

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION DIVISION OF PLANNING AND ENGINEERING

CONCEPTUAL ROADWAY IMPROVEMENTS
QUINOBEQUIN ROAD
IN NEWTON
MASSACHUSETTS
MIDDLESEX COUNTY

DCR CONTRACT NO. P20-3361-D7A

INDEX

SHEET NO.

G-01

TITLE SHEET & INDEX

K-01

KEY PLAN

TS-01

TYPICAL SECTIONS

S-01 - S-07

SITE ANALYSIS PLANS

C-01 - C-07

CONSTRUCTION PLAN

PROJECT BEGIN N 2943775 3757 E 723818.3539

PROJECT LOCATION

PROJECT END N 2940552 3334 E 730023.8547

WELLESLEY

NEEDHAM

CHARLES D. BAKER, GOVERNOR

KARYN E. POLITO, LT. GOVERNOR

KATHLEEN A. THEOHARIDES, SECRETARY, EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

JIM MONTGOMERY, COMMISSIONER DEPARTMENT OF CONSERVATION & RECREATION

PATRICE KISH, CHIEF ENGINEER
DEPARTMENT OF CONSERVATION & RECREATION

SCALE: 1" = 1500'

CONCEPTUAL DESIGN

NOT FOR CONSTRUCTION

REV. DATE DESCRIPTION

BY

Comparison Land Development
Environmental Services
101 Walnut St., P.O. Box 9151
Watertown, MA 02472
617 924 1770 FAX 617 924 2286

DESIGNER:MES
CHECKED: PTS
CHECKED: PTS
CHECKED: PTS

DEPARTMENT OF CONSERVATION AND RECREATION DIVISION OF PLANNING AND ENGINEERING

CONCEPTUAL ROADWAY IMPROVEMENTS

QUINOBEQUIN ROAD
NEWTON, MA

DESIGNER:MES
CHECKED: PTS

DRAWN: MES

CONT. P20-3361-D7A

SCALE: AS NOTED

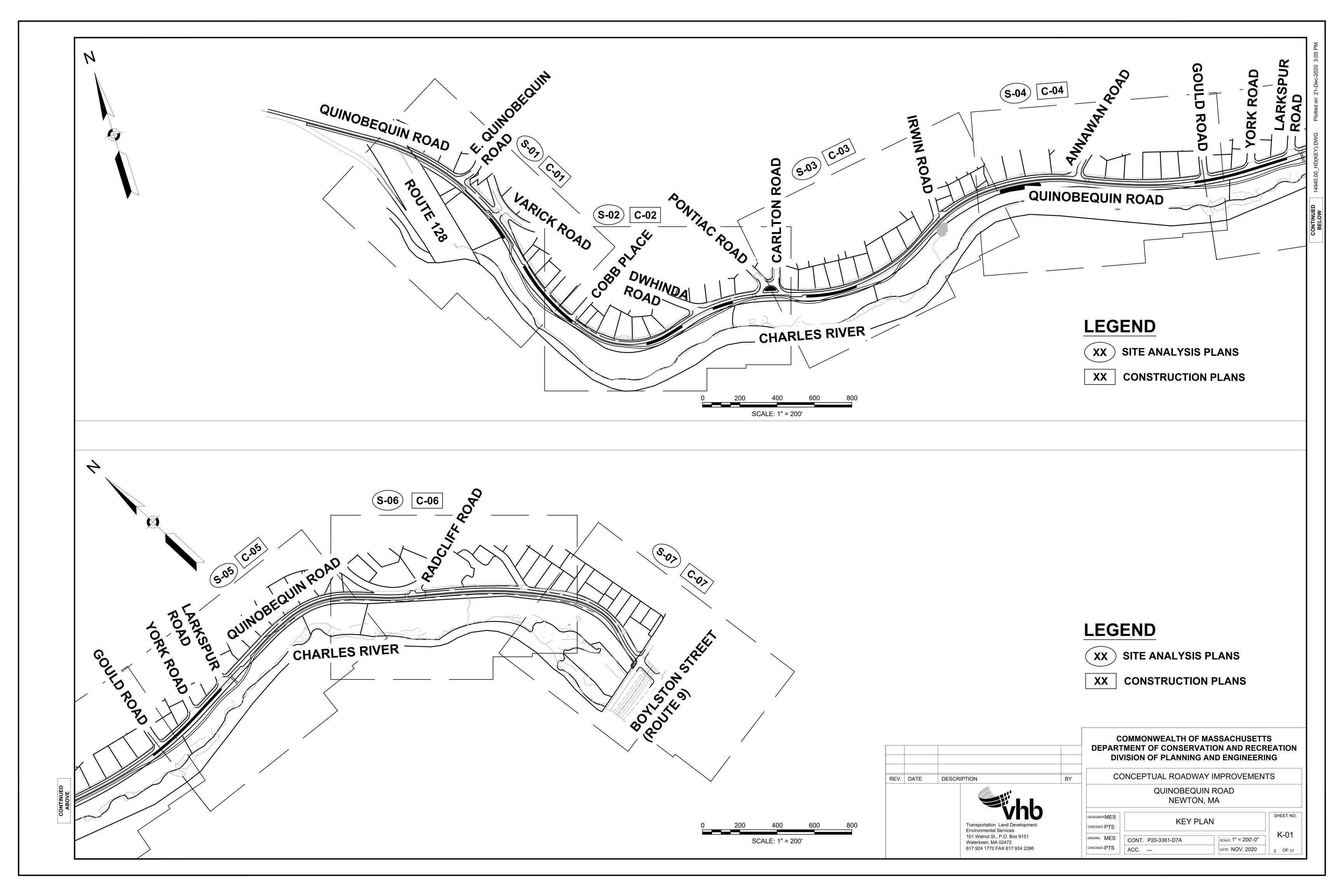
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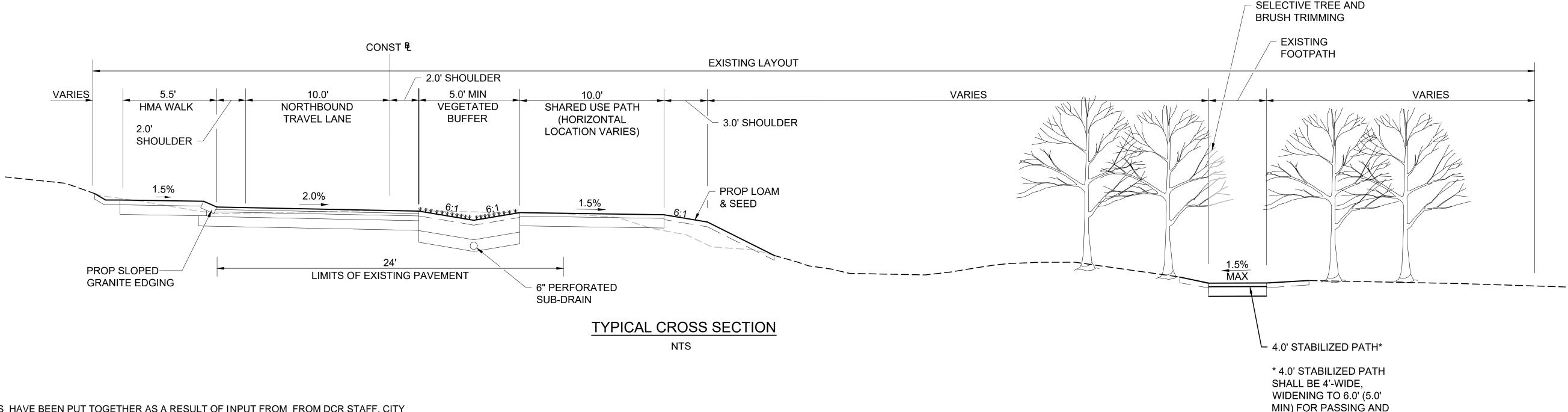
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COMMONWEALTH OF MASSACHUSETTS

DATE: NOV. 2020

LENGTH OF PROJECT = 1.5 MILES
NOVEMBER 2020





NOTES:

THE FOLLOWING PLANS HAVE BEEN PUT TOGETHER AS A RESULT OF INPUT FROM FROM DCR STAFF, CITY OF NEWTON, MASSDOT, LOCAL LEGISLATORS, PROJECT ABUTTERS AND PROJECT STAKEHOLDERS. AS A RESULT OF THE INPUT, ALTERNATIVE 1(21st CENTURY PARKWAY) WAS SELECTED AS THE PREFERRED ALTERNATIVE. THE CONCEPTUAL PLANS INCLUDED HEREIN DOCUMENT THE THE EXISTING CORRIDOR CONDITIONS AND DEFICIENCIES ALONG WITH PREFERRED ALTERNATIVE FOR FUTURE IMPROVEMENTS.

1. DESIGN GUIDELINES:

- DCR HISTORIC PRESERVATION TREATMENT GUIDELINES
- MASSDOT 2006 PROJECT DEVELOPMENT & DESIGN GUIDELINES
 - COMPLETE STREETS
 - AMERICAN ASSOCIATION OF HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)
 - o ROADSIDE DESIGN GUIDE
 - O GEOMETRIC DESIGN OF HIGHWAYS AND STREETS (2018)
- MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
- FEDERAL AND STATE SEPARATED BIKE LANE PLANNING AND DESIGN GUIDE
- U.S. FOREST SERVICE TRAIL ACCESSIBILITY GUIDELINES (FSTAG)
- 2. **ARCHEOLOGICAL RESOURCE PRESERVATION:** THE CHARLES RIVER SHORELINE IS HIGHLY SENSITIVE FOR THE PRESENCE OF ARCHAEOLOGICAL RESOURCES. THE PROJECT TEAM HAS UTILIZED THE CITY OF NEWTON'S ARCHAEOLOGICAL SURVEY AS A REFERENCE. SPECIFIC ARCHAEOLOGICAL AREAS WITHIN THE PROJECT LIMITS ARE NOT CURRENTLY KNOWN. PREFERRED ALTERNATIVE SHALL MINIMIZE EXCAVATIONS FOR CONSTRUCTION ACTIVITIES BETWEEN THE ROADWAY AND THE RIVER'S EDGE.
- 3. **HISTORIC PARKWAY CHARACTER IMPACTS:** QUINOBEQUIN ROAD IS LISTED ON THE NATIONAL REGISTER OF HISTORIC PLACES. PREFERRED ALTERNATIVE SHALL MINIMIZE CHANGES TO THE CHARACTER OF THE PARKWAY AND ITS SETTING.
- 4. **NATURAL RESOURCE PRESERVATION:** THE PROJECT WILL REQUIRE PERMITTING PURSUANT TO THE MASSACHUSETTS WETLAND PROTECTION ACT (WPA) AND THE FEDERAL CLEAN WATER ACT (CWA).
 - THE WOODED AREAS ALONG QUINOBEQUIN ROAD CONTAIN MANY VEGETATED WETLANDS AND SMALL TRIBUTARY STREAMS ASSOCIATED WITH THE CHARLES RIVER. AREAS SUBJECT TO REGULATION UNDER THE WPA IN THE VICINITY OF QUINOBEQUIN ROAD CONSIST OF:
 - o BORDERING VEGETATED WETLAND (BVW)
 - O BANK (ASSOCIATED WITH THE CHARLES RIVER AND ADJACENT STREAMS)
 - o LAND UNDER WATERBODIES AND WATERWAYS (LUWW)
 - O BORDERING LAND SUBJECT TO FLOODING (BLSF) (100-YEAR FLOODPLAIN)
 - O 200-FOOT RIVERFRONT AREA
 - IMPACTS TO VEGETATED WETLAND RESOURCE AREAS WOULD REQUIRE REPLICATION AT A RATIO OF 1:1.
 - WORK IN BLSF WILL REQUIRE COMPENSATORY FLOOD STORAGE TO COMPENSATE FOR ANY FILL IN FLOODPLAIN.
 - THE ENTIRETY OF THE PROJECT LIMITS LIE WITHIN THE 200-FOOT RIVERFRONT AREA WHICH EXTEND

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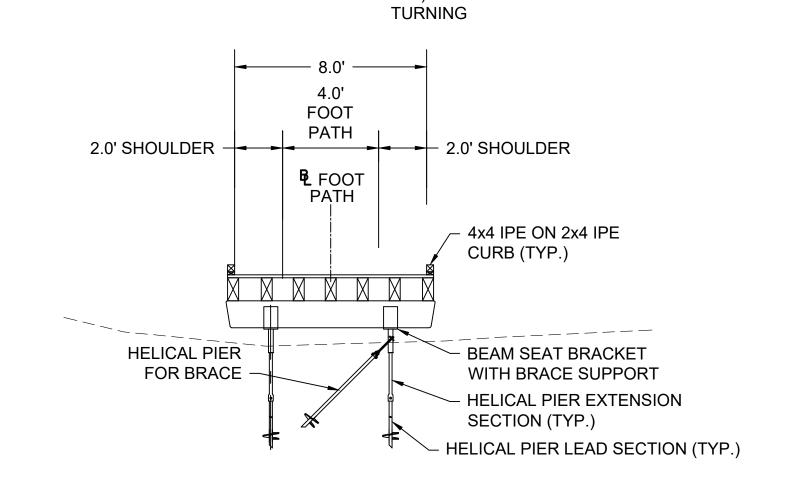
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 - FROM THE LIMITS OF MEAN ANNUAL HIGH WATER ASSOCIATED WITH THE CHARLES RIVER.
 THE PROJECT WILL REQUIRE SUBMITTING THE FOLLOW PERMIT APPLICATIONS:
 - O A NOTICE OF INTENT WILL NEED TO BE SUBMITTED TO THE NEWTON CONSERVATION AND MASSDEP PURSUANT TO THE WPA.
 - O WORK IN FEDERALLY JURISDICTIONAL RESOURCES WILL REQUIRE SUBMISSION OF A SELF-VERIFICATION NOTIFICATION (SVN) TO THE US ARMY CORPS OF ENGINEERS PURSUANT TO SECTION 404 OF THE CWA.
 - O COORDINATION WITH THE MASSACHUSETTS WATER RESOURCES AUTHORITY (MWRA) AN MWRA 8M

- 5. **ACCESSIBILITY:** PROVIDE COMPLIANT SIDEWALKS, WALKING PATHS, RAMPS, CROSSWALKS. OVERLOOKS ETC, MEETING THE APPLICABLE ACCESSIBILITY GUIDELINES. THESE INCLUDE:
- MASSACHUSETTS ARCHITECTURAL ACCESS BOARD REGULATIONS 521 CMR
- ADA STANDARDS FOR ACCESSIBLE DESIGN (ADASAD)
- PUBLIC RIGHT-OF WAY ACCESSIBILITY GUIDELINES (PROWAG)
- FOREST SERVICE TRAIL ACCESSIBILITY GUIDELINES (FSTAG)
- 6. **STORMWATER:** THE FOLLOWING ISSUES WILL HAVE TO BE PURSUED IN THE SUBSEQUENT DESIGN EFFORTS:
- ALL STORMWATER INFRASTRUCTURE WILL NEED TO ACHIEVE 67% PHOSPHOROUS REMOVAL, AS THE CHARLES RIVER HAS A TMDL FOR PHOSPHOROUS.
- OVERFLOW DISCHARGES WILL BE NEEDED FOR THE INFILTRATION SWALES DUE TO THE SOILS AND HIGH GROUNDWATER IN THE PROJECT AREA.
- MAINTENANCE OPERATIONS SHOULD BE CONSIDERED WHEN DESIGNING SWALES AND ALL OTHER DRAINAGE INFRASTRUCTURE.
- NO EXISTING DRAINAGE INFRASTRUCTURE SHOULD BE UTILIZED DUE TO THE POOR CONDITION. ANY INFRASTRUCTURE NEED IN ADDITION TO THE INFILTRATION SWALES SHALL BE NEW.
- MOST OUTFALLS WITHIN THE PROJECT LIMITS ARE OWNED BY THE CITY OF NEWTON.
 COLLABORATION WITH THE CITY WILL BE REQUIRED TO REPLACE, REPAIR, OR IMPROVE HEADWALLS.
- EXISTING CONNECTIONS BETWEEN CITY OF NEWTON AND DCR INFRASTRUCTURE SHOULD BE REMOVED WHERE FEASIBLE. SEPARATION OF MUNICIPALITY CONNECTIONS SHOULD BE ASSESSED, AND FLOW PATTERNS SHOULD BE REDESIGNED SUCH THAT NO MUNICIPALITY INFRASTRUCTURE DISCHARGES ONTO DCR INFRASTRUCTURE.
- ALL STREAM OR DRAINAGE CHANNELS FROM OUTFALLS CLOSE TO QUINOBEQUIN ROAD MUST BE ACCESSED AND REPAIRED IF NEEDED



TYPICAL SECTION OVER SMALL STREAM

SCALE: 1/4" = 1'-0"

