

# GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY

## CLOSING REGULATORS 012 & 020

# CWF 2016-02

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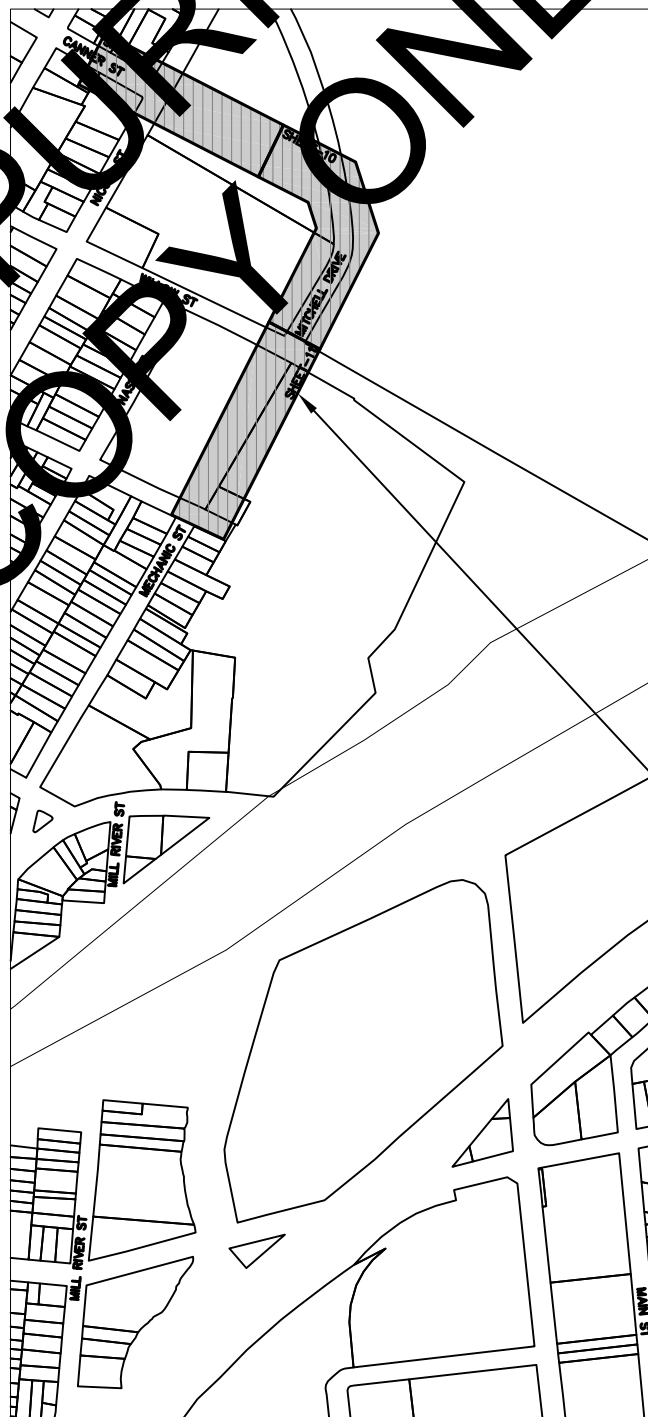
Gary Zrelak

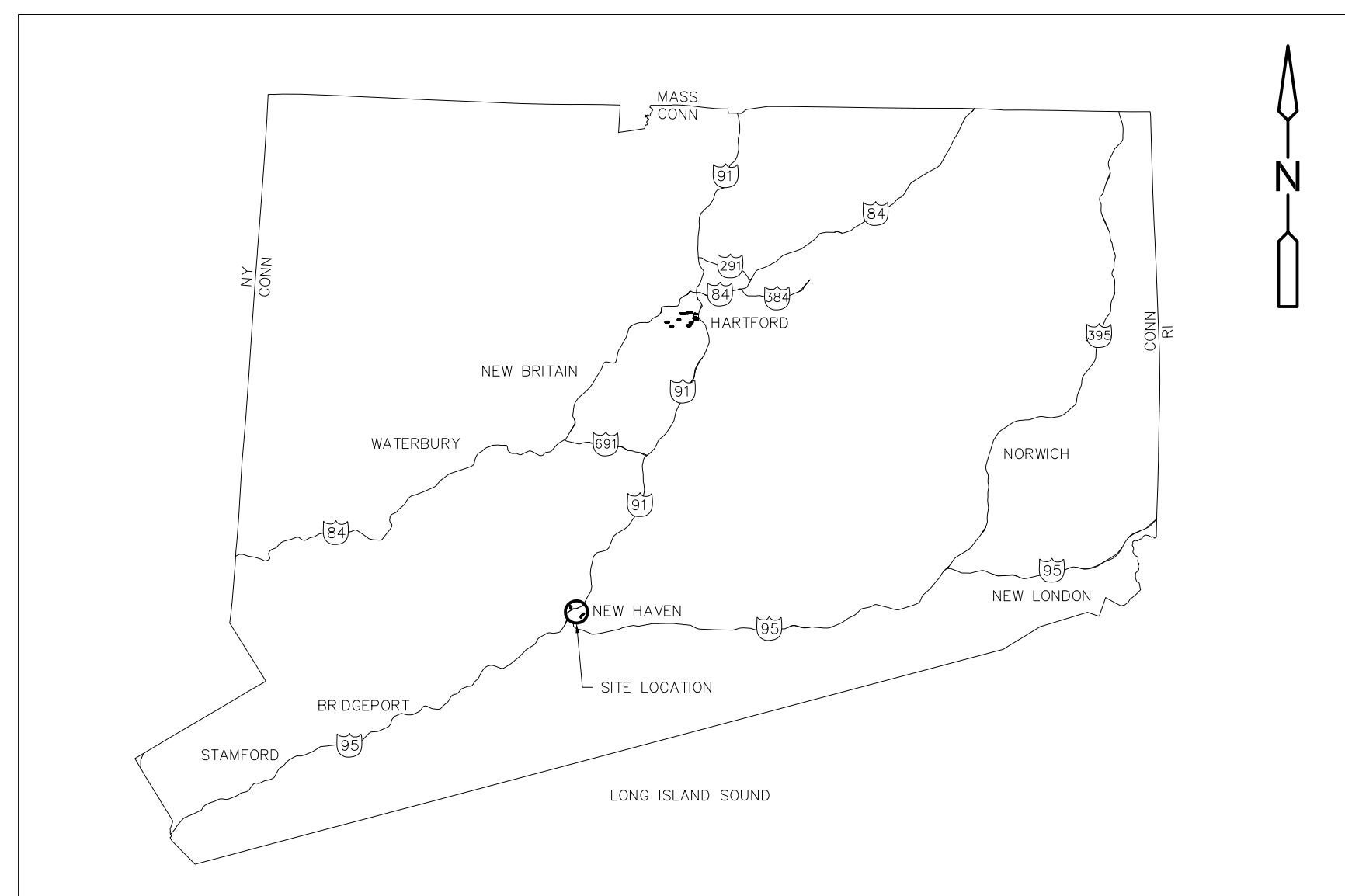


# OCTOBER 2017

  
**OCTOBER 2017**

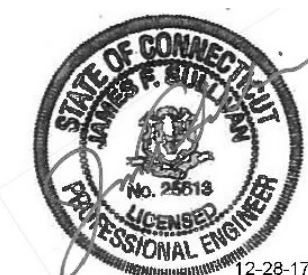
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## VICINITY PLAN

SCALE IN MILES  1" = 4MI




# AECOM

500 ENTERPRISE DRIVE, SUITE 1A  
ROCKY HILL, CT 06067  
(860) 263-5800

## LOCATION PLAN

1" = 500'



250 0 500

INDEX OF DRAWINGS

SHEET NO. TITLE

GENERAL

1	COVER SHEET
2	INDEX OF DRAWINGS
3	NOTES, LEGENDS ABBREVIATIONS AND KEY MAPS
4	CIVIL
5	REGULATOR 020 – CIPP LINING AND MANHOLE REHABILITATION STA 0+00 TO 3+50
6	REGULATOR 020 – CIPP LINING AND MANHOLE REHABILITATION STA 3+50 TO 9+50
7	REGULATOR 020 – CIPP LINING AND MANHOLE REHABILITATION STA 9+50 TO 15+00
8	REGULATOR 020 – CIPP LINING AND MANHOLE REHABILITATION STA 15+00 TO 20+50
9	REGULATOR 020 – CIPP LINING AND MANHOLE REHABILITATION STA 20+50 TO 25+50
10	REGULATOR 012 – CIPP LINING AND MANHOLE REHABILITATION STA 0+00 TO 3+00
11	REGULATOR 012 – CIPP LINING AND MANHOLE REHABILITATION STA 3+00 TO 8+50
12	REGULATOR 012 – CIPP LINING AND MANHOLE REHABILITATION STA 8+50 TO 9+65
13	GNHWPCA STANDARD DETAILS SHEEET 1 OF 2
14	GNHWPCA STANDARD DETAILS SHEEET 2 OF 2
15	CITY OF NEW HAVEN STANDARD DETAILS 1 OF 3
16	CITY OF NEW HAVEN STANDARD DETAILS 2 OF 3
17	CITY OF NEW HAVEN STANDARD DETAILS 3 OF 3
18	MISCELLANEOUS DETAILS 1 OF 2
19	MISCELLANEOUS DETAILS 2 OF 2

MAINTENANCE AND PROTECTION OF TRAFFIC

19	MAINTENANCE & PROTECTION OF TRAFFIC GENERAL NOTES & SIGN LEGEND
20	MAINTENANCE & PROTECTION OF TRAFFIC – NICOLL ST., CANNER ST., & MITCHELL DR.
21	MAINTENANCE & PROTECTION OF TRAFFIC – QUINNIPIAC AVE–1
22	MAINTENANCE & PROTECTION OF TRAFFIC – QUINNIPIAC AVE–2
23	MAINTENANCE & PROTECTION OF TRAFFIC – QUINNIPIAC AVE–3
24	CONSTRUCTION SIGN SUPPORTS AND CHANNELIZING DEVICES
25	MAINTENANCE & PROTECTION OF TRAFFIC DETAILS

GENERAL NOTES

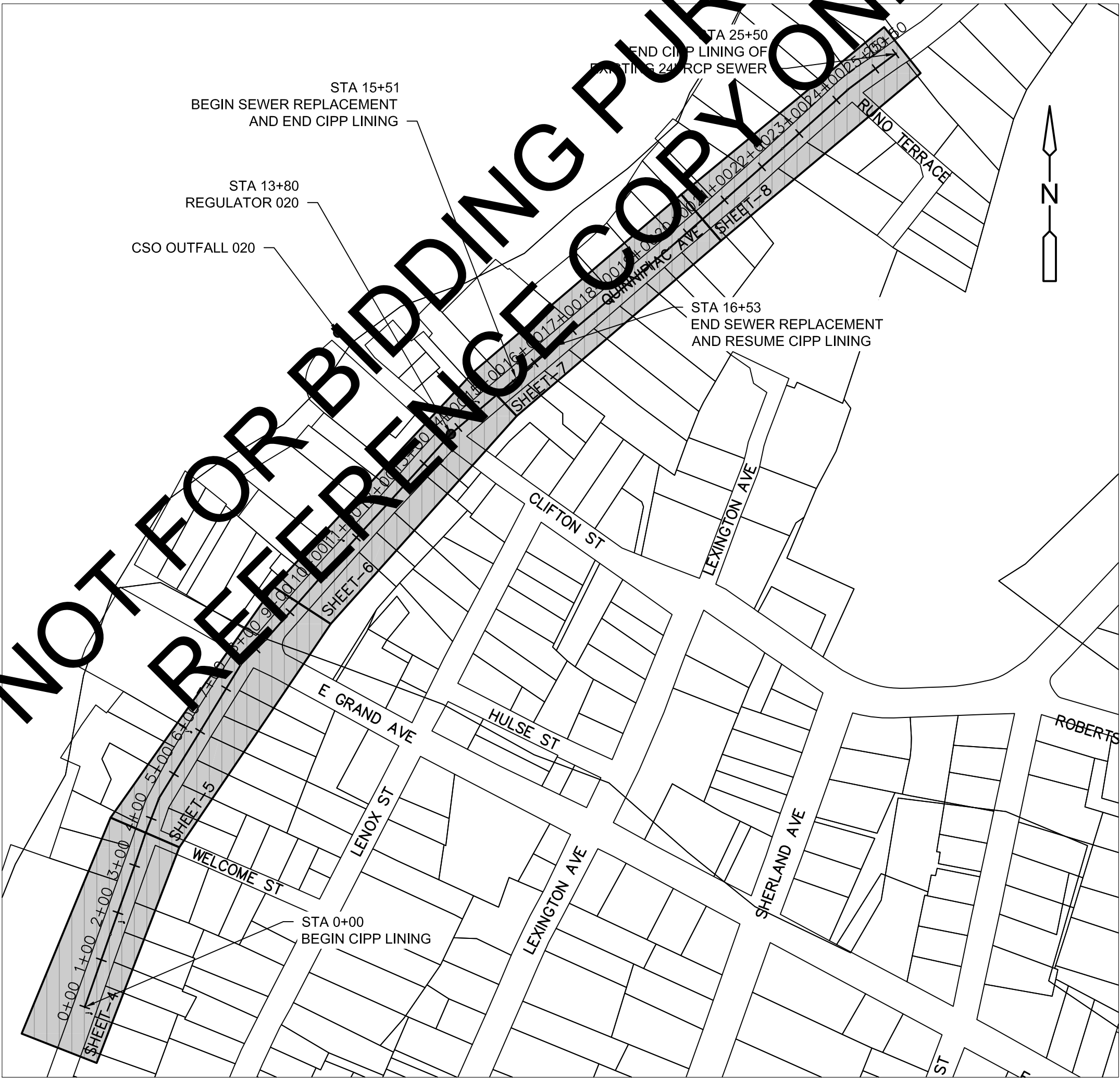
1. "CALL BEFORE YOU DIG": THE CONTRACTOR IS HEREBY REMINDED THAT "CALL BEFORE YOU DIG" MARK-OUTS BY THE APPROPRIATE UTILITY COMPANY ARE REQUIRED. THE CONNECTICUT GENERAL STATUTES REQUIRE NOTICE TO UTILITY COMPANIES OF PENDING EXCAVATION AT OR NEAR PUBLIC UTILITIES. THE CONTRACTOR SHALL CALL 1-800-922-4455 AT LEAST 72 HOURS PRIOR TO BEGINNING EXCAVATION.
2. TOPOGRAPHIC SURVEY WAS PERFORMED BY AECOM IN APRIL, 2016.
3. ELEVATIONS ON ALL PLAN AND PROFILE SHEETS REFER TO VERTICAL DATUM NATIONAL GEODETIC VERTICAL DATUM (NAVD) 1988 AND HORIZONTAL DATUM NAD 1983/92.
4. SUBSURFACE INVESTIGATIONS (BORINGS) WERE CONDUCTED BY GEOLOGIC EARTH EXPLORATION OF NORFOLK, MA. BORING LOGS ARE INCLUDED IN APPENDIX A.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY STANDARDS AND SPECIFICATIONS.
6. ALL REFERENCES TO THE TERM "ENGINEER" SHALL ALSO MEAN THE GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY. (OWNER).
7. THE ENGINEER MAY DIRECT THE CONTRACTOR TO VARY THE PROPOSED WORK DURING CONSTRUCTION TO ADDRESS EXISTING CONDITIONS.
8. THE CONTRACTOR IS HEREBY ADVISED THAT ALL LOCATIONS, SIZE AND MATERIAL OF EXISTING PIPES, CONDUITS, UTILITIES, FOUNDATIONS, AND UTILITY HOUSE SERVICES ARE NOT WARRANTED TO BE CORRECT AND THE CONTRACTOR SHALL HAVE NO CLAIM ON THAT ACCOUNT SHOULD THEY BE OTHER THAN SHOWN. LOCATIONS OF EXISTING UTILITIES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS AS REPRESENTED BY UTILITY DRAWINGS, THEREFORE THEIR ACTUAL LOCATIONS MAY VARY. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR SHALL MAKE EXAMINATIONS IN THE FIELD BY VARIOUS AVAILABLE METHODS AND SHALL OBTAIN INFORMATION FROM UTILITY COMPANIES AND INDIVIDUALS AS TO THE LOCATION OF ALL SUB-SURFACE STRUCTURES.
9. THE LOCATION OF PROPERTY LINES SHOWN ON THESE PLANS ARE NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL ARE SHOWN. EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR.
10. STORM, SANITARY, WATER, GAS, TELEPHONE, CABLE, ELECTRICAL SERVICES, FIBER OPTIC COMMUNICATIONS, OVERHEAD UTILITIES AND OTHER UTILITY SERVICES TO BUILDINGS ARE NOT ALL SHOWN. UTILITY SERVICES TO BUILDINGS THAT ARE SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL ARE SHOWN. EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL ASSUME THAT EACH PROPERTY WILL HAVE SERVICE CONNECTIONS FOR THE VARIOUS UTILITIES. ALL SERVICES AND UTILITIES SHALL BE PROTECTED FROM DAMAGE AND SHALL BE RECONNECTED OR REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO SAFETY ISSUES RELATED TO ELECTRICAL FACILITIES, BOTH OVERHEAD AND UNDERGROUND.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORT AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES, AS WELL AS ANY REPAIR AND/OR REPLACEMENT COSTS OF UTILITIES DAMAGED DURING CONSTRUCTION WHETHER ABOVE OR BELOW GRADE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL UTILITY RELOCATION WORK. CLAIMS FOR EXTRAS WILL NOT BE ALLOWED FOR DELAY OF WORK DUE TO UTILITY COMPANY COORDINATION OR UTILITY RELOCATION WORK.
13. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER OF ANY SUBSURFACE UTILITY OR OTHER PIPE NOT SHOWN ON THE DRAWINGS THAT IS ENCOUNTERED DURING CONSTRUCTION.
14. EXTREME CARE MUST BE EXERCISED BY THE CONTRACTOR TO PROTECT EXISTING SANITARY SEWERS, SANITARY SEWER LATERALS, STORM DRAINS, WATER MAINS AND ALL OTHER UTILITIES DURING CONSTRUCTION.
15. THIS CONTRACT REQUIRES WORKING IN LIVE SEWER AND DRAINAGE INFRASTRUCTURE. CONTRACTOR AND THEIR PERSONNEL SHALL FOLLOW ALL FEDERAL, STATE AND LOCAL REQUIREMENTS FOR SAFETY WHEN IN CONFINED SPACES. ALSO REFER TO RECOMMENDATIONS IN THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH PUBLICATION NO. 80-106, "WORKING IN CONFINED SPACES".
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING FLOWS IN EXISTING SANITARY SEWERS, SEWER SERVICE LATERALS, STORM DRAINAGE SYSTEMS, AND OBTAINING ALL NECESSARY PERMITS.
17. NOT ALL TEST PIT LOCATIONS ARE SHOWN ON THE PLANS. EXCAVATE TEST PITS IN LOCATIONS AS DIRECTED BY THE ENGINEER. TEST PITS SHALL BE DUG TO ADJUST PIPING AS REQUIRED BY THE ENGINEER.
18. ALL PIPE SECTIONS SHOWING LENGTHS IN LINEAR FEET ARE TWO-DIMENSIONAL MEASUREMENTS TAKEN FROM CENTER TO CENTER OF EACH ADJOINING MANHOLE. FOR PAYMENT LENGTH REFER TO MEASUREMENT AND PAYMENT IN SPECIFICATIONS.
19. SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE PLACED IN AND AROUND ALL CATCH BASINS SUBJECT TO RUNOFF FROM CONSTRUCTION AREAS. SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO THE STATE OF CONNECTICUT 2002 GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL AS AMENDED THROUGH RECEIPT OF BID DATE OF THIS PROJECT.
20. AT CONNECTION BETWEEN EXISTING AND NEW STRUCTURES, PIPES, SLEEVES, NIPPLES AND ACCESSORIES NECESSARY FOR MAKING CONNECTIONS MAY NOT BE SHOWN IN THE DETAILS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS AS NECESSARY FOR CONNECTING TO EXISTING STRUCTURES, PIPES AND AS INDICATED IN THE SPECIFICATIONS.
21. THE CONTRACTOR SHALL PROVIDE THE OWNER, LOCAL FIRE/POLICE AUTHORITIES, SCHOOL DEPARTMENT, LOCAL BUSINESSES AND PUBLIC TRANSPORTATION AGENCIES A DETAILED PLAN OF APPROACH INDICATING METHODS OF PROPOSED TRAFFIC ROUTING WHEN WORKING IN THE PUBLIC WAY. COMMUNICATION AND COORDINATION BETWEEN OWNER, CONTRACTOR, LOCAL FIRE/POLICE AUTHORITIES, SCHOOL DEPARTMENTS, LOCAL BUSINESSES AND PUBLIC TRANSPORTATION AGENCIES SHALL BE MAINTAINED THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD.
22. "UTILITY IDENTIFICATION TAPE": AFTER PLACING APPROXIMATELY 2 FEET OF BACKFILL MATERIAL OVER ALL UTILITY PIPING, THE CONTRACTOR SHALL PLACE A 6-INCH WIDE STRIP OF DURABLE, COLOR CODED (BLUE FOR WATER AND GREEN FOR SANITARY & STORM SEWERS) UNDERGROUND UTILITY IDENTIFICATION TAPE IMPRINTED WITH AN APPROPRIATE WARNING INDICATING THE PRESENCE OF THE BURIED UTILITY.
23. ALL PAVEMENT DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED IN ACCORDANCE WITH THE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS.
24. ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND PAVEMENT LIMITS SHALL BE RESTORED AT NO ADDITIONAL COST TO THE GNHWPCHA.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ASSOCIATED WITH DEWATERING SYSTEMS INCLUDING THE CT DEEP GENERAL PERMIT REGISTRATION FORM AND FEES. THE GENERAL PERMIT REGISTRATION MUST BE SUBMITTED TO THE CTDEEP AT LEAST 30 DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
26. FLOWABLE FILL MAY BE USED WHERE AUTHORIZED BY THE ENGINEER.
27. ALL STREET EXCAVATIONS SHALL BE COMPLETELY CLOSED AT THE END OF EACH WORKING DAY BY BACKFILLING AND PLACING TEMPORARY PAVEMENT. EXCAVATIONS MAY BE COVERED BY STEEL PLATES ONLY WHEN APPROVED BY THE ENGINEER.
28. OPENINGS FOR PIPE IN PRECAST MANHOLES SHALL BE CAST IN THE REQUIRED LOCATIONS DURING MANHOLE MANUFACTURING. FIELD CUT OPENINGS WILL NOT BE PERMITTED.
29. HORIZONTAL AND VERTICAL CONTROL IS PROVIDED ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEY WORK INCLUDING LAYOUT OF EXCAVATION LIMITS, LINES AND GRADE FOR WORK. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING AS-BUILT DOCUMENTATION, MAINTAINING LAYOUT MARKS, BENCHMARKS AND CONTROL POINTS PROVIDED BY THE OWNER.
30. NO WORK ON PRIVATE PROPERTY IS AUTHORIZED WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER OF THE PROPERTY AND GNHWPCHA.
31. THE CONTRACTOR SHALL RECONNECT WATER SERVICES WHERE REQUIRED AND IN COORDINATION WITH REGIONAL WATER AUTHORITY. LOCATIONS OF WATER SERVICE RECONNECTION TO BE FIELD DETERMINED. THE CONTRACTOR SHALL ALSO PROVIDE AS-BUILT SKETCHES FOR EACH CONNECTION POINT.
32. GAS MAINS EXPOSED DURING EXCAVATION SHALL BE SUPPORTED AS REQUIRED BY SOUTHERN CONNECTICUT GAS COMPANY.
33. THE CONTRACTOR SHALL COORDINATE WITH REGIONAL WATER AUTHORITY DURING BIDDING FOR FIRE HYDRANT ACCESS DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTE THAT USE OF EXISTING HYDRANT MAY NOT BE FEASIBLE AND SHALL MAKE ALTERNATIVE ARRANGEMENTS FOR BRINGING WATER TO THE SITE.

ABBREVIATIONS

ABD, ABDN	ABANDONED	GS	GAS SERVICE	SMH	SEWER MANHOLE
AV	AIR VALVE	GV	GATE VALVE	SPEC	SPECIFICATIONS
BC	BITUMINOUS CONCRETE	HC	HOUSE CONNECTION	SQ FT	SQUARE FEET
BCLC	BITUMINOUS CONCRETE CURB	HDPE	HIGH DENSITY POLYETHYLENE	STA	STATION
BIT	BITUMINOUS	H or HORIZ	HORIZONTAL	ST	STEEL
BLDG	BUILDING	HP	HIGH PRESSURE	ST or STL	STREET
BM	BENCH MARK	HYD	FIRE HYDRANT	STM	STORM
BO	BLOW OFF	I	INVERT (NEW)	SW	SIDEWALK or SOUTH WEST
BRK	BRICK	INV	INVERT	T	TELEPHONE
BSMT	BASEMENT	I.D.	INSIDE DIAMETER	TBD	TO BE DETERMINED
BV	BUTTERFLY VALVE	INT.	INTERVAL	TBM	TEMPORARY BENCH MARK
CA TV	CABLE TELEVISION	L	LEFT	TEL or TELE	TELEPHONE
CB	CATCH BASIN or CONCRETE BLOCK	LAT CONN	LATERAL CONNECTION	TP	TOP OF FRAME
CC	CONCRETE CURB	LF	LINEAR FEET	THK	THICK (NESS)
CHN LK	CHAIN LINK	LS	LUMP SUM	TP	TEST PIT
CI	CAST IRON	MAX	MAXIMUM	TRAV	TRAVERSE POINT (SURVEY)
CIPP	CURED-IN-PLACE PIPE	MB	MAIL BOX	TYP	TYPICAL
C.L.F.	CENTERLINE, PROPERTY LINE, STREETLINE	MECH	MECHANICAL	UC	UNDERGROUND CONDUIT
C.L.F.	CHAIN LINK FENCE	MH	MANHOLE	UE	UNDERGROUND ELECTRIC
CLSM	CONTROLLED LOW STRENGTH MATERIAL	MIN	MINIMUM	UP	UTILITY POLE
CMP	CORRUGATED METAL PIPE	MISC	MISCELLANEOUS	V or VERT	VERTICAL
CON or CONC	CONCRETE	MJ	MECHANICAL JOINT	VC/VCP	VITRIFIED CLAY or CLAY TILE PIPE
CP	CONTROL POINT	N	NORTH	W	WATER or WEST
CS	COMBINED SEWER	NE	NORTH EAST	WG	WATER GATE
CT DEEP	CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION	NW	NORTH WEST	WI/WICL	WROUGHT IRON/ WROUGHT IRON CEMENT LINED
CU FT	CUBIC FEET	N.I.C	NOT IN CONTRACT	WS	WATER SERVICE
CY	CUBIC YARD	NO OR #	NUMBER	2X3	CONDUIT QUANTITIES
D	STORM DRAIN	O.D.	OUTSIDE DIAMETER		
DH	DRILL HOLE	OW	OBSERVATION WELL		
DI	DROP INLET or DUCTILE IRON	PE	PLAIN END or POLYETHYLENE		
DIA or Ø	DIAMETER	PK	PK NAIL		
DMH	DRAIN MANHOLE	PL	PLASTIC PIPE OR PLATE		
DS	DRAWING	PROP	PROPERTY LINE or PROPOSED		
DWG	DRAWING	PVC	POLYVINYL CHLORIDE		
E	EAST OR ELECTRICAL	PVMT	PAVEMENT		
EA	EACH	RC or RCP	REINFORCED CONCRETE PIPE		
EL or ELEV	ELEVATION	RCPP	REINFORCED CONCRETE CULVERT PIPE		
EOB	END OF BORING	REC	RECORD DRAWING		
EOP	EDGE OF PAVEMENT	RMC	REINFORCED METAL CONDUIT		
EX. or EXIST.	EXISTING	R.O.W.	RIGHT-OF-WAY		
FL	FLOW LINE	R&R	REMOVE AND REPLACE		
FT	FEET or FOOT	S	SEWER, SERVICE or SOUTH		
G	NATURAL GAS	SAN	SANITARY		
GALV	GALVANIZED	SE	SOUTH EAST		
GC	GRANITE CURB	SECT	SECTION		
GNHWPCA	GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY	SF	SQUARE FEET		

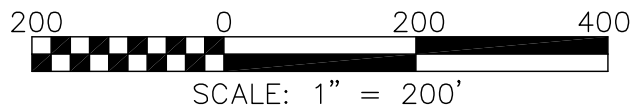
LEGEND

	Bush		Mailbox
	Catch Basin		Parking Meter
	Coniferous Tree		Sign
	Deciduous Tree		Utility Pole
	Gas Gate		Water Gate
	Hydrant		Monument
	Light Pole		Sanitary Manhole
	Telephone Manhole		Storm Drain Manhole
	Buckeye Jet Fuel Line		
	Underground Gas		
	Underground Electric		
	Underground Water		
	Overhead Wires		
	Storm Drainage		
	Sanitary Sewer		
	Underground Telephone		
	Minor Contour		
	Major Contour		
	Bypass Pumping Route		
	Piping greater than 18"		
	Centerline with Stationing & Tick Mark		

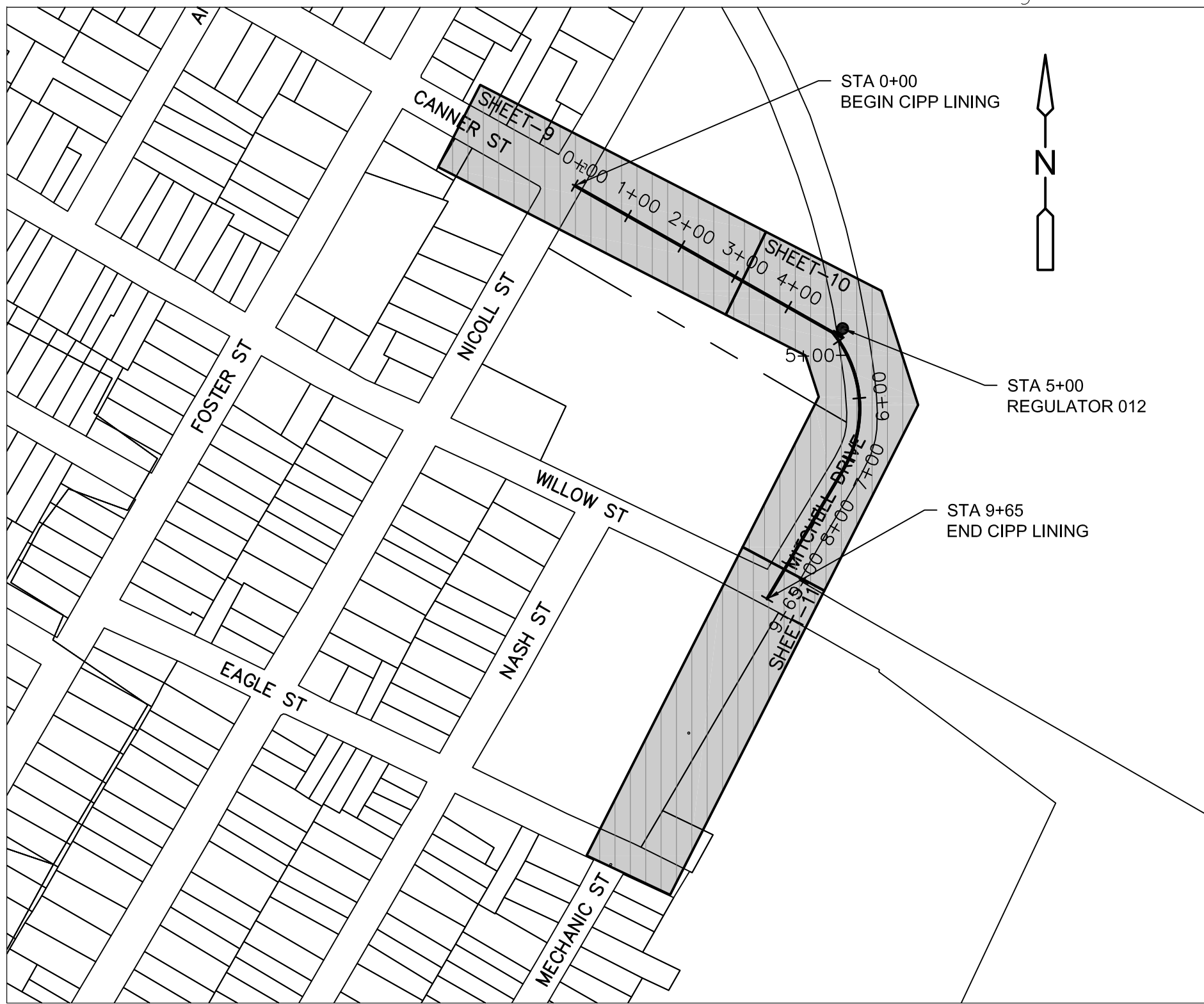


REGULATOR 020 PLAN & PROFILE KEY-MAP

SCALE: 1"=200'



SCALE: 1" = 200'



REGULATOR 012 PLAN & PROFILE KEY-MAP

SCALE: 1"=200'

REV. NO.	DATE	DRWN	CHKD		REMARKS

DESIGNED BY: S. GANESH  
DRAWN BY: G. SMITH  
SHEET CHK'D BY: R. BERLANDY  
CROSS CHK'D BY: S. GANESH  
APPROVED BY: J. SULLIVAN  
DATE: OCTOBER 2017



Greater New Haven Water Pollution Control Authority  
260 East Street  
New Haven, CT 06511  
(203) 466-5280 p (203) 772-1564 f  
www.gnhwpca.com



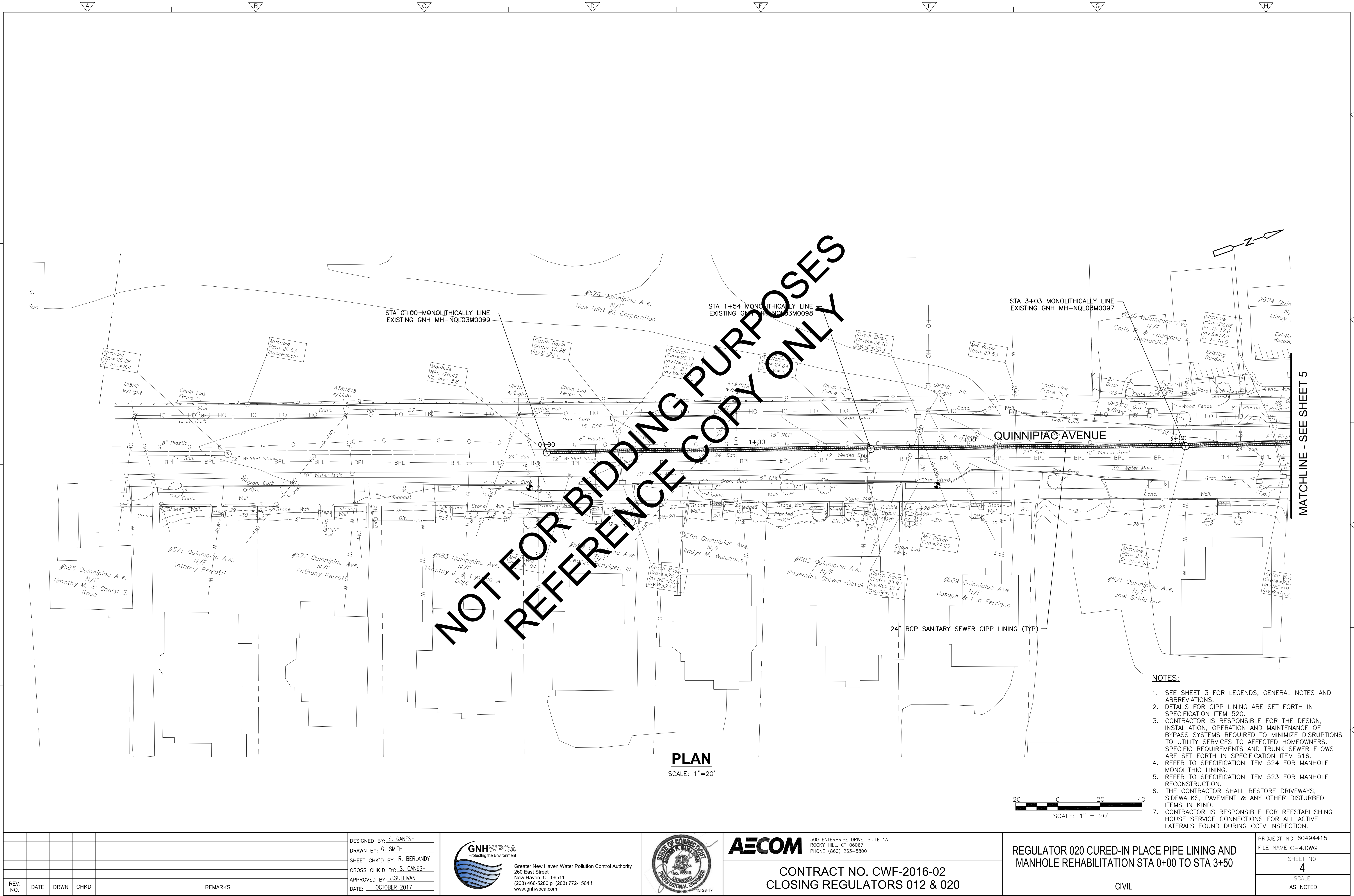
500 ENTERPRISE DRIVE, SUITE 1A  
ROCKY HILL, CT 06067  
PHONE (860) 263-5800

CONTRACT NO. CWF-2016-02  
CLOSING REGULATORS 012 & 020

NOTES, LEGENDS, ABBREVIATIONS & KEY MAPS

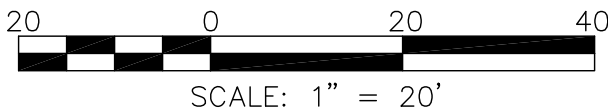
GENERAL

PROJECT NO. 60494415
FILE NAME: G3.DWG
SHEET NO. 3
SCALE: AS NOTED



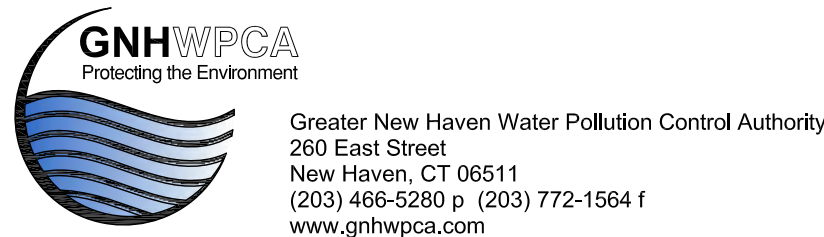
PLAN  
SCALE: 1"=20'

- NOTES:
- SEE SHEET 3 FOR LEGENDS, GENERAL NOTES AND ABBREVIATIONS.
  - DETAILS FOR CIPP LINING ARE SET FORTH IN SPECIFICATION ITEM 520.
  - CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, OPERATION AND MAINTENANCE OF BYPASS SYSTEMS REQUIRED TO MINIMIZE DISRUPTIONS TO UTILITY SERVICES TO AFFECTED HOMEOWNERS. SPECIFIC REQUIREMENTS AND TRUNK SEWER FLOWS ARE SET FORTH IN SPECIFICATION ITEM 516.
  - REFER TO SPECIFICATION ITEM 524 FOR MANHOLE MONOLITHIC LINING.
  - REFER TO SPECIFICATION ITEM 523 FOR MANHOLE RECONSTRUCTION.
  - THE CONTRACTOR SHALL RESTORE DRIVEWAYS, SIDEWALKS, PAVEMENT & ANY OTHER DISTURBED ITEMS IN KIND.
  - CONTRACTOR IS RESPONSIBLE FOR REESTABLISHING HOUSE SERVICE CONNECTIONS FOR ALL ACTIVE LATERALS FOUND DURING CCTV INSPECTION.



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REGULATOR 020 CURED-IN PLACE PIPE LINING AND  
MANHOLE REHABILITATION STA 0+00 TO STA 3+00

CIVIL

PROJECT NO. 60494415 FILE NAME: C-4.DWG
SHEET NO. 4
SCALE: AS NOTED

MATCHLINE - SEE SHEET 5



NOT FOR BIDDING PURPOSES ONLY

PLAN

SCALE: 1"=20'

NOTES:

1. SEE SHEET 3 FOR LEGENDS, GENERAL NOTES AND ABBREVIATIONS.
2. DETAILS FOR CIPP LINING ARE SET FORTH IN SPECIFICATION ITEM 520.
3. CONTRACTOR SHALL DECOMMISSION MONITORING WELL AFTER THE CONSTRUCTION / CIPP LINING OF THE SEWER AND DURING RESTORATION. REFER TO OBSERVATION WELL DECOMMISSIONING SPECIFICATION SECTION 1620
4. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, OPERATION AND MAINTENANCE OF BYPASS SYSTEMS REQUIRED TO MINIMIZE DISRUPTIONS TO UTILITY SERVICES TO AFFECTED HOMEOWNERS. SPECIFIC REQUIREMENTS AND TRUNK SEWER FLOWS ARE SET FORTH IN SPECIFICATION ITEM 516.
5. REFER TO SPECIFICATION ITEM 524 FOR MANHOLE MONOLITHIC LINING.
6. REFER TO SPECIFICATION ITEM 523 FOR MANHOLE RECONSTRUCTION.
7. THE CONTRACTOR SHALL RESTORE DRIVEWAYS, SIDEWALKS, PAVEMENT & ANY OTHER DISTURBED ITEMS IN KIND.
8. CONTRACTOR IS RESPONSIBLE FOR REESTABLISHING HOUSE SERVICE CONNECTIONS FOR ALL ACTIVE LATERALS FOUND DURING CCTV INSPECTION.

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DRWN	CHKD
REMARKS	



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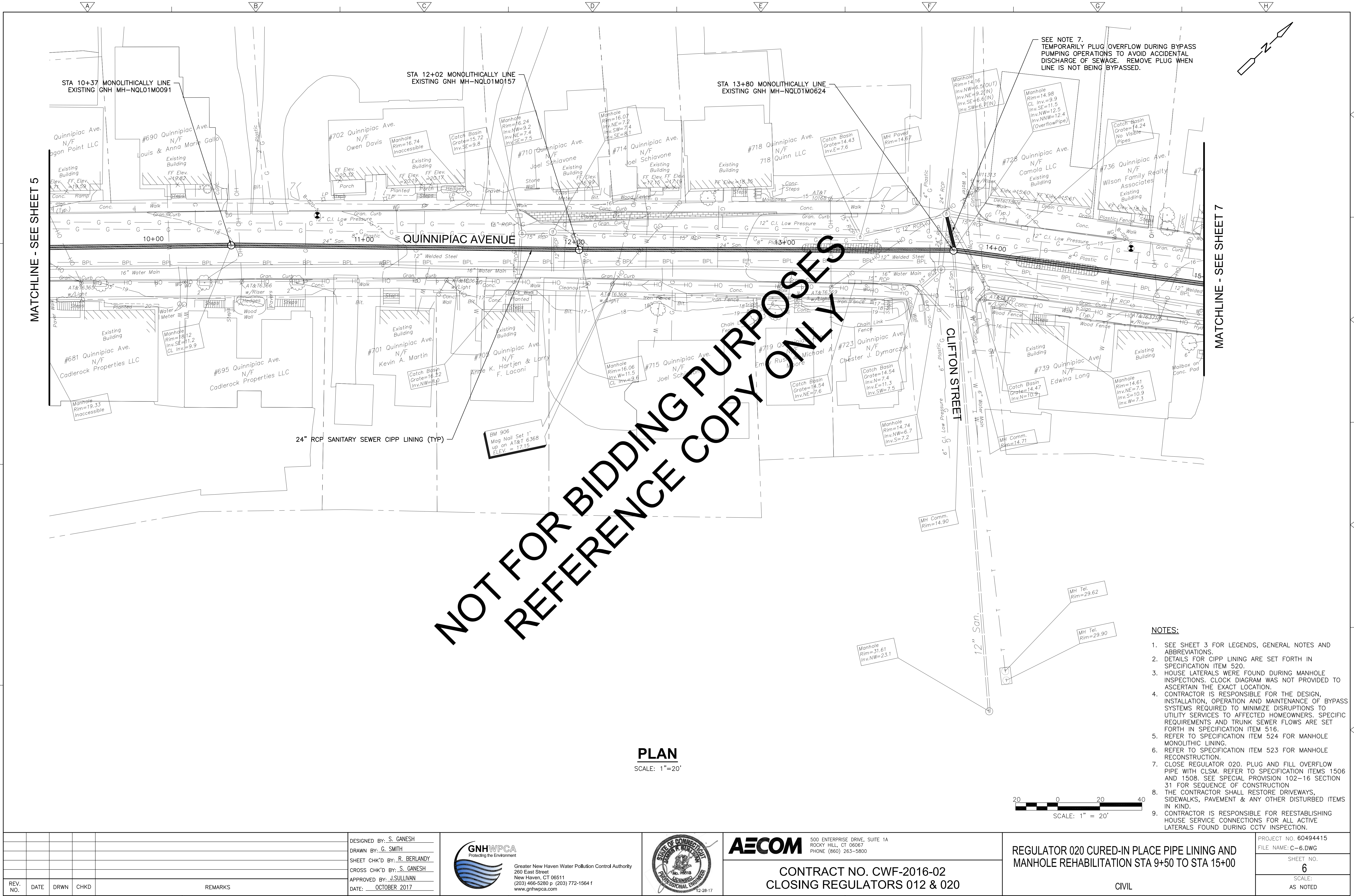
REGULATOR 020 CURED-IN PLACE PIPE LINING AND  
MANHOLE REHABILITATION STA 3+50 TO STA 9+50

CIVIL

PROJECT NO. 60494415  
FILE NAME: C-5.DWG

SHEET NO.  
5

SCALE:  
AS NOTED



**PLAN**  
SCALE: 1"=20'


- NOTES:**
- SEE SHEET 3 FOR LEGENDS, GENERAL NOTES AND ABBREVIATIONS.
  - DETAILS FOR CIPP LINING ARE SET FORTH IN SPECIFICATION ITEM 520.
  - HOUSE LATERALS WERE FOUND DURING MANHOLE INSPECTIONS. CLOCK DIAGRAM WAS NOT PROVIDED TO ASCERTAIN THE EXACT LOCATION.
  - CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, OPERATION AND MAINTENANCE OF BYPASS SYSTEMS REQUIRED TO MINIMIZE DISRUPTIONS TO UTILITY SERVICES TO AFFECTED HOMEOWNERS. SPECIFIC REQUIREMENTS AND TRUNK SEWER FLOWS ARE SET FORTH IN SPECIFICATION ITEM 516.
  - REFER TO SPECIFICATION ITEM 524 FOR MANHOLE MONOLITHIC LINING.
  - REFER TO SPECIFICATION ITEM 523 FOR MANHOLE RECONSTRUCTION.
  - CLOSE REGULATOR 020. PLUG AND FILL OVERFLOW PIPE WITH CLSM. REFER TO SPECIFICATION ITEMS 1506 AND 1508. SEE SPECIAL PROVISION 102-16 SECTION 31 FOR SEQUENCE OF CONSTRUCTION.
  - THE CONTRACTOR SHALL RESTORE DRIVEWAYS, SIDEWALKS, PAVEMENT & ANY OTHER DISTURBED ITEMS IN KIND.
  - CONTRACTOR IS RESPONSIBLE FOR REESTABLISHING HOUSE SERVICE CONNECTIONS FOR ALL ACTIVE LATERALS FOUND DURING CCTV INSPECTION.

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CLOSING REGULATORS 012 & 020

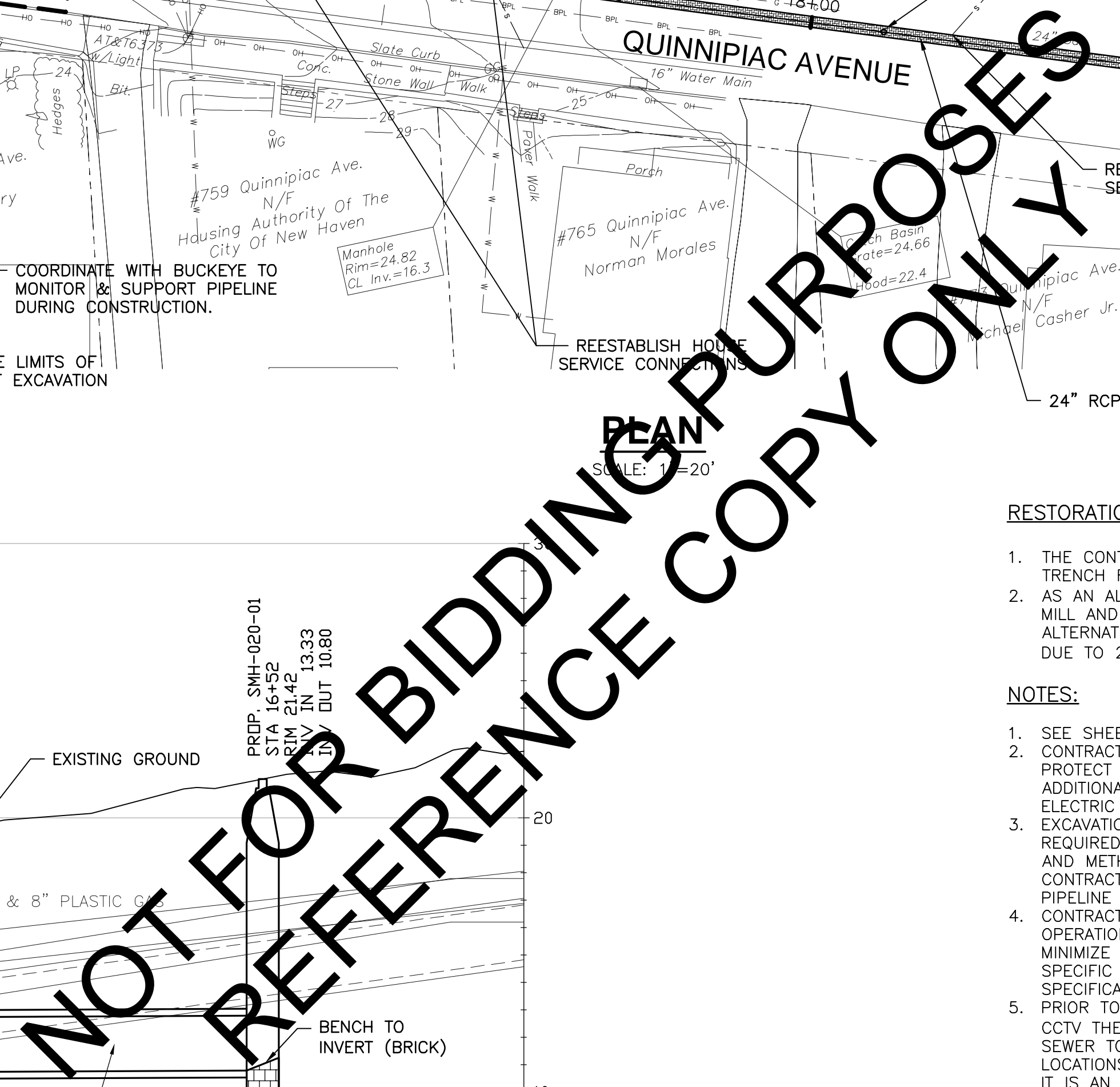
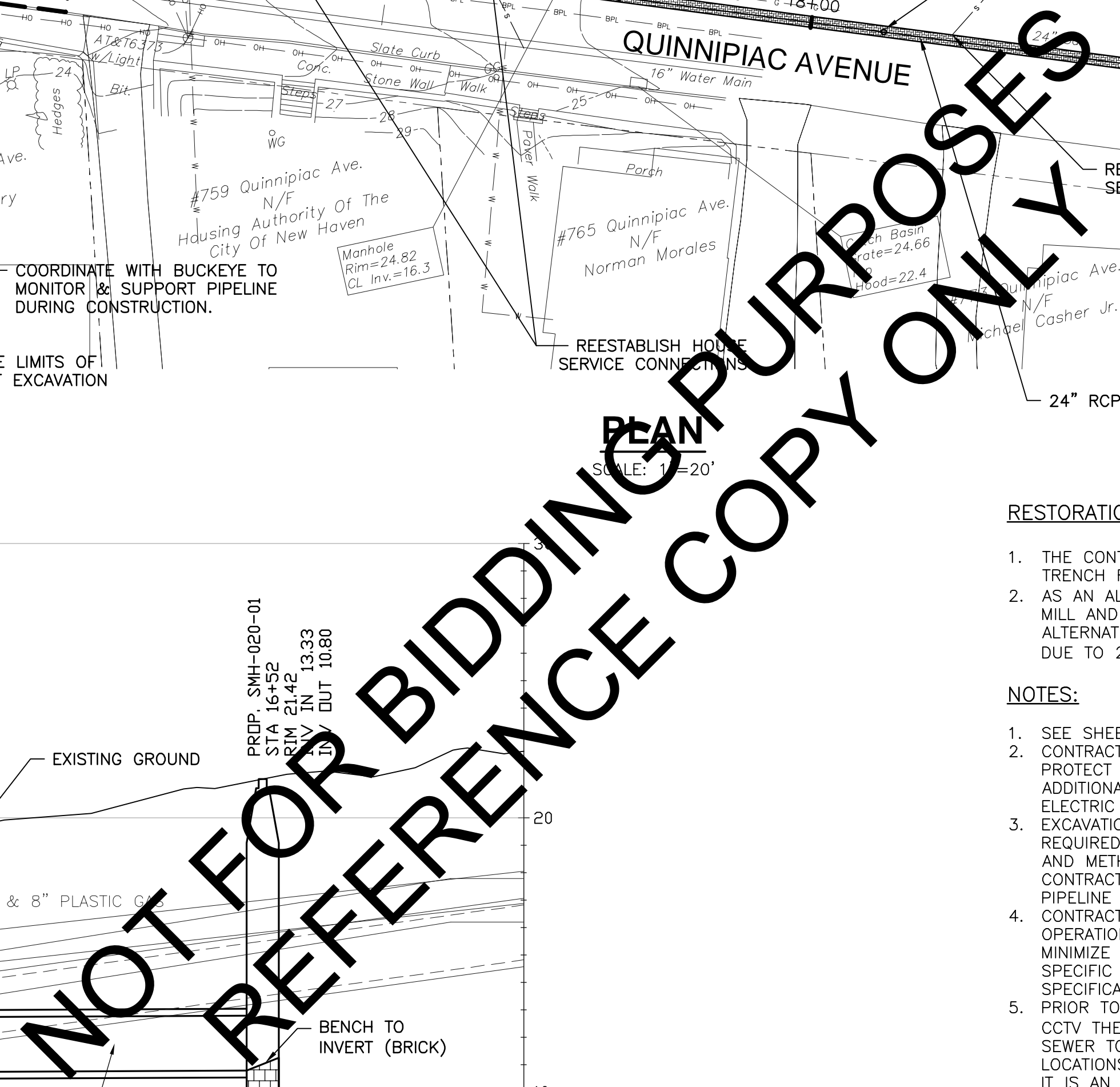
REGULATOR 020 CURED-IN PLACE PIPE LINING AND  
MANHOLE REHABILITATION STA 9+50 TO STA 15+00

CIVIL

PROJECT NO. 60494415  
FILE NAME: C-6.DWG

SHEET NO.  
**6**

SCALE:  
AS NOTED



SCALE: 1"=20' HORIZ.  
1"= 4' VERT.

1. SEE SHEET 3 FOR LEGENDS, GENERAL NOTES AND ABBREVIATIONS.
2. CONTRACTOR SHALL VERIFY LOCATIONS OF UTILITY CROSSINGS AND PROTECT THEM PRIOR TO INSTALLING TRENCH SUPPORT SYSTEMS. ADDITIONALLY CONTRACTOR SHALL COMPLY WITH OSHA OVERHEAD ELECTRIC REQUIREMENTS DURING INSTALLATION OF TRENCH SUPPORTS.
3. EXCAVATION SUPPORT SYSTEM LIMITS ARE APPROXIMATE, CONTRACTOR IS REQUIRED TO SELECT EXCAVATION LIMITS BASED ON SPECIFIC MEANS AND METHODS TO BE EMPLOYED AND LIMITATIONS SET FORTH IN CONTRACT DOCUMENTS SUCH AS MINIMIZING TRAFFIC IMPACTS, BUCKEYE PIPELINE REQUIREMENTS, ETC.
4. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, OPERATION AND MAINTENANCE OF BYPASS SYSTEMS REQUIRED TO MINIMIZE DISRUPTIONS TO UTILITY SERVICES TO AFFECTED HOMEOWNERS. SPECIFIC REQUIREMENTS AND TRUNK SEWER FLOWS ARE SET FORTH IN SPECIFICATION ITEM 516.
5. PRIOR TO INSTALLATION OF THE PROPOSED SEWER, CONTRACTOR SHALL OCTV THE ENTIRE LENGTH OF THE EXISTING 24" RCP QUINNIPAC TRUNK SEWER TO IDENTIFY ALL ACTIVE AND INACTIVE HOUSE SERVICE LATERAL LOCATIONS. IT CAN BE ASSUMED THAT IF THE LATERAL IS NOT CAPPED, IT IS AN ACTIVE LATERAL.
6. ALL LATERALS WITHIN THE TRENCH SHALL BE REPLACED AND RECONNECTED TO THE NEW TRUNK SEWER. IF THE FIELD ENGINEER DETERMINES THAT A LATERAL SHOULD BE REPLACED OUTSIDE THE TRENCH BASED ON ITS CONDITION, A SUITABLE CONNECTION POINT TO THE EXISTING LATERAL SHALL BE ESTABLISHED BY THE FIELD ENGINEER. SEE SPECIFICATION ITEM 512.
7. A STANDARD CLEAN-OUT SHALL BE INSTALLED FOR LATERALS REPLACED UP TO THE EDGE OF CURB. REPLACEMENT OF LATERALS BEYOND THE CURB WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
8. FOR TRENCH EXCAVATION, SUPPORT OF EXCAVATION, INSTALLATION OF NEW 24" PVC PIPE, AND TEMPORARY UTILITY SUPPORT REFER TO SPECIFICATION ITEM 205.
9. REFER TO SPECIFICATION ITEM 524 FOR MANHOLE MONOLITHIC LINING.
10. REFER TO SPECIFICATION ITEM 523 FOR MANHOLE RECONSTRUCTION.
11. DETAILS FOR CIPP LINING ARE SET FORTH IN SPECIFICATION ITEM 520.
12. THE CONTRACTOR SHALL RESTORE DRIVEWAYS, SIDEWALKS, PAVEMENT & ANY OTHER DISTURBED ITEMS IN KIND.



					DESIGNED BY: <u>S. GANESH</u>
					DRAWN BY: <u>G. SMITH</u>
					SHEET CHK'D BY: <u>R. BERLANDY</u>
					CROSS CHK'D BY: <u>S. GANESH</u>
REV. NO.	DATE	DRWN	CHKD	REMARKS	APPROVED BY: <u>J.SULLIVAN</u> DATE: <u>    </u> OCTOBER 2017

DESIGNED BY: S. GANESH  
DRAWN BY: G. SMITH  
SHEET CHK'D BY: R. BERLANDY  
CROSS CHK'D BY: S. GANESH  
APPROVED BY: J.SULLIVAN  
DATE: OCTOBER 2017



Greater New Haven Water Pollution Control Authority  
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**AECOM**

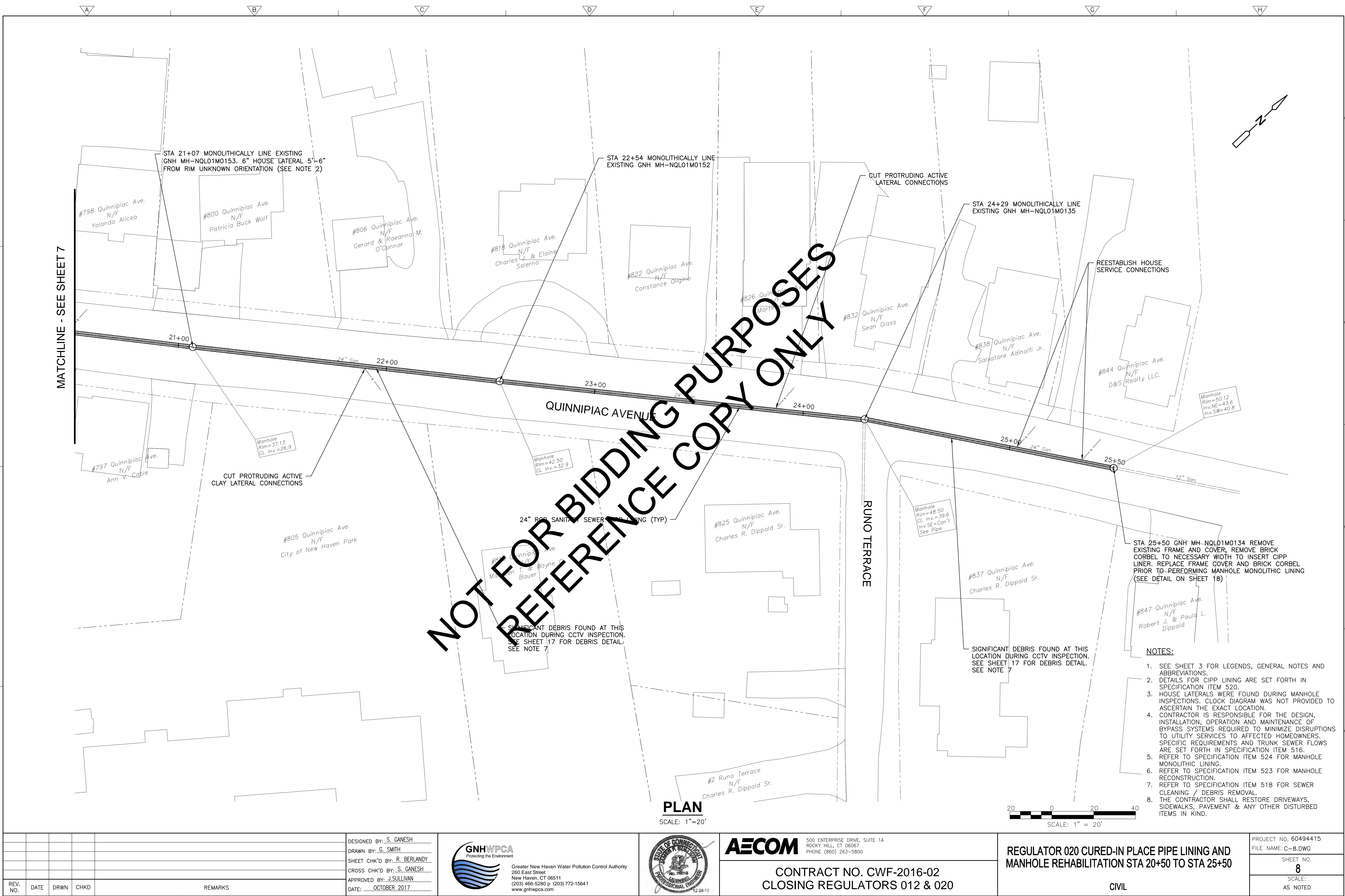
500 ENTERPRISE DRIVE, SUITE 1A  
ROCKY HILL, CT 06067  
PHONE (860) 263-5800

CONTRACT NO. CWF-2016-02  
CLOSING REGULATORS 012 & 020

REGULATOR 020 CURED-IN-PLACE PIPE LINING AND  
MANHOLE REHABILITATION STA 15+00 TO STA 20+50

CIVIL

SCALE:  
AS NOTED




REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. GANESH  
DRAWN BY: G. SMITH  
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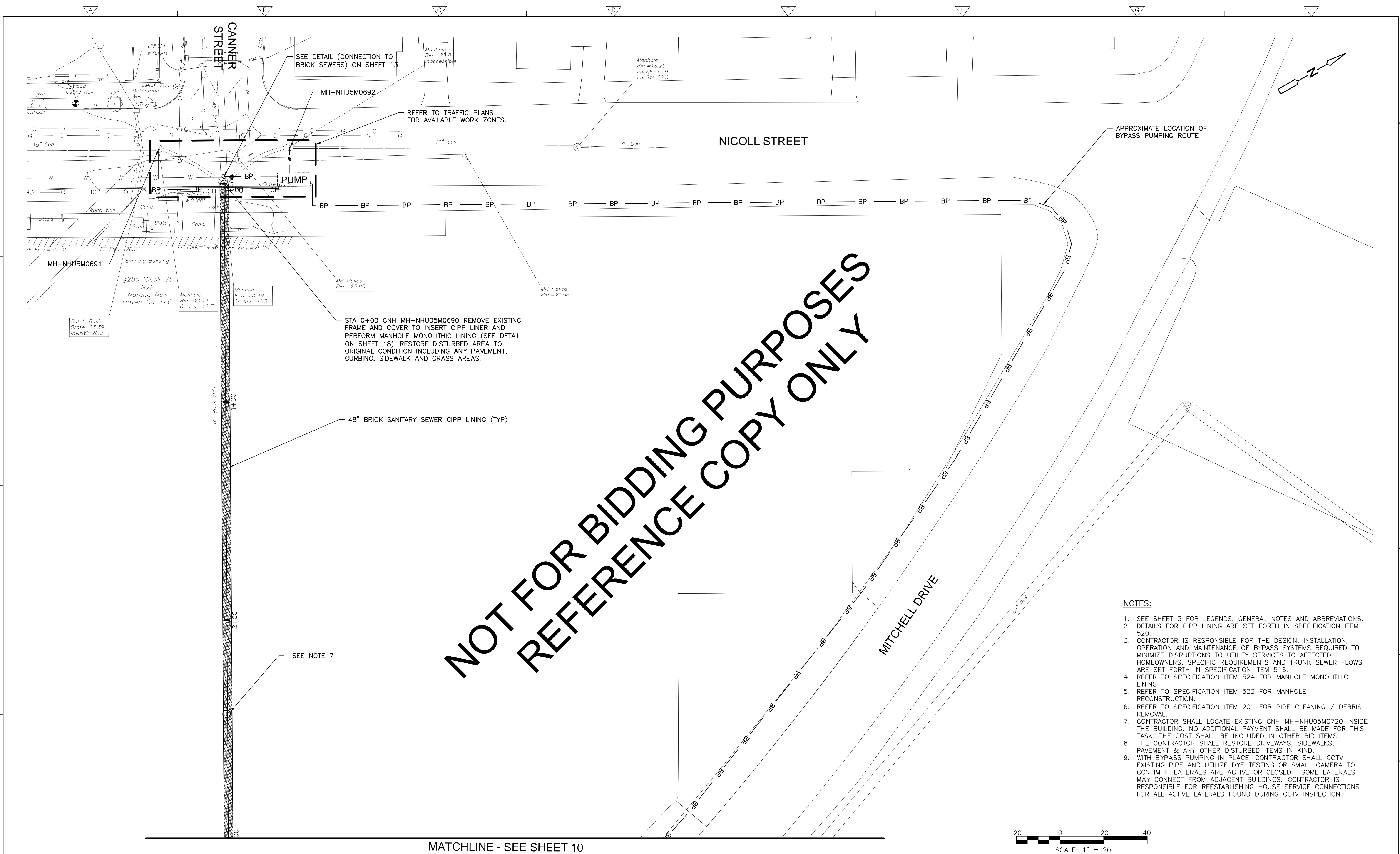
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CONTRACT NO. CWF-2016-02  
CLOSING REGULATORS 012 & 020

REGULATOR 020 CURED-IN PLACE PIPE LINING AND  
MANHOLE REHABILITATION STA 20+50 TO STA 25+50

CIVIL

PROJECT NO. 60494415 FILE NAME: C-8.DWG
SHEET NO. 8
SCALE: AS NOTED



- NOTES:
- SEE SHEET 3 FOR LEGENDS, GENERAL NOTES AND ABBREVIATIONS.
  - DETAILS FOR CIPP LINING ARE SET FORTH IN SPECIFICATION ITEM 520.
  - CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, OPERATION AND MAINTENANCE OF BYPASS SYSTEMS REQUIRED TO MINIMIZE DISRUPTIONS TO UTILITY SERVICES TO AFFECTED HOMEOWNERS. SPECIFIC REQUIREMENTS AND TRUNK SEWER FLOWS ARE SET FORTH IN SPECIFICATION ITEM 516.
  - REFER TO SPECIFICATION ITEM 524 FOR MANHOLE MONOLITHIC LINING.
  - REFER TO SPECIFICATION ITEM 523 FOR MANHOLE RECONSTRUCTION.
  - REFER TO SPECIFICATION ITEM 201 FOR PIPE CLEANING / DEBRIS REMOVAL.
  - CONTRACTOR SHALL LOCATE EXISTING GNH MH-NHU05M0720 INSIDE THE BUILDING. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS TASK. THE COST SHALL BE INCLUDED IN OTHER BID ITEMS.
  - THE CONTRACTOR SHALL RESTORE DRIVEWAYS, SIDEWALKS, PAVEMENT & ANY OTHER DISTURBED ITEMS IN KIND.
  - WITH BYPASS PUMPING IN PLACE, CONTRACTOR SHALL CCTV EXISTING PIPE AND UTILIZE DYE TESTING OR SMALL CAMERA TO CONFIRM IF LATERALS ARE ACTIVE OR CLOSED. SOME LATERALS MAY CONNECT FROM ADJACENT BUILDINGS. CONTRACTOR IS RESPONSIBLE FOR REESTABLISHING HOUSE SERVICE CONNECTIONS FOR ALL ACTIVE LATERALS FOUND DURING CCTV INSPECTION.

				DESIGNED BY: S. GANESH	 <div>Greater New Haven Water Pollution Control Authority 260 East Street New Haven, CT 06511 (203) 466-5280 p (203) 772-1564 f www.gnhwpc.com</div>		 <div>500 ENTERPRISE DRIVE, SUITE 1A ROCKY HILL, CT 06067 PHONE (860) 263-5800</div>	CONTRACT NO. CWF-2016-02 CLOSING REGULATORS 012 & 020	REGULATOR 012 CURED-IN PLACE PIPE LINING AND MANHOLE REHABILITATION STA 0+00 TO STA 3+00	PROJECT NO. 60494415
				DRAWN BY: G. SMITH					FILE NAME: C-9.DWG	
				SHEET CHK'D BY: R. BERLANDY					SHEET NO. 9	
				CROSS CHK'D BY: S. GANESH					SCALE: AS NOTED	
REV. NO.	DATE	DRWN	CHKD	REMARKS	APPROVED BY: J.SULLIVAN DATE: OCTOBER 2017				CIVIL	

The diagram shows a cross-section of a bridge structure. On the left, a hatched area represents the 'Existing' structure, which is a brick parapet. To its right is a new, solid concrete parapet. The concrete parapet is labeled '48" Brick Par.' and has a height of '4' + 00'. The top of the concrete parapet is marked with a 'C' and a '3'.



- SEE NOTE 4

RESTORE AREA TO EXISTING —  
CONDITION. REFER TO SPECIAL  
SPECIFICATION 102-16 ITEM 30

APPROXIMATE LOCATION OF  
BYPASS PUMPING ROUTE

PRESERVE AND PROTECT  
RETAINING WALL AND  
WOOD POST RAIL

MITCHELL DRIVE

STA 4+82 GNH MH NHU05M0737 REMOVE EXISTING  
FRAME AND COVER, REMOVE BRICK CORBEL TO  
NECESSARY WIDTH TO INSERT CIPP LINER. REPLACE  
WITH WATERTIGHT FRAME, COVER AND BRICK  
CORBEL PRIOR TO PERFORMING MANHOLE  
MONOLITHIC LINING

— ABANDON TWIN 18" RCP OVERFLOWS.  
PLUG AND FILL WITH CLSM. REFER TO  
SPECIFICATION ITEMS 1506 & 1508

GNH MH-NHU05M0730

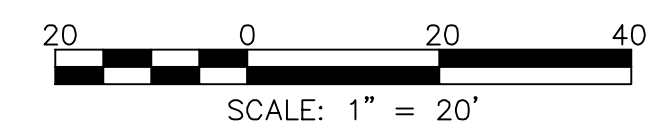
— 35"x52" BRICK SANITARY SEWER CIPP LINING (TYP)




STA 7+18 MONOLITHICALLY LINE  
EXISTING GNH MH-NHU05M0731

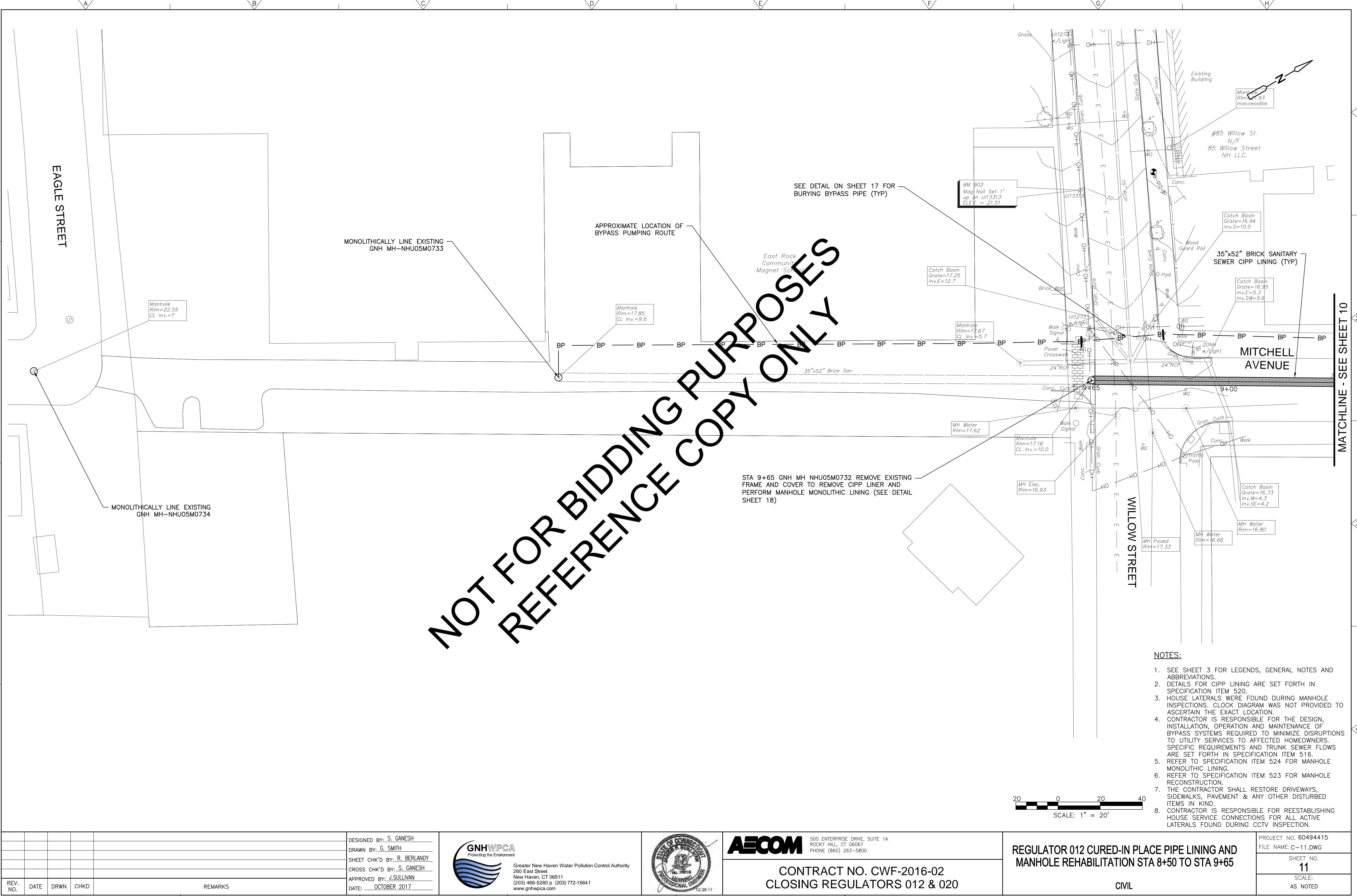
MATCHLINE - SEE SHEET 11

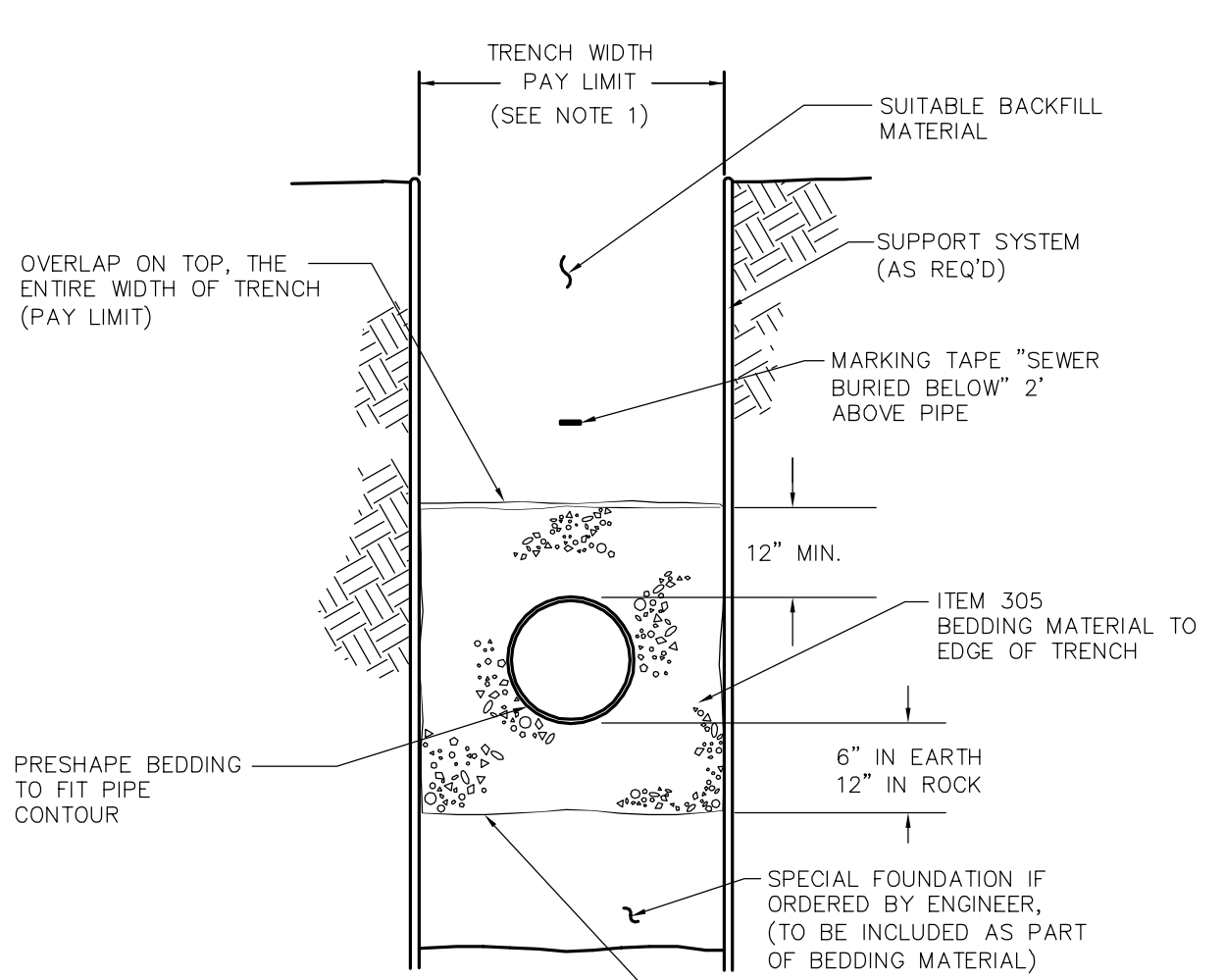
- NOTES:

1. SEE SHEET 3 FOR LEGENDS, GENERAL NOTES AND ABBREVIATIONS.
2. DETAILS FOR CIPP LINING ARE SET FORTH IN SPECIFICATION ITEM 520.
3. HOUSE LATERALS WERE FOUND DURING MANHOLE INSPECTIONS. CLOCK DIAGRAM WAS NOT PROVIDED TO ASCERTAIN THE EXACT LOCATION.
4. CONTRACTOR SHALL DECOMMISSION MONITORING WELL AFTER THE CONSTRUCTION OF THE SEWER AND DURING RESTORATION. REFER TO MONITORING WELL DECOMMISSIONING SPECIFICATION SECTION 1620
5. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, OPERATION AND MAINTENANCE OF BYPASS SYSTEMS REQUIRED TO MINIMIZE DISRUPTIONS TO UTILITY SERVICES TO AFFECTED HOMEOWNERS. SPECIFIC REQUIREMENTS AND TRUNK SEWER FLOWS ARE SET FORTH IN SPECIFICATION ITEM 516.
6. REFER TO SPECIFICATION ITEM 524 FOR MANHOLE MONOLITHIC LINING.
7. REFER TO SPECIFICATION ITEM 523 FOR MANHOLE RECONSTRUCTION.
8. REFER TO SPECIFICATION ITEM 201 FOR PIPE CLEANING / DEBRIS REMOVAL.
9. THE CONTRACTOR SHALL RESTORE DRIVEWAYS, SIDEWALKS, PAVEMENT & ANY OTHER DISTURBED ITEMS IN KIND.
10. CONTRACTOR IS RESPONSIBLE FOR REESTABLISHING HOUSE SERVICE CONNECTIONS FOR ALL ACTIVE LATERALS FOUND DURING CCTV INSPECTION.



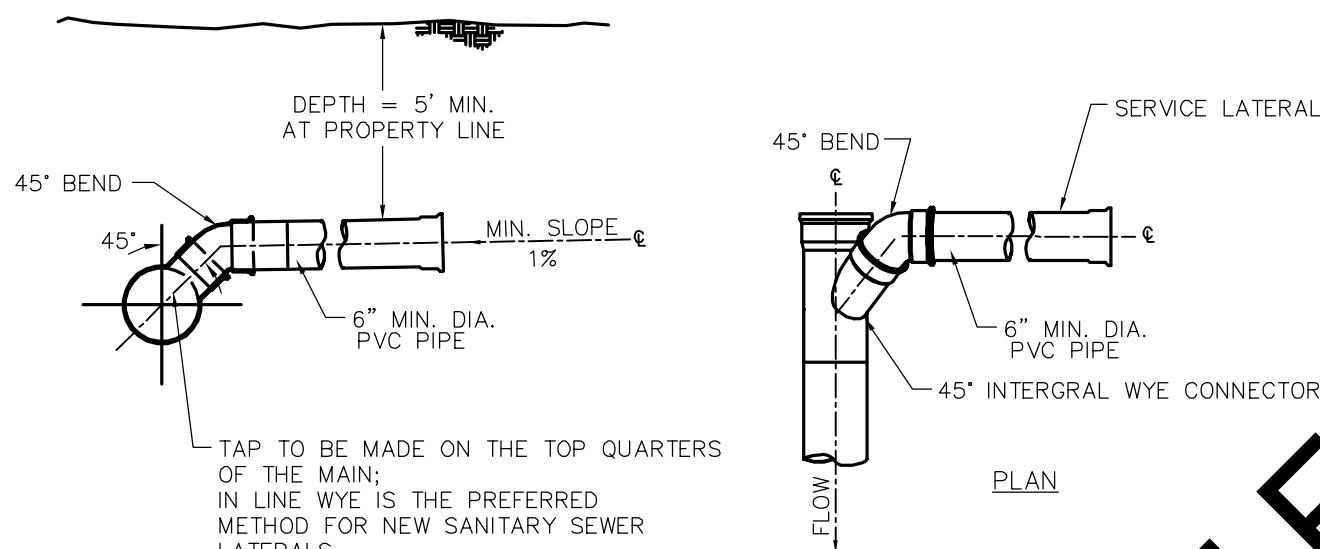
					DESIGNED BY: <u>S. GANESH</u> DRAWN BY: <u>G. SMITH</u> SHEET CHK'D BY: <u>R. BERLANDY</u> CROSS CHK'D BY: <u>S. GANESH</u> APPROVED BY: <u>J.SULLIVAN</u> DATE: <u>OCTOBER 2017</u>		 Greater New Haven Water Pollution Control Authority 260 East Street New Haven, CT 06511 (203) 466-5280 p (203) 772-1564 f www.gnhwpcap.com		 12-28-17		 500 ENTERPRISE DRIVE, SUITE 1A ROCKY HILL, CT 06067 PHONE (860) 263-5800		REGULATOR 012 CURED-IN PLACE PIPE LINING AND MANHOLE REHABILITATION STA 3+00 TO STA 8+50		PROJECT NO. 60494415 FILE NAME: C-10.DWG	
									CONTRACT NO. CWF-2016-02 CLOSING REGULATORS 012 & 020		CIVIL		SHEET NO. 10		SCALE: AS NOTED	
REV. NO.	DATE	DRWN	CHKD	REMARKS												





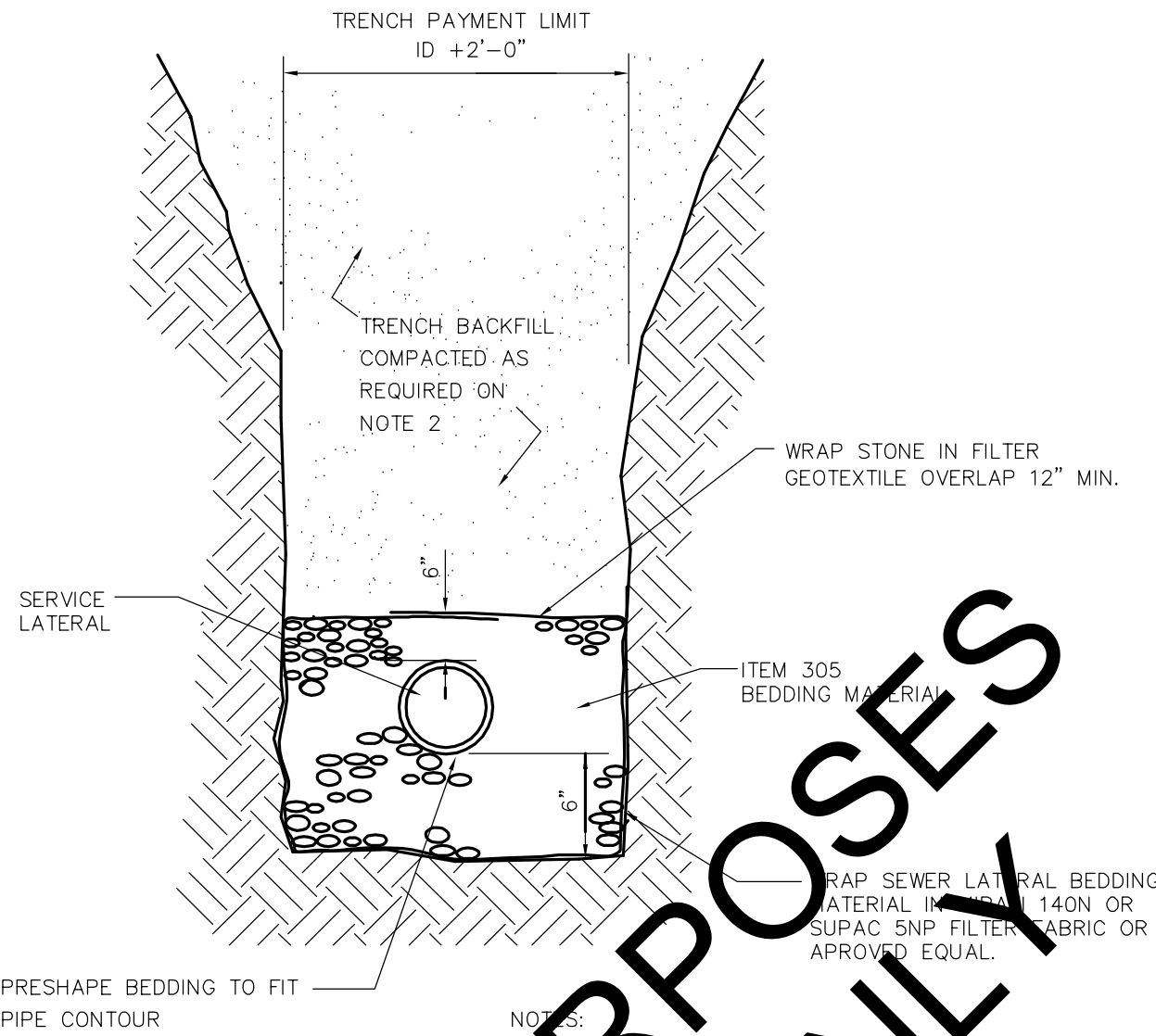
- NOTES:
1. MAXIMUM PAY WIDTH FOR BEDDING MATERIAL & TRENCH EXCAVATION IS 1D + 2'-0" FOR I.D. LESS THAN 30". I.D. + 3'-0" FOR EQUAL TO OR GREATER THAN 30".
  2. BEDDING AND BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY.
- WRAP SEWER MAINS/BEDDING MATERIAL IN MIRAFI 140N OR SUPAC SNP FILTER FABRIC OR AN APPROVED EQUAL CONFORMING TO THE REQUIREMENTS OF CONN DOT FORM 816, 2004, ARTICLE M.08.01.26 AS AMENDED.

TRENCH SECTION  
SANITARY SEWER MAIN  
NTS



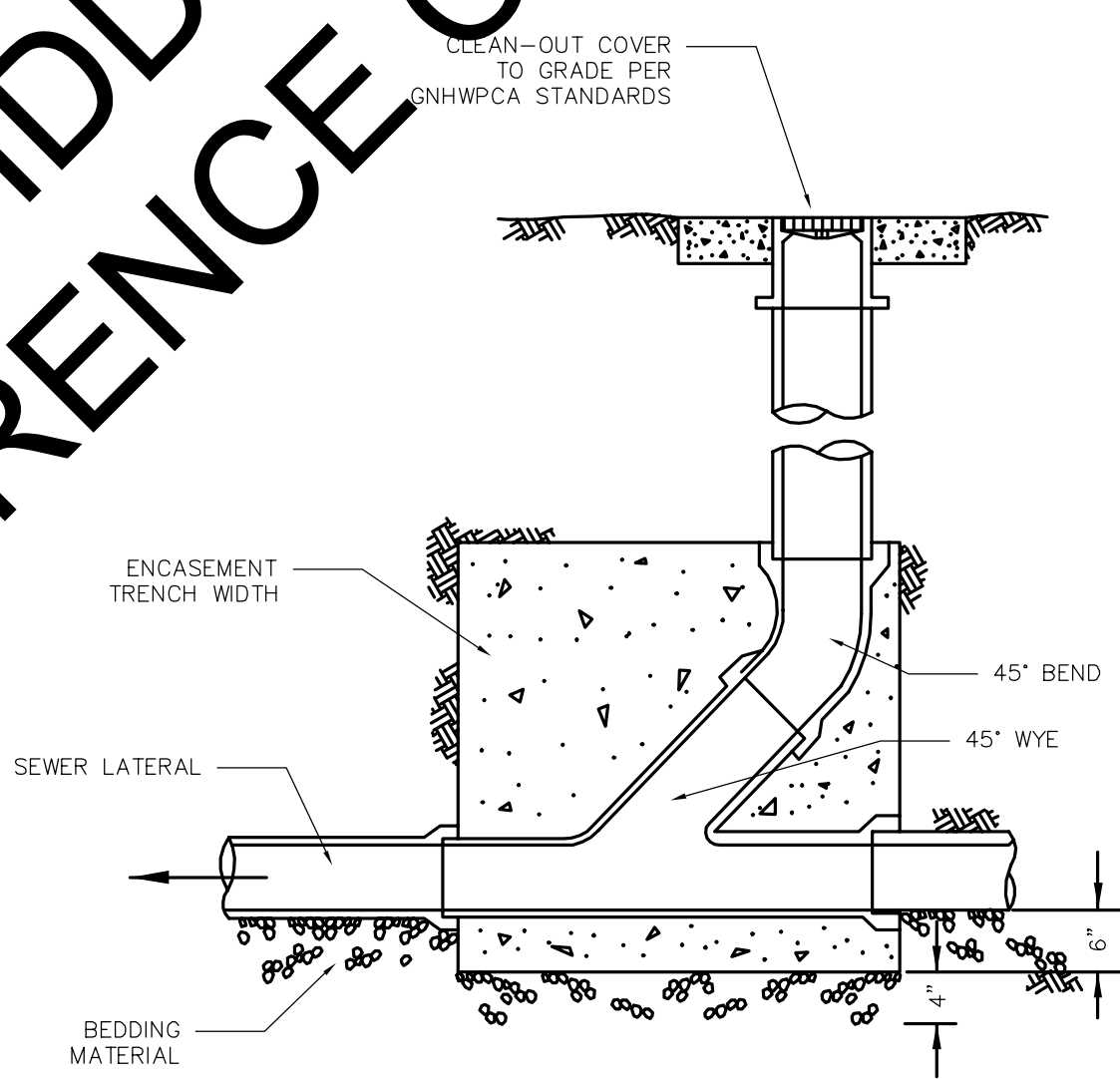
- NOTES:
1. SANITARY SEWER LATERALS SHALL NOT BE RE-USED.
  2. ALL PIPING SHALL BE LAID WITH CARE IN ACCORDANCE WITH GNHWPCA STANDARD SPECIFICATIONS, AS AMENDED.
  3. APPROPRIATE BEDDING AND BACKFILL SHALL BE AS RECOMMENDED BY THE GNHWPCA.
  4. GRANULAR FILL AND BEDDING MATERIAL SHALL CONFORM TO GNHWPCA STANDARD SPECIFICATIONS.
  5. SHIELDED COUPLINGS ARE REQUIRED ON ALL DISSIMILAR PIPE TRANSITIONS, COUPLING SHALL BE MISSION FLEX-SEAL ARC COUPLINGS, OR APPROVED EQUAL.
  6. NEW LATERALS SHALL BE CONSTRUCTED WITH INTEGRAL WYES. NEW CONNECTION TO EXISTING SEWER MAINS SHALL BE CORED. DRILL CORE SHALL BE PROPER SIZE PER INSERT MANUFACTURER'S RECOMMENDATION. PIPE INSERTS AND SADDLES SHALL BE MANUFACTURED BY INSERTA TEE OR GENERAL ENGINEERING COMPANY GENENGCO'S "SEALTITE TYPE U".
  7. IN NEW SUBDIVISIONS AND OTHER CONSTRUCTION INVOLVING NEW ROADS, INSTALL LATERALS TO 6 FEET BEHIND PROPERTY LINE AT A MINIMUM DEPTH OF 5 FEET FOR SEWERS IN STREET RIGHT-OF-WAY.

STANDARD SEWER LATERAL CONNECTION  
NTS



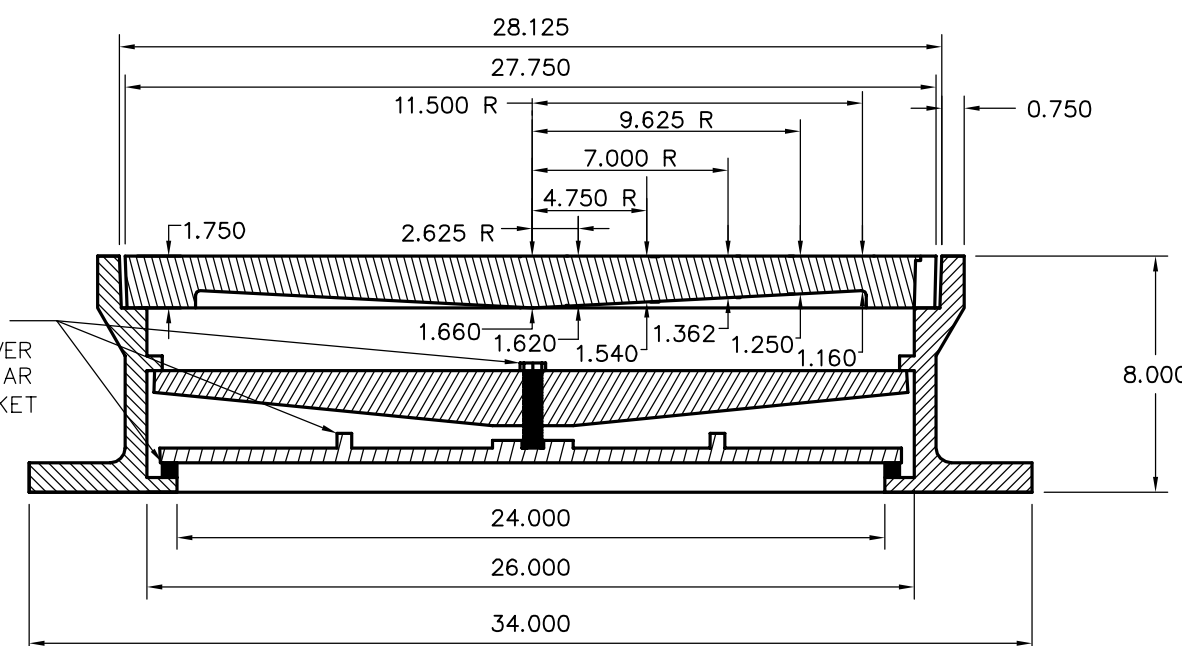
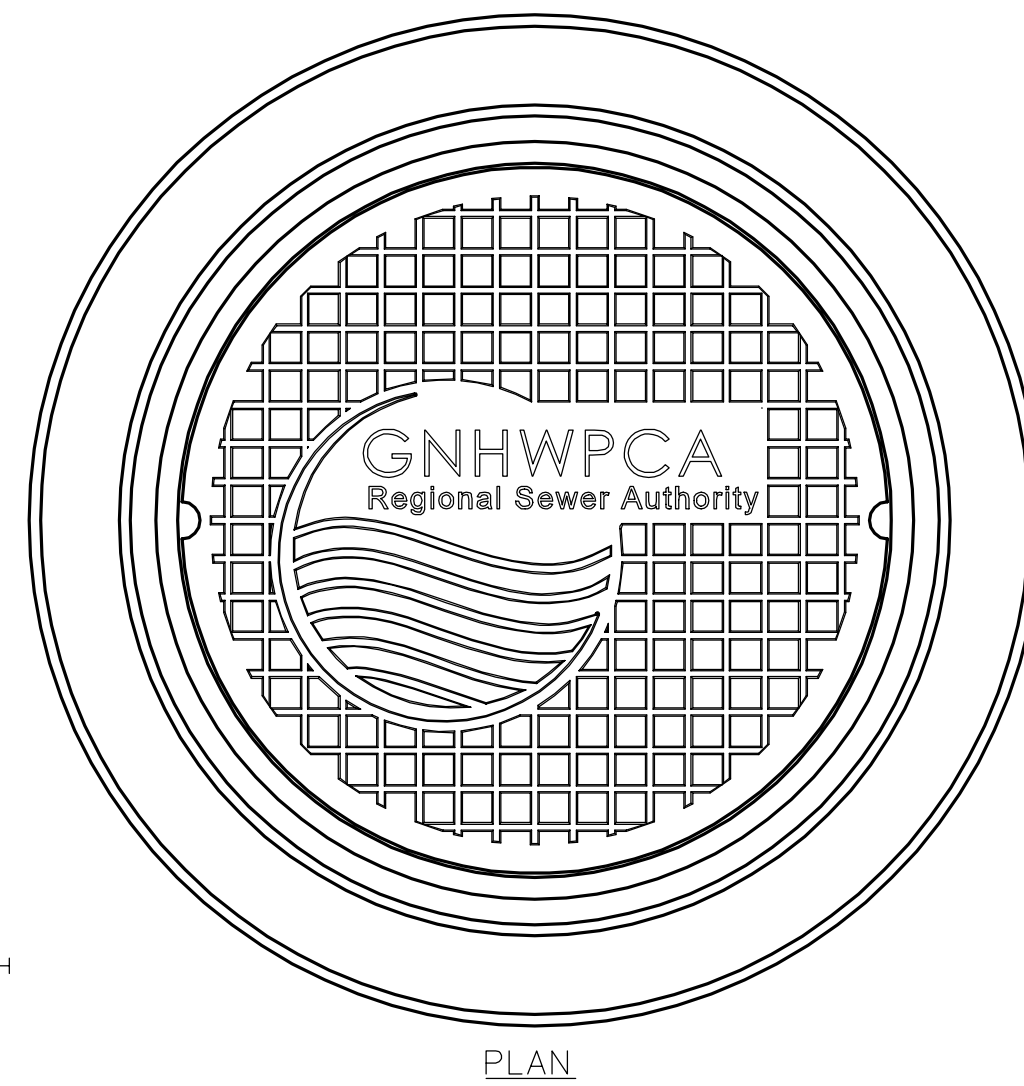
- NOTES:
1. MAXIMUM PAY WIDTH FOR BEDDING MATERIAL & TRENCH EXCAVATION IS 1D + 2'-0" FOR I.D. LESS THAN 30". I.D. + 3'-0" FOR EQUAL TO OR GREATER THAN 30".
  2. BEDDING AND BACKFILL MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY.

TRENCH SECTION  
SANITARY SEWER LATERAL  
NTS

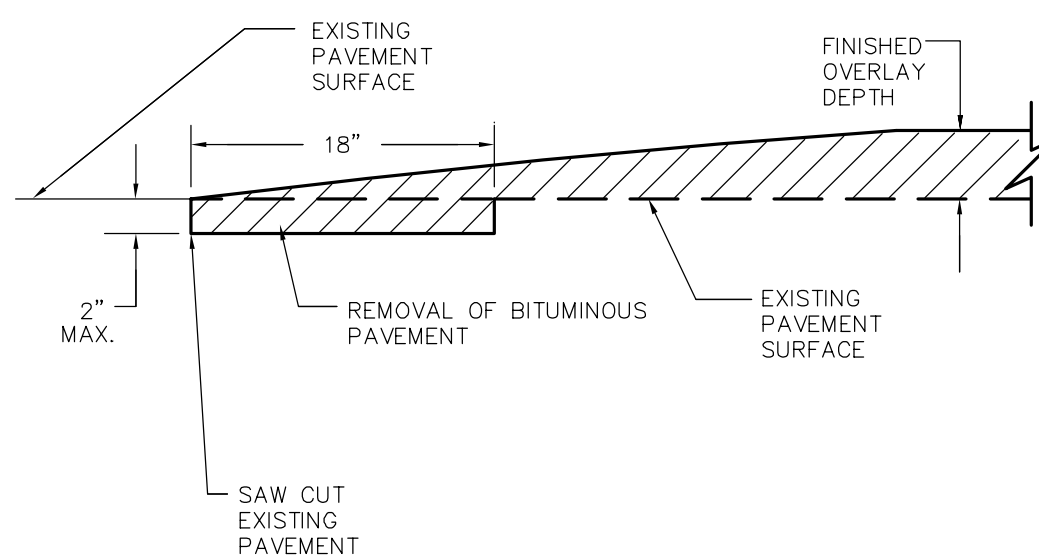


- NOTES:
1. CLEAN-OUT PIPE SIZE SHALL MATCH EXISTING LATERAL.
  2. NEW SEWER LATERALS AND CLEAN-OUTS SHALL BE 6-INCH OR AS APPROVED BY THE GNHWPCA.
  3. ENTIRE WYE SECTION TO BE ENCASED IN CONTROLLED LOW STRENGTH MATERIAL OR GRANULAR FILL, AS DIRECTED BY THE GNHWPCA.

STANDARD CLEAN-OUT  
NTS



STANDARD WATERTIGHT  
MANHOLE COVER  
NTS



- NOTES:
1. IF THE PAVEMENT IS MILLED AND OVERLAYED, THE CONTRACTOR SHALL MATCH EXISTING PAVEMENT SURFACE.

OVERLAY TRANSITION TO  
EXISTING PAVEMENT  
NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. GANESH  
DRAWN BY: M. THIBODEAU  
SHEET CHK'D BY: R. BERLANDY  
CROSS CHK'D BY: S. GANESH  
APPROVED BY: J. SULLIVAN  
DATE: OCTOBER 2017



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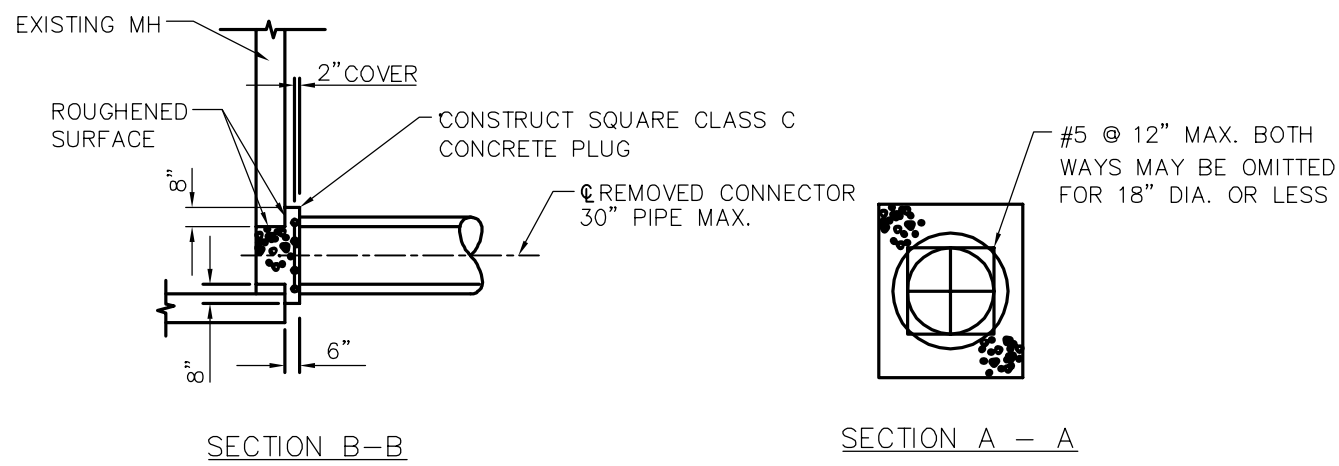
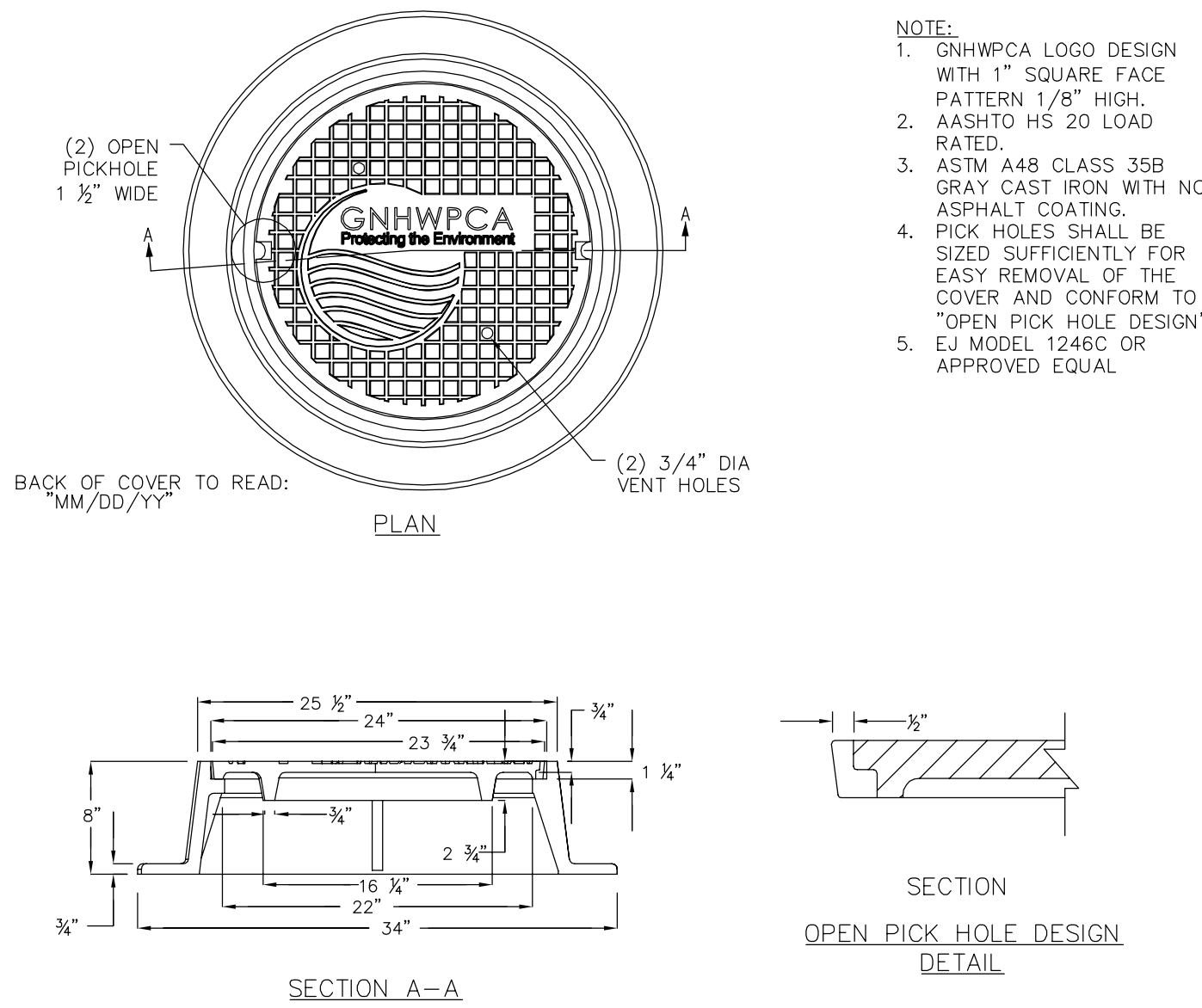
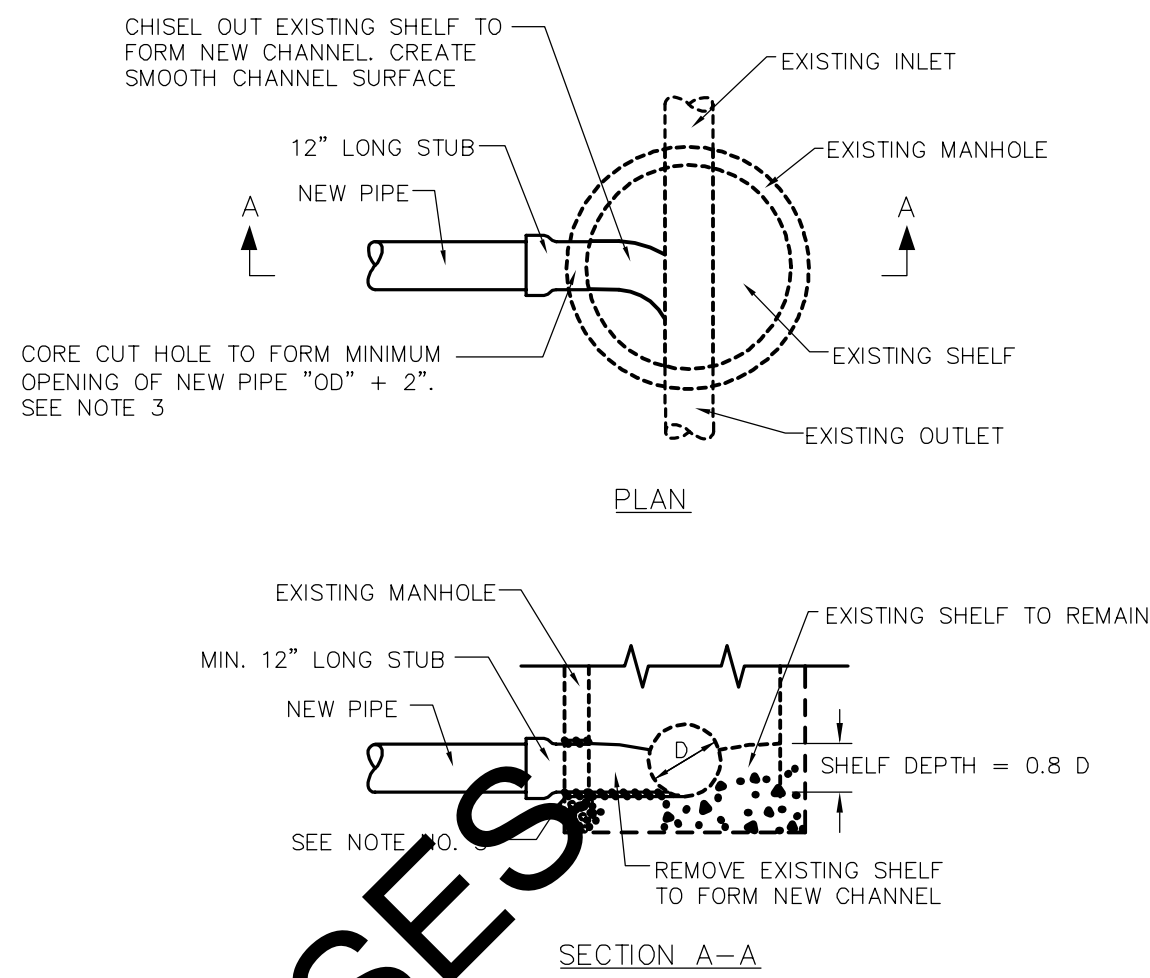
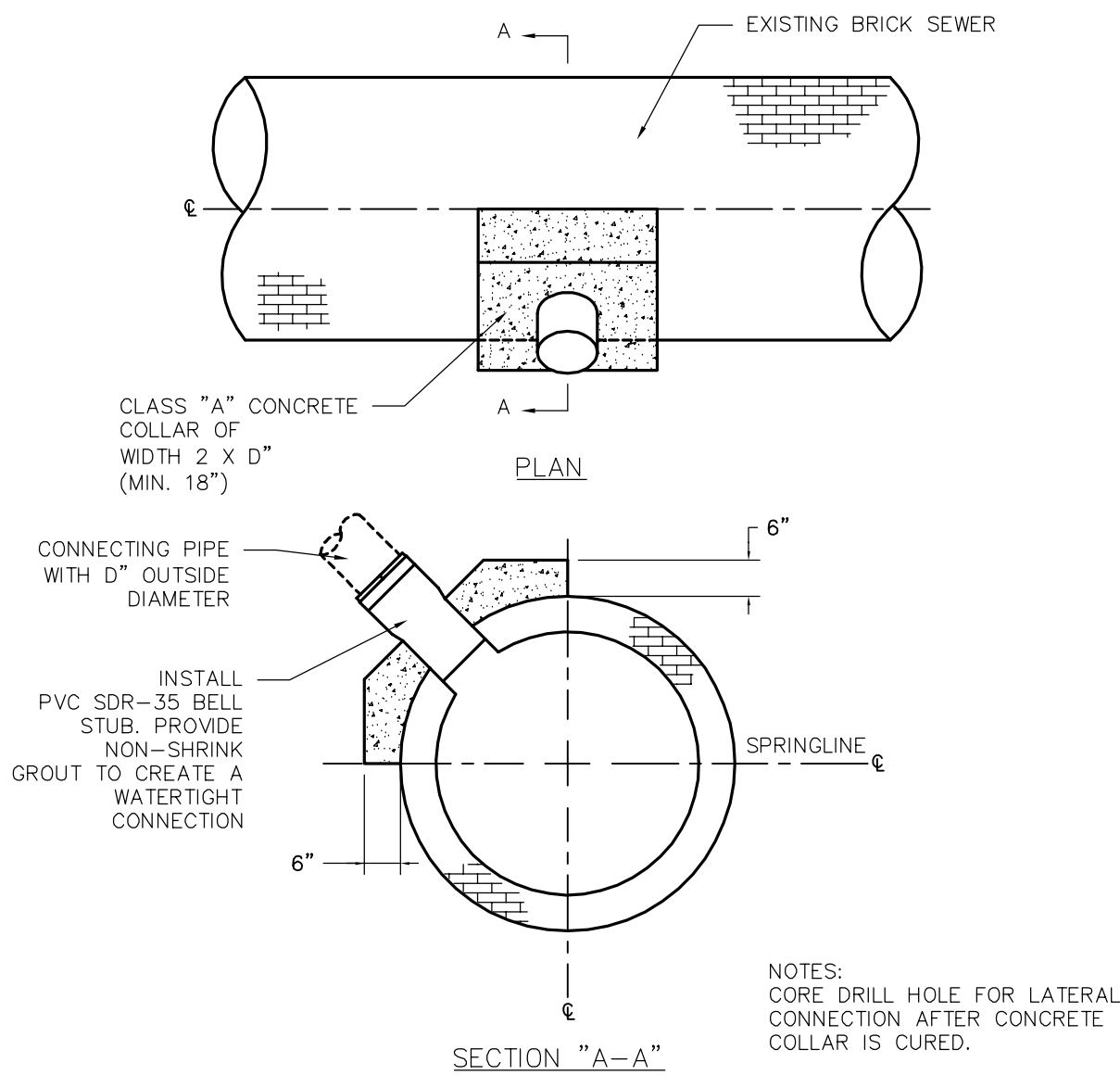
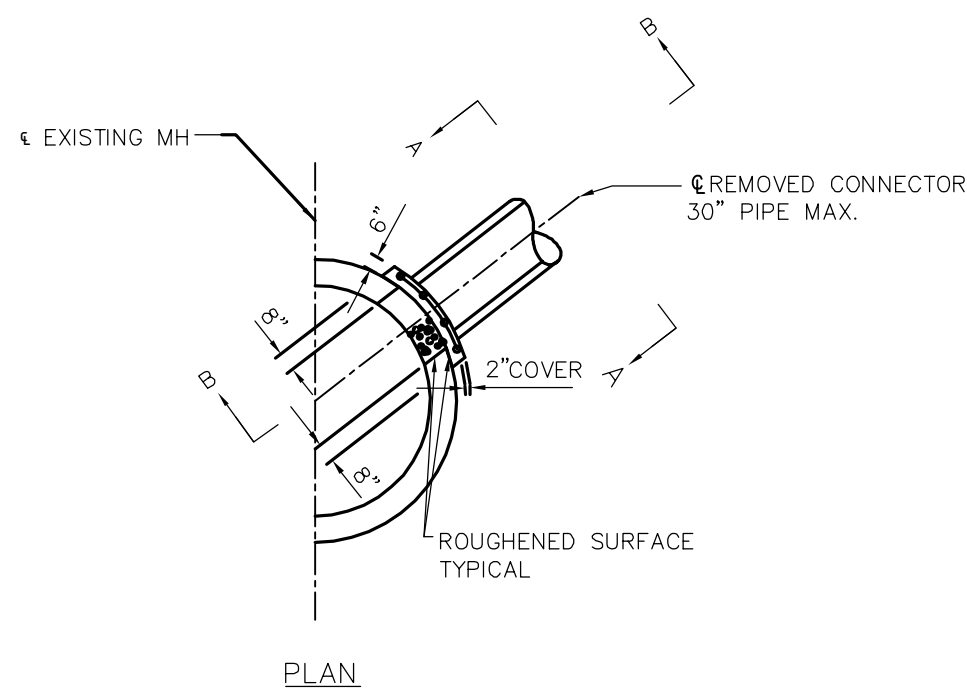
500 ENTERPRISE DRIVE, SUITE 1A  
ROCKY HILL, CT 06067  
PHONE (860) 263-5800

CONTRACT NO. CWF-2016-02  
CLOSING REGULATORS 012 & 020

GNHWPCA STANDARD DETAILS SHEET 1 OF 2

CIVIL

PROJECT NO. 60494415 FILE NAME: C-12.DWG
SHEET NO. <b>12</b>
SCALE: AS NOTED

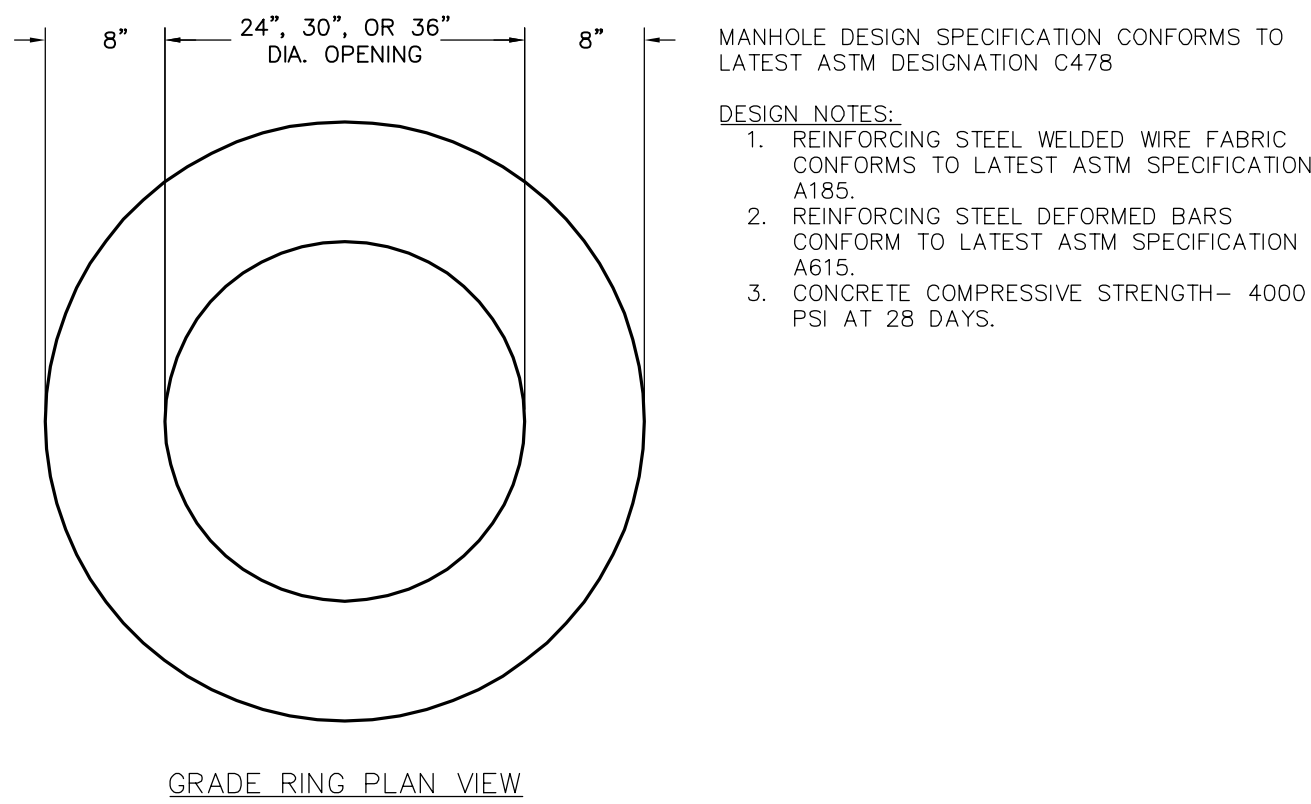


PIPE PLUG AT MANHOLE  
NTS

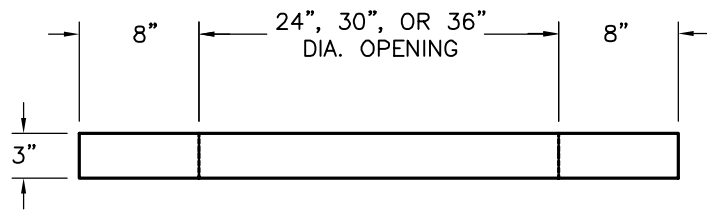
CONNECTION TO BRICK SEWERS  
NTS

CONNECTION TO EXISTING  
MANHOLE  
NTS

TYPICAL SANITARY SEWER  
MANHOLE FRAME AND COVER  
NTS

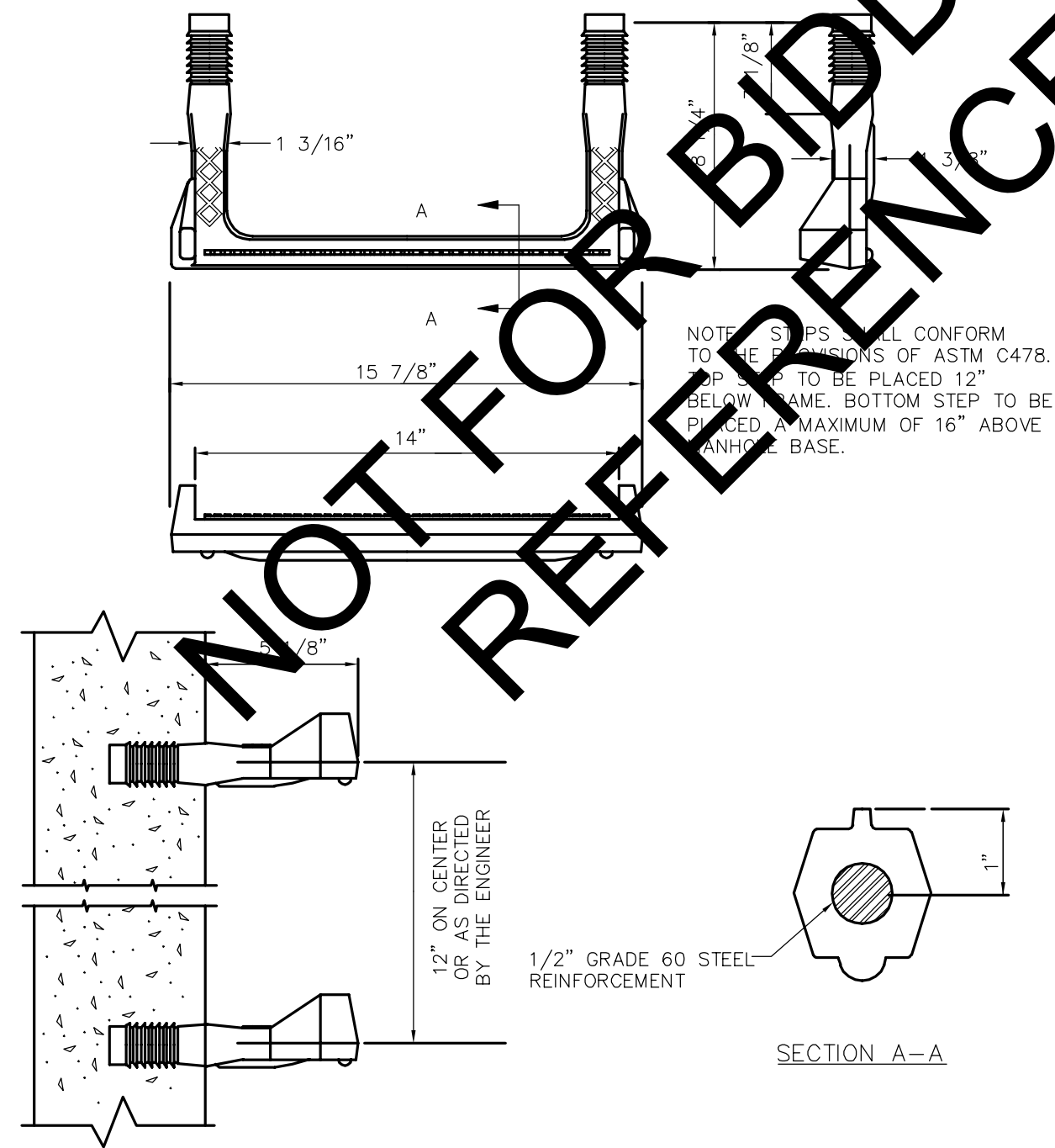


GRADE RING PLAN VIEW

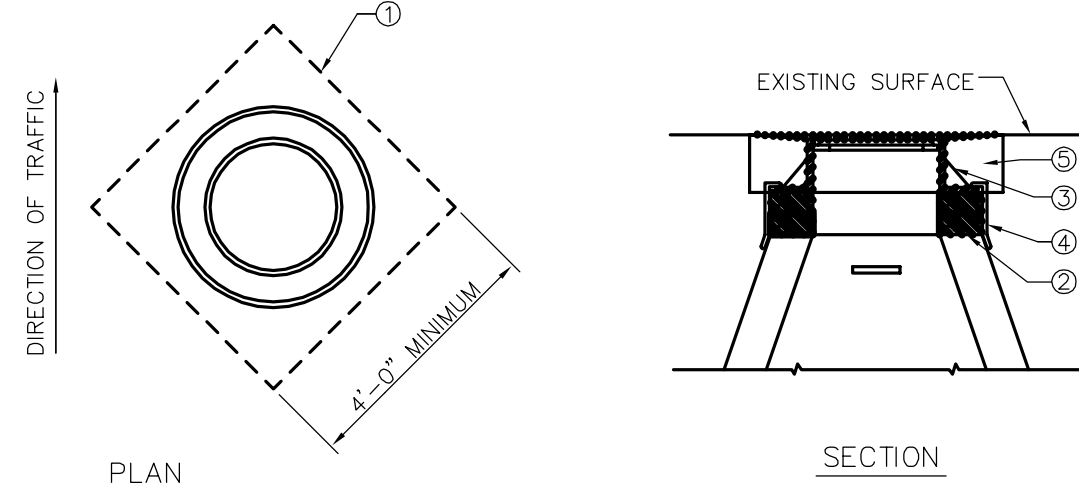


GRADE RING ELEVATION VIEW

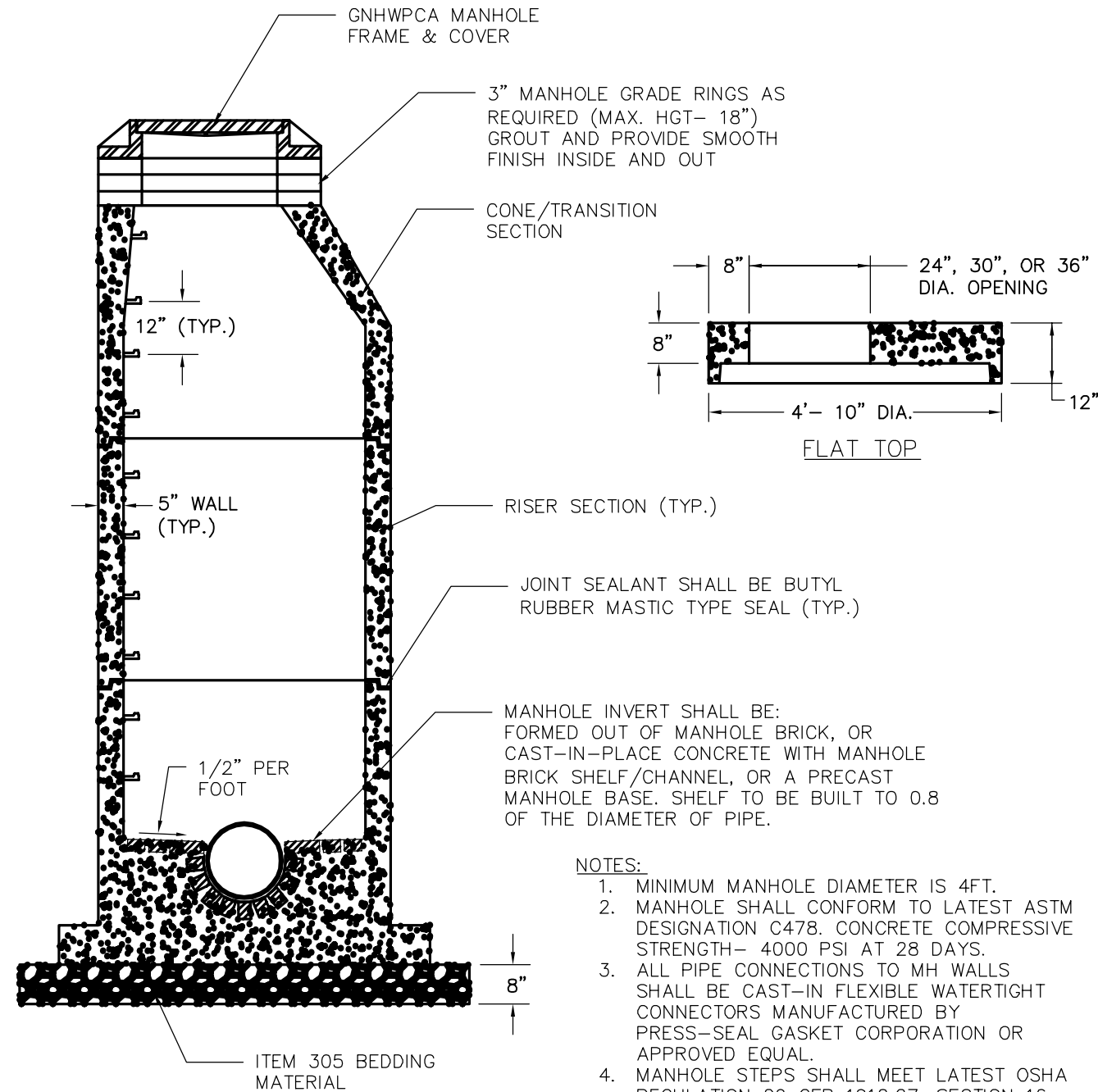
MANHOLE GRADE RING  
NTS



COPOLYMER POLYPROPYLENE PLASTIC  
STEEL REINFORCED MANHOLE STEP  
NTS



TYPICAL MANHOLE COVER RAISING  
NTS



PRECAST SANITARY SEWER MANHOLE  
NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. GANESH  
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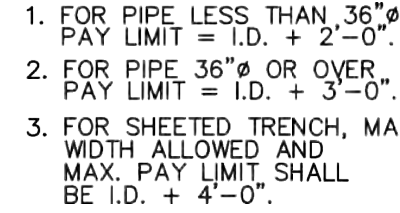
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CONTRACT NO. CWF-2016-02  
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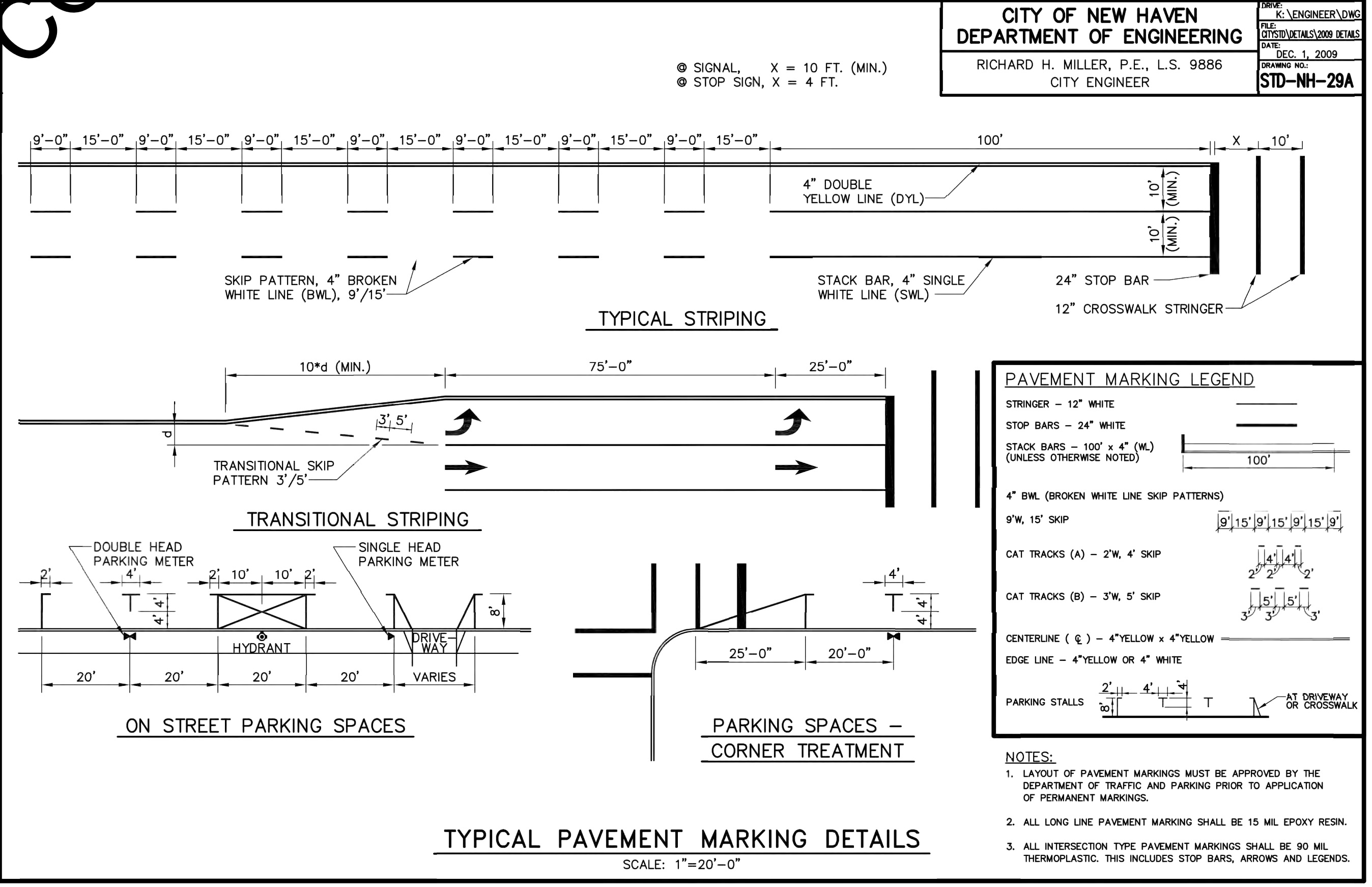
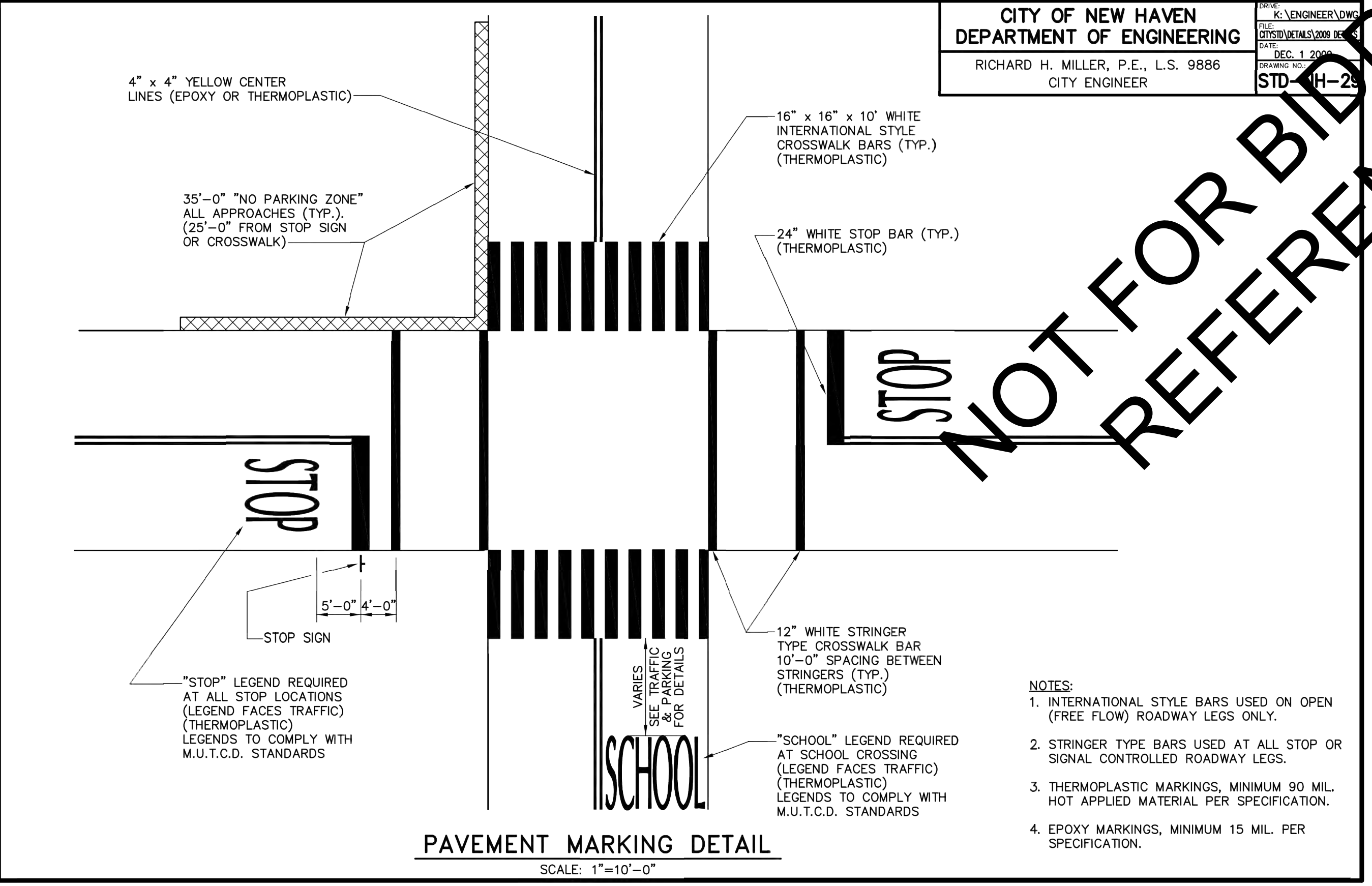
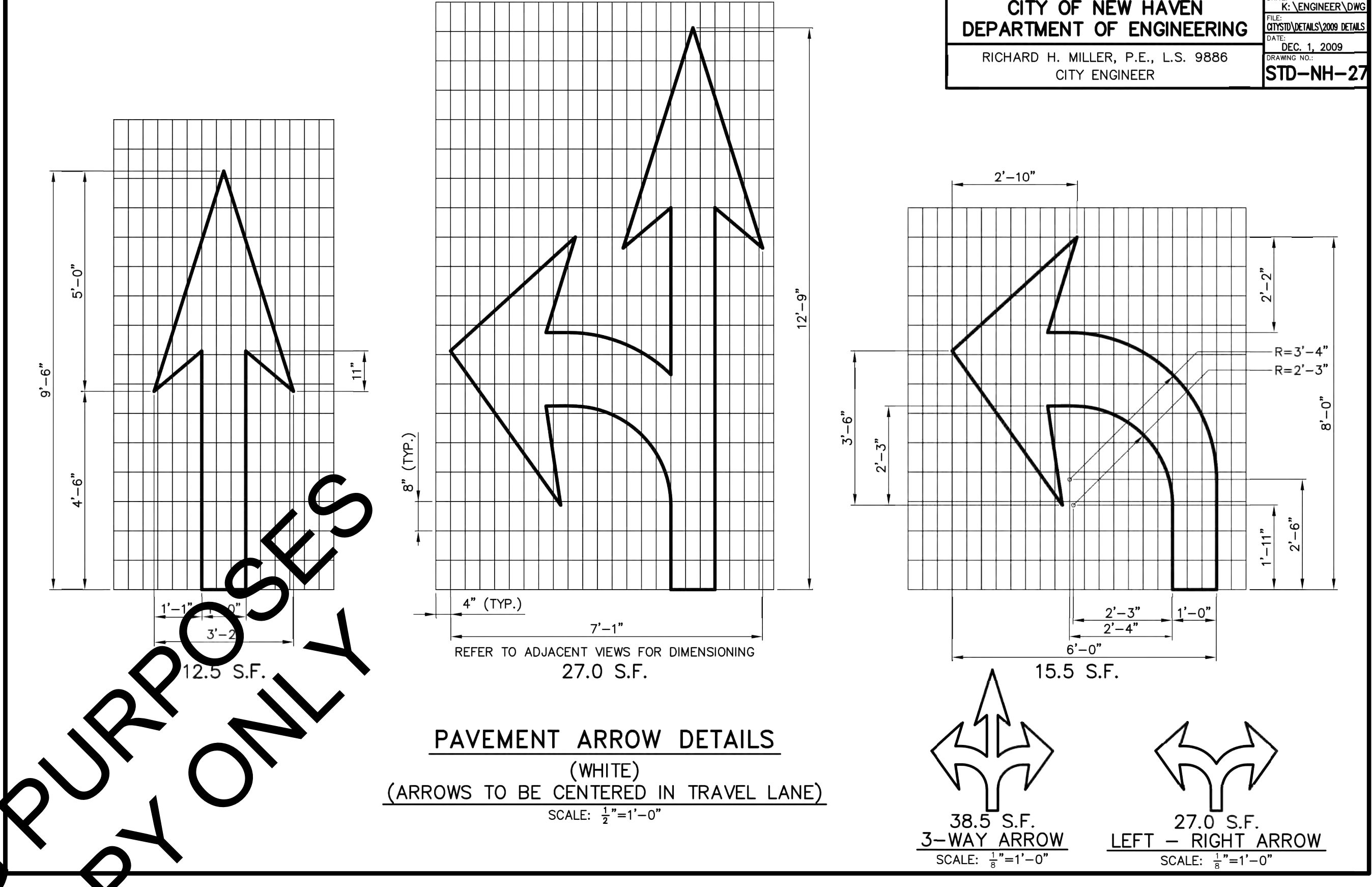
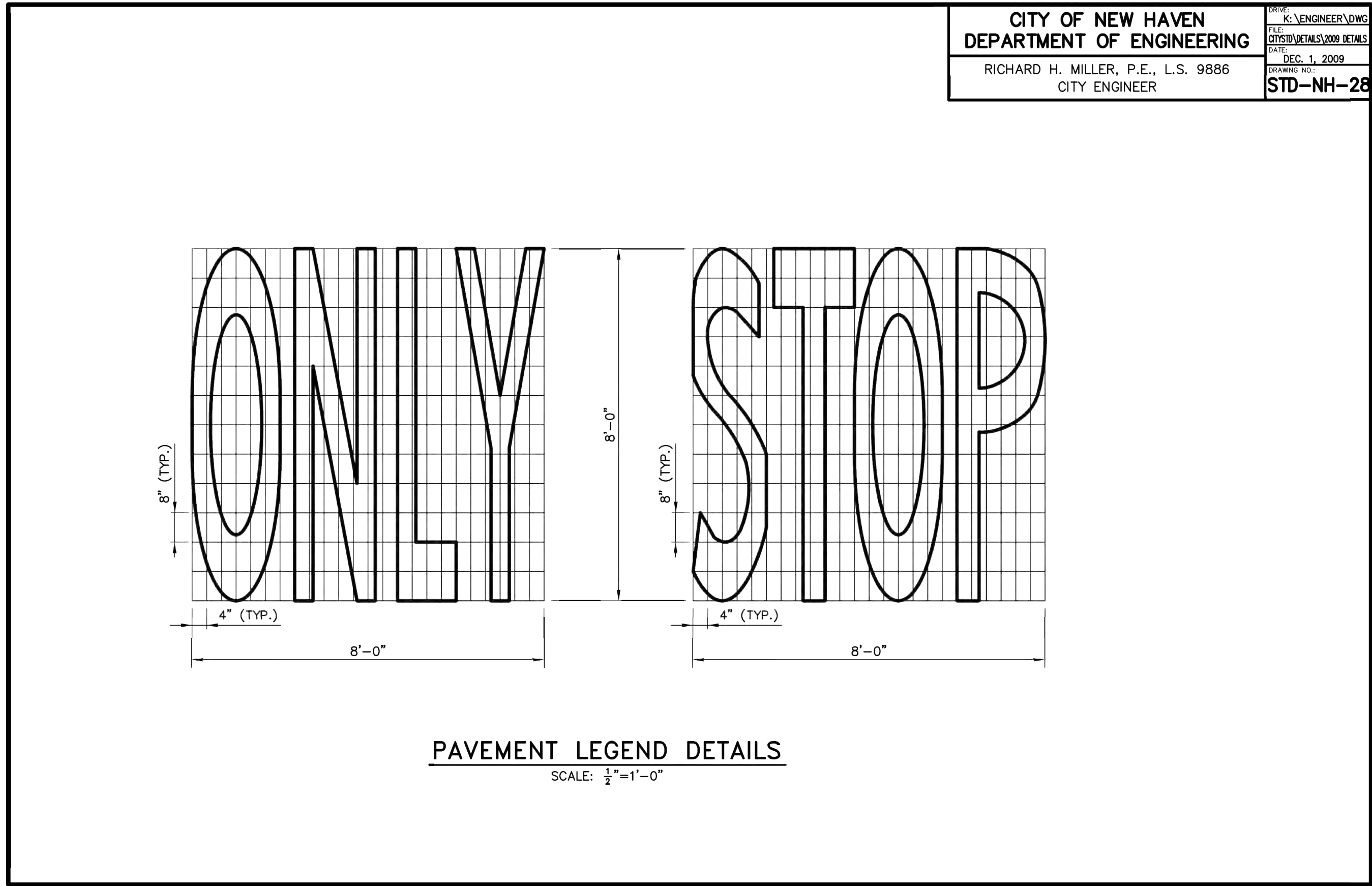
GNHWPCA STANDARD DETAILS SHEET 2 OF 2

CIVIL

PROJECT NO. 60494415  
FILE NAME: C-13.DWG  
SHEET NO.  
**13**  
SCALE:  
AS NOTED



PROJECT NO. 60494415
FILE NAME: C-14.DWG
SHEET NO. <b>14</b>
SCALE: AS NOTED



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. GANESH
DRAWN BY: M. THIBODEAU
SHEET CHK'D BY: R. BERLANDY
CROSS CHK'D BY: S. GANESH
APPROVED BY: J. SULLIVAN
DATE: OCTOBER 2017



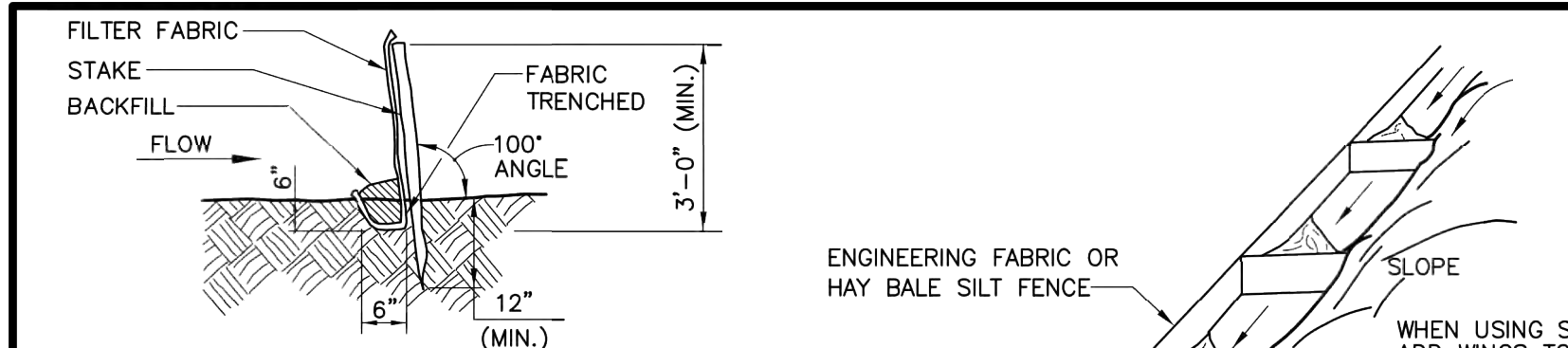
**AECOM** 500 ENTERPRISE DRIVE, SUITE 1A  
ROCKY HILL, CT 06067  
PHONE (860) 263-5800

CONTRACT NO. CWF-2016-02  
CLOSING REGULATORS 012 & 020

CITY OF NEW HAVEN STANDARD DETAILS 2 OF 3

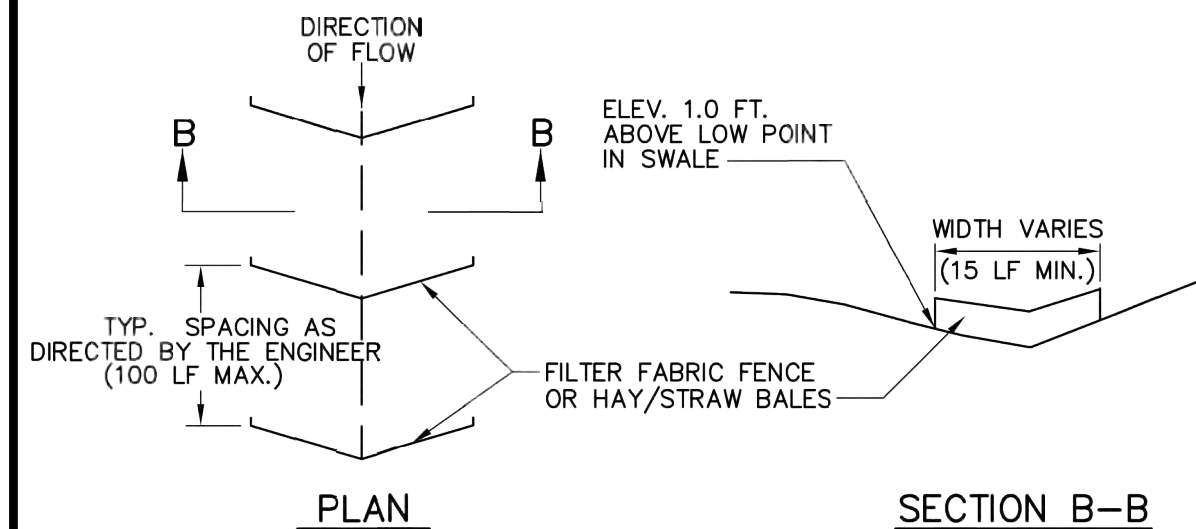
CIVIL

PROJECT NO. 60494415  
FILE NAME: C-15.DWG  
SHEET NO. 15  
SCALE: AS NOTED



**SILT FENCE INSTALLATION**

- A) MINIMUM LENGTH OF SILT FENCE IS 15 L.F.
- B) MAXIMUM POST SPACING IS 10 L.F.
- C) JOINTS ONLY AT SUPPORT POST WITH MINIMUM 6" OVERLAP, SECURELY SEALED.
- D) SEDIMENTATION DEPOSITS SHALL BE REMOVED WHEN THEY REACH 1/2 THE HEIGHT OF THE SILT FENCE.
- E) SILT FENCE SHALL NOT BE USED IN A WATER COURSE.
- F) UPON ESTABLISHMENT OF GROUND COVER ON DISTURBED AREAS, AND WHEN DIRECTED BY THE ENGINEER, FENCE WILL BE REMOVED AND ANY SEDIMENTATION WILL BE THINLY SPREAD UPON EXISTING GROUND COVER.



**CHECK DAM  
FILTER FABRIC OR HAY/STRAW BALES**  
(TO BE PAID FOR AS "SEDIMENTATION CONTROL FILTER FABRIC FENCE SYSTEM")

**SEDIMENTATION AND EROSION CONTROL DETAILS**  
NOT TO SCALE

NOTE:  
SEE SHEET STD-NH-33A FOR FURTHER DETAILS.

CITY OF NEW HAVEN  
DEPARTMENT OF ENGINEERING

RICHARD H. MILLER, P.E., L.S. 9886  
CITY ENGINEER

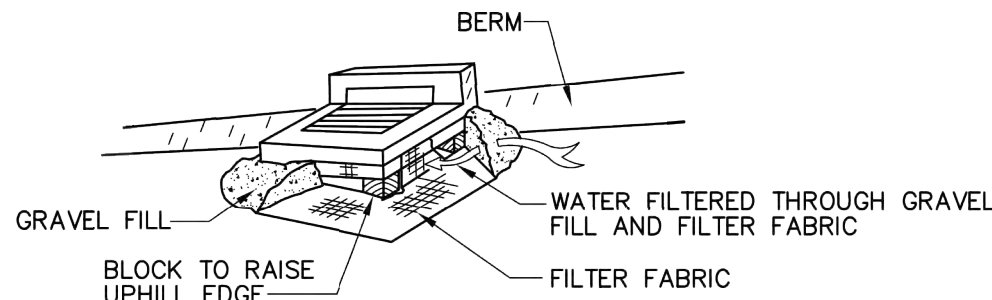
DRIVE: K:\ENGINEER\DWG

FILE: C:\STD\DETAILS\2009\DETAILS

DATE: DEC. 1, 2009

DRAWING NO.: STD-NH-33

**SEDIMENTATION CONTROL SYSTEM  
TOE OF SLOPE**  
WHERE DIRECTED BY ENGINEER



WHERE DIRECTED BY ENGINEER, CONTRACTOR SHALL CONSTRUCT A STONE DIKE IN LIEU OF THE FILTER FABRIC CHECK DAM.

**SEDIMENTATION CONTROL SYSTEM  
FOR CATCH BASINS**

NOTE: RAISE AND PROTECT CATCH BASIN TOPS WITH CRUSHED STONE AS SOON AS POSSIBLE TO PERMIT DRAINAGE TO ENTER STORM SYSTEMS, WHEN ROADWAY IS BROUGHT UP TO SUBBASE BEFORE PAVING.

CITY OF NEW HAVEN  
DEPARTMENT OF ENGINEERING

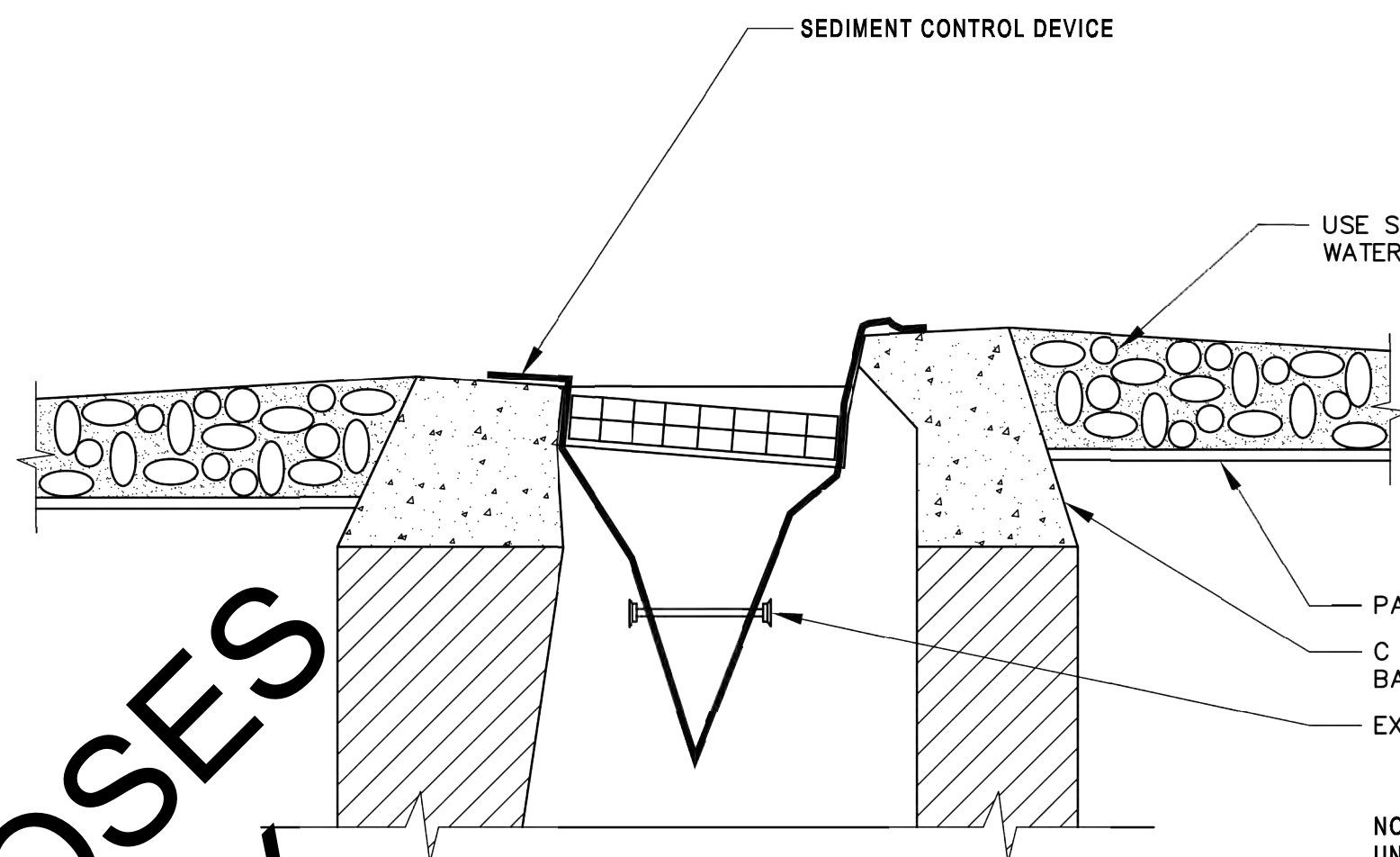
RICHARD H. MILLER, P.E., L.S. 9886  
CITY ENGINEER

DRIVE: K:\ENGINEER\DWG

FILE: C:\STD\DETAILS\2009\DETAILS

DATE: DEC. 1, 2009

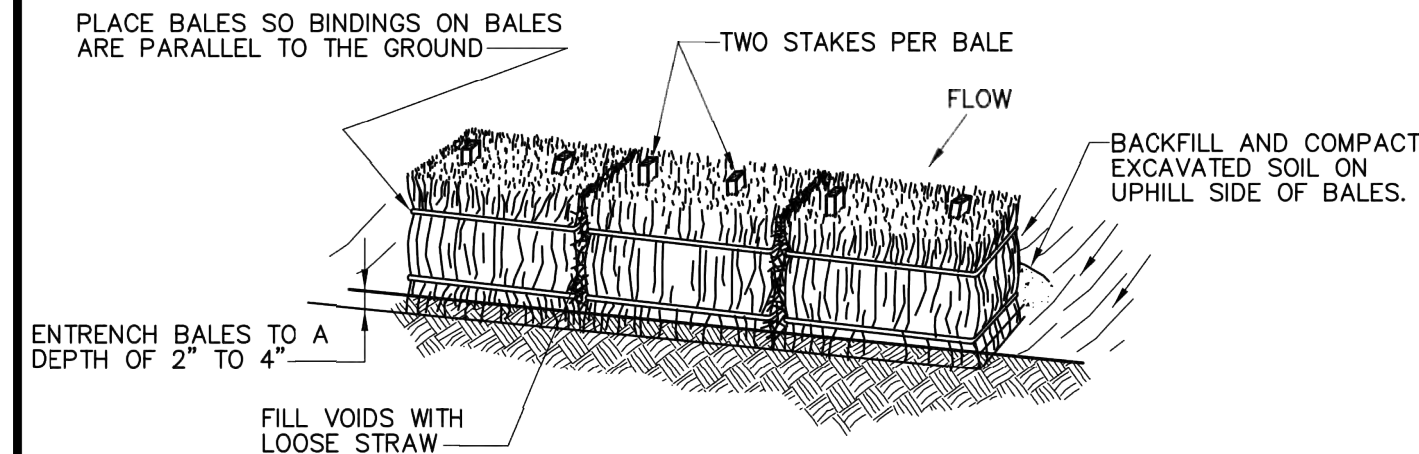
DRAWING NO.: STD-NH-08F



NOTE: IN UNPAVED AREAS, USE STONE CHECK DAMS TO GUIDE RUNOFF INTO CATCHBASIN

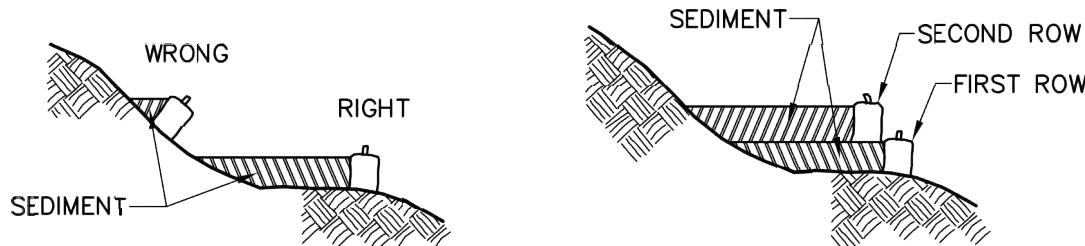
NOTE: SEDIMENT CONTROL DEVICE TO REMAIN IN CB UNTIL AREA IS COMPLETELY STABILIZED

**SEDIMENT CONTROL DEVICE AT CATCHBASIN**  
NOT TO SCALE



**INSTALLATION**

- A) IDEALLY, BALES SHOULD BE ENTRENCHED 2 TO 4 INCHES AND TIGHTLY BUTTED TOGETHER. BALES CAN BE SUCCESSFULLY PLACED WITHOUT A TRENCH IF GOOD GROUND CONTACT IS MADE. REMOVE HEAVY BRUSH AND FILL IN ALL VOIDS WITH LOOSE STRAW.
- B) BALES SHALL BE ONLY USED AS A TEMPORARY BARRIER AND FOR NO LONGER THAN 60 DAYS. THEY SHALL NOT BE USED ON A JOB ADJACENT TO A RESIDENTIAL NEIGHBORHOOD, RESIDENCES OR ADJACENT TO OR IN A WATERCOURSE.
- C) WHEN SEDIMENTATION DEPOSITS REACH WITHIN 3" OF THE TOP OF THE BALES, REMOVE SEDIMENTATION OR ADD ADDITIONAL BALES ON SEDIMENTATION DIRECTLY BEHIND THE FIRST ROW OF BALES AS DIRECTED BY THE ENGINEER.
- D) UPON ESTABLISHMENT OF GROUND COVER ON DISTURBED AREAS AND WHEN DIRECTED BY THE ENGINEER, HAY BALES WILL BE REMOVED AND USED AS MULCH. ANY SEDIMENTATION WILL BE THINLY SPREAD UPON ESTABLISHED GROUND COVER.



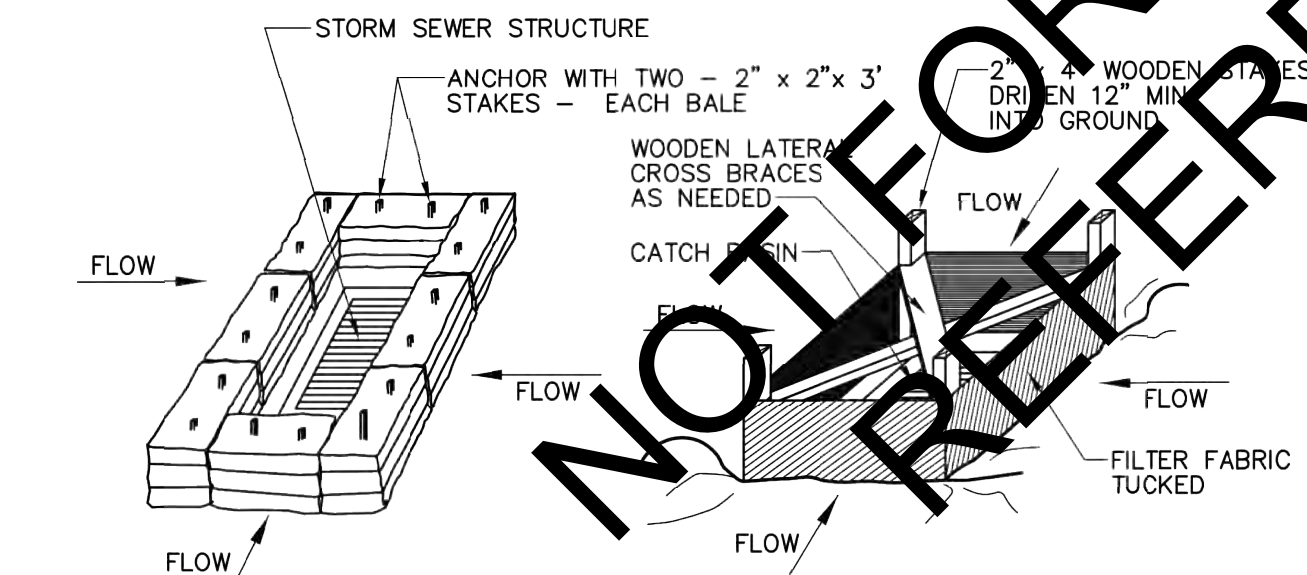
**BALE PLACEMENT**

**PREFERRED PLACEMENT**

BALES PLACED AWAY FROM TOE OF SLOPE HAVE A LARGER CONFINEMENT AREA. ADDITIONAL BALES SHOULD BE ADDED BEHIND ORIGINAL BALES BEFORE SEDIMENT TOPS THE FIRST BALE.

**DIKES HAY/STRAW BALES**

**SEDIMENTATION AND EROSION CONTROL DETAILS**  
NOT TO SCALE



**HAY BALE INSTALLATION  
AT CATCH BASIN**

**SILT FENCE INSTALLATION  
AT CATCH BASIN**

**CATCH BASIN IN A DEPRESSION**

NOT FOR BIDDING PURPOSES  
REFERENCE COPY ONLY

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: S. GANESH  
DRAWN BY: M. THIBODEAU  
SHEET CHK'D BY: R. BERLANDY  
CROSS CHK'D BY: S. GANESH  
APPROVED BY: J. SULLIVAN  
DATE: OCTOBER 2017



Greater New Haven Water Pollution Control Authority  
260 East Street  
New Haven, CT 06511  
(203) 466-5280 p. (203) 772-1564 f.  
www.gnhwpca.com



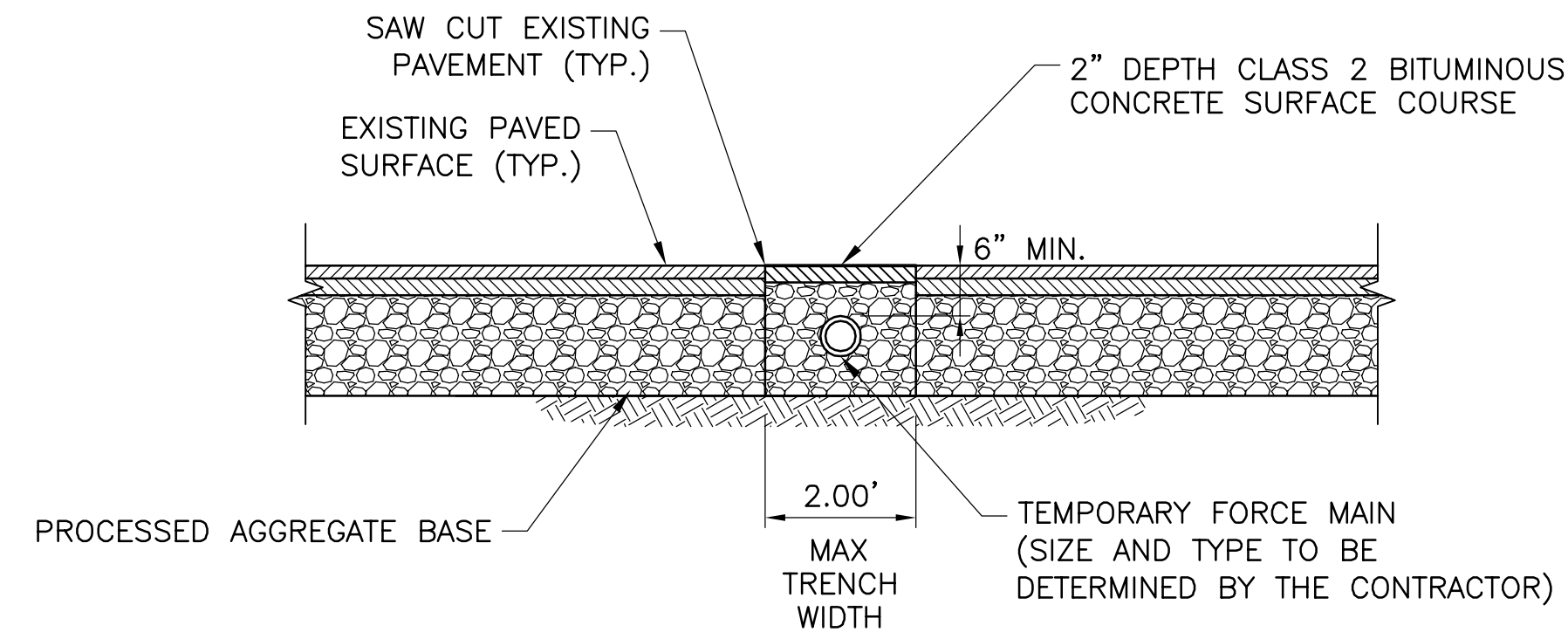
500 ENTERPRISE DRIVE, SUITE 1A  
ROCKY HILL, CT 06067  
PHONE (860) 263-5800

CONTRACT NO. CWF-2016-02  
CLOSING REGULATORS 012 & 020

CITY OF NEW HAVEN STANDARD DETAILS 3 OF 3

CIVIL

PROJECT NO. 60494415  
FILE NAME: C-16.DWG  
SHEET NO. 16  
SCALE: AS NOTED



**BURIED TEMPORARY PIPING DETAIL**  
NOT TO SCALE

- NOTES:**
- 1. LAY FLAT HOSE WILL BE ALLOWED FOR DRIVEWAY CROSSINGS AS LONG AS ACCESS IS MAINTAINED

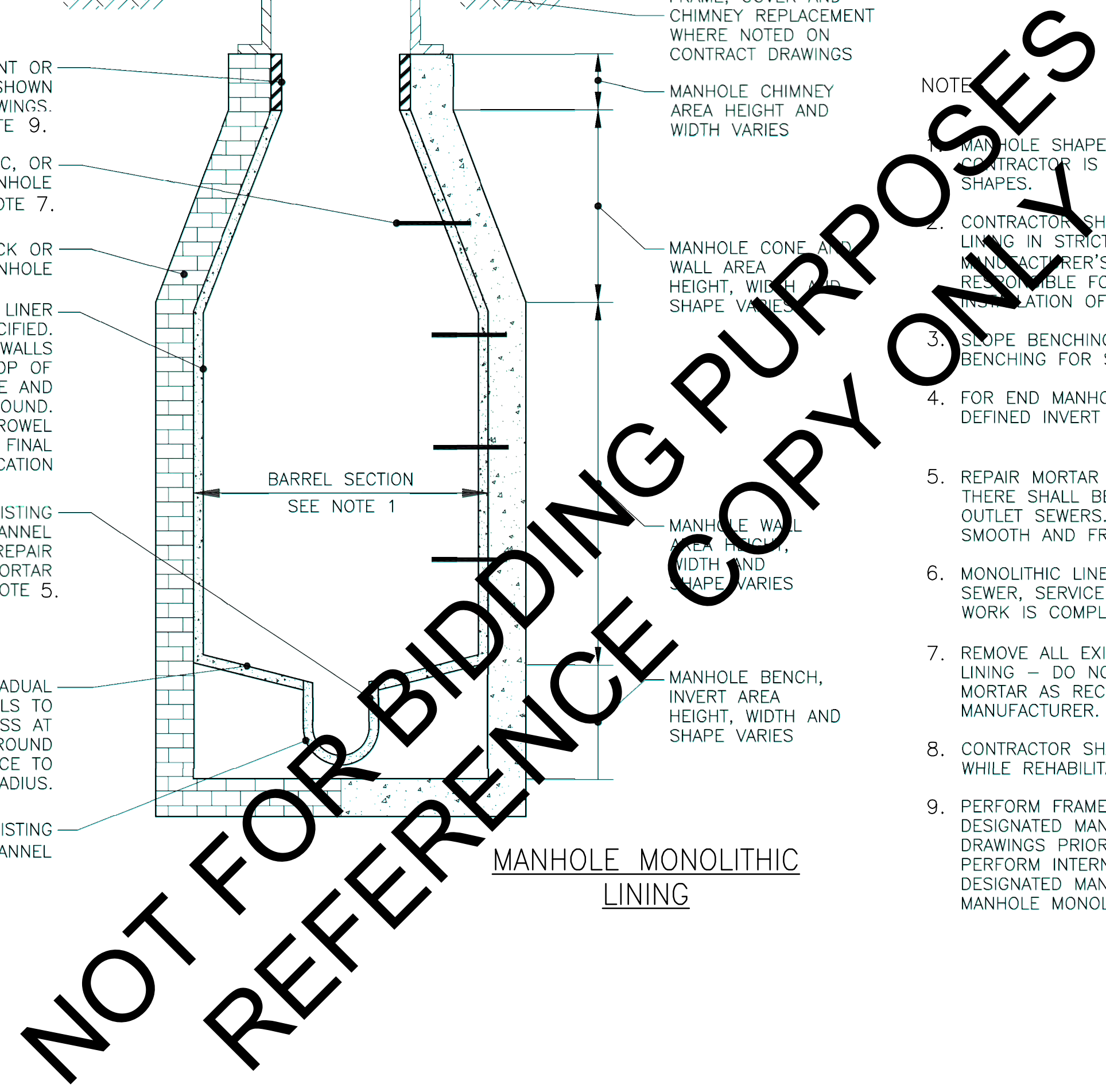


DEBRIS BETWEEN MH-NQL01M0134  
& MH-NQL01M0135



DEBRIS BETWEEN MH-NQL01M0152  
& MH-NQL01M0153

					DESIGNED BY: S. GANESH	 Greater New Haven Water Pollution Control Authority 260 East Street New Haven, CT 06511 (203) 466-5280 p (203) 772-1564 f www.gnhwpca.com		 500 ENTERPRISE DRIVE, SUITE 1A ROCKY HILL, CT 06067 PHONE (860) 263-5800	MISCELLANEOUS DETAILS 1 OF 2	PROJECT NO. 60494415 FILE NAME: C-17.DWG
					DRAWN BY: G. SMITH					
					SHEET CHK'D BY: R. BERLANDY					
					CROSS CHK'D BY: S. GANESH					
REV. NO.	DATE	DRWN	CHKD	REMARKS	APPROVED BY: J. SULLIVAN	CONTRACT NO. CWF-2016-02 CLOSING REGULATORS 012 & 020	CIVIL	SCALE: AS NOTED	SHEET NO. 17	
					DATE: OCTOBER 2017					



MAINTENANCE AND PROTECTION OF TRAFFIC – GENERAL NOTES									
<p>1. MAINTENANCE AND PROTECTION OF TRAFFIC PLANS SHOWN HEREIN ARE FOR GUIDANCE AND DEPICT THE MINIMUM REQUIREMENTS. ALL SIGNS AND DEVICES MAY NOT BE SHOWN. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE ALL SIGNS, DEVICES AND OTHER APPURTENANCES NECESSARY TO MAINTAIN PEDESTRIAN AND VEHICLE TRAFFIC SAFETY THROUGH THE WORK ZONE IN COMPLETE COMPLIANCE WITH ALL CITY OF NEW HAVEN REQUIREMENTS. THERE SHALL BE NO LIMIT TO THE NUMBER OF SIGNS OF THE TYPE SHOWN ON THESE MAINTENANCE AND PROTECTION OF TRAFFIC PLANS, OR TO THE NUMBER OF TRAFFIC CONES, TRAFFIC DRUMS, CONSTRUCTION BARRICADES, ETC. AS SHOWN IN THE PLANS. ALL COSTS SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR THE ITEM MAINTENANCE AND PROTECTION OF TRAFFIC. THERE SHALL BE NO ADDITIONAL PAYMENT FOR MAINTENANCE AND PROTECTION OF TRAFFIC WORK SHOWN BUT REQUIRED BY THE CITY, GNHWPCA, OR THE ENGINEER.</p> <p>2. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FROM THE CITY OF NEW HAVEN. THE COST OF ALL SIGNS AND PROTECTIVE DEVICES REQUIRED BY ALL PERMITS IS INCLUDED IN THE LUMP SUM PRICE FOR THE ITEM MAINTENANCE AND PROTECTION OF TRAFFIC.</p> <p>3. CONTRACTOR SHALL MODIFY THE TEMPORARY TRAFFIC AT THE DIRECTION OF POLICE INCLUDING RELOCATING TRAFFIC CONTROL DEVICES OR PROVIDING ADDITIONAL TRAFFIC CONTROL DEVICES.</p> <p>4. ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009 EDITION, LATEST REVISION.</p> <p>5. ALLOWABLE WORK ZONE TIMES ARE PER THE PERMITS. WORK HOURS SHALL BE 7:00 AM TO 7:00 PM MONDAY THROUGH FRIDAY UNLESS OTHERWISE SHOWN ON THE PLANS OR PERMIT.</p> <p>6. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE CITY OF NEW HAVEN DEPARTMENT OF TRANSPORTATION, TRAFFIC, AND PARKING TO ESTABLISH AND REVIEW METHODS TO BE UTILIZED FOR THE SAFE PASSAGE OF SCHOOL AGED CHILDREN AND PASSAGE OF SCHOOL BUSES ON STREETS AFFECTED BY WORK UNDER THIS CONTRACT.</p> <p>7. ANY MODIFICATION OF THE MAINTENANCE AND PROTECTION OF TRAFFIC PLANS SHOWN HERE IN SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR TO THE ENGINEER FOR REVIEW AND APPROVAL BY THE CITY OF NEW HAVEN DEPARTMENT OF TRANSPORTATION, TRAFFIC AND PARKING AT LEAST TEN BUSINESS DAYS IN ADVANCE OF DATE OF MODIFICATION.</p> <p>8. NO MAINTENANCE AND PROTECTION OF TRAFFIC PLAN HAS BEEN INCLUDED FOR SURFACE RESTORATION WORK. CONTRACTOR SHALL SUBMIT A MAINTENANCE AND PROTECTION OF TRAFFIC PLAN IN WRITING TO THE ENGINEER FOR APPROVAL BY THE CITY FOR THIS WORK.</p> <p>9. ALL TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION. LOCATIONS FOR TEMPORARY SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED AS DIRECTED BY THE ENGINEER SO AS NOT TO CONFLICT WITH EXISTING PERMANENT SIGNS OR SIGNS FOR ANY OTHER CONSTRUCTION ACTIVITY. DO NOT INSTALL DUPLICATE SIGNS WHERE EXISTING CONSTRUCTION SIGNS CURRENTLY EXIST. EXISTING SIGNS IN CONFLICT WITH TEMPORARY SIGNS SHALL BE COVERED OR ADJUSTED TO MEET FIELD CONDITIONS. SIGNS, DRUMS, CONES, BARRICADES, PRECAST CONCRETE BARRIER CURBS AND OTHER TRAFFIC CONTROL DEVICES ARE SHOWN SCHEMATICALLY TO DEPICT THE GENERAL ARRANGEMENT OF THE WORK ZONE AND AREA TRAFFIC PATTERNS. THESE ARE THE MINIMUM AMOUNT ACCEPTABLE. THE CONTRACTOR IS SOLELY RESPONSIBLE TO PROVIDE ALL DEVICES, APPURTENANCES AND ADJUST ALL TRAFFIC CONTROL DEVICES AS REQUIRED TO COMPLY WITH CITY STANDARDS AND MAINTAIN THE SAFETY OF THE WORK ZONE AND PUBLIC. ALL SIGNS SHALL BE COVERED WHEN NOT IN USE AND REMOVED WHEN NO LONGER NEEDED. ALL COSTS ARE INCLUDED IN THE LUMP SUM PRICE FOR THE ITEM "MAINTENANCE AND PROTECTION OF TRAFFIC".</p> <p>10. MAINTAIN 10' MIN. TRAVEL LANES UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER OR POLICE.</p> <p>11. ALL TEMPORARY CONSTRUCTION SIGNS SHALL BE MOUNTED ON EXISTING POLES OR POSTS, INSTALLED IN GRASS AREAS, OR ON PORTABLE SIGN SUPPORTS. SPECIFIC APPROVAL BY THE CITY OF NEW HAVEN DEPARTMENT OF TRANSPORTATION, TRAFFIC AND PARKING IS REQUIRED FOR ALL OTHER SIGN INSTALLATIONS. THE CONTRACTOR SHALL RESTORE CITY FIXTURES AND/OR ASSETS TO PRIOR CONDITION WHEN SIGNS ARE NO LONGER NEEDED.</p> <p>12. NO PERMANENT SIGNS OR PAVEMENT MARKINGS ARE TO BE REMOVED WITHOUT SPECIFIC PERMISSION OF THE CITY OF NEW HAVEN DEPARTMENT OF TRANSPORTATION, TRAFFIC, AND PARKING.</p> <p>13. TEMPORARY PAVEMENT MARKINGS SHALL BE REQUIRED FOR ALL PATTERNS THAT WILL REMAIN IN USE FOR LONGER THAN 24 HOURS. TEMPORARY PAVEMENT MARKINGS AND SYMBOLS SHALL BE PLACED AT LOCATIONS AS SHOWN ON THE PLANS, REQUIRED BY THE CITY PERMIT, AS DIRECTED BY THE CITY OF NEW HAVEN DEPARTMENT OF TRANSPORTATION, TRAFFIC, AND PARKING, OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RESTORE PAVEMENT MARKINGS ON TEMPORARY PATCHES PRIOR TO OPENING THE WORK ZONE TO TRAFFIC. THE WORK SHALL INCLUDE PLACING THE TEMPORARY PAVEMENT MARKINGS, REMOVING CONFLICTING PAVEMENT MARKINGS, AND REMOVING TEMPORARY PAVEMENT MARKINGS WHEN NO LONGER REQUIRED, AS DIRECTED BY THE ENGINEER. THE COST IS INCLUDED IN THE RESPECTIVE TEMPORARY PAVEMENT MARKING ITEM.</p> <p>14. TEMPORARY SIGNS AND OTHER TEMPORARY TRAFFIC PROTECTIVE DEVICES SHALL REMAIN IN PLACE AS SHOWN THROUGHOUT THE FULL DURATION OF EACH STAGE OF CONSTRUCTION. TRAFFICMEN SHALL BE REQUIRED WHEN DEVICES SHOWN ARE INSTALLED, RELOCATED, OR REMOVED.</p> <p>15. ALL ROAD WORK AHEAD SIGNS INCLUDING SUPPLEMENTAL PLAQUES SHALL BE DISPLAYED AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION.</p> <p>16. NO SIGNAGE SHALL BE PLACED THAT OBSTRUCTS EXISTING SIGNAGE.</p> <p>17. ALL SIGNAGE REMOVED TO ACCOMMODATE CONSTRUCTION SHALL BE REPLACED TO THE SATISFACTION OF THE CITY OF NEW HAVEN DEPARTMENT OF TRANSPORTATION, TRAFFIC, AND PARKING AT THE CONTRACTOR'S EXPENSE.</p> <p>18. CONTRACTOR SHALL PROVIDE ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES. CONTRACTOR SHALL STAGE HIS WORK SO THAT ACCESS IS MAINTAINED TO ALL PROPERTIES, INCLUDING BUSINESSES, AT ALL TIMES. IF DURING CONSTRUCTION, ACCESS TO THE AFFECTED BUSINESSES IS NOT APPARENT, ADDITIONAL SIGNS (i.e. BUSINESS ACCESS) MAY BE REQUIRED BY THE ENGINEER.</p> <p>19. ACCESSIBLE PEDESTRIAN ACCESS THROUGH WORK ZONES SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL PROTECT AND MAINTAIN SIDEWALKS AND PEDESTRIAN CROSSINGS THAT ARE NOT IDENTIFIED FOR CLOSURE ON THE PLANS. PROVIDE TEMPORARY PEDESTRIAN CROSSINGS AT INTERSECTIONS. A 4' MIN. WIDE SIDEWALK SHALL BE PROVIDED ADJACENT TO WORK ZONES. IF THE CONTRACTOR CAN PROVE THAT IT IS IMPOSSIBLE TO PROVIDE A 4' MIN. SIDEWALK, A NARROWER SIDEWALK CAN BE PROVIDED IF IT MEETS ADA STANDARDS AND IS APPROVED, IN WRITING, BY THE ENGINEER. A SAFETY FENCE SHALL SEPARATE PEDESTRIAN TRAFFIC FROM ALL TRENCHES AND ACTIVE WORK ZONES. THE CONTRACTOR SHALL SUBMIT IN WRITING TO THE ENGINEER FOR APPROVAL BY THE CITY MAINTENANCE AND PROTECTION OF TRAFFIC PLANS FOR MAINTAINING PEDESTRIAN TRAFFIC AT SIDEWALKS AND CROSSWALKS, INCLUDING DETOURS IF REQUIRED, FOR AREAS NOT SHOWN ON THE PLANS. THE COST IS INCLUDED IN THE ITEM MAINTENANCE AND PROTECTION OF TRAFFIC.</p> <p>20. CONTRACTOR SHALL MAINTAIN TRAFFIC SIGNALS AT ALL TIMES. MODIFICATIONS TO THE EXISTING TRAFFIC SIGNALS, INCLUDING BUT NOT LIMITED TO TIMING, SEQUENCING, HEAD LOCATION, CAMERA LOCATION OR ADJUSTMENT, ETC. SHALL BE PERFORMED AS APPROVED BY THE CITY OF NEW HAVEN DEPARTMENT OF TRANSPORTATION, TRAFFIC, AND PARKING. THE WORK SHALL BE PAID UNDER THE ITEM "TRAFFIC SIGNAL SUBCONTRACTOR TIMING ADJUSTMENT".</p> <p>21. CONTRACTOR SHALL INSTALL NEW TRAFFIC DETECTOR LOOPS WHERE EXISTING LOOPS ARE REMOVED OR DAMAGED DURING CONSTRUCTION. TEMPORARY LOOPS MAYBE REQUIRED. ALL WORK SHALL BE PERFORMED AS REQUIRED BY THE CITY OF NEW HAVEN DEPARTMENT OF TRANSPORTATION, TRAFFIC, AND PARKING. THE COST SHALL BE INCLUDED IN THE ITEM "MAINTENANCE AND PROTECTION OF TRAFFIC".</p> <p>22. CONTRACTOR SHALL PROVIDE A PHOTOLOG OF THE PROPOSED WORK AREA WHICH SHALL INCLUDE EXISTING RIGHT-OF ELEMENTS INCLUDING SIGNS, SIGNALS, WALK LIGHTS, PAVEMENT MARKINGS, BUS SHELTERS, ETC. AT THE TIME OF THE PERMIT APPLICATION. SUCH PHOTOLOG SHALL BE PROVIDED IN THE FORMAT OF A SINGLE, MULTIPAGE .PDF FILE.</p>									
				DESIGNED BY: <u>SJ</u>		DRAWN BY: <u>SJ</u>		SHEET CHK'D BY: <u>VAA</u>	
				CROSS CHK'D BY:		APPROVED BY: <u>MMG</u>		DATE: <u>OCTOBER 2017</u>	
REV. NO.				DATE		DRWN		CHKD	
				REMARKS					



N

●

TRAFFIC DRUM

⊗

42" TRAFFIC CONE

└─┘

TRAFFIC BARRICADE (TYPE III)

⊙

TRAFFIC SIGN

└─┘

TRAFFIC SIGN MOUNTED ON TRAFFIC BARRICADE

→

DIRECTION OF TRAFFIC AROUND WORK AREA

▨

WORK AREA

☆

POLICE OFFICER

LEGEND

SIGN LEGEND:

ROAD WORK AHEAD

A

ROAD CLOSED AHEAD

H

ROAD CLOSED

I

DO NOT ENTER

J

ROAD CLOSED TO THRU TRAFFIC LOCAL TRAFFIC ONLY

KL

DETOUR AHEAD

M

END DETOUR

O

DETOUR

PL

DETOUR

PR

NICOLL ST. DETOUR

BB-2 QS

NICOLL ST. DETOUR

BB-2 QL

MITCHELL DR. DETOUR

BB-3 QL

NICOLL ST. DETOUR

BB-2 QR

NICOLL ST. ROAD CLOSED AHEAD

BB-2 H

MITCHELL DR. ROAD CLOSED AHEAD

BB-3 H

CANNER ST. ROAD CLOSED AHEAD

BB-4 H

SIDEWALK CLOSED

XC

SIDEWALK CLOSED CROSS HERE

XLA

SIDEWALK CLOSED CROSS HERE

XRA

TRAFFIC CONTROL NOTES:

- FOR GENERAL NOTES REFER TO SHEET 19.
- DETOUR NICOLL STREET, MITCHELL DRIVE AND CANNER STREET TRAFFIC AS SHOWN.
- WORK SHOWN ON THIS SHEET TO BE PERFORMED DURING EAST ROCK COMMUNITY MAGNET SCHOOL'S SUMMER BREAK.
- MAINTAIN SIDEWALK ACCESS DURING CONSTRUCTION.
- SAFETY FENCE SHALL SEPARATE PEDESTRIAN TRAFFIC FROM ALL OPEN TRENCHES AND/OR ACTIVE WORK ZONES.
- CONTRACTOR TO PROVIDE ACCESS TO ABUTTING PROPERTIES AT ALL TIMES.
- CONTACT CITY OF NEW HAVEN DEPARTMENT OF TRANSPORTATION, TRAFFIC AND PARKING 2 WEEKS PRIOR TO DISTURBING LOOP DETECTORS ON MITCHELL DRIVE. LOOP DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH CITY'S REQUIREMENTS.
- REGULATOR 012 CONSTRUCTION OF CIPP LINING INCLUDING ANY DETOURS TO BE PERFORMED WHEN SCHOOLS ARE NOT IN SESSION.
- ALL SIGNS ARE TO BE ADJUSTED IN THE FIELD TO MEET CURRENT CONDITIONS AS DIRECTED BY THE ENGINEER OR PERMITTING AUTHORITY.

NICOLL STREET, CANNER STREET AND MITCHELL DRIVE – DETOUR PLAN  
NOT TO SCALE

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: SJ  
DRAWN BY: SJ  
SHEET CHK'D BY: VAA  
CROSS CHK'D BY:  
APPROVED BY: MMG  
DATE: OCTOBER 2017

GNHWPCA

Protecting the Environment

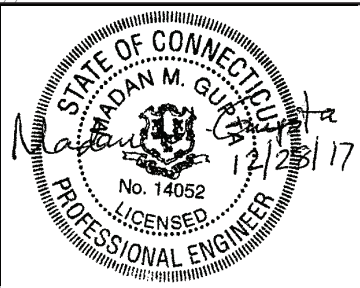
Greater New Haven Water Pollution Control Authority

260 East Street

New Haven, CT 06511

(203) 466-5280 p (203) 772-1564 f

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AECOM

500 ENTERPRISE DRIVE, SUITE 1A

ROCKY HILL, CT 06067

PHONE (860) 263-5800

CONTRACT NO. CWF-2016-02

CLOSING REGULATORS 012 & 020

MAINTENANCE & PROTECTION OF TRAFFIC

NICOLL ST., CANNER ST. & MITCHELL DR.

TRAFFIC

PROJECT NO. 60494415

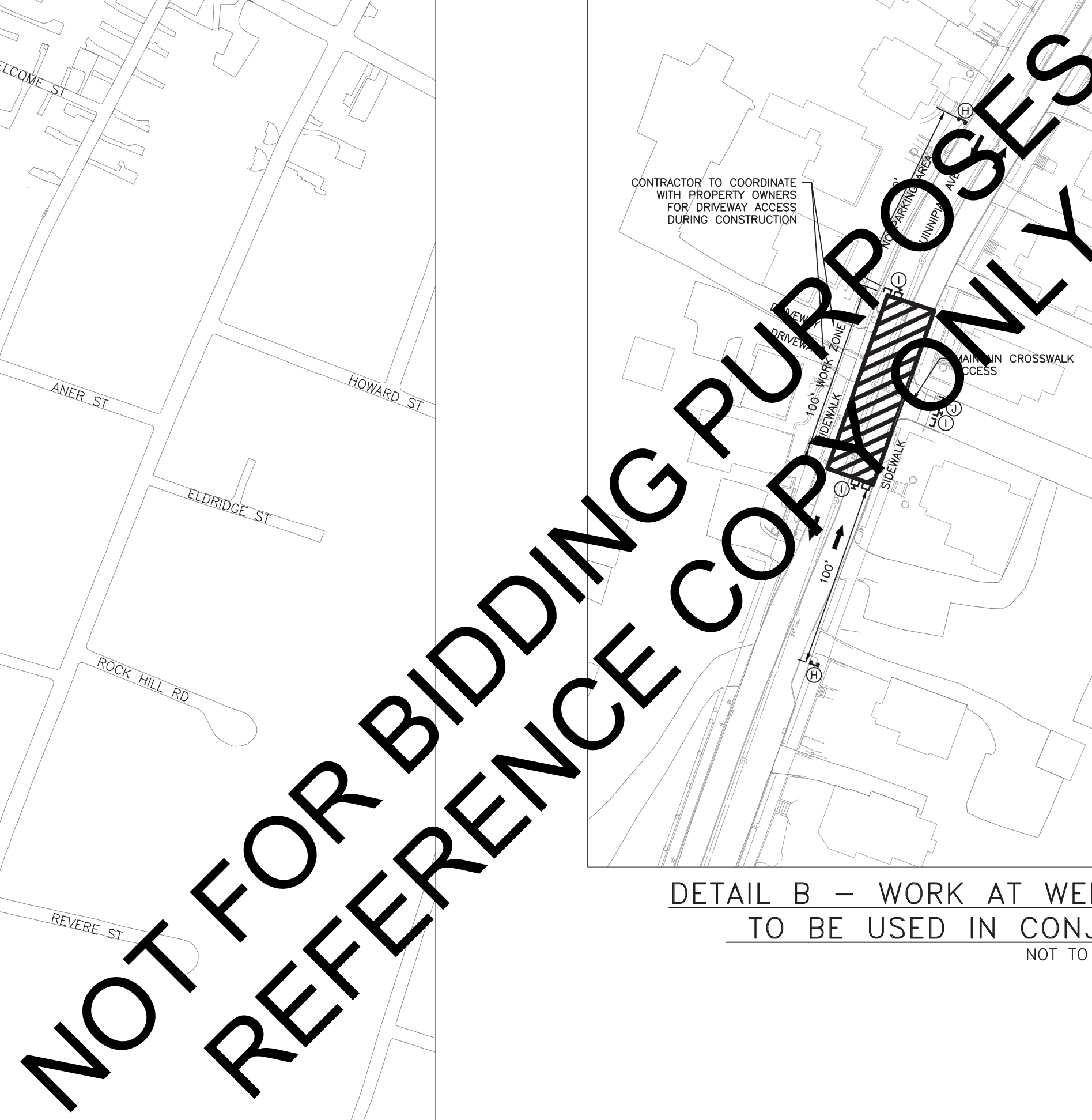
FILE NAME: MPT-02.DWG

SHEET NO. 20

SCALE: AS NOTED

GM2 ASSOCIATES

GM2 Associates, Inc.  
Consulting Engineers  
115 Glastonbury Boulevard  
Glastonbury, CT 06033

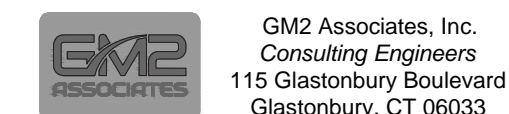


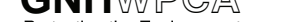
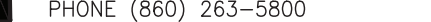

DETAIL B – WORK AT WELCOME STREET INTERSECTION  
TO BE USED IN CONJUNCTION WITH DETOUR 1  
NOT TO SCALE

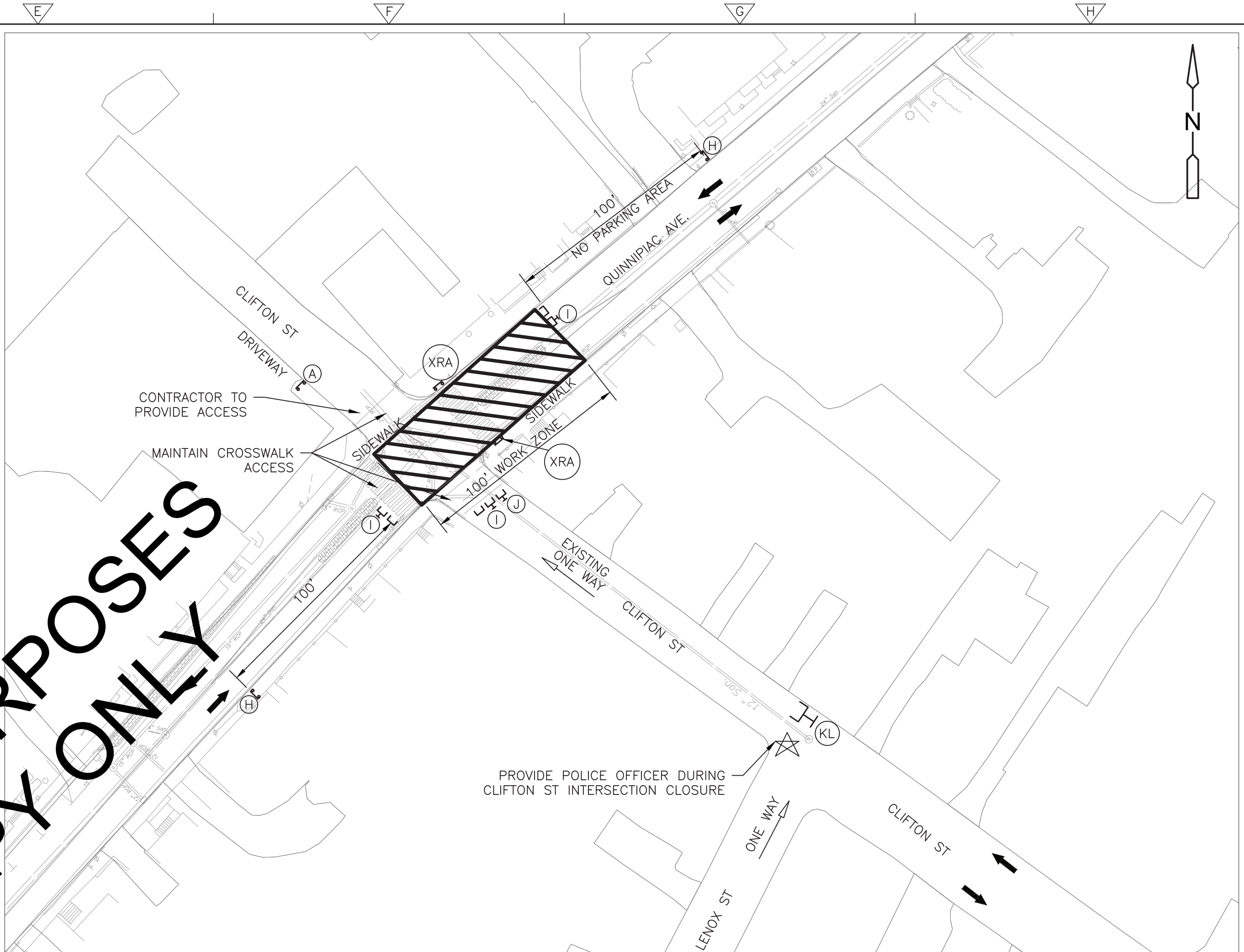
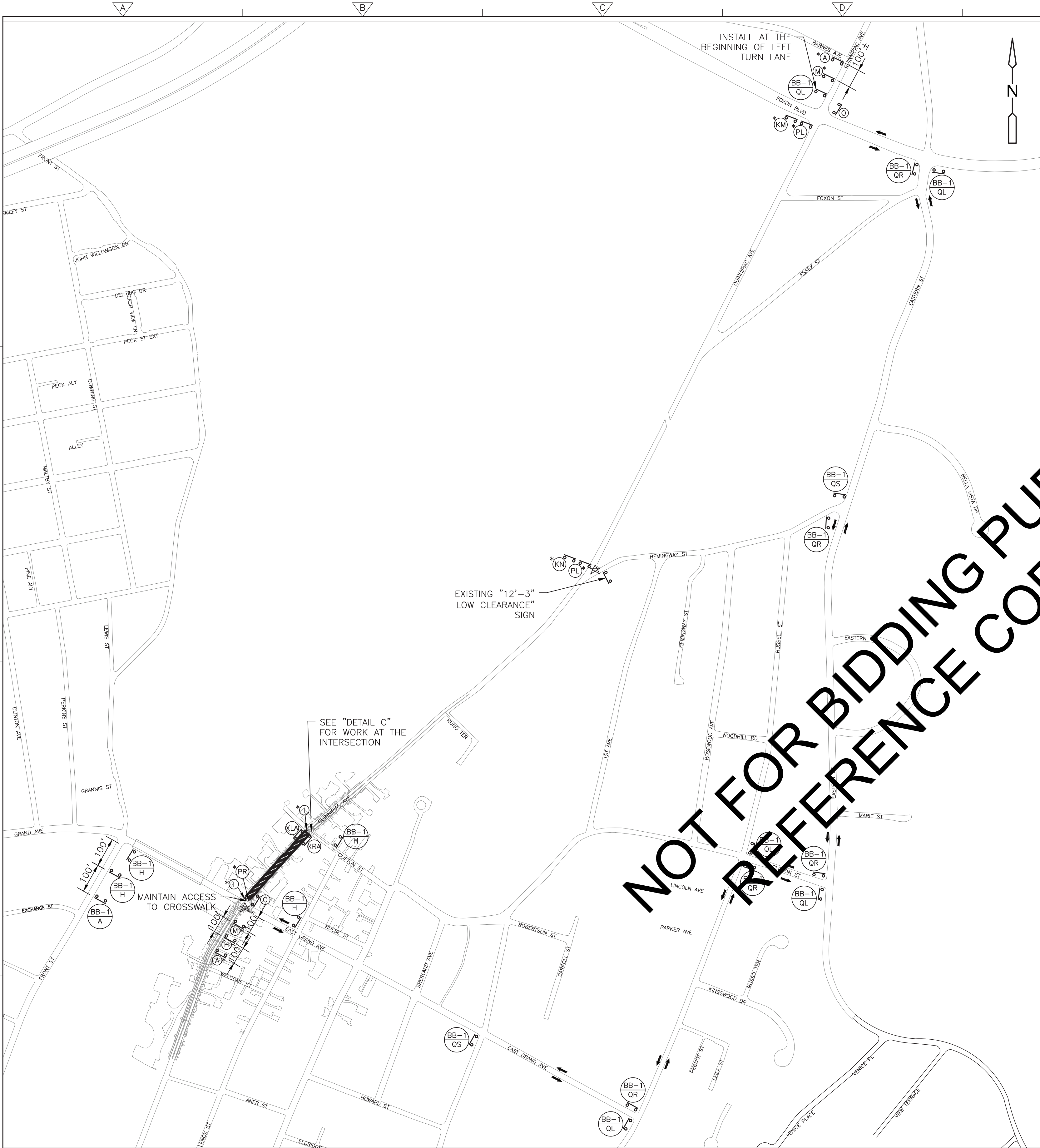
- TRAFFIC DRUM
- ⊗ 42" TRAFFIC CONE
- ⌏ TRAFFIC BARRICADE (TYPE III)
- ⊖ TRAFFIC SIGN
- ⊣ TRAFFIC SIGN MOUNTED ON TRAFFIC BARRICADE
- ➔ DIRECTION OF TRAFFIC AROUND WORK AREA
- ▨ WORK AREA
- ☆ POLICE OFFICER

	(A)		(PR)
	(H)		(BB-1 QS)
	(I)		(BB-1 QL)
	(J)		(BB-1 QR)
	(KL)		(BB-1 H)
	(M)		
	(O)		(BB-1 H QL)
	(PL)		

1. FOR GENERAL NOTES REFER TO SHEET 19.
2. DETOUR QUINNIPIAC AVENUE TRAFFIC AS SHOWN.
3. PROVIDE POLICE OFFICER AT THE INTERSECTION OF EAST GRAND AVE AND QUINNIPIAC AVE.
4. MAINTAIN SIDEWALK ACCESS ALONG ONE SIDE OF THE STREET AT A MINIMUM DURING CONSTRUCTION.
5. MAINTAIN ACCESS FOR LOCAL TRAFFIC ONLY ON QUINNIPIAC AVENUE DURING CONSTRUCTION.
6. CIPP LINING OR MANHOLE REHABILITATION ALONG QUINNIPIAC AVENUE SHALL NOT BE PERFORMED DURING REPLACEMENT OF GAS MAIN OR SEWER PIPING.
7. ALL SIGNS ARE TO BE ADJUSTED IN THE FIELD TO MEET CURRENT CONDITIONS AS DIRECTED BY THE ENGINEER OR PERMITTING AUTHORITY.



				DESIGNED BY: <u>SJ</u>	 <p>Greater New Haven Water Pollution Control Authority 260 East Street New Haven, CT 06511 (203) 466-5280 p (203) 772-1564 f www.gnhwpc.com</p>		 <p>500 ENTERPRISE DRIVE, SUITE 1A ROCKY HILL, CT 06067 PHONE (860) 263-5800</p>	<p><b>CONTRACT NO. CWF-2016-02</b> <b>CLOSING REGULATORS 012 &amp; 020</b></p>	<p><b>MAINTENANCE &amp; PROTECTION OF TRAFFIC</b> <b>QUINNIPIAC AVENUE - 1</b></p> <p>TRAFFIC</p>	PROJECT NO. 60494415
				DRAWN BY: <u>SJ</u>						FILE NAME: MPT-03.DWG
				SHEET CHK'D BY: <u>VAA</u>						SHEET NO. 21
				CROSS CHK'D BY:						SCALE: AS NOTED
REV. NO.	DATE	DRWN	CHKD	REMARKS						



DETAIL C – WORK AT CLIFTON STREET INTERSECTION  
TO BE USED IN CONJUNCTION WITH DETOUR 2  
NOT TO SCALE

**LEGEND**

- TRAFFIC DRUM
- ⊙ 42" TRAFFIC CONE
- ▬ TRAFFIC BARRICADE (TYPE III)
- ⊙ TRAFFIC SIGN
- TRAFFIC SIGN MOUNTED ON TRAFFIC BARRICADE
- DIRECTION OF TRAFFIC AROUND WORK AREA
- ▨ WORK AREA
- ☆ POLICE OFFICER

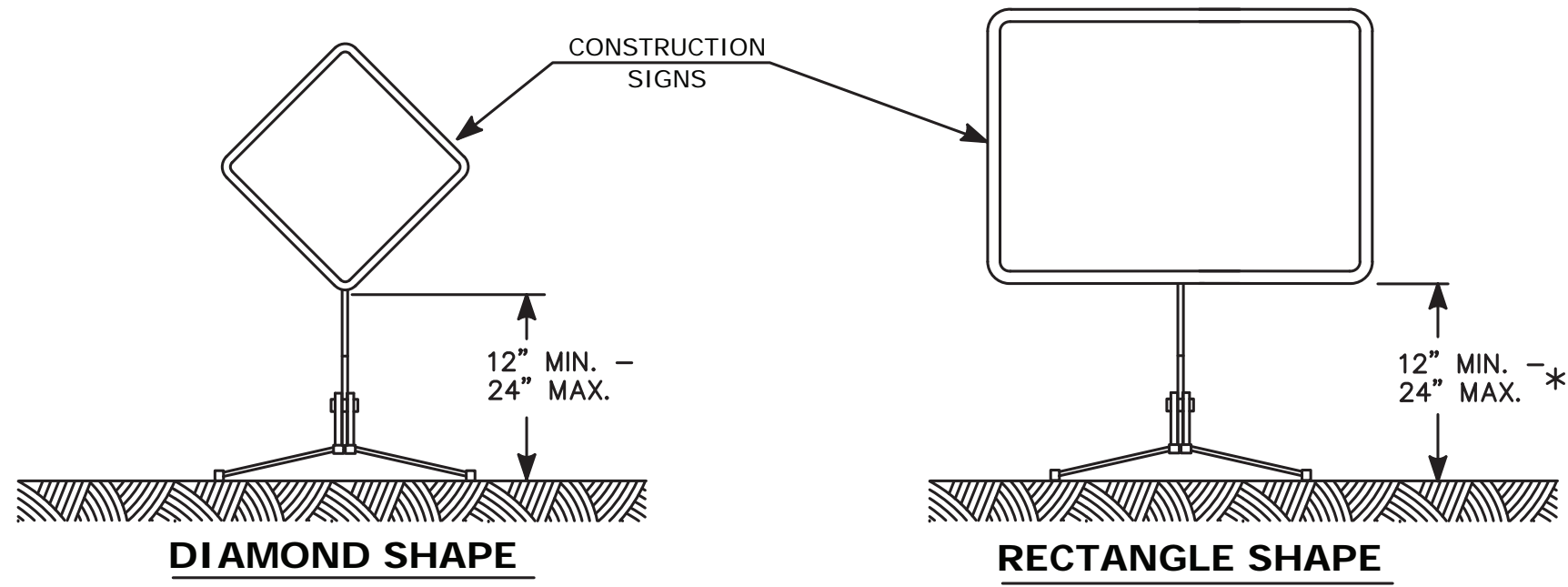
**SIGN LEGEND:**

ROAD WORK AHEAD	(A)	DETOUR	(PR)
ROAD CLOSED AHEAD	(H)	QUINNIPIAC AVE	(BB-1 A)
ROAD CLOSED	(I)	QUINNIPIAC AVE	(BB-1 QS)
DO NOT ENTER	(J)	DETOUR	(BB-1 QL)
ROAD CLOSED TO THRU TRAFFIC LOCAL TRAFFIC ONLY	(KL)	QUINNIPIAC AVE	(BB-1 OR)
ROAD CLOSED 1 MILE AHEAD LOCAL TRAFFIC ONLY	(KM)	DETOUR	(BB-1 H)
ROAD CLOSED 1/2 MILE AHEAD LOCAL TRAFFIC ONLY	(KN)	QUINNIPIAC AVE	(BB-1 XLA)
DETOUR AHEAD	(M)	ROAD CLOSED AHEAD	(XRA)
END DETOUR	(O)	SIDEWALK CLOSED CROSS HERE	
DETOUR	(PL)	SIDEWALK CLOSED CROSS HERE	

**TRAFFIC CONTROL NOTES:**

- FOR GENERAL NOTES REFER TO SHEET 19.
- DETOUR QUINNIPIAC AVENUE TRAFFIC AS SHOWN.
- PROVIDE POLICE OFFICER AT THE INTERSECTION OF EAST GRAND AVE AND QUINNIPIAC AVE AND AT THE INTERSECTION OF QUINNIPIAC AVENUE AND HEMINGWAY STREET. DURING WORK AT THE INTERSECTION OF QUINNIPIAC AVE AND CLIFTON ST, PROVIDE POLICE OFFICER AT THE INTERSECTION OF CLIFTON ST AND LENOX ST AS WELL.
- MAINTAIN SIDEWALK ACCESS DURING CONSTRUCTION.
- ALL SIGNS ARE TO BE ADJUSTED IN THE FIELD TO MEET CURRENT CONDITIONS AS DIRECTED BY THE ENGINEER OR PERMITTING AUTHORITY.

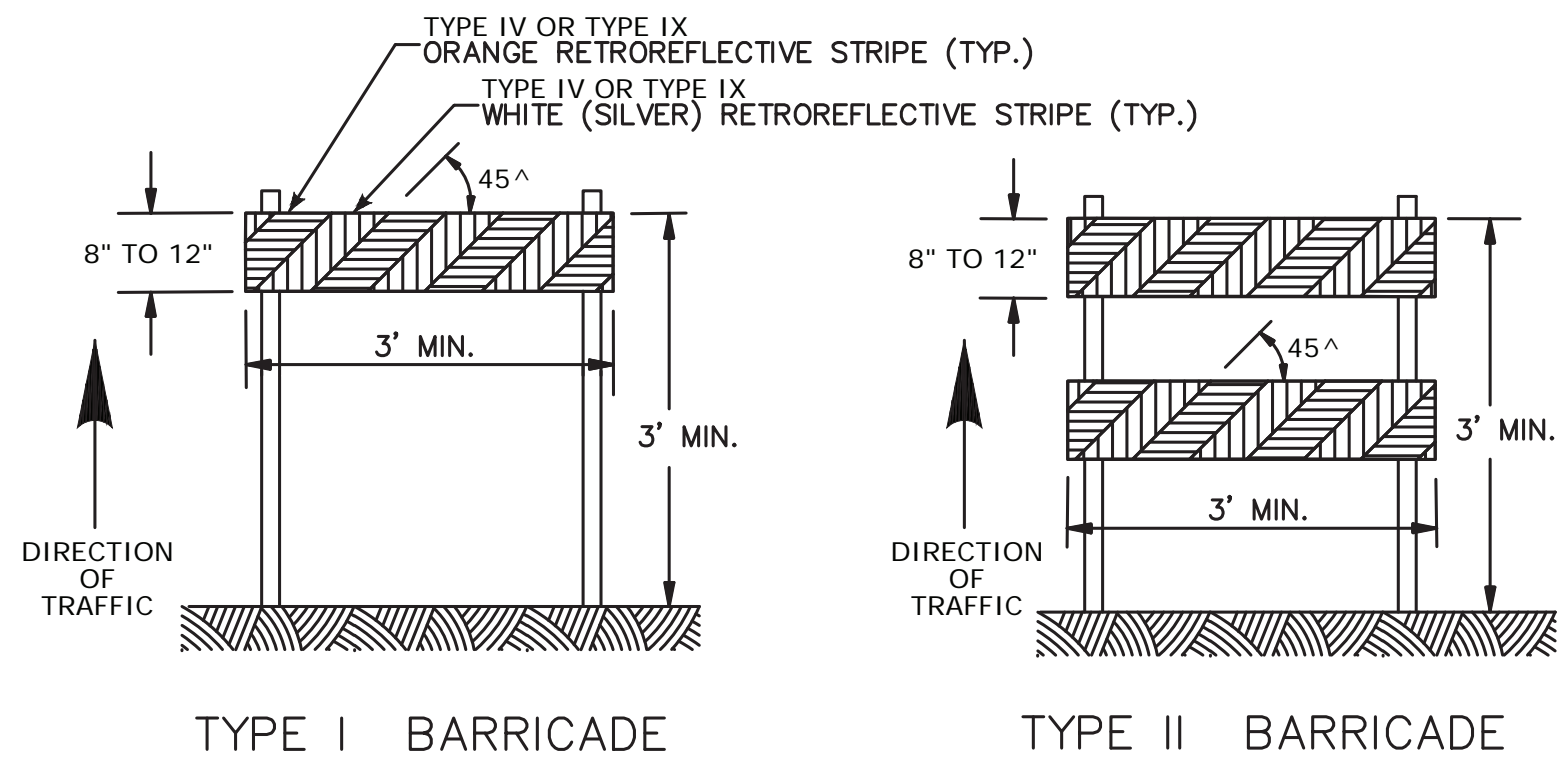




PORTABLE CONSTRUCTION SIGNS

NOTES FOR PORTABLE SIGN SUPPORTS:

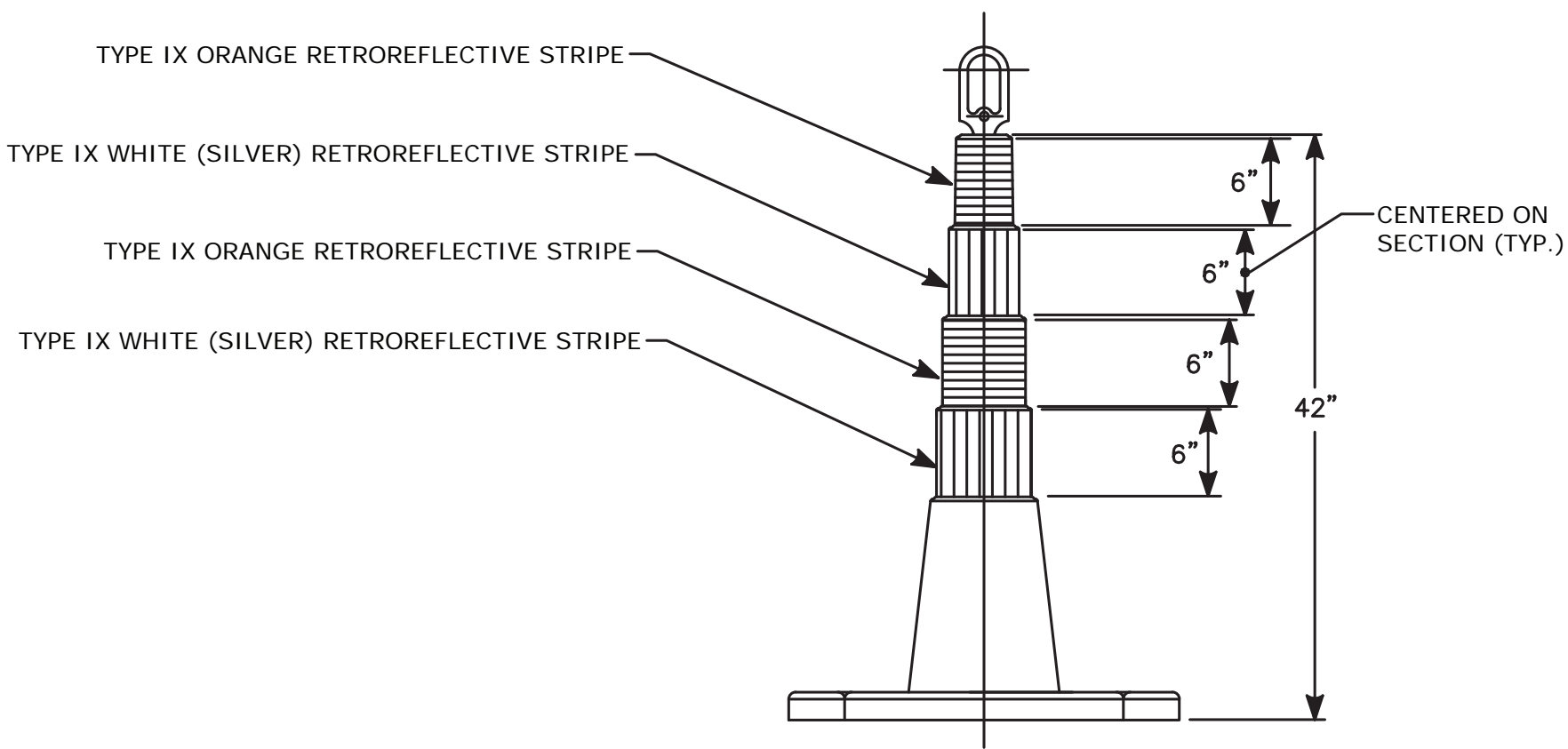
- SIGNS AND THEIR PORTABLE SUPPORTS SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES AND THE LATEST EDITION OF THE MUTCD.
- MOUNTING HEIGHT OF SIGNS SHALL BE A MINIMUM OF 12" AND A MAXIMUM OF 24". SIGNS SHALL BE MOUNTED HIGHER AS NEEDED TO MEET FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.
- THE ENGINEER RESERVES THE RIGHT TO REJECT ANY SUPPORT DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- PORTABLE SIGN SUPPORTS SHALL BE STABILIZED IN A MANNER THAT WILL NOT AFFECT THEIR COMPLIANCE WITH NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 2 DEVICES.
- PORTABLE CONSTRUCTION SIGN SUPPORTS SHOULD NOT BE USED FOR DURATION OF MORE THAN 3 DAYS EXCEPT FOR R9-8 THROUGH R9-11a SERIES, R11 SERIES, W1-6 THROUGH W1-8 SERIES, M4-10, AND E5-1.



CONSTRUCTION BARRICADES

NOTES:

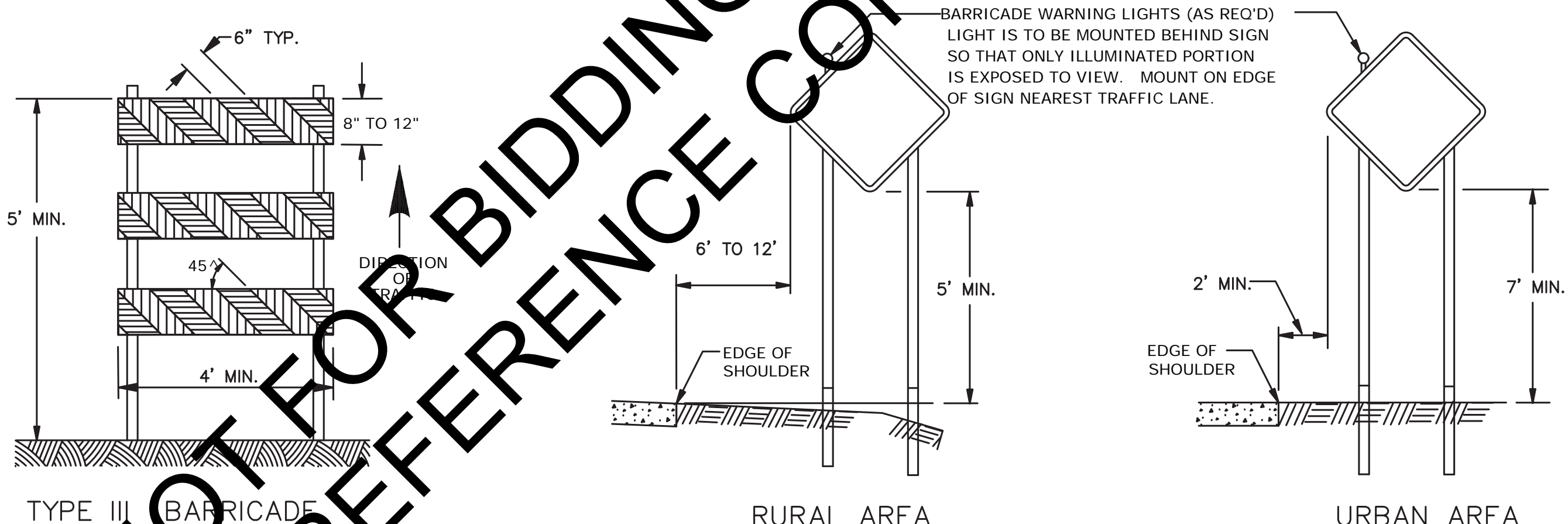
- CONSTRUCTION BARRICADES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH AND THE LATEST EDITION OF THE MUTCD.
- MARKINGS FOR BARRICADE RAILS SHALL BE ALTERNATE ORANGE AND WHITE STRIPES SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS. 6" WIDE STRIPES SHALL BE USED.
- THE ENTIRE AREA OF ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS. THE SIDES OF BARRICADES FACING TRAFFIC SHALL HAVE RETROREFLECTIVE RAIL FACES.
- THE ENGINEER RESERVES THE RIGHT TO REJECT ANY BARRICADE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- CORNERS OF BARRICADE RAILS SHALL BE ROUNDED.
- SIGNS MAY ONLY BE INSTALLED ON TYPE III BARRICADES AND SHALL BE PLACED SO AS TO COVER NO MORE THAN ONE BARRICADE RAIL.



42" TRAFFIC CONE

NOTES:

- TRAFFIC CONES SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
- IF RUBBER CONES ARE USED, THEY SHALL HAVE INTERIOR RISERS FOR RIGIDITY.
- IF PLASTIC CONES ARE USED, THEY SHALL BE COLOR IMPREGNATED.
- THE ENGINEER RESERVES THE RIGHT TO REJECT ANY CONE DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- THE ENTIRE AREA OF ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATION.
- THE SECTIONS OF CONES NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.



RURAL AREA

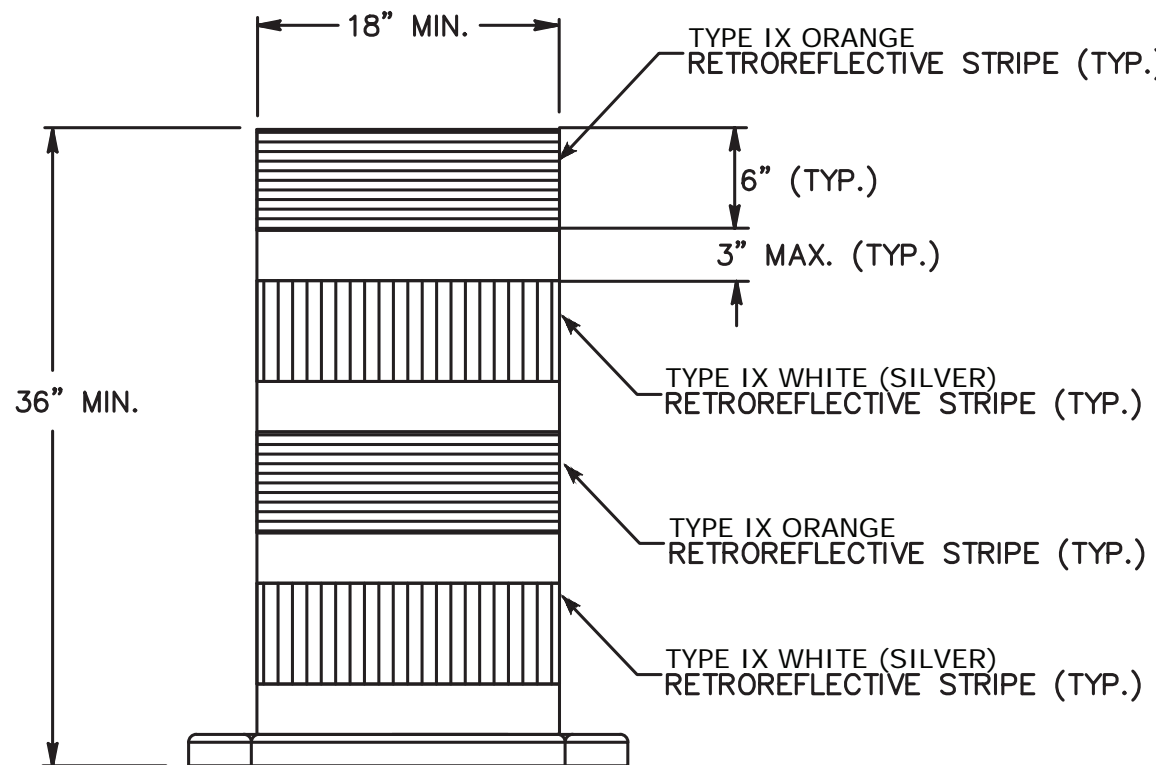
URBAN AREA

PLACEMENT OF CONSTRUCTION SIGNS

TYPICAL LONG TERM INSTALLATION

NOTES:

SUPPORTS SHALL BE METAL SIGN POSTS AND HAVE BREAK-AWAY FEATURES.



TRAFFIC DRUM

FRONT VIEW

NOTES:

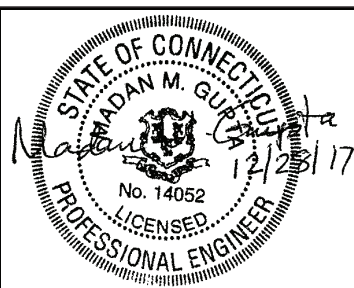
- TRAFFIC DRUM SHALL CONFORM TO THE REQUIREMENTS OF NCHRP REPORT 350 (TL-3) OR THE AASHTO MASH FOR CATEGORY 1 DEVICES AND THE LATEST EDITION OF THE MUTCD.
- THE ENGINEER RESERVES THE RIGHT TO REJECT ANY DRUM DEEMED UNSUITABLE FOR THE PURPOSE INTENDED.
- THE ENTIRE AREA OF ORANGE AND WHITE STRIPES SHALL BE RETROREFLECTIVE SHEETING AS REQUIRED IN THE SPECIFICATIONS.
- THE SECTIONS OF DRUMS NOT COVERED WITH RETROREFLECTIVE STRIPES SHALL BE ORANGE.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: SJ  
DRAWN BY: SJ  
SHEET CHK'D BY: VAA  
CROSS CHK'D BY:  
APPROVED BY: MMG  
DATE: OCTOBER 2017



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CONTRACT NO. CWF-2016-02  
CLOSING REGULATORS 012 & 020

CONSTRUCTION SIGN SUPPORTS AND  
CHANNELIZING DEVICES

TRAFFIC



GM2 Associates, Inc.  
Consulting Engineers  
115 Glastonbury Boulevard  
Glastonbury, CT 06033

PROJECT NO. 60494415  
FILE NAME: MPT-06.DWG

SHEET NO.  
24

SCALE:  
AS NOTED

