MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	1	46
PROJECT FILE NO.		608495	

TITLE SHEET & INDEX

PLAN OF

RESURFACING & RELATED WORK ON ROUTE 2A

IN THE CITY/TOWN OF

LINCOLN - CONCORD - LEXINGTON

MIDDLESEX COUNTY

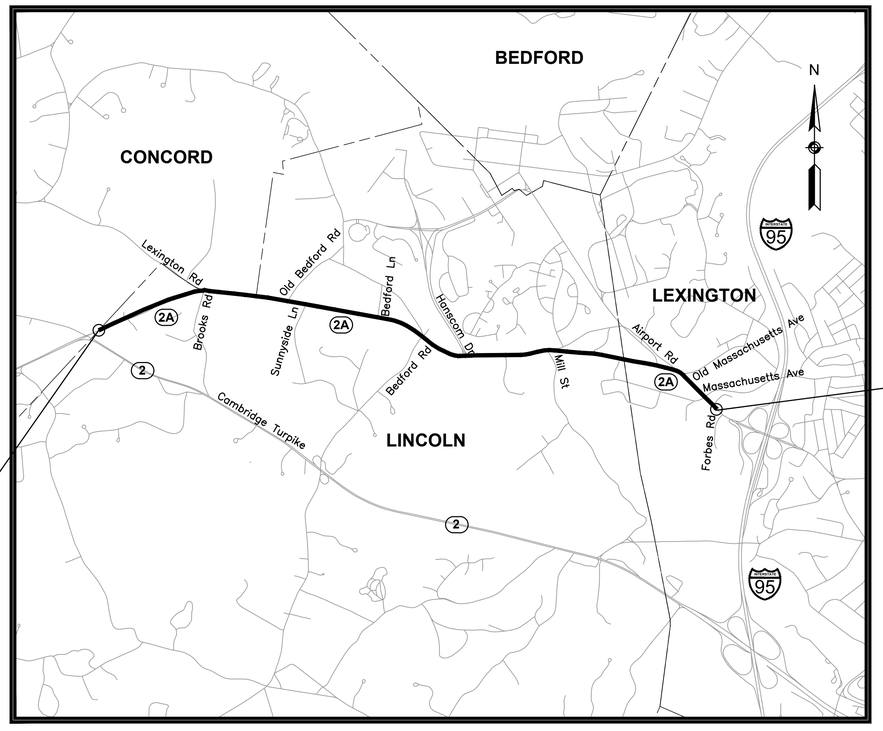
FEDERAL AID PROJECT NO.

DRAFT 100%/PSE SUBMISSION

THESE PLANS ARE SUPPLEMENTED BY 2021 EDITION OF THE MASSDOT HIGHWAY DIVISION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, 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.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2	LEGEND & ABBREVIATIONS
3	GENERAL NOTES
4	KEY PLAN
5	TYPICAL SECTIONS
6-19	CONSTRUCTION PLANS
20-21	CONSTRUCTION DETAILS
22	PEDESTRIAN CURB RAMP DETAILS
23-36	SIGN AND PAVEMENT MARKING PLANS
37-39	SIGN AND PAVEMENT MARKING DETAILS
40-46	TRAFFIC MANAGEMENT PLANS



BEGIN PROJECT (RTE 2A)
STA. 80+99.42±(LINCOLN) =
STA. 0+00 (CONCORD)
N 2989219.4184
E 704902.0112
MM 91.701

END PROJECT (RTE 2A)
STA. 153+81.73±(LEXINGTON)
N 2987234.1712
E 720444.0933
MM 94.223

1,800 0 1,800 3,600

SCALE 1" = 1,800'

LENGTH OF PROJECT = 13,625 FEET = 2.6 MILE

DESIGN DESIGNATION (ROUTE 2A)

DESIGN SPEED	40 MPH
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL

1/5/2022	DRAFT 100%/PSE SUBMISSION	1
4/1/2021	25/75% SUBMISSION	0

massDOT
Massachusetts Department of Transportation
Highway Division

APPROVED

CHIEF ENGINEER **DATE**

608495(25%-75%)1-TITLESHEET.DWG Plotted on 7-Jan-2022 12:58 PM

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
JB	JB	JERSEY BARRIER
CB	CB	CATCH BASIN
		CATCH BASIN CURB INLET
FP	FP	FLAG POLE
GP	GP	GAS PUMP
MB	MB	MAIL BOX
		POST SQUARE
		POST CIRCULAR
WELL	WELL	WELL
EHH	EHH	ELECTRIC HANDHOLE
		FENCE GATE POST
GG	GG	GAS GATE
BHL #	BHL #	BORING HOLE
MW #	MW #	MONITORING WELL
TP #	TP #	TEST PIT
		HYDRANT
		LIGHT POLE
CO.BD.		COUNTY BOUND
		GPS POINT
		CABLE MANHOLE
		DRAINAGE MANHOLE
		ELECTRIC MANHOLE
		GAS MANHOLE
		MISC MANHOLE
		SEWER MANHOLE
		TELEPHONE MANHOLE
		WATER MANHOLE
MHB	MHB	MASSACHUSETTS HIGHWAY BOUND
MON		MONUMENT
SB		STONE BOUND
TB		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
TPL or GUY	TPL or GUY	TROLLEY POLE OR GUY POLE
HTP		TRANSMISSION POLE
UFB	UFB	UTILITY POLE W/ FIREBOX
UPDL	UPDL	UTILITY POLE WITH DOUBLE LIGHT
ULT	ULT	UTILITY POLE W / 1 LIGHT
UPL	UPL	UTILITY POLE
		BUSH
SIZE & TYPE		TREE
		STUMP
		SWAMP / MARSH
WG	WG	WATER GATE
PM	PM	PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
100 99		CONTOURS (ON-THE-GROUND SURVEY DATA)
100 99		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
		GUARD RAIL - DOUBLE FACE - STEEL POSTS
		GUARD RAIL - DOUBLE FACE - WOOD POSTS
		CHAIN LINK OR METAL FENCE
		WOOD FENCE
		HAY BALES/SILT FENCE
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		100 FT WETLAND BUFFER
		200 FT RIVERFRONT BUFFER
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT

TRAFFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
1	1	CONTROLLER PHASE ACTUATED
		TRAFFIC SIGNAL HEAD (SIZE AS NOTED)
		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)
		VIDEO DETECTION CAMERA
		MICROWAVE DETECTOR
		PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE
	*	EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
		VEHICULAR SIGNAL HEAD
		VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
		FLASHING BEACON
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
RRSG	RRSG	RAILROAD SIGNAL
OR		SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)
	20'	MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		HIGH MAST POLE OR TOWER
		SIGN AND POST
		SIGN AND POST (2 POSTS)
	20'	MAST ARM WITH LUMINAIRE
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		CONTROL CABINET, POLE MOUNTED
		FLASHING BEACON CONTROL AND METER PEDESTAL
		LOAD CENTER ASSEMBLY
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
ONLY	ONLY	LEGEND "ONLY" - WHITE
	SL	STOP LINE
	CW	CROSSWALK
	SWL	SOLID WHITE LINE
	SYL	SOLID YELLOW LINE
	BWL	BROKEN WHITE LINE (10' LINE W/30 ' GAP)
	BYL	BROKEN YELLOW LINE
	DWL	DOTTED WHITE LINE
	DYL	DOTTED YELLOW LINE
	DWLEx	DOTTED WHITE LINE EXTENSION (3' LINE W/9 ' GAP)
	DYLEx	DOTTED YELLOW LINE EXTENSION
	DBWL	DOUBLE WHITE LINE
	DBYL	DOUBLE YELLOW LINE

ABBREVIATIONS

GENERAL

AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
BIT.	BITUMINOUS
BC	BOTTOM OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
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
DW	STEADY DON'T WALK - PORTLAND ORANGE
DWY	DRIVEWAY
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EXIST (or EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
NIC	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
PWW	PAVED WATER WAY

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	2	46
PROJECT FILE NO.	608495		

LEGEND & ABBREVATIONS

ABBREVIATIONS (cont.)

GENERAL

R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SBE	SLOPED BITUMINOUS EDGING
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/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

TRAFFIC SIGNAL ABBREVIATIONS

CAB	CABINET
CCVE	CLOSED CIRCUIT VIDEO EQUIPMENT
DW	STEADY UPRAISED HAND
FDW	FLASHING UPRAISED HAND
FR	FLASHING CIRCULAR RED
FRL	FLASHING RED LEFT ARROW
FRR	FLASHING RED RIGHT ARROW
FY	FLASHING CIRCULAR YELLOW
FYL	FLASHING YELLOW LEFT ARROW
FYR	FLASHING YELLOW RIGHT ARROW
G	STEADY CIRCULAR GREEN
GL	STEADY GREEN LEFT ARROW
GR	STEADY GREEN RIGHT ARROW
GSL	STEADY GREEN SLASH LEFT ARROW
GSR	STEADY GREEN SLASH RIGHT ARROW
GV	STEADY GREEN VERTICAL ARROW
OL	OVERLAP
PED	PEDESTRIAN
PTZ	PAN, TILT, ZOOM
R	STEADY CIRCULAR RED
RL	STEADY RED LEFT ARROW
RR	STEADY RED RIGHT ARROW
TR SIG	TRAFFIC SIGNAL
TSC	TRAFFIC SIGNAL CONDUIT
W	STEADY WALKING PERSON
Y	STEADY CIRCULAR YELLOW
YL	STEADY YELLOW LEFT ARROW

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LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	3	46
PROJECT FILE NO.	608495		

GENERAL NOTES

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GENERAL NOTES

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT FOR REVIEW A SCHEDULE OF OPERATIONS IN ADDITION TO OTHER CONTRACT REQUIREMENTS TO THE ENGINEER.

CONSTRUCTION PLANS
THE BASE MAPPING UTILIZED IN THE CONSTRUCTION PLANS WAS DEVELOPED USING AERIAL PHOTOGRAPHY AND RECORD PLANS. THE LOCATIONS OF FEATURES ARE APPROXIMATE AND ACTUAL FIELD CONDITIONS MAY VARY.

1. THE BASELINE, STATE HIGHWAY LAYOUT, AND EXISTING ROADWAY WAS SURVEY BY WSP USA, INC. ON MAY 1, 2020. UPON REQUEST MASSDOT SHALL STAKEOUT THE EXISTING LAYOUT AND STATE HIGHWAY LAYOUT.

2. GUARDRAIL STATION AND OFFSET INFORMATION IS APPROXIMATE AND ACTUAL LOCATIONS MAY VARY SLIGHTLY IN THE FIELD. UNLESS WHERE DIRECTED BY THE PLANS OR THE RESIDENT ENGINEER, EXISTING FIELD LOCATIONS ARE TO BE MAINTAINED.

3. ALL FRAME AND GRATES WITHIN RESURFACING LIMITS, AND WITHIN THE TRAVELED WAY, ARE TO BE REPLACED WITH HOOK & LOCK TYPE CASTINGS. CASCADE GRATES SHALL BE INSTALLED ON LOCAL ROADS

4. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, ALL SIGNS ARE TO BE RETAINED

5. THE LOCATIONS OF EXISTING STRUCTURES SUCH AS SEWERS, DRAINS, WATER MAINS AND OTHER UTILITIES ARE ONLY APPROXIMATE AND THE ENGINEER DOES NOT GUARANTEE THEIR NUMBER OR LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES WITH THE PROPER UTILITY ENGINEERING DEPARTMENT/COMPANY BEFORE EXCAVATING.

6. THE CONTRACTOR SHALL NOTIFY DIG-SAFE (1-888-344-7233) SEVENTY-TWO HOURS PRIOR TO THE START OF ANY WORK ON THE PROJECT. IN ADDITION, THE CONTRACTOR SHALL SAFELY AND ACCURATELY DETERMINE THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES ON THE SITE PRIOR TO THE START OF WORK.

7. COORDINATES, IN FEET, ARE REFERENCED TO THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, MAINLAND ZONE, REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83).

8. ELEVATIONS, IN FEET, ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

9. NO EXISTING PUBLIC UTILITY STRUCTURES SHALL BE ABANDONED AND/OR DISMANTLED WITHOUT AUTHORIZATION FROM THE ENGINEER.

10. DAMAGE OF PROPERTY BEYOND THE WORK LIMITS CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE, SUBJECT TO THE APPROVAL OF THE ENGINEER AND ACCEPTANCE OF THE PROPERTY OWNER.

11. ALL NON-PRECAST CEMENT CONCRETE USED ON THIS PROJECT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI OR AS OTHERWISE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS.

12. THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIAL IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS AT HIS OWN EXPENSE IF NOT OTHERWISE SPECIFIED, OUTSIDE OF THE PROJECT LIMITS.

13. THE LOCATIONS OF PROPOSED PIPELINES, STRUCTURES AND UTILITY RELOCATIONS MAY BE MODIFIED TO SUIT FIELD CONDITIONS AT THE DISCRETION OF THE ENGINEER. OFFSETS TO DRAINAGE STRUCTURES ARE TO THE CENTER OF THE FRAME OR GRATE.

14. IF THE CONTRACTOR DAMAGES UTILITY SERVICES, HE SHALL IMMEDIATELY NOTIFY THE RESPECTIVE UTILITY COMPANY AND SHALL IMMEDIATELY REPLACE OR REPAIR, UNLESS INDICATED OTHERWISE BY THE RESPECTIVE UTILITY OWNER.

15. ALL PROPOSED DRAINAGE CONNECTIONS TO EXISTING STRUCTURES WILL BE INCLUDED IN THE COST OF INSTALLATION OF THE NEW PIPE OR STRUCTURE.

16. RIM ELEVATIONS MAY BE SUBJECT TO FIELD ADJUSTMENTS AS DIRECTED BY THE ENGINEER. ELEVATIONS ON CATCH BASINS ARE REFERENCED TO THE CENTER OF GRATE AT FACE OF CURB.

17. WHEN A PROPOSED STRUCTURE INTERFERES WITH ANY UNDERGROUND UTILITY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.

18. ALL EXISTING DRAINAGE STRUCTURES, AND SELECTED DRAINAGE PIPES, WHICH ARE TO REMAIN WITHIN THE PROJECT LIMITS SHALL BE CLEANED AND THE SEDIMENT SHALL BE PROPERLY DISPOSED OF.

19. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESEEDED PRIOR TO THE END OF THE PROJECT.

20. ALL TRENCH BACKFILL SHALL BE MECHANICALLY TAMPED; NO JETTING SHALL BE ALLOWED.

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	4	45
PROJECT FILE NO.	608495		

KEY PLAN

N

NAD 83

PROJECT BEGIN
STA 80+99.42
N 2989219.4184
E 704902.0112

CAMBRIDGE TURNPIKE 2

LINCOLN

BYPASS RD

CONCORD
LINCOLN

LEXINGTON RD

BROOKS ST

CONCORD
LINCOLN

N GREAT RD

SUNNYSIDE LN

OLD BEDFORD RD

BEDFORD LN

N GREAT RD

VIRGINIA RD

BEDFORD RD

HANSCOM DR

CONTINUED BELOW

SHEET NO.6a
SHEET NO.6b
SHEET NO.7a
SHEET NO.7b
SHEET NO.8a
SHEET NO.8b
SHEET NO.9a
SHEET NO.9b
SHEET NO.10a
SHEET NO.10b
SHEET NO.11a
SHEET NO.11b
SHEET NO.12a
SHEET NO.12b
SHEET NO.13a
SHEET NO.13b

2A

CONTINUED ABOVE

HANSCOM DR

SHEET NO.13a
SHEET NO.13b
SHEET NO.14a
SHEET NO.14b
SHEET NO.15a
SHEET NO.15b
SHEET NO.16a
SHEET NO.16b
SHEET NO.17a
SHEET NO.17b
SHEET NO.18a
SHEET NO.18b
SHEET NO.19a

N GREAT RD

MILL ST

N GREAT RD

AIRPORT RD

OLD MASSACHUSETTS AVE

MASSACHUSETTS AVE

MARRETT RD

2A

FORBES RD

LINCOLN
LEXINGTON

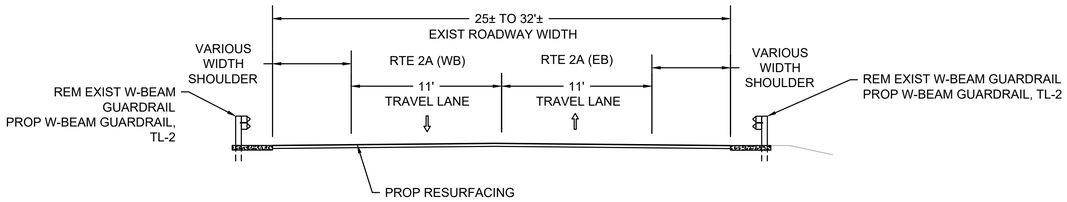
95

MARRETT RD

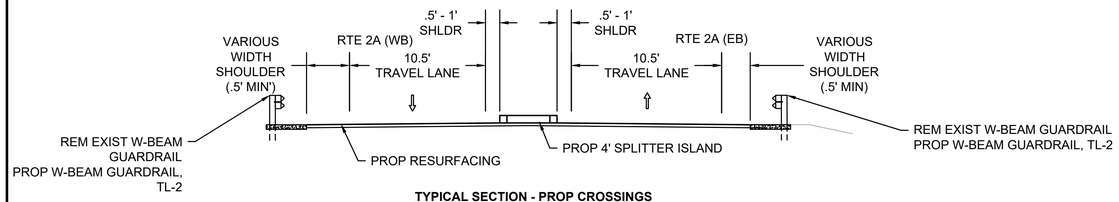
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SCALE 1" = 300'

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TYPICAL SECTION - ROUTE 2A
STA 80+99.42± TO 27+61.73± (1895 MAIN BL)
STA 25+91.23± TO 9+26.65± (1895 MAIN BL)
STA 8+58.15± TO 0+00± (1895 MAIN BL) = STA 0+00± (1896 MAIN BL)
STA 0+00± TO 2+95.46± (1896 MAIN BL)
STA 3+64.32± TO 34+65.68± (1896 MAIN BL)
STA 0+05.18± TO 18+53.67± (1897 MAIN BL)
STA 19+22.17± TO 20+34.00 (1897 MAIN BL) = STA 181+95.48 (1898 MAIN BL)
STA 181+95.48 TO STA 174+20.57 (1898 MAIN BL)
STA 171+84.16± TO STA 153+81.73 (1898 MAIN BL)
NTS



TYPICAL SECTION - PROP CROSSINGS
STA 27+61.73± TO 25+91.23± (1895 MAIN BL)
STA 9+26.65± TO 8+58.15± (1895 MAIN BL)
STA 2+95.46± TO 3+64.32± (1896 MAIN BL)
STA 34+65.68 - 35+58.97 (1896 MAIN BL) = STA 0+00.00 (1897 MAIN BL)
STA 0+00.00 TO 0+05.18 (1897 MAIN BL)
STA 18+53.67 TO 19+22.17 (1897 MAIN BL)
STA 174+20.57 - 171+84.16 (1898 MAIN BL)
NTS

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	5	46
PROJECT FILE NO.	608495		

TYPICAL SECTIONS

PAVEMENT NOTES

PROPOSED MILLING AND OVERLAY (ROUTE 2A)
SURFACE: 2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER
MILLING: FINE MILLING TO A DEPTH OF 2"

RECONSTRUCTED DRIVEWAYS:
SURFACE: 1.5" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5) OVER
2.5 " SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5)
FOUNDATION: 8" GRAVEL BORROW

RECONSTRUCTED PEDESTRIAN CURB RAMPS:
SURFACE: 4" CEMENT CONCRETE (AIR-ENTRAINED 4000 PSI, $\frac{3}{4}$ ", 610)

FOUNDATION: 8" GRAVEL BORROW

FULL DEPTH RECONSTRUCTED - AREAS OF WIDENING >4' (LEXINGTON RD)
SURFACE: 2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5)
2.5" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0)
4.5" SUPERPAVE BASE COURSE 37.5 (SBC-37.5)
4" DENSE GRADED CRUSHED STONE FOR SUB-BASE

FOUNDATION: 8" GRAVEL BORROW

BOX WIDENING RECONSTRUCTED - AREAS OF WIDENING <4' (LEXINGTON RD)
SURFACE: 2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5)
8" HIGH EARLY STRENGTH CEMENT CONCRETE BASE COURSE

FOUNDATION: 8" GRAVEL BORROW

GENERAL NOTES:

1. CONSTRUCTION PLANS ARE GENERALLY NOT BASED ON GROUND SURVEY AND ARE FOR REFERENCE ONLY, THE BASELINE WILL NOT BE REPRODUCED IN THE FIELD BY MASSDOT.
2. PERMANENT ROADWAY PATCHING SHALL BE COMPENSATED UNDER ITEM 451., AND BE INSTALLED USING SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5).
3. ASPHALT EMULSION FOR TACK COAT AND HMA JOINT SEALANT SHALL BE APPLIED PER MASSDOT SUPERPAVE SPECIFICATIONS.
4. WHERE ACCEPTABLE FOR REUSE, EXISTING SUBGRADE MAY BE RETAINED AT SIDEWALK AND DRIVEWAY CONSTRUCTION LOCATIONS.

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:00 PM

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	8	45
PROJECT FILE NO.	608495		

CONSTRUCTION PLANS
SHEET 1 OF 15

Plotted on 7-Jan-2022 1:01 PM

608495(XX)HD1.DWG

N

NAD 83

TOWN OF CONCORD
TOWN OF LINCOLN

100' WETLAND BUFFER

EXIST WETLAND

PROP TRANSITION TO NCHRP 350

S.H.L.O.

W BEAM
R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

PROP SEDIMENT CONTROL BARRIER (TYP)

PROP SEDIMENT CONT

PROP FINE MILLING
& HOT MIX ASPHALT
OVERLAY

0+00.00
80+99.42

80 79 78 77 76 75

BYPASS ROAD - ROUTE 2A
(ST.HWY LO. 3102)

CONTINUED BELOW

PAVE LIMIT

BURIED END
R&D EXISTING BURIED END
PROP GUARDRAIL TRAILING ANCHORAGE

W BEAM
R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

S.H.L.O.

100' WETLAND BUFFER

PROJECT BEGIN
STA 80+99.42
N 2989219.4184
E 704902.0112

PROP TRANSITION TO NCHRP 350

EXIST WETLAND

N

NAD 83

100' WETLAND BUFFER

BURIED END
R&D EXISTING BURIED END
PROP GUARDRAIL TRAILING ANCHORAGE

BURIED END
R&D EXISTING BURIED END
PROP TANGENT END TREATMENT, TL-2

BURIED END
R&D EXISTING BURIED END
PROP TANGENT END TREATMENT, TL-2

W BEAM
R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

PROP SEDIMENT CONTROL BARRIER (TYP)

CB
RIM=187.97
DEPTH=180.17
INV.1=182.47

WOODED AREA

GRAVEL DRIVE

STN WALL

LOCATION LINE OF 1934
ST.HWY. LO. 3102

BENCHMA

RT 2

UPL

OHW

MB

ADJ

SBE
SYL

12"RCP

CONTINUED ABOVE

75 74 73 72 71 70

BYPASS ROAD - ROUTE 2A
(ST.HWY LO. 3102)

CONTINUED ON SHEET NO.7

PROP FINE MILLING
& HOT MIX ASPHALT
OVERLAY

PAVE LIMIT

100' WETLAND BUFFER

CB
RIM=188.06
DEPTH=179.76
INV.1=182.36
INV.2=182.36
INV.3=182.25

1
N: 2989594.468'
E: 705743.932'
EL: 188.150'
MMAG

REFLECTOR
DO NOT PASS

LOCATION LINE OF 1934
ST.HWY. LO. 3102

WOODED AREA

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	7	46
PROJECT FILE NO.	608495		

CONSTRUCTION PLANS
SHEET 2 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:02 PM

N

NAD 83

2
N: 2989765.934'
E: 706024.988'
EL: 204.020'
PM ON CB RIM

BENCHMARK: 21 XCUT ON HYD BOMO
EL=206.41'

CB
RIM= 203.88
DEPTH=198.18
INV.1=198.58

BENCHMARK: 20 RR SPIKE IN UPL 9 1' ABOVE
EL=212.96'

CONTINUED FROM SHEET NO. 6

BYPASS ROAD - ROUTE 2A
(ST.HWY LO. 3102)

PROP FINE MILLING & HOT MIX ASPHALT OVERLAY

PAVE LIMIT

ADJ

3
N: 2989890.781'
E: 706416.518'
EL: 211.170'
MSTN

CB
RIM= 204.02
DEPTH=197.52
INV.1=198.02
INV.2=198.22

DO NOT PASS

LOCATION LINE OF 1934 ST.HWY. LO. 3

CONTINUED BELOW

N

NAD 83

4
N: 2990051.953'
E: 706761.933'
EL: 204.580'
MMAG

CB
RIM= 207.63
DEPTH=200.63
INV.1=202.63

LOCATION LINE OF 1934 ST.HWY. LO. 3102

BYPASS ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 3102)

PROP FINE MILLING & HOT MIX ASPHALT OVERLAY

PAVE LIMIT

ADJ

SPEED LIMIT 40

WELCOME TO MINUTE MAN NATIONAL HISTORICAL PARK

CB
RIM= 202.12
DEPTH=196.52
INV.1=197.92

CONTINUED ABOVE

CONTINUED ON SHEET NO. 8

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	8	46
PROJECT FILE NO.		608495	

CONSTRUCTION PLANS
SHEET 3 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:03 PM

N
NAD 83

TOWN OF CONCORD
TOWN OF LINCOLN
LEXINGTON ROAD
(PUBLIC – ST.HWY LO. 218)

PAVING LIMIT
R&S
PROP GRAN EDGING
R&D EXISTING VGC
PROP GRAN EDGING
R&D EXISTING VGC
BOX WIDENING RECONSTRUCTED AREA
(SEE TYPICAL SECTION)
REM EXISTING SLOPE EDGING & GRASS STRIP
PROP HMA
PROP SAWCUT
R&R

PROP SAWCUT
PROP GRAN EDGING
REM EXIST GRANITE EDGING
REM EXISTING SIGNS
EXISTING ROADWAY TO BE EXCAVATED AND REMOVED
LOAM & SEED TO BE REPLACED
AREA = 4,305 SF
EXISTING GRASS
(RETAIN)
R&S EXISTING SIGNS
R&S

PROP SAWCUT
PROP GRAN EDGING
R&S EXIST FLASHING WARNING BECON

PROP GRAN EDGING
PROP FINE MILLING
& HOT MIX ASPHALT
OVERLAY

REPAIR ROADWAY EROSION

PAVE LIMIT

BROOKS ROAD

LOCATION LINE OF 1934 ST.HWY. LO. 3102
LOCATION LINE OF 1897 ST.HWY. LO. 218
LOCATION LINE OF 1895 ST.HWY. LO. 218
LOCATION LINE OF 1895 ST.HWY. LO. 92
MAIN BL OF 1934 ST.HWY. LO. NO. 3102
N72°32'40"E (1934=N72°41'25"E (NAD 83)
1897 ST.HWY. LO. NO. 218
S53°37'E (1897)=S66°04'48"E (NAD 83)
MAIN BL OF 1895 ST.HWY. LO. NO. 92
S71°15'E (1895)=S84°15'36"E (NAD 83)
52+79.10 1895 MAIN BL – LO 92 =
52+80.00 1897 MAIN BL – LO. 218
52+17.63 1934 MAIN BL – LO 92 =
51+82.30 1897 MAIN BL – LO. 3104
S84°15'36"E 728.88'
+38.79 PT
+60.63 PC
+49.53 PI
+50.22 PI

CONTINUED FROM SHEET NO. 7
CONTINUED BELOW
CONTINUED ABOVE
CONTINUED ON SHEET NO. 9

NORTH GREAT ROAD - ROUTE 2A (PUBLIC – ST.HWY LO. 92)

PROP FINE MILLING & HOT MIX ASPHALT OVERLAY

BENCHMARK: 18 RR SPIKE IN UPL 102 1' ABOVE EL=195.52'

5
N: 2990230.027'
E: 707364.417'
EL: 201.130'
MSTN GPS2512

6
N: 2990159.287'
E: 707835.251'
EL: 203.020'
MSTN GPS2513

7
N:
E:
EL:
PM

CB RIM=200.11 DEPTH=192.91 INV.1=195.01
DMH RIM=200.28 INV.1=193.68 INV.2=193.68 INV.3=193.38
DMH RIM=201.11 INV.1=192.71 INV.2=192.91 INV.3=192.41
CB RIM=195.53 DEPTH=189.03 INV.1=193.03
DMH RIM=195.85 INV.1=190.25 INV.2=190.05 INV.3=192.25
CB RIM=193.34 DEPTH=186.84 INV.1=190.34
CB RIM=193.41 DEPTH=188.81 INV.1=189.51
DMH RIM=193.57 INV.1=187.77 INV.2=187.57 INV.3=188.87 INV.4=189.57

MM 82.5
MM 92.4
SPEED LIMIT 40
BROOKS VILLAGE HISTORICAL AREA
SAMUEL BROOKS HOUSE
HISTORICAL HOUSE
PARKING LOT
HISTORIC SIGN
MHB (HELD BACK CENTER)
BRICK
BIT.DRIVE
GRAVEL DRIVE
PARKING AHEAD
BROOKS RD DEAD END
NO ENTRANCE TO RT 2

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	9	46
PROJECT FILE NO.	608495		

CONSTRUCTION PLANS
SHEET 4 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:04 PM

N

NAD 83

7
N: 2990163.839'
E: 708254.627'
EL: 193.430'
PM ON CB RIM

LINE OF 1895 ST.HWY. LO. 92

RT 2 WEST

PARKING AHEAD

GRAVEL DRIVE

CB
RIM=176.65
DEPTH=170.35
INV.1=174.15

BURIED END
R&D EXISTING BURIED END
PROP GUARDRAIL TRAILING ANCHORAGE

100' WETLAND BUFFER

W BEAM
R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

PROP SEDIMENT CONTROL BARRIER (TYP)

CONTINUED FROM SHEET NO. 8

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 92)

PROP FINE MILLING & HOT MIX ASPHALT OVERLAY

892.80'

S83°06'36"E

ADJ(BO)

ADJ

PAVE LIMIT

LOCATION LINE OF 1895 ST.HWY. LO. 92

CONTINUED BELOW

HISTORICAL HOUSE

BIT.DRIVE

2"GAS – NG RECORD

BARBED WIRE FENCE

CB
RIM=179.56
DEPTH=174.56
INV.1=175.26

DMH
RIM=176.74
INV.1=171.44
INV.2=171.14
INV.3=173.24

8
N: 2990071.578'
E: 708750.620'
EL: 174.080'
MMAG

DMH
RIM=168.81
INV.1=162.01
INV.2=162.21

MM
92.6

BENCHMARK: 17 XCUT VERTICAL GUARDRAIL POST
EL=171.94'

9
N: 2990047.635'
E: 709255.856'
EL: 173.880'
MMAG

DMH
RIM=166.80
INV.1=161.70
INV.2=161.70
INV.3=161.10
INV.4=151.50
INV.5=151.50

DMH
RIM=168.20
INV.1=162.90
INV.2=164.80
INV.3=164.30

CB
RIM=167.74
DEPTH=165.14
INV.1=165.34

DMH
RIM=175.36
INV.1=170.36
INV.2=172.36
INV.3=171.16

DMH
RIM=175.08
INV.1=169.98
INV.2=169.88
INV.3=169.78

CB
RIM=175.17
DEPTH=172.87
INV.1=172.97

DMH
RIM=187.93
INV.1=183.33
INV.2=182.83
INV.3=183.83

BOX CULVERT 36"X48"

ENTERING LINCOLN

NO SIGN

WOODED AREA

EXIST WETLAND

SPEED LIMIT 40

INV 12" IRON EL=160.62

DMH
RIM=168.81
INV.1=162.01
INV.2=162.21

CB
RIM=168.00
DEPTH=164.70
INV.1=165.00

DMH
RIM=168.37
INV.1=164.37
INV.2=164.67

CB
RIM=175.09
DEPTH=172.59
INV.1=172.09

DMH
RIM=175.43
INV.1=171.93
INV.2=171.73

CB
RIM=187.50
DEPTH=185.1
INV.1=185.10

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 92)

L=170.85'
R=2865.00'
Δ=3°25'00"

1679.00'
S79°41'36"E

PROP FINE MILLING & HOT MIX ASPHALT OVERLAY

PAVE LIMIT

CONTINUED ABOVE

CONTINUED ON SHEET NO. 10

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	10	46
PROJECT FILE NO.	608495		

CONSTRUCTION PLANS
SHEET 5 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:05 PM

OLD BEDFORD ROAD
(PUBLIC – 940 CT. LO. 180.31' BL OF 1950 CT. LO.)
S46°25'45"W (1950)=N37°53'42"W (NAD 83)
S31°33'42"W

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 92)

N
NAD 83

LOCATION LINE OF 1895 ST.HWY. LO. 92

PROP SEDIMENT CONTROL BARRIER (TYP)

PROP FINE MILLING & HOT MIX ASPHALT OVERLAY

PROP SPLITTER ISLAND (SEE CONSTRUCTION DETAILS)

SUNNYSIDE LANE
(PUBLIC – 1952 TW.LO.)

1679.00'
S79°41'36"E

64+23.08 PI
32+38.37 1895 MAIN BL – LO 92 =
64+23.08 1940 MAIN BL – CT. LO.

CONTINUED FROM SHEET NO. 9

CONTINUED BELOW

CONTINUED ABOVE

CONTINUED ON SHEET NO. 11

BENCHMARK: 16 XCUT ON HYD BOMO

10
N: 2989968.770'
E: 709667.034'
EL: 191.390'
MMAG

11
N: 2989857.384'
E: 710074.174'
EL: 200.770'
MMAG

12
N: 2989807.169'
E: 710577.966'
EL: 203.220'
MMAG

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	11	46
PROJECT FILE NO.	608495		

CONSTRUCTION PLANS
SHEET 6 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:06 PM

N
NAD 83

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 92)

CONTINUED FROM SHEET NO. 10
CONTINUED BELOW
CONTINUED ABOVE
CONTINUED ON SHEET NO. 12

PROP SEDIMENT CONTROL BARRIER (TYP)
PROP FINE MILLING & HOT MIX ASPHALT OVERLAY
LOCATION LINE OF 1895 ST.HWY. LO. 92
EXIST WETLAND
WOODED AREA
STN WALL
STN RETAINING WALL
ADJ(BO)
ADJ
20 19 17 16 15 14 13 12 11 10 9
S79°41'36"E
990.67'
S79°50'36"E
+09718
+09718
+18190
BENCHMARK: 15 RR SPIKE IN UPL 5/67 1' ABOVE EL=210.77'
13
N: 2989679.744'
E: 711061.174'
EL: 213.050'
MMAG
14
N: 2989635.670'
E: 711527.457'
EL: 226.140'
MMAG
100' WETLAND BUFFER
NO PASS ZONE
DO NOT PASS
PROP 5'x5' CONCRETE LANDING PAD
PROP PEDESTRIAN REFUGE ISLAND (SEE CONSTRUCTION DETAILS)
PAVE LIMIT
BENCHMARK: 14 CHISELED SQ IN SIGN BASE EL=235.42'
CB
RIM= 235.34
DEPTH=229.64
INV.1=231.84
TOP2=232.64
TOP3=232.64
DMH
RIM= 232.28
INV.1=228.28
FULL OF SILT
PARKING AHEAD
ROCK OUTCROP
GRAVEL DRIVE
GRASS
GRAVEL
BIT.
S.H.L.O.
MM 93.0

BEDFORD LANE
(PRIVATE)
LOCATION LINE OF PLAN 1292 OF 1957
LOCATION LINE OF PLAN 906 OF 1962
PLAN 1741 OF 1962

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	12	46
PROJECT FILE NO.	608495		

CONSTRUCTION PLANS
SHEET 7 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:06 PM

BEDFORD LANE (PRIVATE)
LOCATION LINE OF PLAN 906 OF 1954
NAD 83
PAVE LIMIT
GRAVEL DRIVE
BIT.
GRASS
BIT.DRIVE
DO NOT ENTER
SPEED LIMIT 40
WOODED AREA
LOCATION LINE OF 1895 ST.HWY. LO. 92
STN WALL
EP
SWL
DBYL
PAVE LIMIT
HARTWELL TAVERN AREA
CONTINUED FROM SHEET NO. 11
ADJ(BO)
341.75'
S78°52'41"E
PROP FINE MILLING & HOT MIX ASPHALT OVERLAY
NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 92)
ADJ
L=257.82'
R=955.00'
Δ=15°28'05"
12"RCP
12"CLAY
2"GAS – NG
RECORD
RECORD GAS GATE
OHW
UPL 5/56
UPL 5/55
UPL 5/54
UPL 5/58
UPL 5/52
SBE
6"PIPE
MM 93.2
INTERSECTION AHEAD
DMH
RIM= 231.27
INV.1=224.57
INV.2=224.47
CB
RIM= 235.61
DEPTH=231.61
INV.1=231.61
INV.2=FULL OF SILT
CB
RIM= 233.95
DEPTH=226.75
INV.1=228.45
INV.2=FULL OF WATER
CB
RIM= 225.76
DEPTH=219.06
INV.1=220.56
INV.2=220.46
INV.3=220.86
MHB
CENTER BACK
CONTINUED BELOW
15
N: 2989523.587'
E: 711939.987'
16
N: 2989467.402'
E: 712393.335'
EL: 234.070'
MMAG
1741 OF 1962
LOCATION LINE OF PLAN 1292 OF 1957
BEDFORD LANE (PRIVATE)

N
NAD 83
43
N: 2989312.889'
E: 712737.844'
EL: 223.871'
MMAG
PARKING AHEAD
ROCK OUTCROP
LOCATION LINE OF 1895 ST.HWY. LO. 92
0+00.00 1895 MAIN BL – LO 92 =
0+00.00 1896 MAIN BL – LO. 211
S63°24'36"E
217.33'
S63°25'53"E
59.12'
S55°40'23"E
299.63'
PROP FINE MILLING & HOT MIX ASPHALT OVERLAY
NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 211)
LOCATION LINE OF 1896 ST.HWY. LO. 211
LOCATION LINE OF PLAN 906 OF 1954
LOCATION LINE OF 1965 UNRECORDED PLAN
VIRGINIA ROAD
(PUBLIC – 1965 PLAN)
PROP 5' X 5' CEM CONC LANDING PAD
PROP PEDESTRIAN REFUGE ISLAND
BOULDERS
12"ROAD NARROWS
RT 2A EAST
RT 2A WEST
BEDFORD ROAD
(PUBLIC – 1950 CT.LO.)
N34°45'43"E
311.26'
(NAD 83)
BENCHMARK: 13 SPIKE IN 28" OAK TREE 1' ABOVE EL=225.30'
CB
RIM= 227.32
DEPTH=223.52
INV.1=223.62
CB
RIM= 215.71
INV.1=212.61
DMH
RIM= 215.56
DEPTH=208.56
INV.1=210.36
INV.2=212.46
DMH
RIM= 204.80
INV.1=201.50
INV.2=198.40
INV.3=UTO
WATER LEVEL=198.70
CB
RIM= 204.68
INV.1=201.48
CB
RIM= 213.56
INV.1=209.06
INV.2=208.46
INV.3=208.26
CB
RIM= 205.52
INV.1=203.42
INV.2=199.12
INV.3=199.12
17
N: 2989177.931'
E: 712858.440'
EL: 211.420'
MMAG
CONTINUED ABOVE
CONTINUED ON SHEET NO. 13

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	13	46
PROJECT FILE NO.	608495		

CONSTRUCTION PLANS
SHEET 8 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:07 PM

VIRGINIA ROAD
(PUBLIC – 1965 PLAN)

OF 1965 UNRECORDED PLAN

BENCHMARK: 12 XCUT ON HYD BOMO
EL=201.43'

NAD 83

DMH
RIM= 201.55
INV.1=196.15
INV.2=196.55
INV.3=196.55

18
N: 2988952.242'
E: 713222.916'
EL: 201.540'
MMAG

100' WETLAND BUFFER

WOODED AREA

NO U TURN

STN WALL

12" POST

12" RCP

LOCATION LINE OF 1896 ST.HWY. LO. 211

WOOD FENCE

ADJ

ADJ(BO)

CONTINUED FROM SHEET NO. 12

3+94.57 1896 MAIN BL – LO 211 =
0+00.00 1950 MAIN BL – CO. LO.

S47°49'53"E
274.85'

S47°49'53"E
274.85'

+33.35
PI

S56°15'23"E
246.88'

+80.23
PC

L=149.59'
R=880.10'
Δ=9°44'19"

CONTINUED BELOW

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 211)

PROP FINE MILLING
& HOT MIX ASPHALT
OVERLAY

PROP SEDIMENT CONTROL BARRIER (TYP)

PAVE LIMIT

RECORD 2"GAS – NG

GAS GATE RECORD

UPL 5/47

UPL 5/45

UPL 46

UPL 5/43

OHW

SWL

EP

STOP

RIP RAP

REFLECTOR

INV IS BURIED
EL=197.43'

W BEAM
R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

BURIED END
R&D EXISTING BURIED END
PROP GUARDRAIL TRAILING ANCHORAGE

BURIED END
R&D EXISTING BURIED END
PROP TANGENT END TREATMENT, TL-2

INV NO PIPES VISIBLE
EL=198.81'

BEDFORD ROAD
(PUBLIC – 1950 CT.LO.)

BL OF 1950 CT. LO.
(NAD 83)=N34°45'43"E
311.26'

CO. LO.

50 CO. LO.

EL=197.39

LOCATION LINE OF 1896
ST.HWY. LO. 211

EXIST. WETLAND

EL=196.95'

366 ST.HWY. LO. 5571

UPL 146/25

HANSCOM DRIVE
(PUBLIC – ST. HWY. LO. 5571)

COBBLE STN

DO NOT ENTER

LSA

SBE

CB
RIM= 192.11
DEPTH= 186.91
INV.1= 189.11
INV.2= 189.11

12" RCP

REFLECTOR

39
N: 2988619.065'
E: 713820.164'
EL: 194.140'
MREB GPS2514

CB
RIM= 191.96
DEPTH= 186.96
INV.1= 189.26
FULL OF DEBRIS

GAS PIPELINE POST

WOOD FENCE

RT 2A WEST

RT 2A

CONTINUED ABOVE

S65°59'53"E
247.63'

+29.82
PT

+73.60
PT

N86°32'07"E
288.85'

PAVE LIMIT
ADJ(BO)

+77.45
PC

L=196.15'
R=409.18'
Δ=27°27'58"

PAVE LIMIT

RECORD 2"GAS – NG

TENNESSEE GAS 24" NG

UPL 5/40

UPL 5/39

UPL 38

UPL 37

UPL 35

14",12",12",18"

20
N: 2988600.639'
E: 714040.907'
EL: 193.054'
MMAG

W BEAM
R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

BURIED END
R&D EXISTING BURIED END
PROP TANGENT END TREATMENT, TL-2

19
N: 2988686.606'
E: 713539.710'
EL: 197.620'
MMAG

LEFT TURN MUST TURN LEFT

HANSCOM FIELD

GRAVEL

GRAVEL DRIVE

MM 93.6

CONTINUED ON SHEET NO. 14

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	14	46
PROJECT FILE NO.	608495		

CONSTRUCTION PLANS
SHEET 9 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:08 PM

N

NAD 83

HANSCOM DRIVE
(PUBLIC – ST. HWY. LO. 5571)

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 211)

CONTINUED FROM SHEET NO. 13

CONTINUED BELOW

CONTINUED ABOVE

CONTINUED ON SHEET NO. 15

PROP FINE MILLING & HOT MIX ASPHALT OVERLAY

PAVE LIMIT

LOCATION LINE OF 1896 ST.HWY. LO. 211

LOCATION LINE OF 1896 ST.HWY. LO. 5571

17+02.80 1896 MAIN BL – LO 211 =
17+00.00 1996 MAIN BL – LO. 5571

N86°32'07"E
288.85'

N89°29'37"E
1272.34'

CB
RIM=194.47
DEPTH=188.87
INV.1=191.87
FULL OF DEBRIS

MHB
CENTER BACK
(HELD FOR LINE)

MHB
DH
(HELD)

BENCHMARK: 10 XCUT ON BOLT OF TRAFFIC LIGHT POLE
EL=196.94'

BENCHMARK: 9 XCUT ON HYD BOMO
EL=199.63'

21
N: 2988575.245'
E: 714469.833'
EL: 194.230'
MMAG

22
N: 2988615.061'
E: 714913.242'
EL: 197.780'
MMAG

R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

R&D EXISTING BURIED END
PROP GUARDRAIL TRAILING ANCHORAGE

R&D EXISTING BURIED END
PROP TANGENT END TREATMENT, TL-2

R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

R&D EXISTING BURIED END
PROP GUARDRAIL TRAILING ANCHORAGE

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	15	46
PROJECT FILE NO.	608495		

CONSTRUCTION PLANS
SHEET 10 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:09 PM

N

NAD 83

CB
RIM=198.67
INV.1=196.57

24
N: 2988671.906'
E: 715799.505'
EL: 204.240'
MMAG

WOODED AREA
GRASS
WOOD FENCE
FP
SWL
DBYL
GRAVEL
S.H.L.O.
TO CLAY
48"
10"
12" POST
STN WALL
8"
6"
4" POST
6" POST
DO NOT ENTER
16" POST
10"
4" POST
EP
374.53'

CONTINUED FROM SHEET NO. 14

CONTINUED BELOW

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 211)

PROP FINE MILLING
& HOT MIX ASPHALT
OVERLAY

29
30
31
32
33
34

L=149.40'
R=680.25'
Δ=12°35'01"
PC
PT
+84.19
N76°54'37"E

FENCE
OHW
LINE OF 1896 ST.HWY. LO. 211
UPL 5/25
UPL NO#
UPL 23
UPL 21
LOCATION LINE OF 1896 ST.HWY. LO. 21

23
N: 2988580.343'
E: 715365.294'
EL: 200.920'
MMAG

PARKING AHEAD
WOODED AREA
16"
20"
46"
12"
26"

℄

N

NAD 83

25
N: 2988741.792'
E: 716205.320'
EL: 214.070'
MMAG

BENCHMARK: 8 XCUT ON HYD BOMO
EL=215.55'

BIT.DRIVE
MB
STN WALL
12" GRANITE POST
VGC
JOHN NELSON HOUSE
GRANITE BLOCK WALLS
20"
16"
14"
12"
10"
8"
18"
12",8",8"

PROP 5' X 5' CEM CONC LANDING PAD
PARKING LOT CLOSES AT SUNSET
LOCATION LINE OF 1896 ST.HWY. LO. 211
LOCATION LINE OF 1899 ST.HWY. LO. 186
POST
GRAVEL
PAUL REVERE CAPTURE SITE
35+58.97 1896 MAIN BL – LO 211 =
0+00.00 1897 MAIN BL – LO. 186
+58.72
PC
1
Δ=18°08'02"
R=654.73'
L=207.22'
PT
+65.94
2
3
4
5
ADJ(BO)
S85°01'36"E
1243.78'
PROP FINE MILLING
& HOT MIX ASPHALT
OVERLAY

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 211)

CONSTRUCTION SIGN
STOP
PAVE LIMIT
GPL
UPL 5/17
UPL 16
UPL 5/15
UPL 14
UPL 19
UPL 18
MHB
TH 0.5 SQ UP 0.3
MM 94.0
PROP PED REFUGE ISLAND
PROP 5' X 5' CEM CONC LANDING PAD
MILL STREET
CONSTRUCTION SIGN

MILL STREET
(PUBLIC – PLAN 1236 OF 1965)

LOCATION LINE OF PLAN 1236 OF 1965
LOCATION LINE OF PLAN 1236 O

CONTINUED ABOVE

CONTINUED ON SHEET NO. 16

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	16	46
PROJECT FILE NO.	608495		

CONSTRUCTION PLANS
SHEET 11 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:09 PM

N
NAD 83

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 186)

CONTINUED FROM SHEET NO. 15

CONTINUED BELOW

BENCHMARK: 7 XCUT ON HYD BOMO
EL=222.95'

WOODED AREA
CROSSING ROAD AHEAD
PARKING AHEAD
GRASS
ROCK OUTCROP
GRAVEL DRIVE
GRASS
100' WETLAND BUFFER
EXIST WETLAND
STN WALL
PAVE LIMIT
LOCATION LINE OF 1897 ST.HWY. LO. 186
BRUSH
BIT.
FP
SWL
DBYL
OHW
UPL 14
UPL 13
UPL 12
UPL 1/11
UPL 5/10
GRASS/BRUSH
UPL NO#
STOP
ADJ(BO)

PROP FINE MILLING
& HOT MIX ASPHALT
OVERLAY

S.H.L.O.

BURIED END
R&D EXISTING BURIED END
PROP GUARDRAIL
TRAILING ANCHORAGE

W BEAM
R&D EXISTING W BEAM
PROP GUARDRAIL,
TL-2 (SINGLE FACED)

R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

BURIED END
R&D EXISTING BURIED END
PROP TANGENT END TREATMENT, TL-2

MM 94.2
MINUTE MAN VISITOR CENTER

26
N: 2988668.795'
E: 716639.513'
EL: 222.330'
MMAG

28
N: 2988630.792'
E: 717475.036'
EL: 213.800'
MMAG

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 186)

CONTINUED ABOVE

CONTINUED ON SHEET NO. 17

ACCESS DRIVE

W BEAM
R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

BURIED END
R&D EXISTING BURIED END
PROP GUARDRAIL TRAILING ANCHORAGE

PROP SEDIMENT CONTROL BARRIER
(TYP)

BURIED END
R&D EXISTING BURIED END
PROP TANGENT END TREATMENT, TL-2

MINUTE MAN VISITOR CENTER
MHB CENTER BACK
12"CLUSTER
EHH
WOOD FENCE
ROCK OUTCROP
REFLECTOR
8"DEAD
PI
S78°49'06"E
583.00'

PROP FINE MILLING
& HOT MIX ASPHALT
OVERLAY

W BEAM
R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

PROP SEDIMENT CONTROL BARRIER
(TYP)

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	17	46
PROJECT FILE NO.	608495		

CONSTRUCTION PLANS
SHEET 12 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:10 PM

N
NAD 83

PROP PEDESTRIAN REFUGE ISLAND
(SEE CONSTRUCTION DETAILS)

BURIED END
R&D EXISTING BURIED END
PROP TANGENT END TREATMENT, TL-2

PROP 5'x5' CONCRETE LANDING PAD

W BEAM
R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

TOWN OF LEXINGTON
TOWN OF LINCOLN

ENTERING LINCOLN

LOCATION LINE OF 1898 ST.HWY. LO. 291

LOCATION LINE OF 1897 ST.HWY. LO. 186

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 186)

CONTINUED FROM SHEET NO. 16

CONTINUED BELOW

PROP FINE MILLING
& HOT MIX ASPHALT
OVERLAY

PAVE LIMIT

20+34.00 1897 MAIN BL =
181+95.48 1898 MAIN BL

CONSTRUCTION SIGN

MINUTE MAN

R&D EXISTING BURIED END
PROP GUARDRAIL TRAILING ANCHORAGE

PROP 5'x5' CONCRETE LANDING PAD

ACCESS DRIVE

30
N: 2988497.746'
E: 717965.123'
EL: 204.870'
MMAG

CB
RIM=204.88
DEPTH=199.48
INV.1=201.28
INV.2=201.38

CB
RIM=205.18
DEPTH=200.38
INV.1=201.68
INV.2=201.68
FULL OF DEBRIS

CB
RIM=204.45
DEPTH=199.75
INV.1=201.55

BOULDERS

INV 12" RCP FES
EL=198.25'

INV 12" RCP
EL=201.01'

BENCHMARK: 5 XCUT ON HYD BOMO – OUT OF
EL=206.40'

31
N: 2988444.720'
E: 718402.619'
EL: 205.660'
MMAG

LOCATION LINE OF 1946 ST.HWY. LO. 3460

LOCATION LINE OF 1946 ST.HWY. LO. 3460

DSK MASSDPW STA 54A6

WOOD FENCE

S.H.L.O.

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 291)

CONTINUED ABOVE

LOCATION LINE OF 1898 ST.HWY. LO. 291

PROP SEDIMENT CONTROL BARRIER (TYP)

0 20 50 100
SCALE: 1" = 20'

REDUCE SPEED LIMIT

R&D EXISTING BURIED END
PROP TANGENT END TREATMENT, TL-2

W BEAM
R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

R&D EXISTING BURIED END
PROP GUARDRAIL TRAILING ANCHORAGE

PROP SPLITTER ISLAND
(SEE CONSTRUCTION DETAILS)

LOAM AND SEED

AREA TO BE EXCAVATED = 2154 SF

R&D EXISTING CURB

AIRPORT ROAD
(PUBLIC – ST.HWY LO. 3460)

RT 2A WEST

RT 2A EAST
RT 2A WEST

KEEP RIGHT

STOP

BENCHMARK: 4

CONTINUED ON SHEET NO. 18

505.92'
S79°54'02"E

WOODED AREA

GRASS

GRAVEL

EP

SWL

OHW

STN WALL

SPEED LIMIT 40

SPEED LIMIT 35

REFLECTOR

BURIED END

TLRS

UPL S1

UPL 238

UPL 57236

UPL 57237

UPL 57235

UPL 57233

UPL 252

UPL 231

UPL 57230

VGC

SBE

LSA

LSL

SBE

PB

BIT.

UPL NO#

PAVE LIMIT

STOP

CONSTRUCTION SIGN

LOCATION LINE OF 1898 ST.HWY. LO. 291

NO PASSING ZONE

MM

DBY

EXIST WETLAND

100' WETLAND BUFFER

WOODED AREA

GRASS

GRAVEL

EP

STN WALL

OHW

SPEED LIMIT

REFLECTOR

BURIED END

W BEAM

EAST 2A

RT 2A EAST
RT 2A WEST

KEEP RIGHT

STOP

SBE

GRASS

BIT.

SWL

DBY

UPL NO#

UPL S1

UPL 238

UPL 57236

UPL 57237

UPL 57235

UPL 57233

UPL 252

UPL 231

UPL 57230

VGC

SBE

LSA

LSL

SBE

PB

BIT.

UPL NO#

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	18	46
PROJECT FILE NO.	608495		

CONSTRUCTION PLANS
SHEET 13 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:11 PM

PROP SAWCUT
REMOVE EXISTING SPLITTER ISLAND
FULL DEPTH RECONSTRUCTED AREA (SEE PAVEMENT NOTES)
LOAM AND SEED
AREA TO BE EXCAVATED = 2077 SF

MAIN BL "A" OF 1996 ST.HWY. LO. NO. 5571 N48°45'10"W (1946)=N48°45'47"W (NAD 83)

NAD 83

LOCATION LINE OF 1946 ST.HWY. LO. 3460

169+61.85 1897 MAIN BL – LO. 186 =
169+15.53 1946 MAIN BL – LO. 3460

LOCATION LINE OF 1898 ST.HWY. LO. 291

MARRETT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 291)

CONTINUED FROM SHEET NO. 17

CONTINUED BELOW

PROP FINE MILLING & HOT MIX ASPHALT OVERLAY

PROP SPLITTER ISLAND (SEE CONSTRUCTION DETAILS)

PAVE LIMIT

PROP SEDIMENT CONTROL BARRIER (TYP)

RT 2A EAST
RT 2A WEST

INTERSECTION AHEAD

DO NOT PASS

MM 94.6

STN WALL

100' WETLAND BUFFER

RECORD ELECTRIC EVERSOURCE

UPL 57230
UPL 228
UPL 227
UPL B57225
UPL NO#
UPL 57226

BRUSH & GRASS
BRUSH
GRASS
GRAVEL
TRAIL
WOOD FENCE

1511.57' N48°45'47"W
1511.57' S48°45'47"E
489.75' S74°41'17"E
1358.96' S44°46'47"E
115.94' N74°41'17"W

167+97.06 1897 MAIN BL – LO. 186 =
83+81.67 1930 MAIN BL – CO. LO.

MAIN BL "A" OF 1996 ST.HWY. LO. NO. 5571 N48°45'10"W (1946)=N48°45'47"W (NAD 83)

LOCATION LINE OF 1930 CT.HWY. LO. L

MAIN BL OF 1930 CT.HWY. LO. S60°56'00"E (1930)

OLD MASSACHUSETTS AVE (PUBLIC – 1930 COUNTY LO)

THE BATTLE ROAD APRIL 19, 1775

BENCHMARK: 3 MAG IN UPL 57/223 1' ABOVE GRADE EL=195.56'

1" X2.5" POST

L=534.52'
R=622.05'
Δ=49°13'02"

STOP

Δ=29°54'28"
R=354.30'
L=184.94'

PT 165.81'

PEDESTRIANS CROSSING

RET EXIST COBBLE STONE ISLAND

DO NOT CROSS

WOODED AREA

10"DEAD

NO SIGN

REDUCE SPEED

EXIST WETLAND

CONTINUED ABOVE

CONTINUED ON SHEET NO. 19

33
N: 2988254.850'
E: 719324.374'
EL: 195.470'
PM ON MHT RIM

34
N: 2988046.442'
E: 719666.046'
EL: 194.150'
MREB

35
N: 298
E: 719
EL: 19
MMAC

1897 MAIN BL – LO. 186 =
1930 MAIN BL – CO. LO.

167 MAIN BL "A" OF 1996 ST.HWY. LO. NO. 5571 N48°45'10"W (1946)=N48°45'47"W (NAD 83) 166+07.26

0 20 50 100
SCALE: 1" = 20'

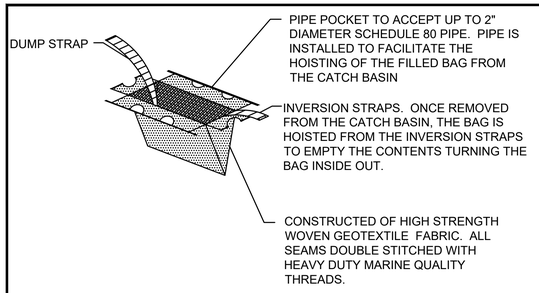
LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	19	46
PROJECT FILE NO.	608495		

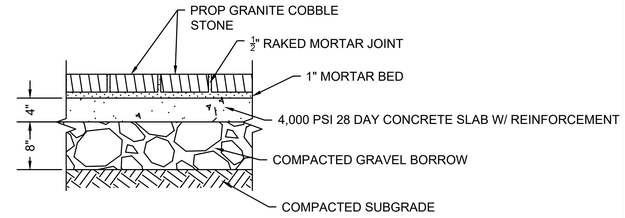
CONSTRUCTION PLANS
SHEET 14 OF 14

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:12 PM

RET EXIST COBBLE STONE ISLAND
PROP SEDIMENT CONTROL BARRIER (TYP)
CONTINUED FROM SHEET NO. 18
CONTINUED ABOVE
CONTINUED BELOW
NAD 83
MASSACHUSETTS AVE
(1999 ST. HWY. ALT. 7012)
(1961 TW. LO. 5)
MARRETT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 291)
(ST.HWY. ALT. 5188)
(ST. HWY. ALT. 7012)
CRANBERRY HILL
FORBES ROAD
(PUBLIC – LCC 15874P)
158+06.65 1897 MAIN BL – LO. 186 =
73+80.35 1950 MAIN BL – CO. LO.
LOCATION LINE OF 1898 ST.HWY. LO. 291
LOCATION LINE OF 1999 HWY ALT. 7012
LOCATION LINE OF 1999 ST.HWY. ALT. 7012
LOCATION LINE OF 1999 ST. HWY ALT. 5016
PROP FINE MILLING & HOT MIX ASPHALT OVERLAY
PAVE LIMIT
PROP SEDIMENT CONTROL BARRIER (TYP)
PED 7
REM EXIST PED
RECONSTRUCTED PED
PROJECT END
STA 153+81.73
N2987234.1712
E720444.0933
BENCHMARK: 2 MAG NAIL IN UTL POLE 223 1' ABOVE GRADE EL=181.78'
BENCHMARK: 1 CHISELED SQ IN TRAFFIC LIGHT BASE EL=199.24'
INV T2" CONC SLEEVE EL=189.28'
HISTORIC LEXINGTON
EXIST WETLAND BRUSH
WOODED AREA
BRUSH AND WOODED AREA
WILDFLOWER AREA NO MOWING
LEFT LANE MUST TURN LEFT
LEFT TURN MUST TURN LEFT
DIRECTIONAL TURNING
RT 95 & 128
OFFICE FOR LEASE
CONSTRUCTION ENTRANCE
FORBES BUSINESS CENTER
PEDESTRIAN CROSSING
BUS STOP
SPEED LIMIT 45
NARROW ROAD SPEED LIMIT 35
MASSDOT DISTRICT 4
ROCK OUTCROP
BENCH ON CONC.PAD
LEDGE
CONC.SIGN ONE CRANBURY HILL
GAS – NG – NO REC INFO OF SIZE
WALL WEIGHT LIMIT AHEAD
STN RET.WALL
700' WETLAND BUFFER
ADJ
SCALE: 1" = 20'
0 20 50 100



SILT SACK INLET PROTECTION
NTS



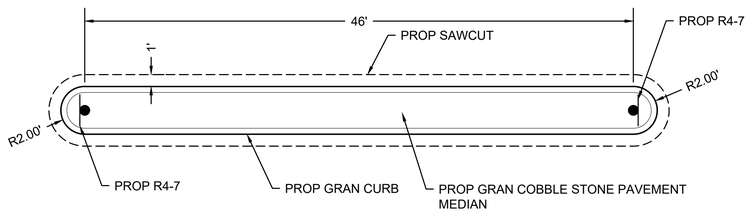
GRANITE COBBLE PAVEMENT
NTS

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

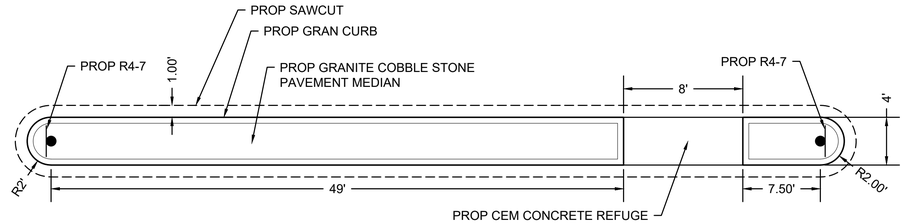
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	20	46
PROJECT FILE NO.	608495		

CONSTRUCTION DETAILS

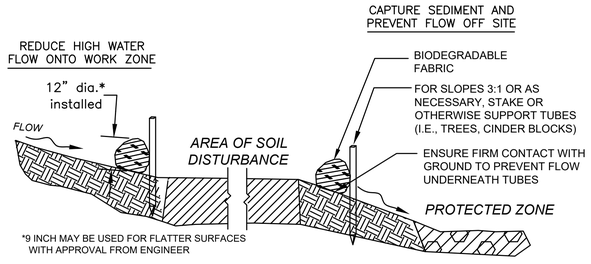
608495\XX\HD1.DWG Plotted on 7-Jan-2022 1:14 PM



PROP SPLITTER ISLAND MEDIANS
NTS



PROP MEDIAN AT PEDESTRIAN CROSSINGS
NTS

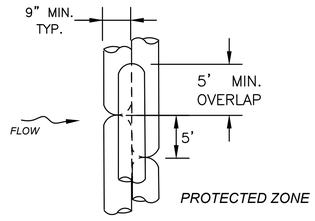


SECTION

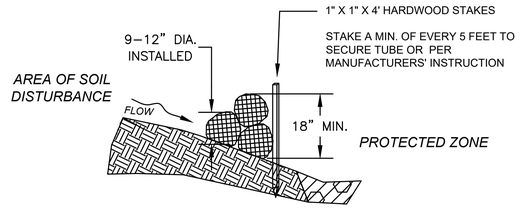
SEDIMENT BARRIER - COMPOST FILTER TUBE

NOT TO SCALE

WHERE SPECIFIED ON CONSTRUCTION PLANS OR AS REQUIRED



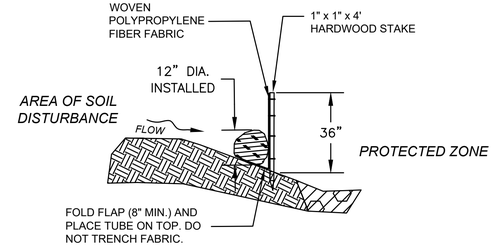
PLAN VIEW



SECTION

COMPOST FILTER TUBES STACKED

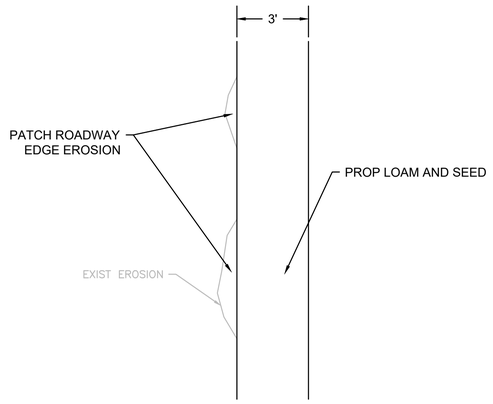
NOT TO SCALE



SECTION

COMPOST FILTER TUBE & SILT FENCE

NOT TO SCALE



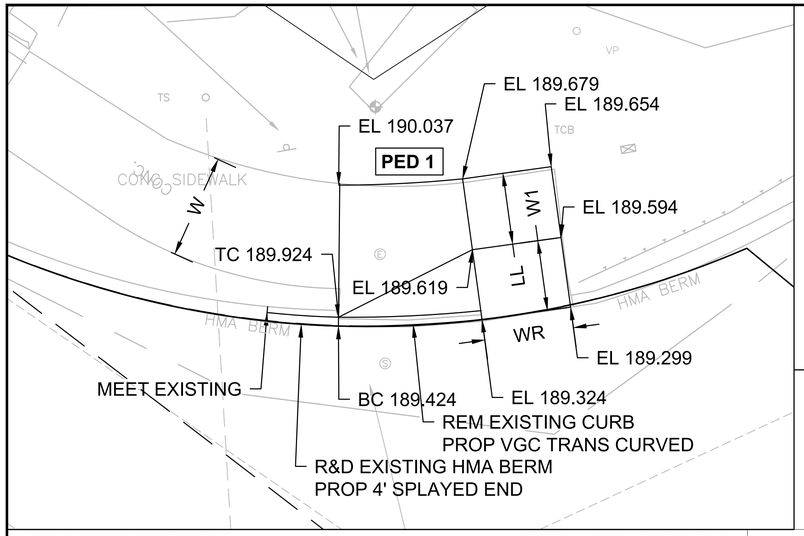
ROADWAY EROSION REPAIR
NTS

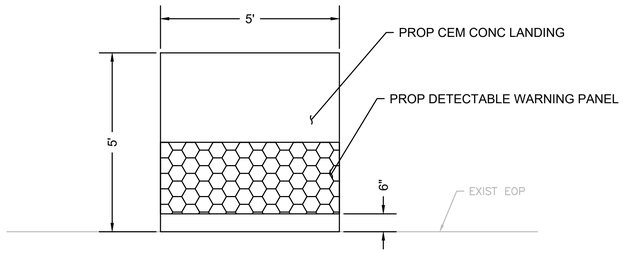
LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	21	46
PROJECT FILE NO.	608495		

CONSTRUCTION DETAILS

608495(XX)HD1.DWG Plotted on 7-Jan-2022 1:14 PM





PROP CEM CONC PED LANDING
NTS

LINCOLN-CONCORD-LEXINGTON RT 2A							PEDESTRIAN CURB RAMP DESIGN TABLE										
PED NO		RAMP REFERENCE POINT		Reveal			GUTTER SLOPE		TRANSITION LENGTH			W1		W2		LL	
	TOWN-BASELINE	STATION	OFFSET	R1 (L)	R2 (R)	WR	S1 (LEFT)	S2 (RIGHT)	LEFT SIDE	RIGHT SIDE	W	LENGTH	SLOPE	LENGTH	SLOPE	LENGTH	SLOPE
1	LEXINGTON- RT 2A	157+90	42' LT	6.00	2.70	5.0'	-1.29%	-0.28	8.00	NA	5.3	3.9	7.50%	NA	NA	4.0	1.5%

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	22	46
PROJECT FILE NO.	608495		

PEDESTRIAN CURB RAMP DETAILS

608495\(XX)\HD1.DWG Plotted on 7-Jan-2022 1:15 PM

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	23	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 1 OF 14

608495(XX)\PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:16 PM

N

NAD 83

TOWN OF CONCORD
TOWN OF LINCOLN

100' WETLAND BUFFER

EXIST WETLAND

PROP TRANSITION TO NCHRP 350

S.H.L.O.

R&D EXISTING W BEAM
PROP GUARDRAIL, TL-2 (SINGLE FACED)

5.49'

3.55'

6" SWL
6" DBYL
6" SWL

11'

0+00.00
80+99.42

80 79 78 77 76 75

BYPASS ROAD - ROUTE 2A
(ST.HWY LO. 3102)

6" SWL
6" DBYL
6" SWL

CONTINUED BELOW

4.03'

4.50'

PAVE LIMIT

S.H.L.O.

100' WETLAND BUFFER

MATCH EXIST

PROJECT BEGIN
STA 80+99.42
N 2989219.4184
E 704902.0112

PROP TRANSITION TO NCHRP 350

N

NAD 83

EXIST WETLAND

100' WETLAND BUFFER

℄

MAP 110 PARCEL 6
31 BYPASS ROAD
N/F
CRAIG SELF
BK 18727 PG 263

℄ APPROXIMATE PROPERTY

BENCHMA

WOODED AREA

GRAVEL DRIVE

STN WALL

LOCATION LINE OF 1934
ST.HWY. LO. 3102

RT 2

UPL 16

OHW

MB

UPL 125-15

SBE
STC
DBYL

3.52'

4.65'

11'

CONTINUED ABOVE

6" SWL
6" DBYL
6" SWL

75 74 73 72 71 70

BYPASS ROAD - ROUTE 2A
(ST.HWY LO. 3102)

6" SWL
6" DBYL
6" SWL

CONTINUED ON SHEET NO. 24

4.05'

5.82'

PAVE LIMIT

100' WETLAND BUFFER

1
N: 2989594.468'
E: 705743.932'
EL: 188.150'
MMAG

REFLECTOR
DO NOT PASS

LOCATION LINE OF 1934
ST.HWY. LO. 3102

WOODED AREA

WATER EASEMENT
PLAN 1438 OF 1959

℄ APPROXIMATE PROPERTY LINE

℄ PROPERTY LINE

MAP 110 PARCEL 2
32 BYPASS ROAD
N/F
QI ZHU
BK 37512 PG 309

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	24	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 2 OF 14

608495(XX)PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:17 PM

N

NAD 83

APPROXIMATE PROPERTY LINE

APPROXIMATE PROPERTY LINE

APPROXIMATE

APPROXIMATE

APPROXIMATE PROPERTY LINE

2
N: 2989765.934'
E: 706024.988'
EL: 204.020'
PM ON CB RIM

BENCHMARK: 21 XCUT ON HYD BOMO
EL=206.41'

CB
RIM=203.88
DEPTH=198.18
INV.1=198.58

STN WALL

WOODED AREA

WOODED AREA

WOODED AREA

N/F
ANTONG-MURDOCK
BK 68574 PG 260

N/F
SHOLEH RAZAVITOUSI
BK 42731 PG 289

BENCHMARK: 20 RR SPIKE IN UPL 9 1' ABOVE
EL=212.96'

INV.1=202.6

14"DOUBLE

16"TRIPLE

10" NO POST

BIT. DRIVE

PAINTED WATER LINE

BIT. DRIVE

BIT. DRIVE

WG

WG

S.H.L.O.

POST

BIT. DRIVE

SHRUB

UPL 14

UPL 13

UPL 12

UPL 125

UPL 125

OHW

OHW

OHW

OHW

OHW

OHW

MB

MB

MB

PAVE LIMIT

4.16'

11'

3.99'

SBE

SBE

STL

EP

EP

SWL

EP

6" SWL
6" DBYL
6" SWL

BYPASS ROAD - ROUTE 2A

(ST.HWY LO. 3102)

CONTINUED FROM SHEET NO. 23

CONTINUED BELOW

PT
+32.25

69

68

67

66

65

64

RT 12

12"RCP

6.20'

11'

5.47'

6"TWIN

14"TWIN

6"TRD

6"TRD

18"DBL

15"DBL

WOODED AREA

LOCATION LINE OF 1934 ST.HWY. LO. 3

CB
RIM=204.02
DEPTH=197.52
INV.1=198.02
INV.2=198.22

DO NOT PASS

UPL 125

WATER EASEMENT
PLAN 1438 OF 1959

WATER EASEMENT
PLAN 1438 OF 1959

3
N: 2989890.781'
E: 706416.518'
EL: 211.170'
MSTN

WATER EASEME
PLAN 1438 OF

PERTY LINE

APPROXIMATE PROPERTY LINE

PROPERTY LINE

MAP 110 PARCEL 1
26 BYPASS ROAD
N/F
DAVID V. MRAKOVICH TR.
BK 54768 PG 476

MAP 109 PARCEL 16
22 BYPASS ROAD
N/F
MCLEAN HOSPITAL CORP.

PARCEL 18
PASS ROAD
N/F
ORE POULOS
844 PG 471

MAP 109 PARCEL 15
15 BYPASS ROAD
N/F
THE EDINBURG CENTER INC.
BK 50930 PG 465

APPROXIMATE PROPERTY LINE

WATER EASEMENT
PLAN 1020 OF 1957

MAP 109 PARCEL 20
11 BYPASS ROAD
N/F
SUSAN DESANCTIS
BK 29727 PG 484

4
N: 2990051.953'
E: 706761.933'
EL: 204.580'
MMAG

APPROXIMATE PROPERTY LINE

MAP 109 PARCEL 21
BYPASS ROAD
N/F
UNITED STATES OF AMERICA
BK 11151 PG 149

NAD 83

N

GRASS

LOCATION LINE OF 1934 ST.HWY. LO. 3102

6" LAMP POST

LOCATION LINE

SHRUB

4"
POST
GRAV.

BIT.
BOULDER

BIT.DRIVEWAY

BIT.DRIVEWAY

HEDGE

HEDGE

PAVE LIMIT

5.58'

RT 2A

4.87'

11'

11'

3.07'

EP

SWL

SWL

SWL

6" SWL
6" DBYL
6" SWL

BYPASS ROAD - ROUTE 2A

(PUBLIC – ST.HWY LO. 3102)

CONTINUED ABOVE

CONTINUED ON SHEET NO. 25

PC
+55.30

63

62

61

60

59

58

57

DBYL

DBYL

6"TWIN

10"DBL

12"DBL

12"DBL

12"TRP

12"DEAD

18"QUAD

WOODED AREA

WOODED AREA

WOODED AREA

WELCOME TO MINUTE MAN
NATIONAL HISTORICAL PARK

WOOD FENCE

LOCATION LINE OF 1934 S

SPEED LIMIT
40

WATER EASEMENT
PLAN 1438 OF 1959

RIGHT-OF-WAY EASEMENT
PLAN 415 OF 1961

MAP 109 PARCEL 15
16 BYPASS ROAD

MAP 109 PARCEL 14
12 BYPASS ROAD
N/F
STEVEN R. KANNER

MAP 109 PARCEL 14
12 BYPASS ROAD
N/F
STEVEN R. KANNER
BK 26289 PG 484

APPROXIMATE PROPERTY LINE

0 20 50 100

SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	25	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 3 OF 14

608495(XX)PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:18 PM

N

NAD 83

CONTINUED FROM SHEET NO. 24

TOWN OF LINCOLN

TOWN OF CONCORD

LEXINGTON ROAD (PUBLIC – ST.HWY LO. 218)

LOCATION LINE OF 1897 ST.HWY. LO. 218

MAIN BL OF 1897 ST.HWY. LO. NO. 218 S53°17'E (1897)=S66°04'48"E (NAD 83)

LOCATION LINE OF 1934 ST.HWY. LO. 3102

MAIN BL OF 1934 ST.HWY. LO. NO. 3102 N72°32'40"E (1934=N72°41'25"E (NAD 83)

LOCATION LINE OF 1895 ST.HWY. LO. 218

MAIN BL OF 1895 ST.HWY. LO. NO. 92 S71°15'E (1895)=S84°15'36"E (NAD 83)

PROP MA-D1-6
PROP MA-D1-5

PROP BRICK RED PAINTED PAVEMENT

BROOKS ROAD

BROOKS RD DEAD END NO ENTRANCE TO RT 2

APPROXIMATE PROPERTY LINE

EXISTING GRASS

30 MPH BUST STOP

CAUTION VEHICLES EXISTING

12"TRP

R&S

R&R

SL

RT 2A EAST

RT 2A WEST

STOP

PARCEL 21
ASS ROAD
N/F
ATES OF AMERICA
1151 PG 149

PARCEL ID 4248–2
1175 LEXINGTON ROAD
N/F
USA DEPARTMENT OF THE INTERIOR
BK 11220 PG 113

PARCEL ID 4248–2
120A LEXINGTON ROAD
N/F
USA DEPARTMENT OF THE INTERIOR
BK 12212 PG 238

120A LEXINGTON ROAD
N/F
USA DEPARTMENT OF THE INTERIOR
BK 12212 PG 238

123A LEXINGTON
N/F
USA DEPARTMENT OF T
BK 10135 PG

WOOD FENCE
WOODED AREA
GRASS
STN WALL
BARBED WIRE FENCE
2"GAS – NG RECORD
OHW
UPL 98
UPL 99
UPL 100
UPL 101
UPL 102
UPL 5–89
EP
DBYL
SWL
6" SWL
6" DBYL
6" POST
10" OVERLOOK POST
24"DBL
15"
12"
10"DBL
36"
24"
21"
8"
6"
EPLP
EPLP (HELD)
STOP
PARKING AHEAD
RT 2A EAST
PARKING LOT
HISTORIC SIGN
GRAVEL
GRAVEL DRIVE
BIT.DRIVE
PAVE LIMIT
MHB (HELD BACK CENTER)
SBE
BRICK
HISTORICAL HOUSE
BROOKS VILLAGE HISTORICAL AREA
SPEED LIMIT 40
MM 82.5
MM 92.4
SAMUEL BROOKS HOUSE

5.40'
4.43'
3.35'
3.85'
3.53'
2.28'

+60.63 PC
+38.79 PT
+82.16 PC
+17.30 PT
+49.53 PI
+50.22 PI

52+79.10
52+80.00 1897 MAIN BL – LO 218
52+78.16 1895 MAIN BL – LO 218
52+17.63 1934 MAIN BL – LO 92
52+82.30 1897 MAIN BL – LO 3104
51+88.42 1895 MAIN BL – LO 92

728.88' S84°15'36"E

MAP 109 PARCEL 8
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10364 PG 143

6
N: 2990159.287'
E: 707835.251'
EL: 203.020'
MSTN GPS2513

BENCHMARK: 18 RR SPIKE IN UPL 102 1' ABOVE EL=195.52'

NORTH GREAT ROAD - ROUTE 2A (PUBLIC – ST.HWY LO. 92)

NORTH GREAT ROA

CONTINUED ABOVE

CONTINUED BELOW

CONTINUED ON SHEET NO. 26

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	26	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 4 OF 14

608495(XX)PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:19 PM

123A LEXINGTON ROAD
N/F
USA DEPARTMENT OF THE INTERIOR
BK 10135 PG 53

N/F
USA DEPARTMENT OF THE INTERIOR
BK 10019 PG 472

USA DEPARTMENT OF THE INTERIOR
BK 10019 PG 472

TOWN OF C

APPROXIMATE PROPERTY LINE

NAD 83

7
N: 2990163.839'
E: 708254.627'
EL: 193.430'
PM ON CB RIM

PARKING AHEAD

RT 2 WEST

LINE OF 1895 ST.HWY. LO. 92

12" GRANITE POST

GRAVEL DRIVE

100' WETLAND BUFFER

EX

APPROX

8"DBL

8"QUAD

10"DBL

12"TRP

6"DBL

STN WALL

GRASS

SWL

SBE

EP

VGC

WG

MB

CONTINUED FROM SHEET NO. 25

CONTINUED BELOW

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 92)

TOWN OF CONCORD

TOWN OF LINCOLN

6" SWL

6" DBYL

892.80'

S83°06'36"E

3.52'

3.43'

2.85'

2.28'

2.73'

PAVE LIMIT

LOCATION LINE OF 1895 ST.HWY. LO. 92

2"GAS – NG RECORD

BARBED WIRE FENCE

BIT.DRIVE

HISTORICAL HOUSE

MM 92.6

8
N: 2990071.578'
E: 708750.620'
EL: 174.080'
MMAG

MAP 109 PARCEL 3
41 NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 9939 PG 253

MAP 108 PARCEL 11
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10880 PG 335

BENCHMARK: 17 XCUT VERTICAL GUARDRAIL POST
EL=171.94'

9
N: 2990047.635'
E: 709255.856'
EL: 173.880'
MMAG

MW

ENTERING LINCOLN

NO SIGN

WOODED AREA

EXIST WETLAND

GRAVEL

BIT.

SPEED LIMIT 40

L=170.86'
R=2865.00'
Δ=3°25'00"

PC +86.58

1679.00'

S79°41'36"E

3.57'

3.69'

4.51'

MAP 112 PARCEL 29
37 NORTH GREAT ROAD
N/F
LINCOLN J MIARA
BK 70441 PG 283

MAP 108 PARCEL 10
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10999 PG 282

MAP 108 PARCEL 10
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10999 PG 282

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	27	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 5 OF 14

608495(XX)PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:20 PM

NAD 83

OLD BEDFORD ROAD
(PUBLIC – 1950 CT. LO.)
S46°25'45"W (1950)=N37°53'42"W (NAD 83)
180.31'
S31°33'42"W

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 92)

64+23.08
32+38.37 1895 MAIN BL – LO 92
64+23.08 1946 MAIN BL – ST. LO.

DBYL 1679.00' S79°41'36"E

LOCATION LINE OF 1895 ST.HWY. LO. 92

PAVE LIMIT

CONTINUED FROM SHEET NO. 26

CONTINUED BELOW

CONTINUED ABOVE

CONTINUED ON SHEET NO. 28

6" SWL
6" DBYL
6" SWL

11'
4.70'
3.37'
5.24'
2.39'
10.50'
1.00'

PROP R4-7

12" YELLOW GORE LINE
45° AT 10' SPACING ON CENTER (TYP.)

PROP SPLITTER ISLAND
(SEE CONSTRUCTION DETAILS)

MAP 108 PARCEL OLD BEDFORD RC
N/F
UNITED STATES OF AI
BK 12728 PG 3

MAP 108 PARCEL 9
59 NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 13178 PG 140

MAP 108 PARCEL 8
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 13178 PG 140

MAP 108 PARCEL 7
SUNNYSIDE LANE
N/F
UNITED STATES OF AMERICA
BK 10241 PG 143

MAP 108 PARCEL 6
36 SUNNYSIDE LANE
N/F
UNITED STATES OF AMERICA
BK 11344 PG 563

SUNNYSIDE LANE
(PUBLIC – 1952 TW.LO.)

UNITED STATES OF AMERICA
BK 12289 PG 541

BENCHMARK: 16 XCUT ON HYD BOMO

MAP 108 PARCEL 60
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10112 PG 277

MAP 108 PARCEL 61
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10091 PG 155

MAP 108 PARCEL 62
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10433 PG 149

MAP 108 PARCEL 4
SUNNYSIDE LANE
N/F
UNITED STATES OF AMERICA
BK 10302 PG 460

MAP 108 PARCEL 3
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10189 PG 87

MAP 108 PARCEL 2
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10594 PG 315

DRAINAGE EASEMENT
PLAN BOOK 8057 PAGE END

RIGHT-OF-WAY EASEMENT
PLAN BOOK 8057 PAGE END

CB
RIM= 202.90
DEPTH=197.80
NPV

10
N: 2989968.770'
E: 709667.034'
EL: 191.390'
MMAG

11
N: 2989857.384'
E: 710074.174'
EL: 200.770'
MMAG

12
N: 2989807.169'
E: 710577.966'
EL: 203.220'
MMAG

100' WETLAND BUFFER
EXIST WETLAND
WOODED AREA
TALL GRASS
GRAVEL
STONE WALL
STN WALL
ROCK OUTCROP
BROKEN NO SIGN
MHB SB CENTER
MHB CB CENTER TOP BROKEN (HELD CENTER)
EPLP (ON LINE)
BIT.DRIVE
STOP
SPEED LIMIT 40
NO PASSING
RECORD 4"CAST – NG
UPL 5–73
UPL 72 • 10"
UPL 5–70
LOCATION LINE OF 1895 ST.HWY. LO. 92
APPROXIMATE PROPERTY LINE

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	28	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 6 OF 14

608495(XX)PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:21 PM

NORTH GREAT ROAD - ROUTE 2A

(PUBLIC – ST.HWY LO. 92)

CONTINUED FROM SHEET NO. 27

CONTINUED BELOW

CONTINUED ABOVE

CONTINUED ON SHEET NO. 29

N

NAD 83

APPROXIMATE PROPERTY LINE

N/F
UNITED STATES OF AMERICA
BK 10899 PG 149

N/F
UNITED STATES OF AMERICA
BK 11571 PG 289

N/F
UNITED STATES OF AMERICA
BK 12289 PG 541

WOODED AREA

EXIST WETLAND

STN WALL

STN RETAINING WALL

LOCATION LINE OF 1895 ST.HWY. LO. 92

6" SWL

6" DBYL

EP SWL

DBYL

S79°41'36"E

S79°50'36"E

990.67'

+08118

+09157.18

20

19

17

16

15

11'

3.53'

3.59'

3.75'

3.27'

UPL 69

UPL 5-68

RECORD 4"GAS – NG

UPL 64

UPL 5-65

OHW

DBW

MM 93.0

BENCHMARK: 15 RR SPIKE IN UPL 5/67 1' ABOVE EL=210.77'

MAP 108 PARCEL 1
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 12212 PG 238

13
N: 2989679.744'
E: 711061.174'
EL: 213.050'
MMAG

100' WETLAND BUFFER

MAP 108 PARCEL 1
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 12212 PG 238

N/F
UNITED STATES OF AMERICA
BK 13069 PG 320

14
N: 2989635.670'
E: 711527.457'
EL: 226.140'
MMAG

NO PASS ZONE

DO NOT PASS

MAP 108 PARCEL 68
100 NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10899 PG 149

PROP RRFB W/ W11-2 W16-7p

PROP 5'x5' CONCRETE LANDING PAD

PROP PEDESTRIAN REFUGE ISLAND (SEE CONSTRUCTION DETAILS)

12" YELLOW GORE LINE 45° AT 10' SPACING ON CENTER (TYP.)

PROP R4-7

PROP R4-7

PAVE LIMIT

BEDFORD LANE
(PRIVATE)

LOCATION LINE OF PLAN 1292 OF 1957

LOCATION LINE OF PLAN 906 OF 1962

PLAN 1741 OF 1962

10.50'

1.00'

1.00'

1.66'

10.50'

1.45'

6" SWL

6" DBYL

6" SWL

+18186

+18190

S.H.L.O.

3.89'

2.53'

UPL 63

UPL 62

UPL 61

UPL 60

UPL 59

UPL 8/20A

4"GAS – NG RECORD

BENCHMARK: 14 CHISELED SQ IN SIGN BASE EL=235.42'

STN WALLS

GRASS

GRAVEL

PARKING AHEAD

ROCK OUTCROP

GRAVEL DRIVE

W11-2

W16-9p

AHEAD

PROP RRFB W/ W11-2 W16-7p

PROP 5'x5' CONCRETE LANDING PAD

PROP "SHARK TEETH" YIELD LINE

MAP 113 PARCEL 52
97 NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 11617 PG 327

MAP 113 PARCEL 53
101 NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 12568 PG 564

0 20 50 100

SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	29	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 7 OF 14

608495(XX)\PAVMTMRKG.DWG Plotted on 7-Jan-2022 1:22 PM

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 92)

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 211)

BEDFORD LANE (PRIVATE)

BEDFORD ROAD (PUBLIC – 1956 ST.LO.)

VIRGINIA ROAD (PUBLIC – 1965 PLAN)

RT 2A EAST
RT 2A WEST

CONTINUED FROM SHEET NO. 28

CONTINUED BELOW

CONTINUED ABOVE

CONTINUED ON SHEET NO. 30

MAP 108 PARCEL 69
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10229 PG 13

MAP 108 PARCEL 70
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10076 PG 327

MAP 113 PARCEL 54
BEDFORD ROAD
N/F
UNITED STATES OF AMERICA
BK 10189 PG 51

MAP 114 PARCEL 5
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10298 PG 263

MAP 114 PARCEL 6
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10232 PG 121

MAP 114 PARCEL 7
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 8772 PG 408

15
N: 2989523.587'
E: 711939.987'

16
N: 2989467.402'
E: 712393.335'
EL: 234.070'
MMAG

17
N: 2989177.931'
E: 712858.440'
EL: 211.420'
MMAG

43
N: 2989312.889'
E: 712737.844'
EL: 223.871'
MMAG

BENCHMARK: 13 SPIKE IN 28" OAK TREE 1' ABOVE EL=225.30'

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	30	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 8 OF 14

608495(XX)\PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:23 PM

VIRGINIA ROAD (PUBLIC – 1965 PLAN)

OF 1965 UNRECORDED PLAN

MAP 114 PARCEL 16
1 VIRGINIA ROAD
N/F
UNITED STATES OF AMERICA
BK 12800 PG 721

BENCHMARK: 12 XCUT ON HYD BOMO
EL=201.43'

NAD 83

APPROXIMATE PROPERTY LINE

MAP 114 PARCEL 12
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10065 PG 55

18
N: 2988952.242'
E: 713222.916'
EL: 201.540'
MMAG

100' WETLAND BUFFER

WOODED AREA

NO U TURN

STN WALL

274.72'
S47°49'53"E

11.00'

3.05'

LOCATION LINE OF 1896 ST.HWY. LO. 211

245.04'
S56°15'23"E

R=855.10' L=145.34'
Δ=9° 44' 19"

WOOD FENCE

CONTINUED FROM SHEET NO. 29

3+94.57 1896 MAIN BL – LO 211
0+00.00 1950 MAIN BL – LO 211

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 211)

6" SWL
6" DBYL
6" SWL

+80.23 PC

R=880.10'
Δ=9°44'19"

CONTINUED BELOW

110.80'

PAVE LIMIT

PROP "BRICK RED" PAINTED PAVEMENT

274.85'
S47°49'53"E

+33.35 PI

S56°15'23"E
246.88'

5.43'

S47°49'53"E
164.18'

R=50.00' L=81.37'
Δ=93° 14' 48"

BEDFORD ROAD
(PUBLIC – 1950 CT. LO.)

N34°45'43"E
341.26'

CO. LO. 248.67'
N34°45'43"E

BL OF 1950 CT. LO.
D)=N34°45'43"E (NAD 83)

226.66'
50 CO. LO.

EL=197.39

STOP

RIP RAP

REFLECTOR

EXIST WETLAND

UPL 5/47

UPL 5/45

UPL 5/44

UPL 46

UPL 1/1

OHW

SWL

EP

SBE

MAP 114 PARCEL 20
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10065 PG 51

MAP 114 PARCEL 14
142 NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 13069 PG 322

MAP 114 PARCEL 19
NORTH GREAT ROAD
N/F
TOWN OF LINCOLN
BK 15833 PG 34

LOCATION LINE OF 1896 ST.HWY. LO. 211

248.72'
S56°15'23"E

Δ=9° 44' 19"
R=905.10' L=153.84'

2.04'

HANSCOM DRIVE
(PUBLIC – ST. HWY LO. 5571)

TENNESSEE GAS COMPANY EA.

306 ST.HWY. LO. 5571

UPL 146/25

CORBLE STN

DO NOT ENTER

LSA

12"RCP

CB
RIM=192.11
DEPTH=186.91
INV.1=189.11
INV.2=189.11

CB
RIM=191.96
DEPTH=186.96
INV.1=189.26
FULL OF DEBRIS

39
N: 2988619.065'
E: 713820.164'
EL: 194.140'
MREB GPS2514

RT 2A WEST

GAS PIPELINE POST

CONTINUED ABOVE

+29.82 PT

S65°59'53"E
247.63'

3.64'

4.93'

LOCATION LINE OF 1896 ST.HWY. LO. 211

+77.45 BC

L=196.15'
R=409.18'
Δ=27°27'58"

+25.60 PT

3.19'

PAVE LIMIT

N86°32'07"E
288.85'

CONTINUED ON SHEET NO. 31

LEFT TURN MUST TURN LEFT

19
N: 2988686.606'
E: 713539.710'
EL: 197.620'
MMAG

20
N: 2988600.639'
E: 714040.507'
EL: 193.064'
MMAG

MAP 114 PARCEL 18
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 11510 PG 28

HANSCOM FIELD

GRAVEL DRIVE

TENNESSEE GAS PIPE LINE COMPANY EASEMENT 7765 PAGE 100

6" DOTTED WHITE LINE EXTENSION (DWLEx)
3' LINES W/ 9' GAPS (TYP)

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	31	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 9 OF 14

608495(XX)\PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:24 PM

N

NAD 83

HANSCOM DRIVE
(PUBLIC – ST. HWY. LO. 5571)

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 211)

CONTINUED FROM SHEET NO. 30

CONTINUED BELOW

CONTINUED ABOVE

CONTINUED ON SHEET NO. 32

LOCATION LINE OF 1896 ST.HWY. LO. 211

1896 ST.HWY. LO. 5571

N86°32'07"E
288.85'

N80°20'37"E
1272.34'

17+02.80 1896 MAIN BL – LO 211 =
17+00.00 1996 MAIN BL – LO. 5571

RT 2A EAST
RT 2A WEST

PAVE LIMIT
12"SYL 45°@10' O.C.

6" SWL
6" DBYL
6" SYL

REFLECTOR

CB
RIM=194.47
DEPTH=188.87
INV.1=191.87
FULL OF DEBRIS

MHB
CENTER BACK
(HELD)FOR LINE)

MHB
DH
(HELD)

FIBER OPTIC POST

HANSCOM FIELD

INTERSECTION AHEAD

WOODED AREA

12" GRANITE POST

GRASS

STN WALL

ROAD NARROWS

NO PASSING ZONE

RECORD 2"GAS – NG

OPTIC CABLE

APPROXIMATE PROPERTY LI

100' WETLAND BUFFER

BENCHMARK: 10 XCUT ON BOLT OF TRAFFIC LIGHT POLE
EL=196.94'

21
N: 2988575.245'
E: 714469.833'
EL: 194.230'
MMAG

22
N: 2988615.061'
E: 714913.242'
EL: 197.780'
MMAG

BENCHMARK: 9 XCUT ON HYD BOMO
EL=199.63'

SPEED LIMIT
40

MAP 114 PARCEL 17
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 11510 PG 28

MAP 115 PARCEL 1
190 NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 13068 PG 252

MAP 114 PARCEL 15
165 NORTH GREAT ROAD

MAP 114 PARCEL 15
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA

MAP 115 PARCEL 23
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10433 PG 153

SCALE: 1" = 20'
0 20 50 100

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	32	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 10 OF 14

608495(XX)PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:25 PM

N
NAD 83

CONTINUED FROM SHEET NO. 31

CONTINUED ABOVE

CONTINUED BELOW

CONTINUED ON SHEET NO. 33

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 211)

MILL STREET
(PUBLIC – PLAN 1236 OF 1965)

LINE OF 1896 ST.HWY. LO. 211

LOCATION LINE OF 1896 ST.HWY. LO. 211

LOCATION LINE OF 1897 ST.HWY. LO. 186

LOCATION LINE OF 1899 ST.HWY. LO. 186

LOCATION LINE OF PLAN 1236 OF 1965

PROXIMATE PROPERTY LINE

PAVE LIMIT

WOODED AREA

GRASS

GRAVEL

WOOD FENCE

FENCE

STN WALL

GRANITE BLOCK WALLS

JOHN NELSON HOUSE

PAUL REVERE CAPTURE SITE

PARKING AHEAD

PARKING LOT CLOSES AT SUNSET

DO NOT ENTER

S.H.L.O.

CB
RIM=198.67
INV.1=196.57

BENCHMARK: 8 XCUT ON HYD BOMO
EL=215.55'

23
N: 2988580.343'
E: 715365.294'
EL: 200.920'
MMAG

24
N: 2988671.906'
E: 715799.505'
EL: 204.240'
MMAG

25
N: 2988741.792'
E: 716205.320'
EL: 214.070'
MMAG

35+58.97 1896 MAIN BL – LO. 211 =
0+00.00 1897 MAIN BL – LO. 186

PC
PT
Δ=18°08'02"
R=654.73'
L=207.22'

L=149.40'
R=680.25'
A=12°35'01"

N76°54'37"E
S85°01'36"E
1243.78'
374.53'

6" SWL
6" DBYL
6" DBYL

11.00'
2.45'
2.33'
3.44'
2.16'
4.44'
4.03'
3.78'
3.19'
0.50'
1.91'
10.50'
0.69'

PROP RRFB W/ W11-2 W16-7p
PROP 5' X 5' CEM CONC LANDING PAD
PROP R4-7
PROP PED REFUGE ISLAND
PROP 5' X 5' CEM CONC LANDING PAD
PROP RRFB W/ W11-2 W16-7p
PROP R4-7
PROP "SHARK TEETH" YIELD LINE (TYP)
12" YELLOW CHEVRON LINE (10' SPACING @ 45°) (TYP)

MAP 115 PARCEL 23
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10433 PG 153

MAP 115 PARCEL 22
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 1143 PG 134

MAP 115 PARCEL 23
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 10433 PG 153

MAP 115 PA
MILL STR
N/F
UNITED STATES O
BK 10943 P

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	33	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 11 OF 14

608495(XX)PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:26 PM

N

NAD 83

MAP 115 PARCEL 6
200 NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 12624 PG 377

BENCHMARK: 7 XCUT ON HYD BOMO
EL=222.95'

WOODED AREA

CROSSING ROAD AHEAD

PARKING AHEAD

ROCK OUTCROP

GRAVEL DRIVE

100' WETLAND BUFFER

EXIST WETLAND

STN WALL

PAVE LIMIT

LOCATION LINE OF 1897 ST.HWY. LO. 186

BRUSH

STOP

FP

EW

SWL

DBYL

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 186)

6" SWL
6" DBYL
6" SWL

11.00'

2.17'

2.91'

CONTINUED FROM SHEET NO. 32

CONTINUED BELOW

GRASS

OHW

UPL 13

UPL 12

UPL 1/11

UPL 5/10

GRASS/BRUSH

UPL NO#

S.H.L.O.

26
N: 2988668.795'
E: 716639.513'
EL: 222.330'
MMAG

28

MM 94.2

MINUTE MAN VISITOR CENTER

MAP 115 PARCEL 11
MILL STREET
N/F
UNITED STATES OF AMERICA
BK 10943 PG 489

MAP 115 PARCEL 12
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 686 PG 3

APPROXIMATE PROPERTY LINE

N

NAD 83

ACCESS DRIVE

28
N: 2986630.792'
E: 717475.036'
EL: 213.800'
MMAG

MINUTE MAN VISITOR CENTER

MHB CENTER BACK

12"CLUSTER

EHH

MAP 115 PARCEL 4
NELSON ROAD
N/F
UNITED STATES OF AMERICA
BK 10185 PG 115

NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 186)

CONTINUED ABOVE

CONTINUED ON SHEET NO. 34

10.50'

0.86'

0.80'

0.97'

0.76'

2.30'

2.01'

11.00'

6" SWL
6" DBYL
6" SWL

S78°49'06"E
583.00'

PI

REFLECTOR

WOOD FENCE

LOCATION LINE OF 1897 ST.HWY. LO. 186

12" YELLOW GORE LINE
45° AT 10' SPACING ON CENTER (TYP.)

12" YELLOW GORE LINE
45° AT 10' SPACING ON CENTER (TYP.)

100' WETLAND BUFFER

MAP 115 PARCEL 11
MILL STREET
N/F
UNITED STATES OF AMERICA
BK 10943 PG 489

MAP 115 PARCEL 11
MILL STREET
N/F
UNITED STATES OF AMERICA
BK 10943 PG 489

0 20 50 100

SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	34	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 12 OF 14

608495(XX)PAVMTMRKG.DWG Plotted on 7-Jan-2022 1:27 PM

N
NAD 83

PROP PEDESTRIAN REFUGE ISLAND
(SEE CONSTRUCTION DETAILS)
MAP 115 PARCEL 7
NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 12725 PG 179
APPROXIMATE PROPERTY LINE
EXIST WETLAND
WOODED AREA
12" YELLOW GORE LINE
45° AT 10' SPACING ON CENTER (TYP.)
PROP RRFB W/
W11-2
W16-7p
PROP 5'x5' CONCRETE LANDING PAD
PROP R4-7
PROP "SHARK TEETH" YIELD LINE (TYP)
TOP WETLAND BUFFER
TOWN OF LEXINGTON
TOWN OF LINCOLN
ENTERING LINCOLN
W11-2
W16-9p
AHEAD
LOCATION LINE OF 1898 ST.HWY. LO. 291
LOCATION LINE OF 1897 ST.HWY. LO. 186
REFLECTOR
STN WALL
GRASS
10.50'
11.00'
2.34'
2.57'
6" SWL
6" DBYL
NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 186)
CONTINUED FROM SHEET NO. 33
CONTINUED BELOW
181+95.66
181
180
179
20
19
UPL NO#
OHW
EXIST WETLAND
PAVE LIMIT
STOP
SBE
STL
CONSTRUCTION SIGN
30
N: 2988497.746'
E: 717965.123'
EL: 204.870'
MMAG
PROP RRFB W/
W11-2
W16-7p
PROP 5'x5' CONCRETE LANDING PAD
PROP R4-7
W11-2
W16-9p
AHEAD
SPEED LIMIT 40
PASSING ZONE
LSL
20+34.00 1897 MAIN BL =
181+95.48 1898 MAIN BL
CONSTRUCTION SIGN
MINUTE MAN
ACCESS DRIVE
RIGHT-OF-WAY EASEMENT
PLAN 175 OF 1982
APPROXIMATE PROPERTY LINE
WOODED AREA
UPL S1
UPL 238
UPL 57236
UPL 57237
UPL 57234
UPL 57235
UPL 232
UPL 231
UPL 57230
LOCATION LINE OF 1898 ST.HWY. LO. 291
1.97'
2.54'
2.69'
505.92'
S79°54'02"E
PI
+86.81
VGC
RT 2A EAST
RT 2A WEST
BENCHMARK: 4

MAP 52 PARCEL 10
115 MASSACHUSETTS AVE
N/F
USA & PARK NATIONAL
BK 12310 PG 534
BENCHMARK: 5 XCUT ON HYD BOMO – OUT OF
EL=206.40'
31
N: 2988444.720'
E: 718402.619'
EL: 205.660'
MMAG
CONTINUED ABOVE
LOCATION LINE OF 1946 ST.HWY. LO. 3460
WOOD FENCE
DSK MASSDPW STA 54A6
S.H.L.O.
NORTH GREAT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 291)
179+92.73
179
178
177
176
175
174
173
11.00'
2.26'
1.87'
2.69'
AIRPORT ROAD
(PUBLIC – ST.HWY LO. 3460)
PAVE LIMIT
6" SWL
6" DBYL
PROP SPLITTER ISLAND
(SEE CONSTRUCTION DETAILS)
12" YELLOW GORE LINE
45° AT 10' SPACING ON CENTER (TYP.)
PROP R4-7
STOP
SIGN R&S
RT 2A WEST
SPEED LIMIT 40
SPEED LIMIT 35
GRAVEL
CONTINUED ON SHEET NO. 35
REDUCE SPEED LIMIT
EAST 2A
REFLECTOR
WOODED AREA
GRASS

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	35	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 13 OF 14

608495(XX)PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:28 PM

MARRETT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 291)

MARRETT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 291)

OLD MASSACHUSETTS AVE
(PUBLIC – 1930 COUNTY LO)

NAD 83

N

LOCATION LINE OF 1996 ST.HWY. LO. NO. 5571
N48°45'10"W (1946)=N48°45'47"W (NAD 83)

LOCATION LINE OF 1946 ST.HWY. LO. 3460

LOCATION LINE OF 1898 ST.HWY. LO. 291

LOCATION LINE OF 1930 CT.HWY. LO.

MAIN BL "A" OF 1996 ST.HWY. LO. NO. 5571
N48°45'10"W (1946)=N48°45'47"W (NAD 83)

1511.57'
N48°45'47"W

1511.57
S48°45'47"E

489.75'
S74°41'17"E

1358.96'
S44°46'47"E

169+61.85 1897 MAIN BL – LO. 186 =
169+15.53 1946 MAIN BL – LO. 3460

167+97.06 1897 MAIN BL – LO. 186 =
83+81.67 1930 MAIN BL – CO. LO.

1897 MAIN BL – LO. 186 =
1930 MAIN BL – CO. LO.

166+07.26

N74°41'17"W
115.94'

PT
165.81

PC
+91.07

PT
+97.06

PI
+39
+88.81

PC
+08
+12.12

Δ=29°54'28"
R=354.30'

L=534.52'
R=622.25'
Δ=49°13'02"

10.50'
0.50'
11.00'
4.63'
6.82'
11.00'
0.50'
10.50'
0.50'
11'
11'
2.51'
1.89'

6" SWL
6" DBYL
6" DWELx
3' LINE W/ 9' GAP

PROP R4-7
PROP SPLITTER ISLAND
(SEE CONSTRUCTION DETAILS)
12" YELLOW GORE LINE
45° AT 10' SPACING ON CENTER (TYP.)

PAVE LIMIT

CONTINUED FROM SHEET NO. 34
CONTINUED BELOW
CONTINUED ABOVE
CONTINUED ON SHEET NO. 36

MAP 52 PARCEL 7A
3058 MASS AVE
N/F
USA
BK 12749 PG 492

MAP 52 PARCEL 6
3038 NORTH GREAT ROAD
N/F
UNITED STATES OF AMERICA
BK 12704 PG 77

MAP 52 PARCEL 7A
3058 MASS AVE
N/F
USA
BK 12749 PG 492

MAP 52 PARCEL 14A
MASS AVE
N/F
ATIONAL PARK
779 PG 581

MAP 52 PARCEL 23A
MASS AVE
N/F
USA NATIONAL PARK
BK NA PG NA

MAP 52 PARCEL 4A
MARRETT ROAD
N/F
BOSTON EDISON COMPANY
BK 8123 PG 302

MAP /52 PARCEL 3B
MARRETT ROAD
N/F
USA NATIONAL PARK
BK 11389 PG 500

33
N: 2988254.850'
E: 719324.374'
EL: 195.470'
PM ON MHT RIM

34
N: 2988046.442'
E: 719666.046'
EL: 194.150'
MREB

BENCHMARK: 3 MAG IN UPL 57/223 1' ABOVE GRADE
EL=195.56'

THE BATTLE ROAD
APRIL 19, 1775

NEW VISITOR CENTER ENTRY

RT 2A EAST
RT 2A WEST

DO NOT PASS

INTERSECTION AHEAD

REDUCE SPEED

PEDESTRIANS CROSSING

DO NOT CROSS

100' WETLAND BUFFER

EXIST WETLAND

APPROXIMATE PROPERTY LINE

STN WALL

WOOD FENCE

WOODED AREA

BRUSH

BRUSH & GRASS

GRASS

GRAVEL

TRAIL

1" X2.5" POST

MM 94.6

MM 94.8

NO SIGN

STOP

0 20 50 100
SCALE: 1" = 20'

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	36	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING PLANS
SHEET 14 OF 14

608495(XX)PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:28 PM

MAP 52 PARCEL 23A
MASS AVE
N/F
USA NATIONAL PARK
BK NA PG NA

NAD 83

MASSACHUSETTS AVE (ROUTE 2A) (1999 ST. HWY. ALT. 7012)

MAP 51 PARCEL 56A
72 MARRETT ROAD
N/F
LIXI HOSPITAL LINCOLN
BK 66982 PG 593

LOCATION LINE OF 1999 HWY ALT. 7012

MARRETT ROAD - ROUTE 2A
(PUBLIC – ST.HWY LO. 291)

CONTINUED FROM SHEET NO. 35

CONTINUED BELOW

158+06.65 1897 MAIN BL – LO. 188 =
73+80.35 1950 MAIN BL – CO. LO.

6" SWL
6" DBYL
6" DOTTED WHITE LINE EXTENSION (DWLEx)
3' LINES W/ 9' GAPS (TYP)

MATCH EXIST
PAVE LIMIT
CRANBERRY HILL

BENCHMARK: 2 MAG IN UPL 57/223 1' ABOVE GRADE
EL=121.78'

MAP 52 PARCEL 2
760 MARRETT ROAD
N/F
USA NATIONAL PARK
BK 10399 PG 249

MAP 52 PARCEL 1B
MARRETT ROAD
N/F
MINUTEMAN REG VOC TECH
BK 12534 PG 36

MAP 52 PARCEL 1C
750 MARRETT ROAD
N/F
CRANBERRY ONE LLC
BK 45215 PG 456

BENCHMARK: 1 CHISELED SQ IN TRAFFIC LIGHT BASE
EL=199.24'

CONTINUED ABOVE

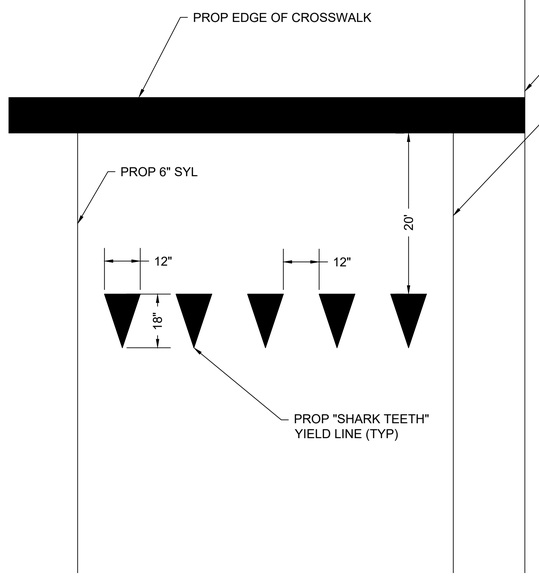
PROJECT END
STA 153+81.73
N2987234.1712
E720444.0933

MAP 52 PARCEL 1C
750 MARRETT ROAD
N/F
CRANBERRY ONE LLC
BK 45215 PG 456

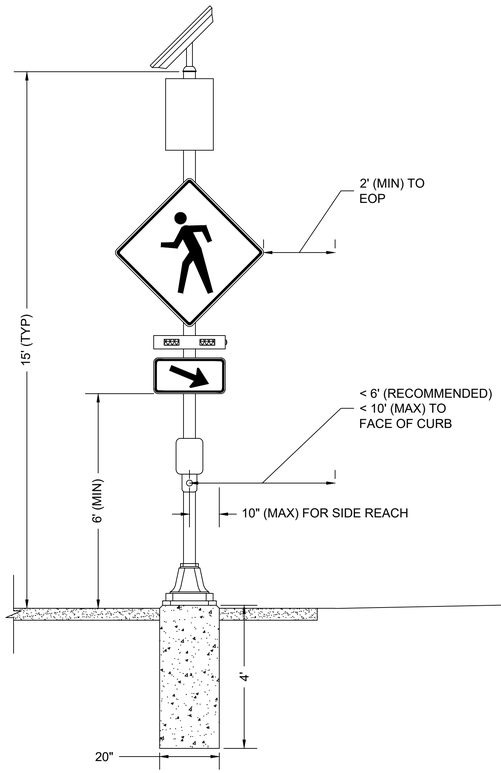
FORBES ROAD
(PUBLIC – LCC 15874P)

0 20 50 100
SCALE: 1" = 20'

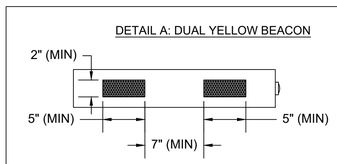
IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER			
R4-7	24	30		SEE	LATEST	MUTCD	12	WHITE	BLACK	BLACK	P-5 12	5	60
W11-2	30	30		SEE	LATEST	MUTCD	24	YELLOW	BLACK	BLACK	P-5 8	6.25	150
W16-7pL	24	12		SEE	LATEST	MUTCD	8	YELLOW	BLACK	BLACK	ATTACHED TO W11-2	2	16
W16-7pR	24	12		SEE	LATEST	MUTCD	8	YELLOW	BLACK	BLACK	ATTACHED TO W11-2	2	16
W16-9p	24	12		SEE	LATEST	MUTCD	8	YELLOW	BLACK	BLACK	ATTACHED TO W11-2	2	16

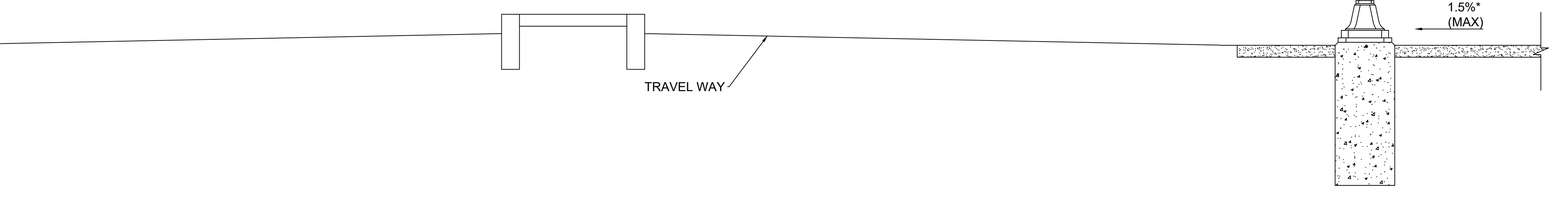


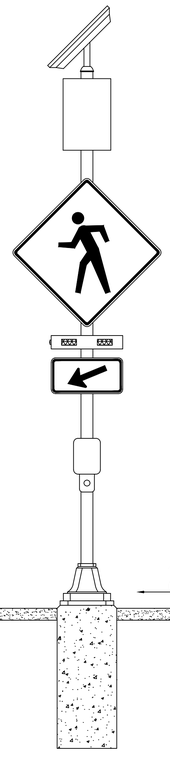
"SHARK TEETH" YIELD LINE AT MID-BLOCK CROSSINGS
NTS



DETAIL A: DUAL YELLOW BEACON







NOTES:

1. CROSSWALK AND ADA-COMPLIANT RAMPS NOT SHOWN. SEE PLANS FOR LOCATIONS.
2. REFER TO THE SPECIAL PROVISIONS FOR SIGN DIMENSIONS.
3. ALL CONDUIT, PULL BOXES, SERVICE CONNECTIONS, AND EQUIPMENT GROUNDING REQUIRED FOR AC POWER IS NOT SHOWN IN THIS DETAIL AND SHALL BE PAID FOR SEPARATELY UNDER THEIR RESPECTIVE PAY ITEMS.
4. ACCESS TO ALL PEDESTRIAN ACTUATED CONTROLS SHALL BE ADA/AAB COMPLIANT.
5. *0.5% CONSTRUCTION TOLERANCE FOR CROSS-SLOPE.

MAJOR ITEMS LIST

- 2 CEMENT CONCRETE FOUNDATIONS PER 812.30.1
- 2 15' TRAFFIC SIGNAL POSTS & PEDESTALS (FEDERAL STANDARD 595 COLOR 10233 - COCOA BROWN / NATIONAL PARK SERVICE
- 2 APS PUSHBUTTON SYSTEMS
- 4 DUAL RECTANGULAR YELLOW LED BEACONS IN NEMA ENCLOSURES
- 2 R10-25 SIGNS
- 4 W11-2 SIGNS
- 2 W16-7PR SIGNS
- 2 W16-7PL SIGNS
- 2 SOLAR PANEL SYSTEMS (NOT REQUIRED FOR AC POWER)
- 2 NEMA ENCLOSURES FOR ALL COMPONENTS NEEDED TO MEET FUNCTIONAL REQUIREMENTS PER SPECIAL PROVISIONS
- 2 BATTERY SYSTEMS (NOT REQUIRED FOR AC POWER)

PLUS ALL MOUNTING AND SUPPORTING HARDWARE AND WIRING NECESSARY TO COMPLETE A WORKING SYSTEM.

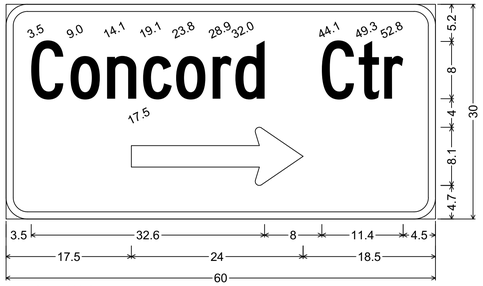
LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	37	46
PROJECT FILE NO.	608495		

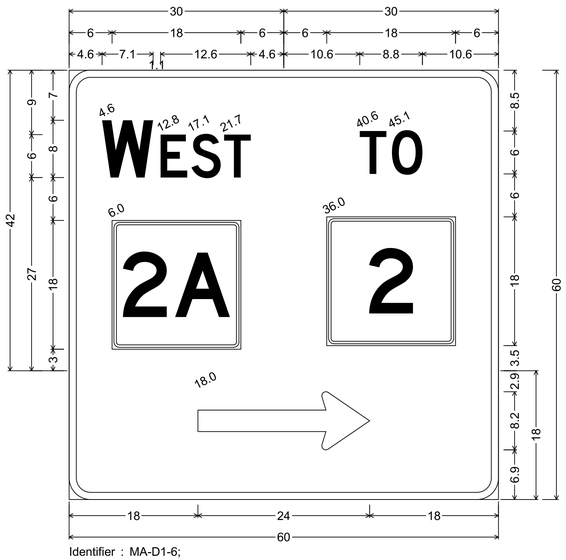
SIGN AND PAVEMENT MARKING DETAILS

608495(XX)PAVNTMRKG.DWG Plotted on 7-Jan-2022 1:30 PM

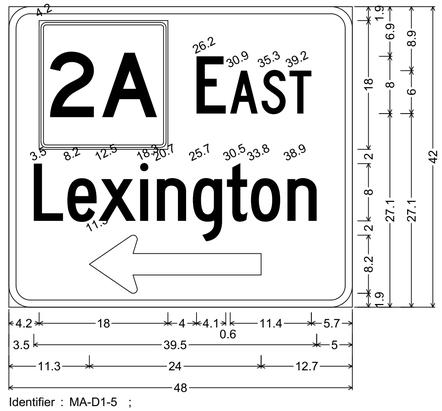
608495_2ASIGNS (1).DWG Plotted on 7-Jan-2022 1:30 PM



Identifier : MA-D1-4 ;
Job Number : 608495;
Supports : 2 - P5 posts;
3.0" Radius, 1.0" Border, White on Green;
[Concord Ctr] C 2K 85% spacing;
Standard Arrow Custom 24.0" X 8.1" 0°;

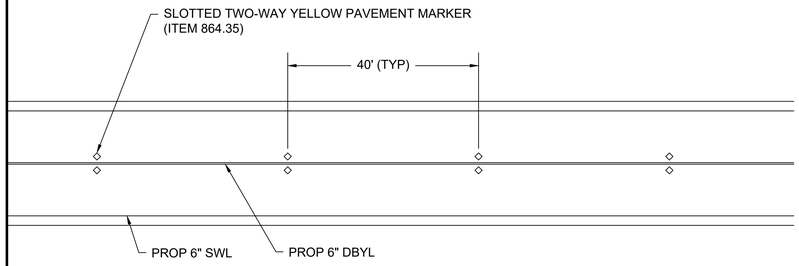


Identifier : MA-D1-6;
Job Number : 608495;
3.0" Radius, 1.0" Border, White on Green;
[WEST] D 2K; State Highway 2A M1-5;
Job Number : 608495;
3.0" Radius, 1.0" Border, White on Green;
[TO] D 2K; State Highway 2 M1-5;
Job Number : 608495;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 24.0" X 8.1" 0°;

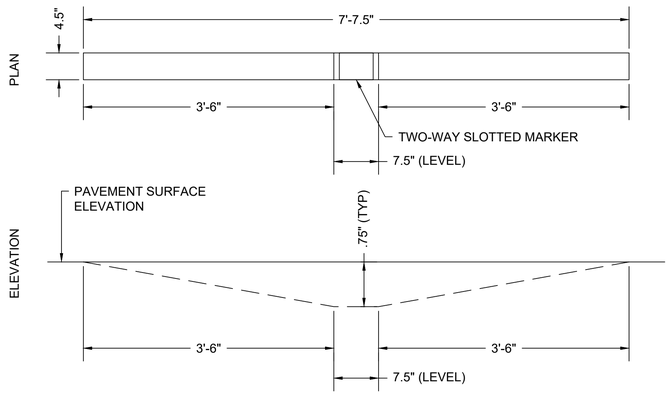


Identifier : MA-D1-5 ;
Job Number : 608495;
Supports : Mount with MA-D1-5;
3.0" Radius, 1.0" Border, White on Green;
State Highway 2A M1-5; [EAST] C 2K;
[Lexington] C 2K 85% spacing;
Standard Arrow Custom 24.0" X 8.1" 180°;

NOTE:
SEE TYPICAL SECTIONS FOR
LANE AND SHOULDER WIDTHS



SLOTTED TWO-WAY PAVEMENT MARKER
DETAIL (2 LANE UNDIVIDED HIGHWAY)
NTS



SLOTTED TWO-WAY PAVEMENT MARKER
NTS

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	39	46
PROJECT FILE NO.	608495		

SIGN AND PAVEMENT MARKING DETAILS

608495(XX)PAVNTMRKG.DWG Plotted on 7-Jan-2022 2:12 PM

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	40	46
PROJECT FILE NO.	608495		

TRAFFIC MANAGEMENT PLANS
ADVANCED SIGNAGE PLAN

Plotted on 7-Jan-2022 2:12 PM
608495(XX)TR1-ADVWARSGNPLN.DWG

N
NAD 83

CONCORD

BEGIN PROJECT (RTE 2A)
STA. 0+00 (TOWN OF CONCORD) =
STA. 80+99.42 (TOWN OF LINCOLN)
MEET EXISTING

2A

CAMBRIDGE TURNPIPE
MA-R2-10e
500 FT
G20-1(ROAD WORK NEXT 3 MILES)
MA-R2-10a
W20-1(AHEAD)
2
1,500 FT
375 FT
375 FT
W20-1(750 FT)
MA-R2-10a
W20-1(1,500 FT)

LEXINGTON ROAD
MA-R2-10e
W20-1(AHEAD)
MA-R2-10a

BROOKS ROAD
MA-R2-10e
MA-R2-10a
W20-1(AHEAD)

LINCOLN

OLD BEDFORD ROAD
W20-1(AHEAD)
MA-R2-10a
MA-R2-10e

SUUNYSIDE LANE
MA-R2-10e
MA-R2-10a
W20-1(AHEAD)

BEDFORD LANE
W20-1(AHEAD)
MA-R2-10a
MA-R2-10e

BATTLE ROAD TRAIL
W20-1(AHEAD)
MA-R2-10a
MA-R2-10e

HANSCROM DRIVE
W20-1(AHEAD)
MA-R2-10a
MA-R2-10e

BROOKS ROAD
MA-R2-10e
MA-R2-10a
W20-1(AHEAD)

CONTINUED BELOW

CONTINUED ABOVE

MA-R2-10a
HANSCROM DRIVE
W20-1(AHEAD)
MA-R2-10a
MA-R2-10e

BROOKS ROAD
MA-R2-10e
MA-R2-10a
W20-1(AHEAD)

2A

MILL STREET
MA-R2-10e
MA-R2-10a
W20-1(AHEAD)

AIRPORT ROAD
W20-1(AHEAD)
MA-R2-10a
MA-R2-10e

LINCOLN

LEXINGTON

END PROJECT (RTE 2A)
STA. 153+81.73
(TOWN OF LEXINGTON)
MEET EXISTING

N
NAD 83

OLD MASSACHUSETTS AVENUE
MA-R2-10a
W20-1(AHEAD)
MA-R2-10e

MASSACHUSETTS AVENUE
MA-R2-10a
W20-1(AHEAD)
MA-R2-10e
MA-R2-10a
W20-1(AHEAD)
G20-1(ROAD WORK NEXT 3 MILES)
W20-1 (ROAD WORK AHEAD)
MA-R2-10a
MA-R2-10e
500 FT
375 FT
1,500 FT
375 FT
MA-R2-10a
MA-R2-10e
W20-1(1,500 FT)

95

0 350 700 1,400
SCALE: 1" = 350'

NOTES:

1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
2. ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
3. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
4. TEMPORARY CONSTRUCTION SIGNING, BARRICADES, AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
5. SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
6. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
7. THE FIRST TEN PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH TYPE A SEQUENTIAL LIGHTS.
8. THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
9. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
10. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
11. MINIMUM LANE WIDTH IS TO BE 11 FEET (3.3m) UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
12. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.

LEGEND:

- REFLECTORIZED PLASTIC DRUM OR 36" CONE
- P/F POLICE/FLAGGER DETAIL
- TYPE III BARRICADE
- CHANGEABLE MESSAGE SIGN
- ARROW BOARD
- WORK ZONE
- DIRECTION OF TRAFFIC
- IMPACT ATTENUATOR
- MEDIAN BARRIER
- MEDIAN BARRIER WITH WARNING LIGHTS
- WORK VEHICLE
- TRUCK MOUNTED ATTENUATOR
- TRAFFIC OR PEDESTRIAN SIGNAL
- SIGN

THE IDEAL CAPACITY OF A MAJOR HIGHWAY IS GENERALLY CONSIDERED TO BE 1900 PASSENGER CARS PER HOUR PER LANE (PCPHPL). IN WORK ZONES ON A MULTI-LANE DIVIDED HIGHWAY, THE FOLLOWING VOLUME GUIDELINES HAVE BEEN SUGGESTED:

MEASURED AVERAGE WORK ZONE CAPACITIES

NUMBER OF LANES		NUMBER OF STUDIES	AVERAGE CAPACITY	
NORMAL (EXISTING)	OPEN (TO TRAFFIC)		VPH	VPHPL
3	1	7	1,170	1,170
2	1	8	1,340	1,340
5	2	8	2,740	1,370
4	2	4	2,960	1,480
3	2	9	2,980	1,490
4	3	4	4,560	1,520

Source: Dudek, C., Notes on Work Zone Capacity and Level of Service. Texas Transportation Institute, Texas A&M University, College Station, Texas (1984)

BY OBTAINING HOURLY TRAFFIC COUNTS FOR A PARTICULAR ROADWAY (WITH A MINIMUM OF A 48-HOUR AUTOMATIC TRAFFIC RECORDER (ATR) COUNT), THIS WILL HELP TO DETERMINE AT WHAT TIMES OF THE DAY OR NIGHT A CERTAIN NUMBER OF LANES MAY BE CLOSED.

SUGGESTED WORK ZONE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS **		
	A	B	C
LOCAL OR LOW VOLUME ROADWAYS*	350	350	350
MOST OTHER ROADWAYS*	500	500	500
FREEWAYS AND EXPRESSWAYS*	1,000	1,500	2,640

* ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.

** DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

MA-R2-10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA-R2-10a, MA-R2-10e AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

Based on: Table 6C-1 MUTCD LATEST EDITION

STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

SPEED* (mph)	DISTANCE (ft)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

*POSTED SPEED, OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

THESE VALUES MAY BE USED TO DETERMINE THE LENGTH OF LONGITUDINAL BUFFER SPACES.

THE DISTANCES IN THE ABOVE CHART REPRESENT THE MINIMAL VALUES FOR BUFFER SPACING.

Source: Table 6C-2 MUTCD LATEST EDITION

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	41	46
PROJECT FILE NO.	608495		

TRAFFIC MANAGEMENT PLANS
TYPICAL SETUP DETAILS

CONVENTIONAL ROADWAY- A STREET OR HIGHWAY OTHER THAN A LOW-VOLUME ROAD, EXPRESSWAY, OR FREEWAY.

EXPRESSWAY- A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.

FREEWAY- A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS.

LOW-VOLUME ROAD- A FACILITY LYING OUTSIDE OF BUILT-UP AREAS OF CITIES, TOWNS, AND COMMUNITIES, AND IT SHALL HAVE A TRAFFIC VOLUME OF LESS THAN 400 AADT. IT SHALL NOT BE A FREEWAY, EXPRESSWAY, INTERCHANGE RAMP, FREEWAY SERVICE ROAD OR A ROAD ON A DESIGNATED STATE HIGHWAY SYSTEM.

Source: MUTCD LATEST EDITION

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH (L)*
MERGING TAPER	AT LEAST L
SHIFTING TAPER	AT LEAST 0.5L
SHOULDER TAPER	AT LEAST 0.33L
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FT MIN. 100 FT MAX.
DOWNSTREAM TAPER	50 FT MIN. 100 FT MAX. PER LANE

Source: Table 6C-3 MUTCD LATEST EDITION

FORMULAS FOR DETERMINING TAPER LENGTHS

SPEED LIMIT (S)	TAPER LENGTH (L) FEET
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	$L = WS$

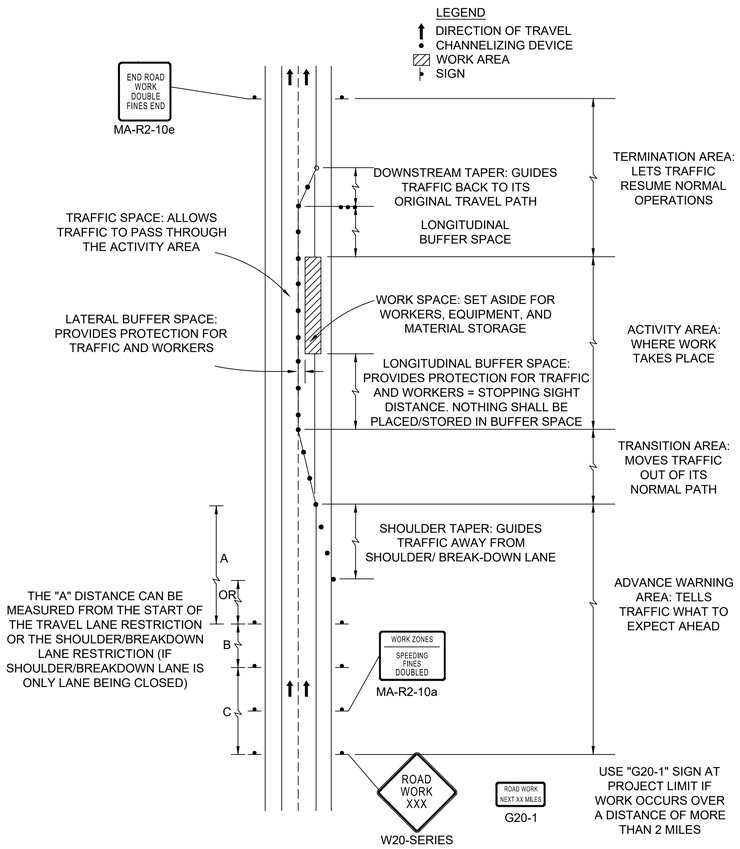
WHERE: L = TAPER LENGTH IN FEET

W = WIDTH OF OFFSET IN FEET

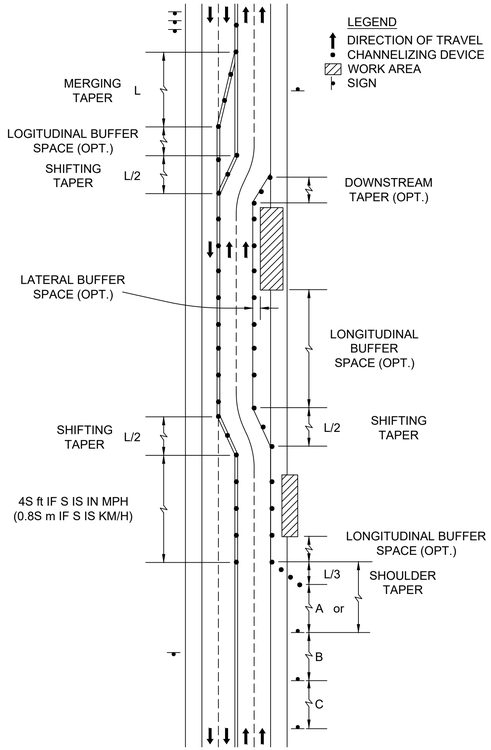
S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICAPATED OPERATING SPEED IN MPH

Source: Table 6C-4 MUTCD LATEST EDITION

608495(25%-75%)TRAFFICMANAGEMENTPLANS.DWG Plotted on 7-Jan-2022 2:12 PM



BLOCK NAME: TR–GEN–4
DESCRIPTION: COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL (TTC) ZONE
LAYER: GE–TEXT

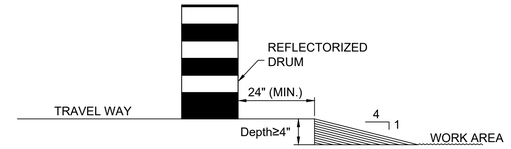


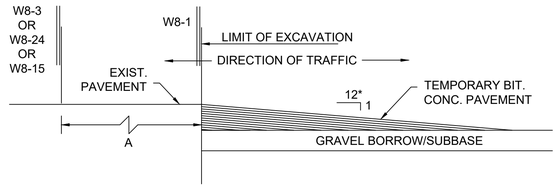
BLOCK NAME: TR–GEN–5
DESCRIPTION: TYPES OF TAPERS AND BUFFER SPACES
LAYER: GE–TEXT

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	42	46
PROJECT FILE NO.	608495		

TRAFFIC MANAGEMENT PLANS
TYPICAL SETUP DETAILS





* - INCREASE SLOPE RATIO FOR HIGHER SPEEDS

BLOCK NAME: TR–GEN–6
DESCRIPTION: LATERAL AND LONGITUDINAL DROP–OFF DETAILS
LAYER: GE–TEXT

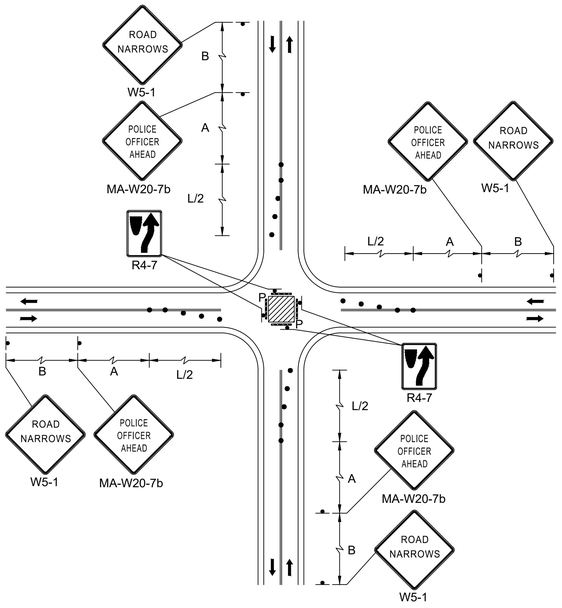
608495(25%-75%)TRAFFICMANAGEMENTPLANS.DWG Plotted on 7-Jan-2022 2:12 PM

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

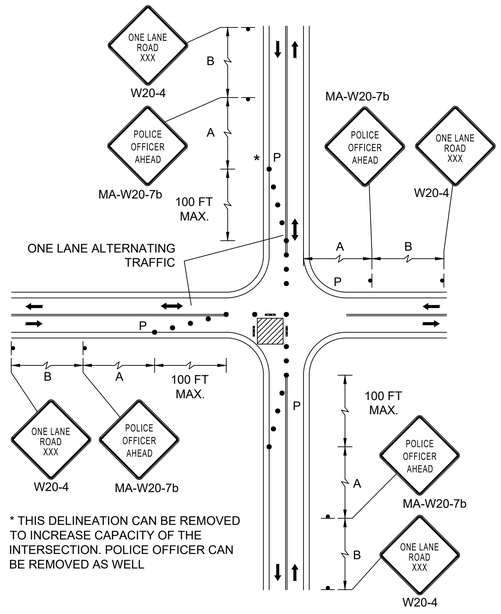
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	43	46
PROJECT FILE NO.	608495		

TRAFFIC MANAGEMENT PLANS
TYPICAL SETUP DETAILS

608495(25%-75%)TRAFFICMANAGEMENTPLANS.DWG Plotted on 7-Jan-2022 2:12 PM

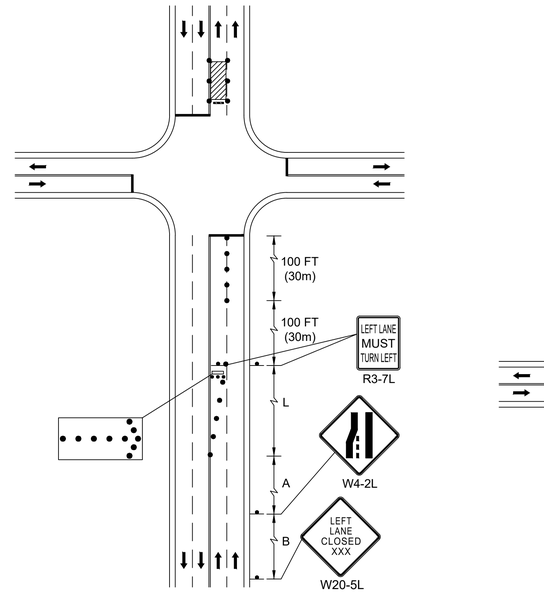


BLOCK NAME: TR–INT–1
DESCRIPTION: SINGLE LANE APPROACH CENTER CLOSURE
LAYER: GE–TEXT

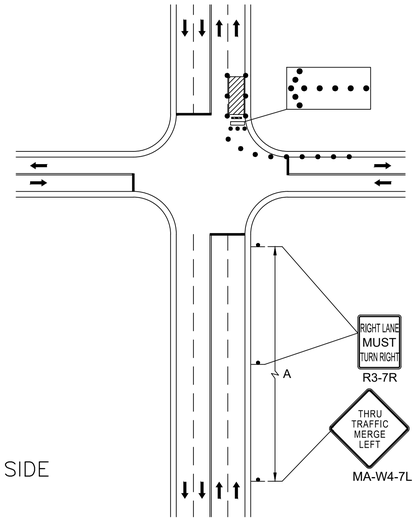


* THIS DELINEATION CAN BE REMOVED TO INCREASE CAPACITY OF THE INTERSECTION. POLICE OFFICER CAN BE REMOVED AS WELL

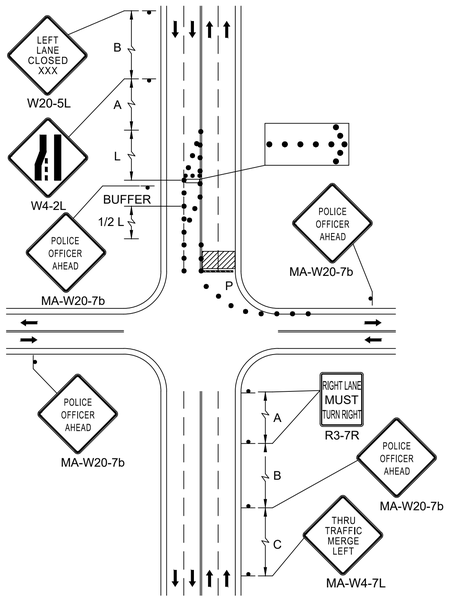
BLOCK NAME: TR–INT–2
DESCRIPTION: SINGLE LANE APPROACH ONE QUADRANT CLOSURE
LAYER: GE–TEXT



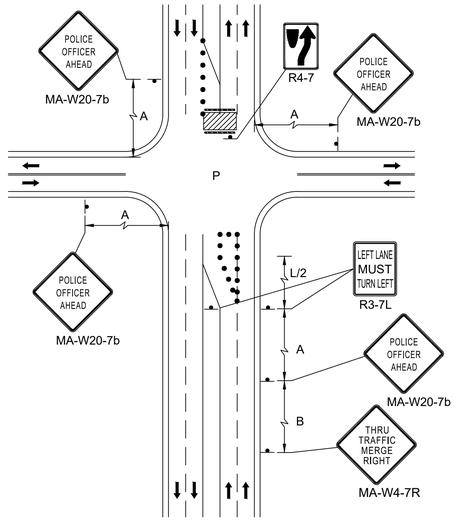
BLOCK NAME: TR–INT–3
DESCRIPTION: DOUBLE LANE APPROACH FAR SIDE CLOSURE INSIDE LANE
LAYER: GE–TEXT



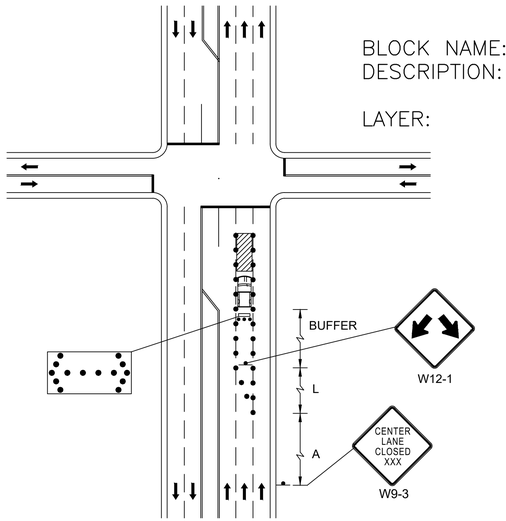
BLOCK NAME: TR–INT–4
DESCRIPTION: DOUBLE LANE APPROACH FAR SIDE CLOSURE RIGHT LANE
LAYER: GE–TEXT



BLOCK NAME: TR–INT–5
DESCRIPTION: DOUBLE LANE APPROACH HALF ROAD CLOSURE
LAYER: GE–TEXT



BLOCK NAME: TR–INT–6
DESCRIPTION: MULTI–LANE APPROACH MULTIPLE LANE CLOSURE
LAYER: GE–TEXT



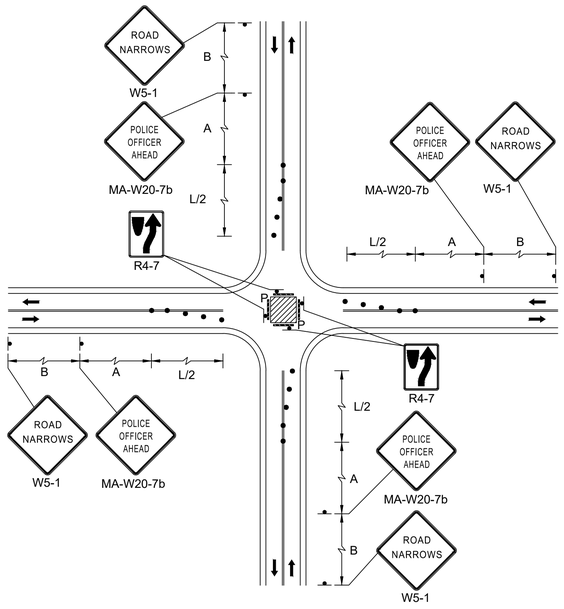
BLOCK NAME: TR–INT–7
DESCRIPTION: MULTI–LANE APPROACH NEAR SIDE CLOSURE
LAYER: GE–TEXT

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

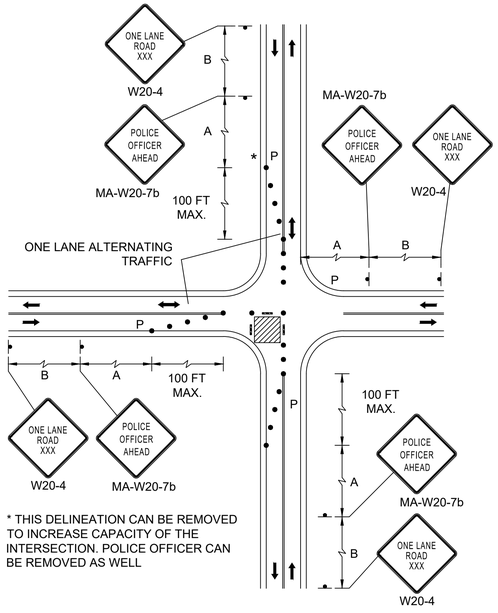
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	44	46
PROJECT FILE NO.	608495		

TRAFFIC MANAGEMENT PLANS
TYPICAL SETUP DETAILS

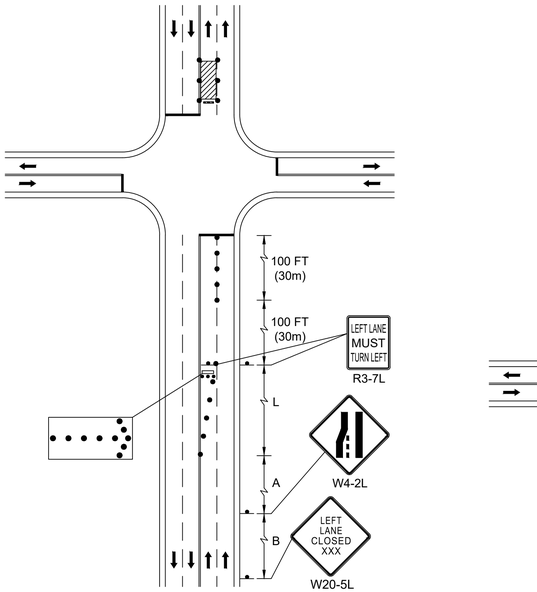
608495(25%-75%)TRAFFICMANAGEMENTPLANS.DWG Plotted on 7-Jan-2022 2:12 PM



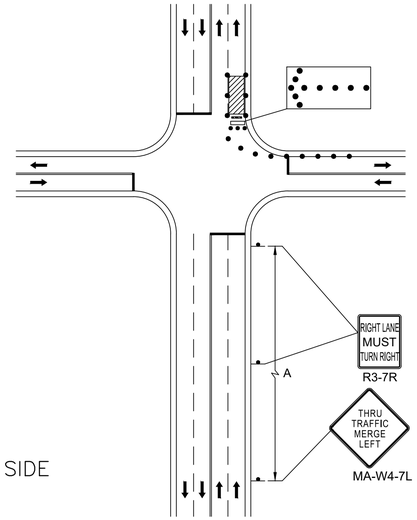
BLOCK NAME: TR–INT–1
DESCRIPTION: SINGLE LANE APPROACH CENTER CLOSURE
LAYER: GE–TEXT

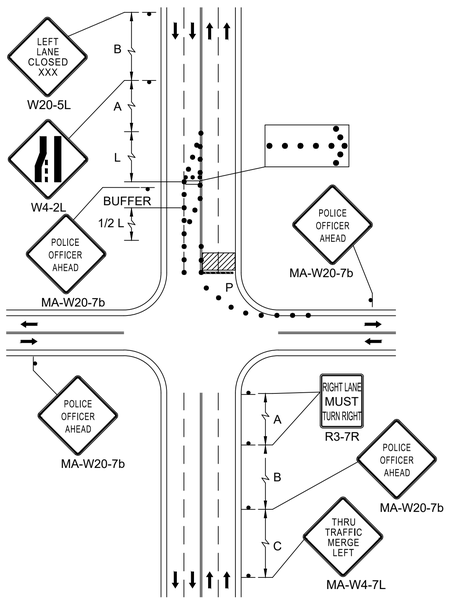


BLOCK NAME: TR–INT–2
DESCRIPTION: SINGLE LANE APPROACH ONE QUADRANT CLOSURE
LAYER: GE–TEXT

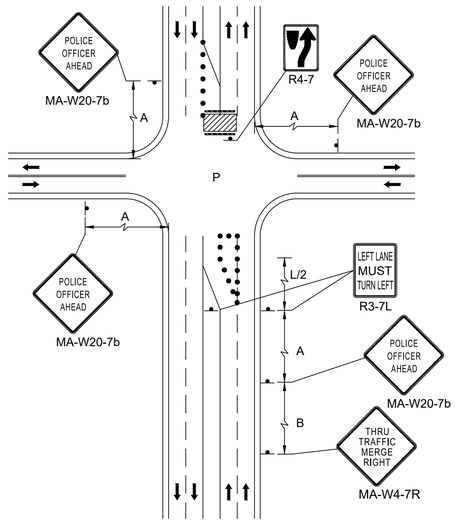


BLOCK NAME: TR–INT–3
DESCRIPTION: DOUBLE LANE APPROACH FAR SIDE CLOSURE INSIDE LANE
LAYER: GE–TEXT

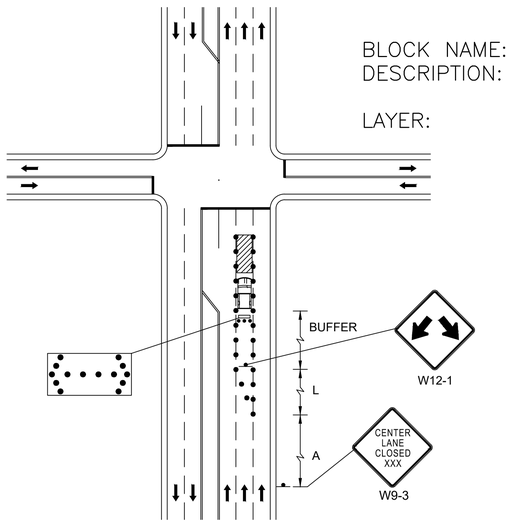




BLOCK NAME: TR–INT–5
DESCRIPTION: DOUBLE LANE APPROACH HALF ROAD CLOSURE
LAYER: GE–TEXT



BLOCK NAME: TR–INT–6
DESCRIPTION: MULTI–LANE APPROACH MULTIPLE LANE CLOSURE
LAYER: GE–TEXT



BLOCK NAME: TR–INT–4
DESCRIPTION: DOUBLE LANE APPROACH FAR SIDE CLOSURE RIGHT LANE
LAYER: GE–TEXT

BLOCK NAME: TR–INT–7
DESCRIPTION: MULTI–LANE APPROACH NEAR SIDE CLOSURE
LAYER: GE–TEXT

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ROUTE 2A

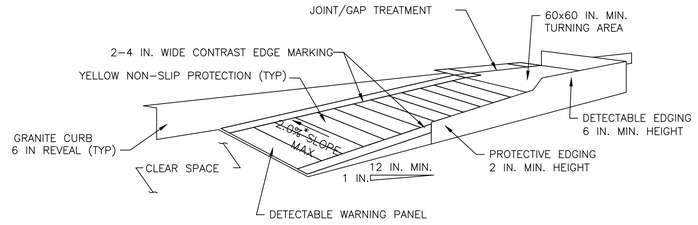
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	45	46
PROJECT FILE NO.	608495		

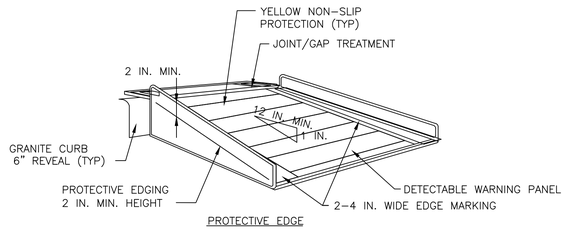
TRAFFIC MANAGEMENT PLANS
TYPICAL SETUP DETAILS

608495(25%-75%)TRAFFICMANAGEMENTPLANS.DWG Plotted on 7-Jan-2022 2:12 PM

NOTES:

1. CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
2. PROTECTIVE EDGING WITH A 2 IN. MINIMUM HEIGHT SHALL BE INSTALLED WHEN THE CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6 IN. OR GREATER OR HAS A SIDE APRON SLOP STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN THE CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3 IN. OR MORE.
3. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. THE CURB RAMP WALKWAY AND LANDING AREA SURFACE SHALL BE OF A SOLID CONTINUOUS CONTRASTING COLOR ABUTTING UP TO THE EXISTING SIDEWALK.
5. CURB RAMPS AND LANDING SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
6. CLEAR SPACE OF 48X48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
7. WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
9. CHANGES BETWEEN SURFACE HEIGHTS SHOULD NOT EXCEED 0.5 IN. LATERAL EDGES SHOULD BE VERTICAL UP TO 0.25 IN. HIGH, AND BEVELED AT 1:2 BETWEEN 0.25 IN. AND 0.5 IN. HEIGHT.
10. IF A TEMPORARY PEDESTRIAN RAMP LEADS TO A CROSSWALK, THEN A DETECTABLE WARNING PANEL PAD MUST BE ADHERED TO THE BASE OF THE RAMP. IF IT LEADS TO A PROTECTED PEDESTRIAN BYPASS THAT DOES NOT CONFLICT WITH VEHICULAR TRAFFIC, THEN A PAD SHALL NOT BE INSTALLED ON THE RAMP.





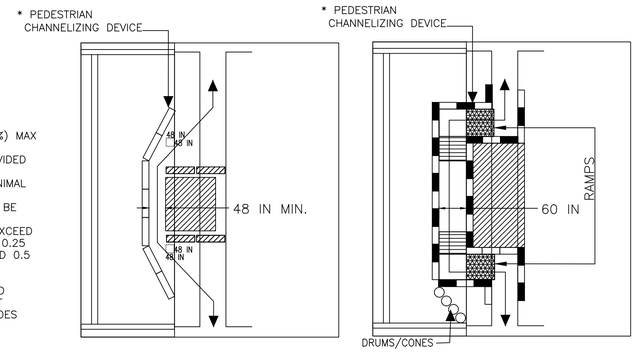
PROTECTIVE EDGE

PED-1
PEDESTRIAN DETAILS

* – LANDING AREA USED TO OVERLAP NON-ADA COMPLAINT SURFACES.

** – DETECTABLE EDGE REMOVED IF A CONTINUOUS SIDEWALK.

*** –60 IN IF AN OBSTRUCTION IS AT BACK OF SIDEWALK

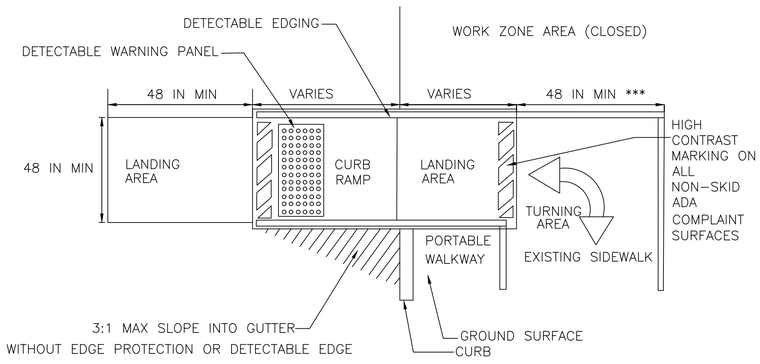


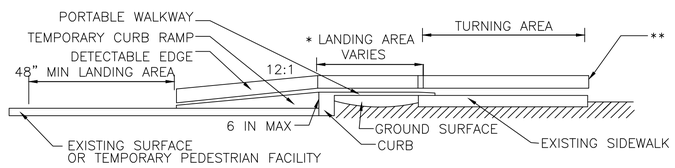
- Detail I is considered an example of a short term closure and pedestrian assistance (personal) to navigate around the closure/work area could be considered as an option in place of providing ADA/AAB devices. Detail II is considered an example of a long term closure that would require additional ADA/AAB complaint devices. If a sidewalk closure or restriction lasts for more than one (1) work shift then ADA/AAB compliance shall be followed.
- When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, temporary facilities shall be provided and they shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility.
- A pedestrian channelizing device that is detectable by a person with a visual disability traveling with the aid of a long cane shall be placed across the full width of the closed sidewalk.
- When used, temporary ramps shall comply with Americans with Disabilities Act (see Figures Ped-1 & Ped-2).
- The alternate pathway should have a smooth continuous hard surface for the entire length of the temporary pedestrian facility.
- The protective requirements of a TTC situation have priority in determining the need for temporary traffic barriers and their use in this situation should be based on engineering judgment.
- Controls only for pedestrian traffic are shown; vehicular traffic should be handled as shown elsewhere. These details are used in conjonction with the proposal lane closure details and during construction staging, as determined by the Engineer.
- Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.
- Existing audible devices no longer applicable due to construction shall be disabled.

AUDIBLE DEVICES

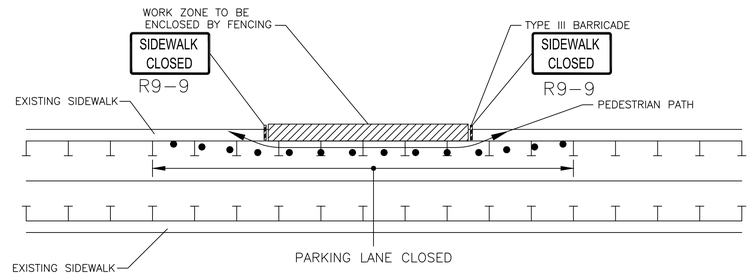
For long term sidewalk closures (at a minimum overnight) a form of speech messaging for pedestrians with visual disabilities shall be provided. Audible information devices such as detectable barriers or barricades and other passive pedestrian activation (motion activated) devices should be considered for these cases. These audible devices can be mountable or stand alone.

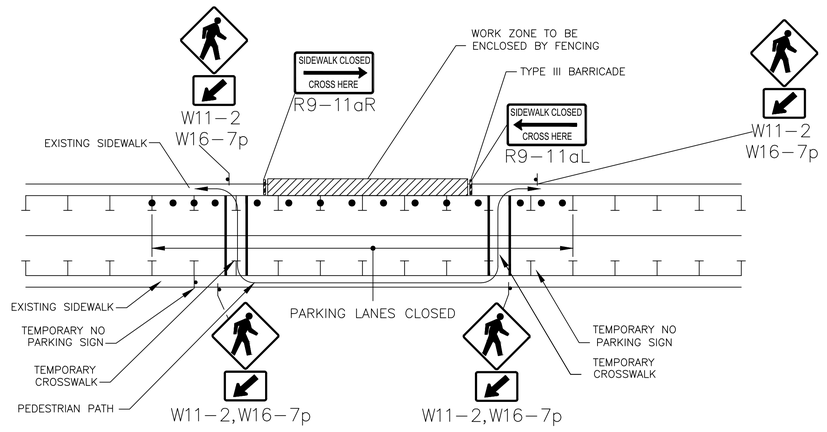
PED-3
PEDESTRIAN DETAILS





TEMPORARY CURB RAMP PED-2
PEDESTRIAN DETAILS





NOTES

1. ADDITIONAL ADVANCE WARNING MAY BE NECESSARY.
2. CONTROLS ONLY FOR PEDESTRIAN TRAFFIC ARE SHOWN. VEHICULAR TRAFFIC SHOULD BE HANDLED AS SHOWN ELSEWHERE.
3. STREET LIGHTING SHOULD BE CONSIDERED WHEN LOCATING CONTROL DEVICES.
4. IF THE WORK ZONE DOES NOT PERMIT PEDESTRIANS TO TRAVEL ADJACENT TO IT AS SHOWN IN PEDESTRIAN BYPASS TYPE I, TEMPORARY CROSSWALKS WITH APPROPRIATE SIGNS SHOULD BE INSTALLED TO CROSS PEDESTRIANS TO THE OPPOSITE SIDE OF THE STREET AS SHOWN IN PEDESTRIAN BYPASS TYPE II, AND AS DIRECTED BY THE ENGINEER. TEMPORARY CURB RAMPS WILL BE REQUIRED AT ALL TEMPORARY CROSSWALK LOCATIONS.
5. BYPASS IS TO BE USED IN CONJUCTION WITH THE PROPOSED LANE CLOSURE DETAILS AND DURING CONSTRUCTION STAGING, AS DIRECTED BY THE ENGINEER.
6. THE TEMPORARY SIDEWALK SHOULD BE A MINIMUM OF 4 FEET WIDE. IF THIS WALKWAY EXCEEDS 200 FEET THEN A 5 FOOT X 5 FOOT PASSING ZONE. (FOR SHORT TERM SETUPS < 10 HOURS, THIS CONDITION MAY BE WAIVED. A NOTE WOULD NEED TO BE INCLUDED IN THE TTCP THAT STATES HOW THE CONTRACTOR SHOULD ADDRESS THIS ISSUE.)

PED-4
PEDESTRIAN BYPASS

IDENTIFI-CATION NUMBER	DIMENSION OF SIGN IN INCHES		TEXT	TEXT DIMENSIONS (INCHES)			NO. OF SIGNS REQUIRED	COLOR			UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER		
W20-1(1,500 FT)	36	36	ROAD WORK 1,500 FT	SEE	2009	MUTCD	2	ORANGE	BLACK	BLACK	9	18
MA-R2-10a	48	36	WORK ZONES / SPEEDING FINES DOUBLED	MASS	DOT	STNDRD	16	ORANGE WHITE	BLACK	BLACK	12	192
W20-1(AHEAD)	36	36	ROAD WORK AHEAD	SEE	2009	MUTCD	14	ORANGE	BLACK	BLACK	9	126
MA-R2-10e	48	36	END ROAD WORK DOUBLE FINES END	MASS	DOT	STNDRD	16	ORANGE WHITE	BLACK	BLACK	12	192
W4-2R	36	36		SEE	LATEST	MUTCD	1	ORANGE	BLACK	BLACK	9	9
W4-2L	36	36					6				9	54
W20-5L (AHEAD)	36	36	RIGHT / LEFT LANE CLOSED AHEAD				6				9	54
W20-5R (AHEAD)							1				9	9
MA-W4-7L	36	36	THRU TRAFFIC MERGE LEFT				4				9	36
MA-W4-7R							2				9	18
R3-7L	30	30	LEFT LANE MUST TURN LEFT				2				6.25	12.5
R3-7R	30	30	RIGHT LANE MUST TURN RIGHT				2				6.25	12.5
MA-W20-7b	36	36	POLICE OFFICER AHEAD				8				9	72
W5-1	36	36	ROAD NARROWS				2				9	18
W1-4L	36	36					2				9	18
W1-4R	36	36					2				9	18
R4-7	24	30					3				5	15
W13-1p	24	30	XX M.P.H.				4				5	20

IDENTIFI-CATION NUMBER	DIMENSION OF SIGN IN INCHES		TEXT	TEXT DIMENSIONS (INCHES)			NO. OF SIGNS REQUIRED	COLOR			UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND	BORDER		
W8-14	30	30	GROOVED PAVEMENT AHEAD	SEE	LATEST	MUTCD	2	ORANGE	BLACK	BLACK	6.25	12.5
W12-1	36	36					2				9	18
W9-3	36	36	CENTER LANE CLOSED XXX				2				9	18
R1-2	36	36	YIELD				2	RED WHITE			9	18

NOTE: ALL BACKGROUND SIGNS ARE TO BE FLUORESCENT ORANGE UNLESS OTHERWISE SPECIFIED.

LINCOLN - CONCORD - LEXINGTON
ROUTE 2A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	46	46
PROJECT FILE NO.	608495		

TRAFFIC MANAGEMENT PLANS
TRAFFIC SIGN SUMMARY

608495(25%-75%)TRAFFICMANAGEMENTPLANS.DWG Plotted on 7-Jan-2022 2:12 PM