

# MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION

## PLAN AND PROFILE OF WASHINGTON STREET (ROUTE 133)

IN THE TOWN OF  
**BOXFORD, MA**  
**ESSEX COUNTY**

FEDERAL AID PROJECT NO. -

# 25% SUBMITTAL

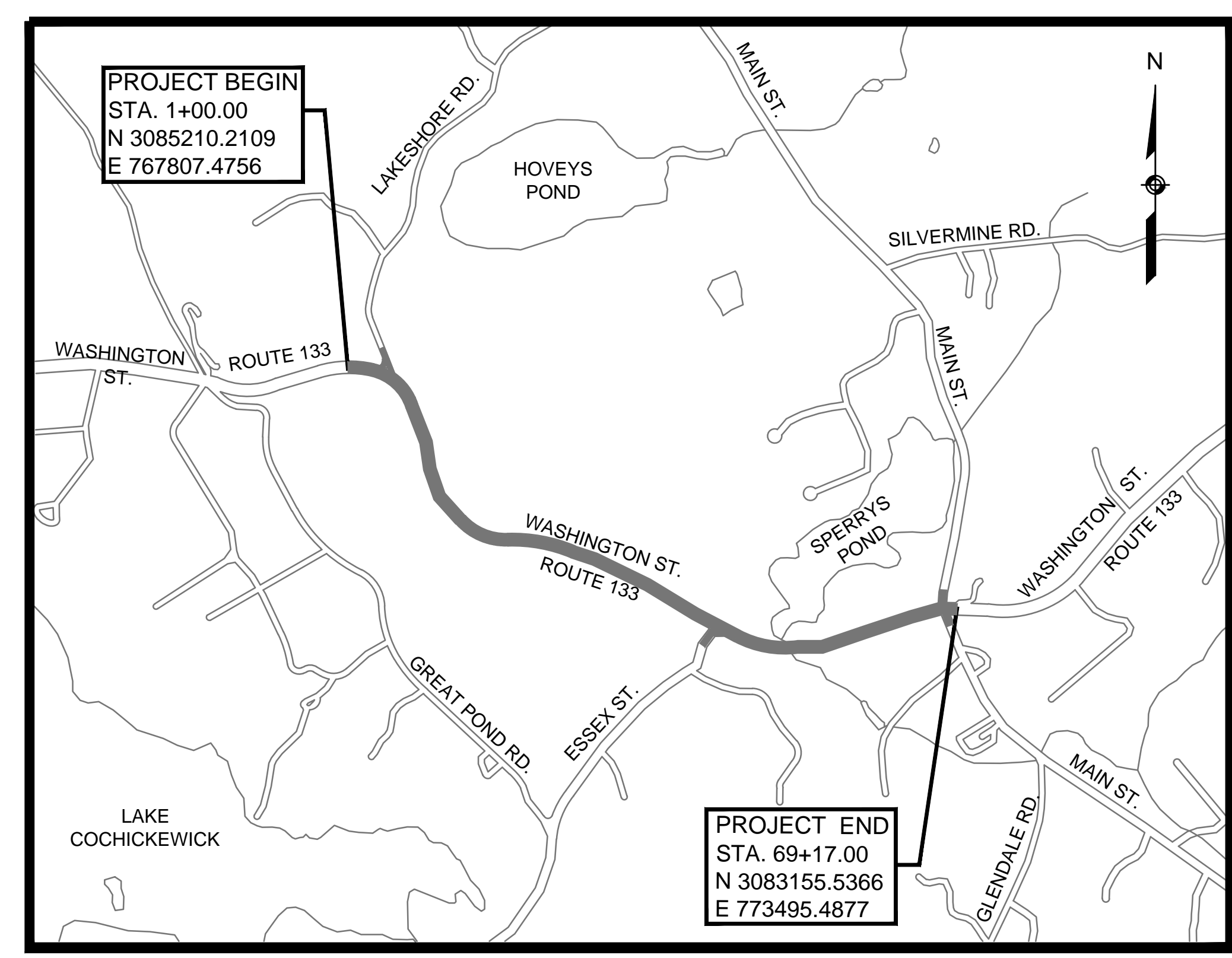
**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	1	64
PROJECT FILE NO.		606721	

**TITLE SHEET & INDEX**

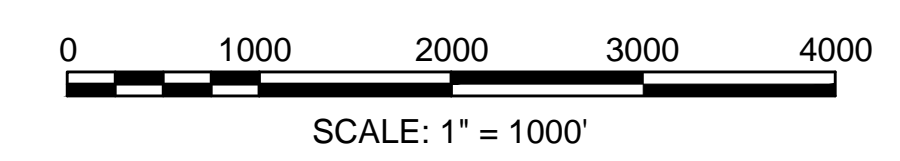
THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 1988, AS AMENDED, THE SUPPLEMENTAL SPECIFICATIONS DATED JULY 1, 2015, THE 2014 CONSTRUCTION STANDARD DETAILS, THE 1996 CONSTRUCTION AND TRAFFIC STANDARD DETAILS, (AS RELATED TO TRAFFIC STANDARD DETAILS ONLY), 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.

INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2	KEYPLAN & TEST PIT LOCATIONS
3	LEGEND & ABBREVIATIONS
4-7	TYPICAL SECTIONS
8	CONSTRUCTION DETAILS
9-22	CONSTRUCTION PLANS
23-36	PROFILES
37-39	PROFILE - SIDE STREETS
40-53	TRAFFIC SIGN & PAVEMENT MARKINGS
54-55	TEMPORARY TRAFFIC CONTROL PLANS
56-64	CRITICAL CROSS SECTIONS



### DESIGN DESIGNATION - WASHINGTON STREET (ROUTE 133)

	STA 1+00 TO STA 12+00	STA 12+00 TO STA 44+00	STA 44+00 TO STA 69+00
DESIGN SPEED	30 MPH	45 MPH	30 MPH
ADT (2013)	5,500	7,400	9,300
ADT (2033)	6,700	9,000	11,350
K	9.8%	9.6%	9.5%
D	60%	62%	65%
T (PEAK HOUR)	3%	3%	3%
T (AVERAGE DAY)	3%	3%	3%
DHV	660	860	1080
DDHV	400	540	700
FUNCTIONAL CLASSIFICATION	RURAL MAJOR COLLECTOR	RURAL MAJOR COLLECTOR	RURAL MAJOR COLLECTOR




LENGTH OF PROJECT = 6,817.00 FEET = 1.291 MILES

DATE	DESCRIPTION	REV #

DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

\_\_\_\_\_  
DIVISION ADMINISTRATOR      DATE



RECOMMENDED FOR APPROVAL

\_\_\_\_\_  
CHIEF ENGINEER      DATE

APPROVED

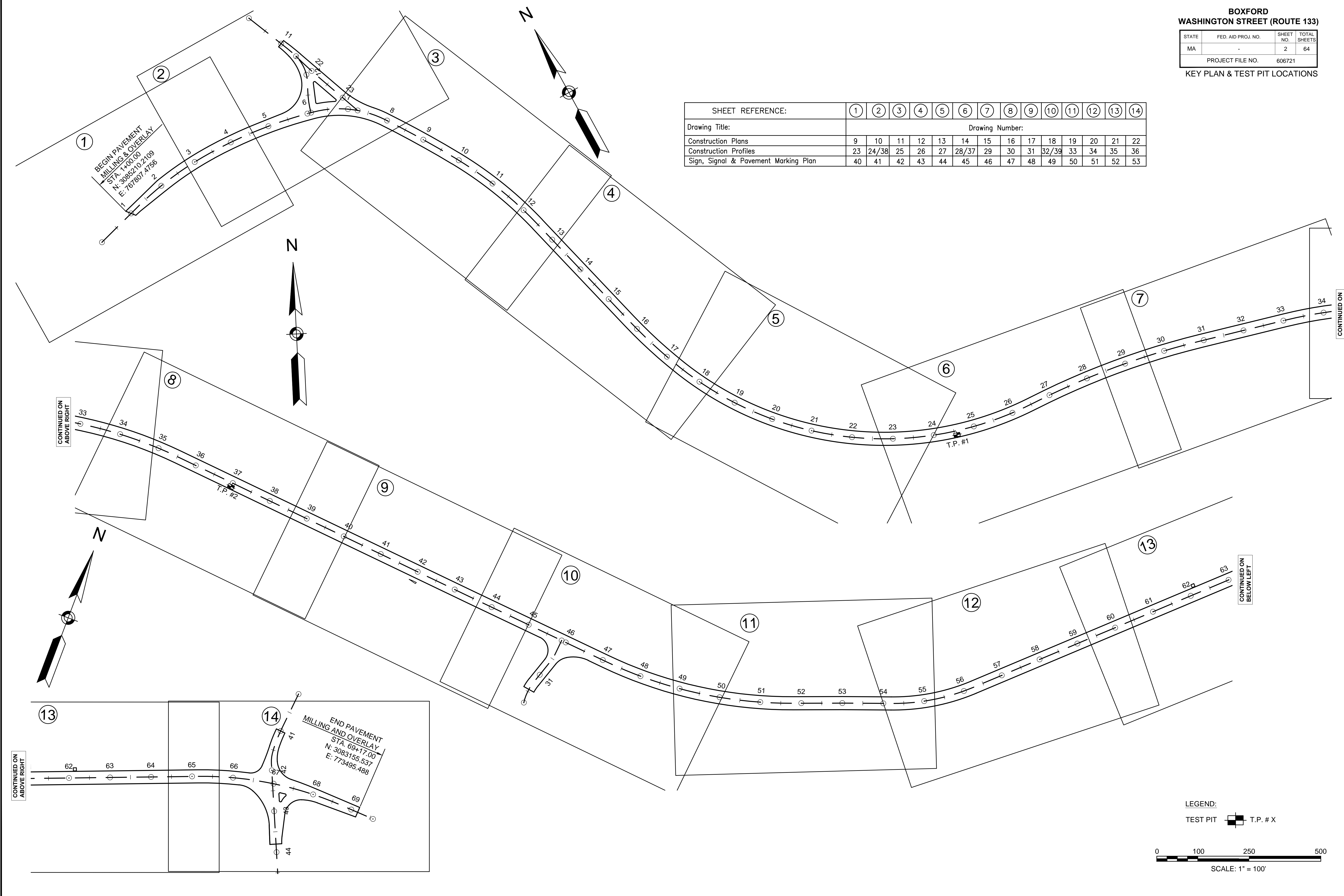
\_\_\_\_\_  
HIGHWAY ADMINISTRATOR      DATE

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

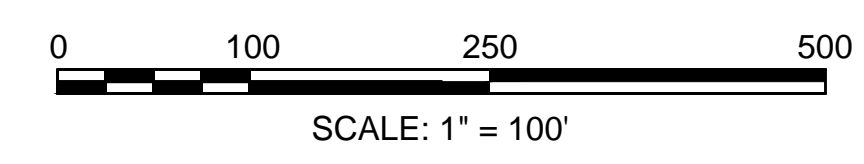
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	2	64

PROJECT FILE NO. 606721  
**KEY PLAN & TEST PIT LOCATIONS**

SHEET REFERENCE:	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Drawing Title:	Drawing Number:													
Construction Plans	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Construction Profiles	23	24/38	25	26	27	28/37	29	30	31	32/39	33	34	35	36
Sign, Signal & Pavement Marking Plan	40	41	42	43	44	45	46	47	48	49	50	51	52	53



LEGEND:  
TEST PIT [Symbol] T.P. # X



## LEGEND

### GENERAL SYMBOLS

EXISTING	PROPOSED

### GENERAL SYMBOLS (CONT.)

EXISTING	PROPOSED

### TRAFFIC SIGNAL SYMBOLS

EXISTING	PROPOSED

### PAVEMENT MARKINGS AND SIGNING SYBSOLS

EXISTING	PROPOSED

## ABBREVIATIONS

### GENERAL

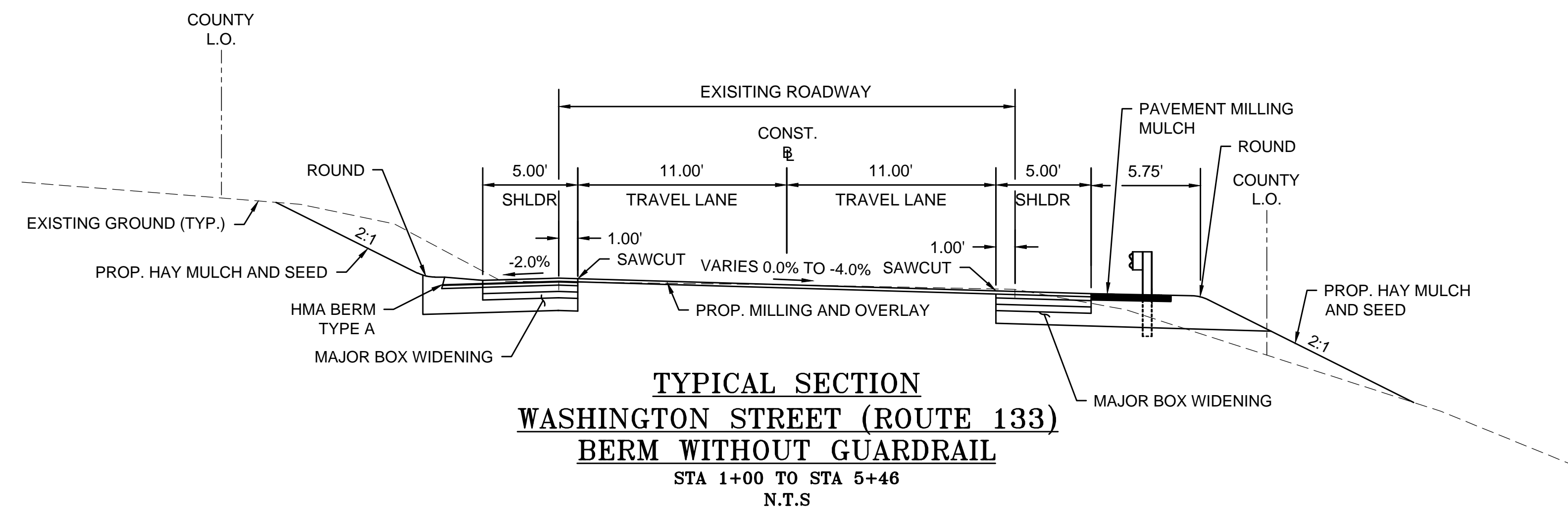
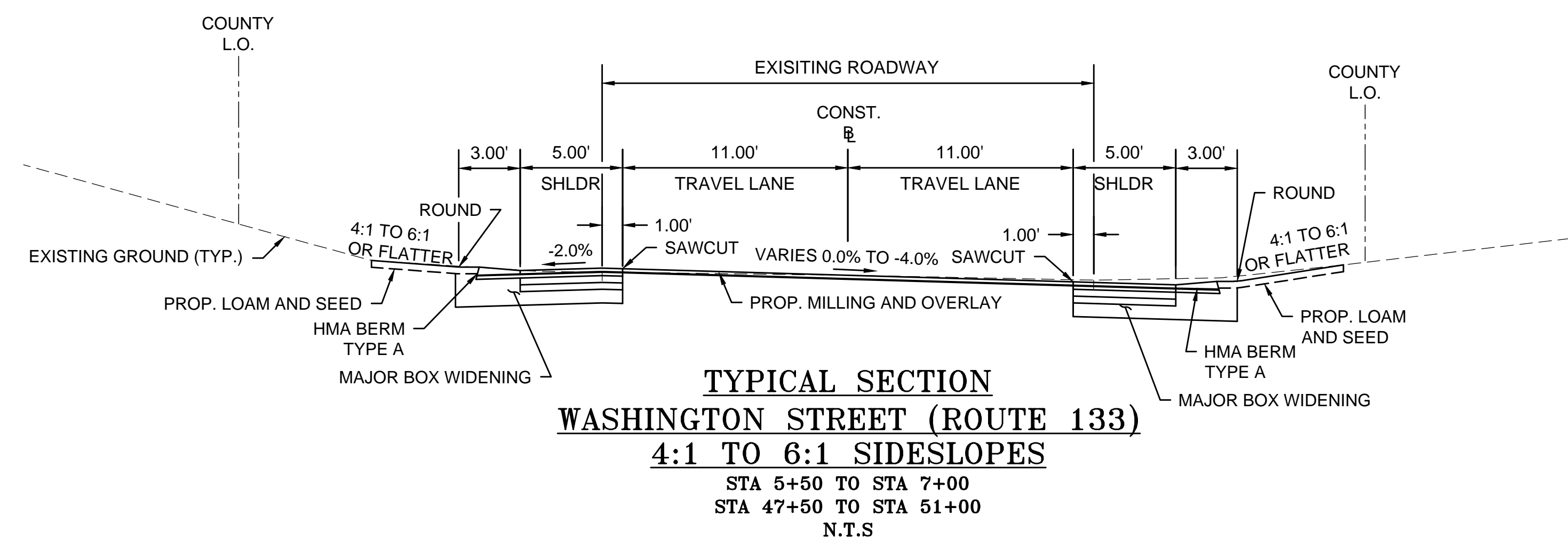
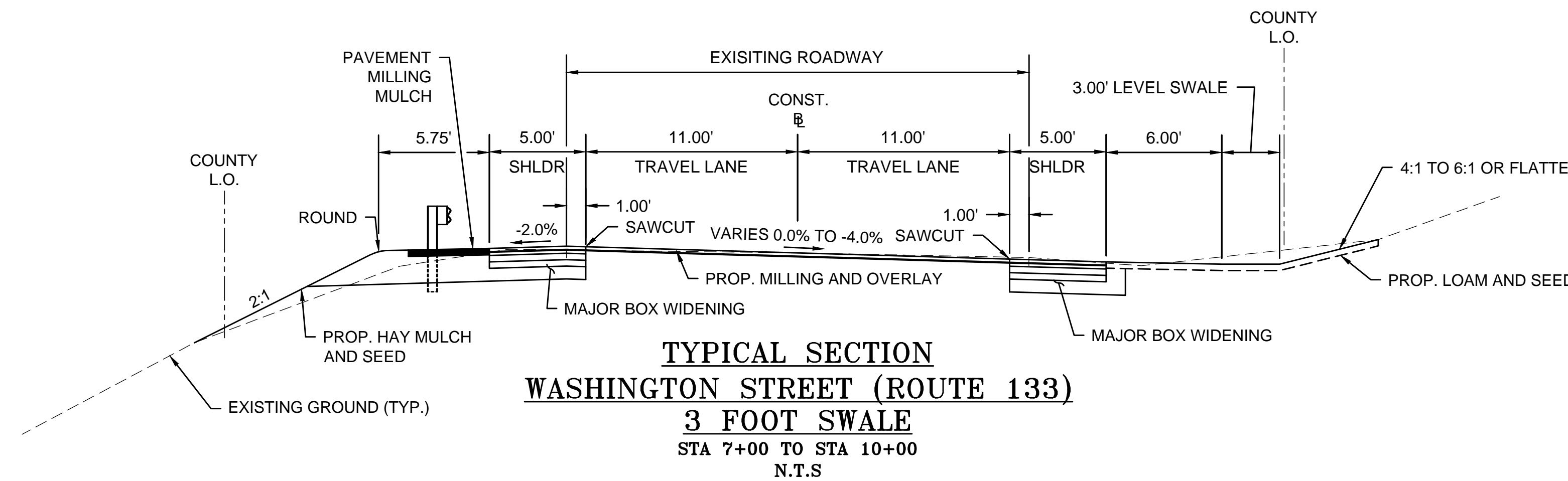
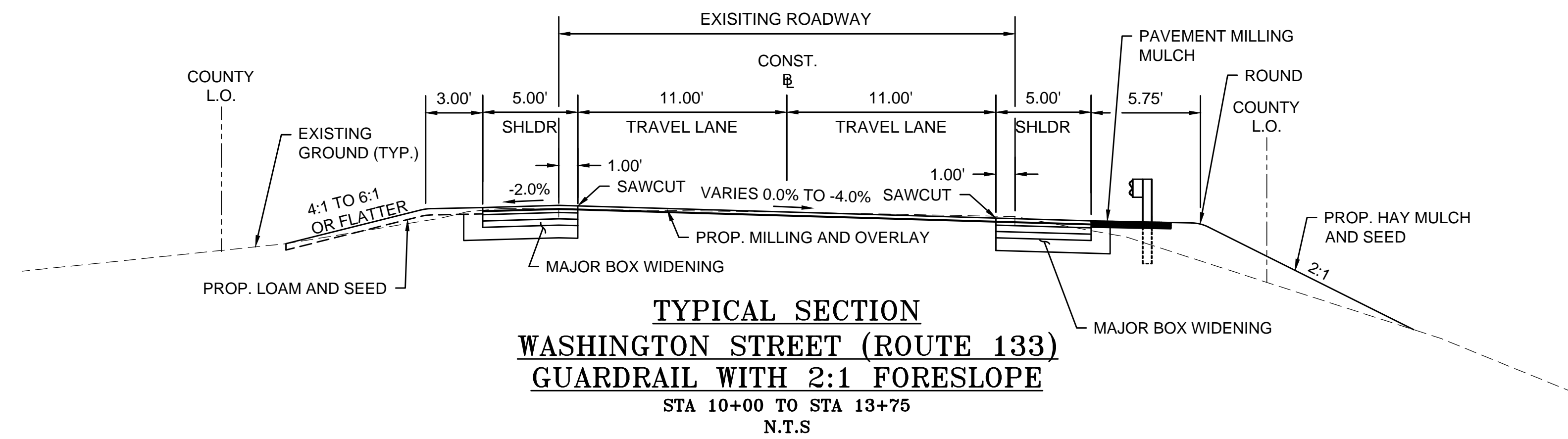
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
BIT.	BITUMINOUS
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCH MARK
BO	BY OTHERS
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CEM	CEMENT
CI	CURB INLET
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DWY	DRIVEWAY
ELEV (OR EL.)	ELEVATION
EXIST (OR EX)	EXISTING
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
GAR	GARAGE
GG	GAS GATE
GI	GUTTER INLET
GRAN	GRANITE
GRAV	GRAVEL
HMA	HOT MIX ASPHALT
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LT	LEFT
MAX	MAXIMUM
MB	MAIL BOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
NO.	NOT IN CONTRACT
NO.	NUMBER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT-OF-WAY
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE
TEMP	TEMPORARY
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VC	VERTICAL CURVE
WCR	WHEELCHAIR RAMP
WG	WATER GATE
X-SECT	CROSS SECTION

### TRAFFIC SIGNAL

CAB.	CABINET
DW	STEADY DON'T WALK
FDW	FLASHING DON'T WALK
FR	FLASHING CIRCULAR RED
FW	FLASHING WALK - LUNAR WHITE
FY	FLASHING CIRCULAR AMBER
FRL	FLASHING RED LEFT ARROW
FRR	FLASHING RED RIGHT ARROW
G	STEADY CIRCULAR GREEN
GL	STEADY GREEN LEFT ARROW
GR	STEADY GREEN RIGHT ARROW
GV	STEADY GREEN VERTICAL ARROW
PED	PEDESTRIAN
R	STEADY CIRCULAR RED
RV	STEADY RED VERTICAL ARROW
RL	STEADY RED LEFT ARROW
RR	STEADY RED RIGHT ARROW
TR SIG	TRAFFIC SIGNAL
W	STEADY WALK
Y	STEADY CIRCULAR AMBER
YL	STEADY AMBER LEFT ARROW
YR	STEADY AMBER RIGHT ARROW
YV	STEADY AMBER VERTICAL ARROW

## GENERAL NOTES

- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
- THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- THE TERM "PROPOSED" (PROP.) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, REUSING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET" (R&R).
- JOINTS BETWEEN NEW BITUMINOUS CONCRETE ROADWAY PAVEMENT AND SAWCUT EXISTING PAVEMENT SHALL BE SEALED WITH BITUMEN AND BACKSANDS.
- ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
- ALL PROPOSED PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
- DRAINAGE ELEVATIONS ARE PROVIDED FOR DESIGN PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY BY TEST PIT, THE LOCATIONS OF EXISTING UTILITIES WHICH MAY CONFLICT WITH THE PROPOSED DRAINAGE DESIGN. ANY FIELD ADJUSTMENTS REQUIRED WILL BE MADE AS APPROVED OR DIRECTED BY THE ENGINEER. ONLY AFTER THE CONTRACTOR VERIFIES ELEVATIONS FOR THE CONSTRUCTABILITY OF THE DRAINAGE SYSTEM SHALL ANY STRUCTURES BE ORDERED. ANY FIELD ADJUSTMENTS TO LINE & GRADE UP TO A DEPTH OF 5' SHALL BE INCLUDED IN THE COST OF THE PIPE. PIPE EXCAVATION GREATER THAN 5' WILL BE PAID UNDER CLASS B TRENCH EXCAVATION.
- FIELD SURVEY PROVIDED BY MASSDOT SURVEY CONSULTANT AND BAYSIDE ENGINEERING, INC. HORIZONTAL DATUM IS BASED ON MASS GRID SYSTEM NAD 1983. ELEVATIONS SHOWN ON THIS PLAN REFER TO THE NAVD OF 1988.



**PAVEMENT NOTES:**

**PROPOSED PAVEMENT MILLING AND OVERLAY:**  
 2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER  
 3/8" STRESS ABSORBING MEMBRANE INTERLAY (RUBBER CHIP SEAL) OVER  
 2" PAVEMENT MICROMILLING

**PROPOSED FULL DEPTH RECONSTRUCTION:**  
 2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER  
 0.05 GAL/SY TACK COAT OVER  
 2" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER  
 0.05 GAL/SY TACK COAT OVER  
 4" SUPERPAVE BASE COURSE 37.5 (SIC-37.5) OVER  
 4" DENSE GRADED CRUSHED STONE OVER  
 8" GRAVEL BORROW - TYPE B

**PROPOSED MAJOR BOX WIDENING RECONSTRUCTION:**  
 2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER  
 3/8" STRESS ABSORBING MEMBRANE INTERLAY (RUBBER CHIP SEAL) OVER  
 2" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER  
 0.05 GAL/SY TACK COAT OVER  
 4" SUPERPAVE BASE COURSE 37.5 (SIC-37.5) OVER  
 4" DENSE GRADED CRUSHED STONE OVER  
 8" GRAVEL BORROW - TYPE B

**PROPOSED MINOR BOX LESS THAN 4 FEET:**  
 2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER  
 3/8" STRESS ABSORBING MEMBRANE INTERLAY (RUBBER CHIP SEAL) OVER  
 2" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER  
 0.05 GAL/SY TACK COAT OVER  
 6" HES CEMENT CONCRETE BASE OVER  
 8" GRAVEL BORROW - TYPE B

**PROPOSED HOT MIX ASPHALT WALK SURFACE:**  
 1" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER  
 0.05 GAL/SY TACK COAT OVER  
 1 1/2" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER  
 8" GRAVEL BORROW - TYPE B

**PROPOSED HOT MIX ASPHALT DRIVEWAY:**  
 1 1/2" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER  
 0.05 GAL/SY TACK COAT OVER  
 2" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER  
 8" GRAVEL BORROW - TYPE B

**PROPOSED CEMENT CONCRETE WALKS / WHEELCHAIR RAMP:**  
 4" CEMENT CONCRETE  
 AIR ENTRAINED 4000 PSI, 3/4" 610 OVER  
 8" GRAVEL BORROW TYPE B.

**PROPOSED PERMANENT PATCH:**  
 2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER  
 0.05 GAL/SY TACK COAT OVER  
 2" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5) OVER  
 0.05 GAL/SY TACK COAT OVER  
 6" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0)  
 PLACED IN 2 LIFTS OVER  
 GRAVEL SUB-BASE

**PROPOSED TEMPORARY PATCH:**  
 3" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0) PLACED IN ONE LAYER OVER  
 12" GRAVEL BORROW OR SUITABLE BACKFILL MATERIAL

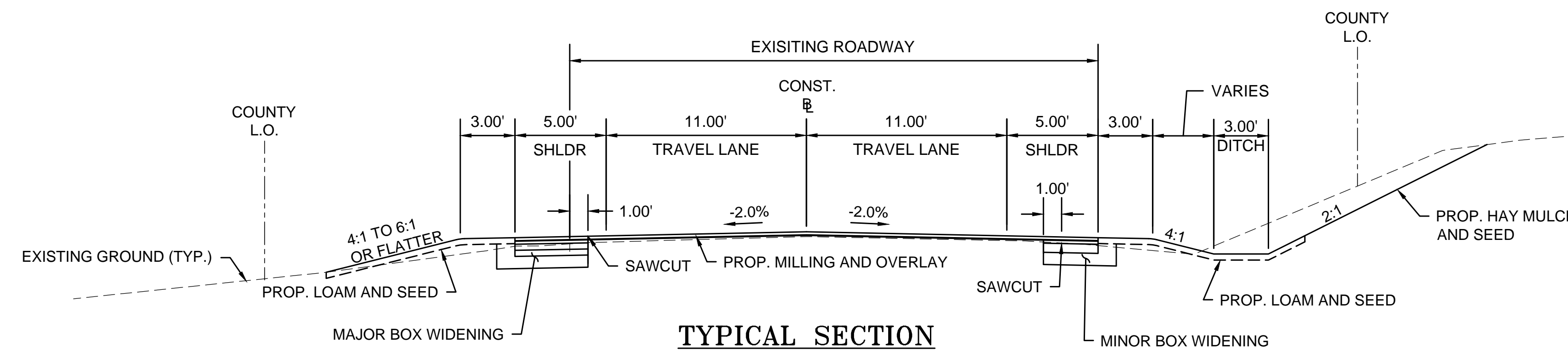
**PROPOSED LAWNS AND SLOPES:**  
 4" LOAM AND SEED

**PROPOSED MULCH AREAS:**  
 4" AGED PINE BARK

**GENERAL NOTES:**

- EXISTING GRAVEL DETERMINED TO BE SUITABLE SHALL REMAIN, AND THAT EXISTING SUITABLE GRAVEL AVAILABLE FOR REUSE SHALL BE UTILIZED WHERE DIRECTED BEFORE NEW GRAVEL IS PAID FOR.
- FOR BOX WIDENING LESS THAN 4 FEET SUBSTITUTE CEMENT CONCRETE FOR SUPERPAVE BASE COURSE AND DENSE GRADED CRUSHED STONE.
- THE STRESS ABSORBING MEMBRANE INTERLAY (SAMI) SHALL EXTEND A MINIMUM OF 2 FEET BEYOND THE TRANSVERSE JOINT WHERE MILL AND OVERLAY AREAS MEET FULL DEPTH AREAS.

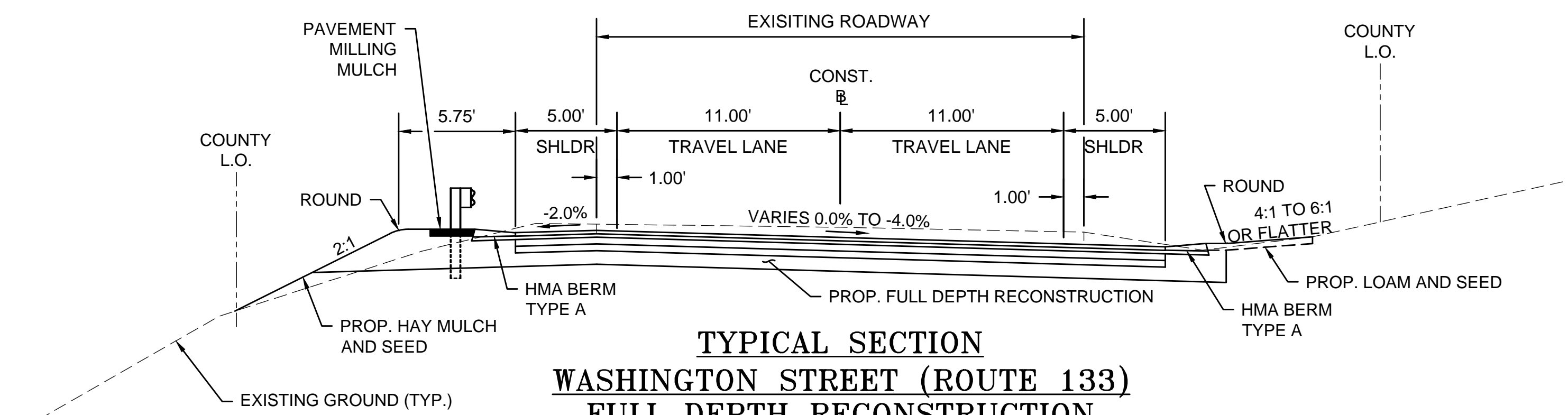




**TYPICAL SECTION  
WASHINGTON STREET (ROUTE 133)  
DITCH SECTION WITH 2:1 BACKSLOPE**

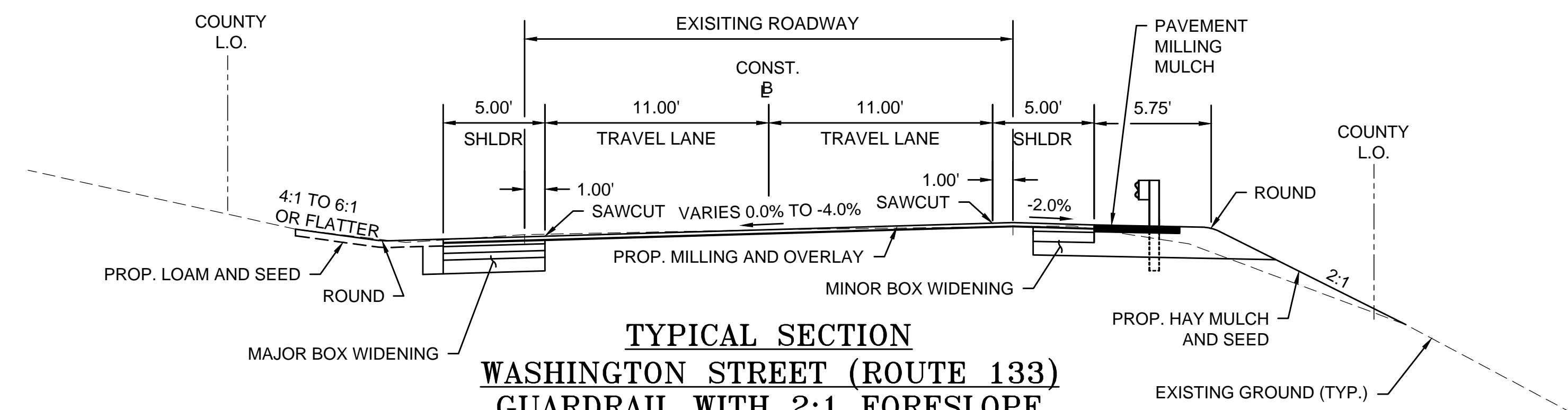
STA 28+00 TO STA 31+00  
STA 17+00 TO STA 17+50  
STA 54+50 TO STA 63+50 (NO ESTABLISHED LAYOUT)  
N.T.S

NOTE:  
NO COUNTY LAYOUT HAS BEEN ESTABLISHED  
BETWEEN STA. 51+88 AND STA. 69+18



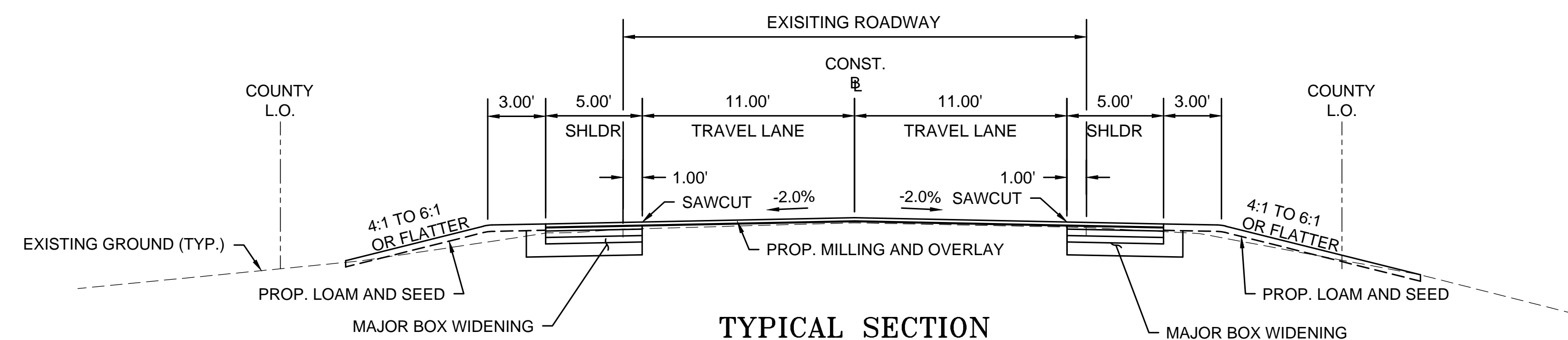
**TYPICAL SECTION  
WASHINGTON STREET (ROUTE 133)  
FULL DEPTH RECONSTRUCTION**

STA 21+90 TO STA 25+00  
STA 14+00 TO STA 16+75  
N.T.S



**TYPICAL SECTION  
WASHINGTON STREET (ROUTE 133)  
GUARDRAIL WITH 2:1 FORESLOPE**

STA 17+50 TO STA 19+00  
N.T.S

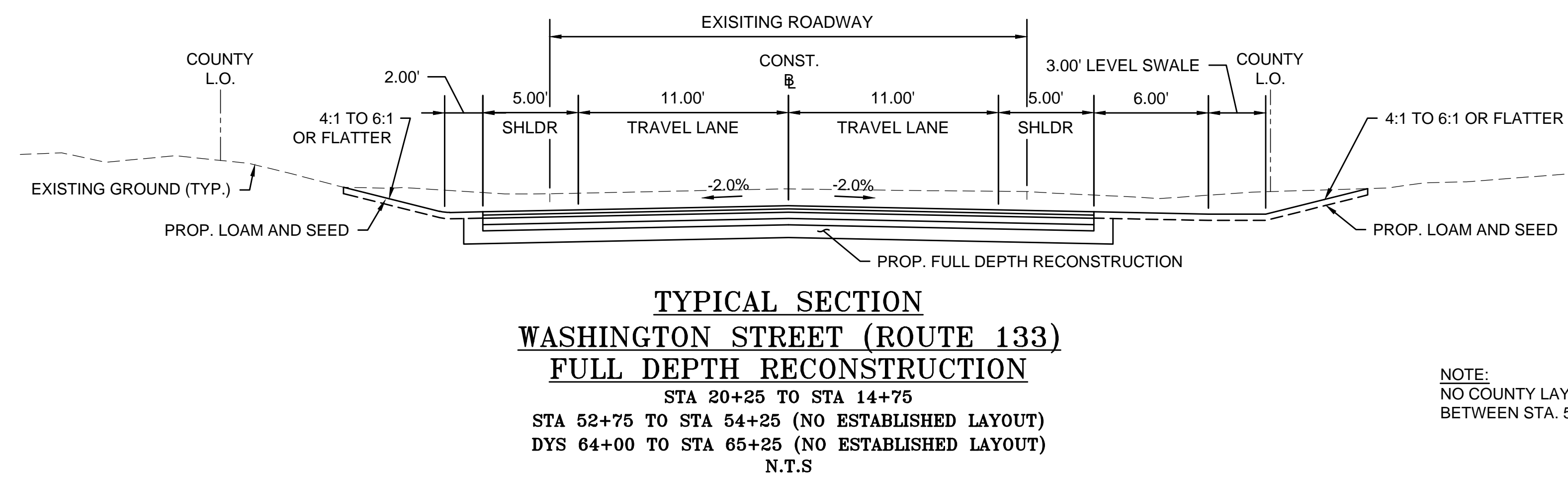
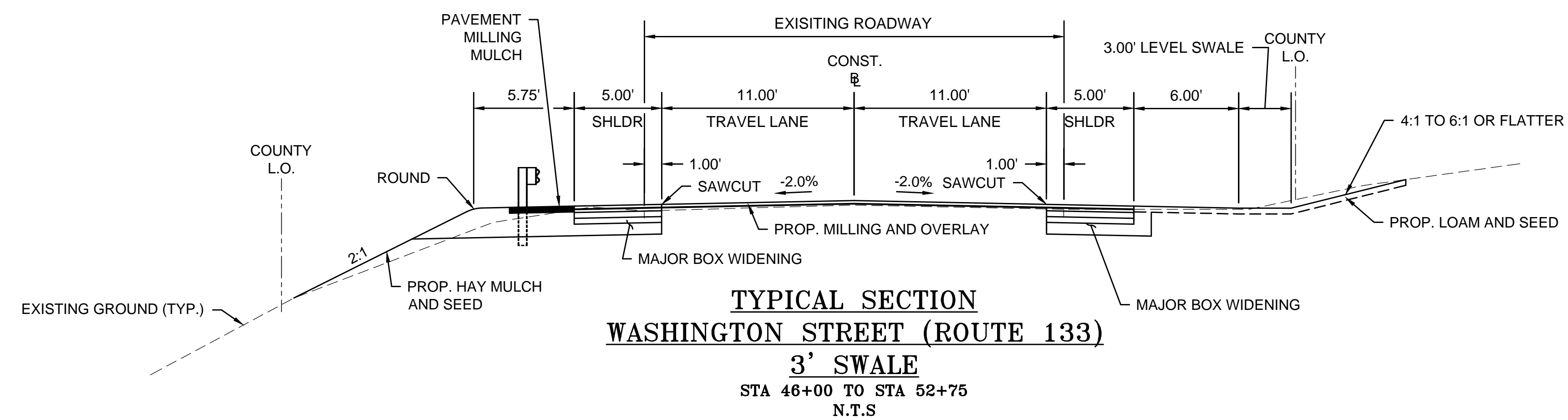
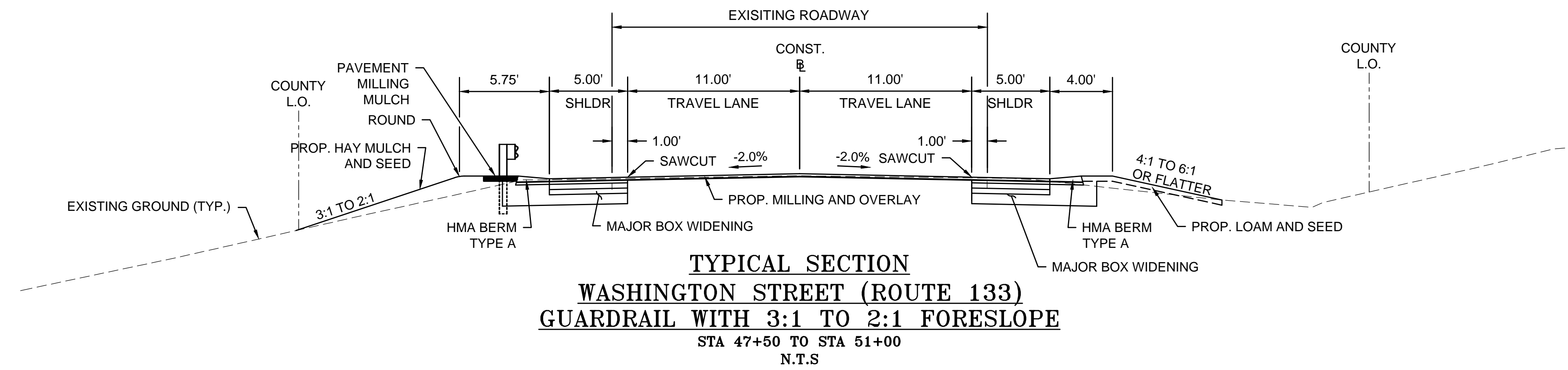


**TYPICAL SECTION  
WASHINGTON STREET (ROUTE 133)  
4:1 TO 6:1 SIDESLOPES**

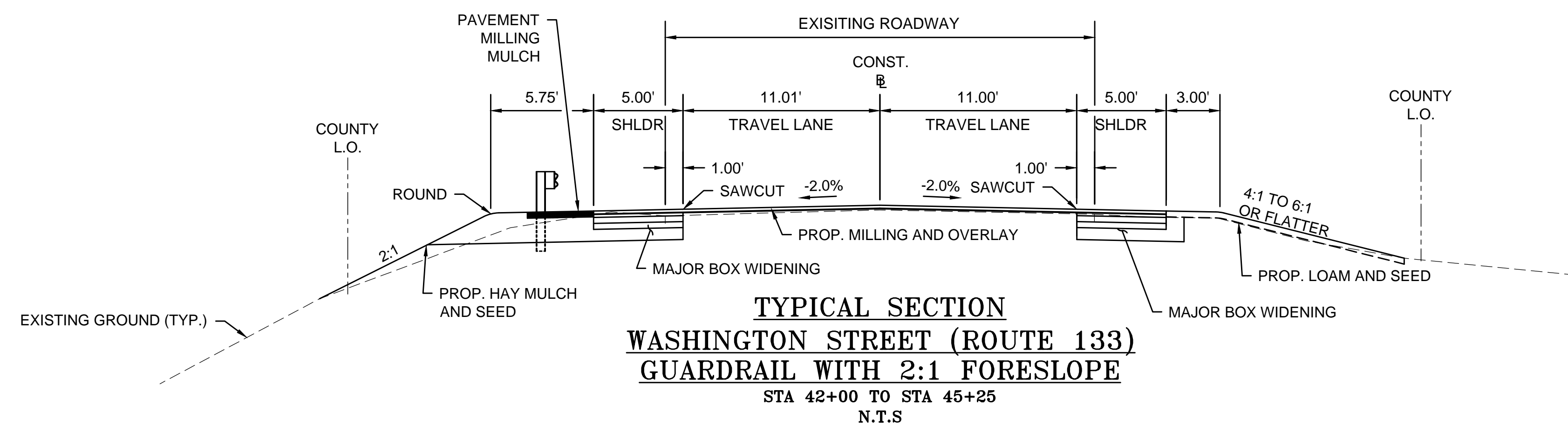
STA 17+50 TO STA 19+25  
N.T.S

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	6	64
PROJECT FILE NO.		606721	

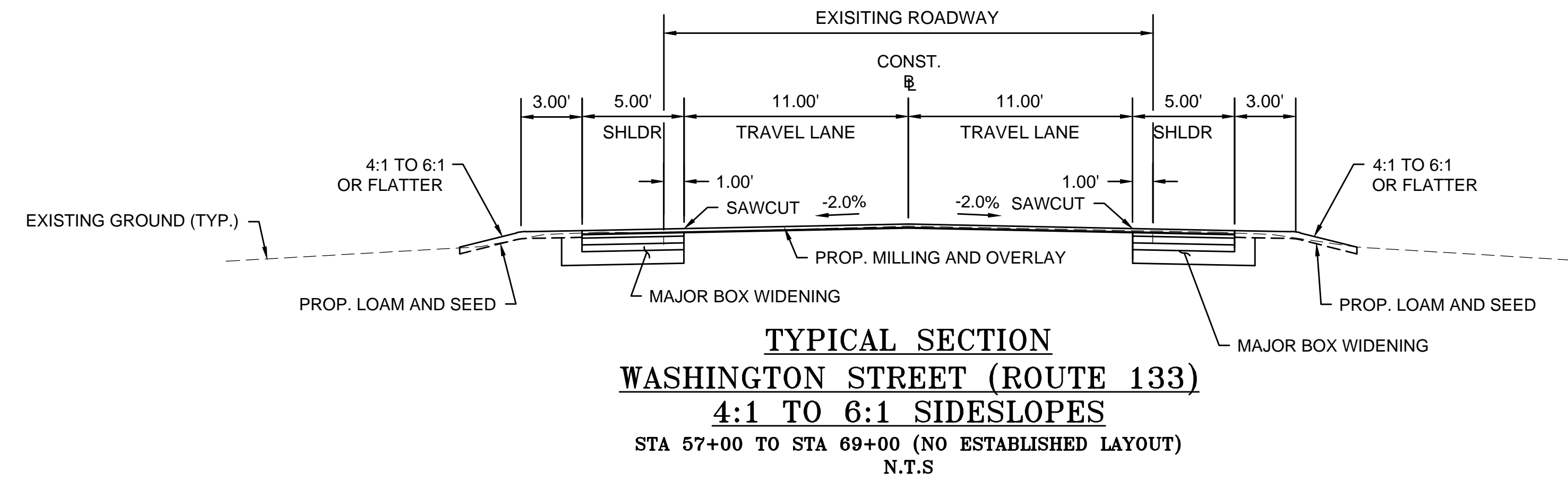


NOTE:  
NO COUNTY LAYOUT HAS BEEN ESTABLISHED  
BETWEEN STA. 51+88 AND STA. 69+18

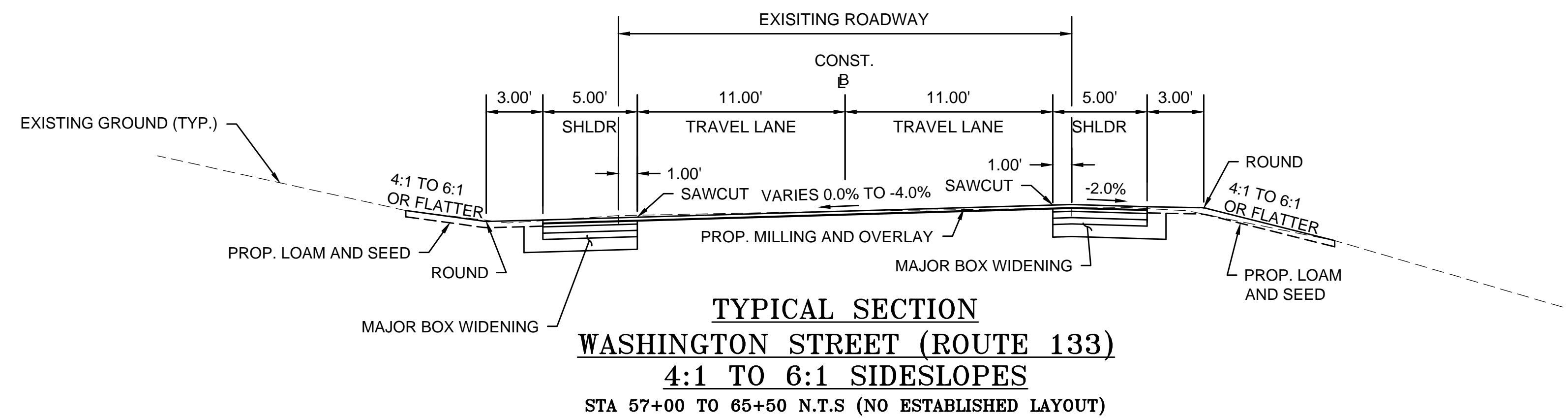


**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

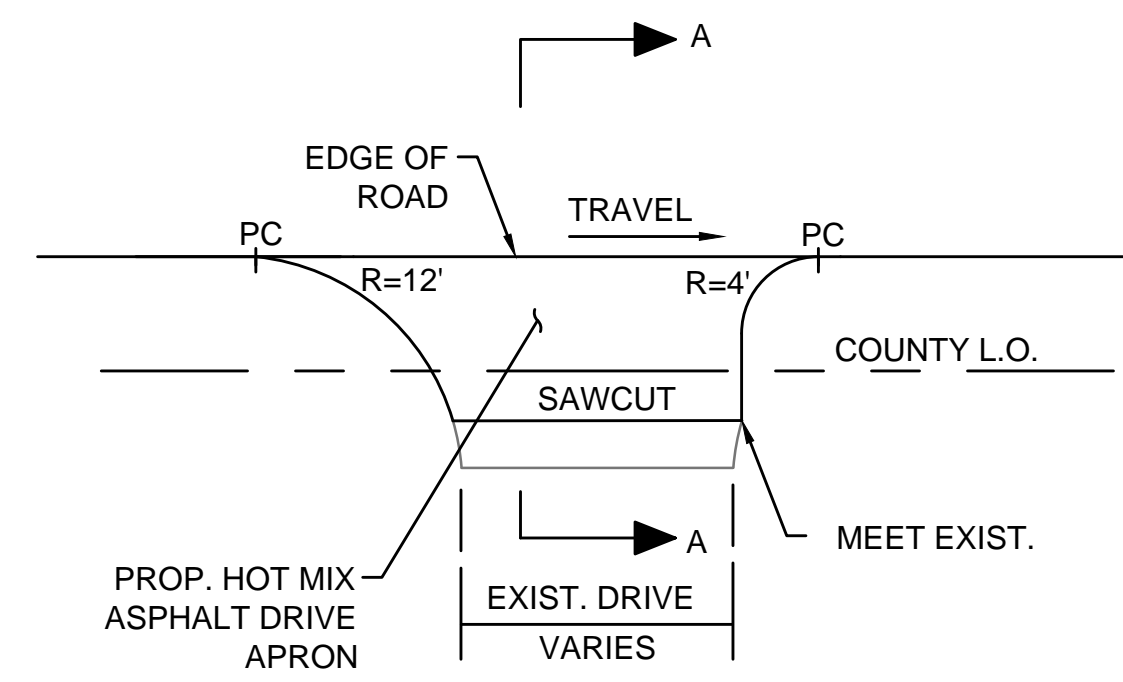
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	7	64
PROJECT FILE NO.		606721	



**NOTE:**  
NO COUNTY LAYOUT HAS BEEN ESTABLISHED  
BETWEEN STA. 51+88 AND STA. 69+18

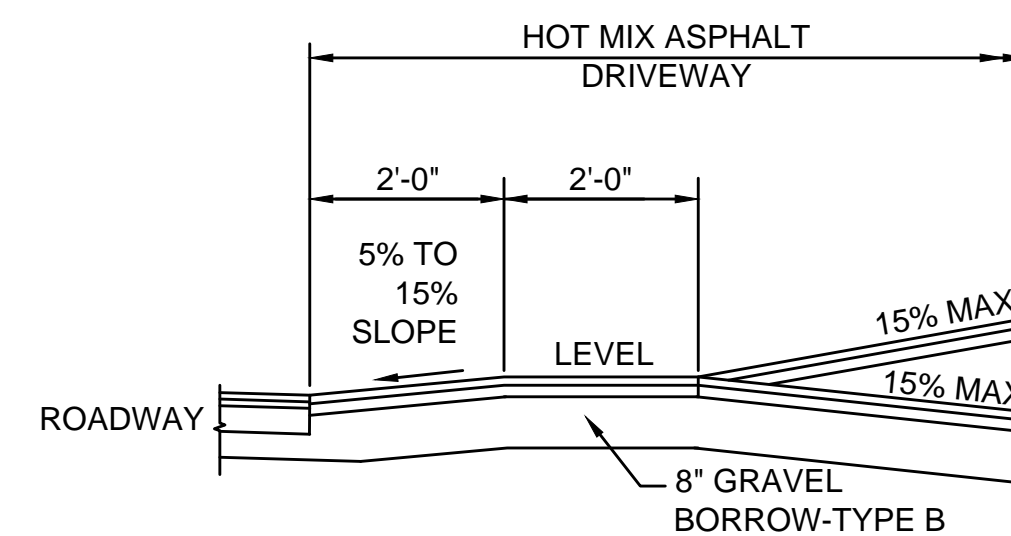


**NOTE:**  
NO COUNTY LAYOUT HAS BEEN ESTABLISHED  
BETWEEN STA. 51+88 AND STA. 69+18

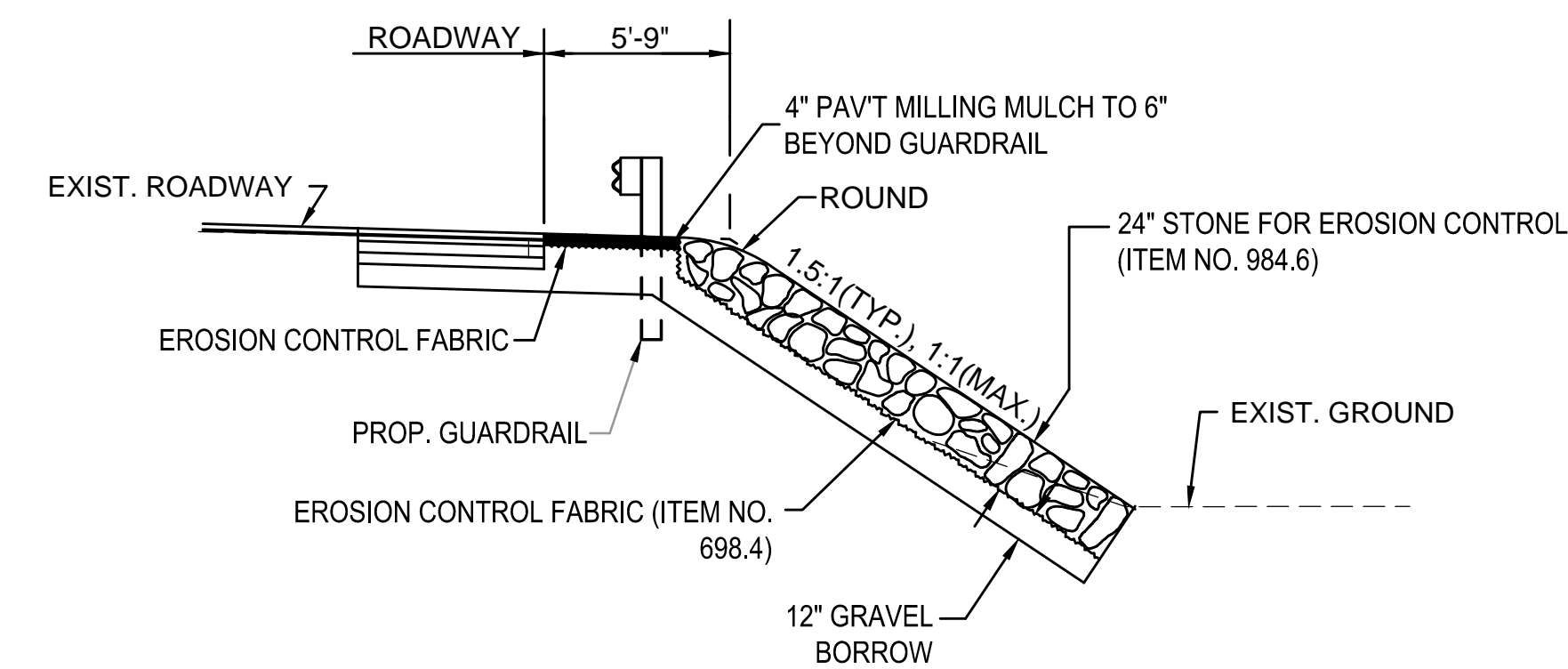


**NOTE:**  
PROVIDE SAWCUT BETWEEN PROPOSED HMA DRIVEWAY APRON AND ROADWAY WHERE PAVEMENT MILLING & OVERLAY IS PROPOSED.

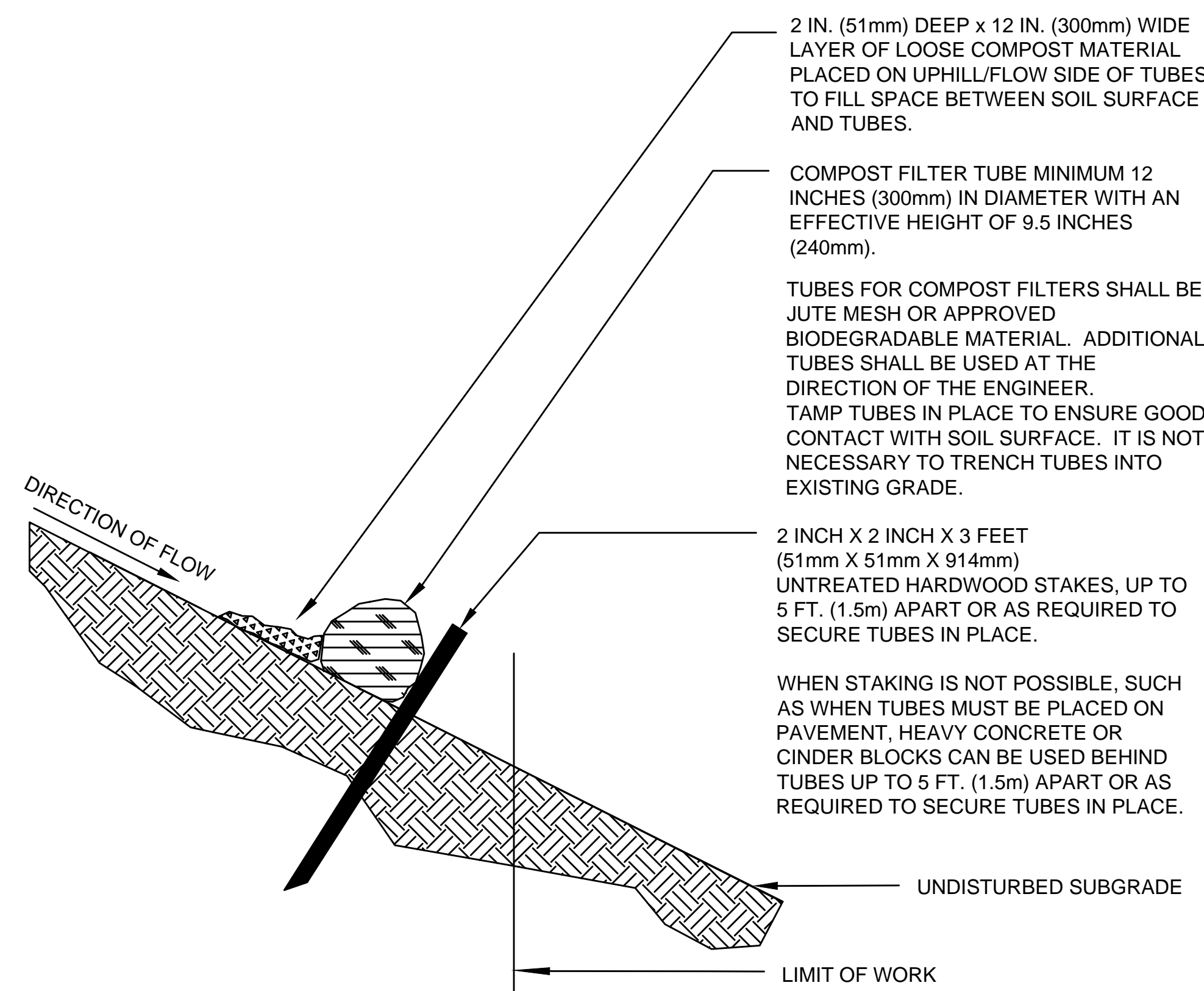
**TYPICAL DRIVEWAY DETAIL**  
N.T.S



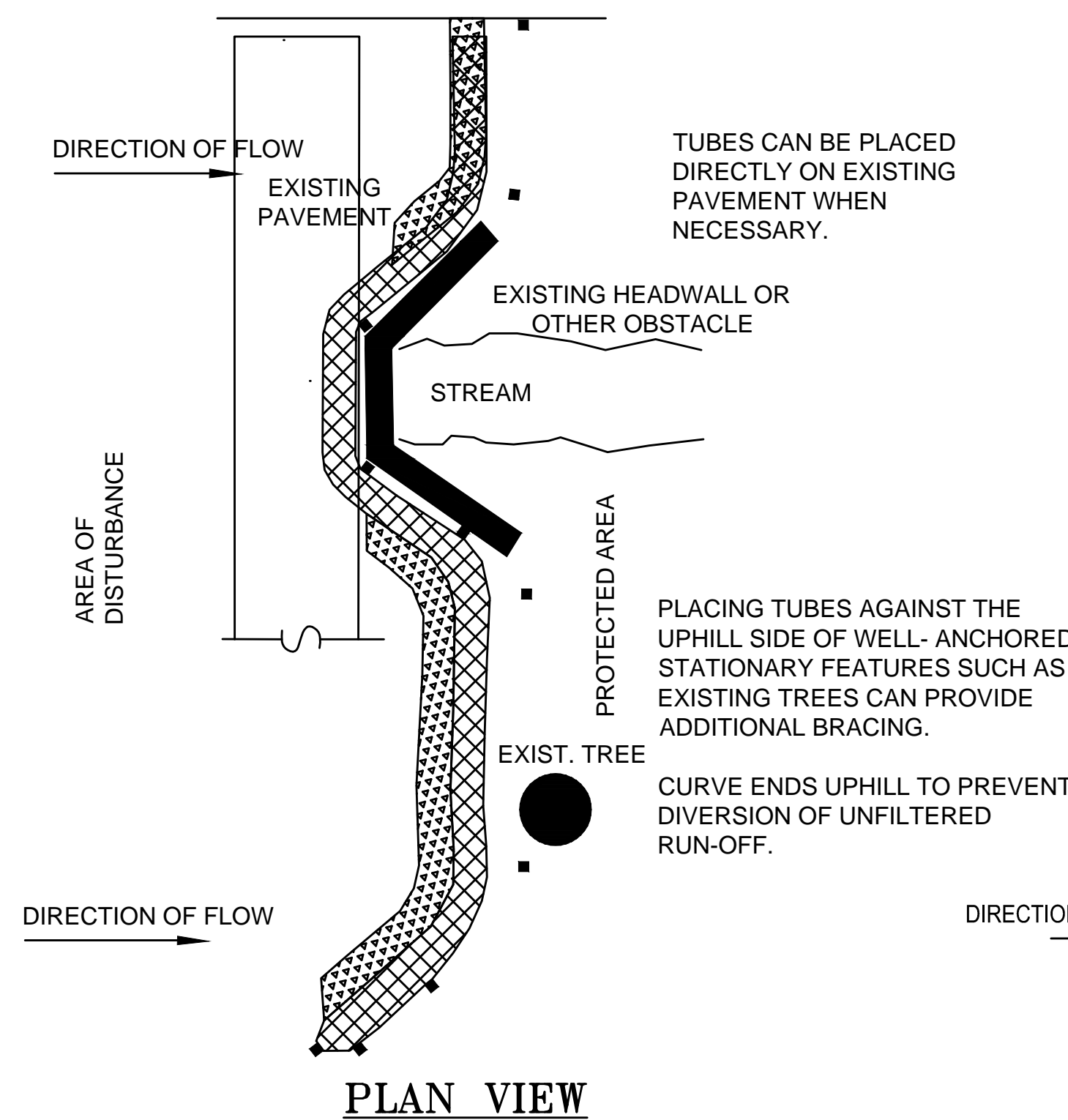
**SECTION A-A**  
N.T.S  
\*\* TOLERANCE FOR CONSTRUCTION ±0.5%



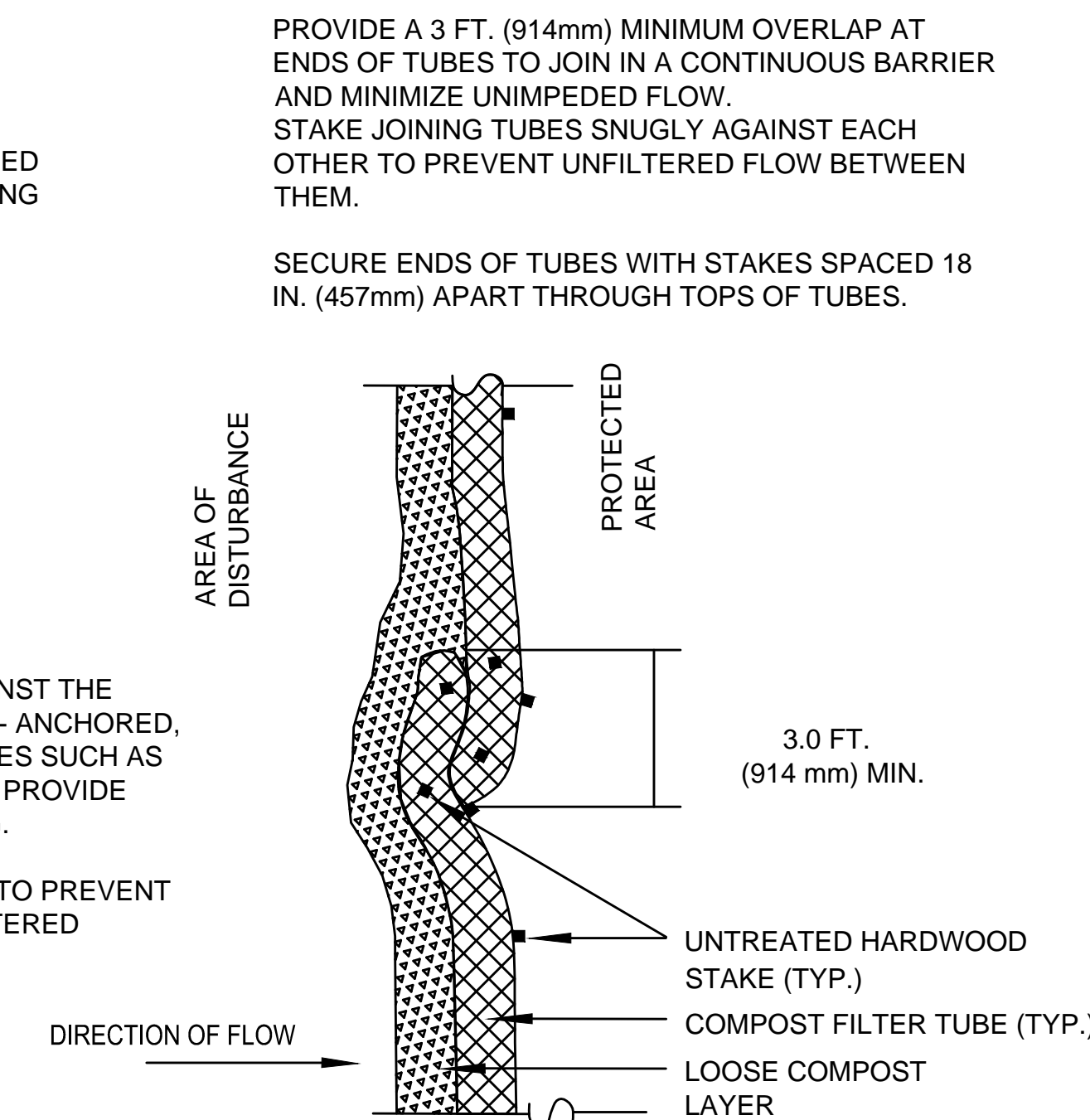
**ROCK FILL SLOPE TREATMENT**  
 STA. 1+75 RT TO STA. 3+75 RT  
 STA. 11+25 LT LAKESHORE RD. CONST. BASELINE TO STA. 22+75 LT LAKSHORE RD. CONST. BASELINE  
 STA. 12+25 RT TO STA. 14+15 RT  
 STA. 18+25 RT TO STA. 21+10 LT  
 STA. 24+75 RT TO STA. 27+50 LT  
 STA. 27+85 RT TO STA. 28+25 LT  
 STA. 30+50 RT TO STA. 32+00 LT  
 STA. 39+50 LT TO STA. 40+25 LT  
 STA. 43+75 LT TO STA. 44+45 LT  
 STA. 48+25 RT TO STA. 48+65 RT  
 STA. 50+65 RT TO STA. 51+25 RT  
 N.T.S.  
 \*CONSTRUCTION TOLERANCE ±0.5%



**SINGLE COMPOST FILTER TUBE DETAIL**  
N.T.S



**PLAN VIEW**



**PLAN VIEW - JOINT DETAIL**

PROVIDE A 3 FT. (914mm) MINIMUM OVERLAP AT ENDS OF TUBES TO JOIN IN A CONTINUOUS BARRIER AND MINIMIZE UNIMPEDED FLOW. STAKE JOINING TUBES SNUGLY AGAINST EACH OTHER TO PREVENT UNFILTERED FLOW BETWEEN THEM.  
 SECURE ENDS OF TUBES WITH STAKES SPACED 18 IN. (457mm) APART THROUGH TOPS OF TUBES.

**GENERAL NOTES:**

PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES (300mm) FOR SLOPES UP TO 50 FEET (15.24m) IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.

INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.

DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.

CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.



HIGHWAY GUARD DETAILS  
 STA. 1+00 (CONNECT TO EXISTING) RT TO STA. 5+63 (TANGENT END SECTION) RT

TRAFFIC SIGNAL CONDUIT  
 NONE

WATER SUPPLY ALTERATIONS  
 NONE

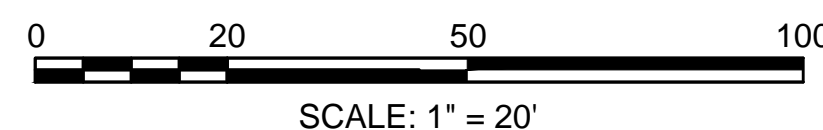
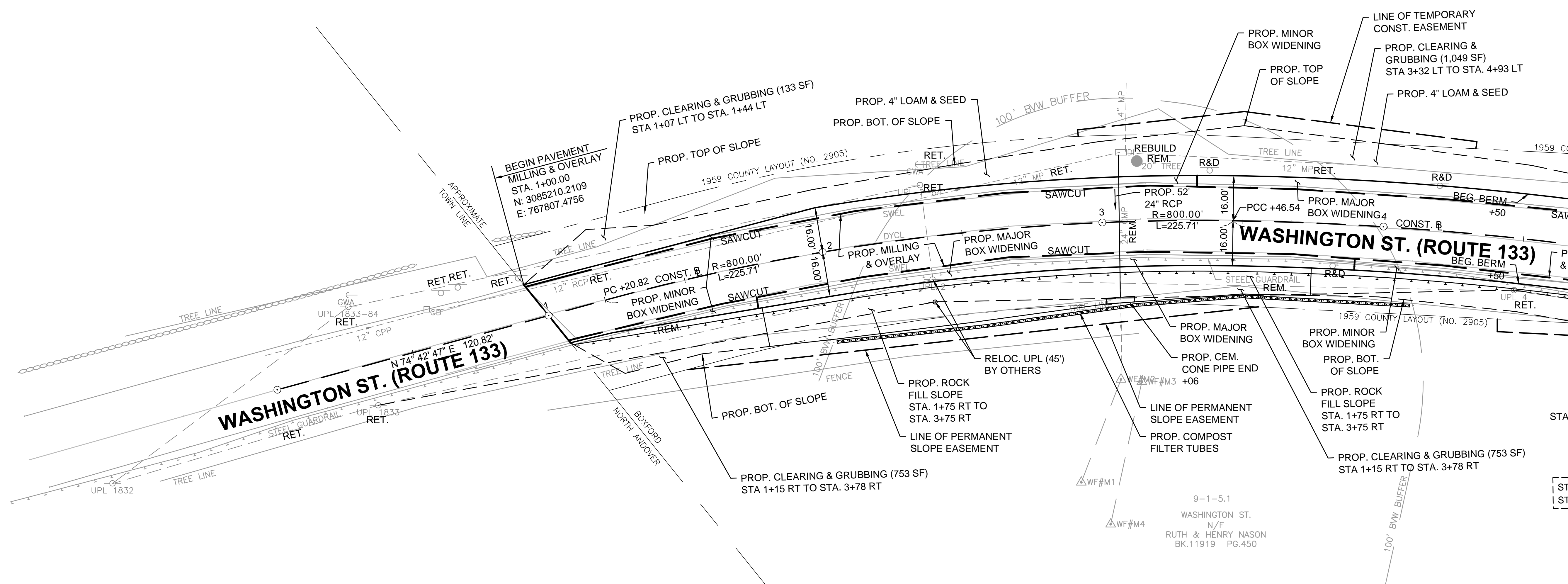
DRAINAGE DETAILS  
 SEE BELOW

**BOXFORD  
 WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	9	64

PROJECT FILE NO. 606721  
**CONSTRUCTION PLANS**

9-1-3+4  
 285 WASHINGTON ST.  
 N/F  
 FREDERICK H. GLORE  
 BK.6471 PG.680



CONTINUED ON  
 SHEET NO. 10

HIGHWAY GUARD DETAILS  
 STA. 1+00 (CONNECT TO EXISTING) RT TO STA. 5+63 (TANGENT END SECTION) RT  
 STA. 11+05 LAKESHORE ROAD (TANGENT END SECTION) LT TO  
 STA. 9+13 WASHINGTON ST. (TANGENT END SECTION) LT

TRAFFIC SIGNAL CONDUIT  
 NONE

WATER SUPPLY ALTERATIONS  
 NONE

DRAINAGE DETAILS  
 SEE BELOW

**BOXFORD  
 WASHINGTON STREET (ROUTE 133)**

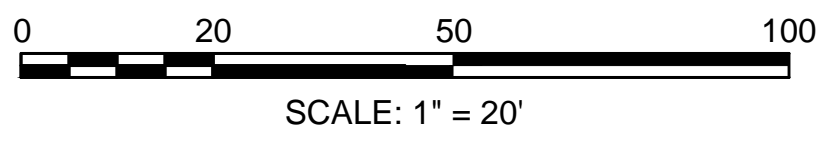
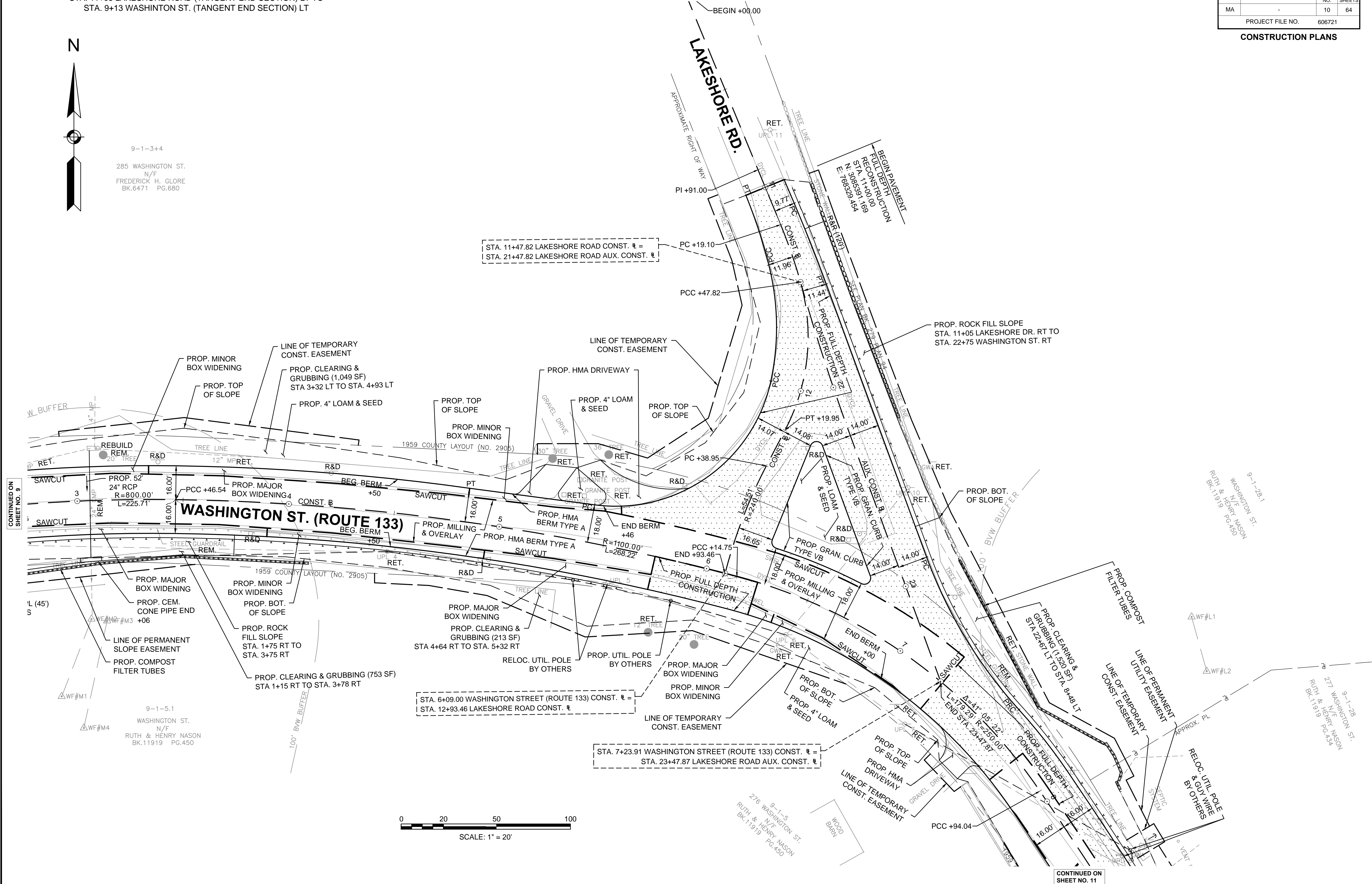
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	10	64

PROJECT FILE NO. 606721  
**CONSTRUCTION PLANS**



9-1-3+4

285 WASHINGTON ST.  
 N/F  
 FREDERICK H. GLORE  
 BK.6471 PG.680



CONTINUED ON  
 SHEET NO. 9

CONTINUED ON  
 SHEET NO. 11

HIGHWAY GUARD DETAILS  
 STA. 11+05 LAKESHORE ROAD (TANGENT END SECTION) LT TO  
 STA. 9+13 WASHINGTON ST. (TANGENT END SECTION) LT  
 STA. 11+38 (TANGENT END SECTION) RT TO STA. 14+63 (TANGENT END SECTION) RT

TRAFFIC SIGNAL CONDUIT  
 NONE

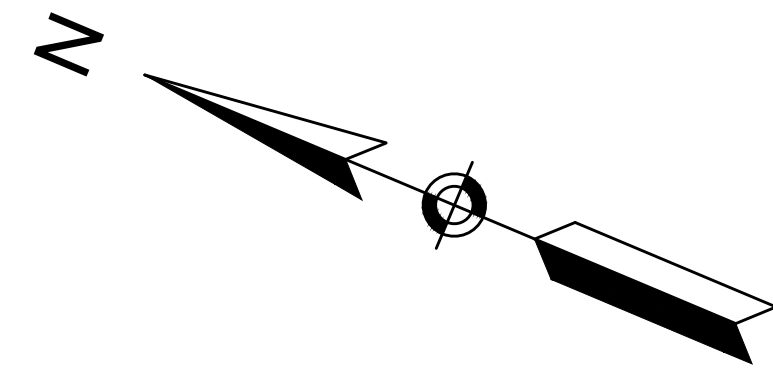
WATER SUPPLY ALTERATIONS  
 NONE

DRAINAGE DETAILS  
 SEE BELOW

**BOXFORD**  
**WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	11	64

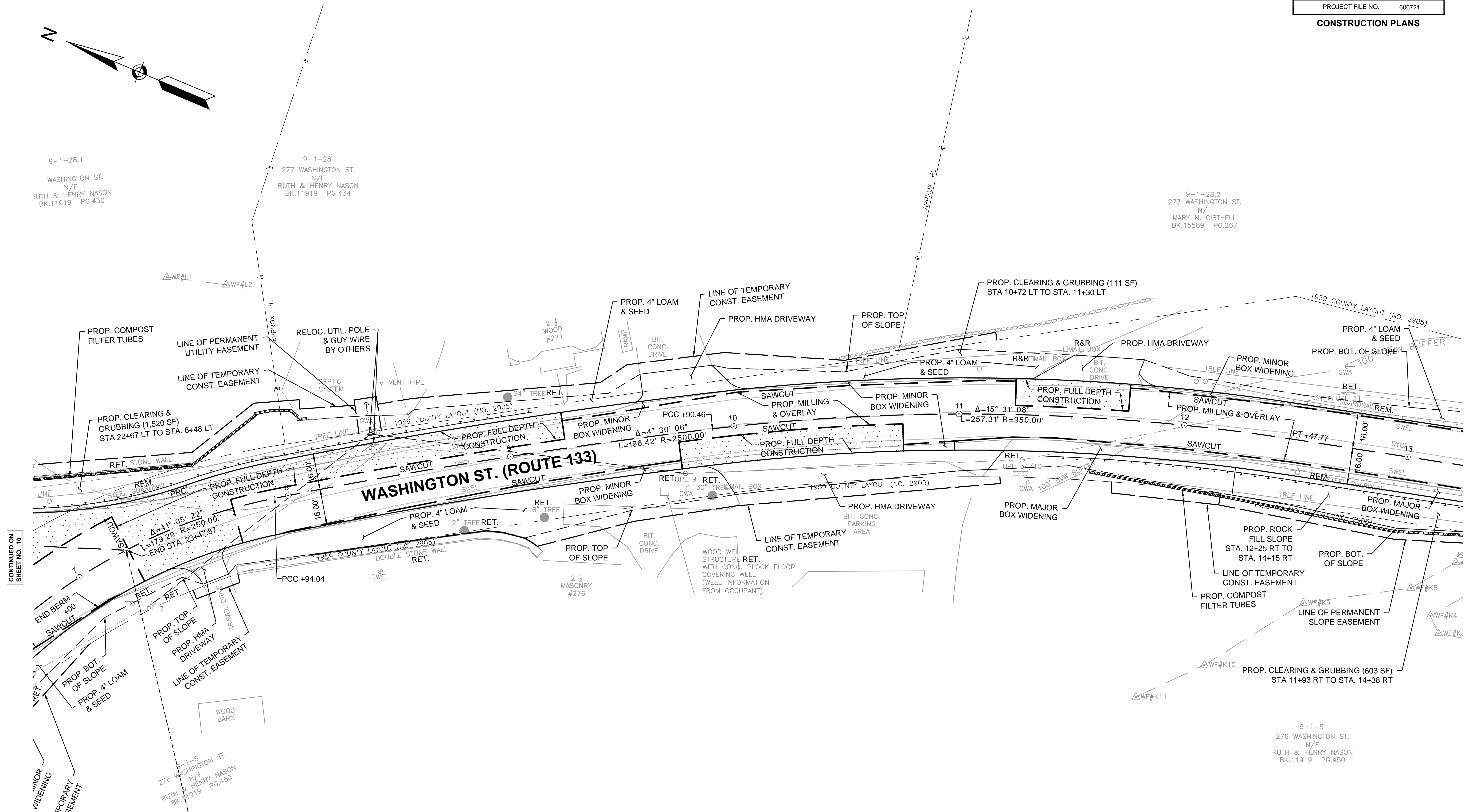
PROJECT FILE NO. 606721  
**CONSTRUCTION PLANS**



9-1-28.1  
 WASHINGTON ST.  
 N/F  
 RUTH & HENRY NASON  
 BK.11919 PG.450

9-1-28  
 277 WASHINGTON ST.  
 N/F  
 RUTH & HENRY NASON  
 BK.11919 PG.434

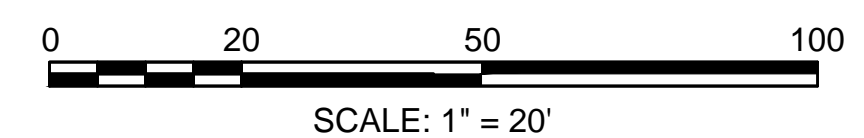
9-1-28.2  
 273 WASHINGTON ST.  
 N/F  
 MARY N. CIRTHELL  
 BK.15589 PG.267



CONTINUED ON  
 SHEET NO. 10

CONTINUED ON  
 SHEET NO. 12

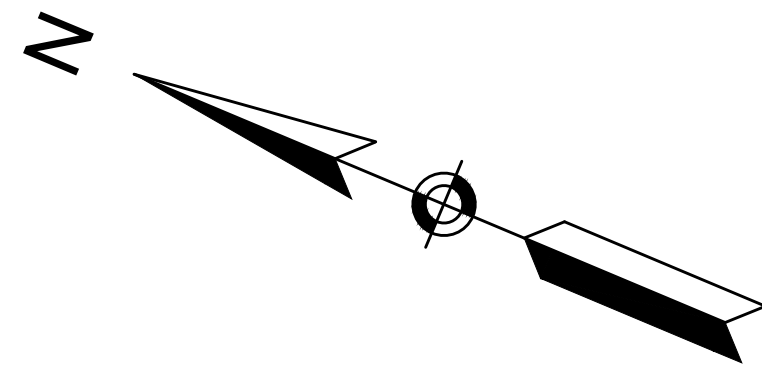
STA. 7+23.91 WASHINGTON STREET (ROUTE 133) CONST. E. =  
 STA. 23+47.87 LAKESHORE ROAD AUX. CONST. E.





HIGHWAY GUARD DETAILS

STA. 11+38 (TANGENT END SECTION) RT TO STA. 14+63 (TANGENT END SECTION) RT  
STA. 14+38 (TANGENT END SECTION) LT TO STA. 21+63 (TANGENT END SECTION) LT



TRAFFIC SIGNAL CONDUIT

NONE

WATER SUPPLY ALTERATIONS

NONE

DRAINAGE DETAILS

SEE BELOW

BOXFORD  
WASHINGTON STREET (ROUTE 133)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	12	64

PROJECT FILE NO. 606721  
CONSTRUCTION PLANS

9-1-28.2  
273 WASHINGTON ST.  
N/F  
MARY N. CIRTHELL  
BK.15589 PG.267

9-1-28  
277 WASHINGTON ST.  
N/F  
RUTH & HENRY NASON  
BK.11919 PG.434

9-1-27.1  
269 WASHINGTON ST.  
N/F  
KELLY PATRICK & CLARA TE  
BK.28284 PG.119

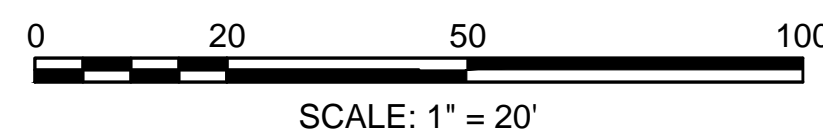
9-1-27  
WASHINGTON ST.  
N/F  
BTA/BOLT, INC.  
BK.12494 PG.322

9-1-5  
276 WASHINGTON ST.  
N/F  
RUTH & HENRY NASON  
BK.11919 PG.450

9-1-5  
276 WASHINGTON ST.  
N/F  
RUTH & HENRY NASON  
BK.11919 PG.450

CONTINUED ON  
SHEET NO. 11

CONTINUED ON  
SHEET NO. 13



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	13	64

PROJECT FILE NO. 606721  
**CONSTRUCTION PLANS**

**HIGHWAY GUARD DETAILS**  
STA. 14+38 (TANGENT END SECTION) LT TO STA. 21+25 (TANGENT END SECTION) LT

**TRAFFIC SIGNAL CONDUIT**  
NONE

**WATER SUPPLY ALTERATIONS**  
NONE

**DRAINAGE DETAILS**  
SEE BELOW

9-1-25  
253 WASHINGTON ST.  
N/F  
SUSAN RICHARDS  
BK.6531 PG.169

9-1-35.1  
265A WASHINGTON ST.  
N/F  
DONNA M. HENDRICKSON  
BK.19862 PG.262

9-1-27  
WASHINGTON ST.  
N/F  
BTA/BOLT, INC.  
BK.12494 PG.322

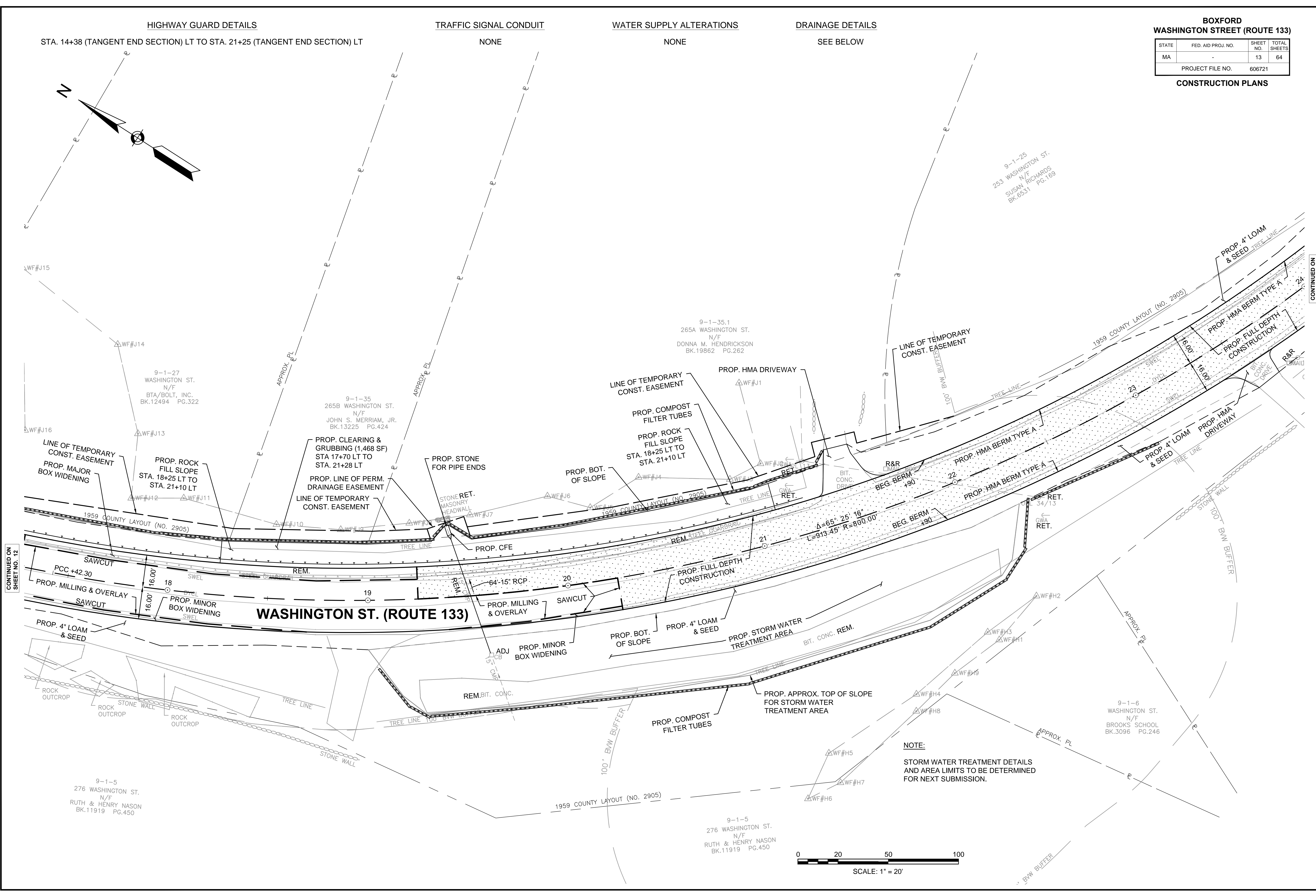
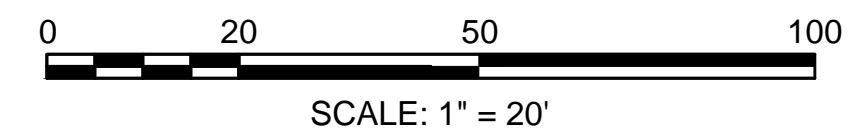
9-1-35  
265B WASHINGTON ST.  
N/F  
JOHN S. MERRIAM, JR.  
BK.13225 PG.424

9-1-6  
WASHINGTON ST.  
N/F  
BROOKS SCHOOL  
BK.3096 PG.246

9-1-5  
276 WASHINGTON ST.  
N/F  
RUTH & HENRY NASON  
BK.11919 PG.450

9-1-5  
276 WASHINGTON ST.  
N/F  
RUTH & HENRY NASON  
BK.11919 PG.450

**NOTE:**  
STORM WATER TREATMENT DETAILS  
AND AREA LIMITS TO BE DETERMINED  
FOR NEXT SUBMISSION.



CONTINUED ON  
SHEET NO. 12

CONTINUED ON  
SHEET NO. 14



HIGHWAY GUARD DETAILS

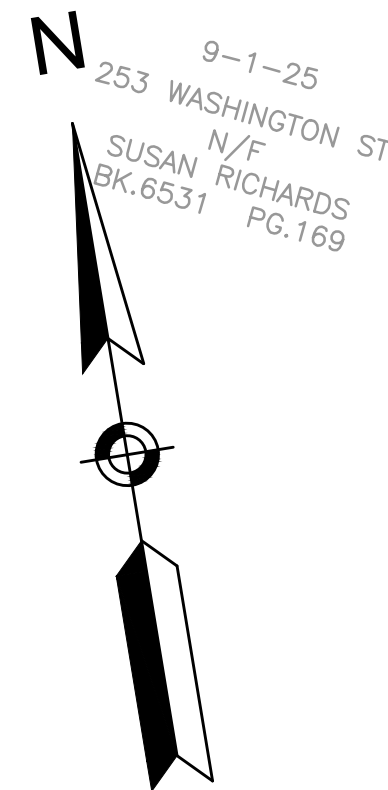
TRAFFIC SIGNAL CONDUIT

WATER SUPPLY ALTERATIONS

DRAINAGE DETAILS

STA. 24+25 (TANGENT END SECTION) LT TO STA. 27+55 (TANGENT END SECTION) LT  
STA. 26+14 (TANGENT END SECTION) RT TO STA. 27+88 (TANGENT END SECTION) RT  
STA. 27+80 (TANGENT END SECTION) LT TO STA. 28+63 (TANGENT END SECTION) LT

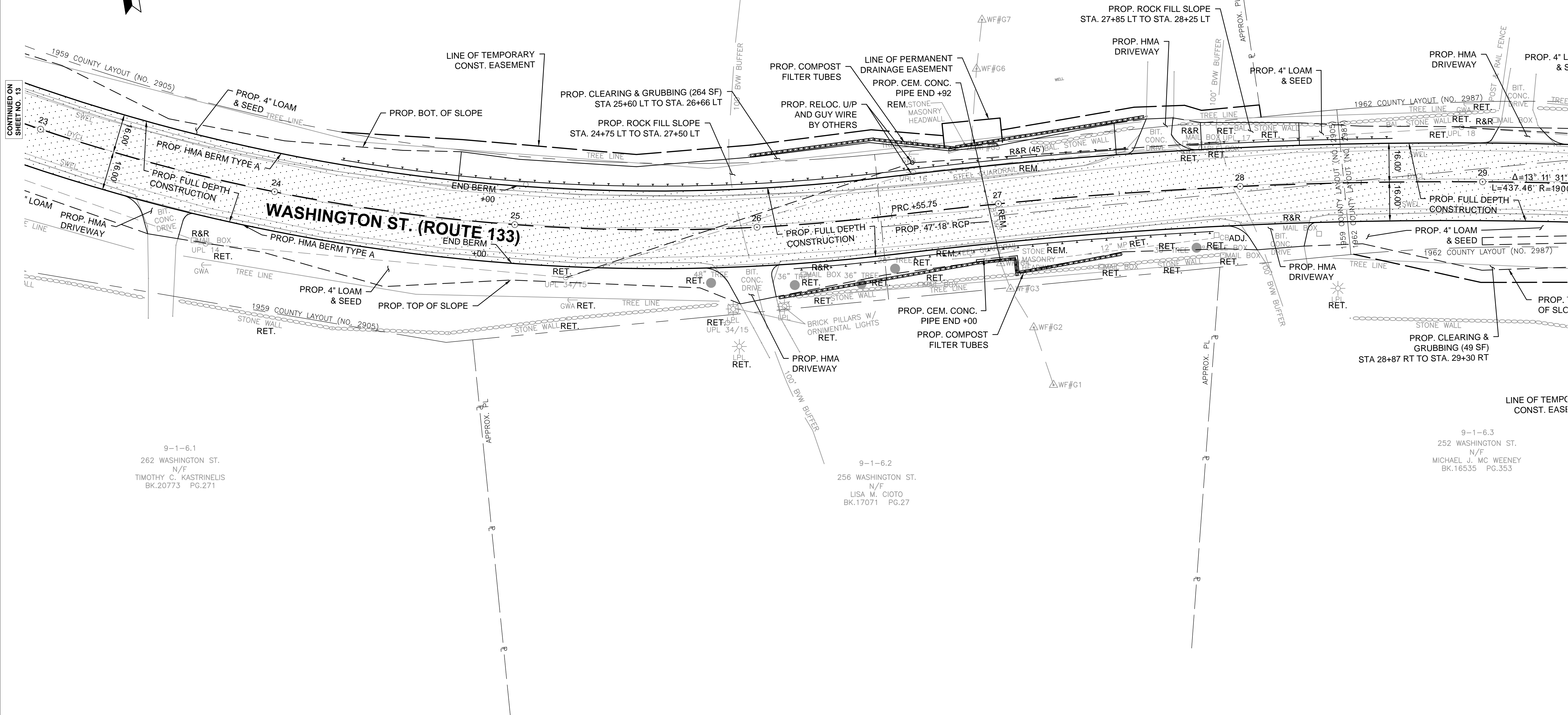
BOXFORD WASHINGTON STREET (ROUTE 133)			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	14	64
PROJECT FILE NO. 606721			
CONSTRUCTION PLANS			



9-1-32  
251 WASHINGTON ST.  
N/F  
LAWRENCE D. GALLAGHI  
BK.14137 PG.560

CONTINUED ON  
SHEET NO. 13

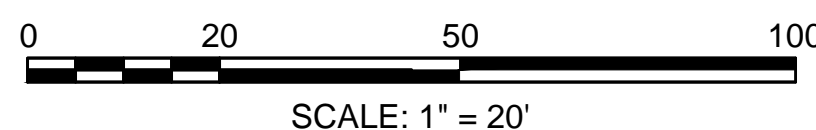
CONTINUED ON  
SHEET NO. 15



9-1-6.1  
262 WASHINGTON ST.  
N/F  
TIMOTHY C. KASTRINELIS  
BK.20773 PG.271

9-1-6.2  
256 WASHINGTON ST.  
N/F  
LISA M. CIOTO  
BK.17071 PG.27

9-1-6.3  
252 WASHINGTON ST.  
N/F  
MICHAEL J. MC WEENEY  
BK.16535 PG.353



HIGHWAY GUARD DETAILS

STA. 27+80 (TANGENT END SECTION) LT TO STA. 28+63 (TANGENT END SECTION) LT  
STA. 29+88 (TANGENT END SECTION) LT TO STA. 32+40 (TANGENT END SECTION) LT  
STA. 30+63 (TANGENT END SECTION) RT TO STA. 31+70 (TANGENT END SECTION) RT  
STA. 32+71 (TANGENT END SECTION) LT TO STA. 33+33 (TANGENT END SECTION) LT  
STA. 33+60 (TANGENT END SECTION) LT TO STA. 35+13 (TANGENT END SECTION) LT

TRAFFIC SIGNAL CONDUIT

NONE

WATER SUPPLY ALTERATIONS

NONE

DRAINAGE DETAILS

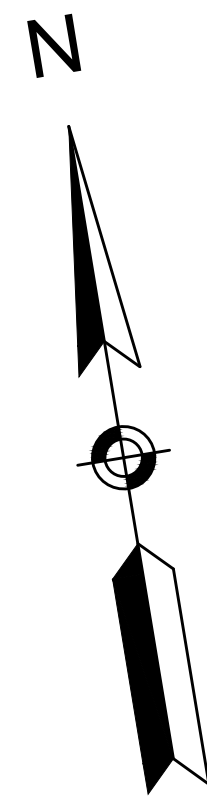
SEE BELOW

BOXFORD  
WASHINGTON STREET (ROUTE 133)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	15	64

CONSTRUCTION PLANS

PROJECT FILE NO. 606721



9-1-32  
251 WASHINGTON ST.  
N/F  
LAWRENCE D. GALLAGHER  
BK.14137 PG.560

9-1-36  
237 WASHINGTON ST.  
N/F  
RICHARD J. RESCIGNO  
BK.15196 PG.340

PROP. HMA DRIVEWAY  
PROP. 4" LOAM & SEED

RELOC. U/P BY OTHERS

PROP. ROCK FILL SLOPE  
STA. 30+50LT TO STA. 32+00 LT

LINE OF TEMPORARY CONST. EASEMENT

PROP. CEM. CONC. PIPE  
END +41

PROP. COMPOST FILTER TUBES  
LINE OF PROP. DRAINAGE EASEMENT

LINE OF TEMPORARY CONST. EASEMENT  
PROP. BOT. OF SLOPE  
PROP. HMA DRIVEWAY

PROP. HMA DRIVEWAY

PROP. CLEARING & GRUBBING (135 SF)  
STA 34+21 LT TO STA. 34+90 LT

PROP. BOT. OF SLOPE

WASHINGTON ST. (ROUTE 133)

PROP. 48" 18" RCP  
S 74° 20' 59" E 211.73'

UPL 3288 RET.

PROP. FULL DEPTH CONSTRUCTION  
L=246.65' R=1040.00'

PROP. HMA DRIVEWAY  
PROP. BOT. OF SLOPE

PROP. 4" LOAM & SEED

PROP. TOP OF SLOPE

PROP. LOAM AND SEED DITCH  
PROP. 4" LOAM & SEED

PROP. TOP OF SLOPE

PROP. CEM. CONC. PIPE  
END +47

PROP. HMA DRIVEWAY

PROP. HMA DRIVEWAY

PROP. LOAM AND SEED DITCH

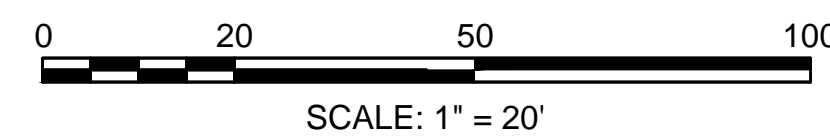
PROP. TOP OF SLOPE

PROP. HMA DRIVEWAY

RET. PROP. 4" LOAM & SEED

9-1-6.3  
252 WASHINGTON ST.  
N/F  
MICHAEL J. MC WEENEY  
BK.16535 PG.353

9-1-7  
WASHINGTON ST.  
N/F  
NEW ENGLAND POWER CO.  
BK.3976 PG.566



CONTINUED ON SHEET NO. 14

CONTINUED ON SHEET NO. 16

HIGHWAY GUARD DETAILS

TRAFFIC SIGNAL CONDUIT

WATER SUPPLY ALTERATIONS

DRAINAGE DETAILS

STA. 33+60 (TANGENT END SECTION) LT TO STA. 35+13 (TANGENT END SECTION) LT  
 STA. 38+38 (TANGENT END SECTION) LT TO STA. 50+37 (TANGENT END SECTION) LT  
 STA. 39+86 (TANGENT END SECTION) RT TO STA. 40+75 (CONNECT TO SPECIAL BASE ANCHOR) RT

NONE

NONE

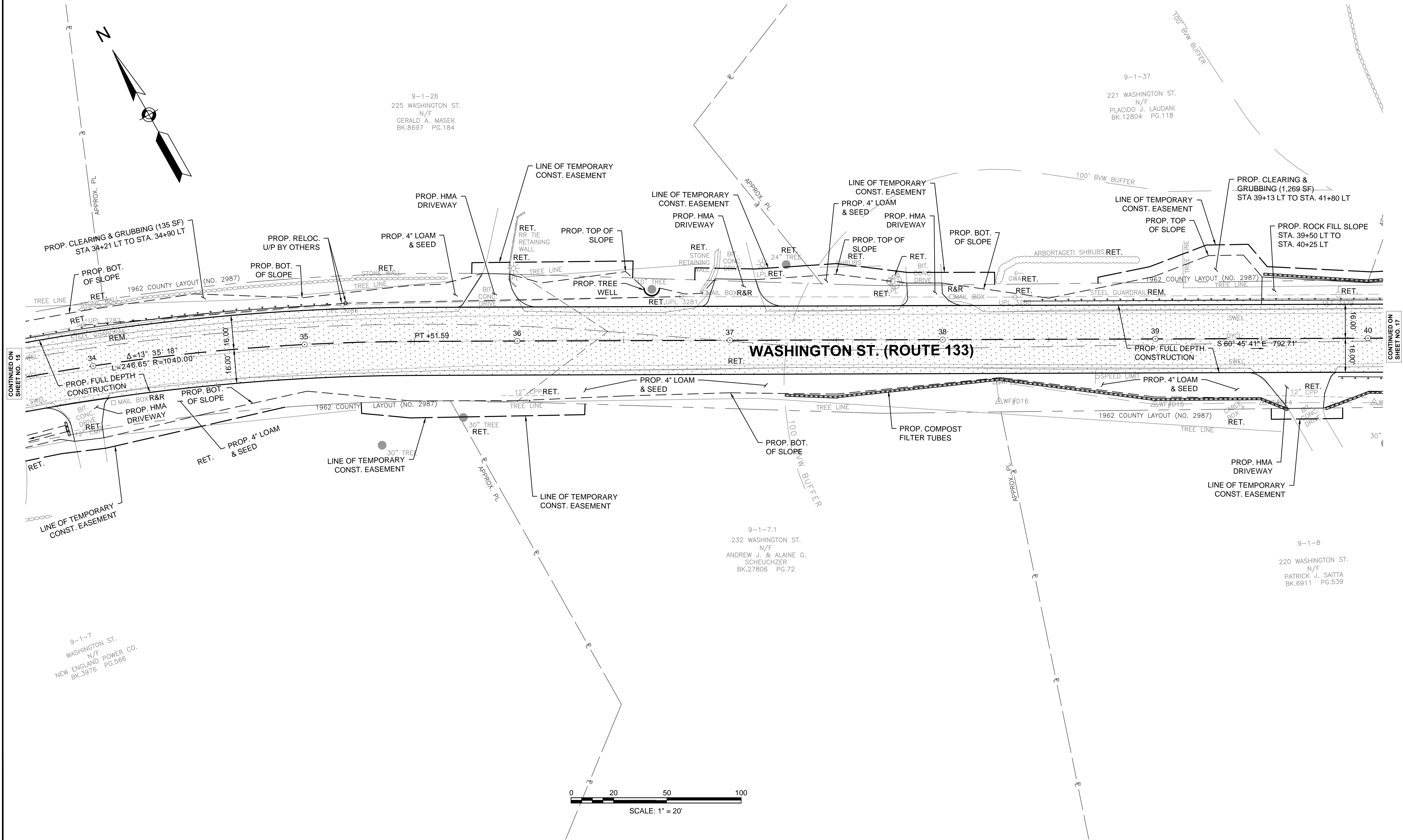
SEE BELOW

BOXFORD  
 WASHINGTON STREET (ROUTE 133)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	16	64

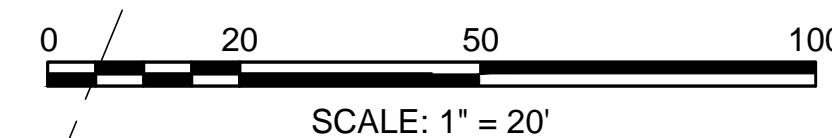
PROJECT FILE NO. 606721

CONSTRUCTION PLANS



CONTINUED ON SHEET NO. 15

CONTINUED ON SHEET NO. 17



9-1-7  
 WASHINGTON ST.  
 N/F  
 NEW ENGLAND POWER CO.  
 BK.3976 PG.566

9-1-26  
 225 WASHINGTON ST.  
 N/F  
 GERALD A. MASEK  
 BK.8697 PG.184

9-1-37  
 221 WASHINGTON ST.  
 N/F  
 PLACIDO J. LAUDANI  
 BK.12804 PG.118

9-1-7.1  
 232 WASHINGTON ST.  
 N/F  
 ANDREW J. & ALAINE G.  
 SCHEUCHZER  
 BK.27806 PG.72

9-1-8  
 220 WASHINGTON ST.  
 N/F  
 PATRICK J. SAITTA  
 BK.6911 PG.539



HIGHWAY GUARD DETAILS

TRAFFIC SIGNAL CONDUIT

WATER SUPPLY ALTERATIONS

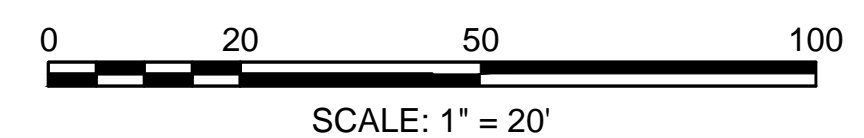
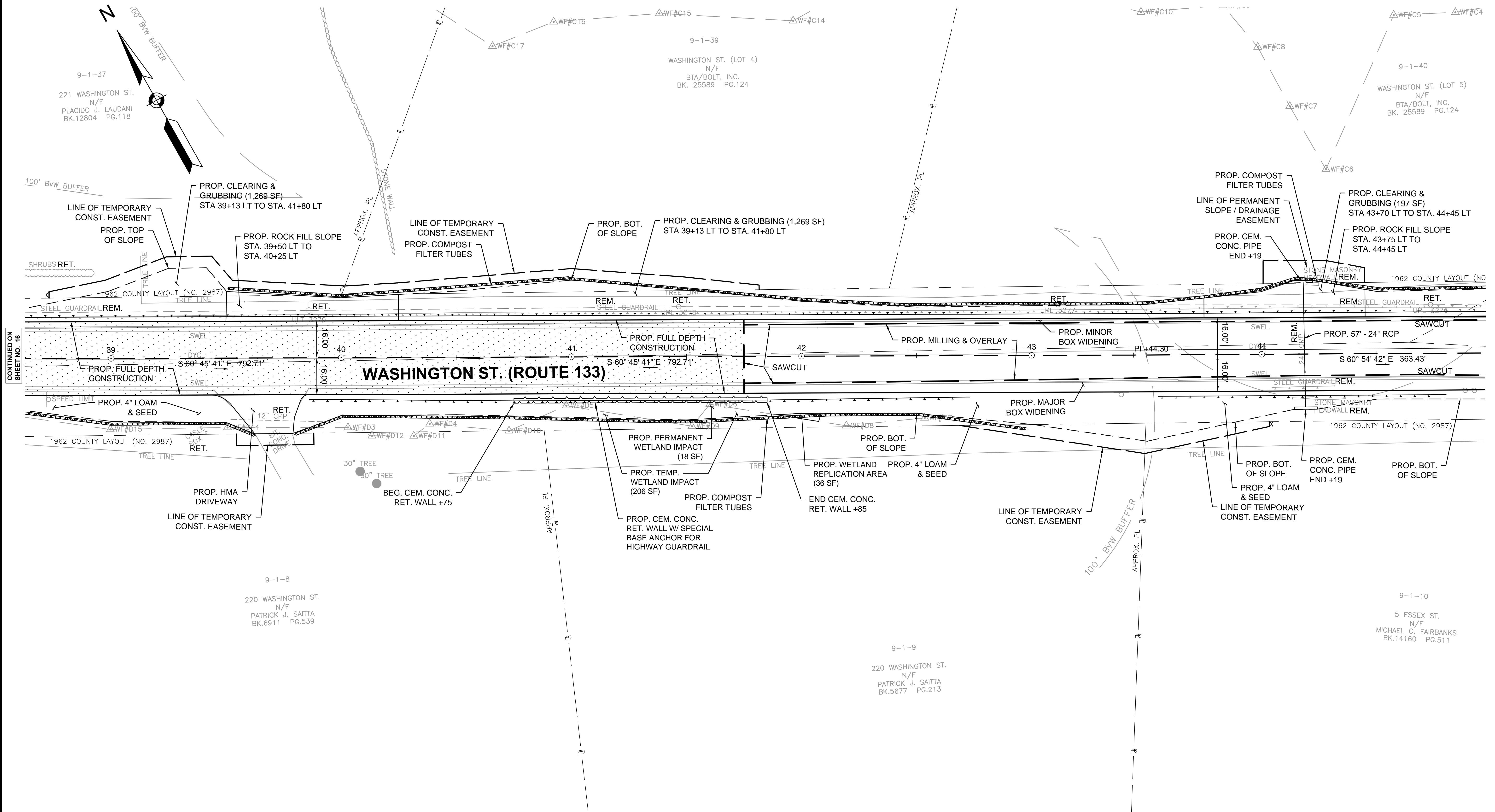
DRAINAGE DETAILS

BOXFORD  
WASHINGTON STREET (ROUTE 133)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	17	64
PROJECT FILE NO. 606721			

CONSTRUCTION PLANS

STA. 38+38 (TANGENT END SECTION) LT TO STA. 50+37 (TANGENT END SECTION) LT  
 STA. 39+86 (TANGENT END SECTION) RT TO STA. 40+75 (CONNECT TO SPECIAL BASE ANCHOR) RT  
 STA. 40+75 (SPECIAL BASE ANCHOR) RT TO STA. 41+85 (SPECIAL BASE ANCHOR) RT  
 STA. 41+85 (CONNECT TO SPECIAL BASE ANCHOR) RT TO STA. 42+73 (TANGENT END SECTION) RT  
 STA. 43+55 (TANGENT END SECTION) RT TO STA. 44+80 (TANGENT END SECTION) RT



CONTINUED ON SHEET NO. 16

CONTINUED ON SHEET NO. 18

HIGHWAY GUARD DETAILS

STA. 38+38 (TANGENT END SECTION) LT TO STA. 50+37 (TANGENT END SECTION) LT  
STA. 43+55 (TANGENT END SECTION) RT TO STA. 44+80 (TANGENT END SECTION) RT

TRAFFIC SIGNAL CONDUIT

NONE

WATER SUPPLY ALTERATIONS

NONE

DRAINAGE DETAILS

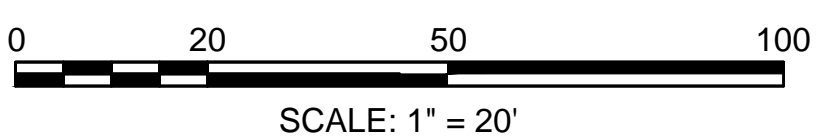
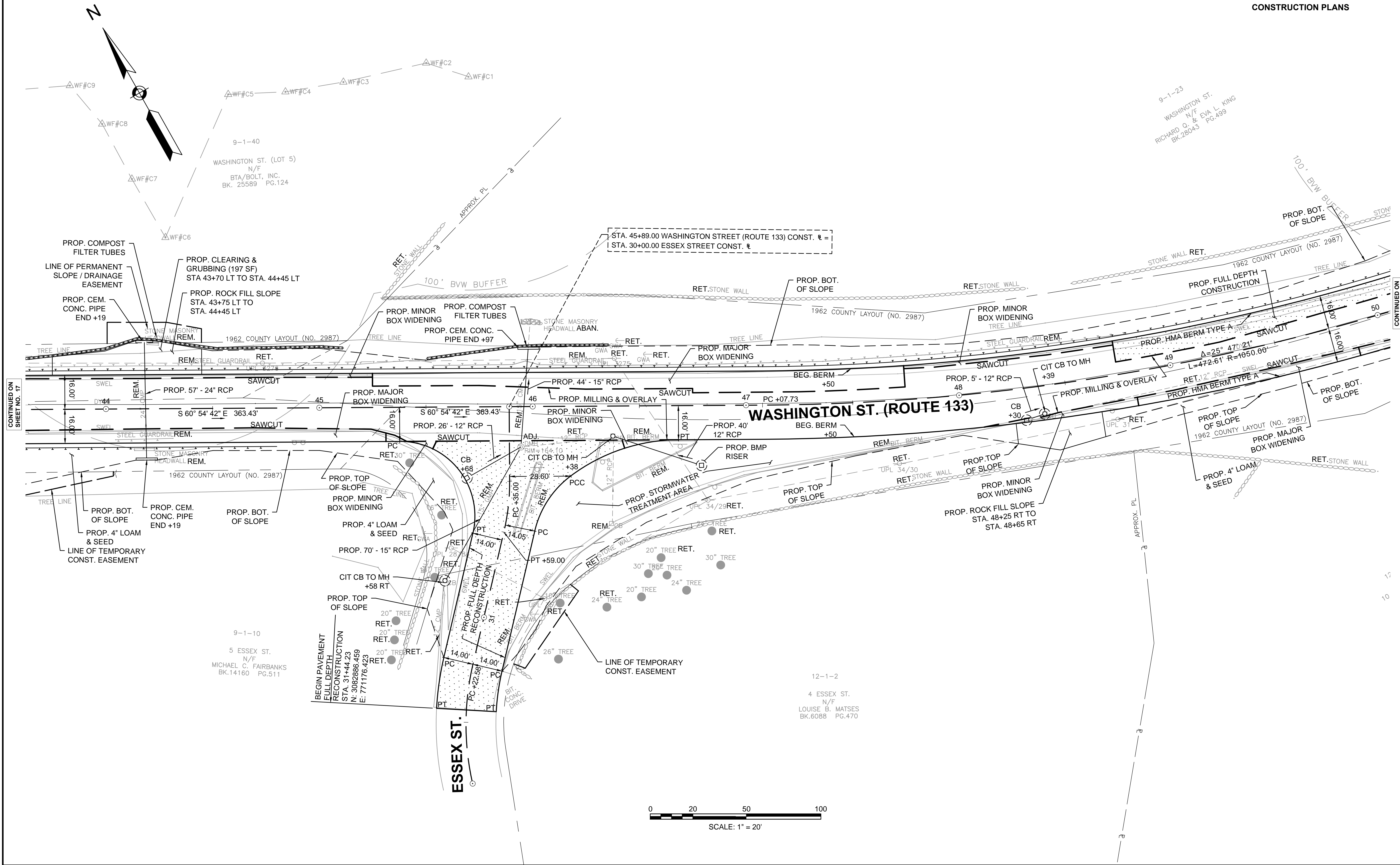
SEE BELOW

BOXFORD  
WASHINGTON STREET (ROUTE 133)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	18	64

PROJECT FILE NO. 606721

CONSTRUCTION PLANS



CONTINUED ON SHEET NO. 17

CONTINUED ON SHEET NO. 19



HIGHWAY GUARD DETAILS

STA. 38+38 (TANGENT END SECTION) LT TO STA. 50+37 (TANGENT END SECTION) LT  
STA. 50+27 (TANGENT END SECTION) RT TO STA. 51+84 (TANGENT END SECTION) RT  
STA. 50+82 (TANGENT END SECTION) LT TO STA. 53+10 (TANGENT END SECTION) LT  
STA. 52+20 (CONNECT TO EXISTING) RT TO STA. 53+00 (FLARED END SECTION) RT

TRAFFIC SIGNAL CONDUIT

NONE

WATER SUPPLY ALTERATIONS

NONE

DRAINAGE DETAILS

SEE BELOW

BOXFORD  
WASHINGTON STREET (ROUTE 133)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	19	64

PROJECT FILE NO. 606721  
CONSTRUCTION PLANS



9-1-23

WASHINGTON ST.  
N/F  
RICHARD Q. & EVA L. KING  
BK.28043 PG.499

9-1-22

189 WASHINGTON ST.  
N/F  
WILLIAM W. PAISLEY  
BK.20029 PG.321

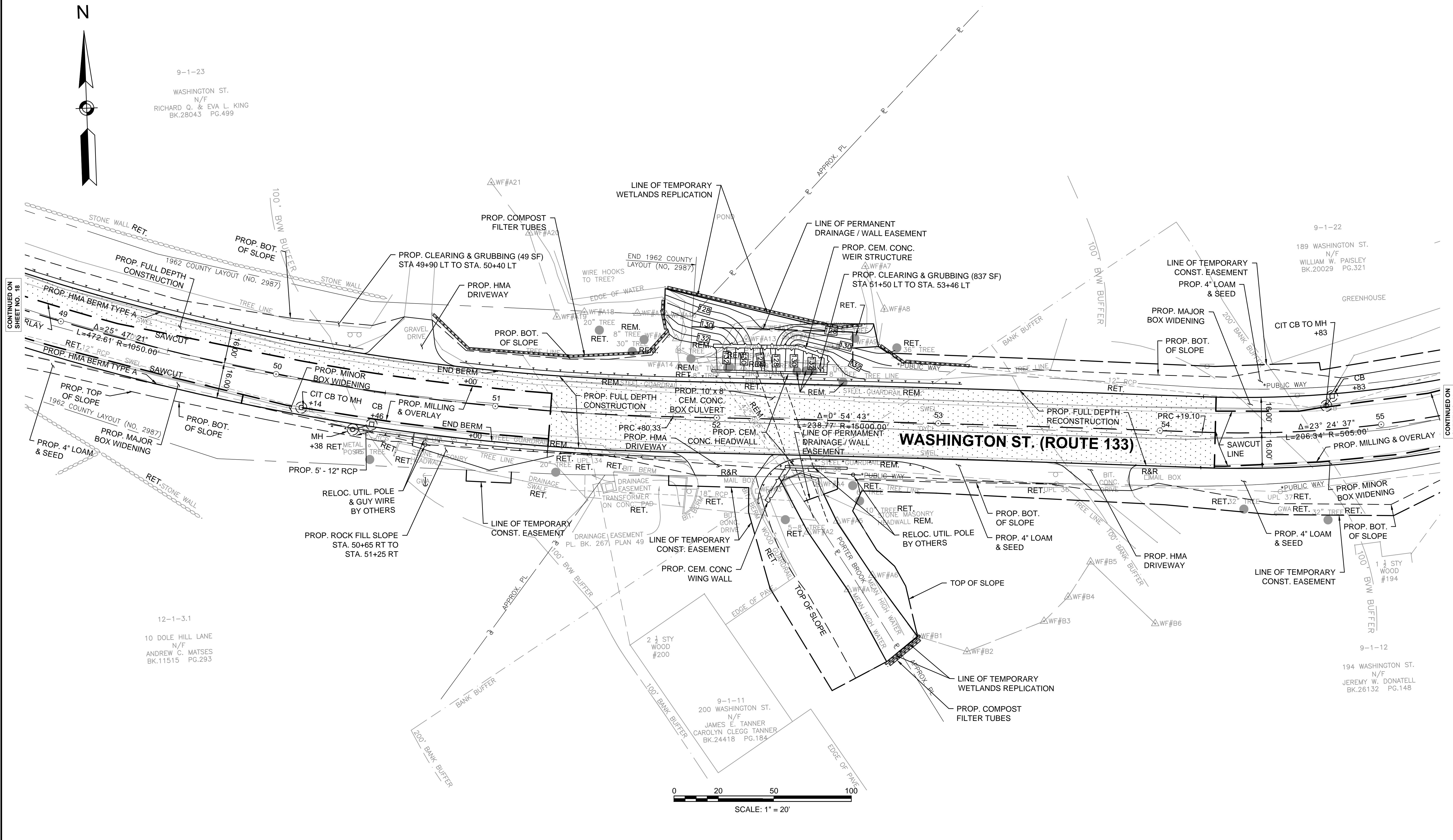
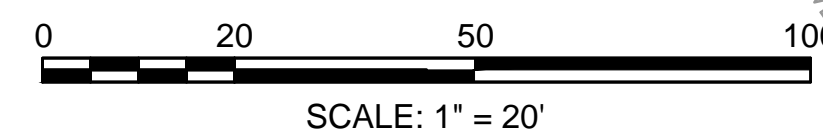
12-1-3.1

10 DOLE HILL LANE  
N/F  
ANDREW C. MATSES  
BK.11515 PG.293

9-1-11  
200 WASHINGTON ST.  
N/F  
JAMES E. TANNER  
CAROLYN CLEGG TANNER  
BK.24418 PG.184

9-1-12

194 WASHINGTON ST.  
N/F  
JEREMY W. DONATELL  
BK.26132 PG.148



CONTINUED ON SHEET NO. 18

CONTINUED ON SHEET NO. 20

HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

SEE BELOW

WATER SUPPLY ALTERATIONS

SEE BELOW

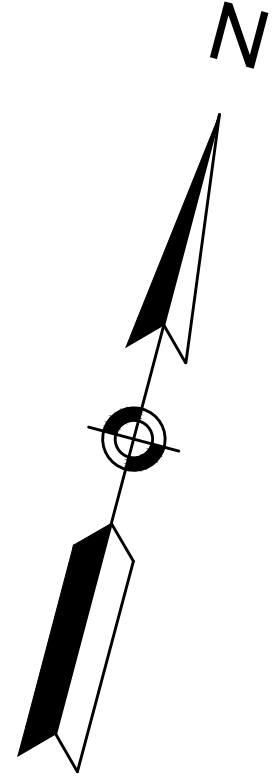
DRAINAGE DETAILS

SEE BELOW

BOXFORD  
WASHINGTON STREET (ROUTE 133)

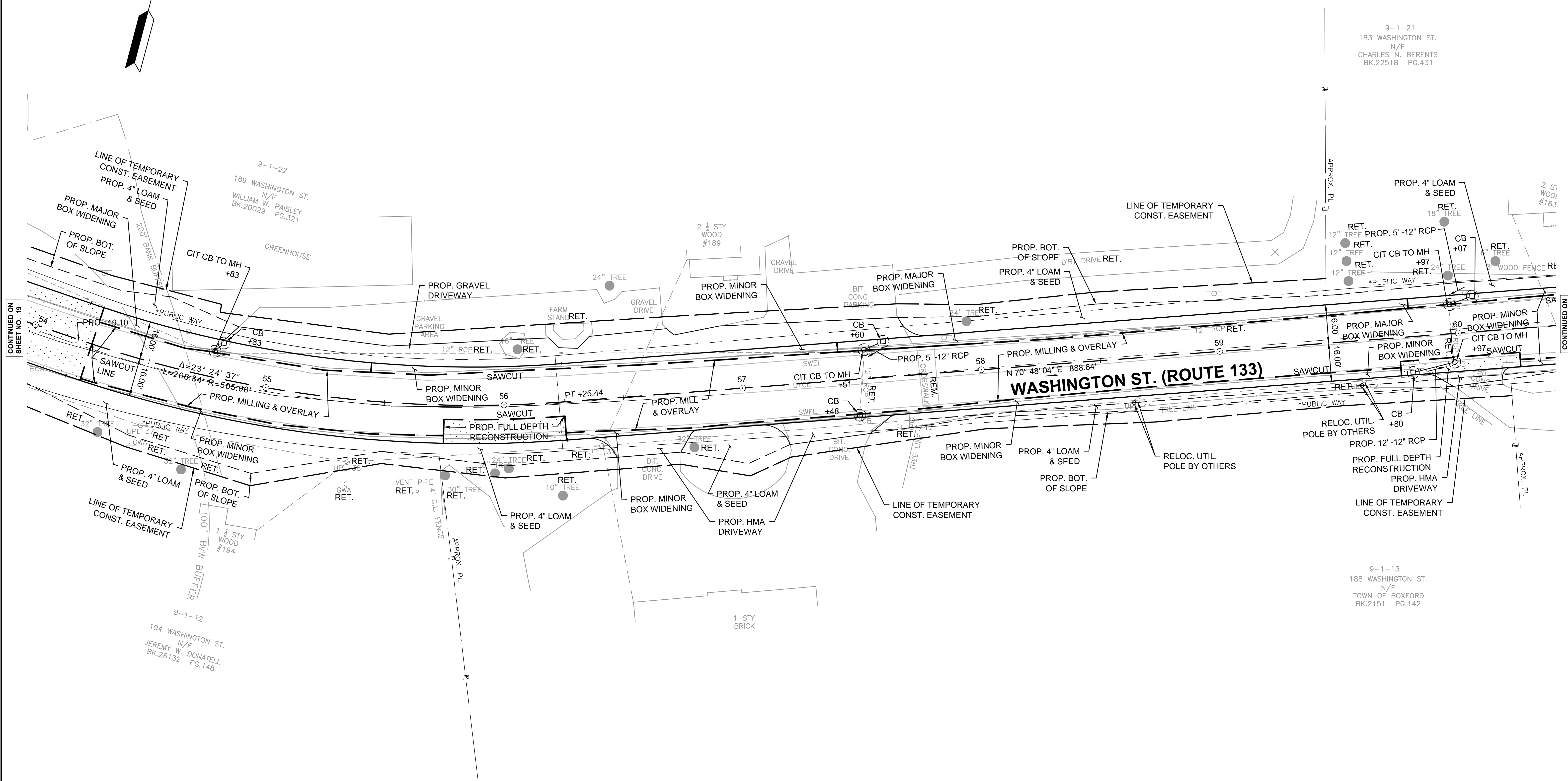
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	20	64

PROJECT FILE NO. 606721  
CONSTRUCTION PLANS



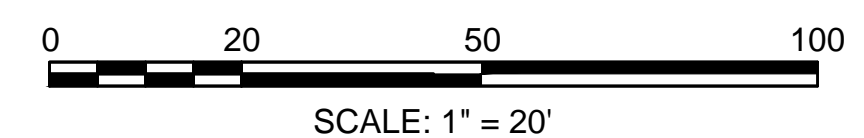
9-1-21  
183 WASHINGTON ST.  
N/F  
CHARLES N. BERENTS  
BK.22518 PG.431

9-1-13  
188 WASHINGTON ST.  
N/F  
TOWN OF BOXFORD  
BK.2151 PG.142



CONTINUED ON SHEET NO. 19

CONTINUED ON SHEET NO. 21



HIGHWAY GUARD DETAILS

TRAFFIC SIGNAL CONDUIT

WATER SUPPLY ALTERATIONS

DRAINAGE DETAILS

NONE

SEE BELOW

SEE BELOW

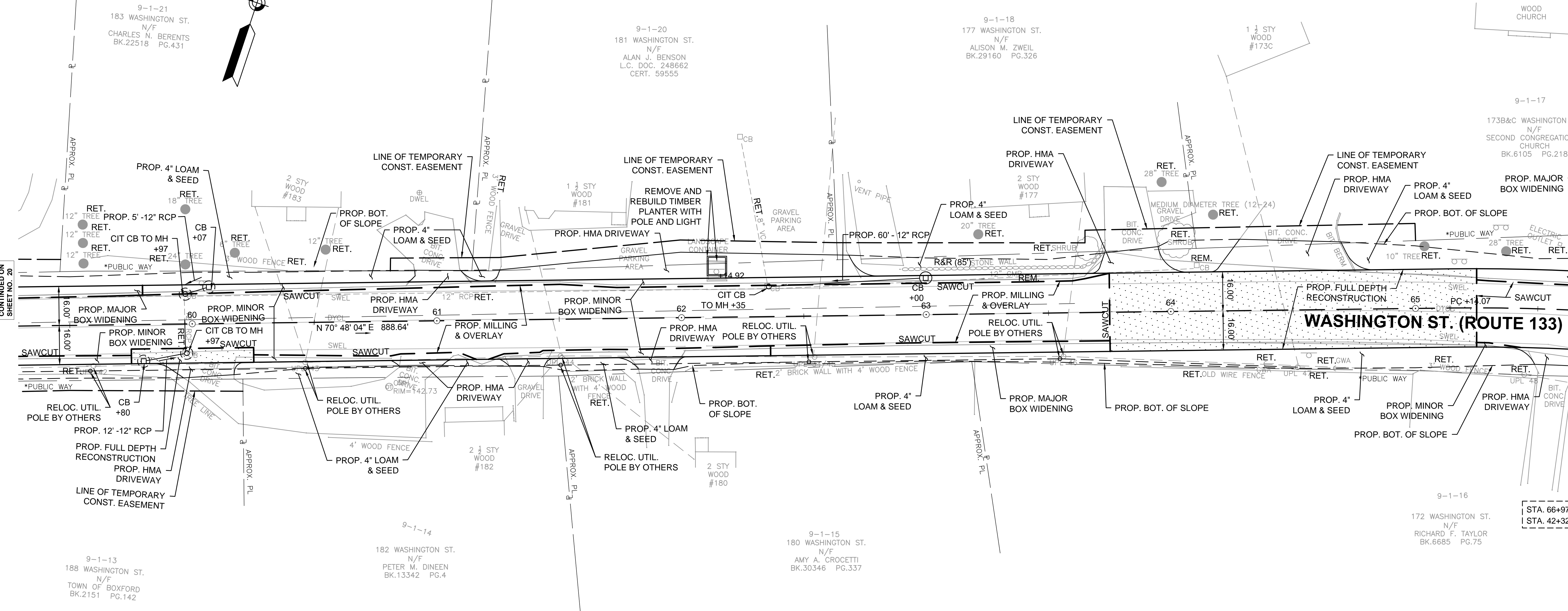
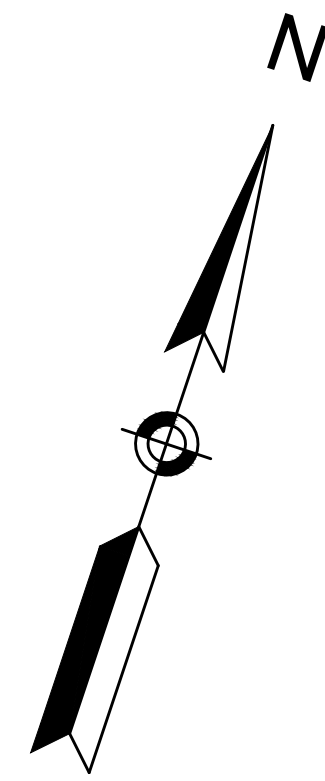
SEE BELOW

### BOXFORD WASHINGTON STREET (ROUTE 133)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	21	64

PROJECT FILE NO. 606721

#### CONSTRUCTION PLANS

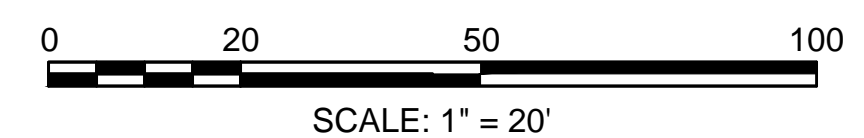


CONTINUED ON SHEET NO. 20

CONTINUED ON SHEET NO. 22

### WASHINGTON ST. (ROUTE 133)

STA. 66+97.51  
STA. 42+32.12





HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

SEE BELOW

WATER SUPPLY ALTERATIONS

SEE BELOW

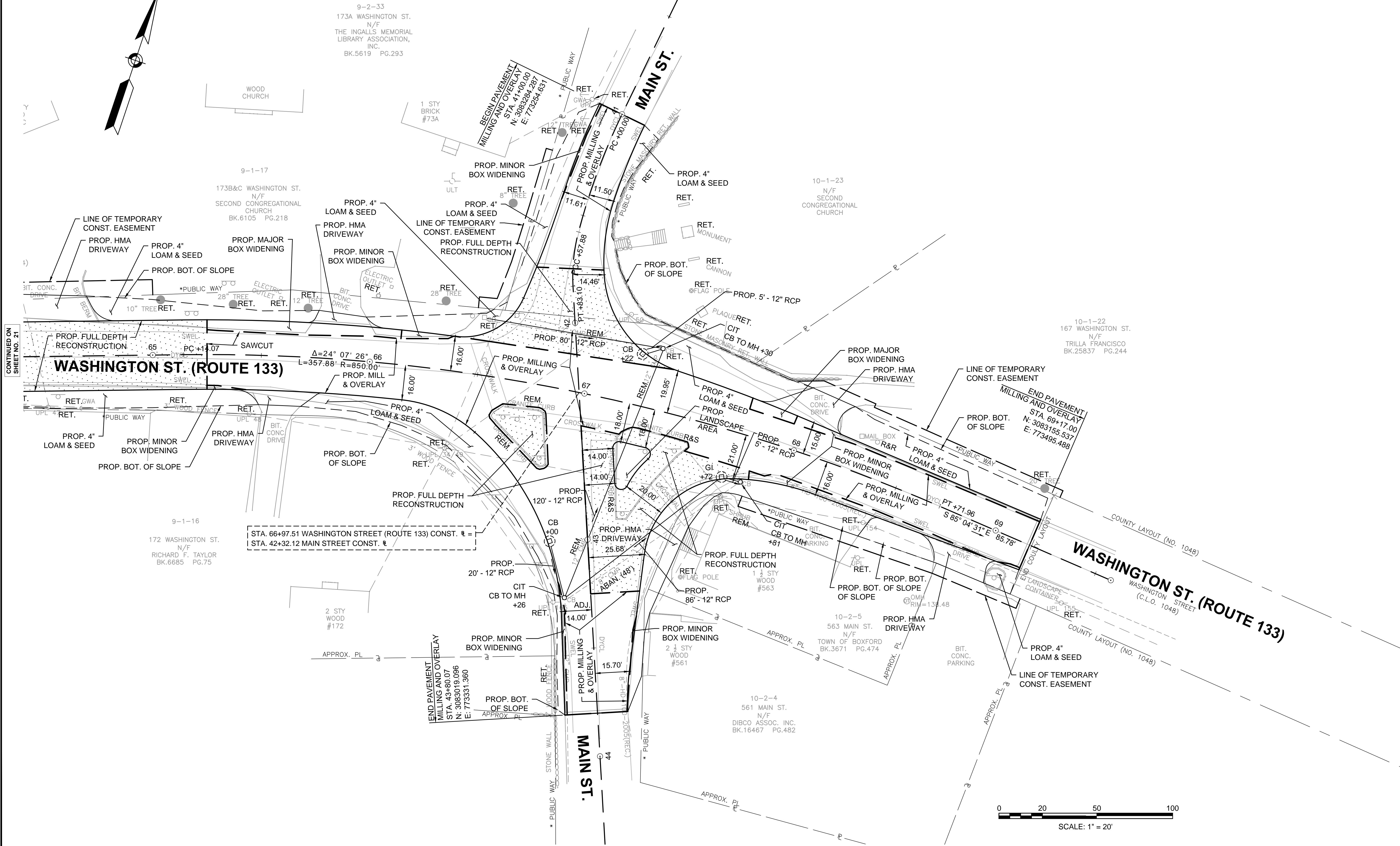
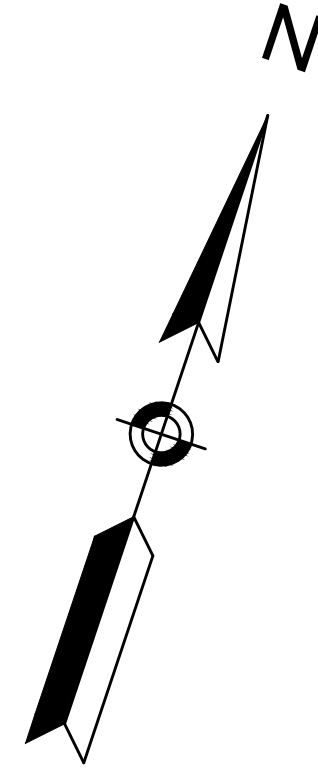
DRAINAGE DETAILS

SEE BELOW

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

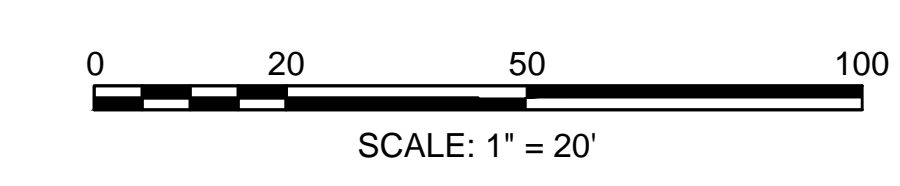
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	22	64
PROJECT FILE NO. 606721			

**CONSTRUCTION PLANS**



CONTINUED ON SHEET NO. 21

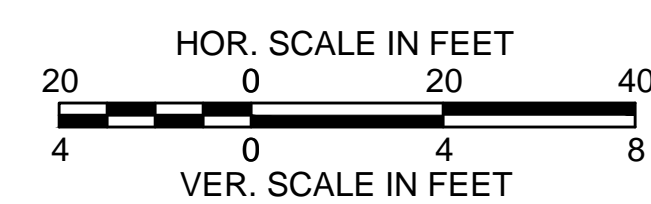
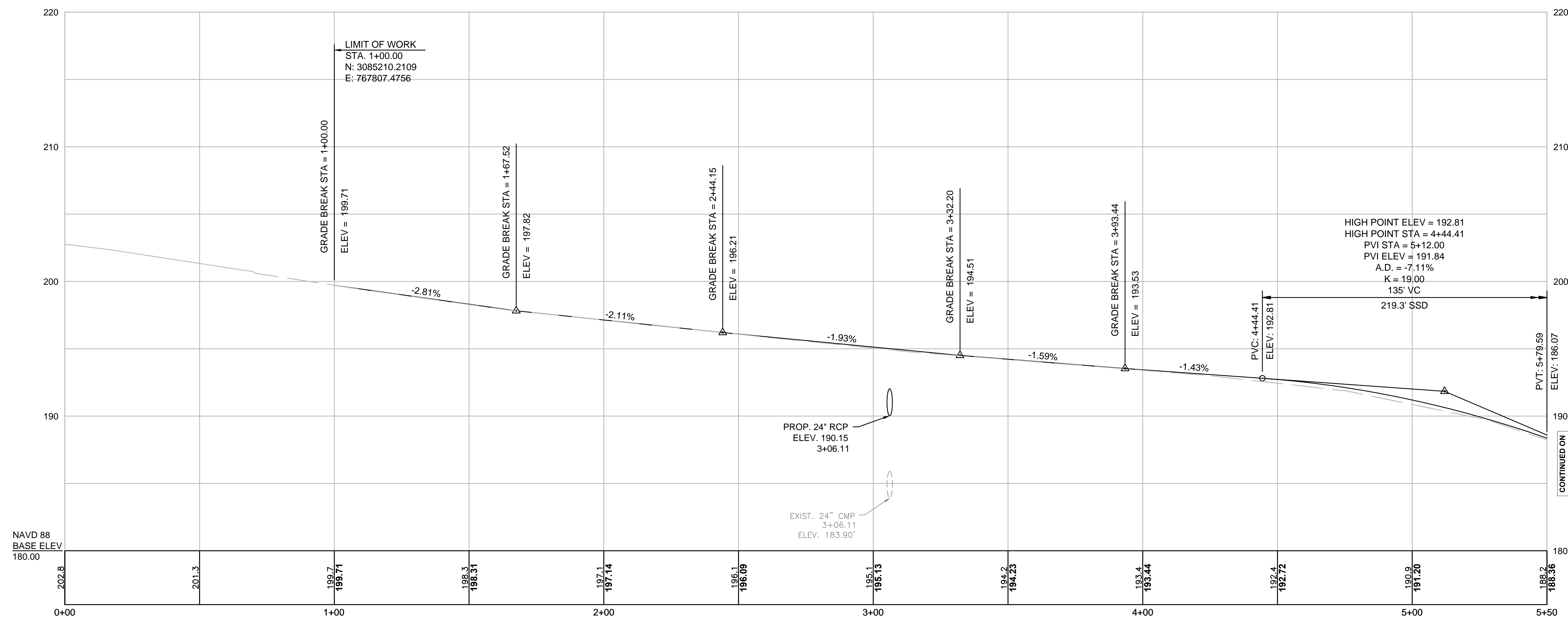
STA. 66+97.51 WASHINGTON STREET (ROUTE 133) CONST.  $\frac{1}{2}$ " =  $\frac{1}{4}$ "  
 STA. 42+32.12 MAIN STREET CONST.  $\frac{1}{2}$ " =  $\frac{1}{4}$ "



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	23	64
PROJECT FILE NO. 606721			

**PROFILE**



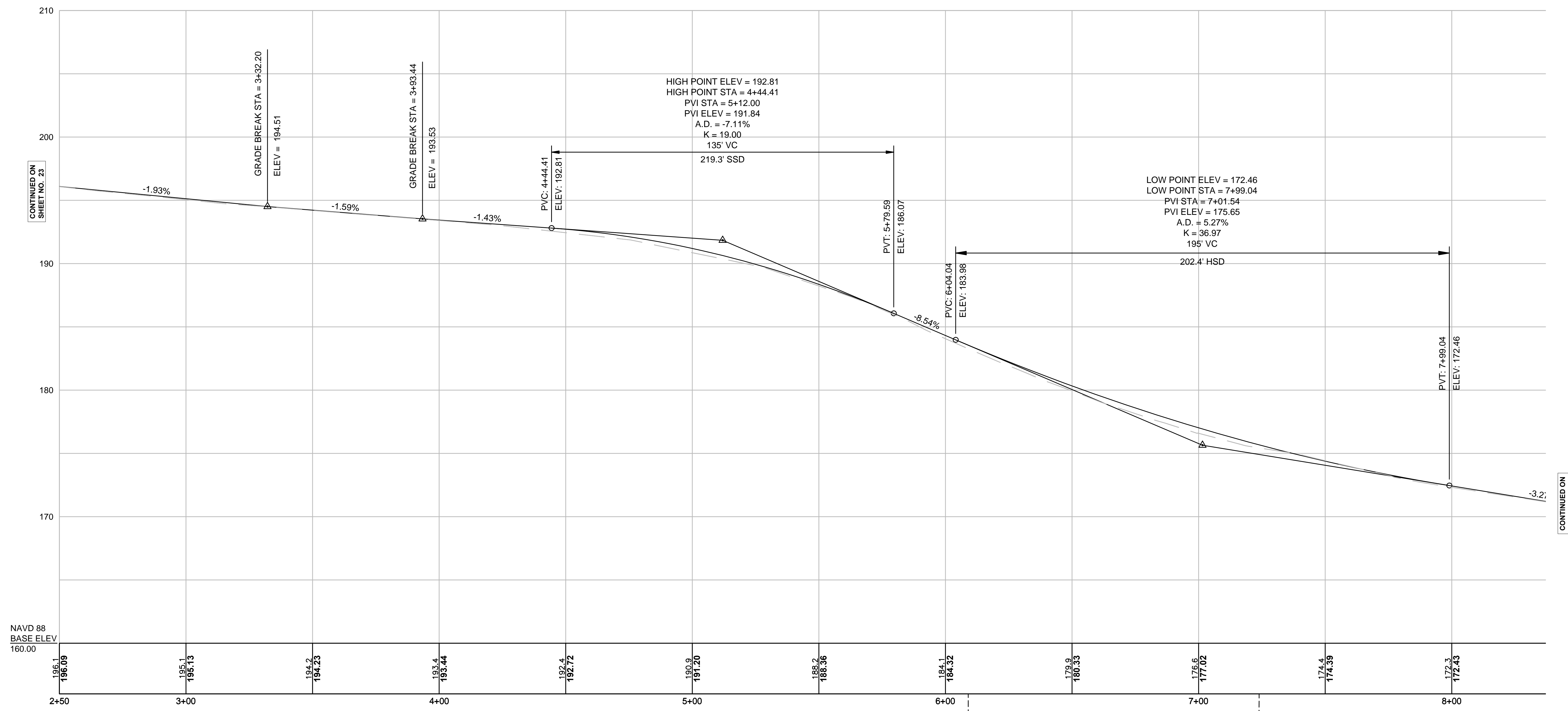
FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 9



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	24	64
PROJECT FILE NO. 606721			

**PROFILE**



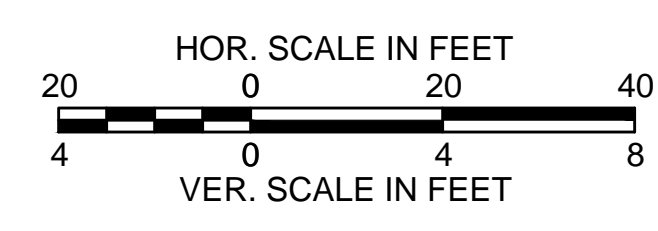
CONTINUED ON  
SHEET NO. 23

CONTINUED ON  
SHEET NO. 25

NAVD 88  
BASE ELEV  
160.00

STA. 6+09.00 WASHINGTON STREET (ROUTE 133) CONST. E =  
STA. 12+93.46 LAKESHORE ROAD CONST. E

STA. 7+23.91 WASHINGTON STREET (ROUTE 133) CONST. E =  
STA. 23+47.87 LAKESHORE ROAD AUX. CONST. E

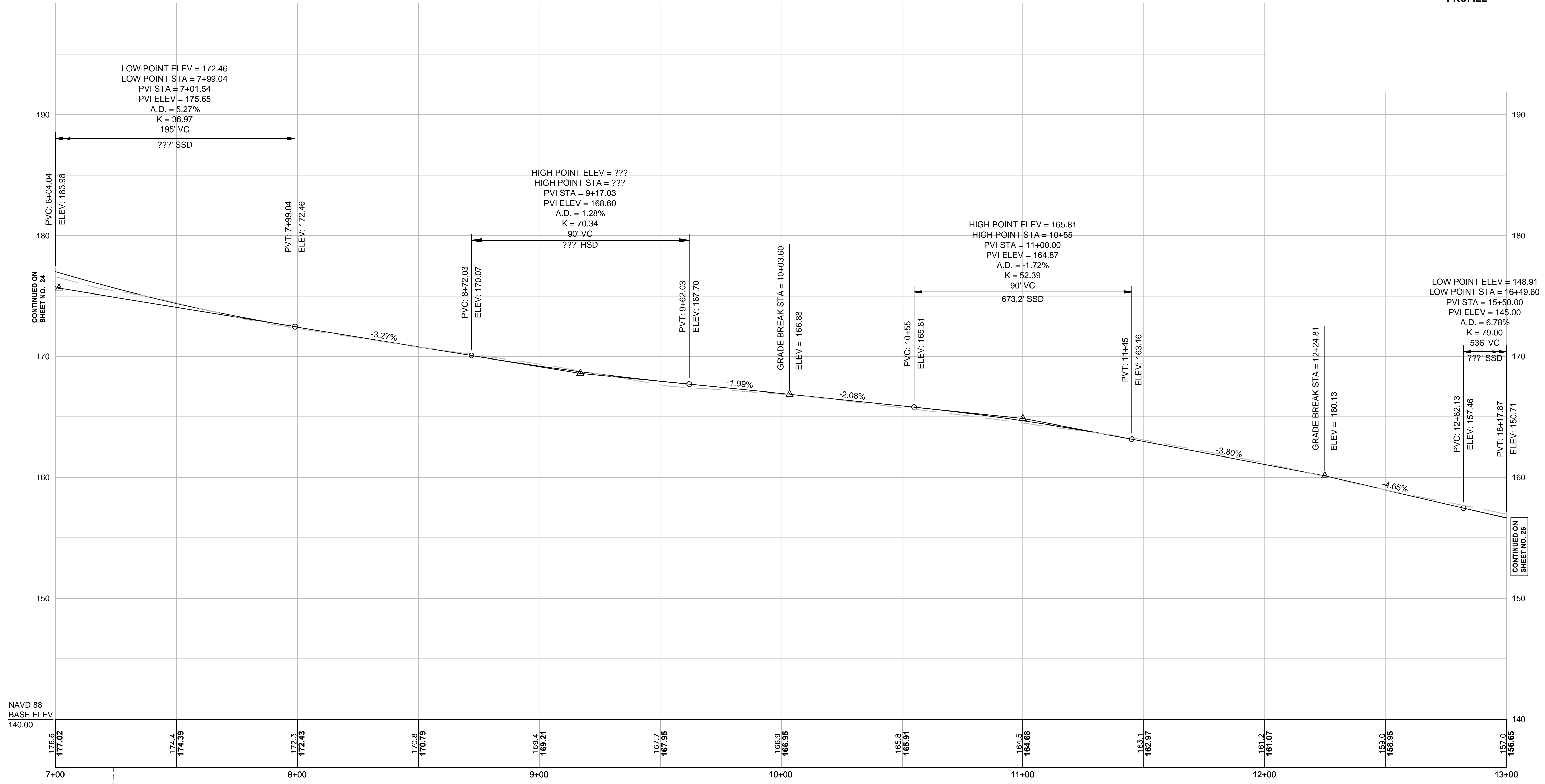


FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 10

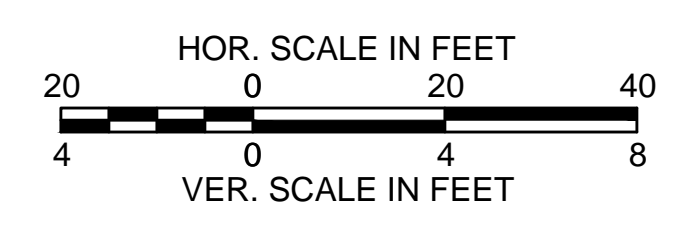
**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	25	64
PROJECT FILE NO. 606721			

**PROFILE**



STA. 7+23.91 WASHINGTON STREET (ROUTE 133) CONST. E =  
STA. 23+47.87 LAKESHORE ROAD AUX. CONST. E



FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 11

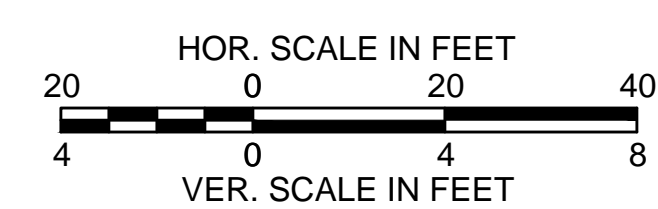
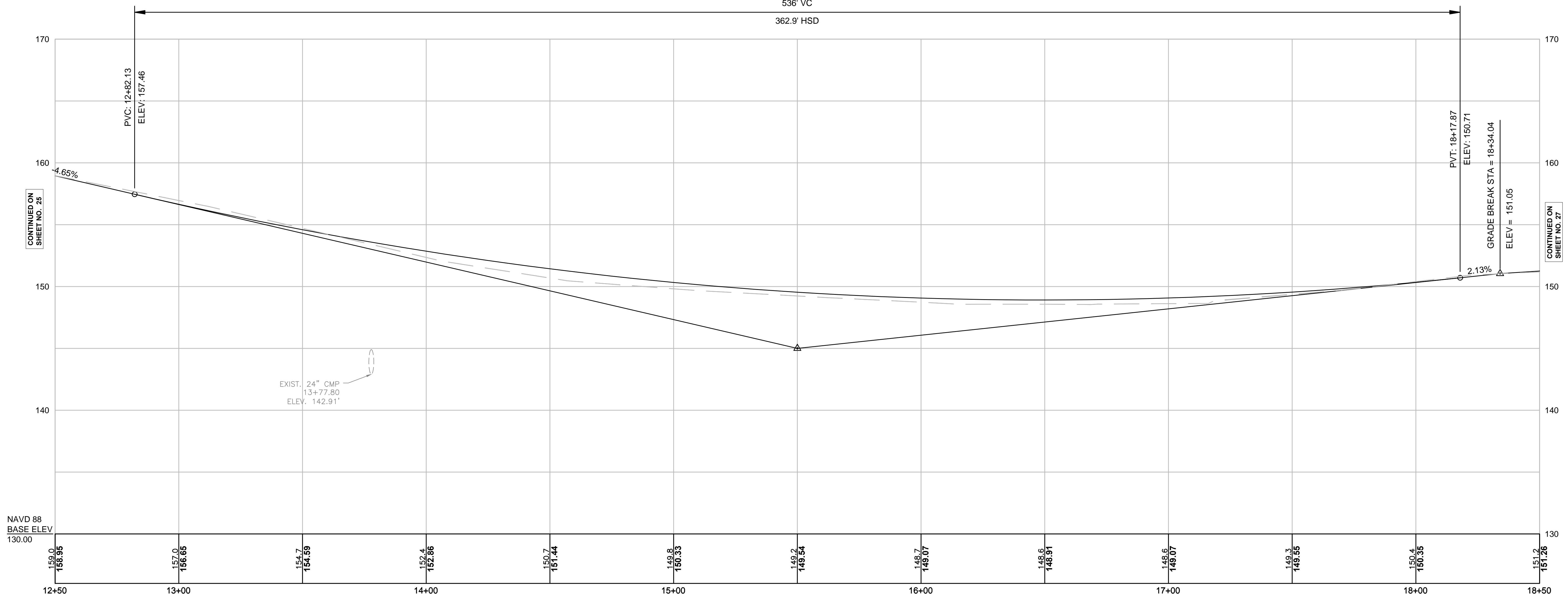
**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	26	64
PROJECT FILE NO.		606721	

**PROFILE**

LOW POINT ELEV = 148.91  
 LOW POINT STA = 16+49.60  
 PVI STA = 15+50.00  
 PVI ELEV = 145.00  
 A.D. = 6.78%  
 K = 79.00  
 536' VC

362.9' HSD

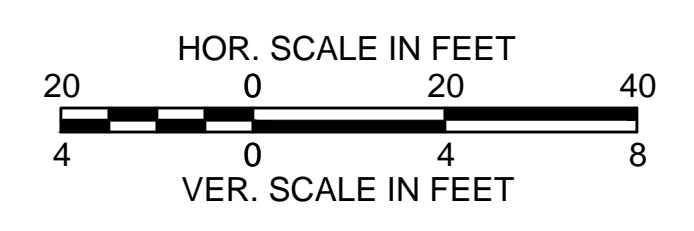
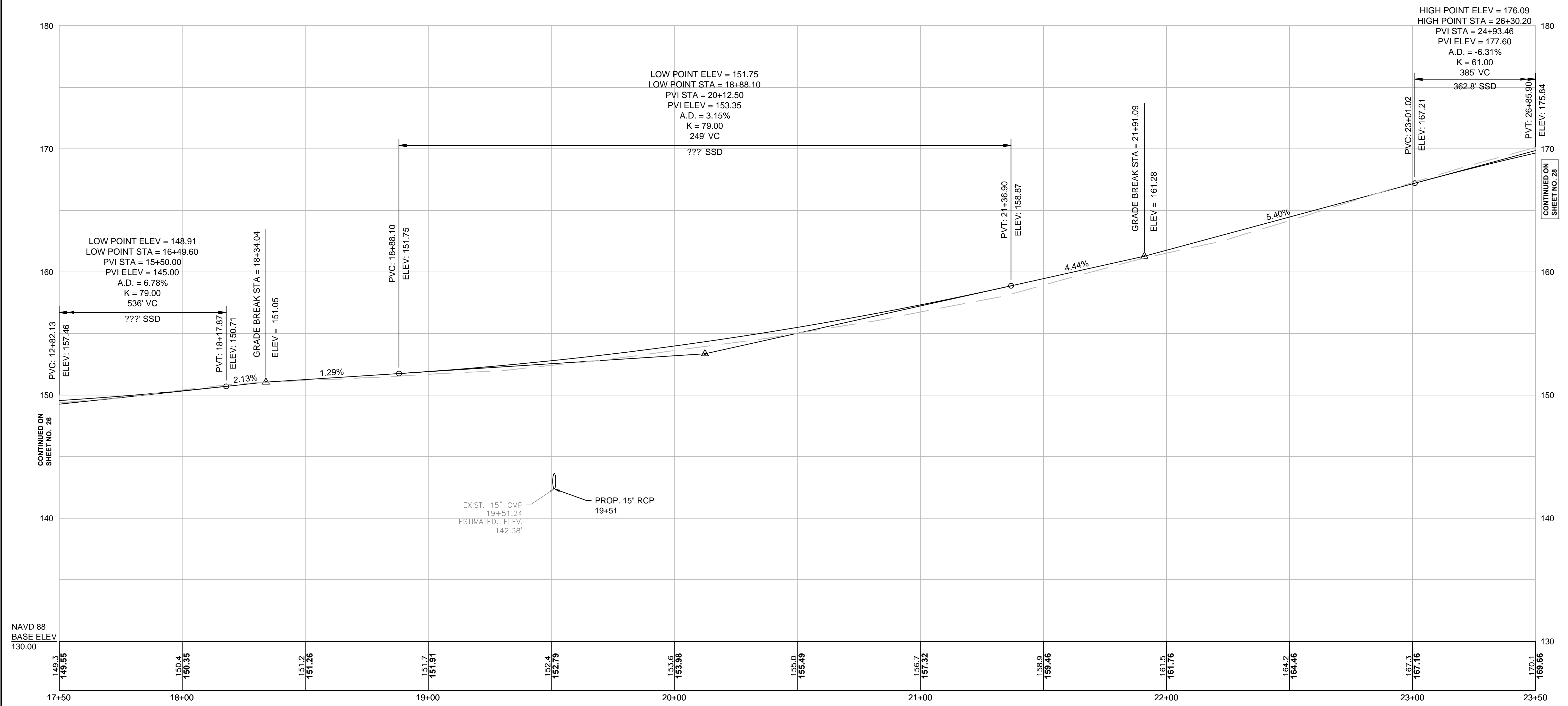


FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 12

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	27	64
PROJECT FILE NO. 606721			

**PROFILE**

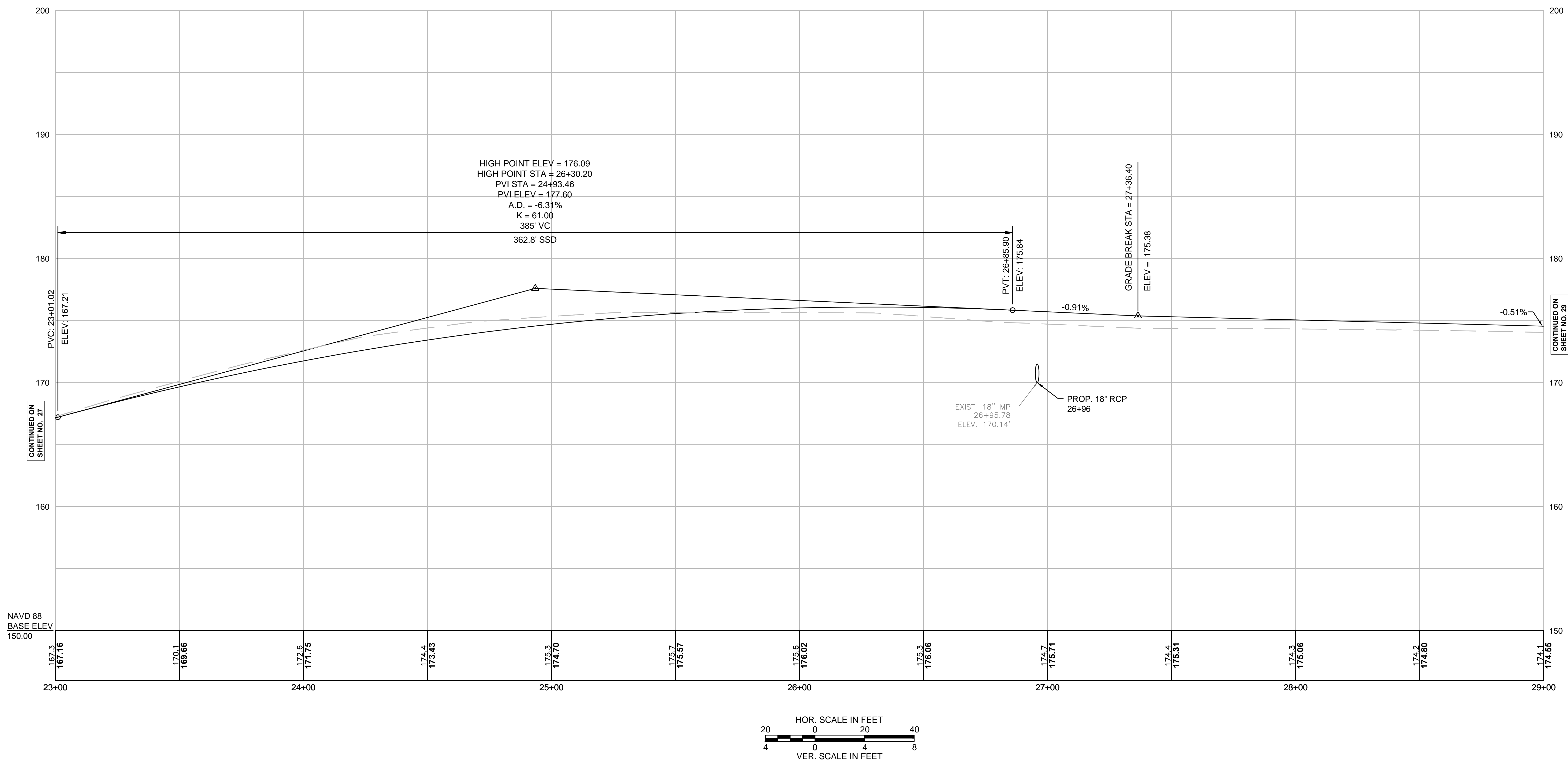


FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 13

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	28	64
PROJECT FILE NO. 606721			

**PROFILE**



CONTINUED ON  
SHEET NO. 27

CONTINUED ON  
SHEET NO. 29

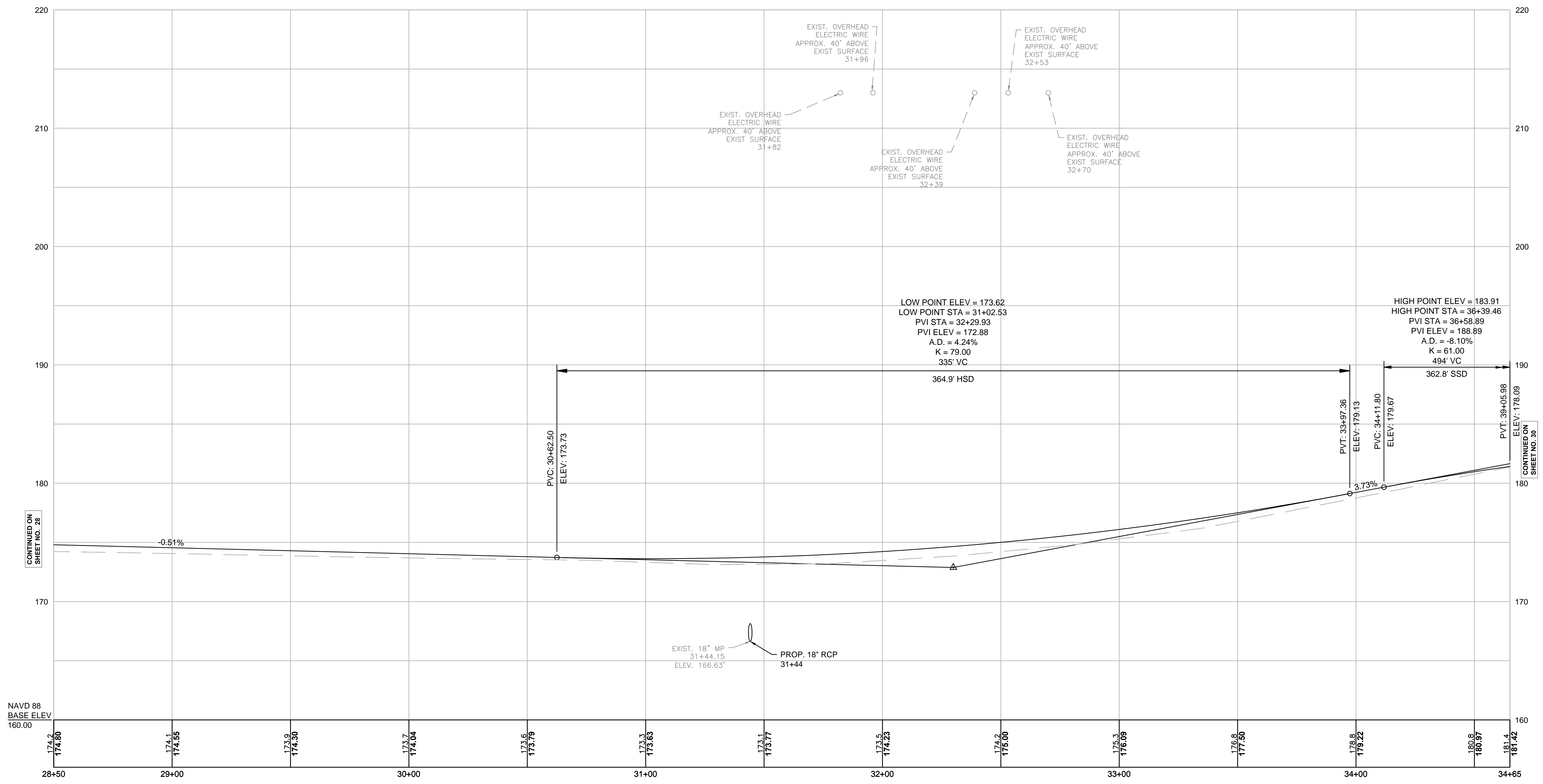
FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 14



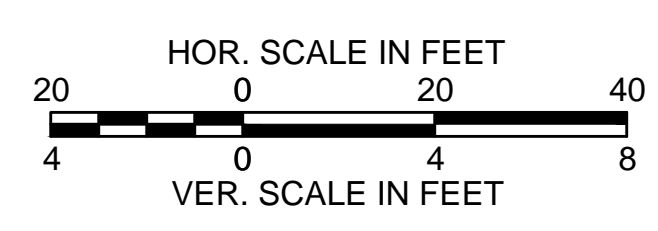
**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	29	64
PROJECT FILE NO. 606721			

**PROFILE**



NAV88  
BASE ELEV  
160.00



FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 15

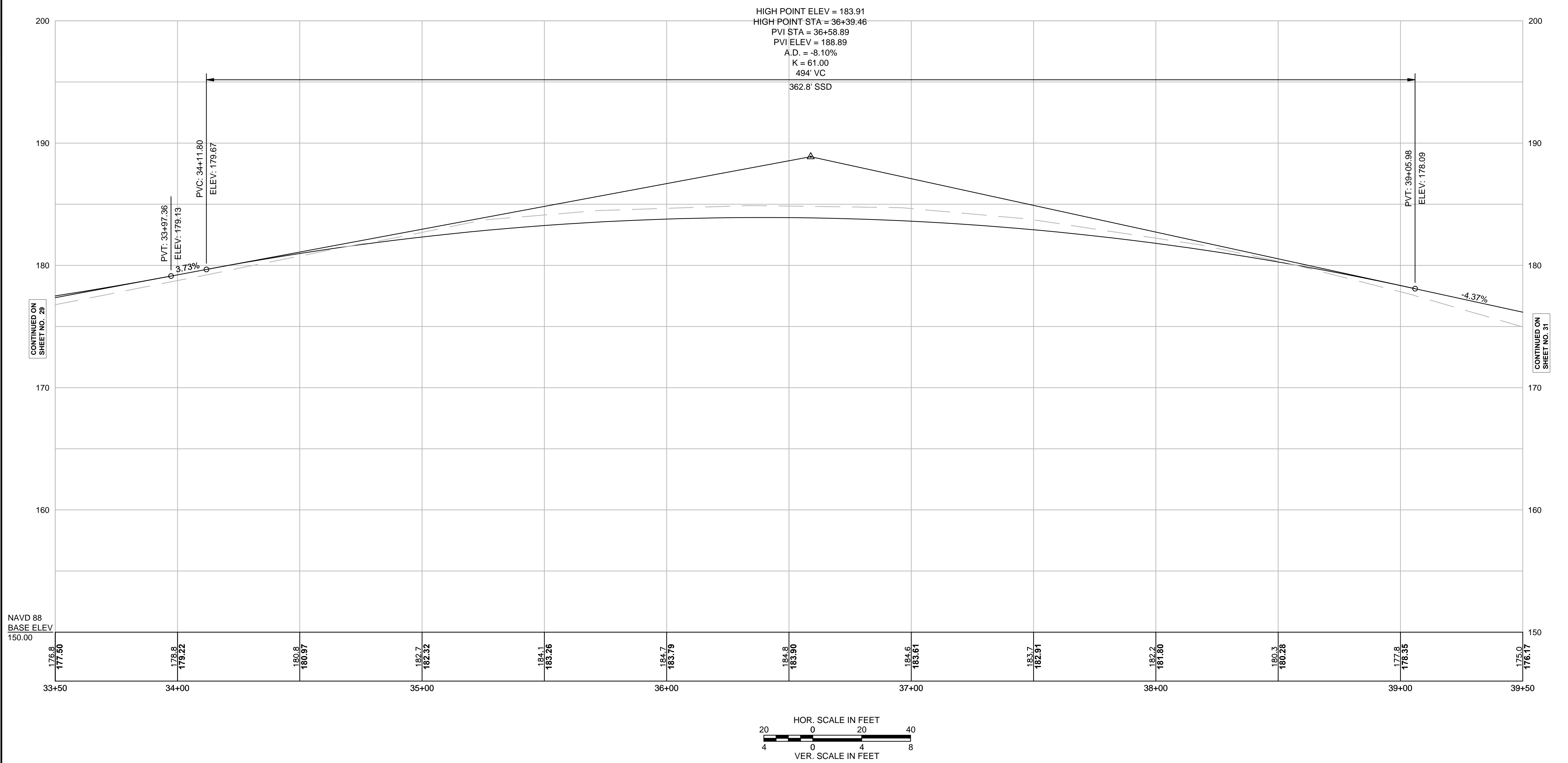
CONTINUED ON  
SHEET NO. 28

CONTINUED ON  
SHEET NO. 30

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	30	64
PROJECT FILE NO.		606721	

**PROFILE**

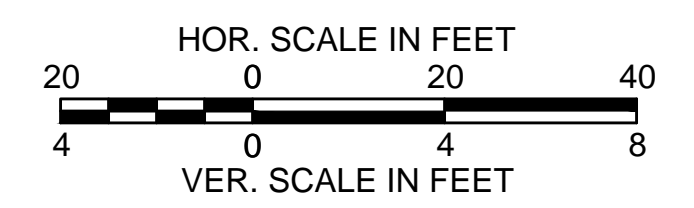
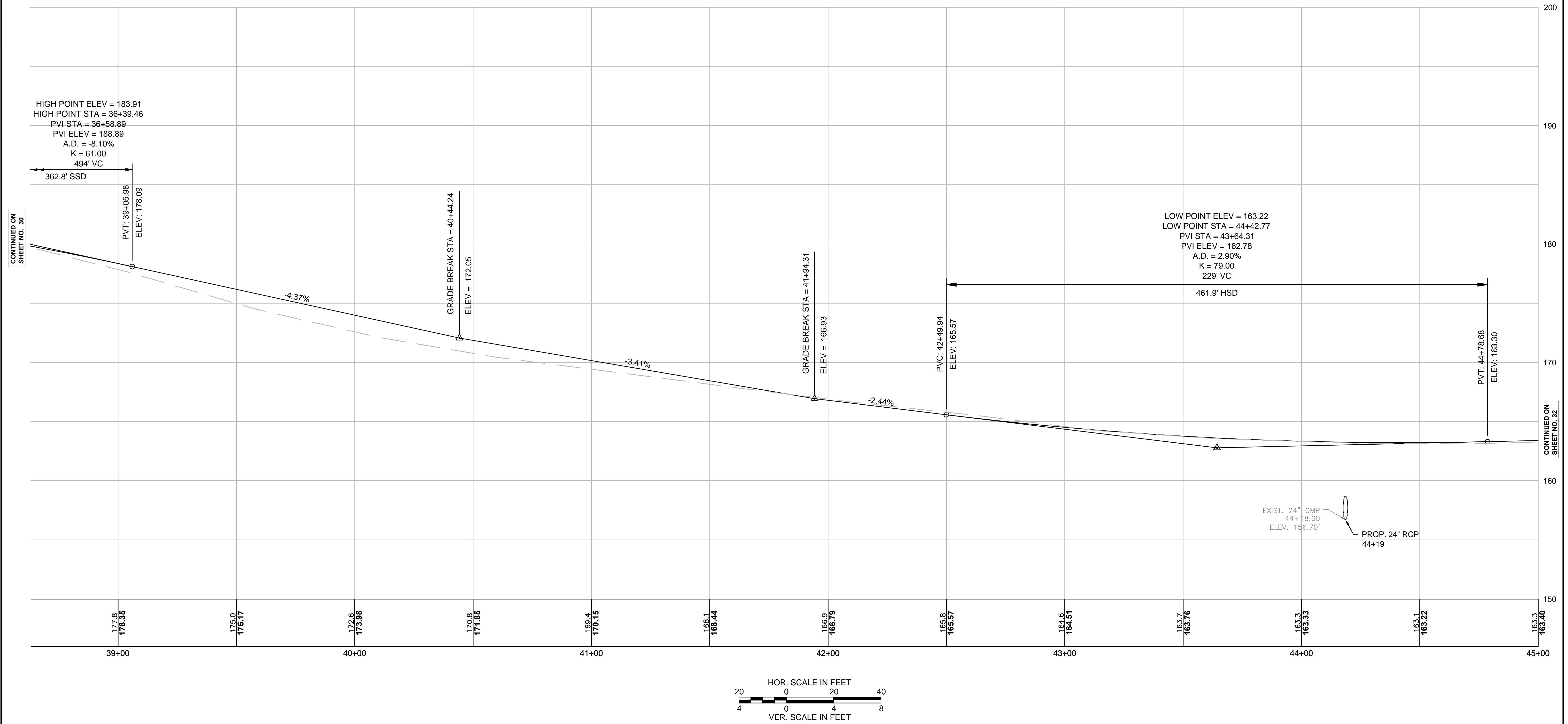


FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 16

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	31	64
PROJECT FILE NO.		606721	

**PROFILE**



FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 17

CONTINUED ON  
SHEET NO. 30

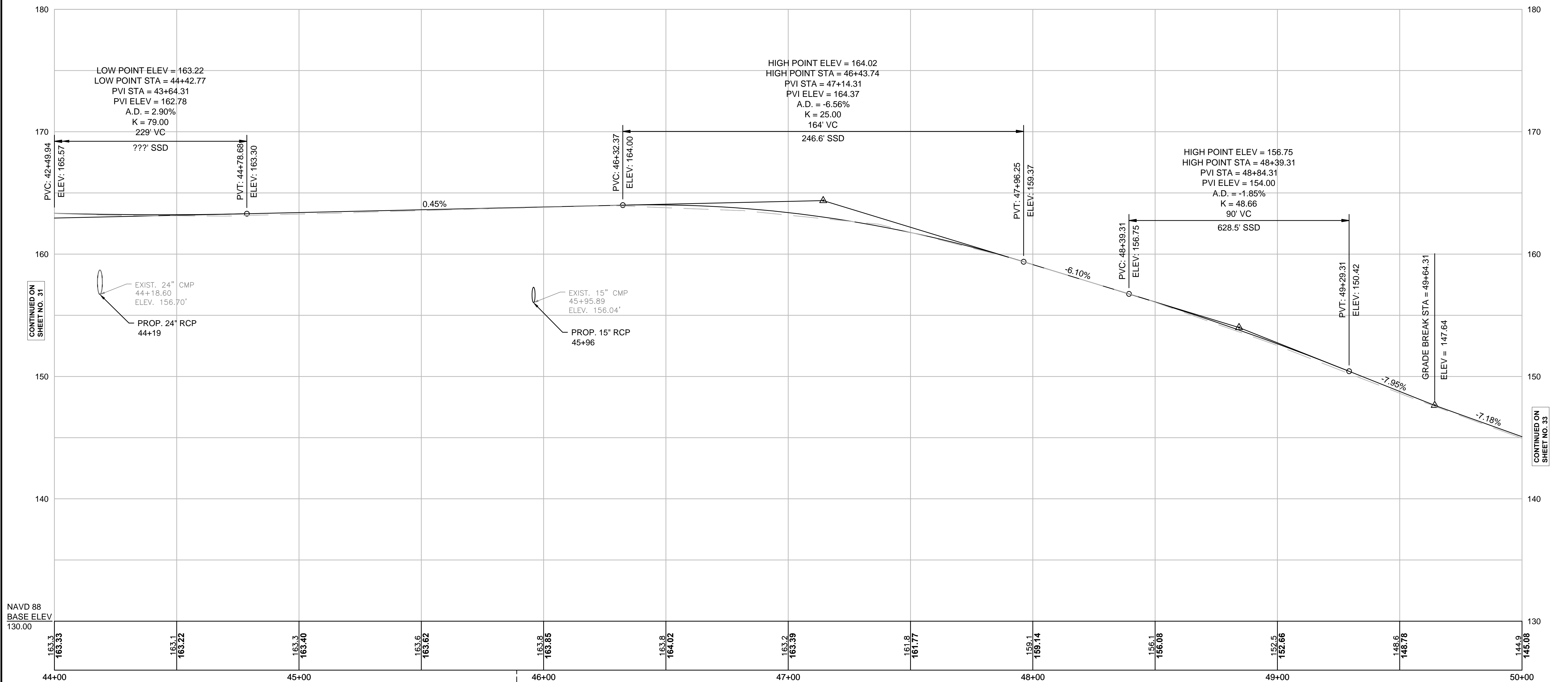
CONTINUED ON  
SHEET NO. 32

606721(HB)(PROFILES).DWG Plotted on: 25-Sep-2015 12:24 PM

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	32	64
PROJECT FILE NO.		606721	

**PROFILE**

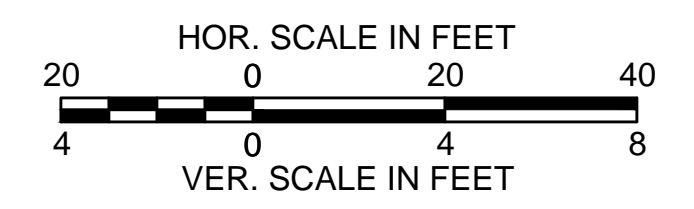


CONTINUED ON  
SHEET NO. 31

CONTINUED ON  
SHEET NO. 33

NAVD 88  
BASE ELEV  
130.00

STA. 45+89.00 WASHINGTON STREET (ROUTE 133) CONST.  $\epsilon$  =  
STA. 30+00.00 ESSEX STREET CONST.  $\epsilon$

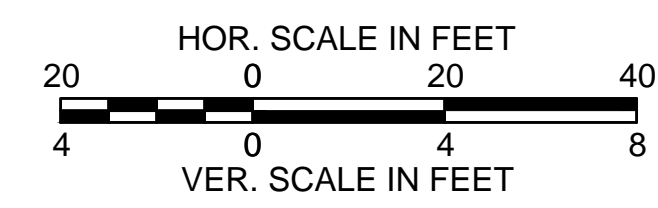
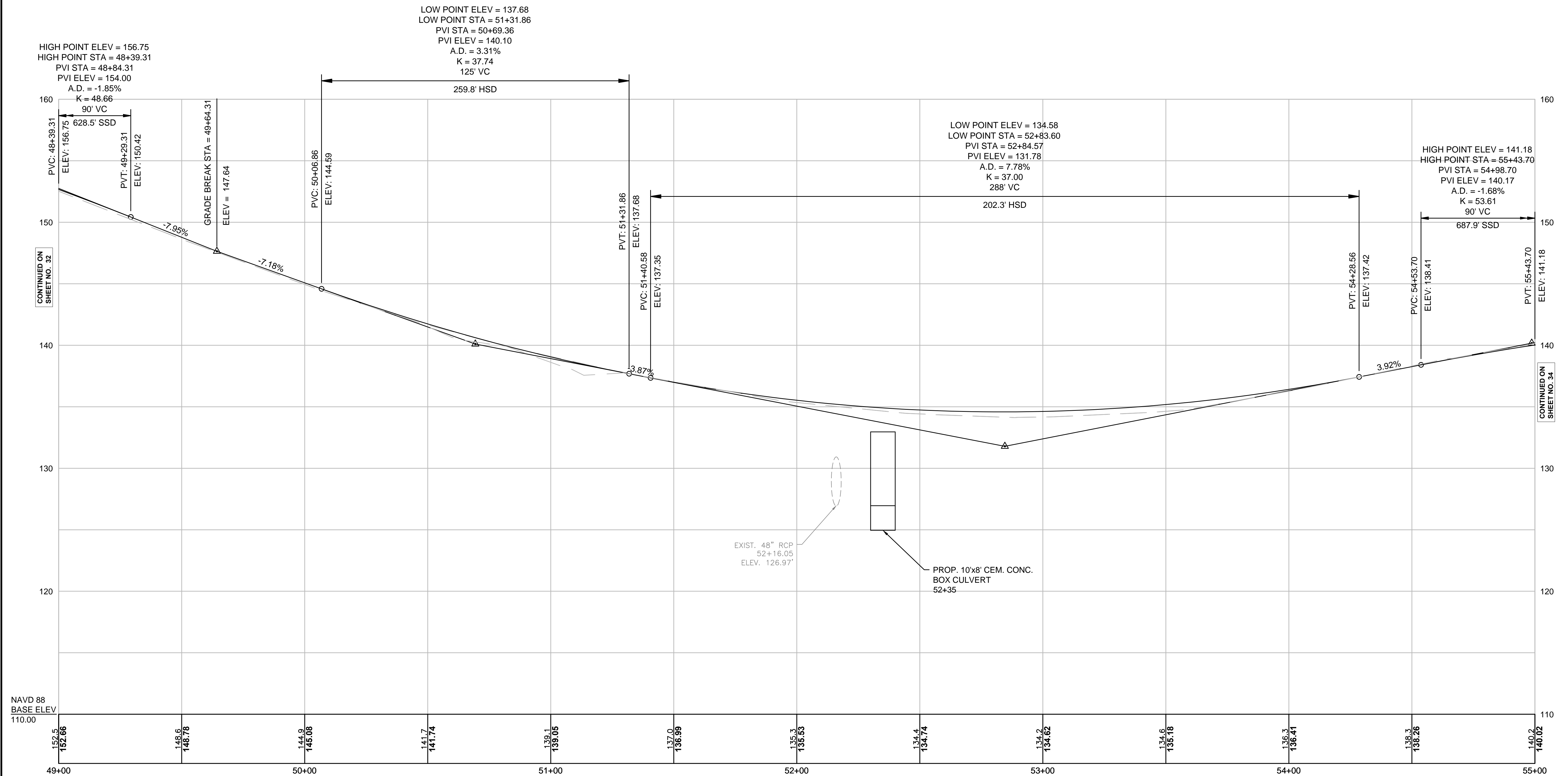


FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 18

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	33	64
PROJECT FILE NO. 606721			

**PROFILE**

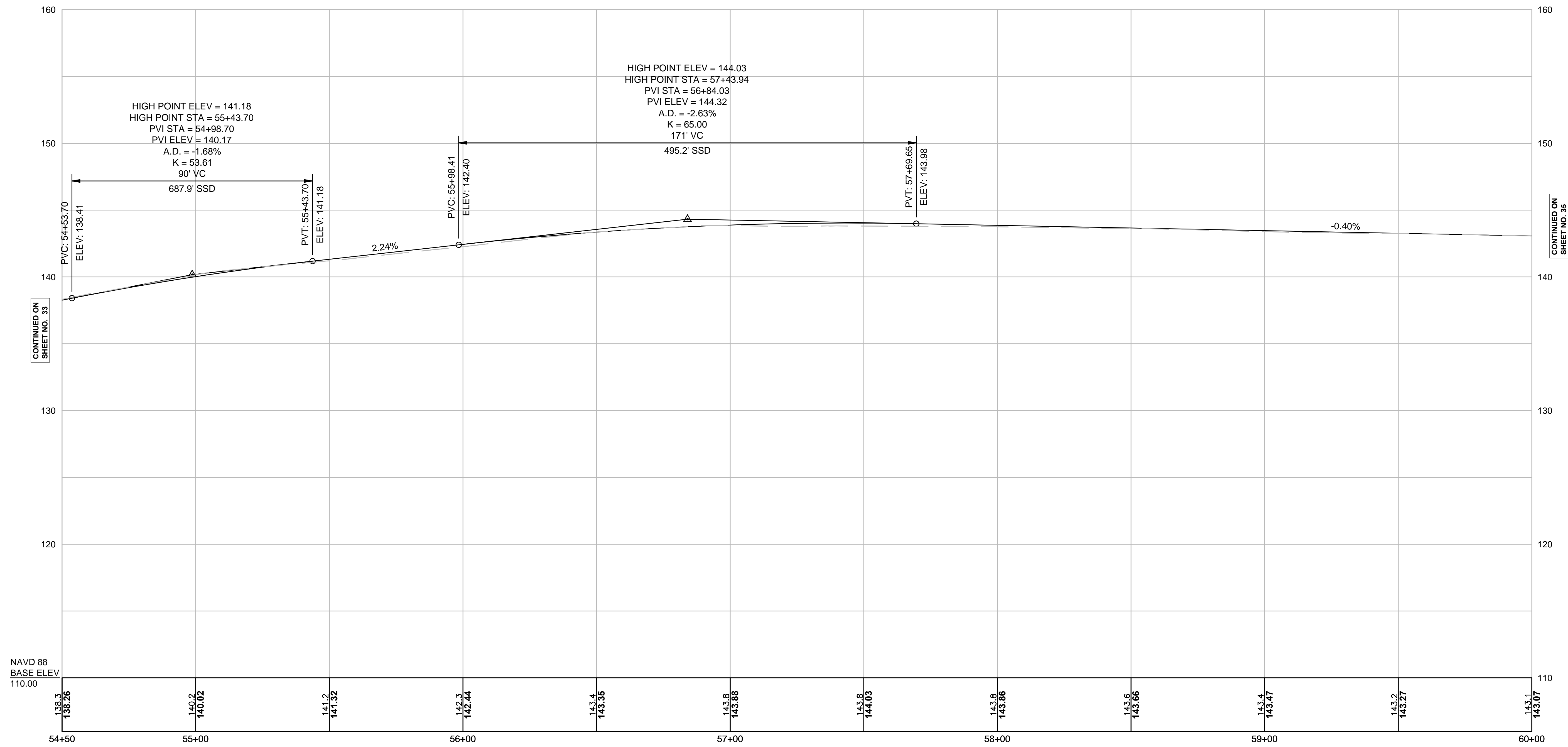


FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 19

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

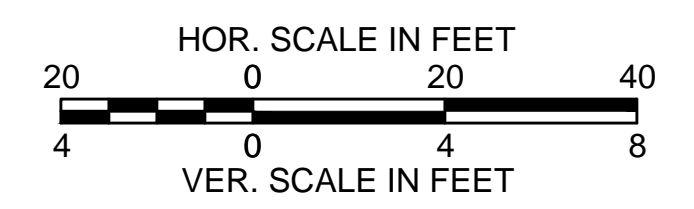
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	34	64
PROJECT FILE NO.		606721	

**PROFILE**



CONTINUED ON  
SHEET NO. 33

CONTINUED ON  
SHEET NO. 35



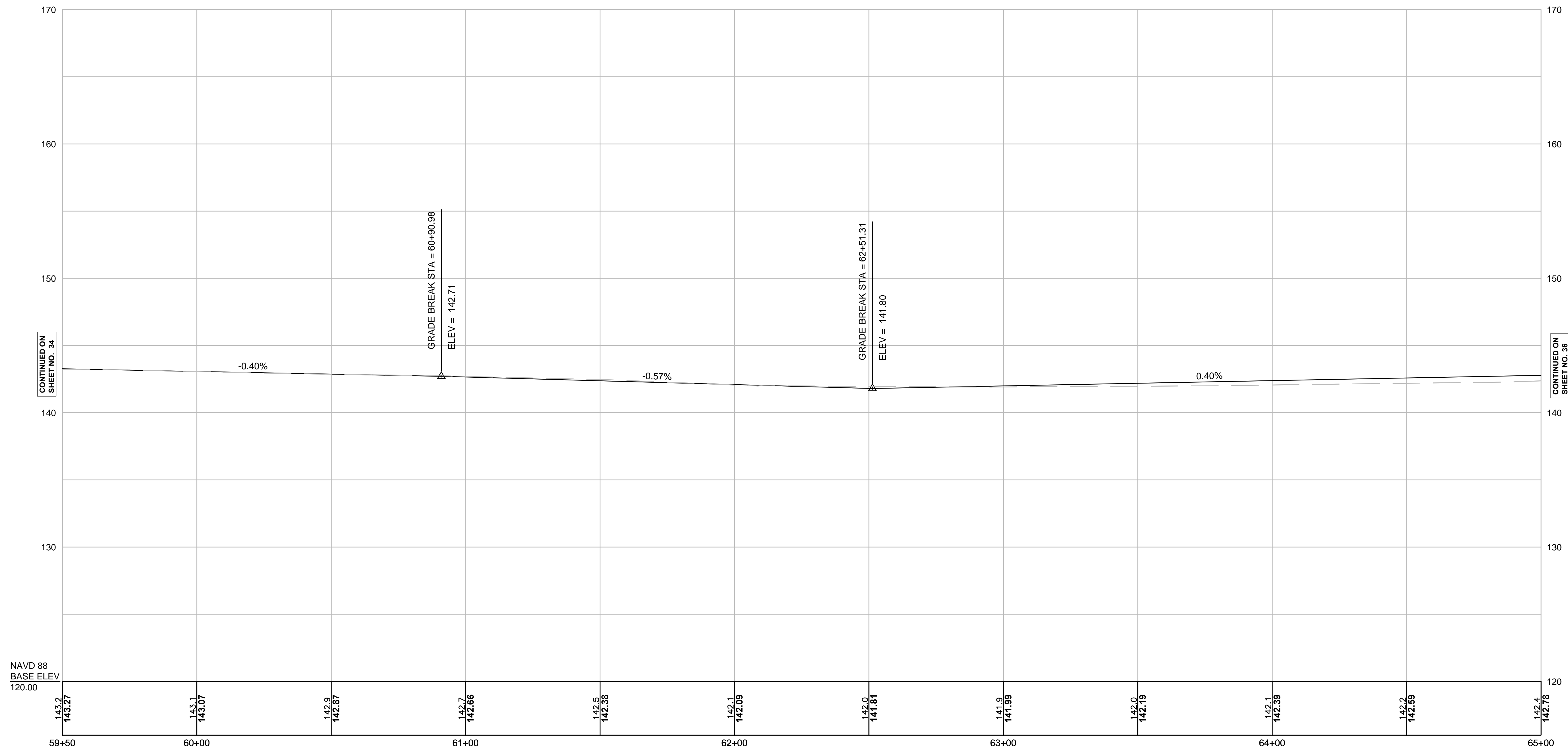
FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 20



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	35	64
PROJECT FILE NO.		606721	

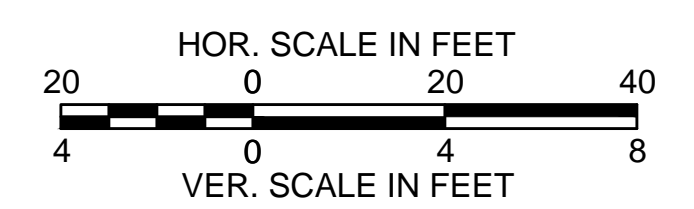
**PROFILE**



CONTINUED ON  
SHEET NO. 34

CONTINUED ON  
SHEET NO. 36

NAVD 88  
BASE ELEV  
120.00

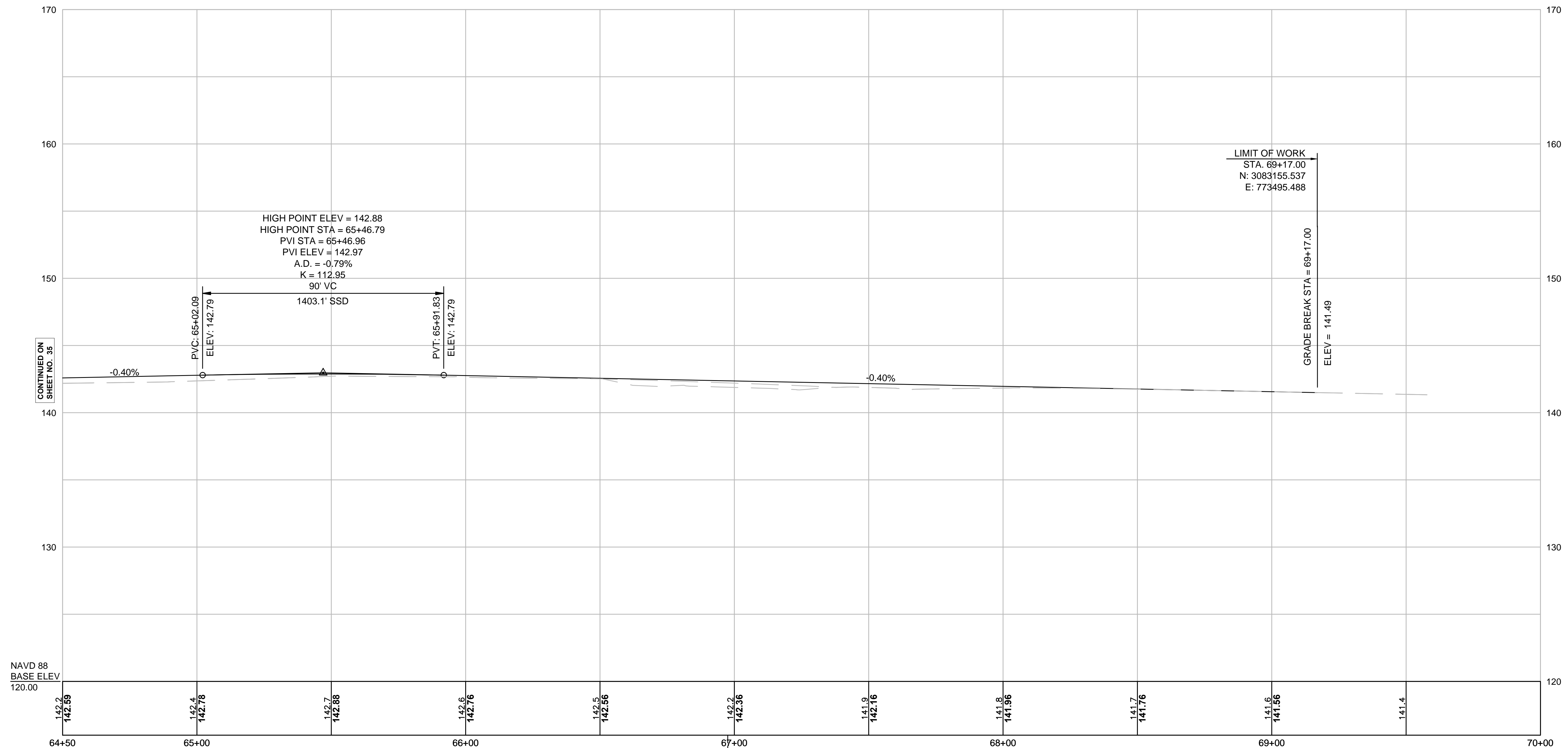


FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 21

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	36	64
PROJECT FILE NO.		606721	

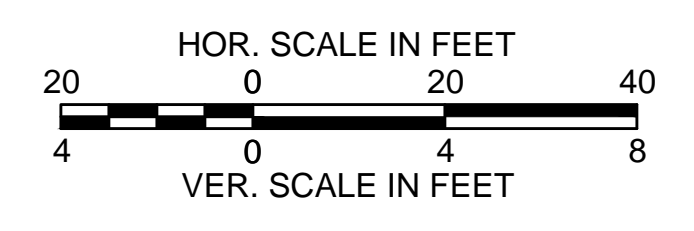
**PROFILE**



CONTINUED ON  
SHEET NO. 35

NAVD 88  
BASE ELEV  
120.00

STA. 66+97.51 WASHINGTON STREET (ROUTE 133) CONST.  $\epsilon$  =  
STA. 42+32.12 MAIN STREET CONST.  $\epsilon$

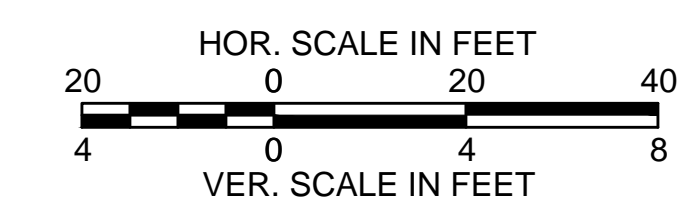
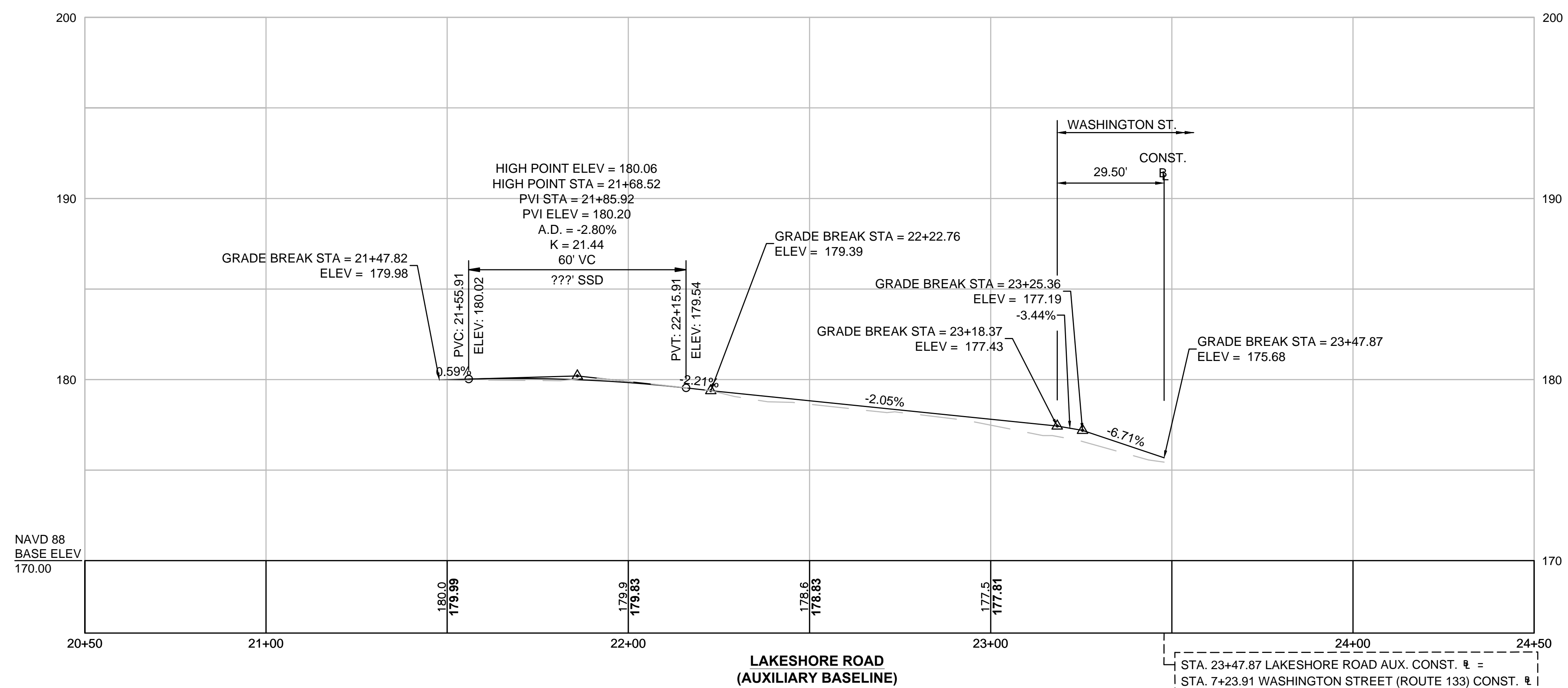
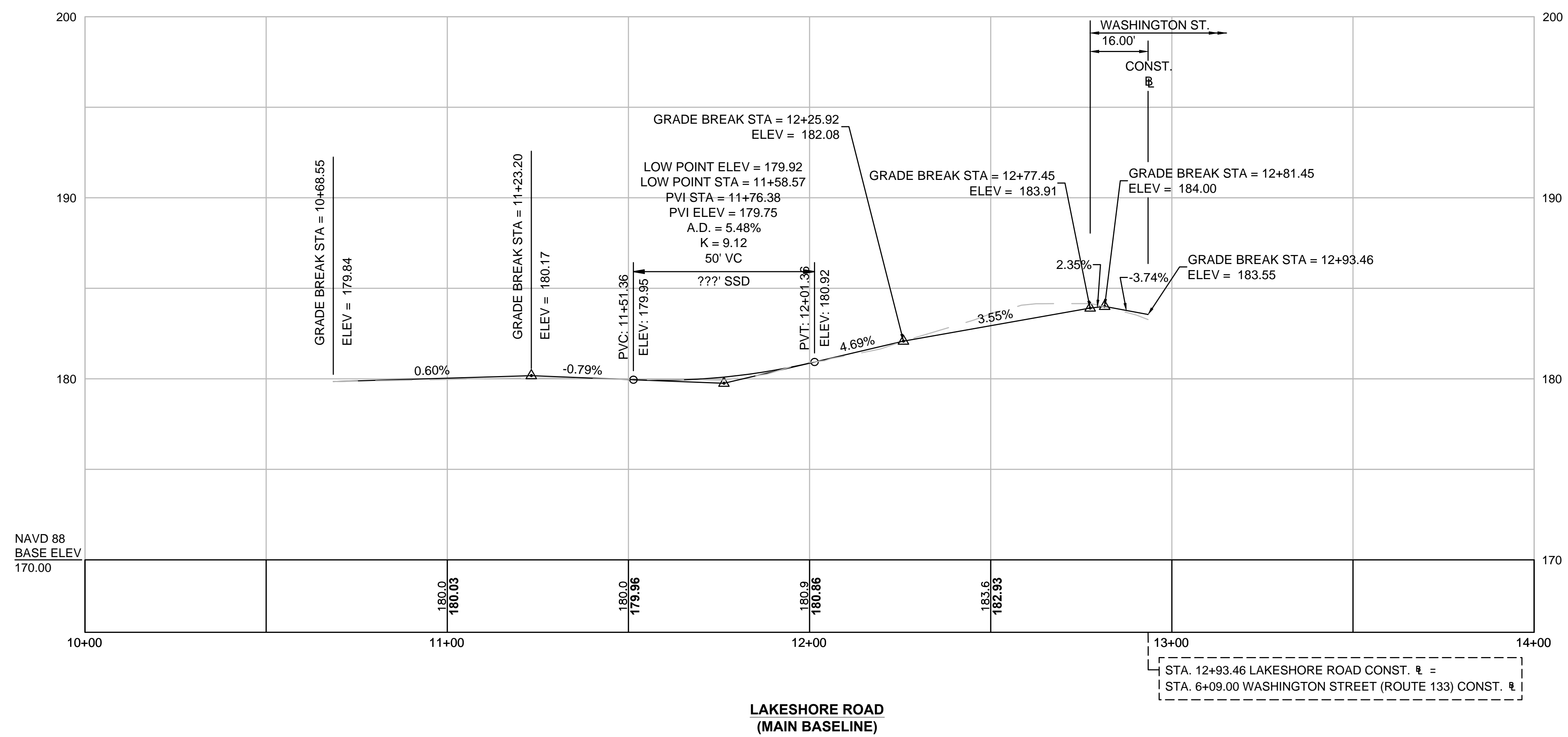


FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 22

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	37	64
PROJECT FILE NO.		606721	

**PROFILE  
LAKESHORE ROAD**

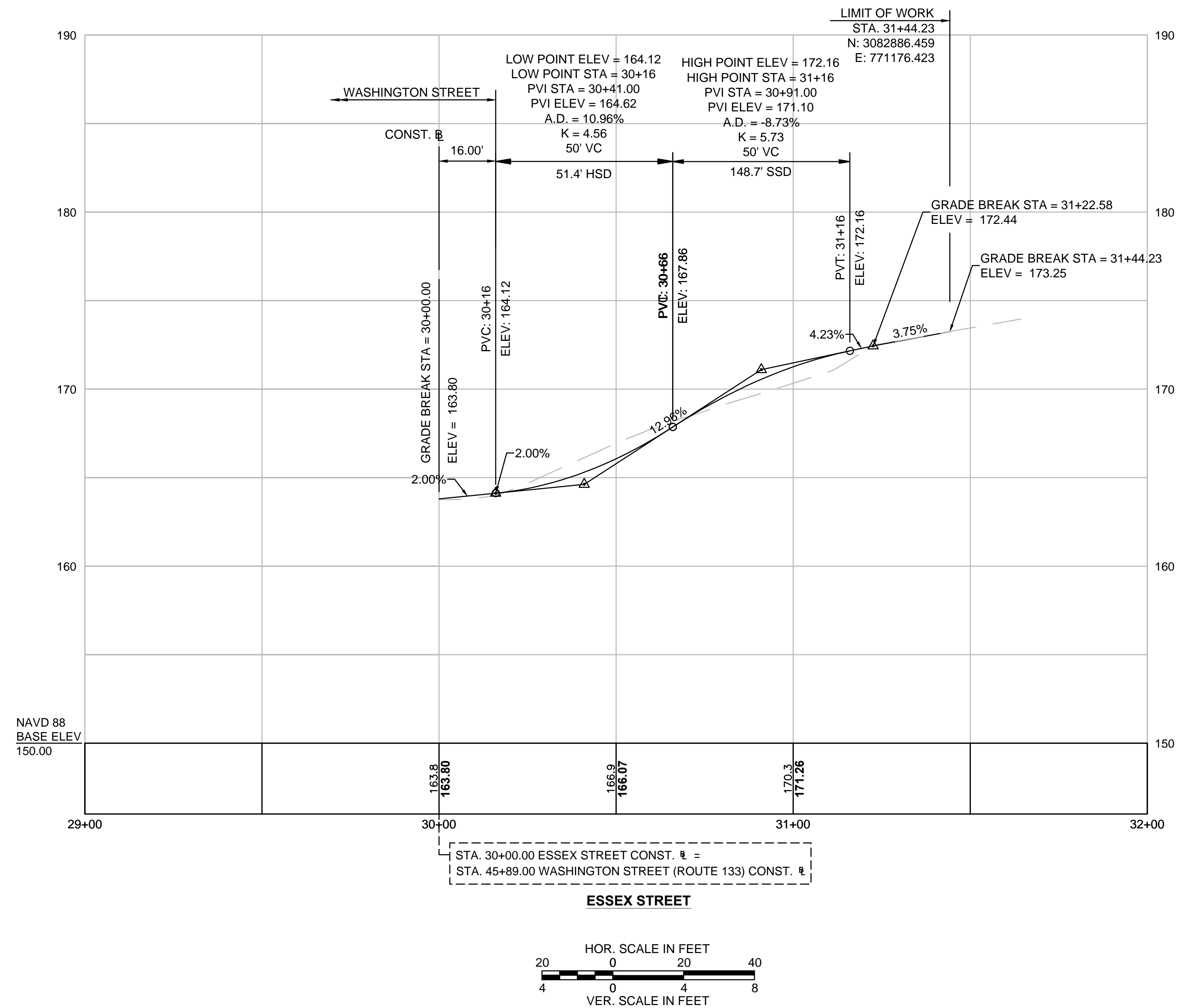


FOR CONSTRUCTION PLANS:  
SEE SHEET NO.10

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	38	64
PROJECT FILE NO.		606721	

**PROFILE  
ESSEX STREET**

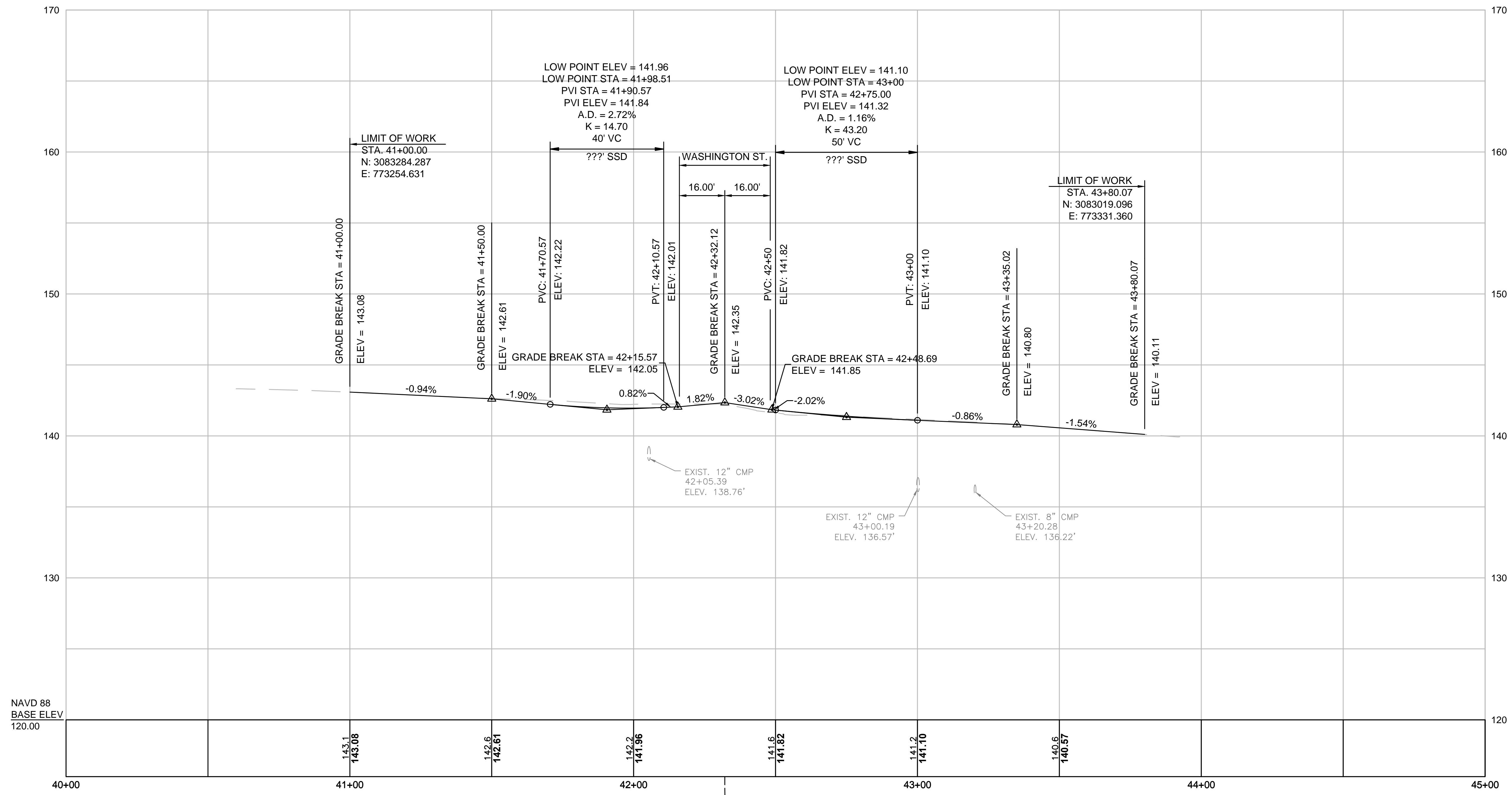


FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 18

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

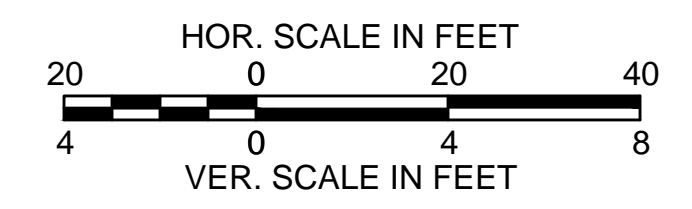
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	39	64
PROJECT FILE NO.		606721	

**PROFILE  
MAIN STREET**



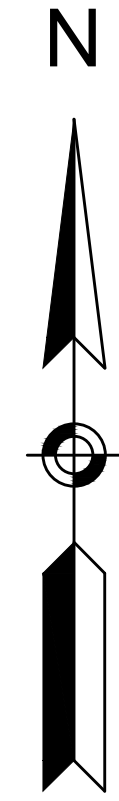
STA. 42+32.12 MAIN STREET CONST. =  
STA. 66+97.51 WASHINGTON STREET (ROUTE 133) CONST. =

**MAIN STREET**

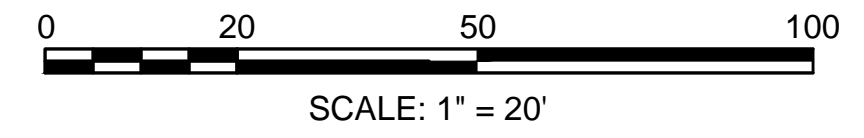


FOR CONSTRUCTION PLANS:  
SEE SHEET NO. 22





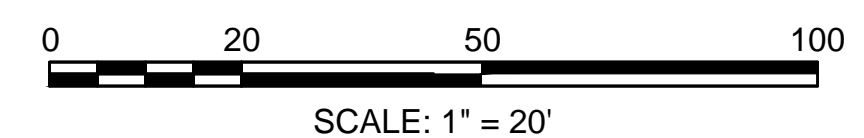
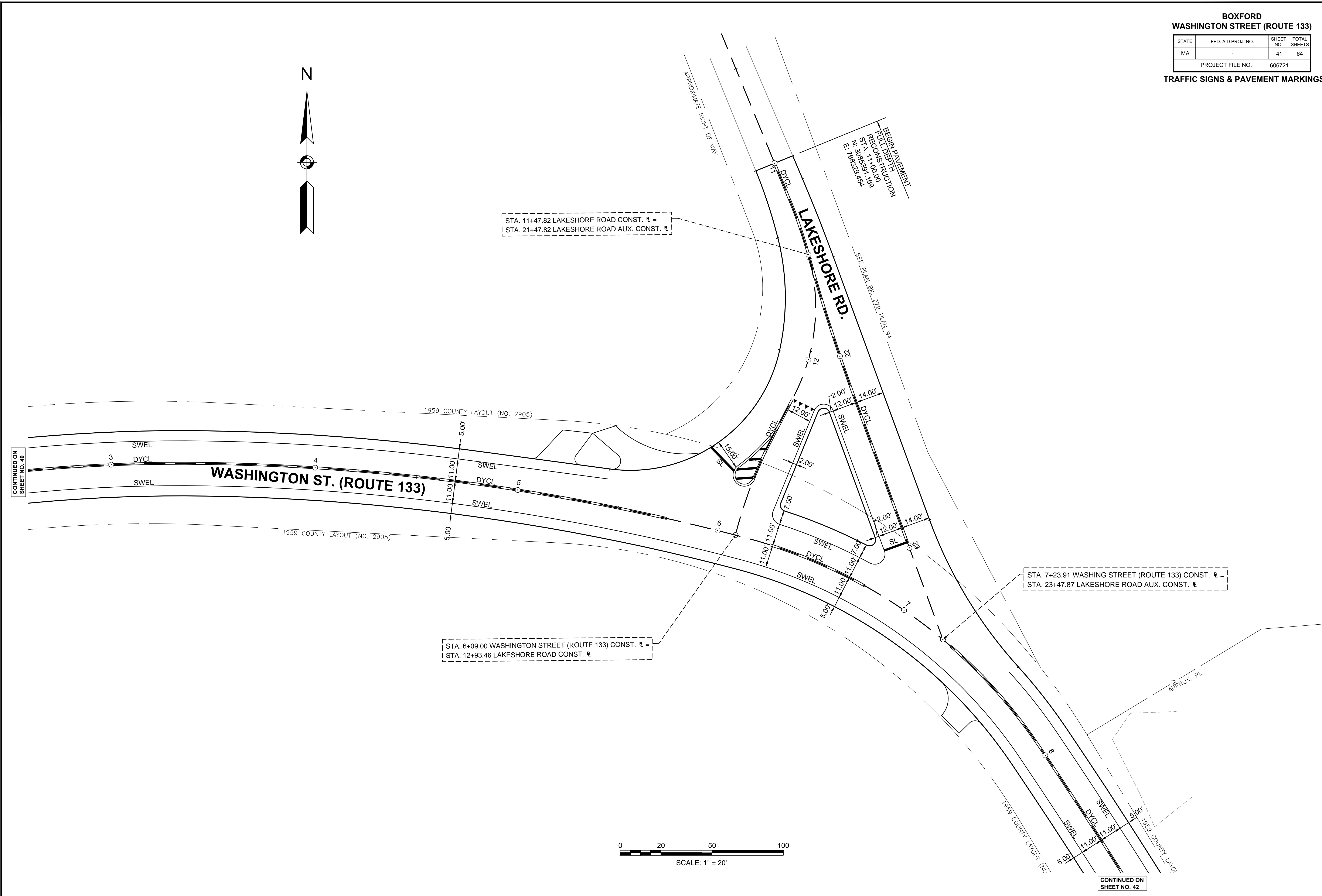
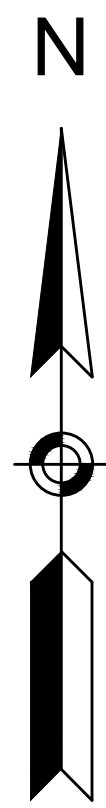
STA. 11+47.82 LAK  
STA. 21+47.82 LAK



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	41	64
PROJECT FILE NO. 606721			

**TRAFFIC SIGNS & PAVEMENT MARKINGS**



CONTINUED ON SHEET NO. 40

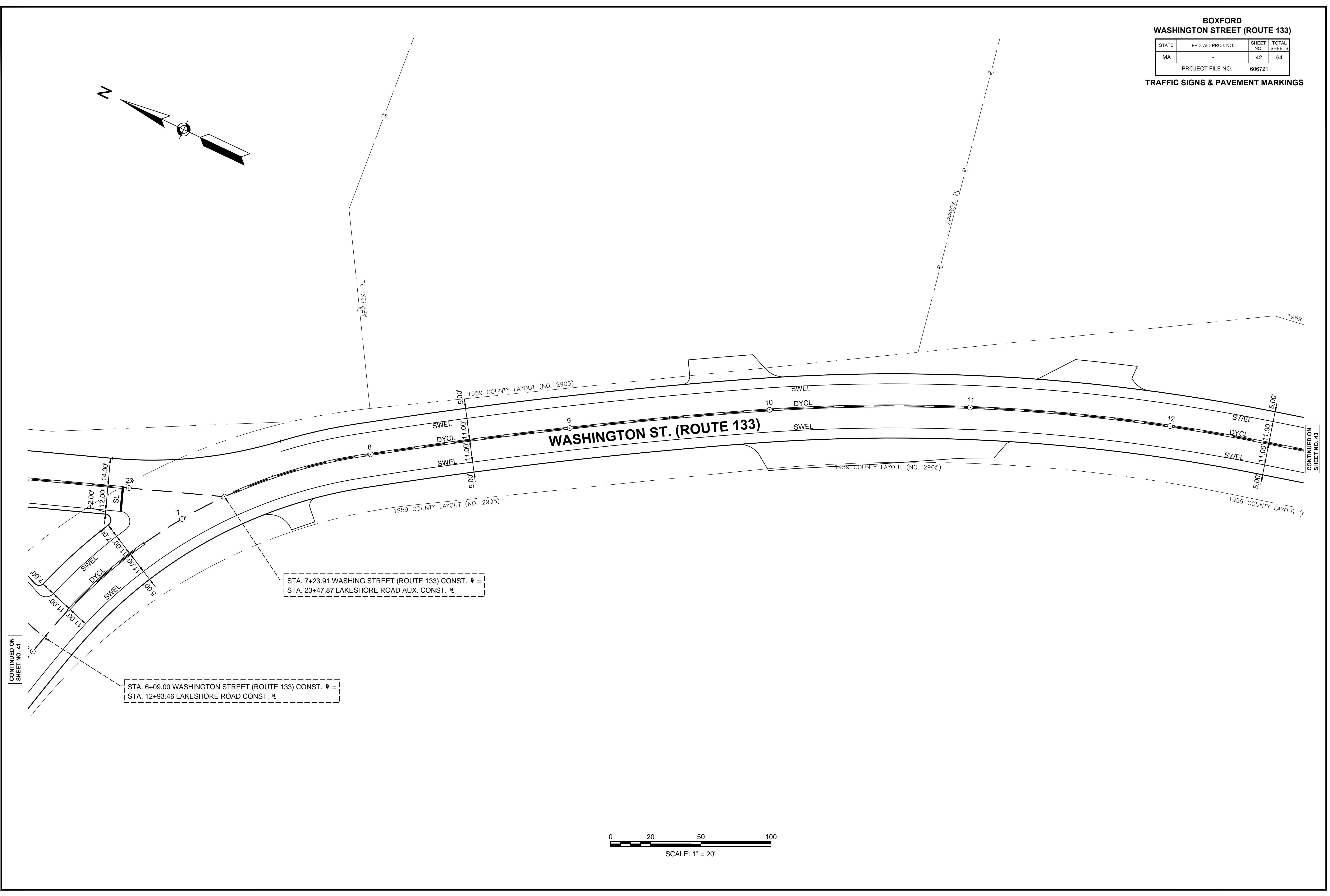
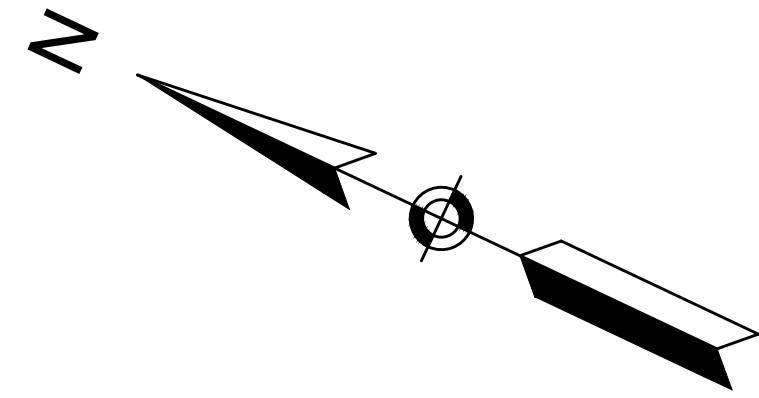
CONTINUED ON SHEET NO. 42

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	42	64

PROJECT FILE NO. 606721

**TRAFFIC SIGNS & PAVEMENT MARKINGS**

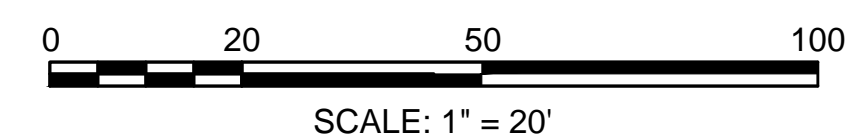


STA. 7+23.91 WASHINGTON STREET (ROUTE 133) CONST.  $\frac{1}{2}$  =  
STA. 23+47.87 LAKESHORE ROAD AUX. CONST.  $\frac{1}{2}$

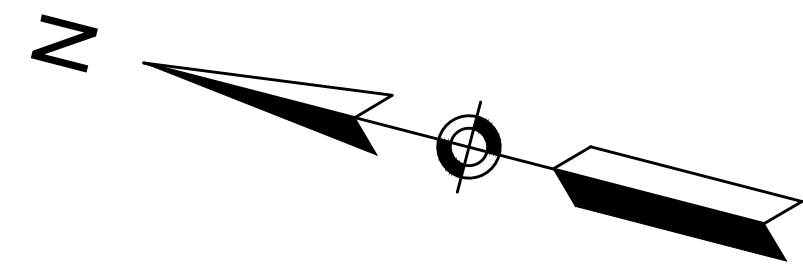
STA. 6+09.00 WASHINGTON STREET (ROUTE 133) CONST.  $\frac{1}{2}$  =  
STA. 12+93.46 LAKESHORE ROAD CONST.  $\frac{1}{2}$

CONTINUED ON  
SHEET NO. 41

CONTINUED ON  
SHEET NO. 43



SCALE: 1" = 20'



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

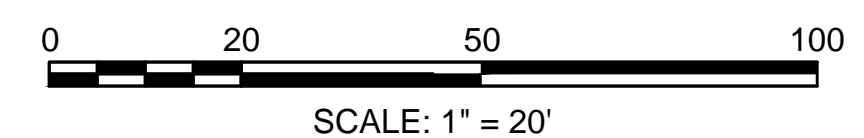
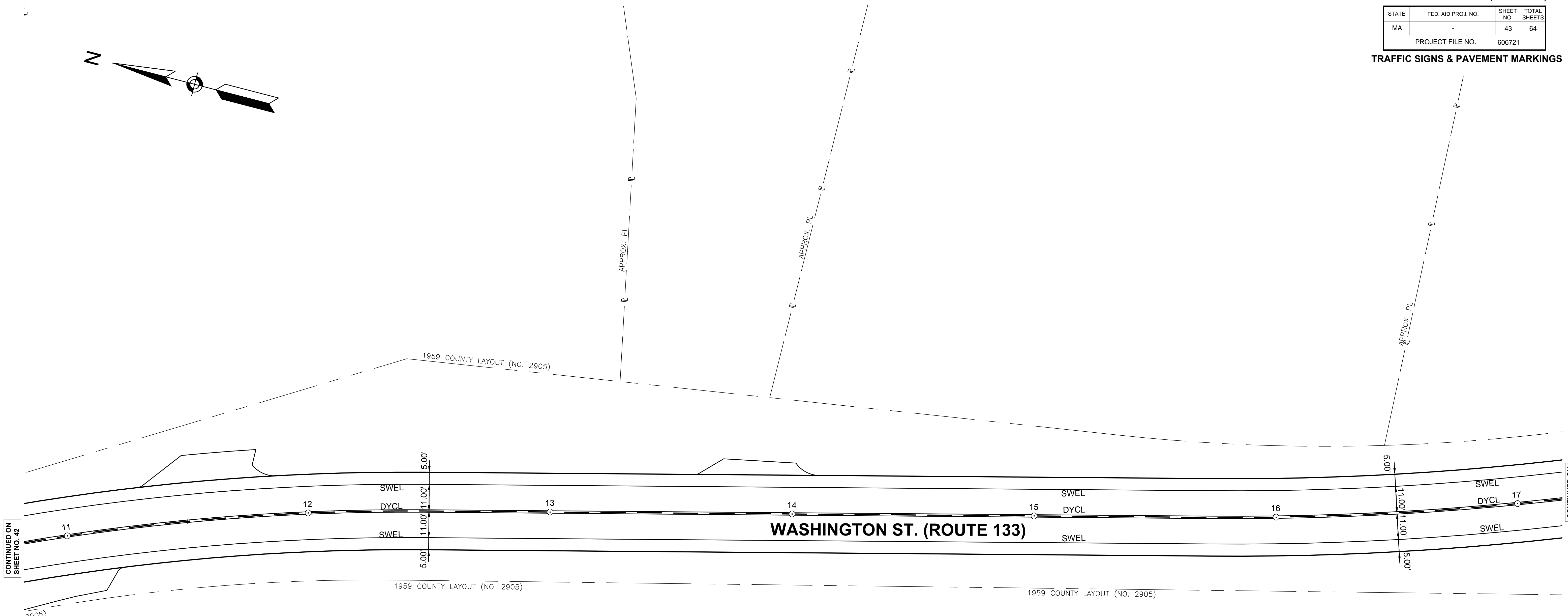
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	43	64

PROJECT FILE NO. 606721

**TRAFFIC SIGNS & PAVEMENT MARKINGS**

CONTINUED ON  
SHEET NO. 42

CONTINUED ON  
SHEET NO. 44

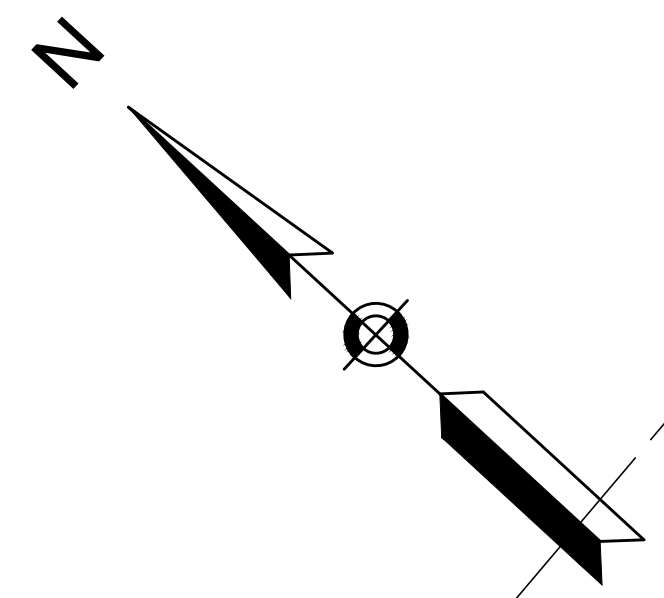




**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

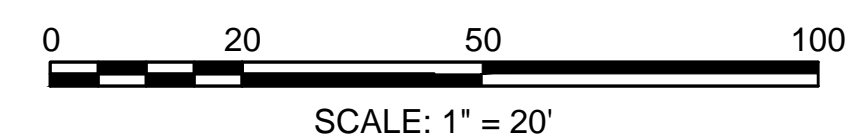
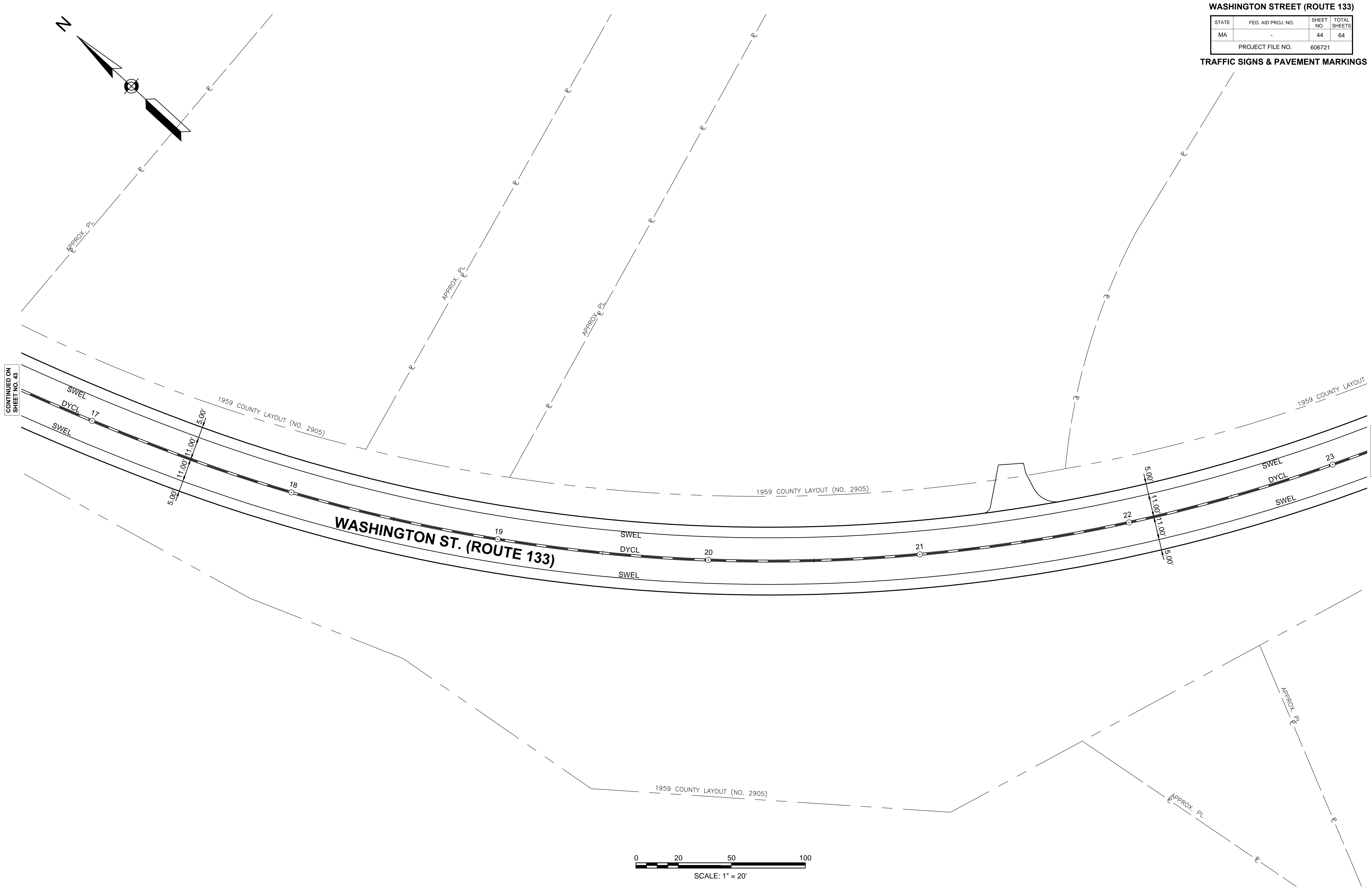
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	44	64
PROJECT FILE NO. 606721			

**TRAFFIC SIGNS & PAVEMENT MARKINGS**



CONTINUED ON  
SHEET NO. 43

CONTINUED ON  
SHEET NO. 45

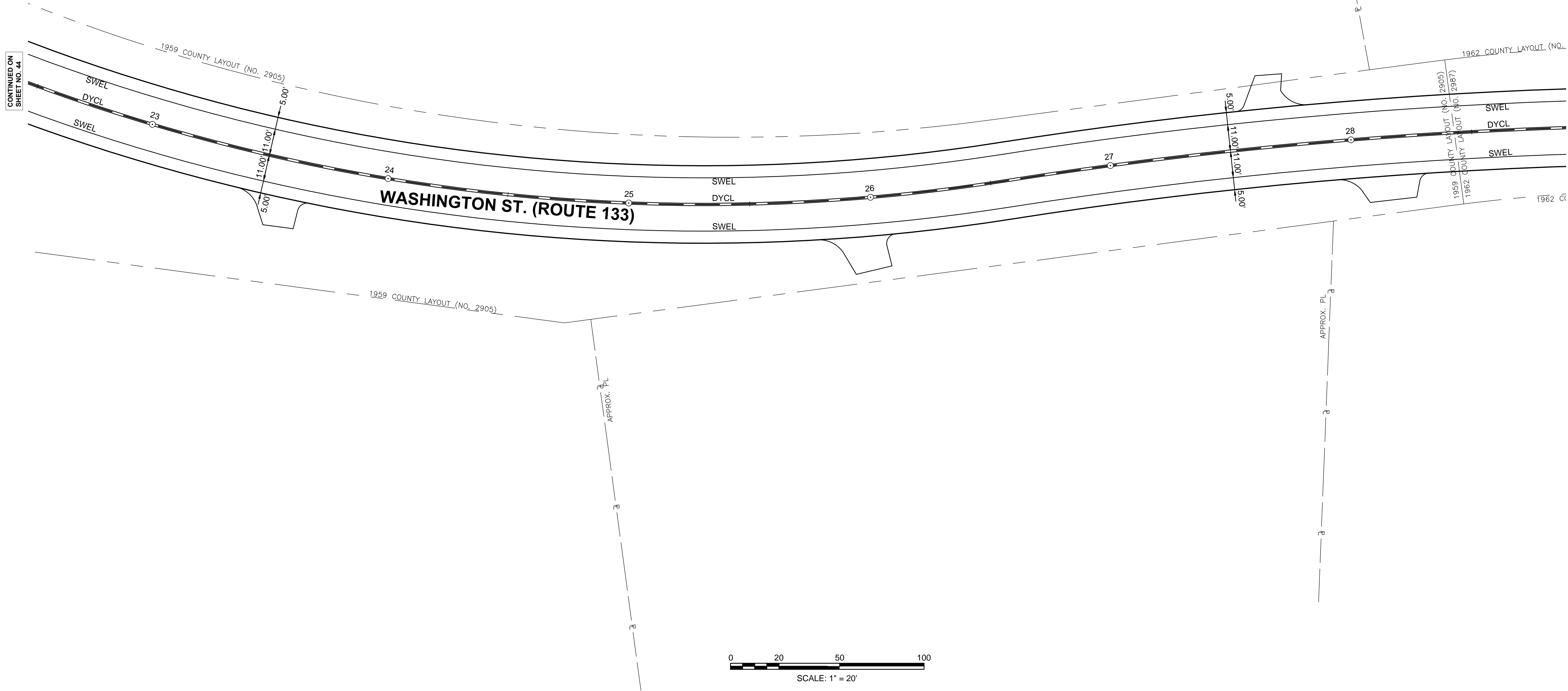
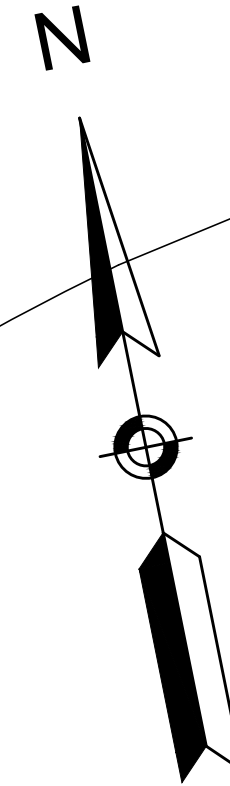


SCALE: 1" = 20'

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

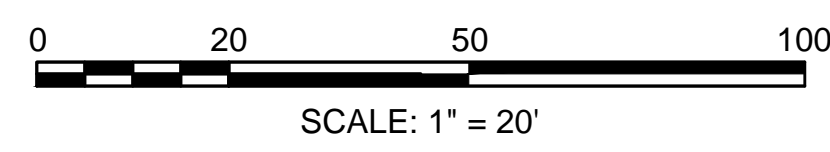
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	45	64
PROJECT FILE NO.		606721	

**TRAFFIC SIGNS & PAVEMENT MARKINGS**



CONTINUED ON SHEET NO. 44

CONTINUED ON SHEET NO. 46



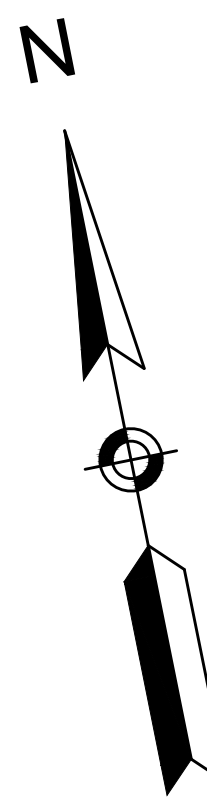
**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	46	64
PROJECT FILE NO.		606721	

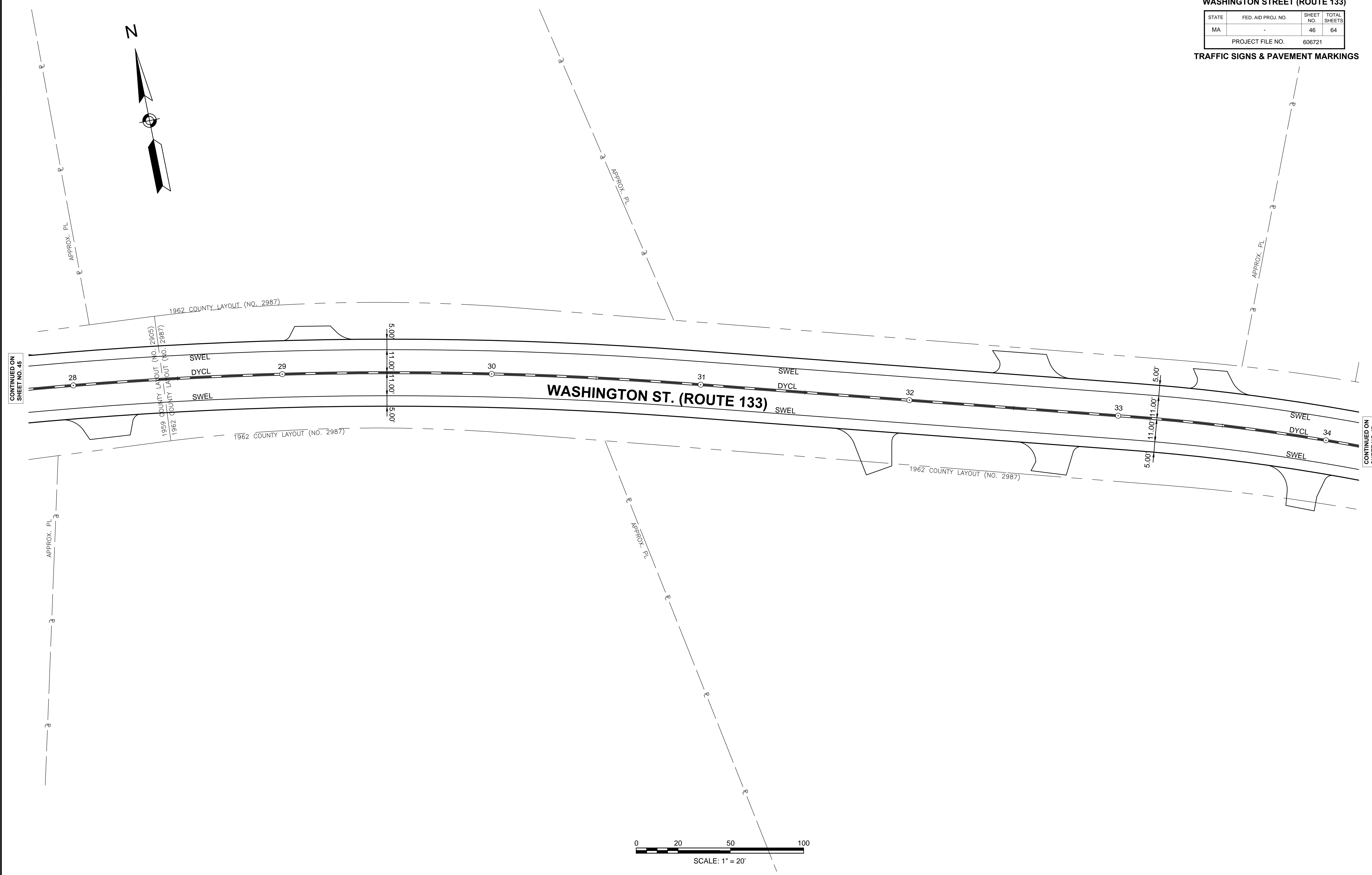
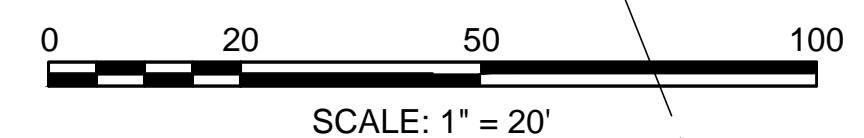
**TRAFFIC SIGNS & PAVEMENT MARKINGS**

CONTINUED ON  
SHEET NO. 45

CONTINUED ON  
SHEET NO. 47



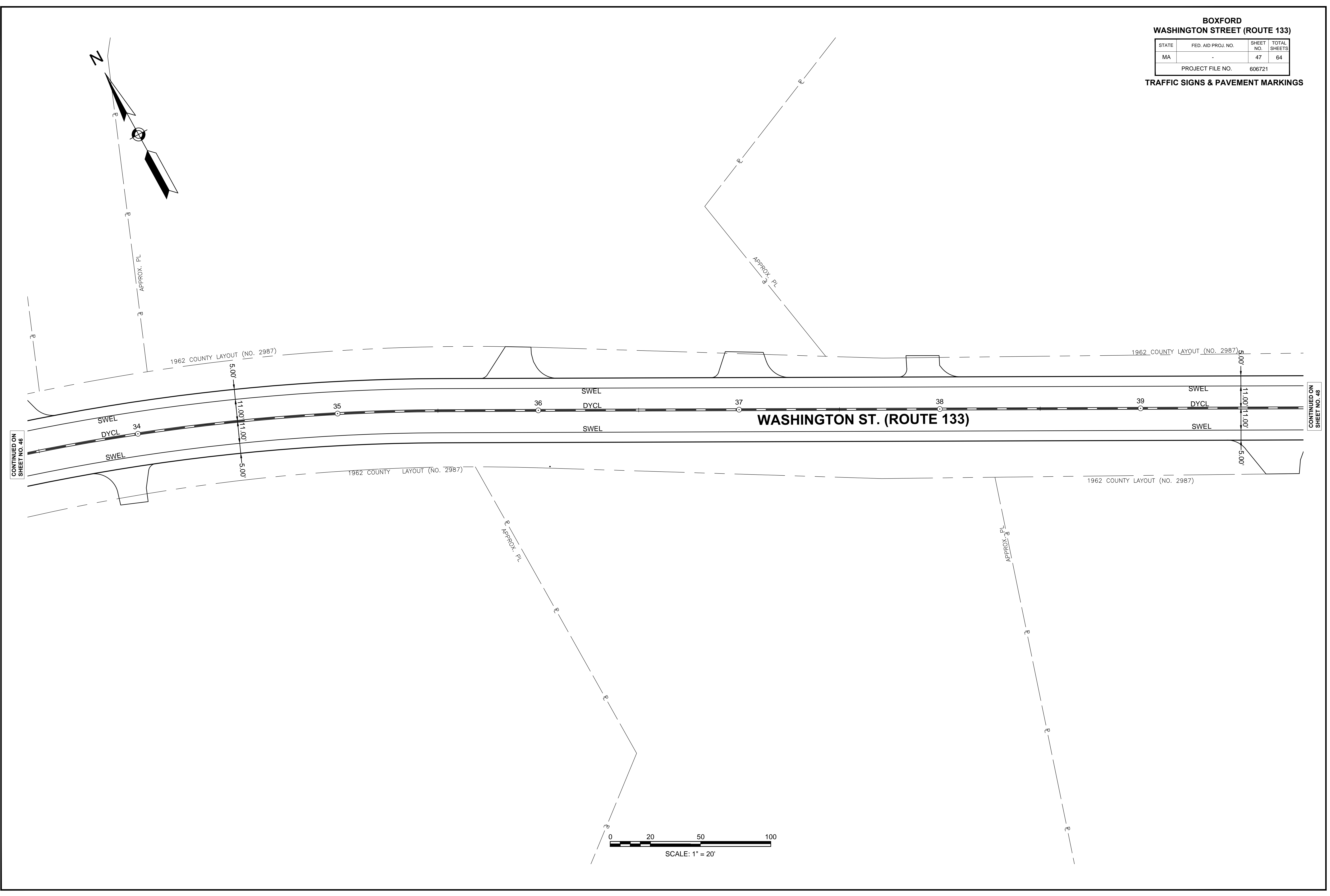
**WASHINGTON ST. (ROUTE 133)**



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	47	64
PROJECT FILE NO.		606721	

**TRAFFIC SIGNS & PAVEMENT MARKINGS**



CONTINUED ON  
SHEET NO. 46

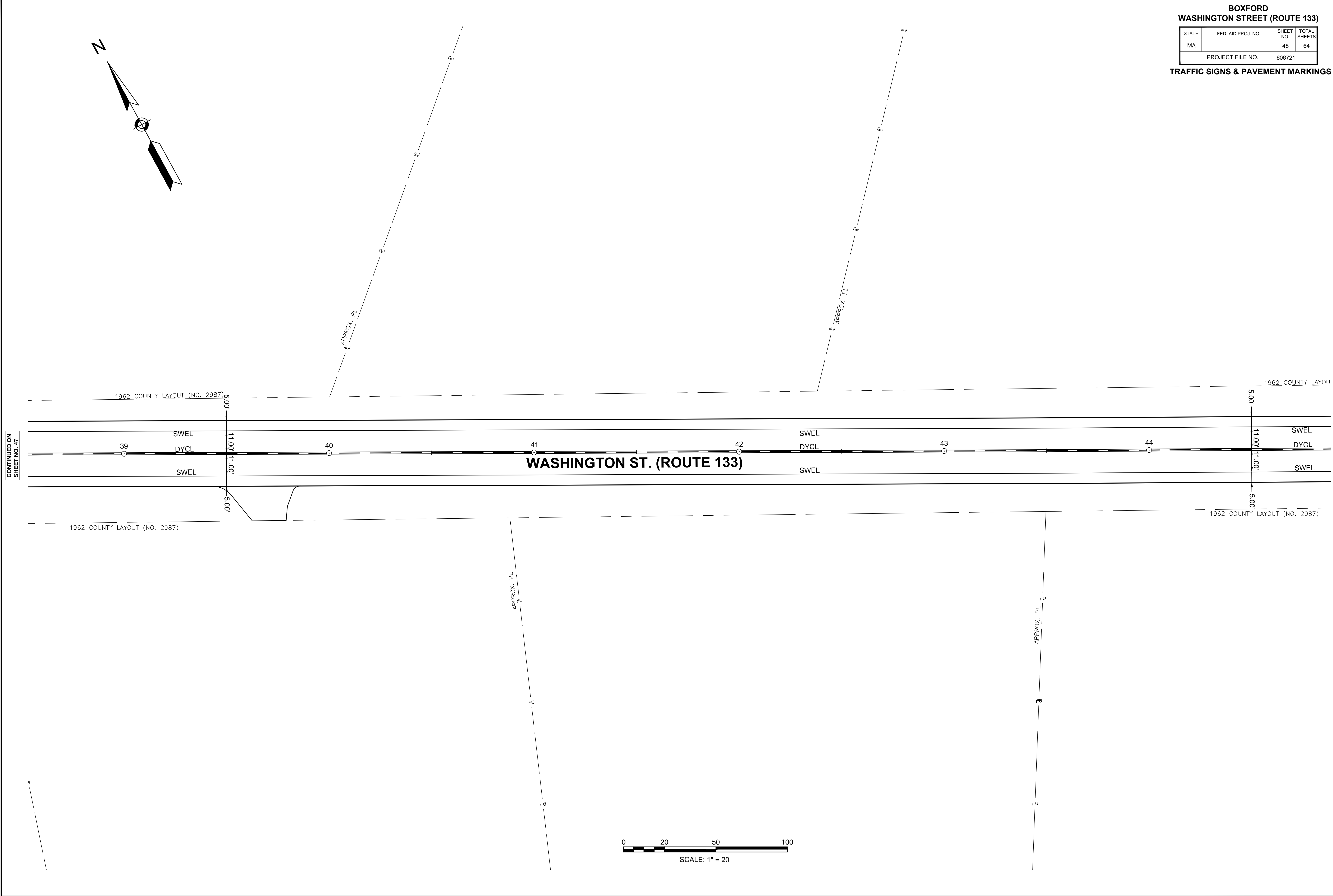
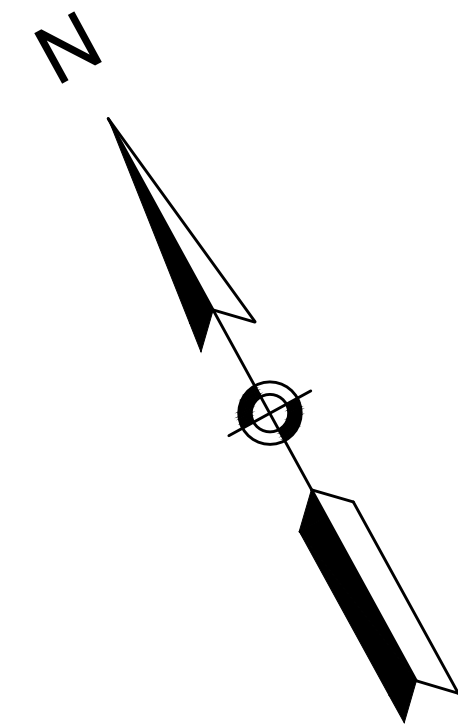
CONTINUED ON  
SHEET NO. 48



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

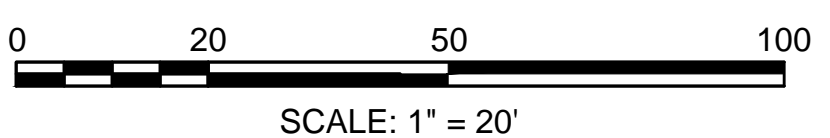
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	48	64
PROJECT FILE NO.		606721	

**TRAFFIC SIGNS & PAVEMENT MARKINGS**



CONTINUED ON  
SHEET NO. 47

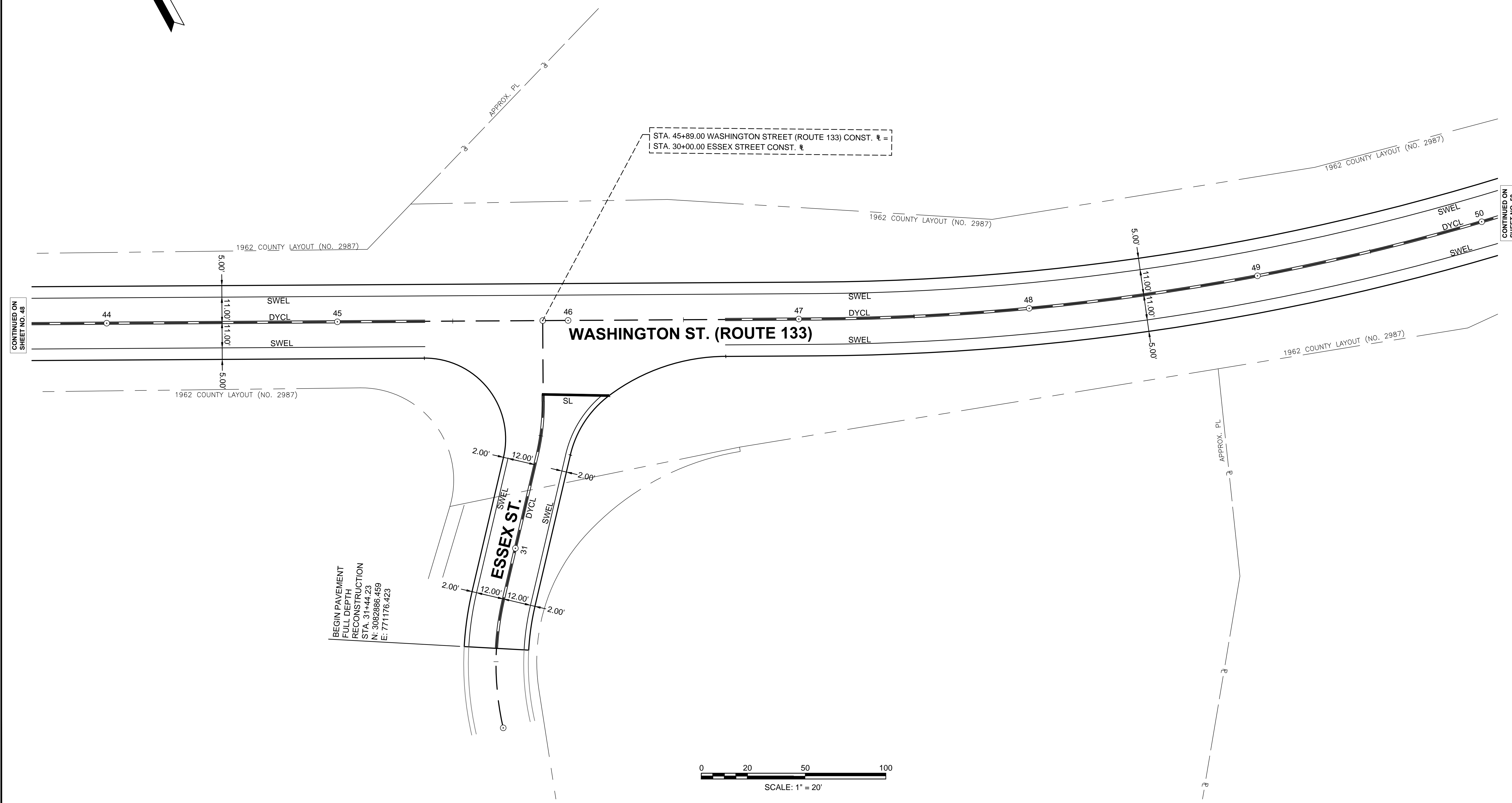
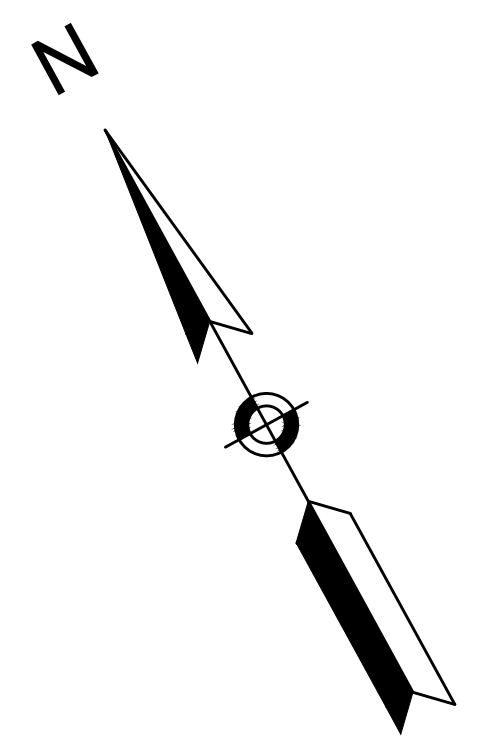
CONTINUED ON  
SHEET NO. 49



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	49	64
PROJECT FILE NO.		606721	

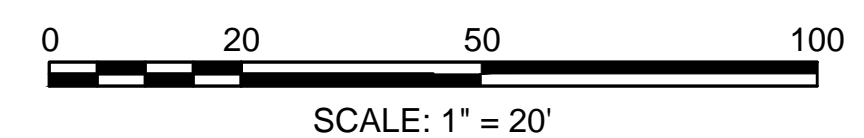
**TRAFFIC SIGNS & PAVEMENT MARKINGS**



CONTINUED ON SHEET NO. 48

CONTINUED ON SHEET NO. 50

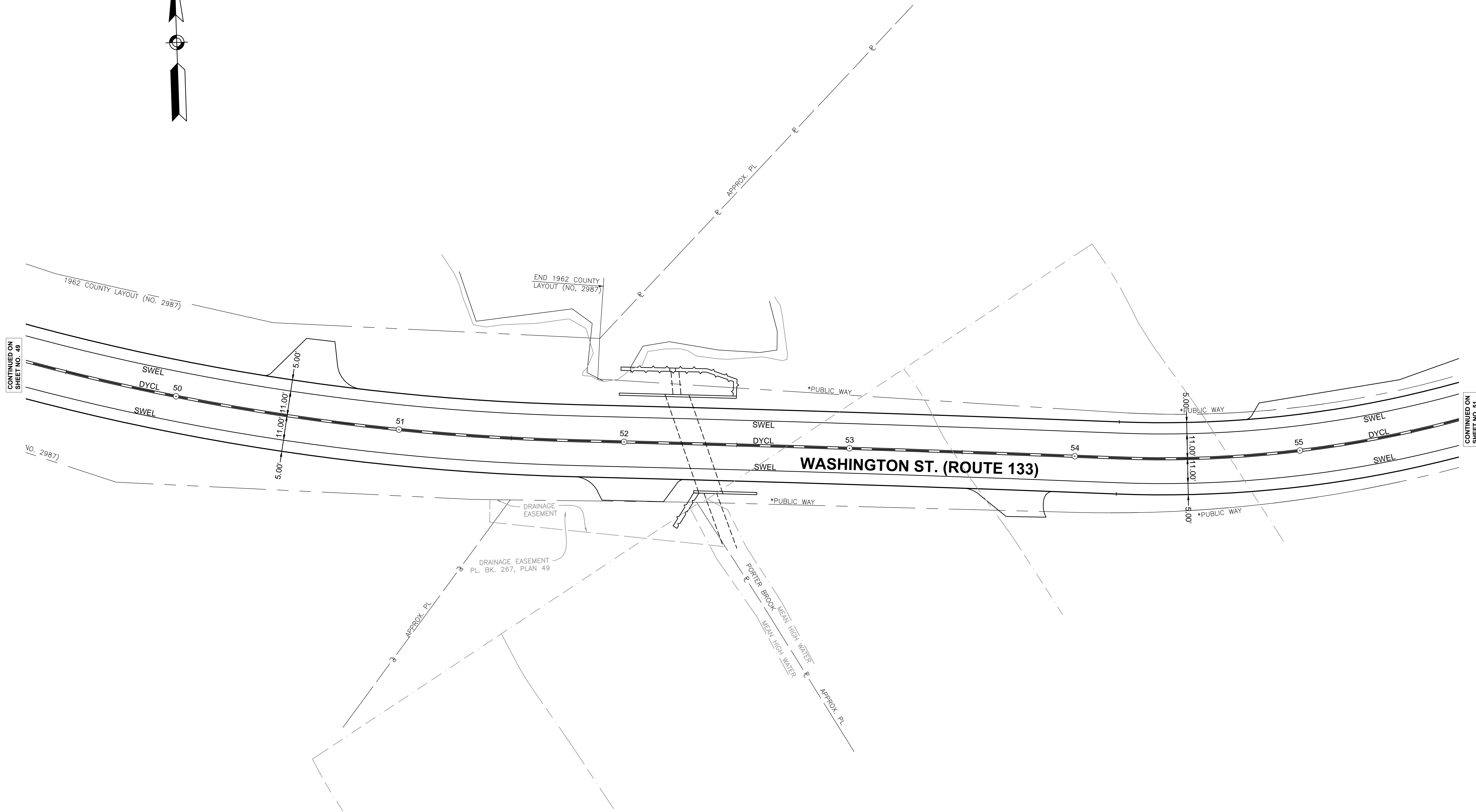
BEGIN PAVEMENT  
FULL DEPTH  
RECONSTRUCTION  
STA. 31+44.23  
N: 3082886.459  
E: 771176.423



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

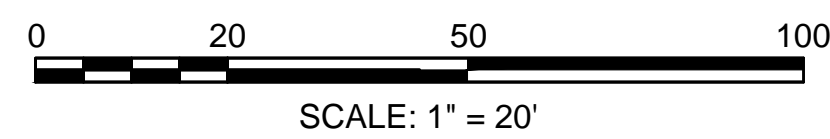
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	50	64
PROJECT FILE NO.		606721	

**TRAFFIC SIGNS & PAVEMENT MARKINGS**



CONTINUED ON  
SHEET NO. 49

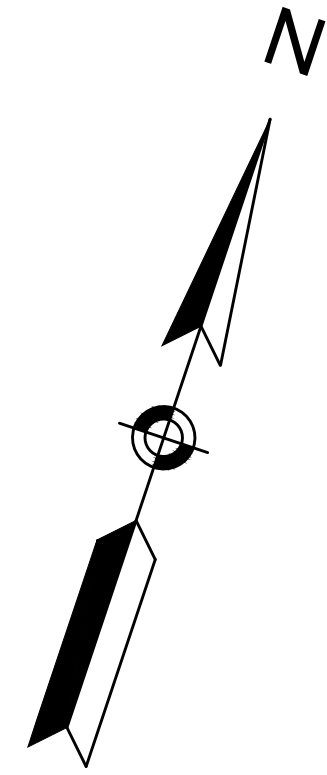
CONTINUED ON  
SHEET NO. 51



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

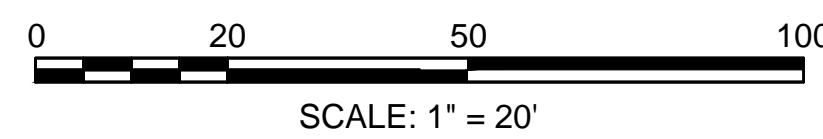
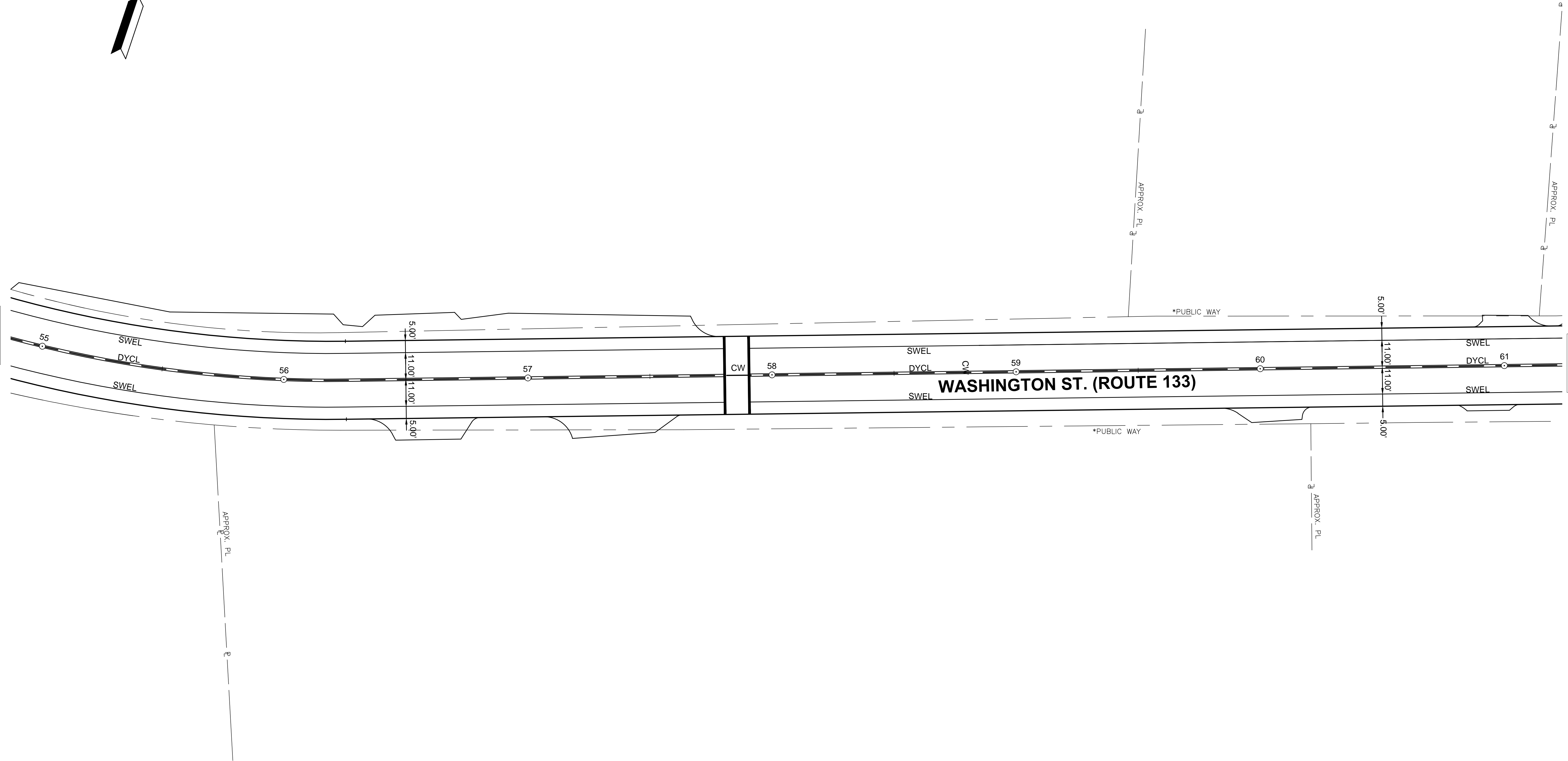
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	51	64
PROJECT FILE NO.		606721	

**TRAFFIC SIGNS & PAVEMENT MARKINGS**



CONTINUED ON  
SHEET NO. 50

CONTINUED ON  
SHEET NO. 52

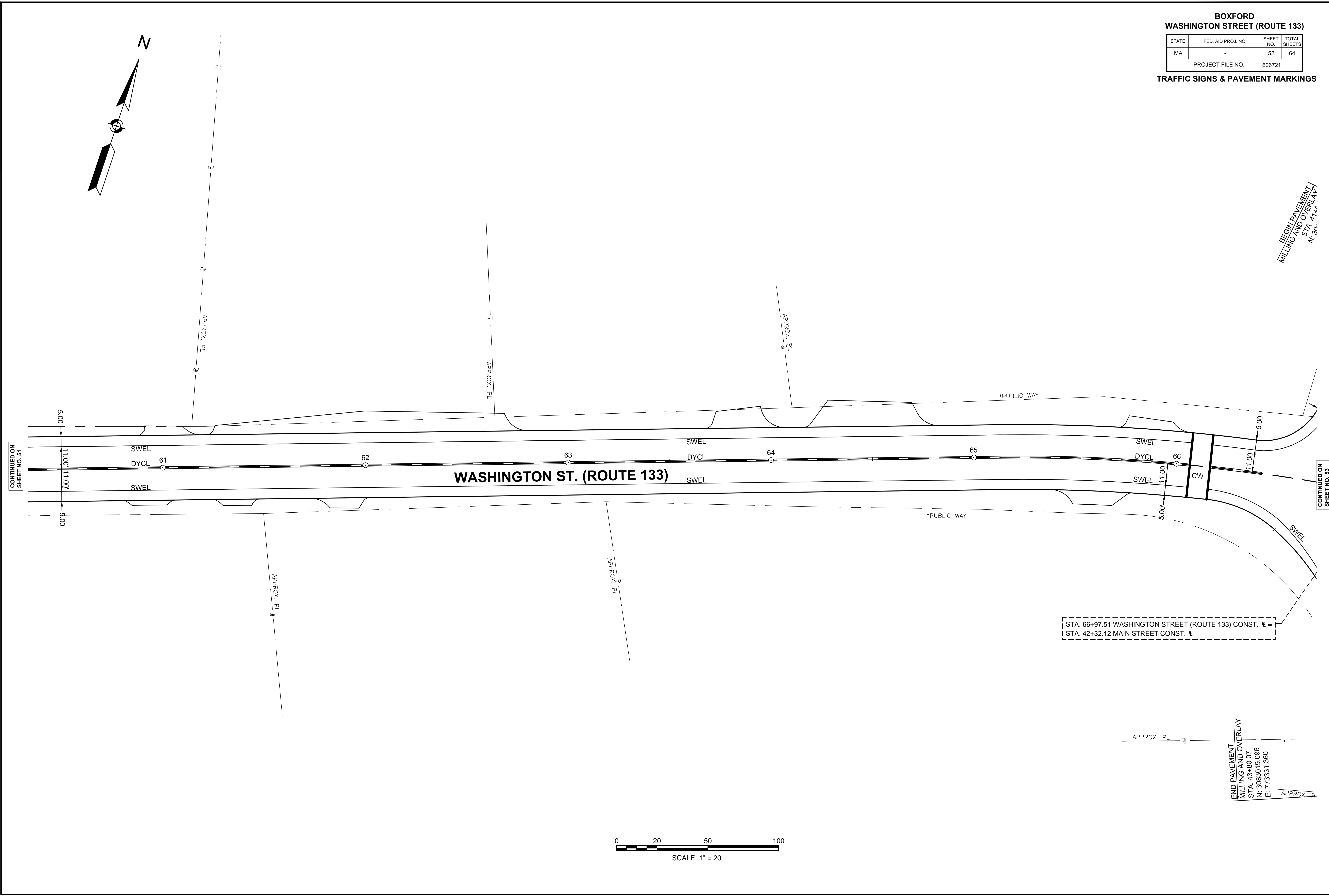


**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	52	64
PROJECT FILE NO.		606721	

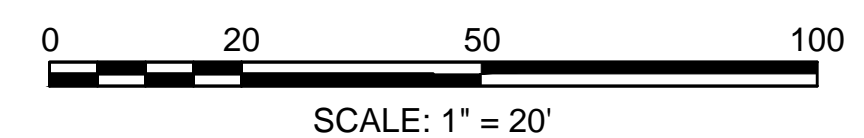
**TRAFFIC SIGNS & PAVEMENT MARKINGS**

BEGIN PAVEMENT  
MILLING AND OVERLAY  
STA. 41+1.42  
N. 32° 41' 14" E



STA. 66+97.51 WASHINGTON STREET (ROUTE 133) CONST. =  
STA. 42+32.12 MAIN STREET CONST. =

END PAVEMENT  
MILLING AND OVERLAY  
STA. 43+80.07  
N: 3083019.096  
E: 773331.360

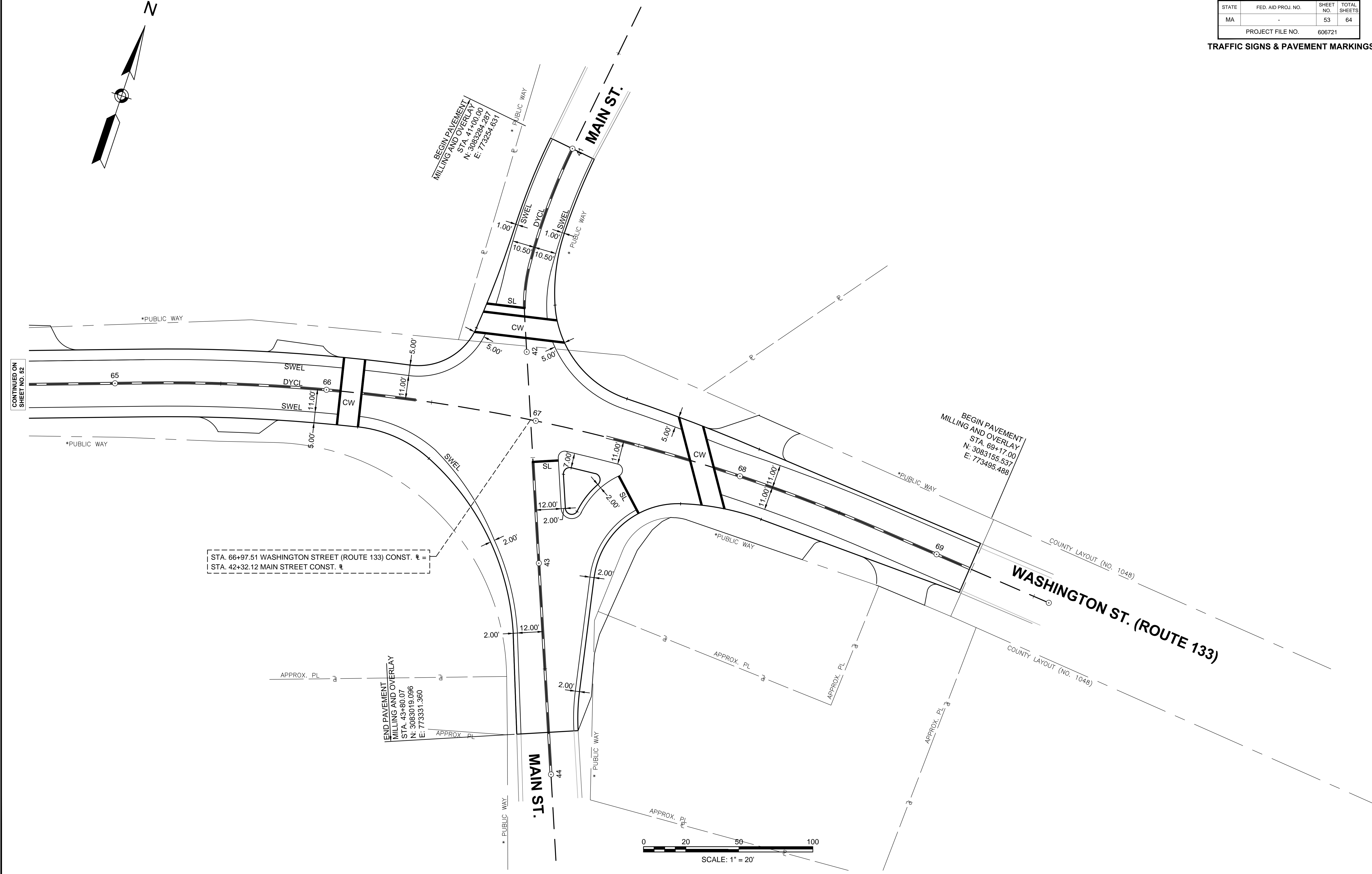
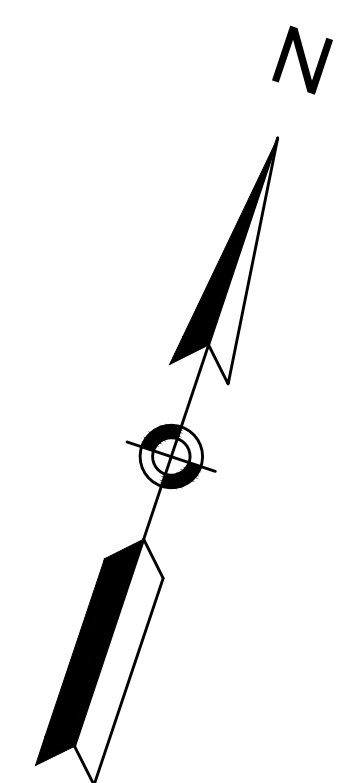




**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	53	64
PROJECT FILE NO.		606721	

**TRAFFIC SIGNS & PAVEMENT MARKINGS**

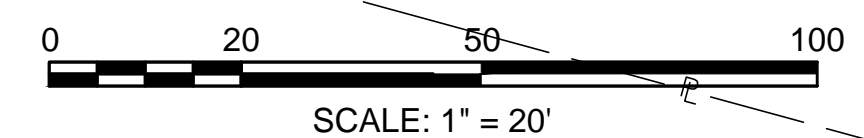


STA. 66+97.51 WASHINGTON STREET (ROUTE 133) CONST. =  
STA. 42+32.12 MAIN STREET CONST. =

END PAVEMENT  
MILLING AND OVERLAY  
STA. 43+80.07  
N: 3083019.086  
E: 773331.380

BEGIN PAVEMENT  
MILLING AND OVERLAY  
STA. 41+00.00  
N: 3083284.287  
E: 773234.631

BEGIN PAVEMENT  
MILLING AND OVERLAY  
STA. 69+17.00  
N: 3083155.537  
E: 773495.488



CONTINUED ON  
SHEET NO. 52

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	54	64
PROJECT FILE NO.		606721	

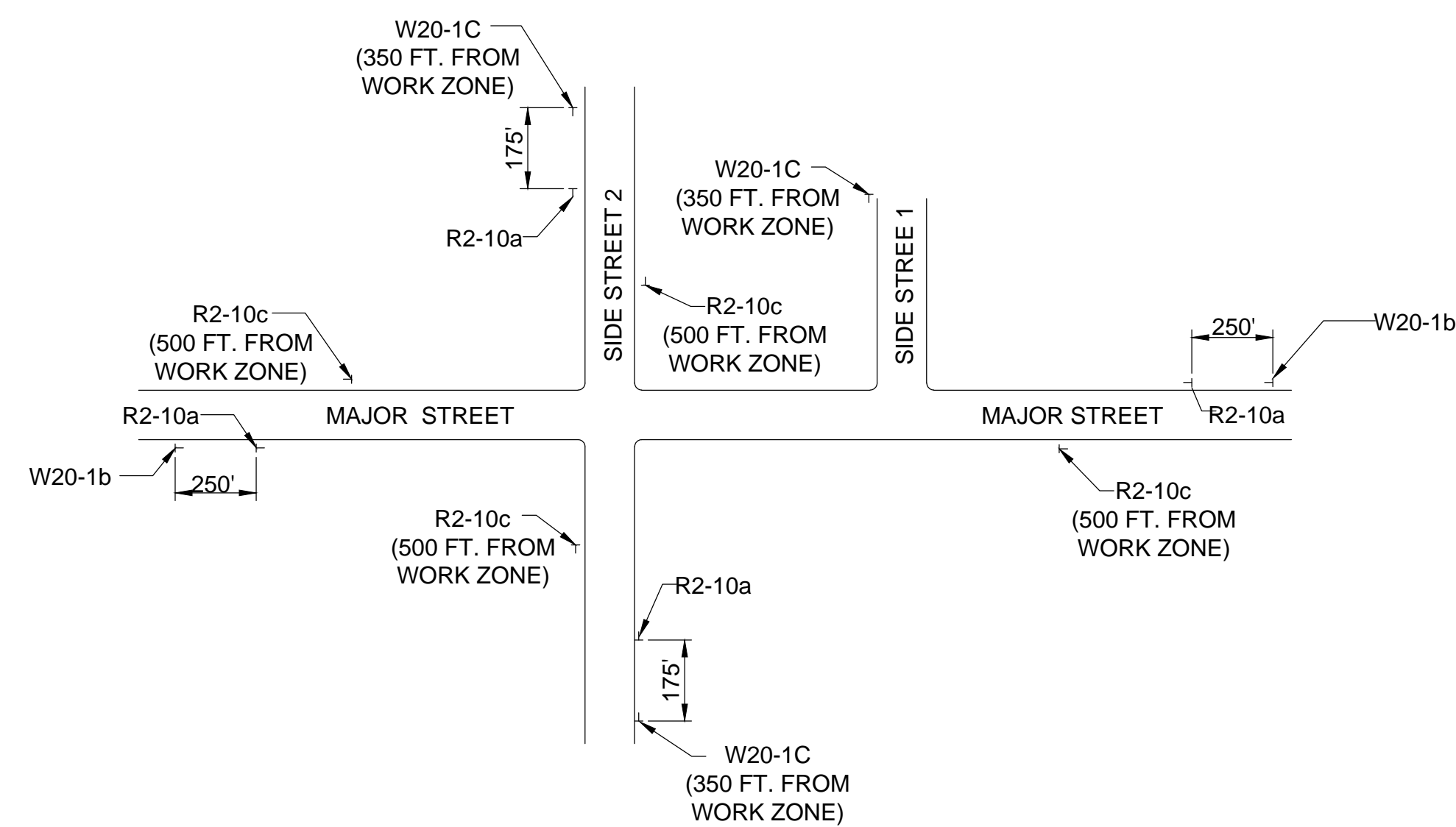
**TEMPORARY TRAFFIC CONTROL PLAN**

**TRAFFIC MANAGEMENT NOTES:**

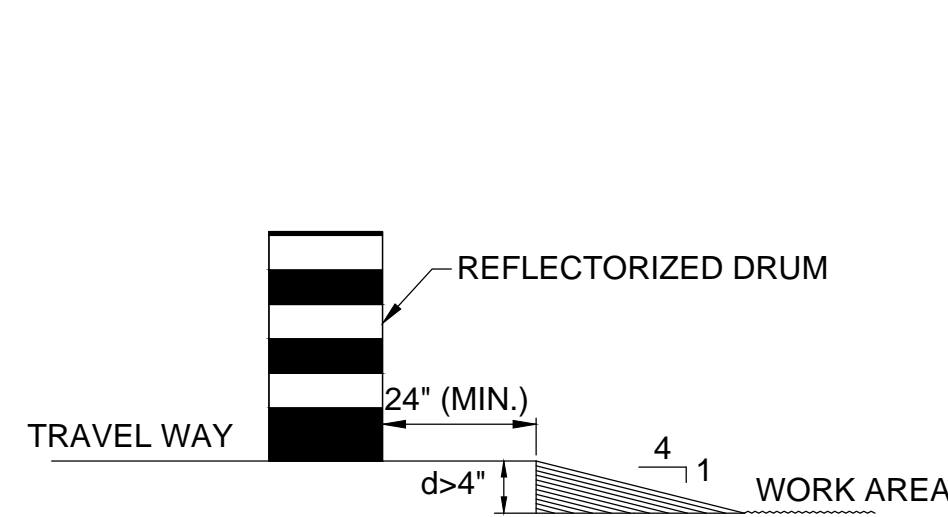
- INSTALL AND/OR RELOCATE TEMPORARY SIGNS, DRUMS, AND OTHER TRAFFIC MAINTENANCE DEVICES AS REQUIRED.
- ALL CONSTRUCTION SIGNING AND OTHER TRAFFIC MAINTENANCE DEVICES SHALL CONFORM WITH THE 2009 MUTCD AS AMENDED.
- REMOVE OR COVER ALL TEMPORARY SIGNS, DRUMS AND OTHER TRAFFIC MAINTENANCE DEVICES THAT ARE NOT REQUIRED ON THE COMPLETION OF THE WORK, EACH DAY. THIS PARTICULARLY APPLIES TO THE W20-7a OR W20-8 SIGNS, WHICH SHALL BE COMPLETELY COVERED OR REMOVED AT THE END OF EACH DAY.
- CONTRACTOR SHALL USE TEMPORARY PATCHING OR BEVELED STEEL PLATES TO COVER CONDUIT TRENCHES NOT COMPLETED IN A DAYS WORK.
- ALL DISTANCES MAY BE ADJUSTED TO FIT FIELD CONDITIONS, AS DIRECTED BY THE ENGINEER.
- ACCESS TO ABUTTERS SHALL REMAIN OPEN AT ALL TIMES.
- NO SIGNS SHALL BE ATTACHED TO DRUMS OR CONES. ALL CONSTRUCTION SIGNS SHALL BE ATTACHED TO THEIR OWN INDEPENDENT SUPPORTS AND MEET NCHRP 350 STANDARDS.
- NO SIGNS SHALL BE VISIBLE TO TRAFFIC THAT MAY CONFLICT WITH ACTUAL CONDITIONS.
- PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION SHALL BE OBLITERATED. TEMPORARY PAVEMENT MARKINGS SHALL BE USED AS NECESSARY AND SHALL BE IN PLACE BEFORE WORK IS COMPLETED EACH NIGHT.
- THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER (IN FEET) SHOULD BE APPROXIMATELY EQUAL TO THE SPEED LIMIT (IN MPH).
- PEDESTRIANS SHOULD BE PROVIDED WITH A SAFE CONVENIENT TRAVEL PATH THROUGH THE CONSTRUCTION ZONE FOR THE DURATION OF CONSTRUCTION BY USE OF APPROPRIATE TRAFFIC MAINTENANCE DEVICES AND/OR A POLICE OFFICER (DURING WORK HOURS). IF THE AREAS OF SIDEWALK NEED TO BE CLOSED OVERNIGHT, THE CONTRACTOR SHALL MAKE ALL REASONABLE PROVISIONS TO KEEP A SAFE PATHWAY OPEN FOR PEDESTRIANS.
- LOCATION OF W11-2, W16-7P AND R9-11 SIGNS TO BE APPROVED BY THE ENGINEER WHO WILL DETERMINE THE NECESSITY FOR PROVIDING TEMPORARY CROSSWALKS.
- DURING EACH PHASE, EDGES OF WORK MUST BE DELINEATED WITH REFLECTORIZED DRUMS.
- ONE LANE OPERATION SHALL NOT BE IN OPERATION DURING PEAK HOURLY VOLUMES WHICH OCCUR BETWEEN THE HOURS OF 7:00 AM TO 9:00 AM AND 3:30 PM TO 6:00 PM.

**LEGEND**

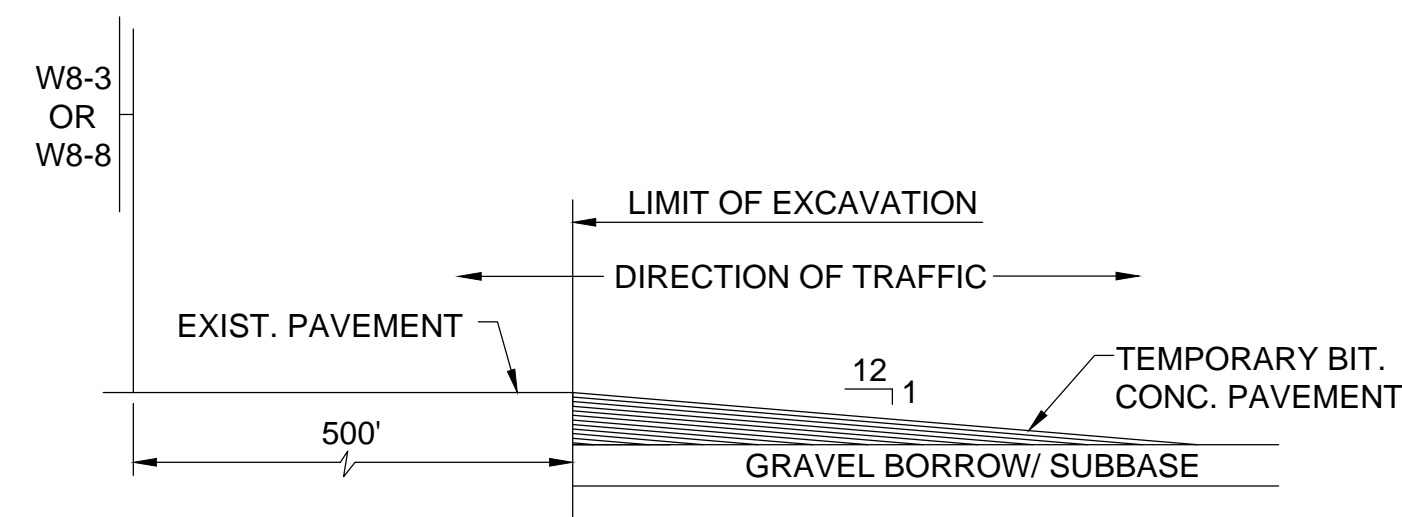
	WORK AREA
	REFLECTIVE DRUM
	REFLECTIVE DRUM W/ FLASHER (TYPE A)
	DIRECTION OF TRAVEL
	TRAFFIC OFFICER OR FLAGGER
	PORTABLE BREAKAWAY BARRICADE TYPE III
	TEMPORARY SIGN
	PAVEMENT MARKINGS TO COVER OR REMOVE



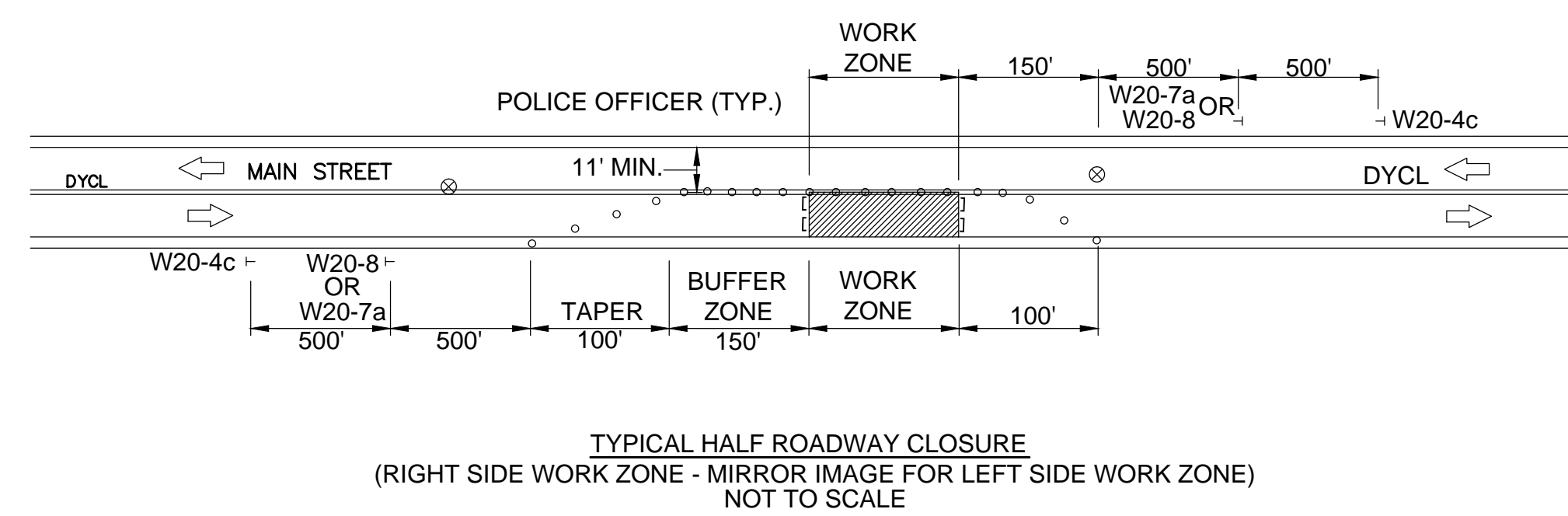
**TYPICAL ADVANCE WARNING SIGN INSTALLATION**  
NOT TO SCALE



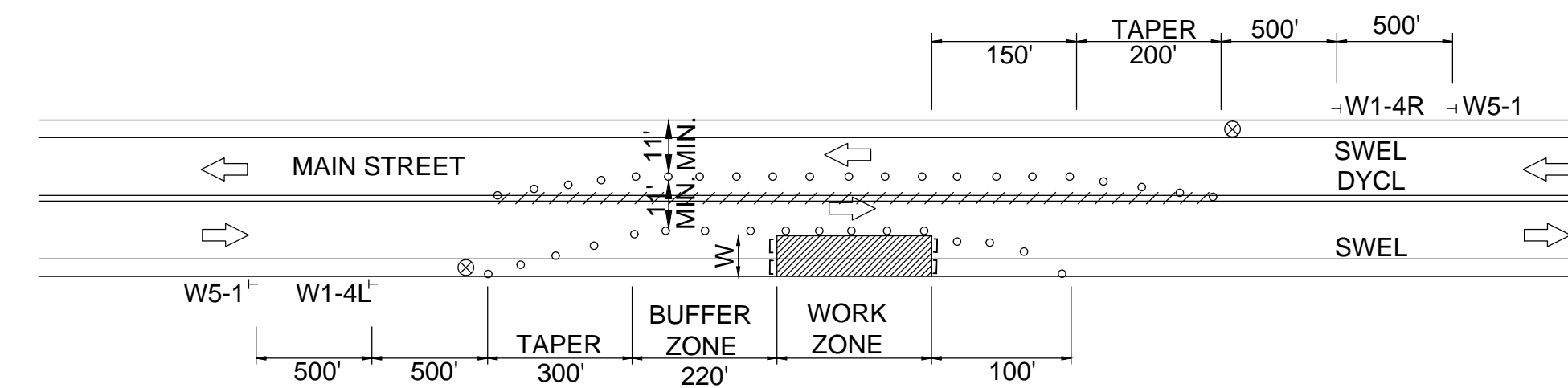
**LATERAL DROP-OFF DETAIL**  
NOT TO SCALE



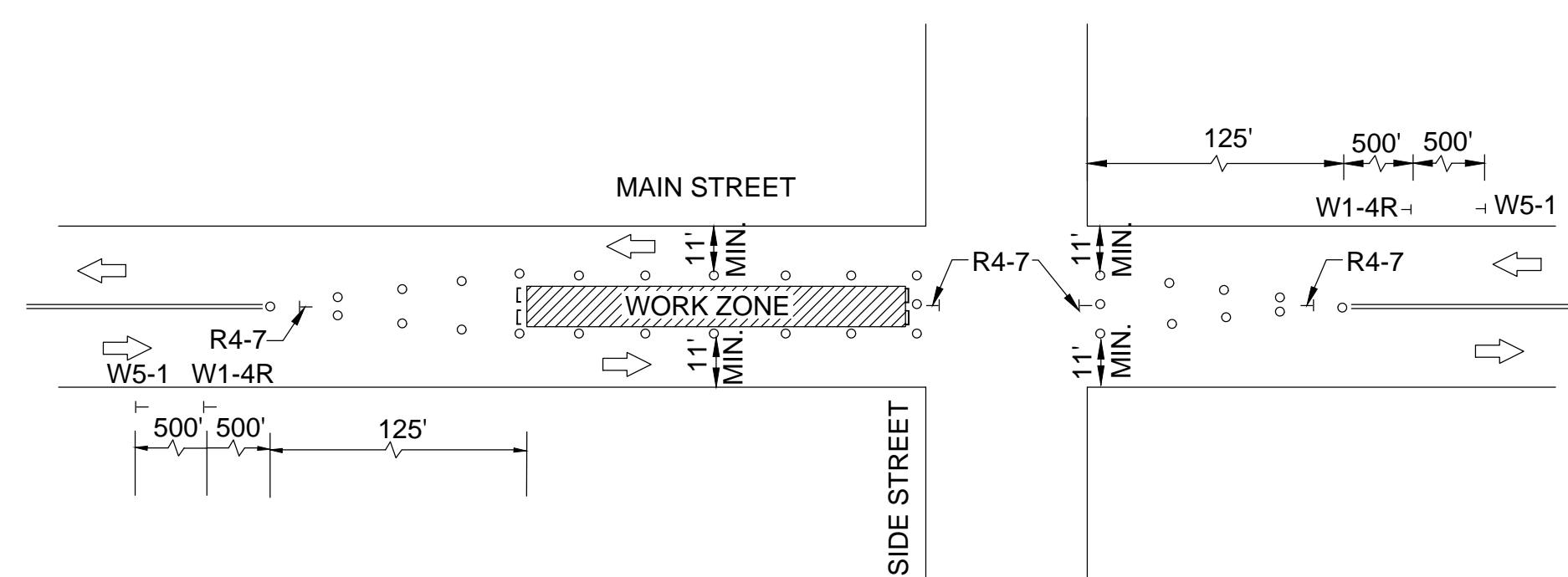
**LONGITUDINAL DROP-OFF DETAIL**  
NOT TO SCALE



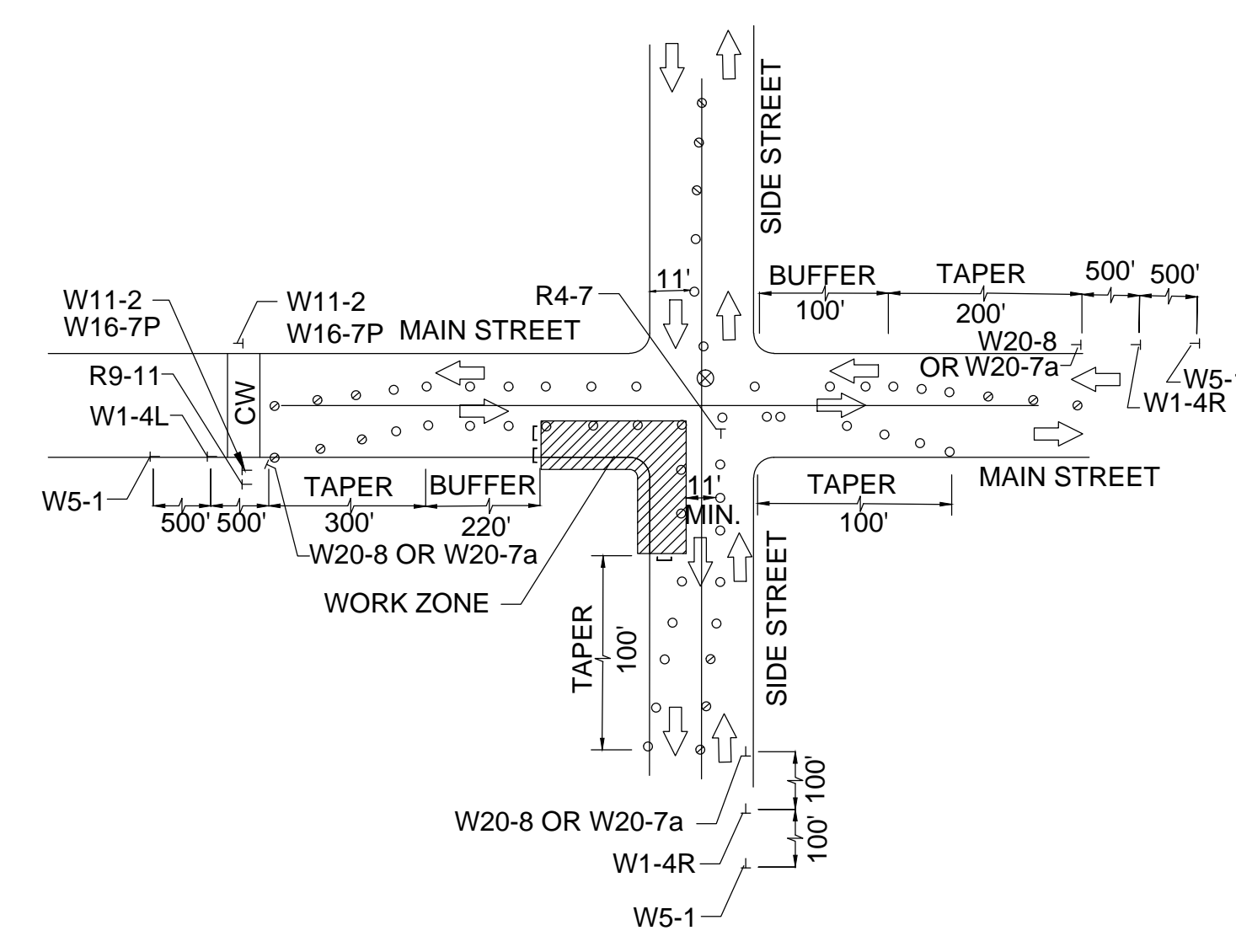
**TYPICAL HALF ROADWAY CLOSURE**  
(RIGHT SIDE WORK ZONE - MIRROR IMAGE FOR LEFT SIDE WORK ZONE)  
NOT TO SCALE



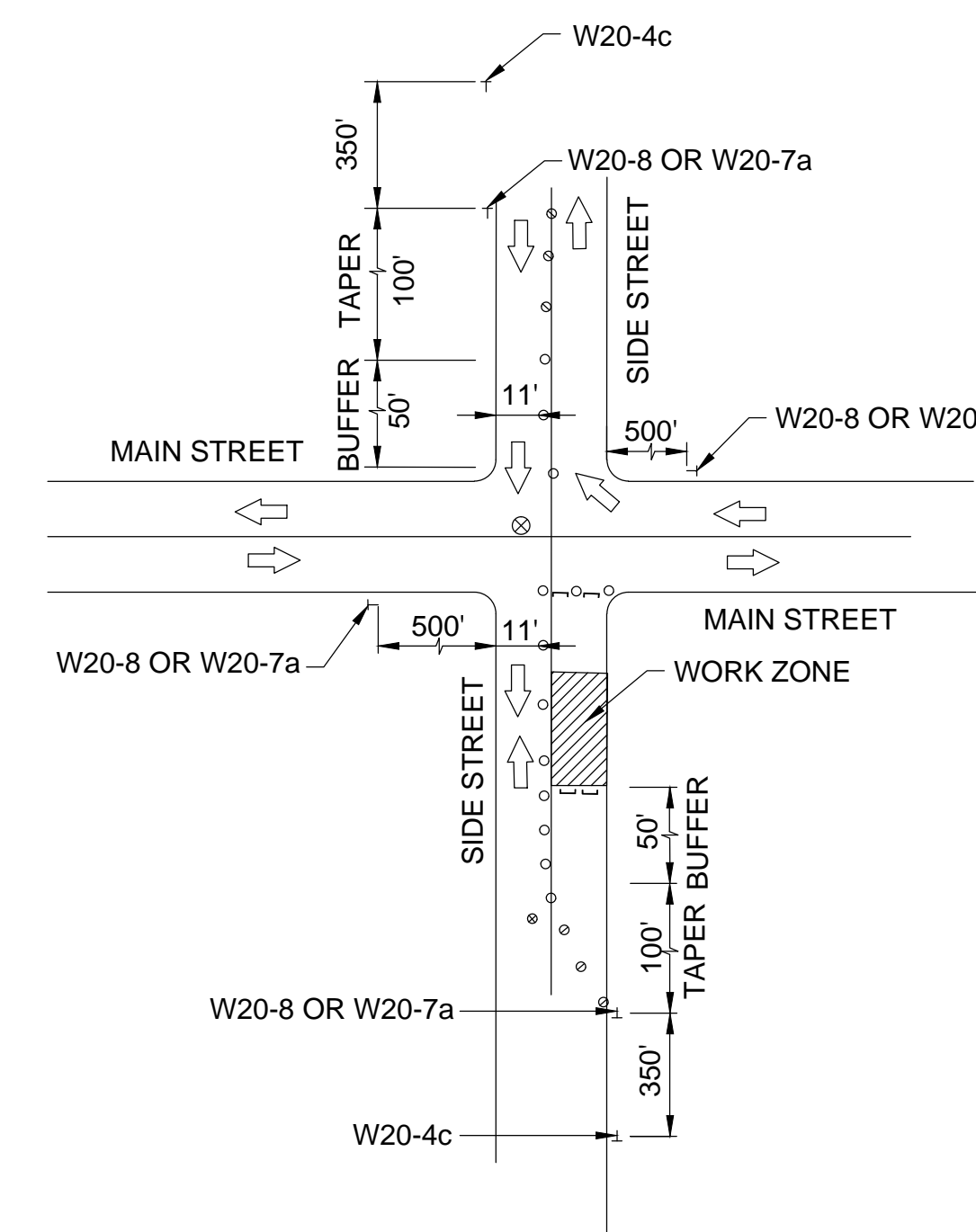
**TYPICAL SHOULDER/PARTIAL LANE CLOSURE**  
(WITH ENCROACHMENT ON DYCL)  
(RIGHT SIDE WORK ZONE - MIRROR IMAGE FOR LEFT SIDE WORK ZONE)  
NOT TO SCALE



**TYPICAL TEMPORARY CENTER OF ROAD CONSTRUCTION DETAIL**  
FOR MAIN LINE  
NOT TO SCALE



**TYPICAL QUADRANT CLOSURE**  
NOT TO SCALE



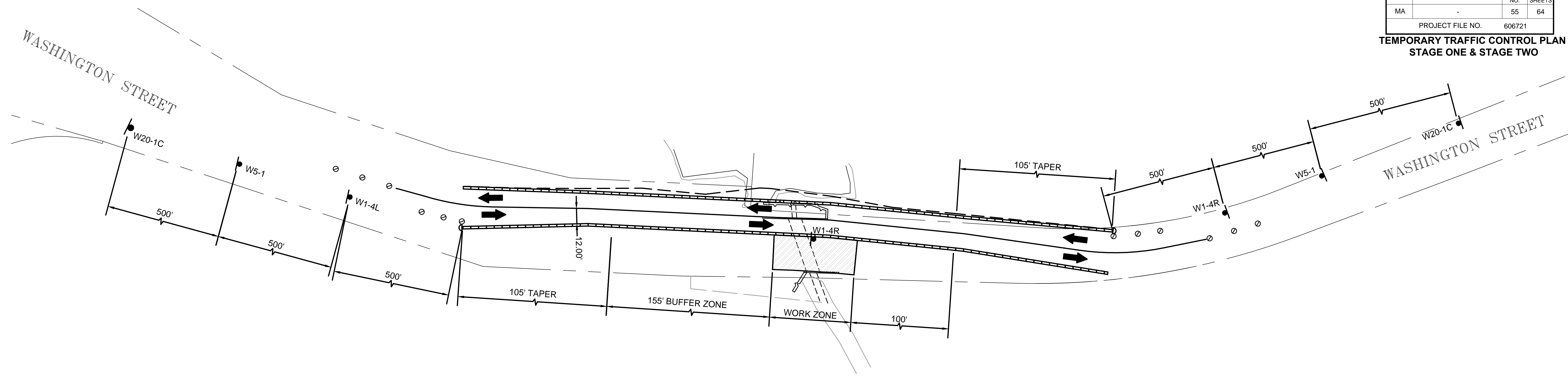
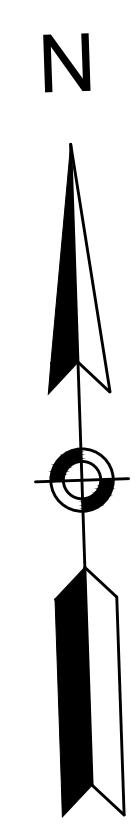
**TYPICAL TEMPORARY LANE CLOSURE**  
(RIGHT SIDE WORK ZONE - MIRROR IMAGE FOR LEFT SIDE WORK ZONE)  
NOT TO SCALE

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	55	64

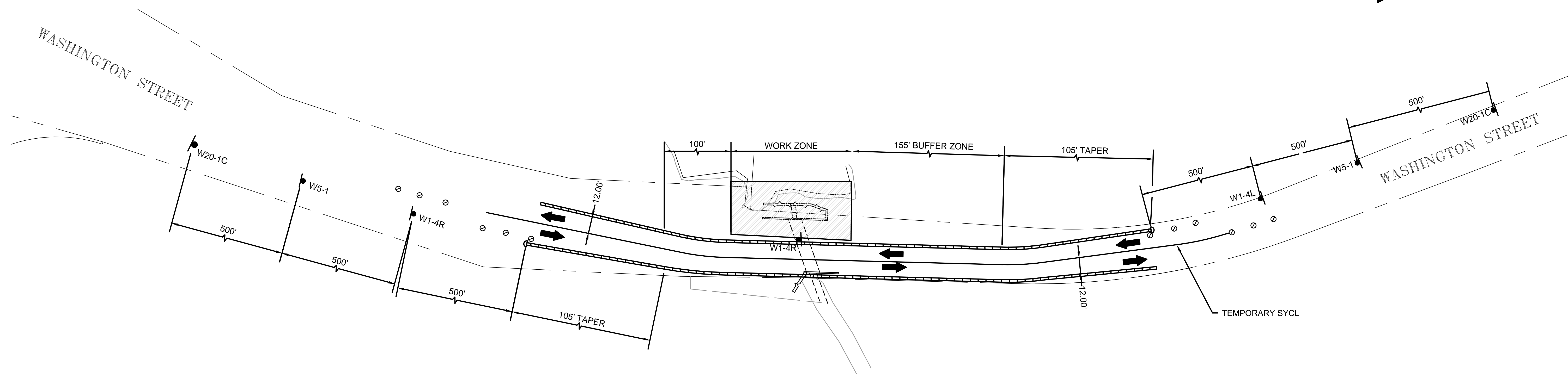
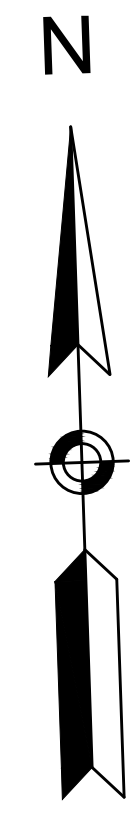
PROJECT FILE NO. 606721

**TEMPORARY TRAFFIC CONTROL PLAN  
STAGE ONE & STAGE TWO**



STAGE ONE  
NOT TO SCALE

- LEGEND**
- IMPACT ATTENUATOR
  - TEMPORARY JERSEY BARRIER
  - TRAFFIC SIGN
  - REFLECTIVE DRUM W/FLASHER (TYPE A)
  - TRAFFIC FLOW

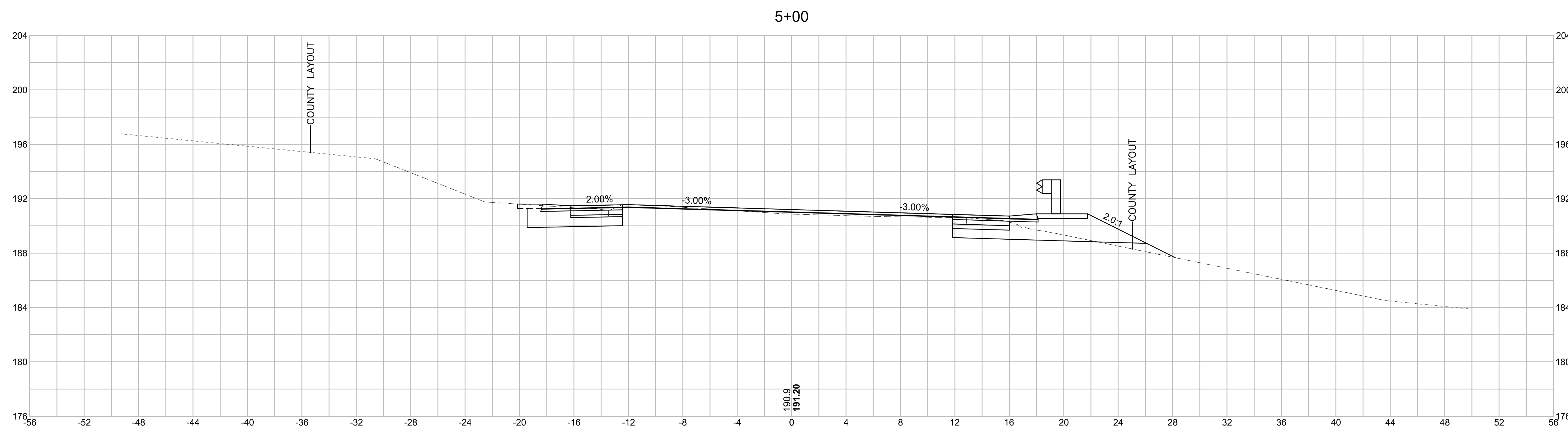
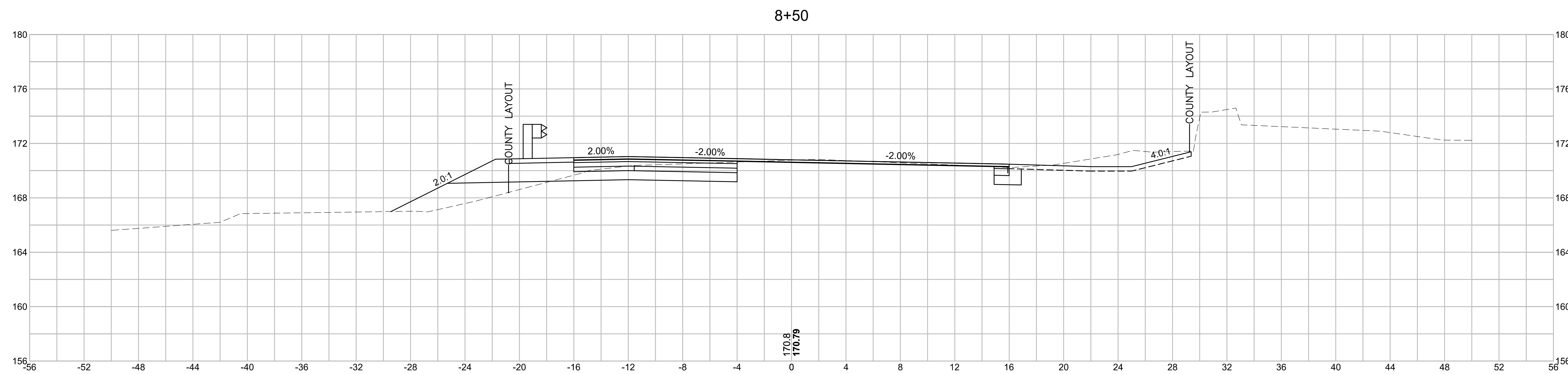


STAGE TWO  
NOT TO SCALE

**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	56	64
PROJECT FILE NO.		606721	

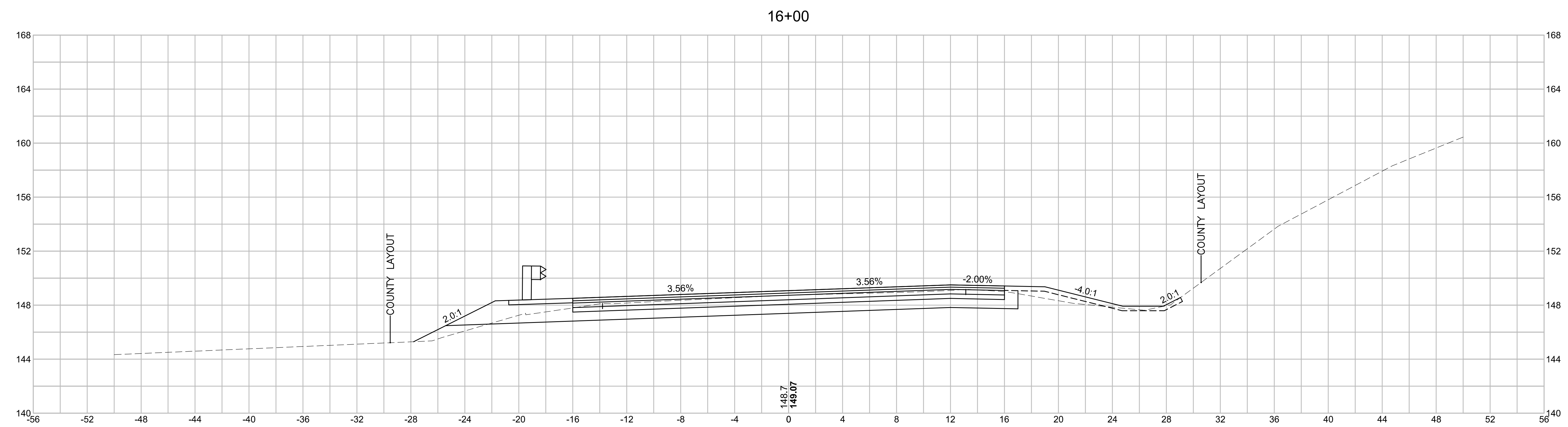
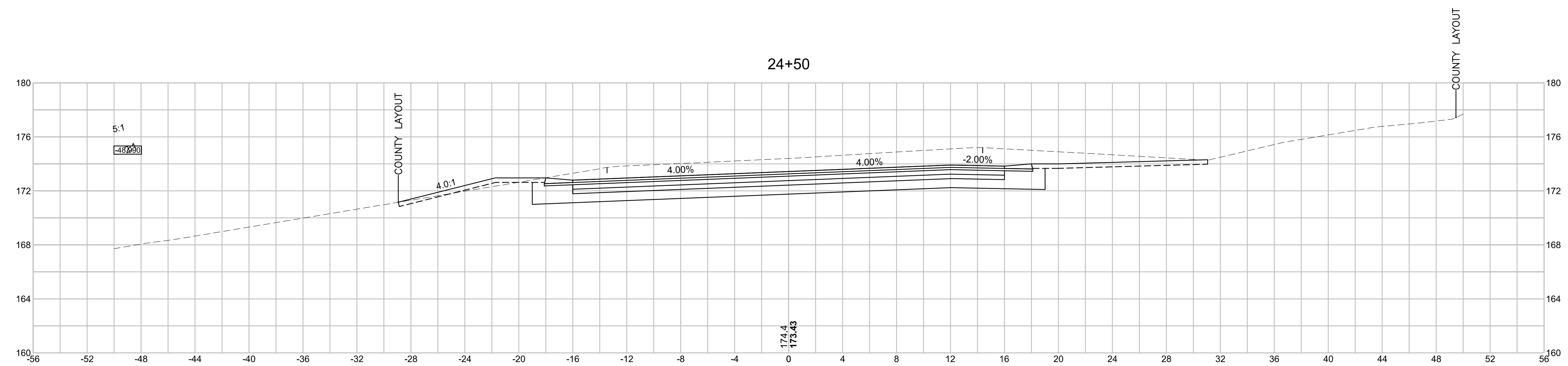
**CRITICAL CROSS SECTIONS**



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	57	64
PROJECT FILE NO.		606721	

**CRITICAL CROSS SECTIONS**

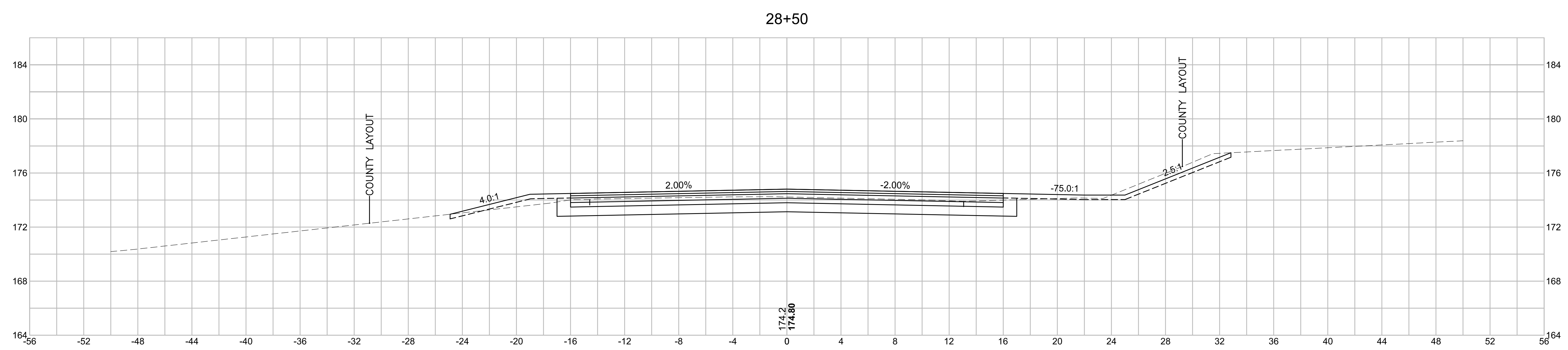
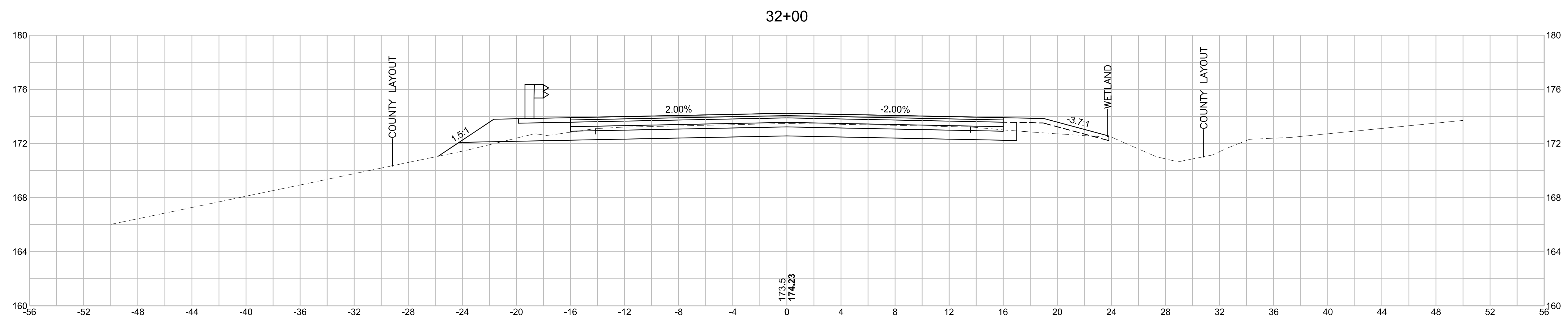




**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	58	64
PROJECT FILE NO.		606721	

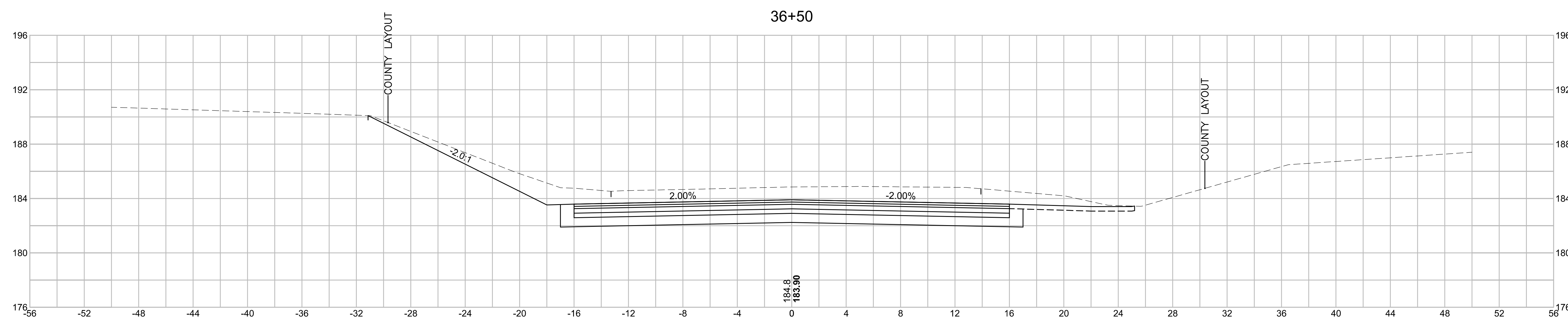
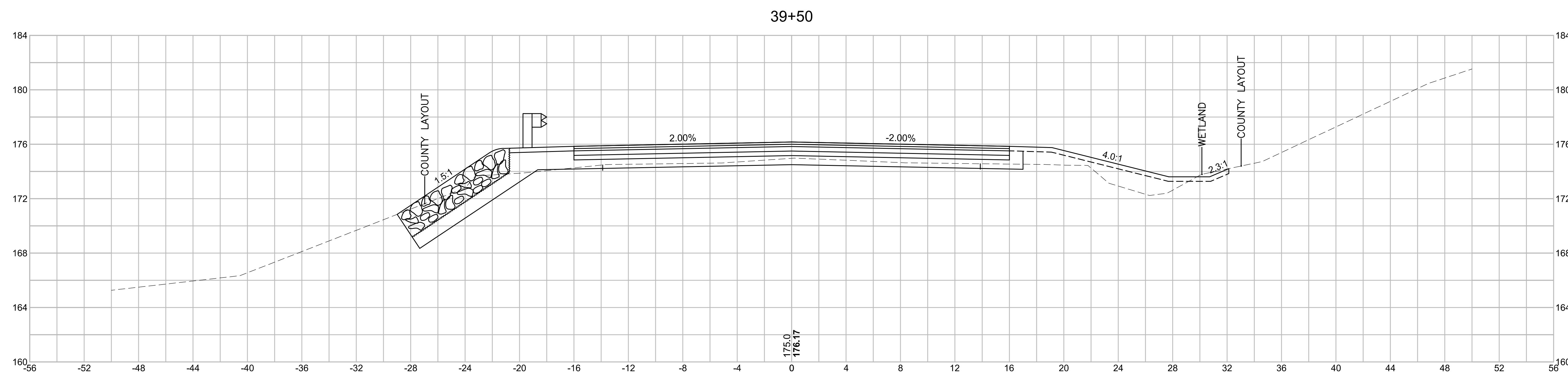
**CRITICAL CROSS SECTIONS**



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	59	64
PROJECT FILE NO.		606721	

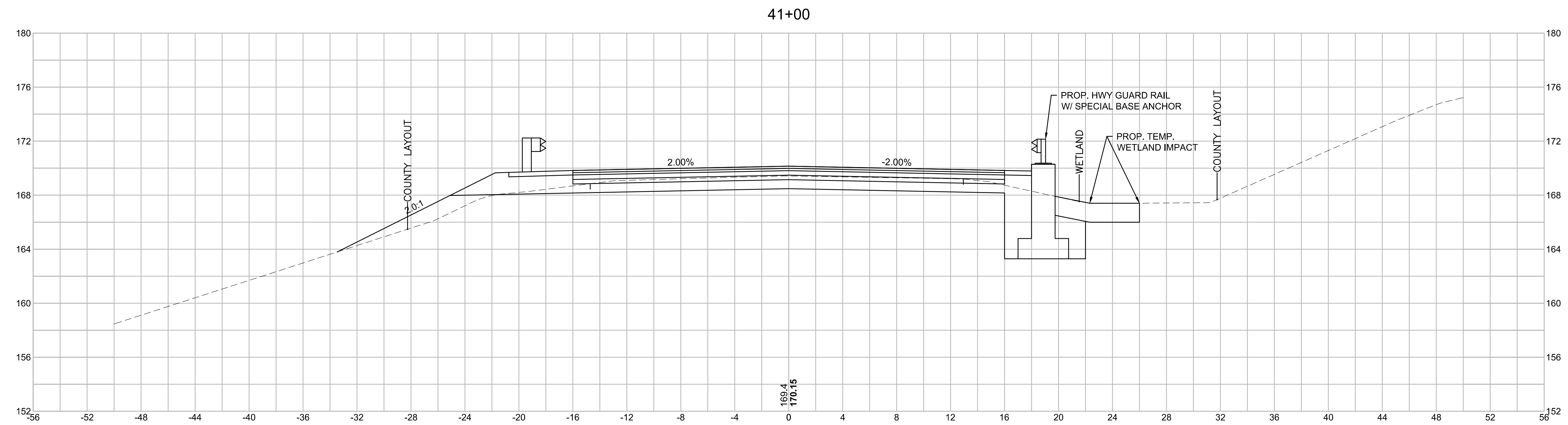
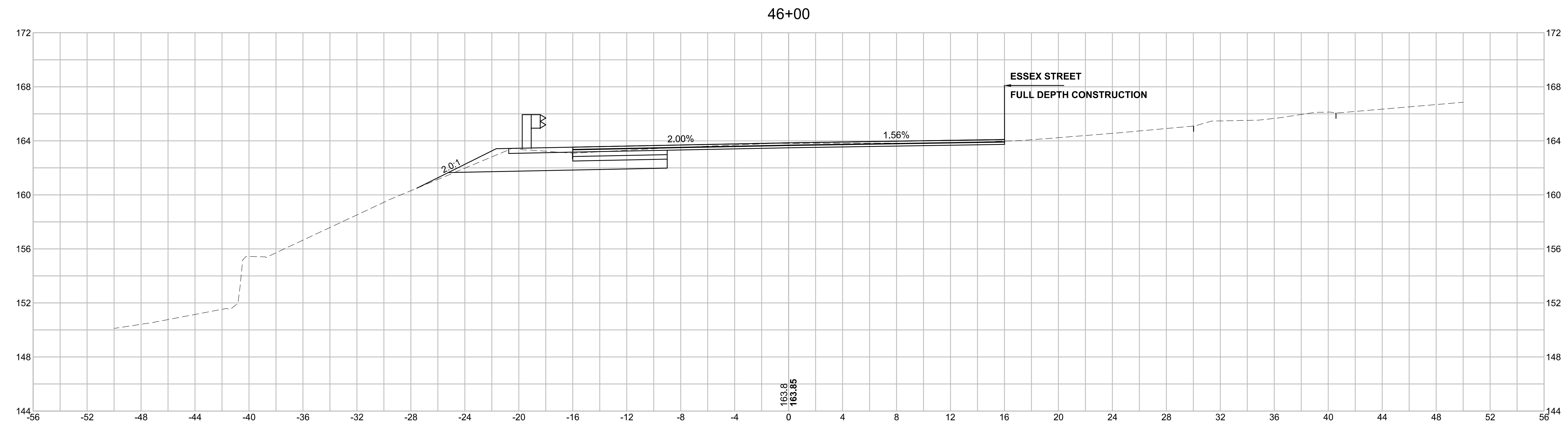
**CRITICAL CROSS SECTIONS**



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	60	64
PROJECT FILE NO.		606721	

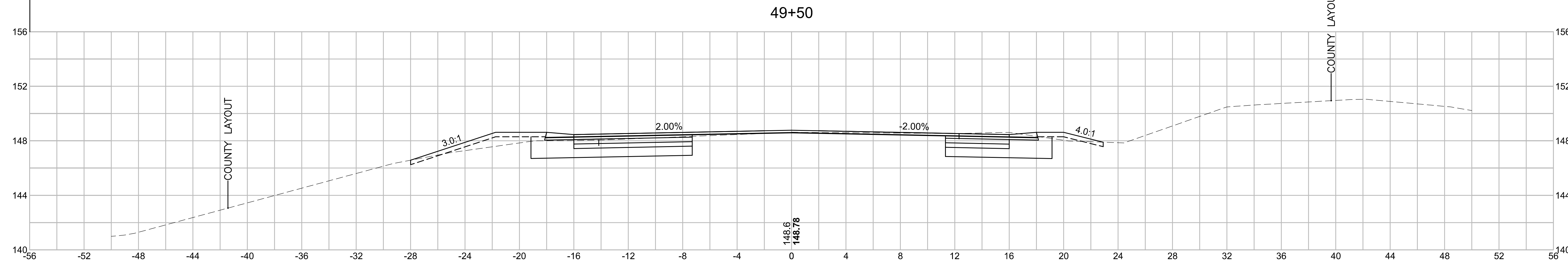
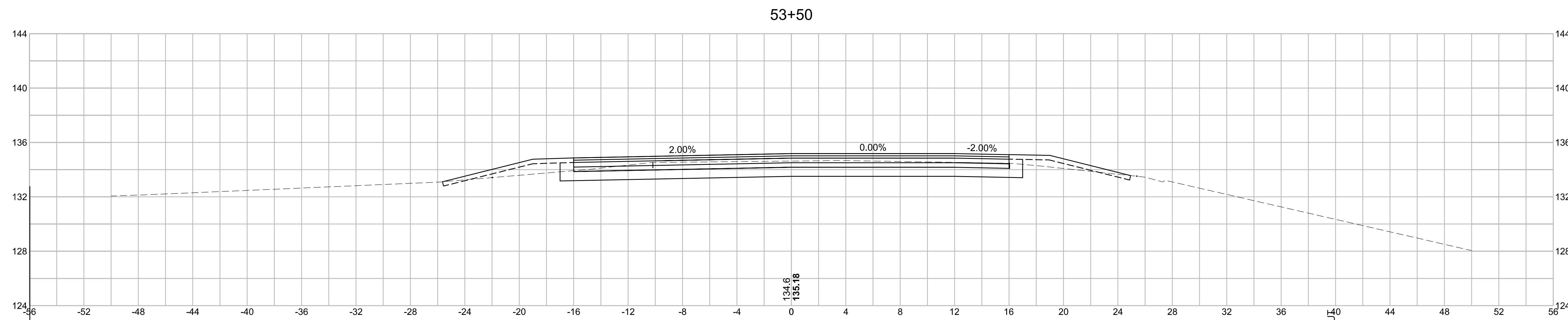
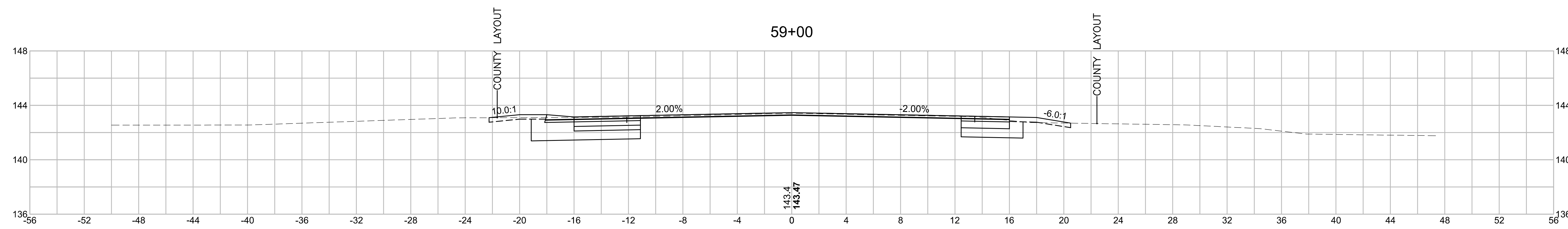
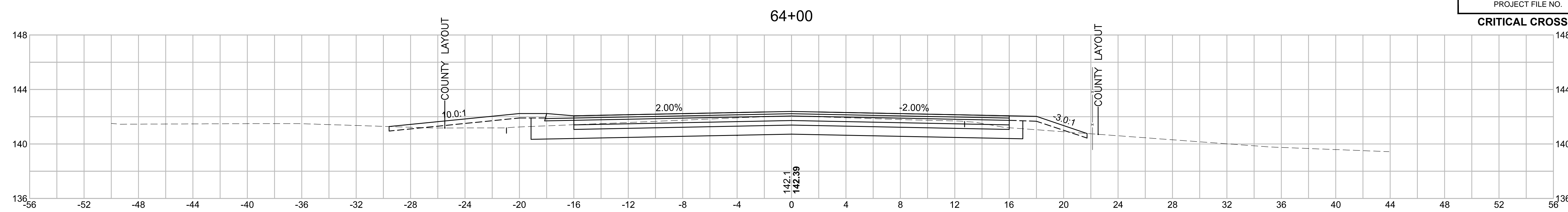
**CRITICAL CROSS SECTIONS**



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	61	64

**CRITICAL CROSS SECTIONS**

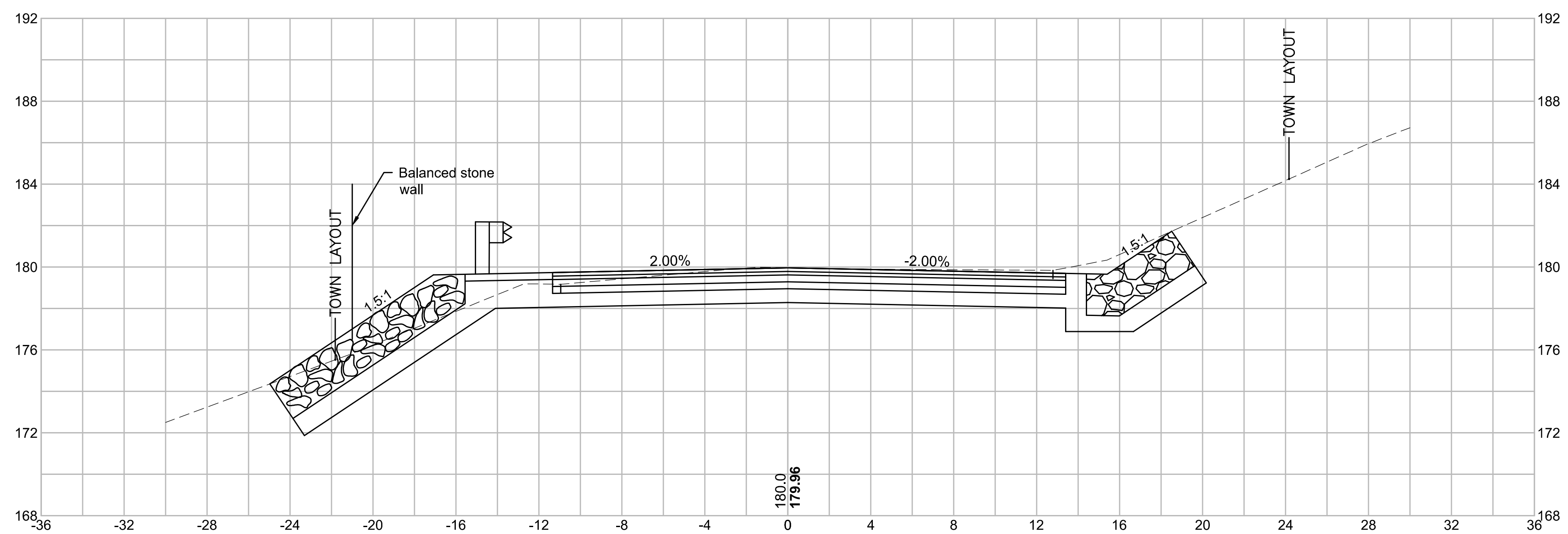


**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

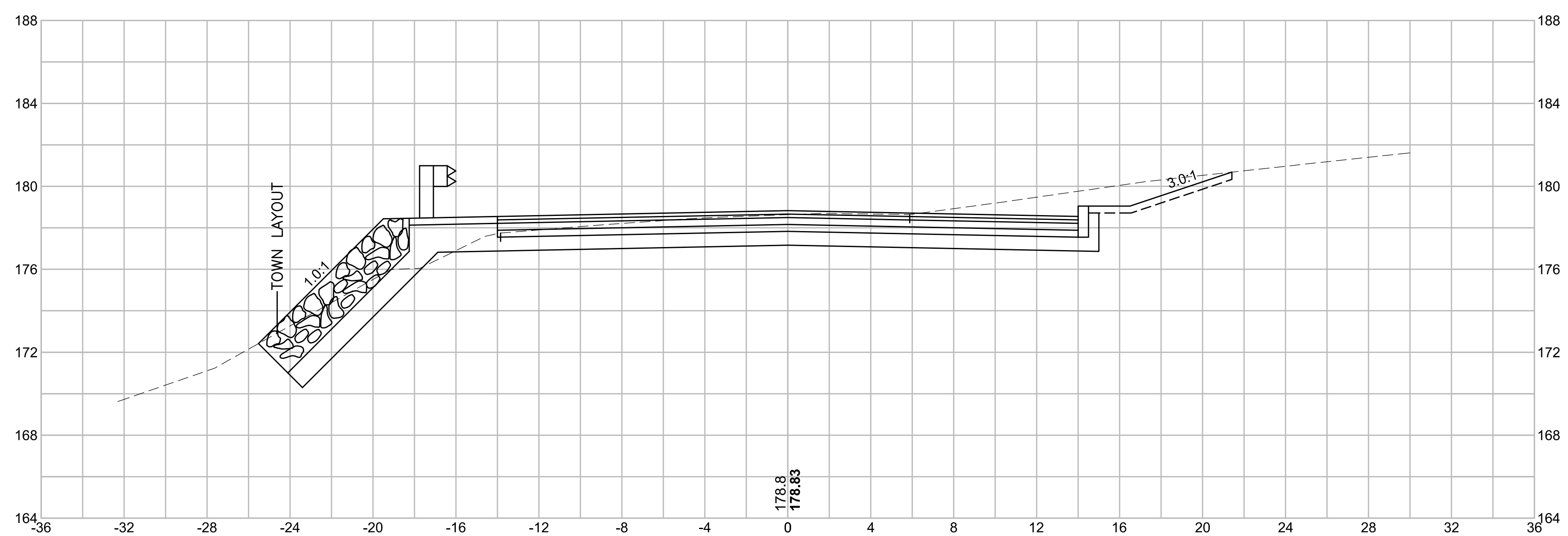
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	62	64
PROJECT FILE NO.		606721	

**CRITICAL CROSS SECTIONS  
LAKESHORE ROAD**

11+50 - CONSTRUCTION BASELINE



22+50 - AUXILIARY BASELINE

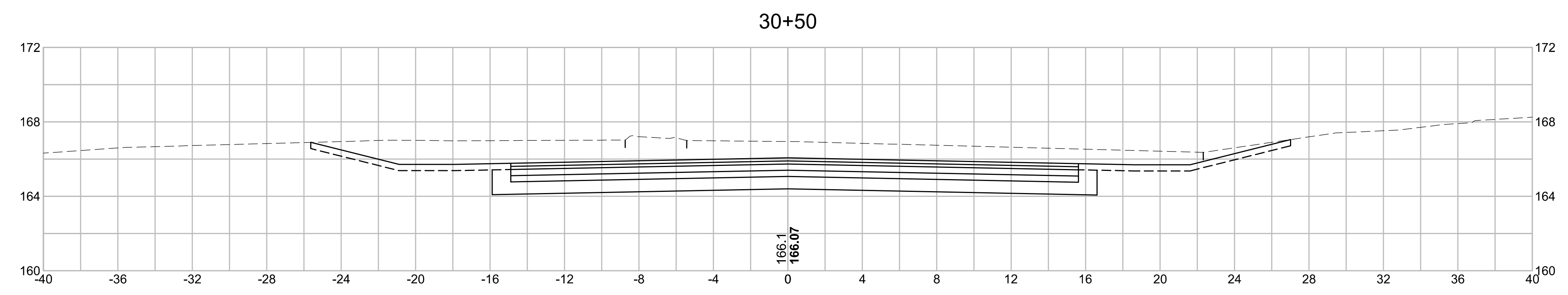




**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	63	64
PROJECT FILE NO.		606721	

**CRITICAL CROSS SECTIONS  
ESSEX STREET**



**BOXFORD  
WASHINGTON STREET (ROUTE 133)**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	64	64
PROJECT FILE NO.		606721	

**CRITICAL CROSS SECTIONS  
MAIN STREET**

