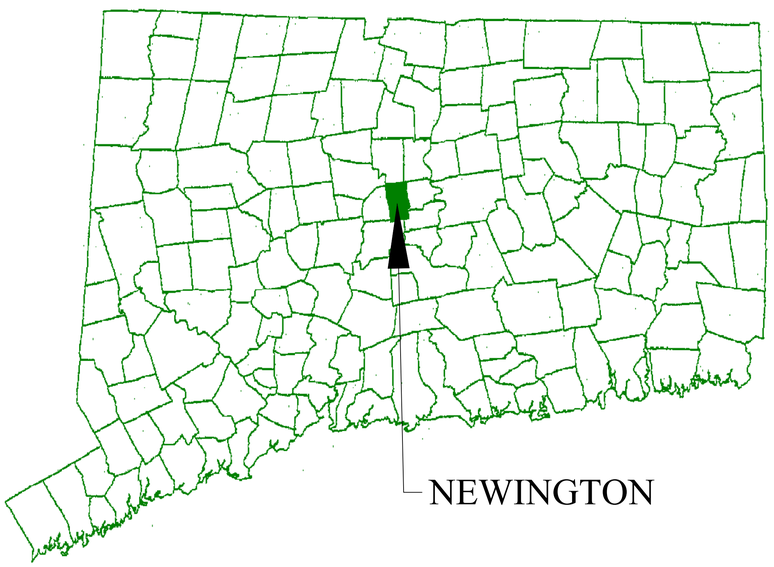
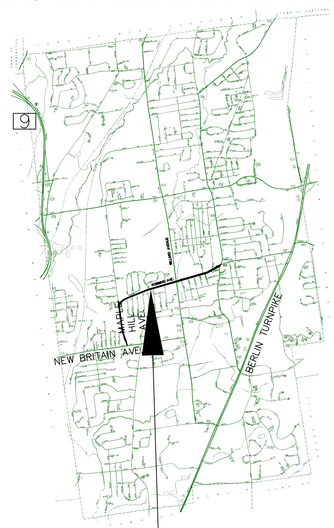
MAPLE HILL AVENUE AND ROBBINS AVENUE COMPLETE STREETS PROJECT

TOWN OF NEWINGTON, CONNECTICUT

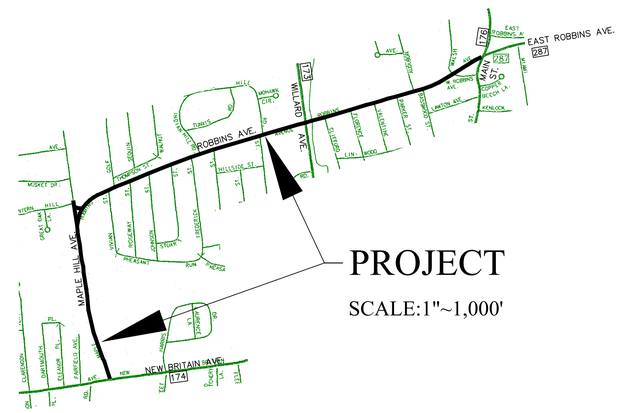
STATE PROJECT NO. L093-0001

DECEMBER 2019





SCALE: 1"~4,000'



SCALE:1"~1,000'

DRAWING INDEX:

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XX - XX TRAFFIC CONTROL SIGNAL PLANS
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XX - XX CATCH BASIN FRAMES AND GRATES
XX - XX SIDEWALK DETAILS

70% DESIGN SUBMISSION

CALL 811 BEFORE YOU DIG
811
SAFE DIGGING PARTNER

DEVELOPED BY:
vhb
100 Great Meadow Road, Suite 200
Wethersfield, Connecticut 06901
860-807-4300 – FAX 860-372-4570

GARY J. FUERSTENBERG
TOWN ENGINEER
P.E. NO. 21892

REVISIONS:

COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL NAD 83
VERTICAL NAVD 88

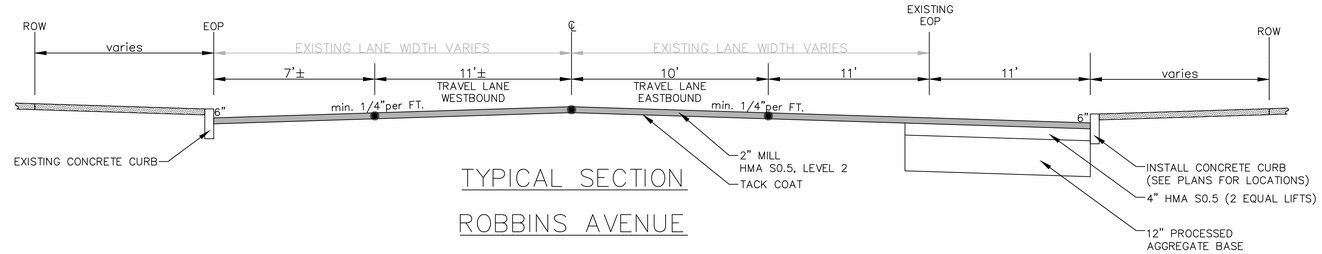
PROJECT 18007
DATE 12 / 16 / 2019
DRAWN TJM
CHECK EAN
SHEET 1 OF X
SCALE: AS NOTED

ABBREVIATIONS LEGEND

STA	STATION
GRAN	GRANITE
BIT	BITUMINOUS
CONC	CONCRETE
STC	STATE TRAFFIC CONTROL
CTL	CONTROL
ROW	RIGHT OF WAY
EOP	EDGE OF PAVEMENT
T.O.N.	TOWN OF NEWINGTON
MPT	MAINTENANCE AND PROTECTION OF TRAFFIC
℄	CENTERLINE
rcp	REINFORCED CONCRETE PIPE
crnp	CORREGATED METAL PIPE
ellip	ELLIPTICAL
RMC	RIGID METAL CONDUIT

LEGEND

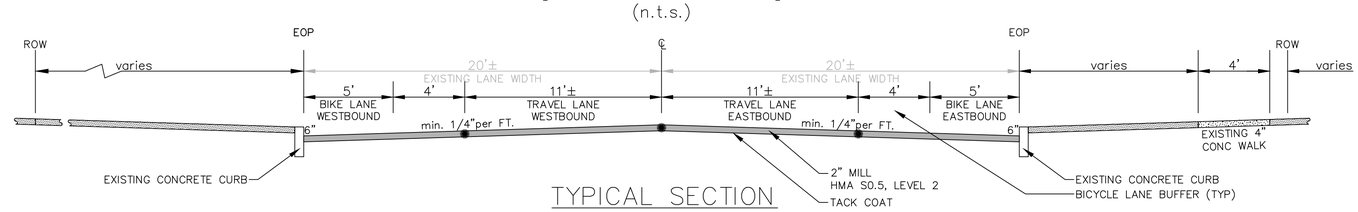
EXISTING		PROPOSED
	PROPERTY/BOUNDARY LINE	
	CURB	
	DRIVEWAY	
72	INTERMEDIATE CONTOUR	[72]
70	INDEX CONTOUR	[70]
72.9 + DYCL	SPOT ELEVATION	[72.9] + DYCL
	DOUBLE YELLOW CENTERLINE	
EL	EDGE LINE	EL
DLL	DASHED LANE LINE	DLL
	BICYCLE LANE LINE	BIKE-LL
GAS	GAS PIPE	
W	WATER PIPE	
	HYDRANT	
S	SANITARY PIPE	
Ⓢ	SANITARY MANHOLE	
D	STORM DRAIN PIPE	
	CLEAN STORM DRAIN PIPE	(SIZE AND MATERIAL)
	CLEAN DRAINAGE STRUCTURE	CS
	ABANDON PIPE	AP
Ⓓ	STORM MANHOLE	
	CATCH BASIN	
	YARD DRAIN	
OF-2	STORM DRAIN OUTFALL	
E	ELECTRIC WIRE	
Ⓣ	COMMUNICATION MANHOLE	
	UTILITY POLE (WITH GUY)	
	SIGN POST	
#17	BUILDING AND BUILDING NUMBER	
	RETAINING WALL	
	TREE	
	LIMIT OF WORK	
	GUIDE RAIL	
	SUBSURFACE EXPLORATION	
	BIKE LANE SYMBOL	
	TRAFFIC ARROW	
	STOP BAR	
	CROSSWALK	
	MILL AND OVERLAY AREA	
CONC WALK	CONCRETE SIDEWALK/RAMP	
	TOPSOIL, SEED, MULCH	
D2	VEHICLE DETECTOR-LOOP	
D2	VEHICLE DETECTOR-VIDEO	D2
	FULL DEPTH PAVEMENT	



TYPICAL SECTION

ROBBINS AVENUE

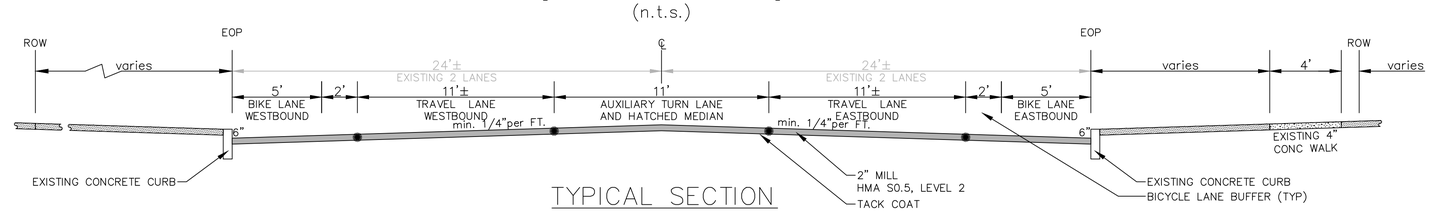
WALSH AVENUE TO MAIN STREET
[STA. 156+25 TO 160+00]
(n.t.s.)



TYPICAL SECTION

ROBBINS AVENUE

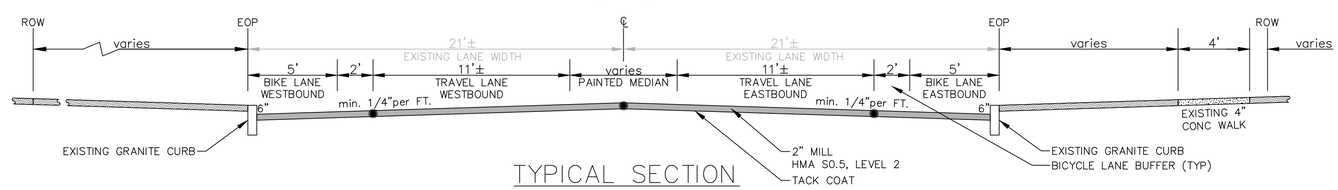
WILLARD AVENUE TO WALSH AVENUE
[STA. 135+00 TO 156+25]
(n.t.s.)



TYPICAL SECTION

ROBBINS AVENUE

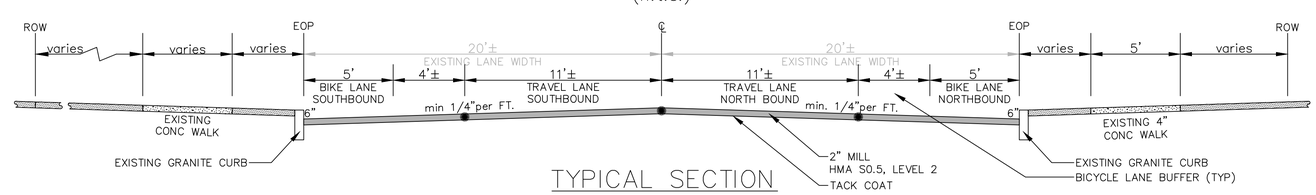
VIVIAN STREET TO WILLARD AVENUE
[STA. 106+00 TO 134+50]
(n.t.s.)



TYPICAL SECTION

ROBBINS AVENUE

MAPLE HILL AVENUE TO VIVIAN STREET
[STA. 100+50 TO 106+00]
(n.t.s.)



TYPICAL SECTION

MAPLE HILL AVENUE

NEW BRITAIN AVENUE TO ROBBINS AVENUE
[STA. 2+00 TO 27+50]
(n.t.s.)

SEQUENCE OF WORK:
1. NOTIFY 811 SYSTEM (FORMERLY CALL BEFORE YOU DIG) FOR UTILITY CLEARANCE.
2. COMPLETE SITE IMPROVEMENTS PRIOR TO MILLING.
3. COMPLETE TRAFFIC SIGNAL IMPROVEMENTS PRIOR TO MILLING (TO MAINTAIN USE OF EXISTING LOOP DETECTORS).
4. MILL AND OVERLAY MAPLE HILL AVENUE AND ROBBINS AVENUE.
5. RESTORE DISTURBED LANDSCAPED AREAS.
6. CLEAN CATCH BASIN SUMPS AND STORM PIPES AFTER FINISHED COURSE OF BITUMINOUS PAVEMENT.

GENERAL NOTES:
1. ALL WORK WITHIN A STATE OF CONNECTICUT RIGHT OF WAY REQUIRES APPLICATION TO STATE FOR ENCROACHMENT PERMIT.
2. TOWN OF NEWINGTON TO MARK PROJECT LIMITS IN THE FIELD.
3. REFER TO TRAFFIC CONTROL SIGNAL PLANS FOR SUPPLEMENTAL LEGEND.
4. PROPOSED CONDITIONS SHOWN IN BLACK, EXCEPT PROPOSED MILL AND OVERLAY AREA SHOWN AS GREY SHADE.

SECTION NOTES:
- ● LONGITUDINAL SEAM
1. SECTION CONVENTION IS LOOKING UP STATION.
2. NO COLD LONGITUDINAL SEAMS.
3. LONGITUDINAL SEAMS: 1,000 FEET MAXIMUM LENGTH.
4. LATERAL SEAMS: 12 INCHES MINIMUM OVERLAP.

REVISIONS:

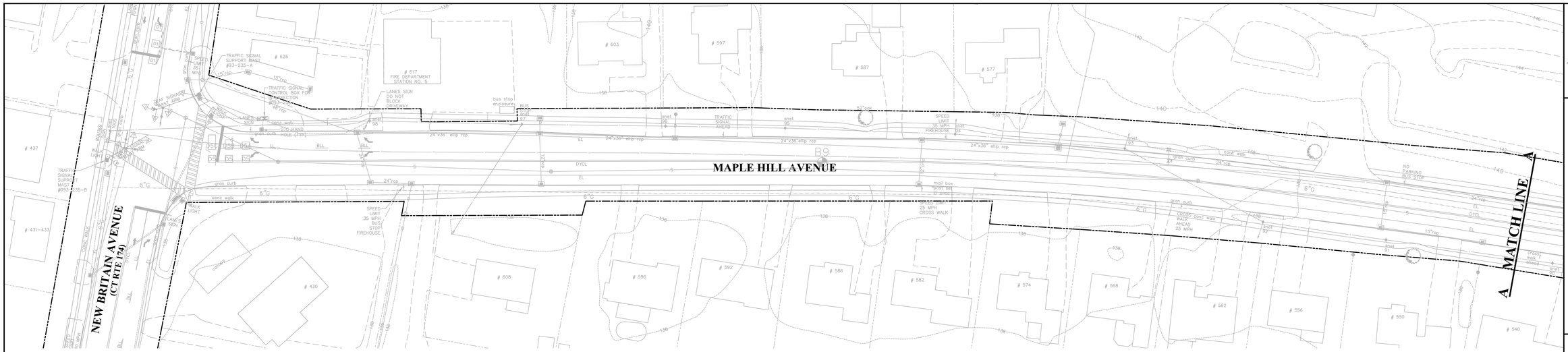
vhb

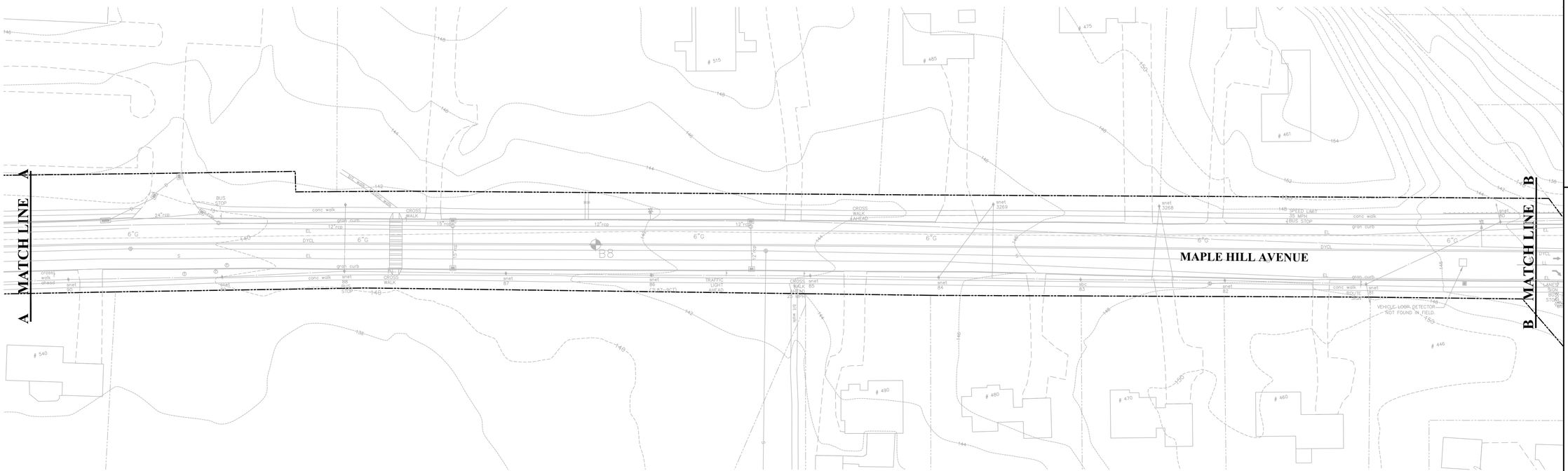
NOTES AND CROSS-SECTIONS
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT 06111

DATUMS:

HORIZONTAL: NAD 83
VERTICAL: NAVD88

PROJECT	18003
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	As-Noted





EXISTING CONDITIONS NOTES:

1. ROAD AND UTILITY LOCATIONS ON EXISTING CONDITIONS BASE MAP ARE APPROXIMATE AND COMPILED FROM RECORD RESEARCH AND MAPPING FROM TOWN OF NEWINGTON GIS, MDC DRAWINGS AND CNG DRAWINGS (NOT SURVEYED).
2. BASE MAP IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS A RESULT OF A FIELD SURVEY, AND IS SUBJECT TO SUCH CHANGE AS A FIELD SURVEY MAY DISCLOSE.
3. HORIZONTAL DATUM: NAD83; VERTICAL DATUM: NAVD88
4. COMMUNICATION, WATER AND GAS VALVES OR MANHOLES NOT SHOWN.
5. NOTIFY THE ENGINEER OF ANY DICREPANCY OBSERVED IN THE FIELD.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

REVISIONS:

vhb

EXISTING CONDITIONS PLAN
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE

PREPARED FOR

TOWN OF NEWINGTON

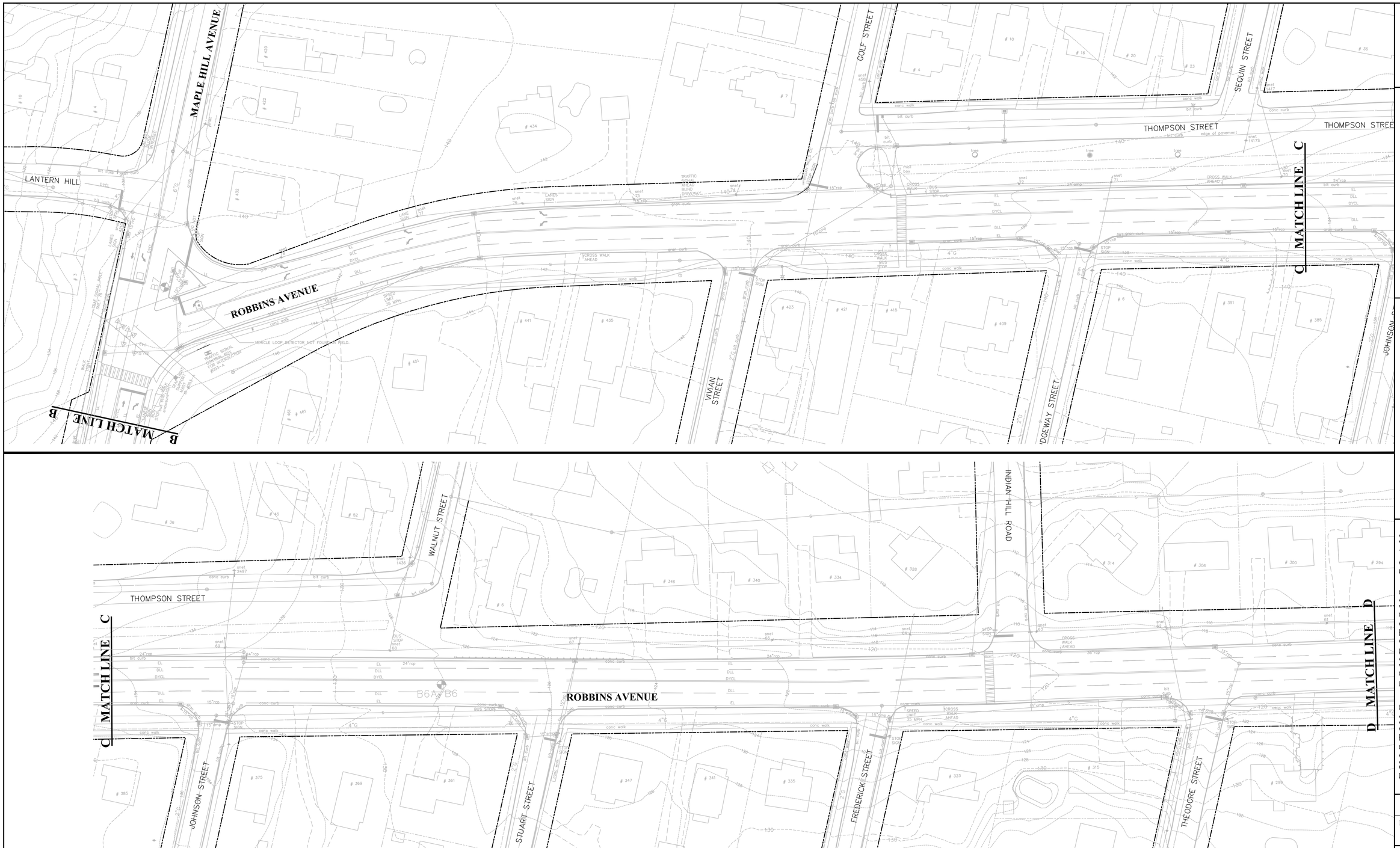
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

PROJECT	18003
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	1" = 40"



REVISIONS:

vhb

EXISTING CONDITIONS PLAN
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE

PREPARED FOR

TOWN OF NEWINGTON

131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83

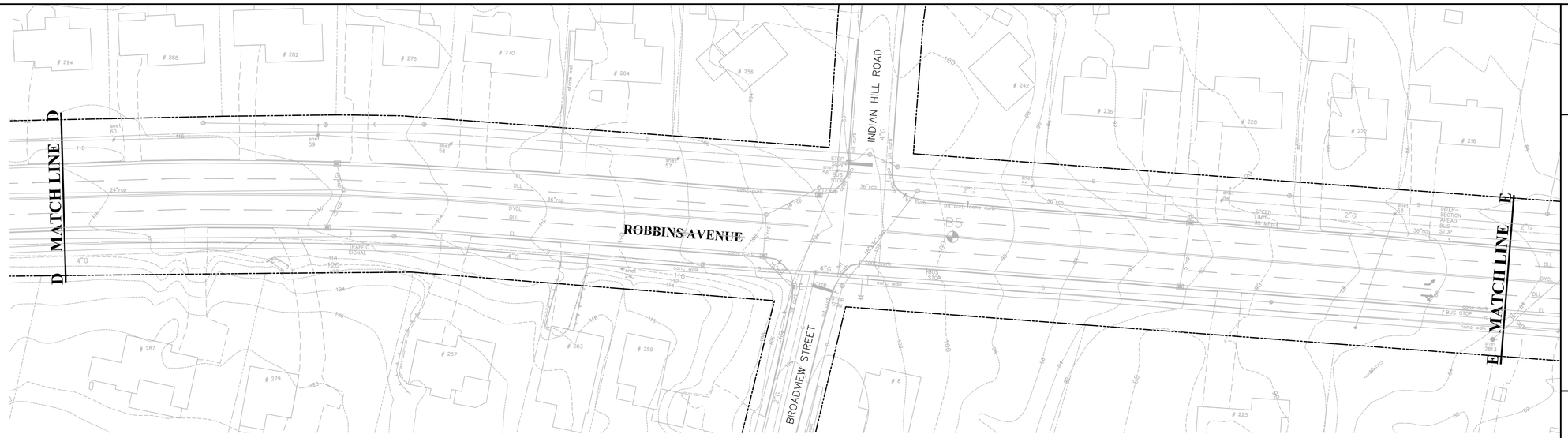
VERTICAL: NAVD88

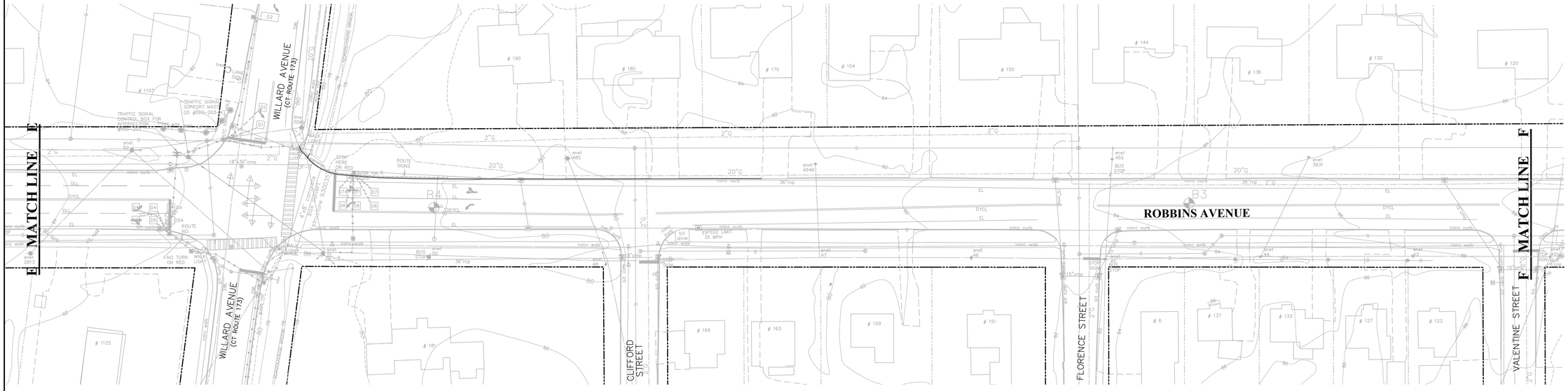
PROJECT	18003
DATE	12/ 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	1" = 40"

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.





GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

REVISIONS:

vhb

EXISTING CONDITIONS PLAN
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE

PREPARED FOR

TOWN OF NEWINGTON

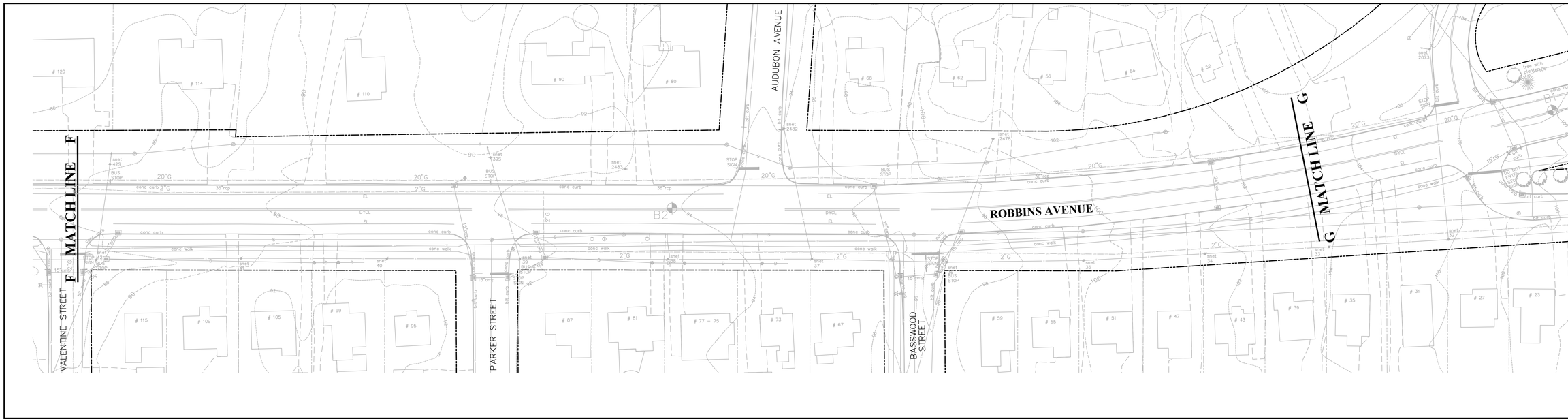
131 CEDAR STREET NEWINGTON, CT. 06111

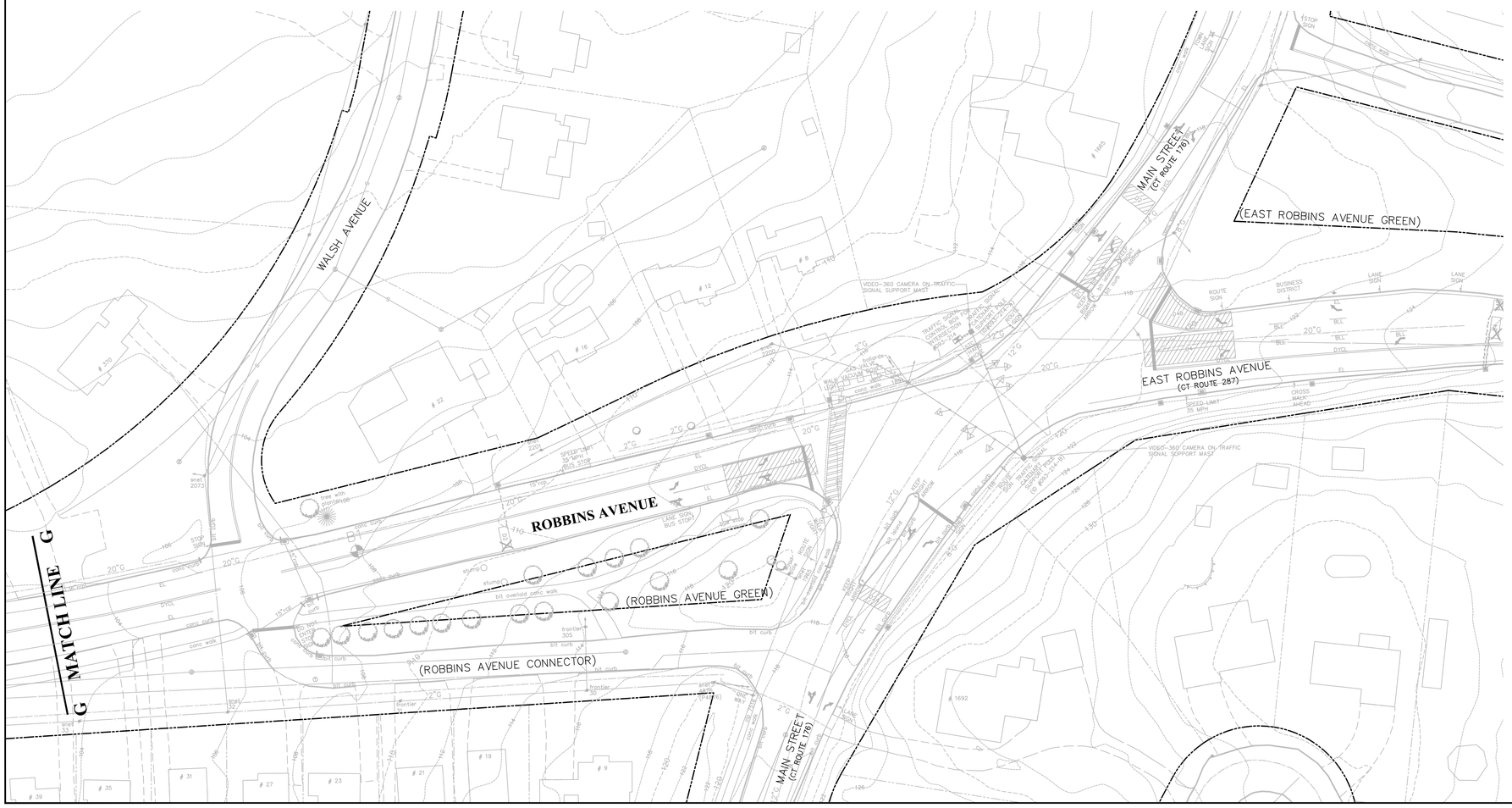
DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

PROJECT	18003
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	1" = 40"





GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

REVISIONS:

vhb

EXISTING CONDITIONS PLAN
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE

PREPARED FOR

TOWN OF NEWINGTON

131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

PROJECT	18006
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	1" = 40'

Driller: Scott Marino (NEBCo)	**Connecticut DOT Boring Report**	Hole No.: B1
Inspector:Gary Fuerstenberg, PE	Town: Newington CT	Stat./Offset: ROBBINS AVENUE; STA. ~157+09, 2'L OFFSET
Engineer: Gary Fuerstenberg, PE	Project No: NA	Northing: NA
Start Date: 9 October 2018	Route No.: NA	Easting: NA
Finish Date: 9 October 2018	Bridge No.: NA	Surface Elevation: (pavement surface)
Project Description: LOTCIP - Complete Street Project		
Casing Size/Type: 4.5 inch solid stem	Sampler Type/Size: split-barrel	Core Barrel Type:
Hammer Wt.: 140# Fall: 30 inches	Drill: Mobile B-53	
Groundwater Observations: not encountered		Sheet 1 of 1

SAMPLES							
Depth (feet) From - To	Sample Type Number	Blows on Sampler per 6 inches	Pen (inches)	Rec (inches)	RQD %	General Strata Description	Material Description and Notes
							4 inches Bituminous Concrete
							6 inches Processed Aggregate Base Course
							10 inches pavement structure
1-3	S1	17-48-60-22	24	20		SM-FILL	red-brown fine to coarse SAND, some Silt, some fine to coarse Gravel, moist
3-5	S2	16-19-35-32	24	16		SM-GT	red-brown fine to coarse SAND, some Silt, some fine to coarse Gravel, moist
							augered to 5 feet
5-7	S3	14-15-16-20	24	20		ML-GF	red-brown SILT, little fine Sand, moist
7-9	S4	26-20-28-24	24	20		ML-GF	red-brown SILT, little fine Sand, moist
9-11	S5	12-23-25-25	24	20		ML-GF	red-brown SILT, little fine Sand, moist
							END OF BORING: 11 FEET

Sample Type: S=Split Spoon C=Core UP=Undisturbed Piston V=Vane Shear Test
Proporitons used: Trace = 1-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Total Penetration in	NOTES:	
Earth: 11 feet Rock: 0 feet	SM = silty sand	GT = Glacial Till
	ML = low-plastic silt	GF = Glacio Fluvial

Driller: Scott Marino (NEBCo)	**Connecticut DOT Boring Report**	Hole No.: B2
Inspector:Gary Fuerstenberg, PE	Town: Newington CT	Stat./Offset: ROBBINS AVENUE; STA. ~149+78, 1'L OFFSET
Engineer: Gary Fuerstenberg, PE	Project No: NA	Northing: NA
Start Date: 9 October 2018	Route No.: NA	Easting: NA
Finish Date: 9 October 2018	Bridge No.: NA	Surface Elevation: (pavement surface)
Project Description: LOTCIP - Complete Street Project		
Casing Size/Type: 4.5 inch solid stem	Sampler Type/Size: split-barrel	Core Barrel Type:
Hammer Wt.: 140# Fall: 30 inches	Drill: Mobile B-53	
Groundwater Observations: not encountered		Sheet 1 of 1

SAMPLES							
Depth (feet) From - To	Sample Type Number	Blows on Sampler per 6 inches	Pen (inches)	Rec (inches)	RQD %	General Strata Description	Material Description and Notes
							5 inches Bituminous Concrete
							6 inches Processed Aggregate Base Course
							11 inches pavement structure
1-3	S1	28-60-40-30	24	18		SM-FILL	red-brown fine to coarse SAND, some Silt, some fine to coarse Gravel, moist
3-5	S2	40-32-30-27	24	16		SM-FILL	red-brown fine to coarse SAND, some Silt, some fine to coarse Gravel, moist
							(black stained, cresote odor)
							augered to 5 feet
5-7	S3	5-14-16-17	24	22		CL (top 11")	red-brown low-plastic CLAY, trace fine Sand, moist
						SM (bot 11")	red-brown fine to coarse SAND, some Silt, some fine to coarse Gravel, moist
7-9	S4	16-18-17-22	24	22		ML-GF	red-brown SILT, little fine Sand, moist
9-11	S5	9-19-17-21	24	14		ML-GF	red-brown SILT, little fine Sand, moist
							END OF BORING: 11 FEET

Sample Type: S=Split Spoon C=Core UP=Undisturbed Piston V=Vane Shear Test
Proporitons used: Trace = 1-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Total Penetration in	NOTES:	
Earth: 11 feet Rock: 0 feet	SM = silty sand CL = low-plastic	GT = Glacial Till
	ML = low-plastic silt	GF = Glacio Fluvial

Driller: Scott Marino (NEBCo)	**Connecticut DOT Boring Report**	Hole No.: B3
Inspector:Gary Fuerstenberg, PE	Town: Newington CT	Stat./Offset: ROBBINS AVENUE; STA. ~142+17, 1'L OFFSET
Engineer: Gary Fuerstenberg, PE	Project No: NA	Northing: NA
Start Date: 9 October 2018	Route No.: NA	Easting: NA
Finish Date: 9 October 2018	Bridge No.: NA	Surface Elevation: (pavement surface)
Project Description: LOTCIP - Complete Street Project		
Casing Size/Type: 4.5 inch solid stem	Sampler Type/Size: split-barrel	Core Barrel Type:
Hammer Wt.: 140# Fall: 30 inches	Drill: Mobile B-53	
Groundwater Observations: not encountered		Sheet 1 of 1

SAMPLES							
Depth (feet) From - To	Sample Type Number	Blows on Sampler per 6 inches	Pen (inches)	Rec (inches)	RQD %	General Strata Description	Material Description and Notes
							6 inches Bituminous Concrete
							6 inches Processed Aggregate Base Course
							12 inches pavement structure
1-3	S1	35-40-26-33	24	20		SM-FILL	red-brown fine to coarse SAND, some Silt, some fine to coarse Gravel, moist
3-5	S2	36-33-35-36	24	14		SM-FILL	red-brown fine to coarse SAND, some Silt, some fine to coarse Gravel, moist
							augered to 5 feet
5-7	S3	4-8-20-16	24	20		ML-GF	red-brown SILT, little fine Sand, moist
7-9	S4	20-15-18-20	24	22		ML-GF	red-brown SILT, little fine Sand, moist
9-11	S5	8-9-8-12	24	16		ML-GF	red-brown SILT, little fine Sand, wet
							END OF BORING: 11 FEET

Sample Type: S=Split Spoon C=Core UP=Undisturbed Piston V=Vane Shear Test
Proporitons used: Trace = 1-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Total Penetration in	NOTES:	
Earth: 11 feet Rock: 0 feet	SM = silty sand	GT = Glacial Till
	ML = low-plastic silt	GF = Glacio Fluvial

Driller: Scott Marino (NEBCo)	**Connecticut DOT Boring Report**	Hole No.: B4
Inspector:Gary Fuerstenberg, PE	Town: Newington CT	Stat./Offset: ROBBINS AVENUE; STA. ~136+15, 3'R OFFSET
Engineer: Gary Fuerstenberg, PE	Project No: NA	Northing: NA
Start Date: 9 October 2018	Route No.: NA	Easting: NA
Finish Date: 9 October 2018	Bridge No.: NA	Surface Elevation: (pavement surface)
Project Description: LOTCIP - Complete Street Project		
Casing Size/Type: 4.5 inch solid stem	Sampler Type/Size: split-barrel	Core Barrel Type:
Hammer Wt.: 140# Fall: 30 inches	Drill: Mobile B-53	
Groundwater Observations: not encountered		Sheet 1 of 1

SAMPLES							
Depth (feet) From - To	Sample Type Number	Blows on Sampler per 6 inches	Pen (inches)	Rec (inches)	RQD %	General Strata Description	Material Description and Notes
							6 inches Bituminous Concrete
							6 inches Processed Aggregate Base Course
							12 inches pavement structure
1-3	S1	43-67-23-10	24	16		SM-FILL	red-brown fine to coarse SAND, some fine to coarse gravel, little silt, moist
							(black stained, cresote odor)
3-5	S2	10-20-24-13	24	16		ML-GF	red-brown SILT, little fine Sand, moist
							augered to 5 feet
5-7	S3	9-12-13-12	24	24		ML-GF	red-brown SILT, little fine Sand, moist
7-9	S4	16-16-13-13	24	20		ML-GF	red-brown SILT, little fine Sand, moist
9-11	S5	18-5-8-15	24	16		ML-GF	red-brown SILT, little fine Sand, moist
							END OF BORING: 11 FEET

Sample Type: S=Split Spoon C=Core UP=Undisturbed Piston V=Vane Shear Test
Proporitons used: Trace = 1-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Total Penetration in	NOTES:	
Earth: 11 feet Rock: 0 feet	SM = silty sand	GT = Glacial Till
	ML = low-plastic silt	GF = Glacio Fluvial

Driller: Scott Marino (NEBCo)	**Connecticut DOT Boring Report**	Hole No.: B5
Inspector:Gary Fuerstenberg, PE	Town: Newington CT	Stat./Offset: ROBBINS AVENUE; STA. ~129+06, 0' OFFSET
Engineer: Gary Fuerstenberg, PE	Project No: NA	Northing: NA
Start Date: 9 October 2018	Route No.: NA	Easting: NA
Finish Date: 9 October 2018	Bridge No.: NA	Surface Elevation: (pavement surface)
Project Description: LOTCIP - Complete Street Project		
Casing Size/Type: 4.5 inch solid stem	Sampler Type/Size: split-barrel	Core Barrel Type:
Hammer Wt.: 140# Fall: 30 inches	Drill: Mobile B-53	
Groundwater Observations: not encountered		Sheet 1 of 1

SAMPLES							
Depth (feet) From - To	Sample Type Number	Blows on Sampler per 6 inches	Pen (inches)	Rec (inches)	RQD %	General Strata Description	Material Description and Notes
							4 inches Bituminous Concrete
							6 inches Processed Aggregate Base Course
							10 inches pavement structure
1-3	S1	16-14-9-9	24	18		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
							(black stained, cresote odor)
3-5	S2	9-14-22-24	24	18		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
							augered to 5 feet
5-7	S3	19-21-21-27	24	18		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
7-9	S4	44-33-33-31	24	20		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
9-11	S5	10-11-24-26	24	8		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
							END OF BORING: 11 FEET

Sample Type: S=Split Spoon C=Core UP=Undisturbed Piston V=Vane Shear Test
Proporitons used: Trace = 1-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Total Penetration in	NOTES:	
Earth: 11 feet Rock: 0 feet	SM = silty sand	GT = Glacial Till
	ML = low-plastic silt	GF = Glacio Fluvial

Driller: Scott Marino (NEBCo)	**Connecticut DOT Boring Report**	Hole No.: B6
Inspector:Gary Fuerstenberg, PE	Town: Newington CT	Stat./Offset: ROBBINS AVENUE; STA. ~114+06, 2'R OFFSET
Engineer: Gary Fuerstenberg, PE	Project No: NA	Northing: NA
Start Date: 9 October 2018	Route No.: NA	Easting: NA
Finish Date: 9 October 2018	Bridge No.: NA	Surface Elevation: (pavement surface)
Project Description: LOTCIP - Complete Street Project		
Casing Size/Type: 4.5 inch solid stem	Sampler Type/Size: split-barrel	Core Barrel Type:
Hammer Wt.: 140# Fall: 30 inches	Drill: Mobile B-53	
Groundwater Observations: not encountered		Sheet 1 of 1

SAMPLES							
Depth (feet) From - To	Sample Type Number	Blows on Sampler per 6 inches	Pen (inches)	Rec (inches)	RQD %	General Strata Description	Material Description and Notes
							7 inches Bituminous Concrete
							4 inches Processed Aggregate Base Course
							11 inches pavement structure
1-3	S1	45-30-16-8	24	0		SM-FILL	no sample recovered (probably pushed stone)
3-5	S2	20-16-16-15	24	0		SM-GT	no sample recovered (probably pushed stone)
							augered to 5 feet
5-7	S3	10-10-16-27	24	18		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
7-9	S4	50-36-40-45	24	18		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
9-11	S5	57-30-33-45	24	18		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
							END OF BORING: 11 FEET

Sample Type: S=Split Spoon C=Core UP=Undisturbed Piston V=Vane Shear Test
Proporitons used: Trace = 1-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Total Penetration in	NOTES:	
Earth: 11 feet Rock: 0 feet	SM = silty sand	GT = Glacial Till
	ML = low-plastic silt	GF = Glacio Fluvial

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

REVISIONS:

vhb

SUBSURFACE EXPLORATIONS LOGS
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

PROJECT
18003

DATE
12 / 16 / 2019

DRAWN
TJM

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EAN

SHEET
XX OF XX

SCALE:
NTS

Driller: Scott Marino (NEBCo)	**Connecticut DOT Boring Report**	Hole No.: B6A
Inspector:Gary Fuerstenberg, PE	Town: Newington CT	Stat./Offset:ROBBINS AVENUE: STA. ~114+04, 2'R OFFSET
Engineer: Gary Fuerstenberg, PE	Project No: NA	Northing: NA
Start Date: 9 October 2018	Route No.: NA	Easting: NA
Finish Date: 9 October 2018	Bridge No.: NA	Surface Elevation: (pavement surface)
Project Description: LOTCIP - Complete Street Project		
Casing Size/Type: 4.5 inch solid stem	Sampler Type/Size: split-barrel	Core Barrel Type:
Hammer Wt.: 140# Fall: 30 inches	Drill: Mobile B-53	
Groundwater Observations: not encountered		Sheet 1 of 1

Depth (feet) From - To	SAMPLES Sample Type Number	Blows on Sampler per 6 inches	Pen (inches)	Rec (inches)	RQD %	General Strata Description	Material Description and Notes
							7 inches Bituminous Concrete
							4 inches Processed Aggregate Base Course
							11 inches pavement structure
1-3	S1	16-15-9-7	24	16		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
3-5	S2	10-10-7-10	24	16		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
							END OF BORING: 5 FEET

Sample Type: S=Split Spoon C=Core UP=Undisturbed Piston V=Vane Shear Test
Proporitons used: Trace = 1-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Total Penetration in
Earth: 5 feet Rock: 0 feet

NOTES:
SM = silty sand GT = Glacial Till
ML = low-plastic silt GF = Glacio Fluvial

Driller: Scott Marino (NEBCo)	**Connecticut DOT Boring Report**	Hole No.: B7
Inspector:Gary Fuerstenberg, PE	Town: Newington CT	Stat./Offset:MAPLE HILL AVENUE: STA. ~26+31, 19'R OFFSET
Engineer: Gary Fuerstenberg, PE	Project No: NA	Northing: NA
Start Date: 9 October 2018	Route No.: NA	Easting: NA
Finish Date: 9 October 2018	Bridge No.: NA	Surface Elevation: (pavement surface)
Project Description: LOTCIP - Complete Street Project		
Casing Size/Type: 4.5 inch solid stem	Sampler Type/Size: split-barrel	Core Barrel Type:
Hammer Wt.: 140# Fall: 30 inches	Drill: Mobile B-53	
Groundwater Observations: not encountered		Sheet 1 of 1

Depth (feet) From - To	SAMPLES Sample Type Number	Blows on Sampler per 6 inches	Pen (inches)	Rec (inches)	RQD %	General Strata Description	Material Description and Notes
							6 inches Bituminous Concrete
							4 inches Processed Aggregate Base Course
							10 inches pavement structure
1-3	S1	12-9-25-11	24	20		SM-FILL	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
							(black burnt material)
3-5	S2	12-6-6-5	24	16		ML-GF	red-brown SILT, little fine Sand, moist
							augered to 5 feet
5-7	S3	6-8-14-14	24	20		ML-GF	red-brown SILT, little fine Sand, moist
7-9	S4	70-55-35-30	24	20		SM-GT	red-brown fine to coarse SAND, some Silt, some fine to coarse Gravel, moist
9-11	S5	9-11-31-30	24	20		SM-GT	red-brown fine to coarse SAND, some Silt, some fine to coarse Gravel, moist
							END OF BORING: 11 FEET

Sample Type: S=Split Spoon C=Core UP=Undisturbed Piston V=Vane Shear Test
Proporitons used: Trace = 1-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Total Penetration in
Earth: 11 feet Rock: 0 feet

NOTES:
SM = silty sand GT = Glacial Till
ML = low-plastic silt GF = Glacio Fluvial

Driller: Scott Marino (NEBCo)	**Connecticut DOT Boring Report**	Hole No.: B8
Inspector:Gary Fuerstenberg, PE	Town: Newington CT	Stat./Offset:MAPLE HILL AVENUE: STA. ~17+50, 0' OFFSET
Engineer: Gary Fuerstenberg, PE	Project No: NA	Northing: NA
Start Date: 9 October 2018	Route No.: NA	Easting: NA
Finish Date: 9 October 2018	Bridge No.: NA	Surface Elevation: (pavement surface)
Project Description: LOTCIP - Complete Street Project		
Casing Size/Type: 4.5 inch solid stem	Sampler Type/Size: split-barrel	Core Barrel Type:
Hammer Wt.: 140# Fall: 30 inches	Drill: Mobile B-53	
Groundwater Observations: not encountered		Sheet 1 of 1

Depth (feet) From - To	SAMPLES Sample Type Number	Blows on Sampler per 6 inches	Pen (inches)	Rec (inches)	RQD %	General Strata Description	Material Description and Notes
							7 inches Bituminous Concrete
							4 inches Processed Aggregate Base Course
							11 inches pavement structure
1-3	S1	27-19-18-19	24	20		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
3-5	S2	41-22-33-33	24	22		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
							augered to 5 feet
5-7	S3	25-27-22-23	24	16		SM-GT	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, moist
7-8'5"	S4	36-70-100/5"	17	12		SM-GT (top 6")	red-brown fine to coarse SAND, some fine to coarse Gravel, little Silt, wet
						ROCK (bot 6")	weathered Shale bedrock (SPT refusal)
							END OF BORING: 8 FEET 5 INCHES

Sample Type: S=Split Spoon C=Core UP=Undisturbed Piston V=Vane Shear Test
Proporitons used: Trace = 1-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Total Penetration in
Earth: 8 feet 5 inches Rock: 0 feet

NOTES:
SM = silty sand GT = Glacial Till
ML = low-plastic silt GF = Glacio Fluvial

Driller: Scott Marino (NEBCo)	**Connecticut DOT Boring Report**	Hole No.: B9
Inspector:Gary Fuerstenberg, PE	Town: Newington CT	Stat./Offset:MAPLE HILL AVENUE: ~STA. 7+17, 1'R OFFSET
Engineer: Gary Fuerstenberg, PE	Project No: NA	Northing: NA
Start Date: 9 October 2018	Route No.: NA	Easting: NA
Finish Date: 9 October 2018	Bridge No.: NA	Surface Elevation: (pavement surface)
Project Description: LOTCIP - Complete Street Project		
Casing Size/Type: 4.5 inch solid stem	Sampler Type/Size: split-barrel	Core Barrel Type:
Hammer Wt.: 140# Fall: 30 inches	Drill: Mobile B-53	
Groundwater Observations: not encountered		Sheet 1 of 1

Depth (feet) From - To	SAMPLES Sample Type Number	Blows on Sampler per 6 inches	Pen (inches)	Rec (inches)	RQD %	General Strata Description	Material Description and Notes
							8 inches Bituminous Concrete
							2 inches Processed Aggregate Base Course
							10 inches pavement structure
1-3	S1	23-20-10-16	24	20		SM-GT	red-brown fine to coarse SAND, some fine to coarse gravel, some Silt, moist
3-5	S2	13-20-23-31	24	18		SM-GT	red-brown fine to coarse SAND, some Silt, moist
							augered to 5 feet
5-7	S3	10-7-7-7	24	22		ML-GF	red-brown SILT, trace fine Sand, moist
7-9	S4	13-10-11-10	24	20		ML-GF	red-brown SILT, trace fine Sand, wet
9-11	S5	6-6-10-11	24	16		ML-GF	red-brown SILT, trace fine Sand, wet
							END OF BORING: 11 FEET

Sample Type: S=Split Spoon C=Core UP=Undisturbed Piston V=Vane Shear Test
Proporitons used: Trace = 1-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Total Penetration in
Earth: 11 feet Rock: 0 feet

NOTES:
SM = silty sand GT = Glacial Till
ML = low-plastic silt GF = Glacio Fluvial

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

REVISIONS:

vhb

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MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
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131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

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18003

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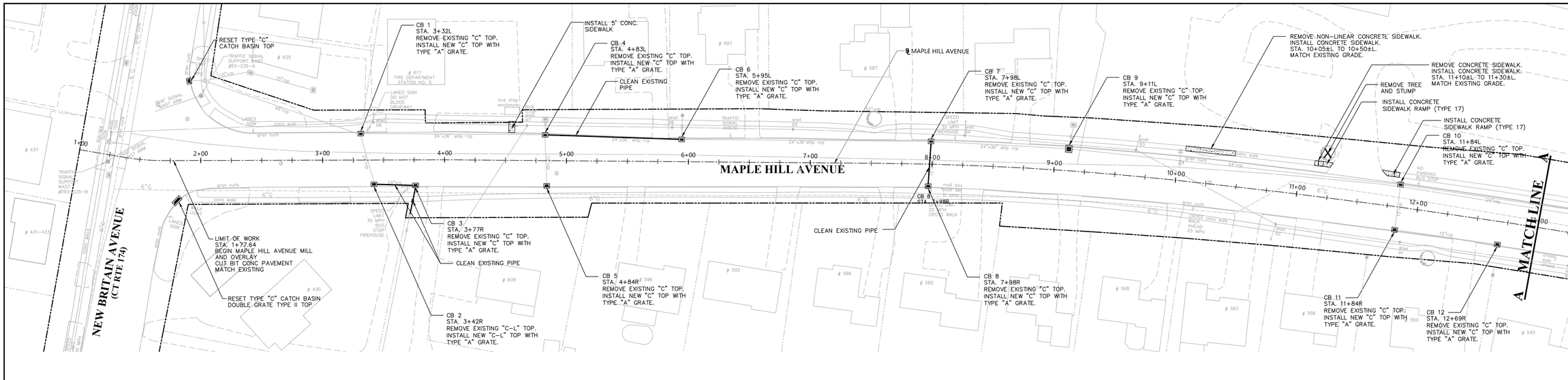
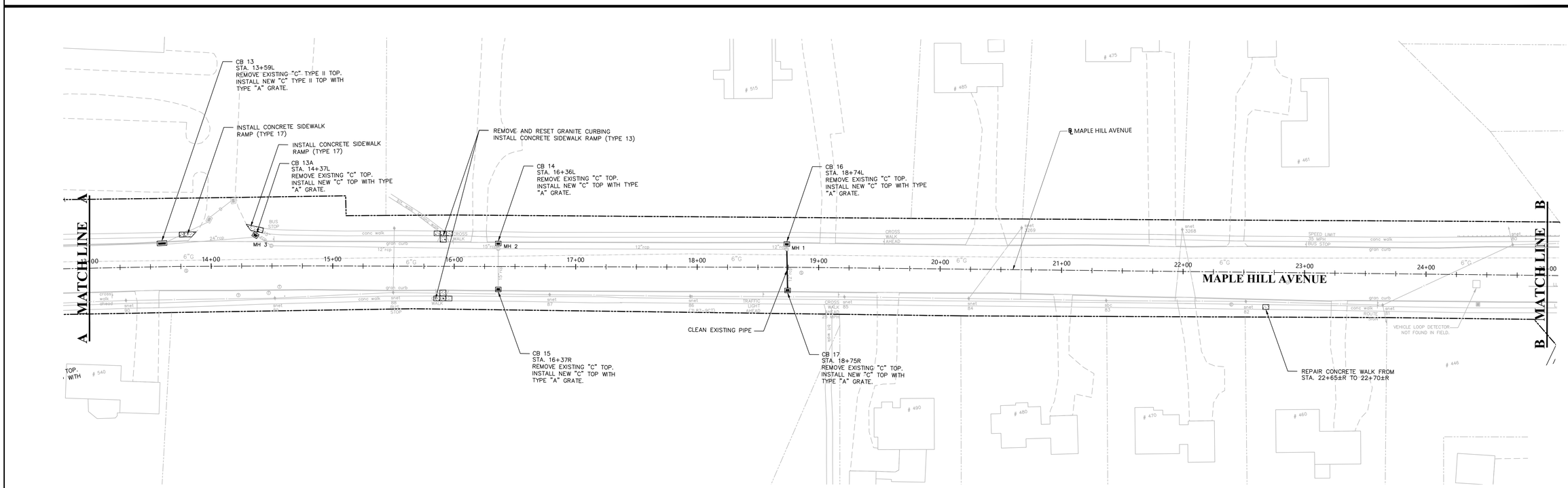
XX OF XX

SCALE:
NTS





CLEARING AND GRUBBING NOTES:
1. TOWN OF NEWINGTON TREE WARDEN WILL POST TREES TO BE REMOVED 11 DAYS PRIOR TO REMOVAL.
   COORDINATE TREE REMOVAL SCHEDULE WITH THE TOWN OF NEWINGTON TREE WARDEN A MINIMUM OF 2 WEEKS, BUT NOT GREATER THAN 3 WEEKS PRIOR TO REMOVING TREES.
2. REMOVE TREES AND STUMPS PRIOR TO PERFORMING CONCRETE WORK.
3. RESTORE LANDSCAPE AREAS (INSTALL TOPSOIL, SEED AND MULCH) AFTER REMOVAL OF STUMPS.

SITE IMPROVEMENT NOTES:
1. INSTALL SILTSACK®AT ALL CATCH BASINS PRIOR TO THE START OF WORK.
2. SAWCUT AND REMOVE ROAD PAVEMENT MINIMUM 2 FEET FROM NEW GRANITE CURB TO FACILITATE COMPACTING BASE COURSE ADJACENT TO NEW CURB.
3. COMPACT BASE AND REPAVE ADJACENT TO NEW/RESET CONCRETE CURB AFTER CONCRETE HAS SUFFICIENTLY CURED.
4. RESTORE DISTURBED LANDSCAPED AREAS AND APPLY A MINIMUM OF 4 INCHES TOPSOIL, SEED AND MULCH.
5. CLEAN ALL CATCH BASIN SUMPS AFTER FINISHED COURSE OF BITUMINOUS PAVEMENT.
6. STORM PIPES TO BE CLEANED AS NOTED.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REVISIONS:

vhb

SITE IMPROVEMENTS
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83

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PROJECT	18003
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SCALE:	1" = 40"

LIMIT OF WORK
END MAPLE HILL AVENUE MILL AND OVERLAY
CUT BIT CONC PAVAMENT
MATCH EXISTING
STA. 27+60.96

℄ MAPLE HILL AVENUE

CB 19
STA. 26+71L
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE

CB 20
STA. 26+92R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

R3'

CB 18
STA. 26+48R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

CB 23
STA. 26+39R
REMOVE EXISTING "C-L" TOP.
INSTALL NEW "C-L" TOP WITH TYPE "A" GRATE.

R3'

CLEAN EXISTING PIPE

REMOVE BITUMINOUS CURB
REMOVE EXISTING PAVED ISLAND
INSTALL GRANITE CURB
MATCH EXISTING GRADE AND CURB REVEAL
GRADE ISLAND TO "C-L" CB TOP OF FRAME
INSTALL BITUMINOUS ISLAND.

R3'

INSTALL CONCRETE SIDEWALK RAMP (TYPE 10)

LANTERN HILL

MAPLE HILL AVENUE

ROBBINS AVENUE

CLEAN EXISTING PIPE

CB 19A
STA. 25+59L
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

R3'

CB 22
STA. 100+44L
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

℄ MAPLE HILL AVENUE

LIMIT OF WORK
END MAPLE HILL AVENUE MILL AND OVERLAY
BEGIN ROBBINS AVENUE MILL AND OVERLAY
STA. 25+98.70 21.83' RT MAPLE HILL AVENUE
STA. 100+24.94 ROBBINS AVENUE

CB 21
STA. 100+36R
REMOVE EXISTING "C" TYPE II TOP.
INSTALL NEW "C" TYPE II TOP WITH TYPE "A" GRATE.

REMOVE EXISTING BUS STOP ENCLOSURE AND CONCRETE PAD
INSTALL BUS STOP ENCLOSURE, INSTALL 8'x14'x5" CONCRETE PAD BEHIND CONCRETE WALK.
INSTALL 14' CONCRETE PAD

B MATCH LINE B

CB 25
STA. 103+31L
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

CLEAN EXISTING PIPE

CB 24
STA. 103+28R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

CLEAN EXISTING PIPE

REPAIR CONCRETE WALK FROM:
STA. 103+77±R TO 104+08±R
STA. 104+17±R TO 104+54±R

VIVIAN STREET

REMOVE BITUMINOUS SIDEWALK
STA. 200+43.34, 15.00' RT
PT 6" BCLC

CB 70
STA. 200+35R
INSTALL TYPE "C" CB WITH TYPE "A" GRATE

STA. 200+15.75, 28.02' LT
BEGIN 6" BCLC

STA. 200+14.33, 22.66' LT
PC 6" BCLC

INSTALL 37'-12" RCP
R30'

CONVERT CB TO MH
CONVERT CB TO MH
INSTALL 5' OF 15" RCP

CB 25A
STA. 106+34L
INSTALL TYPE "C" CB
WITH TYPE "A" GRATE

START REMOVE BITUMINOUS CURB
INSTALL CAST-IN-PLACE CONCRETE CURB
STA. 106+20.49
MATCH EXISTING

GOLF STREET

INSTALL CONCRETE SIDEWALK RAMP (TYPE 20)

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

STA. 200+73.11
END 6" BCLC

REMOVE EXISITNG CONCRETE WALK

INSTALL CONCRETE WALK

℄ GOLF STREET

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

END 6" BCLC
STA. 201+78.06, 15.40' RT
PT 6" BCLC
STA. 202+03.56, 15.48' RT
END INSTALL CONC. CURB
PC BEGIN INSTALL 6" BCLC
STA. 301+91.75, 37.50' LT

R21.5'

LIMIT OF WORK
STA. 302+35.42
BEGIN GOLF STREET FULL-DEPTH PAVEMENT
MATCH EXISTING

R21.5'

PC 6" BCLC
STA. 202+77.18, 15.06' RT

BEGIN 6" BCLC
STA. 202+97.04,
13.85' RT

PI 6" CONC. CURB
STA. 110+09.47

END REMOVE BITUMINOUS CURB
INSTALL CAST-IN-PLACE CONCRETE CURB
STA. 110+39.40
MATCH EXISTING

SEQUIN STREET

THOMPSON STREET

CB 30
STA. 110+43L
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

C MATCHLINE C

CB 27
STA. 108+34R
REMOVE EXISTING "C" TOP
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

CLEAN EXISTING PIPE

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

CB 26
STA. 107+33R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

CB 26B
STA. 105+87R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

CLEAN EXISTING PIPE

CB 26A
STA. 105+58R
REMOVE EXISTING "C" TYPE II TOP.
INSTALL NEW "C" TYPE II TOP WITH TYPE "A" GRATE.

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

℄ RIDGEWAY STREET

RIDGEWAY STREET

CB 29
STA. 110+28R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE

CLEAN EXISTING PIPE

PT END 6" BCLC
BEGIN CONC. CURB
STA. 301+91.75, 37.50' LT

CB 28
STA. 109+27R
REMOVE EXISTING "C" TOP
INSTALL NEW "C" TOP WITH TYPE "A" GRATE

STA. 301+91.75
END GOLF STREET
FULL-DEPTH PAVEMENT

CB 28A
STA. 109+03R
REMOVE EXISTING "C" TOP
INSTALL NEW "C" TOP WITH TYPE "A" GRATE

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

CB 27A
STA. 108+60R
REMOVE EXISTING "C" TOP
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

REVISIONS:

S CURB

CB 31
STA. 111+64R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE

CAP/ABANDON 15" RCP STORM DRAIN BY BULKHEADING PIPE AND FILLING WITH FLOWABLE FILL.

END REMOVE BITUMINOUS CURB
INSTALL CAST-IN-PLACE CONCRETE CURB
STA. 112+18.96
MATCH EXISTING

WALNUT STREET

THOMPSON STREET

CB 32
STA. 112+23L
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE

CB 31B
STA. 112+09R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE

C MATCHLINE C

CB 33
STA. 114+62R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

CLEAN EXISTING PIPE

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

CB 34
STA. 115+30L
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

CB 35A
STA. 117+90R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

ROBBINS AVENUE

℄ ROBBINS AVENUE

CLEAN EXISTING PIPE

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

CB 31A
STA. 111+81R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

JOHNSON STREET

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

CB 33B
STA. 115+15R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

CLEAN EXISTING PIPE

CB 33A
STA. 114+86R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

STUART STREET

CB 35
STA. 117+72R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

CLEAN EXISTING PIPE

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

FREDERICK STREET

CB 35B
STA. 118+23R
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

CLEAN EXISTING PIPE

INDIAN HILL ROAD

CB 36
STA. 119+00L
REMOVE EXISTING "C" TOP.
INSTALL NEW "C" TOP WITH TYPE "A" GRATE.

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

INSTALL TOPSOIL AND TURF ESTABLISHMENT

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

CB 36
STA. 119+00L

CLEAN EXISTING PIPE

INSTALL TOPSOIL AND TURF ESTABLISHMENT

INSTALL CONCRETE SIDEALK

CB 37
STA. 120+79R
EXISTING TOP TO REMAIN

CLEAN EXISTING PIPE

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

SAWCUT EXISTING SIDEWALK AND REMOVE EXISTING RAMP.
INSTALL BITUMINOUS CURB TO CATCH BASIN.
INSTALL TOPSOIL, SEED AND MULCH.

REMOVE BITUMINOUS CURB ON BOTH SIDES OF CATCH BASIN AND AND INSTALL CAST-IN-PLACE CONCRETE CURB
STA. 120+75±R TO 120+85±R.
MATCH EXISTING GRADE AND CURB REVEAL

CB 38
STA. 121+26L
REMOVE EXISTING "C" TOP
INSTALL NEW "C" TOP WITH TYPE "A" GRATE

THEODORE STREET

CLEAN EXISTING PIPE

INSTALL CONCRETE SIDEWALK RAMP (TYPE 16)

CB 37B
STA. 121+33R
PROVIDE TYPE "A" GRATE TOP TO REMAIN

CLEAN EXISTING PIPE

CB 37A
STA. 121+00R
PROVIDE TYPE "A" GRATE TOP TO REMAIN

D MATCHLINE D

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

SITE IMPROVEMENTS
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE

PREPARED FOR

TOWN OF NEWINGTON

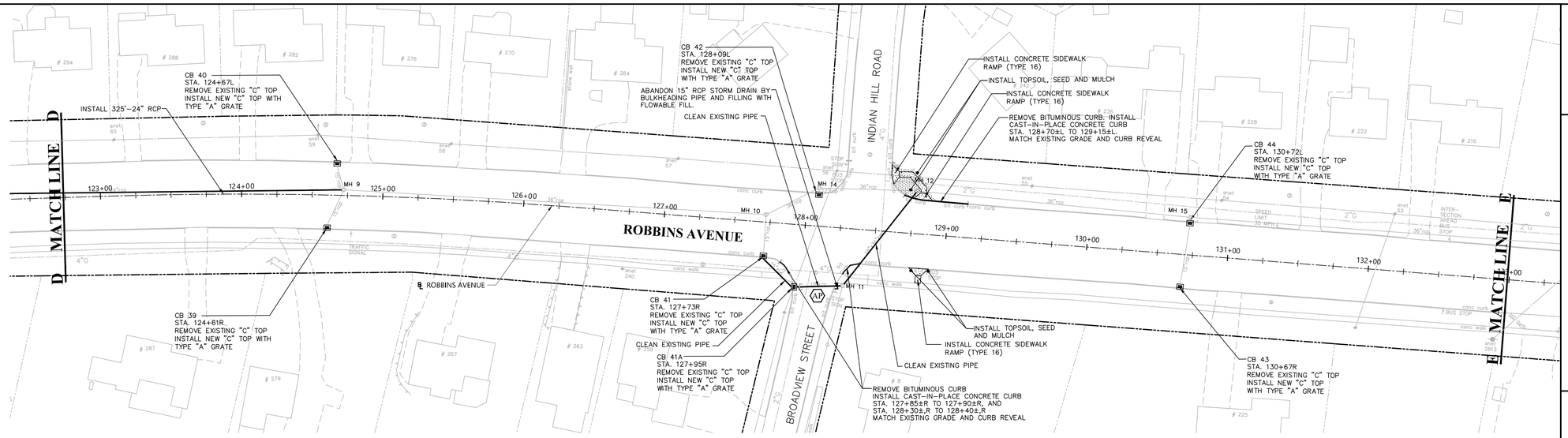
131 CEDAR STREET NEWINGTON, CT. 06111

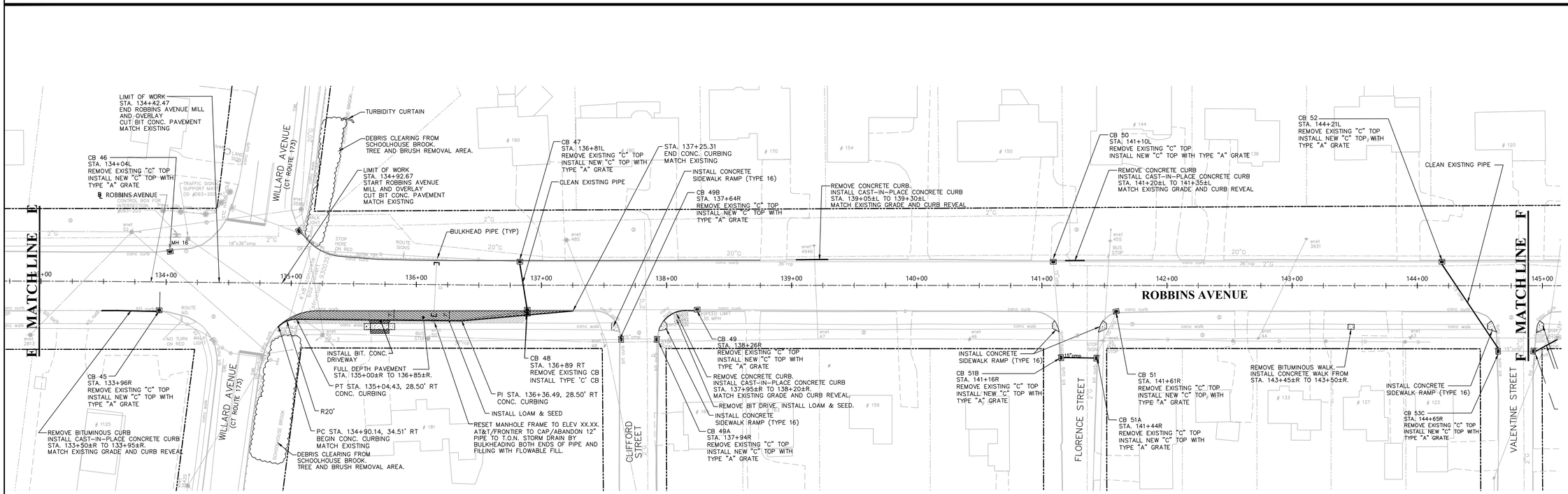
DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

PROJECT	18003
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	1" = 40"





NOTE:
REMOVING DEBRIS AND REMOVAL OF TREE AND BRUSH
SHALL BE PAID FOR UNDER ITEM "CLEARING AND GRUBBING"

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

REVISIONS:

vhb

SITE IMPROVEMENTS
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

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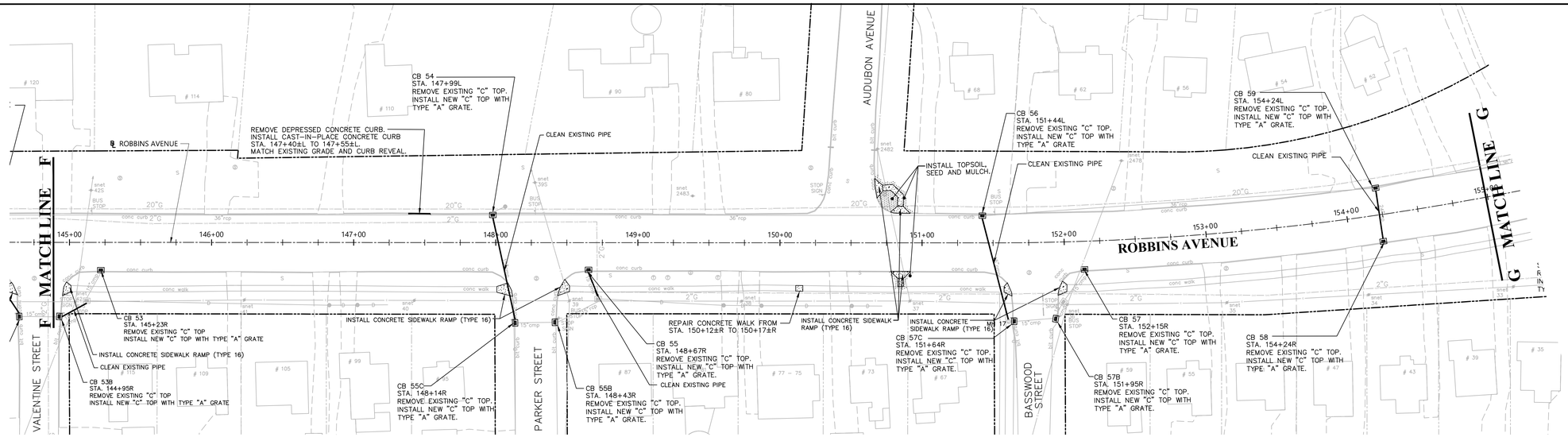
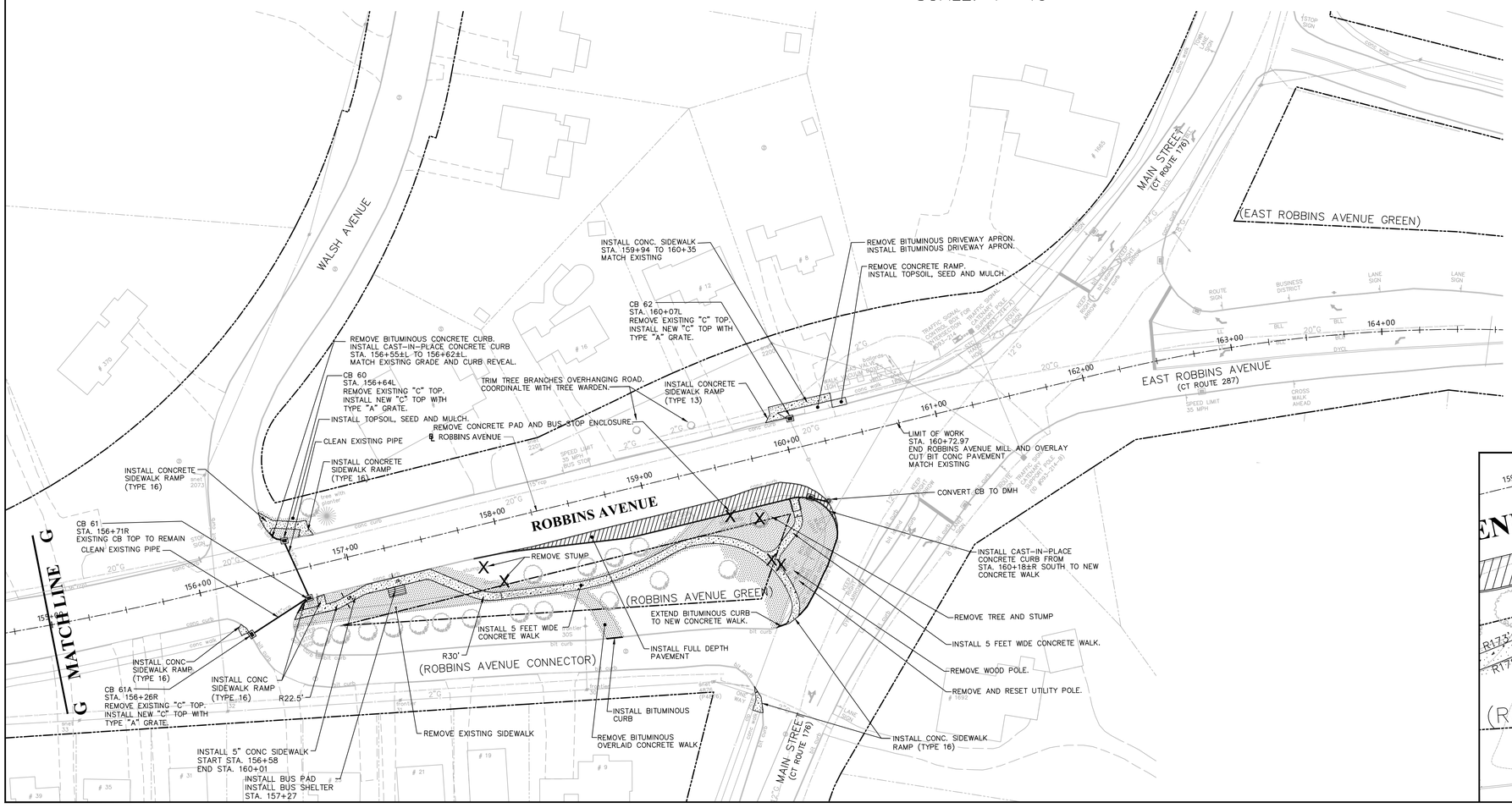
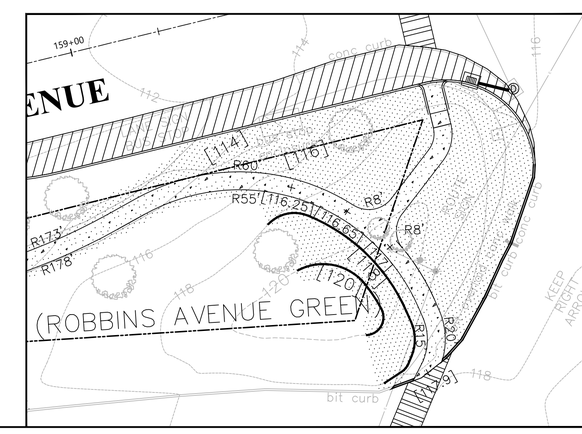


PLAN
SCALE: 1"=40'

PLAN
SCALE: 1"=40'



ROBBINS AVENUE GREEN GRADING DETAIL
SCALE: 1"=20'



REVISIONS:

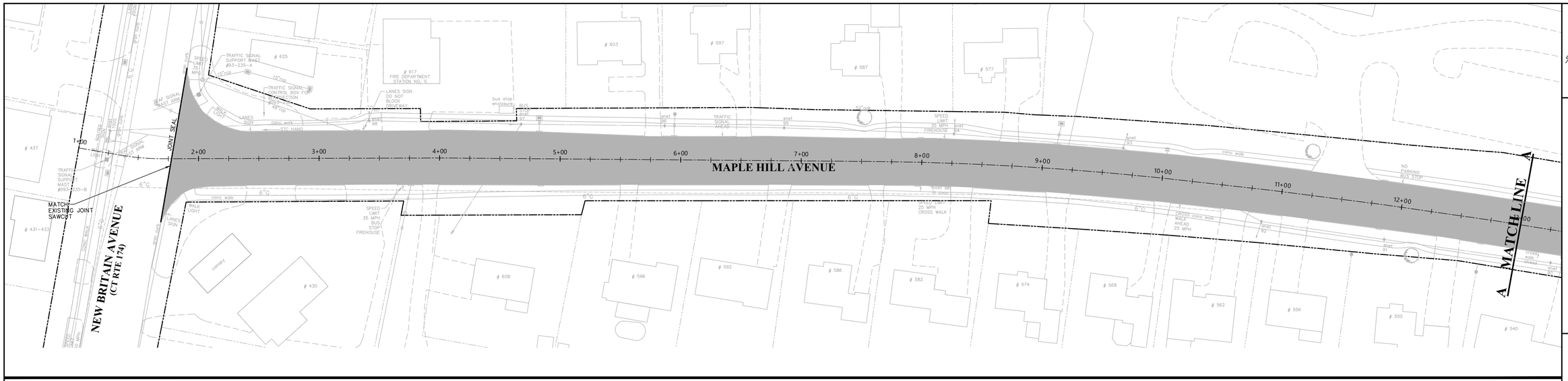
vhb

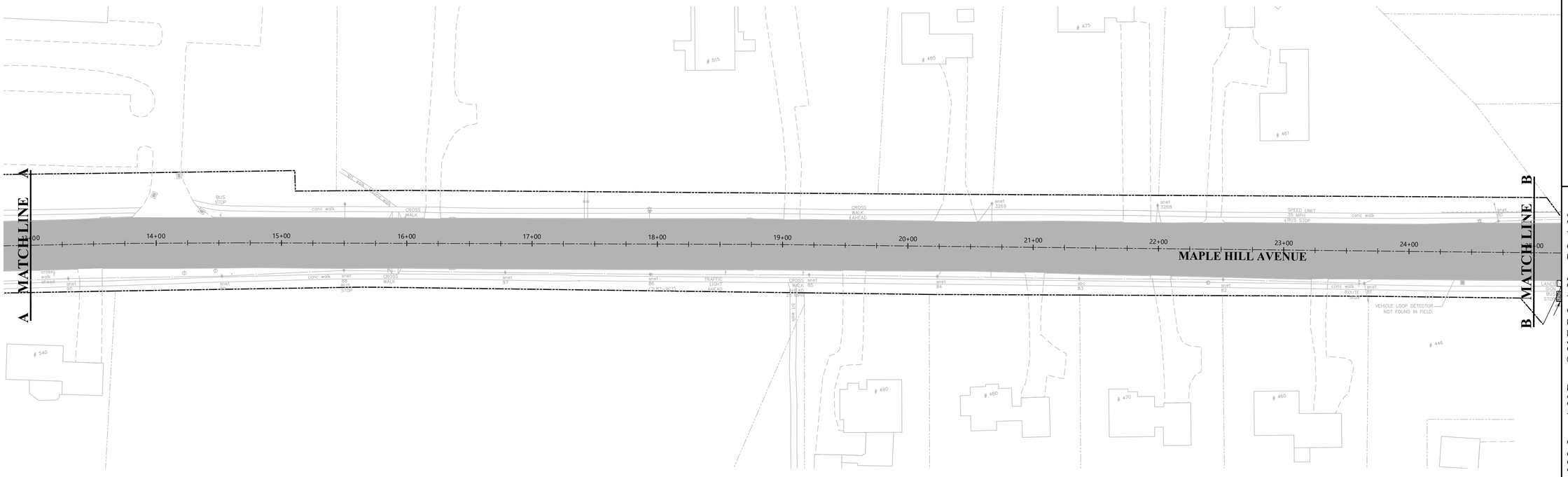
SITE IMPROVEMENTS
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83
VERTICAL: NAVD88

PROJECT	18006
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	AS-NOTED





MILL AND OVERLAY NOTES:

1. COMPLETE TRAFFIC SIGNAL IMPROVEMENTS PRIOR TO MILLING.
2. COMPLETE SITE IMPROVEMENTS PRIOR TO MILLING.
3. ABANDON VEHICLE DETCTOR LOOPS ON MAPLE HILL AVENUE AND ROBBINS AVENUE VIA MILLING.
4. MILL MAXIMUM OF 2 INCHES TO ESTABLISH CROWN PER ROAD SECTIONS.
5. MILL UP TO AN ADDITIONAL 1" AS NECESSARY WHERE UNEVEN PAVEMENT IS ENCOUNTERED.
6. AFTER MILLING AND PRIOR TO PAVING, INSTALL TEMPORARY BITUMINOUS RAMP AT: DRIVEWAYS, START AND END, UNCONTROLLED INTERSECTIONS.
7. RE-ESTABLISH CROWN PER ROAD SECTIONS FOR PROPER DRAINAGE.
8. SWEEP ROAD SURFACE MAXIMUM 24 HOURS PRIOR TO OVERLAY.
9. INSTALL SHIM COURSE AND BINDER COURSE, AS NEEDED.
10. OVERLAY MINIMUM 2 INCHES (MAXIMUM 2 1/4 INCHES) TO SURFACE ROAD.
11. LONGITUDINAL JOINT LENGTH: 1,000 FEET MAXIMUM.
12. ADJUST VALVES AND MANHOLES TO GRADE PRIOR TO INSTALLATION OF FINISHED COURSE OF PAVEMENT OVERLAY.
13. INSTALL WEARING COURSE.
14. WEARING COURSE LONGITUDINAL SEAMS: MINIMUM 12 INCHES HORIZONTAL OFFSET FROM BINDER COURSE LONGITUDINAL SEAMS.
15. INSTALL LONGITUDINAL SEAMS PER ROAD TYPICAL SECTIONS.
16. HOT JOINT SEAL ALL JOINTS.
17. INSTALL TEMPORARY PAVEMENT MARKINGS IMMEDIATELY AFTER MILLING TO ESTABLISH TRAVEL LANES AND CENTERLINE.
18. COMPLETE PAVING WITHIN 7 DAYS AFTER MILLING.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

10/10/2018 - BORINGS LOCATED

REVISIONS:

vhb

MILL AND OVERLAY PLAN
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE

PREPARED FOR

TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

PROJECT	18003
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	1" = 40"

10/10/2018 - BORINGS LOCATED

REVISIONS:

vhb

MILL AND OVERLAY PLAN
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE

PREPARED FOR

TOWN OF NEWINGTON

131 CEDAR STREET NEWINGTON, CT 06111

DATUMS:

HORIZONTAL: NAD 83

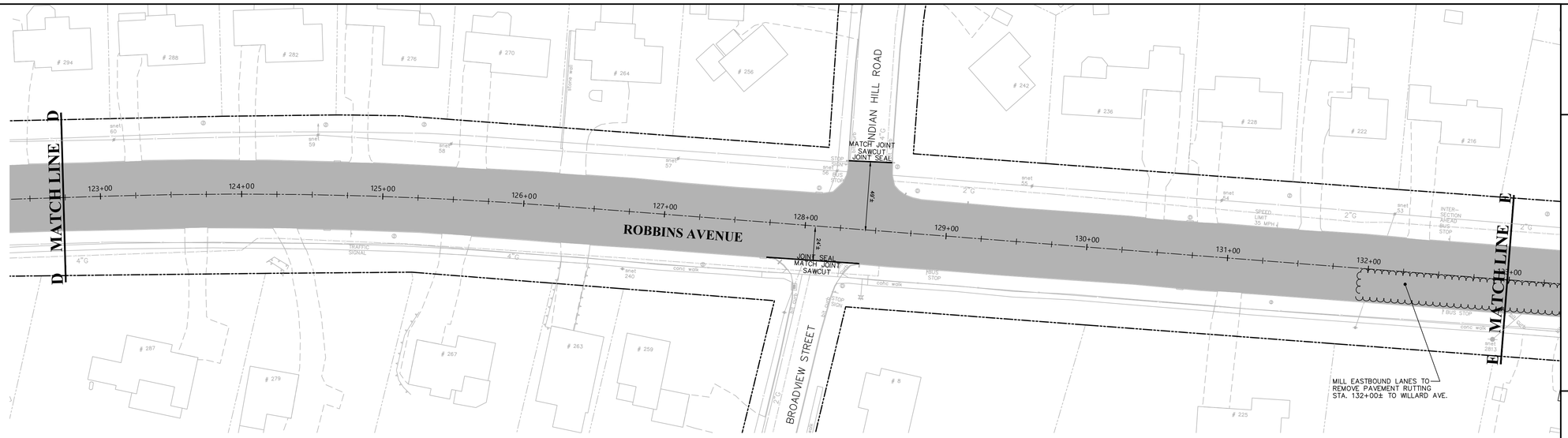
VERTICAL: NAVD88

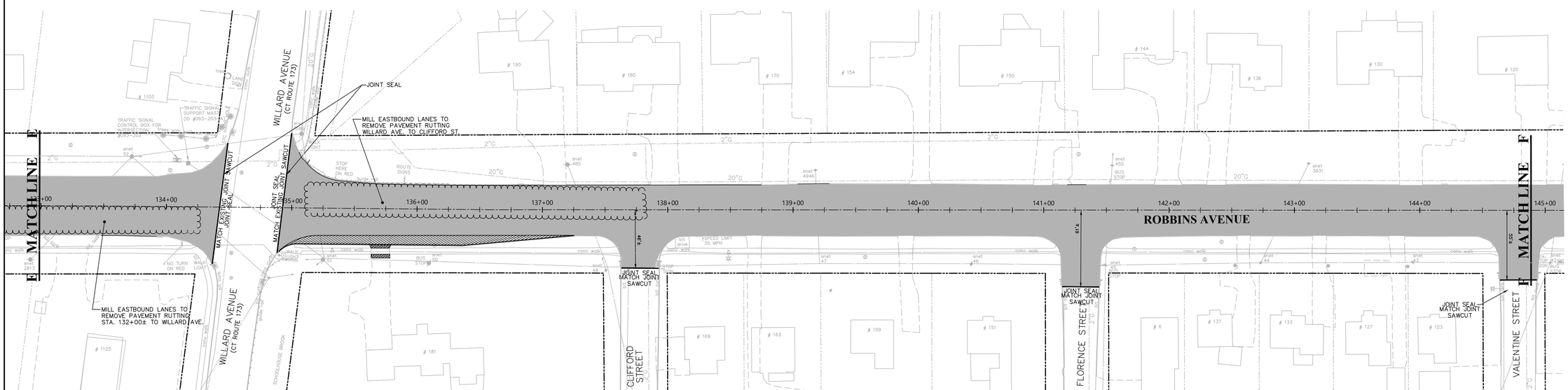
PROJECT	18003
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	1" = 40"

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.





GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

10/10/2018 - BORINGS LOCATED

REVISIONS:

vhb

MILL AND OVERLAY PLAN
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE

PREPARED FOR

TOWN OF NEWINGTON

131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

PROJECT	18003
DATE	12 / 16 / 2019
DRAWN	TJM
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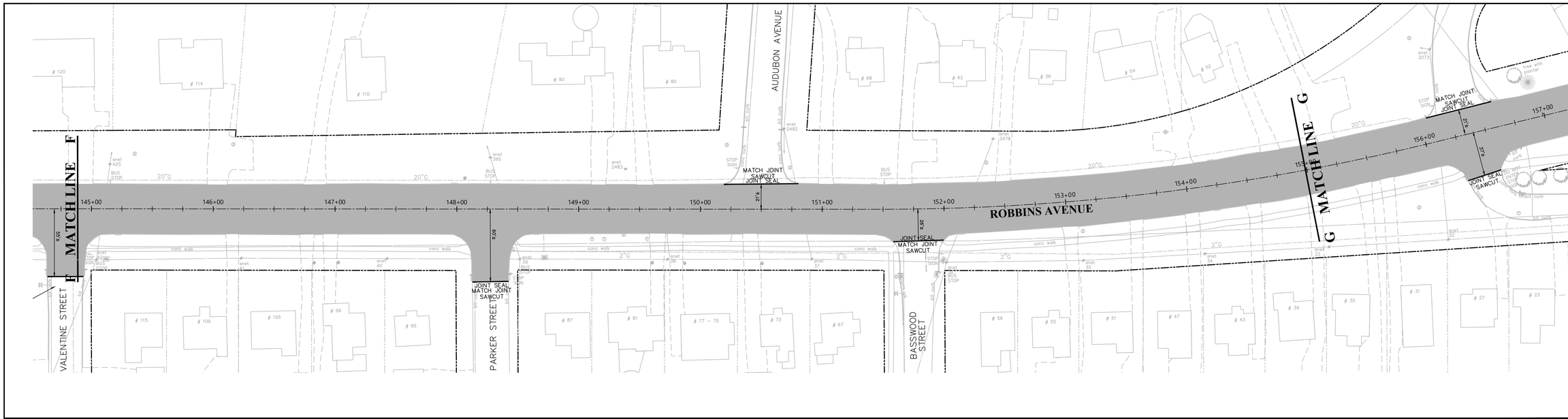
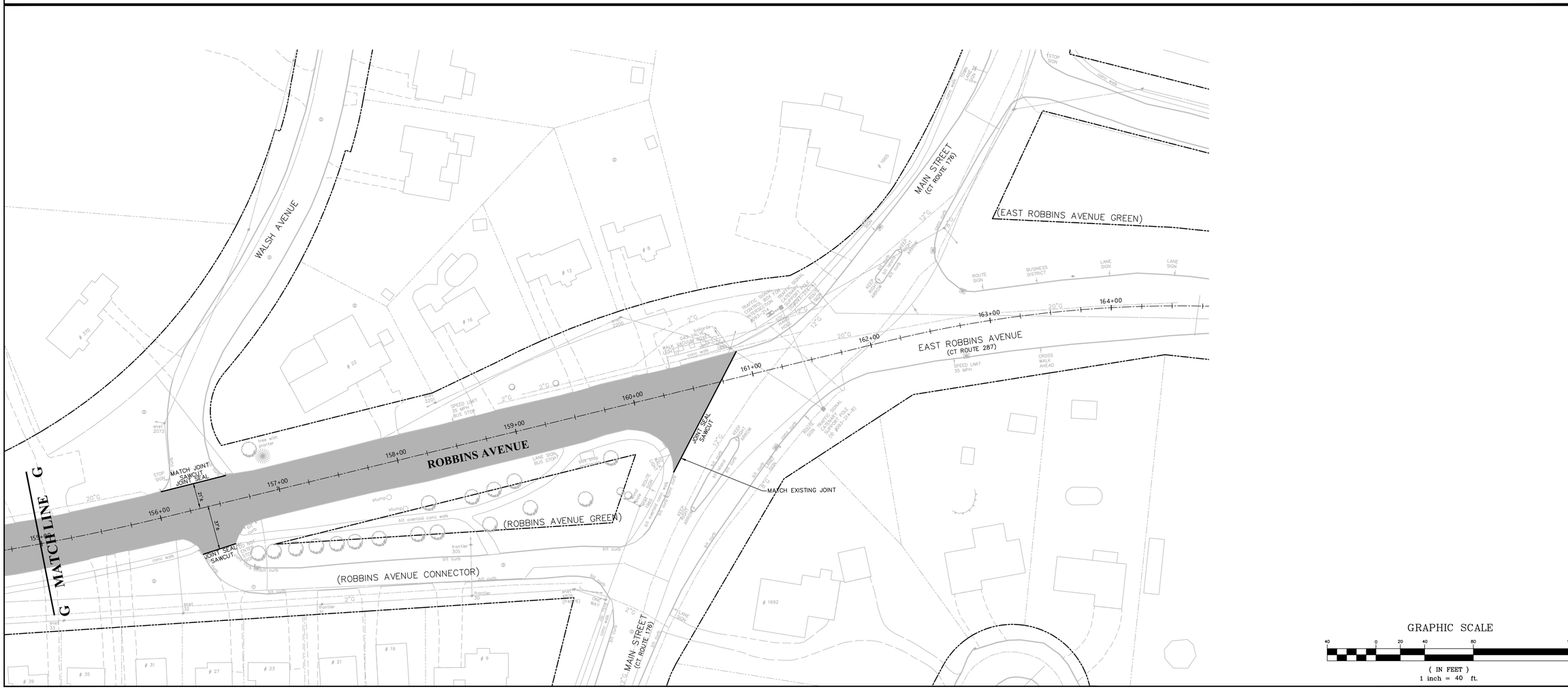
SHEET	XX OF XX
SCALE:	1" = 40"





GRAPHIC SCALE

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(IN FEET)
1 inch = 40 ft.

10/10/2018 - BORINGS LOCATED

REVISIONS:

vhb

MILL AND OVERLAY PLAN
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE

PREPARED FOR

TOWN OF NEWINGTON

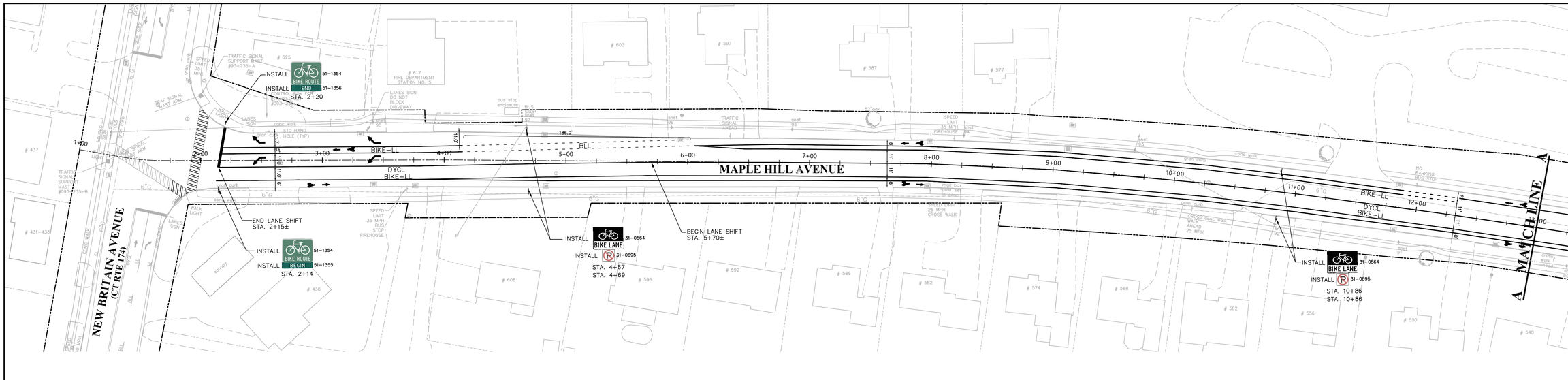
131 CEDAR STREET NEWINGTON, CT. 06111

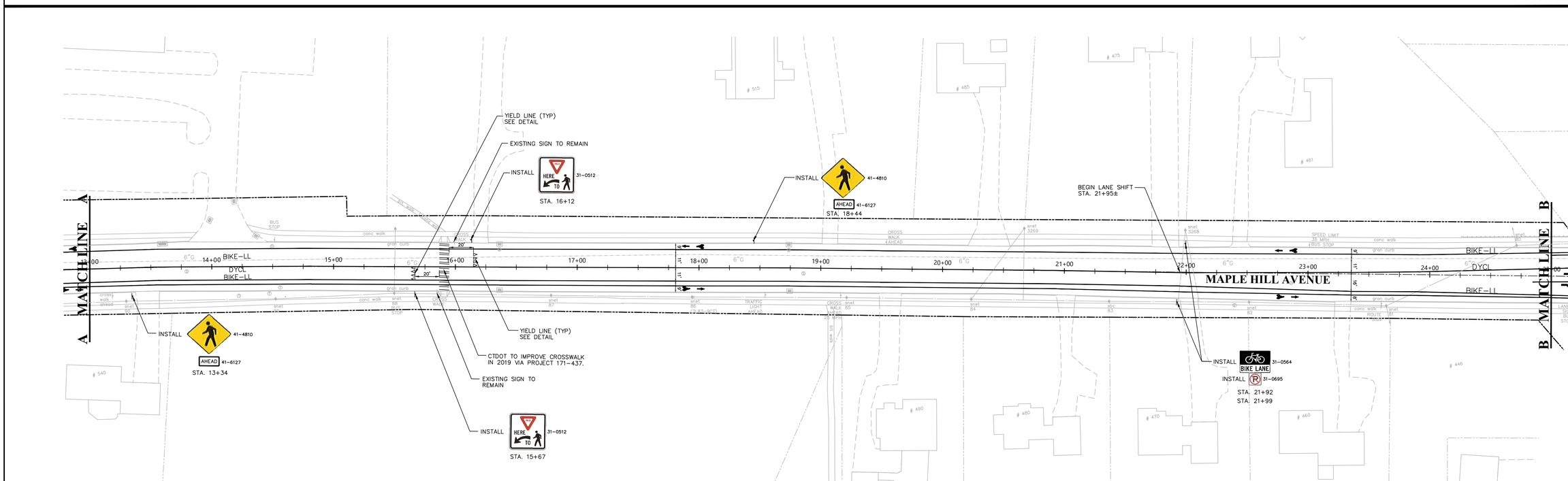
DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

PROJECT	18006
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	1" = 40'





PAVEMENT MARKINGS NOTES:
1. PROVIDE BIKE TEMPLATE TO TOWN OF NEWINGTON
2. INSTALL SIGNS ON 10 FT U-CHANNEL BREAKAWAY POSTS.
3. USE EPOXY RESIN FOR ALL PAVEMENT MARKS.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

REVISIONS:

vhb

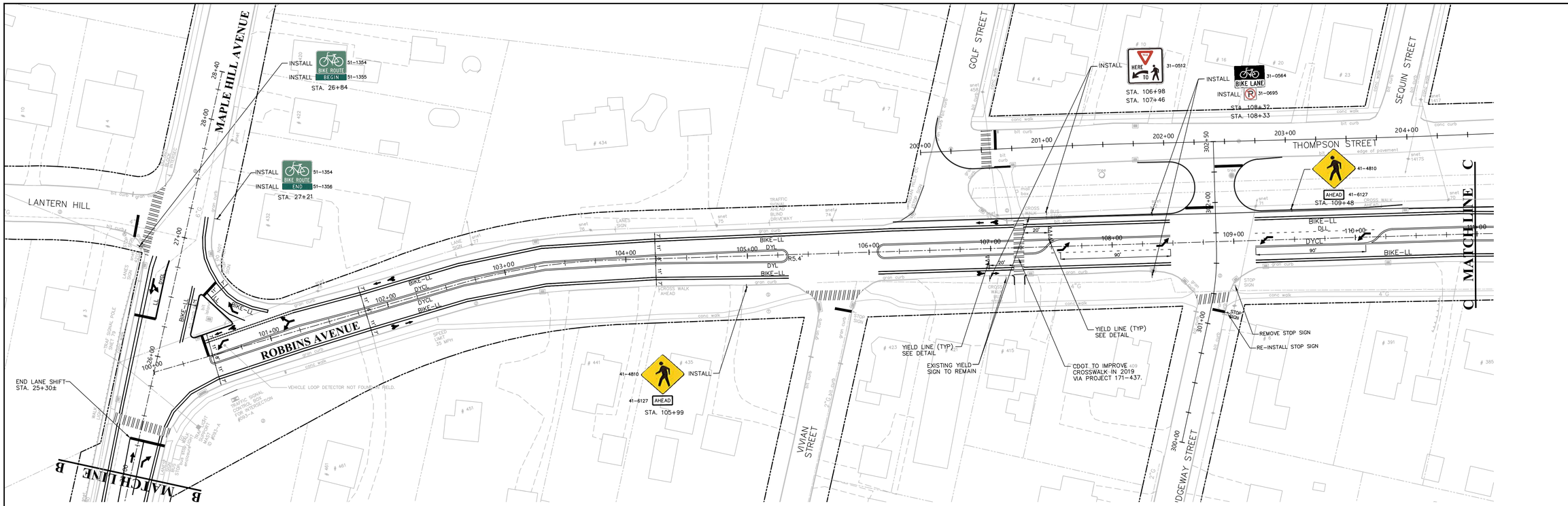
PAVEMENT MARKINGS AND SIGNS
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

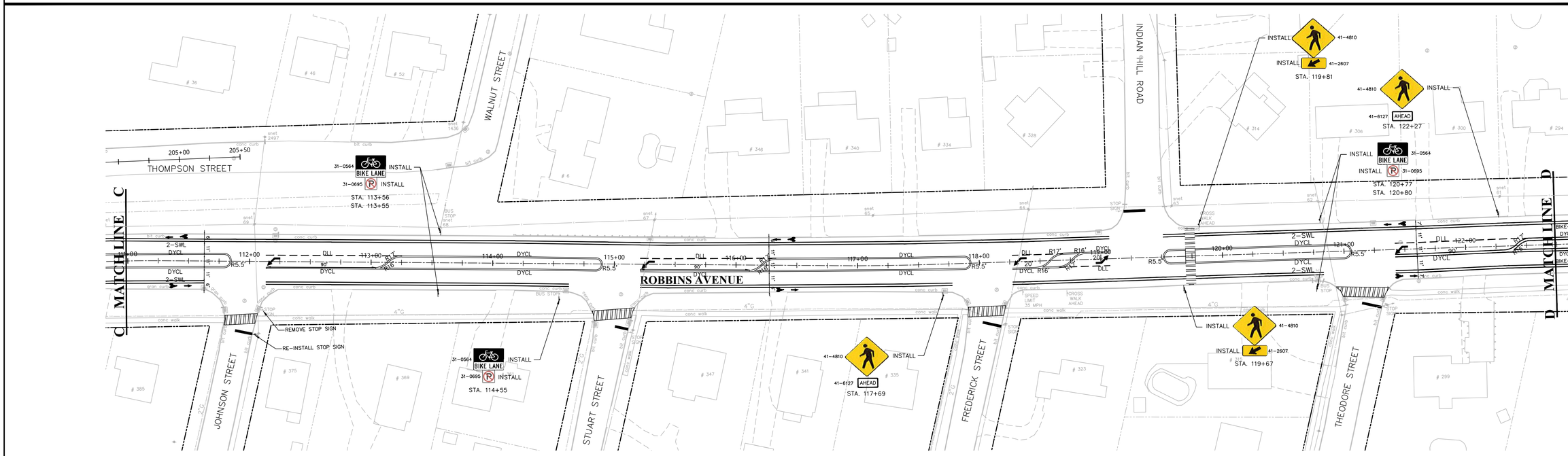
DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

PROJECT	18003
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	1" = 40"





GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

REVISIONS:

vhb

PAVEMENT MARKINGS AND SIGNS COMPLETE STREETS PROJECT MAPLE HILL AVENUE & ROBBINS AVENUE

PREPARED FOR

TOWN OF NEWINGTON

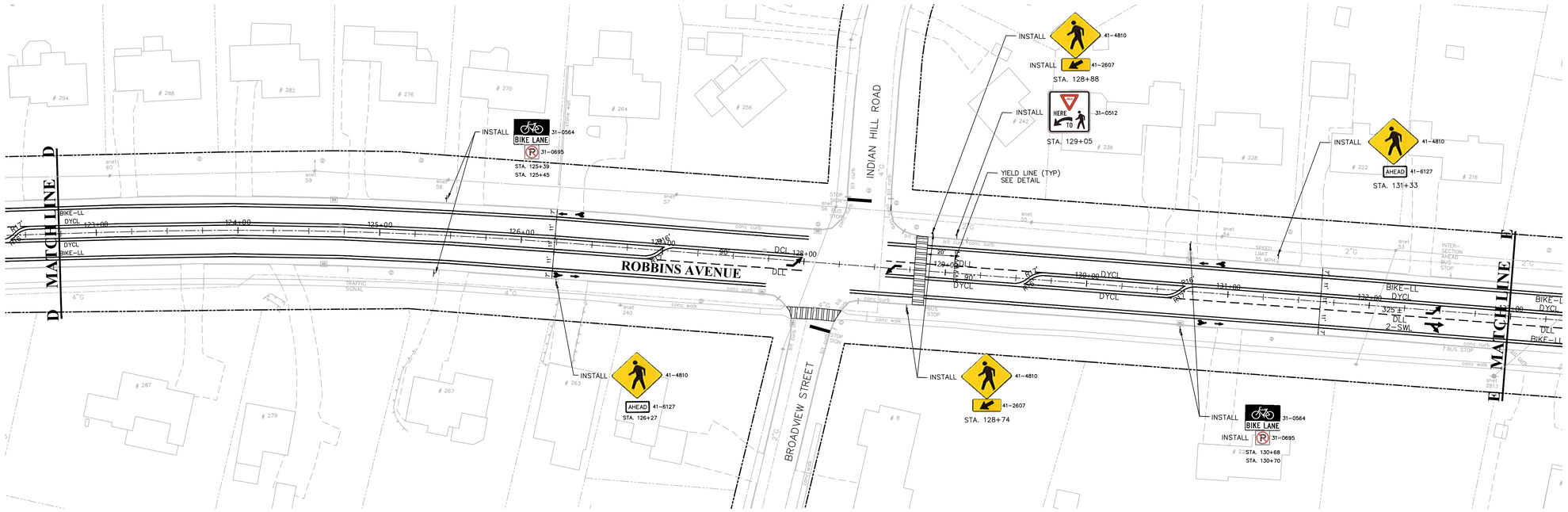
131 CEDAR STREET NEWINGTON, CT. 06111

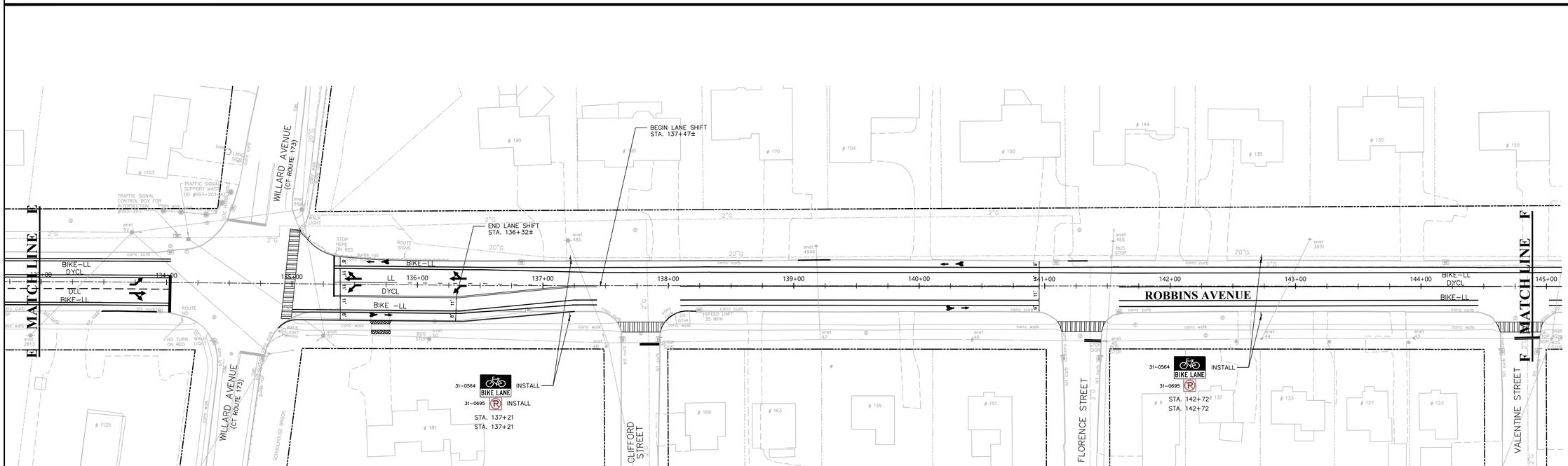
DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

PROJECT	18003
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	1" = 40"





GRAPHIC SCALE

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(IN FEET)
1 inch = 40 ft.

REVISIONS:

vhb

PAVEMENT MARKINGS AND SIGNS
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE

PREPARED FOR

TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

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PROJECT	18003
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CHECK	EAN
SHEET	XX OF XX
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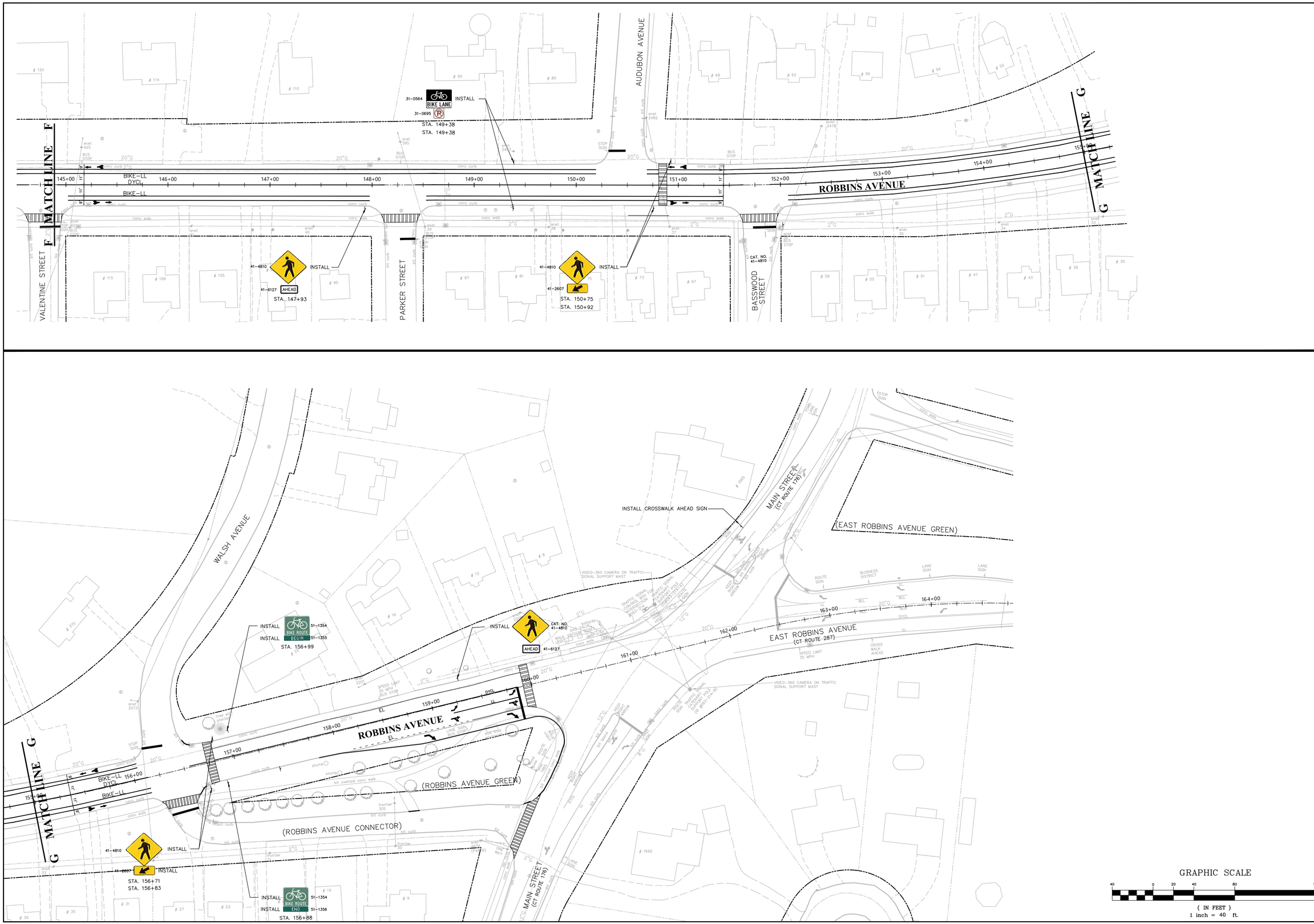


REVISIONS:

vhb

PAVEMENT MARKINGS AND SIGNS
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83
VERTICAL: NAVD88

PROJECT	18006
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	1" = 40'

MOVEMENT DIAGRAM

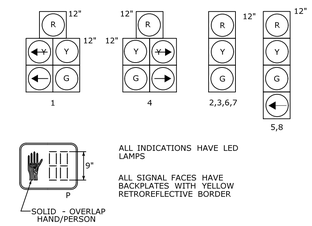
NTOR			PHASE 1			PHASE 2 PRE-EMPT. 1			PHASE 3			PHASE 4			PHASE 5 PRE-EMPT. 2			PHASE 6			PHASE 7			PHASE 8					
NONE			1 2 4			1 2 3 6						8 7			4 5														
		FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
FACE #	1	Y	◄G	◄Y G	G	G	Y	R	R	R	R	R	R	R	R	R	R												
	2	Y	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R												
	3	Y	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R												
	4	R	R ►	R Y►	R	R	R	R	R	R	R	R	R	R	G	Y ►(1)	R ►(2)												
	5	R	R	R	R	R	R	R	R	R	R	R	R	R	◄G	Y	R												
	6	Y	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R												
	7	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R												
	8	R	R	R	R	R	R	R	R	R	R	◄G	Y	R	R	R	R												
	P	OFF	◄			DW		►	WØ	◄				DW			►												
						◄ YIELD																							
INTERVALS	MIN GRN		5			15						5			7														
	WALK								7 (3)	ACCESSIBLE PEDESTRIAN SIGNAL																			
	PED CLR								17 (4)																				
	VEH EXT		1.5			2.5						1.5			1.5														
	MAX 1		14			19						8			12														
	MAX 2		11			32						8			17														
	YELLOW			3			4.2			4			3			3.6													
	RED				1.6			2.5			0			1			1												
	ADD INIT									COUNTDOWN PEDESTRIAN SIGNAL																			
	MAX INIT																												
	TBR																												
	TTR																												
	MIN GAP																												
MODE			NON-LOCK			MIN RECALL			NON-LOCK			NON-LOCK			NON-LOCK			OFF			OFF			OFF					
INT START						THIS PHASE																							

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY
Ø2 ON TO OMIT Ø1.
(1) TO BE "Y" IF PHASE 2 IS NEXT.
(2) TO BE "R" IF PHASE 2 IS NEXT.
(3) PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL.
(4) COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL.
MANUAL AND INTERVAL ADVANCE TO BE DISCONNECTED DURING Ø3 PEDESTRIAN CHANGE INTERVAL.
PRE-EMPTION TO BE INOPERATIVE DURING FLASHING OPERATION.
SIGNAL MAY DOUBLE CYCLE IF Ø3 IS CALLED.

OFFICE RECORD

REV #	TIR #	SM # N/A	SIGNAL REVISED:
REVISED LANE USE ON MAPLE HILL AVENUE & INSTALLED 360-DEGREE			
VIDEO DETECTION CAMERA UNDER STATE PROJECT # L093-0001			



ALL INDICATIONS HAVE LED LAMPS

ALL SIGNAL FACES HAVE BACKPLATES WITH YELLOW RETROREFLECTIVE BORDER

PRE-EMPTION SETTINGS

	PRE-EMPT 1	PRE-EMPT 2
PRIORITY	NO	NO
DET. LOCK	YES	YES
DELAY	0	0
ALT. MIN. GRN	5	5
ALT. YELLOW	PARENT	PARENT
ALT. RED	PARENT	PARENT
ALT. PED. CLR.	17	17
HOLD GREEN	15	15
HOLD YELLOW	4.2	3.6
HOLD RED	2.5	1
HOLD PHASE	2	5
EXIT PHASE	5	1
EXIT CALL	NONE	NONE

CONSTRUCTION NOTES:

ALL MATERIAL AND CONSTRUCTION METHODS SHALL CONFORM TO THE FOLLOWING CURRENT D.O.T. DOCUMENTS WHICH CAN BE ACCESSED ON THE D.O.T. WEBSITE:
- •STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION,
- •SUPPLEMENTAL SPECIFICATION TO THE STANDARD SPECIFICATION,
- •SPECIAL PROVISIONS TO THE STANDARD SPECIFICATIONS,
- •STANDARD INSTALLATION AND GUIDE DETAIL SHEETS.

ALL TRAFFIC SIGNAL EQUIPMENT IS EXISTING EXCEPT AS NOTED.

MODIFY EXISTING CONTROLLER TO ACCOMMODATE CHANGES. SUPPLY 5 COPIES OF REVISED CABINET WIRING DIAGRAMS.

COORDINATE THIS REVISION WITH CONNECTICUT D.O.T. SIGNAL LAB. CONTACT MR. DONALD ASSARD (860) 258-0346 OR MR. MARK ZAMPINI (860) 258-0349 AT LEAST 45 DAYS PRIOR TO REVISION.

INSTALL NEW VIDEO DETECTION PROCESSOR IN EXISTING CABINET.

INSTALL 360-DEGREE VIDEO DETECTION CAMERA ON MAST ARM ID #093-235A.

REMOVE EXISTING IP VIDEO DETECTION CAMERA AND ASSOCIATED CABLING FROM MAST ARM ID #093-235A. RETAIN IP VIDEO DETECTION CAMERA FOR INSTALLATION AT INTERSECTION #093-203.

VIDEO DETECTION ZONE LOCATIONS ARE FOR ILLUSTRATION PURPOSES ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR DESIGNATED REPRESENTATIVE. CAMERA CABLES ARE TO BE INSTALLED CONTINUOUSLY BETWEEN EACH CAMERA AND THE CONTROLLER CABINET. NO SPLICES WILL BE ALLOWED.

DETECTORS				SYSTEM LOC	COORDINATION TYPE: TC/TBC					
IDENT	SIZE (WXL)	TURNS	MODE	MASTER 93-236	PROGRAM FUNCTION	TIME	DAYS	CYCLE	OFFSET SEC	OFFSET %
D1	6' X 35'	VIDEO 360	PRESENCE	93-235	FLASH	NONE	DAILY			
D2,D2A	6'X 6'	4	PRESENCE		MAX 1	ALL OTHER TIMES				
D2B,D2C	6'X 6'	4	PRESENCE		MAX 2	1500 - 1800				
D4	6' X 25'	VIDEO 360	6" DELAY		PATTERN 1	ALL OTHER TIMES		75"	1"	
D5	6' X 35'	VIDEO 360	PRESENCE		PATTERN 2	1500 - 1800	M-F	90"	1"	
D5A	6' X 35'	VIDEO 360	6" DELAY							
BD1	4' X 35'	VIDEO 360	PRESENCE							

SIGN LEGEND:
- (A) EXIST. 31-0283
- (B) EXIST. 31-0282
- (C) SPAN MTD. 31-0135
- (D) EXIST. 31-0283Z
- (E) EXIST. 31-0552
- (F) EXIST. 31-0283Z AND SUBMTD. 31-0803Z

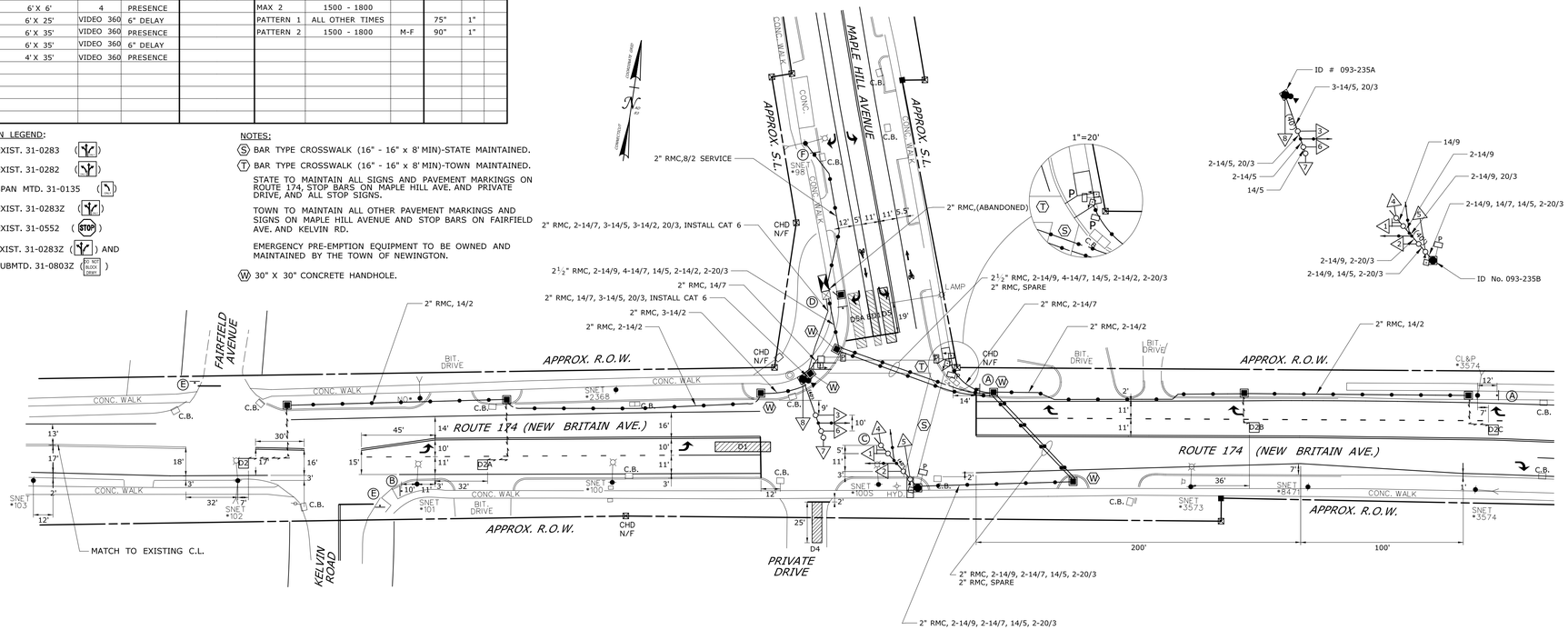
NOTES:
- (S) BAR TYPE CROSSWALK (16" - 16" x 8' MIN)-STATE MAINTAINED.
- (T) BAR TYPE CROSSWALK (16" - 16" x 8' MIN)-TOWN MAINTAINED.

STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON ROUTE 174, STOP BARS ON MAPLE HILL AVE. AND PRIVATE DRIVE, AND ALL STOP SIGNS.

TOWN TO MAINTAIN ALL OTHER PAVEMENT MARKINGS AND SIGNS ON MAPLE HILL AVENUE AND STOP BARS ON FAIRFIELD AVE. AND KELVIN RD.

EMERGENCY PRE-EMPTION EQUIPMENT TO BE OWNED AND MAINTAINED BY THE TOWN OF NEWINGTON.

(W) 30" X 30" CONCRETE HANDHOLE.



MAST ARM INFORMATION

ID #	ARM LENGTH	APPROX. ARM ATTACHMENT HT.	YEAR INSTALLED
093-235A	40'	17'	2016
093-235B	40'	17'	2016

	TRAFFIC	DATE	ELECTRICAL	DATE
ENGINEER				
DRAWN BY				
CHECKED BY				
SUBMITTED BY				
APPROVED BY				
APPROVED DATE				

vhb — 100 Great Meadow Road, Suite 200, Wethersfield, Connecticut 06109, Tel: 860 807-4300 Fax: 860 372-4570

REV # INTERSECTION # 93-235

ENERGY BY TOWN | ADDRESS #
MAINT LEVEL 5 | SERVICE POLE SNET 98
UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
- R RED
- Y YELLOW
- G GREEN
- ◄R RED ARROW
- ◄Y YELLOW ARROW
- ◄ GREEN ARROW
- WØ WALK/ PED. CLR
- D.W. DON'T WALK
- FL. FLASHING

- PROPOSED WOOD SPAN POLE
- EXISTING WOOD SPAN POLE
- PROPOSED STEEL SPAN POLE
- EXISTING STEEL SPAN POLE
- PROPOSED UTILITY POLE
- EXISTING UTILITY POLE
- PEDESTAL MOUNTING
- PEDESTRIAN PUSH BUTTON & SIGN
- DIRECTIONAL ARW. FOR PUSH BUTTON

- TRAFFIC SIGNAL FACE
- PEDESTRIAN SIGNAL FACE
- DET. LEADS IN SAW CUT
- PROPOSED RMC (RIGID METAL CONDUIT)
- EXISTING RMC (RIGID METAL CONDUIT)
- AUXILIARY TERMINATION CABINET
- AUXILIARY EQUIPMENT CABINET
- VIDEO DETECTION ZONE

- PROPOSED CONTROLLER
- EXISTING CONTROLLER
- LOOP DETECTOR
- SD SYSTEM DETECTOR
- MAGNETIC DETECTOR
- OPTICAL DETECTOR
- VIDEO DETECTOR
- AUDIO DETECTOR

- SIDEWALK RAMP
- CABLE CLOSURE
- WIRELESS SENSOR
- WIRELESS RECEIVER
- WIRELESS TRANSMITTER
- GUY WIRE
- PROPOSED HANDHOLE
- EXISTING HANDHOLE

DATE PLOTTED : 12/17/2019\\vhb\gbl\proj\Wethersfield\42560.00\cad\ts\planset\018_TR_ASSET_093-235.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

TOWN OF NEWINGTON
ROUTE 174 (NEW BRITAIN AVENUE)
AT MAPLE HILL AVENUE

SCALE 1" = 40'

TOWN: **NEWINGTON**

DRAWING TITLE: **TRAFFIC CONTROL SIGNAL PLAN**

PROJECT NO. L093-0001
DRAWING NO. TCS-01
SHEET NO.

MOVEMENT DIAGRAM

NTOR			PHASE 1			PHASE 2 PRE-EMPT 1			PHASE 3			PHASE 4 PRE-EMPT 2			PHASE 5	PHASE 6	PHASE 7	PHASE 8
NONE																		
		FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL				
F	1	Y	G	Y G	G	G	Y	R	R	R	R	R	R	R				
A	2	Y	G	G	G	G	Y	R	R	R	R	R	R	R				
C	3	Y	R	R	R	G	Y	R	R	R	R	R	R	R				
E	4	Y	R	R	R	G	Y	R	R	R	R	G	Y	R				
#	5	R	R	R	R	R	R	R	R	R	R	G	Y	R				
	6	R	R	R	R	R	R	R	R	R	R	G	Y	R				
	P	OFF				DW			WØ			DW						
I	MIN GRN		5			15			0*			7						
N	WALK								7	ACCESSIBLE PEDESTRIAN SIGNAL								
T	PED CLR								11									
E	VEH EXT		1			2.5						3						
R	MAX1		8			30						20						
V	MAX2		8			30						20						
A	YELLOW			3.0			3.0			4.0			3.0					
L	RED				1.0			2.0			0			1.5				
S	ADD INIT									COUNTDOWN PEDESTRIAN SIGNAL								
	MAX INIT																	
	TBR																	
	TTR																	
	MIN GAP																	
MODE			NON-LOCK			MIN RECALL			NON-LOCK			LOCKED			OFF	OFF	OFF	OFF
INIT START						THIS PHASE												

DETECTORS

IDENT	SIZE (WxL)	TYPE	MODE
D1	SEE PLAN	VIDEO	PRESENCE
D2	SEE PLAN	VIDEO	PRESENCE
D2A	SEE PLAN	VIDEO	PRESENCE
D4	SEE PLAN	VIDEO	PRESENCE
BD1	SEE PLAN	VIDEO	PRESENCE
BD2	SEE PLAN	VIDEO	PRESENCE

SYSTEM LOC | COORDINATION TYPE: NONE

MASTER	PROGRAM FUNCTION	PROGRAM TIME	PROGRAM DAYS	CYCLE	OFFSET SEC	OFFSET %
	FLASH	NONE				

DETECTOR CHART	
DETECTOR	LOCAL
D1	Ø1 C&E
D2	Ø2 C&E
D2A	Ø2 C&E
D4	Ø4 C&E
BD1	Ø4 C&E
BD2	Ø1 C&E

C&E = CALL AND EXTEND
E = EXTEND

PRE-EMPTION SETTINGS

	PRE-EMPT 1	PRE-EMPT 2
PRIORITY	NO	NO
DET. LOCK	YES	YES
DELAY	0	0
ALT. MIN. GRN	5	5
ALT. YELLOW	PARENT	PARENT
ALT. RED	PARENT	PARENT
ALT. PED. CLR.	17	17
HOLD GREEN	15	15
HOLD YELLOW	3	3
HOLD RED	2	1.5
HOLD PHASE	2	4
EXIT PHASE	4	1
EXIT CALL	NONE	NONE

Ⓣ BAR TYPE CROSSWALK (12"WIDE, 24"SPACE, 8'LONG MINIMUM), TOWN MAINTAINED
Ⓢ BAR TYPE CROSSWALK (16"WIDE, 24"SPACE, 8'LONG MINIMUM), STATE MAINTAINED

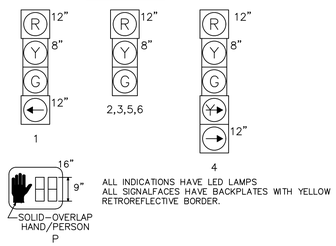
TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY
Ø2 ON TO OMIT Ø1.
1 TO BE "Y" IF PHASE 2 IS NEXT.
2 TO BE "R" IF PHASE 2 IS NEXT.
3 PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL.
4 COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL.
MANUAL AND INTERVAL ADVANCE TO BE DISCONNEDTED DURING Ø3 PEDESTRIAN CHANGE INTERVAL.
PRE-EMPTION TO BE INOPERATIVE DURING FLASHING OPERATION.
SIGNAL MAY DOUBLE CYCLE IF Ø3 IS CALLED.

OFFICE RECORD

REV. #	TIR #	SM # N/A	SIGNAL REVISED:
			WIDEN ROBBINS AVENUE TO ADD PRE-EMPTION AND VIDEO DETECTION UNDER PROJECT NO. L093-0001.

SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS
ALL SIGNALFACES HAVE BACKPLATES WITH YELLOW RETROREFLECTIVE BORDER.

CONSTRUCTION NOTES:

ALL MATERIAL AND CONSTRUCTION METHODS SHALL CONFORM TO THE FOLLOWING CURRENT D.O.T. DOCUMENTS WHICH CAN BE ACCESSED ON THE D.O.T. WEBSITE:

- STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION,
- SUPPLEMENTAL SPECIFICATION TO THE STANDARD SPECIFICATION,
- SPECIAL PROVISIONS TO THE STANDARD SPECIFICATIONS,
- STANDARD INSTALLATION AND GUIDE DETAIL SHEETS.

ALL TRAFFIC SIGNAL EQUIPMENT IS EXISTING EXCEPT AS NOTED.

MODIFY EXISTING CONTROLLER TO ACCOMMODATE CHANGES. SUPPLY 5 COPIES OF REVISED CABINET WIRING DIAGRAMS.

INSTALL NEW VIDEO DETECTION PROCESSOR IN EXISTING CABINET.

INSTALL 360-DEGREE VIDEO DETECTION CAMERA ON THE SPAN POLE ON THE SOUTHEAST CORNER, AS SHOWN ON THE PLAN.

VIDEO DETECTION ZONE LOCATIONS ARE FOR ILLUSTRATION PURPOSES ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR DESIGNATED REPRESENTATIVE. CAMERA CABLES ARE TO BE INSTALLED CONTINUOUSLY BETWEEN EACH CAMERA AND THE CONTROLLER CABINET. NO SPLICES WILL BE ALLOWED.

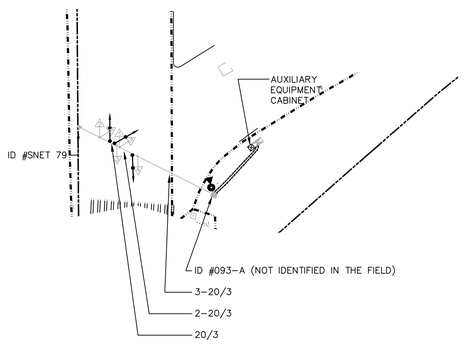
Ⓒ REPLACE ARROW INDICATION IN SIGNAL HEAD 1 WITH BI-COLOR ARROW

EMERGENCY PRE-EMPTION NOTES

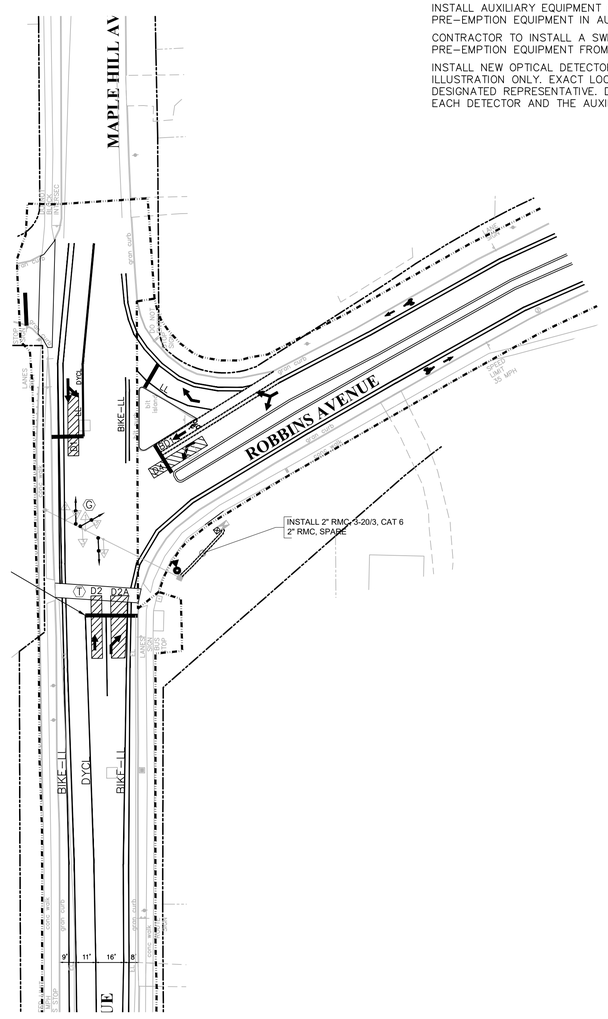
INSTALL AUXILIARY EQUIPMENT CABINET ON LEFT SIDE OF CONTROLLER CABINET. INSTALL PRE-EMPTION EQUIPMENT IN AUXILIARY CABINET.

CONTRACTOR TO INSTALL A SWITCH IN THE SIGNAL CABINET TO EFFECTIVELY DISCONNECT THE PRE-EMPTION EQUIPMENT FROM THE TRAFFIC SIGNAL CONTROLLER.

INSTALL NEW OPTICAL DETECTORS ON EXISTING SPAN. PRE-EMPTION DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE AUXILIARY EQUIPMENT CABINET.



SPAN WIRE
ELECTRICAL CALLOUTS
N.T.S.



NOTES:
1. SIGNAL OWNED BY TOWN OF NEWINGTON.
2. TOWN TO MAINTAIN SIGNS AND PAVEMENT MARKINGS ON MAPLE HILL AVENUE AND ROBBINS AVENUE.
3. LOCATION OF ALL PHYSICAL FEATURES, INCLUDING SIGNAL EQUIPMENT AND PAVEMENT MARKINGS, MAY NOT REFLECT ACTUAL FIELD CONDITIONS.
4. DATA SHOWN IN GRAY (MOVEMENT DIAGRAM, DETECTORS, PROGRAM, TECHNICAL NOTES, ETC.) FROM FIELD OBSERVATION ON FEBRUARY 5, 2019.
5. NO CLOCK IN CENTRAL BOX.
6. EXISTING ELECTRIC WIRES/CONDUIT FOR TRAFFIC SIGNAL AND ELECTRIC SERVICE NOT SHOWN.
7. EXISTING ELECTRIC SERVICE LIKELY FROM SNET 79.

TRAFFIC PLAN LEGEND:
R RED
Y YELLOW
G GREEN
RED ARROW
YELLOW ARROW
GREEN ARROW
WØ WALK/PED. CLR
D.W. DON'T WALK
FL. FLASHING

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DECTOR

SIDEWALK RAMP
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSMITTER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

360° CAMERA
STANDARD CAMERA
SWL SINGLE WHITE LINE
DYL DOUBLE YELLOW LINE

PROGRESS PRINT
NOT FOR CONSTRUCTION
12 / 17 / 2019

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REVISIONS:

TOWN OF NEWINGTON
ENGINEERING DEPARTMENT

TRAFFIC CONTROL SIGNAL PLAN
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE

PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:
HORIZONTAL: NAD 83
VERTICAL: NAVD88

PROJECT	18003
DATE	08 / 30 / 2019
DRAWN	JHD
CHECK	GJF
SHEET	24 OF x
SCALE:	1" = 40"

MOVEMENT DIAGRAM

	NTOR	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
			PRE-EMPT 1		PRE-EMPT 2				PRE-EMPT 3	
	FLASH	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL	GRN CL CL
FACE # 1	Y	◄G ◄Y G G	G Y R	R R R	R R R	R R R		R R R	R R R	
2	Y	G G G	G Y R	R R R	R R R	R R R		R R R	R R R	
3	Y	R R R	G Y R	R R R	R R R	R R R		R R R	R R R	
4	R	R R R	R R R	◄R ◄Y R R	R R R	R R R		R R R	G Y R	
5	R	R R R	R R R	R R R	R R R	R R R		R R R	G Y R	
6	R	R R R	R R R	R R R	G Y R	R R R		◄R ◄Y R R	R R R	
7	R	R R R	R R R	R R R	G Y R	R R R		R R R	R R R	
P	OFF					WØ DW		DW		
INTERVALS MIN GRN		6	15	6	9	7 (1) 15 (2) ACCESSIBLE PEDESTRIAN SIGNAL		6	9	
WALK										
PED CLR										
VEH EXT		2	4	2	2			2	2	
MAX 1		9	20	9	20			9	20	
MAX 2		9	30	12	30			12	30	
YELLOW		3.0	4.3	3.0	3.6	4.0		3.0	3.6	
RED		1.0	2.2	1.0	3.2	0.0 COUNTDOWN PEDESTRIAN SIGNAL		1.0	3.2	
ADD INIT										
MAX INIT										
TBR										
TTR										
MIN GAP										
MODE		MIN RECALL	MIN RECALL	NON-LOCK	NON-LOCK	NON-LOCK	OFF	NON-LOCK	NON-LOCK	
INIT START			THIS PHASE							

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY
PHASE 2 ON TO OMIT PHASE 1.
PHASES 4 & 8 CHECK TO CALL PHASES 3 & 7.
① PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL.
② COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL.
MANUAL AND INTERVAL ADVANCE TO BE DISCONNECTED DURING PHASE 5 PEDESTRIAN CHANGE INTERVAL.
PRE-EMPTION TO BE INOPERATIVE DURING FLASHING OPERATION.

OFFICE RECORD

REV # TIR # N/A SM # SIGNAL REVISED:
REVISED PAVEMENT MARKINGS, ADDED PRE-EMPTION AND VIDEO DETECTION
UNDER PROJECT #L093-0001.

DETECTORS

IDENT	SIZE (WXL)	TYPE	MODE
D1	6' X 35'	VIDEO 360	PRESENCE
D2	14' X 6'	VIDEO IP	PRESENCE
D3	8' X 6'	VIDEO 360	PRESENCE
D4	6' X 35'	VIDEO 360	PRESENCE
D5	6' X 35'	VIDEO 360	PRESENCE
D6	6' X 35'	VIDEO 360	PRESENCE
D7	6' X 35'	VIDEO 360	PRESENCE

SYSTEM LOC MASTER

COORDINATION TYPE: NONE

PROGRAM FUNCTION	TIME	DAYS
FLASH	NONE	
MAX 1	ALL OTHER TIMES	
MAX 2	1400-1900	M-SAT

CYCLE	OFFSET SEC	OFFSET %

SIGN LEGEND

Ⓐ EXIST. 31-0349 (↖↑↗)
Ⓑ EXIST. 31-0802Z (STOP HERE ON RED ↙)
Ⓒ EXIST. 31-0824Z (NTOR)

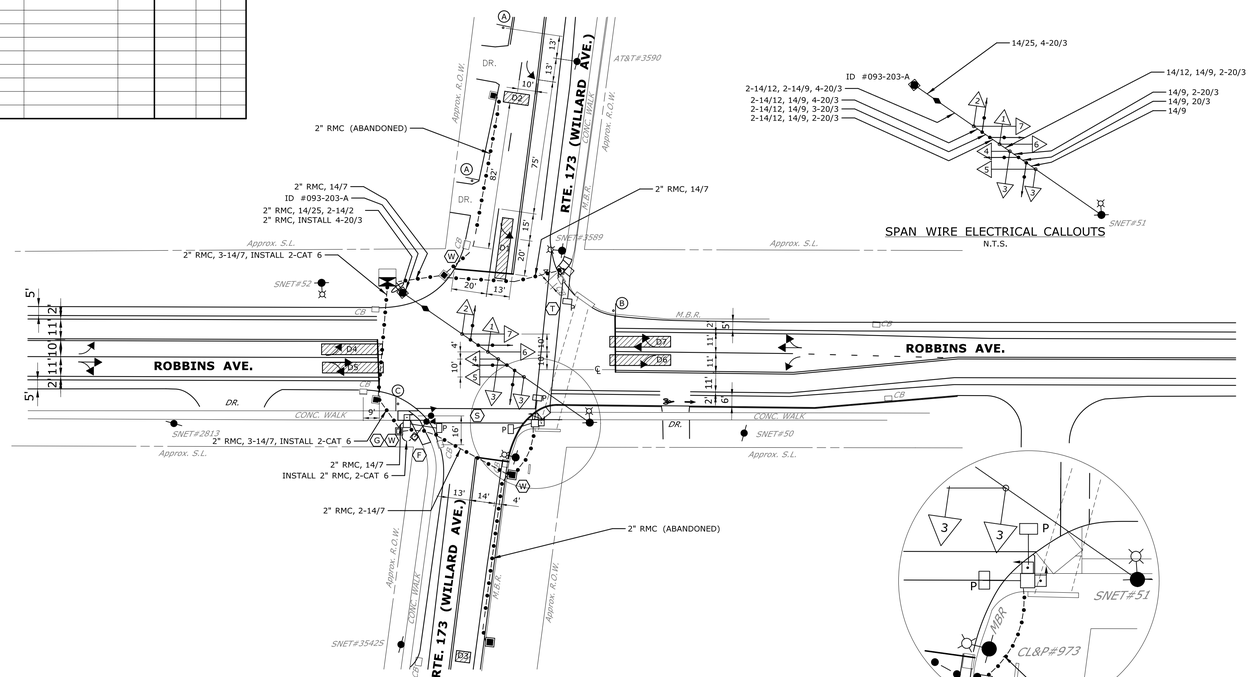
NOTES:

STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON ROUTE 173 AND ALL STOP BARS.

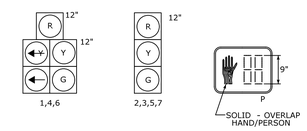
TOWN TO MAINTAIN ALL SIGNS AND OTHER PAVEMENT MARKINGS ON ROBBINS AVE.

Ⓢ BAR TYPE CROSSWALK (24" - 16" X 8' MIN.) - STATE MAINTAINED.
Ⓣ BAR TYPE CROSSWALK (24" X 16" X 8' MIN.) - TOWN MAINTAINED.
Ⓦ 30" X 30" CONCRETE HANDHOLE.

THE LOCATION OF ALL PHYSICAL FEATURES, INCLUDING SIGNAL EQUIPMENT AND PAVEMENT MARKINGS, MAY NOT REFLECT ACTUAL FIELD CONDITIONS.



SIGNAL FACES



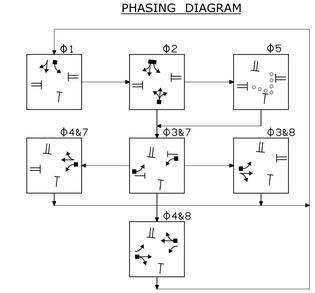
ALL INDICATIONS HAVE LED LAMPS.

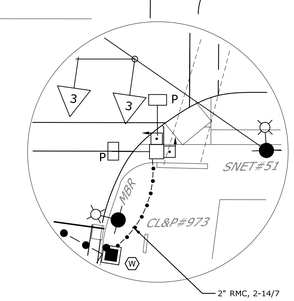
PRE-EMPTION SETTINGS

	PRE-EMPT 1	PRE-EMPT 2	PRE-EMPT 3
PRIORITY	NO	NO	NO
DET. LOCK	YES	YES	YES
DELAY	0	0	0
ALT. MIN. GRN	5	5	5
ALT. YELLOW	PARENT	PARENT	PARENT
ALT. RED	PARENT	PARENT	PARENT
ALT. PED. CLR.	18	18	18
HOLD GREEN	15	15	15
HOLD YELLOW	4.3	3.6	3.6
HOLD RED	2.2	3.2	3.2
HOLD PHASE	2	4	8
EXIT PHASE	3&7	1	1
EXIT CALL	NONE	NONE	NONE

SPAN WIRE ELECTRICAL CALLOUTS
N.T.S.

PHASING DIAGRAM





DETAIL "A" ENLARGED VIEW
N.T.S.

CONSTRUCTION NOTES:

ALL MATERIAL AND CONSTRUCTION METHODS SHALL CONFORM TO THE FOLLOWING CURRENT D.O.T. DOCUMENTS WHICH CAN BE ACCESSED ON THE D.O.T. WEBSITE:
- STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION,
- SUPPLEMENTAL SPECIFICATION TO THE STANDARD SPECIFICATION,
- SPECIAL PROVISIONS TO THE STANDARD SPECIFICATIONS,
- STANDARD INSTALLATION AND GUIDE DETAIL SHEETS.

ALL TRAFFIC SIGNAL EQUIPMENT IS EXISTING EXCEPT AS NOTED.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING* PRIOR TO INSTALLATION.

TRIM TREE BRANCHES/VEGETATION AS NEEDED AND AS DIRECTED BY THE ENGINEER TO ACCOMMODATE VIDEO DETECTION ZONES AS SHOWN ON THE PLAN. WORK TO BE PAID UNDER ITEM NO. 0952001A SELECTIVE CLEARING AND THINNING.

MODIFY EXISTING CONTROLLER TO ACCOMMODATE CHANGES. SUPPLY 5 COPIES OF REVISED CABINET WIRING DIAGRAMS.

COORDINATE THIS REVISION WITH CONNECTICUT D.O.T. SIGNAL LAB. CONTACT MR. DONALD ASSARD (860) 258-0346 OR MR. MARK ZAMPINI (860) 258-0349 AT LEAST 45 DAYS PRIOR TO REVISION.

(F) REPLACE EXISTING HANDHOLE WITH 30"x 30" CONCRETE HANDHOLE. EXTEND CONDUITS INTO NEW HANDHOLE.

INSTALL NEW VIDEO DETECTION PROCESSOR IN EXISTING CABINET.

(G) INSTALL 360-DEGREE VIDEO DETECTION CAMERA AND IP VIDEO CAMERA ON NEW ALUMINUM LIGHT STANDARD (15' BRACKET, 30' MOUNTING HEIGHT). IP VIDEO CAMERA TO BE RELOCATED FROM INTERSECTION 093-235.

VIDEO DETECTION ZONE LOCATIONS ARE FOR ILLUSTRATION PURPOSES ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR DESIGNATED REPRESENTATIVE. CAMERA CABLES ARE TO BE INSTALLED CONTINUOUSLY BETWEEN EACH CAMERA AND THE CONTROLLER CABINET. NO SPLICES WILL BE ALLOWED.

REMOVE ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISIONS. CONDUIT SHOWN ON THE PLAN AS ABANDONED SHALL REMAIN IN PLACE.

EMERGENCY PRE-EMPTION NOTES

INSTALL AUXILIARY EQUIPMENT CABINET ON LEFT SIDE OF CONTROLLER CABINET. INSTALL PRE-EMPTION EQUIPMENT IN AUXILIARY CABINET.

CONTRACTOR TO INSTALL A SWITCH IN THE SIGNAL CABINET TO EFFECTIVELY DISCONNECT THE PRE-EMPTION EQUIPMENT FROM THE TRAFFIC SIGNAL CONTROLLER.

INSTALL NEW OPTICAL DETECTORS ON EXISTING SPAN. PRE-EMPTION DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE AUXILIARY EQUIPMENT CABINET.

SPAN POLE INFORMATION

ID # 093-203A HEIGHT 30', B.C. 20", LOAD AT YIELD 7,800 LBS. INSTALLED 1995

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
◄R RED ARROW
◄Y YELLOW ARROW
◄— GREEN ARROW
WØ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING
LIGHT POLE

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSMITTER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

DATE PLOTTED : 12/17/2019\\vhb\gbl\proj\Wethersfield\42560.00\cad\ts\planset\017_TR_ASSET_093-203.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROUTE 173 (WILLARD AVE) AT ROBBINS AVE

SCALE 1" = 40'

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER		
DRAWN BY		
CHECKED BY		
SUBMITTED BY		
APPROVED BY		
APPROVED DATE		

vhb 100 Great Meadow Road, Suite 200 Wethersfield, Connecticut 06109 Tel: 860 807-4300 Fax: 860 372-4570

REV # INTERSECTION #093-203

ENERGY BY - TOWN	ADDRESS #
MAINT LEVEL 5	SERVICE POLE - SNET 52
	UNMETERED SERVICE

TOWN: **NEWINGTON**

DRAWING TITLE: **TRAFFIC CONTROL SIGNAL PLAN**

PROJECT NO. L093-0001
DRAWING NO. TCS-03
SHEET NO.

MOVEMENT DIAGRAM

NTOR	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
NONE	PRE-EMPT 1	PRE-EMPT 2		PRE-EMPT 3				

FACE #	FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
1	R	◄G	◄Y G	G	G	Y	R	R	R	R	R	R	R															
2	R	G	G	G	G	Y	R	R	R	R	R	R	R															
3	R	R	R	R	G	Y	R	R	R	R	R	R	R															
4	R	R	R	R	R	R	R	R	R	R	G	Y	R															
5	R	R	R	R	R	R	R	R	R	R	G	Y	R															
P	OFF	◄	—	—	DW	—	— ►	WØ	◄	—	DW	—	— ►															

INTERVALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8
MIN GRN	5	15		15	—	—	—	—
WALK			7					
PED CLR			15					
VEH EXT	2	5		5				
MAX 1	7	30		25				
MAX 2	10	40		35				
YELLOW	3.0	4.2	4.0	3.6	—	—	—	—
RED	1.0	3.3	0.0	4.5				
ADD INIT		2.5		2.5				
MAX INIT		20		20				
TBR								
TTR								
MIN GAP	—	5		5				
MODE	MIN RECALL	MIN RECALL	NON-LOCK	LOCK	OFF	OFF	OFF	OFF
INT START		THIS PHASE						

SIGN LEGEND

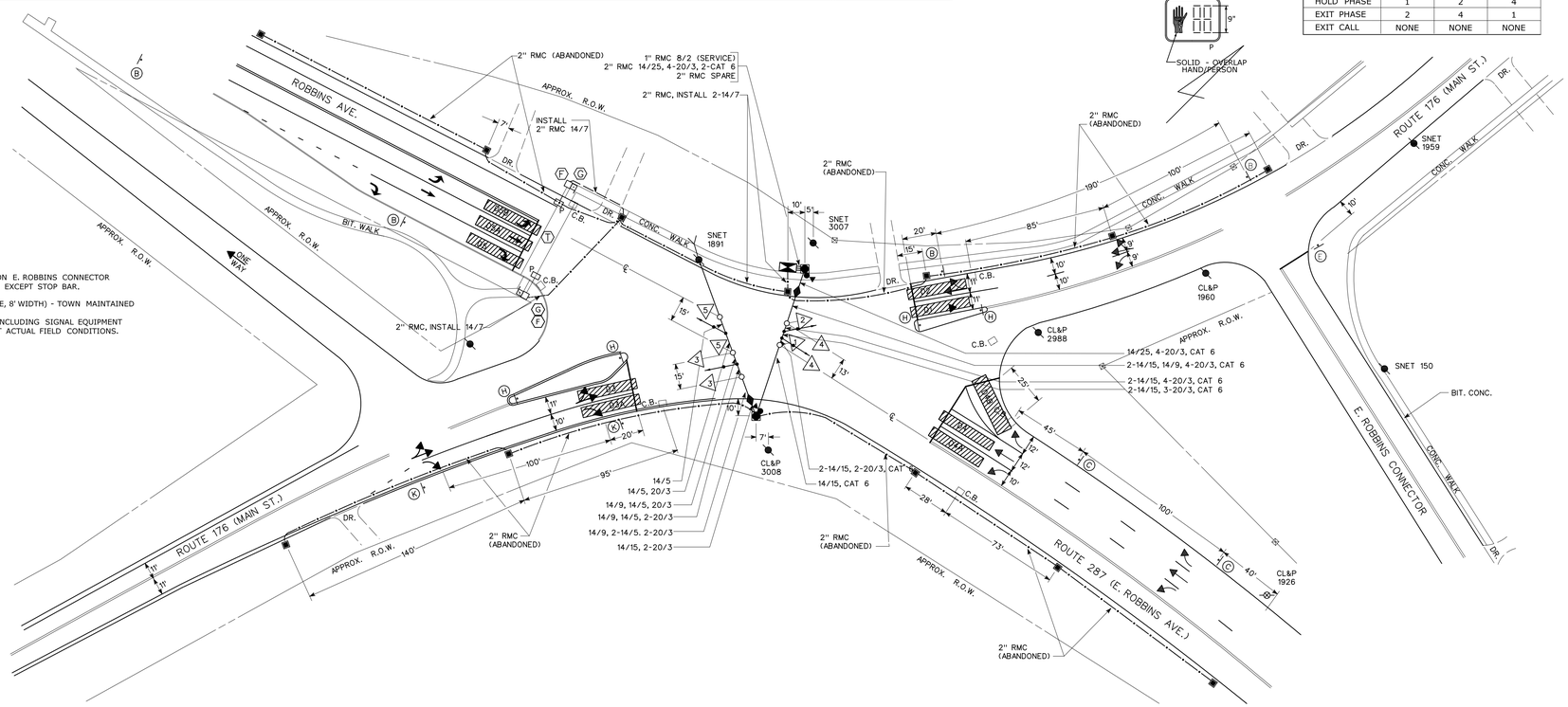
- Ⓑ INSTALL 31-0302
- Ⓒ EXIST. 31-0302
- Ⓔ EXIST. 31-0552 (STOP)
- Ⓗ EXIST. 31-1526 (KEEP RIGHT)
- Ⓚ EXIST. 31-0283

NOTES:

TOWN TO MAINTAIN ALL PAVEMENT MARKINGS ON E. ROBBINS CONNECTOR AND ALL PAVEMENT MARKINGS ON ROBBINS AVE EXCEPT STOP BAR.

Ⓣ BAR TYPE CROSSWALK - (16" BARS, 24" SPACE, 8' WIDTH) - TOWN MAINTAINED

THE LOCATION OF ALL PHYSICAL FEATURES, INCLUDING SIGNAL EQUIPMENT AND PAVEMENT MARKINGS, MAY NOT REFLECT ACTUAL FIELD CONDITIONS.



SPAN POLE INFORMATION

28', 20" B.C., 6100 LBS. LOAD AT YIELD, INSTALLED 1994.

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY
PHASE 2 ON TO OMIT PHASE 1.

OFFICE RECORD

REV # TIR # N/A SM # SIGNAL REVISED:
WIDENED ROBBINS AVENUE TO ADD RIGHT-TURN LANE AND ADDED PRE-EMPTION
UNDER PROJECT #L093-0001.

DETECTORS

IDENT	SIZE (WXL)	TYPE	MODE
D1	6'X 35'	VIDEO 360	PRESENCE
D2	6'X 35'	VIDEO 360	PRESENCE
D3	6'X 35'	VIDEO 360	PRESENCE
D3A	6'X 35'	VIDEO 360	PRESENCE
D4	6'X 35'	VIDEO 360	PRESENCE
D4A	6'X 35'	VIDEO 360	PRESENCE
D4B	9'X 35'	VIDEO 360	PRESENCE
D5	6'X 35'	VIDEO 360	PRESENCE
D5A	6'X 35'	VIDEO 360	PRESENCE
D5B	6'X 35'	VIDEO 360	PRESENCE

SYSTEM LOC: MASTER

COORDINATION TYPE: NONE

PROGRAM FUNCTION	TIME	DAYS
FLASH	NONE	
MAX 1	ALL OTHER TIMES	
MAX 2	0700-0900	M-F
	1500-1800	

CYCLE	OFFSET SEC	OFFSET %

CONSTRUCTION NOTES:

ALL MATERIAL AND CONSTRUCTION METHODS SHALL CONFORM TO THE FOLLOWING CURRENT D.O.T. DOCUMENTS WHICH CAN BE ACCESSED ON THE D.O.T. WEBSITE:

- •STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION,
- •SUPPLEMENTAL SPECIFICATION TO THE STANDARD SPECIFICATION,
- •SPECIAL PROVISIONS TO THE STANDARD SPECIFICATIONS,
- •STANDARD INSTALLATION AND GUIDE DETAIL SHEETS.

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ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING* PRIOR TO INSTALLATION.

MODIFY EXISTING CONTROLLER TO ACCOMMODATE CHANGES. SUPPLY 5 COPIES OF REVISED CABINET WIRING DIAGRAMS.

COORDINATE THIS REVISION WITH CONNECTICUT D.O.T. SIGNAL LAB. CONTACT MR. DONALD ASSARD (860) 258-0346 OR MR. MARK ZAMPINI (860) 258-0349 AT LEAST 45 DAYS PRIOR TO REVISION.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER THE SPECIAL PROVISIONS. CONDUIT SHOWN ON THE PLAN AS ABANDONED SHALL REMAIN IN PLACE.

(F) INSTALL NEW COUNTDOWN PEDESTRIAN SIGNAL AND APS PUSHBUTTON ON AN 8' ALUMINUM PEDESTAL ON A NEW FOUNDATION.

(G) LOCATE EXISTING CONDUIT AND EXTEND INTO NEW PEDESTAL FOUNDATION.

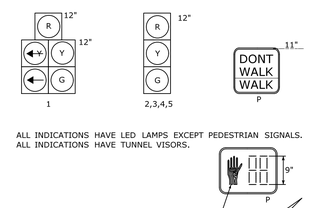
EMERGENCY PRE-EMPTION NOTES

INSTALL AUXILIARY EQUIPMENT CABINET ON LEFT SIDE OF CONTROLLER CABINET. INSTALL PRE-EMPTION EQUIPMENT IN AUXILIARY CABINET.

CONTRACTOR TO INSTALL A SWITCH IN THE SIGNAL CABINET TO EFFECTIVELY DISCONNECT THE PRE-EMPTION EQUIPMENT FROM THE TRAFFIC SIGNAL CONTROLLER.

INSTALL NEW OPTICAL DETECTORS ON EXISTING SPAN. PRE-EMPTION DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE AUXILIARY EQUIPMENT CABINET.

SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS EXCEPT PEDESTRIAN SIGNALS.
ALL INDICATIONS HAVE TUNNEL VISORS.

PRE-EMPTION SETTINGS

	PRE-EMPT 1	PRE-EMPT 2	PRE-EMPT 3
PRIORITY	NO	NO	NO
DET. LOCK	YES	YES	YES
DELAY	0	0	0
ALT. MIN. GRN	5	5	5
ALT. YELLOW	PARENT	PARENT	PARENT
ALT. RED	PARENT	PARENT	PARENT
ALT. PED. CLR.	18	18	18
HOLD GREEN	15	15	15
HOLD YELLOW	3.0	4.2	3.6
HOLD RED	1.0	3.3	4.5
HOLD PHASE	1	2	4
EXIT PHASE	2	4	1
EXIT CALL	NONE	NONE	NONE

	TRAFFIC	DATE	ELECTRICAL	DATE
ENGINEER				
DRAWN BY				
CHECKED BY				
SUBMITTED BY				
APPROVED BY				
APPROVED DATE				

vhb — 100 Great Meadow Road, Suite 200 Wethersfield, Connecticut 06109 Tel: 860 807-4300 Fax: 860 372-4570

REV # INTERSECTION #093-214

ENERGY BY - TOWN	ADDRESS #
MAINT LEVEL 5	SERVICE POLE - SNET 1891
	UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:

- R RED
- Y YELLOW
- G GREEN
- ◄R RED ARROW
- ◄Y YELLOW ARROW
- ◄— GREEN ARROW
- WØ WALK/ PED. CLR
- D.W. DON'T WALK
- FL. FLASHING

- PROPOSED WOOD SPAN POLE
- EXISTING WOOD SPAN POLE
- PROPOSED STEEL SPAN POLE
- EXISTING STEEL SPAN POLE
- PROPOSED UTILITY POLE
- EXISTING UTILITY POLE
- PEDESTAL MOUNTING
- PEDESTRIAN PUSH BUTTON & SIGN
- DIRECTIONAL ARW. FOR PUSH BUTTON
- TRAFFIC SIGNAL FACE
- PEDESTRIAN SIGNAL FACE
- DET. LEADS IN SAW CUT
- PROPOSED RMC (RIGID METAL CONDUIT)
- EXISTING RMC (RIGID METAL CONDUIT)
- AUXILIARY TERMINATION CABINET
- AUXILIARY EQUIPMENT CABINET
- VIDEO DETECTION ZONE
- PROPOSED CONTROLLER
- EXISTING CONTROLLER
- LOOP DETECTOR
- SD SYSTEM DETECTOR
- MAGNETIC DETECTOR
- OPTICAL DETECTOR
- VIDEO DETECTOR
- AUDIO DETECTOR
- SIDEWALK RAMP
- CABLE CLOSURE
- WIRELESS SENSOR
- WIRELESS RECEIVER
- WIRELESS TRANSMITTER
- GUY WIRE
- PROPOSED HANDHOLE
- EXISTING HANDHOLE

DATE PLOTTED : 12/17/2019\\vhb\gbl\proj\Wethersfield\42560.00\cad\ts\planset\015_TR_ASSET_093-214.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

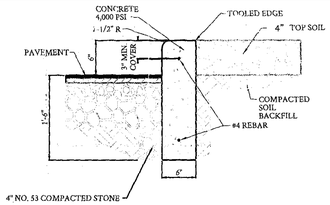
ROUTE 176 (MAIN ST) AT
ROUTE 287 (E. ROBBINS AVE) AND
ROBBINS AVE

SCALE 1" = 40'

TOWN: **NEWINGTON**

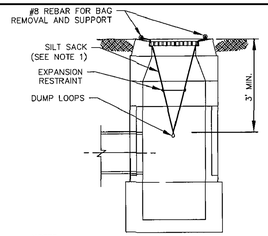
DRAWING TITLE: **TRAFFIC CONTROL SIGNAL PLAN**

PROJECT NO. L093-0001
DRAWING NO. TCS-04
SHEET NO.



CONCRETE CURB DETAIL

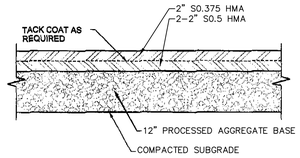
NOT TO SCALE



NOTES:
1. SILT SACKS SHALL BE HI-FLOW SILTSACK® 'TYPE A' FOR TYPE "C-L" CB TOPS AND 'TYPE B' WITH CURB DEFLECTORS FOR TYPE "C" CB TOPS OR OTHER STRUCTURES WITH CURB INLETS AS MANUFACTURED BY ACF ENVIRONMENTAL, INC OR APPROVED EQUAL.
2. SILT SACKS SHALL BE PROVIDED WITH INTERNAL OVERFLOWS.
3. SILT SACKS SHALL BE EMPTIED WHEN THEY HAVE COLLECTED 6" TO 12" OF SEDIMENT. INSPECT EVERY 1 TO 2 WEEKS AND AFTER EVERY MAJOR RAINFALL EVENT.

SILT SACK

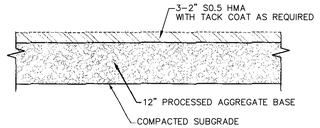
NOT TO SCALE



BITUMINOUS PAVEMENT REPAIR OUTSIDE MILL AND OVERLAY AREA

N.T.S.

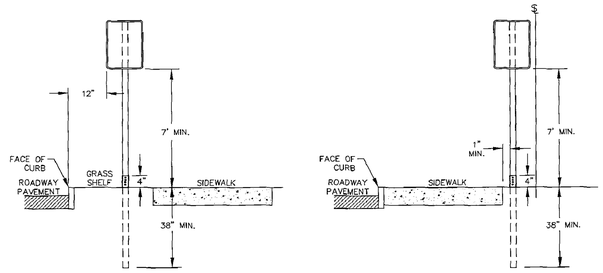
NOTE: MATCH EXISTING PAVEMENT SECTION IF THICKNESSES ARE GREATER.



BITUMINOUS PAVEMENT REPAIR WITHIN MILL AND OVERLAY AREA

N.T.S.

NOTE: MATCH EXISTING PAVEMENT SECTION IF THICKNESS IS GREATER.

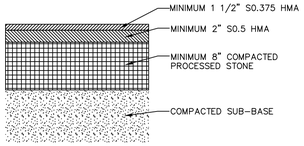


SECTION WITH SIDEWALK AND GRASS SHELF

SECTION WITH SIDEWALK AND NO GRASS SHELF

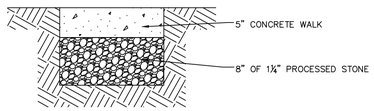
NOTES:
1. SUPPORTS SHALL BE METAL GALVANIZED STEEL POSTS WITH BREAKAWAY COUPLING SYSTEM.
2. WHERE POSTS CANNOT BE INSTALLED BEHIND SIDEWALK, THEY SHALL BE INSTALLED WITH THE EDGE OF THE SIGN 12" FROM FACE OF CURB.

SIGN INSTALLATION - TYPICAL



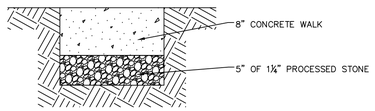
"MINIMUM" PAVEMENT SECTION DETAIL

n.t.s.



CONCRETE SIDEWALK MID-BLOCK SECTION DETAIL

(n.t.s.)



CONCRETE SIDEWALK AT DRIVEWAY SECTION DETAIL

(n.t.s.)

REVISIONS:

vhb

DETAILS FOR
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

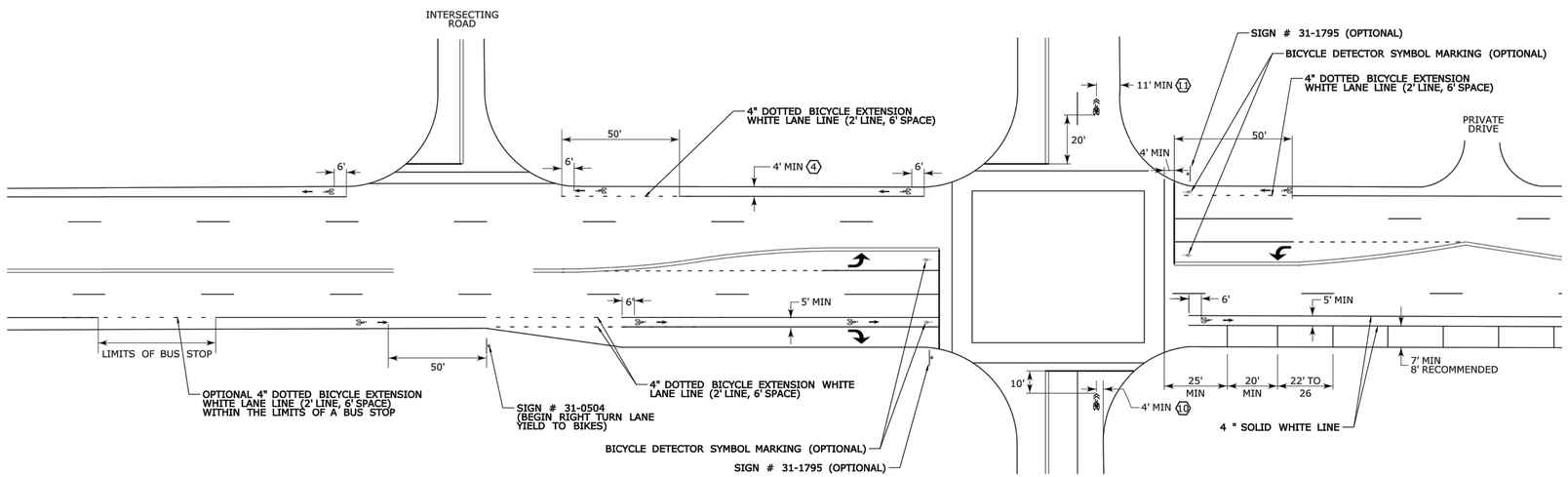
DATUMS:

HORIZONTAL: NAD 83

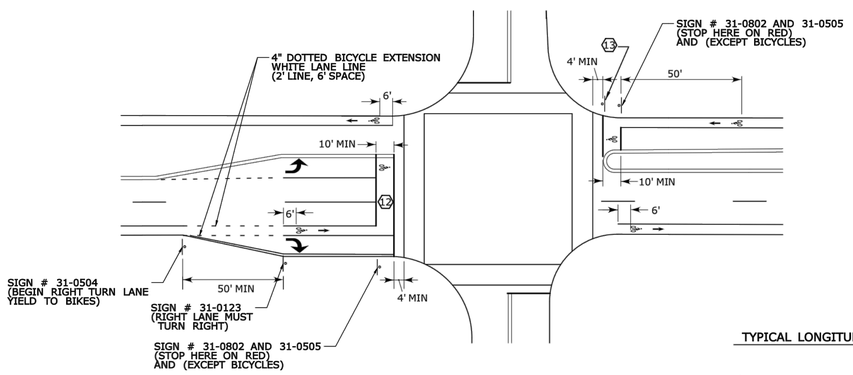
VERTICAL: NAVD88

PROJECT	18006
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	AS - NOTED

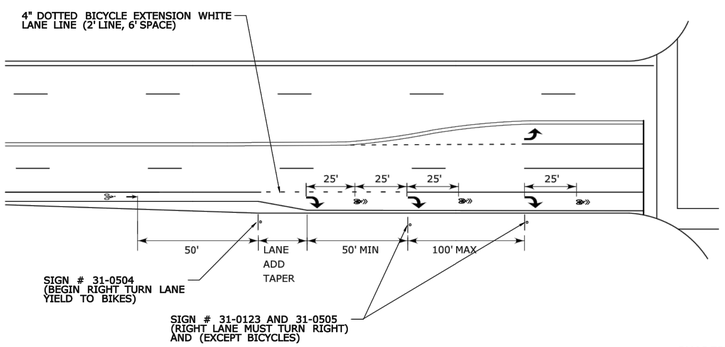
TYPICAL BICYCLE LANE AND SHARROW MARKING DETAIL



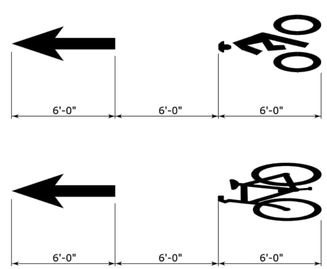
TYPICAL BICYCLE BOX DETAIL



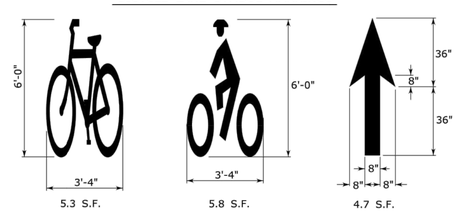
TYPICAL SHARED BICYCLE LANE AND TURN LANE DETAIL



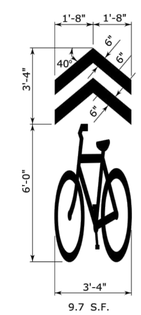
TYPICAL LONGITUDINAL SPACING



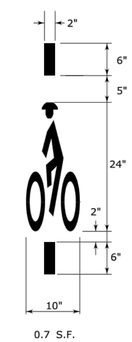
BICYCLE LANE SYMBOL MARKINGS



SHARED LANE SYMBOL MARKING



BICYCLE DETECTOR SYMBOL MARKING



NOTES:

1. BICYCLE PAVEMENT MARKINGS AND GREEN PAVEMENT TO BE OWNED AND MAINTAINED BY THE MUNICIPALITY.
2. MUNICIPALITY MUST OBTAIN FHWA INTERIM APPROVAL FOR BICYCLE BOX INSTALLATION AND COMPLY WITH THE REQUIREMENTS OF FHWA INTERIM APPROVAL No. IA-18, OPTIONAL USE OF AN INTERSECTION BICYCLE BOX. BICYCLE BOX USE IS LIMITED TO SIGNALIZED INTERSECTIONS.
3. MUNICIPALITY MUST OBTAIN FHWA INTERIM APPROVAL FOR GREEN PAVEMENT INSTALLATION AND COMPLY WITH THE REQUIREMENTS OF FHWA INTERIM APPROVAL No. IA-14, OPTIONAL USE OF GREEN COLORED PAVEMENT FOR BIKE LANES AND FHWA INTERPRETATION LETTER 9(09)-86(I), CHROMATICITY REQUIREMENTS FOR GREEN-COLORED PAVEMENT. GREEN COLORED PAVEMENT MAY BE INSTALLED ONLY WITHIN A BICYCLE LANE OR WITHIN AN EXTENSION OF A BICYCLE LANE.

(4) 5 FEET WIDE BICYCLE LANES SHOULD BE USED IF IMMEDIATELY ADJACENT TO A CURB, GUIDE RAIL, OR OTHER VERTICAL SURFACES.

5. MARKINGS USED ON BIKEWAYS SHALL BE RETROREFLECTORIZED.
6. BICYCLE LANES MARKINGS SHOULD BE SPACED AT INTERVALS NO GREATER THAN 500 FT.
7. IF USED, SHARED LANE MARKINGS SHOULD BE SPACED AT INTERVALS NO GREATER THAN 250 FT.
8. SHARED LANE MARKINGS SHOULD NOT BE PLACED ON ROADWAYS THAT HAVE A SPEED LIMIT ABOVE 35 MPH.
9. BICYCLE DETECTOR SYMBOL MARKINGS MAY BE PLACED ON THE PAVEMENT INDICATING THE OPTIMUM POSITION FOR A BICYCLIST TO ACTUATE THE SIGNAL. THE LOCATION OF THE MARKINGS SHALL BE SPECIFIED ON THE SIGNAL PLAN. THE MARKINGS MAY BE SUPPLEMENTED BY SIDE MOUNTED SIGN # 31-1795.

(10) ON STREETS WITHOUT ON-STREET PARKING AND WITH OUTSIDE TRAVEL LANES LESS THAN 14 FEET WIDE, THE CENTERS OF THE SHARED LANE MARKINGS SHOULD BE AT LEAST 4 FEET FROM THE FACE OF THE CURB, OR FROM THE EDGE OF THE PAVEMENT WHERE THERE IS NO CURB.

(11) ON STREETS WITH ON-STREET PARKING THE CENTERS OF THE SHARED LANE MARKINGS SHOULD BE AT LEAST 11 FEET FROM THE FACE OF THE CURB, OR FROM THE EDGE OF THE PAVEMENT WHERE THERE IS NO CURB.

(12) COUNTDOWN PEDESTRIAN SIGNAL HEADS ARE REQUIRED FOR BICYCLE BOXES LOCATED ACROSS MULTILANE APPROACHES.

(13) TURNS ON RED SHALL BE PROHIBITED FROM THE APPROACH WHERE A BICYCLE BOX IS PLACED USING A NO TURN ON RED (R10-11 SERIES) SIGN.

14. AREA OF PAVEMENT MARKING SYMBOLS AS INDICATED IS APPROXIMATE.
15. REFER TO STANDARD SHEET TR-1210..04 FOR PAVEMENT MARKING LINE DETAILS.

REVISIONS:

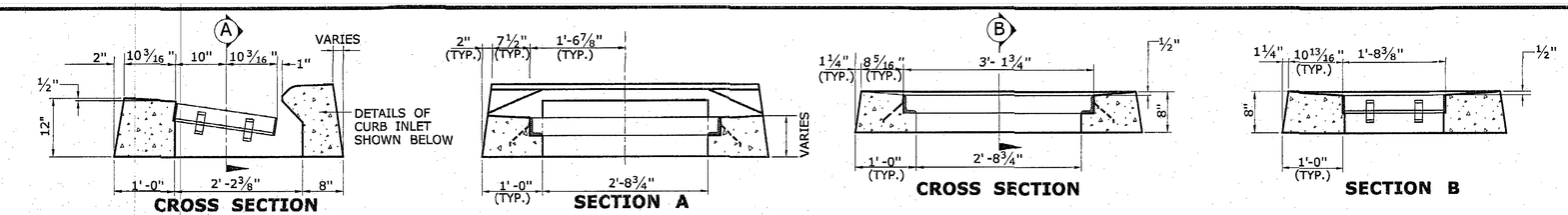
vhb

DETAILS FOR
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83
VERTICAL: NAVD88

PROJECT	18006
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	AS - NOTED



CROSS SECTION

SECTION A

TYPE "C" CATCH BASIN TOP

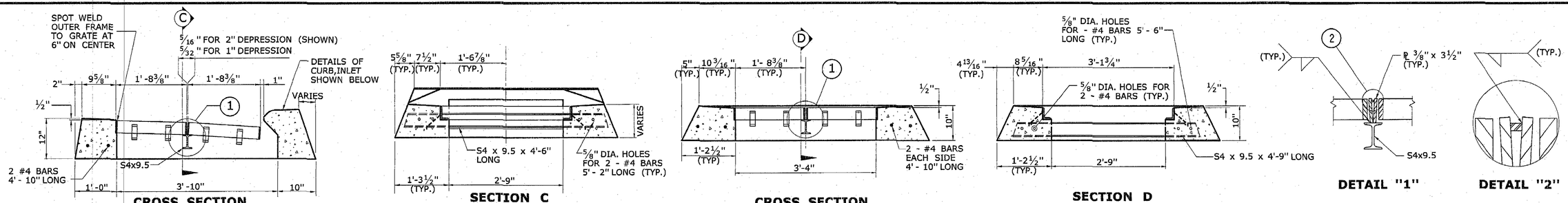
CROSS SECTION

SECTION B

TYPE "C-L" CATCH BASIN TOP

GENERAL NOTES:

1. FOR DETAILS OF FRAMES AND GRATES, SEE DRAWING NO. DGS-08.
2. ALL BARS SHALL HAVE A MINIMUM 2" COVER.



CROSS SECTION

SECTION C

TYPE "C" CATCH BASIN DOUBLE GRATE - TYPE I TOP

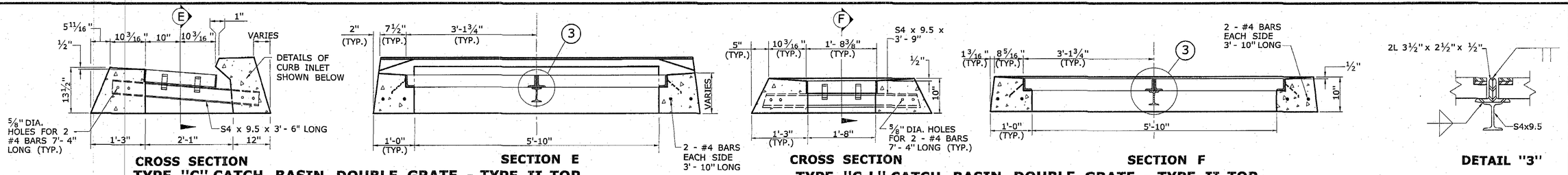
CROSS SECTION

SECTION D

DETAIL "1"

DETAIL "2"

TYPE "C-L" CATCH BASIN DOUBLE GRATE - TYPE I TOP



CROSS SECTION

SECTION E

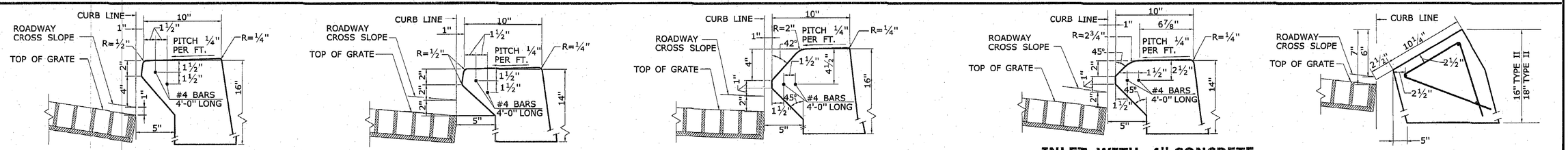
TYPE "C" CATCH BASIN DOUBLE GRATE - TYPE II TOP

CROSS SECTION

SECTION F

DETAIL "3"

TYPE "C-L" CATCH BASIN DOUBLE GRATE - TYPE II TOP



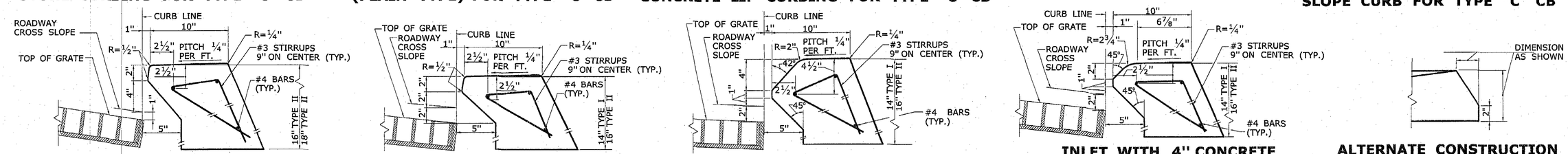
INLET WITH 6" CONCRETE OR STONE CURBING FOR TYPE "C" CB

INLET WITH NO CURBING (PLAIN TYPE) FOR TYPE "C" CB

INLET WITH 6" BITUMINOUS CONCRETE LIP CURBING FOR TYPE "C" CB

INLET WITH 4" CONCRETE PARK CURBING FOR TYPE "C" CB

INLET WITH GRANITE SLOPE CURB FOR TYPE "C" CB



INLET WITH 6" CONCRETE OR STONE CURBING FOR TYPE "C" CB DOUBLE GRATE TYPE I & II

INLET WITH NO CURBING (PLAIN TYPE) FOR TYPE "C" CB DOUBLE GRATE TYPE I & II

INLET WITH 6" BITUMINOUS CONCRETE LIP CURBING FOR TYPE "C" CB DOUBLE GRATE TYPE I & II

INLET WITH 4" CONCRETE PARK CURBING FOR TYPE "C" CB DOUBLE GRATE TYPE I & II

ALTERNATE CONSTRUCTION OF TYPE II TOP

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 1/30/2019

DESIGNER/DRAFTER: -

CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_HIGHWAY_GD_[1-28-19].dgn

SIGNATURE/BLOCK:

OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE: - - -

TOWN: - -

DRAWING TITLE: CATCH BASIN TOPS TYPE "C" & "C-L"

PROJECT NO. -

DRAWING NO. DGS-07

SHEET NO.

REVISIONS:

vhb

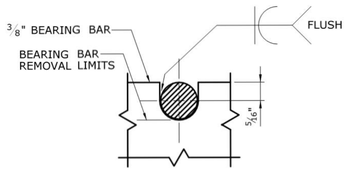
DETAILS FOR COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83

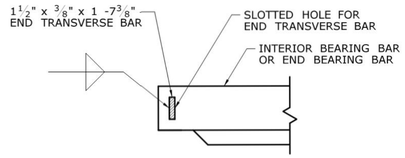
VERTICAL: NAVD88

PROJECT	18006
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	XX OF XX
SCALE:	AS - NOTED

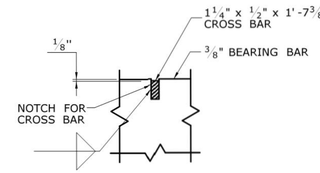


NOTE:
5/8" DIA. ROUND BAR SHALL CONTACT BEARING BAR AT BOTTOM AND BE FLUSH AT TOP.

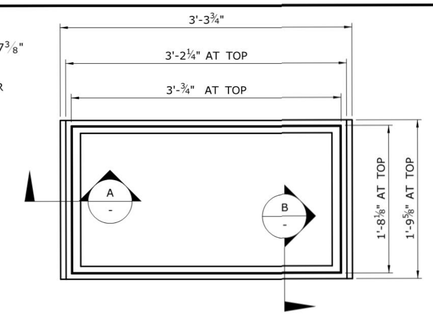
ROUND BAR ATTACHMENT
CATCH BASIN GRATE TYPE A



END TRANSVERSE BAR ATTACHMENT
CATCH BASIN GRATE TYPE A AND B



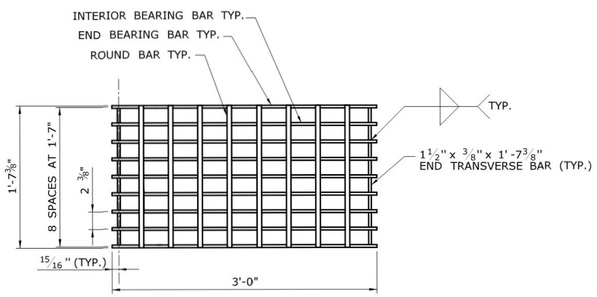
CROSS BAR ATTACHMENT
CATCH BASIN GRATE TYPE B



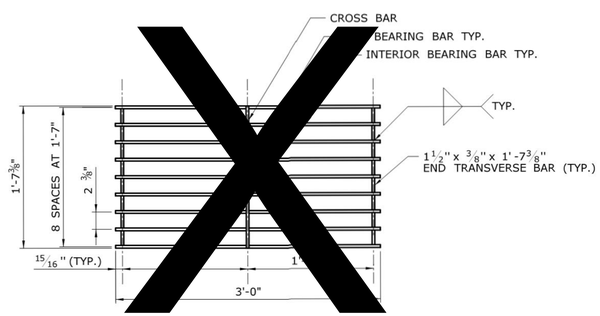
PLAN

GENERAL NOTES:

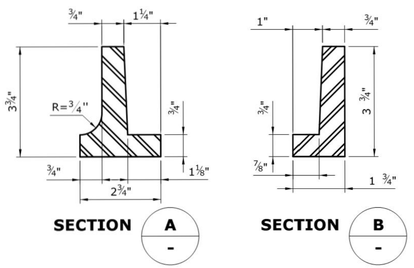
1. STEEL OR CAST IRON SHALL BE USED FOR FRAMES. STEEL SHALL BE USED FOR TYPE "A" AND "B" GRATES.
2. TYPE "A" GRATES SHALL BE USED ON ALL ROADWAYS WHERE BICYCLE TRAFFIC IS ALLOWED OR ON HEAVY DUTY LOCK DOWN TOPS AS DIRECTED BY THE ENGINEER.
3. TYPE "B" GRATES SHALL BE USED ON ALL LIMITED ACCESS HIGHWAYS, RAMPS AND WHERE BICYCLE TRAFFIC IS NOT ALLOWED OR AS DIRECTED BY THE ENGINEER.
4. DO NOT GALVANIZE CAST IRON FRAMES.
5. DIMENSIONAL TOLERANCES SHALL BE ± 1/16 INCH.
6. ALL STEEL BARS SHALL BE WELDED AT ALL INTERSECTIONS.



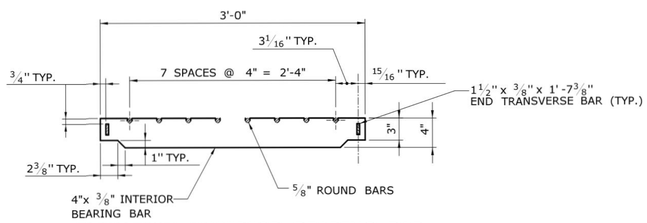
PLAN



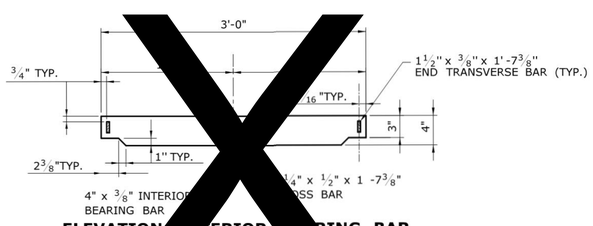
PLAN



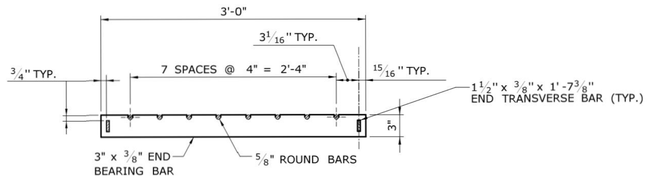
CAST IRON FRAME ALTERNATE



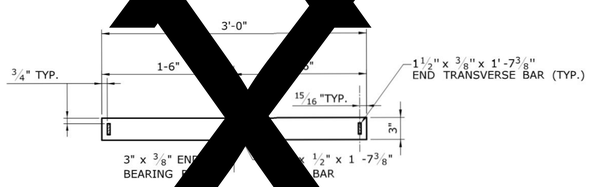
ELEVATION- INTERIOR BEARING BAR



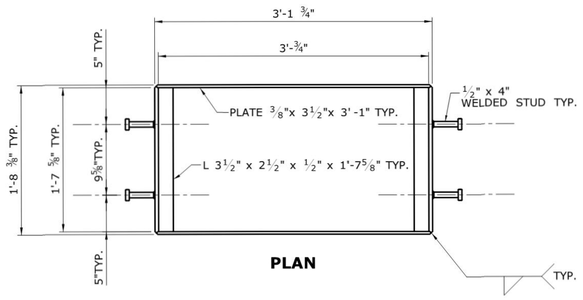
ELEVATION- INTERIOR BEARING BAR



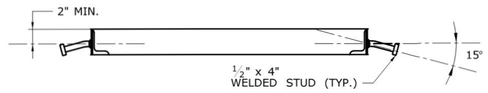
ELEVATION- END BEARING BAR
CATCH BASIN GRATE TYPE A



ELEVATION- END BEARING BAR
CATCH BASIN GRATE TYPE B



PLAN



WELDED STUD ANCHOR DETAILS
STEEL FRAME

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 11/30/2017

DESIGNER/DRAFTER: -
CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_Highway_GD (11-21-17).dgn

SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE: - - -

TOWN: - -

DRAWING TITLE:
CATCH BASIN FRAMES AND GRATES

PROJECT NO. -
DRAWING NO. **DGS-08**
SHEET NO.

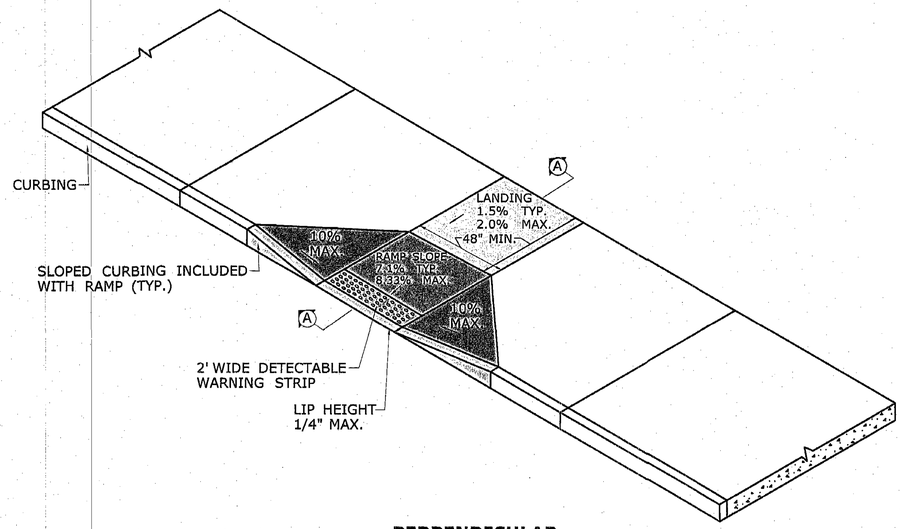
REVISIONS:

vhb

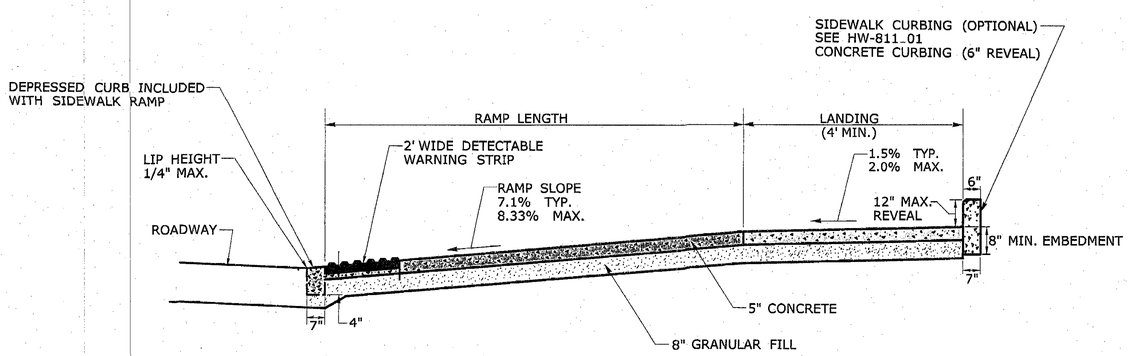
DETAILS FOR
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:
HORIZONTAL: NAD 83
VERTICAL: NAVD88

PROJECT	18006
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	xx OF xx
SCALE:	AS - NOTED



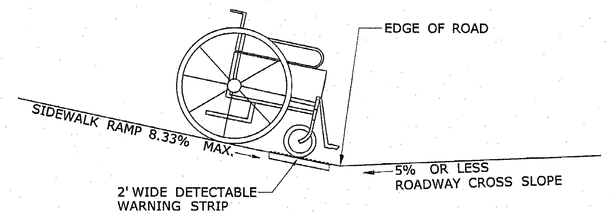
PERPENDICULAR SIDEWALK RAMP



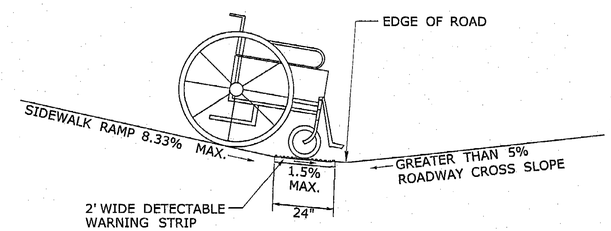
SECTION AA

GENERAL NOTES:

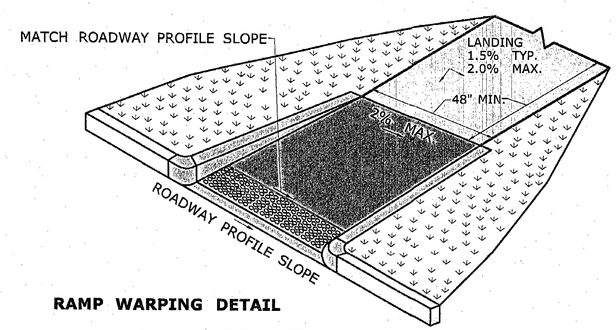
1. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRAVERSE TO THE SLOPE OF THE RAMP.
2. VERTICAL SURFACE DISCONTINUITIES AT JOINTS SHALL NOT EXCEED ¼ INCH.
3. REMOVAL OF EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION OR CONTRACTION JOINT.
4. THE RUNNING SLOPE OF THE CURB RAMP SHALL BE 8.3 PERCENT MAXIMUM BUT SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET.



SIDEWALK RAMP GRADE AT ROADWAY CROSS SLOPE OF 5% OR LESS



SIDEWALK RAMP GRADE AT ROADWAY CROSS SLOPE OF GREATER THAN 5%



RAMP WARPING DETAIL

1. TRANSITION SIDEWALK RAMP TO MATCH ROADWAY PROFILE AS GRADUALLY AS POSSIBLE. DO NOT EXCEED 3 % PER FOOT CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING TO ROADWAY PROFILE.
2. COMPLETE TRANSITION TO ROADWAY PROFILE BEHIND DETECTABLE WARNING SURFACE.

DESIGN INITIATED CHANGE ORDER NO. Y - mm/dd/yy

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
1.	6/19	REVISED MAX LANDING SLOPE TO 2% AND DRAWING TITLE	

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Plotted Date: 6/11/2019

DESIGNER/DRAFTER: -
CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_HIGHWAY_GD [5-30-19].dgn

SIGNATURE/ BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE: - - -

TOWN: - -

DRAWING TITLE:
CONCRETE SIDEWALK RAMPS SHEET 1

PROJECT NO. -
DRAWING NO.
SHEET NO.

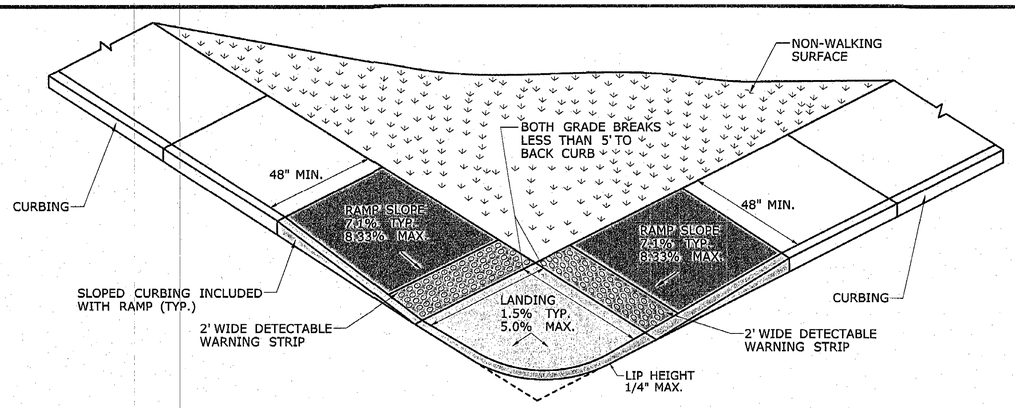
REVISIONS:

vhb

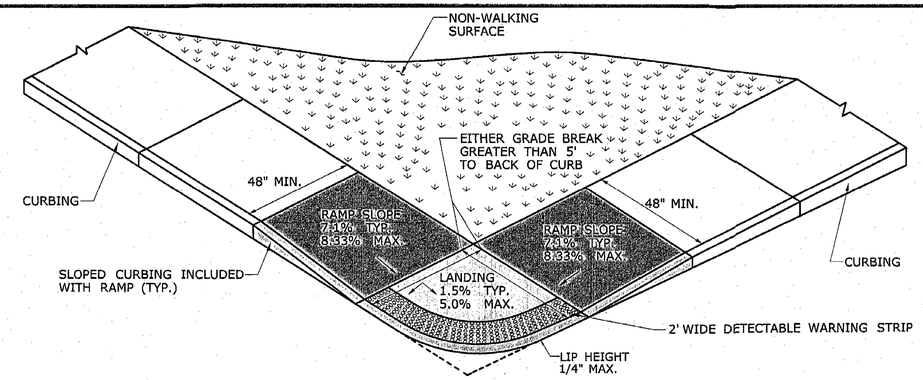
DETAILS FOR
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:
HORIZONTAL: NAD 83
VERTICAL: NAVD88

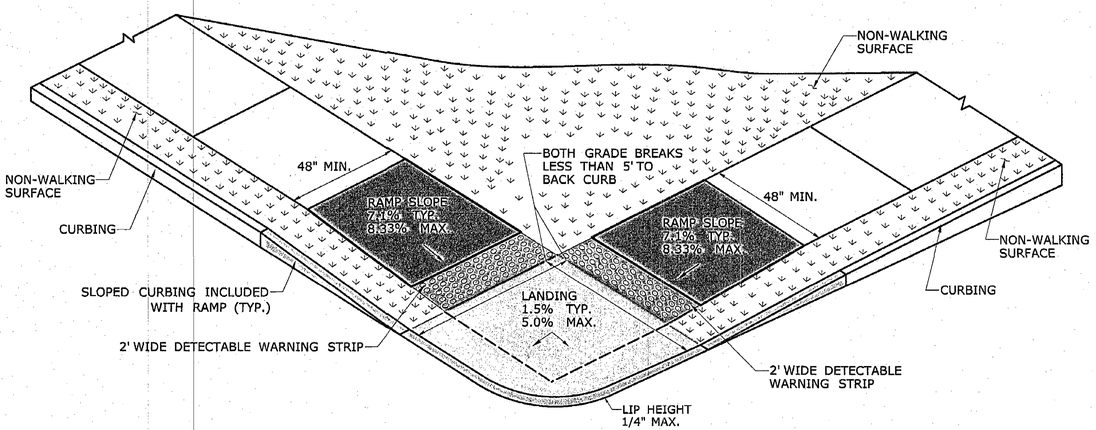
PROJECT 18006
DATE 12 /16 / 2019
DRAWN TJM
CHECK EAN
SHEET xx OF xx
SCALE: AS - NOTED



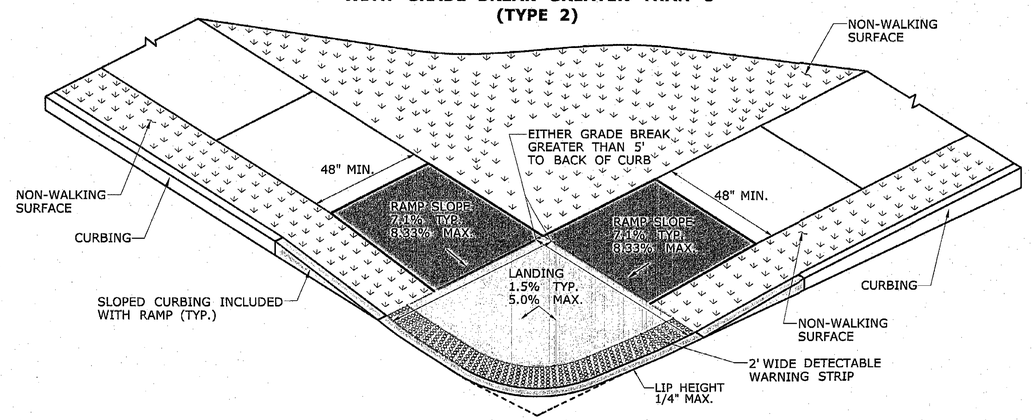
PERPENDICULAR RAMP
WITH A GRADE BREAK OF 5' OR LESS
(TYPE 1)



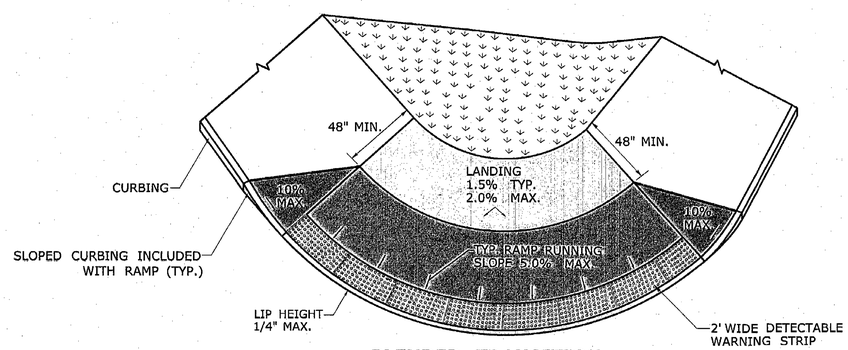
BLENDED TRANSITION
WITH GRADE BREAK GREATER THAN 5'
(TYPE 2)



PERPENDICULAR RAMP
WITH A GRADE BREAK
TO BACK OF CURB OF 5' OR LESS
(TYPE 3)



BLENDED TRANSITION
WITH A GRADE BREAK
TO BACK OF CURB GREATER THAN 5'
(TYPE 4)



BLENDED TRANSITION
WITH LANDING AT TOP
(TYPE 5)

DESIGN INITIATED CHANGE ORDER NO. Y - mm/dd/yy

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/30/2019

DESIGNER/DRAFTER: -
CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_HIGHWAY_GD_[1-28-19].dgn

SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE: - - -

TOWN: - -

DRAWING TITLE:
CONCRETE SIDEWALK RAMPS - SHEET 2

PROJECT NO. -
DRAWING NO.
SHEET NO.

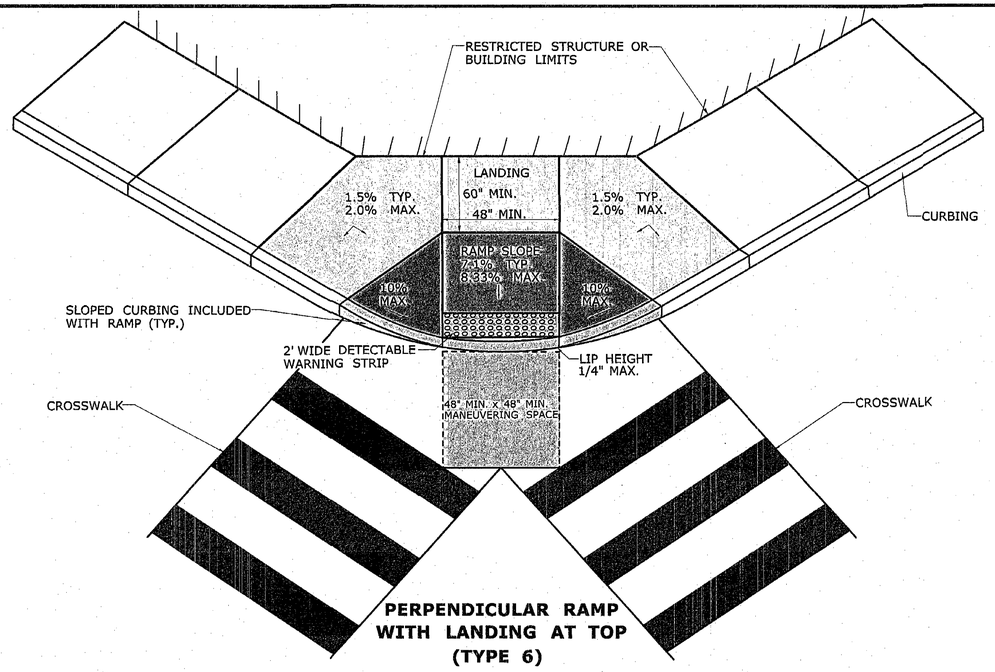
REVISIONS:

vhb

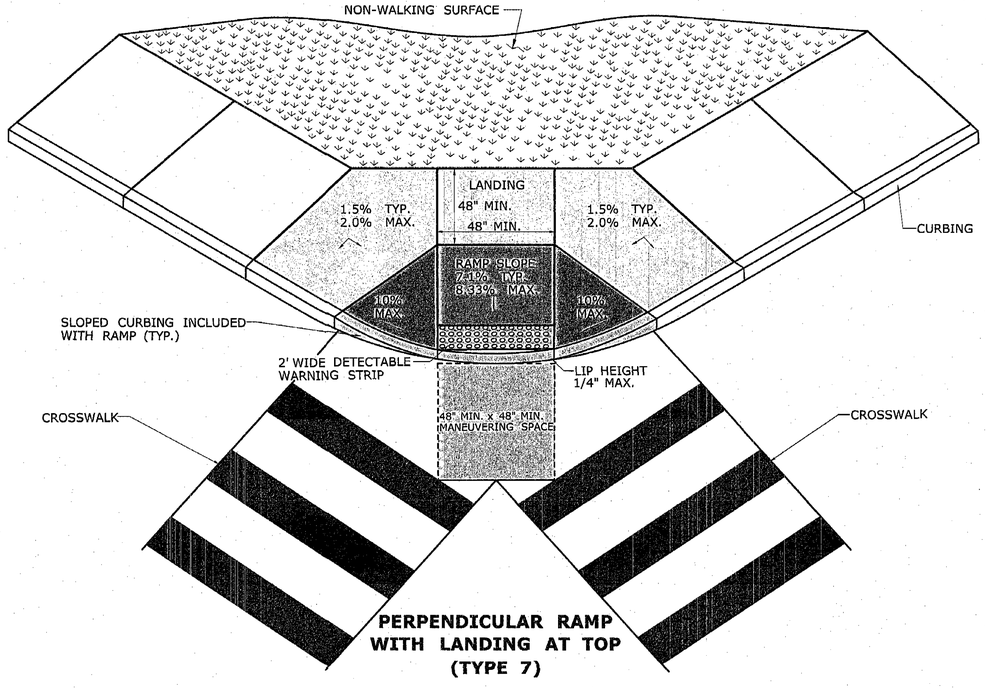
DETAILS FOR
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:
HORIZONTAL: NAD 83
VERTICAL: NAVD88

PROJECT	18006
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	xx OF xx
SCALE:	AS - NOTED



PERPENDICULAR RAMP WITH LANDING AT TOP (TYPE 6)



PERPENDICULAR RAMP WITH LANDING AT TOP (TYPE 7)

DESIGN INITIATED CHANGE ORDER NO. Y - mm/dd/yy

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/30/2019

DESIGNER/DRAFTER: -

CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_HIGHWAY_GD_[1-28-19].dgn

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE: - - -

TOWN: - -

DRAWING TITLE: CONCRETE SIDEWALK RAMPS SHEET 3

PROJECT NO. -

DRAWING NO.

SHEET NO.

REVISIONS:

vhb

DETAILS FOR
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

PROJECT 18006

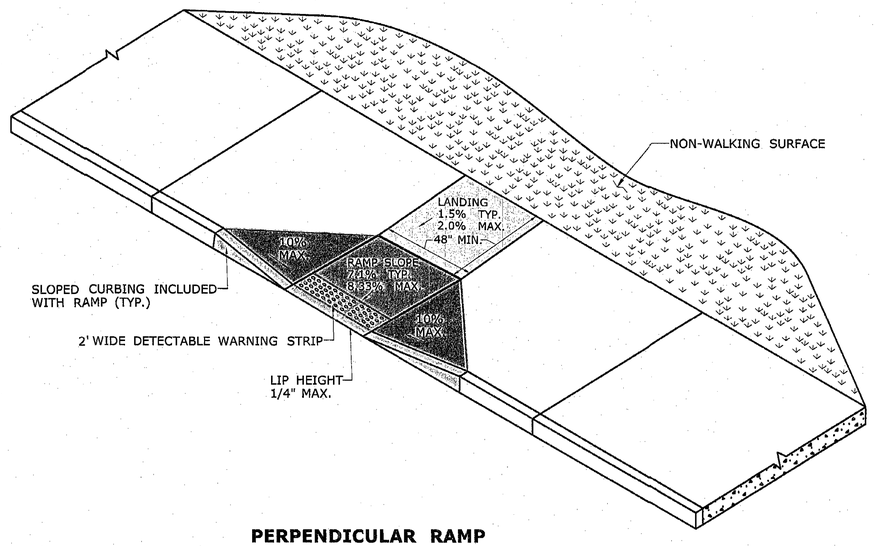
DATE 08 / 30 / 2019

DRAWN TJM

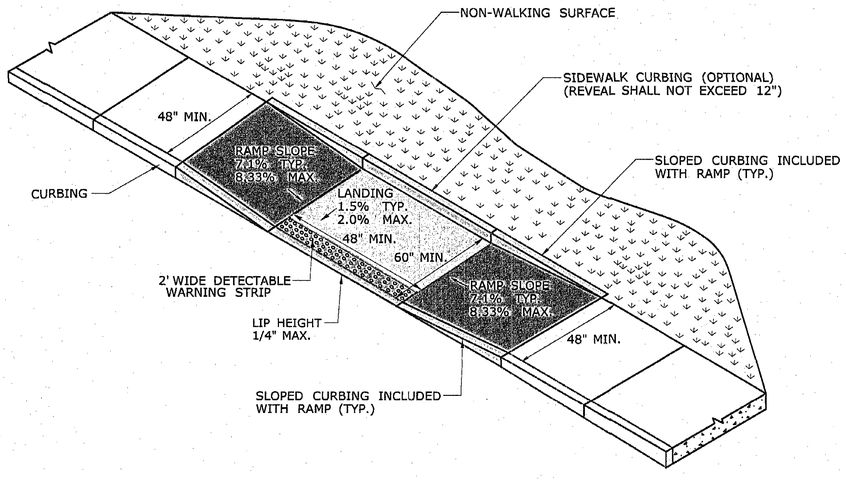
CHECK EAN

SHEET xx OF xx

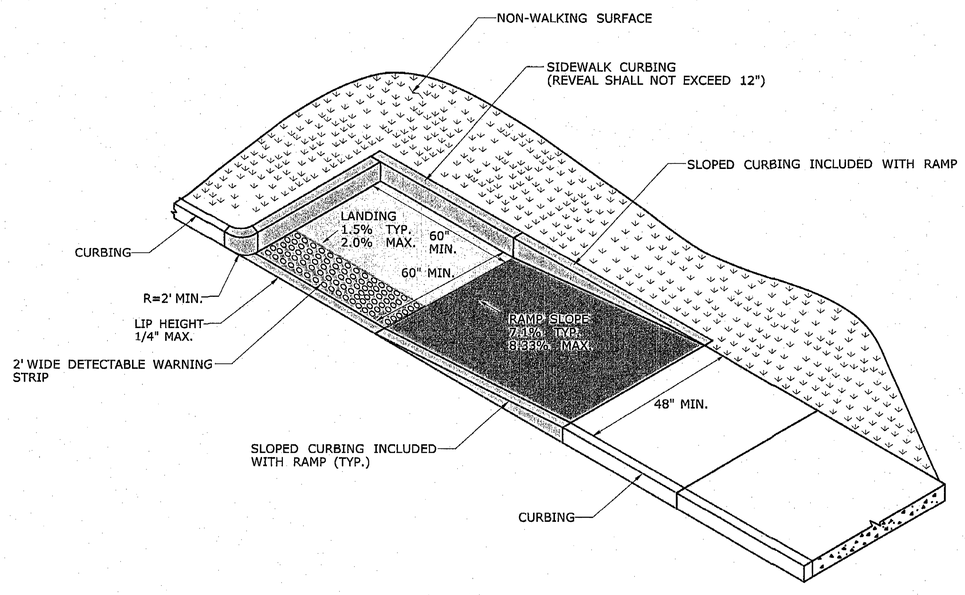
SCALE: AS - NOTED



PERPENDICULAR RAMP WITH 48" BY-PASS (TYPE 8)



PARALLEL RAMP WITHOUT NON-WALKING SURFACE (TYPE 9)



PARALLEL RAMP WITH LANDING AT BOTTOM ON CORNER (TYPE 10)

DESIGN INITIATED CHANGE ORDER NO. Y - mm/dd/yy

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/30/2019

DESIGNER/DRAFTER: -

CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_HIGHWAY_GD_[1-28-19].dgn

SIGNATURE/BLOCK:

OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE: - - -

TOWN: - -

DRAWING TITLE: CONCRETE SIDEWALK RAMPS SHEET 4

PROJECT NO. -

DRAWING NO.

SHEET NO.

REVISIONS:

vhb

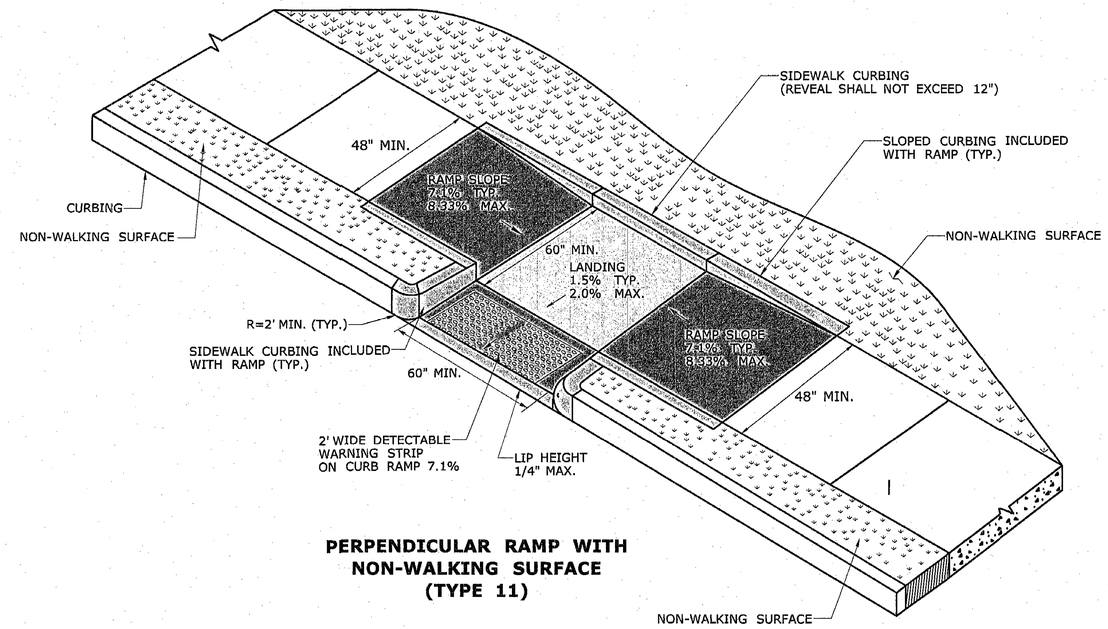
DETAILS FOR
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

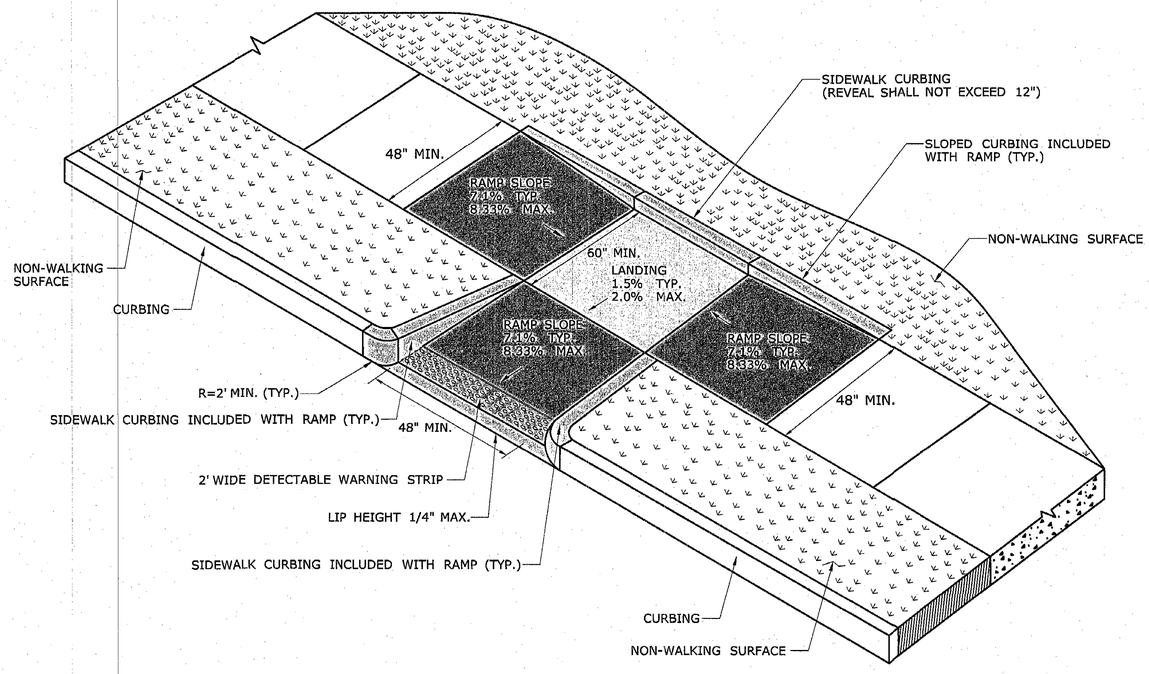
HORIZONTAL: NAD 83

VERTICAL: NAVD88

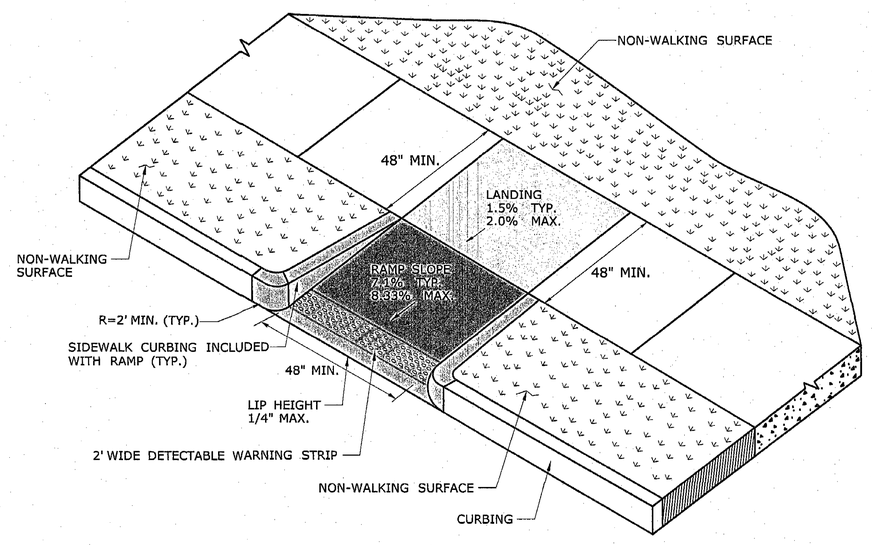
PROJECT	18006
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	xx OF xx
SCALE:	AS - NOTED



PERPENDICULAR RAMP WITH NON-WALKING SURFACE (TYPE 11)



PERPENDICULAR RAMP WITH SIDEWALK CURB AND NON-WALKING SURFACE (TYPE 12)



PERPENDICULAR RAMP WITH NON-WALKING SURFACE (TYPE 13)

DESIGN INITIATED CHANGE ORDER NO. Y - mm/dd/yy

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/30/2019

DESIGNER/DRAFTER: -

CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_HIGHWAY_GD_[1-28-19].dgn

SIGNATURE/ BLOCK:

OFFICE OF ENGINEERING

APPROVED BY:

PROJECT TITLE: - - -

TOWN: - -

DRAWING TITLE: **CONCRETE SIDEWALK RAMPS SHEET 5**

PROJECT NO. -

DRAWING NO.

SHEET NO.

REVISIONS:

vhb

DETAILS FOR
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT 06111

DATUMS:

HORIZONTAL: NAD 83

VERTICAL: NAVD88

PROJECT 18006

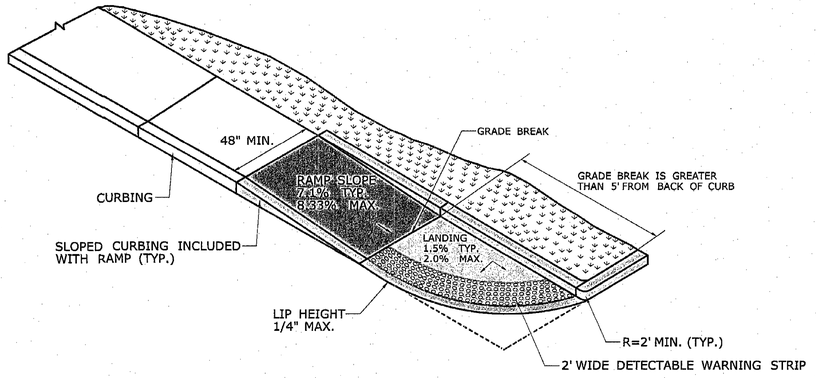
DATE 12 / 16 / 2019

DRAWN TJM

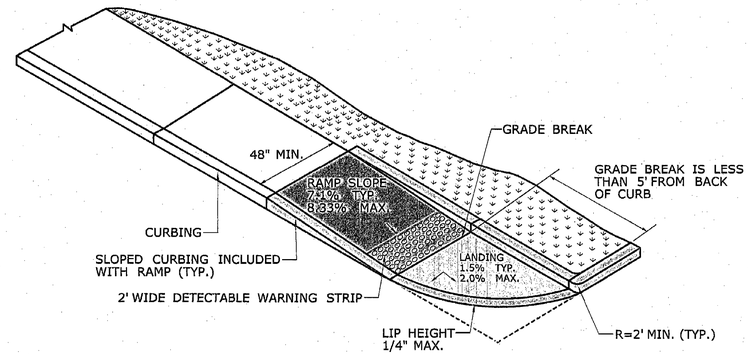
CHECK EAN

SHEET xx OF xx

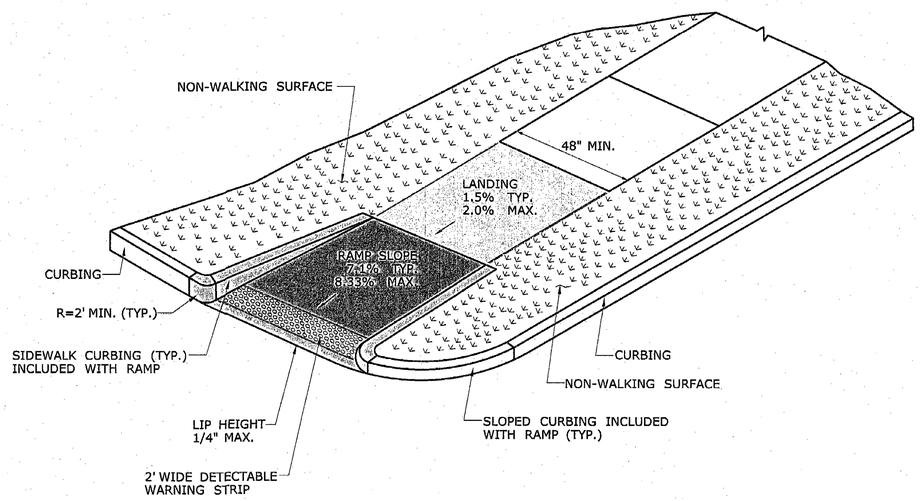
SCALE: AS - NOTED



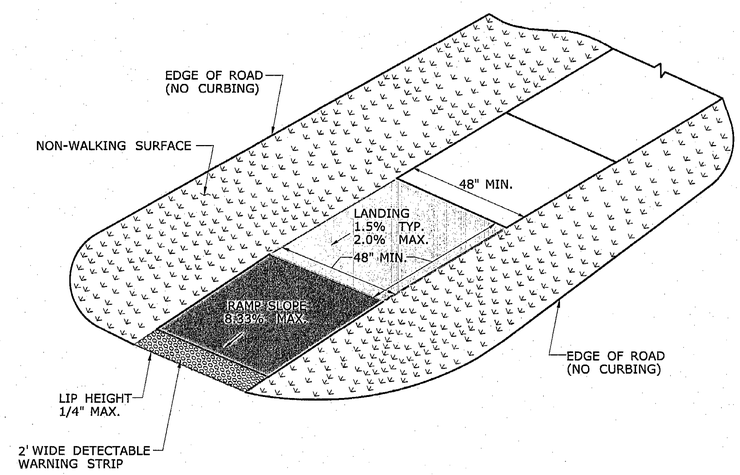
SINGLE DIRECTION RAMP
WITHOUT NON-WALKING SURFACE
GRADE BREAK GREATER THAN 5'
(TYPE 14)



SINGLE DIRECTION RAMP
WITHOUT NON-WALKING SURFACE
GRADE BREAK LESS THAN 5'
(TYPE 15)



SINGLE DIRECTION - RETURN CURB
WITH NON-WALKING SURFACE
(TYPE 16)



SINGLE DIRECTION - NO CURB
WITH NON-WALKING SURFACE
(TYPE 17)

DESIGN INITIATED CHANGE ORDER NO. Y - mm/dd/yy

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/30/2019

DESIGNER/DRAFTER: -
CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_HIGHWAY_GD_[1-28-19].dgn

SIGNATURE/ BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE: - - -

TOWN: - -
DRAWING TITLE: CONCRETE SIDEWALK RAMPS SHEET 6

PROJECT NO. -
DRAWING NO.
SHEET NO.

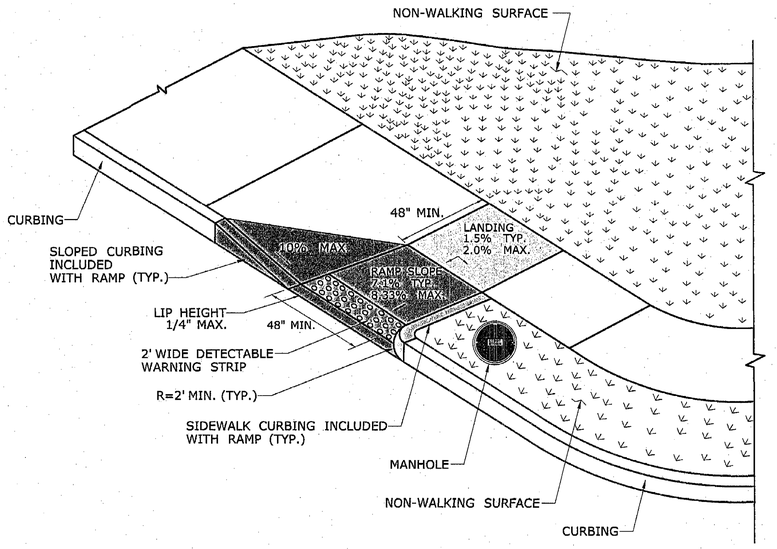
REVISIONS:

vhb

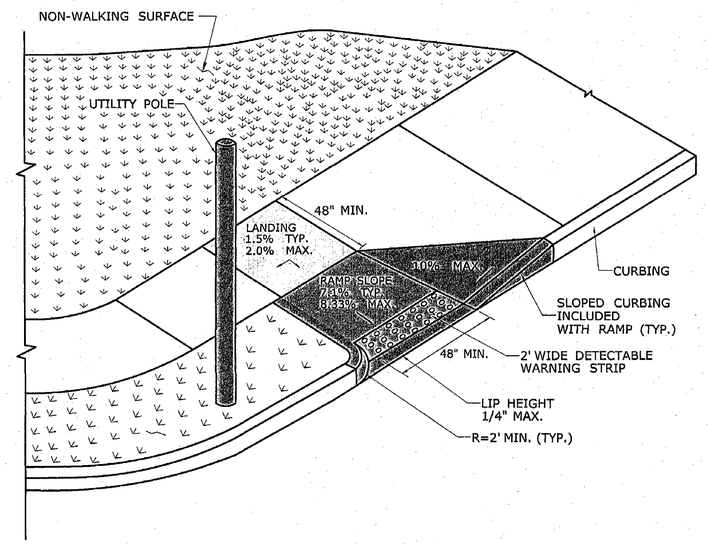
DETAILS FOR
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:
HORIZONTAL: NAD 83
VERTICAL: NAVD88

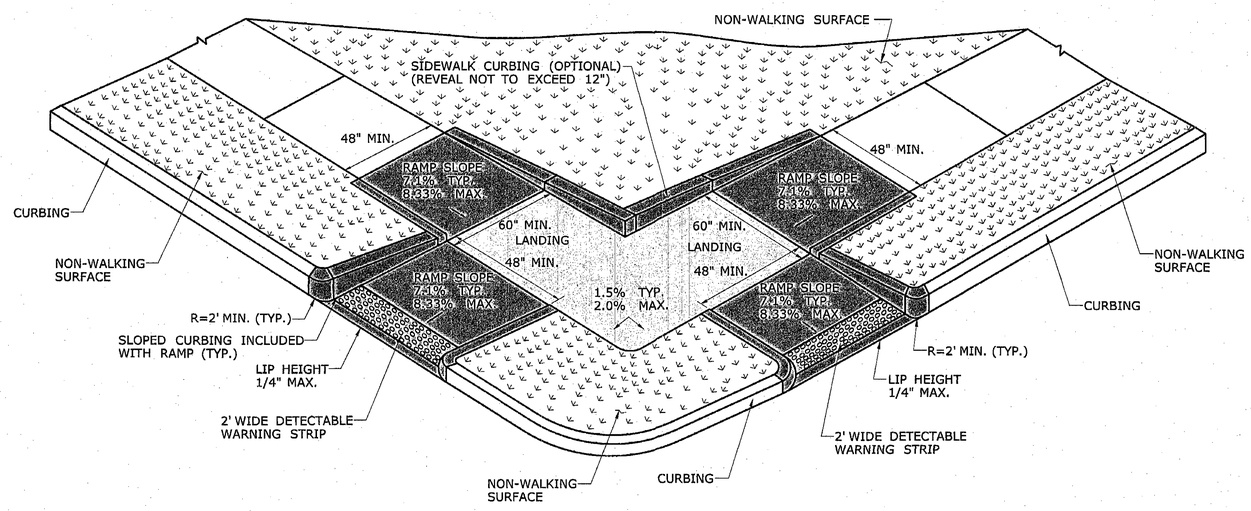
PROJECT 18006
DATE 12 / 16 / 2019
DRAWN TJM
CHECK EAN
SHEET xx OF xx
SCALE: AS - NOTED



PERPENDICULAR RAMP
WITH NON-WALKING SURFACE
(TYPE 18 LEFT)



PERPENDICULAR RAMP
WITH NON-WALKING SURFACE
(TYPE 18 RIGHT)



PERPENDICULAR RAMP
WITH NON-WALKING SURFACE
(TYPE 19)

DESIGN INITIATED CHANGE ORDER NO. Y - mm/dd/yy

REVISIONS:

DETAILS FOR
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83
VERTICAL: NAVD88

PROJECT	18006
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	xx OF xx
SCALE:	AS - NOTED

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

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Plotted Date: 1/30/2019

DESIGNER/DRAFTER: -
CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_HIGHWAY_GD_[1-28-19].dgn

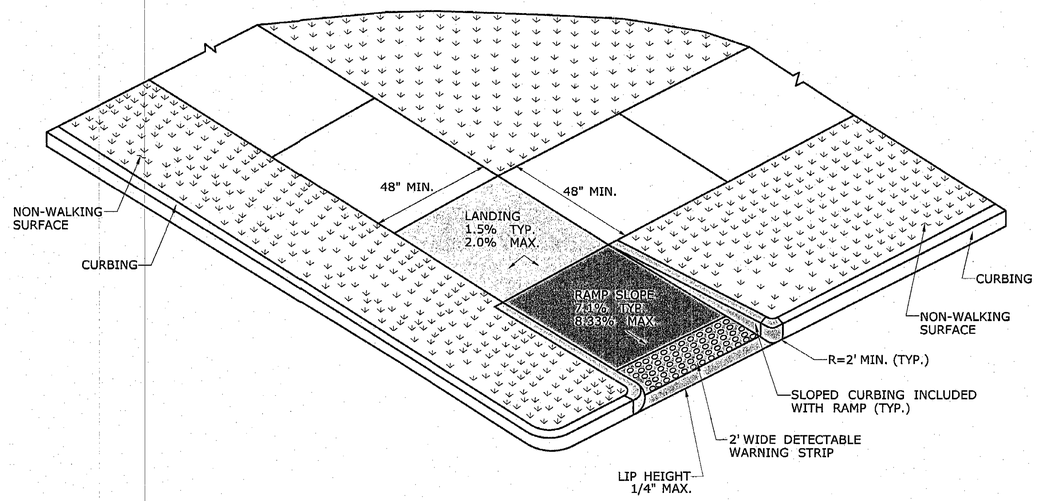
SIGNATURE/ BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE: - - -

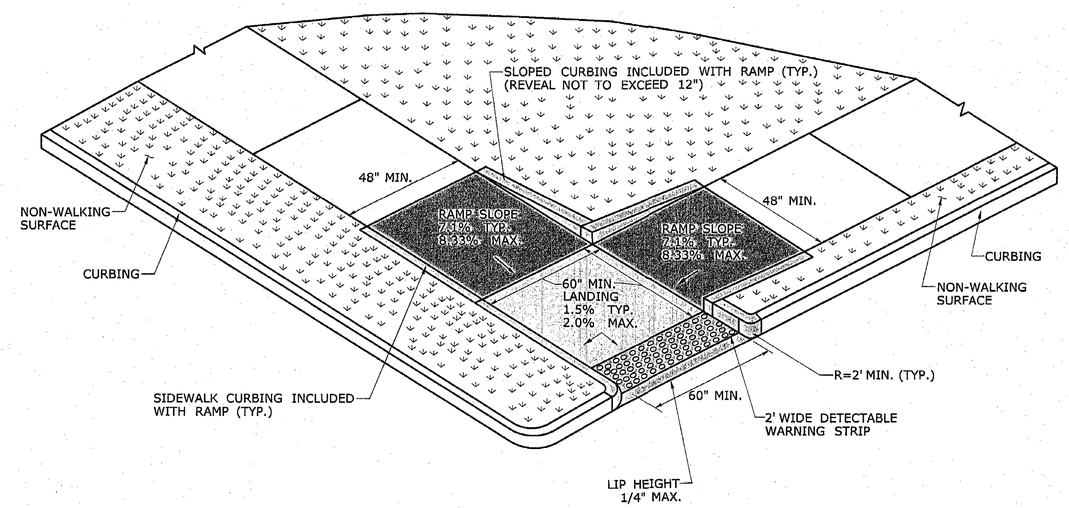
TOWN: - -

DRAWING TITLE:
CONCRETE SIDEWALK RAMPS SHEET 7

PROJECT NO. -
DRAWING NO.
SHEET NO.



RESTRICTED PEDESTRIAN CROSSING SIDEWALK RAMP WITH NON-WALKING SURFACE (TYPE 20)



RESTRICTED PEDESTRIAN CROSSING WITH LANDING AT BOTTOM AND NON-WALKING SURFACE (TYPE 21)

DESIGN INITIATED CHANGE ORDER NO. Y - mm/dd/yy

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 1/30/2019

DESIGNER/DRAFTER: -
CHECKED BY: -

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\CTDOT_HIGHWAY_GD_[1-28-19].dgn

SIGNATURE/BLOCK:
OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE: - - -

TOWN: - -

DRAWING TITLE:
CONCRETE SIDWALK RAMPS SHEET 8

PROJECT NO. -
DRAWING NO.
SHEET NO.

REVISIONS:

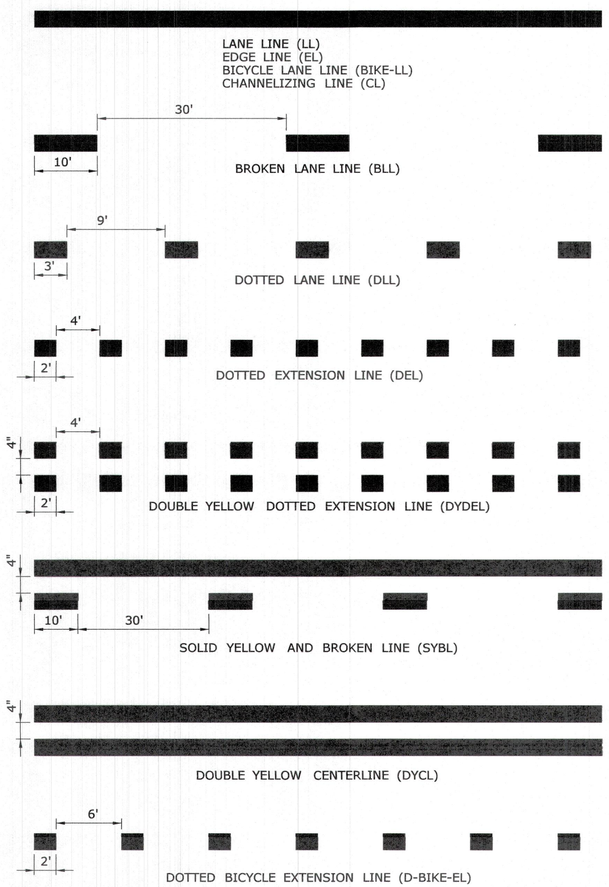
vhb

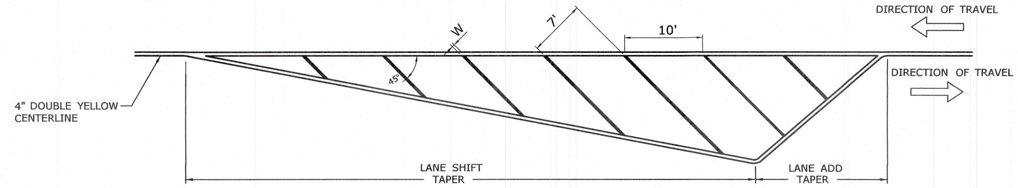
DETAILS FOR
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83
VERTICAL: NAVD88

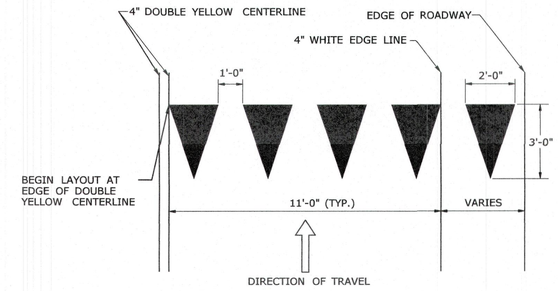
PROJECT	18006
DATE	12 / 16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	xx OF xx
SCALE:	AS - NOTED



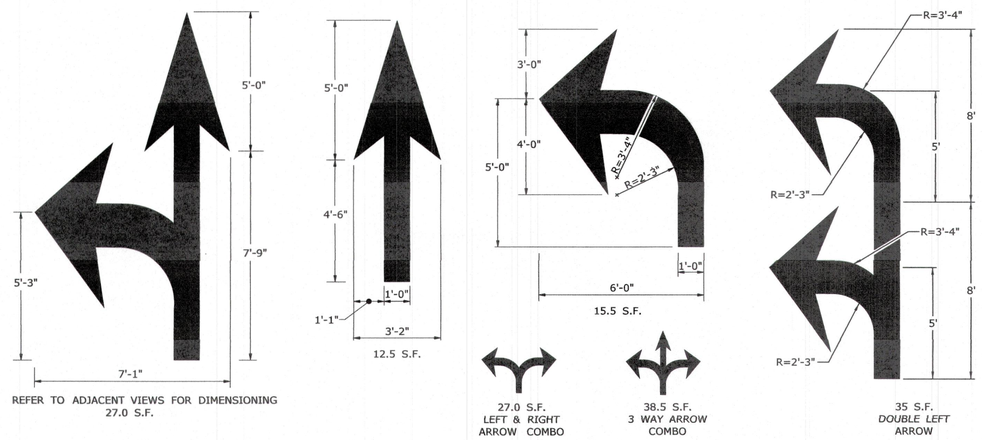


CROSS HATCHED ISLAND DETAIL
(YELLOW)

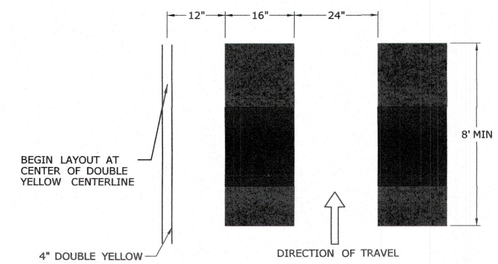
W IS TO BE 6" WHEN POSTED SPEED ≤ 45 MPH
W IS TO BE 12" WHEN POSTED SPEED > 45 MPH
CROSS HATCHED ISLANDS ARE TO BE INSTALLED WHERE CALLED FOR ON THE PLANS



YIELD LINE DETAIL
(WHITE)



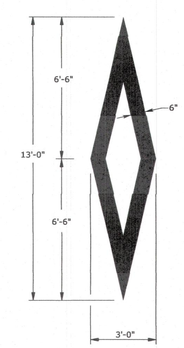
PAVEMENT ARROW DETAILS
(WHITE)
ARROWS SHALL BE CENTERED IN TRAVEL LANE



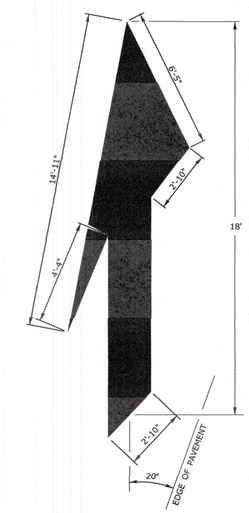
CROSSWALK DETAIL
(WHITE)

NOTES :

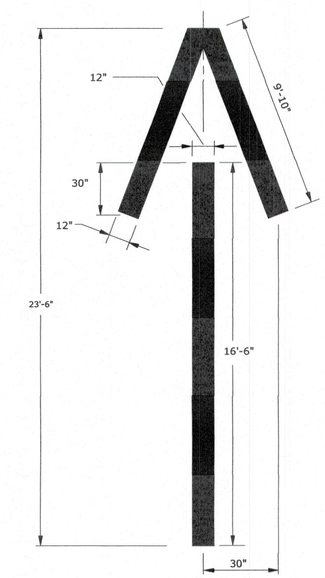
1. AREA OF PAVEMENT MARKINGS AS INDICATED IS APPROXIMATE.
2. RIGHT TURN PAVEMENT MARKING ARROWS ARE MIRROR IMAGE OF LEFT TURN PAVEMENT MARKING ARROWS.



WHITE PREFERENTIAL LANE SYMBOL
13.0 S.F.



WHITE LANE REDUCTION ARROW
41.8 S.F.



WHITE WRONG WAY PAVEMENT ARROW
36.2 S.F.

REV.	DATE	REVISION DESCRIPTION
1	8-2018	REMOVED ROUNDABOUT MARKINGS.

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Plotted Date: 8/10/2018

NOT TO SCALE

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: TR-1210_04.dgn Model: CT_Civil_2D_Sheet

SUBMITTED BY: NAME/DATE/TIME: Mark F. Makuch, P.E. 2018.08.17 09:07:44-04'00'

APPROVED BY: NAME/DATE/TIME: Mark F. Carlino, P.E. 2018.08.21 07:48:45-04'00'

CTDOT STANDARD SHEET

OFFICE OF ENGINEERING

STANDARD SHEET TITLE:

PAVEMENT MARKING LINES AND SYMBOLS

STANDARD SHEET NO.: TR-1210_04

REVISIONS:

vhb

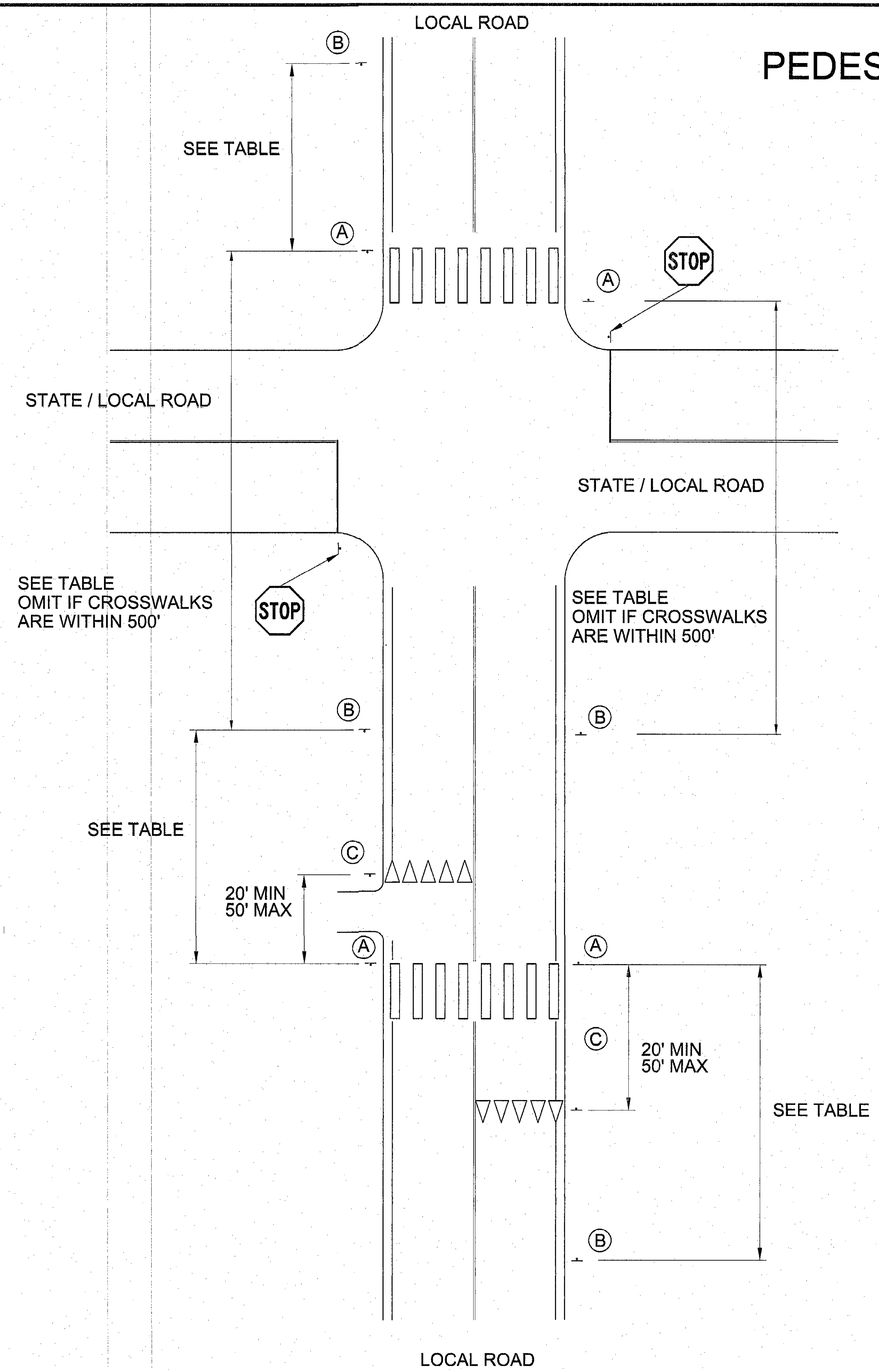
DETAILS FOR COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:

HORIZONTAL: NAD 83
VERTICAL: NAVD88

PROJECT	18006
DATE	12 /16 / 2019
DRAWN	TJM
CHECK	EAN
SHEET	xx OF xx
SCALE:	AS - NOTED

PEDESTRIAN SIGNING AND YIELD LINE DETAILS



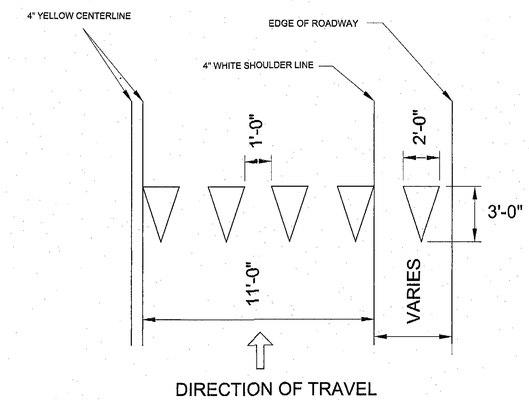
SIGN PLACEMENT TABLE

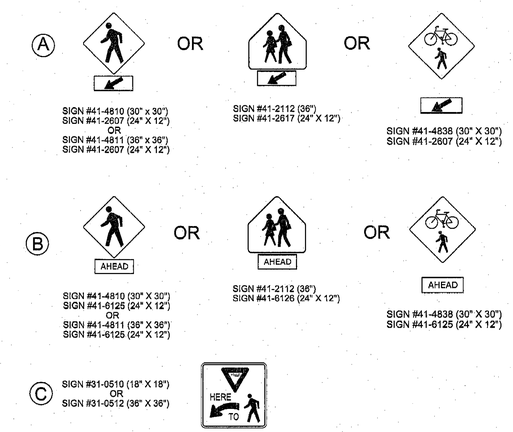
POSTED SPEED ON APPROACH STREET	DISTANCE BETWEEN ASSEMBLY (A) AND ASSEMBLY (B)
15	100' - 150'
20	115' - 165'
25	155' - 205'
30	200' - 250'
35	250' - 300'
40	305' - 355'
45	360' - 410'

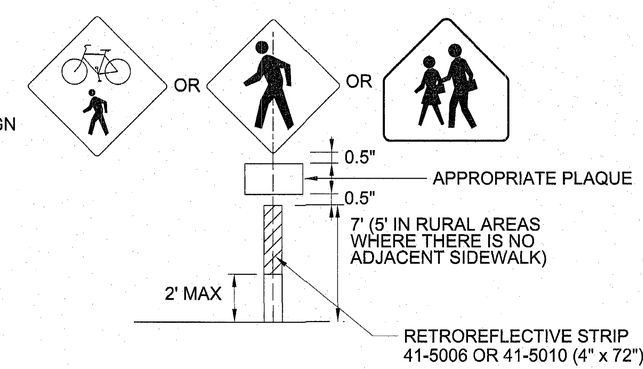
NOTES:

1. SIGN ASSEMBLY (A) TO BE LOCATED AS CLOSE TO MARKED CROSSWALK AS POSSIBLE
2. SIGN ASSEMBLY (B) TO BE INSTALLED IN ADVANCE OF CROSSWALK WITH SUFFICIENT SIGHT DISTANCE ACCORDING TO POSTED SPEED LIMITS AND THE SIGN PLACEMENT TABLE.
3. IF A PEDESTRIAN CROSSING SIGN IS POST-MOUNTED AT THE CROSSWALK LOCATION WHERE "A YIELD HERE TO PEDESTRIANS" (31-0510 or 31-0512) SIGN IS USED ON THE SAME APROACH, THE "YIELD HERE TO PEDESTRIANS" SIGN SHALL NOT BE PLACED ON THE SAME POST AS OR BLOCK THE ROAD USER'S VIEW OF THE PEDESTRIAN CROSSING SIGN.
4. AN ADVANCE PEDESTRIAN CROSSING SIGN WITH AN AHEAD PLAQUE MAY BE USED IN CONJUNCTION WITH A "YIELD HERE TO PEDESTRIANS" SIGN ON THE APPROACH TO THE SAME CROSSWALK.
5. AN ADVANCE PEDESTRIAN CROSSING SIGN WITH AN AHEAD PLAQUE SHALL BE OMITTED IF THERE IS ANOTHER CROSSWALK IN THE SAME DIRECTION WITHIN 500'.
6. PEDESTRIAN SIGNS SHALL BE 30" X 30" ON TWO LANE ROADS AND 36" X 36" ON MULTI-LANE ROADS. 48" X 48" SIGNS ARE ONLY TO BE USED AS DIRECTED IN THE NOTICE TO CONTRACTOR - PROJECT LOCATIONS.
7. ALL PLAQUES, OR SUB-PLATES, ARE TO BE ATTACHED ON THE SIGN POST 1/2" BELOW THE PARENT SIGN AND HAVE THE SAME COLOR BACKGROUND AND SHEETING TYPE AS THE PARENT SIGN.
8. IF THERE ARE TWO CROSSWALKS AT AN INTERSECTION, A PEDESTRIAN SIGN WITH AN ARROW PLAQUE SHALL BE INSTALLED ADJACENT TO THE CROSSWALK ON THE NEAR SIDE OF THE INTERSECTION.
9. SIGN ASSEMBLIES (A) AND (B) SHALL BE INSTALLED WITH A NEW RETROREFLECTIVE STRIP WITH THE SAME COLOR BACKGROUND AND SHEETING TYPE AS THE PARENT SIGN AND BE ATTACHED TO THE SIGN POST 1/2" BELOW THE APPROPRIATE PLAQUE.
10. YIELD LINES SHALL BE INSTALLED SYMETRICALLY AND NOT WITHIN AN OPENING OF A DRIVEWAY.

YIELD LINE DETAIL
WHITE







REV.	DATE	REVISION DESCRIPTION	SHEET NO.
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-	-	-	-
-	-	-	-
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-	-	-	-

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Plotted Date: 11/8/2017

DESIGNER/DRAFTER: LSA
CHECKED BY:
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\Local Road Ped Signing - Typical Sheet - Draft.dgn

SIGNATURE/ BLOCK: OFFICE OF ENGINEERING
APPROVED BY:

PROJECT TITLE: PEDESTRIAN SIGNING ON LOCALROADS

TOWN: VARIOUS - DISTRICT 1
DRAWING TITLE: DETAILS FOR PEDESTRIAN CROSSINGS

PROJECT NO. 171-437
DRAWING NO. TR-02
SHEET NO.

REVISIONS:

vhb

DETAILS FOR
COMPLETE STREETS PROJECT
MAPLE HILL AVENUE & ROBBINS AVENUE
PREPARED FOR
TOWN OF NEWINGTON
131 CEDAR STREET NEWINGTON, CT. 06111

DATUMS:
HORIZONTAL: NAD 83
VERTICAL: NAVD88

PROJECT 18006
DATE 12 / 16 / 2019
DRAWN TJM
CHECK EAN
SHEET xx OF xx
SCALE: AS - NOTED