

**Provincetown Select Board
AGENDA ACTION REQUEST
September, 2020**

OOC

Chapter 90 Funding Request – Conwell Street Project

Requested by: Richard J. Waldo, Public Works Director

Action Sought: Discussion & Approval

Proposed Motions

Move that the Board of Selectmen vote to authorize the Public Works Director to submit a Project Request form to Massachusetts Department of Transportation for use of chapter 90 funding in the amount \$745,140 for Bid Phase Engineering Services and Construction Costs as it relates to the Conwell Street Bicycle and Pedestrian Improvement Project.

Additional Information

The Massachusetts Department of Transportation reimburses cities and towns for costs incurred for eligible transportation projects through the Chapter 90 program. Chapter 90 funding is distributed to cities and towns through a formula that takes into account population, road miles and employment.

Currently the Town of Provincetown has an uncommitted balance of approximately \$833,496 in Chapter 90 funding. It is anticipated that the Town would use approximately \$745,140 of the available Chapter 90 funding for this Conwell Street Bike and Pedestrian Improvement Project.

The Massachusetts Department of Transportation approved the 100% Design for this project, and issued a Road Access Permit. This request is to authorize the Public Works Director to proceed with acquiring bid documents, advertising the project, and accepting bids in accordance with Chapter 90 requirements. Upon the receipt of acceptable bids, the contract will be awarded, and the construction phase of this project will commence.

It is the intention to use Chapter 90 funds for all of the costs of this project.

Additional information and Chapter 90 request form attached.

Board Action

<i>Motion</i>	<i>Second</i>	<i>In favor</i>	<i>Opposed</i>	<i>Disposition</i>

TOWN OF PROVINCETOWN

Department of Public Works

Highway Division
Water & Sewer Division
Buildings & Grounds Division
Transfer Station/Recycling Center
Sanitation Division
Cemetery Division

Richard J. Waldo, Director
Steven H. Wlodkowski, Deputy Director
Cody J. Salisbury, Water Superintendent
Sherry Prada, Operations Director
Robert Capurso, Town Engineer



Veterans Memorial Community Center

2 Mayflower St., Room 74
Mail: 260 Commercial Street
Provincetown MA 02657
Phone: 508.487.7060
FAX: 508.487.4675

<http://www.provincetown-ma.gov>

rwaldo@provincetown-ma.gov
swlodkowski@provincetown-ma.gov
csalisbury@provincetown-ma.gov
sprada@provincetown-ma.gov
rcapurso@provincetown-ma.gov

September, 2020

Mr. Sean M. Sullivan, Acting State Aid Manager
Massachusetts Department of Transportation, District 5 Office
1000 County Street
Taunton, MA 02780

Re: Chapter 90 Project Requests- Conwell Street Rehabilitation

Dear Mr. Sullivan:

Attached herein is the Chapter 90 Project Request form for construction, and engineering bid and construction phase services associated with the Conwell Street Rehabilitation Project.

The project will provide a road diet along Conwell Street, repurposing the heavily trafficked roadway from a two-lane roadway to a two-directional roadway with designated bike lanes on each side, and one sidewalk on the West side. The designated bike lanes and separate sidewalk will provide for safe bicycle and pedestrian accommodations that will connect Route 6 and Race Point Road to Conwell Street. Race Point Road connects to bike trails and recreational spaces within the National Seashore area. There are proposed bike lanes along Route 6 in this area. The majority of the existing roadbed will be reused with areas of transitioning to meet existing alignments to minimize construction costs and impacts. Work includes tying new bike lanes and new sidewalk into existing driveways, installing ADA compliant fixtures and grading in new sidewalk, narrowing vehicular travel lane width, landscape features, pavement markings, minor drainage alternations, traffic calming features, and the provision of safety controls/signing for construction operations.

We are requesting \$745,140 in Chapter 90 funding for the construction, and engineering bid and construction phase services associated with the above Conwell Street rehabilitation.

Please do not hesitate to contact me at (508) 487-7060 should you have any questions or require additional information. I can also be reached via e-mail at rwaldo@provincetown-ma.gov.

Very truly yours,

Richard J. Waldo, P.E.
Director of Public Works, Provincetown

Attachments: Chapter 90 Project Request Form

CHAPTER 90 – PROJECT REQUEST

8/2012

updated

***2 Original Signed Project Request Forms are to be submitted.**

CONTRACT # _____

Classification: Urban Principal Arterial

Primary Road: Conwell Street

Local Road: Cemetery Rd, Old Ann Page Way, Hensche Lane, Off Conwell St

City/Town: Provincetown

Location(s): Conwell Street between Route 6 and Cemetery Road

Length: 910 Feet Width: 35 feet

PROJECT TYPE

Construction: Resurfacing: Engineering: Equipment:

Other: _____

TYPICAL SECTION DETAILS: Indicate depths, special treatments, etc... Also please include sketch for Construction/Improvement Projects.

Surface:	<u>Drawings C1-C7 (Environmental Partners Group)</u>
Base Course:	<u>Drawings C1-C7 (Environmental Partners Group)</u>
Foundation:	<u>N/A</u>
Shoulders/Sidewalks:	<u>Drawings C1-C7 (Environmental Partners Group)</u>

SCOPE OF WORK:

Work consists of preparing Bid Documents by Environmental Partners Group, and subsequent Construction Costs by contractor (tbd), based on approved MassDOT 100% engineered design of Town-owned Conwell Street from Route 6 to Cemetery Road. The project will provide a road diet along Conwell Street, repurposing the heavily trafficked roadway from a two-lane roadway to a two-directional roadway with designated bike lanes on each side, and one sidewalk on the West side. The designated bike lanes and separate sidewalk will provide for safe bicycle and pedestrian accommodations that will connect Route 6 and Race Point Road to Conwell Street. Race Point Road connects to bike trails and recreational spaces within the National Seashore area. There are proposed bike lanes along Route 6 in this area. The majority of the existing roadbed will be reused with areas of transitioning to meet existing alignments to minimize construction costs and impacts. Work includes tying new bike lanes and new sidewalk into existing driveways, installing ADA compliant fixtures and grading in new sidewalk, narrowing vehicular travel lane width, landscape features, pavement markings, minor drainage alternations, traffic calming features, and the provision of safety controls/signing for construction operations.

WORK TO BE DONE:

Force Account: Advertised Contract: Other: Engineering Bid Services and Contractor Construction Costs

Estimated Cost (Please attach estimate and list funding source(s)): \$ 745,140.

These funds will pay 100% of Local Road Project costs to the limit of this assignment

CERTIFICATION

The design, engineering, construction, and future performance of the project, including maintenance, is the responsibility of the Municipality. The proposed work will conform to recognized engineering and construction methods. I/We herby certify under penalty of perjury the following: that the project is on a public way, and any necessary takings have been made; that all materials will comply with approved established specifications; that all weights and quantities will be accurate; that equipment rental rates are those established by MassDOT Highway or the advertised low bid; that all documentation will be checked for accuracy, and will be endorsed in accordance with municipal procedures for accountability.

Reviewed by:	
Signed:	
_____	_____
State Aid Engineer	Date
Road Classification Verified: _____	
Approved for \$ _____ @ 100%	
_____	_____
District Highway Director	Date

Signed:	
_____	_____
Highway Official's Title	Date
_____	_____
Accounting Official's Title	Date
_____	_____
Date	Duly Authorized Municipal Officials

Project Cost Estimate

August 31, 2020

EPG Construction Estimate (includes Police Detail & 10% Contingency):	\$629,000
EPG Bid & Construction Phase Services:	\$48,400
10% Contingency:	\$67,740
Total Estimate:	\$745,140

TOWN OF PROVINCETOWN CONWELL STREET



March 7, 2016

Environmental  Partners

GROUP

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www.envpartners.com

Project Location



Existing Conditions



Existing Conditions



A partnership for engineering solutions.



Existing Conditions



Existing Conditions



A partne



Existing Conditions



A partne

Existing Conditions



Existing Conditions



p for engineering solutions.



Existing Conditions



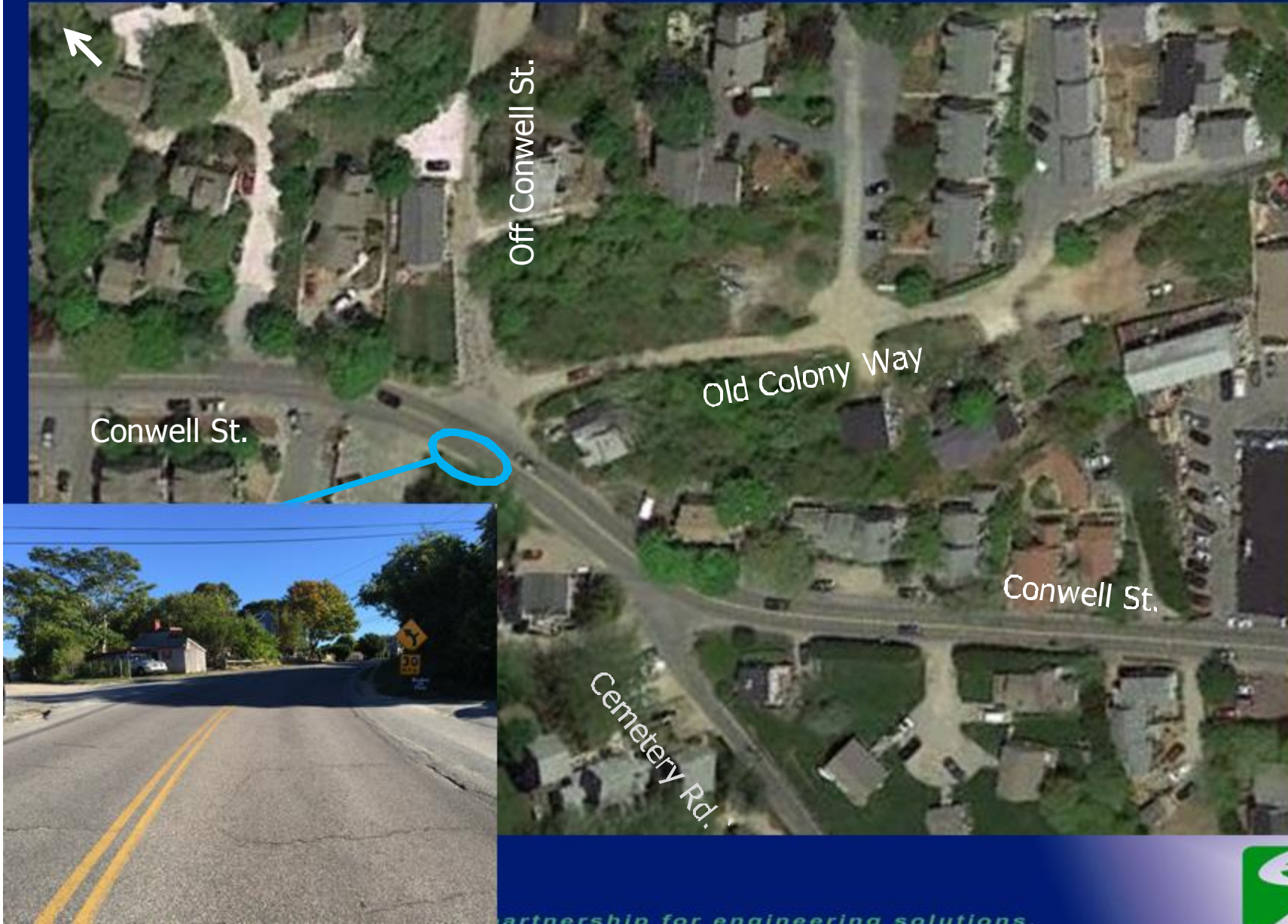
Existing Conditions



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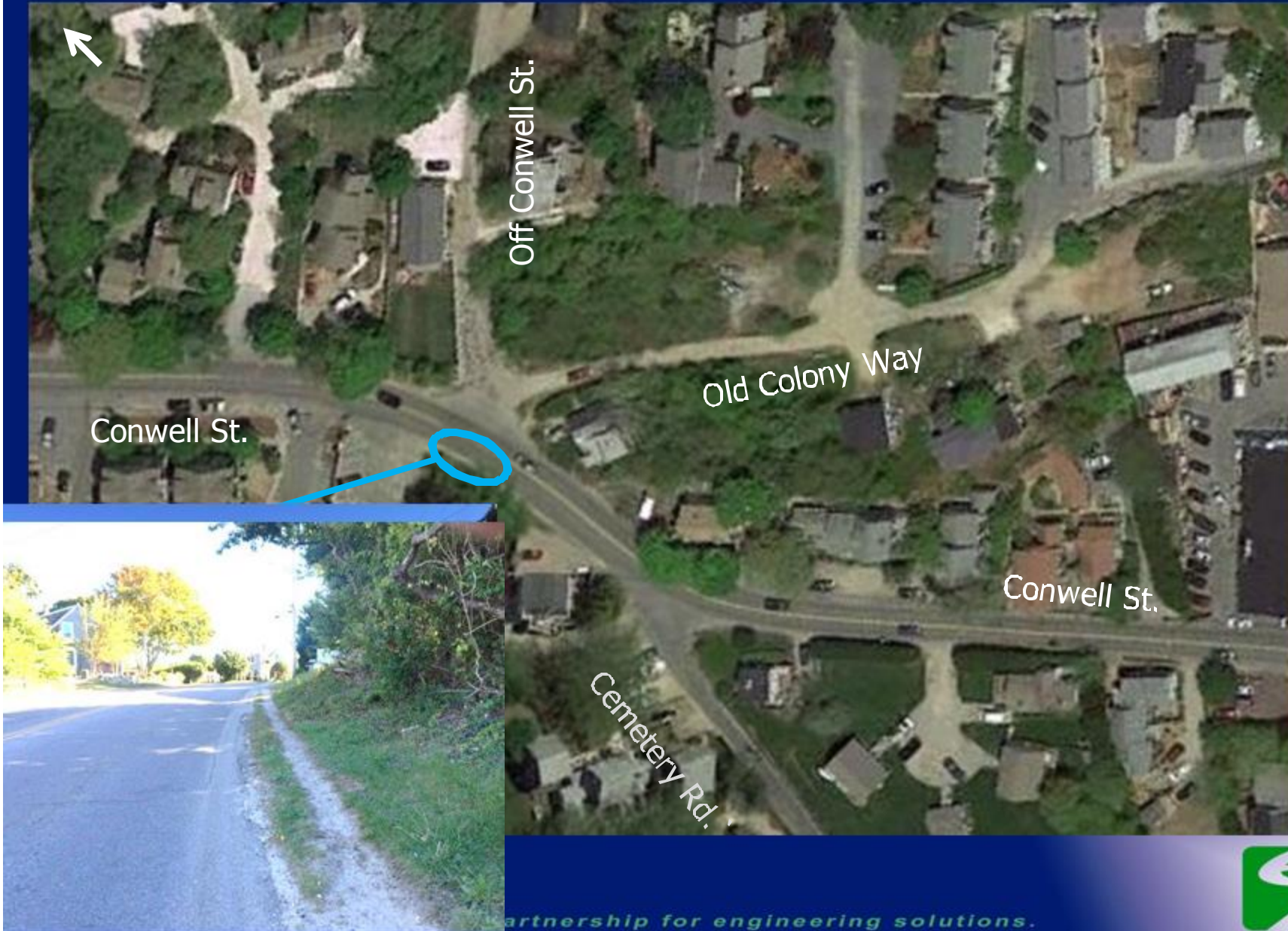
Existing Conditions



partnership for engineering solutions.



Existing Conditions



Partnership for engineering solutions.



Existing Conditions

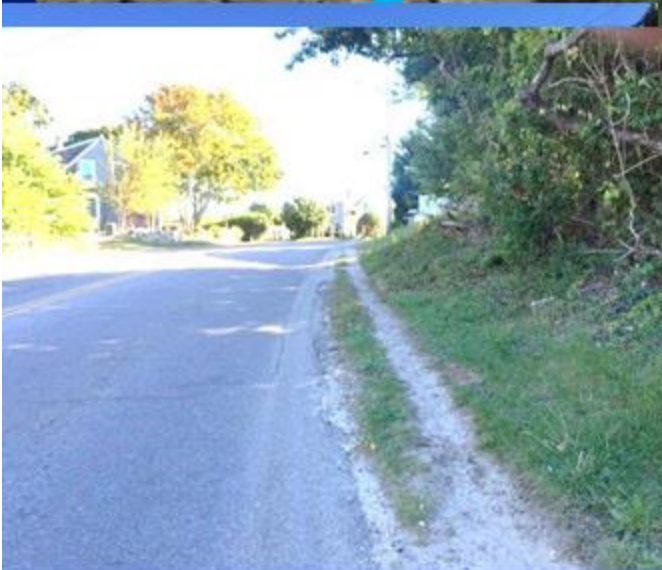


Conwell St.

Old Colony Way

Conwell St.

Cemetery Rd.



Partnership for engineering solutions.



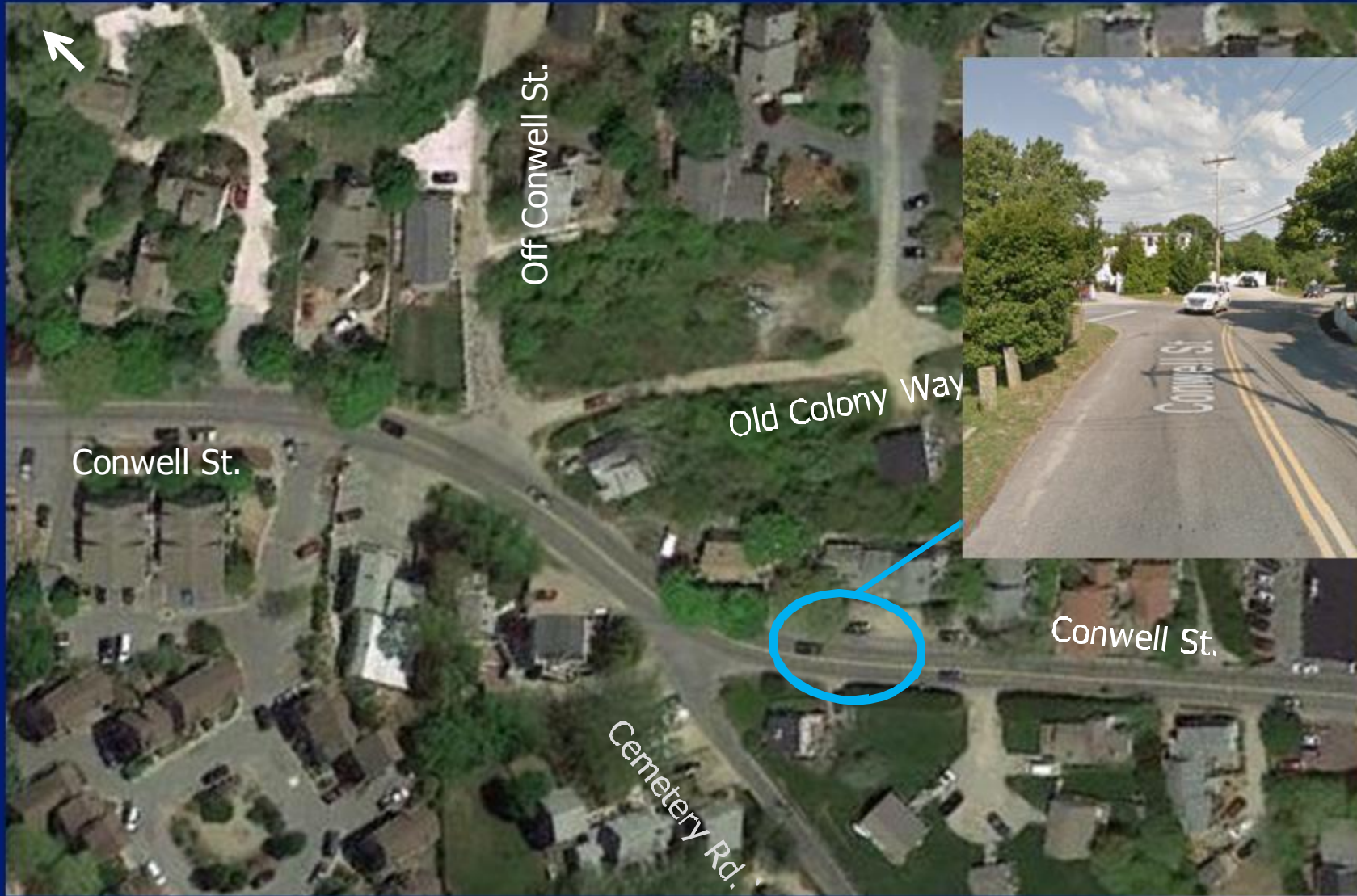
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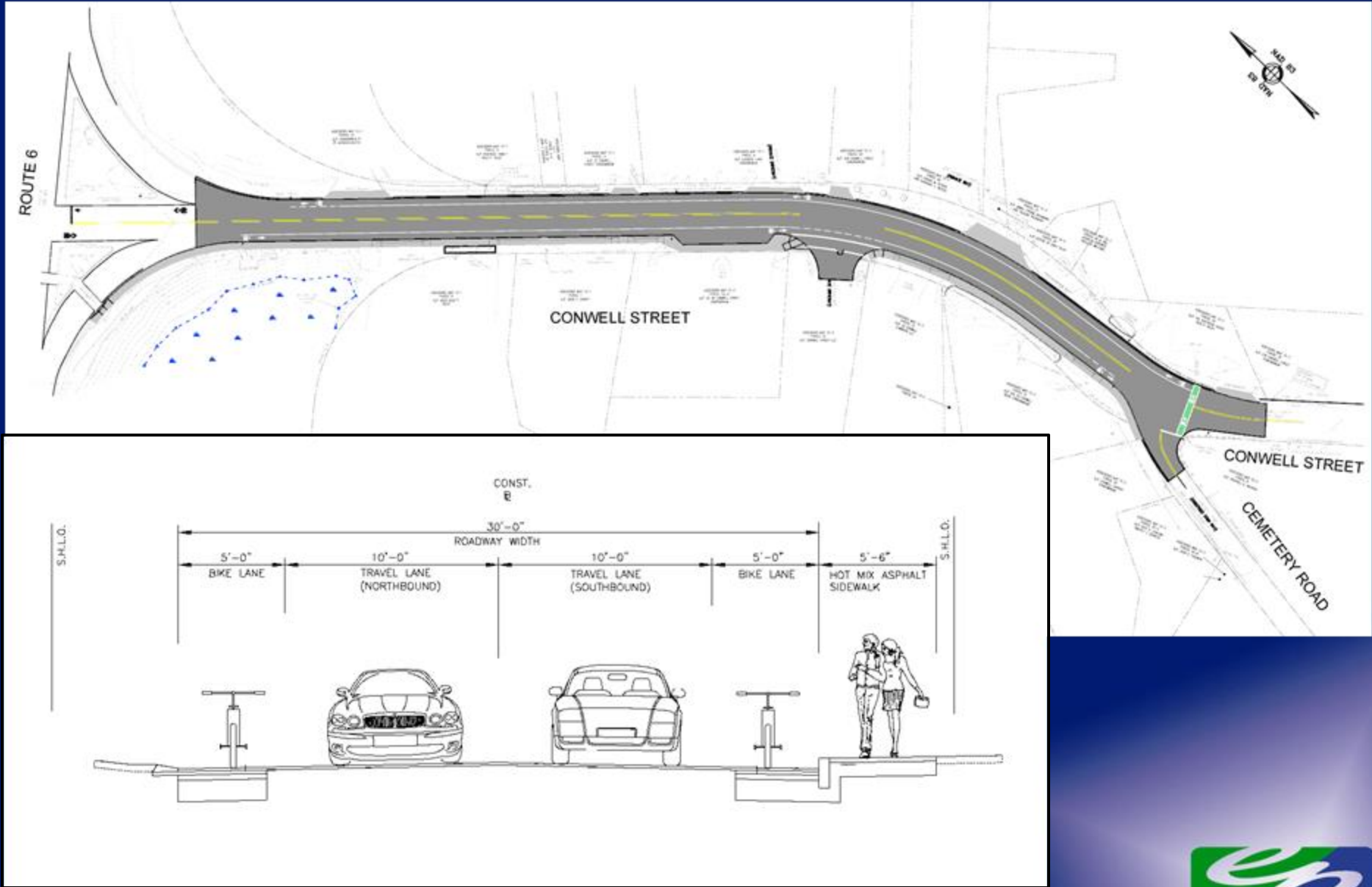
Partnership for engineering solutions.



Existing Conditions



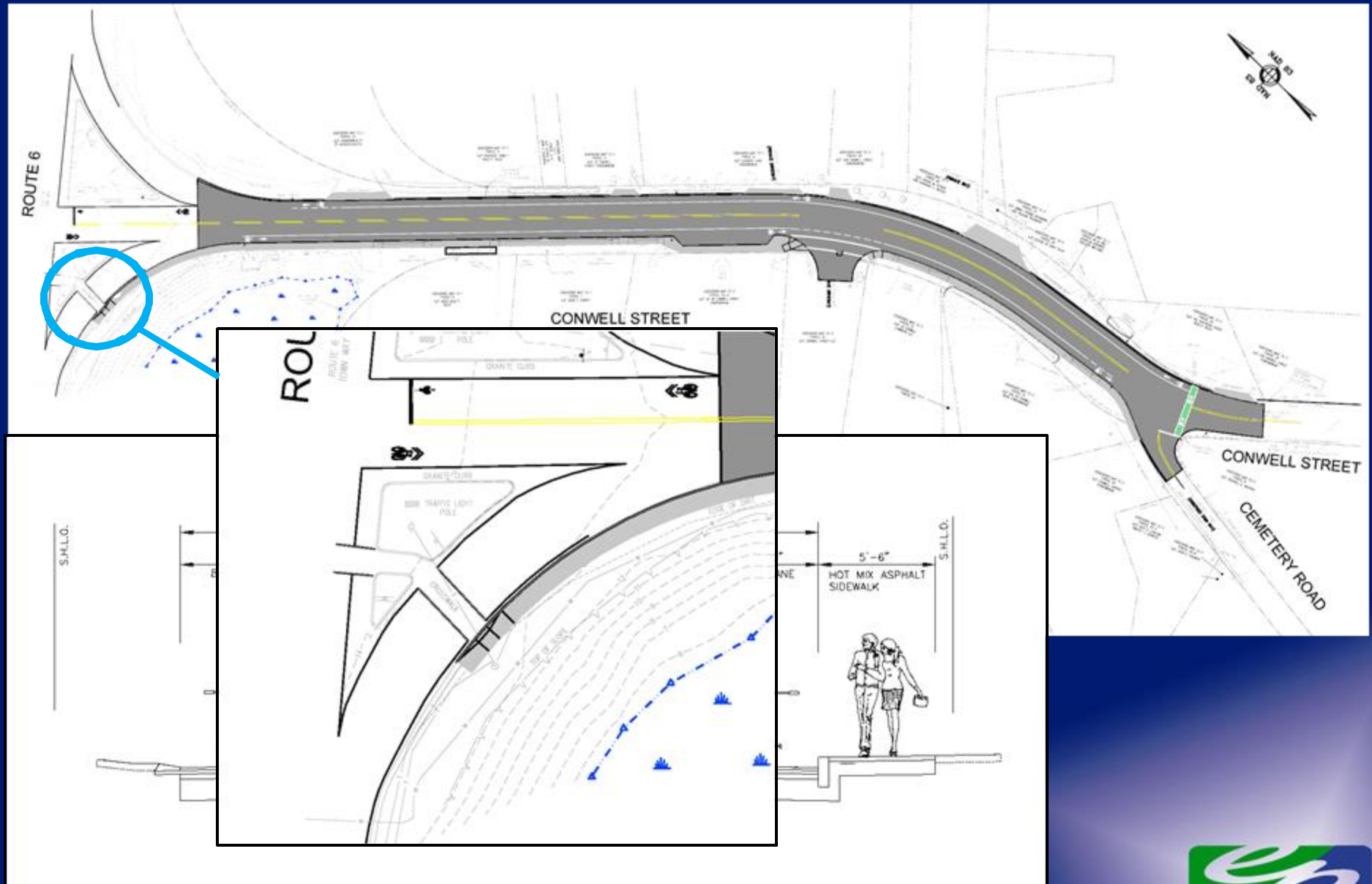
Alternative Layout 1



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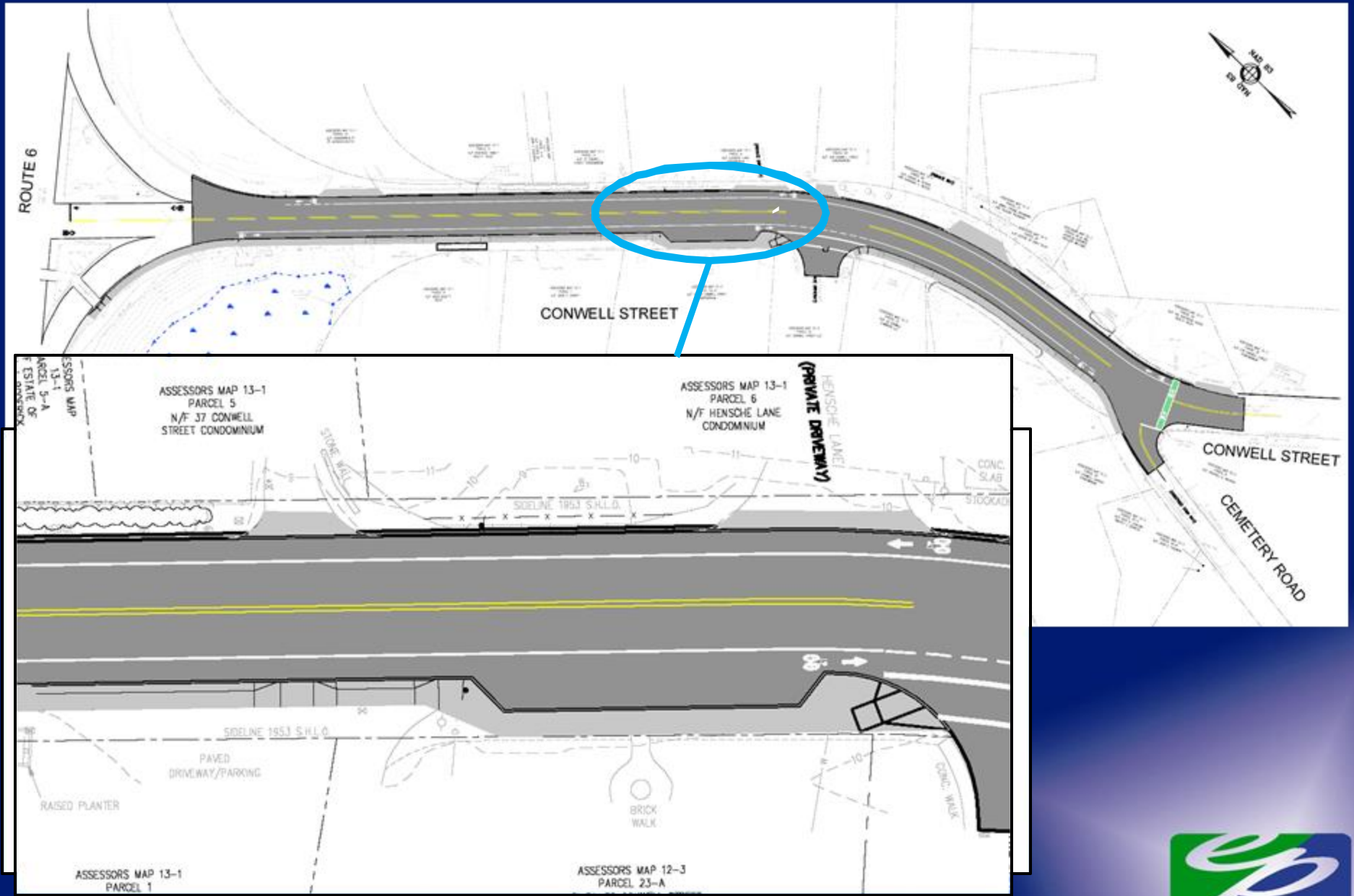
Alternative Layout 1



A partnership for engineering solutions.



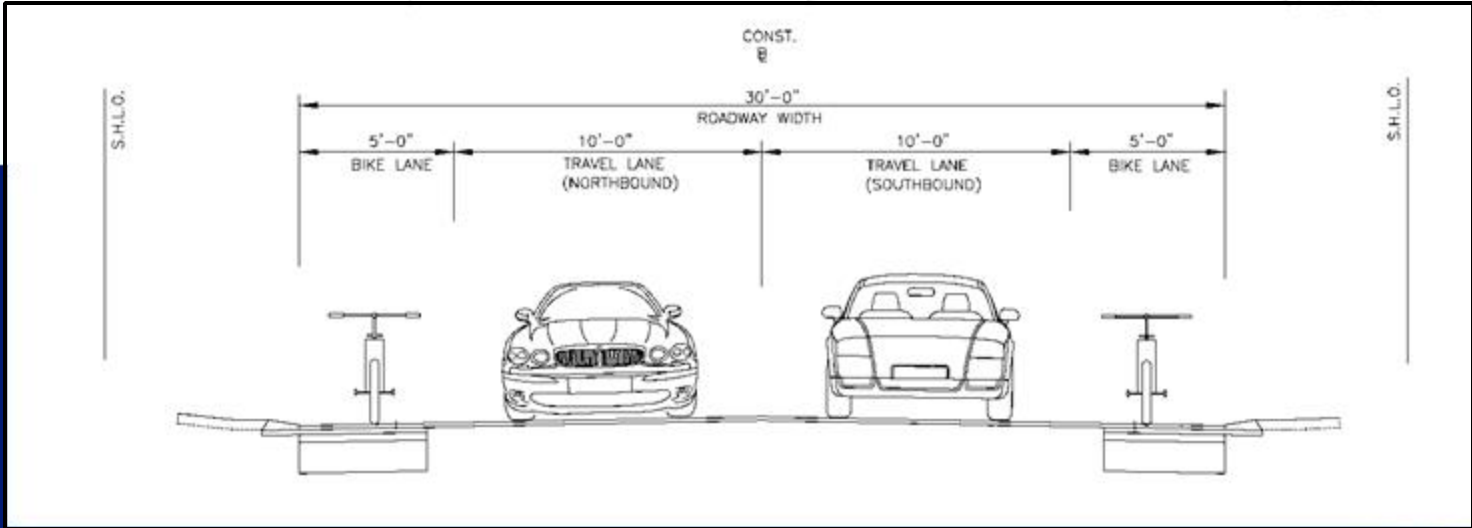
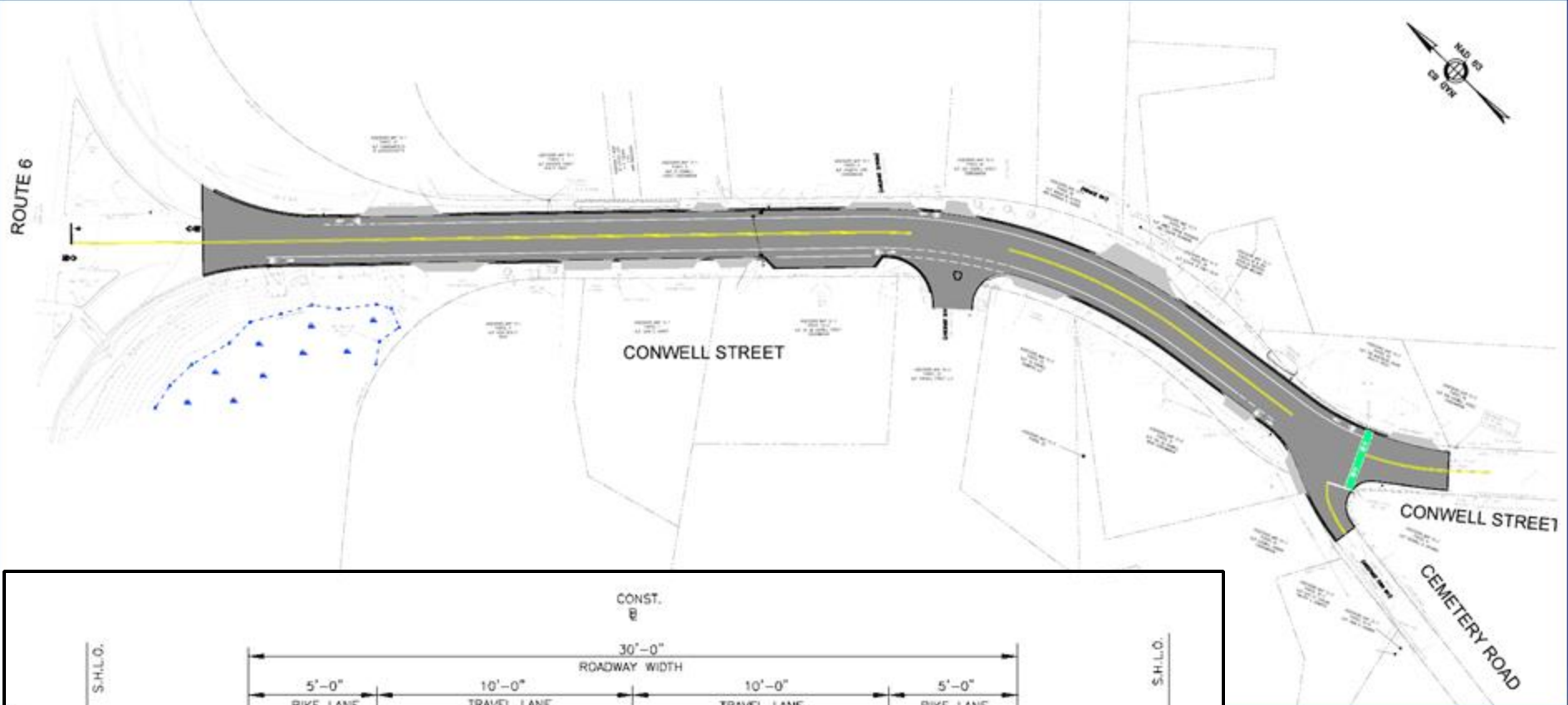
Alternative Layout 1



A partnership for engineering solutions.



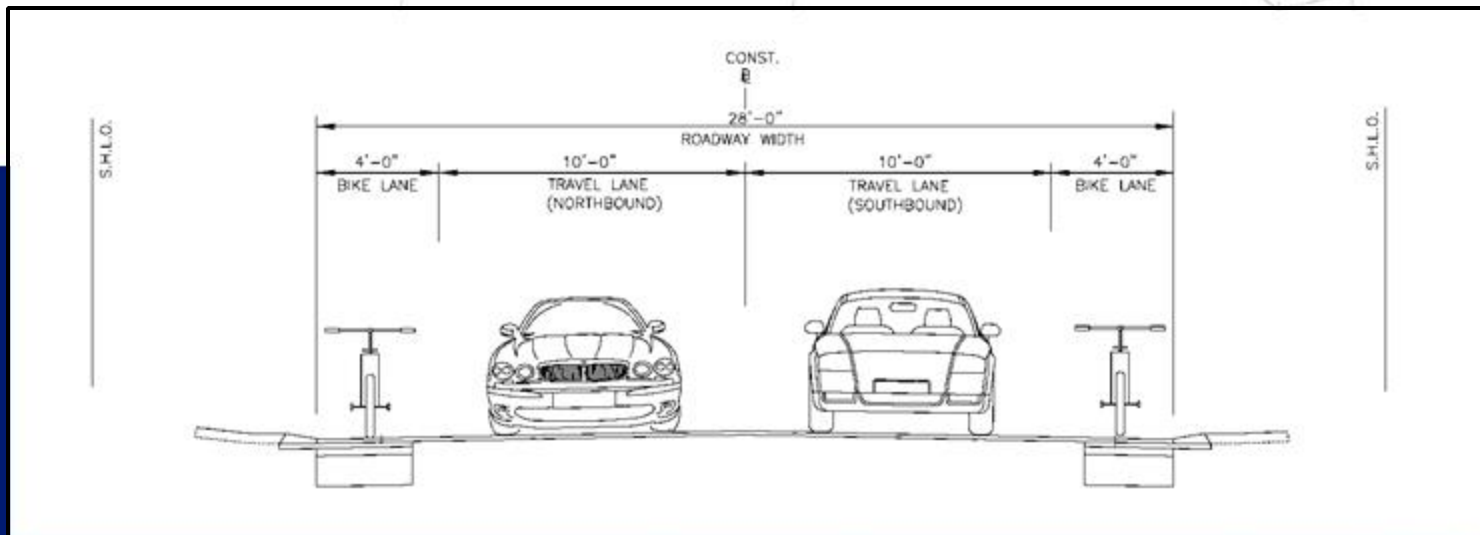
Alternative Layout 2



A partnership for engineering solutions.



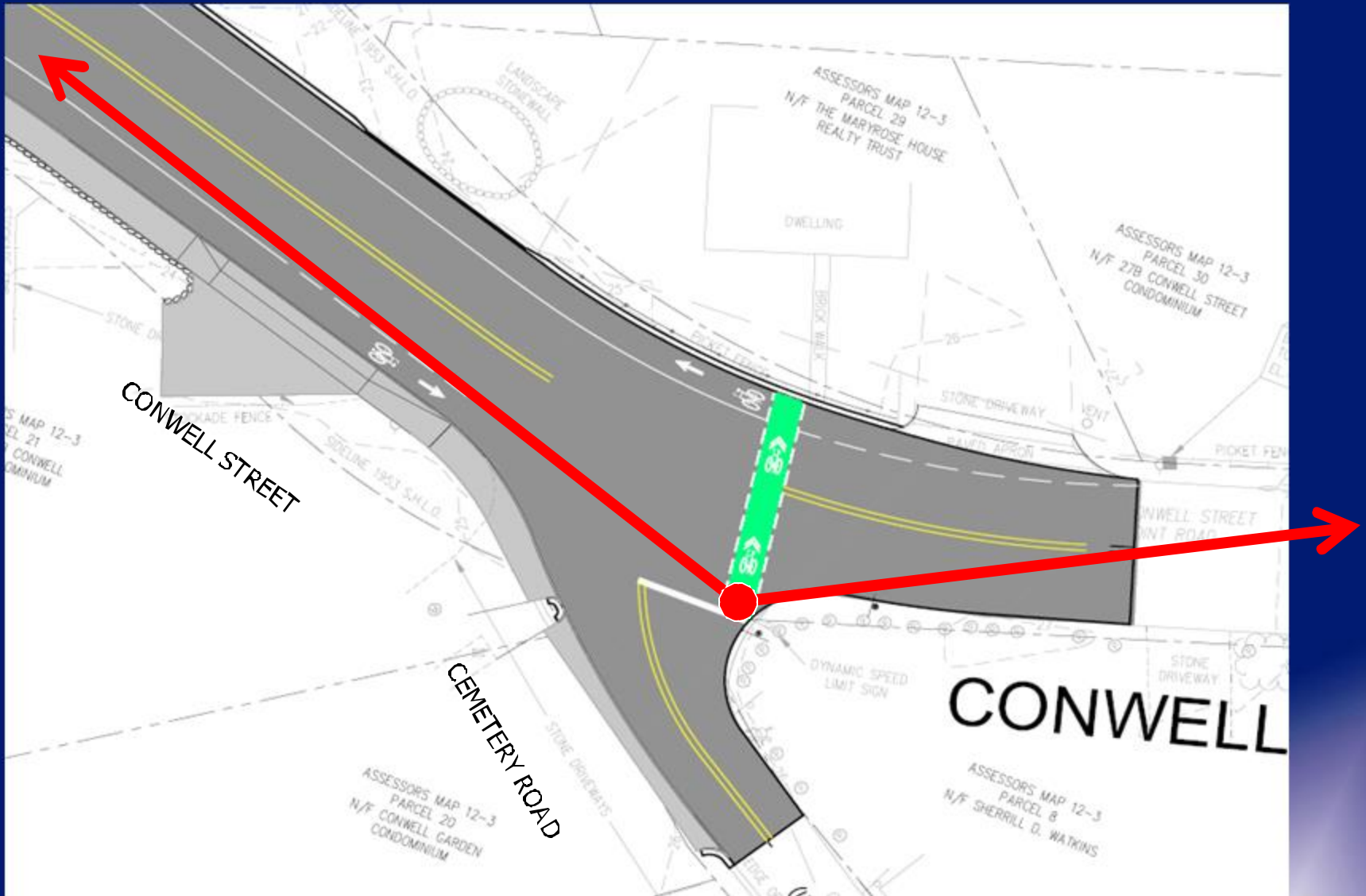
Alternative Layout 3



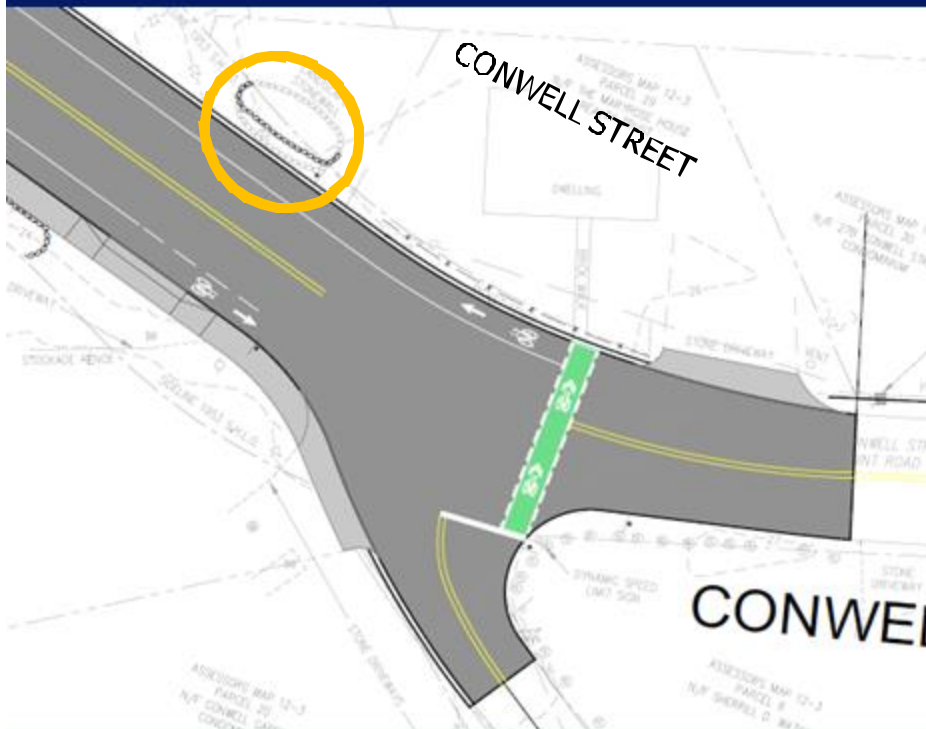
A partnership for engineering solutions.



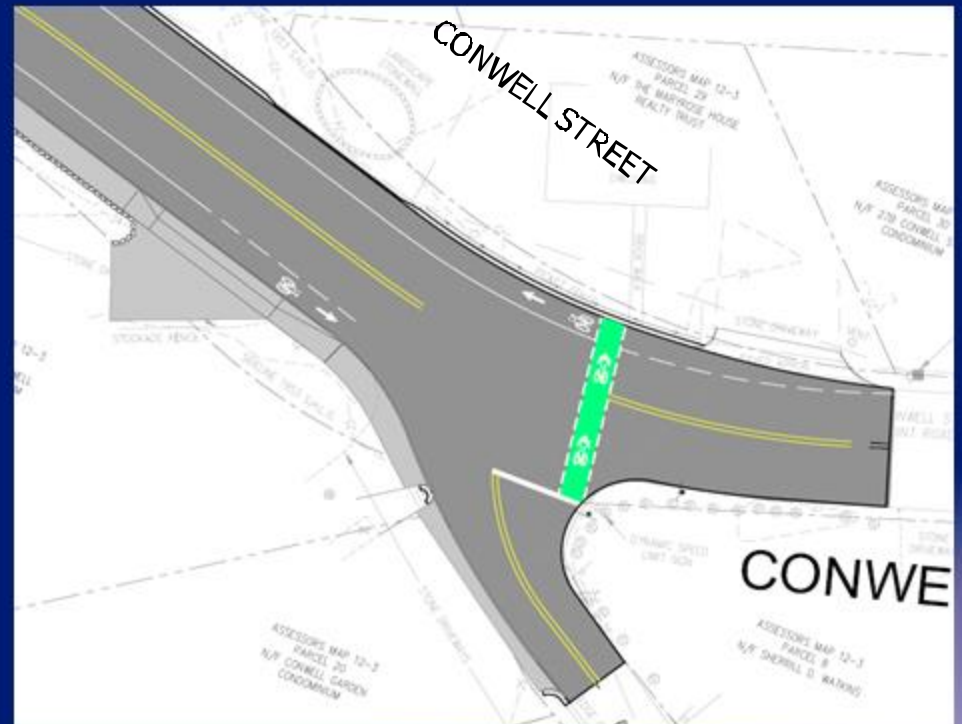
Conwell Street at Cemetery Road



Conwell Street at Cemetery Road



BEFORE

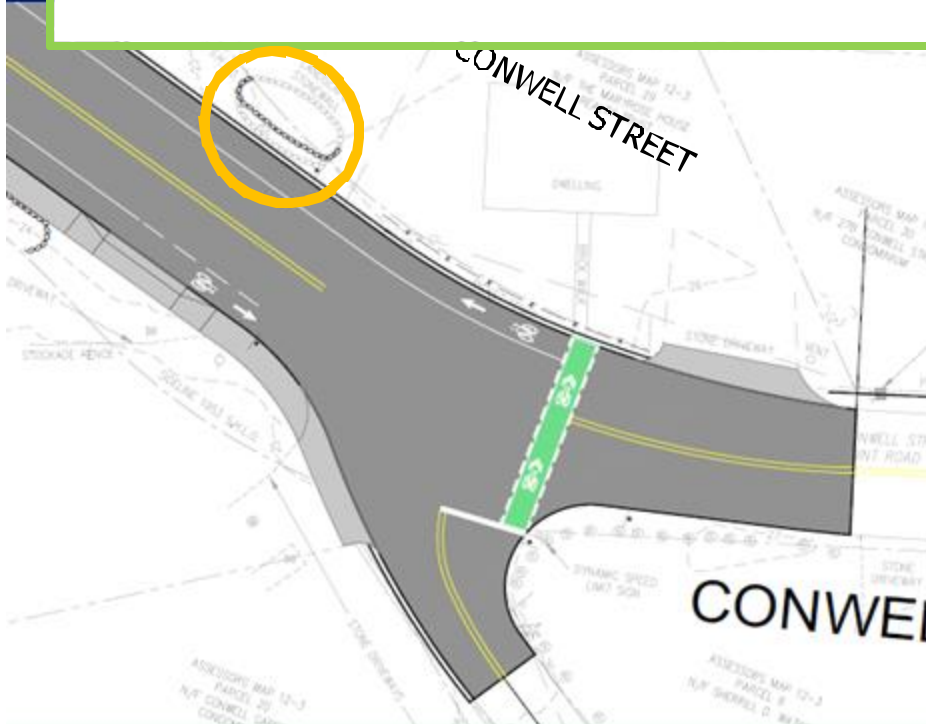


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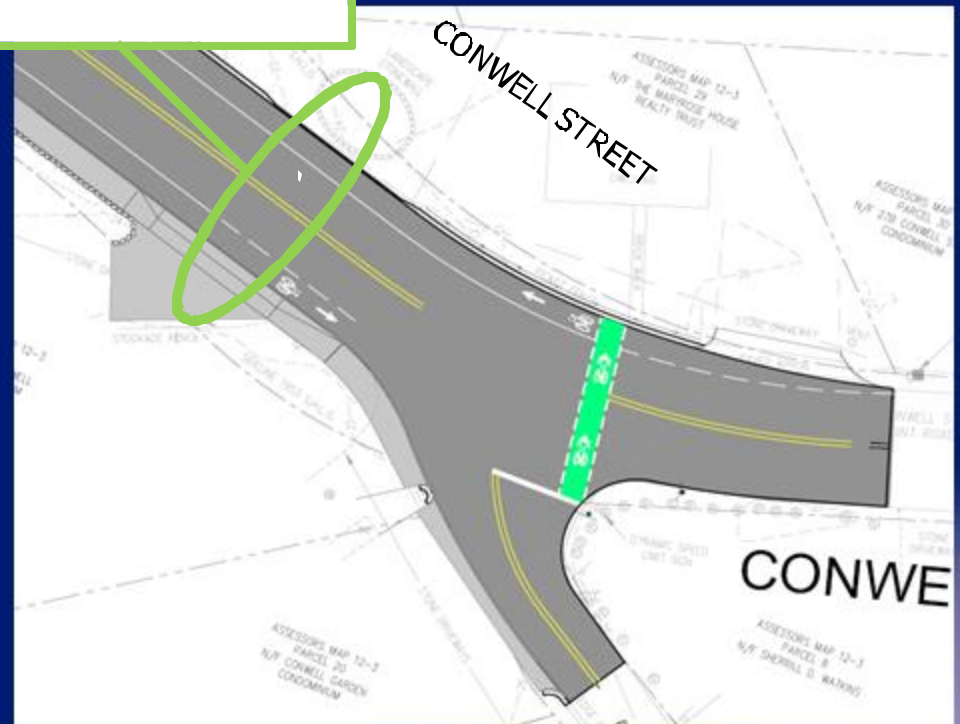
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Conwell Street at Cemetery Road



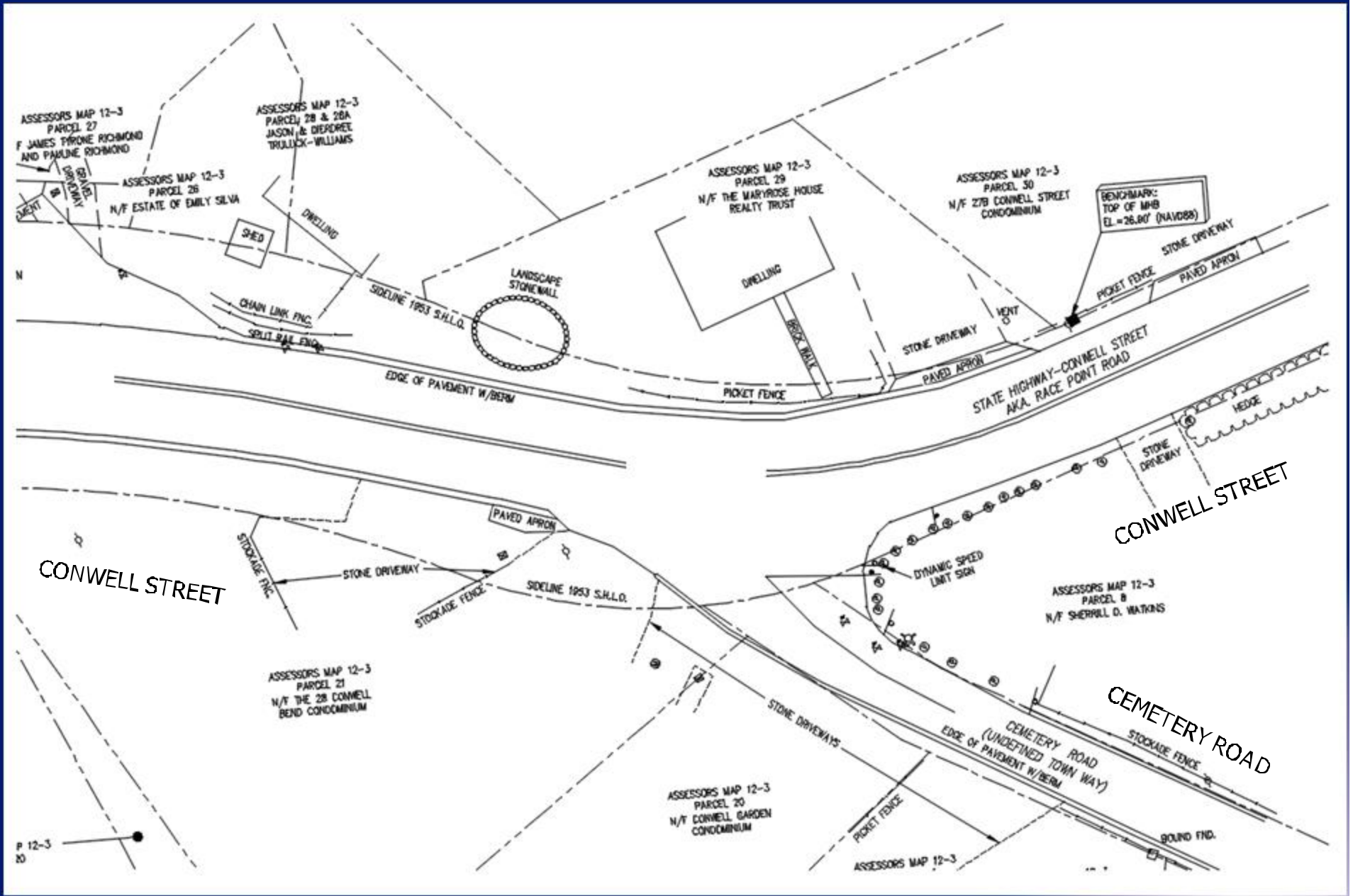
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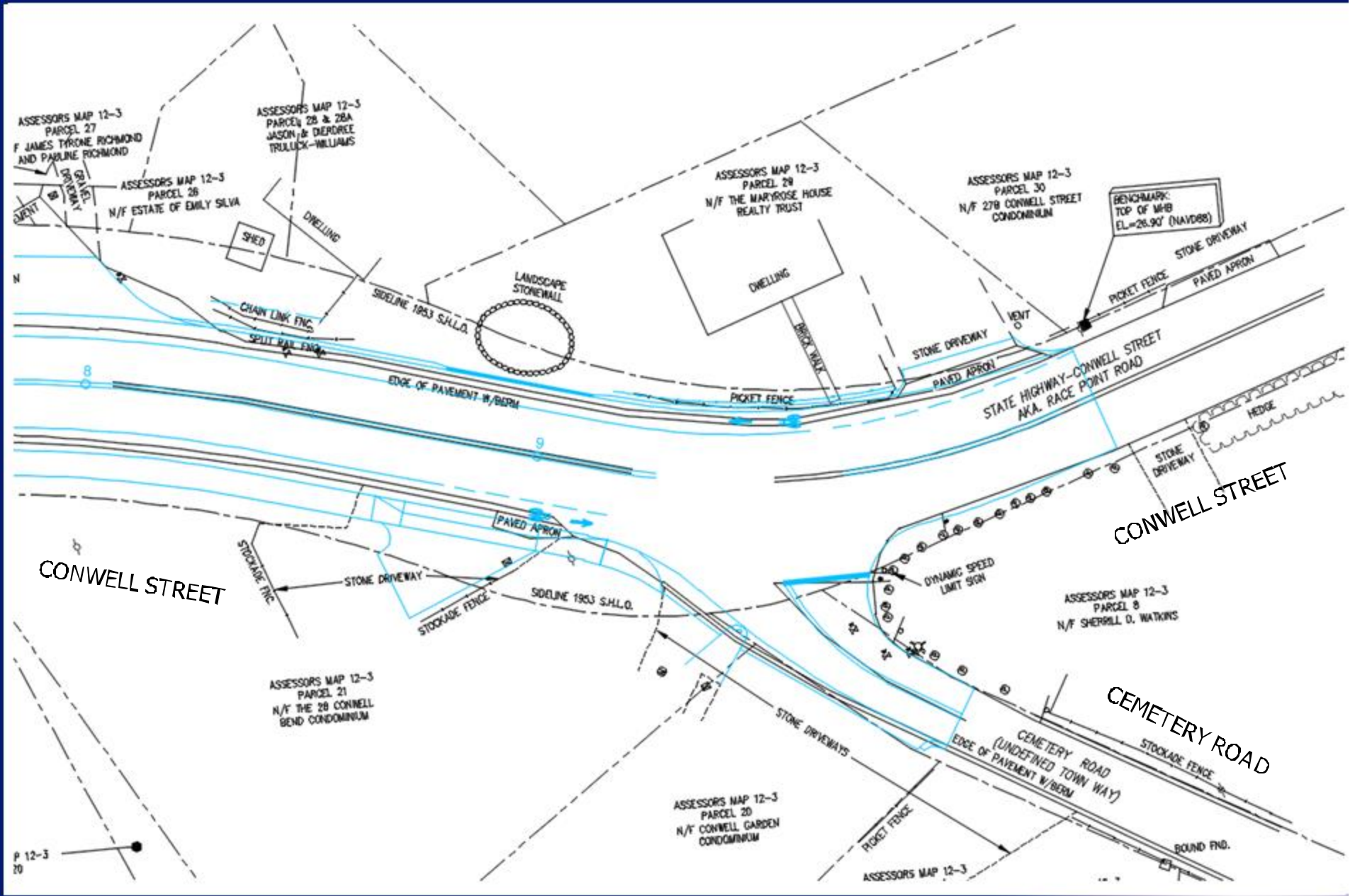
AFTER



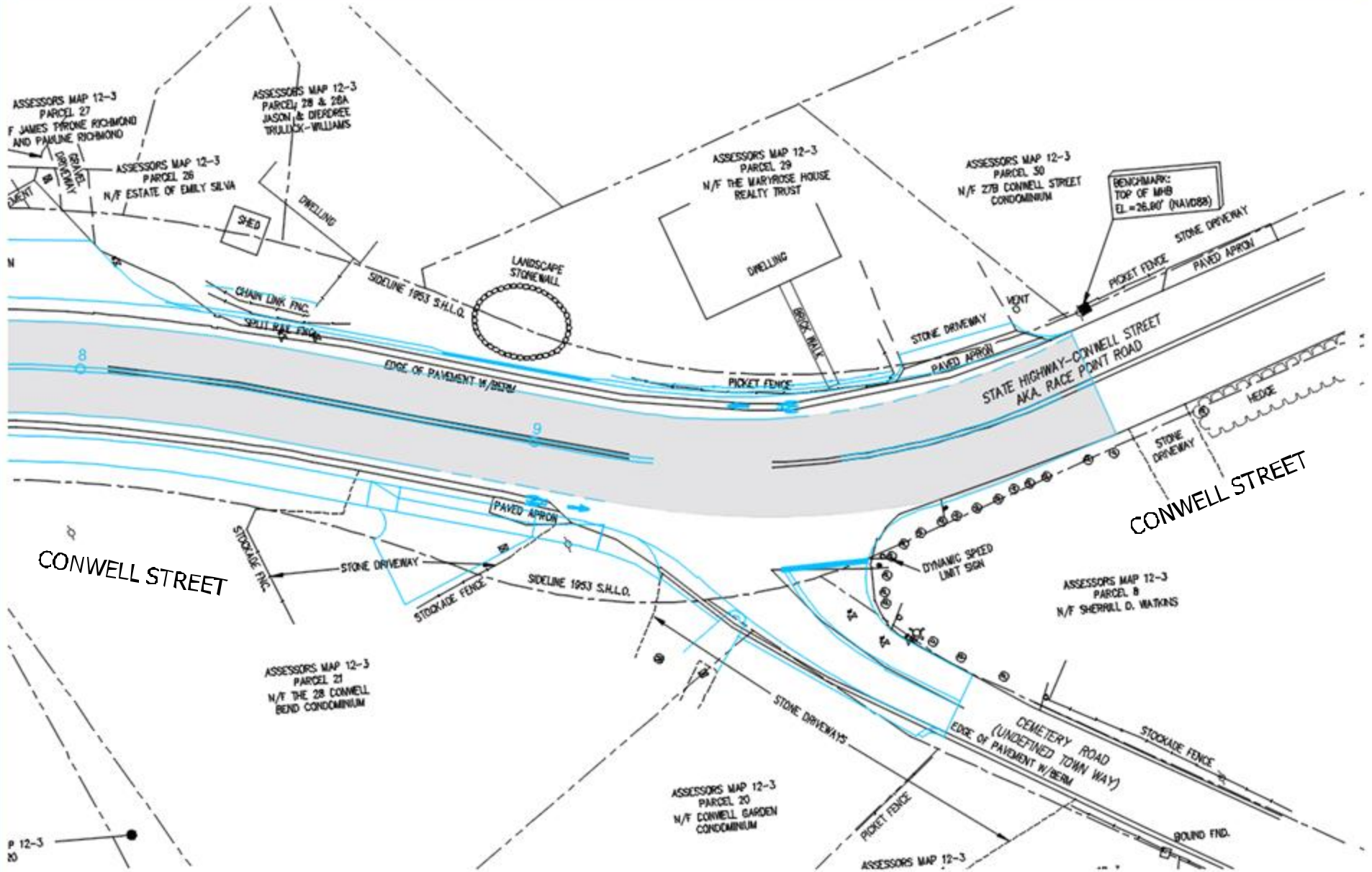
Conwell Street at Cemetery Road



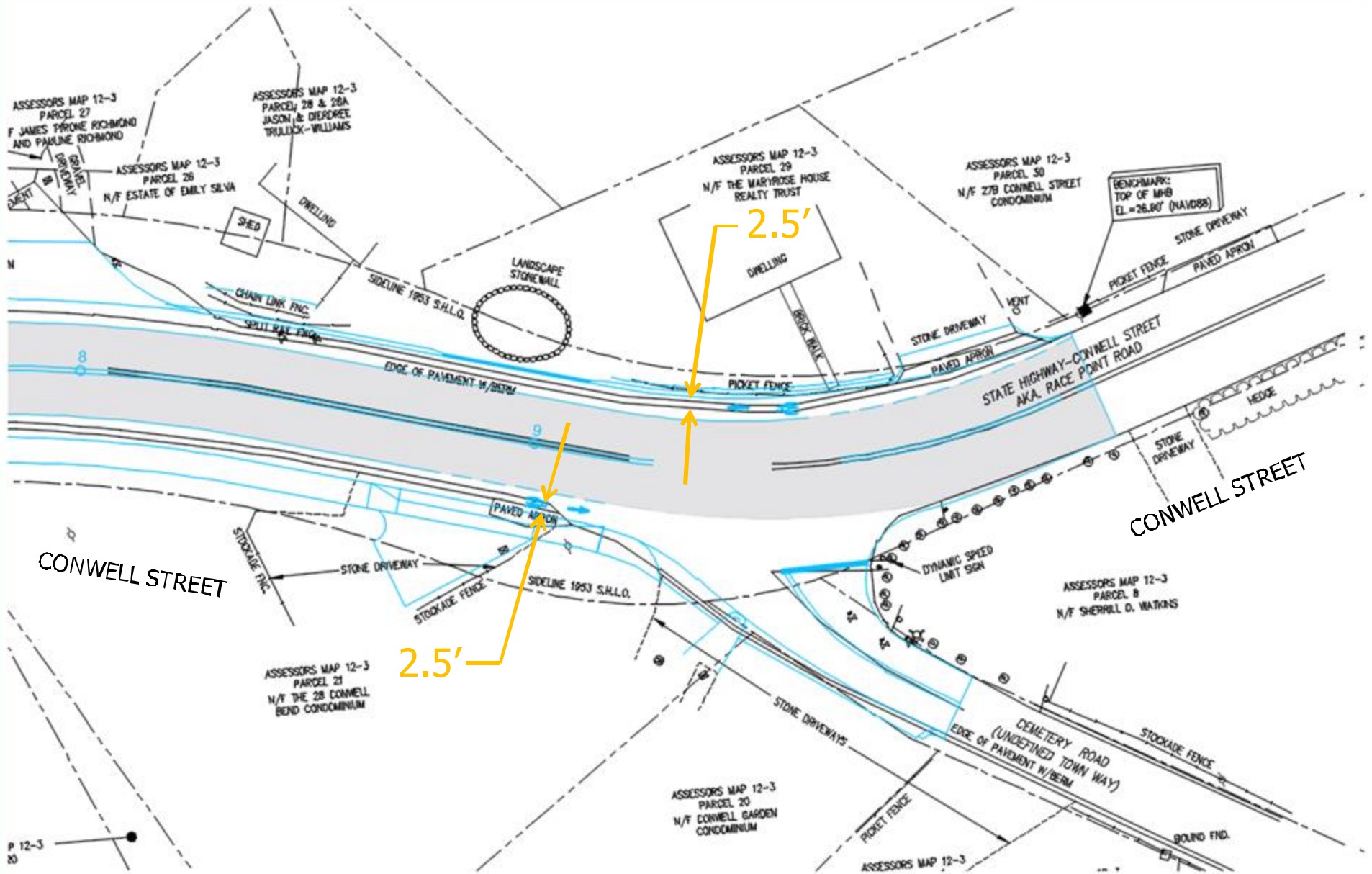
Conwell Street at Cemetery Road



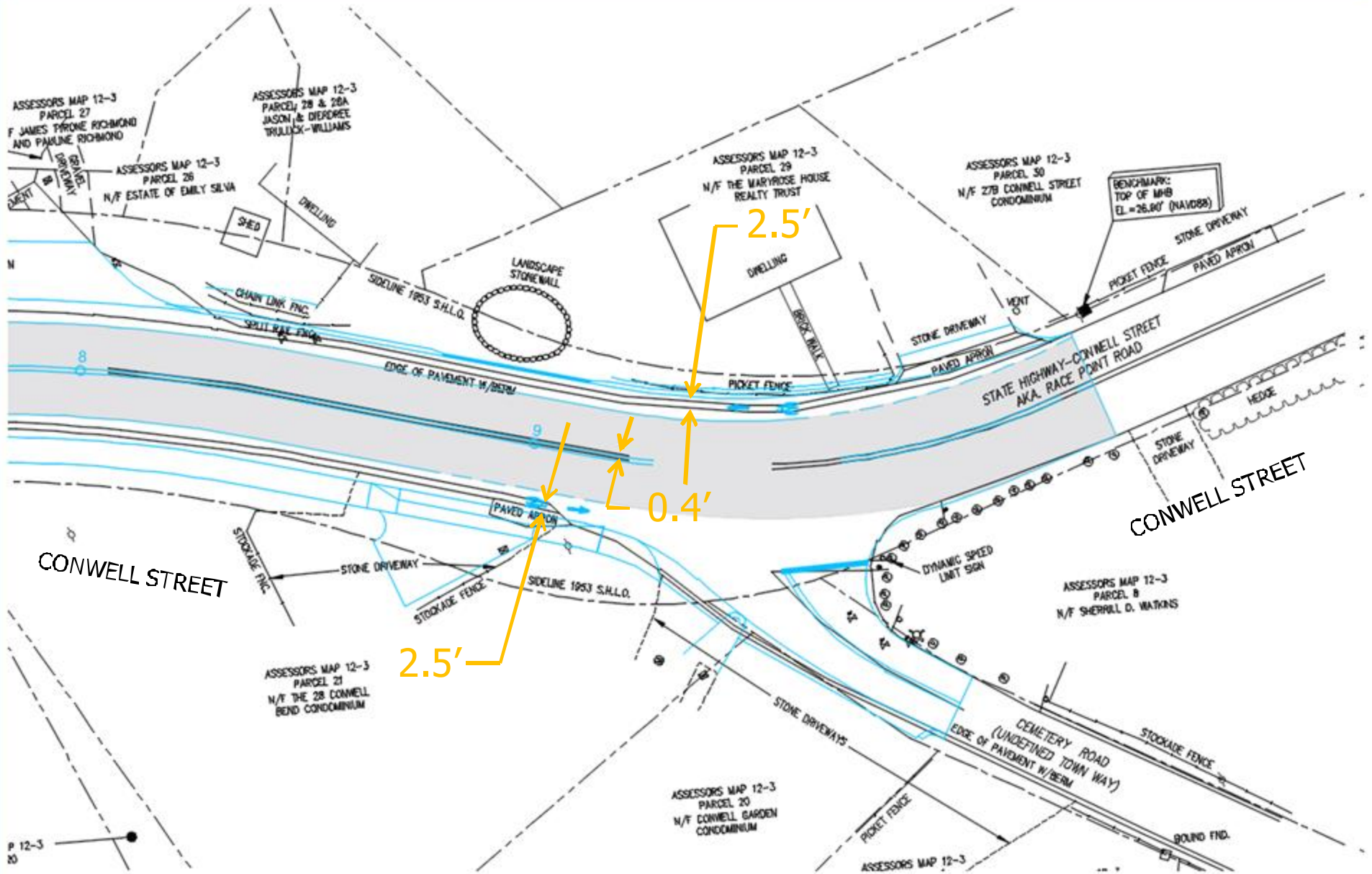
Conwell Street at Cemetery Road



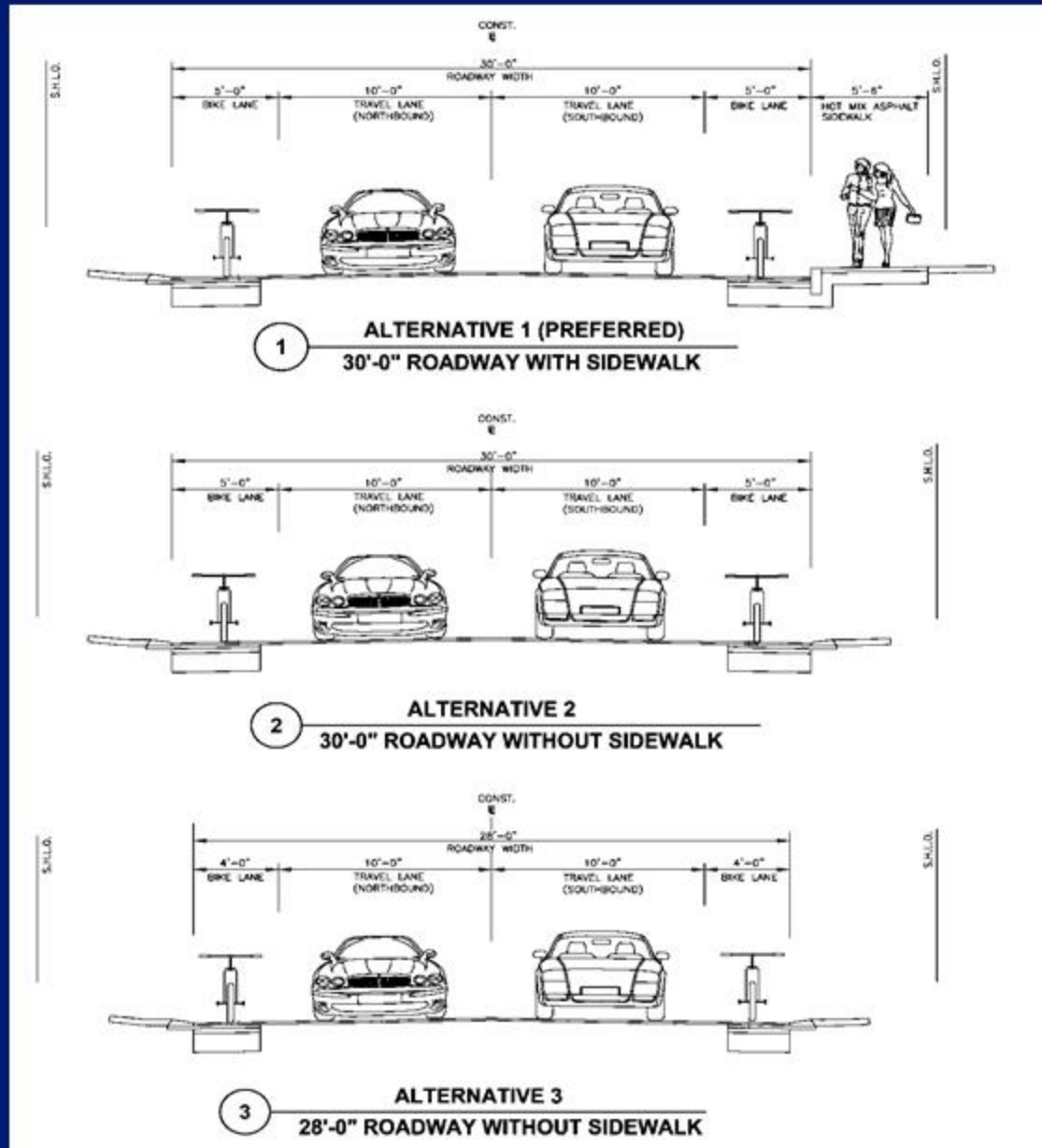
Conwell Street at Cemetery Road



Conwell Street at Cemetery Road



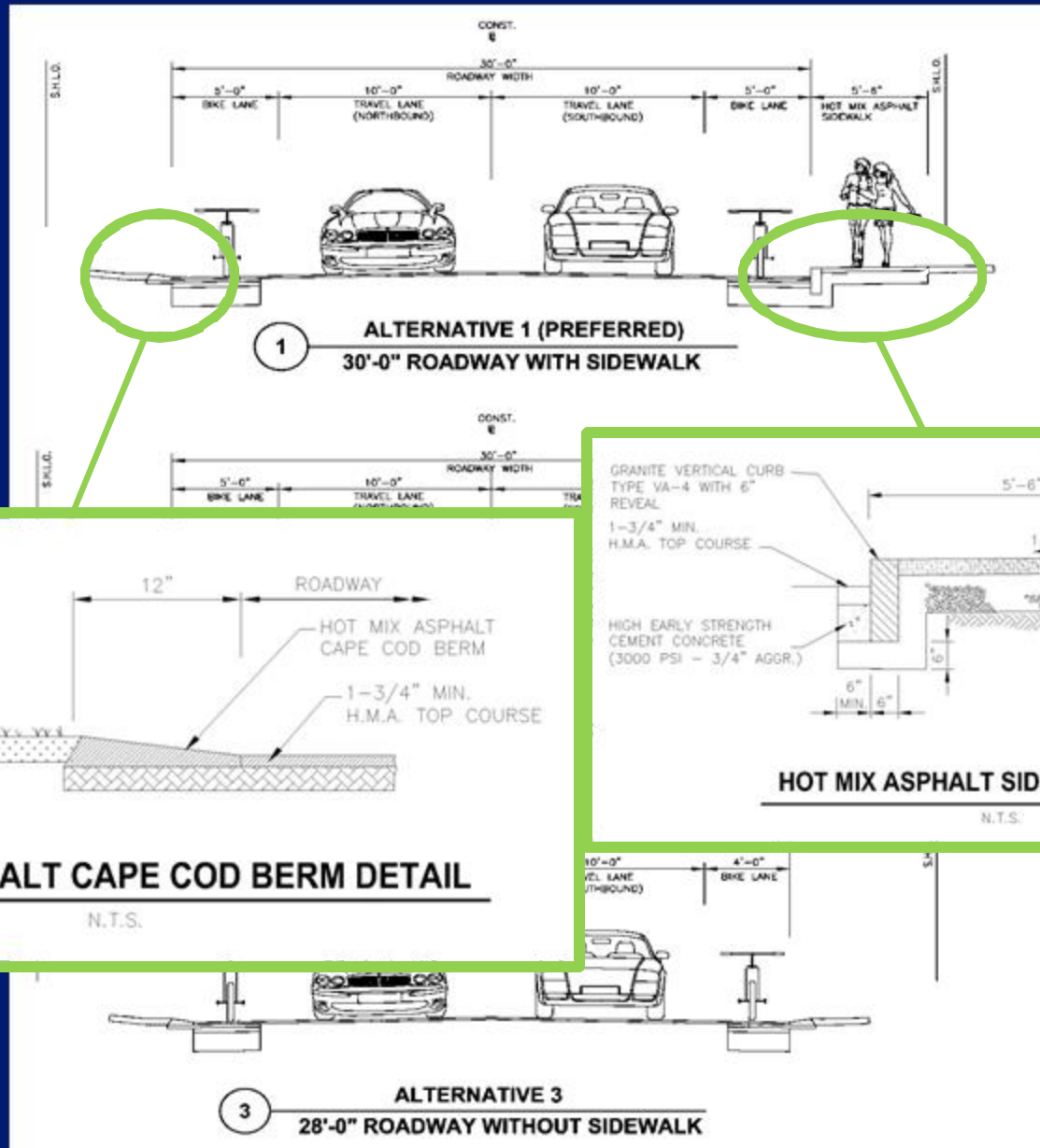
Typical Sections



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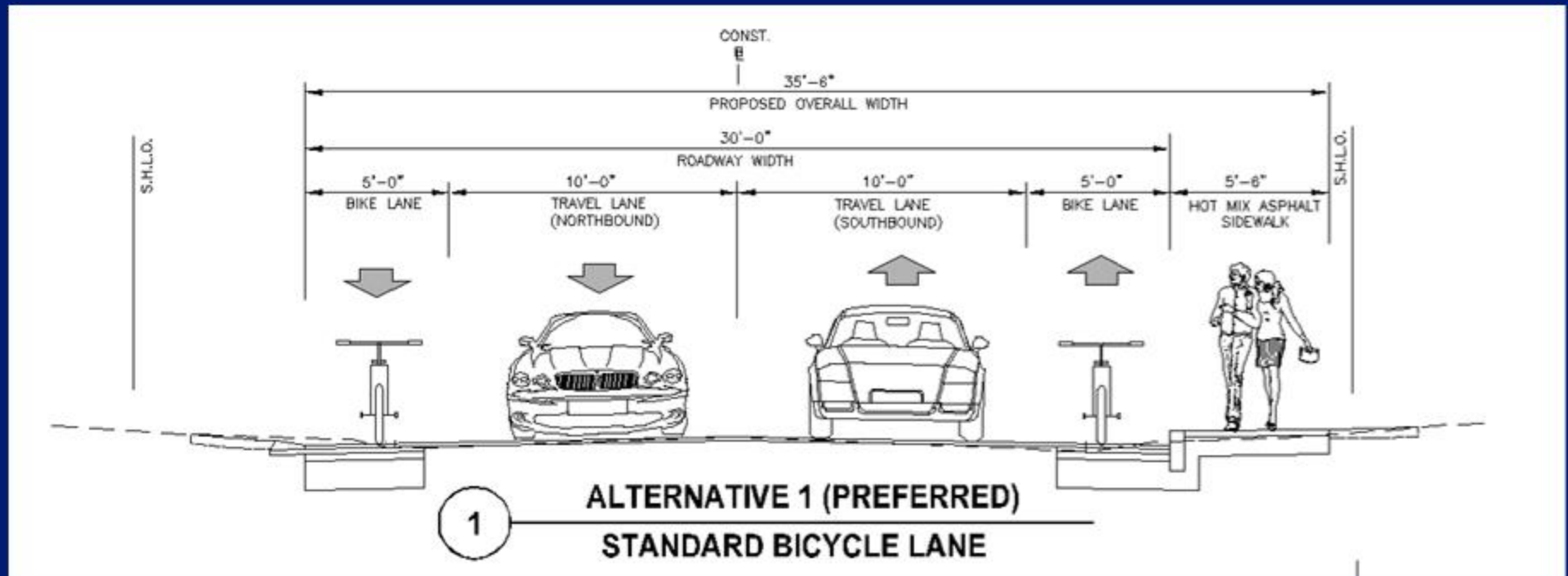
Typical Sections



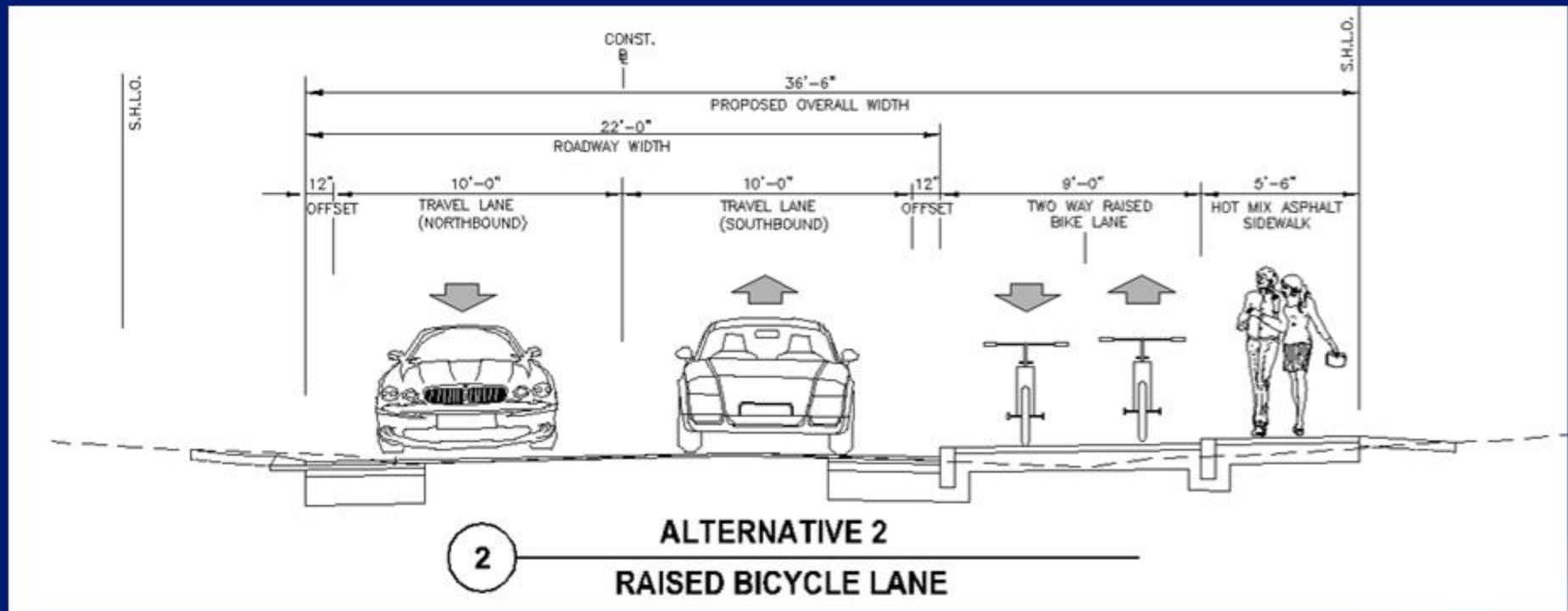
A partnership for engineering solutions.



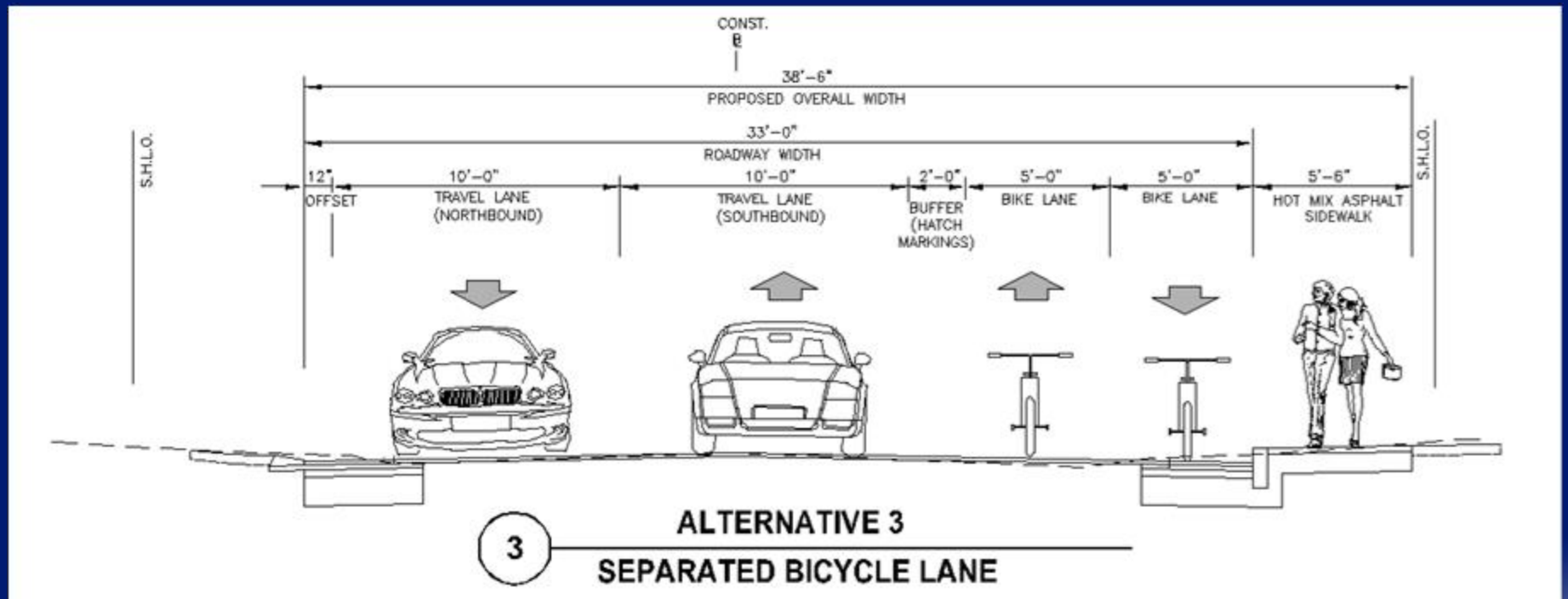
Preferred Typical Sections



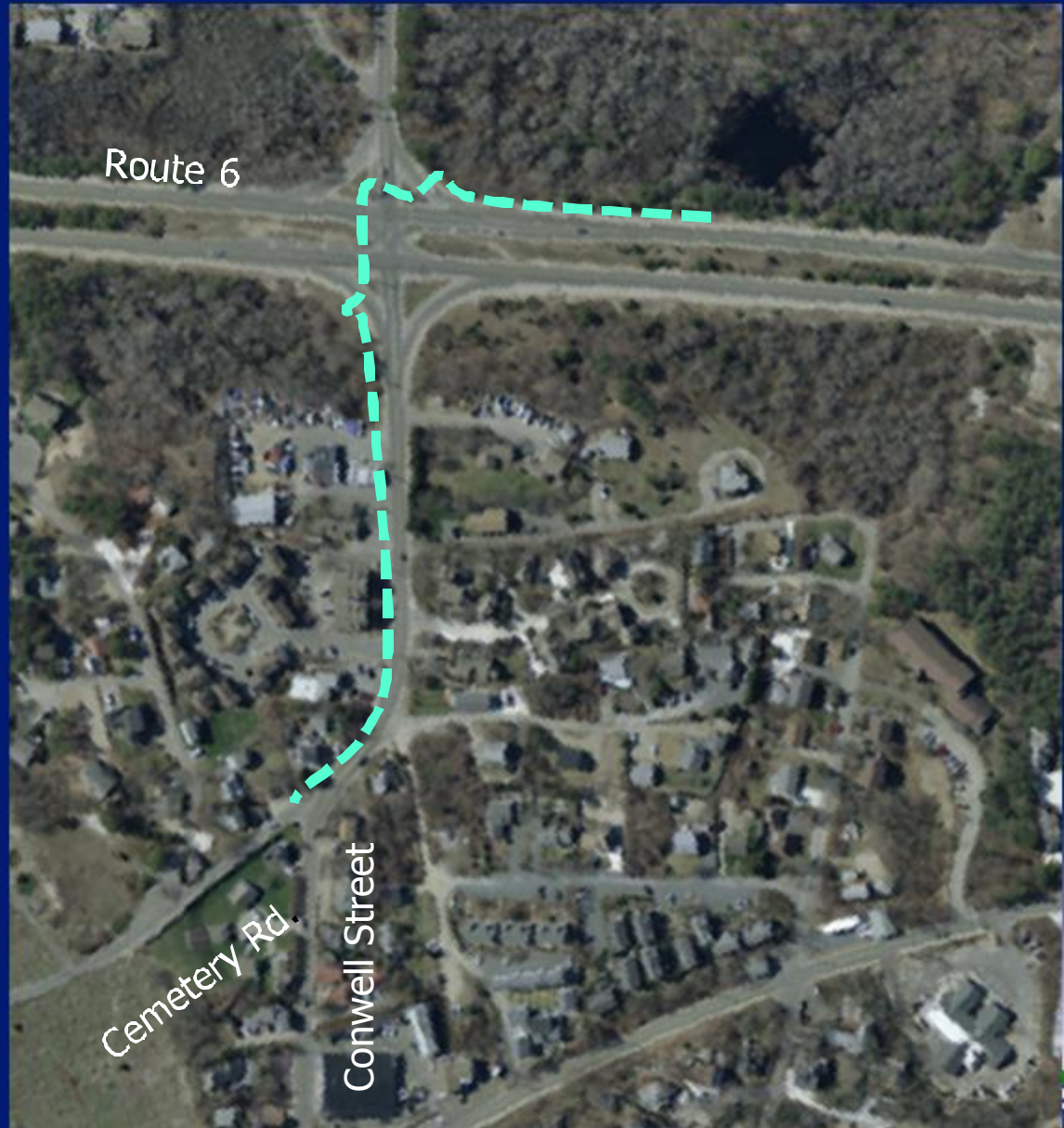
Additional Typical Sections Considered



Additional Typical Sections Considered



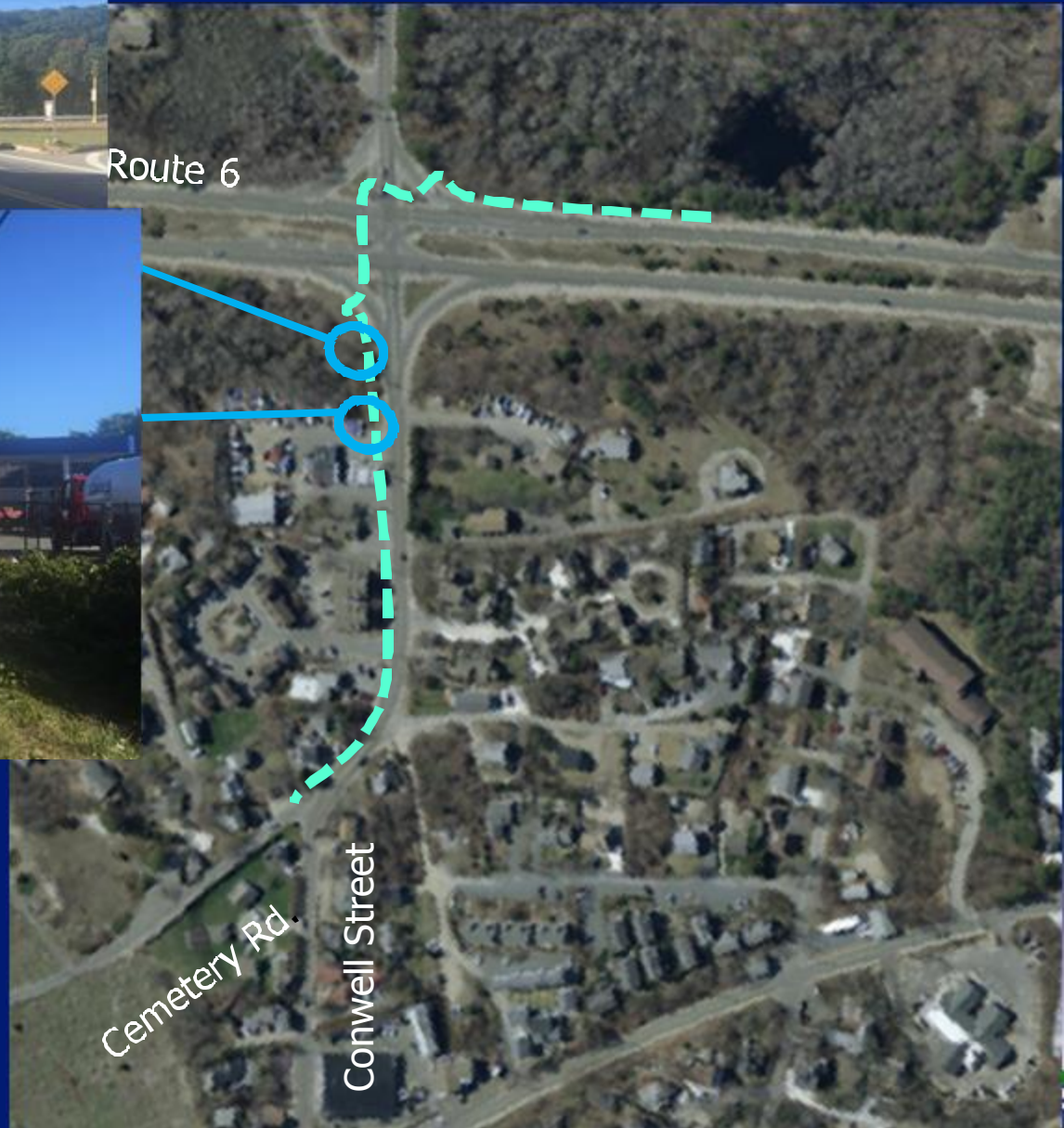
Sidewalk



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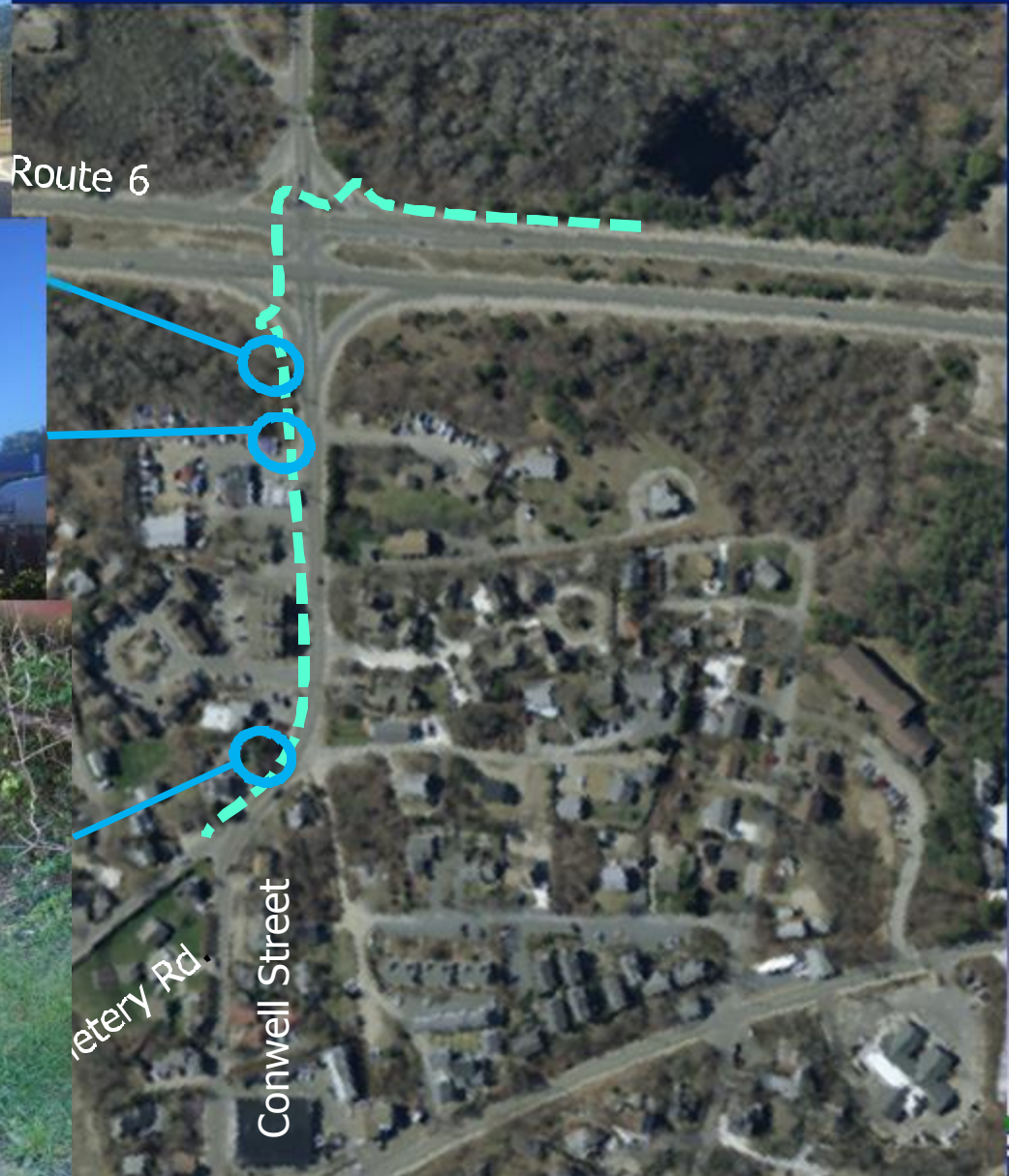
Sidewalk



Sidewalk



Route 6



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Thank you!



James D. Fitzgerald, P.E., LEED AP

jdf@envpartners.com

617-657-0256

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(Provincetown DPW Letterhead)

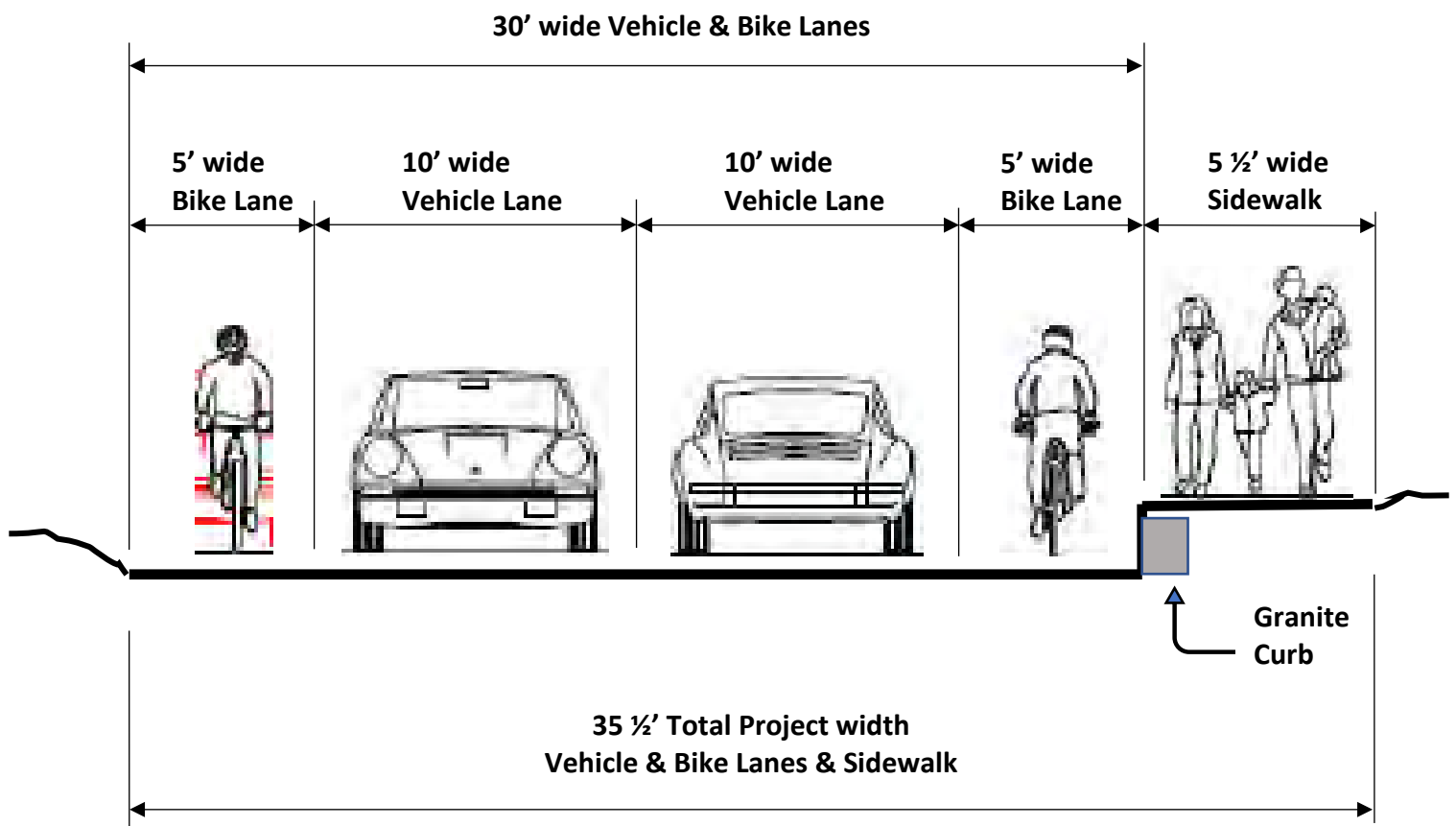
As an ongoing effort to inform the public, this informational notice is an update to the road improvement project along Conwell Street, between Route 6 and Cemetery Avenue.

Provincetown received a Road Work Permit from the Mass Department of Transportation to move forward with this project. The Town is now reviewing options for and working towards securing construction funding. Although a schedule has not been set we anticipate work to begin in the Spring/Fall of 2019

This project will include:

- New paved road surface
- Storm water improvements
- New bike lanes along both sides of the road
- New curb and sidewalk on the West side of the road
- New painted lines and markings
- New roadway signs

Following is a sketch of the roadway design approved by MassDOT:



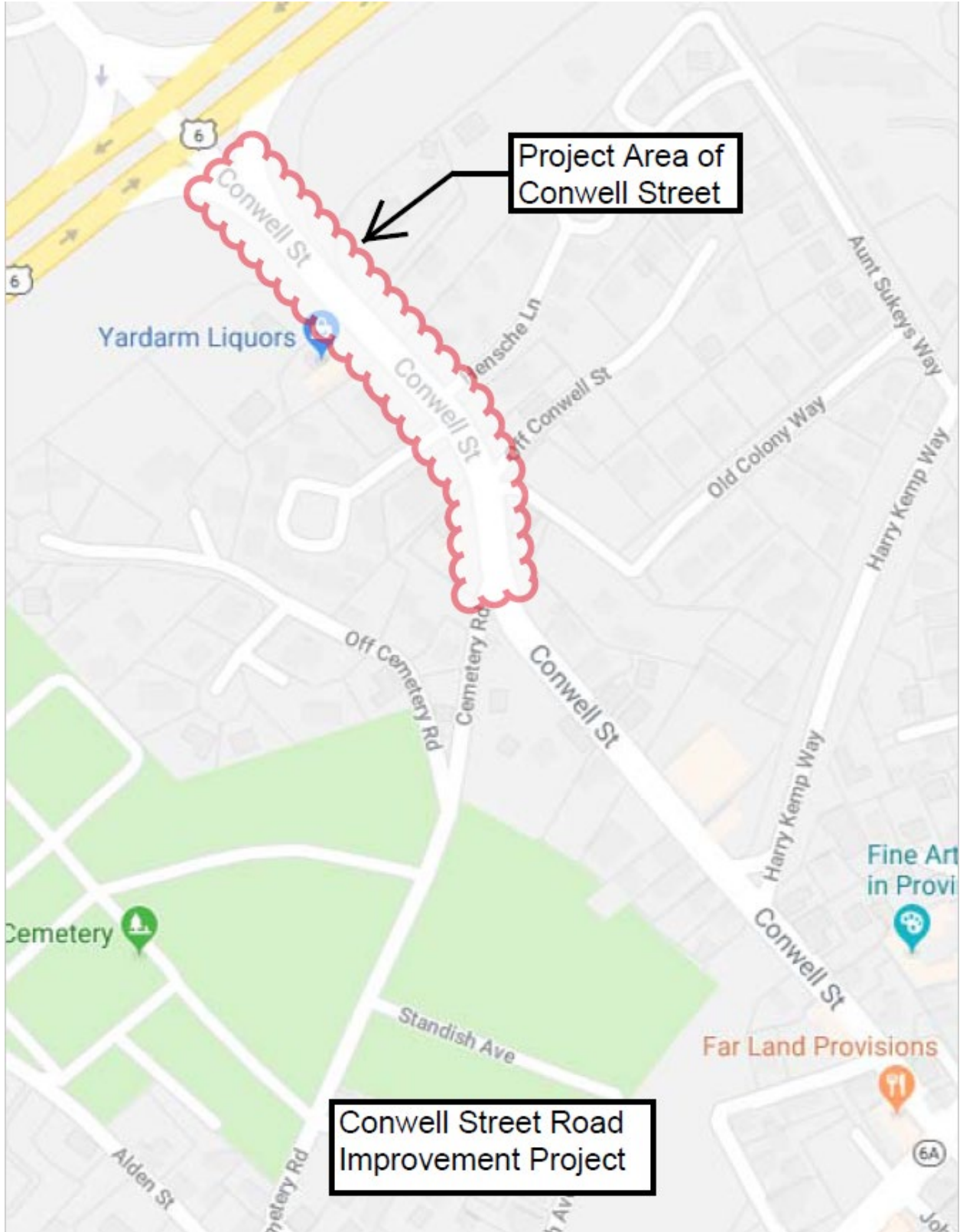
Sketch of Conwell Street Road Project

The final approved project design, which includes two bike lanes and one sidewalk, is the same as the “Preferred Option” that was originally proposed, with minor changes to accommodate abutters’ requests.

History of Public Notifications, Hearings, Meetings & Workshops:

- May 14, 2015 – Design Services IFB published in the Banner.
- May 21, 2015 – Design Services IFB published in the Banner.
- May 21, 2015 – Public Bid Opening (published on Facebook & in IFB notices).
- June 22, 2015 – Public Hearing with BOS for Contract Authorization (advertised prior week).
- June 24, 2015 – Contract Award published in Central Register.
- August 24, 2015 – Public Hearing with BOS to authorize amended contract (advertised prior week).
- November 9, 2015 – Public Hearing with BOS for Preliminary Design proposals and preferred design direction (advertised prior week).
- November 10, 2015 – December 20, 2015 – Internet & Paper Public Survey to indicate support or opposition to project: 67 responses.
- November 23, 2015 – Public Workshop No. 1 notices mailed to abutters.
- December 10, 2015 – Public Workshop No. 1 held and Public Records Request filed.
- February 9, 2016 - Public Workshop No. 2 notices mailed to abutters.
- February 15, 2016 - Public Workshop No. 2 reminder notices mailed to abutters.
- March 7, 2016 – Public Workshop No. 2 held @ Town Hall. Design reflected changes from Workshop No. 1.
- March 28, 2016 – Outer Cape Bicycle and Pedestrian Master Plan project update.
- April 26, 2016 – Public Hearing with Conservation Commission with project update.
- Project Notice of Intent filed with MDEP, NHESP information submitted to MassDOT, Certified Abutter Notifications sent.
- August 2, 2016 – Conservation Commission Meeting for Notice of Intent.

Following is a Site Plan showing the involved portion of Conwell Street:



BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

APRIL, 2018



PREPARED FOR:

TOWN OF PROVINCETOWN
DEPARTMENT OF PUBLIC WORKS
RICHARD J. WALDO, P.E., PUBLIC WORK DIRECTOR
ERIC L. LARSEN, DEPUTY DIRECTOR
2 MAYFLOWER STREET
PROVINCETOWN, MA 02657
P: 508-487-7060

PREPARED BY:

ENVIRONMENTAL PARTNERS GROUP, INC.
1900 CROWN COLONY DRIVE, SUITE 402
QUINCY, MA 02169
P: 617-657-0200
F: 617-657-0201

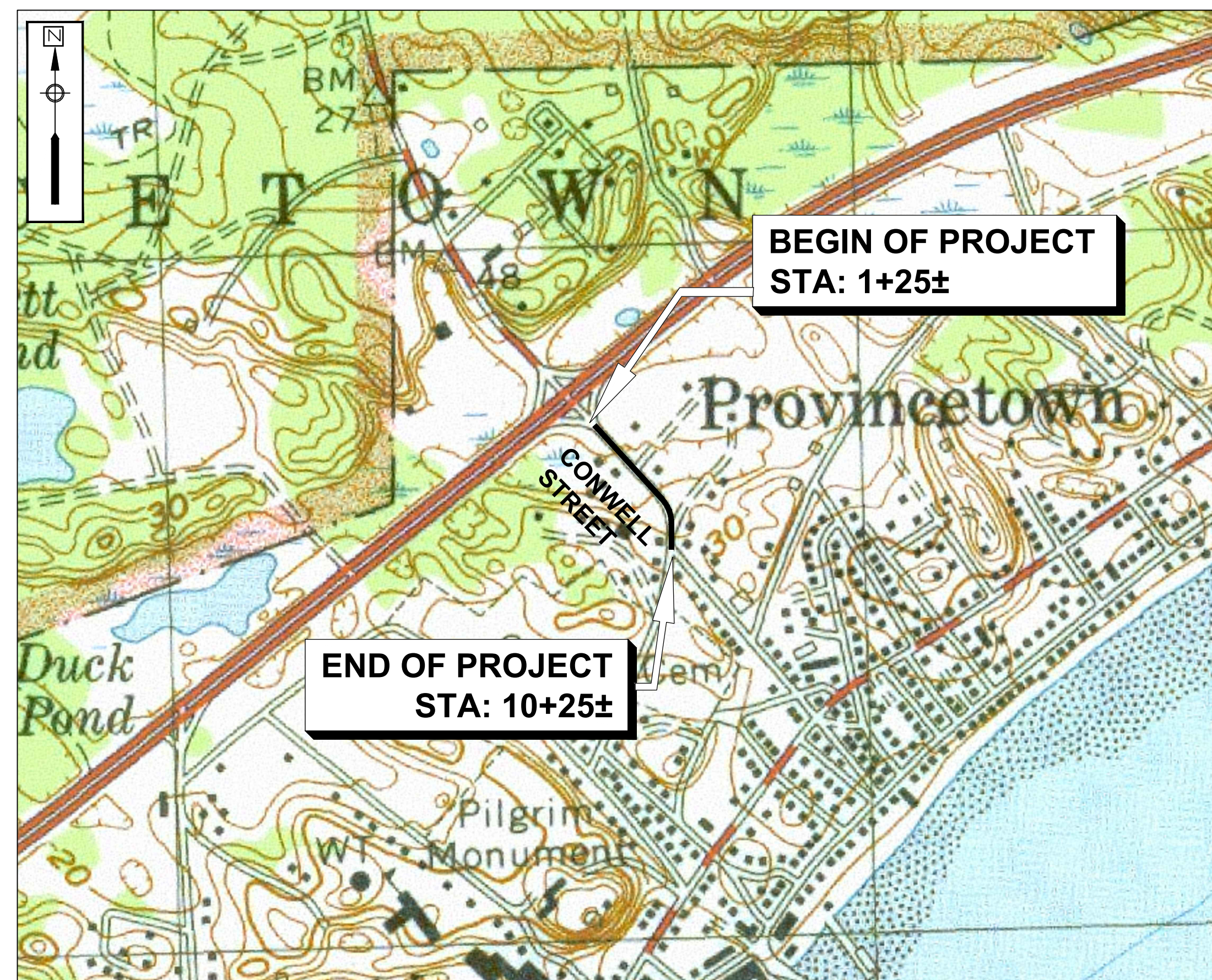
LIST OF DRAWINGS

SHEET NO.	DESCRIPTION
	TITLE SHEET
G-1	LEGENDS, GENERAL NOTES AND KEY PLAN
C-1	CONSTRUCTION PLAN AND PROFILE (STA. 1+00 TO STA. 6+50)
C-2	CONSTRUCTION AND PROFILE (STA. 6+50 TO STA. 11+00)
C-3	CURB TIE PLAN
C-4 - C-7	CONSTRUCTION DETAILS
TS-1	TRAFFIC SIGNS AND PAVEMENT MARKINGS PLAN
TS-2	TRAFFIC SIGN SUMMARY AND PAVEMENT MARKING DETAILS
TMP-1	TRAFFIC MANAGEMENT PLAN
CX-1 - CX-8	CROSS SECTIONS

DESIGN DESIGNATION

	CONWELL ST.
DESIGN SPEED	25 MPH
ADT* (2013)	7,495
ADT (2023)	7,770
K	8.9%
D	59% NB
T (PEAK HOUR)	N/A
T (AVERAGE DAY)	N/A
DHV	632
DDHV	373
FUNCTIONAL CLASSIFICATION	URBAN MINOR ARTERIAL

* RESOURCE: TRAFFIC VOLUME TAKEN FROM 2016 TRAFFIC COUNTING REPORT FOR CAPE COD MASSACHUSETTS BY CAPE COD COMMISSION



VICINITY MAP
1" = 500'

FOR PERMITTING
ONLY

Environmental Partners
A partnership for engineering solutions. GROUP

GENERAL NOTES:

- EXISTING SURVEY INFORMATION ALONG WINTER STREET WAS FIELD SURVEYED BY COASTAL ENGINEERING COMPANY, INC, ORLEANS, MA, DATED SEPTEMBER 21, 2015.
- THE HORIZONTAL CONTROL IS BASED UPON THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM (2001). THE VERTICAL DATUM SHOWN HEREON IS REFERENCE NAVD 88.
- BORDERING VEGETATED WETLAND LIMITS WERE DELINEATED BY PINEBROOK CONSULTING ON MAY 25, 2015.
- IN AREAS WHERE CONSTRUCTION ACTIVITIES ARE ANTICIPATED TO OCCUR IN PROXIMITY TO PRIVATE PROPERTY, PROPERTY LINE LOCATIONS ARE TO BE REVIEWED WITH THE TOWN PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL NOT STORE ANY APPARATUS, MATERIALS, SUPPLIES, OR EQUIPMENT ON DRAINAGE STRUCTURES, PRIVATE PROPERTY OR WITHIN 100 FEET OF WETLANDS, UNLESS DIRECTED TO DO SO BY THE CONTRACT DOCUMENTS.
- TEST PITS TO LOCATE EXISTING UTILITIES MAY BE ORDERED BY THE ENGINEER TO DETERMINE WHETHER TO RAISE OR LOWER THE PROPOSED STORM DRAIN TO CLEAR EXISTING UTILITIES.
- ALL EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY DIG SAFE AT LEAST 72 HOURS IN ADVANCE, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO ANY EXCAVATION.
- DO NOT SCALE DRAWINGS UNLESS OTHERWISE NOTED. WRITTEN DIMENSIONS SHALL PREVAIL. REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
- THE CONTRACTOR SHALL RESTORE ALL PUBLIC AND PRIVATE PROPERTY TO ITS PRE-CONSTRUCTION CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- ALL WATER RESULTING FROM TRENCH DEWATERING ACTIVITIES SHALL BE PROPERLY SETTLED PRIOR TO DISCHARGE. THE DISPOSAL OF SETTLED SOLIDS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL NOT STORE ANY MATERIALS IN AN AREA DESIGNATED AS A WETLANDS BUFFER ZONE.
- ALL EXISTING UTILITIES LINES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE. THE CONTRACTOR, AT NO ADDITIONAL COST TO THE TOWN, SHALL REPAIR ANY EXISTING SEWERS, GAS LINE, WATER MAINS, STORM DRAIN LINES, OR CULVERTS DAMAGED DURING CONSTRUCTION.
- IN THOSE INSTANCES WHERE POWER OR TELEPHONE POLE SUPPORT IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 48-HOUR NOTIFICATION TO THE RESPECTIVE UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR TEMPORARY BRACING OF UTILITIES.
- ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO THE TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. INJURY TO ANY SUCH STRUCTURE CAUSED BY, OR RESULTING FROM, THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY AND THE TOWN.
- THE CONTRACTOR IS TO TAKE SPECIAL CARE NOT TO DAMAGE TREES, BUSHES, PLANTS, FLOWERS, STONEWALLS, FENCES, ETC. WITHIN THE CONSTRUCTION AREA UNLESS THEY ARE NOTED TO BE REMOVED. CONTRACTOR SHALL REPLACE AT NO COST TO OWNER, ALL DAMAGED ITEMS.
- CONTRACTOR SHALL REMOVE AND REPLACE, OR REPAIR, ALL CURBS, SIDE WALKS, PAVEMENT AND OTHER ITEMS DAMAGED BY HIS CONSTRUCTION ACTIVITIES TO AT LEAST THEIR ORIGINAL CONDITION, AND TO THE SATISFACTION OF THE TOWN AND ENGINEER.
- ANY TRAFFIC SIGNAL EQUIPMENT (LIGHTS, CONDUITS, LOOP DETECTORS) DISTURBED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS DIRECTED BY THE TOWN AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC CONTROL DEVICES AS NECESSARY AND IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL BE REQUIRED TO FURNISH AND MAINTAIN A TELEPHONE NUMBER WHERE THE CONTRACTOR CAN BE REACHED 24 HOURS A DAY, 7 DAYS A WEEK.
- THE LOCATION AND LIMITS OF ALL ON-SITE WORK AND STORAGE AREAS SHALL BE REVIEWED/COORDINATED WITH, AND ACCEPTABLE TO THE TOWN. THE CONTRACTOR SHALL LIMIT HIS ACTIVITIES TO THESE AREA.
- THE CONTRACTOR SHALL HANDLE GROUNDWATER, WHERE ENCOUNTERED, IN AN APPROVED MANNER. DURING ANY DEWATERING, THE CONTRACTOR SHALL USE TEMPORARY STONE AROUND THE SUCTION AND DISCHARGE ENDS TO MINIMIZE TRANSPORT OF TRENCH MATERIALS. THE DISCHARGED WATER SHALL PASS THROUGH FILTER FABRIC, SILT BAGS, FRAC TANKS OR A COMBINATION OF ALL.
- PROVIDE TEMPORARY BERMS AND SWALES TO DIVERT SURFACE WATER AWAY FROM THE AREAS THAT WILL BE EXPOSED BY CONSTRUCTION ACTIVITY TO MINIMIZE THE AMOUNT OF SURFACE WATER COMING INTO CONTACT WITH EXPOSED SOILS. PROVIDE STABLE OUTLETS FOR THESE DEVICES, AND LINE OR VEGETATE THESE DIVERSIONS TO PROVIDE FOR THEIR STABILITY DURING CONSTRUCTION.
- WHEN EARTHWORK CONSTRUCTION ACTIVITY IN AN AREA IS COMPLETE, IMMEDIATELY STABILIZE THE AREA WITH A SUITABLE SURFACE AS DESCRIBED HEREIN.

EARTH WORK NOTES:

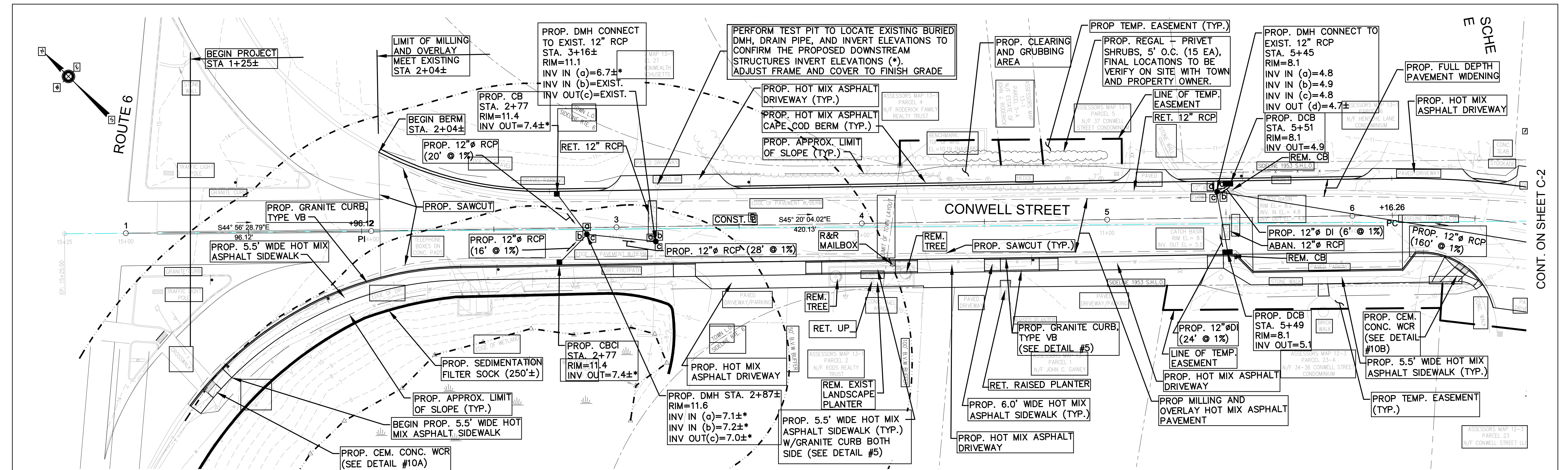
- DEWATERING PUMPING SYSTEM DISCHARGE TO INCLUDE ENERGY DISSIPATION TO PREVENT SCOUR.
- AGGREGATE MATERIALS (GRAVEL, LOAM, STONE) SHALL NOT BE STOCKPILED ON-SITE. MATERIALS SHALL BE STORED OFF-SITE OR DELIVERED DAILY AS NEEDED.
- TEMPORARY DEWATERING SEDIMENTATION BASINS, IF REQUIRED, WILL BE CHECKED AFTER EACH SIGNIFICANT RAINFALL AND CLEANED AS NEEDED TO RETAIN STORAGE CAPACITY.
- TEMPORARY DRAINAGE SWALES, IF REQUIRED, WILL BE CHECKED DAILY AND REPAIRED WHEN NECESSARY.
- INSTALL SEDIMENTATION FILTER SOCK AND SILT SACK AT EXISTING AND PROPOSED CATCH BASINS PRIOR TO COMMENCEMENT OF THE EARTHWORK OPERATIONS. INSPECT EROSION CONTROLS IMMEDIATELY AFTER EACH STORM AND REMOVE ACCUMULATED SEDIMENT AS REQUIRED. REPLACE DAMAGED EROSION CONTROLS AS REQUIRED.
- TURBIDITY, SEDIMENT AND EROSION CONTROL MATERIALS SHALL BE INSPECTED BY THE PROVINCETOWN CONSERVATION AGENT FOLLOWING INSTALLATION AND PRIOR TO ANY FURTHER CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL NOTIFY THE AGENT THAT MATERIALS ARE READY FOR INSPECTION.
- SPILL KITS SHALL BE MAINTAINED ON-SITE AT ALL TIMES.
- SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL DIESEL OR GASOLINE POWERED GENERATORS AND PUMPS.

DRAINAGE NOTES:

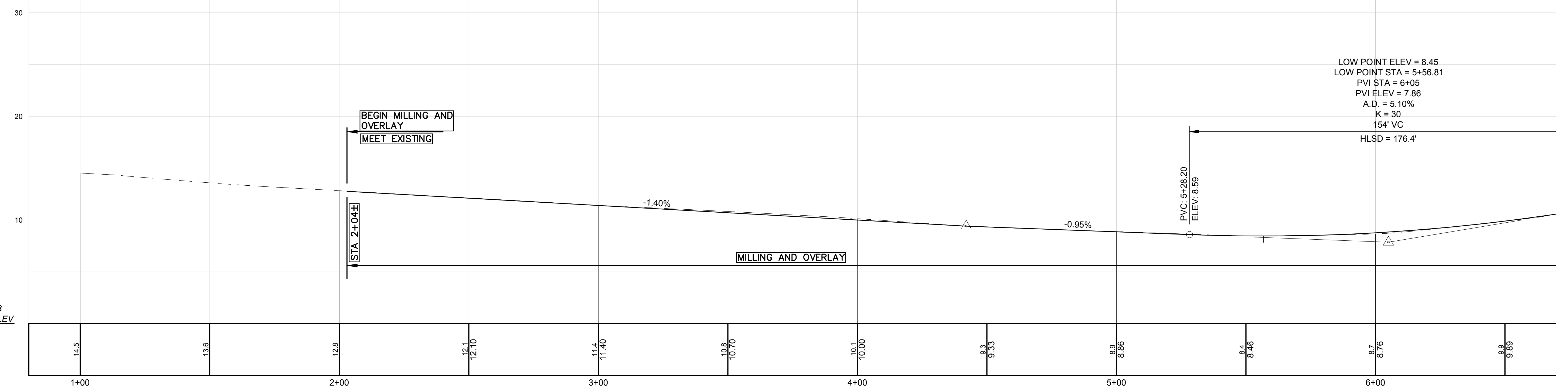
- NEW STORM DRAINS AND SERVICES SHALL BE INSTALLED AT THE MINIMUM DEPTH FROM FINISH GRADE TO TOP OF PIPE AS SHOWN ON THE DRAWINGS. WHERE NECESSARY. FINAL INVERT ELEVATIONS WILL BE CONFIRM BY THE CONTRACTOR IN THE FILED.
- ALL CATCH BASINS TO BE REMOVED AS SHOWN ON THE PLANS SHALL BE DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL COMPLY WITH MASSDOT STANDARD SPECIFICATIONS WITH RESPECT TO BACKFILLING UTILITY TRENCHES AT THE REMOVED DRAINAGE STRUCTURE AREAS.
- ALL PROPOSED DRAINAGE PIPES, TO REPLACE EXISTING PIPES, SHALL BE INSTALLED AT LEAST 1% SLOPE WHERE POSSIBLE, BUT NO FLATTER THAN 0.4% SLOPE.
- OPEN TRENCHES MUST BE BACK FILLED AT THE END OF THE WORKDAY OR COVERED WITH STEEL PLATES.

LEGEND

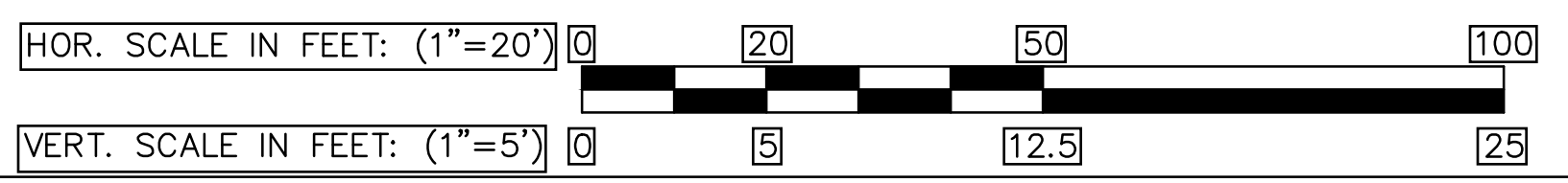
EXISTING	PROPOSED	TRAFFIC



PLAN
SCALE: 1" = 20'

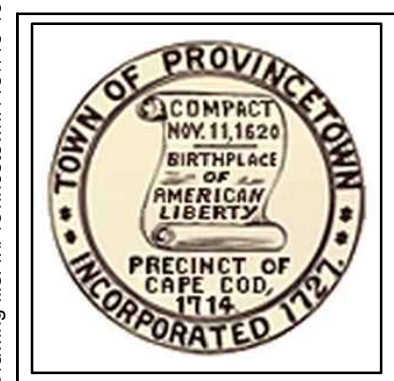


PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 5'



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NAVD 88
BASE ELEV
0.00



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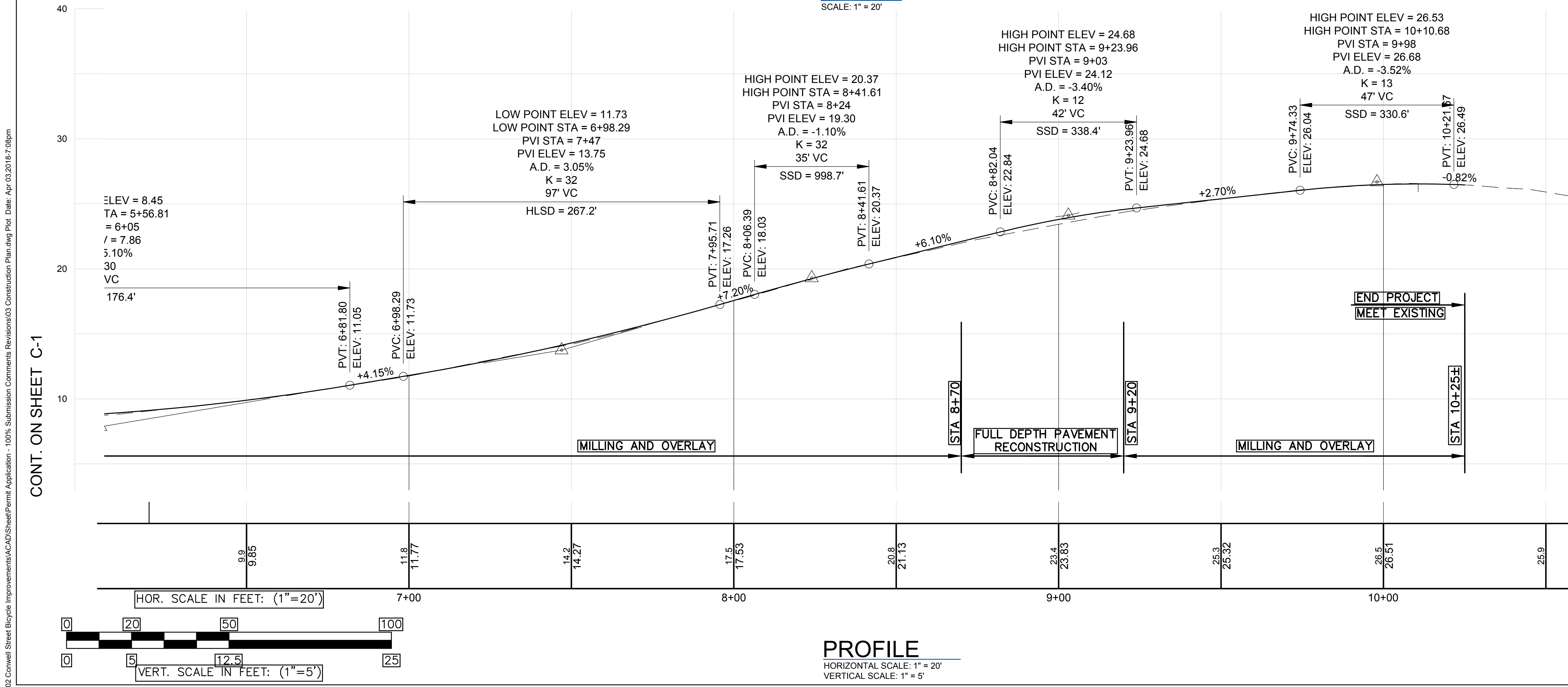
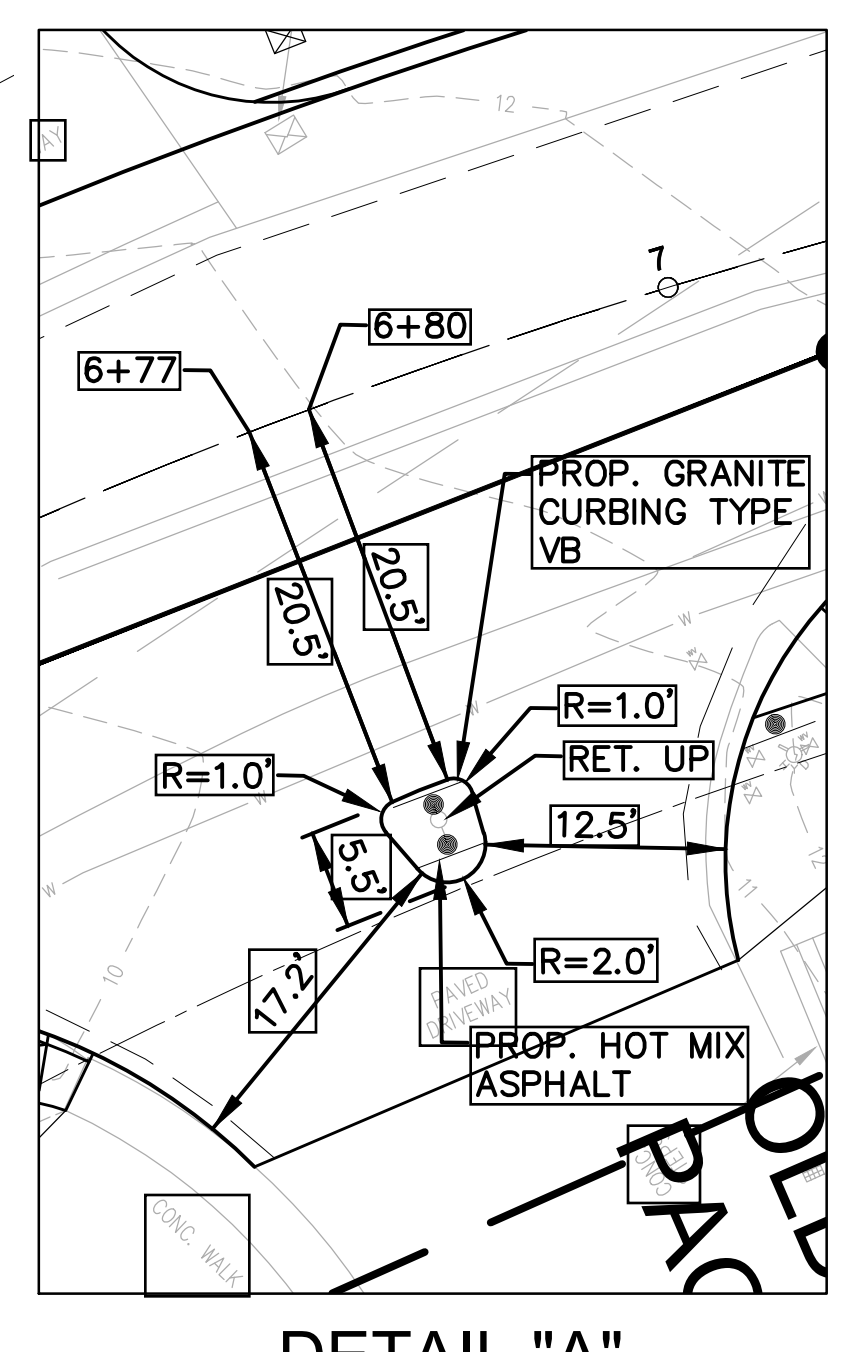
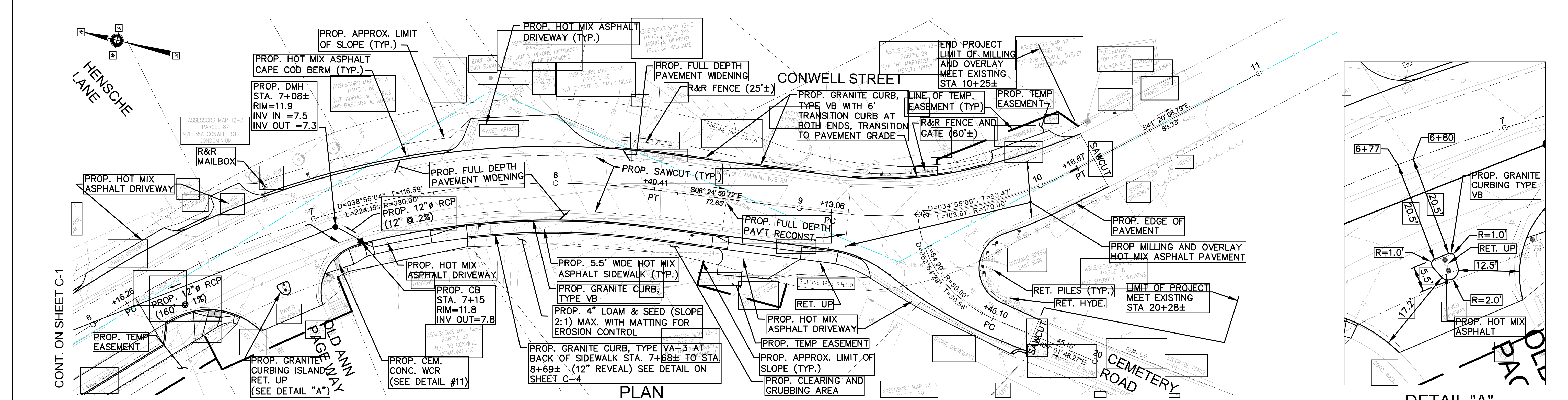
THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

CONSTRUCTION PLAN AND PROFILE (1 OF 2)
(STA. 1+00 TO STA. 6+50)

FOR PERMITTING ONLY

Sheet No. **C-1**



- GENERAL NOTES:**
- IT IS THE INTENT OF THE DESIGN TO PROVIDE A MINIMUM CONSTRUCTED SIDEWALK WIDTH FOR A PATH OF TRAVEL PAST ALL OBSTRUCTIONS OF 3'-0" CLEARANCE FOR HANDICAP ACCESSIBILITY (IN ACCORDANCE WITH THE LATEST A.D.A. AND MASSDOT REQUIREMENTS). THE CONTRACTOR SHALL VERIFY THAT ALL POTENTIAL OBSTRUCTIONS HAVE BEEN ADDRESSED IN THE PLANS INCLUDING BUT NOT LIMITED TO SIGNS, MAILBOXES, UTILITY POLES, AND HYDRANTS SO THEY ARE LOCATED TO PROVIDE THIS MINIMUM PATH OF TRAVEL CLEARANCE AND A MINIMUM 18" TYPICAL CLEARANCE TO THE FACE OF CURB OR 12" MIN. CLEARANCE WHERE 18" IS NOT FEASIBLE OR PRACTICAL. NO UTILITY POLES OR OBSTRUCTIONS ARE PERMITTED WITHIN WHEELCHAIR RAMPS.
 - BRICK RED DETECTABLE WARNING PANELS SHALL BE INSTALLED ON ALL WHEELCHAIR RAMPS AND SHALL COMPLY WITH CONSTRUCTION STANDARD E107.6.5. PAYMENT FOR DETECTABLE WARNING PANELS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF THE WHEELCHAIR RAMPS OR SIDEWALKS IN WHICH THEY ARE BEING INSTALLED.
 - THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL WHEELCHAIR RAMPS ARE CONSTRUCTED TO CONFORM TO AAB/ADA AND THE TOWN REQUIREMENTS.
 - DIMENSIONS AND LIMITS OF WORK ARE APPROXIMATE AND MAY BE ADJUSTED TO ADDRESS ON SITE CONSTRAINTS AS WARRANTED AND DIRECTED.
 - ALL EXISTING SIGNS SHALL BE REMOVED AND STACKED UNLESS OTHERWISE NOTED. SEE SIGNS AND PAVEMENT MARKINGS PLANS.
 - ALL PROPOSED PAVEMENT MARKINGS SHALL MEET EXISTING MARKINGS AT THE LIMITS OF WORK.
 - THE TERM "PROPOSED" (PROP.) MEANS WORK TO BE CONSTRUCTED HEREIN USING NEW MATERIALS OR WHERE APPLICABLE, REUSING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET" (R&R). ALL OTHER MATERIALS SHALL BE "REMOVED AND STACKED" (R&S) OR DISPOSED OF OFF SITE.
 - THE CONTRACTOR IS RESPONSIBLE TO PERFORM TEST PIT TO LOCATE THE EXISTING BURIED DRAINAGE MANHOLE AND DRAINAGE PIPE AT LOCATION NEAR STA. 3+18(LT) AND 5+45 (LT). ALSO, THE CONTRACTOR SHALL DETERMINE THE ACTUAL PROPOSED INVERT ELEVATIONS (*) FOR THE PROPOSED DOWNSTREAM STRUCTURES PRIOR ORDERING THE STRUCTURES.

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Scale: 1" = 20'

Date: MARCH, 2018

Job No.: 115-1502

Designed by: _____

Drawn by: _____

Checked by: _____

Approved by: _____

BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET

PROVINCETOWN, MASSACHUSETTS

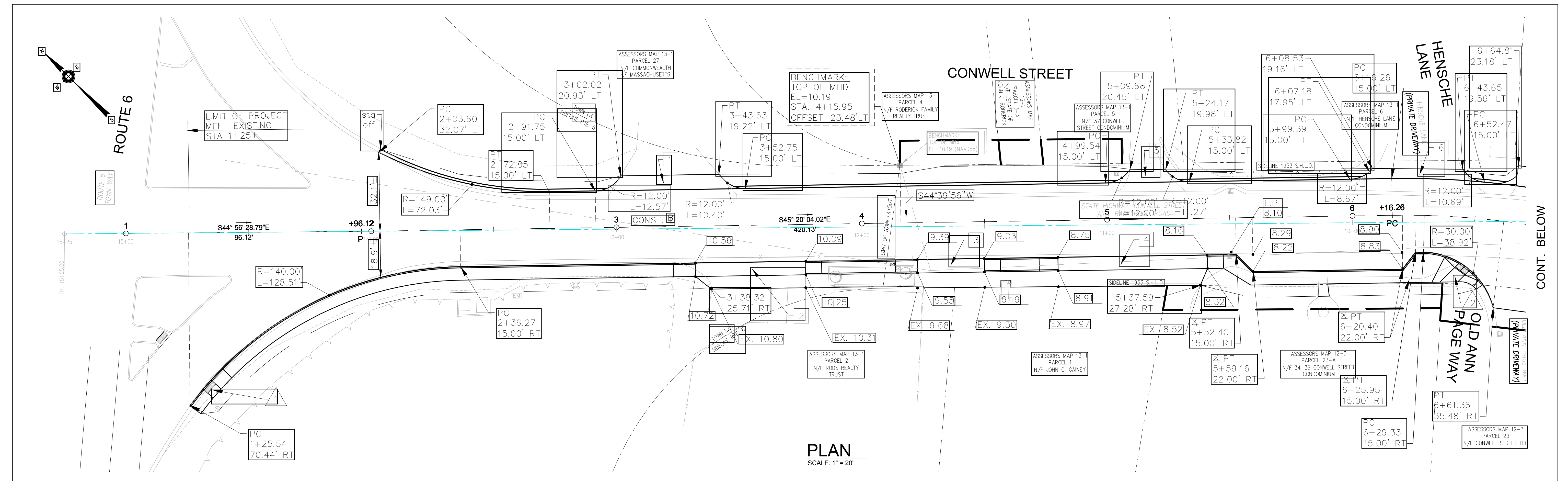
CONSTRUCTION PLAN AND PROFILE (2 OF 2)

(STA. 6+50 TO STA. 11+00)

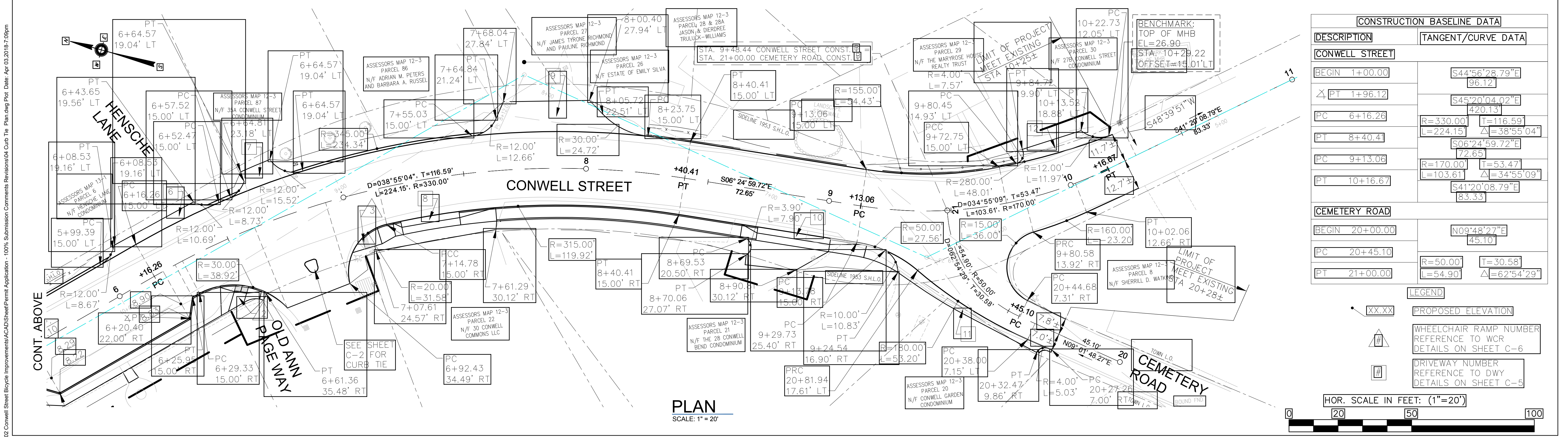
FOR PERMITTING ONLY

Sheet No. **C-2**

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CONT. BELOW




CONT. ABOVE

CONSTRUCTION BASELINE DATA	
DESCRIPTION	TANGENT/CURVE DATA
CONWELL STREET	
BEGIN 1+00.00	S44°56'28.79"E 96.12'
Δ PT 1+96.12	S45°20'04.02"E 420.13'
PC 6+16.26	R=330.00' T=116.59' L=224.15' Δ=38°55'04"
PT 8+40.41	S06°24'59.72"E 72.65'
PC 9+13.06	R=170.00' T=53.47' L=103.61' Δ=34°55'09"
PT 10+16.67	S41°20'08.79"E 83.33'
CEMETERY ROAD	
BEGIN 20+00.00	N09°48'27"E 45.10'
PC 20+45.10	R=50.00' T=30.58' L=54.90' Δ=62°54'29"

LEGEND

- XX.XX PROPOSED ELEVATION
- ♣ WHEELCHAIR RAMP NUMBER REFERENCE TO WCR DETAILS ON SHEET C-6
- Ⓜ DRIVEWAY NUMBER REFERENCE TO DWY DETAILS ON SHEET C-5

HOR. SCALE IN FEET: (1"=20')



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Scale	1" = 20'
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BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

CURB TIE PLAN

FOR PERMITTING ONLY

Sheet No. **C-3**

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PAVEMENT NOTES:

PROPOSED MILL AND PAVEMENT OVERLAY

- SURFACE:** 1 3/4" HOT MIX ASPHALT PAVEMENT TOP COURSE MATERIAL
- BITUMEN FOR TACK COAT (RS-1) AT 0.07 GAL./SQ. YD.
- LEVEL COURSE:** VARIOUS DEPTH HOT MIX ASPHALT PAVEMENT TOP COURSE MATERIAL
- BITUMEN FOR TACK COAT (RS-1) AT 0.07 GAL./SQ. YD.
- MILLING:** COLD PLANE VARIABLE DEPTH TO MEET PROPOSED GRADING (MAX. 3")

PROPOSED FULL DEPTH PAVEMENT RECONSTRUCTION/WIDENING (OVER 3 FEET)

- SURFACE:** 3 3/4" HOT MIX ASPHALT PLACED IN TWO LAYERS: (1 1/2" TOP COURSE OVER 1 1/2" BINDER COURSE).
- BASE:** 3 1/2" HOT MIX ASPHALT BASE COURSE PLACED IN ONE LAYER.
- FOUNDATION:** 12" GRAVEL BORROW TYPE-b

BITUMEN FOR TACK COAT (RS-1) AT 0.05 GAL./SQ. YD. FOR SMOOTH PAVEMENT AT EACH COURSE

PROPOSED FULL DEPTH MINOR WIDENING (LESS THAN 3 FEET)

- SURFACE:** 3 3/4" HOT MIX ASPHALT PLACED IN TWO LAYERS: (1 1/2" TOP COURSE OVER 1 1/2" BINDER COURSE).
- BASE:** 6" HIGH EARLY STRENGTH CEMENT CONCRETE BASE COURSE MATERIAL
- FOUNDATION:** 12" GRAVEL BORROW TYPE-b

PROPOSED HOT MIX ASPHALT SIDEWALK

- SURFACE:** 2 1/2" HOT MIX ASPHALT PLACED IN TWO LAYERS: 1 1/2" TOP COURSE OVER 1 1/2" BINDER COURSE
- SUBBASE:** 8" GRAVEL BORROW - TYPE b

PROPOSED HOT MIX ASPHALT DRIVEWAY

- SURFACE:** 3 3/4" HOT MIX ASPHALT PLACED IN TWO LAYERS: 1 1/2" TOP COURSE OVER 2" BINDER COURSE
- SUBBASE:** 8" GRAVEL BORROW - TYPE b

PROPOSED CEMENT CONCRETE WALK/WHEELCHAIR RAMP

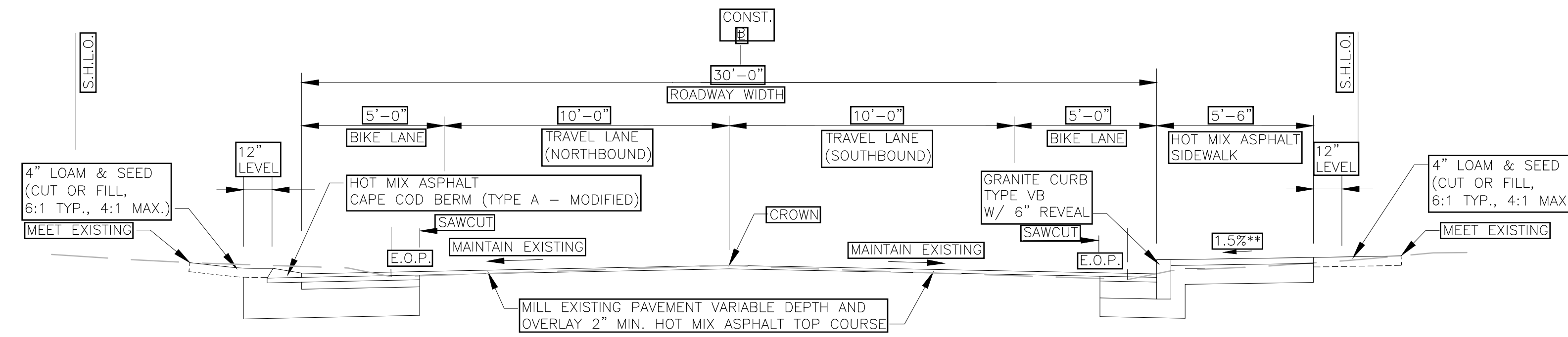
- SURFACE:** 4" CEMENT CONCRETE
- SUBBASE:** 8" GRAVEL BORROW - TYPE b

PROPOSED LOAM & SEED

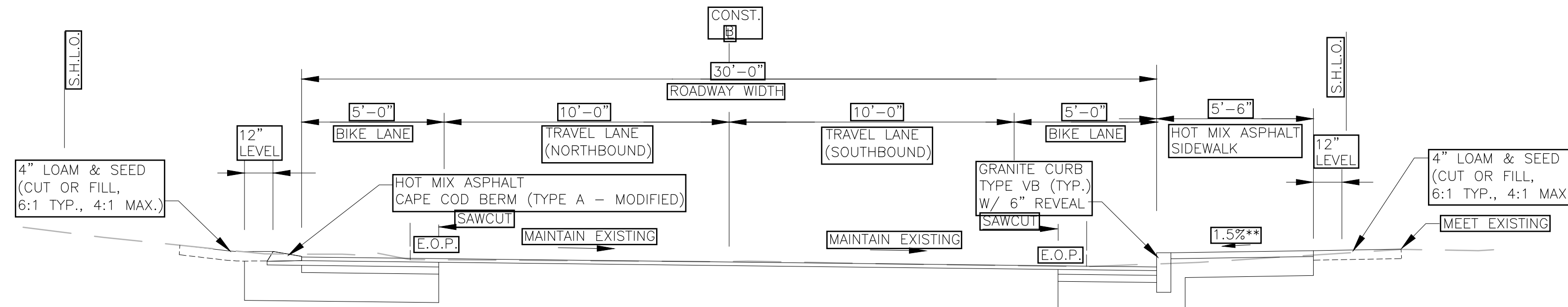
- SURFACE:** 4" LOAM & SEED
- SUBBASE:** VARIABLE DEPTH ORDINARY BORROW TO EXIST. GRAVEL

NOTE:
* 0.5%± CONSTRUCTION TOLERANCE

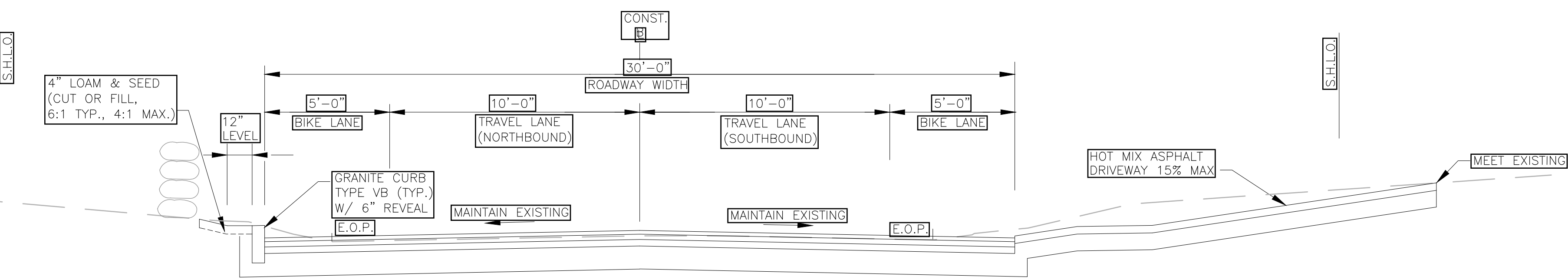
- NOTES:**
- ALL SAW-CUTS IN DRIVEWAYS SHALL BE SEALED WITH A LIQUID ASPHALT SEALER.
 - ANY UNSUITABLE SOILS WILL BE ADDRESSED WITH MASSDOT MATERIALS TESTING PROCEDURES BY THE ENGINEER AND REPLACED WITH SUITABLE SUBBASE AS DIRECTED BY THE ENGINEER.



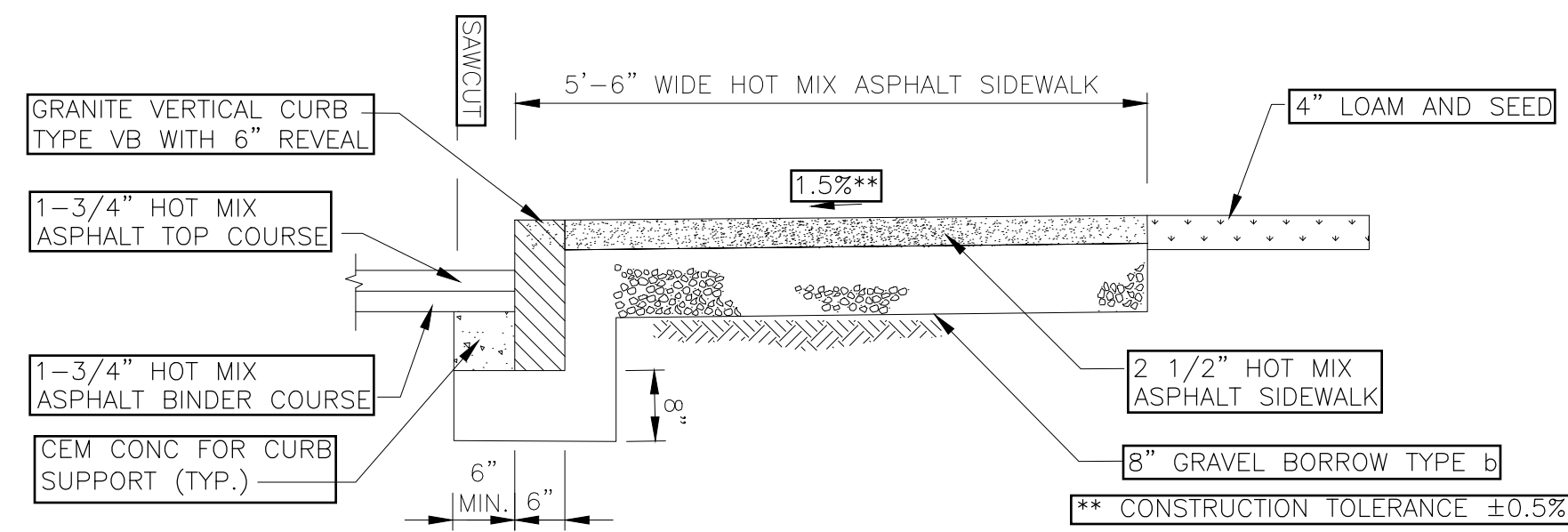
1 TYPICAL SECTION (CROWN)
(STA. 2+72 TO STA. 6+80±)
(STA. 8+15± TO STA. 8+70)
N.T.S.



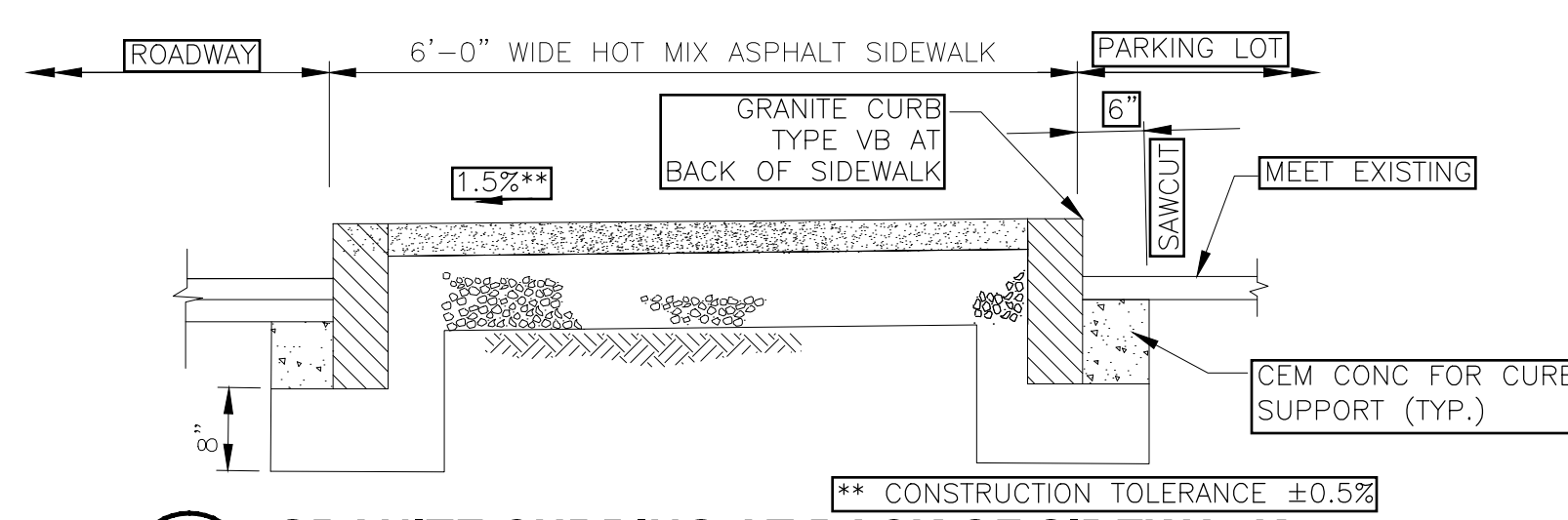
2 TYPICAL SECTION (SUPERELEVATION)
(STA. 6+80± TO STA. 8+15±)
N.T.S.



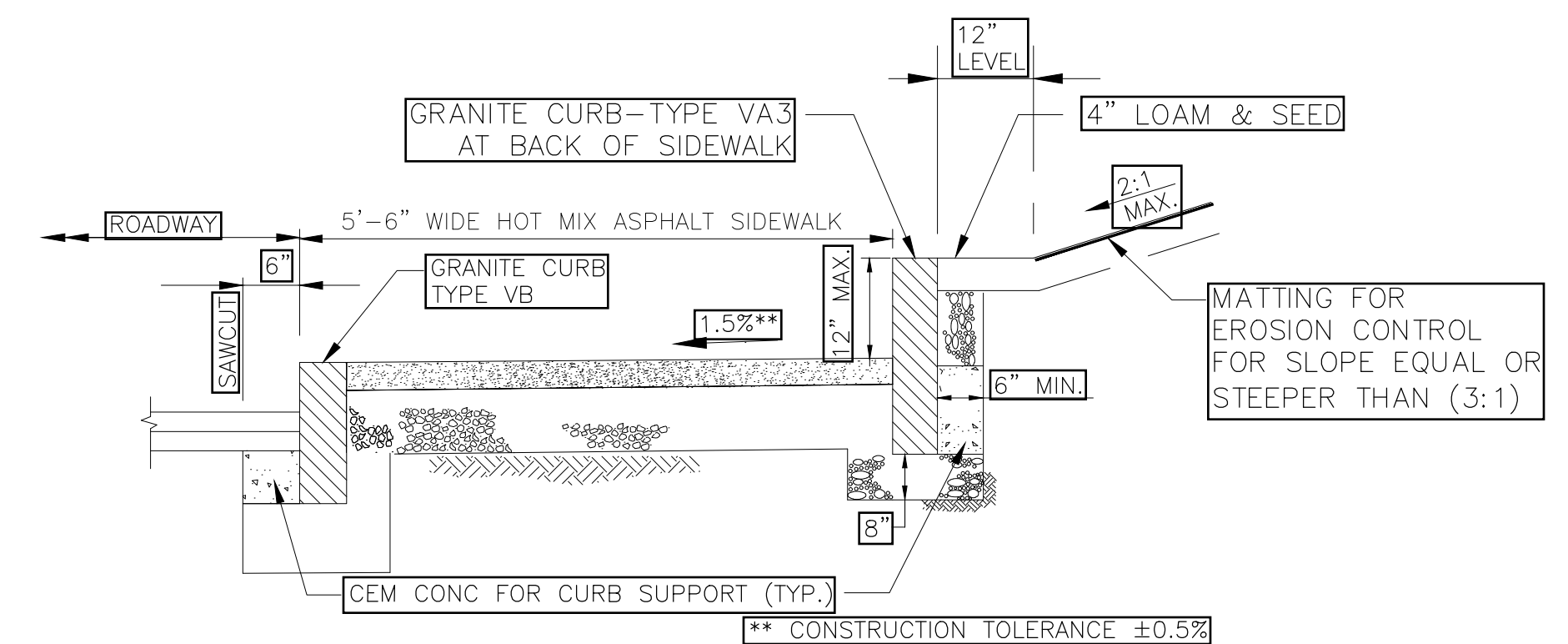
3 TYPICAL SECTION (FULL DEPTH RECONSTRUCTION)
(STA. 8+70 TO STA. 9+20)
N.T.S.



4 HOT MIX ASPHALT SIDEWALK DETAIL
N.T.S.

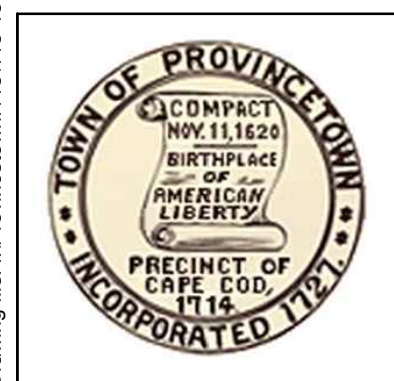


5 GRANITE CURBING AT BACK OF SIDEWALK
(STA. 4+50± TO STA. 4+80± AND STA. 3+76± TO STA. 4+22±)
N.T.S.



6 RAISED GRANITE CURBING AT BACK OF SIDEWALK
(STA. 7+68± TO STA. 8+69±)
N.T.S.

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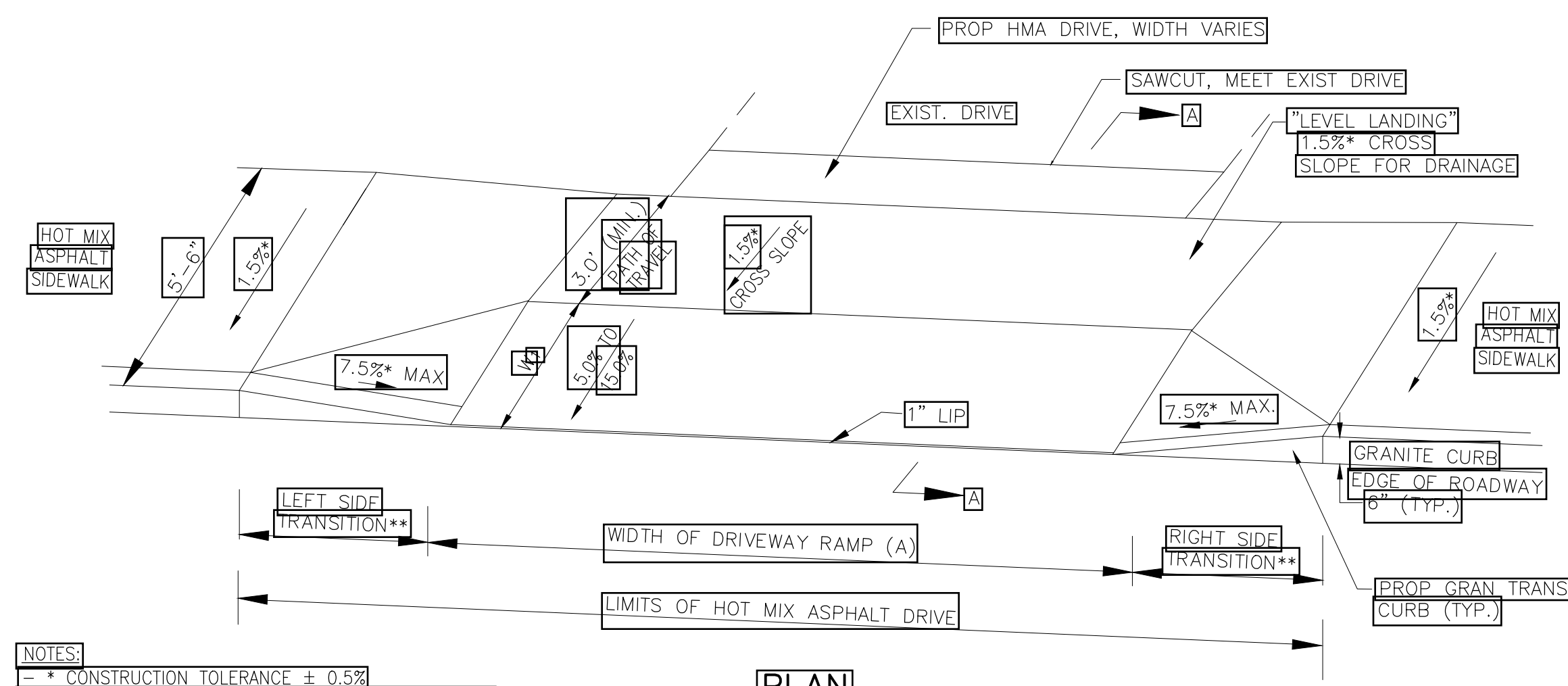
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BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

CONSTRUCTION DETAILS #1

FOR PERMITTING ONLY

Sheet No. **C-4**



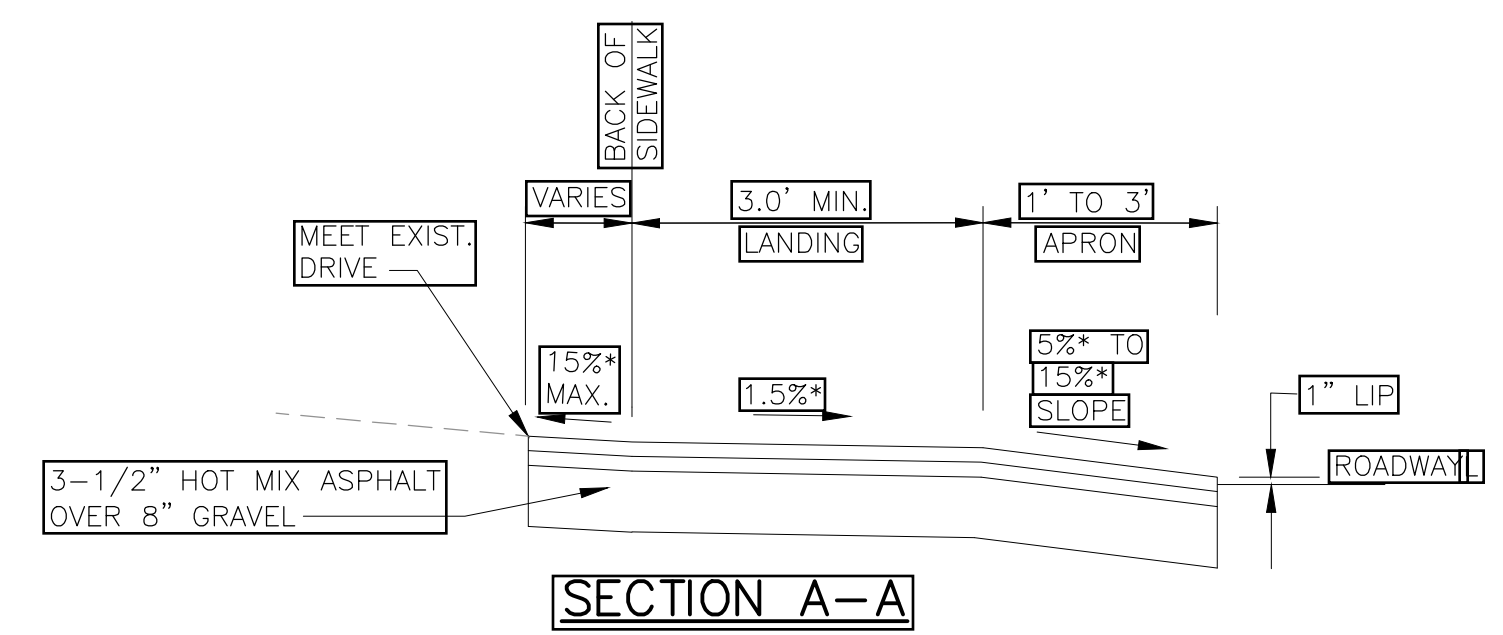
NOTES:
 - * CONSTRUCTION TOLERANCE ± 0.5%
 - ** TRANSITION CURB LENGTH
 (FOR HIGH SIDE TRANSITION LENGTH, SEE MASSDOT STANDARD DETAIL E107.9.0.
 FOR LOW SIDE TRANSITION, W=6'-6")
 - SEE CONSTRUCTION STANDARD E107.7.0
 - *** 3" REVEAL

PLAN

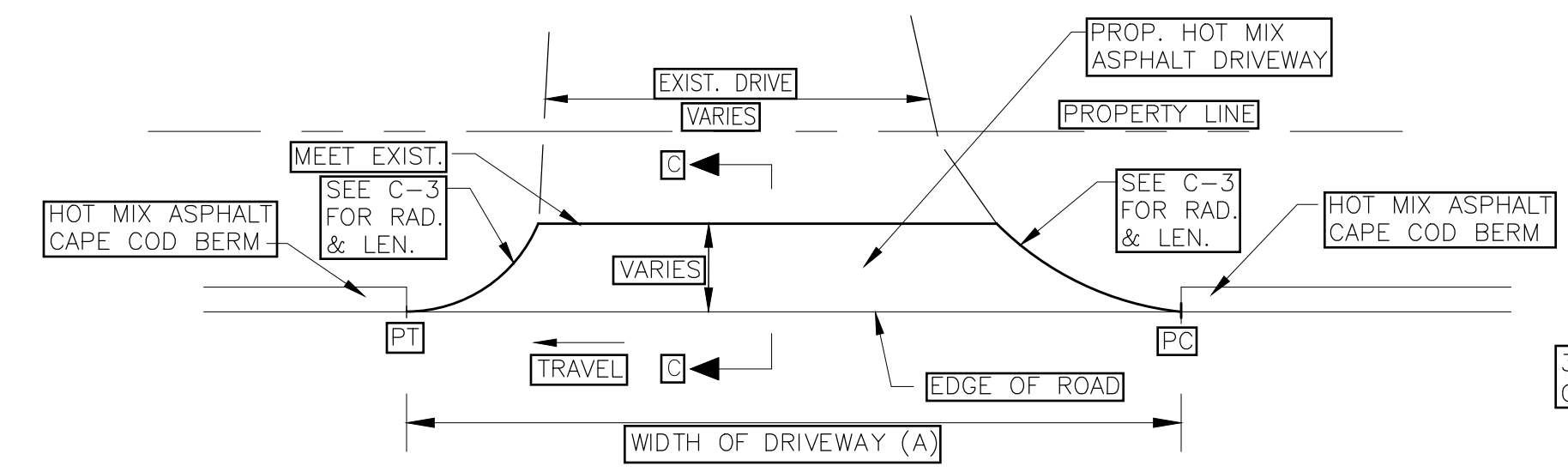
7

HOT MIX ASPHALT SIDEWALK THROUGH RESIDENTIAL DRIVEWAY
 N.T.S.

DWY #	ALIGNMENT	DWY REFERENCE PT C		PATH OF TRAVEL	LENGTH OF RAMP (W1)	WIDTH OF DRIVEWAY RAMP (A)	ROADWAY GUTTER SLOPE (%)	TRANSITION LENGTH	
		STATION	OFFSET					LEFT	RIGHT
8	CONWELL STREET	7+33.53	15.00' RT	3.00'	2.50'	24.12'	5.67%	15.00'	3.25'***
10	CONWELL STREET	8+87.99	15.00' RT	3.00'	2.50'	30.00'	5.50%	15.00'	6.50'



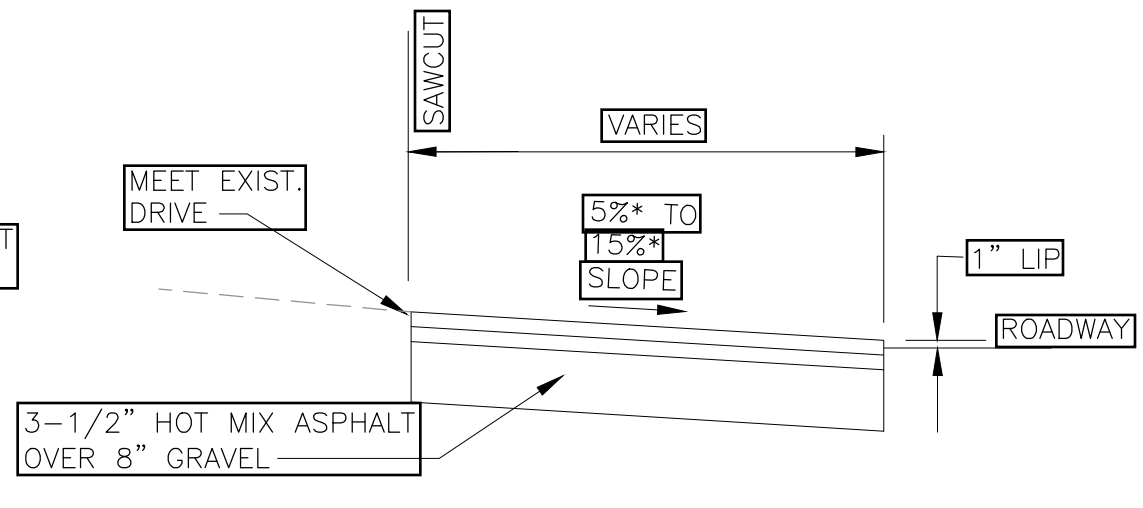
SECTION A-A



PLAN

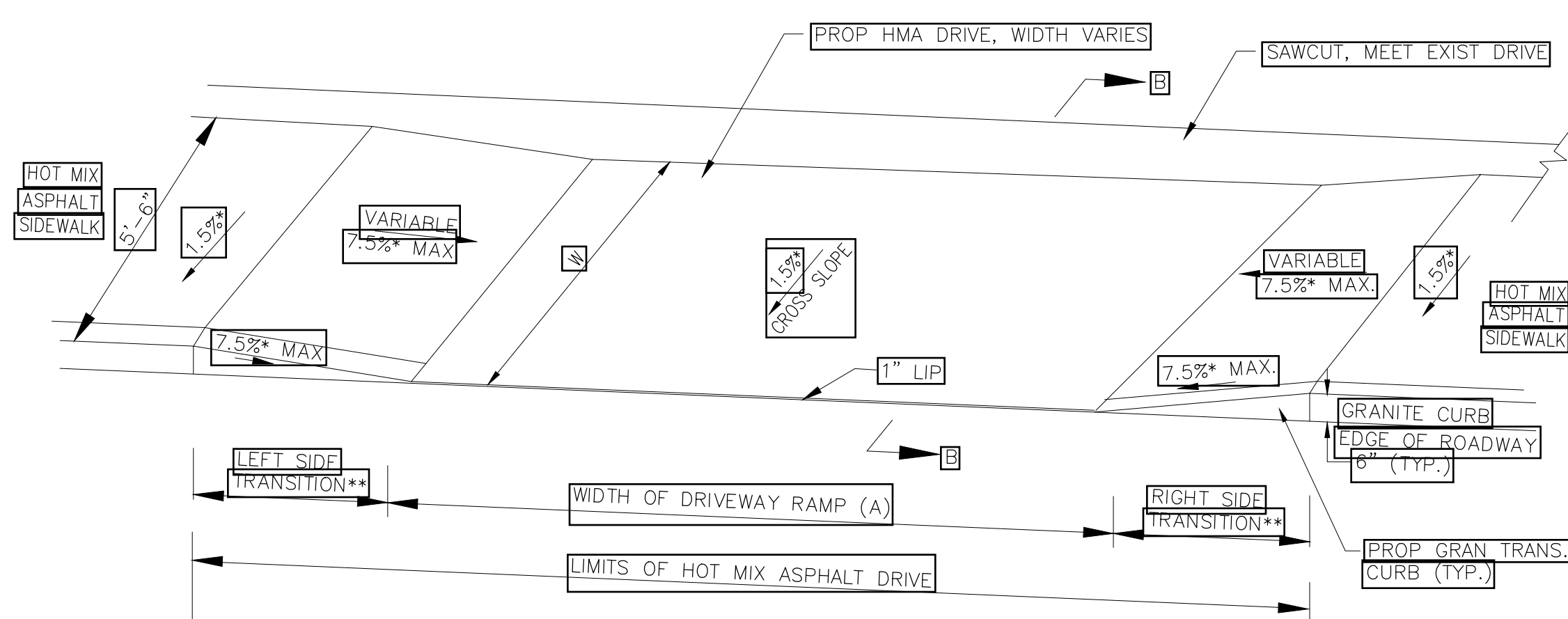
8

NON-SIDEWALK DRIVEWAY DETAIL
 N.T.S.



SECTION C-C

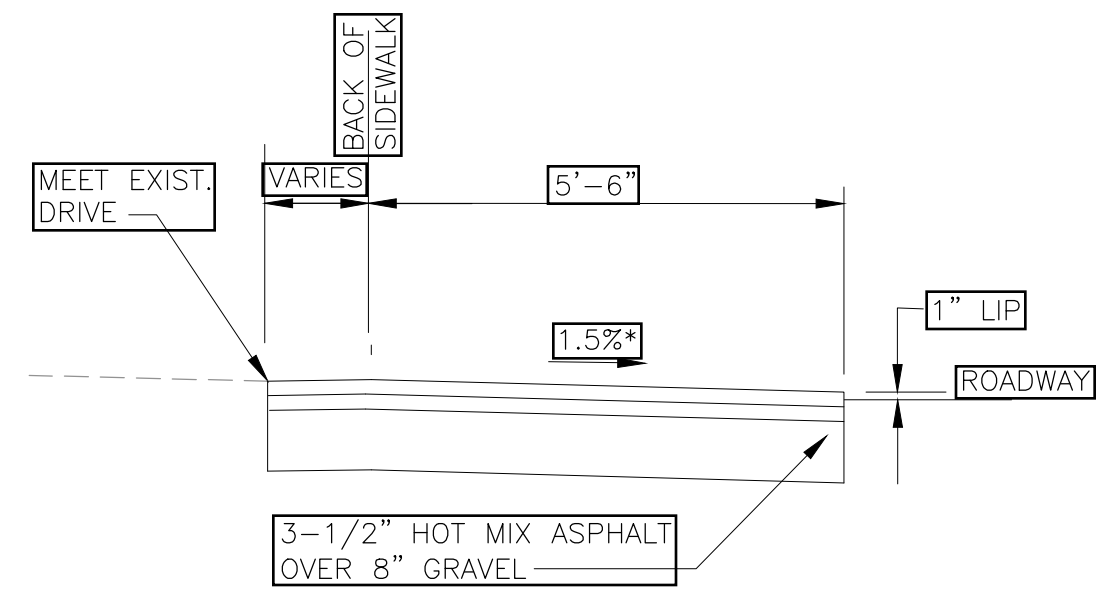
DWY #	ALIGNMENT	DWY REFERENCE PT D		WIDTH OF DRIVEWAY RAMP (A)
		STATION	OFFSET	
1	CONWELL STREET	3+22.19	15.00' LT	61.20'
5	CONWELL STREET	5+16.68	15.00' LT	34.28'
6	CONWELL STREET	6+26.29	15.00' LT	54.86'
7	CONWELL STREET	6+72.48	15.00' LT	31.60'
9	CONWELL STREET	7+89.39	15.00' LT	71.71'
11	CEMETERY ROAD	20+61.92	8.86' RT	77.73'
12	CONWELL STREET	10+02.63	15.00' LT	39.74'



PLAN

9

HOT MIX ASPHALT SIDEWALK THROUGH WIDE DRIVEWAY
 N.T.S.



SECTION B-B

DWY #	ALIGNMENT	DWY REFERENCE PT M		WIDTH OF SIDEWALK (W)	WIDTH OF DRIVEWAY RAMP (A)	ROADWAY GUTTER SLOPE (%)	TRANSITION LENGTH	
		STATION	OFFSET				LEFT	RIGHT
2	CONWELL STREET	3+54.42	15.00' RT	5.50'	45.00'	1.40%	6.50'	9.00'
3	CONWELL STREET	4+36.08	15.00' RT	5.50'	27.30'	1.40%	6.50'	9.00'
4	CONWELL STREET	5+10.18	15.00' RT	5.50'	60.90'	0.87%	6.50'	7.67'

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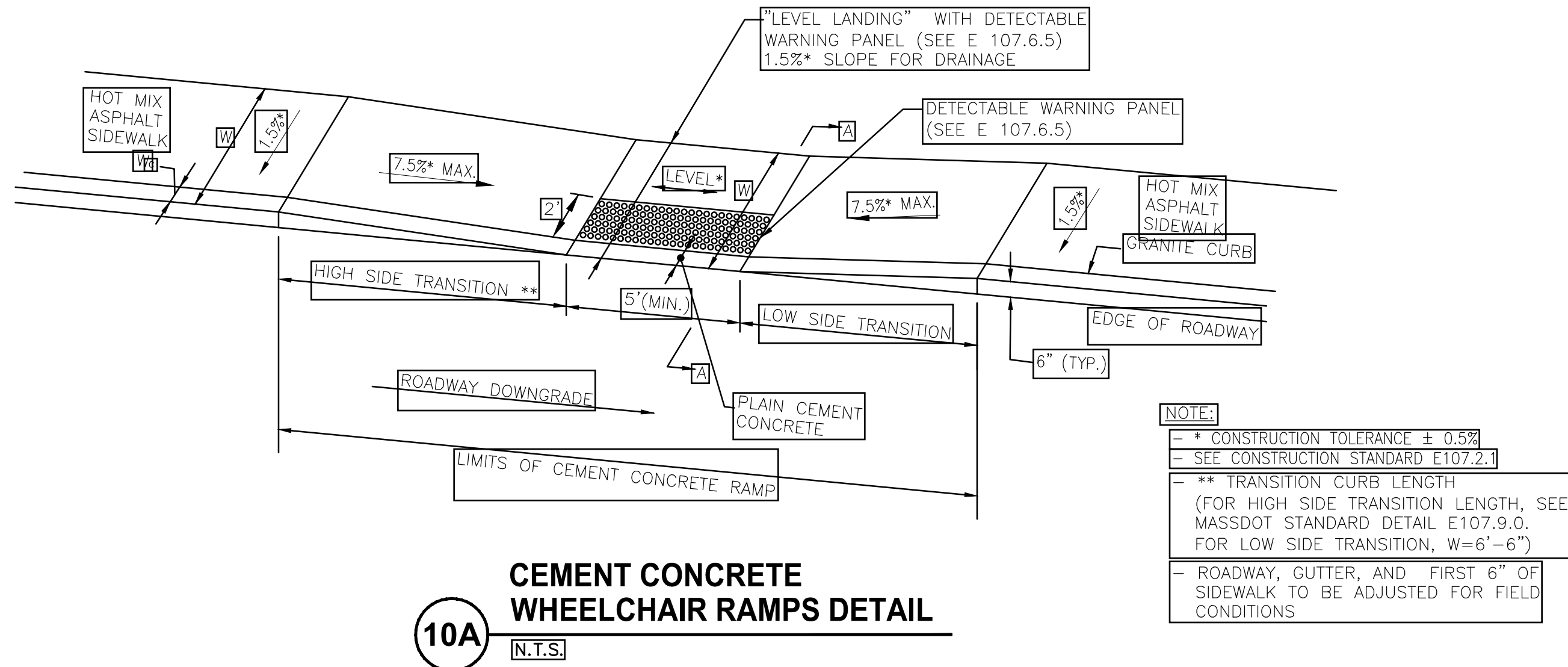
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THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

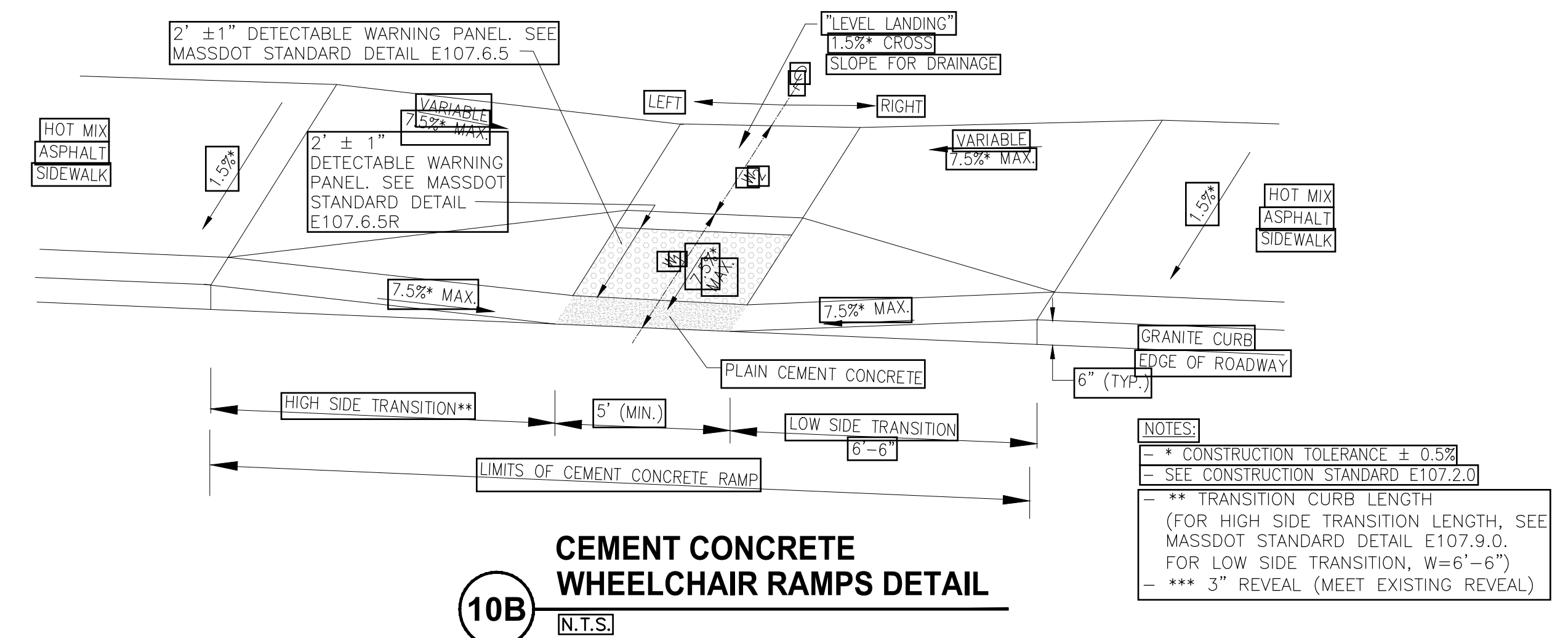
BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

CONSTRUCTION DETAILS #2

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Sheet No.	C-5



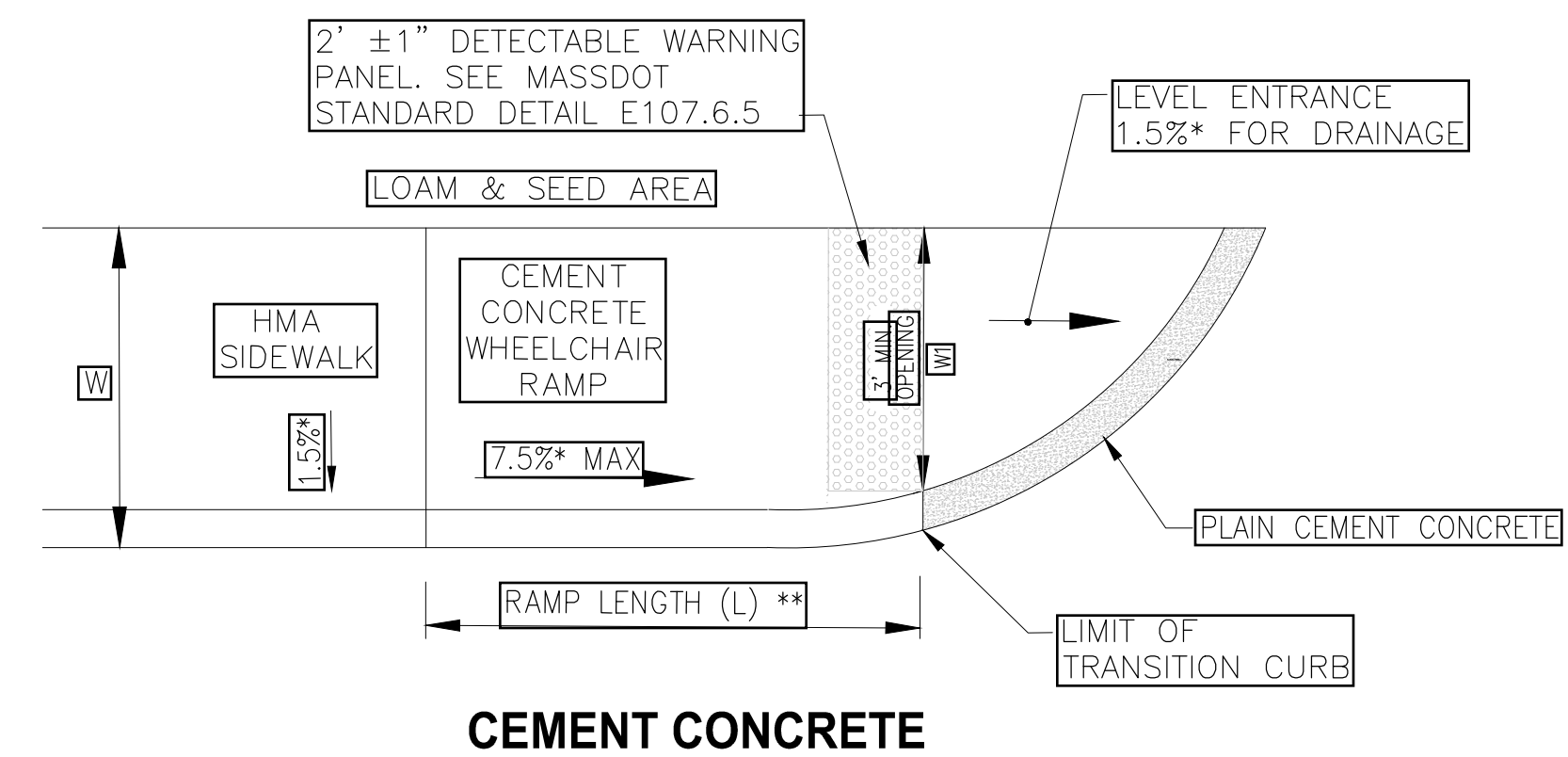
10A
N.T.S.
CEMENT CONCRETE WHEELCHAIR RAMPS DETAIL



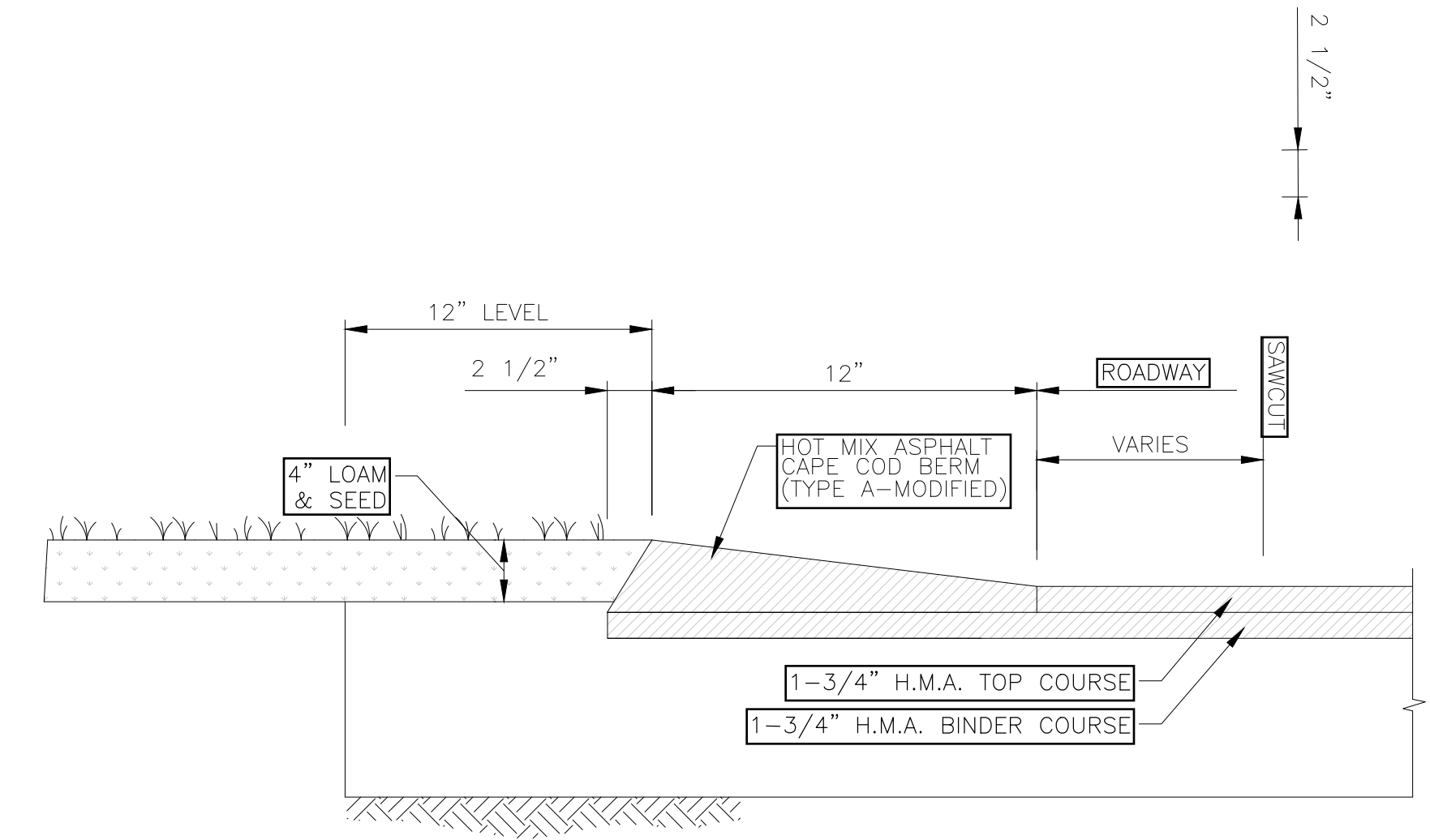
10B
N.T.S.
CEMENT CONCRETE WHEELCHAIR RAMPS DETAIL

WCR #	ALIGNMENT	WCR REFERENCE PT. [D]		WIDTH OF SIDEWALK (W)	WIDTH OF RAMP (MIN. 5.00')	ROADWAY GUTTER SLOPE (%)	TRANSITION LENGTH	
		STATION	OFFSET				LEFT	RIGHT
1	CONWELL STREET	1+32.96	62.60' RT	5.50	5.00'	1.35%	6.50'	9.00'

WCR #	ALIGNMENT	WCR REFERENCE PT. [D]		PRIMARY RAMP (W ₁)	LEVEL LANDING DEPTH (W ₂)	WIDTH OF RAMP (MIN. 5.00')	ROADWAY GUTTER SLOPE (%)	TRANSITION LENGTH	
		STATION	OFFSET					LEFT	RIGHT
2	CONWELL STREET	6+47.43	19.79' RT	2.90'	6.24'	5.00'	2.75%	5.5'***	6.50'



11
N.T.S.
ONE CONTINUOUS DIRECTION WHEELCHAIR RAMPS DETAIL



12
N.T.S.
HOT MIX ASPHALT CAPE COD BERM (TYPE A MODIFIED)

WCR #	ALIGNMENT	WCR REFERENCE PT. [D]		WIDTH OF SIDEWALK (W)	WIDTH OF OPENING (W ₁)	ROADWAY GUTTER SLOPE (%)	LENGTH OF RAMP (L)
		STATION	OFFSET				
3	CONWELL STREET	7+00.65	19.77' RT	6.87'	4.00'	5.70%	7.50'***

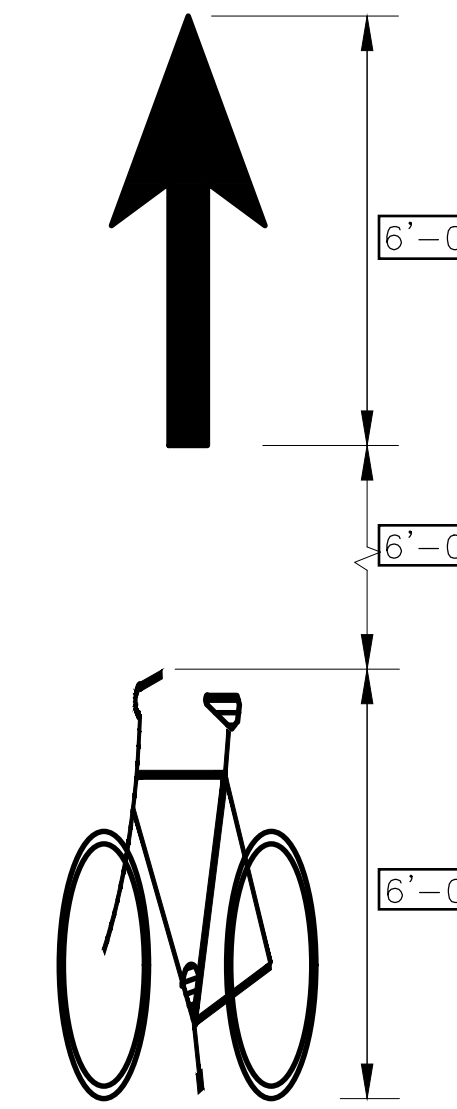
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							BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS	FOR PERMITTING ONLY																												
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Approved by	JDF																																			

TRAFFIC SIGN SUMMARY

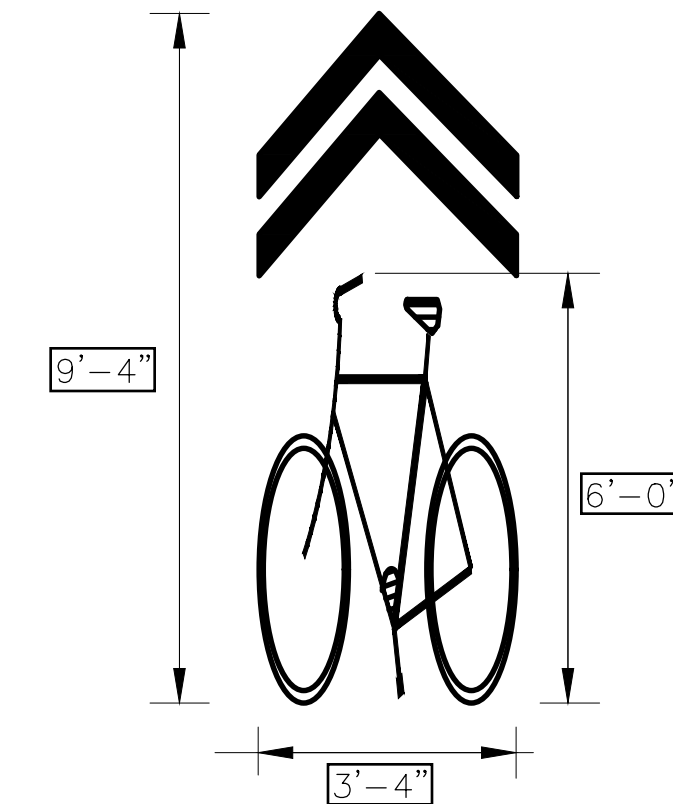
IDENTIFICATION NUMBER	SIZE OF SIGN (INCHES)		TEXT	TEXT DIMENSIONS (INCHES)		NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE (LAND) NUMBER REQUIRED	UNIT AREA IN SQUARE FEET	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING		BACK-GROUND	LEGEND	BORDER			
D3-1	VARIES	18	Conwell St	MUTCD STANDARD		1	MUTCD STANDARD			P5 (1)	EACH	EACH
D3-2	VARIES	18	Cemetery Rd			1				MOUNT W/D3-1 (1)	EACH	EACH
R1-1	30	30				2				P5 (2)	6.25	12.50
R3-17	30	24				9				P5 (9)	5.00	45.00
R3-17aP	24	8	AHEAD			3				MOUNT W/R3-17 (3)	1.33	3.99
R3-17bP	24	8	ENDS			2				MOUNT W/R3-17 (2)	1.33	2.66
R4-7	24	30				2				P5 (2)	5.00	10.00
R5-10d	30	36				1				P5 (1)	7.50	7.50
W1-4	30	30				1				P5 (1)	6.25	6.25
W1-10	30	30				1				P5 (1)	6.25	6.25
W3-3	=	=				R&R (1)				P5 (1)	=	=
W11-1	30	30				1				P5 (1)	6.25	6.25
W11-2	30	30				1				P5 (1)	6.25	6.25
W13-1P (25)	18	18	XX M.P.H.			1				MOUNT W/W1-10 (1)	2.25	2.25
W16-1P	18	24	SHARE THE ROAD			1				MOUNT W/W11-1 (1)	3.00	3.00
W16-7P	24	12				1				MOUNT W/W11-2 (1)	2.00	2.00

SEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 2009 EDITION FOR LATEST REVISIONS AND MASSACHUSETTS AMENDMENTS FOR LATEST SPECIFICATIONS ON TEXT DIMENSIONS AND COLOR.



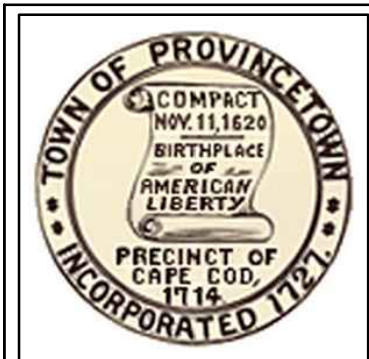
BICYCLE LANE MARKINGS
NOT TO SCALE

NOTE:
ALL BICYCLE LANE AND SHARROW SYMBOL PAVEMENT MARKINGS SHALL BE PAINT IN WHITE THERMOPLASTIC AND COMPLY TO THE LATEST M.U.T.C.D. STANDARD.



SHARED LANE MARKINGS
NOT TO SCALE

Drawing file: I:\Provincetown\115115-1502 Conwell Street Bicycle Improvements\ACAD\Sheet\Permit Application - 100% Submission Comments Revisions\06 Sign and Pavement Marking Plan.dwg Plot Date: Apr 03 2018 7:12pm



MARK	DATE	DESCRIPTION

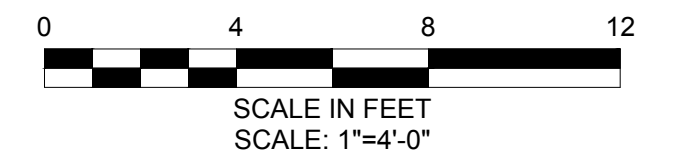
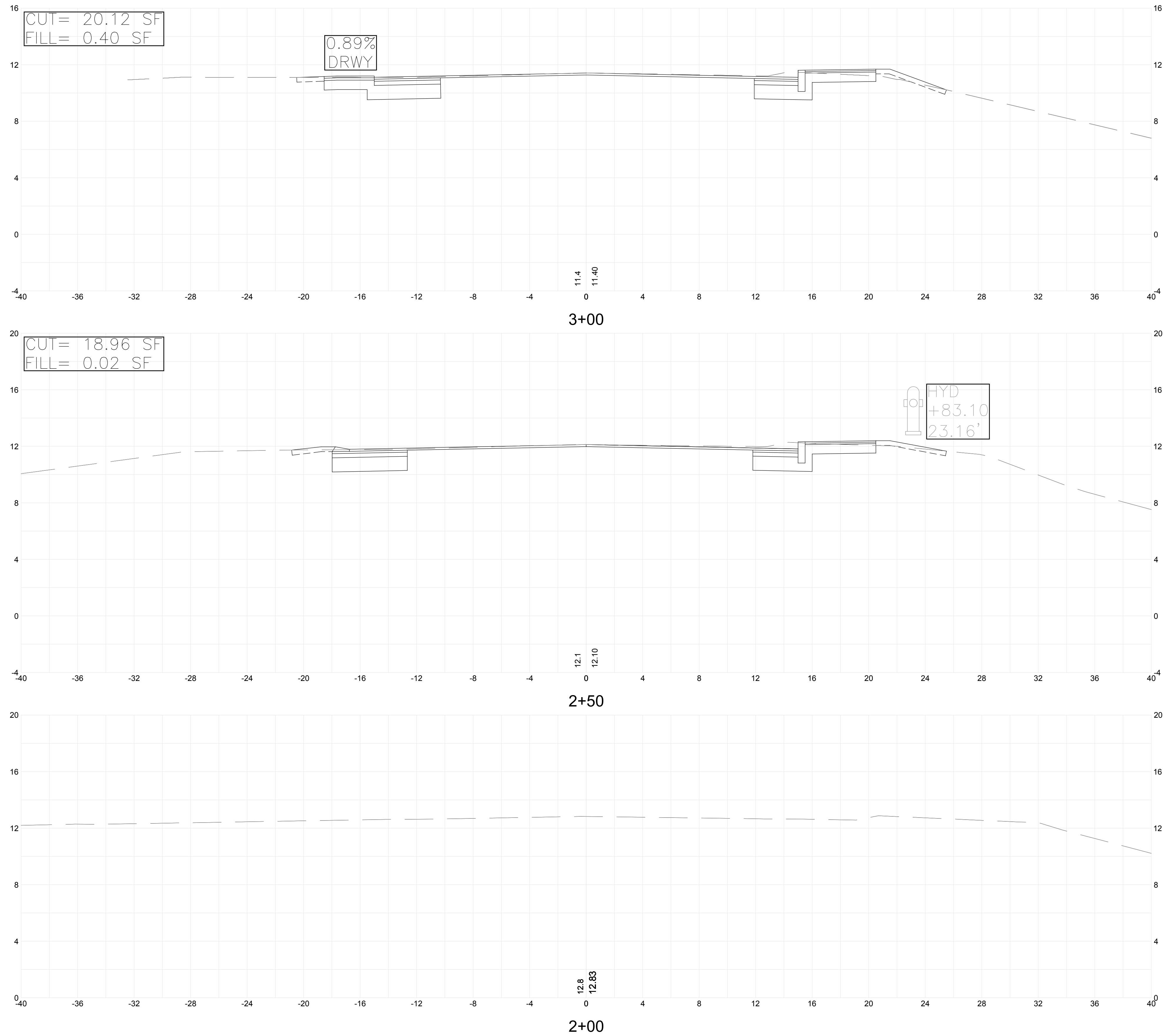
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Date	MARCH, 2018
Job No.	115-1502
Designed by	BLH
Drawn by	BLH
Checked by	JDF
Approved by	JDF

BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

SIGN SUMMARY AND PAVEMENT MARKING DETAILS

FOR PERMITTING ONLY
Sheet No. **TS-2**

Drawing file: I:\Provincetown\115115-1502 Conwell Street Bicycle Improvements\ACAD\Sheet\Permit Application - 100% Submission Comments Revisions\08 Cross Sections.dwg Plot Date: Apr 03, 2018 7:14pm



Scale	1"=4'-0"
Date	MARCH, 2018
Job No.	115-1502
Designed by	BLH
Drawn by	BLH
Checked by	JDF
Approved by	JDF

THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

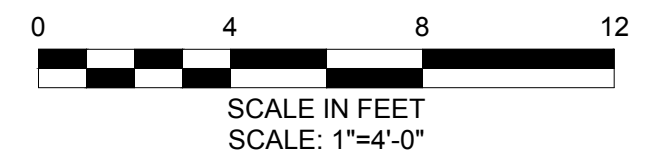
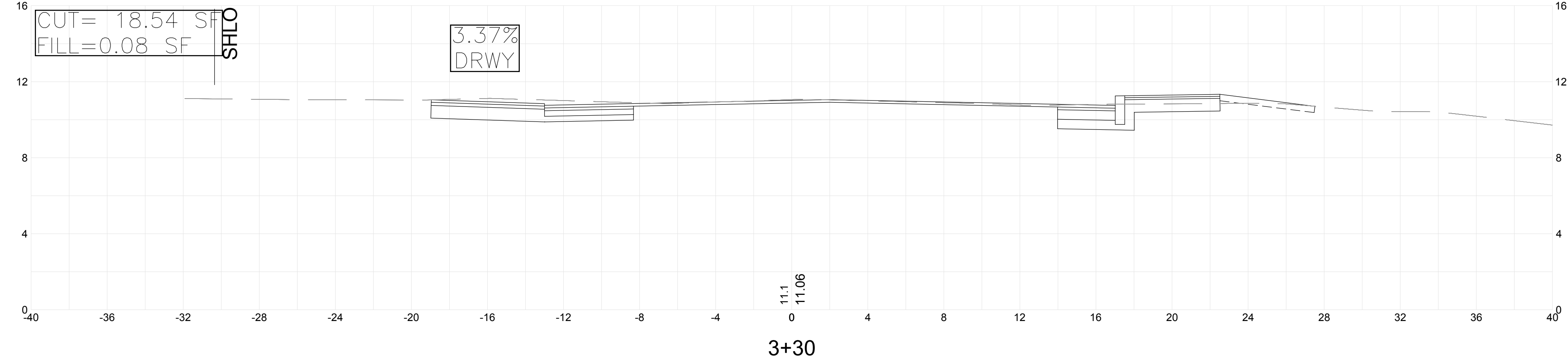
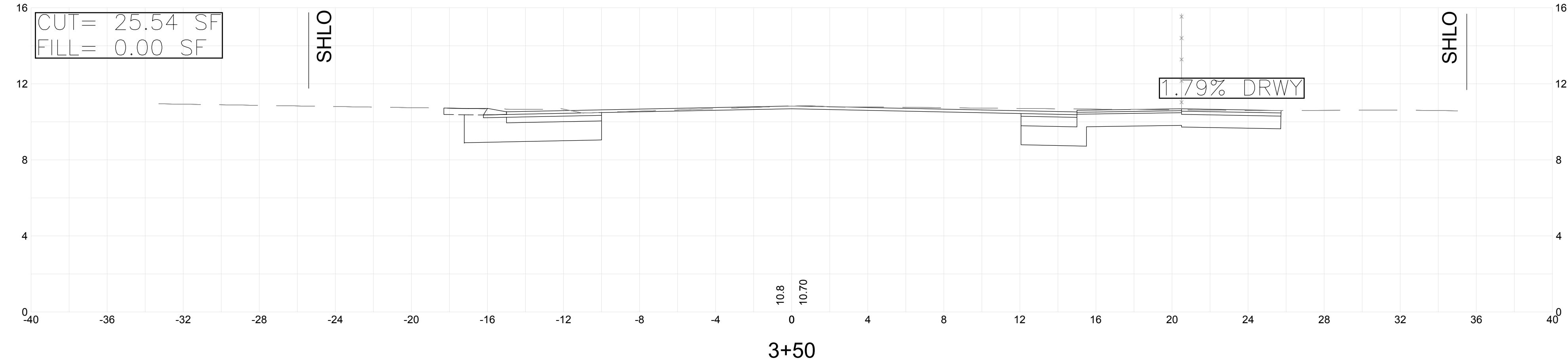
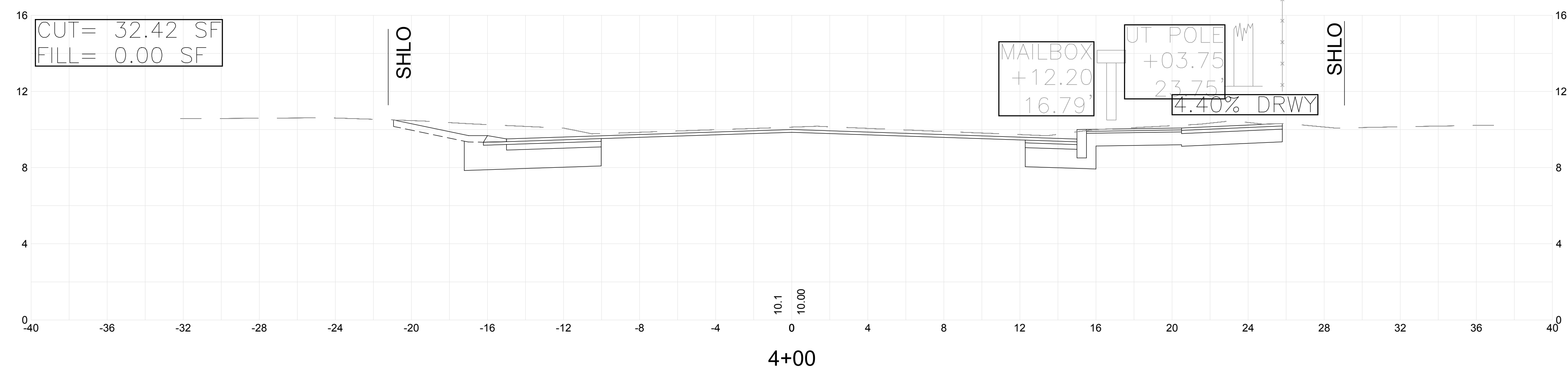
BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

CROSS SECTIONS #1

FOR PERMITTING ONLY
Sheet No.

CX-1

Drawing file: I:\Provincetown\115115-1502 Conwell Street Bicycle Improvements\ACAD\Sheet\Permit Application - 100% Submission Comments Revisions\08 Cross Sections.dwg Plot Date: Apr 03, 2018 7:14pm



Scale	1"=4'-0"	
Date	MARCH, 2018	
Job No.	115-1502	
Designed by	BLH	
Drawn by	BLH	
Checked by	JDF	
Approved by	JDF	
MARK	DATE	DESCRIPTION

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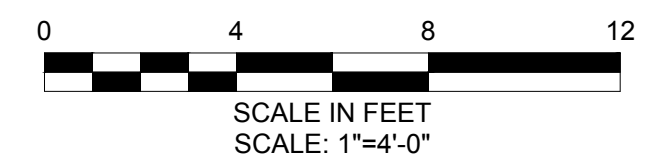
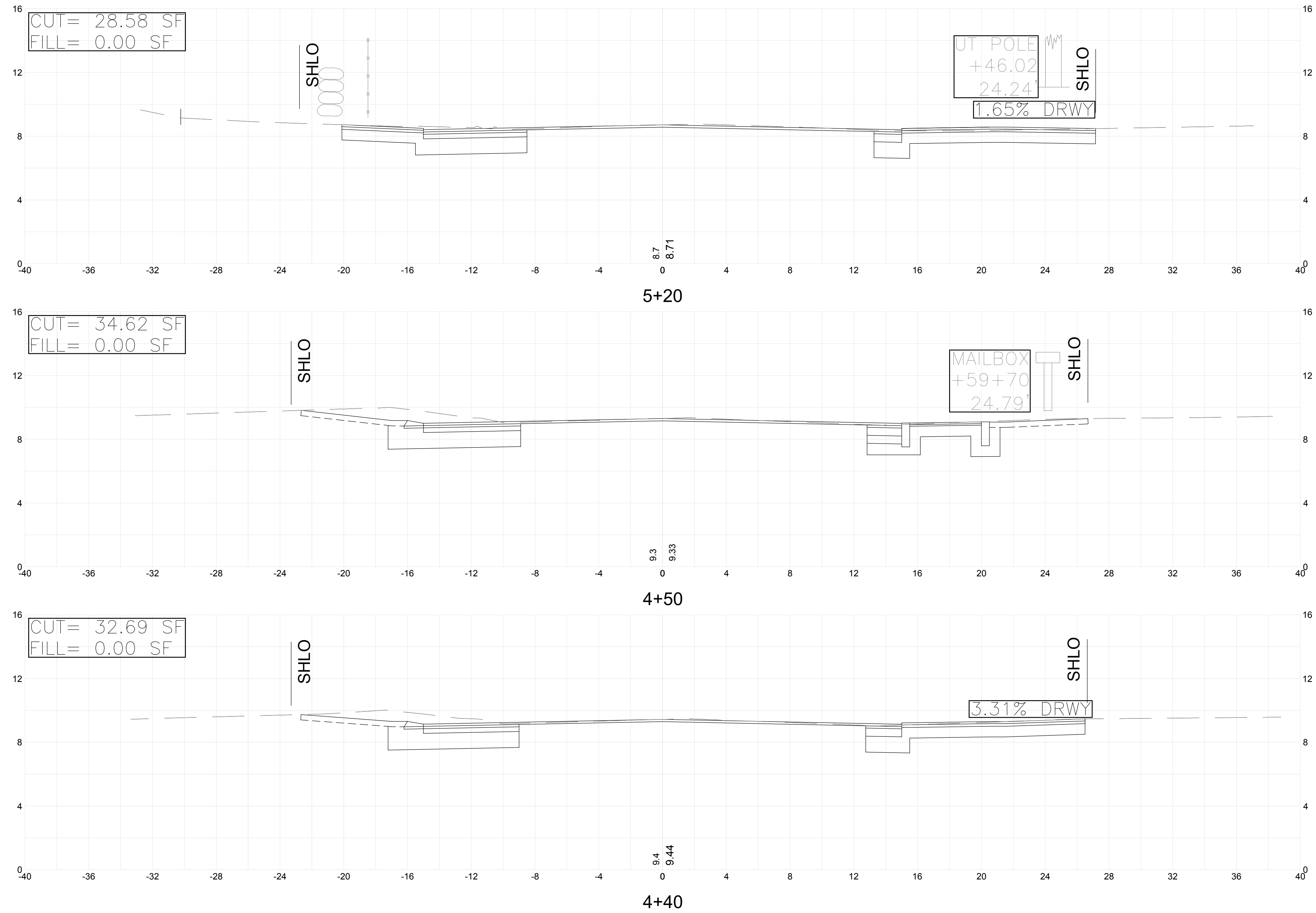
BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

CROSS SECTIONS #2

FOR PERMITTING ONLY
Sheet No.

CX-2

Drawing file: I:\Provincetown\115115-1502 Conwell Street Bicycle Improvements\ACAD\Sheet\Permit Application - 100% Submission Comments Revisions\08 Cross Sections.dwg Plot Date: Apr 03, 2018 7:15pm



Scale	1"=4'-0"	
Date	MARCH, 2018	
Job No.	115-1502	
Designed by	BLH	
Drawn by	BLH	
Checked by	JDF	
Approved by	JDF	
MARK	DATE	DESCRIPTION

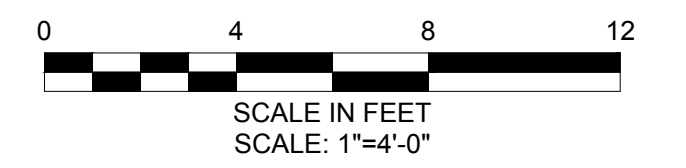
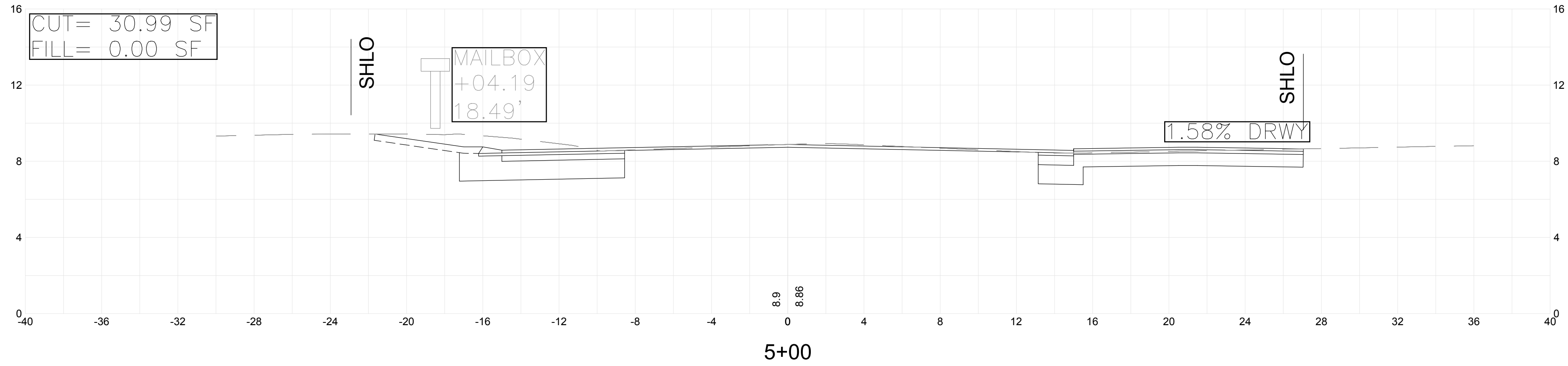
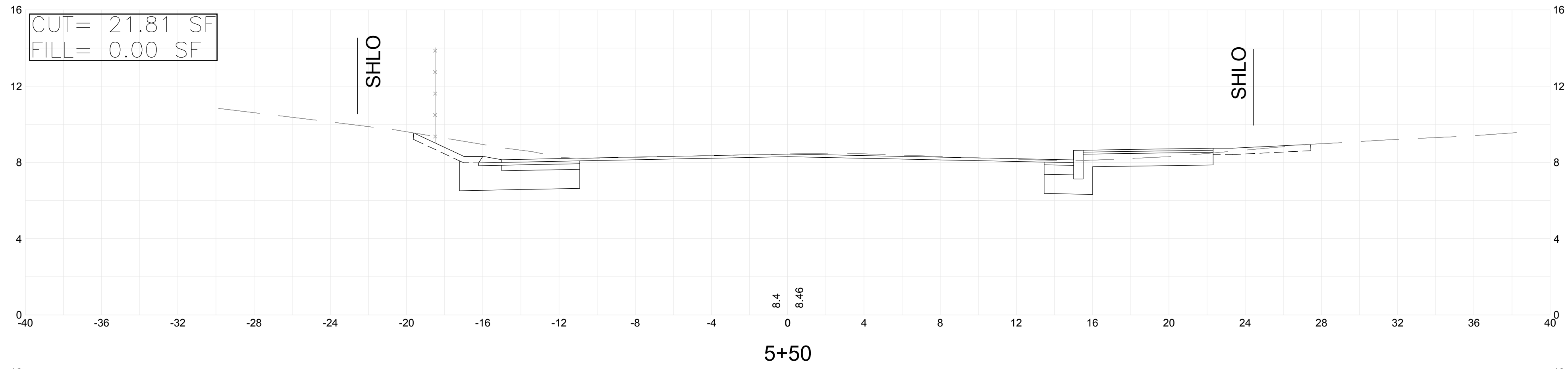
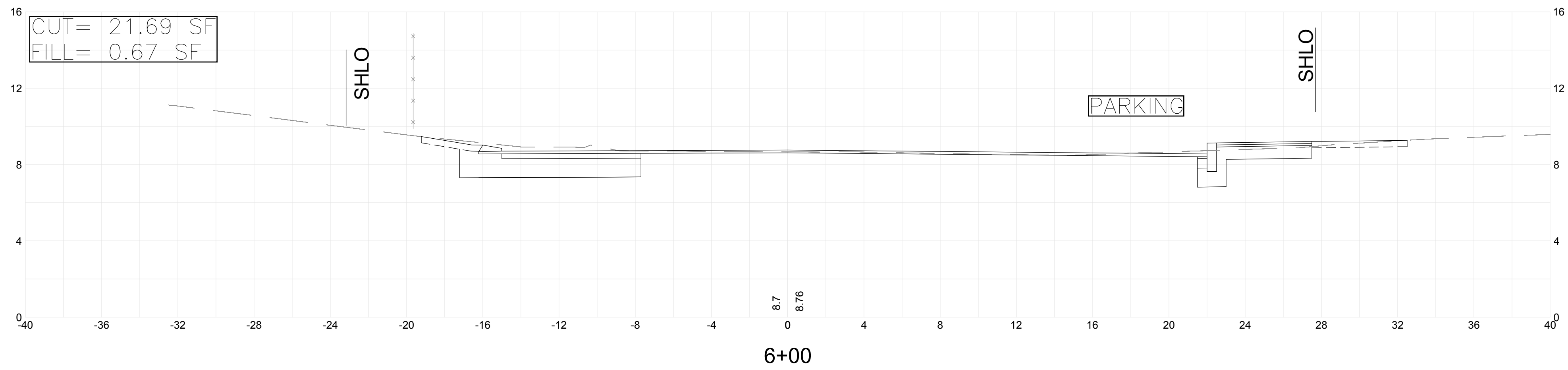
THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

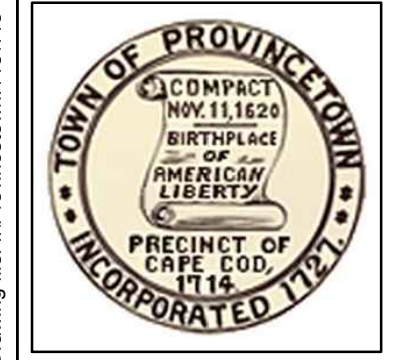
CROSS SECTIONS #3

FOR PERMITTING ONLY
Sheet No.

CX-3



Drawing file: I:\Provincetown\115115-1502 Conwell Street Bicycle Improvements\ACAD\Sheet\Permit Application - 100% Submission Comments Revisions\08 Cross Sections.dwg Plot Date: Apr 03 2018 7:15pm



Scale	1"=4'-0"	
Date	MARCH, 2018	
Job No.	115-1502	
Designed by	BLH	
Drawn by	BLH	
Checked by	JDF	
Approved by	JDF	
MARK	DATE	DESCRIPTION

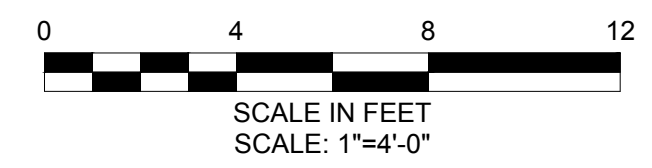
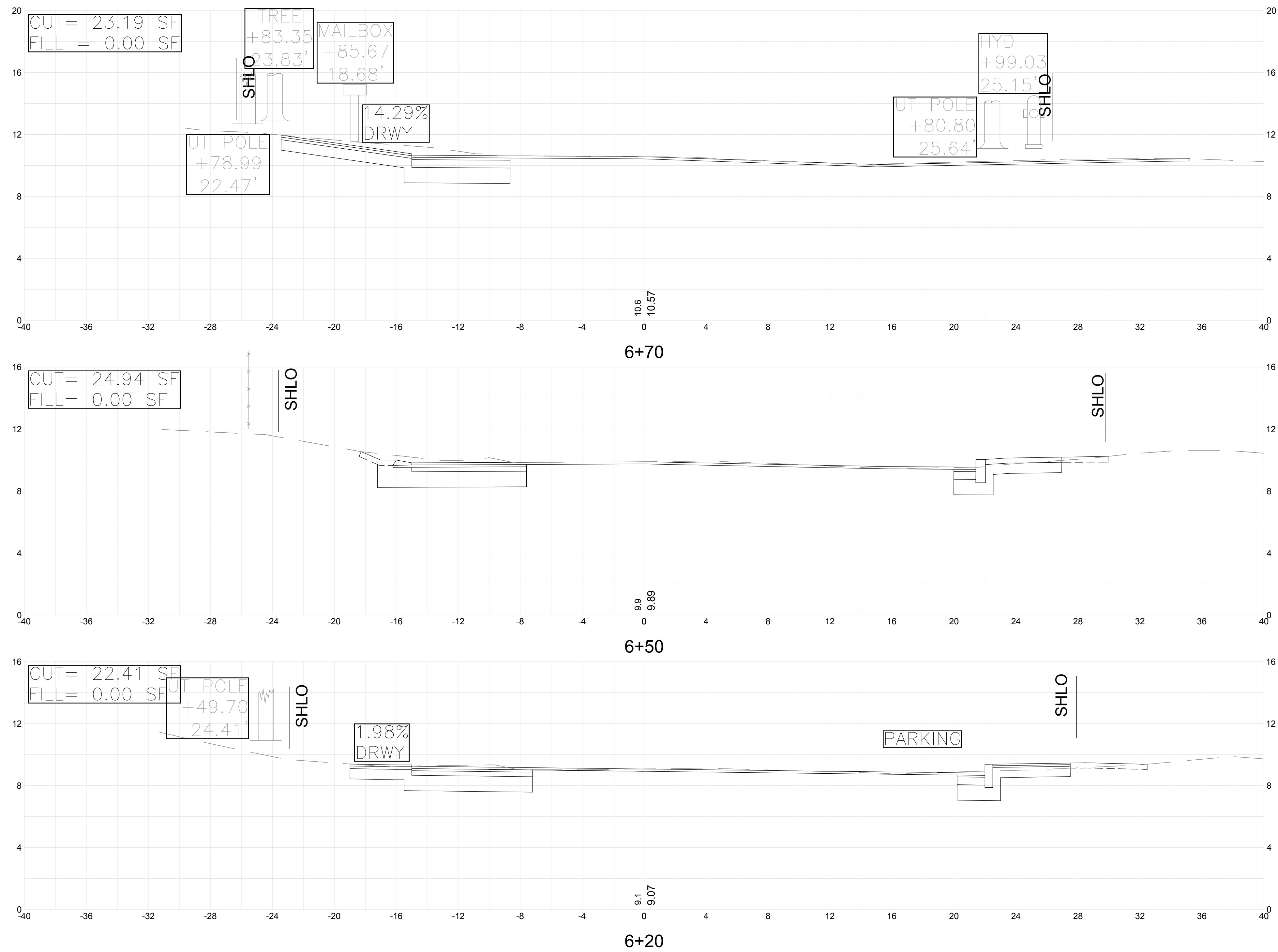
THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

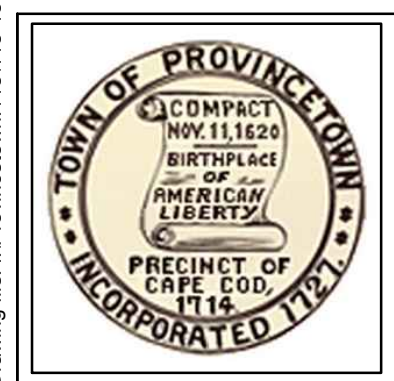
CROSS SECTIONS #4

FOR PERMITTING ONLY

Sheet No. **CX-4**



Drawing file: I:\Provincetown\115115-1502\Conwell Street Bicycle Improvements\ACAD\Sheet\Permit Application - 100% Submission Comments Revisions\08 Cross Sections.dwg Plot Date: Apr 03, 2018 7:16pm



MARK	DATE	DESCRIPTION

Scale	1"=4'-0"
Date	MARCH, 2018
Job No.	115-1502
Designed by	BLH
Drawn by	BLH
Checked by	JDF
Approved by	JDF

THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

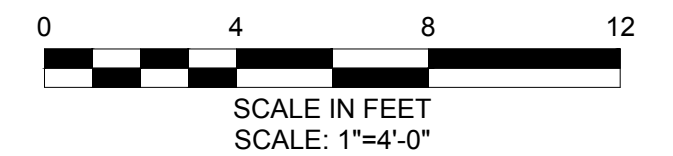
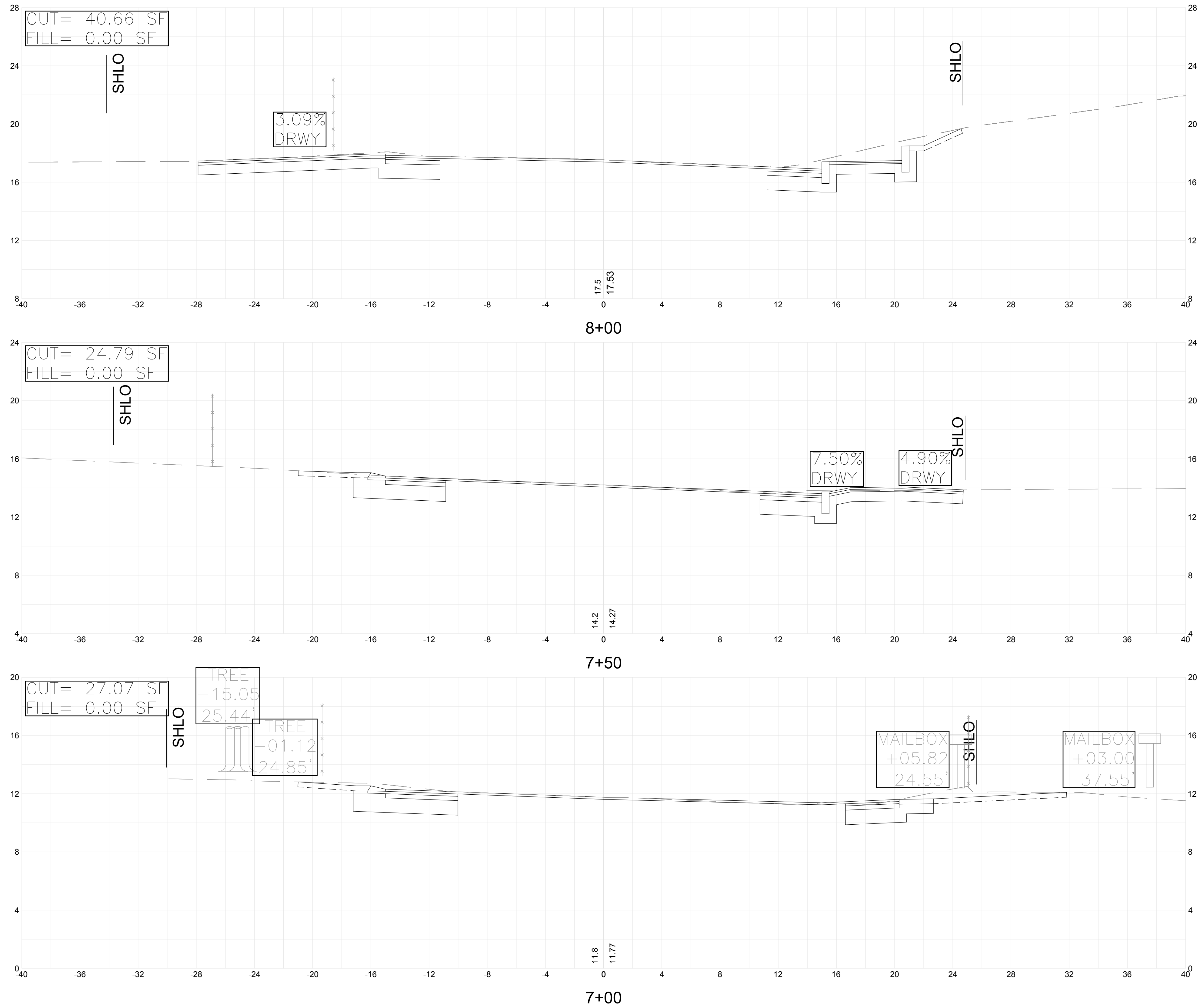
BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

CROSS SECTIONS #5

FOR PERMITTING ONLY

Sheet No. **CX-5**

Drawing file: I:\Provincetown\115115-1502\Conwell Street Bicycle Improvements\ACAD\Sheet\Permit Application - 100% Submission Comments Revisions\08 Cross Sections.dwg Plot Date: Apr 03, 2018 7:16pm



Scale	1"=4'-0"
Date	MARCH, 2018
Job No.	115-1502
Designed by	BLH
Drawn by	BLH
Checked by	JDF
Approved by	JDF

THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

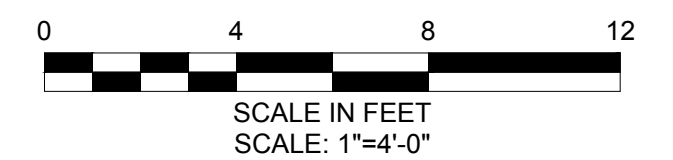
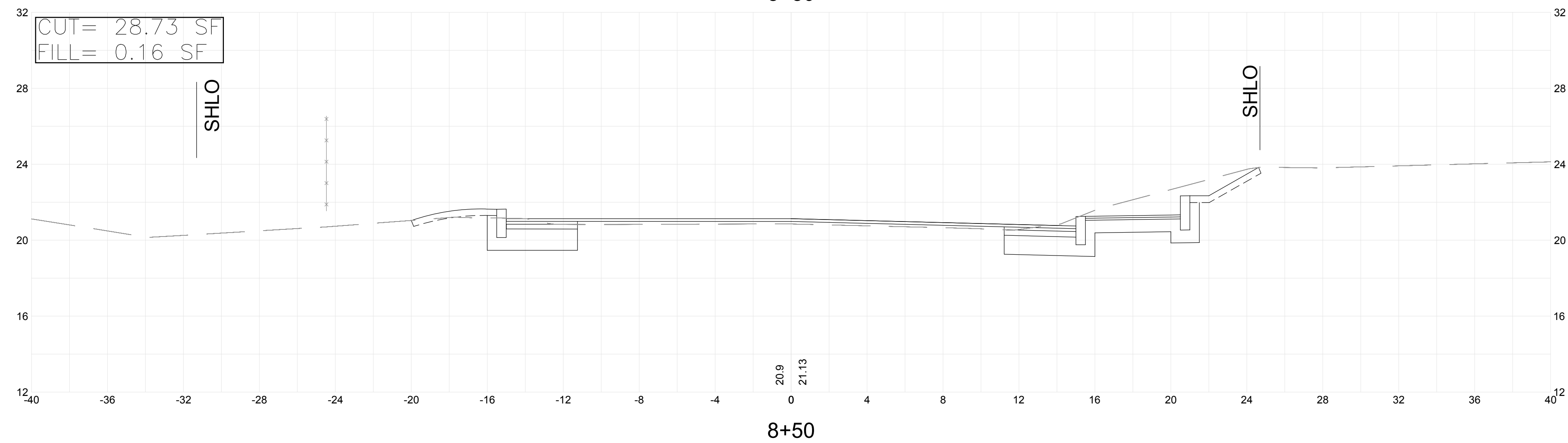
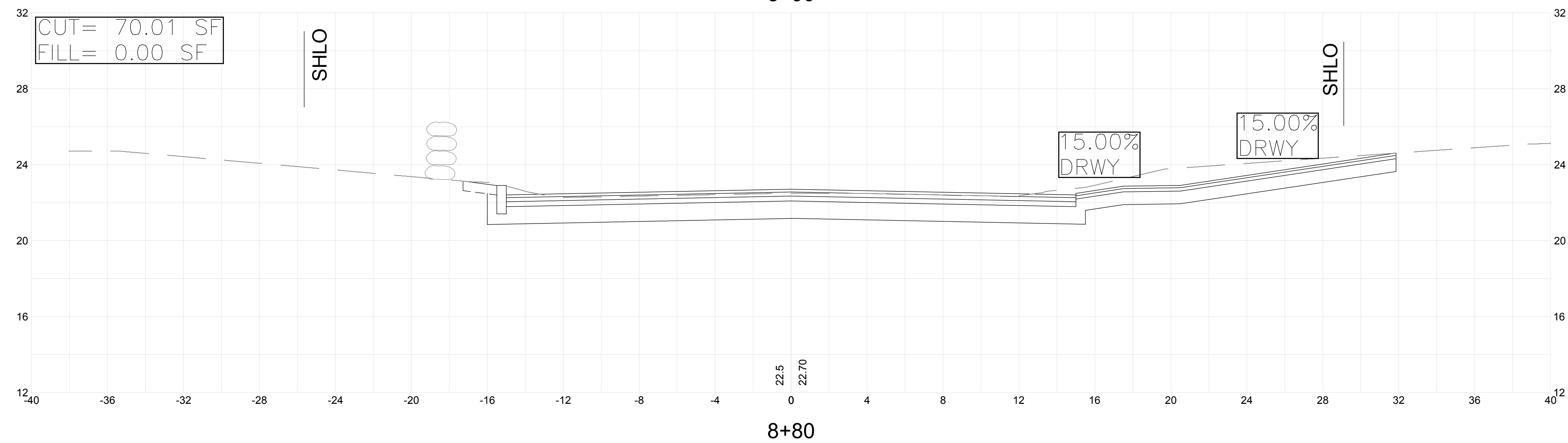
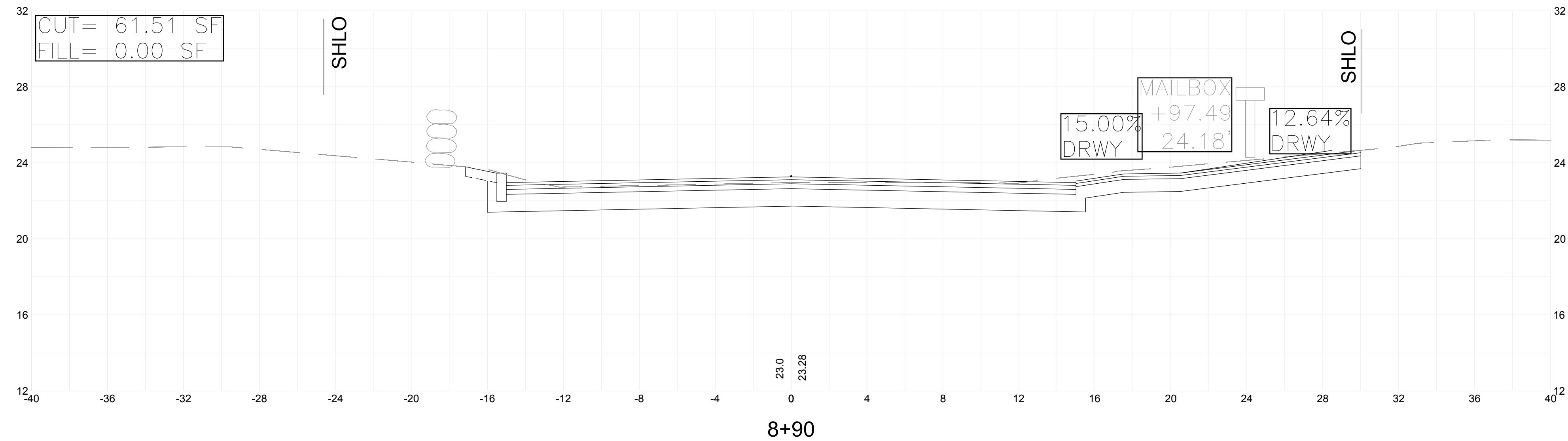
CROSS SECTIONS #6

FOR PERMITTING ONLY

Sheet No.

CX-6

Drawing file: I:\Provincetown\115115-1502\Conwell Street Bicycle Improvements\ACAD\Sheet\Permit Application - 100% Submission Comments Revisions\08 Cross Sections.dwg Plot Date: Apr 03, 2018 7:16pm



Scale	1"=4'-0"	
Date	MARCH, 2018	
Job No.	115-1502	
Designed by	BLH	
Drawn by	BLH	
Checked by	JDF	
Approved by	JDF	
MARK	DATE	DESCRIPTION

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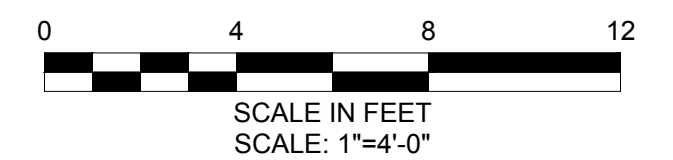
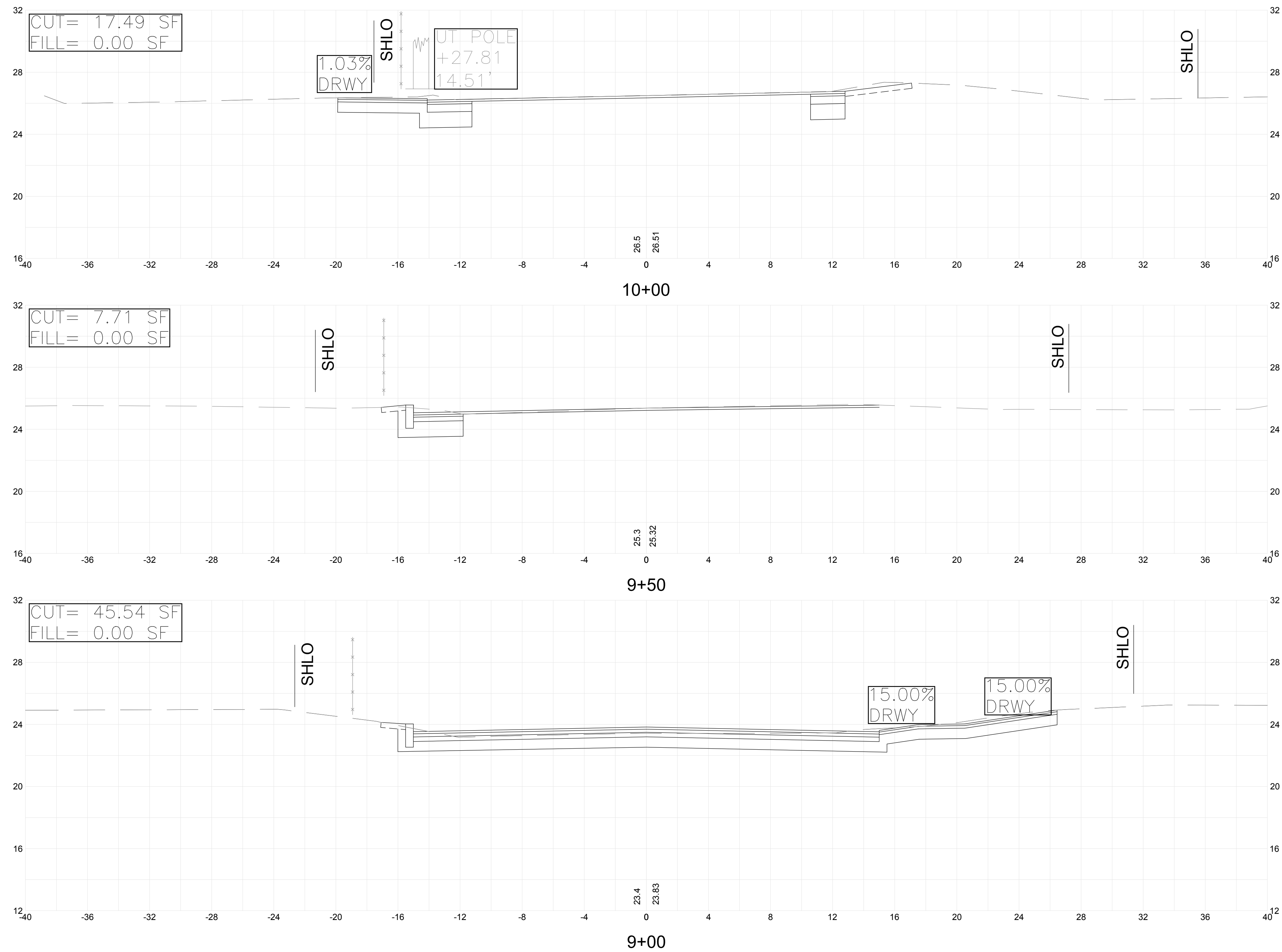
BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

CROSS SECTIONS #7

FOR PERMITTING ONLY
Sheet No.

CX-7

Drawing file: I:\Provincetown\115115-1502\Conwell Street Bicycle Improvements\ACAD\Sheet\Permit Application - 100% Submission Comments Revisions\08 Cross Sections.dwg Plot Date: Apr 03, 2018 7:16pm



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Scale	1"=4'-0"	
Date	MARCH, 2018	
Job No.	115-1502	
Designed by	BLH	
Drawn by	BLH	
Checked by	JDF	
Approved by	JDF	
MARK	DATE	DESCRIPTION

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BICYCLE AND PEDESTRIAN ACCOMMODATION IMPROVEMENTS ALONG CONWELL STREET PROVINCETOWN, MASSACHUSETTS

CROSS SECTIONS #8

FOR PERMITTING ONLY

Sheet No.

CX-8