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Revisions:  
 REVISED PERMIT SET - 2/15/2013

**SOUTH  
 HADLEY  
 LIBRARY**  
 SOUTH HADLEY, MA

**SITE UTILITY  
 PLAN**

Date: 21-NOV-12 Drawn By: TJM  
 Scale: As Shown Project No.: 9165

**C-4**

STORM DRAINAGE - INVERT TABLE			
STRUCTURE	INV IN	INV OUT	RIM
AD-1	118.14 (AD-2)	118.04 (DMH-9)	121.7
AD-2	118.43 (AD-3)	118.30 (AD-1)	121.8
AD-3	118.62 (AD-4)	118.52 (AD-2)	121.8
AD-4		118.80 (AD-3)	121.0
AD-7	117.52 (AD-8)	117.52 (DMH-12)	120.7
AD-8		117.70 (AD-7)	120.7
AD-9		115.71 (AD-9 WYE)	121.2
AD-9 WYE	114.00 (AD-9)		115.0
BEND-22.5'	112.63 (DMH-12)	112.63 (BEND-45')	117.0
BEND-45'	112.50 (BEND-22.5')	112.50 (DMH-9)	117.0
CB-1		109.50 (DMH-2)	113.4
CB-2		110.30 (DMH-5)	113.0
CB-3		111.80 (DMH-5)	114.5
CB-4		109.10 (DMH-7)	111.8
CB-5		109.10 (DMH-7)	111.8
CB-8		112.20 (DMH-7)	115.2

STORM DRAINAGE - INVERT TABLE			
STRUCTURE	INV IN	INV OUT	RIM
DMH-1	106.40 (DMH-2)	SEE PLAN	113.1
DMH-2	107.51 (DMH-3) 107.91 (CB-1) 107.51 (DMH-8)	107.41 (DMH-1)	113.6
DMH-3	107.76 (DMH-4) 107.76 (WQS-1)	107.66 (DMH-2)	114.9
DMH-4	108.18 (DMH-5)	108.44 (DMH-3) 108.08 (WQS-1)	114.5
DMH-5	108.43 (DMH-6) 108.68 (CB-2) 108.68 (CB-3)	108.33 (DMH-4)	113.6
DMH-6	108.77 (DMH-7)	108.67 (DMH-5)	112.5
DMH-7	108.95 (CB-5) 108.95 (CB-4) 108.95 (CB-8)	108.85 (DMH-6)	114.0
DMH-8	111.30 (DMH-9)	111.92 (DMH-2) 111.13 (IB-1)	115.5
DMH-9	112.11 (AD-1) 112.11 (BEND-45')	112.11 (DMH-8)	119.5
DMH-12	115.60 (AD-7)	113.55 (BEND-22.5')	120.3
IB-1	111.03 (DMH-8)		112.8
WQS-1	108.05 (DMH-4)	107.80 (DMH-3)	114.5

SOUTH HADLEY WATER DISTRICT #1  
 CONFIRMED 8" MAIN LOCATED  
 IN CANAL STREET. RECORD PLANS INDICATE  
 ONE 6" AND ONE 10" WATER MAIN.  
 CONTRACTOR SHALL COORDINATE  
 CONNECTION WITH SOUTH HADLEY  
 WATER DISTRICT #1

INFILTRATION BASIN 1 (IB-1)  
 SIX (6) 40' ROWS OF 18" PERFORATED CPP  
 EMBEDDED IN 12" W X 24" D X 41.5' L  
 CRUSHED STONE.  
 TOP OF STONE=111.92  
 18" INV=109.50  
 BOTTOM OF STONE=109.17  
 SEE NOTE 1 THIS SHEET.

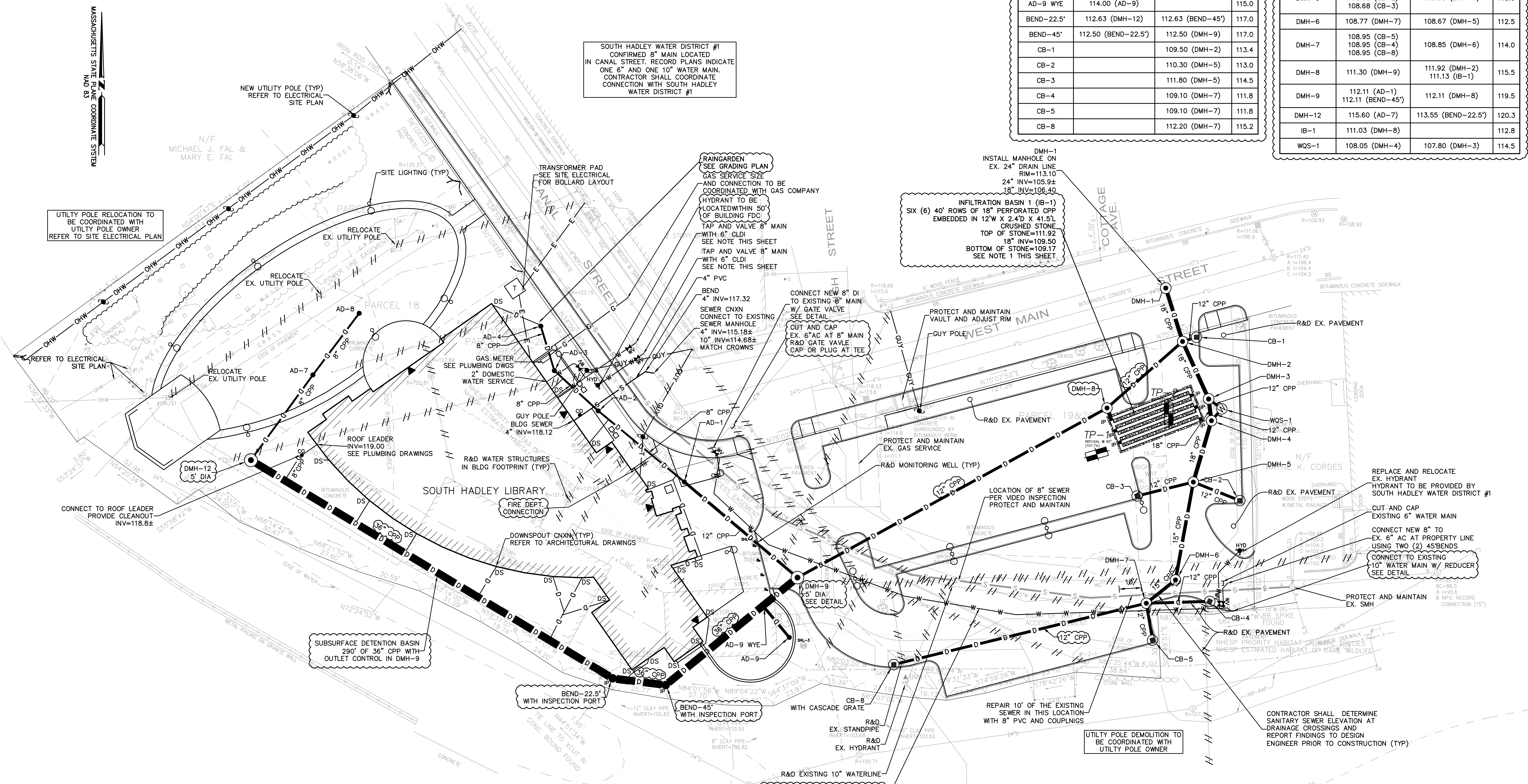
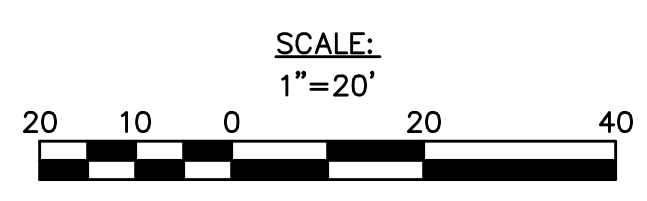
DMH-1  
 INSTALL MANHOLE ON  
 EX. 24" DRAIN LINE  
 RIM=113.10  
 24" INV=105.9±  
 18" INV=106.40

REPAIR 10' OF THE EXISTING  
 SEWER IN THIS LOCATION  
 WITH 8" PVC AND COUPLINGS

CONTRACTOR SHALL DETERMINE  
 SANITARY SEWER ELEVATION AT  
 DRAINAGE CROSSINGS AND  
 REPORT FINDINGS TO DESIGN  
 ENGINEER PRIOR TO CONSTRUCTION (TYP)

NOTE 1: CONTRACTOR SHALL PERFORM A TEST PIT IN  
 THE SAME LOCATION OF TP-2 IN THE PRESENCE OF  
 THE SOUTH HADLEY BOARD OF HEALTH AND NITSCH  
 ENGINEERING PRIOR TO THE START OF CONSTRUCTION.

- ABBREVIATIONS**
- CB CATCH BASIN
  - DMH DRAIN MANHOLE
  - TYP TYPICAL
  - WQS WATER QUALITY STRUCTURE
  - AD AREA DRAIN
  - TP TEST PIT
  - HYD HYDRANT
  - IP INSPECTION PORT
  - CO CLEAN OUT
  - WV WATER VALVE
  - DS DOWNSPOT
  - CNXX CONNECTION
  - R&D REMOVE AND DISPOSE
  - CLDI CEMENT LINED DUCTILE IRON
  - CPP CORRUGATED PLASTIC PIPE
  - PVC POLY VINYL CHLORIDE
  - EX EXISTING
  - INV INVERT
  - FDC FIRE DEPARTMENT CONNECTION



UTILITY POLE RELOCATION TO  
 BE COORDINATED WITH  
 UTILITY POLE OWNER  
 REFER TO SITE ELECTRICAL PLAN

NEW UTILITY POLE (TYP)  
 REFER TO ELECTRICAL  
 SITE PLAN

TRANSFORMER PAD  
 SEE SITE ELECTRICAL  
 FOR BOLLARD LAYOUT

RAIN GARDEN  
 SEE GRADING PLAN  
 GAS SERVICE SIZE  
 AND CONNECTION TO BE  
 COORDINATED WITH GAS COMPANY  
 HYDRANT TO BE  
 LOCATED WITHIN 50'  
 OF BUILDING FDC  
 TAP AND VALVE 8" MAIN  
 WITH 6" CLDI  
 SEE NOTE THIS SHEET  
 TAP AND VALVE 8" MAIN  
 WITH 6" CLDI  
 SEE NOTE THIS SHEET  
 4" PVC  
 BEND  
 4" INV=117.32  
 SEWER CNXX  
 CONNECT TO EXISTING  
 SEWER MANHOLE  
 4" INV=115.18±  
 10" INV=114.68±  
 MATCH CROWNS

CONNECT NEW 8" DI  
 TO EXISTING 8" MAIN  
 W/ GATE VALVE  
 SEE DETAIL  
 CUT AND CAP  
 EX. 6" AC AT 8" MAIN  
 R&D GATE VALVE  
 CAP OR PLUG AT TEE

PROTECT AND MAINTAIN  
 VAULT AND ADJUST RIM  
 GUY POLE (TYP)

PROTECT AND MAINTAIN  
 EX. GAS SERVICE  
 R&D MONITORING WELL (TYP)

LOCATION OF 8" SEWER  
 PER VIDEO INSPECTION  
 PROTECT AND MAINTAIN

REPLACE AND RELOCATE  
 EX. HYDRANT  
 HYDRANT TO BE PROVIDED BY  
 SOUTH HADLEY WATER DISTRICT #1  
 CUT AND CAP  
 EXISTING 6" WATER MAIN  
 CONNECT NEW 8" TO  
 EX. 6" AC AT PROPERTY LINE  
 USING TWO (2) 45° BENDS  
 CONNECT TO EXISTING  
 10" WATER MAIN W/ REDUCER  
 SEE DETAIL

PROTECT AND MAINTAIN  
 EX. SMH

CONTRACTOR SHALL DETERMINE  
 SANITARY SEWER ELEVATION AT  
 DRAINAGE CROSSINGS AND  
 REPORT FINDINGS TO DESIGN  
 ENGINEER PRIOR TO CONSTRUCTION (TYP)

R&D EXISTING 10" WATERLINE  
 NEW 8" CLDI WATER LINE  
 PROVIDE 5' OF COVER  
 PROVIDE 10' MIN. OFFSET FROM  
 EXISTING SEWER WHERE FEASIBLE

SUBSURFACE DETENTION BASIN  
 290' OF 36" CPP WITH  
 OUTLET CONTROL IN DMH-9

BEND-22.5'  
 WITH INSPECTION PORT

BEND-45'  
 WITH INSPECTION PORT

UTILITY POLE DEMOLITION TO  
 BE COORDINATED WITH  
 UTILITY POLE OWNER

MASSACHUSETTS STATE PLANE COORDINATE SYSTEM

N/F  
 MICHAEL J. FAL &  
 MARY E. FAL

SOUTH HADLEY LIBRARY

N/F  
 HOLYOKE GAS  
 & ELECTRIC

SCALE:  
 1"=20'