

p:\80050\working-temp\work order 11 - new hampshire ave rrfb installation\1-8th st, NH ave & quincy st, nw\PSG-P101-80050-11-1.dgn 7/9/2020

REVISION								
DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.

GENERAL NOTES:

- ALL WORK RELATING TO THE INSTALLATION OF RECTANGULAR RAPID FLASHING BEACONS (RRFB'S) SHALL COMPLY WITH APPROPRIATE PROVISIONS OF THE LATEST VERSIONS OF DDOT STANDARD DRAWINGS, STANDARD SPECIFICATIONS, AND CONTRACT SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL SUBMIT TO DDOT CATALOG CUTS OF ALL EQUIPMENT AND MATERIALS TO BE FURNISHED AND INSTALLED. WRITTEN APPROVAL FROM DDOT SHALL BE SECURED PRIOR TO PROCUREMENT.
- THE LOCATION OF PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIALS SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL RECTANGULAR RAPID FLASHING BEACONS (RRFB'S) AND ALL MOUNTING HARDWARE.
- THE CONTRACTOR SHALL RETURN ALL REMOVED TRAFFIC SIGNAL EQUIPMENT TO THE DDOT TRAFFIC SIGNAL SHOP. CONTACT MR. HARVEY ALEXANDER AT LEAST 72 HOURS IN ADVANCE AT 202-671-1485 TO ARRANGE SERVICE.
- NO ABOVE GROUND HARDWARE OR EQUIPMENT SHALL BE LOCATED SUCH THAT A 4 FEET CLEAR PATH IS NOT AVAILABLE FOR ADA PURPOSES.
- THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL SIZE AS-BUILT DRAWING RECORDS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL SIGNAL EQUIPMENT AND CONDUITS, STRUCTURES AND OTHER FACILITIES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR.

REMOVAL NOTE:

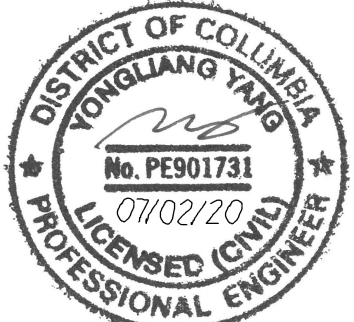
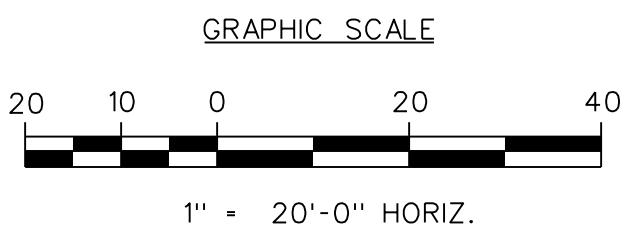
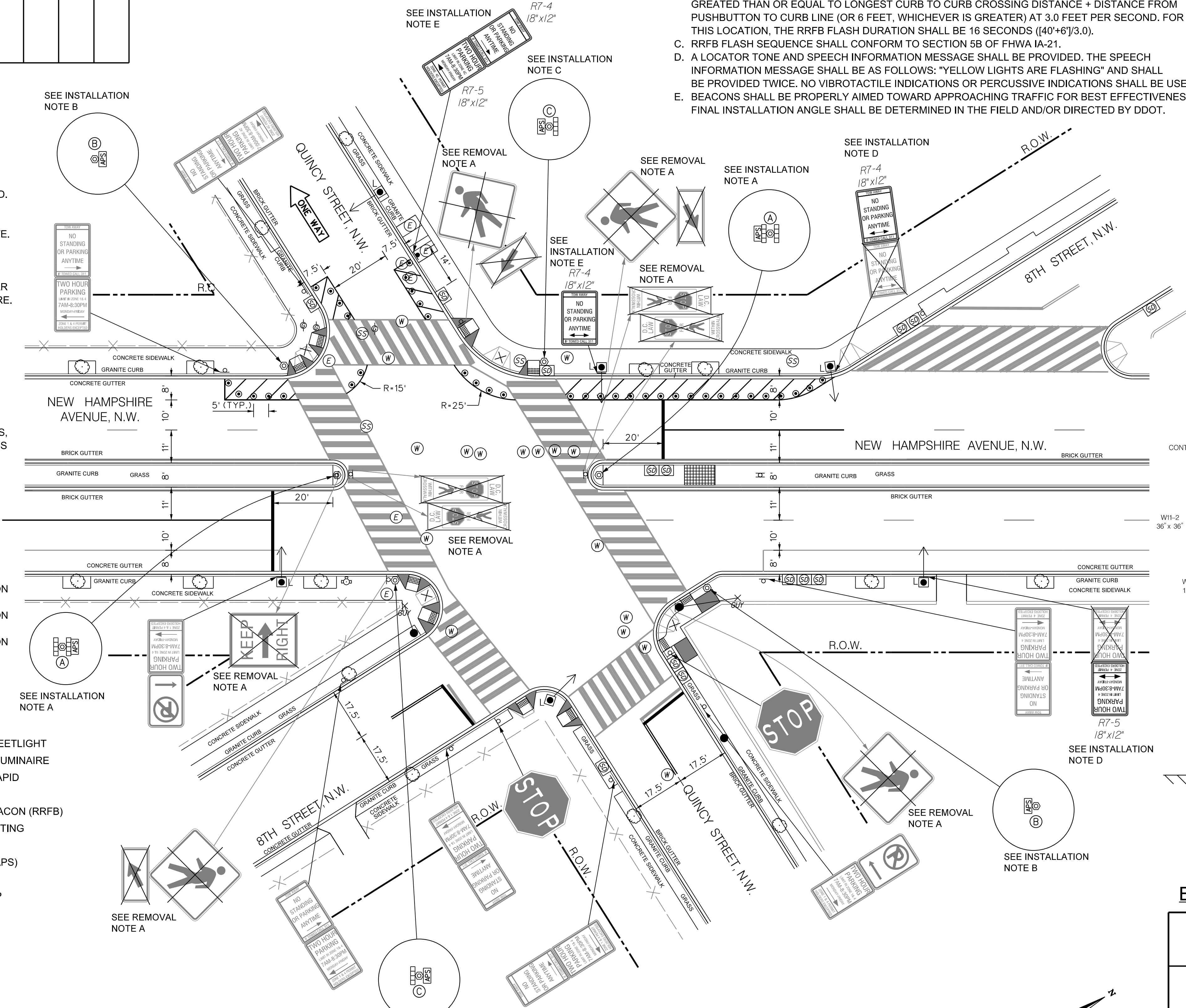
- A. REMOVE SIGN(S).

INSTALLATION NOTES:

- INSTALL SOLAR-POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) A.
- INSTALL SOLAR-POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) B.
- INSTALL SOLAR-POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) C.
- REPLACE SIGN(S) IN KIND.
- INSTALL SIGN(S).

LEGEND:

- EXISTING PEPCO WOOD POLE
- ◻ EXISTING 28.5-FOOT STEEL PENDANT POST STREETLIGHT
- ◉ PROPOSED SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) POLE
- ▨ PROPOSED RECTANGULAR RAPID FLASHING BEACON (RRFB)
- EXISTING LUMINAIRE AND SUPPORT ARM INDICATING DIRECTION OF LIGHT
- ◻ APS PROPOSED ACCESSIBLE PEDESTRIAN SIGNAL (APS)
- ◻ EXISTING WHEELCHAIR RAMP
- ◻ PROPOSED ADA COMPLIANT WHEELCHAIR RAMP
- ◉ EXISTING TREE
- ◉ EXISTING CATCH BASIN(S)
- ◉ EXISTING TRAFFIC SIGN
- ◉ PROPOSED TRAFFIC SIGN
- ◉ EXISTING BUS STOP SIGN
- ◉ EXISTING FIRE HYDRANT
- ◉ EXISTING WATER MANHOLE
- ◉ EXISTING SEWER MANHOLE
- ◉ EXISTING GAS VALVE
- ◉ EXISTING PEPCO MANHOLE
- ◉ EXISTING PEPCO GRATE
- ◉ PROPOSED FLEXIBLE DELINEATORS
- X--- EXISTING METAL FENCE
- EXISTING RETAINING WALL
- - - R.O.W. RIGHT OF WAY LINE

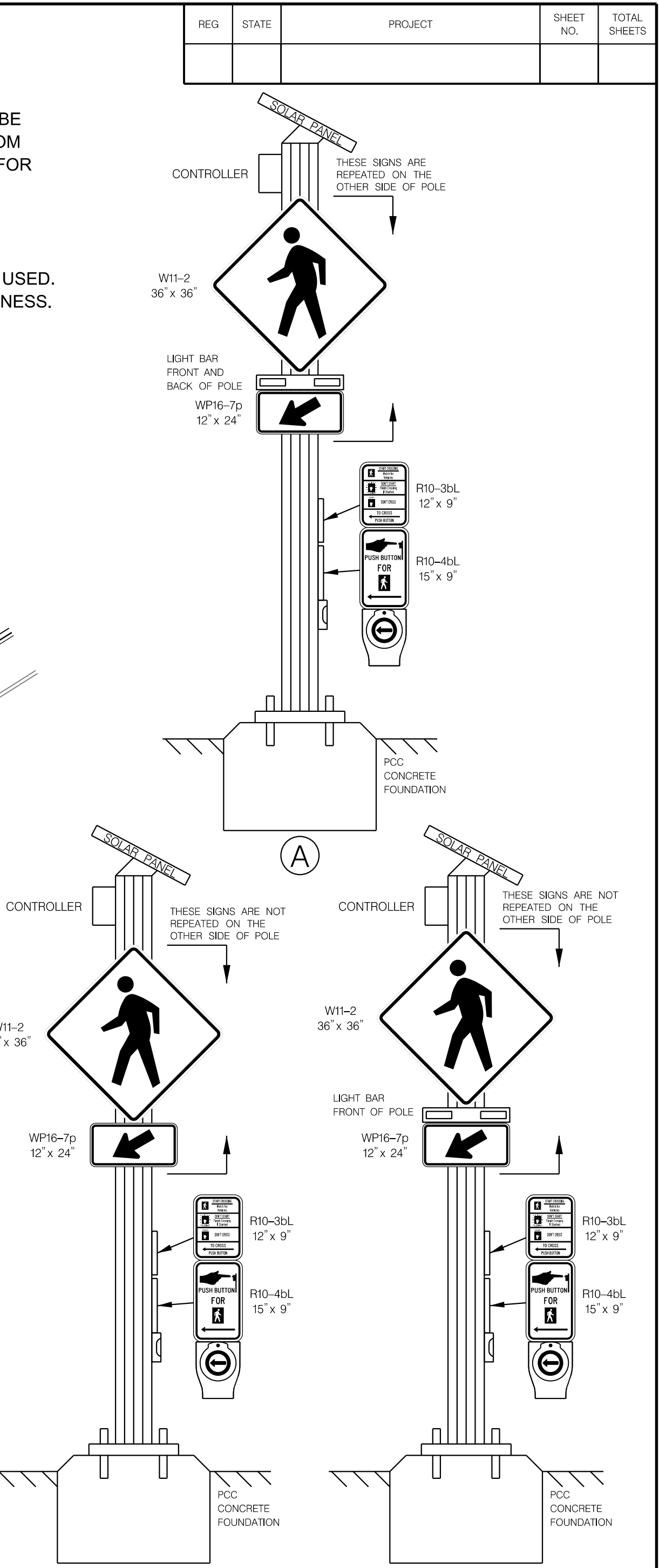


Precision Systems, Inc.
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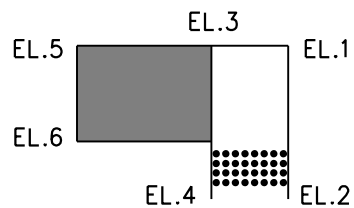
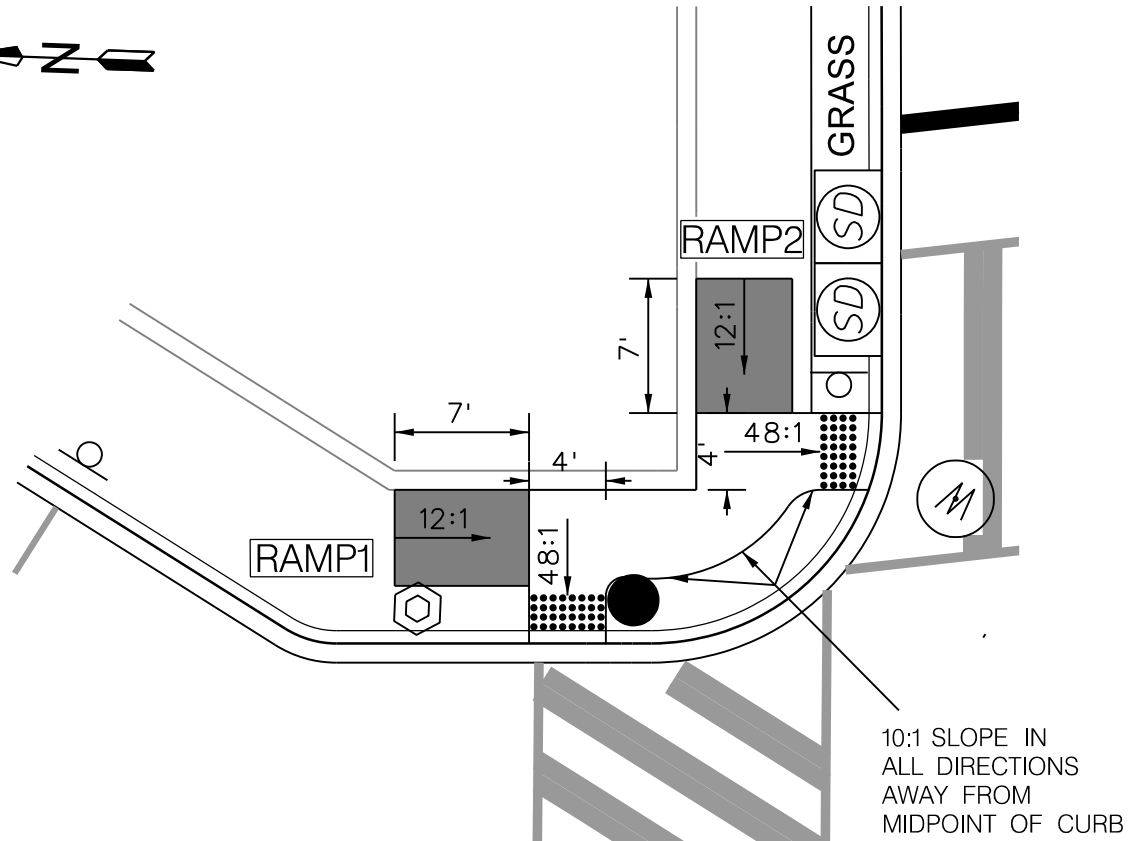
RRFB SPECIFICATIONS:

- RRFB INSTALLATION SHALL FOLLOW GUIDELINES SPECIFIED IN FHWA IA-21.
- RRFB FLASH DURATION SHALL BE CALCULATED AS FOLLOWS: TOTAL FLASH DURATION SHALL BE GREATER THAN OR EQUAL TO LONGEST CURB TO CURB CROSSING DISTANCE + DISTANCE FROM PUSHBUTTON TO CURB LINE (OR 6 FEET, WHICHEVER IS GREATER) AT 3.0 FEET PER SECOND. FOR THIS LOCATION, THE RRFB FLASH DURATION SHALL BE 16 SECONDS (40'+6')/3.0).
- RRFB FLASH SEQUENCE SHALL CONFORM TO SECTION 5B OF FHWA IA-21.
- A LOCATOR TONE AND SPEECH INFORMATION MESSAGE SHALL BE PROVIDED. THE SPEECH INFORMATION MESSAGE SHALL BE AS FOLLOWS: "YELLOW LIGHTS ARE FLASHING" AND SHALL BE PROVIDED TWICE. NO VIBROTACTILE INDICATIONS OR PERCUSSIVE INDICATIONS SHALL BE USED.
- BEACONS SHALL BE PROPERLY AIMED TOWARD APPROACHING TRAFFIC FOR BEST EFFECTIVENESS. FINAL INSTALLATION ANGLE SHALL BE DETERMINED IN THE FIELD AND/OR DIRECTED BY DDOT.



RECTANGULAR RAPID FLASHING BEACON (RRFB) ASSEMBLY DETAIL

DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION TRAFFIC ENGINEERING AND SIGNALS DIVISION 8TH STREET, NEW HAMPSHIRE AVENUE AND QUINCY STREET, N.W. RECTANGULAR RAPID FLASHING BEACON (RRFB) INSTALLATION		FINAL FIELD CHECKED BY AyyYZ DESIGNED BY Ayy DRAWN BY YZSH REVIEWED BY Ayy
SUBMITTED BY TRAFFIC SIGNAL PROJECT ENGINEER	DATE	DATE 07 /20
RECOMMENDED TRAFFIC SIGNAL DESIGN PROJECT MANAGER	DATE	SCALE 1" = 20'
ITS /TRAFFIC SIGNAL MAINTENANCE DIVISION MANAGER	DATE	SHEET 1 OF 1
APPROVED TRAFFIC SIGNAL PROGRAM MANAGER	DATE	DRAWING NO.



CURB RAMP GEOMETRY FOR RAMP(S)

RAMP	LANDING (LxW)	LANDING SLOPE	RAMP LENGTH		SLOPE	CURB HEIGHT	SPOT ELEVATIONS					
			LEFT	RIGHT			EL.1	EL.2	EL.3	EL.4	EL.5	EL.6
1	5'x4'	48:1	N/A	7'	12:1	7"	0"	0"	0"	0"	7"	7"
2	6'x4'	48:1	7'	N/A	12:1	7"	0"	0"	0"	0"	7"	7"

RAMP DETAIL

8TH STREET, NEW HAMPSHIRE AVENUE AND QUINCY STREET, N.W.

D.C. DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING AND SIGNALS
DIVISION

CHECKED BY: AYY DATE: 07/20

DRAWN BY: SH DATE: 07/20

IN SERVICE: SCALE: 1"=10'

DESIGNED BY: PRECISION SYSTEMS, INC.
TRAFFIC SIGNAL DESIGNER

SUBMITTED BY: TRAFFIC SIGNAL PROJECT ENGINEER

RECOMMENDED BY: TRAFFIC SIGNAL DESIGN PROJECT MANAGER

APPROVED BY: TRAFFIC SIGNAL PROGRAM MANAGER