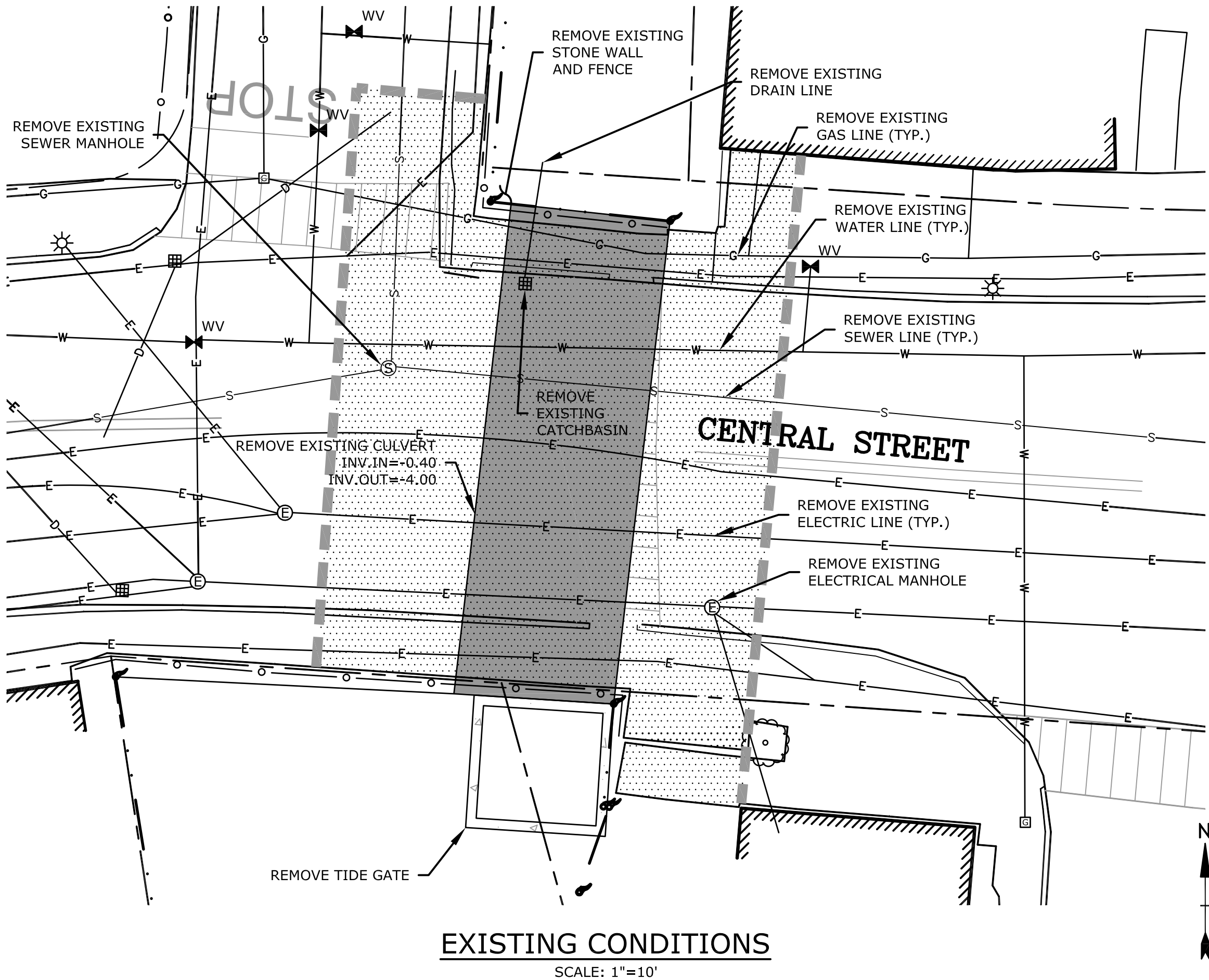
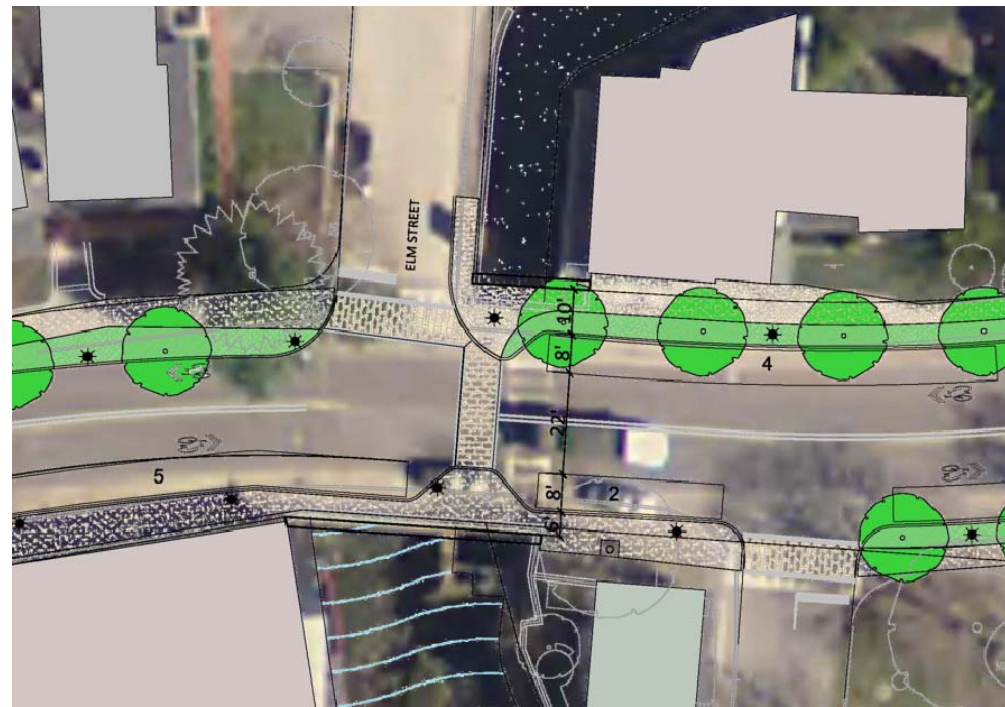


FILENAME: J:\M1476 MANCHESTER MA HYDRO STUDY\TASK 5- PLAN\PERMIT\CAD\M-1476_SITE.DWG
SAVE DATE: 1/29/2016 10:49 AM
PLOT DATE: 1/29/2016 11:02 AM



NOTES:

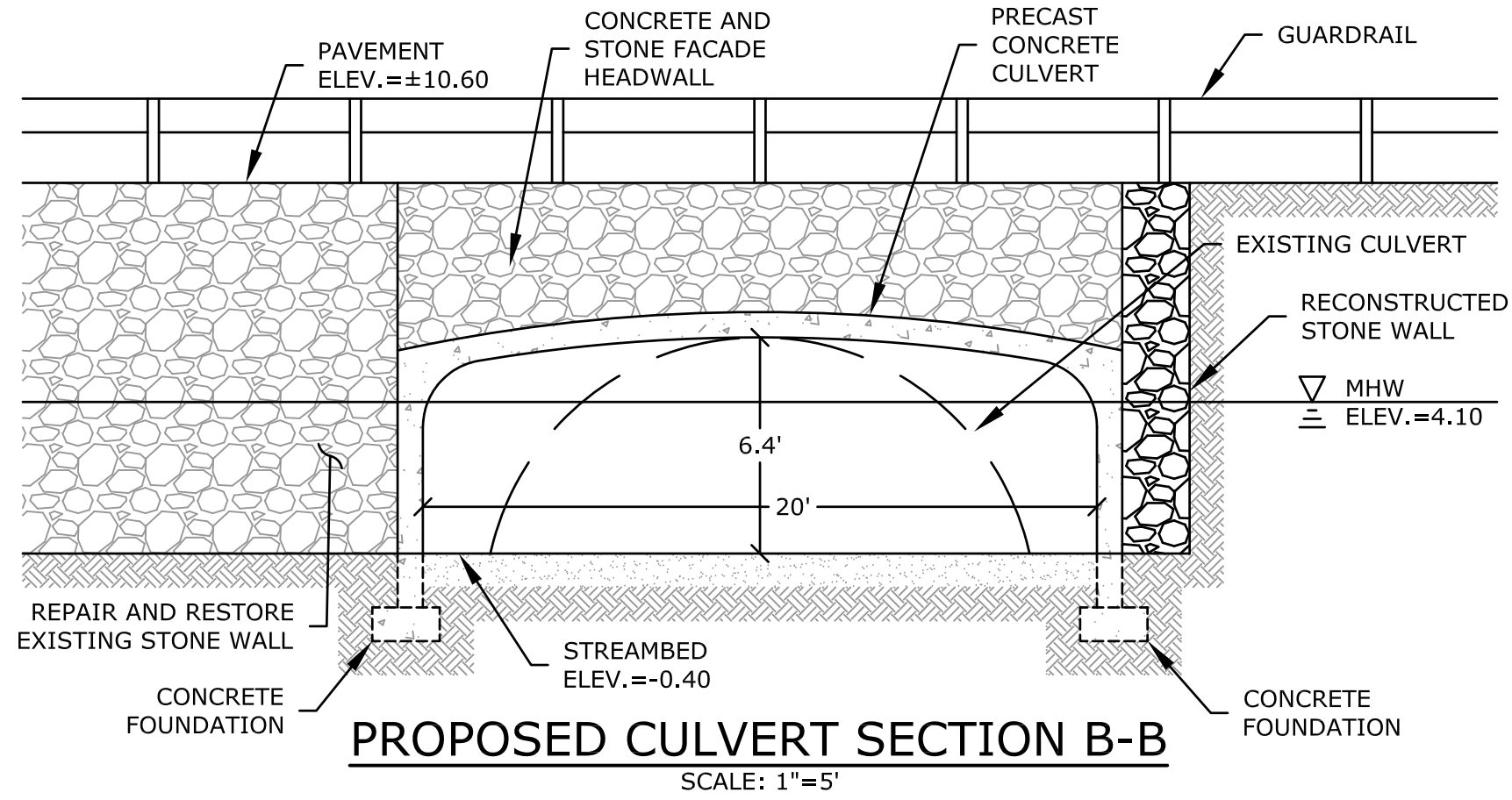
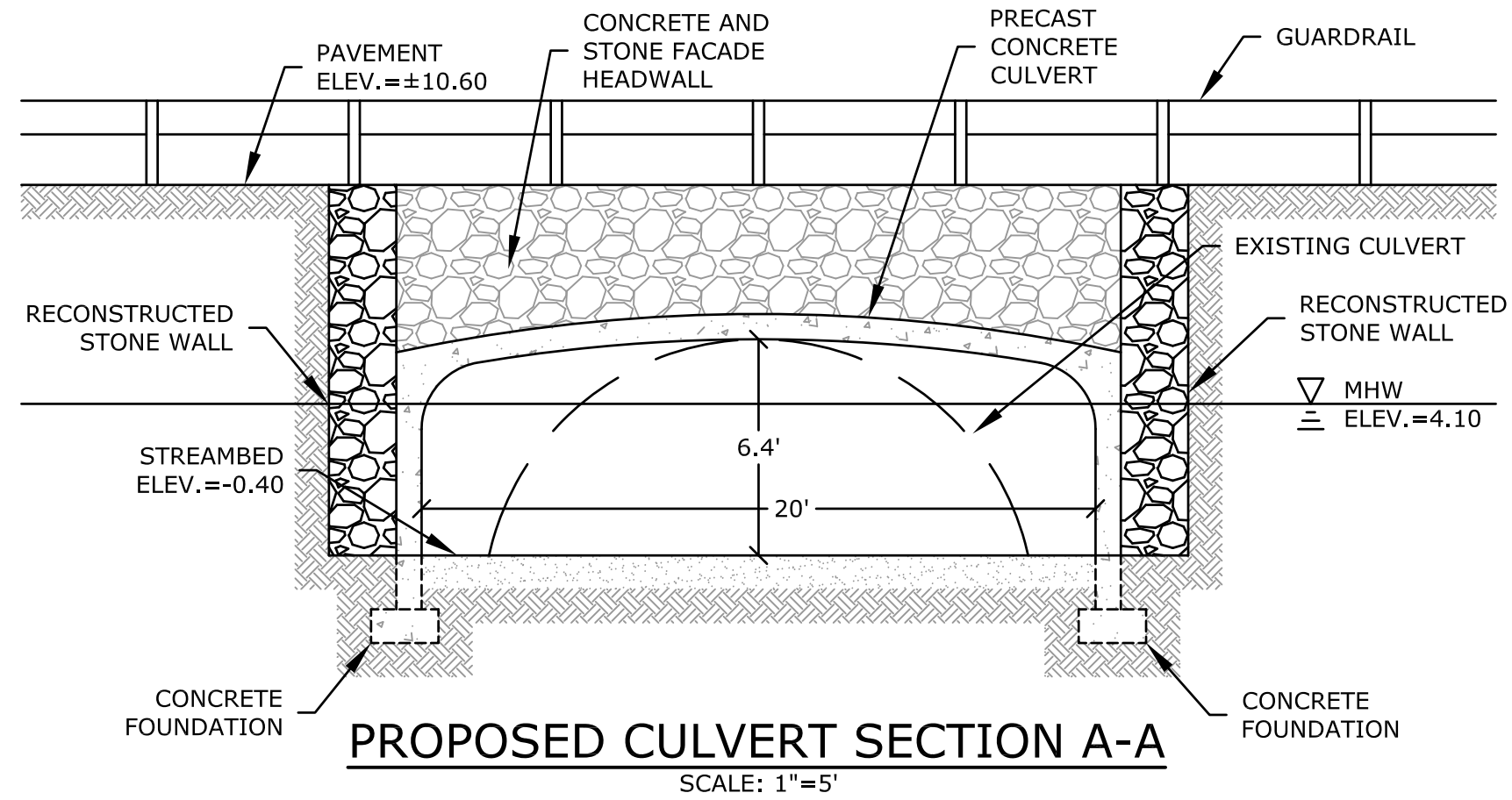
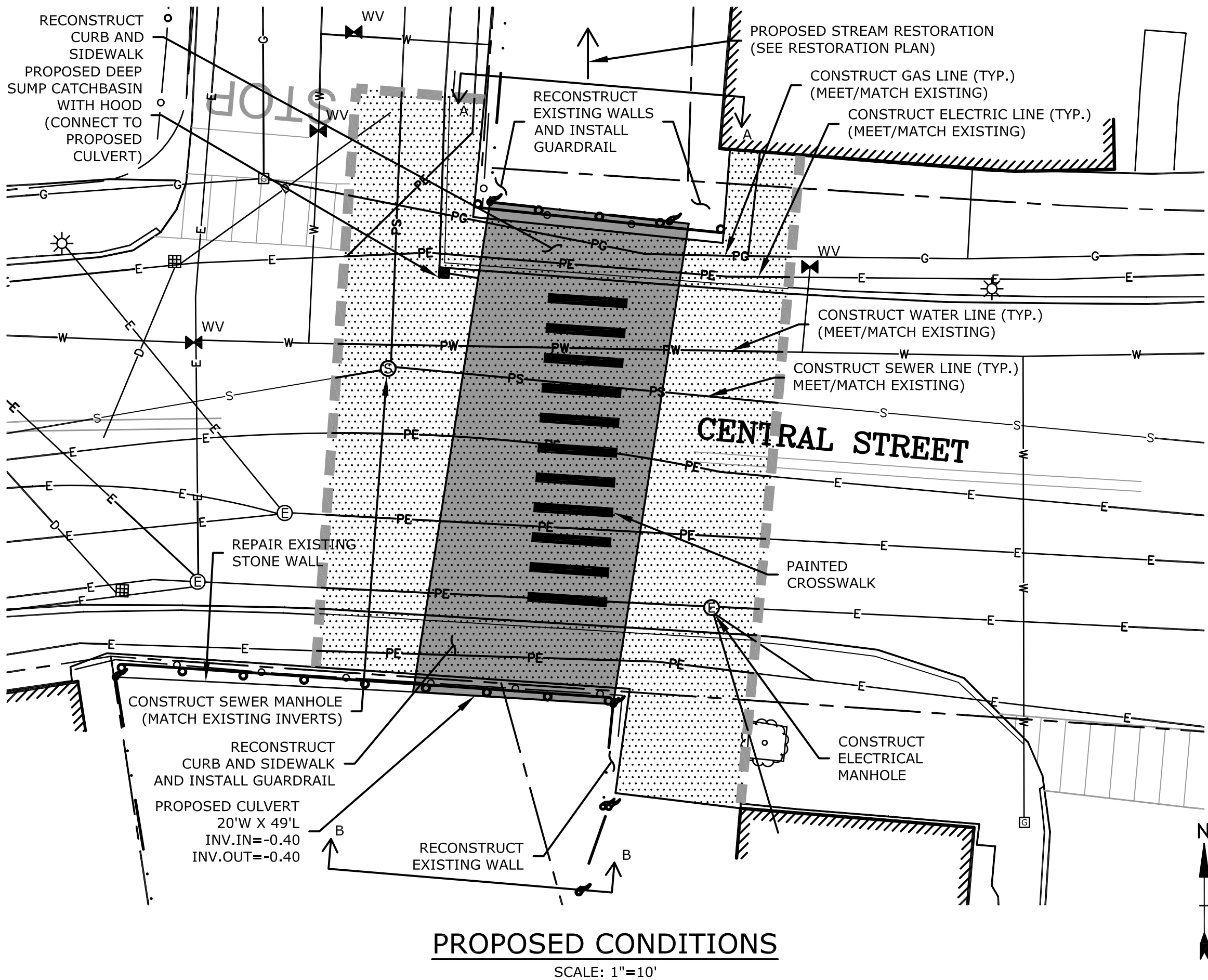
- REFERENCES:
 - CENTRAL STREET PLAN BASED ON SURVEY BY DGT SURVEY GROUP, DATED JUNE 10, 2015.
 - CULVERT INVERTS BASED ON SURVEY BY DOUCET SURVEY INC., DATED JULY 30, 2015.
- HORIZONTAL DATUM REFERENCE NAD83/2011 MASSACHUSETTS STATE PLANE.
- VERTICAL DATUM REFERENCE NAVD88.
- WETLAND DELINEATION BY RIMMER ENVIRONMENTAL CONSULTING, LLC IN APRIL OF 2015.
- PROJECT SHOULD BE COORDINATED WITH INTERSECTION AND STREET IMPROVEMENTS, INCLUDING WIDENING CENTRAL STREET TO IMPROVE SIDEWALKS, PARKING, TRAVEL LANES, AND CROSSWALKS. CURRENTLY, CENTRAL STREET (INCLUDING PARKING AND SIDEWALKS) IS APPROXIMATELY 46' WIDE. INCREASING THE FULL WIDTH TO 50' WOULD ALLOW MINIMUMS FOR TRAVEL, PARKING AND SIDEWALKS TO BE MET. INCREASING THE FULL WIDTH TO 54' WILL ALSO ALLOW STREET TREES AND ADDITIONAL PARKING. THERE ARE MANY OPTIONS FOR WIDENING CENTRAL STREET. THE PHOTOGRAPH BELOW SHOWS ONE CONCEPT TO WIDEN ON BOTH THE SOUTH AND NORTH SIDES OF THE ROAD, RESULTING IN A FULL WIDTH OF 54'.



CENTRAL STREET WIDENING

LEGEND

---	PROPERTY LINE
-.-.-	EDGE OF WETLAND
D	EXISTING DRAIN LINE
OHW	EXISTING OVERHEAD WIRE
E	EXISTING UNDERGROUND ELECTRIC LINE
G	EXISTING GAS LINE
S	EXISTING SEWER LINE
W	EXISTING WATER LINE
PE	PROPOSED UNDERGROUND ELECTRIC LINE
PG	PROPOSED GAS LINE
PS	PROPOSED SEWER LINE
PW	PROPOSED WATER LINE
---	PROPOSED GUARDRAIL
---	LIMIT OF PAVEMENT TO BE REMOVED
---	LIMIT OF PROPOSED PAVEMENT
---	CULVERT
---	EXISTING BUILDING
---	EXISTING CATCHBASIN
---	EXISTING LIGHT POLE
---	EXISTING ELECTRICAL MANHOLE
---	EXISTING SEWER MANHOLE
---	EXISTING WATER VALVE
---	EXISTING GAS VALVE
---	PROPOSED CATCHBASIN
---	PROPOSED ELECTRICAL MANHOLE
---	PROPOSED SEWER MANHOLE



**CONCEPTUAL DESIGN
FOR PLANNING PURPOSES ONLY
NOT FOR CONSTRUCTION**

**Sawmill Brook
Watershed
Flood
Mitigation**

Town of
Manchester-by-
the-Sea

Manchester by the
Sea, Massachusetts

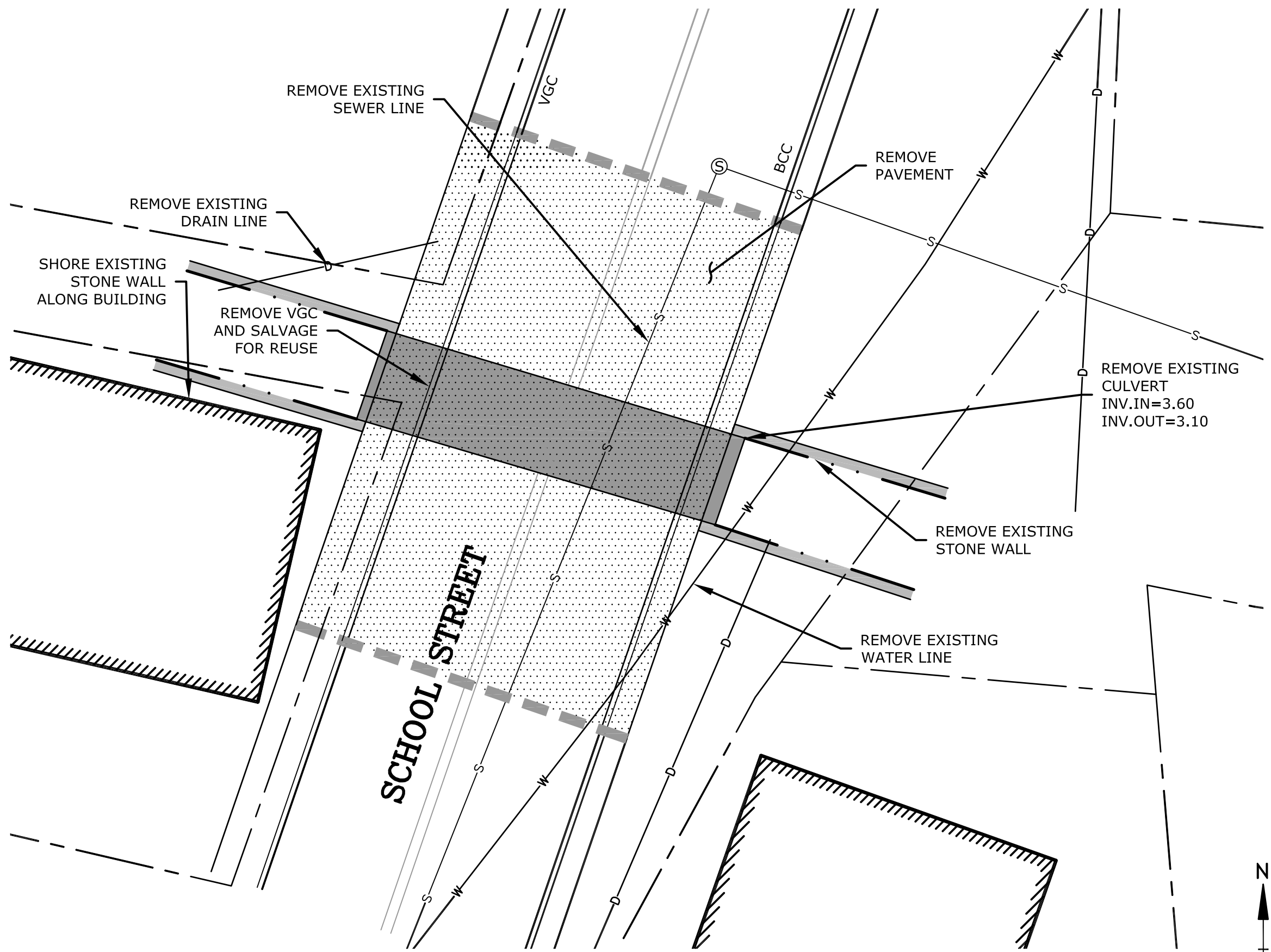
January 29, 2016

Mark	Date	Description
PROJECT NO:	M-1476-3	
FILE:	M-1476_SITE.dwg	
DRAWN BY:	TPD	
CHECKED:	JMP/GCB	
APPROVED BY:	DAM	

CENTRAL STREET
CULVERT REPLACEMENT

SCALE: AS SHOWN

FILENAME: J:\M1476 MANCHESTER MA HYDRO STUDY\TASK 5- PLANS\PERMIT\CAD\M-1476_SITE.DWG
SAVE DATE: 1/29/2016 8:29 AM
PLOT DATE: 1/29/2016 10:48 AM



EXISTING CONDITIONS

SCALE: 1"=10'

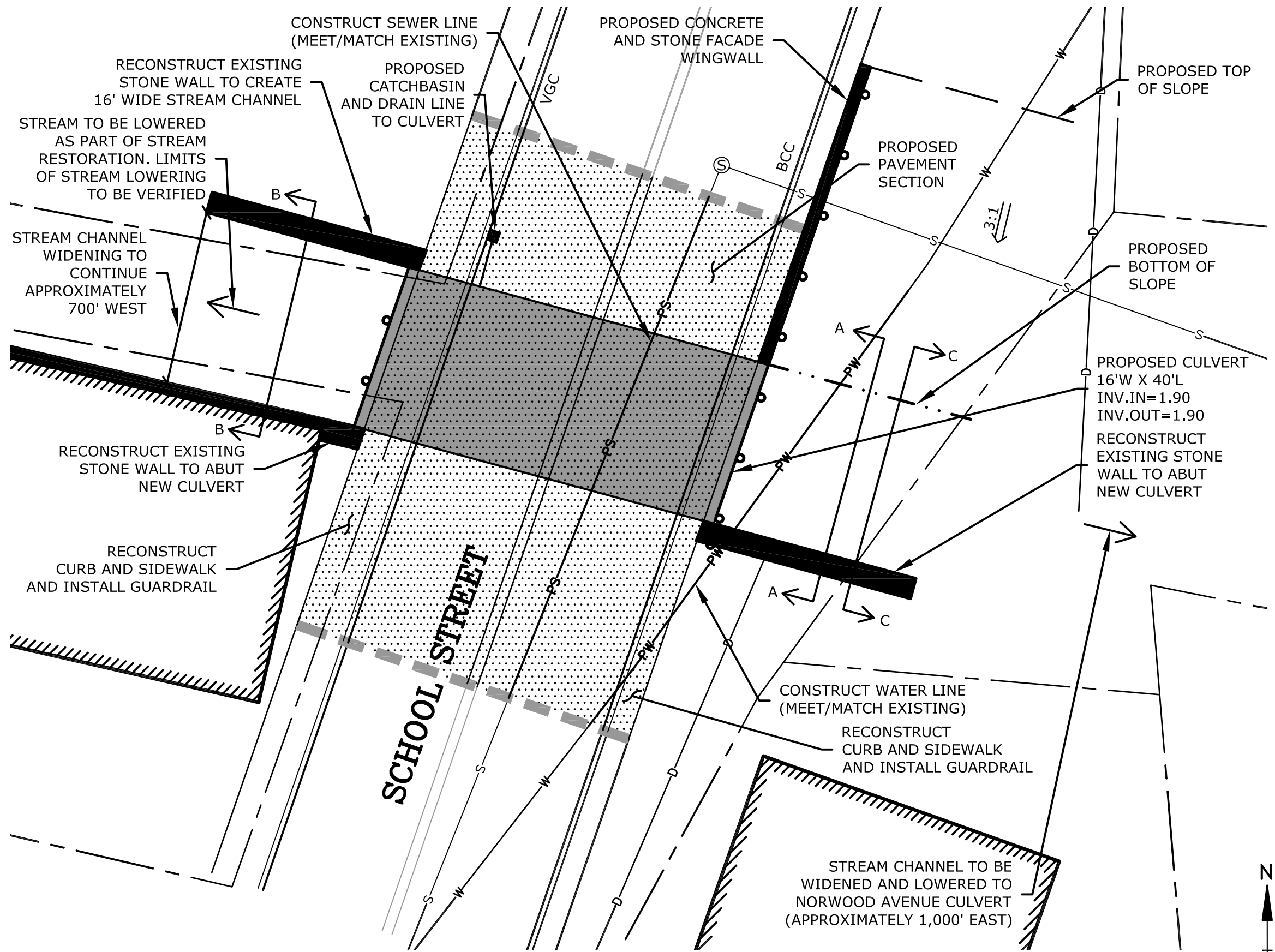
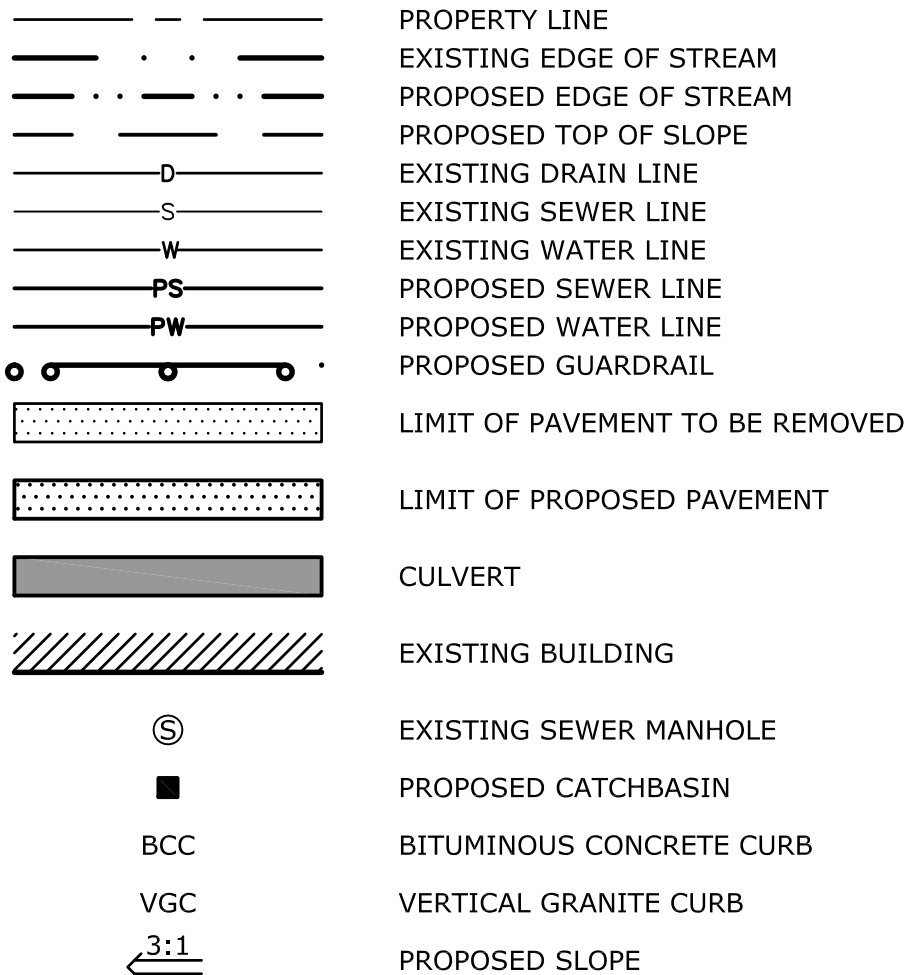
NOTES:

- REFERENCES:
 - PLAN BASED ON FIELD DATA COLLECTED BY TIGHE & BOND, INC. ON DECEMBER 16, 2015.
 - CULVERT INVERTS BASED ON SURVEY BY DOUCET SURVEY INC., DATED JULY 30, 2015.
 - UTILITIES, LOT LINES AND BUILDING LOCATIONS BASED ON GIS INFORMATION FROM THE TOWN OF MANCHESTER-BY-THE-SEA.
- HORIZONTAL DATUM REFERENCE NAD83/2011 MASSACHUSETTS STATE PLANE
- VERTICAL DATUM REFERENCE NAVD88.
- ALL LINES SHOWN ON PLAN ARE APPROXIMATE.
- STREAM LINES ARE BASED ON 2008/2009 AERIAL DATA FROM MASSGIS.
- ALL UTILITY LOCATIONS SHOULD BE VERIFIED PRIOR TO DESIGN.
- PROJECT SHOULD BE COORDINATED WITH INTERSECTION AND STREET IMPROVEMENTS, INCLUDING WIDENING SCHOOL STREET TO ACCOMMODATE A FULL WIDTH SIDEWALK ALONG THE EAST SIDE OF THE ROAD, FROM BROOK STREET TO THE EXISTING SIDEWALK NORTH OF THE CULVERT ON SCHOOL STREET, AND ADDING A CROSSWALK TO BRIDGE STREET. THE FIGURE BELOW SHOWS THE APPROXIMATE LOCATION OF THE SIDEWALK INSTALLATION AND CROSSWALK.



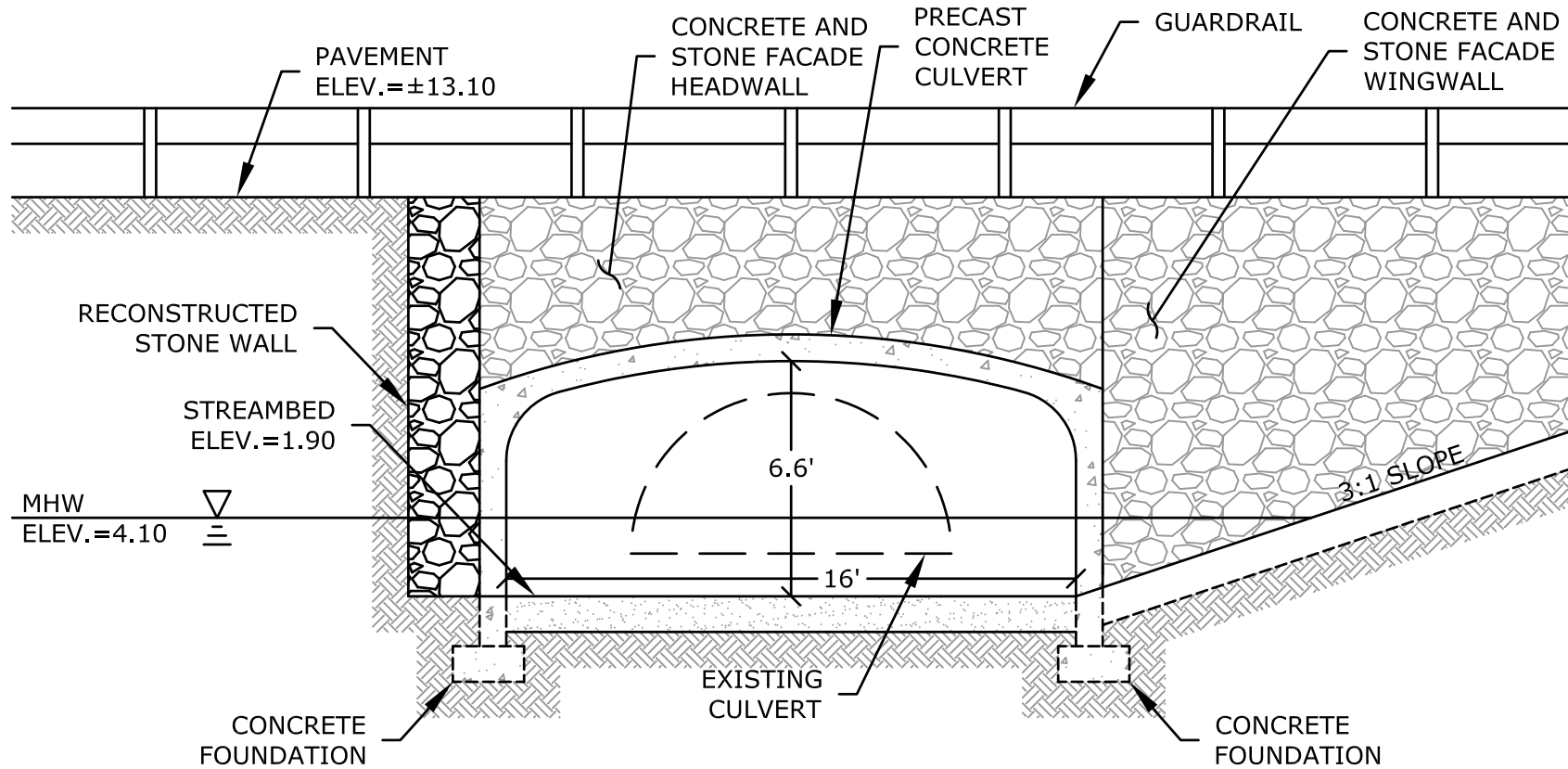
SCHOOL STREET WIDENING

LEGEND



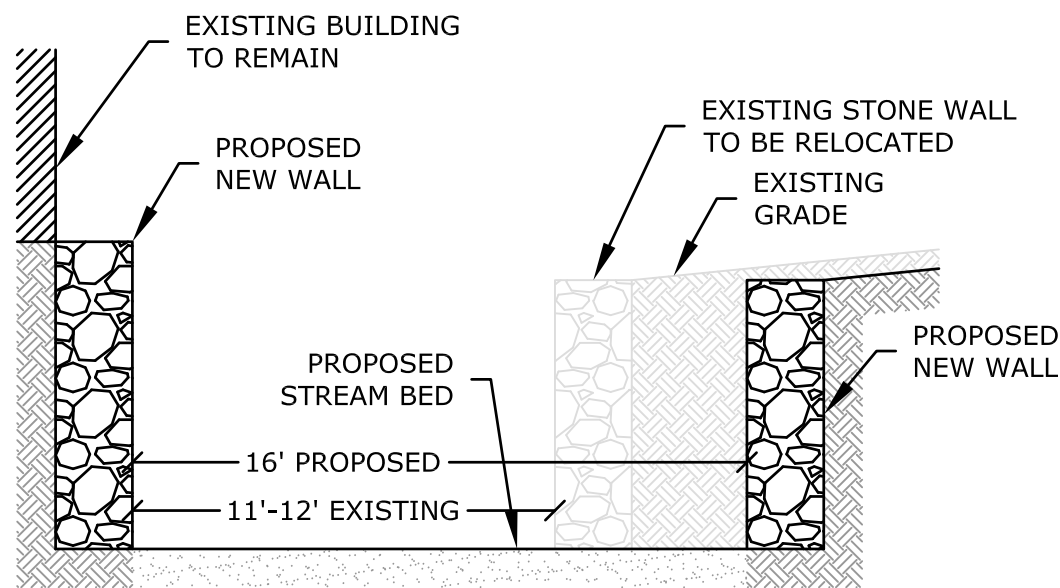
PROPOSED CONDITIONS

SCALE: 1"=10'



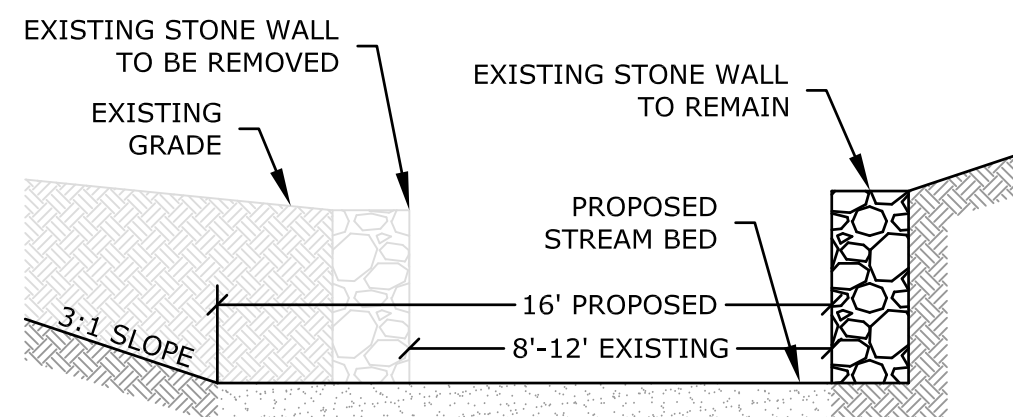
PROPOSED CULVERT SECTION A-A

SCALE: 1"=5'



STREAM SECTION B-B

SCALE: 1"=5'



STREAM SECTION C-C

SCALE: 1"=5'

CONCEPTUAL DESIGN
FOR PLANNING PURPOSES ONLY
NOT FOR CONSTRUCTION

Sawmill Brook
Watershed
Flood
Mitigation

Town of
Manchester-by-
the-Sea

Manchester by the
Sea, Massachusetts

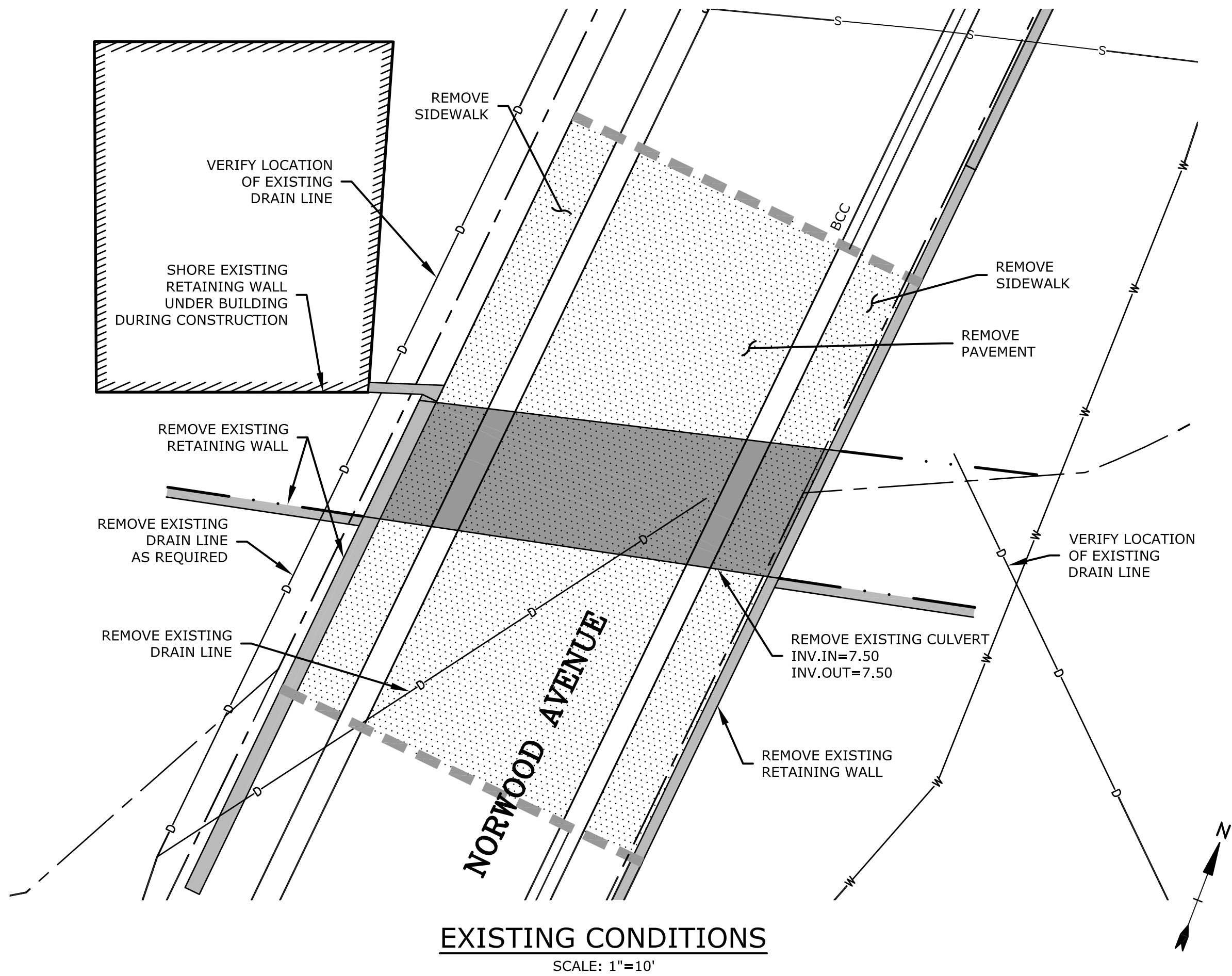
January 29, 2016

Mark	Date	Description
PROJECT NO:	M-1476-3	
FILE:	M-1476_SITE.dwg	
DRAWN BY:	TPD	
CHECKED BY:	JMP/GCB	
APPROVED BY:	DAM	

SCHOOL STREET
CULVERT REPLACEMENT

SCALE: AS SHOWN

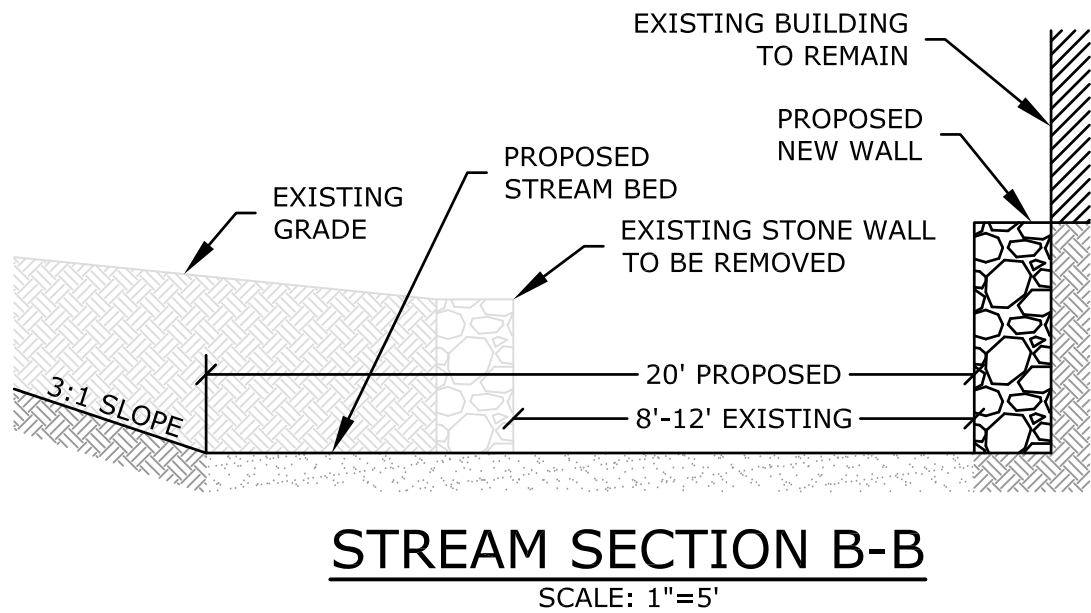
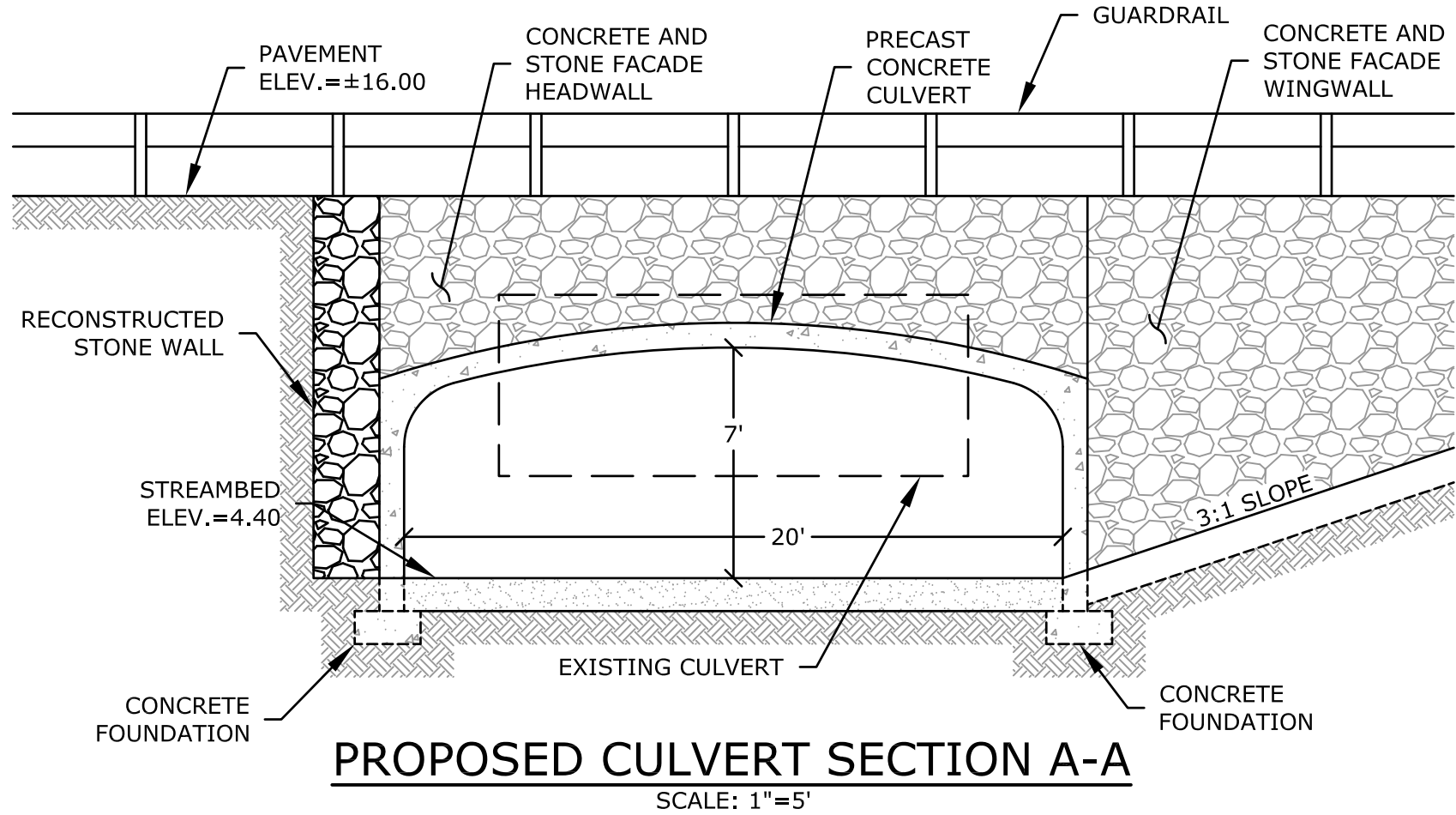
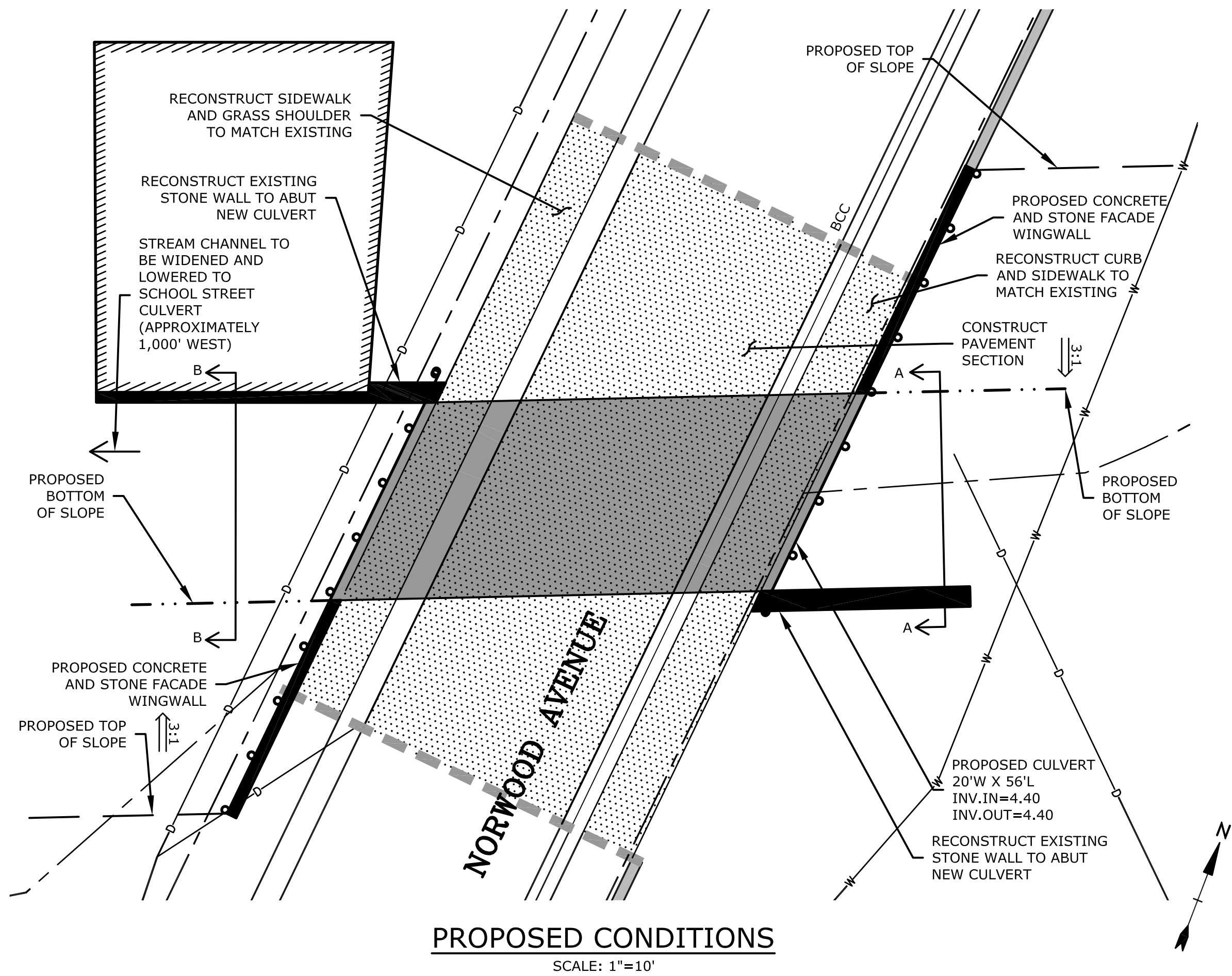
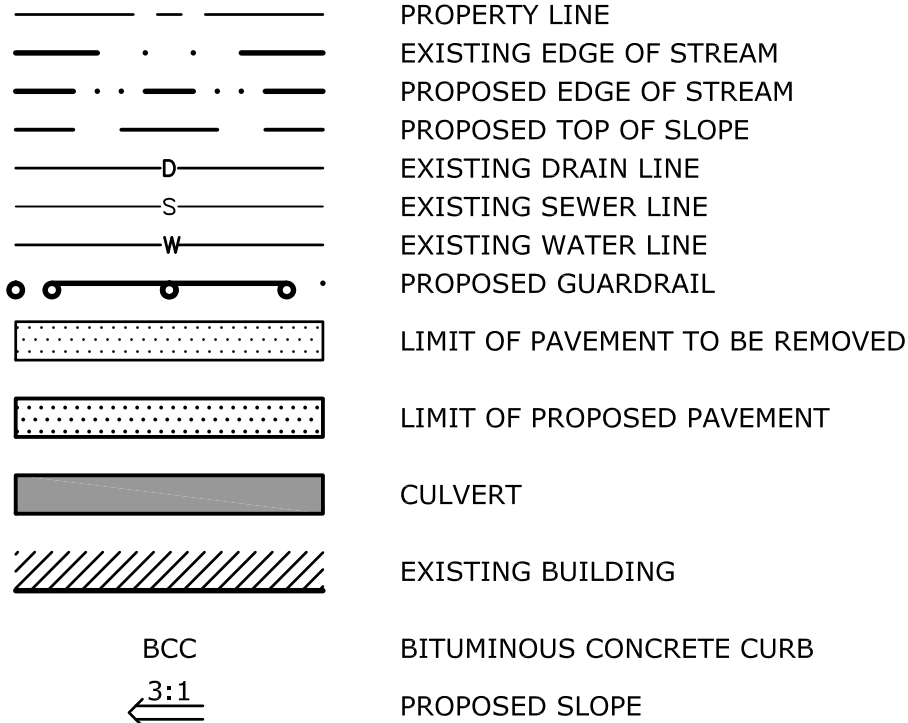
FILENAME: J:\M\1476 MANCHESTER MA HYDRO STUDY\TASK 5- PLANS\PERMIT\CAD\M-1476_SITE.DWG
SAVE DATE: 1/29/2016 8:29 AM
PLOT DATE: 1/29/2016 10:48 AM



NOTES:

- REFERENCES:
 - PLAN BASED ON FIELD DATA COLLECTED BY TIGHE & BOND, INC. ON DECEMBER 16, 2015.
 - CULVERT INVERTS BASED ON SURVEY BY DOUCET SURVEY INC., DATED JULY 30, 2015.
 - UTILITIES, LOT LINES AND BUILDING LOCATIONS BASED ON GIS INFORMATION FROM THE TOWN OF MANCHESTER-BY-THE-SEA.
- HORIZONTAL DATUM REFERENCE NAD83/2011 MASSACHUSETTS STATE PLANE.
- VERTICAL DATUM REFERENCE NAVD88.
- ALL LINES SHOWN ON PLAN ARE APPROXIMATE.
- ALL UTILITY LOCATIONS SHOULD BE VERIFIED PRIOR TO DESIGN.

LEGEND



**CONCEPTUAL DESIGN
FOR PLANNING PURPOSES ONLY
NOT FOR CONSTRUCTION**

**Sawmill Brook
Watershed
Flood
Mitigation**

Town of
Manchester-by-
the-Sea

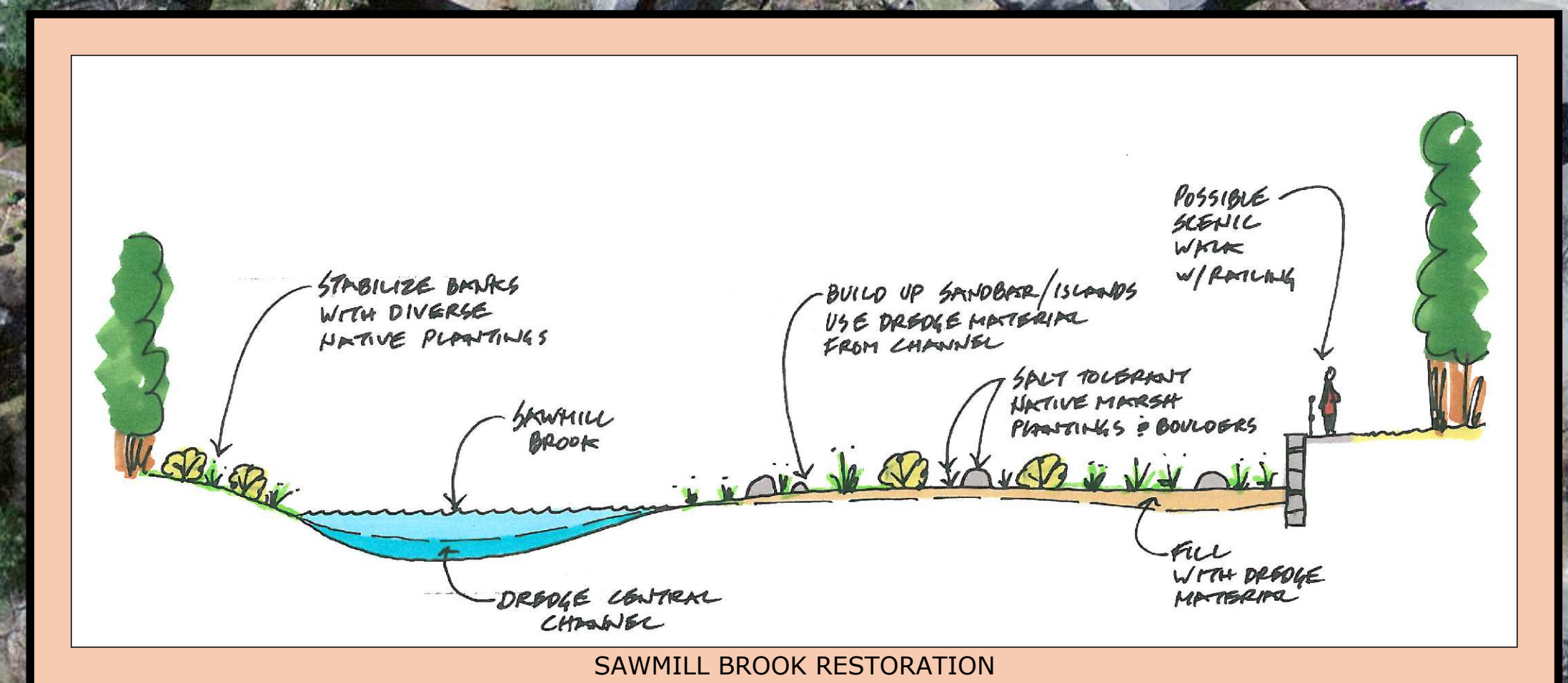
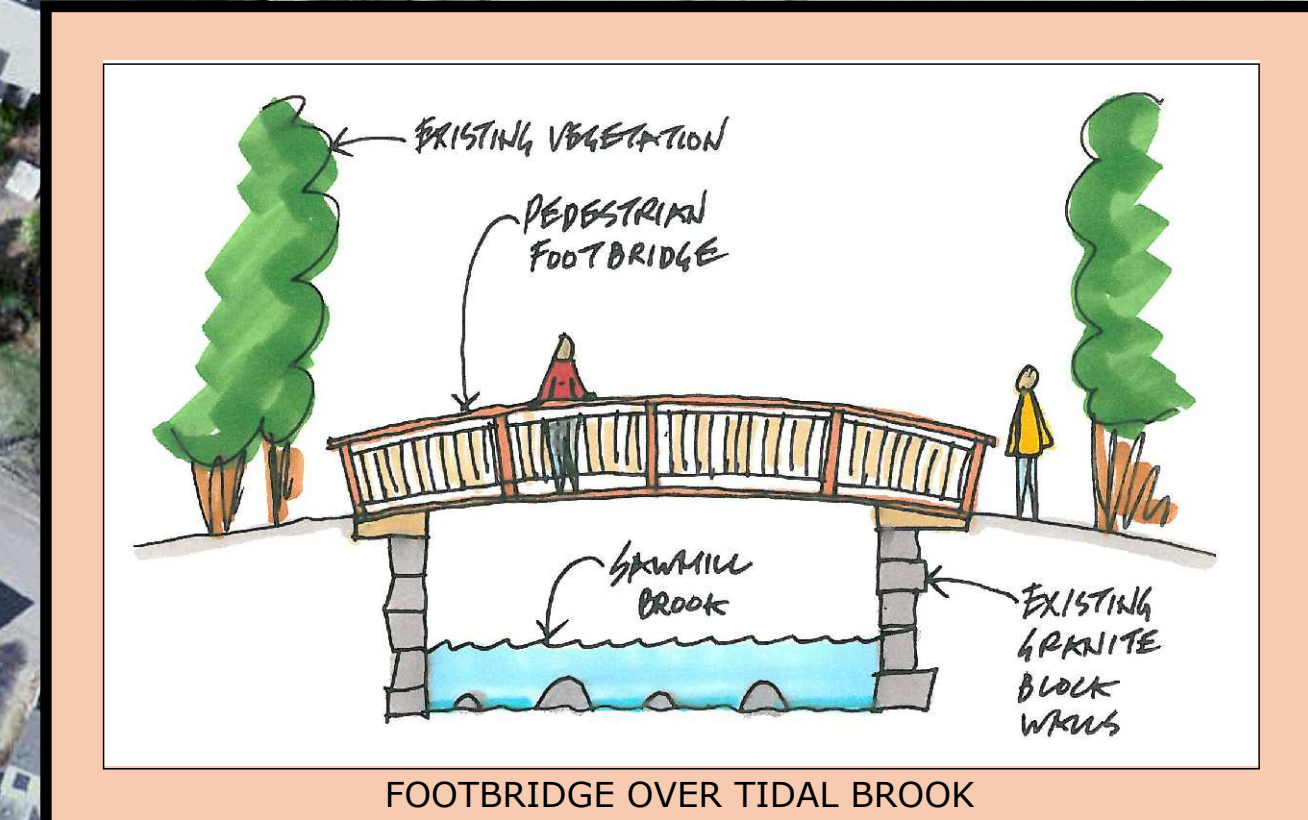
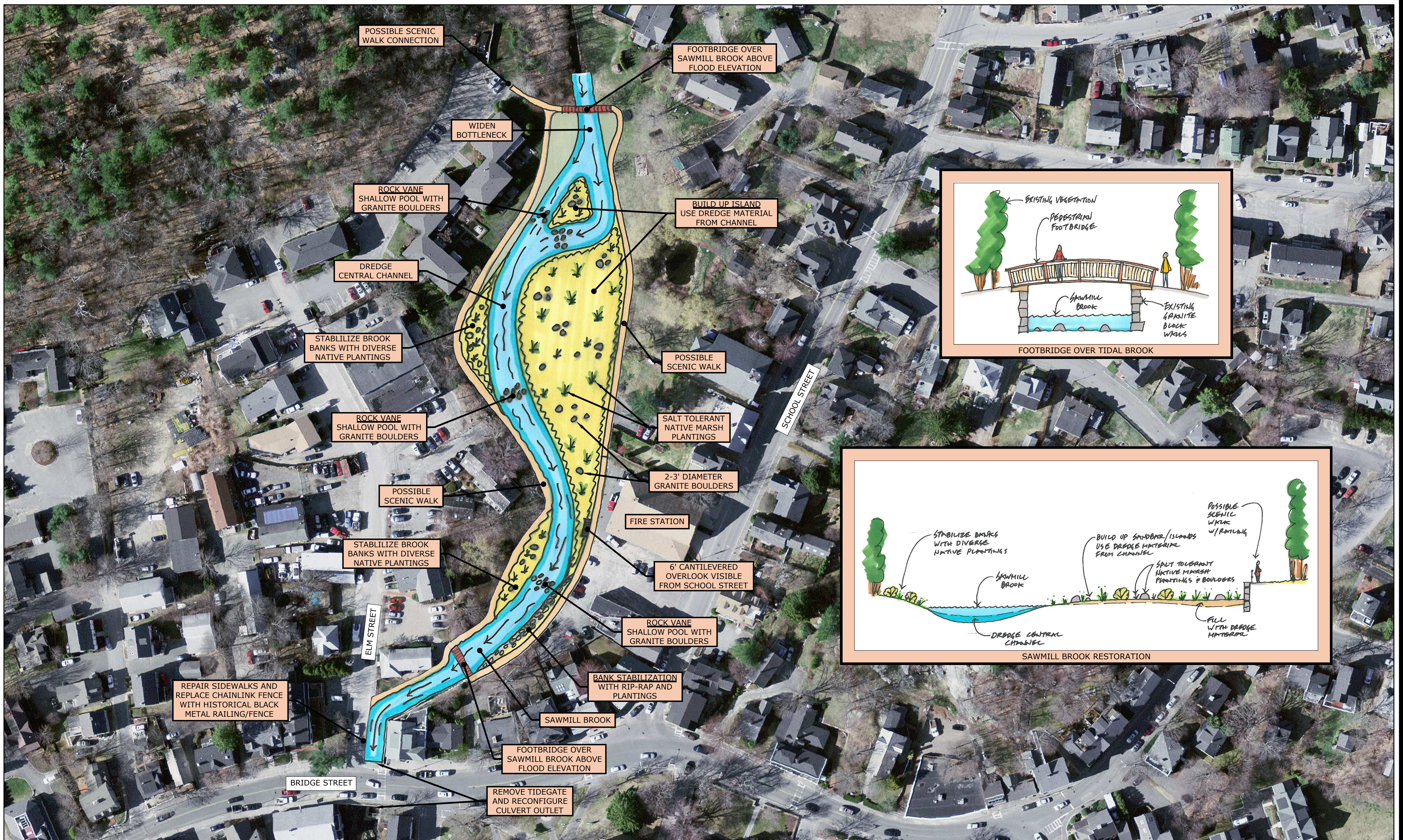
Manchester by the
Sea, Massachusetts

January 29, 2016

Mark	Date	Description
PROJECT NO:	M-1476-3	
FILE:	M-1476_SITE.dwg	
DRAWN BY:	TPD	
CHECKED:	JMP/GCB	
APPROVED BY:	DAM	

NORWOOD AVENUE
CULVERT REPLACEMENT

SCALE: AS SHOWN



RESTORED SAWMILL BROOK MANCHESTER BY THE SEA, MASSACHUSETTS

