

**Addendum #2
Issued January 12, 2018
BID #28-18**

CITY OF PORTSMOUTH

On-Street Bicycle Facility Improvement Project, Lafayette Road/Middle Street

This Addendum forms part of the original document marked “New Hampshire Project #28757, Federal Project # X-A003(791), On-Street Bicycle Facility Improvement Project, Lafayette Road/Middle Street BID#28-18.”

1. Page 41, add bullet (q) to the “Measurement of Quantities” section:

(q) When an item of work is designated as a final pay quantity in the Method of Measurement, or Basis of Payment, or Bid Schedule as (F), the estimated bid quantity for that item of work shall be the final pay quantity, unless the dimensions of any portion or the quantity of that item are revised by the Engineer, or the item or any portion of the item is eliminated. If the dimensions of any portion or the quantity of the item are revised, and the revision results in an increase or decrease in the estimated quantity of that item of work, the final pay quantity for the item will be revised in the amount represented by the changes in the dimensions or the quantity. If a final pay item is eliminated, the estimated quantity for the item will be eliminated. If a portion of a final pay item is eliminated, the final pay quantity will be revised in the amount represented by the eliminated portion of the item of work.

The estimated quantity for each item of work designated as a final pay quantity in the Method of Measurement or Basis of Payment or Bid Schedule shall be considered as approximate only, and no guarantee is made that the quantity that can be determined by computations, based on the details and dimensions shown on the plans, will equal the estimated quantity. No adjustment will be made in the event that the actual quantity based on measurements / computations does not equal the estimated quantity

2. Page 44, revised first paragraph as follows [inserted text is underlined, deleted text has a strikethrough]:

The Standard Specifications for Road and Bridge Construction of the State of New Hampshire Department of Transportation and any Addenda shall apply but without regard to Division Section 100 “General Provisions ~~Conditions~~” of those Standard Specifications (unless specifically referenced in a contract bid item) and without regard to any of those NHDOT provisions that allow for an adjustment for changing fuel and asphalt prices.

3. Given FHWA's recent decision to rescind their interim approval of Rectangular Rapid Flashing Beacons (RRFBs), this addendum delete's all references to RRFB's and replaces "rectangular rapid flashing beacon crossing assembly" with "pedestrian actuated crossing assembly". The intent is that the project will utilize the pedestrian actuated crossing assembly at the same locations noted on the plans for RRFBs but will instead use warning signs with flashing LEDs in the border as detailed herein.

As such, Bid Item 616.21 will be revised as follows:

616.21 Pedestrian Actuated Crossing Assembly Unit

The Special Provision for Item 616.21 on Page 52 shall be replaced in its entirety with the attached Special Provision for Item 616.21.

Sheet 38 of the bid plans shall be replaced with the attached revised sheet 38.

All else remains unchanged.

Please acknowledge this addendum within your proposal. Failure to do so may subject a proposer to disqualification.

End of Addendum #2

January 2018

SPECIAL PROVISION

Item 616.21 – Pedestrian Actuated Crossing Assembly

All provisions of Section 616, except as changed as follows, shall apply.

Description

1.1: This work consists of furnishing and installing pedestrian actuated crossing assemblies as indicated on the plans or as ordered by the Engineer. Posts and bases shall be black, powder coated. Assemblies at each crosswalk shall have wireless communications so that all corresponding LEDs for a crosswalk activate at the same time. An alternating flash pattern shall be used for signs located on opposing ends of the associated crosswalk.

Materials

2.1: The crossing assembly components shall conform to plan details and notes and FHWA, MUTCD, NEMA, ADA and Table 1 requirements:

Table 1	
LED Modules along Sign Perimeter (direction)	Amber LEDs installed within the perimeter of the S1-1 or W11-2 signs. Compliant with MUTCD Section 2A.07.
Flash Pattern	MUTCD Compliant Flash Pattern. Multiple units to flash in synchronized pattern in the same direction without the need for wiring.
Mounting Hardware	Stainless steel u-bolts for 4” to 4 1/2 “ O.D. pole.
Housing	NEMA 4 rated fiberglass cabinet with lockable clasps.
Solar Power	Manufacturer to size solar panel to provide sufficient electrical power for all year operation, with full consideration of the local climate, surrounding vegetation, and structures. Panel to conform to IP-67 and include aluminum mounting bracket for 4” to 4 1/2” O.D. pole.
Batteries (one per assembly)	12V, 40AH Sealed Gel battery requiring no periodic watering.
Battery Warranty	3 years

Autonomy	Minimum 14 days without sun.
Control Circuit	IP-67 NEMA rated enclosure, dustproof and waterproof in water up to 3' for 30 minutes.
Frequency	900 MHz FHSS
Range	Minimum 1,500 feet.
Programmability	Up to 50 systems in one network
Communications Port	RS232
Programming	Programming via Windows basic software.
Sign Substrate	Highway grade aluminum meeting MUTCD and NHDOT requirements.
Reflective Sheeting	3M™ DG3 with anti-graffiti overlay
Hardware	Zinc-plated steel anti-vandal fasteners for signs.
Activation	Each assembly shall be activated by push button with audible and visual confirmation. The push button shall be fully ADA compliant.
Operation	The assembly shall be normally dark, shall initiate operation only upon pedestrian actuation, and cease operation at a predetermined time after the pedestrian actuation. All LEDs associated with a given crosswalk shall, when activated, simultaneously commence operation of their alternating flashing indications and shall cease operation simultaneously. The duration of a predetermined period of operation of the assemblies following each actuation should be based on the MUTCD procedures for timing of pedestrian clearance times for pedestrian signals.
Signs	Each sign assembly shall consist of two sets (mounted back to back) of S1-1 (36" x 36") or W11-2 (30"x30") with W16-7P (24"x12") signs on each pole. All warning signs shall have the MUTCD fluorescent yellow-green background color. Signs shall be mounted back to back (either side of the pole) such that they are visible from both vehicle approaches to the crosswalk. As noted on the plans, it may be necessary to move a set of S1-1 (36" x 36") or W11-2 (30"x30") with associated W16-7P (24"x12") signs onto a U-Channel post if an adjacent utility pole will block their visibility.

Construction Requirements

3.1: General

3.1.1 Crossing assemblies to be set plumb at the required locations on a concrete base in conformance with plan details and notes and FHWA, MUTCD, NEMA and ADA requirements. The base shall have a minimum buried depth of 4-feet in accordance with Manufacturer recommendations. Signs and LEDs shall be visible to both directions of approaching traffic.

3.1.2 No work shall be commenced by the Contractor until approval of the shop drawings and the manufacturer's data has been received in writing from the Engineer. Approval of these drawings shall be general in character and shall not relieve the Contractor from the responsibility of, or the necessity of, furnishing materials and workmanship conforming to the plans and specifications.

Method of Measurement

4.1: Each pedestrian actuated crossing assembly will be measured as a Unit.

4.1.1 No separate payment will be made for tree trimming, concrete, steel, paint, signs, pushbuttons, wiring, wireless communications, sawcutting, excavation, backfill and surface restoration, required for the pedestrian actuated crossing assembly placement as shown on the plans or as ordered.

Basis of Payment

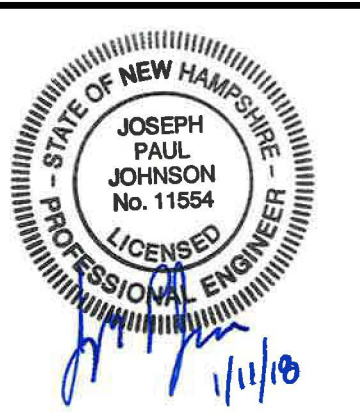
5.1: The accepted quantity of pedestrian actuated crossing assembly will be paid for at the Contract Unit Price, complete in place. The price bid under this item shall be considered as fair compensation for all labor, equipment, tools, supervision, and materials necessary to complete the work associated with construction and installation of pedestrian actuated crossing assemblies as shown on the plans and specified herein. The work shall include, but not be limited to tree trimming, excavation, concrete foundation installation, breakaway bracket, erection, electrical work, sawcutting, backfill, surface restoration, wireless communications for each crosswalk location, system programming, testing, and all other work required to complete the pedestrian actuated crossing assembly installation not paid for under other items specified herein.

Pay item

616.21 Pedestrian Actuated Crossing Assembly

Pay unit

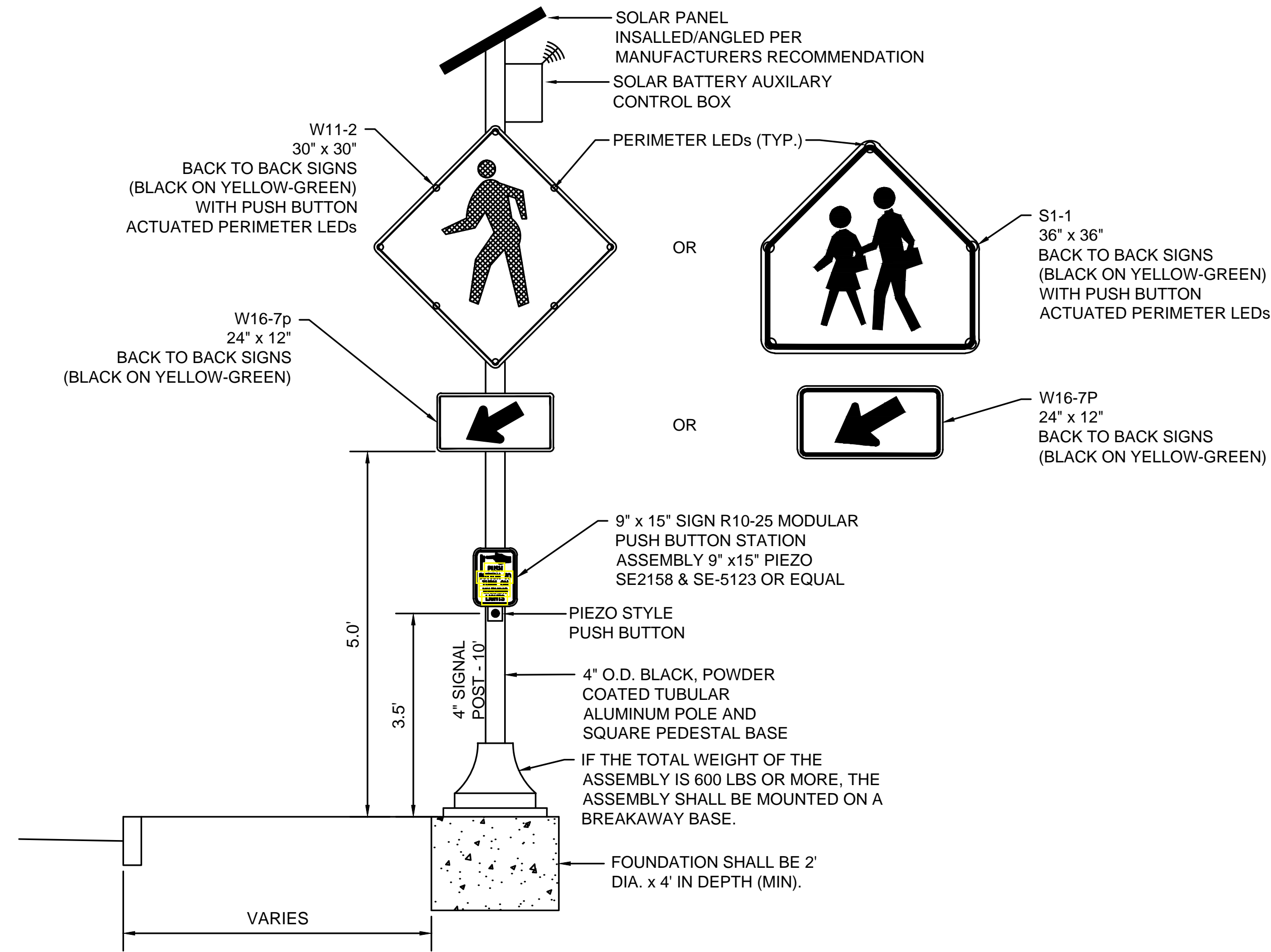
Unit



PREPARED FOR
 CITY OF PORTSMOUTH
 1 JUNKINS AVENUE
 PORTSMOUTH, NH

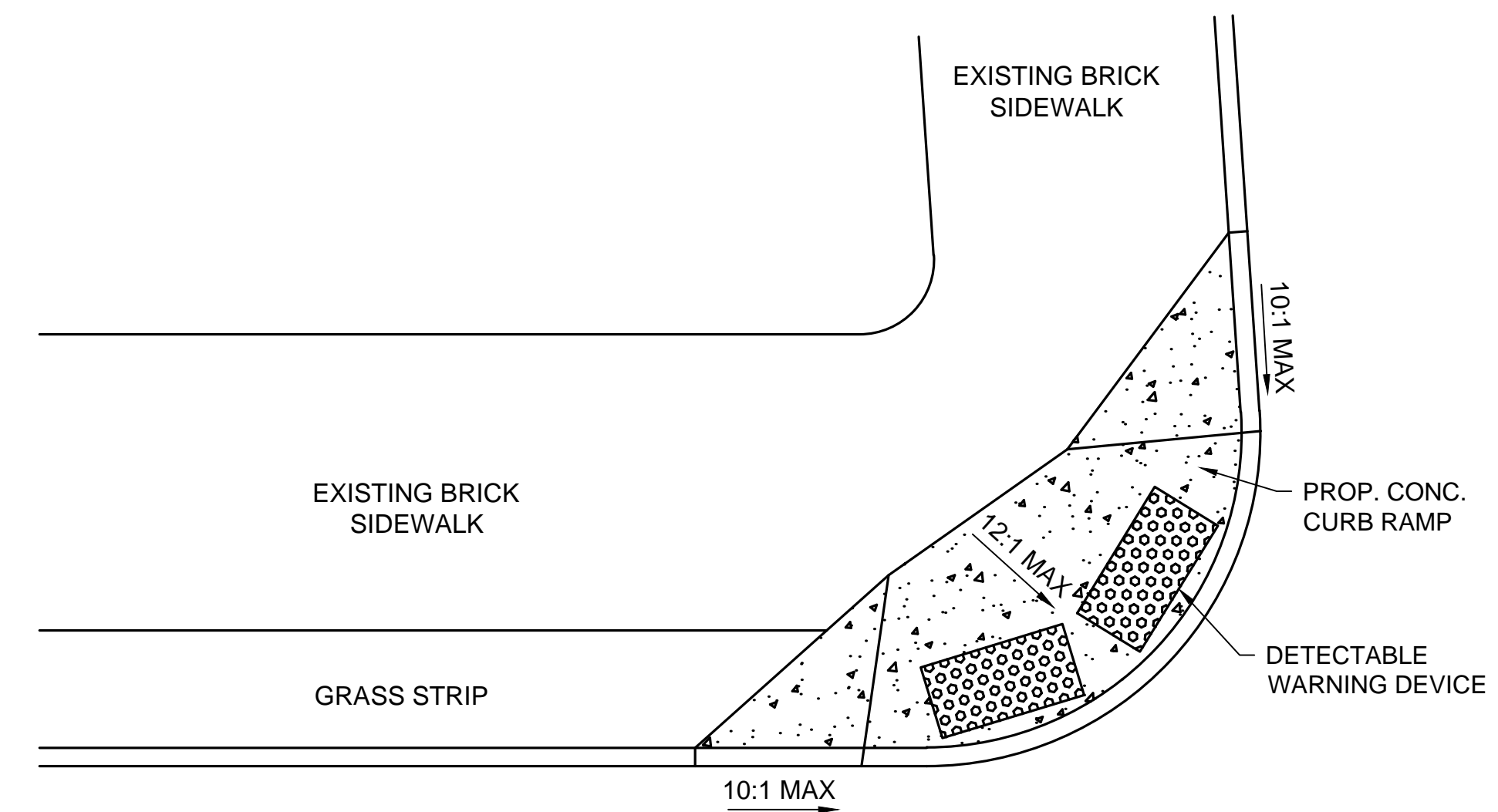
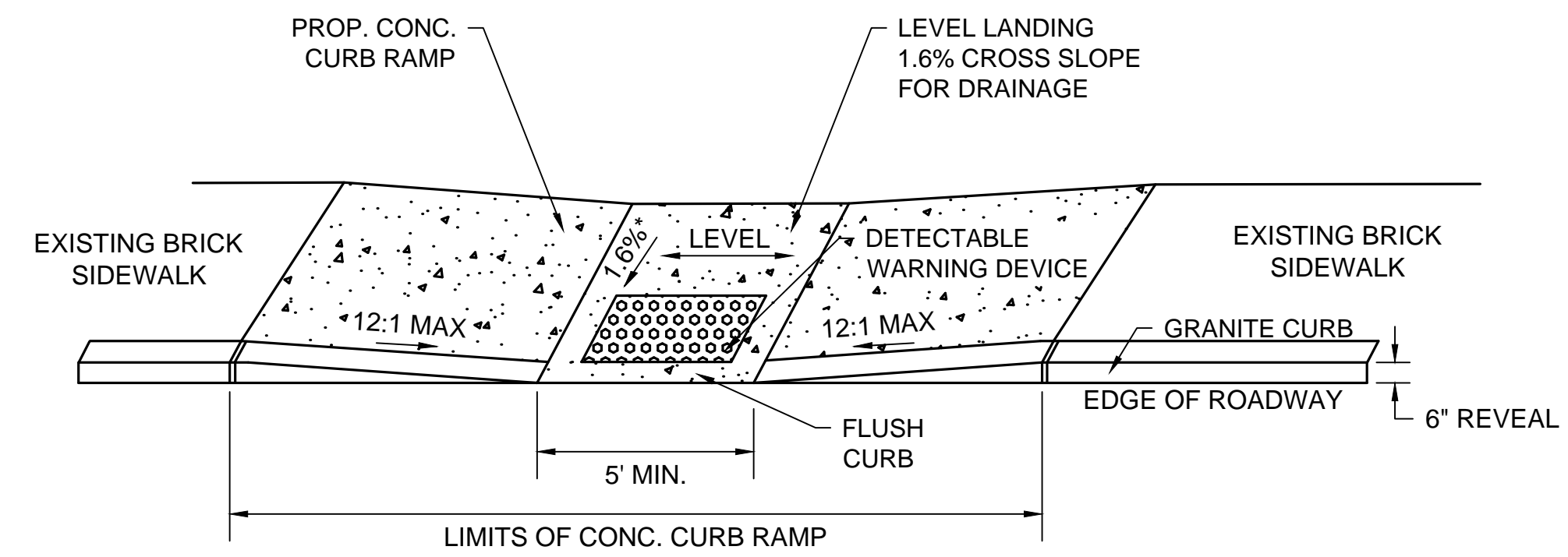
**ON-STREET BICYCLE FACILITY
 IMPROVEMENT PROJECT
 LAFAYETTE ROAD/MIDDLE STREET
 PORTSMOUTH, NH**

**DETAIL "A"
 PEDESTRIAN ACTUATED
 CROSSING ASSEMBLY**



NOTES:

1. WHERE THE CROSSING ASSEMBLY INSTALLATION IS ADJACENT TO A UTILITY POLE, THE ASSEMBLY SHALL BE LOCATED ON THE SIDE OF THE UTILITY POLE SO THAT IT IS CLEARLY VISIBLE BY ONCOMING MOTORISTS IN THE ADJACENT TRAVEL LANE. WHERE THIS OCCURS, AND THE VISIBILITY OF THE W11-2/S1-1 AND W16-7P ARE BLOCKED BY THE ADJACENT UTILITY POLE; THE W11-2/S1-1 AND W16-7P SHALL BE MOUNTED ON A SEPARATE U-CHANNEL POST ON THE DEPARTURE SIDE (OF THE ADJACENT TRAVEL LANE) OF THE UTILITY POLE. THE COST OF THE U-CHANNEL POST AND TO PERFORM THIS WORK IS INCIDENTAL TO ITEM 616.21.
2. FINAL LOCATIONS OF THE CROSSING ASSEMBLY WILL BE COORDINATED IN THE FIELD WITH THE ENGINEER.
3. TREE TRIMMING NEEDED TO IMPROVE VISIBILITY OF THE CROSSING ASSEMBLIES SHALL BE INCIDENTAL TO ITEM 616.21.
4. PUSH BUTTON SHALL BE ORIENTED TO FACE MOST ACCESSIBLE LOCATION ON ADJACENT SIDEWALK AS DIRECTED BY THE ENGINEER.
5. CROSSING ASSEMBLY FOUNDATION SHALL BE FLUSH WITH ADJACENT SIDEWALK TO ALLOW FOR SIDEWALK PLOW PASSAGE.
6. POST AND BASE SHALL BE BLACK, POWDER COATED.



REVISIONS

NO.	REVISION	DATE
4	ADDENDUM 2 REV	1/11/18
3	NHDOT COMMENTS	11/7/17
2	FINAL DESIGN	7/28/17
1	PRELIMINARY DESIGN	10/14/16

07/28/2017

DRAWN/DESIGN BY	CHECKED BY
DPE	JPJ

**CONSTRUCTION
 DETAILS**

SCALE: N.T.S.

28757