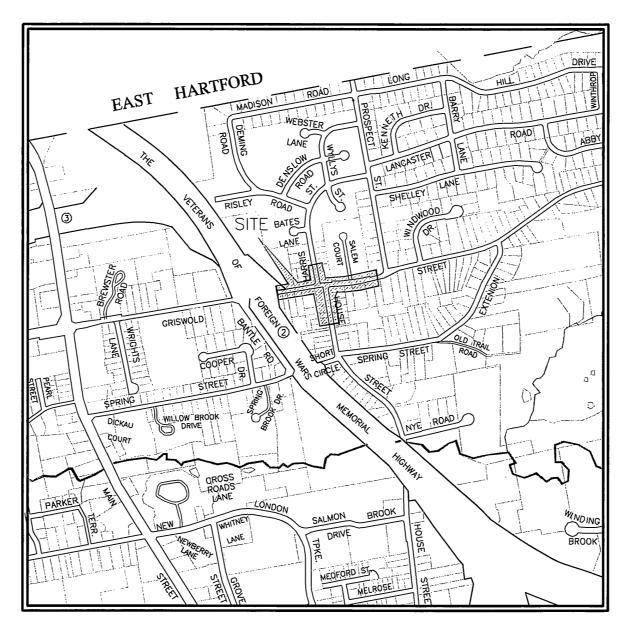
# TOWN OF GLASTONBURY ENGINEERING DEPARTMENT PROPOSED INTERSECTION IMPROVEMENTS GRISWOLD - HOUSE - HARRIS STREETS

State Project No. 53-187

located in

## GLASTONBURY, CONNECTICUT

PW-1211



LOCATION MAP SCALE: 1"=1000"

APRIL 2015

ISSUED FOR CONSTRUCTION

RICHARD J. JOHNSON **TOWN MANAGER** 

DANIEL A. PENNINGTON MANAGER OF PHYSICAL SERVICES/TOWN ENGINEER

## MAPPING NOTES:

- 1. THERE IS NO BOUNDARY/DETERMINATION OPINION.
- 2. NOT ALL IMPROVEMENTS ARE DEPICTED HEREON.
- 3. HORIZONTAL CONTROL IS BASED ON THE CONNECTICUT GEODETIC SURVEY STATE
- PLANE COORDINATES, NORTH AMERICAN DATUM OF 1983 (NAD83).
- 4. ELEVATIONS AND VERTICAL CONTROL IS BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 - (NAVD88).
- 5. THIS PLAN WAS COMPILED FROM OTHER MAPS, RECORD RESEARCH OR OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY, AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE
- 6. REPRODUCTIONS OF THIS PLAN ARE INVALID IF THEY DO NOT BEAR THE IMPRESSION SEAL OF THE UNDERSIGNED LAND SURVEYOR AND/OR

ALL UTILITY INFORMATION AND DATA SHOWN OF INDICATED IN THE CONTRACT DOCUMENTS ARE COMPLIED FROM MAPS AND DATA FURNISHED B OTHERS, ANY SUCH INFORMATION SHOULD NOT BE CONSTRUED AS ACCURATE OR COMPLETE AND THE CONTRACTOR SHALL VERIFY ALL LOCATIONS PRIOR TO CONSTRUCTION.

MANUAL REVISIONS TO THIS DOCUMENT ARE PROHIBITED. ALL REVISIONS MUST BE PERFORMED ON CADD FILE: H: \DWG\Streets\Griswold St\PW-1211 Griswold - Harris - House St Int\Griswold-Harris-House St Int-Const.dwg

SHEET INDEX

**DESCRIPTION** 

TITLE SHEET

DETAILED ESTIMATE

DETAILS AND TYPICAL SECTIONS

ROADWAY CONSTRUCTION PLAN

ROADWAY PROFILE

PAVEMENT MARKING & SIGNING PLAN

CROSS SECTIONS

CROSS SECTIONS

AND INTERSECTION GRADING PLAN

PROPERTY IMPACT PLAN

TRAFFIC SIGNAL PLAN

INTERCONNECT PLAN

MAST ARM SECTIONS/ELEVATIONS

MAST ARM ASSEMBLY ELEVATIONS

MAST ARM ASSEMBLY DETAILS

MAST ARM ASSEMBLY

FOUNDATION DETAILS GENERAL CLAUSES

( TEST PROCEDURES )

ELECTRICAL CONDUIT

TRAFFIC CONTROL FOUNDATIONS CONNDO

PEDESTALS, PEDESTRIAN SIGNALS CONNDO

TRAFFIC SIGNALS AND CABLE ASSIGNMENTS CONNDO

CONCRETE HANDHOLE

PEDESTRIAN PUSH BUTTON

CONTROLLERS

VEHICLE DETECTION SYSTEMS

CONTROL CABLE

SIGN SUPPORT & SIGN PLACEMENT

DETAILS. GORE EXIT SIGNS

SPECIAL DETAILS & PAVEMENT

MARKINGS FOR TWO-WAY HIGHWAY

METAL SIGNS

POSTS & MOUNTING

SIGNS FOR CONSTRUCTION

& PERMIT OPERATION

AND CHANNELING DEVICES FRONTIER / CL&P AERIAL RELOCATION PLAN

(FOR INFORMATION ONLY)

CONNECTICUT NATURAL GAS UTILITY RELOCATION PLAN

(FOR INFORMATION ONLY)

CONSTRUCTION SIGN SUPPORT CONNDO

TRENCHING & BACKFILLING, CONNDO

CONNDO

CONNDO

CONNDO<sup>-</sup>

CONNDO

CONNDO

CONNDO

CONNDO

LOCATION 53-219 INTERSECTION IMPROVEMENTS PLAN

EXISTING CONDITIONS, UTILITIES, GEOMETRY AND CONTROL PLAN

REV. No.

SHEET NO.

8-10

12

13

18

19

20 TR-1000 (

21 TR-1001 (

22 TR-1002 (

23 TR-1010 0

24 TR-1102 01

25 TR-1105 01

26 TR-1107 (

27 TR-1108 0

28 TR-1111 02

29 TR-1113 0

30 TR-1208 (

31 TR-1208 02

32 TR-1210 03

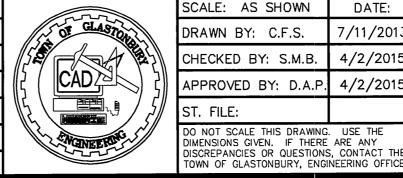
33 TR-1220 01

34 TR-1220 02

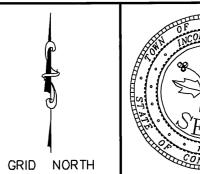
35

GRAPHIC SCALE ( IN FEET 1 inch = 40 ft.IF SCALING FROM THIS PLAN, VERIFY SCALE WITH THE GRAPHIC SCALE PROVIDED ABOVE.

		DRAWING ISSUE STATUS		
				5
				1/2
STP 53-187	1.	ISSUED FOR CONSTRUCTION	4/2/2015	
PW-1211	NO.	DESCRIPTION	DATE	



SCALE: AS SHOWN RAWN BY: C.F.S. CHECKED BY: S.M.B. | 4/2/2015 APPROVED BY: D.A.P. 4/2/2015 OO NOT SCALE THIS DRAWING. USE THE DIMENSIONS GIVEN. IF THERE ARE ANY





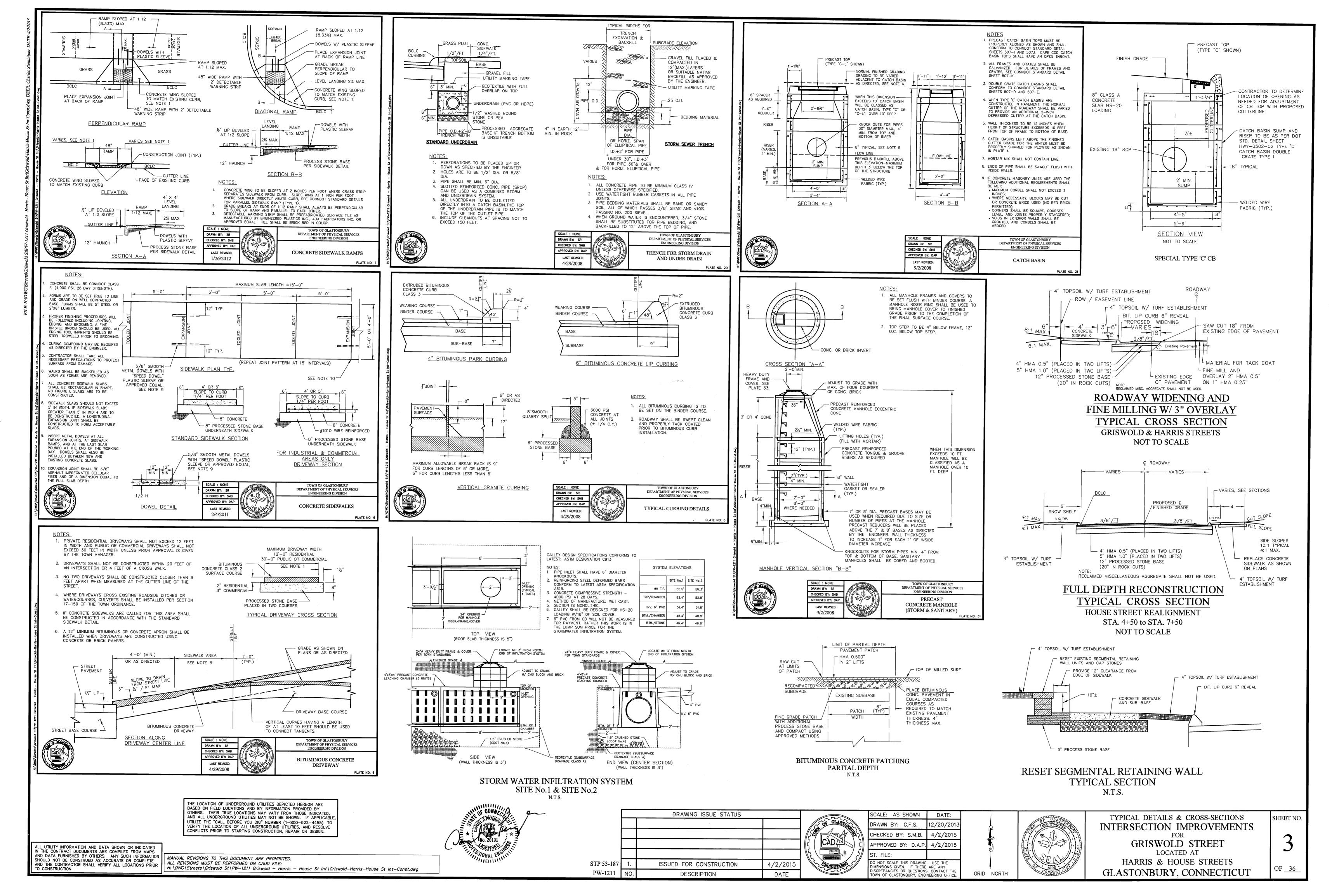
TITLE SHEET INTERSECTION IMPROVEMENTS

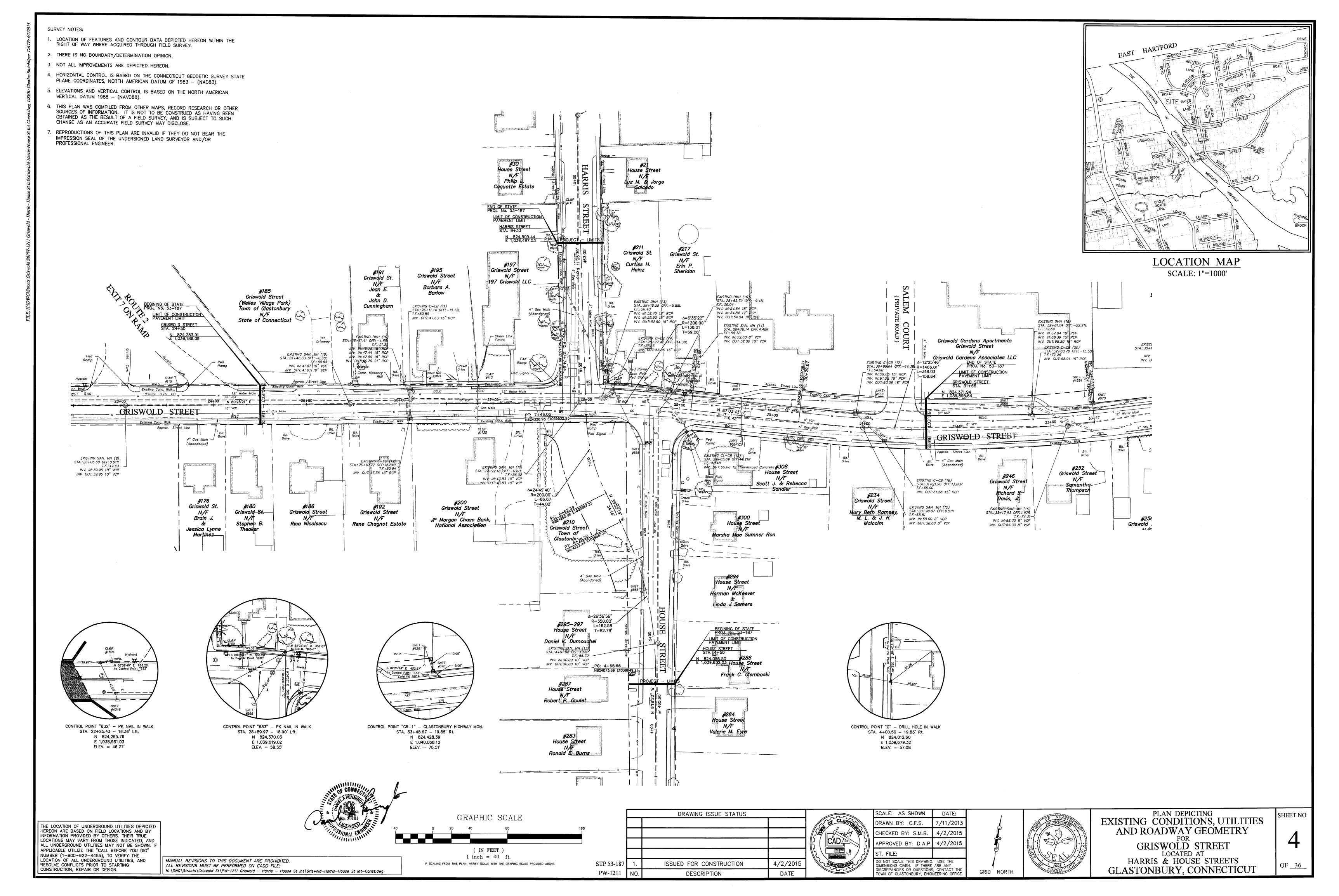
GRISWOLD STREET LOCATED AT HARRIS & HOUSE STREETS OF <u>36</u>

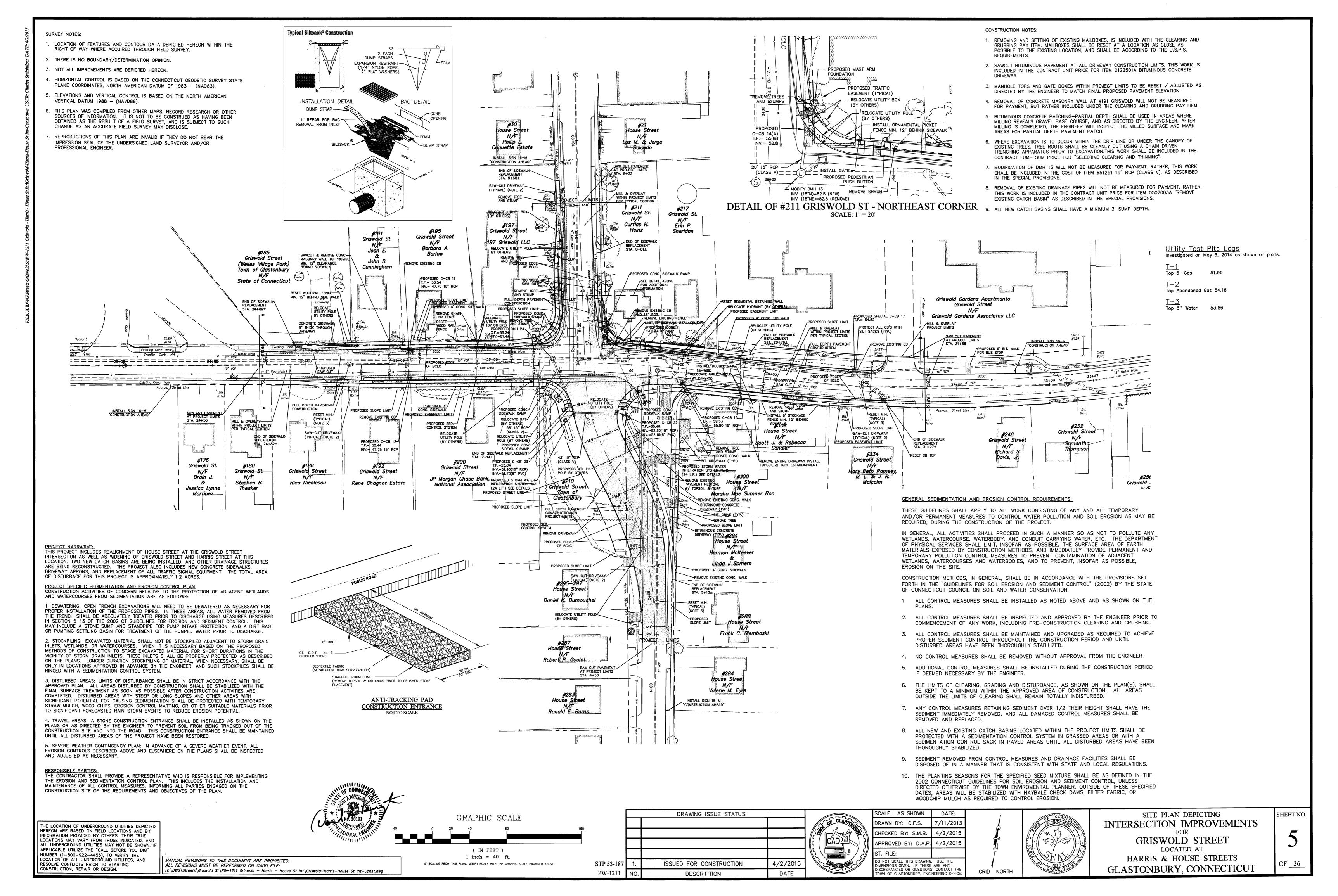
SHEET NO

GLASTONBURY, CONNECTICUT

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE TRUE DETAILED ESTIMATE SHEET CONDITIONS OR ACTUAL QUANTITIES OR DISTRIBUTION OF QUANTITIES OF WORK WHICH WILL BE REQUIRED P = FEDERAL AID PARTICIPATING NP= FEDERAL AID NON PARTICIPATING \*=FOR INTERNAL USE ONLY GRISWOLD - HOUSE - HARRIS INTERSECTION IMPROVEMENT JFOR THE CONSTRUCTION OF IN THE TOWN OF GLASTONBURY FROM STA. <u>24+50</u> TO STA. <u>31+65</u> LENGTH 715 BASE COURSE VARIES WIDTH VARIES ft; DEPTH 0.25 ft HMA 0.5" SURFACE COURSE WIDTH VARIES ft; FROM STA. 4+48 TO STA. 9+33BASE COURSE VARIES \_WIDTH\_<u>VARIES</u> ft; DEPTH 0.25 ft HMA 0.5" SURFACE COURSE WIDTH VARIES ft; DEPTH -- in; SLECTIVE CLEARING AND THINNING TRAFFIC PERSON (UNIFORMED FLAGGER)
TRAFFIC PERSON (TOWN POLICE) **EXCAVATION TRENCH** BITUMINOUS CONCRET DRIVEWAY CUT BITUMINOUS
CONCRETE PAVEMEN
FORMATION OF
SUBGRADE MAINTENANCE AND PROTECTION OF TRAFFIC EARTH EXCAVA FINE MILLING HMA (0-4") S0.5 S1.0 ITEM S0. UNIT C.Y. C.Y. GAL. S.Y. S.Y. S.Y. L.S. C.Y. C.Y. L.F. | S.Y. | L.S. EST. L.F. EA. L.S. L.S. S.Y. S.Y. S.F. S.F. EA. S.Y. S.Y. L.F. L.S. HR. EST. L.S. | L.F. | L.F. | L.F. | L.F. 320 | 820 | 1,026 | 276 | 700 | 2,760 | L.S. | 1,500 | 12 | 1,790 | 2,370 | 35 GRISWOLD STREET | 700 | 870 | 160 8 |6,400 | 210 400 10 | L.S. | L.S. |2,300 |2,300 | 10 | 440 1,920 L.S. 1 L.S. | 800 L.S. | 105 | 110 | 30 | 10 700 | 2,760 | L.S. | 1,500 | 12 | 1,790 | 2,370 | 35 SUBTOTAL 820 | 1,026 | 276 320 8 |6,400 | 210 10 | 440 400 10 L.S. 2,300 2,300 1,920 L.S. L.S. 105 110 | 30 10 L.S. | L.S. 800 L.S. UNASSIGNED TOTALS 820 | 1,026 276 700 2,760 1,500 12 1,790 2,370 35 8 6,400 L.S. 2,300 2,300 10 440 400 10 L.S. | 800 L.S. L.S. 110 10 105 ITEM NUMBER TEMP MARKINGS MARKINGS FEDERAL NON-PARTICIPATING ITEMS ADJUST GATE BOX (GAS) MARK ITEM TRAFFIC UNINTEF POWER EA. EA. L.S. S.F. EA. EA. EA. S.F. EA. EA. EA. S.F. EA. | EA. | EA. DAY L.F. L.F. S.F. L.F. L.F. L.F. E.A. GRISWOLD STREET | 148 120 500 L.S. 42 180 3,000 2,100 400 1,150 40 400 | 2,100 | 1,150 3,000 500 | 2,100 | 400 SUBTOTAL 1,150 L.S. 180 120 400 | 2,100 | 1,150 42 40 10 UNASSIGNED 148 3,000 TOTALS 400 ,150 2,100 400 | 2,100 | NUMBER ITEMS ALTERNATE SELECTOR (MODE FIBER OPTIC PATCH CORD ITEM EA. EA. EA. HARRIS / HOUSE GRISWOLD ST. INT. 20 5 L.S. 100 150 280 | 720 | 665 | 470 | 300 4 ROUTE 2 RAMP 2 150 BANTLE RD. INT. 125 250 | 370 | 500 2200 90 INTERCONNECTION 925 370 SUBTOTAL 100 | 2315 | 430 | 720 | 665 | 470 | 425 | 925 90 UNASSIGNED 100 | 2315 | 430 | 720 | 470 425 TOTALS L.S. THE LOCATION OF UNDERGROUND UTILITIES DEPICTED HEREON ARE BASED ON FIELD LOCATIONS AND BY INFORMATION PROVIDED BY OTHERS. THEIR TRUE LOCATIONS MAY VARY FROM THOSE INDICATED, AND ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN. IF APPLICABLE, UTILIZE THE "CALL BEFORE YOU DIG" NUMBER (1-800-922-4455). TO VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES, AND RESOLVE CONFLICTS PRIOR TO STARTING CONSTRUCTION, REPAIR OR DESIGN. DRAWING ISSUE STATUS SCALE: AS SHOWN DETAILED - ESTIMATE SHEET DATE: SHEET NO. 12/20/2013 INTERSECTION IMPROVEMENTS CHECKED BY: S.M.B. 4/2/2015 GRISWOLD STREET APPROVED BY: D.A.P. 4/2/2015 ALL UTILITY INFORMATION AND DATA SHOWN OR INDICATED LOCATED AT N THE CONTRACT DOCUMENTS ARE COMPILED FROM MAPS ST. FILE: AND DATA FURNISHED BY OTHERS. ANY SUCH INFORMATION SHOULD NOT BE CONSTRUED AS ACCURATE OR COMPLETE AND THE CONTRACTOR SHALL VERIFY ALL LOCATIONS PRIOR HARRIS & HOUSE STREETS MANUAL REVISIONS TO THIS DOCUMENT ARE PROHIBITED DO NOT SCALE THIS DRAWING. USE THE DIMENSIONS GIVEN, IF THERE ARE ANY DISCREPANCIES OR QUESTIONS, CONTACT THE TOWN OF GLASTONBURY, ENGINEERING OFFICE. STP 53-18' ISSUED FOR CONSTRUCTION 4/2/2015 ALL REVISIONS MUST BE PERFORMED ON CADD FILE: GLASTONBURY, CONNECTICUT H:\DWG\Streets\Griswold St\PW-1211 Griswold — Harris — House St Int\Griswold—Harris—House St Int—Const.dwg GRID NORTH PW-1211 DATE DESCRIPTION







200.00' V K = 129.43PVI STA = 29 + 84.00PVI ELEV = 61.00| LP STA = 28 + 84.00 - 100 = 100LP ELEV = 58.37EXISTING SAN. MH (14) STA: 28+78.14 OFF: 4.48R -T.F.: 58.38 INV. IN: 52.00 8" VCP EXISTING C-CB (17) STA.: 30+89.64 OFF: -14.38L T.F.: 64.60 INV. IN: 59.85 15" RCP INV. IN: 61.22 18" RCP EXISTING DMH (16) STA.: 28+83.72 OFF: -9.48L T.F.: 58.04 K = 127.97PVI STA = 26+50.00 INV. IN: 54.84 18" RCP PVI ELEV = 52.20 (MODIFY) INV. IN: 54.84 12" Reinforced Concrete
INV. OUT: 54.54 18" RCP LP STA = 25+75.00 LP ELEV = 51.10 EXISTING DMH (1 T.F.: 56.40 | INV. IN: 52.40 | 8" RCP | INV. IN: 52.50 | 5" RCP (REMOVE) | INV. OUT: 52.50 | 18" RCP | INV. IN: 52.5 | 15" RCP) 18" RCP | EXISTING C-CB (18) STA.: 31+21.96 OFF: 13.8C T.F.: 66.00 INV. OUT: 61.56 15" RCP EXISTING DMH (10) STA.: 26+11.41 OFF: -4.85L T.F.: 51.23 EXISTING SAN. MH (15) STA.: 30+98.07 OFF: 0.51 T.F.: 65.81 \_INV. IN: 46.79 18" RCP INV. IN: 58.60 8" VCP (REMOVE) INV. IN: 47.44 15" RCP EXISTING C-QB (12) STA.: 26+10.72 OFF: 13.84R T.F.: 50.54 INV. OUT: 47.56 15" RCP INV. OUT: 58.60 8" VCP INV. IN: 47.59 15" RCP INV. OUT: 46.79 21" RCP (REMOVE) EXISTING CL-CB (15) STA.: 29+05.69 OFF: 14.21R 18" RCP INV. OUT: 55.68 12" Reinforced Concrete EXISTING SAN. MH (13) STA.: 4+91.98 OFF: 3.56R (REMOVE) -\T.F.: 56.72 ---EXISTING C-CB (14) \_STA.: 28+27.42 OFF: -14.3 (REMOVE)

-EXISTING C-CB (11)

STA::26+11.14 OFF:-15.12|

T.F.: 50.59 INV. OUT: 50.00 10" VCP 21" RCP INV. OUT: 53.06 15" RCP T.F.: 55.2± INV.: 51.1± PROPOSED C-CB 14A STA.: 28+20.3 OS:-28.7 INV. 047: 47.63 15" RCP EXISTING SAN. MH (10) STA.: 25+46.33 QFE:-0.38L \_\_\_\_\_ -----\_\_\_\_\_\_10" VCP EXISTING SAN. MH (11) STA: 27+92.18 OFF: -0.60L T.F.: 56.02 INV. IN: 43.83 10" VCP INV. OUT: 43.83 10" VCP .\_\_\_\_\_ \_\_\_\_ 10" VCP DATUM ELEV 40.00 24+00 24+50 25+00 25+50 26+00 26+50 27+00 27+50 28+00 28+50 30+00 30+50 31 + 0031 + 5032+50 29+00 29+50 32+00 GRISWOLD STREET PROFILE 1"= 40' HORZ., 1"= 4' VERT. 100.00' VC K = 55.60 PVI STA = 5+80.00 PVI ELEV = 57.50 HP STA = 5+73.91 50.00' VC K = 17.71PVI STA = 8+45.01PVI ELEV = 56.70 $\frac{\text{HP STA}}{\text{HP FLEV}} = \frac{8+42.72}{56.53}$ STA = 7+49.8\_ ELEV = 55.79 60 PROPOSED 15" RCP = 3/ 0.79% 匝乌 STA = 7+73.8 ELEV = 55.79(REMOVE) STA: 28+27.42 OFF: -14.39L I.F.: 56.16 INV. OUT: 53.06 15" RCP EXISTING SAN. MH (13) STA.: 4+91.98 OFF: 3.56R T.F.: 56.72— INV. IN: 50.00 10" VCP INV. 007: 30.00 10" VCP PROPOSED C-CB 22 STA.: 7+0.0 OS: 27.7 T.F.: 55.46 INV.: 52.30(15\* RCP) INV.: 52.1 (6\* PVC) | EXISTING DMH (13) (MODIFY) | STA.: 28+16.29 OFF: -5.88L | I.F.: 56.40 | IIV. IN: 52.50 15" RCP (REMOVE) | IIV. OUT: 52.50 18" RCP | INV. IN: 52.50 15" RCP) | PROPOSED DMH 24 | STA.: 7+68.08 OS: -34.3 | -T.F.: -55.2± | INV.: 51.40 | INV.: 50.1± Exist | EXISTING SAN. MH (11) | ST PROPOSED C-CB 23 STA:: 7+10.80 0S -18.0 T.F.: 55.64 PROPOSED / INV.: 51.90(15" RCP)
INV.: 51.70(6" PVC) EXISTING SAN. MH (14) STA::28+78.14 OFF: 4.48R T.F.:58.38 INV. IN:52.00 8" VCP INV. OUT:52.00 10" VCP → 10" VCP EXISTING SAN. MH (11)

STA.: 27+92.18 OFF: -0.60L

-1.F.: 56.02

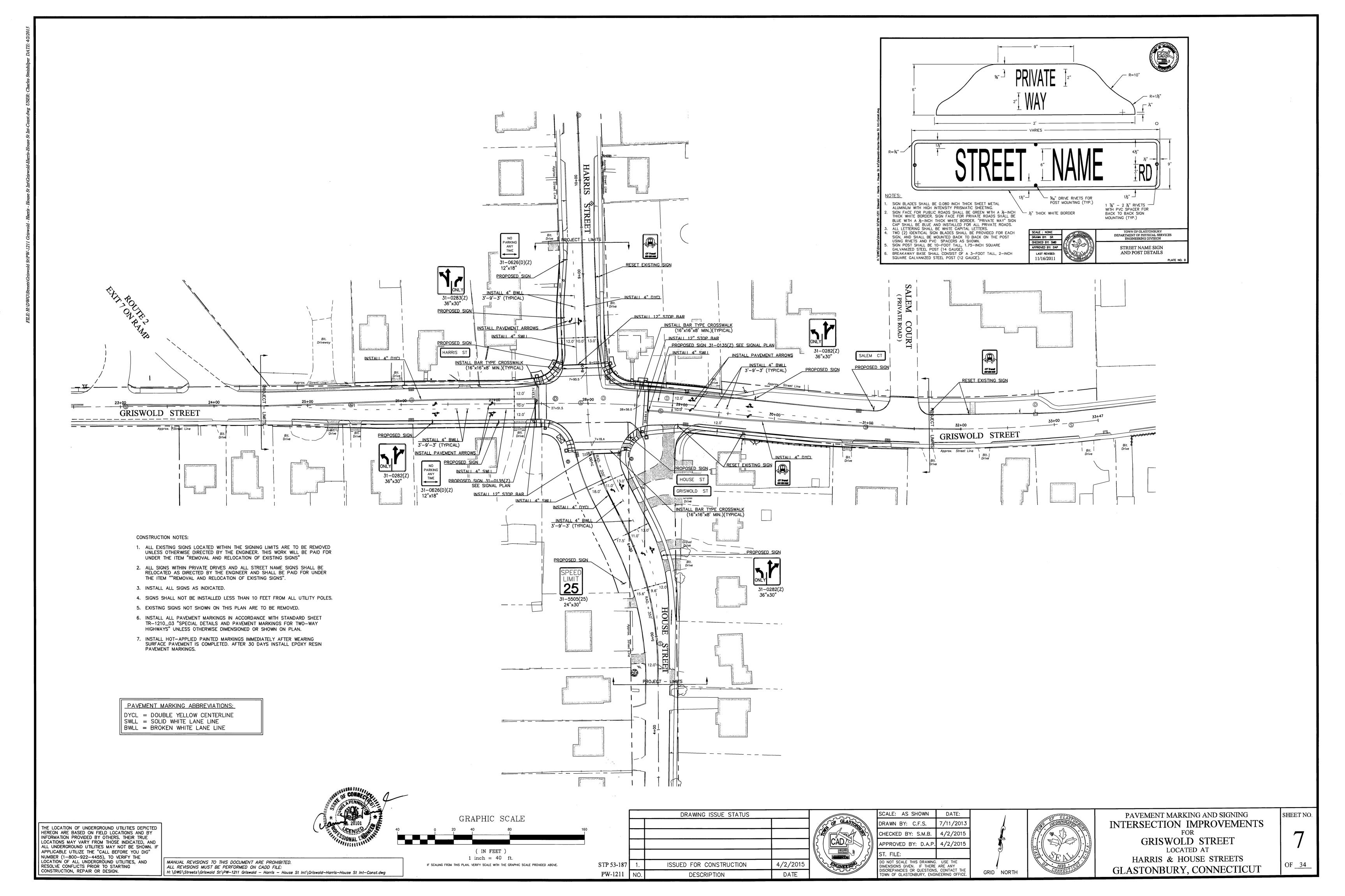
INV. IN: 43.83 10" VCP INV. OUT: 43.83 10" VCP DATUM ELEV 40.00 3+50 4+00 4+50 5+00 6+00 6+50 7+00 7+50 8+00 8+50 9+00 9+50 10+0010+20 5+50 HOUSE STREET / HARRIS STREET PROFILE 1"= 40' HORZ., 1"= 4' VERT. SCALE: AS SHOWN DEPICTING SHEET NO. DATE: DRAWING ISSUE STATUS GRAPHIC SCALE EXISTING & PROPOSED PROFILE SCALE: 1'' = 40' HORZ. DRAWN BY: C.F.S. 7/11/2013 SCALE: 1" = 4' VERT. CHECKED BY: S.M.B. 4/2/2015 GRISWOLD STREET APPROVED BY: D.A.P. 4/2/2015 LOCATED AT ( IN FEET ) HARRIS & HOUSE STREETS 1 inch = 40 ft.DO NOT SCALE THIS DRAWING. USE THE DIMENSIONS GIVEN. IF THERE ARE ANY DISCREPANCIES OR QUESTIONS, CONTACT THE TOWN OF GLASTONBURY, ENGINEERING OFFICE. 4/2/2015 OF <u>36</u> STP 53-187 ISSUED FOR CONSTRUCTION IF SCALING FROM THIS PLAN, VERIFY SCALE WITH THE GRAPHIC SCALE PROVIDED ABOVE. GLASTONBURY, CONNECTICUT

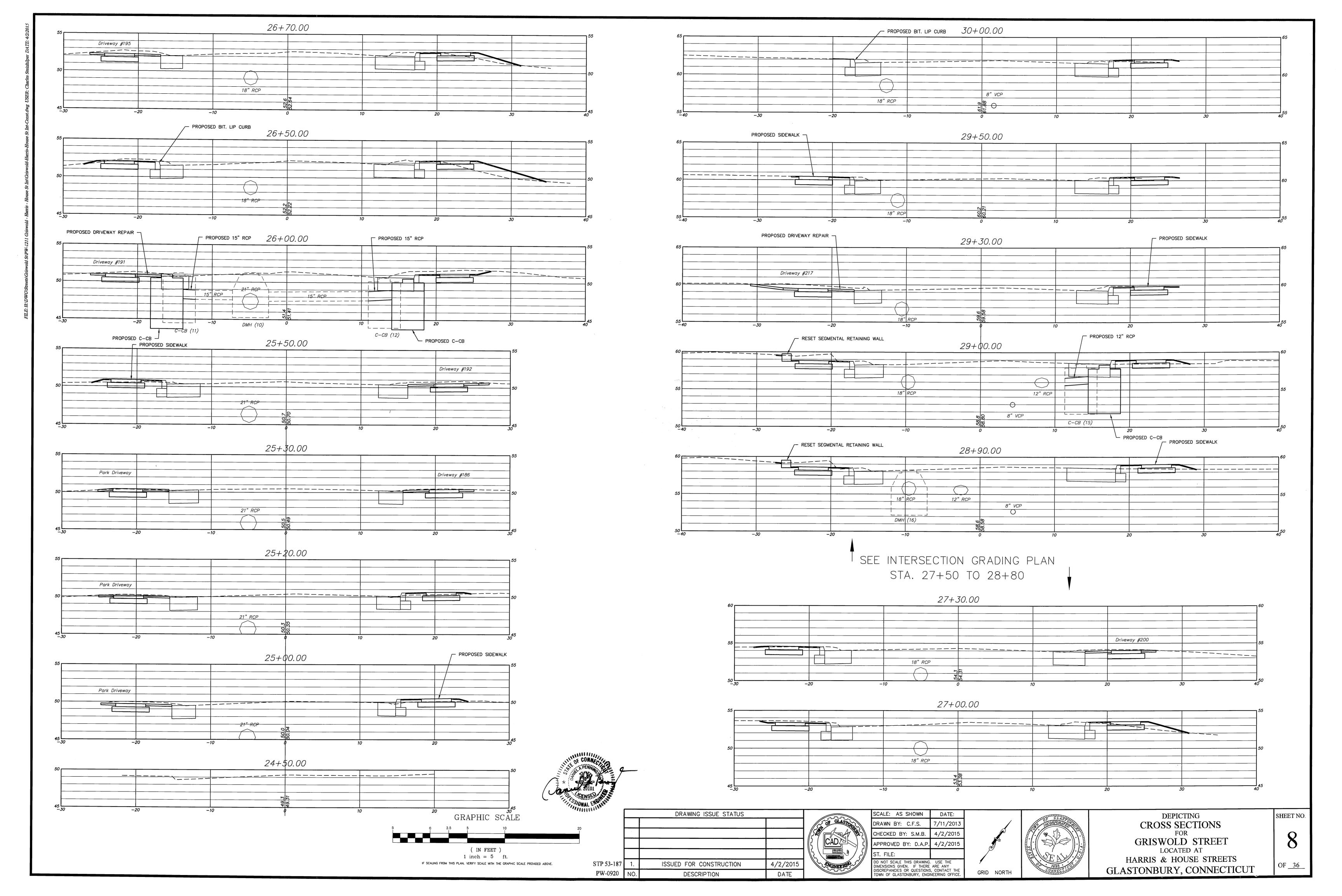
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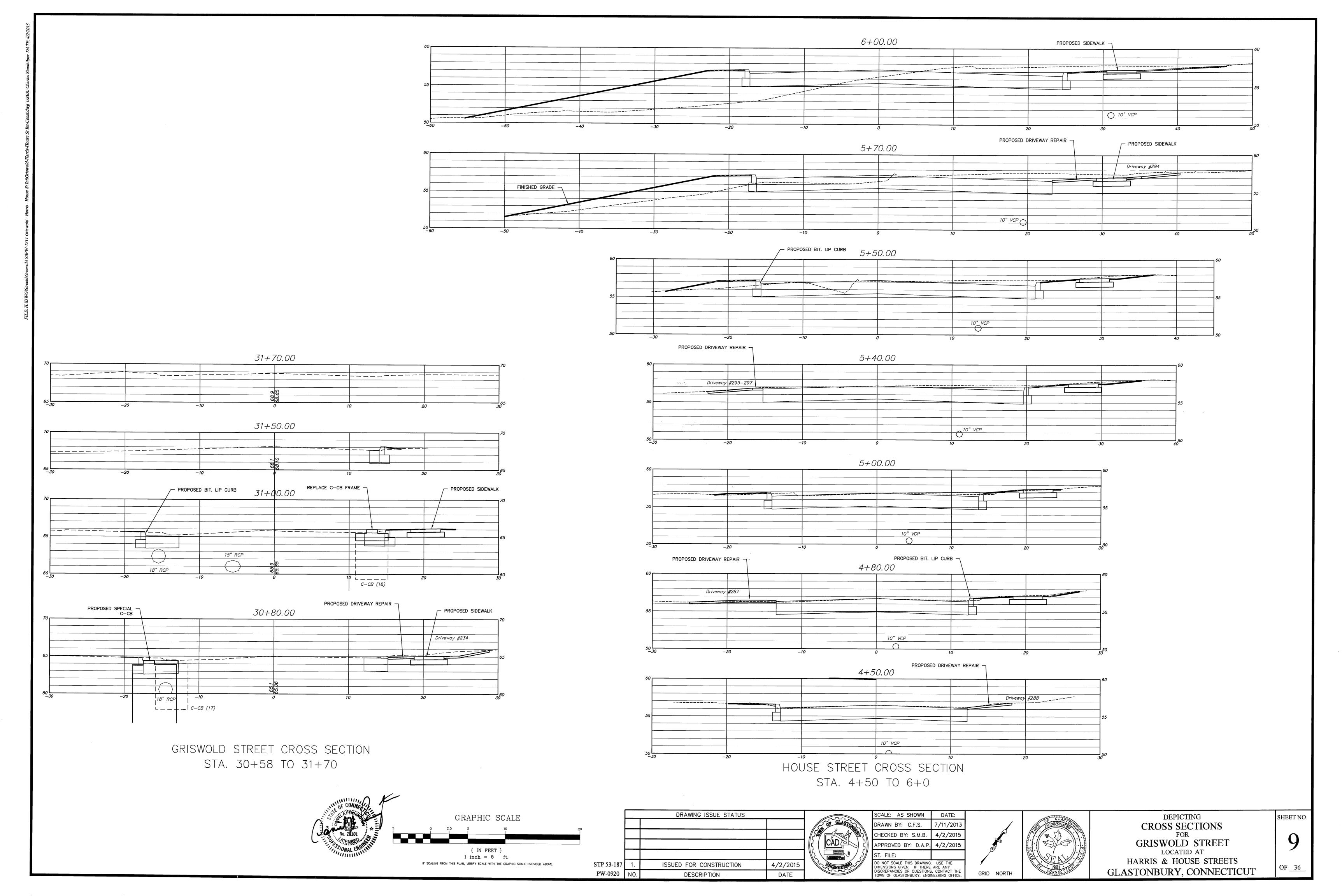
DESCRIPTION

PW-0920 NO.

GRID NORTH





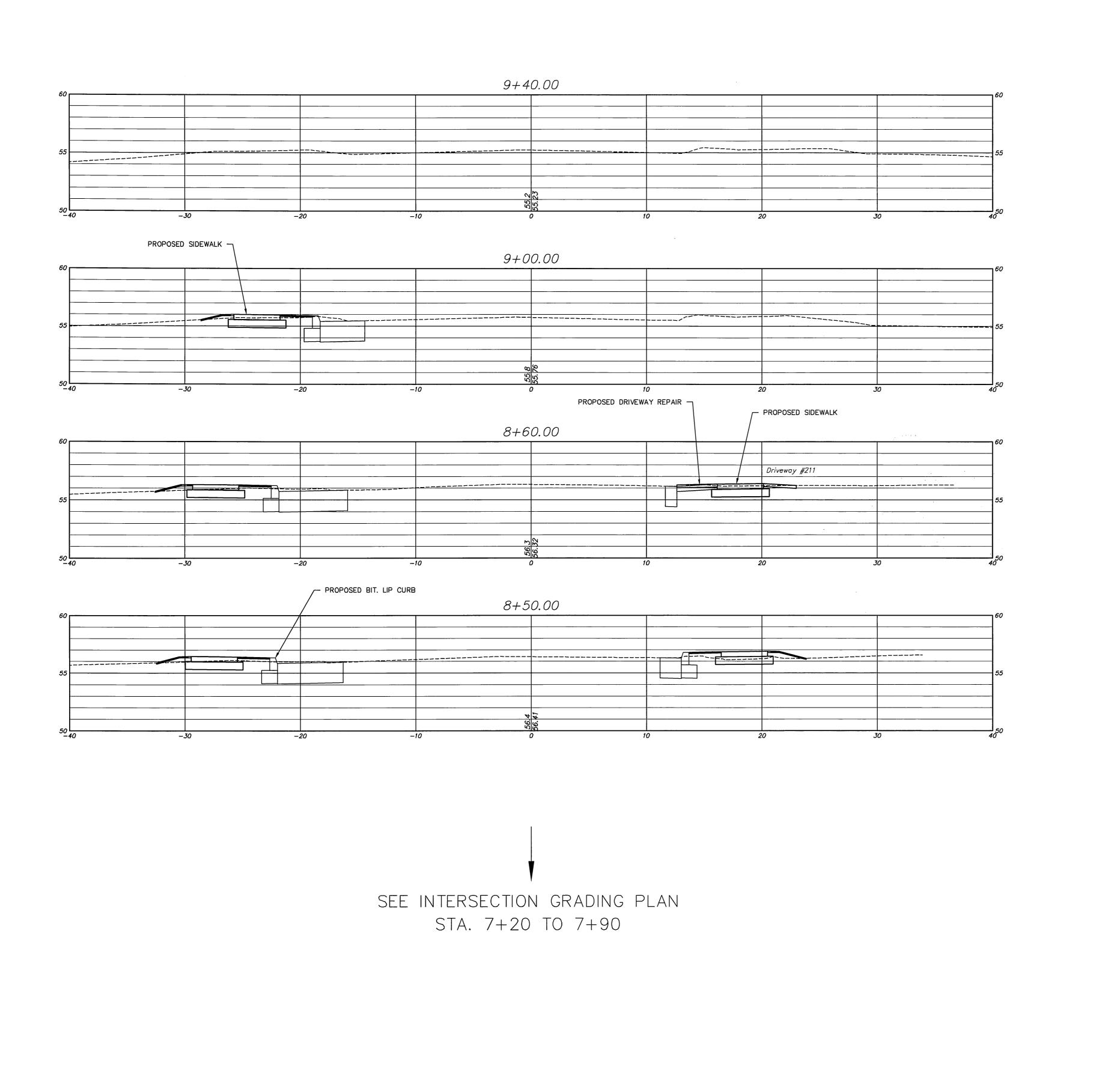


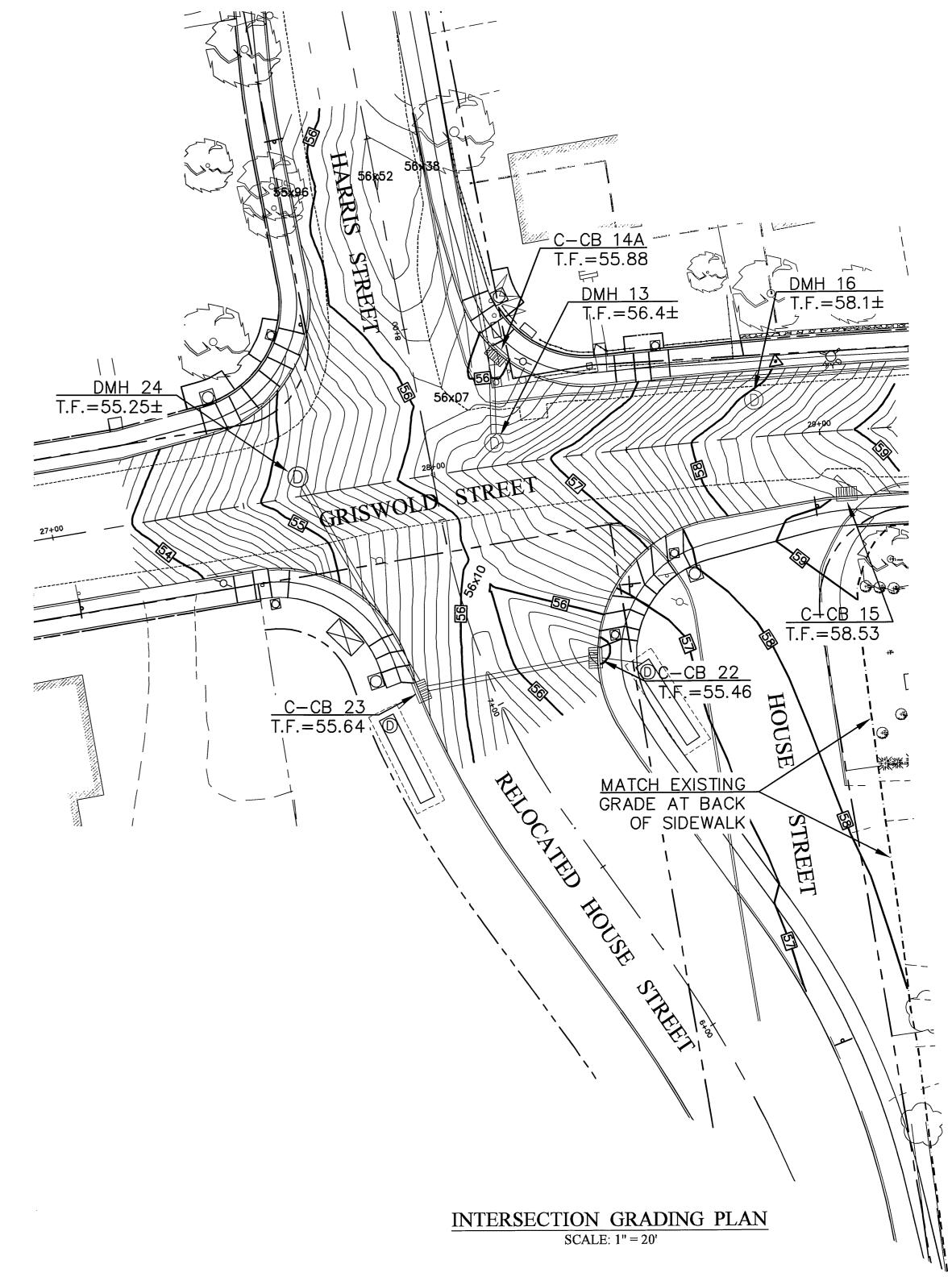
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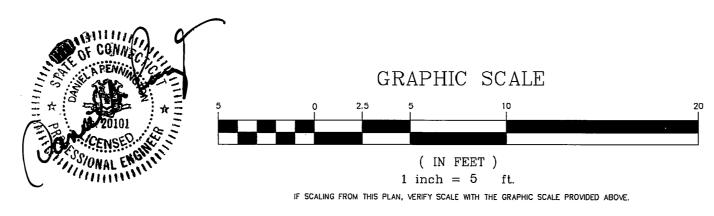
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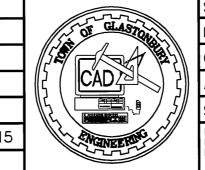
GRID NORTH



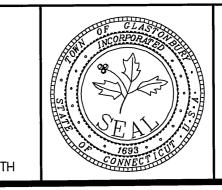




		DRAWING ISSUE STATUS		
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				<b> </b>
				    }
STP 53-187	1.	ISSUED FOR CONSTRUCTION	4/2/2015	
PW-0920	NO.	DESCRIPTION	DATE	



SCALE: AS SHOWN	DATE:					
DRAWN BY: C.F.S.	7/11/2013					
CHECKED BY: S.M.B.	4/2/2015					
APPROVED BY: D.A.P.	4/2/2015					
ST. FILE:						
DO NOT SCALE THIS DRAWING. USE THE DIMENSIONS GIVEN. IF THERE ARE ANY DISCREPANCIES OR QUESTIONS, CONTACT THE TOWN OF GLASTONBURY, ENGINEERING OFFICE.						
TOWN OF GLASTONBOKT, ENGI	NEEKING OFFICE.	ł				

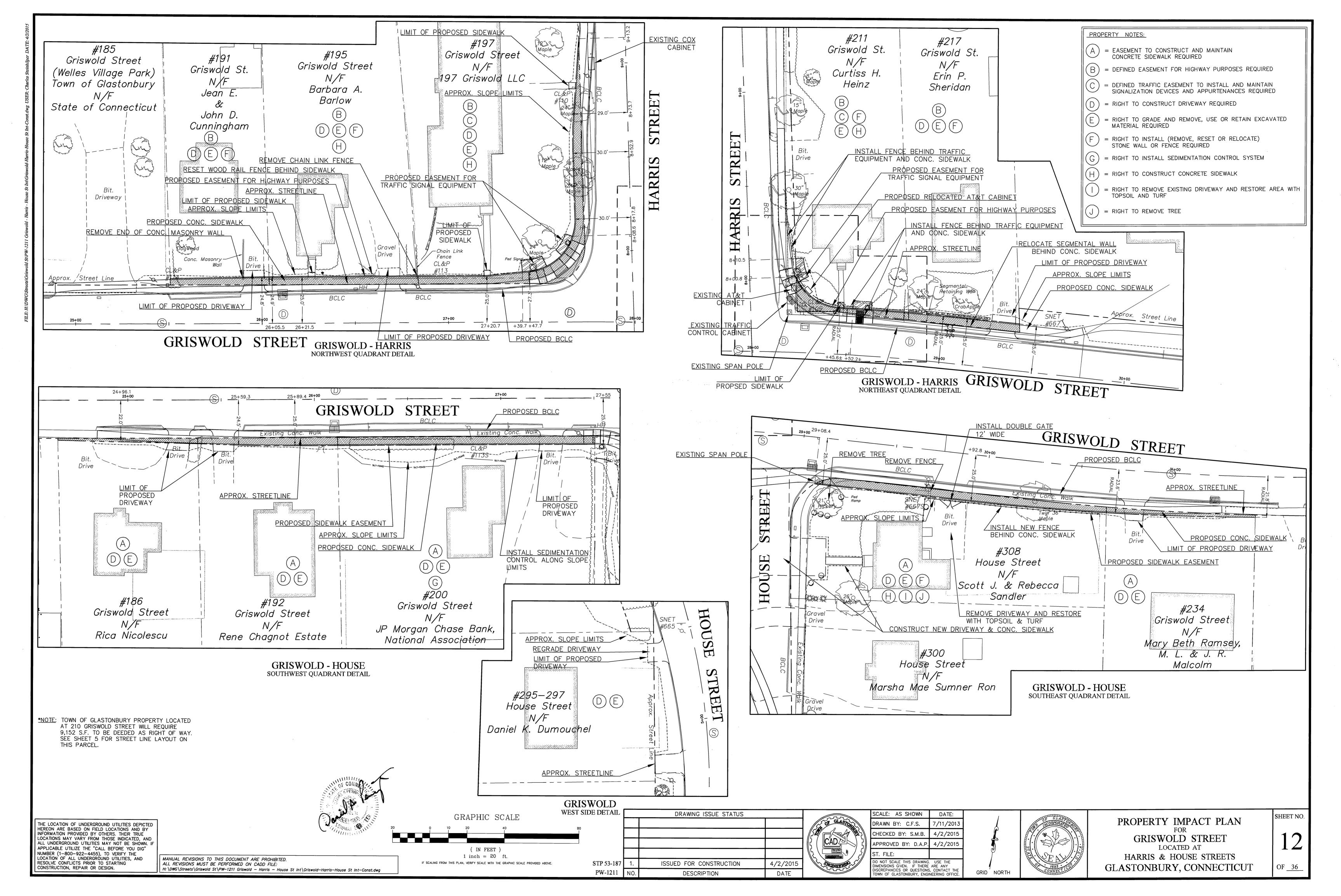


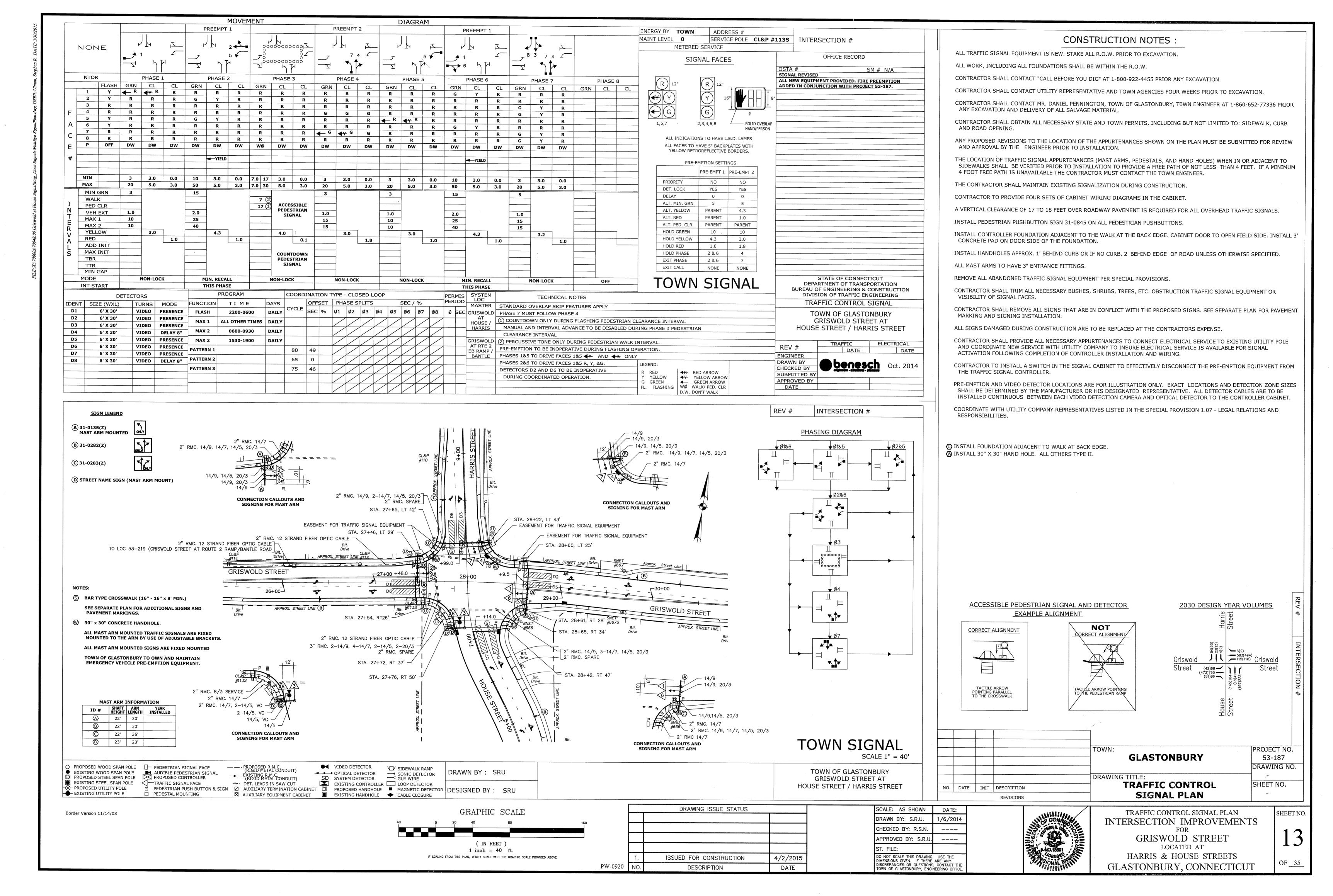
DEPICTING
CROSS SECTIONS &
INTERSECTION GRADING PLAN
FOR
GRISWOLD STREET
LOCATED AT
HARRIS & HOUSE STREETS
GLASTONBURY, CONNECTICUT

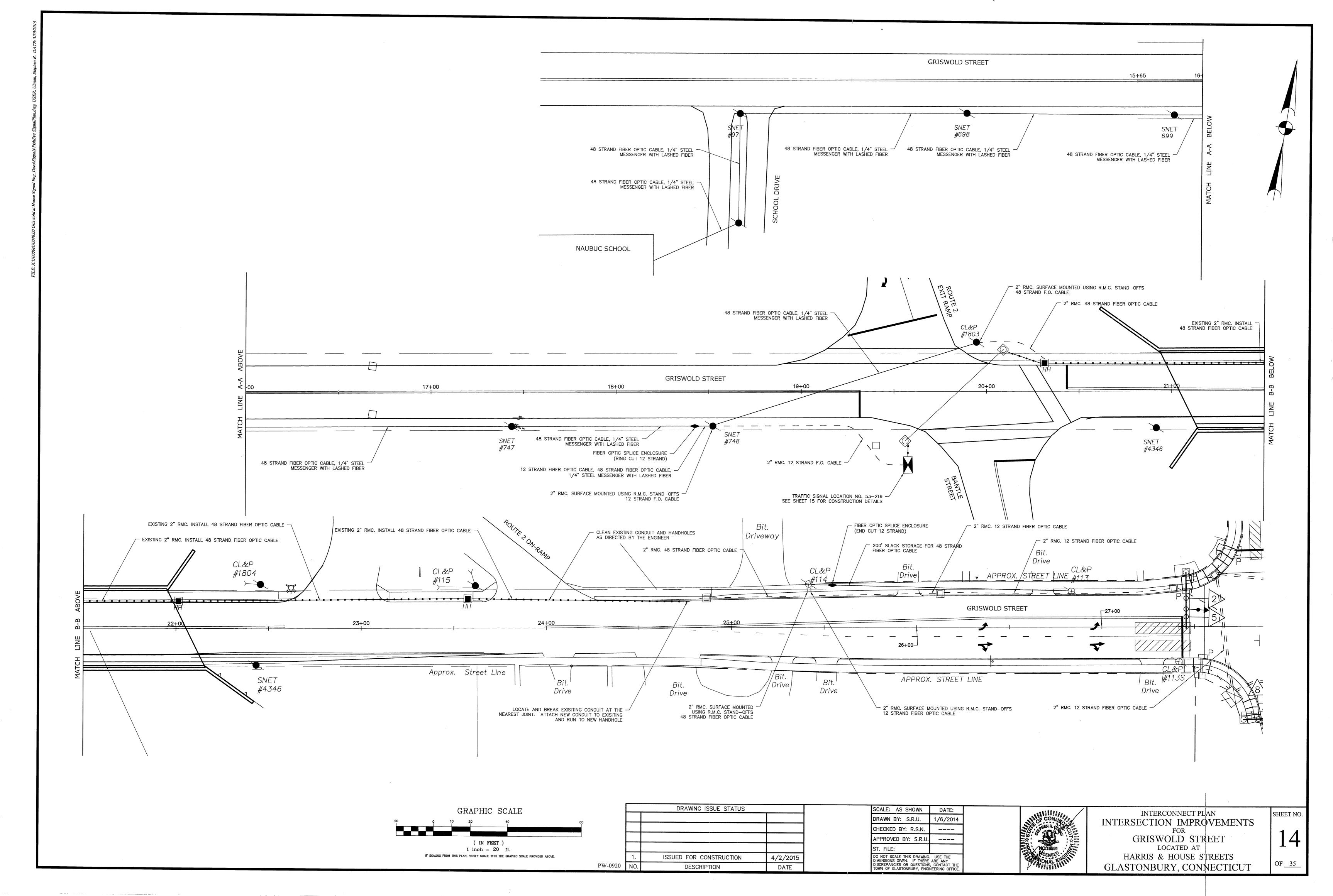
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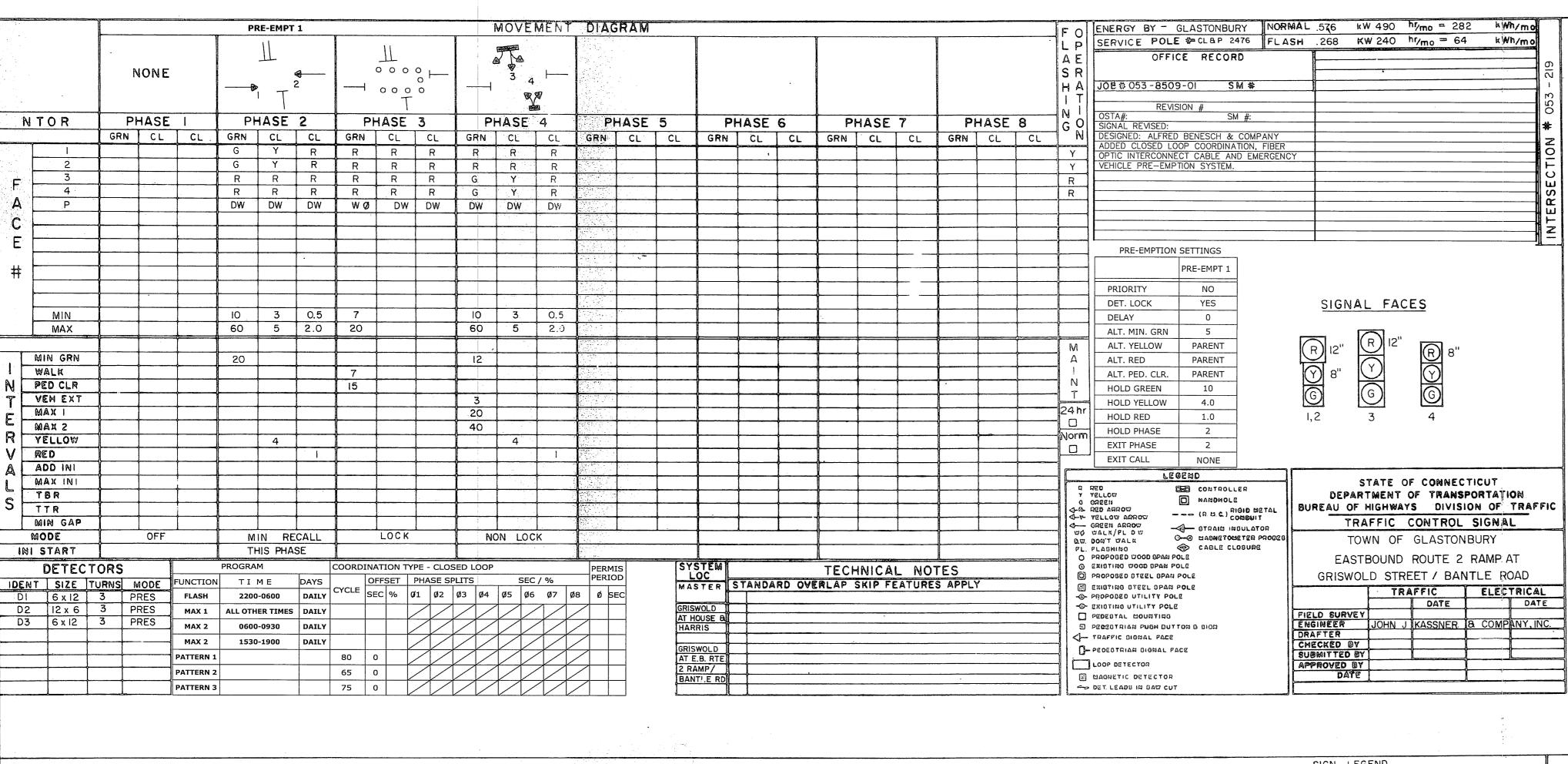
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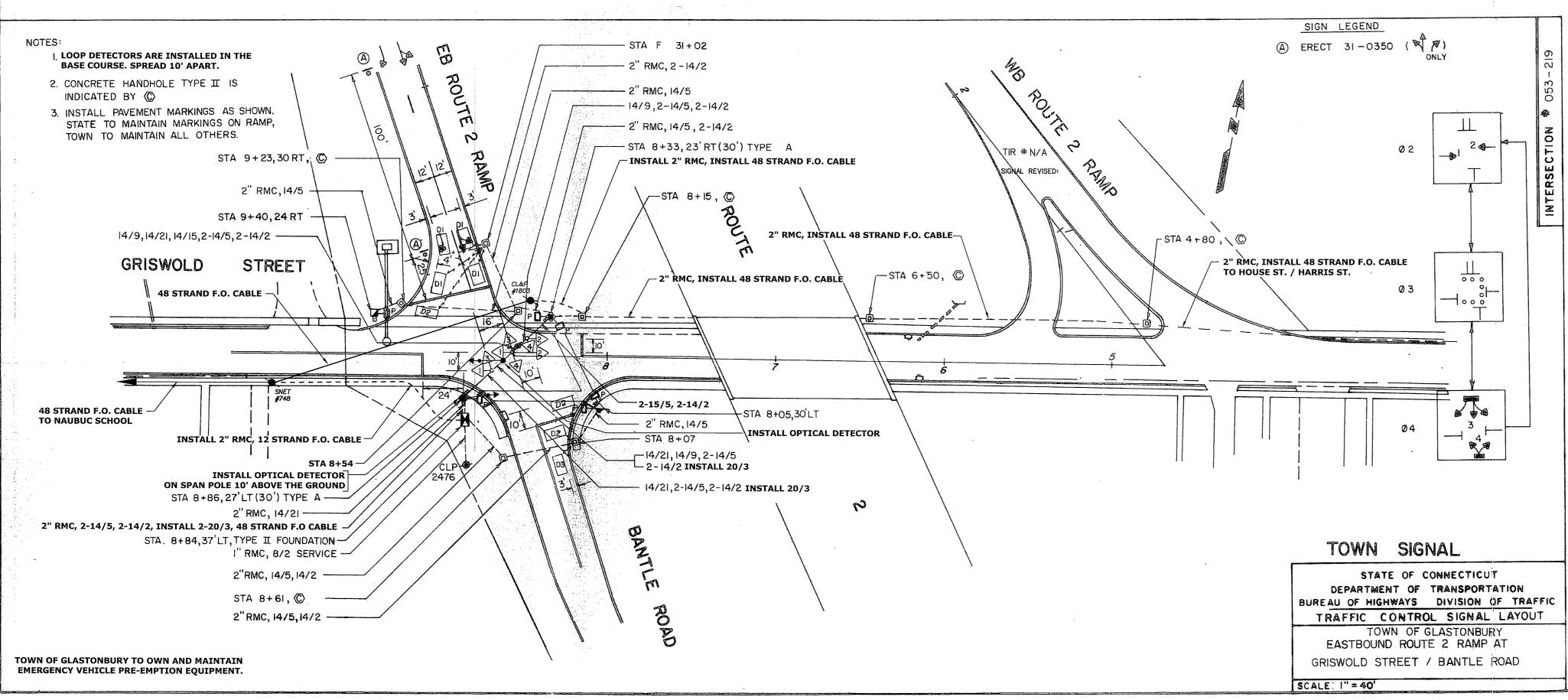
OF \_\_36\_\_





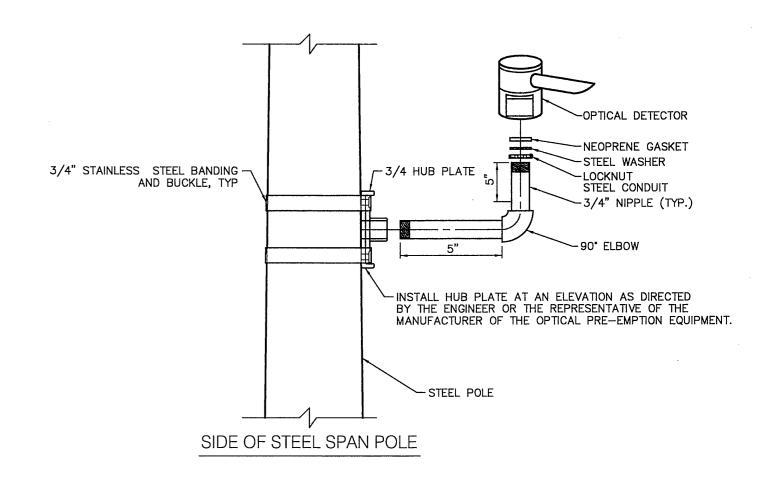






#### CONSTRUCTION NOTES:

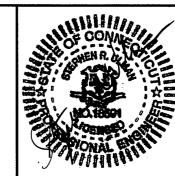
- ALL TRAFFIC SIGNAL EQUIPMENT IS EXISTING EXCEPT AS NOTED.
- TERMINATE THE 12 STRAND FIBER OPTIC DROP CABLE ON A NEW 12 POSITION FIBER OPTIC PATCH PANEL.
- CONTRACTOR SHALL CONTACT MR. DANIEL PENNINGTON, TOWN OF GLASTONBURY, TOWN ENGINEER AT 1-860-652-7736 PRIOR ANY EXCAVATION AND DELIVERY OF ALL SALVAGE MATERIAL.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY STATE AND TOWN PERMITS, INCLUDING BUT NOT LIMITED TO: SIDEWALK, CURB AND ROAD OPENING.
- THE CONTRACTOR SHALL MAINTAIN EXISTING SIGNALIZATION DURING CONSTRUCTION.
- CONTRACTOR TO PROVIDE FOUR SETS OF CABINET WIRING DIAGRAMS IN THE CABINET.
- REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL PROVIDE A NEW CONTROLLER UNIT AND MODIFY THE CONTROLLER CABINET WIRING, SEQUENCE AND TIMING INCLUDING ALL NECESSARY EQUIPMENT AND WIRING TO PROVIDE THE OPERATION SHOWN ON THIS PLAN. SEE THE SPECIAL PROVISION #1108163A "MODIFY EXISTING CONTROLLER"
- CONTRACTOR TO INSTALL A SWITCH IN THE SIGNAL CABINET TO EFFECTIVELY DISCONNECT THE PRE-EMPTION EQUIPMENT FROM THE TRAFFIC SIGNAL CONTROLLER.
- EXACT LOCATIONS OF THE OPTICAL DETECTORS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. ALL DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH OPTICAL DETECTOR TO THE
- USE THE COORDINATION AND PRE-EMPTION SETTINGS SHOWN:



OPTICAL DETECTOR INSTALLATION DETAILS RIGID MOUNTING

NOT TO SCALE

	DRAWING ISSUE STATUS	SCALE: AS SHOWN DATE:	
			DRAWN BY: S.R.U. 10/1/201
			CHECKED BY: R.S.N
			APPROVED BY: S.R.U
			ST. FILE:
1.	ISSUED FOR CONSTRUCTION	4/2/2015	DO NOT SCALE THIS DRAWING. USE THE DIMENSIONS GIVEN. IF THERE ARE ANY
١٥.	DESCRIPTION	DATE	DISCREPANCIES OR QUESTIONS, CONTACT TH TOWN OF GLASTONBURY, ENGINEERING OFFIC

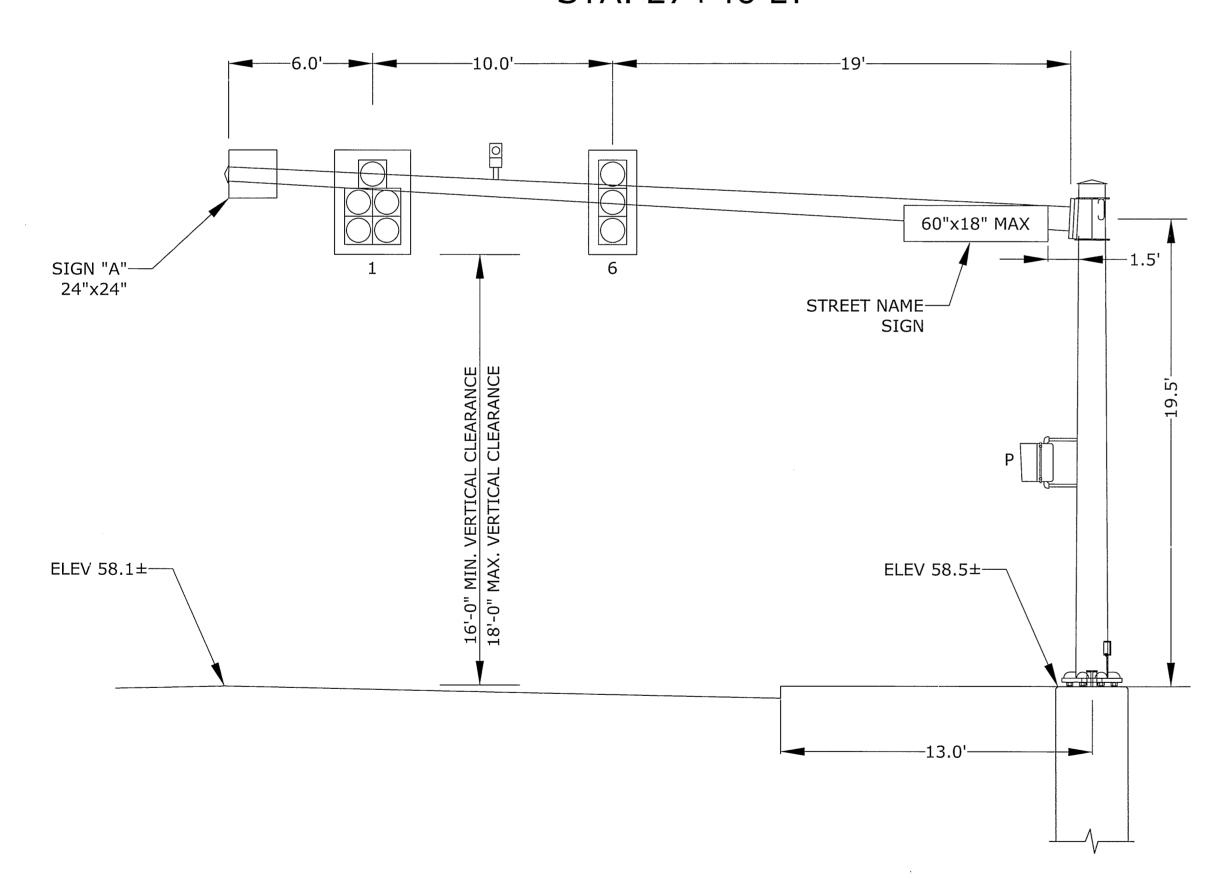


LOCATION 53-219 INTERSECTION IMPROVEMENTS GRISWOLD STREET LOCATED AT HARRIS & HOUSE STREETS

OF <u>35</u> GLASTONBURY, CONNECTICUT

SHEET NO

## MAST ARM LOCATION "A" STA. 27+46 LT



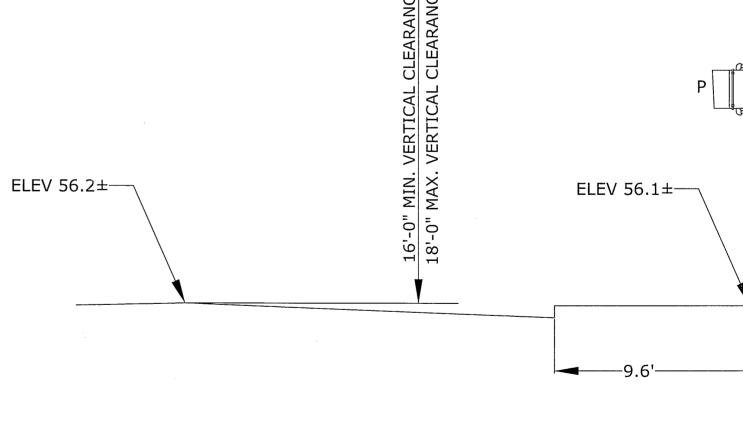
MAST ARM LOCATION "C" STA. 28+65 RT

ALL MAST ARM TRAFFIC SIGNALS ARE FIXED MOUNTED TO THE MAST ARM BY USE OF ADJUSTABLE BRACKETS.

ALL SIGNAL FACES TO HAVE BACKPLATES WITH RETROREFLECTIVE BORDER.

VIEW IS PERPENDICULAR TO ARM.

CONTRACTOR TO VERIFY MAST ARM INFORMATION INCLUDING CROSS-SECTIONS AND ELEVATIONS PRIOR TO SUBMITTING WORKING DRAWINGS.



MAST ARM LOCATION "B"

STA. 28+22 LT

ELEV 56.4±-

FISH EYE VIDEO-DETECTOR

MAST ARM LOCATION "D" STA. 27+76 RT

DRAWING ISSUE STATUS

DRAWN BY: S.R.U.

CHECKED BY: R.S.N.

APPROVED BY: S.R.U.

ST. FILE:

DO NOT SCALE THIS DRAWIN

DIMENSIONS GIVEN. IF THER

DISCREPANCIES OR QUESTION

DESCRIPTION

DATE

SCALE: AS SHOWN

DRAWN BY: S.R.U.

CHECKED BY: R.S.N.

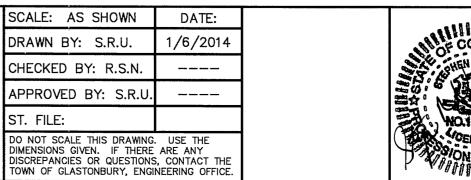
APPROVED BY: S.R.U

DO NOT SCALE THIS DRAWIN

DIMENSIONS GIVEN. IF THER

DISCREPANCIES OR QUESTION

TOWN OF GLASTONBURY, EN





STREET NAME-SIGN

STREET NAME— SIGN

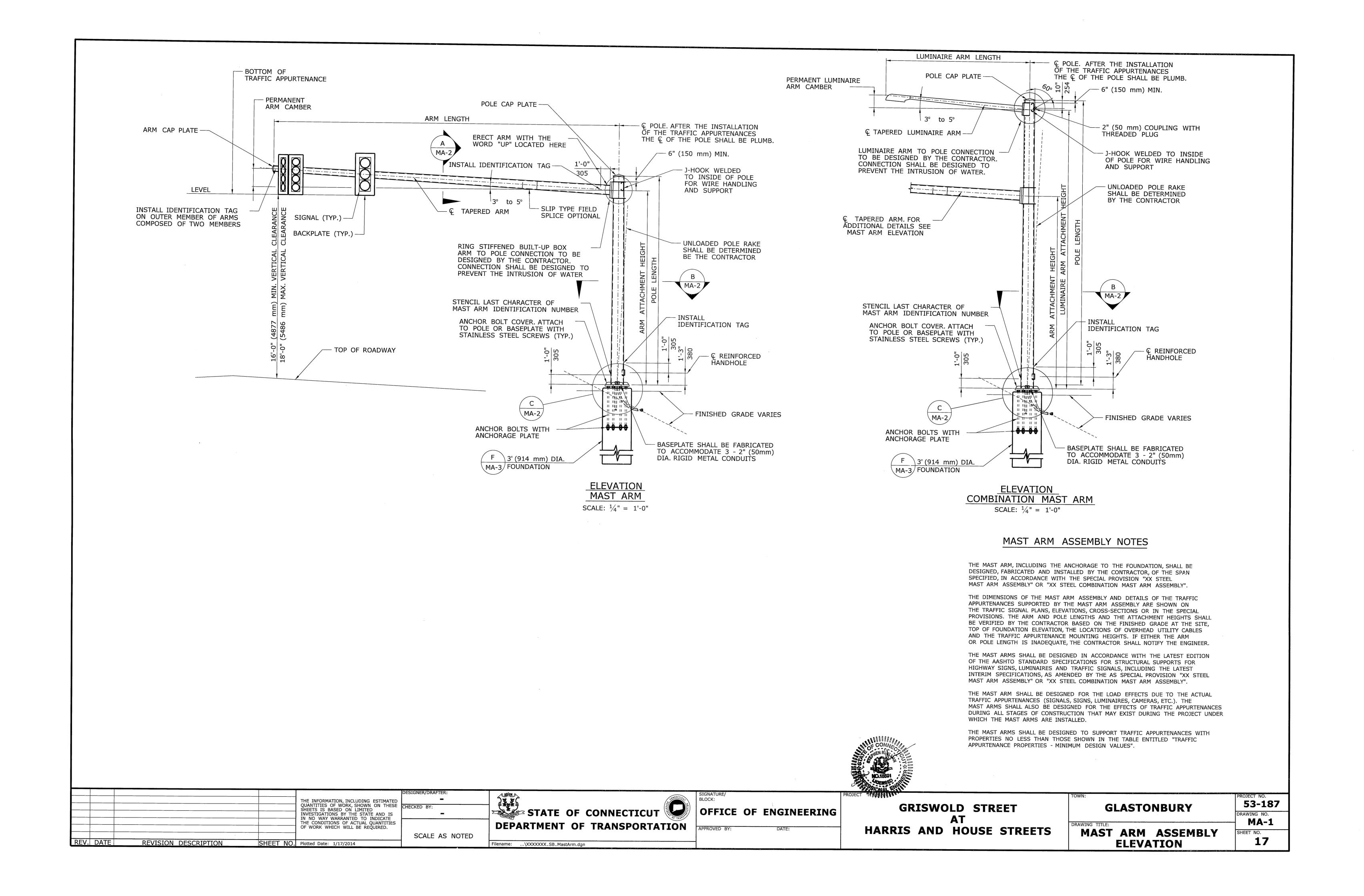
ELEV 56.9±-

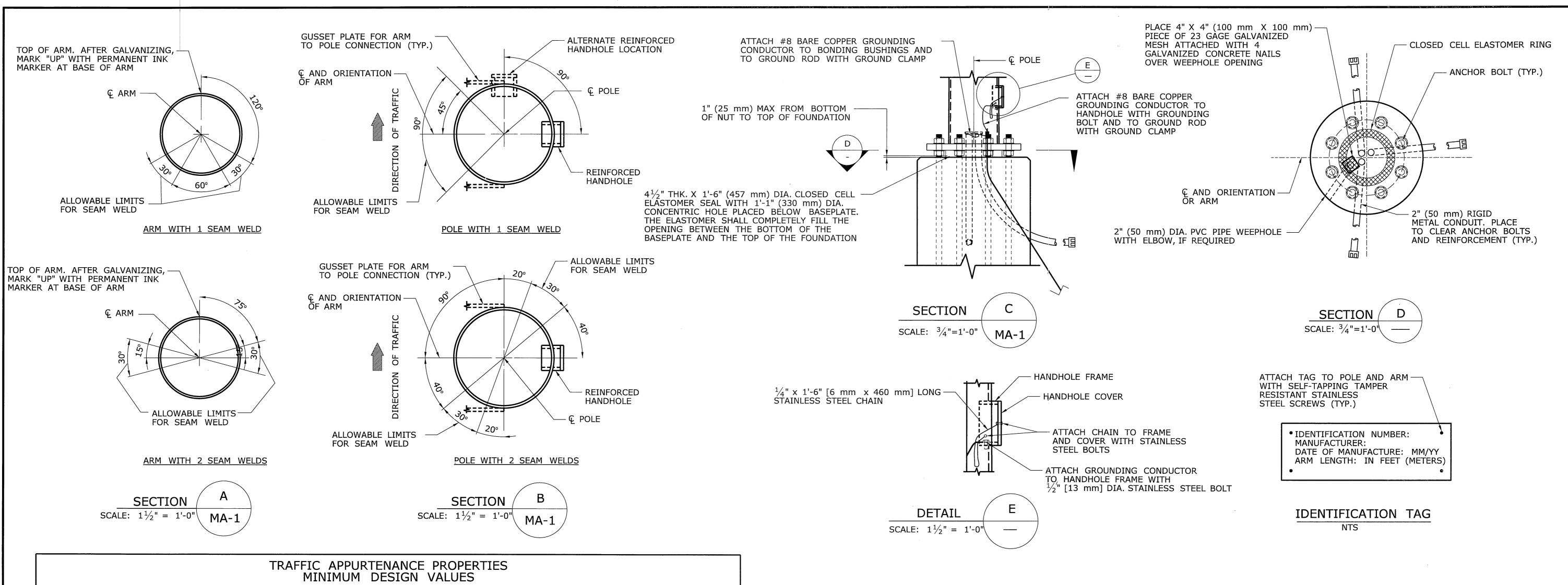
MAST ARM CROSS SECTIONS
INTERSECTION IMPROVEMENTS
FOR
GRISWOLD STREET

LOCATED AT
HARRIS & HOUSE STREETS
GLASTONBURY, CONNECTICUT

16
OF 35

SHEET NO.





MINIMUM DESIGN VALUES						
	2'-0" 610 1320 000 1370	2'-0" 610 19-29	2'-0" 610 \$8-,9	3'-2"	WIDTH	
	3 SECTION , 12" (305) DIA. TRAFFIC SIGNAL W/ BACKPLATE	4 SECTION , 12" (305) DIA. TRAFFIC SIGNAL W/BACKPLATE	5 SECTION , 12" (305) DIA.TRAFFIC SIGNAL W/ BACKPLATE	5 SECTION , 12" (305) DIA.TRAFFIC SIGNAL W/ BACKPLATE	SHEET ALUMINUM SIGN PANEL	
WEIGHT, INCLUDING MOUNTING HARDWARE	65 LBS (29.48 kg)	80 LBS (36.29 kg)	95 LBS (43.09 kg)	105 LBS (47.63 kg)	4 LBS/SQ.FT. (19.53 kg/m <sup>2</sup> )	
TOTAL SURFACE AREA	28.04 SQ. FT. (2.61 m <sup>2</sup> )	35.46 SQ. FT. (3.29 m <sup>2</sup> )	45.16 SQ. FT. (4.20 m <sup>2</sup> )	41.04 SQ. FT. (3.81 m <sup>2</sup> )	BASED ON PANEL DIMENSIONS	
PROJECTED AREA, FRONT FACE	8.62 SQ. FT. (0.80 m <sup>2</sup> )	10.91 SQ. FT. (1.01 m <sup>2</sup> )	13.34 SQ. FT. (1.24 m <sup>2</sup> )	13.72 SQ. FT. (1.28 m <sup>2</sup> )	BASED ON PANEL DIMENSIONS	
PROJECTED AREA, BOTTOM FACE	1.18 SQ. FT. (0.11 m <sup>2</sup> )	1.18 SQ. FT. (0.11 m <sup>2</sup> )	1.18 SQ. FT. (0.11 m <sup>2</sup> )	2.58 SQ. FT. (0.24 m <sup>2</sup> )	BASED ON PANEL DIMENSIONS	
i						

## NOTES

THE TABULATED VALUES ARE THE MINIMUM VALUES THAT SHALL BE USED FOR THE DESIGN.

MAST ARMS SHALL BE DESIGNED ASSUMING ALL TRAFFIC SIGNALS ARE COMPOSED OF 12" (305 mm) DIAMETER SECTIONS WITH BACKPLATES.

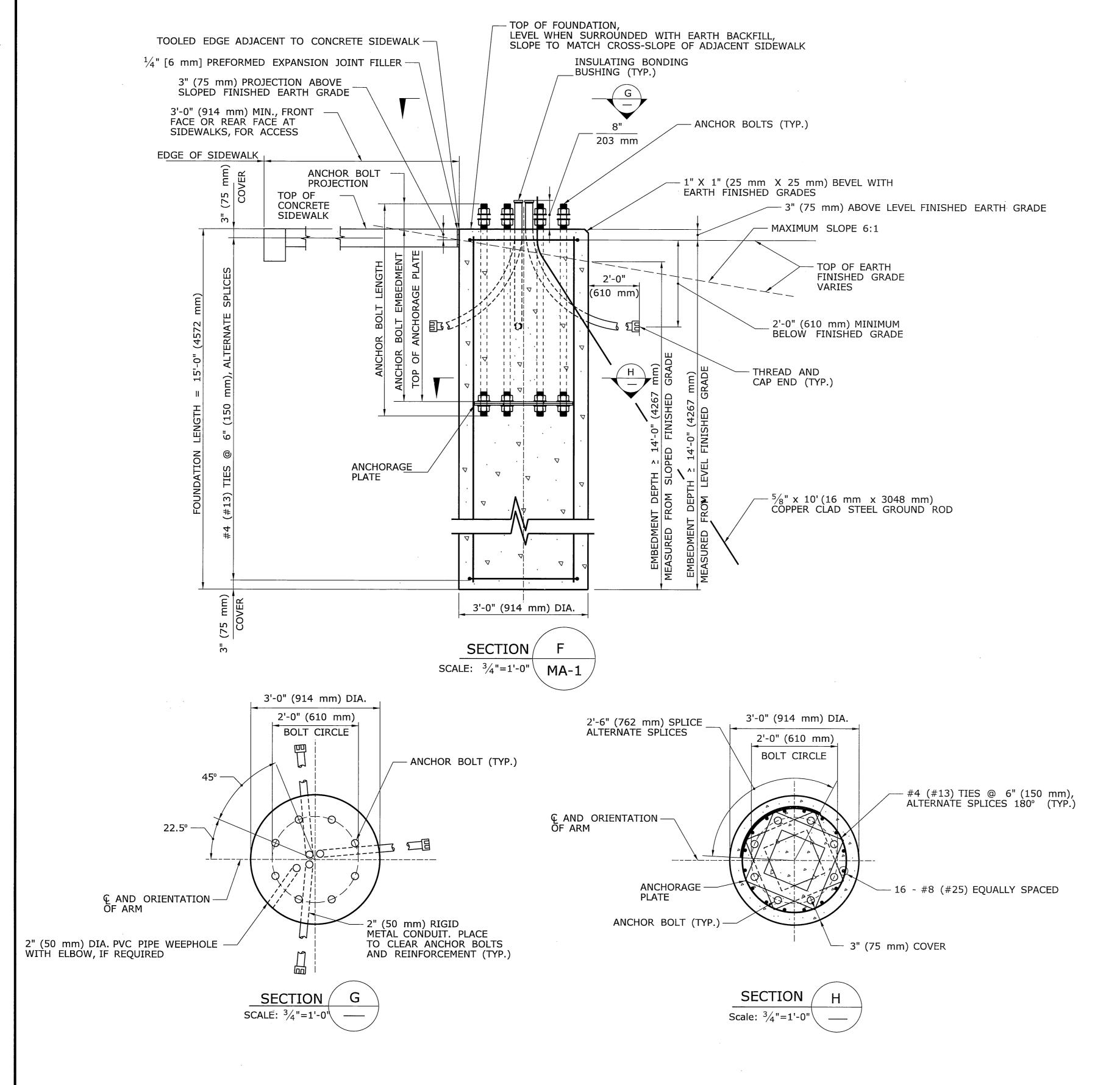
THE PROJECTED FRONT FACE AREA IS IN A PLANE PARALLEL TO THE PLANE FORMED BY THE ARM AND THE POLE.

IF MULTIPLE APPURTENANCES ARE ATTACHED AT THE SAME LOCATION, THE MINIMUM DESIGN VALUE SHALL BE NO LESS THAN THE SUM OF THE CORRESPONDING TRAFFIC APPURTENANCE PROPERTIES.

FOR TRAFFIC APPURTENANCES NOT SHOWN, THE PROPERTIES SHALL BE DETERMINED BY THE CONTRACTOR AND SUBMITTED FOR REVIEW WITH THE WORKING DRAWING SUBMITTAL.



						, , , , , , , , , , , , , , , , , , ,
THE INFORMATION, INCLUDING	DESIGNER/DRAFTER:  ESTIMATED ON THESE CHECKED BY:	SATE SOMMETICE	SIGNATURE/ BLOCK:	PROJECT TITLE:	GLASTONBURY	PROJECT NO. <b>53-187</b>
SHEETS IS BASED ON LIMITE INVESTIGATIONS BY THE STAT IN NO WAY WARRANTED TO	AND IS	STATE OF CONNECTICUT	Office of Engineering	GRISWOLD STREET AT	DRAWING TITLE	DRAWING NO.  MA-2
OF WORK WHICH WILL BE RE	JIRED. SCALE AS NOTED	DEPARTMENT OF TRANSPORTATION	APPROVED BY: DATE:	HARRIS AND HOUSE STREETS	MAST ARM ASSEMBLY	l l
REV. DATE REVISION DESCRIPTION SHEET NO. Plotted Date: 1/17/2014		Filename:\XXXXXXX_SB_MastArm.dgn			DETAILS	10



## FOUNDATION NOTES

THE MAST ARM FOUNDATION IS DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, WITH THE LATEST INTERIM SPECIFCATIONS.

THE FOUNDATION EMBEDMENT IS DESIGNED FOR MAXIMUM LOAD EFFECTS, APPLIED AT THE TOP OF THE FOUNDATION, NO GREATER THAN THE FOLLOWING:

AXIAL COMPRESSIVE FORCE:

8 K ①

8 K (1)

RESULTANT SHEAR FORCE:

TORSION:

150 FT - K ①

RESULTANT BENDING MOMENT:

115 FT - K ①

THE USE OF THE FOUNDATION IS NOT PERMITTED IF THE COMPUTED REACTIONS FROM THE CONTRACTOR DESIGNED MAST ARM ASSEMBLY EXCEED THE ABOVE LOAD EFFECTS.

THE ENGINEER SHALL BE NOTIFIED IF THE SLOPE OF THE FINISHED GRADE AT THE FOUNDATION EXCEEDS THE MAXIMUM PERMITTED SLOPE.

THE CONCRETE FOR THE FOUNDATION SHALL CONFORM TO "CLASS "A" CONCRETE".

THE REINFORCEMENT SHALL BE UNCOATED AND CONFORM TO ASTM A615, GRADE 60 (ASTM A615M, GRADE 420). THE REINFORCEMENT SHALL BE ASSEMBLED WITH WIRE TIES. WELDING TO ASSEMBLE REINFORCEMENT IS NOT PERMITTED. ALL REINFORCEMENT SHALL HAVE 3" (75 mm) COVER, UNLESS OTHERWISE NOTED.

THE CONCRETE SHALL BE PLACED IN A AUGERED HOLE AGAINST UNDISTRURBED EARTH.

THE MAST ARM SHALL NOT BE ERECTED ON THE FOUNDATION UNTIL AFTER THE CONCRETE HAS ATTAINED A 28 DAY COMPRESSIVE STRENGTH,  $f_c^{\mbox{\tiny L}}$ , GREATER THAN OR EQUAL TO 3000 PSI (21 MPa).

THE COST OF THE FOUNDATION, INCLUDING THE EXCAVATION, CONCRETE AND REINFORCEMENT, SHALL BE PAID FOR UNDER THE ITEM "TRAFFIC CONTROL FOUNDATION - MAST ARM".

1 THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE VALUES FOR THE LOAD EFFECTS APPLIED AT THE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL ENSURE THAT THE FOUNDATION IS ONLY USED FOR MAST ARM ASSEMBLIES WITH COMPUTED REACTIONS THAT DO NOT EXCEED THESE MAXIMUM LOAD EFFECTS.

## ATTENTION USER:

THE USER OF THESE FOUNDATION DETAILS IS RESPOSIBLE FOR DETERMNING THE VALUES FOR THE MAXIMUM LOAD EFFECTS APPLIED AT THE TOP OF THE FOUNDATION AND ADDING THE VALUES TO THE ABOVE NOTES. THE USER SHALL ENSURE THAT THE FOUNDATION IS ONLY USED FOR MAST ARM ASSEMBLIES WITH COMPUTED REACTIONS THAT DO NOT EXCEED THESE MAXIMUM LOAD EFFECTS. THIS NOTE SHALL BE REMOVED, BY THE USER, PRIOR TO INCORPORATING THESE FOUNDATION DETAILS INTO THE CONTRACT DOCUMENTS.

			THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	DESIGNER/DRAFTER:  CHECKED BY:  SCALE AS NOTED	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION
DATE	DEVISION DESCRIPTION	CHEET NO	Pletted Date: 1/17/2014	1 SOMEE MONED	Filanamor AVVVVVV CR Markhamadan

OFFICE OF ENGINEERING

APPROVED BY: DATE:

GRISWOLD STREET
AT
HARRIS AND HOUSE STREETS

GLASTONBURY

DRAWING TITLE:

MAST ARM ASSEMBLY
FOUNDATION DETAILS

53-187
DRAWING NO.
MA-3
SHEET NO.
19