

# "SAFE ROUTES TO SCHOOL"

## PROJECT #15991 FEDERAL PROJECT #X-A001(065)

### GRANITE STREET SIDEWALK CONSTRUCTION

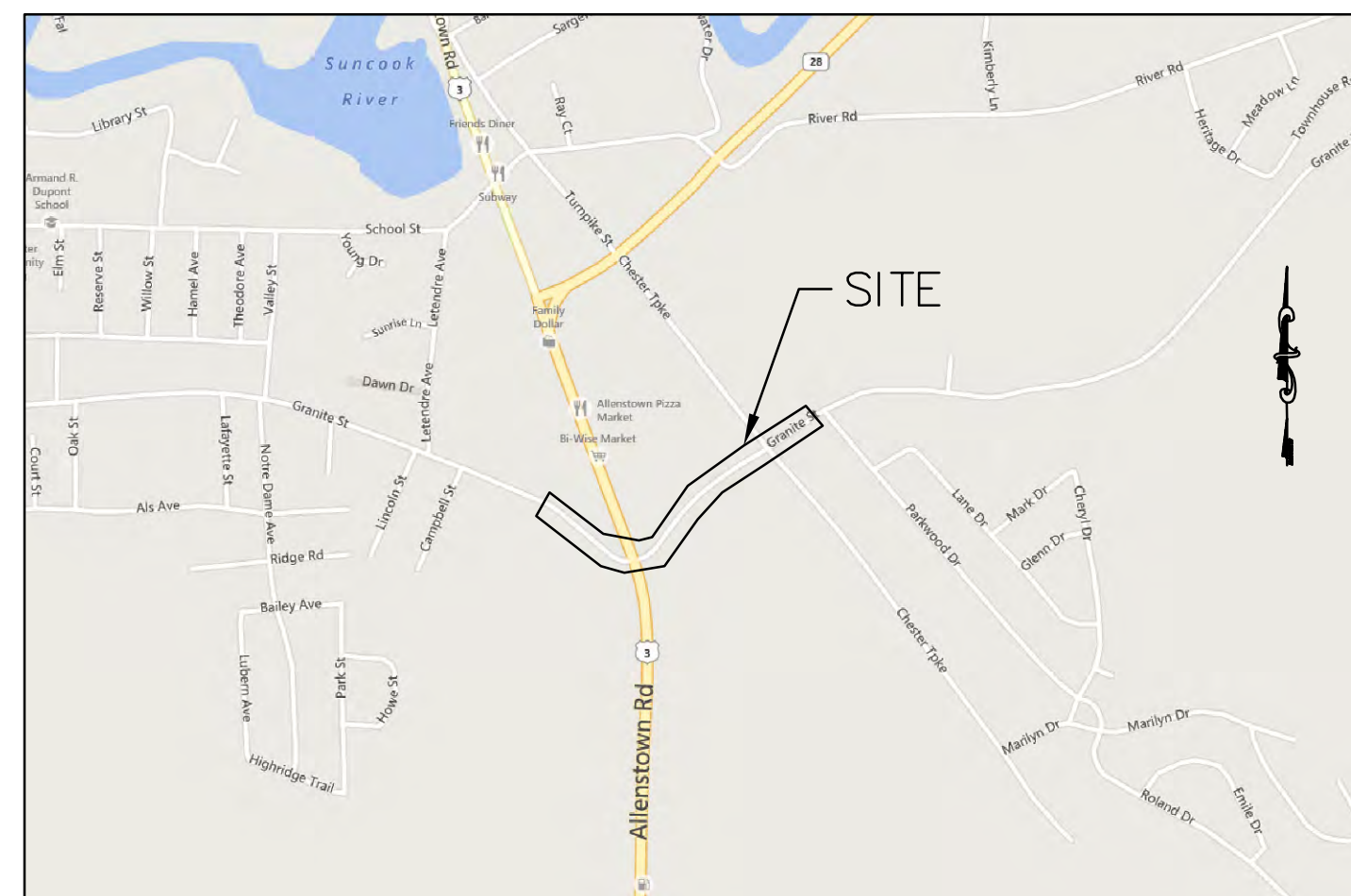
### FROM RITE AID TO PARKWOOD DRIVE

### Allenstown, New Hampshire, Merrimack County

OCTOBER 7, 2014

REVISED: DECEMBER 1, 2014

REVISED: JANUARY 26, 2015



Locus Map - Not To Scale

Client: Town of Allenstown  
16 School Street  
Allenstown, NH 03275

Civil Engineer: Haight Engineering, PLLC  
181 Watson Road  
P.O. Box 1166  
Dover, NH 03820

Surveyor: David Vincent Land Surveying Services  
181 Watson Road  
Dover, NH 03820

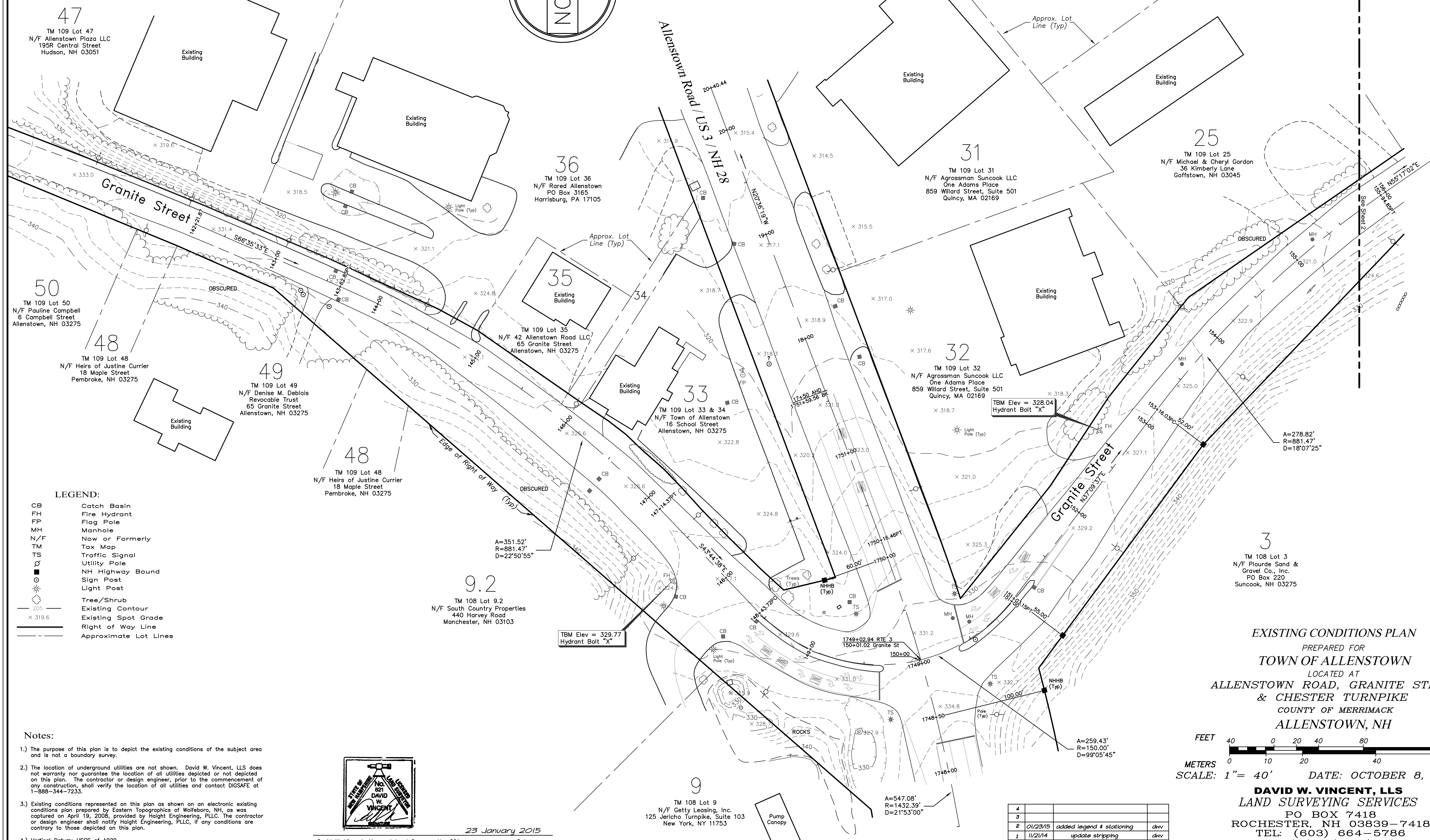
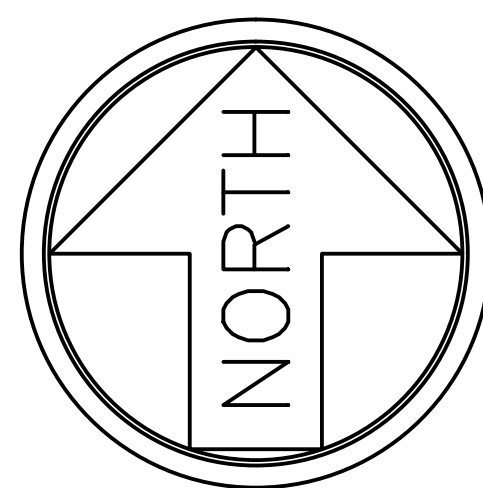
#### INDEX

Existing Conditions  
Demolition Plan A, B & C  
Overall Site Plan  
Site Plan A, B & C  
Layout Plan A, B & C  
Intersection Plan  
Detail Sheet  
NHDOT Record: Signalization and Lighting Plan  
Cross Sections Along Granite Street

#### SHEET NO.

1, 2  
3, 4 & 5  
6  
7, 8 & 9  
10, 11 & 12  
13  
14,15  
16  
XS-1 & XS-2



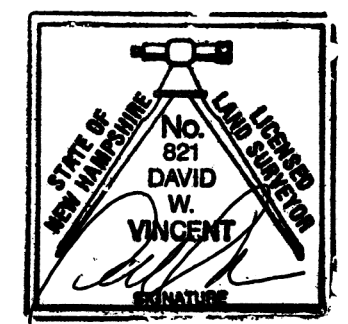


LEGEND:

- CB Catch Basin
- FH Fire Hydrant
- FP Flag Pole
- MH Manhole
- N/F Now or Formerly
- TM Tax Map
- TS Traffic Signal
- Utility Pole
- NH Highway Bound
- Sign Post
- Light Post
- Tree/Shrub
- Existing Contour
- Existing Spot Grade
- Right of Way Line
- Approximate Lot Lines

Notes:

- The purpose of this plan is to depict the existing conditions of the subject area and is not a boundary survey.
- The location of underground utilities are not shown. David W. Vincent, LLS does not warrant the location of all utilities depicted or not depicted on this plan. The contractor or design engineer, prior to the commencement of any construction, shall verify the location of all utilities and contact DIGSAFE at 1-888-344-7233.
- Existing conditions represented on this plan as shown on an electronic existing conditions plan prepared by Eastern Topographics of Wolfeboro, NH, as was captured on April 19, 2008, provided by Hight Engineering, PLLC. The contractor or design engineer shall notify Hight Engineering, PLLC, if any conditions are contrary to those depicted on this plan.
- Vertical Datum: USGS of 1929.



David W. Vincent, Licensed Land Surveyor No. 821 Date 23 January 2015

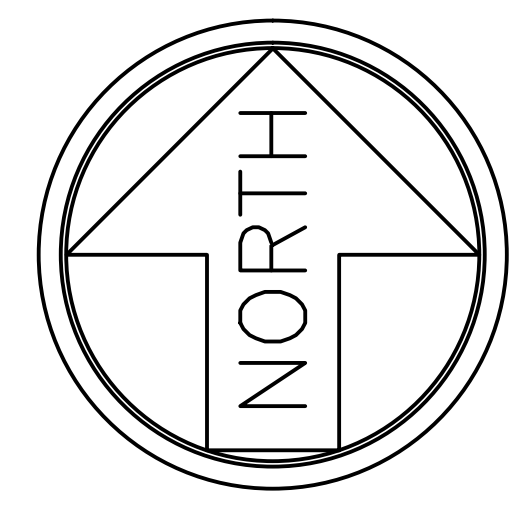
NO.	DATE	DESCRIPTION	BY
4			
3			
2	01/23/15	added legend & stationing	dwv
1	11/21/14	update striping	dwv

EXISTING CONDITIONS PLAN  
PREPARED FOR  
TOWN OF ALLENSTOWN  
LOCATED AT  
ALLENSTOWN ROAD, GRANITE STREET  
& CHESTER TURNPIKE  
COUNTY OF MERRIMACK  
ALLENSTOWN, NH

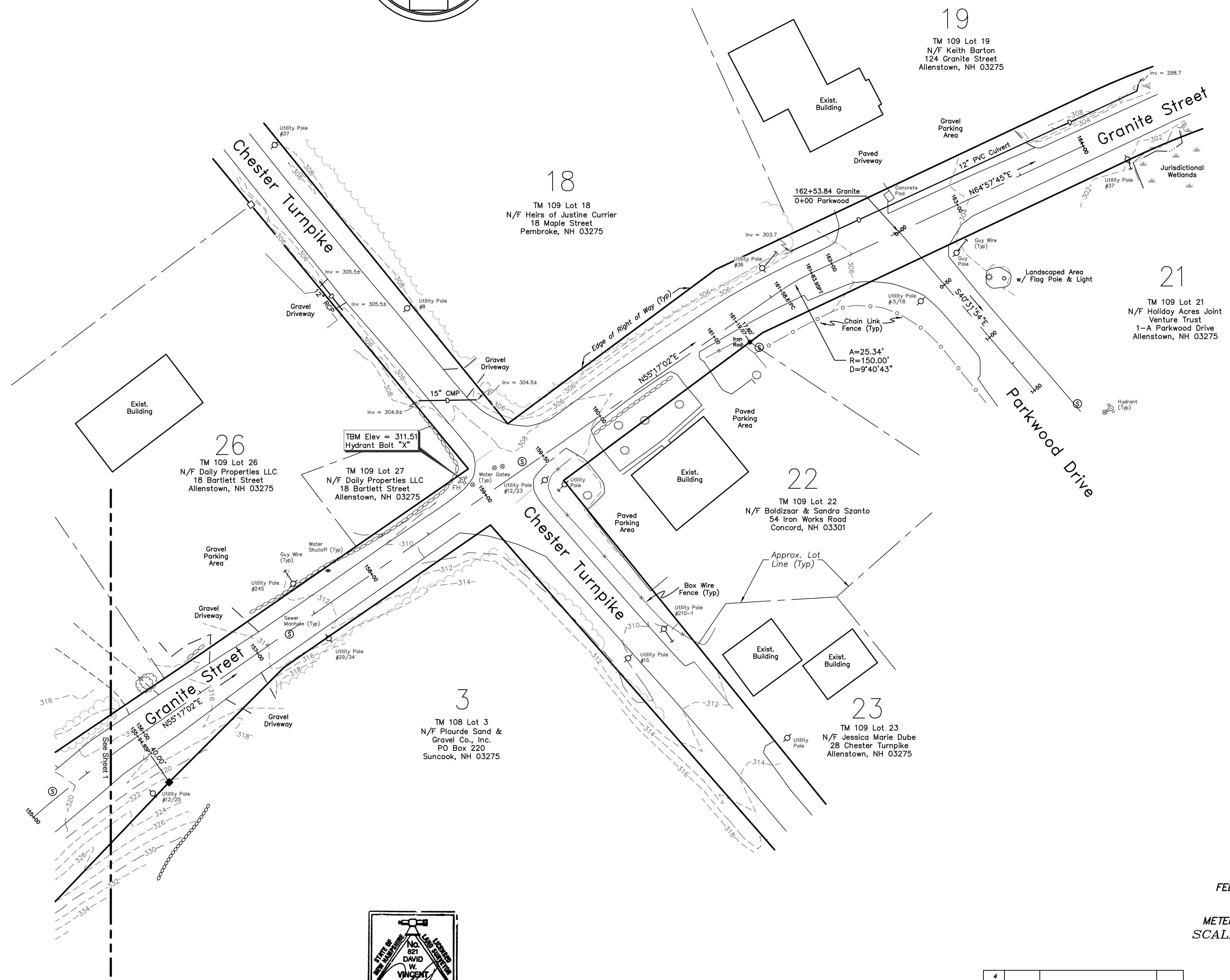
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METERS 0 10 20 40 60  
SCALE: 1" = 40' DATE: OCTOBER 8, 2014

DAVID W. VINCENT, LLS  
LAND SURVEYING SERVICES  
PO BOX 7418  
ROCHESTER, NH 03839-7418  
TEL: (603) 664-5786  
www.landsurveying-service.net

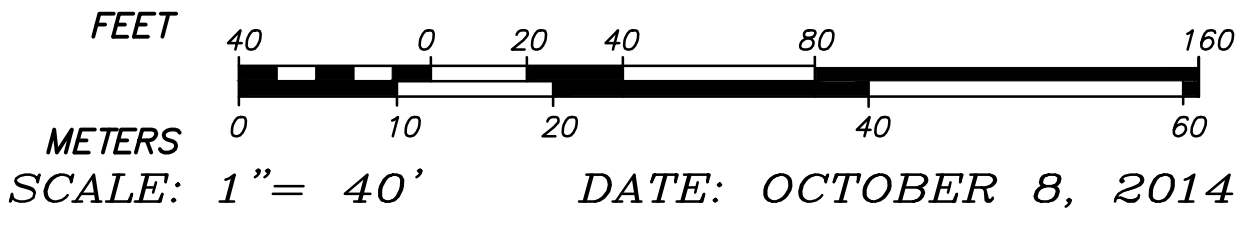
- LEGEND:
- CB Catch Basin
  - FH Fire Hydrant
  - FP Flag Pole
  - MH Manhole
  - N/F Now or Formerly
  - TM Tax Map
  - TS Traffic Signal
  - ⌀ Utility Pole
  - NH Highway Bound
  - ⊙ Sewer Manhole
  - ⊗ Water Gate
  - Tree/Shrub
  - Existing Contour
  - Existing Spot Grade
  - Right of Way Line
  - Approximate Lot Lines



- Notes:
- 1.) The purpose of this plan is to depict the existing conditions of the subject area and is not a boundary survey.
  - 2.) The location of underground utilities are not shown. David W. Vincent, LLS does not warranty nor guarantee the location of all utilities depicted or not depicted on this plan. The contractor or design engineer, prior to the commencement of any construction, shall verify the location of all utilities and contact DIGSAFE at 1-888-344-7233 OR DIAL 811.
  - 3.) Existing conditions represented on this plan as shown on an electronic existing conditions plan prepared by Eastern Topographics of Wolfeboro, NH, as was captured on April 19, 2008, provided by Haight Engineering, PLLC. The existing conditions shown between the southwest corner of Lot 26 and the entrance to Parkwood Drive was field located between April 10, 2014 and June 12, 2014. The contractor or design engineer shall notify Haight Engineering, PLLC, if any conditions are contrary to those depicted on this plan.
  - 4.) Vertical Datum: USGS of 1929.

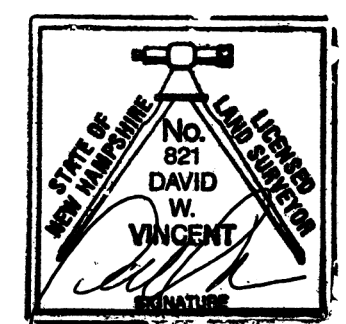


EXISTING CONDITIONS PLAN  
PREPARED FOR  
TOWN OF ALLENSTOWN  
LOCATED AT  
ALLENSTOWN ROAD, GRANITE STREET  
& CHESTER TURNPIKE  
COUNTY OF MERRIMACK  
ALLENSTOWN, NH



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4			
3			
2	01/23/15	added legend & stationing	divv
1	11/21/14	update stripping	divv
NO.	DATE	DESCRIPTION	BY

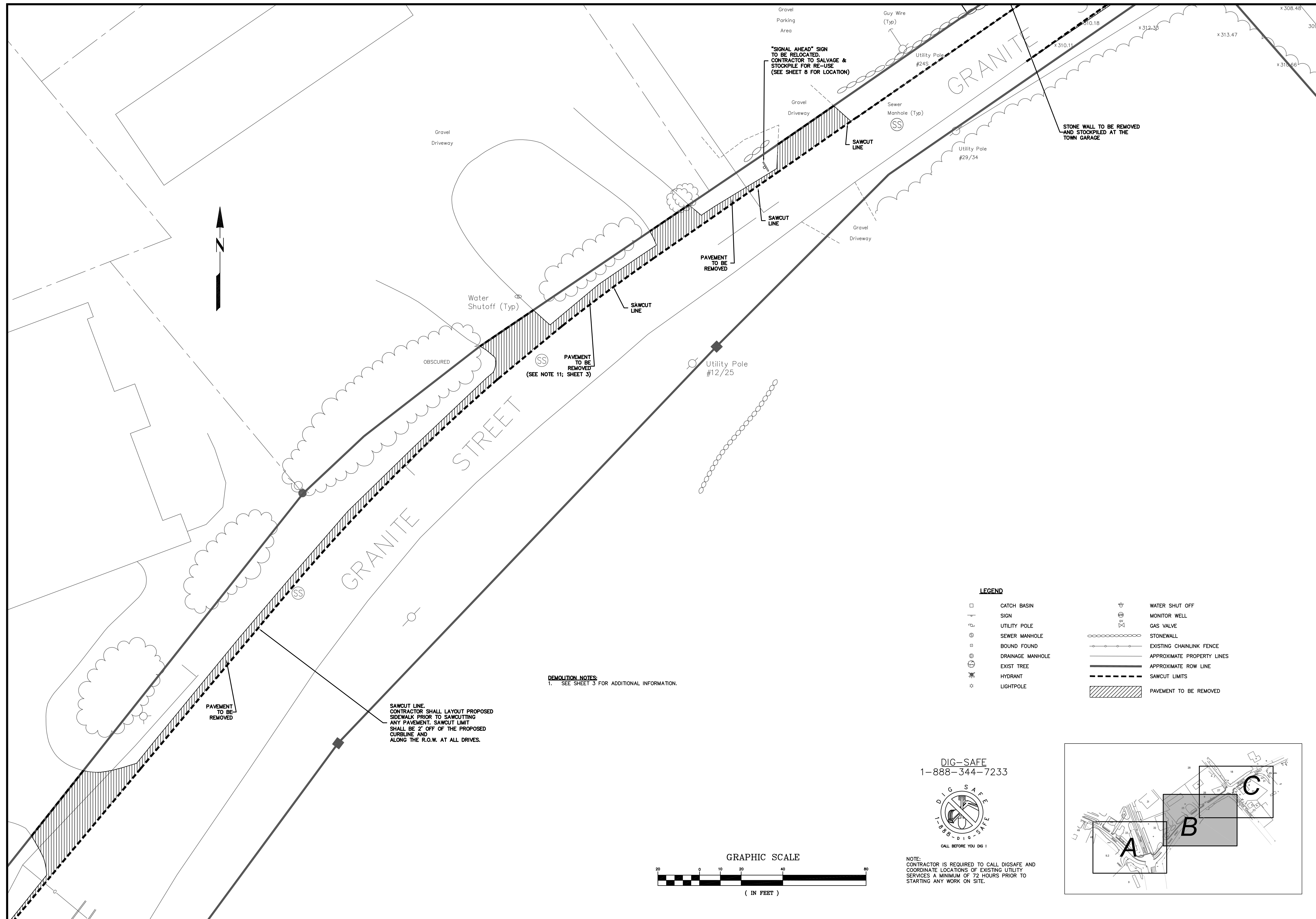


23 January 2015  
David W. Vincent, Licensed Land Surveyor No. 821 Date



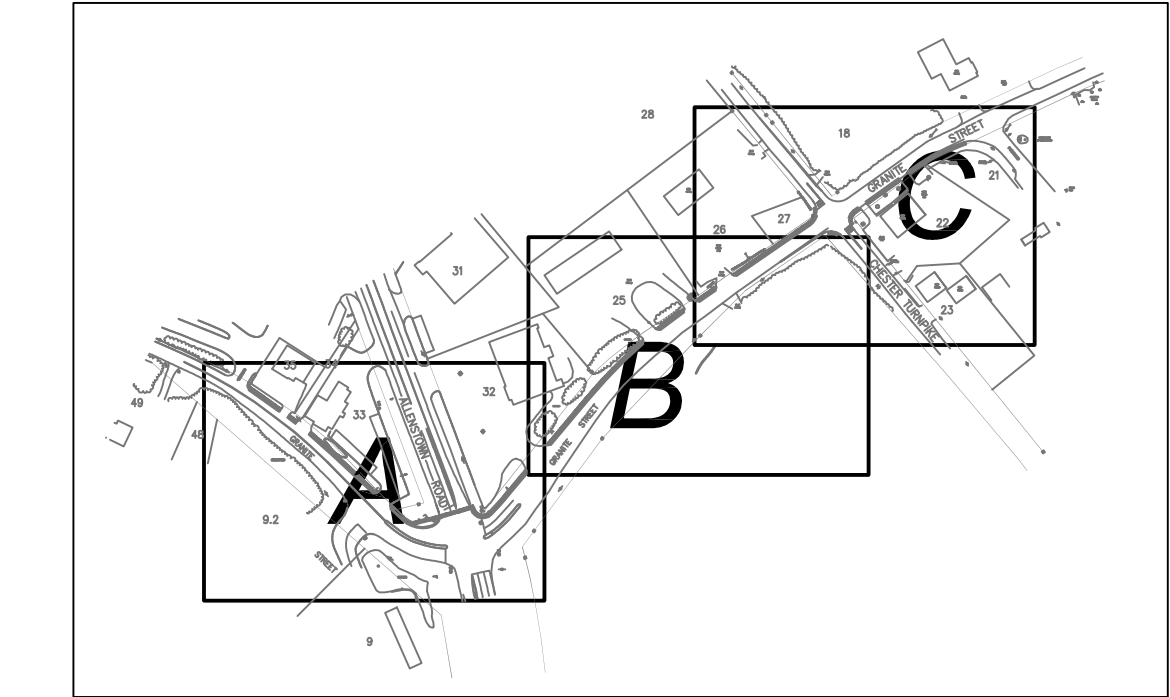




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**KEY PLAN**  
NOT TO SCALE

1. APPROXIMATE PROPERTY LINES FROM TOWN OF ALLENSTOWN TAX MAP NO. 108 & 109 AND FIELD SURVEY. ALL TAX MAP INFORMATION PROVIDED BY THE TOWN OF ALLENSTOWN.
2. THE APPROXIMATE PROPERTY LINES ARE SHOWN FOR REFERENCE ONLY AND DO NOT REPRESENT ACTUAL PROPERTY BOUNDARIES.
3. THE PURPOSE OF THIS PLAN IS TO SHOW THE INSTALLATION OF SIDEWALKS AND CROSSWALKS ALONG GRANITE STREET, FROM THE ENTRANCE OF RITE-AID PLAZA, ACROSS ALLENSTOWN ROAD / US 3 / NH 28 AND EASTERLY TO PARKWOOD DRIVE.
4. THIS SIDEWALK PROGRAM IS BEING DESIGNED FOR AND WILL BE IMPLEMENTED BY THE TOWN OF ALLENSTOWN AS PART OF THEIR "SAFE ROUTES TO SCHOOL" SIDEWALK PROGRAM.
5. A PORTION OF THE PROPOSED SIDEWALK IS TO BE CONSTRUCTED WITHIN THE STATE R.O.W. FOR ALLENSTOWN ROAD / US 3 / NH 28. THE CONTRACTOR SHALL COORDINATE ALL WORK WITHIN THE R.O.W. WITH THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.
6. CROSSWALK SIGNALS SHALL BE INTEGRATED INTO THE EXISTING TRAFFIC SIGNAL AT ALLENSTOWN ROAD / US 3 / NH 28 AND GRANITE STREET INTERSECTION. CONTRACTOR SHALL COORDINATE WITH NHDOT TRAFFIC ENGINEER, PETER CROUCH, (603) 271-2291.
7. EXISTING SIDEWALKS AND CROSSWALKS SHALL REMAIN IN PLACE AND/OR SHALL BE RELOCATED AS WARRANTED WITH THE NEW SIDEWALK LAYOUT. ALL SIGNAGE AND PAVEMENT MARKINGS ARE SUBJECT TO REVIEW AND REVISION BY NHDOT TRAFFIC BUREAU.
8. SIDEWALKS AND CROSSWALKS SHALL BE CONSTRUCTED WITH A 7" REVEAL FACING WITH BITUMINOUS CONCRETE WALKS, EXCEPT AT LOCATIONS WHERE TACTILE PAD WARNINGS ARE USED AND IN THESE CASES THE LANDING PAD SHALL BE NHDOT STANDARD PORTLAND CEMENT CONCRETE AS DETAILED UNLESS OTHERWISE NOTED.
9. CENTERLINES SHALL BE YELLOW TRAFFIC PAINT MEETING THE REQUIREMENTS OF ASHTO M28-TYPE F, UNLESS OTHERWISE NOTED. STOP BARS, CROSSWALKS, ARROWS, AND LEGENDS SHALL BE WHITE THERMOPLASTIC. EDGE LINES SHALL BE WHITE TRAFFIC PAINT AND SHALL MEET THE REQUIREMENTS OF ASHTO M107-TYPE F, UNLESS OTHERWISE NOTED.
10. STATIONING FOR LAYOUT PURPOSES SHALL BE ESTABLISHED BY A NH LICENSED SURVEYOR. (SEE SHEETS 10.11, AND 12 FOR STATIONING).
11. ALL PAVEMENT MARKINGS AND SIGNS TO CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", LATEST EDITIONS AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS.
12. SEE DETAILS FOR SIGNS AND SIGN POST (SHEET 15).
13. STOP BARS SHALL BE 18" WIDE SOLID WHITE LAMINATED.
14. CONTRACTOR SHALL CONTACT DIO-SAFE A MINIMUM OF 72 HOURS PRIOR TO THE START OF ANY WORK. (1-888-344-7233)

DIG-SAFE  
1-888-344-7233


















NOTE:  
CONTRACTOR IS REQUIRED TO CALL DIGSAFE AND  
COORDINATE LOCATIONS OF EXISTING UTILITY  
SERVICES A MINIMUM OF 72 HOURS PRIOR TO  
STARTING ANY WORK ON SITE.

GRAPHIC SCALE





( IN FEET )

**LEGEND**

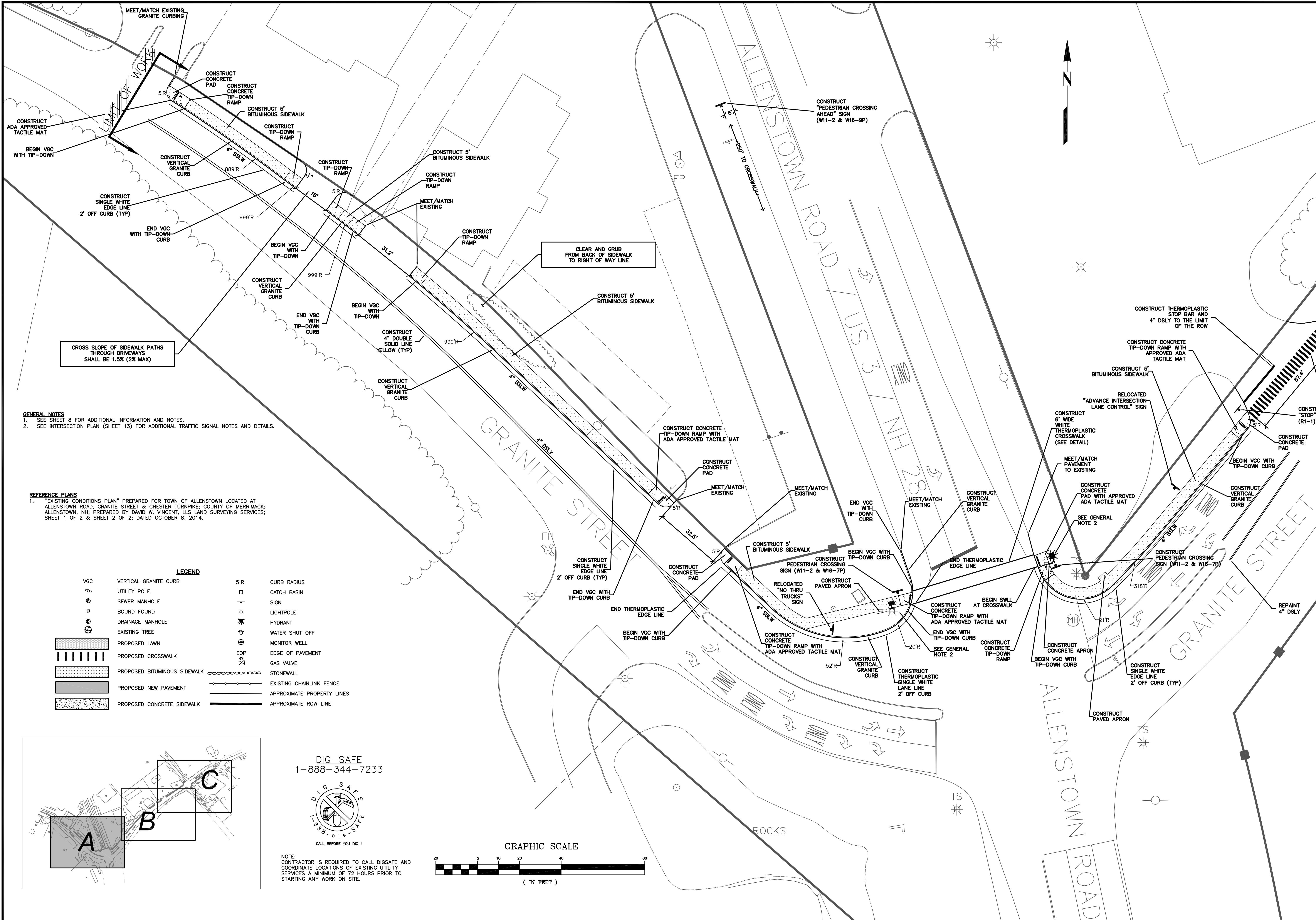
- |   |                  |   |                            |
|---|------------------|---|----------------------------|
|  | CATCH BASIN      |  | WATER SHUT OFF             |
|  | SIGN             |  | MONITOR WELL               |
|  | UTILITY POLE     |  | GAS VALVE                  |
|  | SEWER MANHOLE    |  | STONEWALL                  |
|  | BOUND FOUND      |  | EXISTING CHAINLINK FENCE   |
|  | DRAINAGE MANHOLE |  | APPROXIMATE PROPERTY LINES |
|  | EXISTING TREE    |   |                            |
|  | HYDRANT          |   |                            |
|  | LIGHTPOLE        |   |                            |

**REFERENCE PLANS**

1. "EXISTING CONDITIONS PLAN" PREPARED FOR TOWN OF ALLENSTOWN LOCATED AT ALLENSTOWN ROAD, GRANITE STREET & CHESTER TURNPIKE; COUNTY OF MERRIMACK; ALLENSTOWN, NH; PREPARED BY DAVID W. VINCENT, LLS LAND SURVEYING SERVICES; SHEET 1 OF 2 & SHEET 2 OF 2; DATED OCTOBER 8, 2014.

OVERALL SITE PLAN		<div><div>6</div><div>SRTS PROJECT #15891 FEDERAL PROJECT #X-4001(065) GRANITE STREET SIDEWALK CONSTRUCTION FROM ALLENSTOWN, NH 03275 ALLENSTOWN, NH 03275 MERRIMACK COUNTY</div></div>		<div><div></div><div>TOWN OF ALLENSTOWN 16 SCHOOL STREET ALLENSTOWN, NH 03275</div></div>		<div><div></div><div>HAUGHT ENGINEERING, PLLC CIVIL ENGINEERS P.O. BOX 1166, 181 WATSON ROAD DOVER, NEW HAMPSHIRE 603.760-4266. FAX 603.749.7348</div></div>	
DATE: 10-7-14							
SCALE: 1"=60'							
DRAWN BY: SRD							
DESIGN BY: SRD							
APPROVED BY: SJH	2					KMT 1/26/2015	
PROJECT NO: 0928	1					KMT 12/1/2014	
FILE: SITE.DWG	NO.					APPD	
	REVISION					DATE	

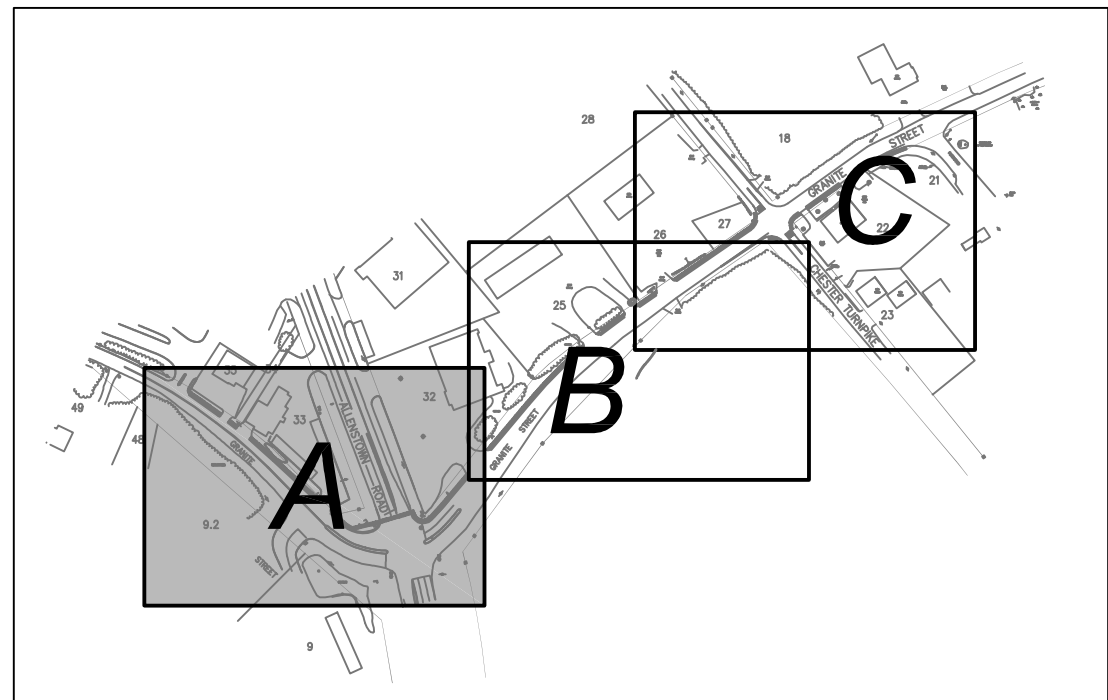




**GENERAL NOTES**  
1. SEE SHEET 8 FOR ADDITIONAL INFORMATION AND NOTES.  
2. SEE INTERSECTION PLAN (SHEET 13) FOR ADDITIONAL TRAFFIC SIGNAL NOTES AND DETAILS.

**REFERENCE PLANS**  
1. "EXISTING CONDITIONS PLAN" PREPARED FOR TOWN OF ALLENTOWN LOCATED AT ALLENTOWN ROAD, GRANITE STREET & CHESTER TURNPIKE, COUNTY OF MERRIMACK, ALLENTOWN, NH, PREPARED BY DAVID W. VINCENT, LLS (LAND SURVEYING SERVICES); SHEET 1 OF 2 & SHEET 2 OF 2; DATED OCTOBER 8, 2014.

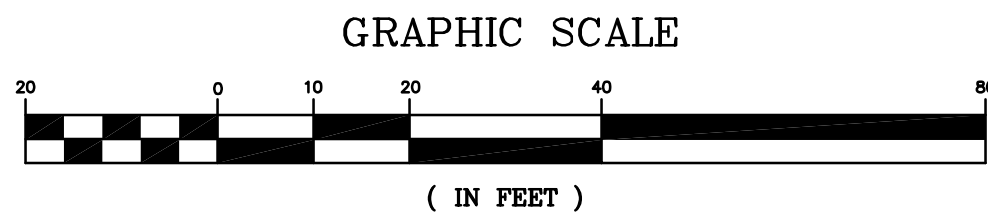
LEGEND			
VGC	VERTICAL GRANITE CURB	5'R	CURB RADIUS
	UTILITY POLE		CATCH BASIN
	SEWER MANHOLE		SIGN
	BOUND FOUND		LIGHTPOLE
	DRAINAGE MANHOLE		HYDRANT
	EXISTING TREE		WATER SHUT OFF
	PROPOSED LAWN		MONITOR WELL
	PROPOSED CROSSWALK		EDGE OF PAVEMENT
	PROPOSED BITUMINOUS SIDEWALK		GAS VALVE
	PROPOSED NEW PAVEMENT		STONEWALL
	PROPOSED CONCRETE SIDEWALK		EXISTING CHAINLINK FENCE
			APPROXIMATE PROPERTY LINE
			APPROXIMATE ROW LINE



DIG-SAFE  
1-888-344-7233

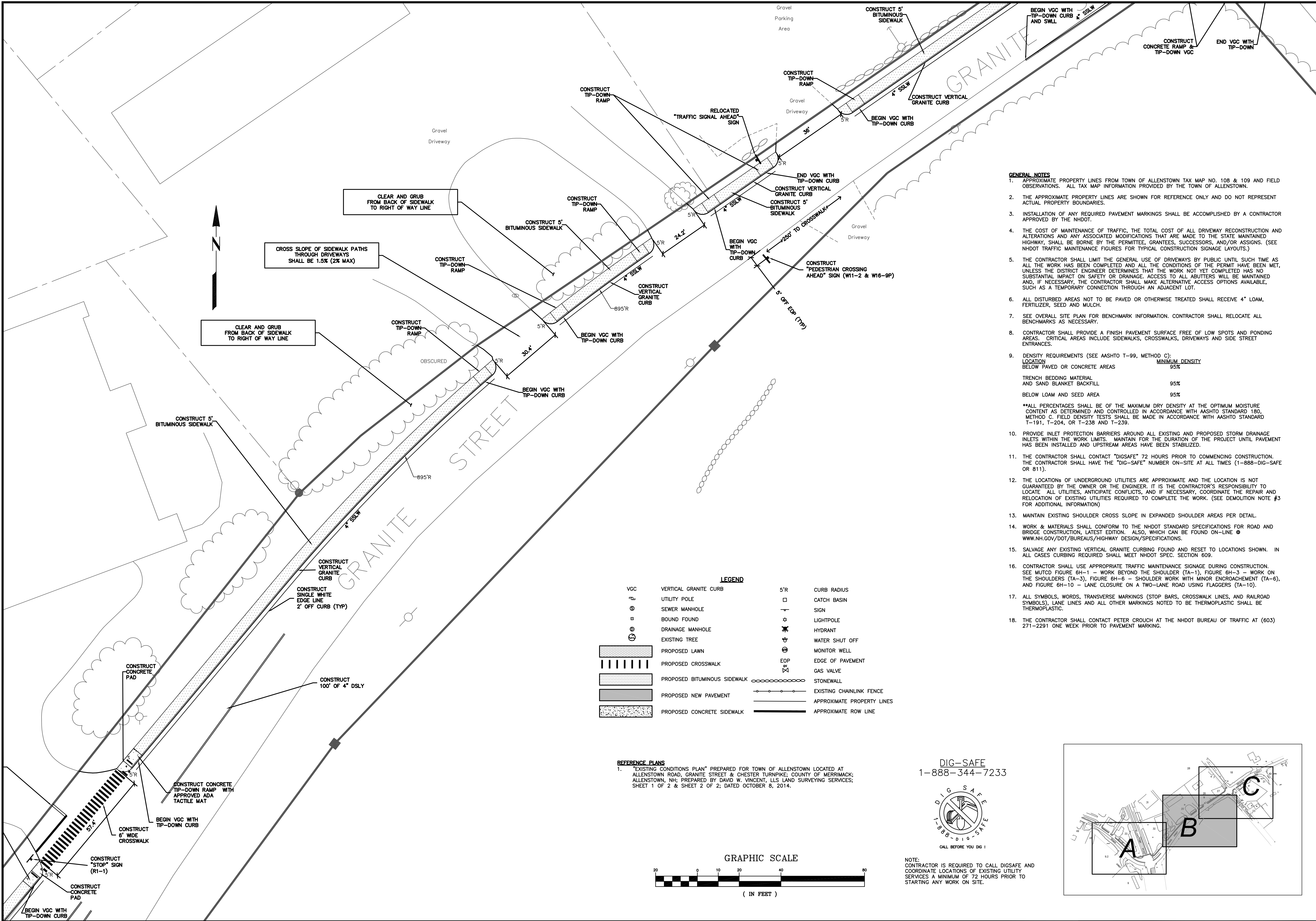


NOTE:  
CONTRACTOR IS REQUIRED TO CALL DIGSAFE AND  
COORDINATE LOCATIONS OF EXISTING UTILITY  
SERVICES A MINIMUM OF 72 HOURS PRIOR TO  
STARTING ANY WORK ON SITE.



HAIGHT ENGINEERING, PLLC CIVIL ENGINEERS P.O. BOX 1166, 81 WATSON ROAD ROCKFORD, NH 03086 603.750.4266 FAX 603.749.7348		1/26/2015	12/1/2014	DATE
FINAL DESIGN REVIEW		KMT	KMT	APPD
PROJECT NO. 03275		1	2	NO.
FILE: SITE.DWG		NO.	NO.	NO.
DATE: 10-7-14		NO.	NO.	NO.
DRAWN BY: SRD		NO.	NO.	NO.
DESIGN BY: SRD		NO.	NO.	NO.
APPROVED BY: S.J.H.		NO.	NO.	NO.
PROJECT NO. 03275		NO.	NO.	NO.
FILE: SITE.DWG		NO.	NO.	NO.
TOWN OF ALLENTOWN 16 SCHOOL STREET ALLENTOWN, NH 03275		SITE PLAN - A		
SRTS PROJECT #15991 FEDERAL PROJECT #X-4001(065) GRANITE STREET SIDEWALK CONSTRUCTION FROM RITE-AID TO PARKWOOD DRIVE ALLENTOWN, NH 03275 MERRIMACK COUNTY		7		





- GENERAL NOTES**
- APPROXIMATE PROPERTY LINES FROM TOWN OF ALLENSTOWN TAX MAP NO. 108 & 109 AND FIELD OBSERVATIONS. ALL TAX MAP INFORMATION PROVIDED BY THE TOWN OF ALLENSTOWN.
  - THE APPROXIMATE PROPERTY LINES ARE SHOWN FOR REFERENCE ONLY AND DO NOT REPRESENT ACTUAL PROPERTY BOUNDARIES.
  - INSTALLATION OF ANY REQUIRED PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A CONTRACTOR APPROVED BY THE NHDOT.
  - THE COST OF MAINTENANCE OF TRAFFIC, THE TOTAL COST OF ALL DRIVEWAY RECONSTRUCTION AND ALTERATIONS AND ANY ASSOCIATED MODIFICATIONS THAT ARE MADE TO THE STATE MAINTAINED HIGHWAY, SHALL BE BORNE BY THE PERMITTEE, GRANTEES, SUCCESSORS, AND/OR ASSIGNS. (SEE NHDOT TRAFFIC MAINTENANCE FIGURES FOR TYPICAL CONSTRUCTION SIGNAGE LAYOUTS.)
  - THE CONTRACTOR SHALL LIMIT THE GENERAL USE OF DRIVEWAYS BY PUBLIC UNTIL SUCH TIME AS ALL THE WORK HAS BEEN COMPLETED AND ALL THE CONDITIONS OF THE PERMIT HAVE BEEN MET, UNLESS THE DISTRICT ENGINEER DETERMINES THAT THE WORK NOT YET COMPLETED HAS NO SUBSTANTIAL IMPACT ON SAFETY OR DRAINAGE. ACCESS TO ALL ADJUTERS WILL BE MAINTAINED AND, IF NECESSARY, THE CONTRACTOR SHALL MAKE ALTERNATIVE ACCESS OPTIONS AVAILABLE, SUCH AS A TEMPORARY CONNECTION THROUGH AN ADJACENT LOT.
  - ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 4" LOAM, FERTILIZER, SEED AND MULCH.
  - SEE OVERALL SITE PLAN FOR BENCHMARK INFORMATION. CONTRACTOR SHALL RELOCATE ALL BENCHMARKS AS NECESSARY.
  - CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE SIDEWALKS, CROSSWALKS, DRIVEWAYS AND SIDE STREET ENTRANCES.
  - DENSITY REQUIREMENTS (SEE AASHTO T-99, METHOD C):  
LOCATION MINIMUM DENSITY  
BELOW PAVED OR CONCRETE AREAS 95%  
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL 95%  
BELOW LOAM AND SEED AREA 95%  
\*\*ALL PERCENTAGES SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH AASHTO STANDARD 180, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH AASHTO STANDARD T-191, T-204, OR T-238 AND T-239.
  - PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS. MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED AND UPSTREAM AREAS HAVE BEEN STABILIZED.
  - THE CONTRACTOR SHALL CONTACT "DIGSAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON-SITE AT ALL TIMES (1-888-DIG-SAFE OR 811).
  - THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATION IS NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, AND IF NECESSARY, COORDINATE THE REPAIR AND RELOCATION OF EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK. (SEE DEMOLITION NOTE #3 FOR ADDITIONAL INFORMATION)
  - MAINTAIN EXISTING SHOULDER CROSS SLOPE IN EXPANDED SHOULDER AREAS PER DETAIL.
  - WORK & MATERIALS SHALL CONFORM TO THE NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. ALSO, WHICH CAN BE FOUND ON-LINE @ WWW.NH.GOV/DOT/BUREAUS/HIGHWAY DESIGN/SPECIFICATIONS.
  - SALVAGE ANY EXISTING VERTICAL GRANITE CURBING FOUND AND RESET TO LOCATIONS SHOWN. IN ALL CASES CURBING REQUIRED SHALL MEET NHDOT SPEC. SECTION 609.
  - CONTRACTOR SHALL USE APPROPRIATE TRAFFIC MAINTENANCE SIGNAGE DURING CONSTRUCTION. SEE MUTCD FIGURE 6H-1 - WORK BEYOND THE SHOULDER (TA-1), FIGURE 6H-3 - WORK ON THE SHOULDERS (TA-3), FIGURE 6H-6 - SHOULDER WORK WITH MINOR ENCROACHMENT (TA-6), AND FIGURE 6H-10 - LANE CLOSURE ON A TWO-LANE ROAD USING FLAGGERS (TA-10).
  - ALL SYMBOLS, WORDS, TRANSVERSE MARKINGS (STOP BARS, CROSSWALK LINES, AND RAILROAD SYMBOLS), LANE LINES AND ALL OTHER MARKINGS NOTED TO BE THERMOPLASTIC SHALL BE THERMOPLASTIC.
  - THE CONTRACTOR SHALL CONTACT PETER CROUCH AT THE NHDOT BUREAU OF TRAFFIC AT (603) 271-2291 ONE WEEK PRIOR TO PAVEMENT MARKING.

LEGEND			
VGC	VERTICAL GRANITE CURB	5'R	CURB RADIUS
⊙	UTILITY POLE	□	CATCH BASIN
⊙	SEWER MANHOLE	⊙	SIGN
⊙	BOUND FOUND	⊙	LIGHTPOLE
⊙	DRAINAGE MANHOLE	⊙	HYDRANT
⊙	EXISTING TREE	⊙	WATER SHUT OFF
▨	PROPOSED LAWN	⊙	MONITOR WELL
▨	PROPOSED CROSSWALK	⊙	EDGE OF PAVEMENT
▨	PROPOSED BITUMINOUS SIDEWALK	⊙	GAS VALVE
▨	PROPOSED NEW PAVEMENT	⊙	STONEWALL
▨	PROPOSED CONCRETE SIDEWALK	⊙	EXISTING CHAINLINK FENCE
		⊙	APPROXIMATE PROPERTY LINES
		⊙	APPROXIMATE ROW LINE

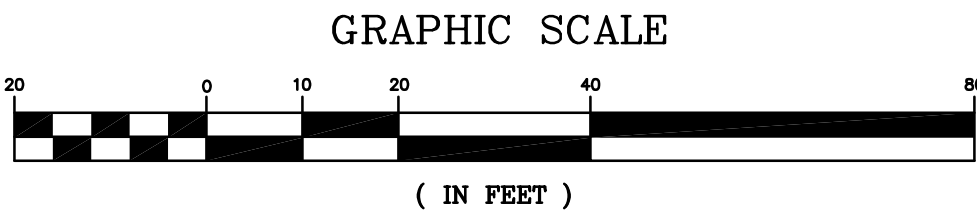
**REFERENCE PLANS**

- "EXISTING CONDITIONS PLAN" PREPARED FOR TOWN OF ALLENSTOWN LOCATED AT ALLENSTOWN ROAD, GRANITE STREET & CHESTER TURNPIKE; COUNTY OF MERRIMACK; ALLENSTOWN, NH; PREPARED BY DAVID W. VINCENT, LLS LAND SURVEYING SERVICES; SHEET 1 OF 2 & SHEET 2 OF 2; DATED OCTOBER 8, 2014.

DIG-SAFE  
1-888-344-7233

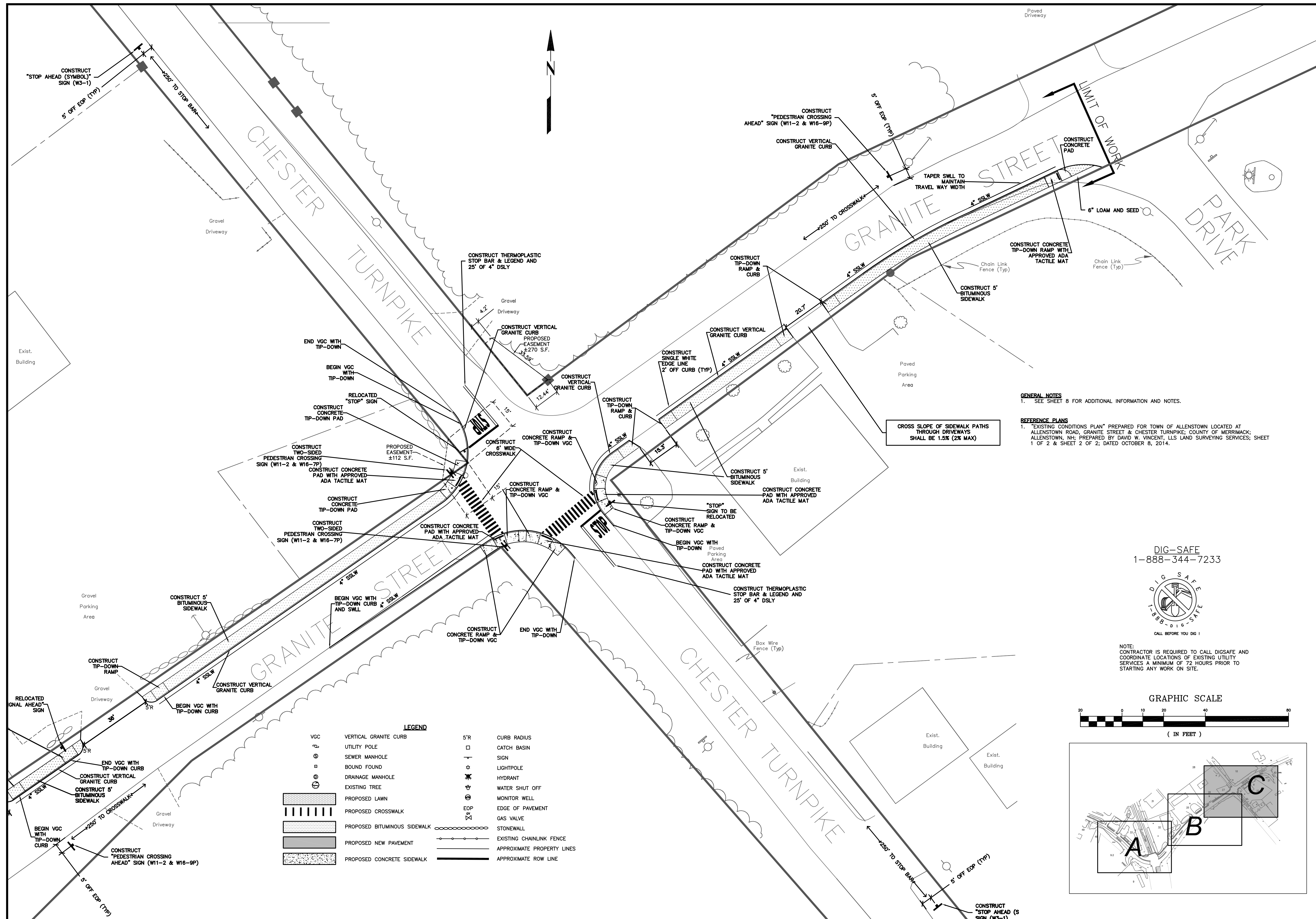




NOTE:  
CONTRACTOR IS REQUIRED TO CALL DIGSAFE AND COORDINATE LOCATIONS OF EXISTING UTILITY SERVICES A MINIMUM OF 72 HOURS PRIOR TO STARTING ANY WORK ON SITE.



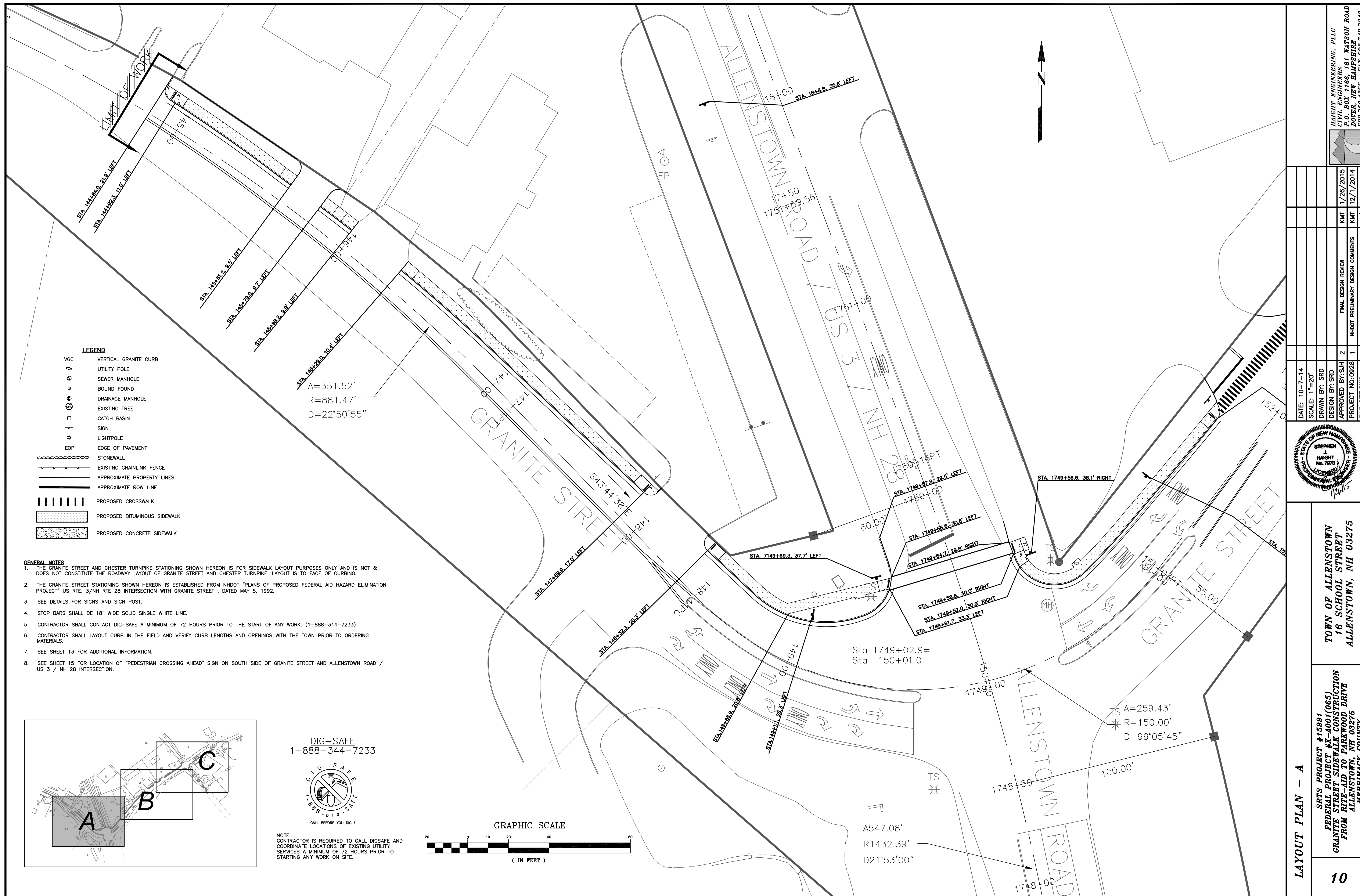
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DATE: 10-7-14	SCALE: 1"=20'	DESIGN BY: SRD	APPROVED BY: SRD
PROJECT NO: 03275	FILE: SITE.DWG	NO. 1	REVISION
TOWN OF ALLENSTOWN 16 SCHOOL STREET ALLENSTOWN, NH 03275		SRTS PROJECT #15991 FEDERAL PROJECT #X-4001(065) GRANITE STREET SIDEWALK CONSTRUCTION FROM RITE-AID TO PARKWOOD DRIVE ALLENSTOWN, NH 03275 MERRIMACK COUNTY	
SITE PLAN - B		8	



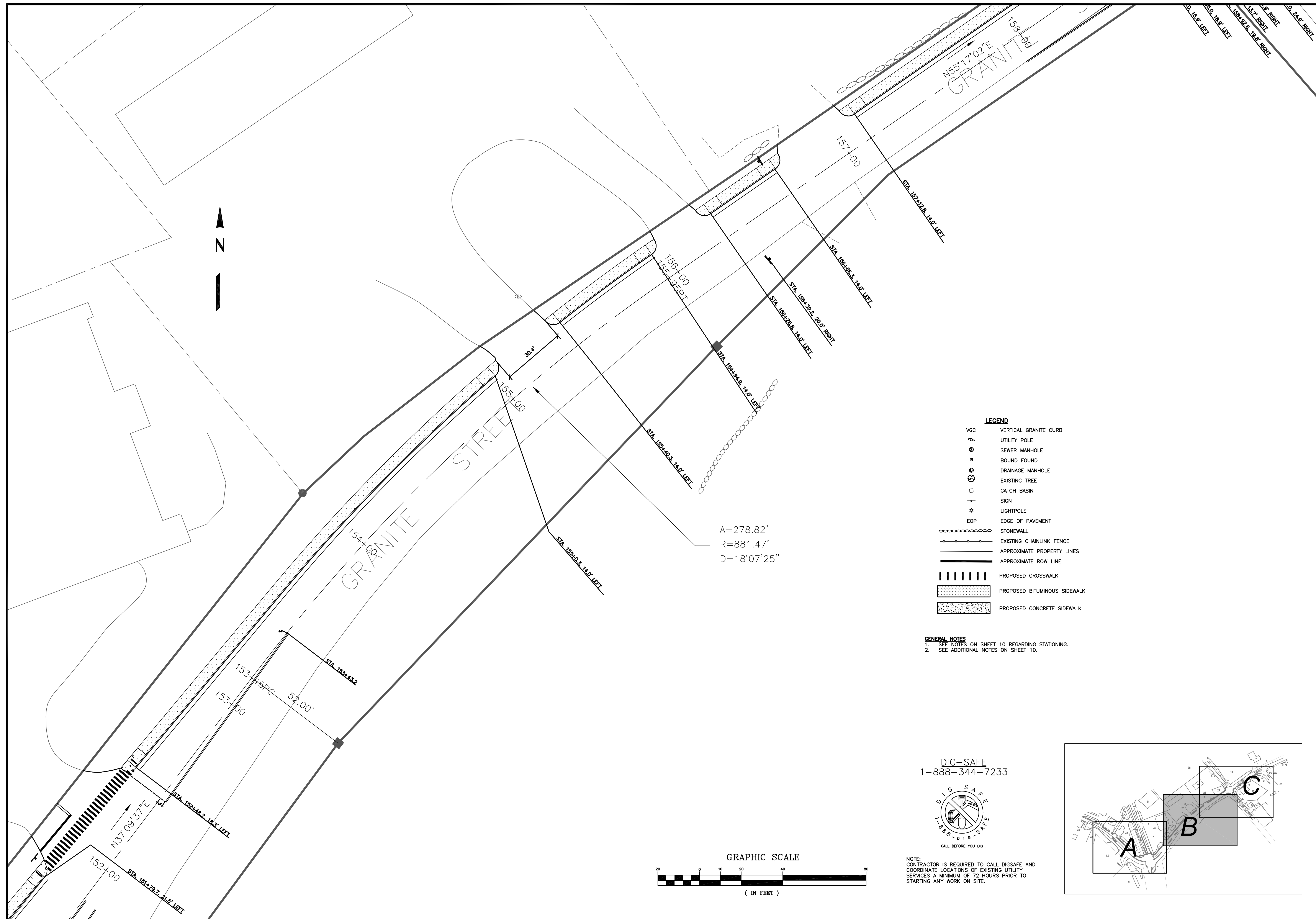


<p><b>SITE PLAN - C</b></p>		<p><b>9</b></p>	
<p>SRTS PROJECT #15991 FEDERAL PROJECT #X-4001(066) GRANITE STREET, SIDEWALK CONSTRUCTION FROM RITVED TO PARKWOOD DRIVE ALEXANDRIA, NH 03216 MERRIMACK COUNTY</p>		<p>TOWN OF ALLENSTOWN 16 SCHOOL STREET ALLENSTOWN, NH 03275</p>	
			
<p>DATE: 10-7-14</p>		<p>SCALE: 1"=20'</p>	
<p>DRAWN BY: SRD</p>		<p>DESIGN BY: SRD</p>	
<p>APPROVED BY: SJH</p>		<p>PROJECT NO: 0928</p>	
<p>FILE: SITE.DWG</p>		<p>NO.</p>	
<p>REVISION</p>		<p>DATE</p>	
<p>HAIGHT ENGINEERING, PLLC CIVIL ENGINEERS P.O. BOX 1166, 181 WATSON ROAD DOVER, NEW HAMPSHIRE 603.750.4266.</p>		<p>HAIGHT ENGINEERING, PLLC CIVIL ENGINEERS P.O. BOX 1166, 181 WATSON ROAD DOVER, NEW HAMPSHIRE 603.750.4266.</p>	



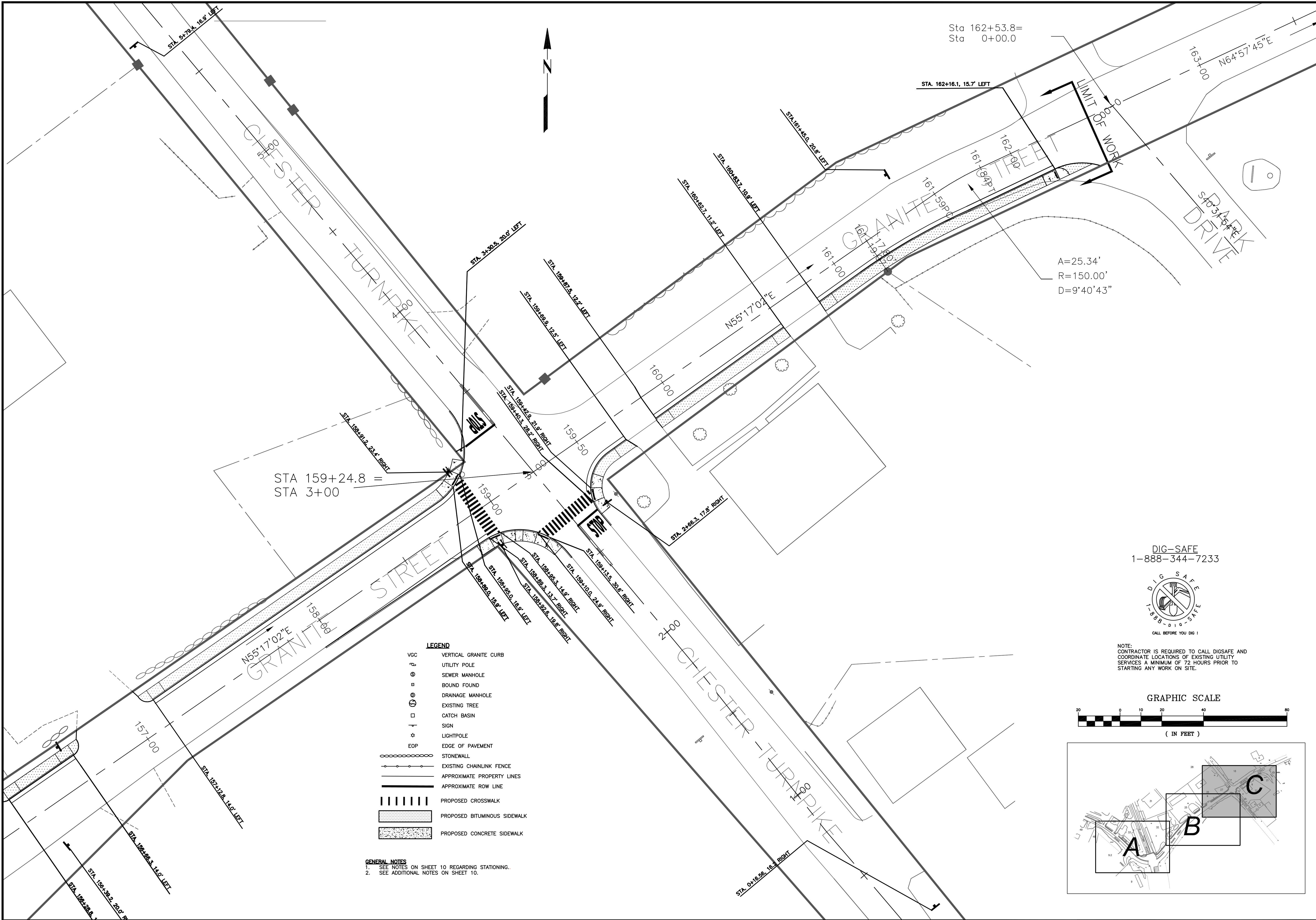
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<b>LAYOUT PLAN - B</b>	<div style="text-align: center;"> <p>SRTS PROJECT #15991 FEDERAL PROJECT #X-4001(066) GRANITE STREET, SIDEWALK CONSTRUCTION FROM RITVED TO PARKWOOD DRIVE ALEXANDRIA TOWN NH 03276 MERRIMACK COUNTY</p> </div>	<div style="text-align: center;"> <p>TOWN OF ALLENSTOWN 16 SCHOOL STREET ALLENSTOWN, NH 03275</p> </div>	<div style="float: left; width: 20%;">DATE: 10--7--14</div> <div style="clear: both;"></div> <div style="float: left; width: 20%;">SCALE: 1"=20'</div> <div style="clear: both;"></div> <div style="float: left; width: 20%;">DRAWN BY: SRD</div> <div style="clear: both;"></div> <div style="float: left; width: 20%;">DESIGN BY: SRD</div> <div style="clear: both;"></div> <div style="float: left; width: 20%;">APPROVED BY: SJH</div> <div style="clear: both;"></div> <div style="float: left; width: 20%;">PROJECT NO: 0928</div> <div style="clear: both;"></div> <div style="float: left; width: 20%;">FILE: SITE.DWG</div> <div style="clear: both;"></div>	<div style="float: right; width: 20%; text-align: right;">KMT</div> <div style="clear: both;"></div> <div style="float: right; width: 20%; text-align: right;">KMT</div> <div style="clear: both;"></div> <div style="float: right; width: 20%; text-align: right;">APP'D</div> <div style="clear: both;"></div> <div style="float: right; width: 20%; text-align: right;">NO.</div> <div style="clear: both;"></div>	<div style="float: right; width: 20%; text-align: right;">KMT</div> <div style="clear: both;"></div> <div style="float: right; width: 20%; text-align: right;">KMT</div> <div style="clear: both;"></div> <div style="float: right; width: 20%; text-align: right;">REVISION</div> <div style="clear: both;"></div> <div style="float: right; width: 20%; text-align: right;">DATE</div> <div style="clear: both;"></div>	<div style="float: right; width: 20%; text-align: right;">HAIGHT ENGINEERING, PLLC CIVIL ENGINEERS P.O. BOX 1166, 181 WATSON ROAD DOVER, NEW HAMPSHIRE 603.750.4266. FAX 603.749.7348</div> <div style="clear: both;"></div>
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STA 159+24.8 =  
STA 3+00

Sta 162+53.8=  
Sta 0+00.0

A=25.34'  
R=150.00'  
D=9°40'43"

- LEGEND**
- VGC VERTICAL GRANITE CURB
  - UTILITY POLE
  - SEWER MANHOLE
  - BOUND FOUND
  - DRAINAGE MANHOLE
  - EXISTING TREE
  - CATCH BASIN
  - SIGN
  - LIGHTPOLE
  - EOP EDGE OF PAVEMENT
  - STONEWALL
  - EXISTING CHAINLINK FENCE
  - APPROXIMATE PROPERTY LINES
  - APPROXIMATE ROW LINE
  - PROPOSED CROSSWALK
  - PROPOSED BITUMINOUS SIDEWALK
  - PROPOSED CONCRETE SIDEWALK

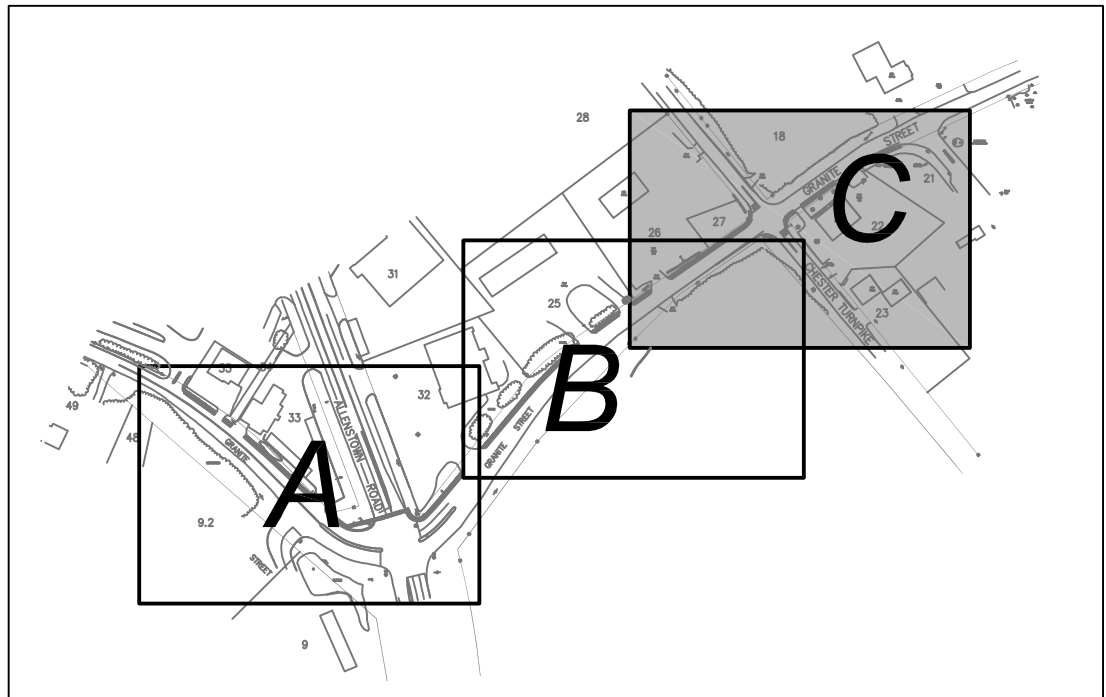
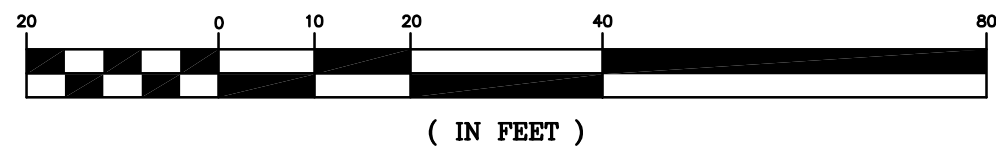
**GENERAL NOTES**  
1. SEE NOTES ON SHEET 10 REGARDING STATIONING.  
2. SEE ADDITIONAL NOTES ON SHEET 10.

DIG-SAFE  
1-888-344-7233



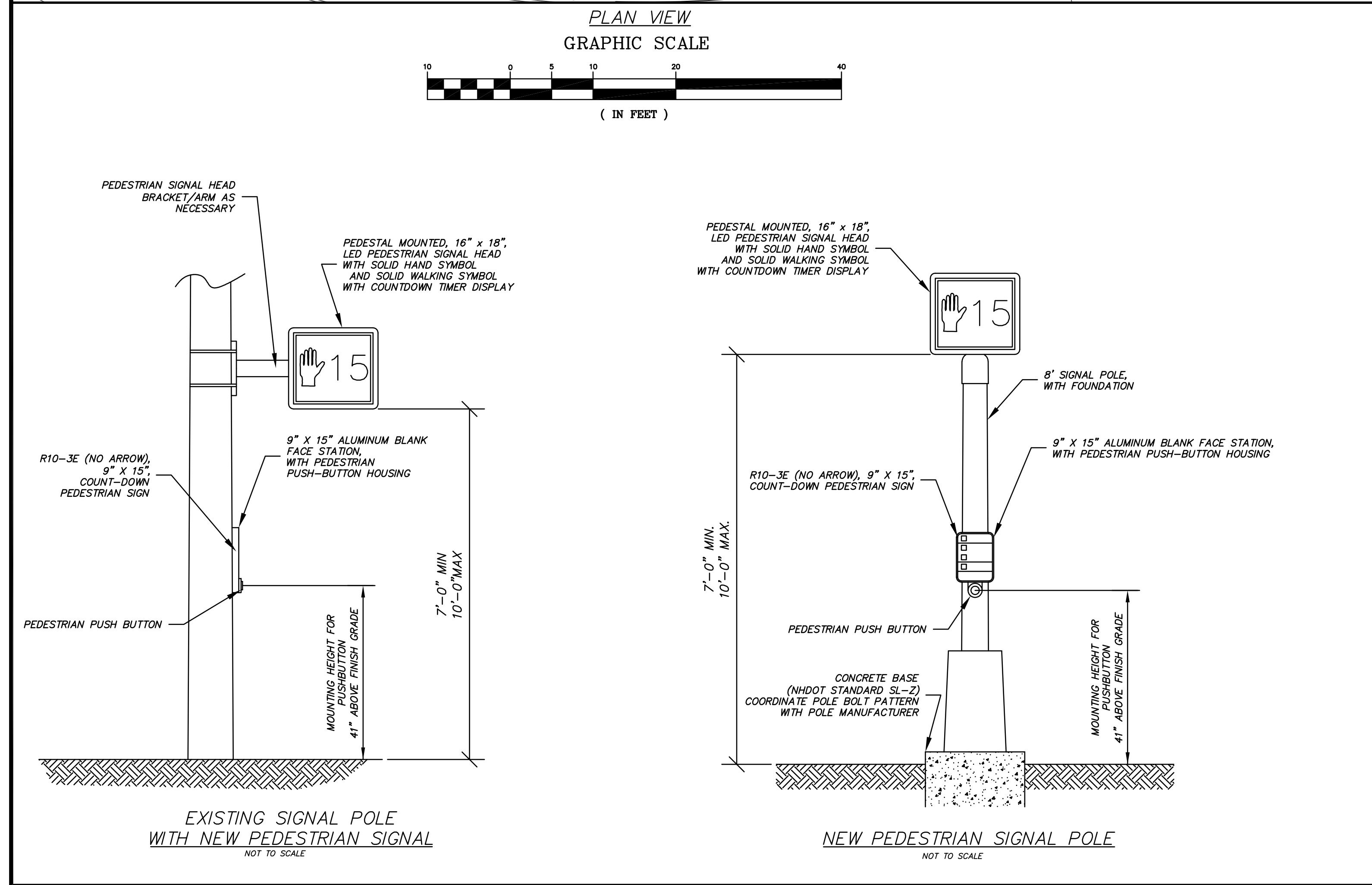
NOTE:  
CONTRACTOR IS REQUIRED TO CALL DIGSAFE AND  
COORDINATE LOCATIONS OF EXISTING UTILITY  
SERVICES A MINIMUM OF 72 HOURS PRIOR TO  
STARTING ANY WORK ON SITE.

GRAPHIC SCALE



HAIGHT ENGINEERING, PLLC CIVIL ENGINEERS P.O. BOX 1166, 81 WATSON ROAD ROCKFORD, VT 05653 603.750.4266 FAX 603.749.7348				DATE			
1/26/2015				DATE			
KMT				APPD			
KMT				REVISION			
FINAL DESIGN REVIEW				NO.			
1				NO.			
PROJECT NO: 03275				FILE: SITE.DWG			
DATE: 10-7-14				DATE: 10-7-14			
SCALE: 1"=20'				SCALE: 1"=20'			
DRAWN BY: SRD				DRAWN BY: SRD			
DESIGN BY: SRD				DESIGN BY: SRD			
APPROVED BY: SJH				APPROVED BY: SJH			
PROJECT NO: 03275				PROJECT NO: 03275			
FILE: SITE.DWG				FILE: SITE.DWG			
TOWN OF ALLENSTOWN 16 SCHOOL STREET ALLENSTOWN, NH 03275				TOWN OF ALLENSTOWN 16 SCHOOL STREET ALLENSTOWN, NH 03275			
SRTS PROJECT #15991 FEDERAL PROJECT #X-4001(065) GRANITE STREET SIDEWALK CONSTRUCTION FROM RITE-AID TO PARKWOOD DRIVE ALLENSTOWN, NH 03275 MERRIMACK COUNTY				SRTS PROJECT #15991 FEDERAL PROJECT #X-4001(065) GRANITE STREET SIDEWALK CONSTRUCTION FROM RITE-AID TO PARKWOOD DRIVE ALLENSTOWN, NH 03275 MERRIMACK COUNTY			
LAYOUT PLAN - C				LAYOUT PLAN - C			
12				12			



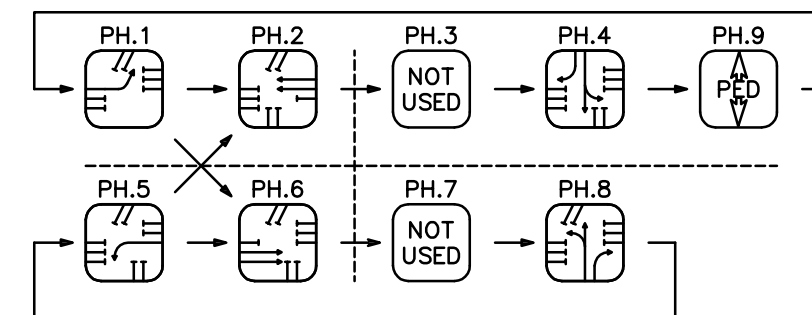


- ① PROPOSED SIGNAL POLE WITH PEDESTAL MOUNTED LED PEDESTRIAN SIGNAL SHALL BE NHDOT APPROVED 8" ALUMINUM PEDESTAL WITH FOUNDATION. PEDESTRIAN SIGNAL HEAD SHALL BE MOUNTED USING "POST TOP" MATERIAL. (SEE NEW PEDESTRIAN SIGNAL POLE DETAIL)
- ② PROPOSED PEDESTRIAN PUSH BUTTON OPERATOR. SHALL BE MOUNTED AT A LOCATION COMPLIANT WITH NHDOT AND ADA.
- ③ PROPOSED L.E.D. PEDESTRIAN SIGNAL HEAD. SHALL BE INSTALLED ON THE EXISTING MAST ARM USING "SIDE OF POLE" MATERIAL.
- ④ INSTALL "PEDESTRIAN ISOLATION MODULE" AND ADDITIONAL LOAD SWITCH TO EXISTING CABINET ON CONCRETE PAD, ANY PROGRAMMING AND/OR TIMING CHANGES TO THE CYCLE OF THE INTERSECTION SHALL BE APPROVED BY NHDOT.
- ⑤ PROPOSED 5' WIDE BITUMINOUS CONCRETE SIDEWALK.
- ⑥ PROPOSED REINFORCED CONCRETE PAD WITH TACTILE MAT.
- ⑦ PROPOSED 2" PVC SCHEDULE 40 CONDUIT FROM EXISTING HAND HOLE TO PROPOSED SIGNAL POLE WITH PEDESTAL MOUNTED LED PEDESTRIAN SIGNAL.
- ⑧ PROPOSED 6' WIDE THERMOPLASTIC CROSSWALK.
- ⑨ CONSTRUCT PEDESTRIAN CROSSING SIGN (W11-2 & W16-7P)

**GENERAL NOTES**

1. SEE PLAN REF. 2 (SHEET 16 OF THIS PLAN SET) FOR ADDITIONAL INTERSECTION INFORMATION.
2. CONTRACTOR SHALL CONTACT NHDOT, PETER CROUCH, P.E., (603) 271-2291, TO REVIEW INSTALLATION OF TRAFFIC CONTROL DEVICES AND SIGNAL PHASING.
3. LED; LIGHT EMITTING DIODE
4. ALL SIGNAL WORK SHALL BE CONDUCTED IN CONFORMANCE WITH THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
5. BASED ON A FIELD INSPECTION OF THE EXISTING TRAFFIC SIGNAL EQUIPMENT AT THIS INTERSECTION ON MAY 19, 2014, SPARE CABLES ARE AVAILABLE IN THE CONDUITS BETWEEN THE CONTROLLER CABINET AND THE TRAFFIC SIGNAL POLE AT STA 1749+64, LT. 43', AND THE HAND HOLE AT STA 1749+53, RT 37'.
6. THE CONDUCTIVITY OF THE SPARE CABLES WAS CONFIRMED BY HAIGHT ENGINEERING ON NOVEMBER 17, 2014.
6. THE CONTRACTOR SHALL USE THESE SPARE CABLES TO CONNECT THE NEW PEDESTRIAN SIGNAL EQUIPMENT TO THE EXISTING TRAFFIC SIGNAL CONTROLLER, FOR THE PEDESTRIAN CROSSING US ROUTE 3 NORTH OF THE INSPECTION.
7. THE PEDESTRIAN CROSSING SHALL BE ON AN EXCLUSIVE PHASE 9 TO BE CALLED FOLLOWING THE MINOR STREET CLEARANCE, PHASES 4&8, AND/OR PRIOR TO RETURNING TO THE MAJOR STREET PHASES 2&6.
8. THE PEDESTRIAN WALK AND CLEARANCE TIME SHALL BE FULLY SERVICED ONCE THE PEDESTRIAN PHASE BEGINS.
9. PROVIDE 5 SECONDS WALK, 20 SECONDS FLASHING DON'T WALK AND A 3 SECOND ALL RED PRIOR TO ADVANCING TO ANOTHER PHASE OR SERVICING AN OPTICOM EMERGENCY PRECEPTION CALL.
10. SIGNAL PHASING EQUIPMENT SHALL BE REVIEWED AND APPROVED BY NHDOT TRAFFIC BUREAU PRIOR TO MANUFACTURING AND INSTALLATION.

### STANDARD 9 PHASE NEMA CONTROLLER



### PROPOSED SIGNAL PHASING

[illegible]

## NHDOT - SEQUENCE AND TIMING CHART

CITY/ TOWN: ALLENSTOWN  
SIGNAL ID#: S-007-01  
LOCATION: US 3  
INTERSECT: GRANITE STREET / GRANITE STREET EXT.  
CABINET TYPE: P TYPE - 1  
CONTROLLER MFG: GAMMATRONIX 80  
INSTALL DATE: 10/08/1990  
FIRE PREEMPT: OPTICOM

## REFERENCE PLANS

1. "EXISTING CONDITIONS PLAN" PREPARED FOR TOWN OF ALLENSTOWN LOCATED AT ALLENSTOWN ROAD, GRANITE STREET & CHESTER TURNPIKE; COUNTY OF MERRIMACK; ALLENSTOWN, NH; PREPARED BY DAVID W. VINCENT, LLS LAND SURVEYING SERVICES; SHEET 1 OF 2 & SHEET 2 OF 2; DATED OCTOBER 8, 2014.
2. "SIGNALIZATION AND LIGHTING LAYOUT"; FEDERAL PROJECT NO.: F-HES-017-1(18); STATE PROJECT NO.: 10289; SHEET 23; TOTAL SHEETS 50; DATE: 7-25-89; DATE: 3-20-90; AS-BUILT DETAILS.

DIG-SAFE  
1-888-344-7233



NOTE:  
CONTRACTOR IS REQUIRED TO CALL DIGSAFE AND  
COORDINATE LOCATIONS OF EXISTING UTILITY  
SERVICES A MINIMUM OF 72 HOURS PRIOR TO  
STARTING ANY WORK ON SITE.

[illegible]





### CONCRETE PAD DETAIL

NOT TO SCALE

NOTES

1. WIRE FABRIC SHOULD BE PLACED ON "CHAIRS" TO MAINTAIN 3" CLEARANCE FROM EARTHEN MATERIAL

VGC TO BE 1'-4" TO  
1' 6" IN HEIGHT



- NOTES

1. SEE SITE PLAN FOR LIMITS OF CURBING.
2. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
3. MINIMUM LENGTH OF CURB STONES = 3'
4. MAXIMUM LENGTH OF CURB STONES = 10'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES (SEE CHART)
6. ALL RADII 20 FEET AND SMALLER TO BE CONSTRUCTED USING CURVED SECTIONS.
7. TAPER ASPHALT AT END OF DAY; TO CONTINUE PAVING ADD TACK AND BEGIN OVERLAY AT TAPER

BITUMINOUS CONCRETE SIDEWALK WITH  
VERTICAL GRANITE CURB

NOT TO SCALE



NOT TO SCALE

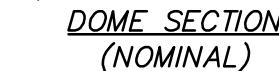
NOTES

1. SEE SITE PLAN FOR LOCATION AND FINISH MATERIAL



"TIP-DOWN" CURB DETAIL

NOT TO SCALE



TACTILE DOME DETAIL

NOT TO SCALE



1. THE MAXIMUM RUNNING SLOPE OF ANY SIDEWALK CURB RAMP IS 12:1. THE MAXIMUM CROSS SLOPE IS 2%. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION.
2. TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. ROADWAY SHOULDER SLOPES ADJOINING SIDEWALK CURB RAMP SHALL BE A MAXIMUM OF 5% (FULL WIDTH) FOR A DISTANCE OF 24" FROM THE ROADWAY CURBLINE.
3. INTERCEPT DRAINAGE ALONG THE CURB IN ADVANCE OF SIDEWALK CURB RAMP OF LANDINGS. CATCH BASINS, MANHOLES, ETC. SHALL NOT BE LOCATED IN OR AT THE BASE OF SIDEWALK CURB RAMPS OR LANDINGS.
4. BOTTOM OF THE SIDEWALK CURB RAMP OR LANDING EXCLUSIVE OF THE FLARED SIDES SHALL BE WHOLLY CONTAINED WITHIN THE CROSSWALK MARKINGS.
5. THE SURFACE OF A PERPENDICULAR SIDEWALK CURB RAMP OR THE LANDING OF A PARALLEL SIDEWALK CURB RAMP SHALL CONTRAST VISUALLY WITH THE ADJOINING SIDEWALK SURFACE, EITHER ASPHALT/LIGHT-COLORED CONCRETE OR LIGHT-COLORED CONCRETE/DARK-STAINED CONCRETE. THE CONCRETE SURFACE SHALL BE SLIP RESISTANT.
6. INSTALL DETECTABLE WARNINGS TACTILE MAT (TRUNCATED DOWNS) AT THE LOCATIONS SHOWN. DETECTABLE WARNINGS SHALL MEASURE 24" IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE SIDEWALK RAMP AND THE EDGE NEAREST THE CURBLINE SHALL BE LOCATED 6" - 8" FROM THE FACE OF CURBLINE.
7. PROVIDE DETECTABLE WARNING SURFACE ANYTIME THAT A CURB RAMP, BLENDED TRANSITION OR LANDING CONNECTS TO A STREET.
8. WHERE BOTH ENDS OF THE BOTTOM GRADE ARE LESS THAN 5'-6" FROM THE BACK OF THE CURB, LOCATE THE DETECTABLE WARNING PANELS ON THE RAMP SURFACE AT THE BOTTOM OF THE RAMP. WHERE EITHER END OF THE BOTTOM GRADE IS GREATER THAN 5'-6" FROM THE BACK OF THE CURB, LOCATE THE DETECTABLE WARNING AT THE BOTTOM OF THE LANDING.

SIDEWALK TIP DOWN AT CURBED RADIUS PAD

NOT TO SCALE

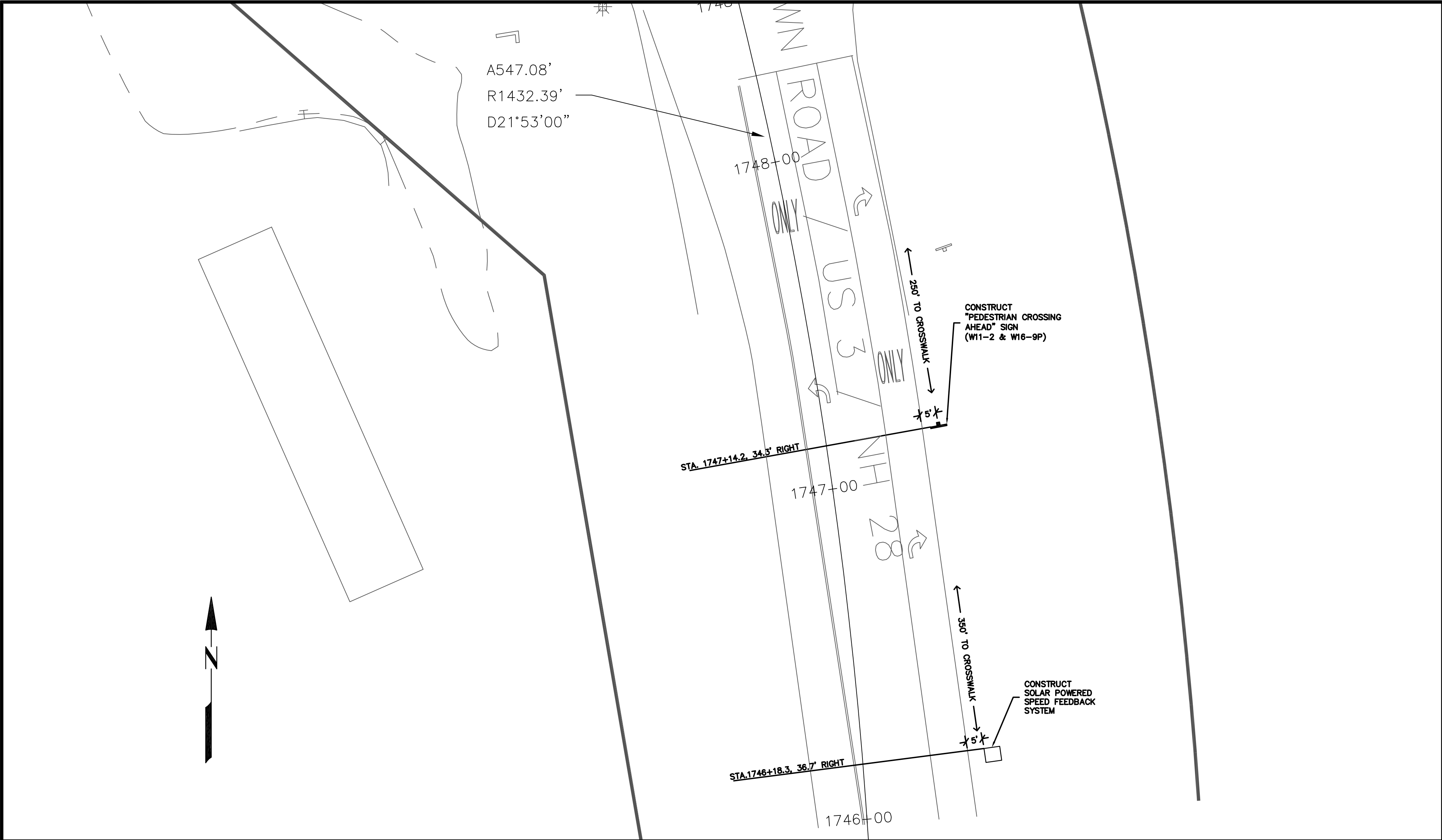


CONCRETE SIDEWALK

NOT TO SCALE

**DETAIL SHEET**



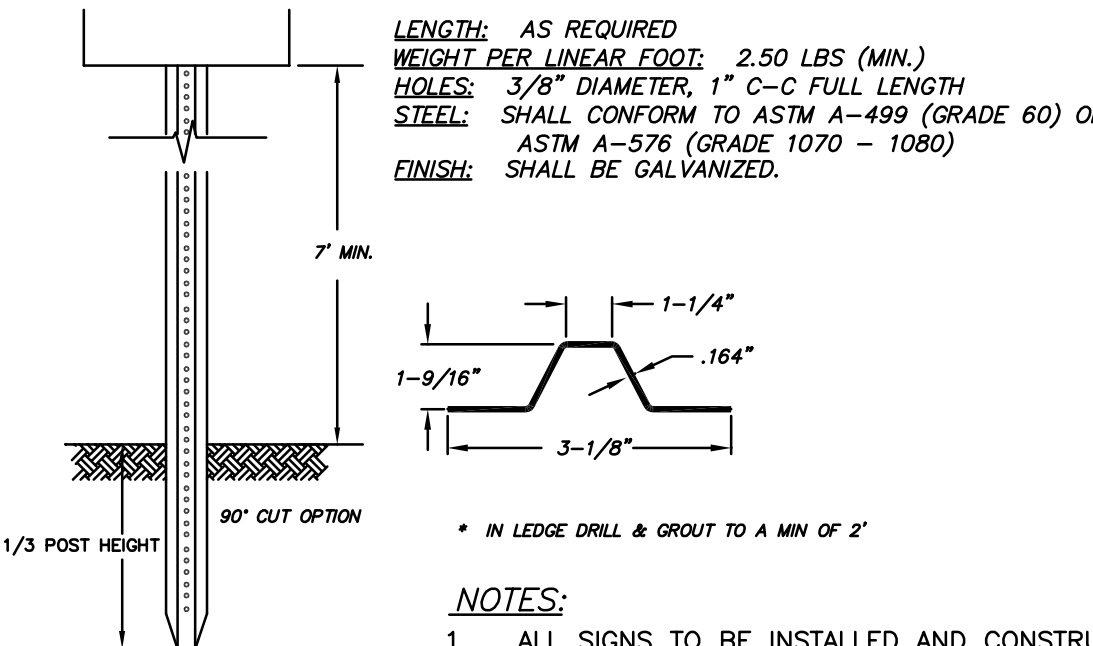
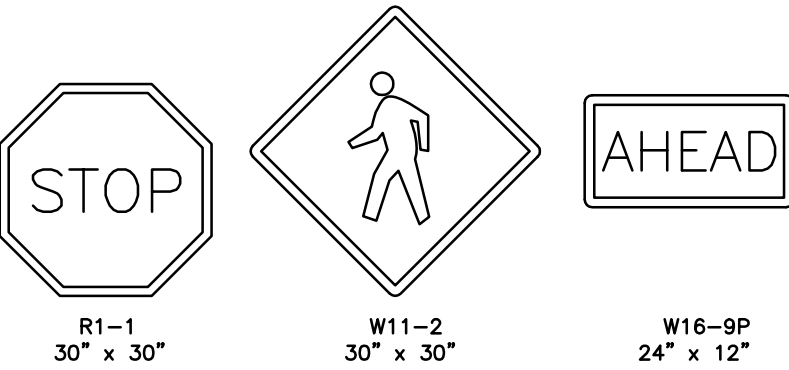
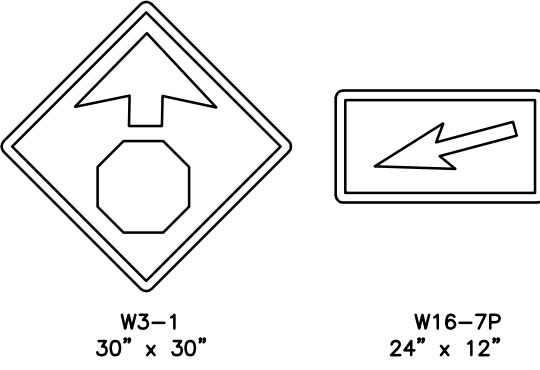


PLAN VIEW FOR PEDESTRIAN CROSSING SIGN AND SPEED  
FEEDBACK SYSTEM

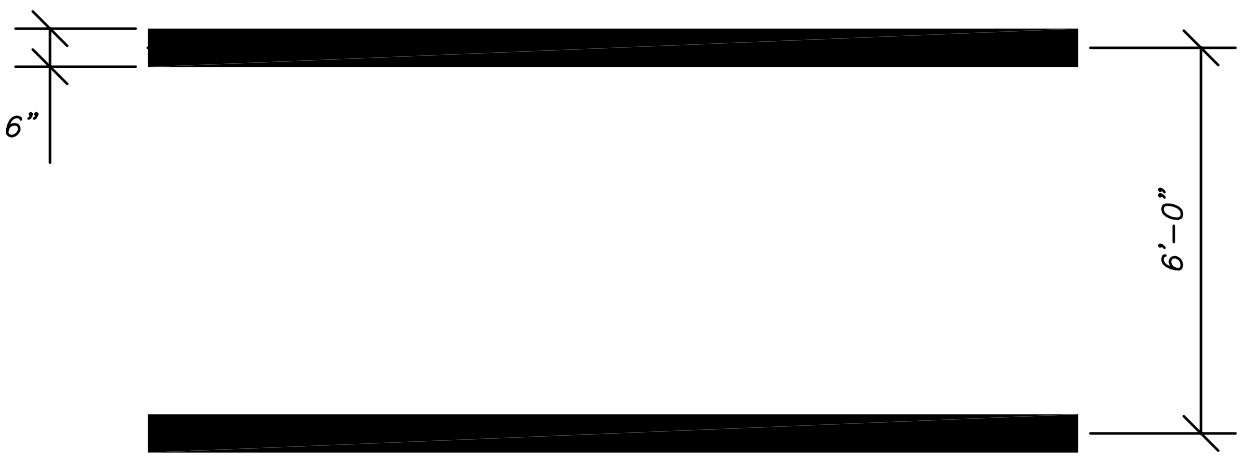
RT. 3 NORTH APPROACH TO INTERSECTION

- LEGEND**
- VGC VERTICAL GRANITE CURB
  - UTILITY POLE
  - SEWER MANHOLE
  - BOUND FOUND
  - DRAINAGE MANHOLE
  - EXISTING TREE
  - CATCH BASIN
  - SIGN
  - LIGHTPOLE
  - EOP EDGE OF PAVEMENT
  - STONEWALL
  - EXISTING CHAINLINK FENCE
  - APPROXIMATE PROPERTY LINES
  - PROPOSED CROSSWALK
  - PROPOSED BITUMINOUS SIDEWALK
  - PROPOSED CONCRETE SIDEWALK

- NOTES:**
- CONSTRUCT "PEDESTRIAN CROSSING AHEAD" SIGNS (W11-2 & W16-9P) AT STA. 1747+14.2, 34.3' RIGHT AND STA. 18+8.8, 35.6' LEFT
  - CONSTRUCT SOLAR POWERED SPEED FEED BACK SYSTEM AT STA. 1746+18.3, 36.7' RIGHT (TO BE APPROVED BY NHDOT)

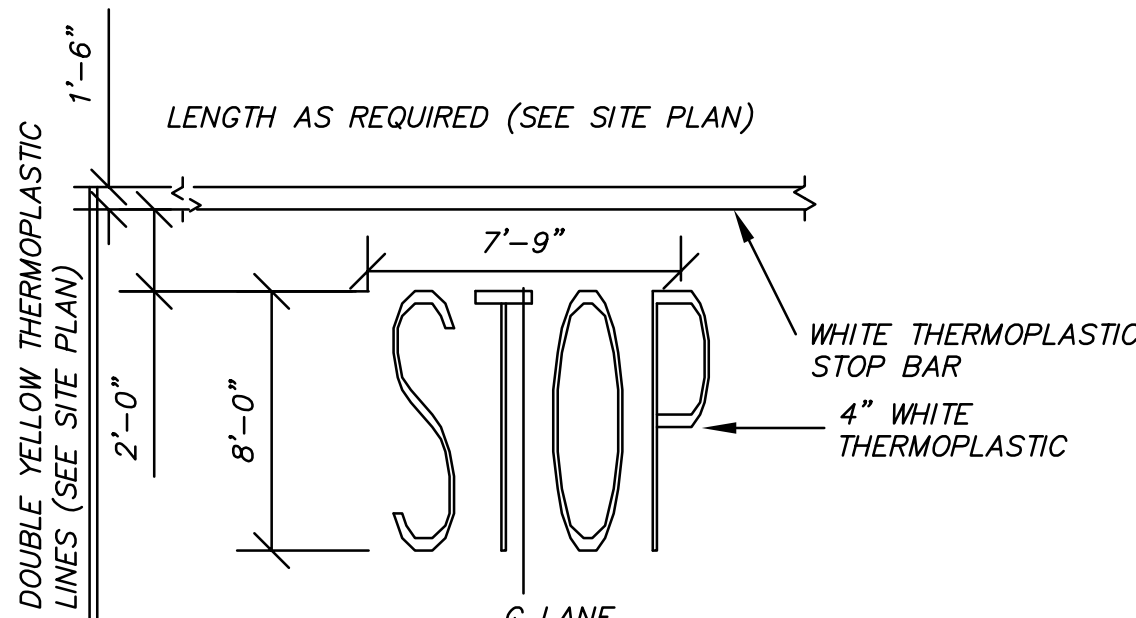
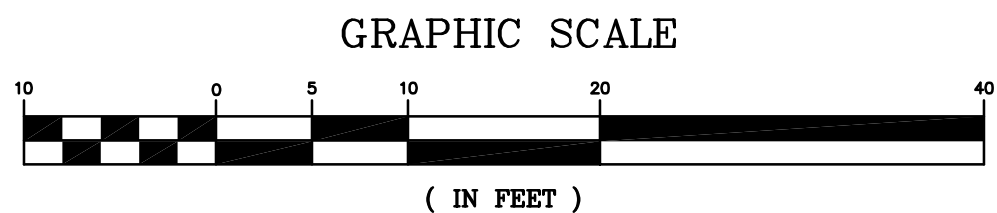


- NOTES:**
- ALL SIGNS TO BE INSTALLED AND CONSTRUCTED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION
  - SIGNS W11-2 AND W16-9P SHALL BE FLUORESCENT YELLOW-GREEN IN COLOR

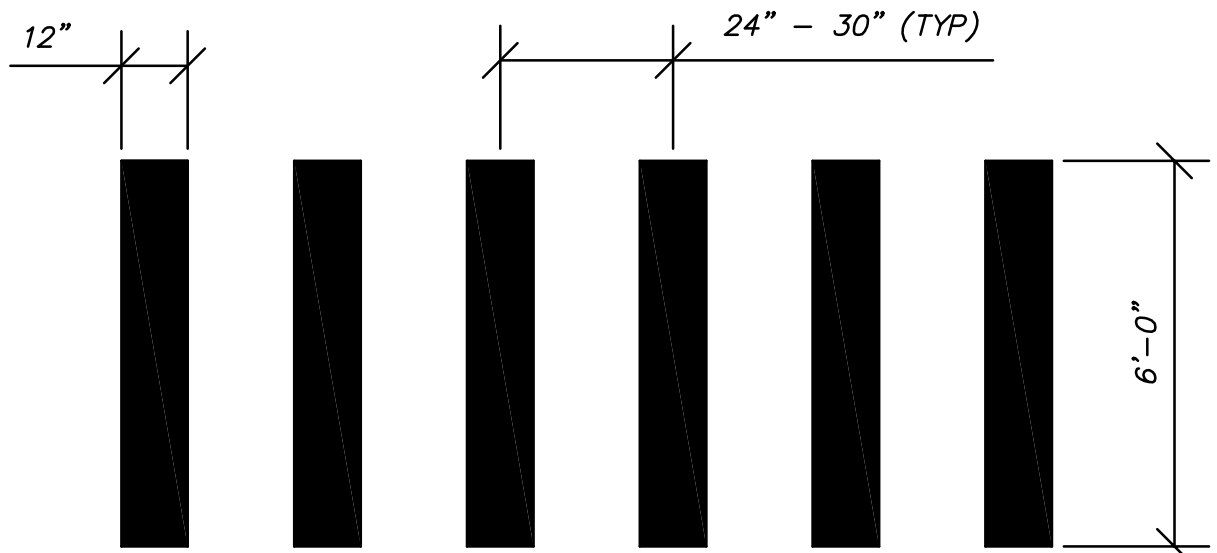


- NOTE:**
- CROSSWALK SHALL BE WHITE THERMOPLASTIC. THERMOPLASTIC SHALL BE APPLIED AS SPECIFIED BY MANUFACTURER.
  - CROSSWALKS THAT CROSS ROUTE 3 SHALL BE NHDOT APPROVED THERMOPLASTIC.

CROSSWALK MARKING DETAIL  
NOT TO SCALE



STOP BAR & LEGEND  
NOT TO SCALE

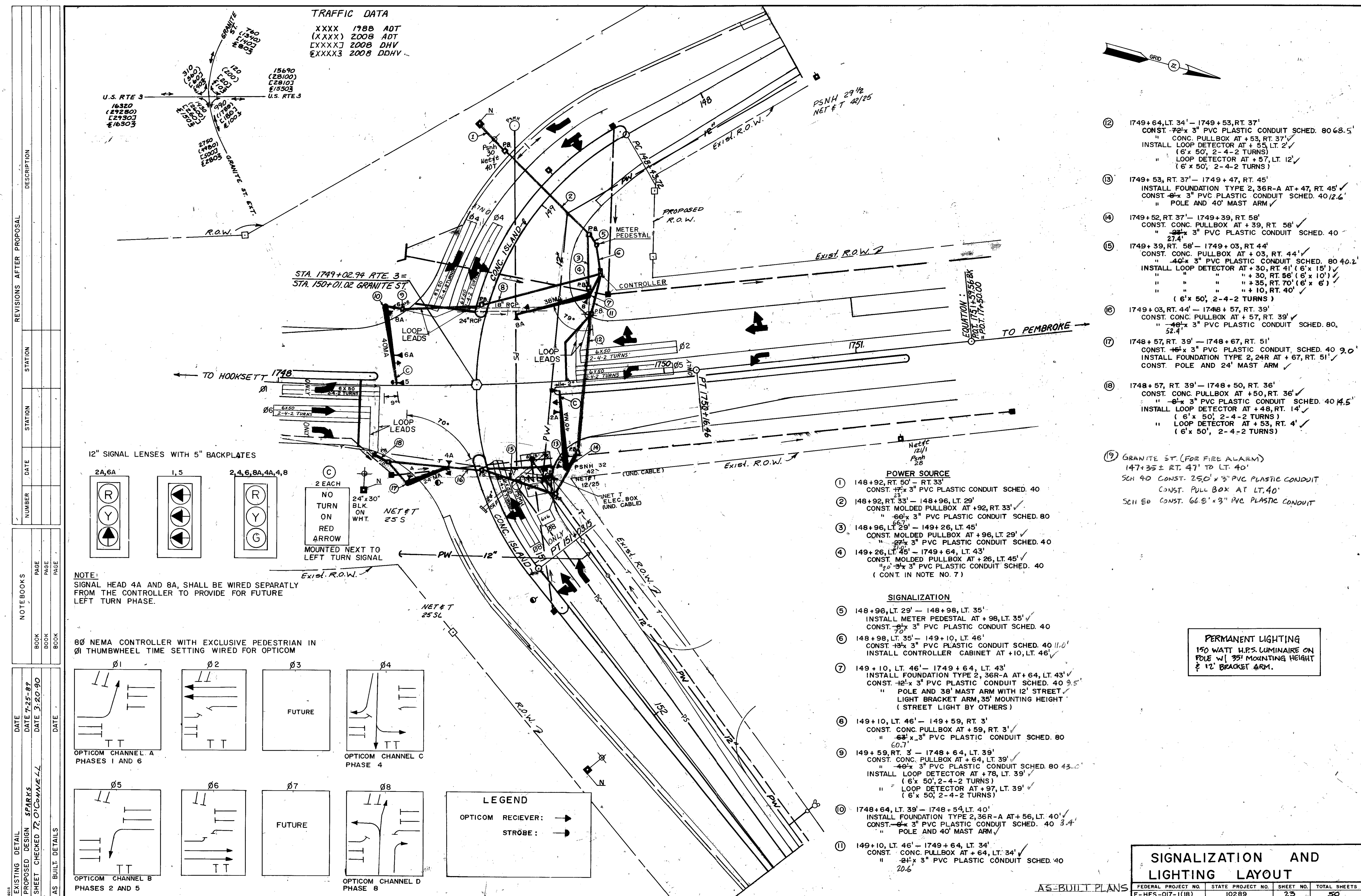


- NOTE:**
- ALL CROSSWALKS SHALL BE NHDOT APPROVED THERMOPLASTIC.
  - SPACING FOR THE MARKINGS SHALL BE UNIFORM FOR EACH INDIVIDUAL CROSSWALK BUT MAY BE MODIFIED FROM ONE CROSSWALK TO THE NEXT TO ELIMINATE A CROSSWALK MARKING DIRECTLY IN A WHEELPATH.

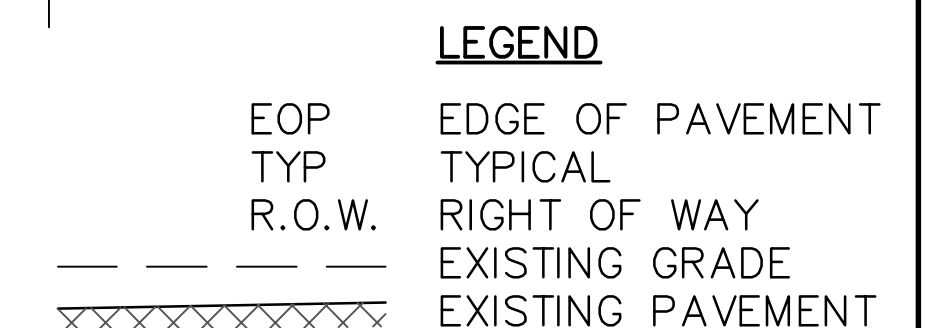
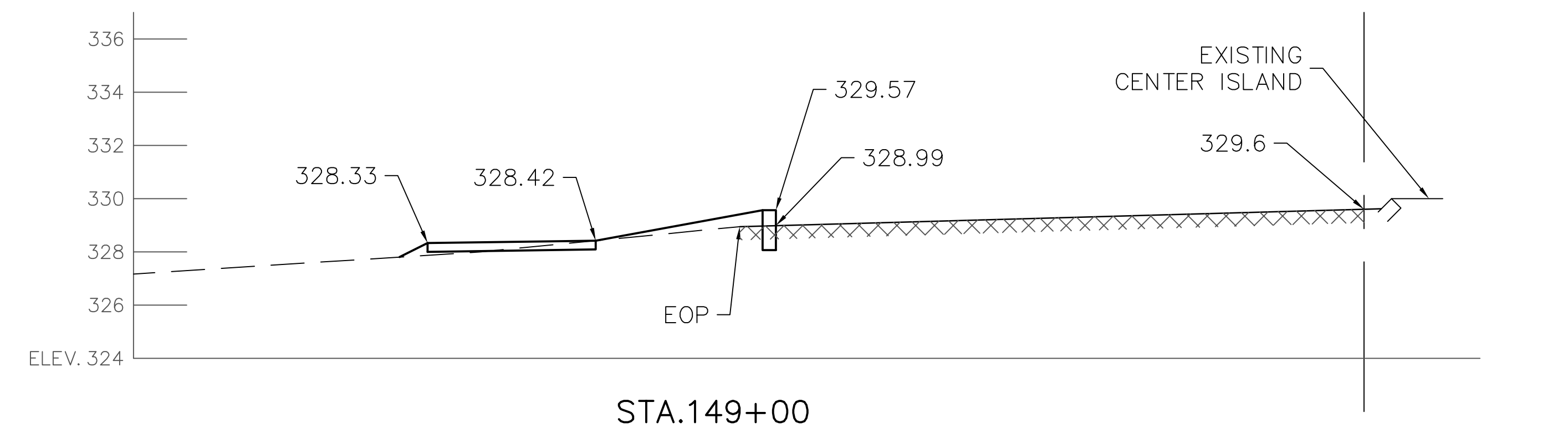
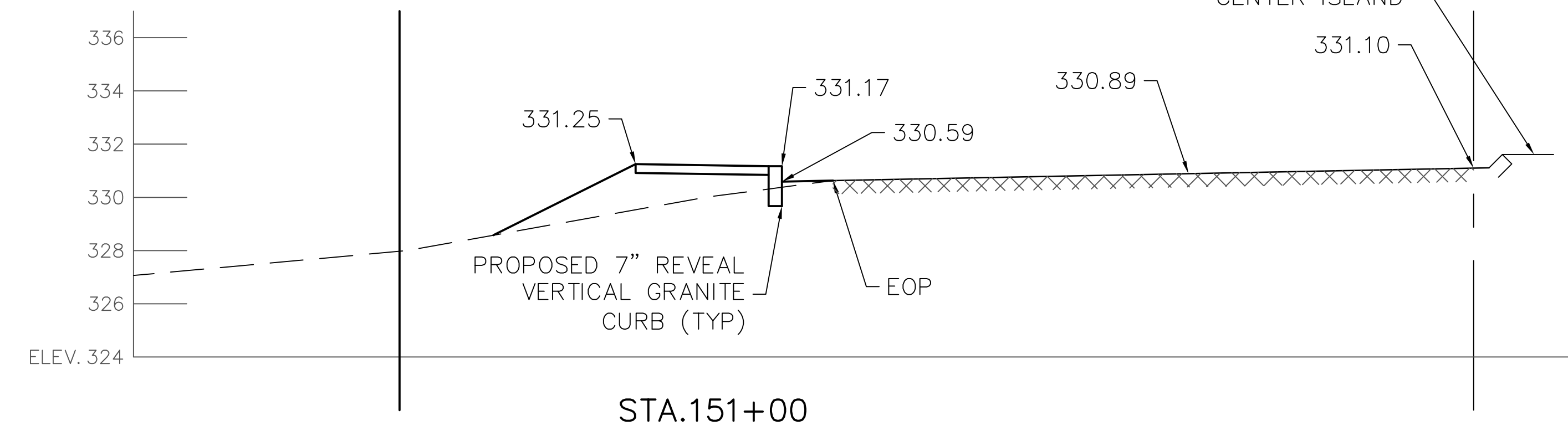
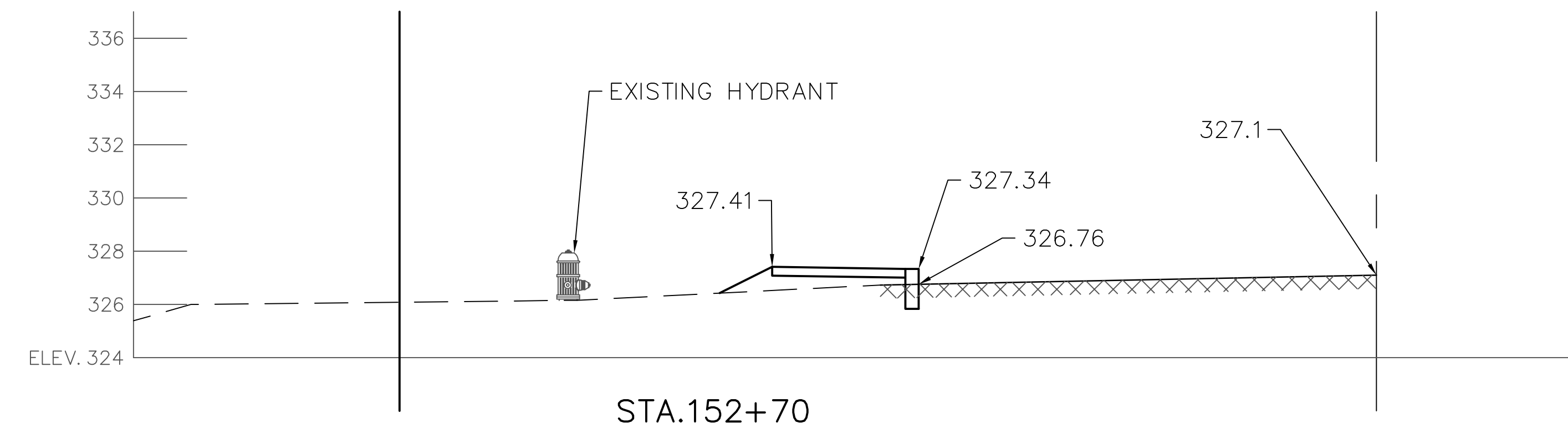
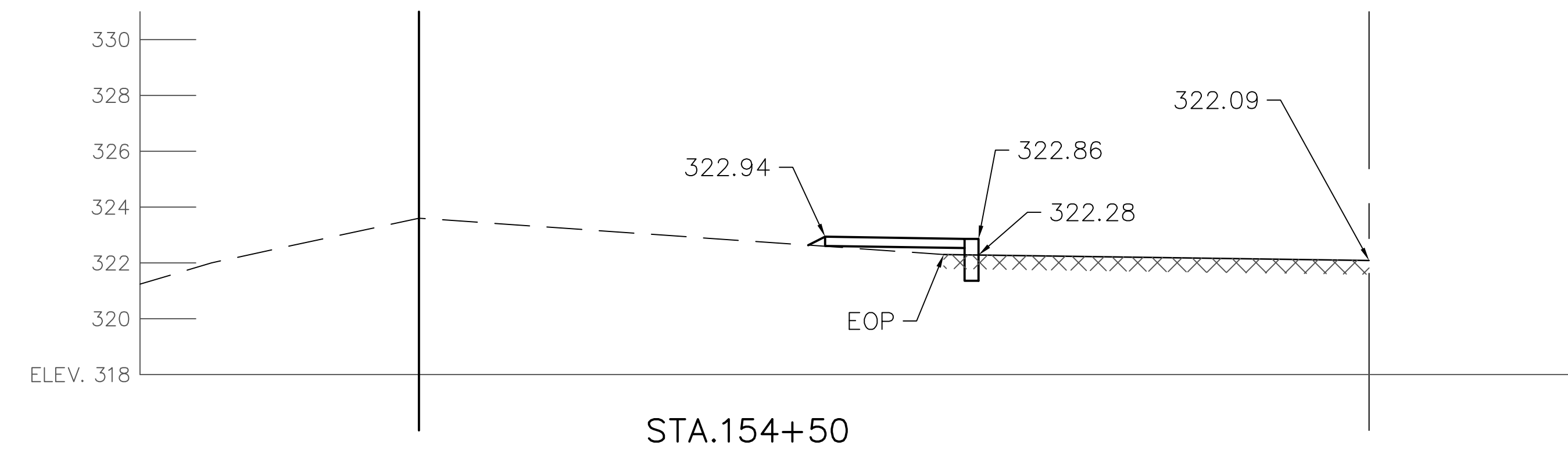
CROSSWALK MARKING DETAIL  
NOT TO SCALE

NH SRYS PROJECT #		HAIGHT ENGINEERING, PLLC CIVIL ENGINEERS 16 SCHOOL STREET ALLENSTOWN, NH 03275 603.750.4866 FAX 603.749.7348	
		1/26/2015	DATE
		KMT	
		KMT	
		APPD	
		REVISION	
		NO.	
TOWN OF ALLENSTOWN 16 SCHOOL STREET ALLENSTOWN, NH 03275			
SIDEWALK CONSTRUCTION PROJECT			
15			

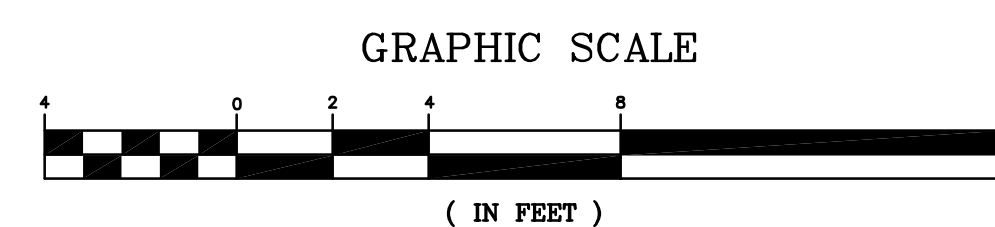
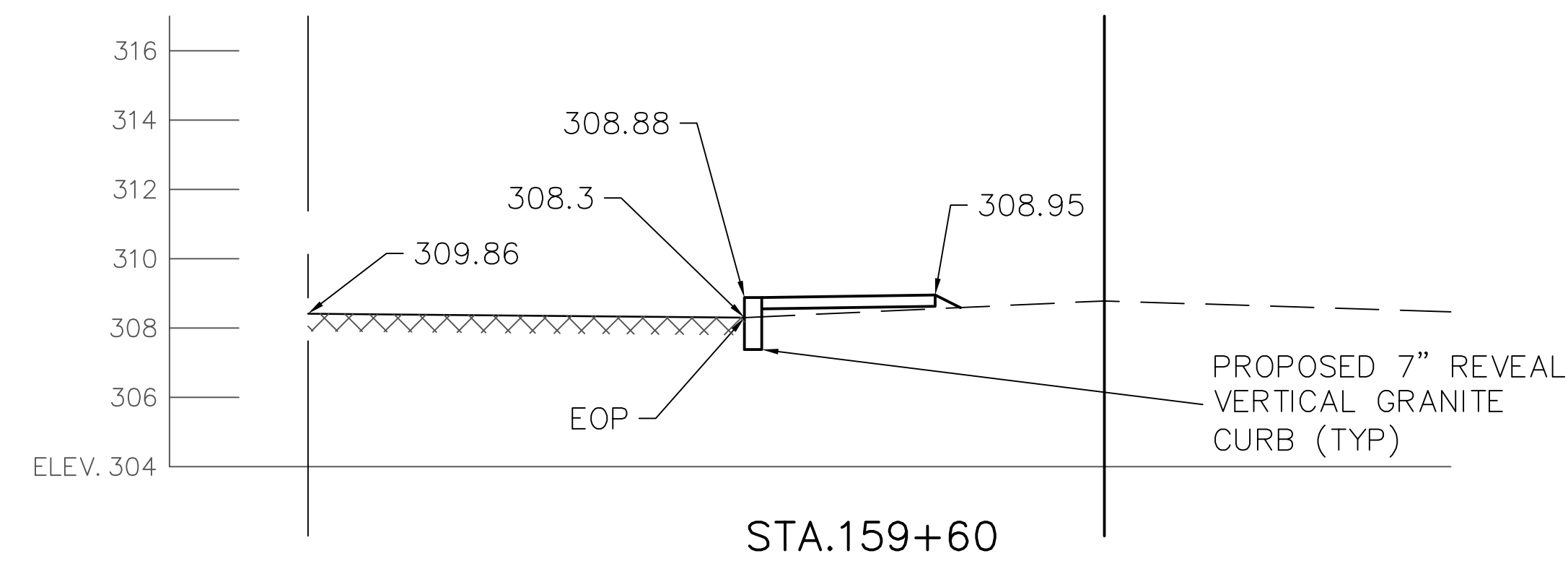
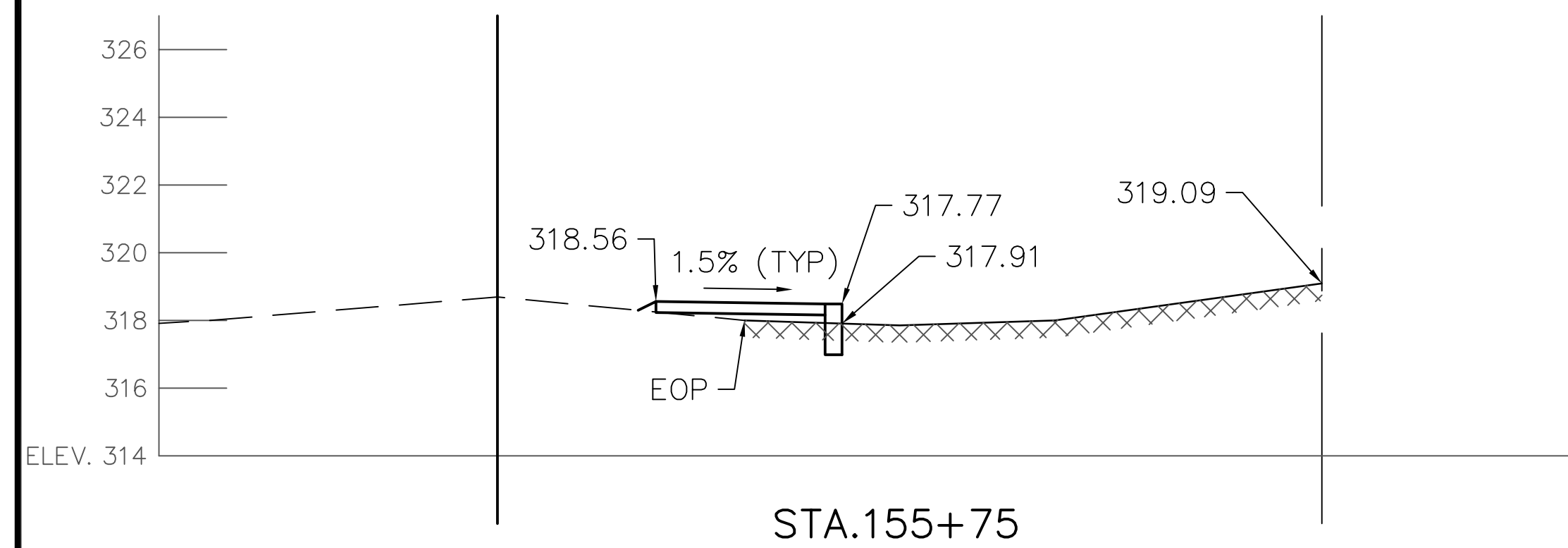
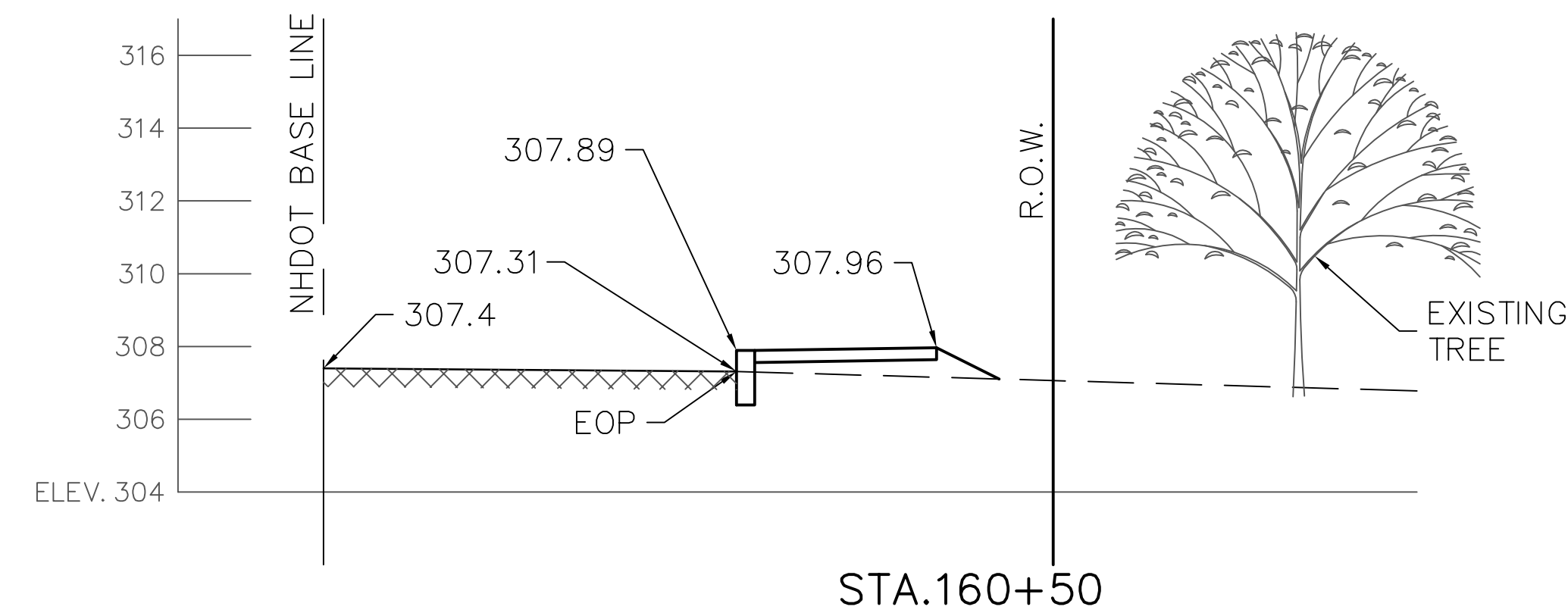
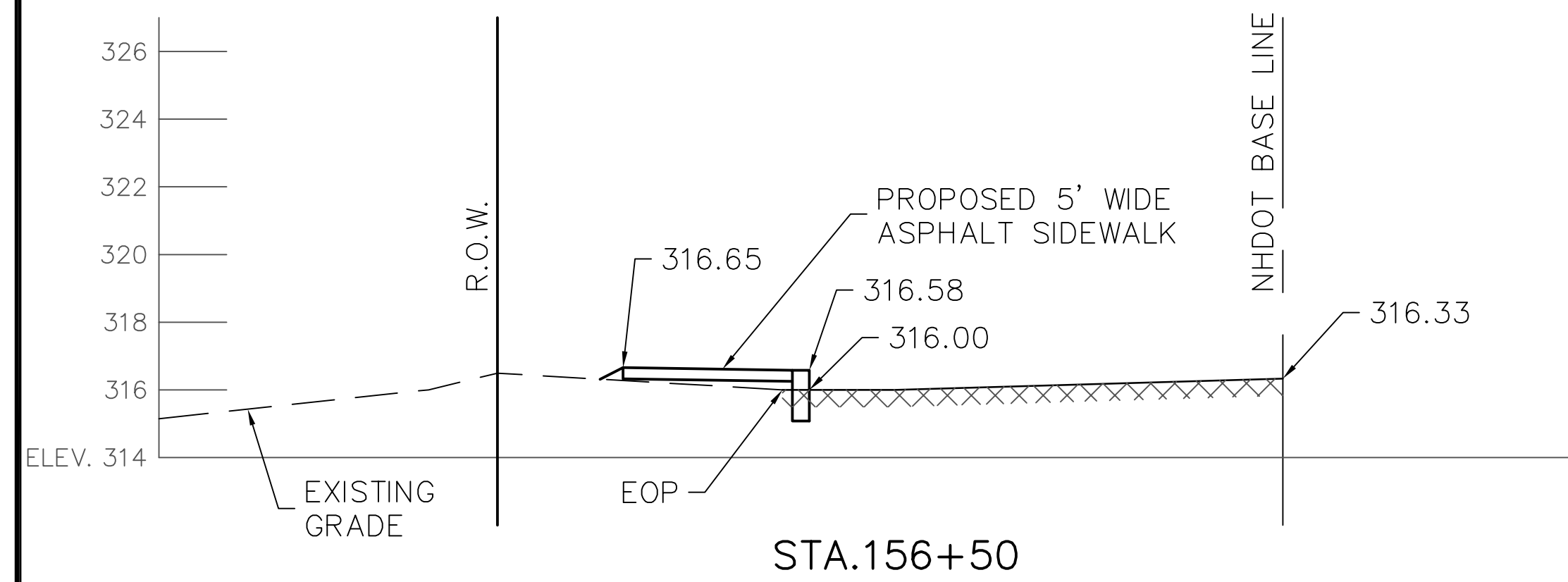
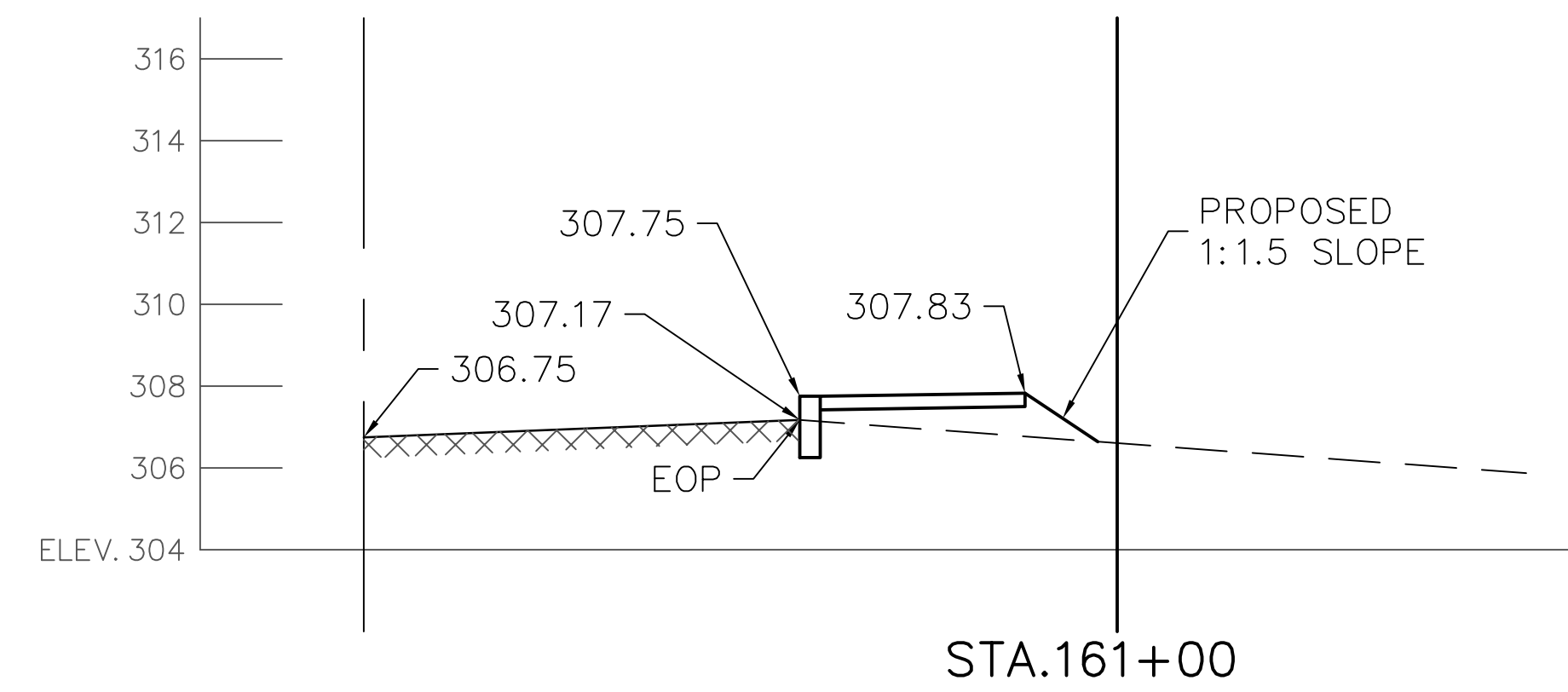
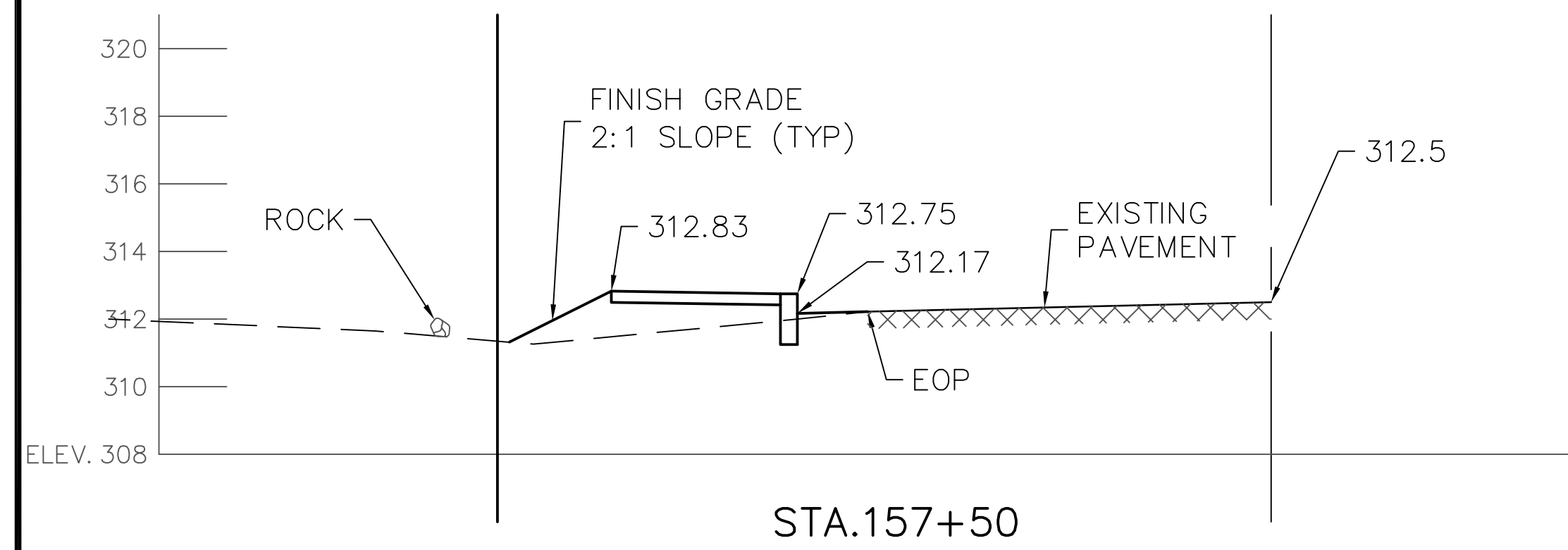
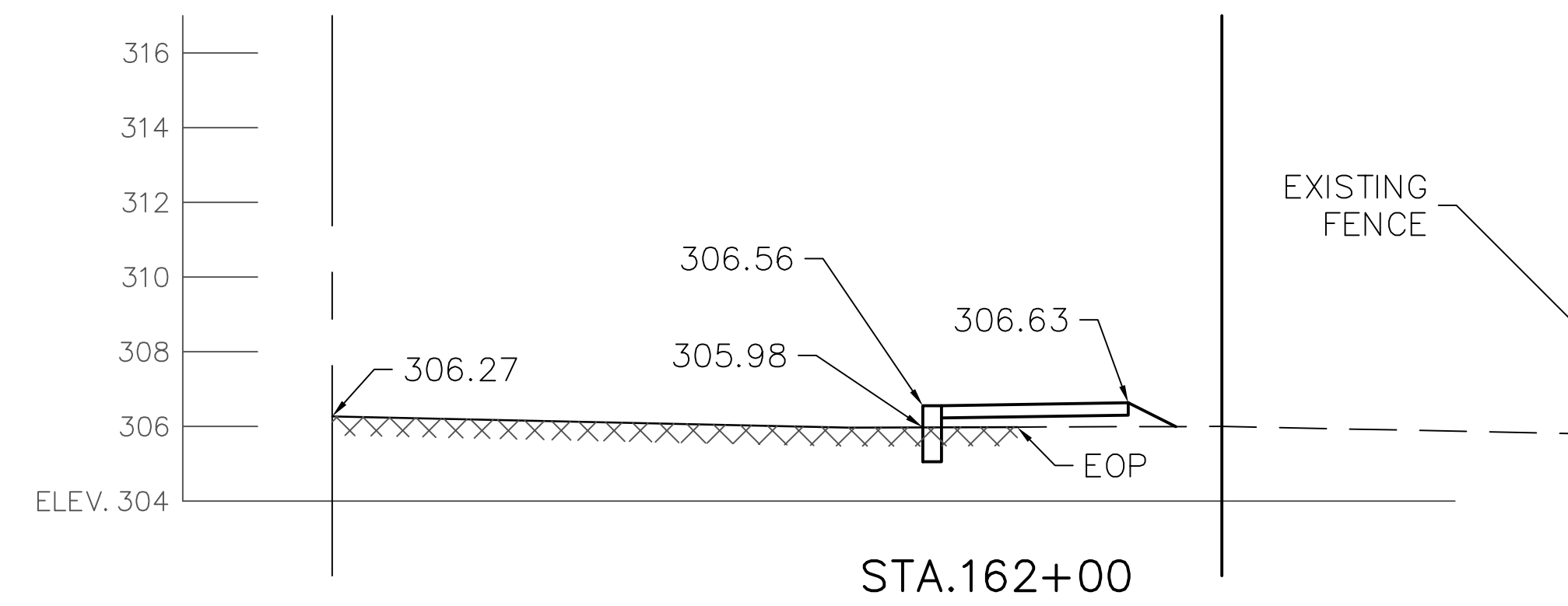
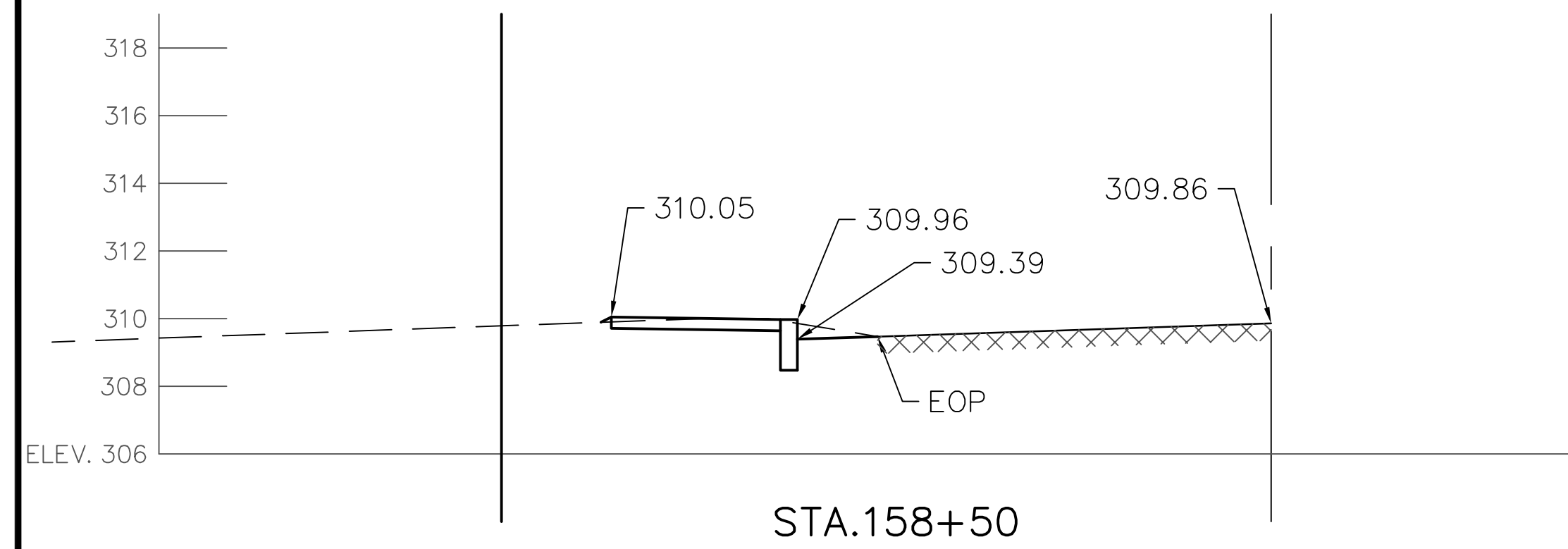









[illegible]





<u>LEGEND</u>	
EOP	EDGE OF PAVEMENT
TYP	TYPICAL
R.O.W.	RIGHT OF WAY
— — — — —	EXISTING GRADE
	EXISTING PAVEMENT

LEGEND

XS-2	CROSS SECTIONS ALONG GRANITE STREET	TOWN OF ALLENSTOWN 16 SCHOOL STREET ALLENSTOWN, NH 03275		DATE: 12-18-14							 HAIGHT ENGINEERING, PLLC CIVIL ENGINEERS P.O. BOX 1166, 181 WATSON ROAD DOVER, NEW HAMPSHIRE 603.750.4286 FAX 603.749.7348
				SCALE: AS SHOWN							
				DRAWN BY: SRD							
				DESIGN BY: SRD							
				APPROVED BY: SJH							
				PROJECT NO: 0905	2			KMT	1/26/2015		
FILE: SITE.DWG	NO.				REVISION	APP'D	DATE				