START OF CONSTRUCTION AND REMOVE AT CONSTRUCTION COMPLETION.

For Bidding Purposes Only

NO.	DATE	ISSUE/REVISION	APP
C	4/3/2017	For Bidding Purposes Only	CRP
B	3/13/2017	95% Design	CRP
A	1/27/2017	65% Design	CRP
NO.	DATE	ISSUE/REVISION	APP

Designed:	C. PRAY
Checked:	M. O'NEIL
Drawn:	D. EDDY
Submitted By:	C. PRAY
P.E. Number:	27740



GEI Project 1610349

Somersville Mill
Somers, Connecticut

SITE MANAGEMENT DETAILS

DWG. NO.
15
SHEET NO.
15 OF 15