

# MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION

CONCORD  
BRUCE FREEMAN RAIL TRAIL PHASE 2C

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	----	1	228
PROJECT FILE NO.		605189	

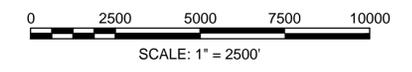
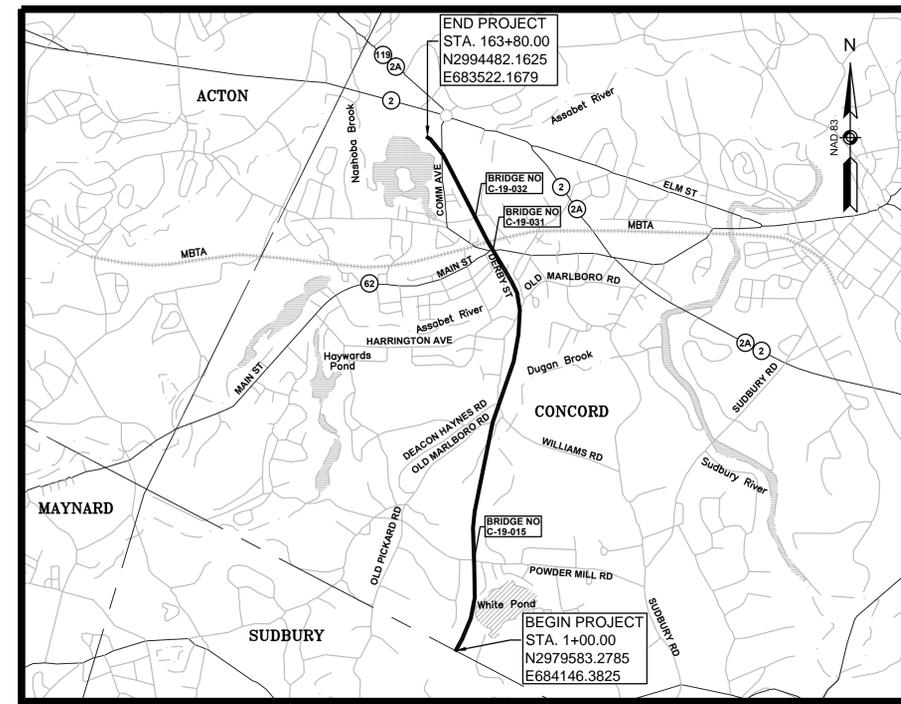
TITLE SHEET & INDEX

PLAN AND PROFILE OF  
BRUCE FREEMAN RAIL TRAIL PHASE 2C  
(BRIDGE NOS. C-19-015, C-19-031 & C-19-032)  
IN THE TOWN OF  
CONCORD  
MIDDLESEX COUNTY

THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 1988, AS AMENDED, THE SUPPLEMENTAL SPECIFICATIONS DATED JUNE 15, 2012, THE 2012 CONSTRUCTION STANDARD DETAILS, THE 1996 CONSTRUCTION AND TRAFFIC STANDARD DETAILS, (AS RELATED TO TRAFFIC STANDARD DETAILS ONLY), THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH MASSACHUSETTS AMENDMENTS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, WILL GOVERN.

## 75% SUBMITTAL

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2	LEGEND & ABBREVIATIONS
3	KEY PLAN & BORING LOCATIONS
4	BORING LOGS
5-9	TYPICAL SECTIONS
10-27	CONSTRUCTION BASELINE TIES
28-60	CONSTRUCTION PLANS & PROFILES
61-77	DRAINAGE & UTILITY PLANS
78-94	CURB TIE PLANS
95	GRADING PLAN
96-112	TRAFFIC SIGNS & PAVEMENT MARKINGS
113-114	TRAFFIC SIGN SUMMARY SHEET
115-116	TRAFFIC SIGNAL PLANS
117	TRAFFIC LEGEND ABBREVIATIONS & NOTES
118	BICYCLE LOOP DETECTOR DETAILS
119-123	MAST ARM & FOUNDATION DETAILS
124-129	RAILROAD CROSSING PLANS
130-135	TEMPORARY TRAFFIC CONTROL PLANS
136-152	LANDSCAPE PLANS
153-154	LANDSCAPE DETAILS
155	RIVERFRONT AREA RESTORATION PLAN
156-164	CONSTRUCTION DETAILS
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167-170	BRIDGE PLANS
171-228	CROSS SECTIONS



LENGTH OF PROJECT = 16,280 FEET = 3.083 MILES

### TRAIL DESIGN DESIGNATION

DESIGN SPEED	18 MPH
MINIMUM HORIZONTAL CURVE RADIUS	60'
MINIMUM LENGTH OF CREST VERTICAL CURVE	100'
MAXIMUM GRADE FOR LEVEL TERRAIN	4.5%

**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

DATE	DESCRIPTION	REV #



RECOMMENDED FOR APPROVAL

CHIEF ENGINEER DATE

DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
APPROVED:

APPROVED

DIVISION ADMINISTRATOR DATE

HIGHWAY ADMINISTRATOR DATE