

# STATE OF VERMONT AGENCY OF TRANSPORTATION



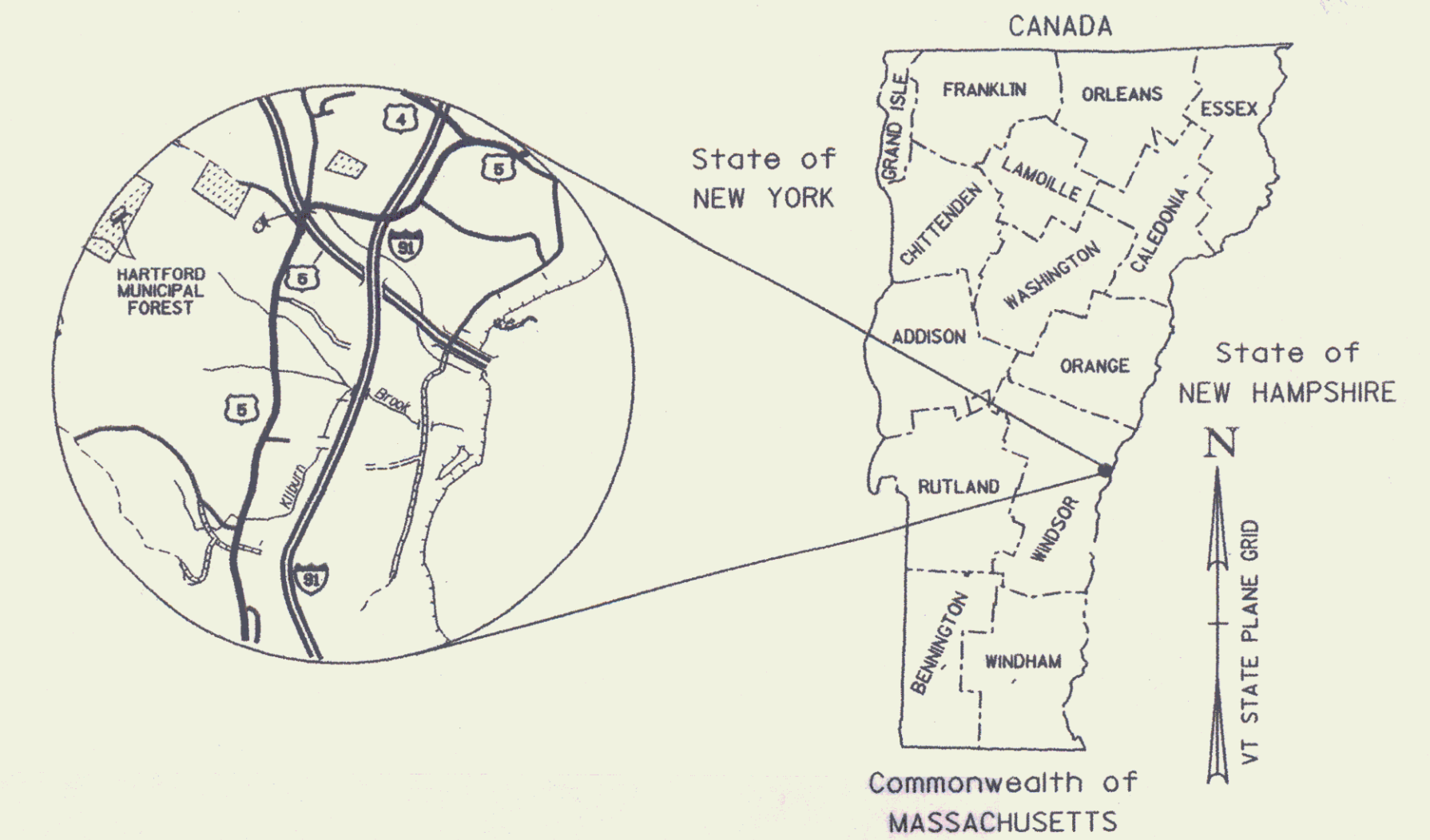
## PROPOSED IMPROVEMENT

TOWN OF HARTFORD  
COUNTY OF WINDSOR

### I-91 HARTFORD REST AREA SEWER SERVICE

THIS PROJECT IS LOCATED IN THE TOWN OF HARTFORD ON U.S. ROUTE 5  
WORK TO BE PERFORMED UNDER THIS PROJECT  
INCLUDES CONSTRUCTION OF GRAVITY AND PRESSURE SEWERS,  
PUMP STATIONS, AND A SLEEVED HIGHWAY CROSSING

LENGTH OF PROJECT:  
SLEEVED HIGHWAY CROSSING = 485 LF  
FORCE MAIN = 6,672 LF  
GRAVITY SEWER = 4,532 LF  
TOTAL LENGTH = 11,689 LF



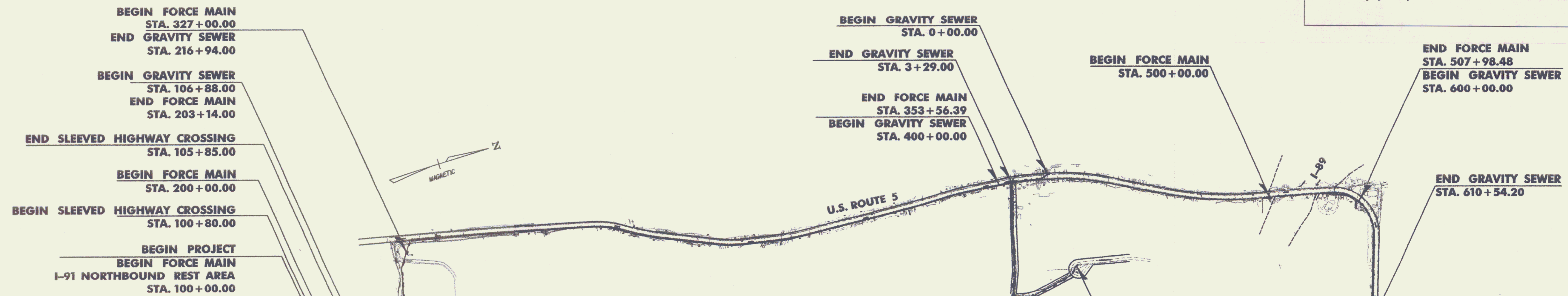
RECORD PLANS	
CONTRACTOR:	J.P. SICARD - BARTON, VT
RESIDENT ENGINEER:	CHRIS BARKER
CONSTRUCTION BEGAN:	AUGUST 19, 2008
CONSTRUCTION COMPLETE:	OCTOBER 26, 2010
RECORD PLANS BY:	CHRIS BARKER & JENNA HYDE
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY:	RESIDENT ENGINEER
DATE:	10/29/12
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.	

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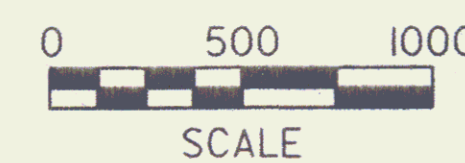


#### CONVENTIONAL SYMBOLS

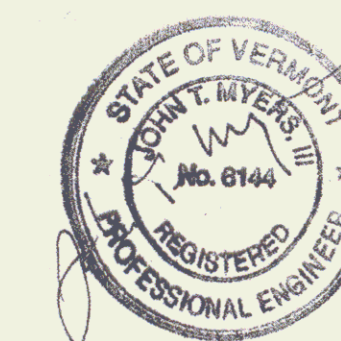
COUNTY LINE	
TOWN LINE	
LIMITS OF ACCESS	
POINT OF ACCESS	
FENCE LINE	
STONE WALL	
TRAVELED WAY	
GUARD RAIL	
RAILROAD	
SURVEY LINE	
CULVERT	
POWER POLE	
TELEPHONE POLE	
TREES	
CONTROL OF ACCESS	
PROPERTY LINE	
R.O.W. TAKING LINE	
SLOPE RIGHTS	
TOP OF CUT	
TOE OF SLOPE	

SURVEYED BY : VTRANS  
SURVEYED DATE : 2007

DATUM  
VERTICAL: NAVD 88  
HORIZONTAL: NAD 83 (CON)

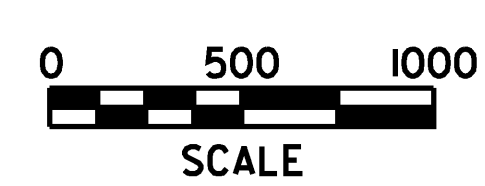
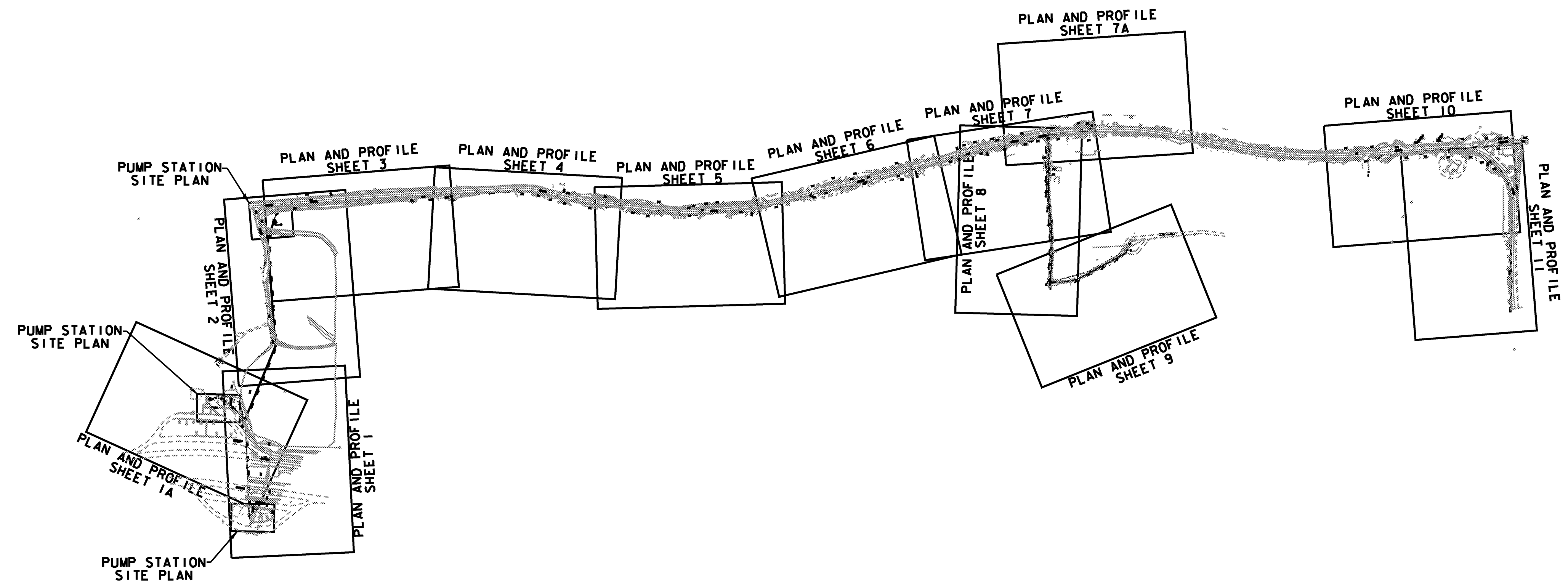
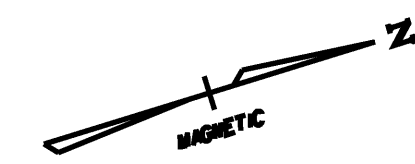


THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.  
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 15, 2006 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.



Stantec Consulting Services Inc.  
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www.stantec.com

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED	DATE 5/29/08
DIRECTOR OF PROGRAM DEVELOPMENT	
APPROVED	DATE 5-19-08
PROJECT MANAGER :	
PROJECT NAME :	HARTFORD REST AREAS
PROJECT NUMBER :	1M BLDG (10)
SHEET 1 OF 70 SHEETS	



PROJECT NAME: HARTFORD REST AREAS	PLOT DATE: 5/19/2008
PROJECT NUMBER: IM BLDG(10)	DRAWN BY: PZA
FILE NAME: ...\\u04a026plt-layout.dgn	CHECKED BY: JTM
PROJECT LEADER: JTM	SHEET 2 OF 70
DESIGNED BY:	
LAYOUT PLAN SHEET	

# QUANTITY SHEET

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
							EROSION CONTROL	UTILITIES - BID ITEMS	UTILITIES-BID ITEMS (NO FED./STATE)	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
								1			1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10				
								400			400		CY	TRENCH EXCAVATION OF ROCK	204.21	EST			TRENCH EXCAVATION OF ROCK AND CONCRETE
								400			400		CY	SUBBASE OF CRUSHED GRAVEL, FINE GRADED	301.26	EST			FOR BACKFILL WHEN UNSUITABLE MATERIAL IS ENCOUNTERED
								1165			1165		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35				MELISI ROAD
								310			310		CY	AGGREGATE SURFACE COURSE	401.10				MELISI ROAD
								177	7		184		CY	AGGREGATE SHOULDERS, IN PLACE	402.10	EST			
								3	.13		3.13		CWT	EMULSIFIED ASPHALT	404.65	EST			
								618	26		644		TON	BITUMINOUS CONCRETE PAVEMENT (PG 58-34)	406.25	EST			
								40			40		LF	48" CAAP .105 (2-2/3 X 1/2)	601.0257				
								5			5		EACH	RELOCATE MAILBOX, SINGLE SUPPORT	617.10				
									160		160		LF	TEMPORARY TRAFFIC BARRIER	621.90				
								15.6			15.6		MFBM	INSULATION BOARD	622.10				
								1			1		LS	TRANSFER TO NEW SYSTEM, SANITARY SEWER	628.42				
								200			200		HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST			
								1000			1000		HR	FLAGGERS	630.15	EST			
										1	1		LS	FIELD OFFICE, ENGINEERS	631.10				
										1	1		LS	TESTING EQUIPMENT, BITUMINOUS	631.17				
										1	1		LU	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.25				
								520			520		HR	EMPLOYEE TRAINEESHIP	634.10				
								1			1		LS	MOBILIZATION/DEMOBILIZATION	635.11				
								1			1		LS	TRAFFIC CONTROL	641.10				
								2			2		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15				
								2			2		EACH	PORTABLE ARROW BOARD	641.16				
								21065			21065		LF	DURABLE 4 INCH WHITE LINE	646.400	EST			
								500			500		SF	PAVEMENT MARKING MASK	646.86	EST			
								2715			2715		SY	GEOTEXTILE FOR ROADBED SEPARATOR	649.11				MELISI ROAD
							1873		30		1903		SY	GEOTEXTILE FOR SILT FENCE	649.51				
								1			1		LS	EPSC PLAN	652.10				
								120			120		HR	MONITORING EPSC PLAN	652.20	EST			
								1			1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30				
								50			50		CY	TEMPORARY STONE CHECK DAM, TYPE I	653.25	EST			
								50			50		CY	VEHICLE TRACKING PAD	653.35	EST			
								1			1		EACH	INLET PROTECTION DEVICE, TYPE I	653.40				
								5			5		EACH	FILTER BAG	653.45	EST			
							13990		290		14280		LF	PROJECT DEMARCATION FENCE	653.55				
								10			10		EACH	EVERGREEN TREES (THUJA OCCIDENTALIS "NIGRA")(6-8 FT, B & B)	656.20				
								51			51		EACH	FLANGED CHANNEL SIGN POST	675.301				
								6			6		EACH	ERECTING SALVAGED SIGNS	675.60				
								1			1		EACH	SPECIAL PROVISION (AIR RELEASE MANHOLE)(6' I.D.)	900.620				
								2			2		EACH	SPECIAL PROVISION (AIR RELEASE MH)(5' I.D.)	900.620				

PROJECT NAME: **HARTFORD REST AREAS**  
PROJECT NUMBER: **IM BLDG (10)**  
FILE NAME: **Hartford\_Quantities\_5-14-2008.xls** PLOT DATE: **06/23/2008**  
PROJECT MANAGER: **JTM** DRAWN BY: **PZA**  
DESIGNED BY: CHECKED BY: **MCF**  
**QUANTITY SHEET #1** SHEET **3** OF **70**

# QUANTITY SHEET

SUMMARY OF ESTIMATED QUANTITIES						TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
BRIDGE CONTROL	UTILITIES - SEE ITEM	CONCRETE (SEE NO. FOR SCHEDULE)	PAVEMENT	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS		
	8			8		EACH	SPECIAL PROVISION (CLEANOUT MANHOLE) (F I D)	900.820						
	2			2		EACH	SPECIAL PROVISION (CLEANOUT MANHOLE) (F I D)	900.820						
	23	3		26		EACH	SPECIAL PROVISION (SEWER MANHOLE) (F I D)	900.820						
	5341			5341		LF	SPECIAL PROVISION (DUCTILE IRON PIPE, CEMENT LINED) (4")	900.840						
	744			744		LF	SPECIAL PROVISION (DUCTILE IRON PIPE, CEMENT LINED) (8")	900.840						
	485			485		LF	SPECIAL PROVISION (HORIZONTAL DIRECTIONAL DRILLING) (P HDPE CASING PIPE W/ 2" CARBIDE PIPE)	900.840						
	54			54		LF	SPECIAL PROVISION (PRE-INSULATED DUCTILE IRON PIPE, CEMENT LINED) (W/ 2" CARBIDE PIPE)	900.840						
	25			25		LF	SPECIAL PROVISION (PVC DRAIN PIPE) (2")	900.840						
	3149	329		3478		LF	SPECIAL PROVISION (PVC SEWER PIPE) (8")	900.840						
	1054			1054		LF	SPECIAL PROVISION (PVC SEWER PIPE) (10")	900.840						
	533			533		LF	SPECIAL PROVISION (SANITARY FORCE MAIN) (2" DR11 HDPE)	900.840						
		65		65		LF	SPECIAL PROVISION (STEEL SLEEVE, SMOOTH WALLED) (1 X 10')	900.840						
	1			1		LS	SPECIAL PROVISION (ELECTRIC HEAT TRACE SYSTEM)	900.845						
	1			1		LS	SPECIAL PROVISION (SEWAGE PUMP STATION W/VALVE VAULT) (S1 NORTHBOUND)	900.845						
	1			1		LS	SPECIAL PROVISION (SEWAGE PUMP STATION W/VALVE VAULT) (S1 SOUTHBOUND)	900.845						
	1			1		LS	SPECIAL PROVISION (SEWAGE PUMP STATION W/VALVE VAULT) (MAXFIELD)	900.845						

# BORING LOG SHEET

STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
MATERIALS & RESEARCH SECTION  
SOILS & FOUNDATIONS UNIT  
AUGER DRILLING NOTES



STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
MATERIALS & RESEARCH SECTION  
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AUGER DRILLING NOTES



STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
MATERIALS & RESEARCH SECTION  
SOILS & FOUNDATIONS UNIT  
AUGER DRILLING NOTES

PROJECT:		HARTFORD SEWER EXPANSION		PROJECT No.:		IM BLDG(10)			
DRILLING METHOD:		Solid Stem Auger		SAMPLE METHOD:		Grab - Auger Flights			
DRILLER:		HOLT		CHECKED BY:		TDE			
BORING No.	ELEVATION	NORTHING	EASTING	DATE DRILLED	DEPTH INTERVAL	FIELD DESCRIPTION	COMMENTS		
						SOIL TYPE	COLOR	MOISTURE	
B-1	568.22	408860.3183	1681252.252	3/29/2007	0.0-5.0	Si and Bo	Brown	Moist	Possible Fill
					5.0-8.0	Si Tr. Organics	Brown	Moist to Wet	
					8.0-12.0	SaGr	Gray	Wet	
					12.0-15.0	Si	Gray	Wet	
					NLTD				
					NOTES:				
B-2	566.42	408953.1196	1681289.222	3/29/2007	0.0-6.0	Si and Cobbles	Brown	Moist	Possible Fill
					6.0	TLOB			
					NOTES:	Bedrock exposed in vicinity of boring.			
B-3	562.33	408992.3434	1681197.122	5/18/2007	0.0-4.0	SiSa	Brown	Moist to Wet	
					4.0-9.0	SiSa	Brown	Wet	
					9.0-11.0	SiGrSa	Dark Gray	Wet	
					11.0-15.0	Si	Gray	Wet	
					NLTD				
					NOTES:	Water @ 3.5' on 5/11/2007			
B-4	559.60	409031.5177	1681105.166	5/18/2007	0.0-5.0	SaSi	Dark Gray	Wet	
					5.0-15.0	Si	Dark Gray	Wet	
					NLTD				
					NOTES:	Water @ 1.0' on 05/18/2007			
B-5	565.81	409070.5707	1681013.131	5/18/2007	0.0-2.0	GrSa	Dark Brown	Wet	
					2.0-5.0	Sa	Brown	Wet	
					5.0-13.0	SaSi	Dark Brown	Wet	
					13.0-15.0	Si	Dark Brown	Wet	
					NLTD				
					NOTES:	Water @ 1.0' on 5/18/2007			
B-6	571.45	409109.6065	1680921.033	5/18/2007	0.0-5.0	GrSa	Brown	Moist	
					5.0-12.0	GrSa	Brown	Wet	
					12.0-15.0	Si	Dark Brown	Wet	
					NLTD				
					NOTES:	Water @ 5.0' on 5/18/2007			
B-7	573.57	409149.0957	1680828.324	4/5/2007	0.0-1.5	Si	Brown	Moist	Topsoil
					1.5-6.0	Si	Brown	Moist to Wet	
					6.0-8.0	SaSi	Brown	Wet	
					8.0-10.0	Si	Gray-Brown	Wet	
					NLTD				
B-8	580.06	409187.689	1680736.995	4/5/2007	0.0-1.5	Si	Brown	Moist	Topsoil
					1.5-3.0	Si	Brown	Moist	
					3.0-5.0	SiSa	Brown	Moist	
					5.0-10.0	Si	Brown	Wet	
					NLTD				
					NOTES:	Borehole collapsed @ 5.8'. Unable to obtain water level			
B-9	582.97	409226.8781	1680644.806	4/5/2007	0.0-1.0	Si	Brown	Moist	Topsoil
					1.0-7.0	Si	Brown	Moist to Wet	
					7.0-10.0	Si	Gray	Wet	
					NLTD				
					NOTES:	Borehole collapsed @ 5.8'. Unable to obtain water level			
B-10	585.62	409266.011	1680552.793	4/5/2007	0.0-1.0	Si	Brown	Moist	Topsoil
					1.0-7.0	Si	Brown	Moist	
					7.0-10.0	Si	Brown	Wet	
					NLTD				
					NOTES:	Water @ 6.9' on 04/09/07			
B-11	587.27	409304.9775	1680460.742	4/5/2007	0.0-1.0	Si	Brown	Moist	Topsoil
					1.0-8.0	Si	Brown	Moist to Wet	
					8.0-10.0	Si	Brown	Wet	
					NLTD				
					NOTES:	Water @ 7.5' on 04/09/07			
B-12	584.85	409344.0386	1680368.849	4/5/2007	0.0-1.0	Si	Brown	Moist	Topsoil
					1.0-8.0	Si	Brown	Moist to Wet	
					8.0-10.0	Si	Gray	Wet	
					NLTD				
					NOTES:	Borehole collapsed @ 5.1'. Unable to obtain water level			
B-13	578.38	409383.0369	1680277.078	4/5/2007	0.0-1.0	Si	Brown	Moist	Topsoil
					1.0-5.0	Si	Brown	Moist to Wet	
					5.0-7.0	Si	Brown	Wet	
					7.0-10.0	Si	Gray	Wet	
					NLTD				
					NOTES:	Water @ 1.8' on 04/09/07			
B-14	576.78	409403.082	1680178.749	4/5/2007	0.0-1.0	Si Tr. Organics	Dark Brown	Wet	
					1.0-3.0	SiSa	Brown	Wet	
					3.0-6.0	Si	Brown	Wet	
					6.0-10.0	Si	Gray	Wet	
					NLTD				
					NOTES:	Water @ 1.2' on 04/09/07			

PROJECT:		HARTFORD SEWER EXPANSION		PROJECT No.:		IM BLDG(10)			
DRILLING METHOD:		Solid Stem Auger		SAMPLE METHOD:		Grab - Auger Flights			
DRILLER:		HOLT		CHECKED BY:		TDE			
BORING No.	ELEVATION	NORTHING	EASTING	DATE DRILLED	DEPTH INTERVAL	FIELD DESCRIPTION	COMMENTS		
						SOIL TYPE	COLOR	MOISTURE	
B-15	577.91	409423.0732	1680080.659	4/5/2007	0.0-1.0	Si Tr. Organics	Dark Brown	Wet	
					1.0-2.5	SiSa	Brown	Wet	
					2.5-5.0	Si	Brown	Wet	
					5.0-10.0	Si	Gray	Wet	
					NLTD				
					NOTES:	Water @ 1.2' on 04/09/07			
B-16	578.45	409443.0301	1679982.782	4/5/2007	0.0-1.0	Si Tr. Organics	Dark Brown	Wet	
					1.0-3.0	SaGr	Brown	Wet	
					3.0-5.0	Si	Gray-Brown	Wet	
					5.0-10.0	Si	Gray	Wet	
					NLTD				
					NOTES:	Water @ 1.6' on 04/09/07			
B-17	579.22	409463.0105	1679884.756	4/5/2007	0.0-1.0	Si Tr. Organics	Dark Brown	Wet	
					1.0-3.0	Si	Brown	Wet	
					3.0-5.0	Gr	Brown	Wet	
					5.0-10.0	Si	Gray	Wet	
					NLTD				
					NOTES:	Water @ 1.4' on 04/09/07			
B-18	581.13	409483.0227	1679786.613	3/28/2007	0.0-1.0	Si	Brown	Moist	Topsoil
					1.0-6.0	Si	Brown	Wet	
					6.0-10.0	Si	Gray-Brown	Wet	
					NLTD				
					NOTES:	Water @ 0.9' on 03/29/07. Runoff entering hole.			
B-19	584.86	409502.9055	1679689.06	3/28/2007	0.0-1.0	Si	Brown	Moist	Topsoil
					1.0-11.0	Si	Brown	Moist to Wet	
					11.0-15.0	Sa	Gray-Brown	Wet	
					NLTD				
					NOTES:	Water @ 4.1' on 03/29/07			
B-20	582.07	409542.8639	1679492.744	3/28/2007	0.0-1.5	Si	Brown	Moist	Topsoil
					1.5-10.0	Si	Brown	Moist to Wet	
					10.0-15.0	Si	Gray-Brown	Wet	
					NLTD				
					NOTES:	Water @ 5.9' on 03/29/07			
B-21	585.79	409522.9481	1679590.767	3/28/2007	0.0-1.5	Si	Brown	Moist	Topsoil
					1.5-5.0	Si	Gray-Brown	Moist to Wet	
					5.0-9.0	Si	Gray	Wet	
					9.0-15.0	SaSi	Brown	Wet	
					NLTD				
					NOTES:	Water @ 0.4' on 03/29/07. Runoff entering hole.			
B-22	581.91	409562.5181	1679394.85	4/6/2007	0.0-5.0	SiGr	Brown	Moist	
					5.0-15.0	Si	Gray-Brown	Moist to Wet	
					15.0-20.0	Si	Gray	Wet	
					NLTD				
					NOTES:	Water @ 4.6' on 04/09/07.			
B-23	586.63	409580.5499	1679308.343	4/10/2007	0.0-2.0	Si	Brown	Moist	Fill
					2.0-7.0	Si	Brown	Moist	
					7.0-10.0	Si	Gray-Brown	Wet	
					NLTD				
					NOTES:	Water @ 6.6' on 04/11/07.			
B-24	585.47	409677.8993	1679329.644	4/10/2007	0.0-2.0	Si	Brown	Moist	Fill
					2.0-7.0	Si	Brown	Moist	
					7.0-10.0	Si	Gray-Brown	Wet	
					NLTD				
					NOTES:	Water @ 6.3' on 04/11/07.			
B-25	585.28	409775.7447	1679352.009	4/10/2007	0.0-2.0	SaSi	Brown	Moist	Fill
					2.0-4.0	Si	Brown	Moist	
					4.0-7.0	Si	Gray-Brown	Moist to Wet	
					7.0-10.0	Si	Brown	Wet	
					NLTD				
					NOTES:	Water @ 4.3' on 04/11/07.			
B-26	585.88	409873.7555	1679372.016	4/10/2007	0.0-1.5	SaSi	Dark Brown	Moist	Fill
					1.5-3.0	Si	Brown	Moist	
					3.0-7.0	Si	Gray-Brown	Moist to Wet	Possible Fill
					7.0-10.0	Si	Brown	Wet	
					NLTD				
					NOTES:	Water @ 4.3' on 04/11/07.			
B-27	585.29								

# BORING LOG SHEET



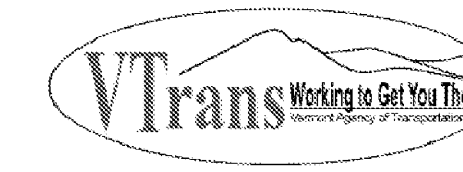
STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
MATERIALS & RESEARCH SECTION  
SOILS & FOUNDATIONS UNIT  
AUGER DRILLING NOTES

PROJECT:		HARTFORD SEWER EXPANSION		PROJECT No.:		IM BLDG(10)		
DRILLING METHOD:		Solid Stem Auger		SAMPLE METHOD:		Grab - Auger Flights		
DRILLER:		HOLT		CHECKED BY:		TDE		
BORING No.	ELEVATION	NORTHING	EASTING	DATE DRILLED	DEPTH INTERVAL	FIELD DESCRIPTION	COMMENTS	
						SOIL TYPE	COLOR	MOISTURE
B-47	628.30	411838.6693	1679996.402	4/11/2007	0.0-1.0	Si	Dark Brown	Moist
					1.0-3.5	Si	Brown	Moist
					TLOB @ 3.5'			
					NOTES: No water to depth.			
B-48	623.59	411930.3536	1680036.156	4/11/2007	0.0-5.0	Si	Brown	Moist
					5.0-8.0	Si	Brown	Moist
					TLOB @ 8.0'			
					NOTES: No water to depth.			
B-49	617.87	412022.4349	1680074.788	4/11/2007	0.0-5.0	Si	Brown	Moist
					5.0-6.0	Rock Particles		
					CNPP			
					NOTES: In probable Ledge. No water to depth.			
B-50	609.63	412113.8118	1680115.757	4/11/2007	0.0-2.0	SaSi	Brown	Moist
					2.0-10.0	Si	Brown	Moist
					NLT			
					NOTES: No water to depth.			
B-51	603.74	412206.1551	1680154.882	4/11/2007	0.0-2.0	SaSi	Brown	Moist
					2.0-9.0	Si	Brown	Moist
					TLOB @ 9.0'			
					NOTES: No water to depth.			
B-52	599.38	412298.8341	1680191.038	4/11/2007	0.0-0.8			
					TLOB			
					NOTES: Ledge showing between B-52 & B-53 on both sides of US-5.			
B-55	577.69	412590.2987	1680259.935	4/11/2007	0.0-3.0	Sa	Brown	Moist
					3.0-10.0	SaSi & Bo	Brown	Moist
					NLT			
					NOTES: No water to depth.			
B-57	576.79	412787.7797	1680295.352	4/11/2007	0.0-10.0	Sa	Brown	Moist
					NLT			
					NOTES: Borehole collapsed @ 7.1'. Unable to obtain water level			
B-58	578.16	412887.1835	1680306.39	4/11/2007	0.0-4.0	Si	Brown	Moist
					4.0-10.0	GrSi	Brown	Moist
					NLT			
					NOTES: No water to depth.			
B-59	578.63	412986.773	1680315.869	4/11/2007	0.0-4.0	Si	Dark Brown	Moist
					4.0-10.0	GrSi	Brown	Moist
					NLT			
					NOTES: Water @ 6.8' on 04/13/07.			
B-60	579.23	413086.5504	1680320.89	4/11/2007	0.0-4.0	Si	Dark Brown	Moist
					4.0-8.0	GrSi	Brown	Moist
					8.0-10.0	SaSi	Brown	Wet
					NLT			
					NOTES: Water @ 6.0' on 04/13/07.			
B-61	581.59	413186.3998	1680329.414	5/7/2007	0.0-7.0	SiSa	Brown	Moist
					7.0-10.0	Sisa	Brown	Moist
					NLT			
					NOTES: Water @ 6.0' on 04/13/07.			
B-62	585.33	413286.1937	1680332.533	5/2/2007	0.0-10.0	GrSiSa	Brown	Moist
					7.0-10.0			
					NLT			
					NOTES: Water at 9.2 on 05/07/2007			
B-63	588.29	413385.8938	1680339.426	5/2/2007	0.0-10.0	GrSiSa	Brown	Moist
B-64	590.55	413485.7057	1680344.292	5/2/2007	NOTES: Boring not take due to underground utility			
B-65	592.68	413574.6811	1680351.661	5/2/2007	0.0-8.0	GrSiSa	Brown	Moist
					8.0-10.0	SaSi	Brown	Moist
					NLT			
					NOTES: No water to depth on 05/07/07			
B-67	596.82	413773.9074	1680362.183	5/2/2007	0.0-1.5	GrSiSa	Brown	Moist
					8.0-10.0	SaSi	Red	Moist
					2.5-10.0	Si	Brown	Moist
					NLT			
					NOTES: Borehole Collapsed @ 8.0' Unable to obtain water level			
B-68	599.21	413844.5671	1680364.094	5/2/2007	0.0-8.5	GrSiSa	Brown	Moist
					8.5-10.0	Sa	Brown	Moist
					NLT			
					NOTES: Borehole collapsed @ 8.6. Unable to obtain water level			
B-69	603.22	413944.3963	1680370.267	5/2/2007	0.0-10.0	GrSiSa	Brown	Moist
					NLT			
					NOTES: No water to depth on 05/08/07			
B-70	606.28	414044.4098	1680367.367	5/2/2007	0.0-10.0	GrSa	Brown	Moist
					NLT			
					NOTES: No water depth on 5/08/2007			



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PROJECT:		HARTFORD SEWER EXPANSION		PROJECT No.:		IM BLDG(10)		
DRILLING METHOD:		Solid Stem Auger		SAMPLE METHOD:		Grab - Auger Flights		
DRILLER:		HOLT		CHECKED BY:		TDE		
BORING No.	ELEVATION	NORTHING	EASTING	DATE DRILLED	DEPTH INTERVAL	FIELD DESCRIPTION	COMMENTS	
						SOIL TYPE	COLOR	MOISTURE
B-71	608.1	414144.4208	1680371.289	05/02/2007	0.0-10.0	GrSa	Brown	Moist
					NLT			
					NOTES: No water depth on 05/08/07			
B-72	611326	414244.5379	1680372.278	5/8/2007	0.0-10.0			
					Hand Steel Surrounding			
B-73	609.11	414344.2254	1680372.513	5/2/2007	0.0-1.0	Si	Dark Brown	Moist
					1.0-10.0	Sa	Brown	Moist
					NLT			
					NOTES: No water to depth on 05/08/07			
B-74	611.35	414444.0417	1680379.741	5/2/2007	0.0-10.0	GrSa	Brown	Moist
					NLT			
					NOTES: No water to depth on 05/08/2007			
B-75	612.05	414542.7245	1680960.71	5/2/2007	0.0-8.0	GrSa	Brown	Moist
					8.0-10.0	Sa	Brown	Moist
					NLT			
					NOTES: No water to depth on 05/08/2007			
B-76	611.99	414634.2755	1680396.885	5/2/2007	0.0-10.0	Sa	Brown	Moist
					NLT			
					NOTES: No water to depth on 05/07/02007			
B-77	613.3	414733.9306	1680406.309	5/5/2007	0.0-10.0	Sa	Brown	Moist
					NLT			
					NOTES: No water depth on 05/07/2007			
B-78	613.81	414807.3154	1680416.534	5/2/2007	0.0-10.0	SiGrSa	Brown	Moist
					NLT			
					NOTES: no water to depth on 5/07/07			
B-99	579.57	416743.3771	1681160.042	5/23/2007	0.0-3.5	GrSiSa	Brown	Moist
					3.5-10.0	Si	Brown	Moist
					Notes			
B-100	576.32	416839.2718	1681189.628	5/23/2007	0.0-10.0	Si	Brown	Moist
					NLT			
					NOTES: Borehole collapsed @ 4.0' Unable to obtain Water level			
B-101	575.83	416936.0988	1681213.557	5/23/2007	0.0-6.5	GrSaSi	Brown	Moist
					6.5-10.0	Si	Brown	Moist
					NLT			
					NOTES: Borehole collapsed @ 6.5' Unable to obtain Water Level			
B-102	579.37	417034.347	1681231.988	5/23/2007	0.0-5.0	GrSaSi	Brown	Moist
					5.0-10.0	Si	Black	Moist
					NLT			
					NOTES: No water depth			
B-103	578.9	417132.2209	1681252.117	5/23/2007	0.0-5.0	GrSa	Brown	Moist
					5.0-10.0	Si	Brown	Moist
					NOTES: No water depth			
B-104	579.9	417230.7288	1681269.566	5/23/2007	0.0-5.0	GrSa	Brown	Moist
					5.0-8.0	SiSa	Brown	Wet
					8.0-10.0	Si	Brown	Wet
					NOTES: Water @ 5.0' on 05/23/07.			
B-105	580.23	417327.8027	1681293.662	5/23/2007	0.0-3.0	GrSiSa	Brown	Moist
					3.0-8.5	SaSi	Brown	Moist to Wet
					8.5-10.0	Si	Gray	Moist to Wet
					NOTES: Water @ 4.0' on 05/23/07.			
B-106	581.52	417434.7784	1681319.591	5/23/2007	0.0-3.0	SaSi	Brown	Moist
					3.0-7.0	SaSi	Brown	Wet
					7.0-10.0	Si	Brown	Wet
					NOTES: Water @ 4.7' on 05/23/07.			
B-107	582.17	417519.2409	168135.477	5/23/2007	0.0-1.0	SiSa	Brown	Moist
					1.0-5.0	SaSi	Brown	Moist
					5.0-10.0	Si	Gray	Moist to Wet
					NOTES: Water @ 4.0' on 05/23/07.			
B-108	581.83	417608.1102	1681396.622	5/23/2007	0.0-5.0	SaSi	Brown	Moist
					5.0-10.0	Si	Light Brown	Moist
					NLT			
					NOTES: No water to depth.			
B-109R	580.35	417675.93	1681470.01	5/23/2007	0.0-6.0	SaSi	Brown	Moist
					6.0-7.0	GrSaSi	Brown	Wet
					7.0-10.0	SaSi	Brown	Wet
					NLT			
					NOTES: No water to depth.			
B-110R	581.43	417725.31	1681556.97	5/23/2007	0.0-2.5	SiSa	Brown	Moist
					2.5-5.5	SaSi	Brown	Moist
					5.5-7.0	Muck	Black	Wet
					7.0-10.0	SaSi	Black	Wet
					NLT			
					NOTES: Water @ 5.5' on 05/23/07.			



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PROJECT:		HARTFORD SEWER EXPANSION		PROJECT No.:		IM BLDG(10)		
DRILLING METHOD:		Solid Stem Auger		SAMPLE METHOD:		Grab - Auger Flights		
DRILLER:		HOLT		CHECKED BY:		TDE		
BORING No.	ELEVATION	NORTHING	EASTING	DATE DRILLED	DEPTH INTERVAL	FIELD DESCRIPTION	COMMENTS	
						SOIL TYPE	COLOR	MOISTURE
B-111R	581.95	417740.86	1681655.75	5/23/20				

GPS CONTROL POINTS

**HVCTRL #1**

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 NORTH = 409150.486  
 EAST = 1681279.058  
 ELEV. = 472.727

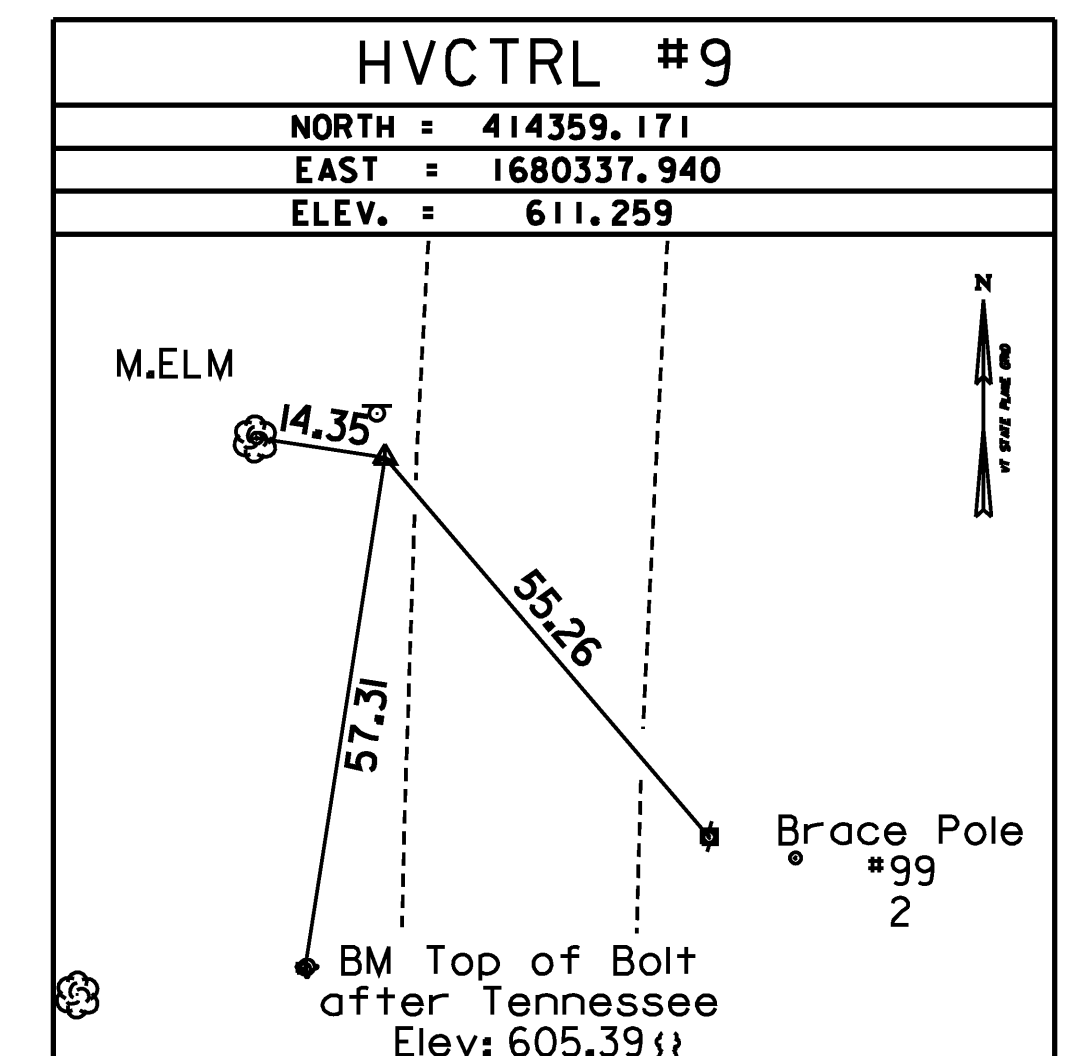
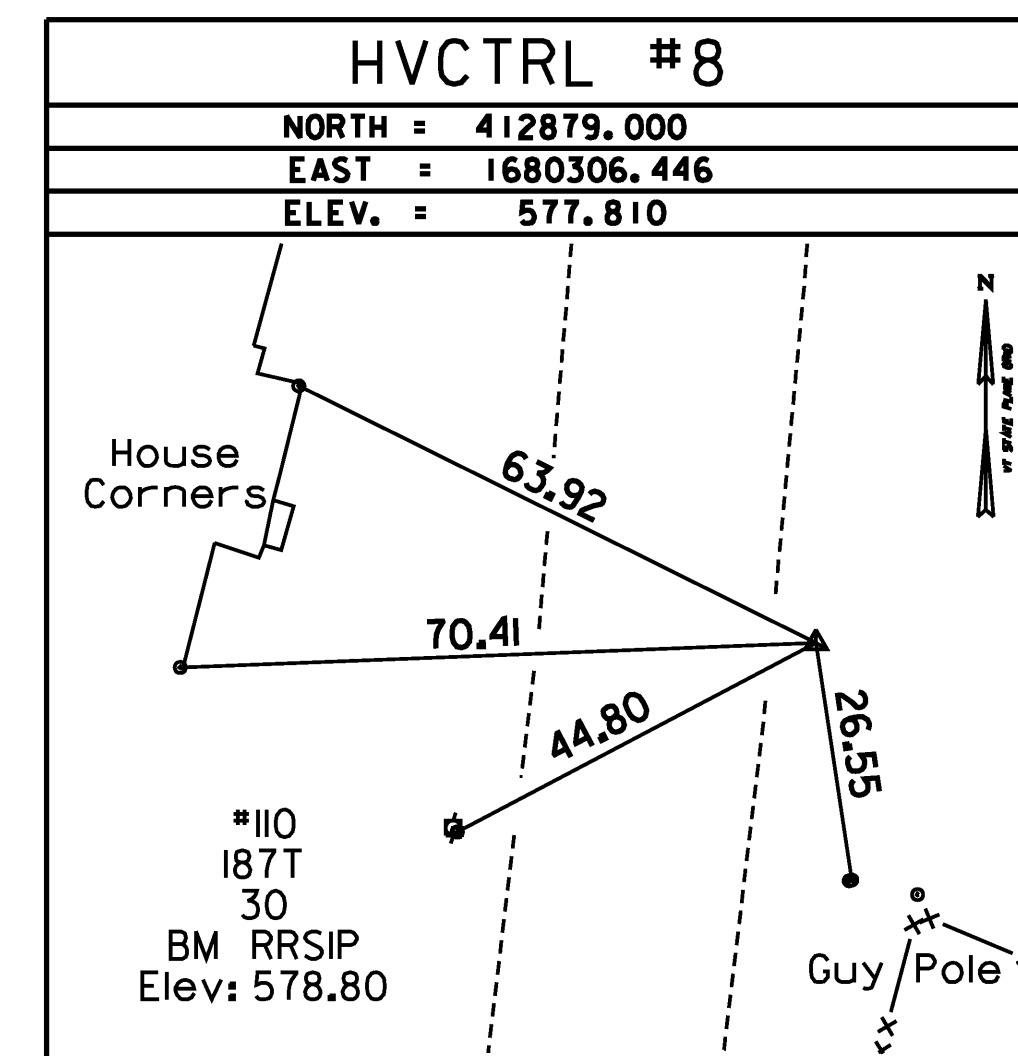
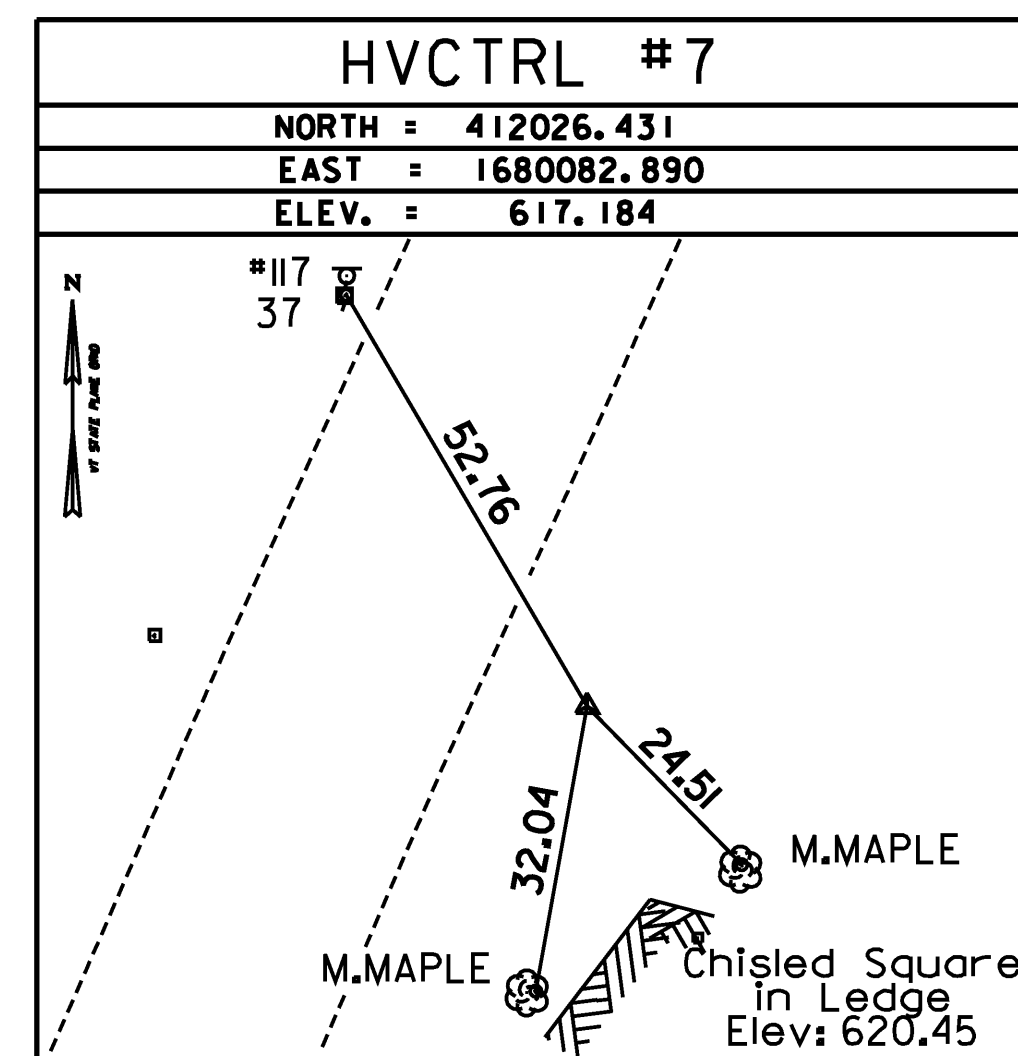
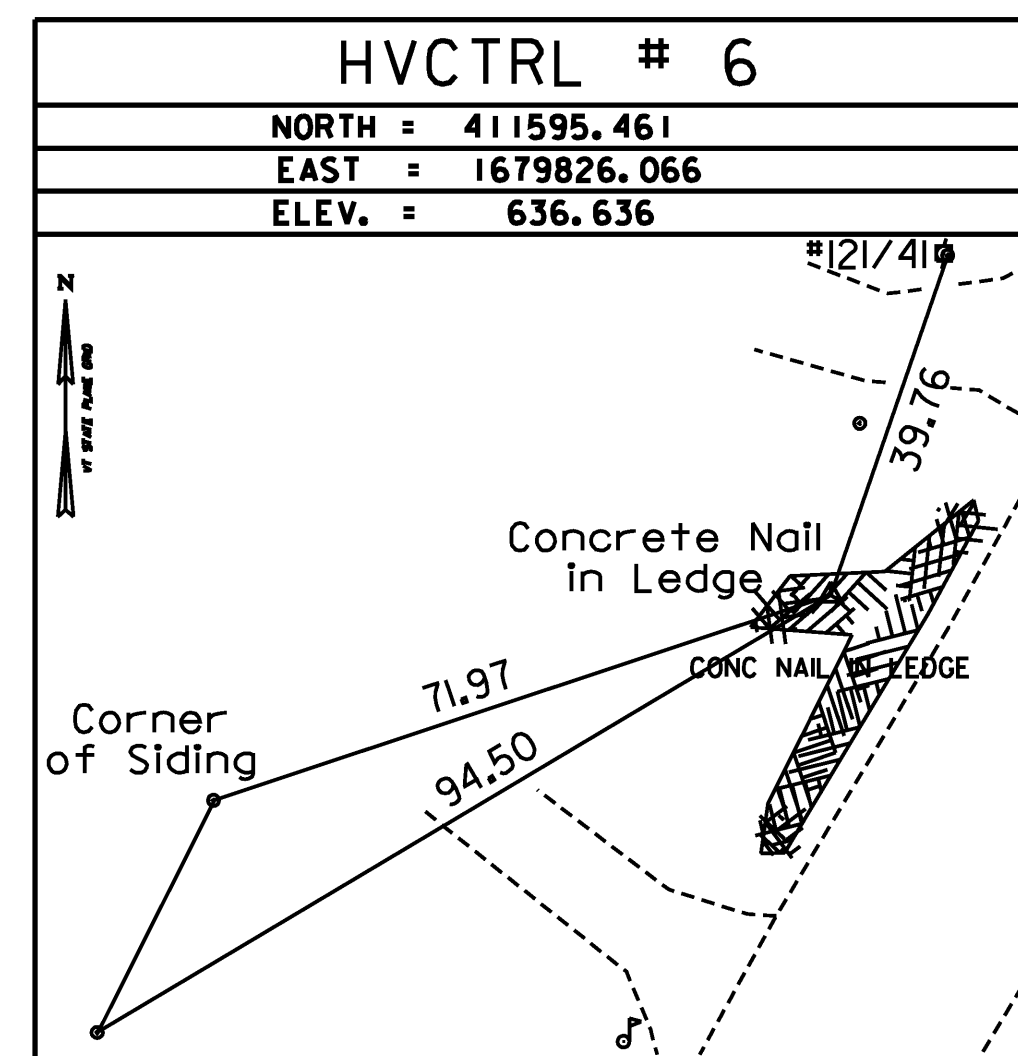
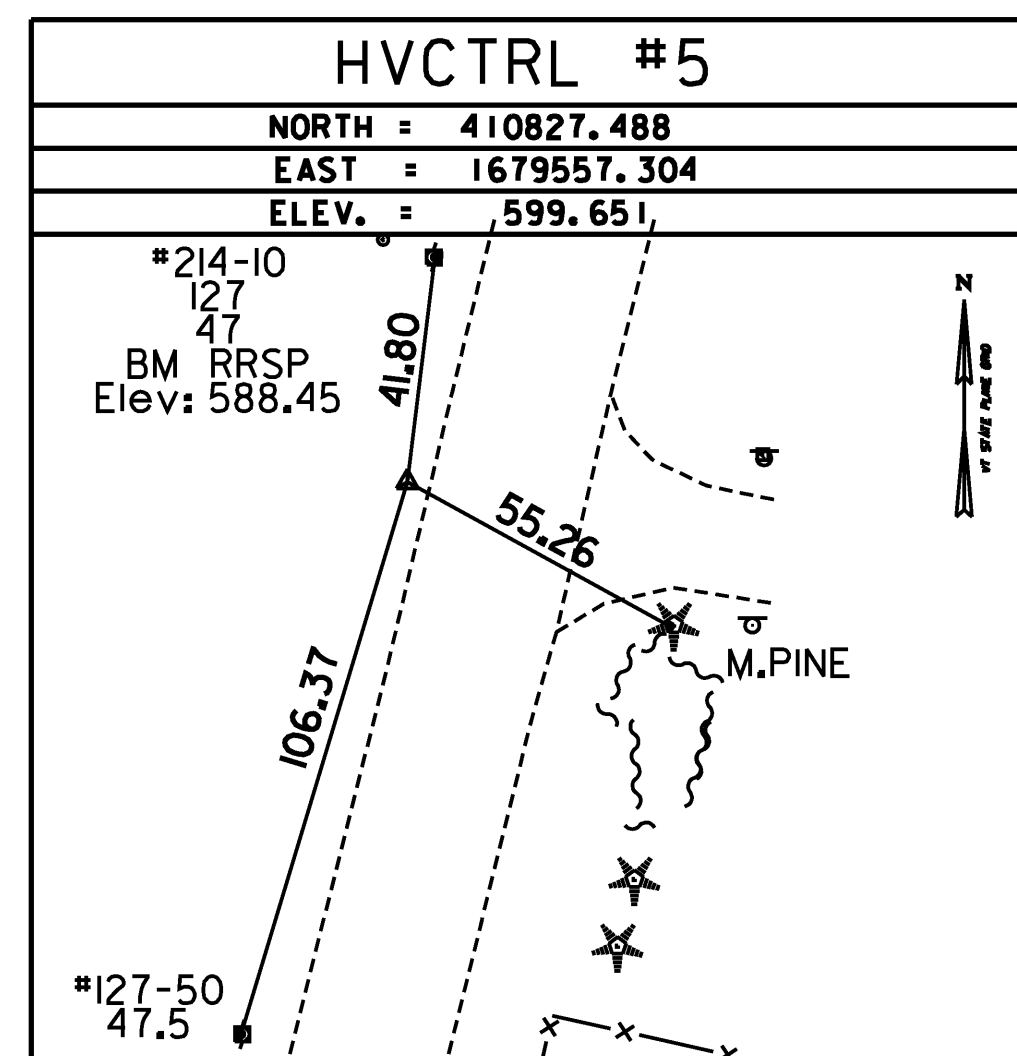
Described by Vermont Geodetic Survey (CHR)  
 General Location, Hartford, VT. The mark is located in the northeast tip of the grassy region formed by the I-91 northbound southeast edge of pavement and the paved truck inspection parking area at the I-91 north bound Hartford rest area, adjacent to mile marker 68.40. The mark is set about 1ft above the ground surface in the top of a massive sloping rock outcrop which projects about 3.3 ft above ground surface on the southeast side. It is 30.8 ft southeast of and about 4.9 ft lower than the I-91 northbound southeast edge of pavement, 23.3 ft west northwest of the truck inspection parking area west northwest edge of pavement, 49.5 ft southwest of lumen #10, 57 ft southwest of the center of a 24" square metal drain, 107.9 ft north northeast of of lumen #9, and 6.6 ft northwest of a fiberglass witness post.

**HVCTRL #2**

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 ELEV. = 480.797

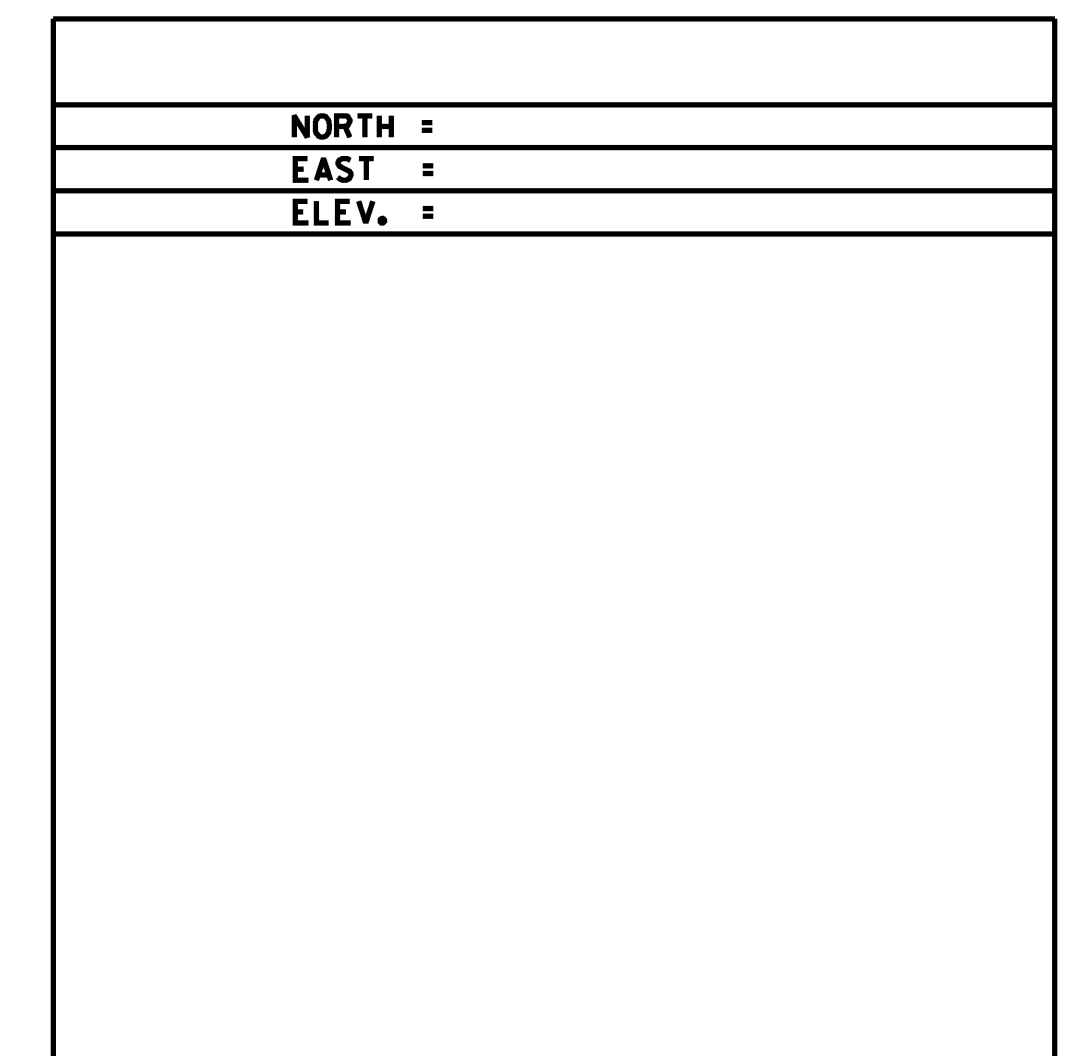
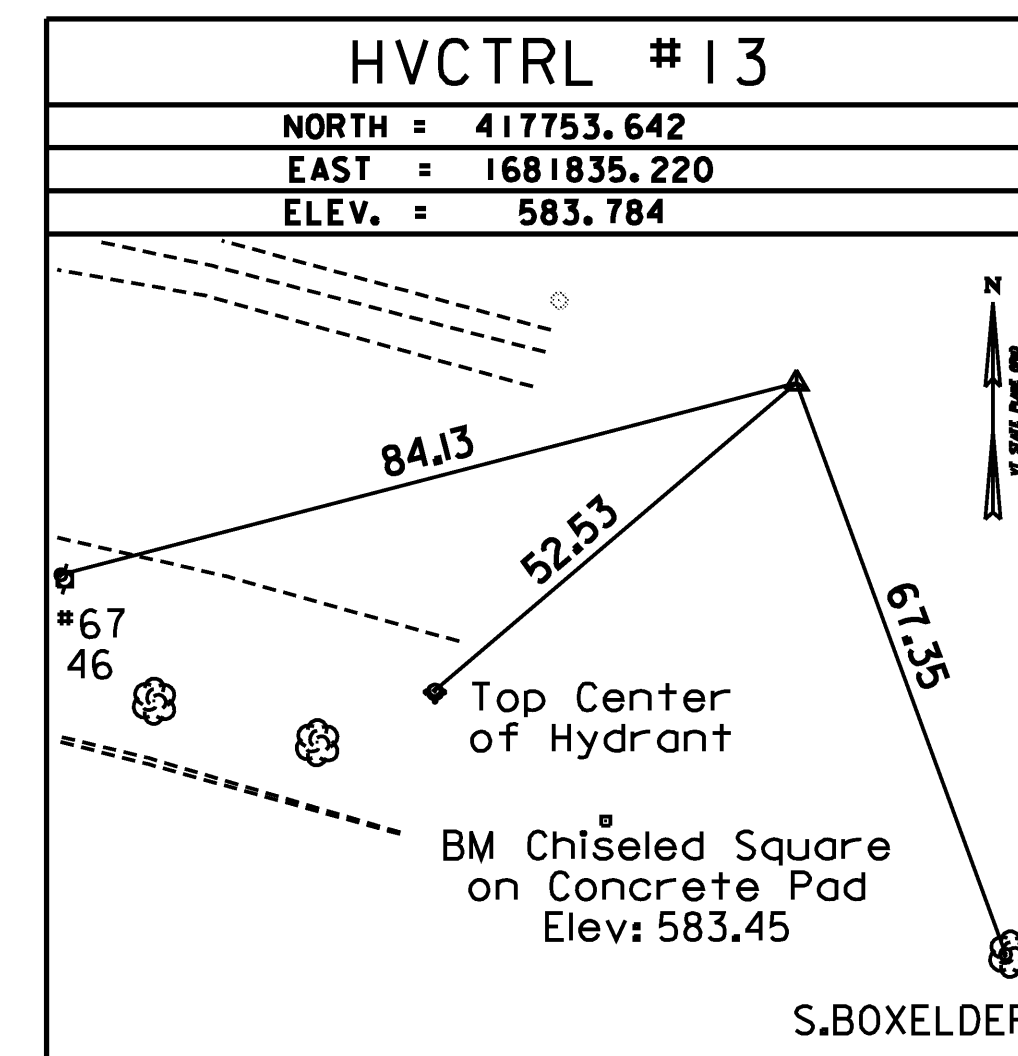
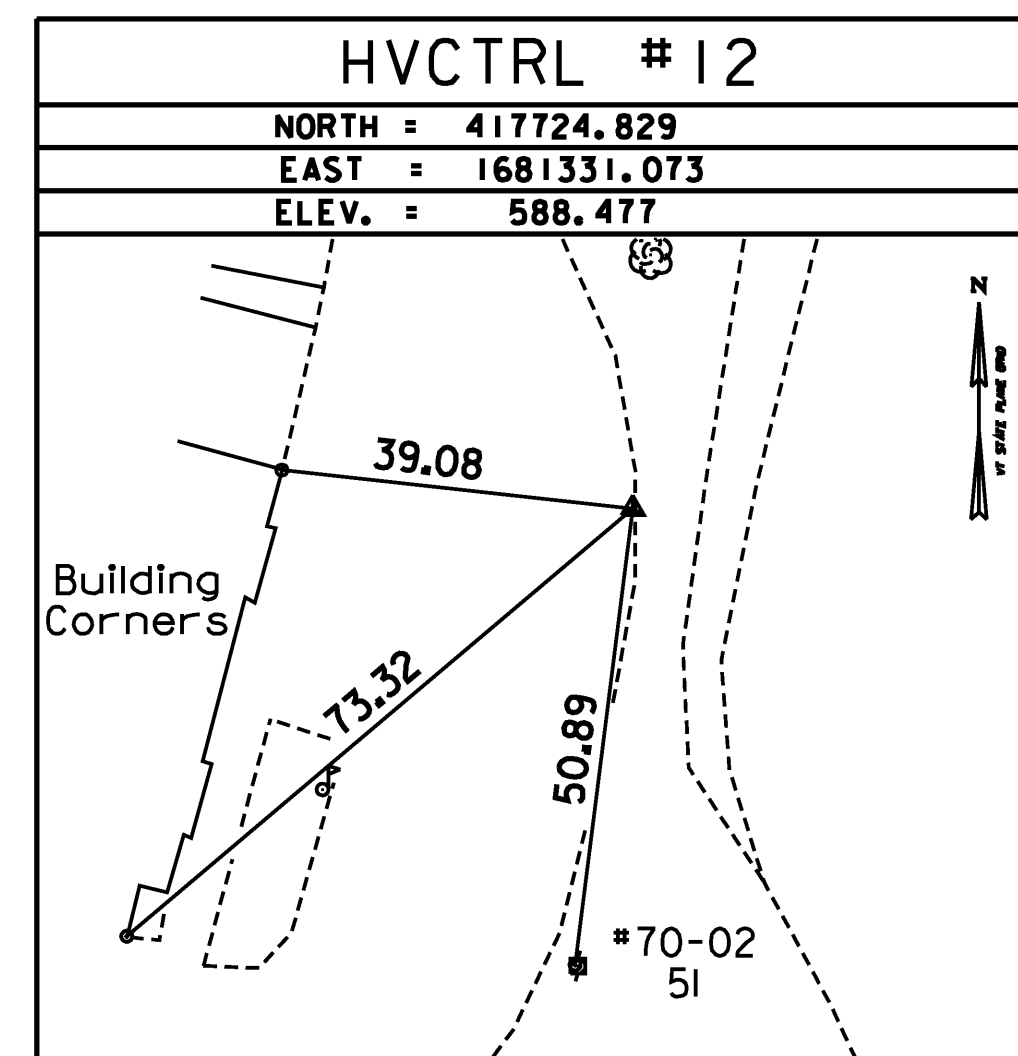
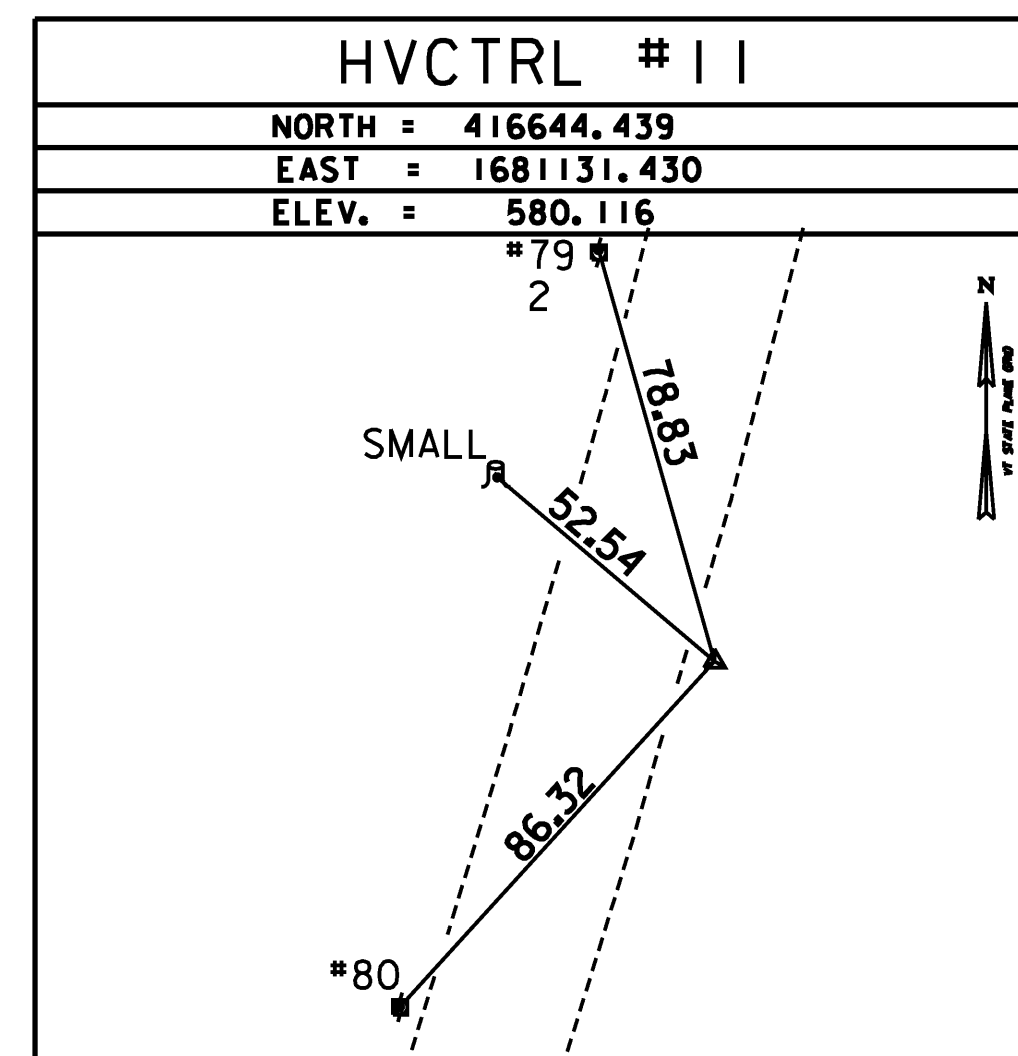
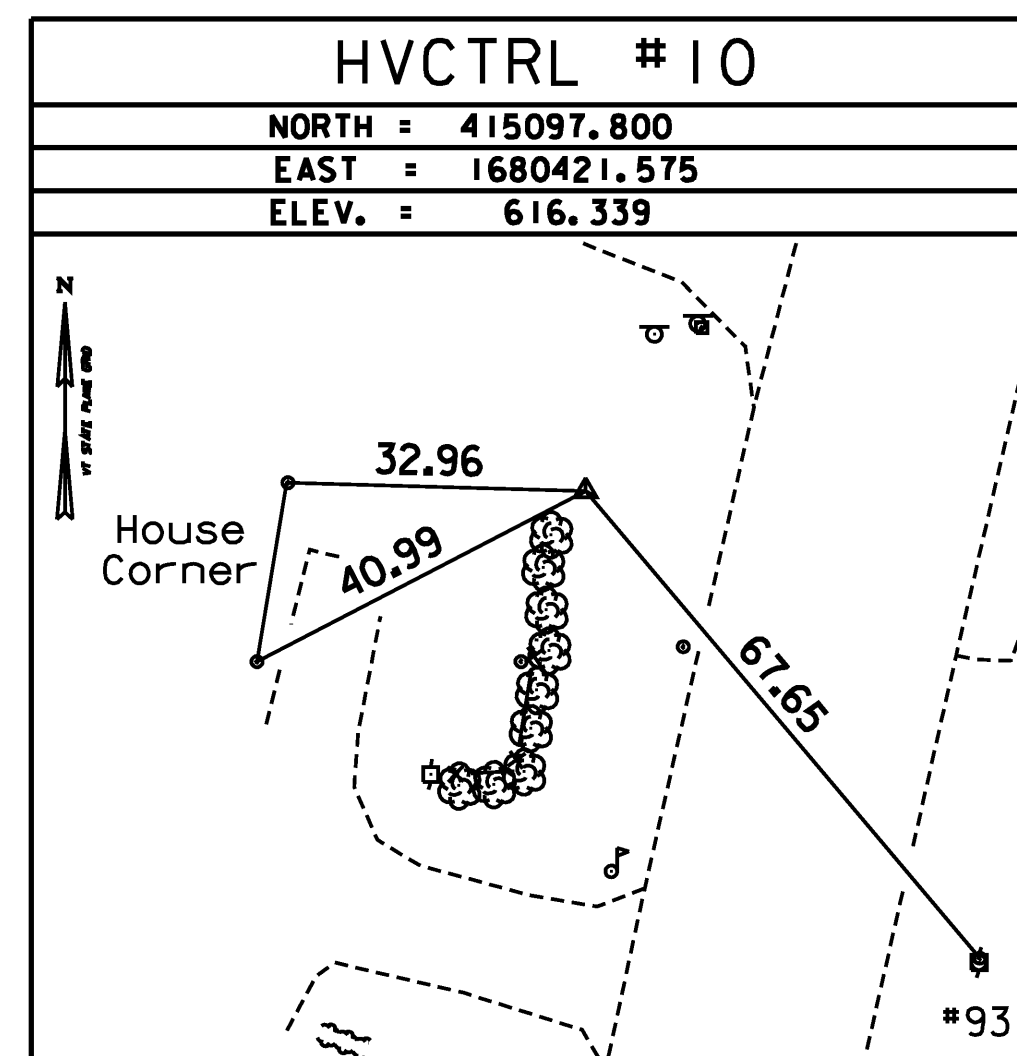
Described by Vermont Geodetic Survey (CHR)  
 General Location, Hartford, VT. To reach from the I-91 southbound bridge over I-89 southbound at exit 10 (I-91), go south along I-91 southbound for 1.5 mi. to the site of the mark on the left in the median, about 0.1 mi. southwest of the I-91 southbound Hartford Rest Area. The mark is set 4" below ground surface in the top of a 12" diameter concrete monument. It is 45.6 ft east of and about 3.3 ft higher than the I-91 southbound east edge of pavement, 88.6 ft west northwest of the I-91 northbound west northwest edge of pavement, 327.8 ft south southwest of the center of the east (outlet) end of a 24" diameter concrete culvert, and 1ft west of a fiberglass witness post.

TRAVERSE TIES



• Main Traverse Completed 12/13/06 by R. Gilman P.C. & S. Hisman

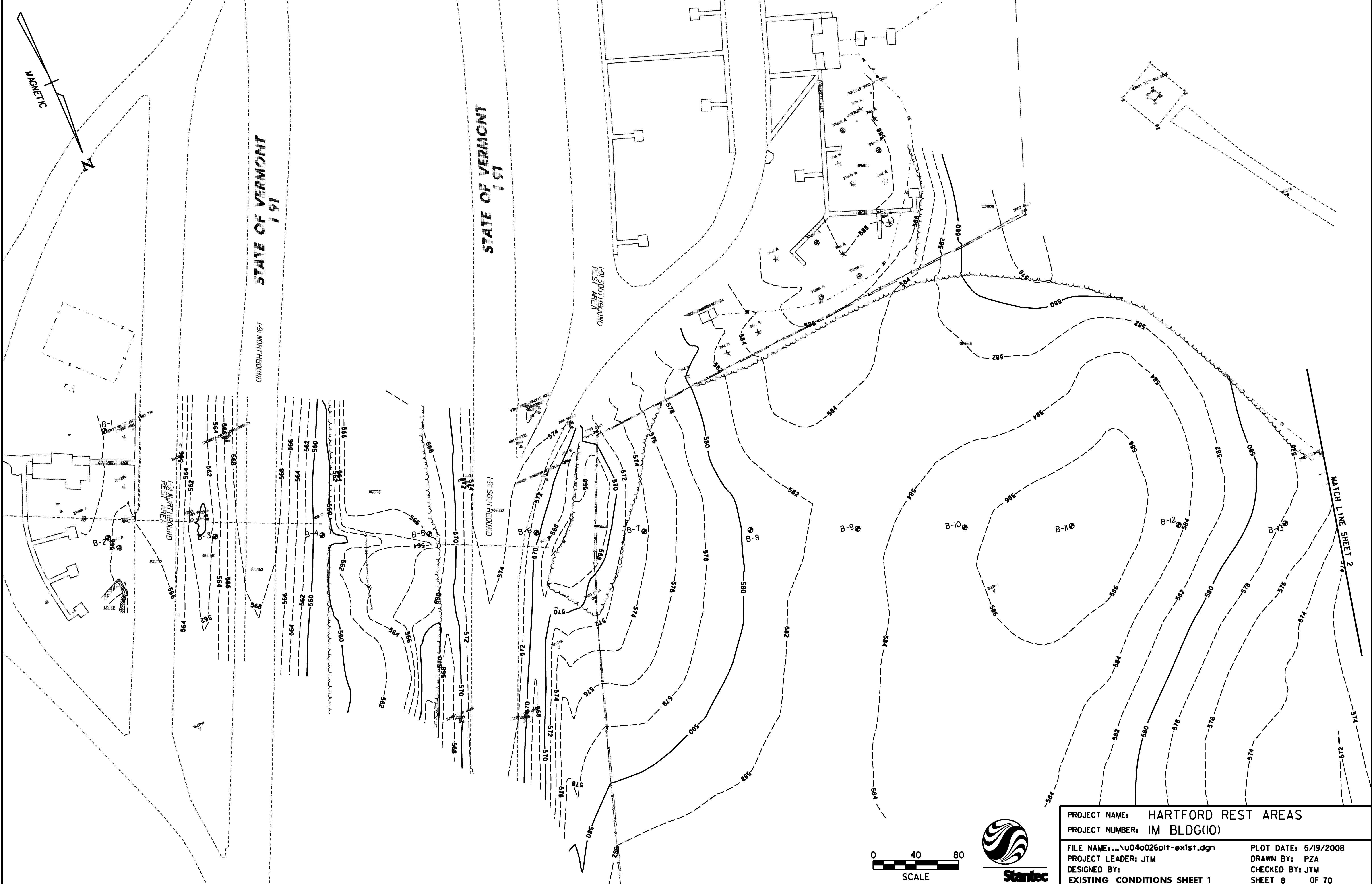
TRAVERSE TIES



DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83(CON)
ADJUSTMENT	COMPASS

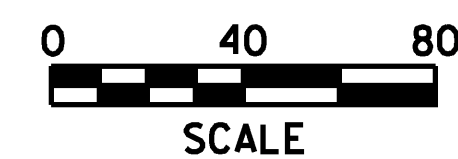
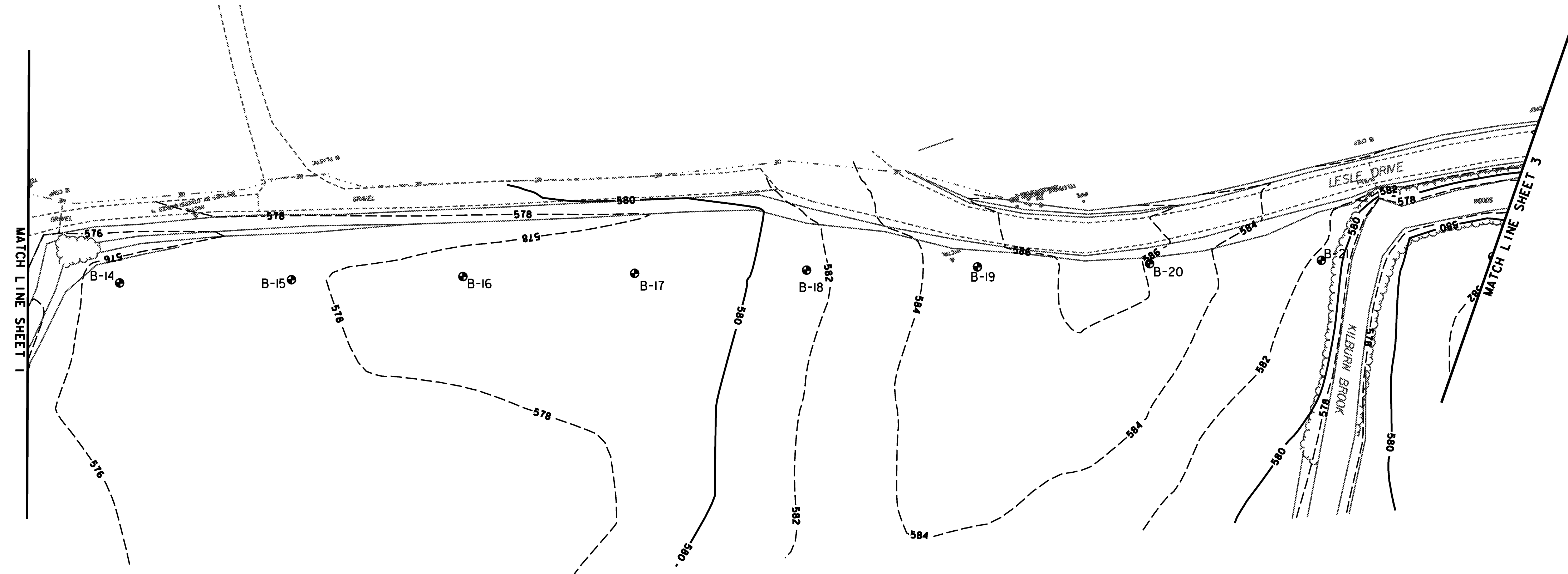
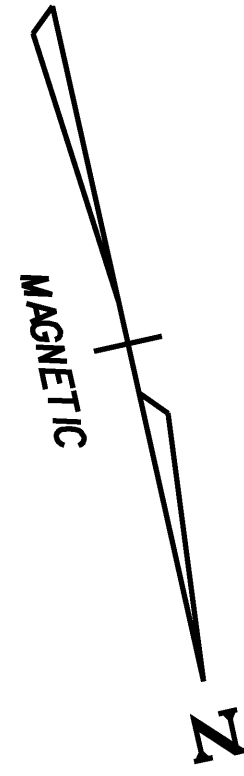


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PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	... \plot files\ x04026pit -t1.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	
HORIZONTAL & VERTICAL CONTROL	
DATE:	5/19/2008
DRAWN BY:	R. BULLOCK
CHECKED BY:	
SHEET	7 OF 70



PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...u04c026plt-ex1st.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	
EXISTING CONDITIONS SHEET 1	
PLOT DATE:	5/19/2008
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET 8	OF 70





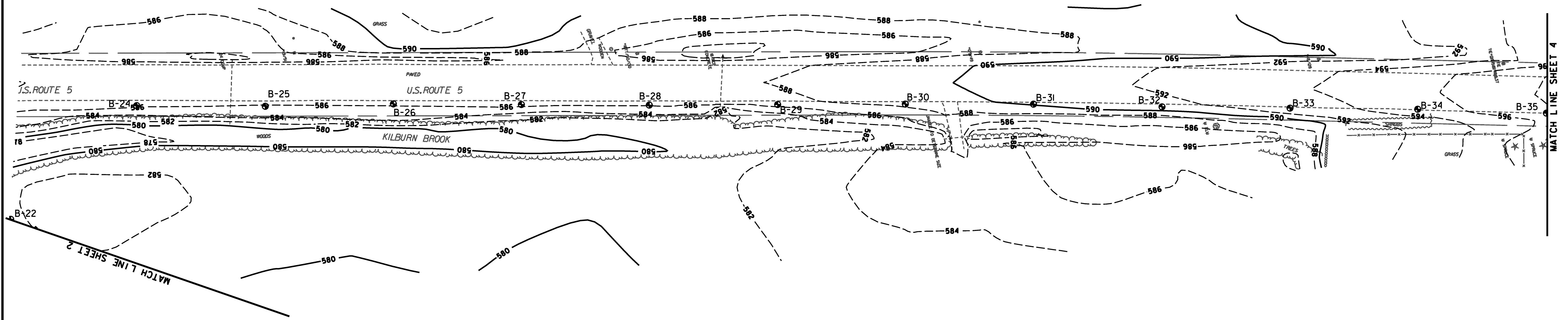
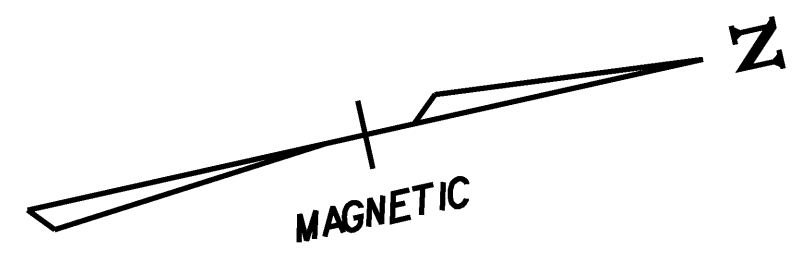
SCALE



PROJECT NAME: HARTFORD REST AREAS  
PROJECT NUMBER: IM BLDG(10)

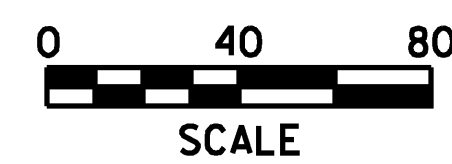
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PROJECT LEADER: JTM  
DESIGNED BY:  
EXISTING CONDITIONS SHEET 2

PLOT DATE: 5/19/2008  
DRAWN BY: PZA  
CHECKED BY: JTM  
SHEET 9 OF 70

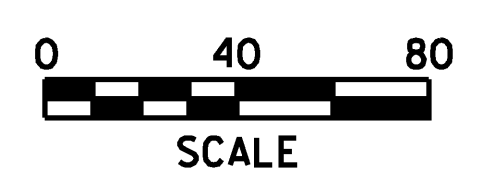
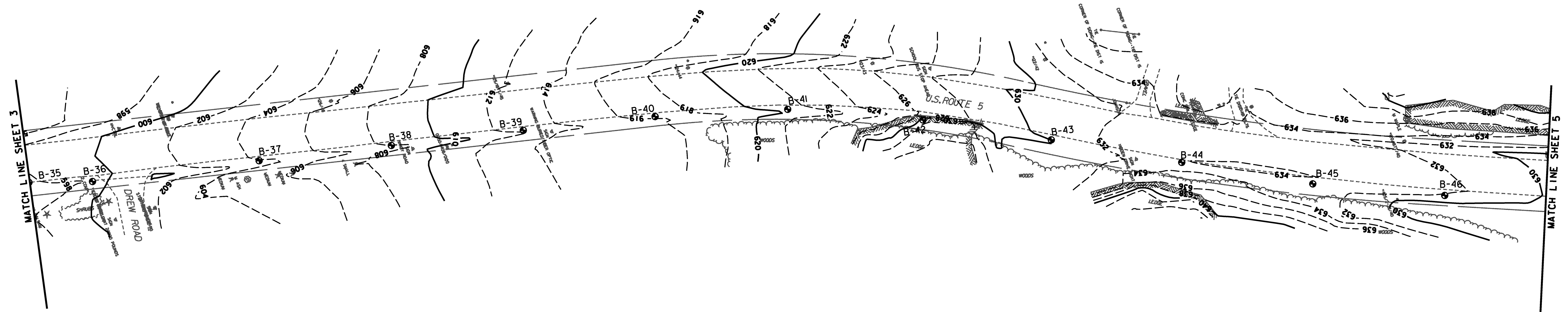
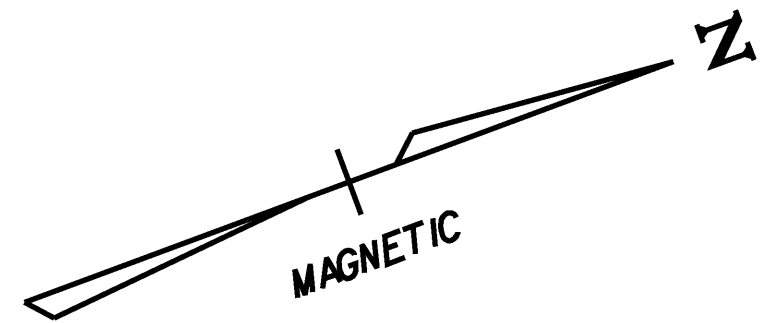


MATCH LINE SHEET 2

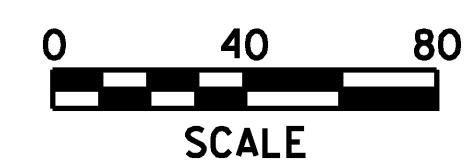
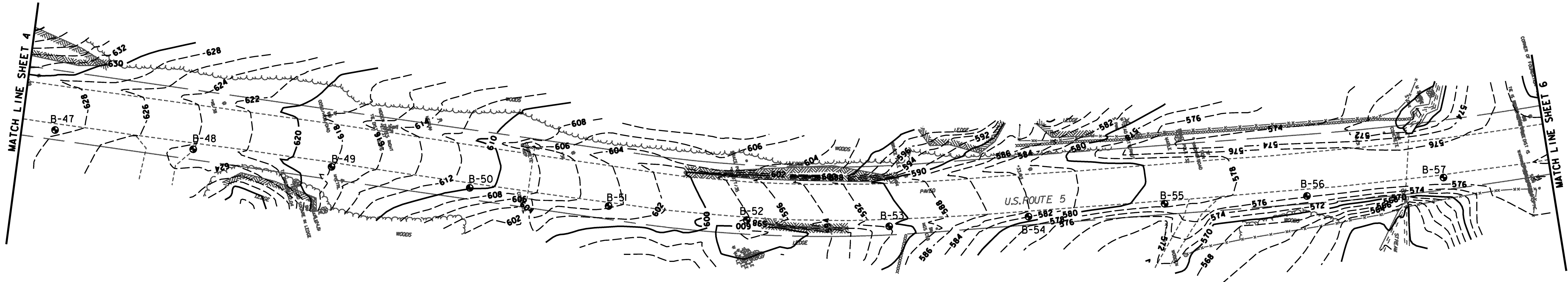
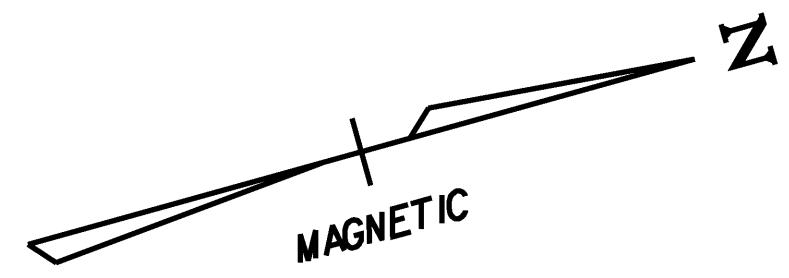
MATCH LINE SHEET 4



PROJECT NAME: HARTFORD REST AREAS	
PROJECT NUMBER: IM BLDG(10)	
FILE NAME: ...\\u04026pit-ex1st.dgn	PLOT DATE: 5/19/2008
PROJECT LEADER: JTM	DRAWN BY: PZA
DESIGNED BY:	CHECKED BY: JTM
EXISTING CONDITIONS SHEET 3	SHEET 10 OF 70



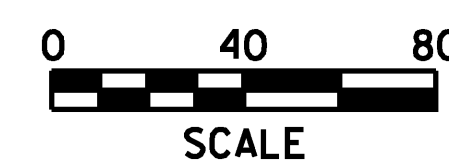
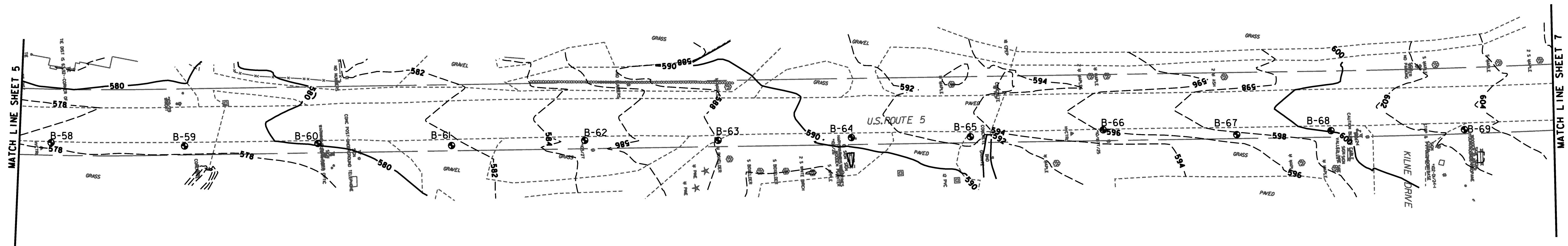
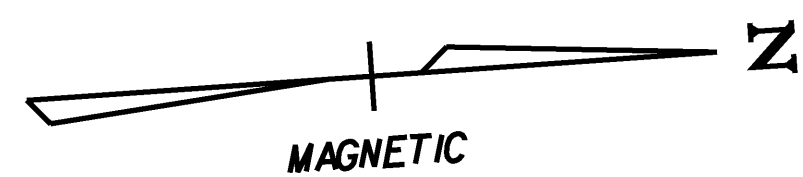
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PROJECT NUMBER:	IM BLDG(10)	PROJECT LEADER:	JTM	DRAWN BY:	PZA
		DESIGNED BY:		CHECKED BY:	JTM
		EXISTING CONDITIONS SHEET 4		SHEET 11	OF 70



SCALE



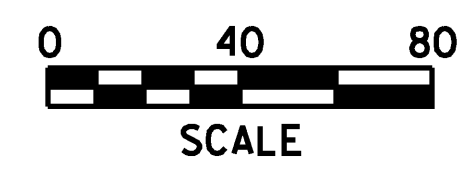
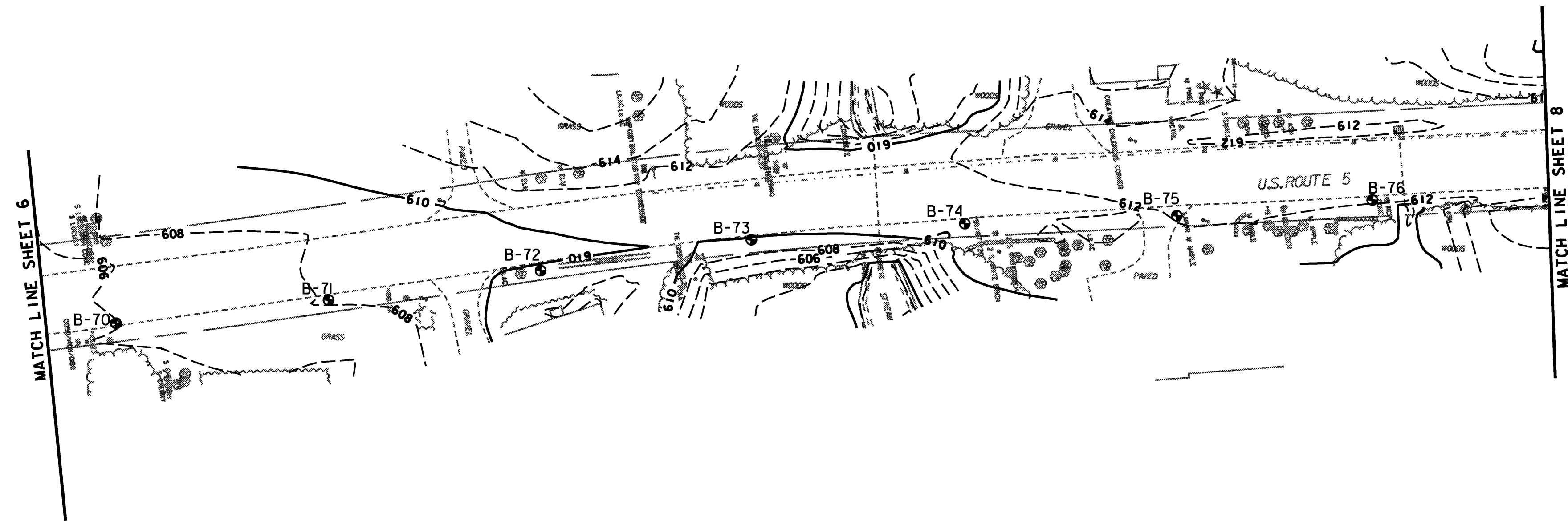
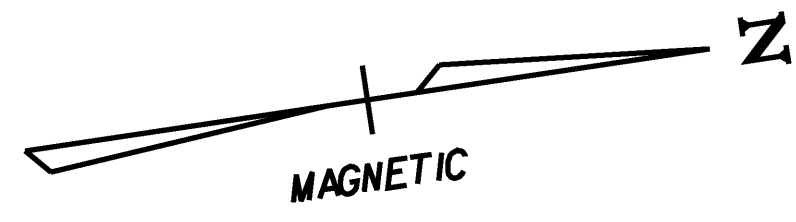
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PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...u04c026plt-ex1st.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	
EXISTING CONDITIONS SHEET 5	
PLOT DATE:	5/19/2008
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET 12	OF 70



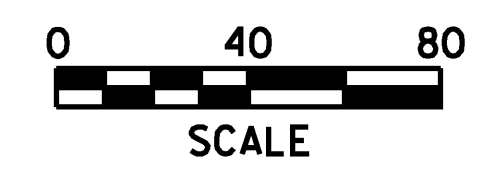
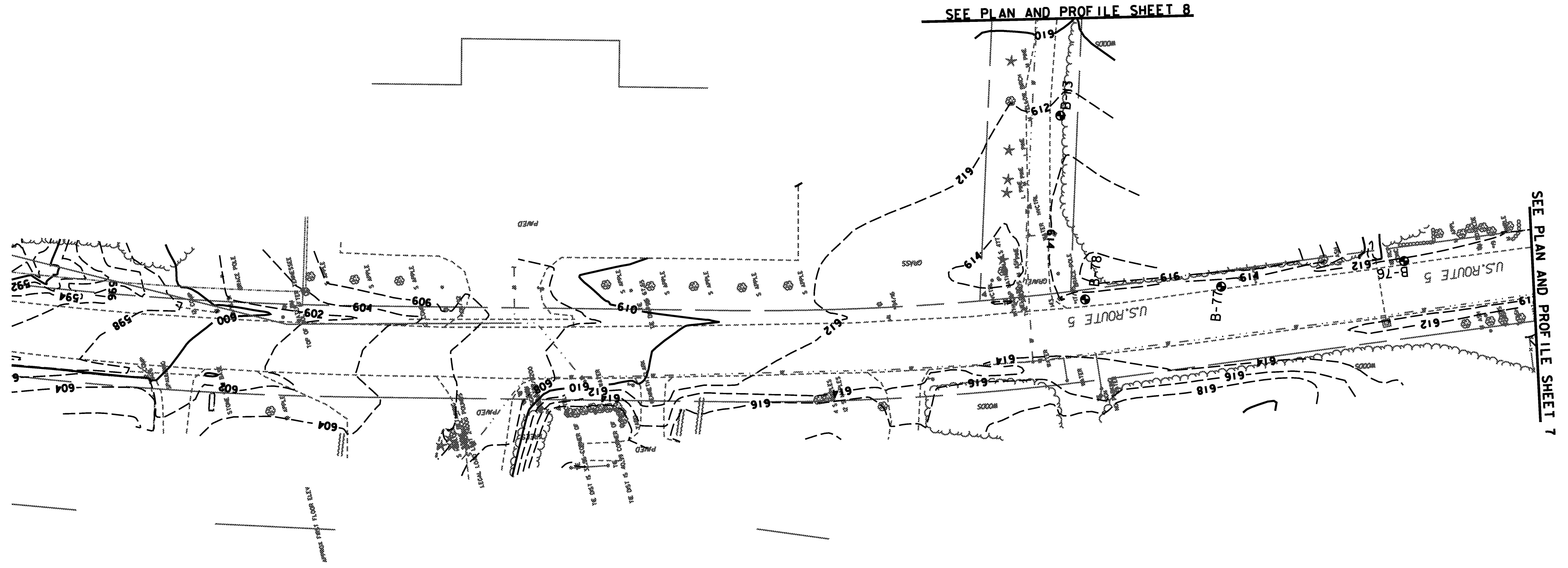
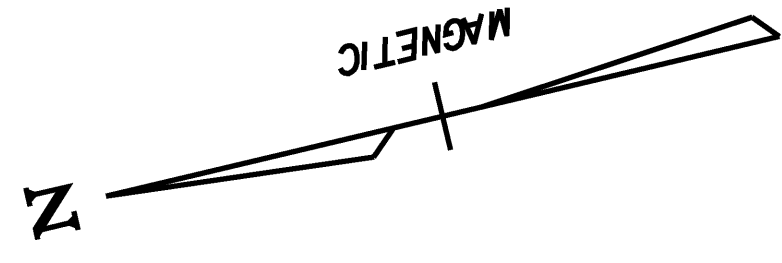
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PROJECT NUMBER: IM BLDG(10)

FILE NAME: ...\\u04c026plt-ex1st.dgn  
PROJECT LEADER: JTM  
DESIGNED BY:  
EXISTING CONDITIONS SHEET 6

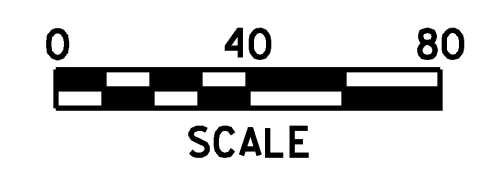
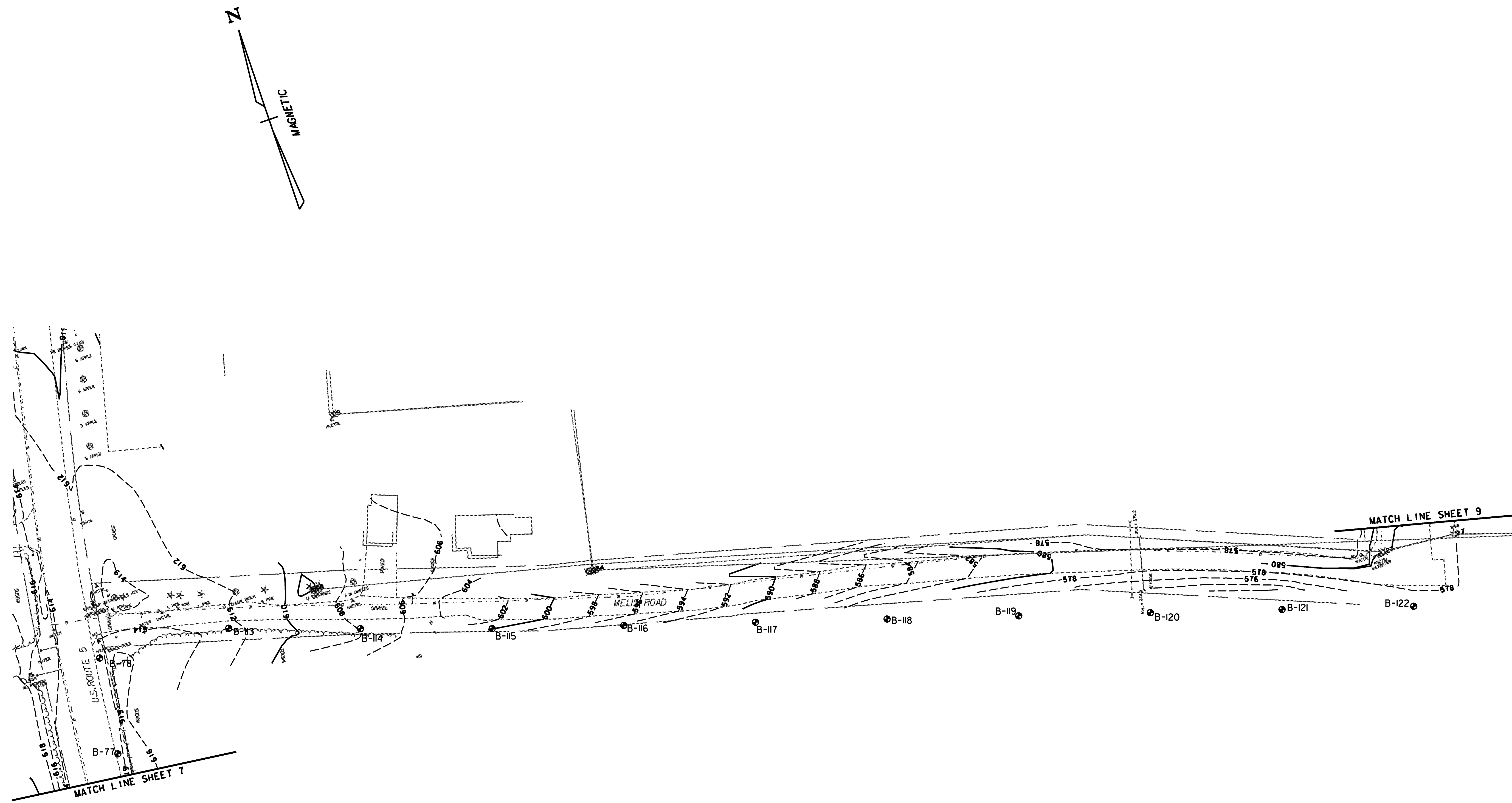
PLOT DATE: 5/19/2008  
DRAWN BY: PZA  
CHECKED BY: JTM  
SHEET 13 OF 70



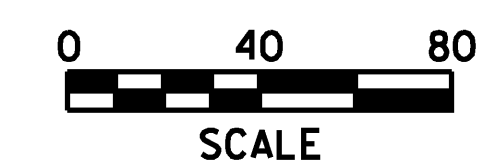
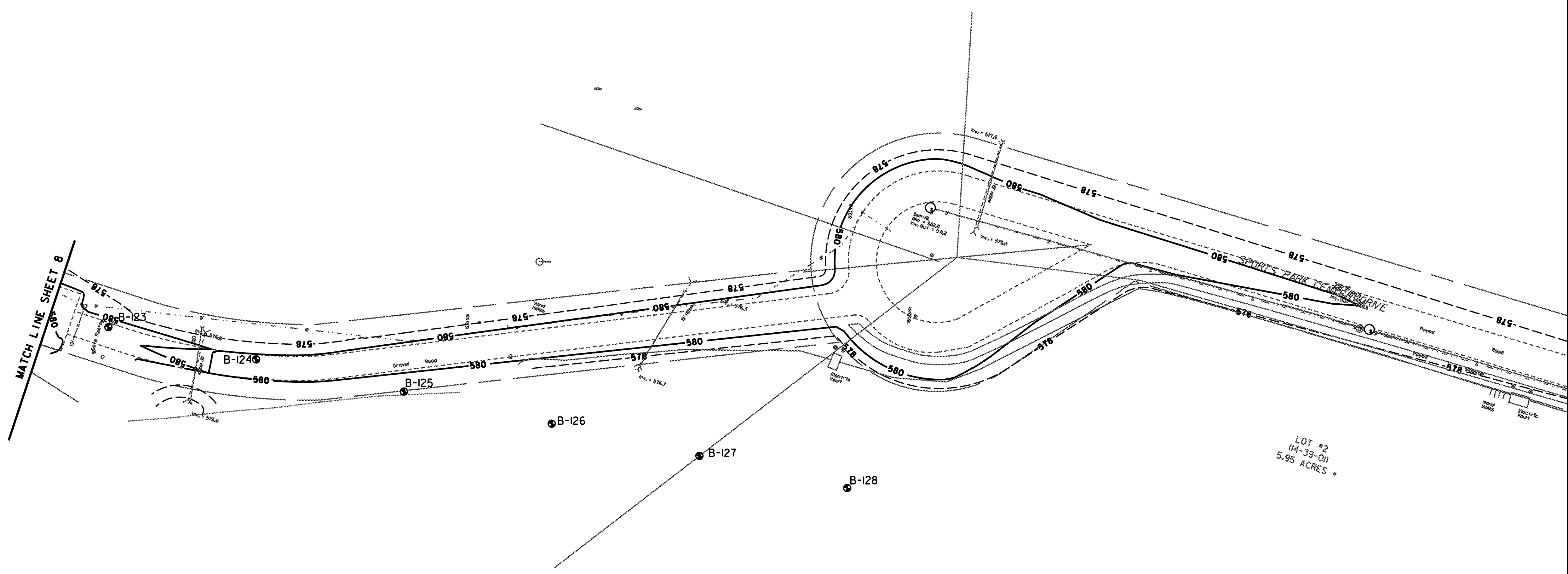
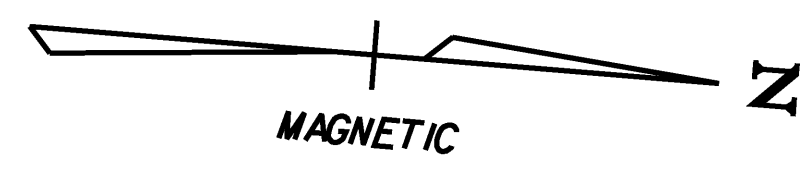
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PROJECT NUMBER: IM BLDG(10)	DRAWN BY: PZA
FILE NAME: ...\\u04026plt-ex1st.dgn	DESIGNED BY: JTM
PROJECT LEADER: JTM	CHECKED BY: JTM
EXISTING CONDITIONS SHEET 7	SHEET 14 OF 70



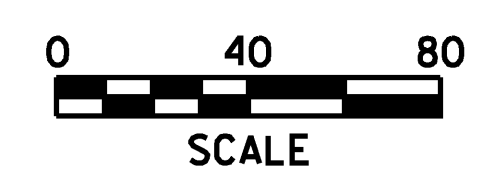
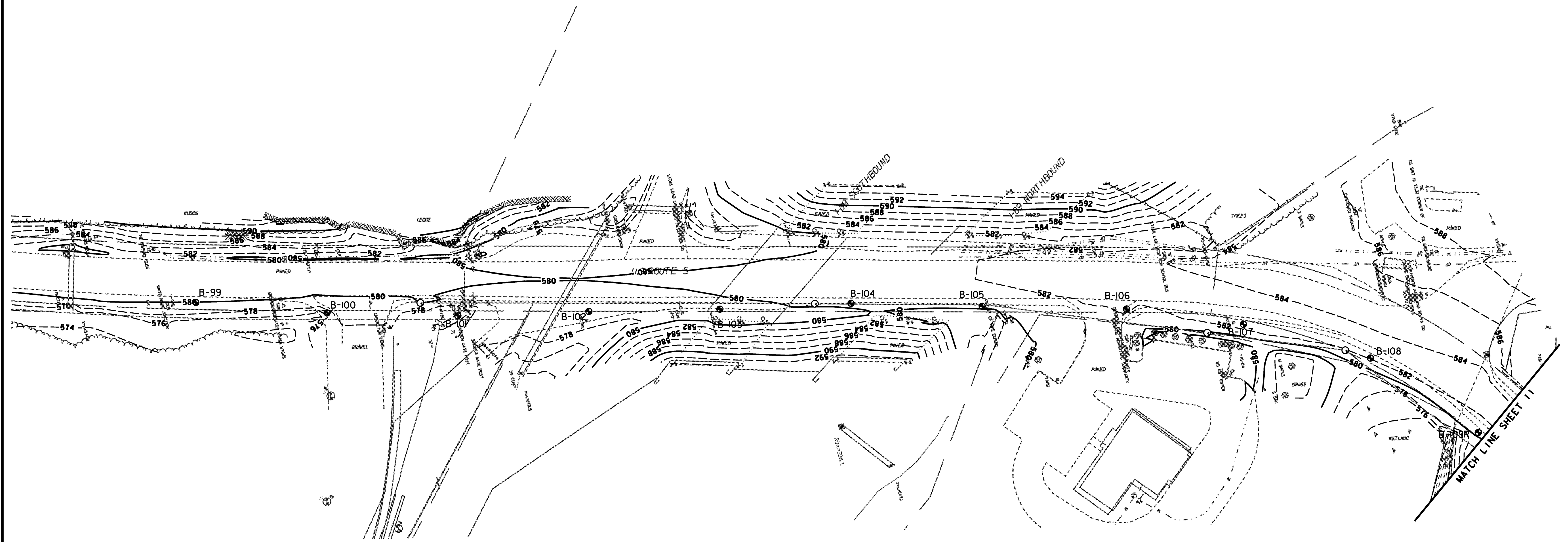
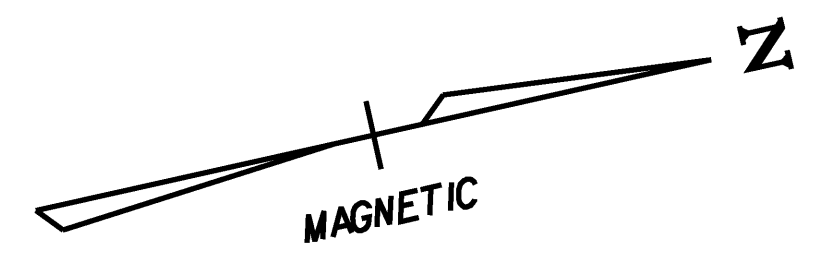
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PROJECT NUMBER: IM BLDG(10)	DRAWN BY: JSK
FILE NAME: ...u04c026p1t-ex1st.dgn	CHECKED BY: JTM
PROJECT LEADER: JTM	SHEET 15 OF 70
DESIGNED BY: MEHP	
EXISTING CONDITIONS SHEET 7A	



PROJECT NAME: HARTFORD REST AREAS	
PROJECT NUMBER: IM BLDG(10)	
FILE NAME: ...u04c026plt-ex1st.dgn	PLOT DATE: 5/19/2008
PROJECT LEADER: JTM	DRAWN BY: PZA
DESIGNED BY:	CHECKED BY: JTM
EXISTING CONDITIONS SHEET 8	SHEET 16 OF 70



PROJECT NAME: HARTFORD REST AREAS	PLOT DATE: 5/19/2008
PROJECT NUMBER: IM BLDG(10)	DRAWN BY: PZA
FILE NAME: ...\\u04c026p1t-ex1st.dgn	CHECKED BY: JTM
PROJECT LEADER: JTM	SHEET 17 OF 70
DESIGNED BY:	
EXISTING CONDITIONS SHEET 9	



PROJECT NAME:	HARTFORD REST AREAS	PLOT DATE:	5/19/2008
PROJECT NUMBER:	IM BLDG(10)	DRAWN BY:	PZA
FILE NAME:	...u04c026plt-ex1st.dgn	CHECKED BY:	JTM
PROJECT LEADER:	JTM	EXISTING CONDITIONS SHEET	10
DESIGNED BY:		SHEET	18 OF 70



# EROSION PREVENTION AND SEDIMENT CONTROL NARRATIVE

## PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO PROVIDE SEWER SERVICE TO THE I-91 NORTHBOUND AND SOUTHBOUND HARTFORD REST AREAS AND INVOLVES THE INSTALLATION OF PUMP STATIONS, FORCE MAINS AND GRAVITY SEWERS FROM THE REST AREAS TO THE HARTFORD WASTEWATER COLLECTION SYSTEM. WASTEWATER WILL FIRST BE PUMPED FROM THE I-91 NORTHBOUND REST AREA TO THE SOUTHBOUND REST AREA. A SMALL BELOW GRADE PUMP STATION WILL BE INSTALLED AT THE NORTHBOUND REST AREA AND A FORCE MAIN WILL BE INSTALLED BENEATH THE INTERSTATE VIA DIRECTIONAL BORING, A TRENCHLESS PIPE INSTALLATION TECHNIQUE. ANOTHER SMALL BELOW GRADE PUMP STATION WILL BE INSTALLED AT THE SOUTHBOUND REST AREA AND FLOWS FROM THE TWO PUMP STATIONS WILL COMBINE IN A MANHOLE LOCATED ON THE TOWN OF HARTFORD'S PROPERTY ADJACENT TO THE SOUTHBOUND REST AREA. VARIOUS RECREATION FACILITIES ARE PROPOSED ON THIS PROPERTY SO THE ROUTE OF THE PROPOSED SEWER WAS CHOSEN TO ACCOMMODATE THESE FACILITIES. WASTEWATER WILL FLOW ACROSS THIS PROPERTY VIA A NEW GRAVITY SEWER TO A PROPOSED PUMP STATION WHICH WILL BE LOCATED ON THE TOWN'S PROPERTY ADJACENT TO ROUTE 5. A NEW FORCE MAIN WILL BE INSTALLED ALONG THE ROUTE 5 RIGHT OF WAY TO A HIGH POINT NEAR MELISI ROAD. A NEW GRAVITY SEWER WILL BE INSTALLED ALONG MELISI ROAD TO THE GRAVEL 'EMERGENCY ENTRANCE' AT THE SOUTH SIDE OF THE SPORTSPARK FACILITY (A PROPOSED INDUSTRIAL PARK WHICH IS IN THE PROCESS OF BEING CONSTRUCTED). THE NEW SEWER WILL BE INSTALLED ALONG THE 'EMERGENCY ENTRANCE' AND CONNECT TO THE EXISTING SPORTS PARK GRAVITY SEWER SYSTEM.

IN ADDITION, A NEW FORCE MAIN WILL BE INSTALLED FROM THE END OF THE SPORTS PARK FORCE MAIN, AT THE NORTH SIDE OF THE SPORTS PARK FACILITY, ALONG ROUTE 5 BENEATH THE I-89 OVERPASS TO A HIGH POINT ALONG ROUTE 5. FROM HERE, GRAVITY SEWER WILL BE INSTALLED TO THE HARTFORD WASTEWATER COLLECTION SYSTEM.

NOTE: AREA OF DISTURBANCE SHALL INCLUDE LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, INCLUDING ANY WASTE, STAGING AND BORROW AREAS WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS.

THE TOTAL DISTURBED AREA OF THIS PROJECT WILL BE APPROXIMATELY 1.93 ACRES.

## SITE INVENTORY

### OFF-SITE DRAINAGE CHARACTERISTICS

AS THIS PROJECT IS A LINEAR PROJECT, MANY DIFFERENT CHARACTERISTICS ARE PRESENT ALONG THE PROJECT ROUTE. THE REST AREAS ARE LOCATED ALONG I-91 WHICH DRAINS VIA A COMBINATION OF CULVERTS AND DRAINAGE SWALES. THE TOWN OF HARTFORD'S PROPERTY ADJACENT TO THE SOUTHBOUND REST AREA IS A RELATIVELY FLAT OVERGROWN FIELD. ROUTE 5 BETWEEN THE TOWN'S PROPERTY AND MELISI ROAD IS EXTREMELY HILLY AND DRAINS OVER LAND TO A SERIES OF SMALL STREAMS WHICH THE ROADWAY CROSSES. ROUTE 5 BETWEEN THE SPORTS PARK AND THE CONNECTION TO THE HARTFORD WASTEWATER CONNECTION SYSTEM PROCEEDS UPHILL AS IT CROSSES BENEATH I-89, THEN LEVELS OFF TO A RELATIVELY FLAT GRADE. DRAINAGE IS CONVEYED FROM THIS AREA VIA DRAINAGE DITCHES TO A SMALL STREAM THAT THE ROADWAY CROSSES.

### DRAINAGE, WATERWAYS, BODIES OF WATER

THIS PROJECT INVOLVES THE CROSSING OF THE KILBURN BROOK AND SEVERAL UNNAMED TRIBUTARIES ALONG ROUTE 5. THE STREAM CROSSINGS ALL OCCUR AT EXISTING CULVERTS WITH THE EXCEPTION OF A NEW CULVERT WHICH WILL BE INSTALLED AT THE ROUTE 5 PUMP STATION.

### TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES

MANY DIFFERENT TOPOGRAPHIC CONDITIONS ARE ENCOUNTERED ALONG THE PROJECT ROUTE. AT THE REST AREAS, EXISTING BUILDINGS ARE PRESENT WHICH WILL BE EXPANDED IN THE FUTURE. THE TOWN OF HARTFORD'S PROPERTY ADJACENT TO THE SOUTHBOUND REST AREA IS AN OVERGROWN GRASSY FIELD BUT RECREATION FACILITIES ARE PLANNED HERE IN THE FUTURE. ROUTE 5 IS AN EXISTING PAVED ROADWAY THAT IS EXTREMELY HILLY IN SECTIONS. ALONG THE PROJECT ROUTE, PROPERTIES ADJACENT TO THE ROADWAY RANGE FROM SMALL FARMS, TO RESIDENTIAL AREAS, TO A COMMERCIAL AREA WHERE THE CONNECTION TO THE HARTFORD WASTEWATER COLLECTION SYSTEM IS MADE.

### VEGETATION

THE MAJORITY OF THIS PROJECT IS LOCATED WITHIN EXISTING ROADWAY SURFACES AND RIGHT OF WAYS SO LITTLE EXISTING VEGETATION WILL BE IMPACTED. THE TOWN OF HARTFORD'S PROPERTY ADJACENT TO THE SOUTHBOUND REST AREA IS PRIMARILY AN OVERGROWN GRASSY FIELD.

### SOILS

AS THIS IS A LINEAR PROJECT, MANY DIFFERENT SOIL TYPES WILL BE ENCOUNTERED. SOILS RANGE FROM THE RAYNHAM SILT LOAM LOCATED ON THE TOWN OF HARTFORD'S PROPERTY TO THE EXTREMELY ROCKY GLOVER-VERSHIRE COMPLEX SOILS LOCATED ALONG PORTIONS OF ROUTE 5.

### SENSITIVE RESOURCE AREAS

THERE ARE SEVERAL CLASS II AND CLASS III WETLANDS LOCATED ADJACENT TO THE PROJECT BUT THESE WETLANDS ARE EITHER FAR ENOUGH FROM THE PROJECT THAT THEY WON'T BE IMPACTED OR THEY WILL BE PROTECTED BY APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES.

## RISK EVALUATION

### RISK DETERMINATION

THIS PROJECT HAS BEEN DETERMINED TO BE LOW RISK BASED ON THE FOLLOWING CONCLUSIONS. BASIC RISK EVALUATION RESULTED IN THE REQUIREMENT FOR A MORE DETAILED ANALYSIS TO DETERMINE RISK AND RESULTED IN THE FOLLOWING REQUIREMENTS:

1. IMPLEMENT THE LOW RISK SITE HANDBOOK FOR EROSION AND SEDIMENT CONTROL. THE HANDBOOK MUST BE KEPT ON SITE AT ALL TIMES.
2. ALL AREAS MUST HAVE TEMPORARY OR FINAL STABILIZATION WITHIN 7 DAYS OF INITIAL DISTURBANCE AND BE STABILIZED THEREAFTER ON A DAILY BASIS. THE FOLLOWING EXCEPTIONS APPLY:
  - a. STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN 24 HOURS AND NO PRECIPITATION IS FORECAST FOR THE NEXT 24 HOURS.
  - b. STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION WITH A DEPTH OF 2 FEET OR GREATER.
3. NO MORE THAN 2 ACRES OF LAND SHALL BE DISTURBED AT ONE TIME.
4. INSPECTION SHALL BE PERFORMED AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A PRECIPITATION EVENT RESULTING IN THE DISCHARGE OF STORMWATER FROM THE CONSTRUCTION SITE.
5. IF THERE IS A DISCHARGE OF VISIBLY DISCOLORED STORMWATER FROM THE CONSTRUCTION SITE OR FROM THE CONSTRUCTION SITE TO WATERS OF THE STATE, THE PERMITTEE SHALL TAKE IMMEDIATE CORRECTIVE ACTION.
6. IF, AFTER COMPLETING CORRECTIVE ACTION, THERE CONTINUES TO BE A DISCHARGE OF SEDIMENT FROM THE CONSTRUCTION SITE TO WATERS OF THE STATE, THE PERMITTEE SHALL NOTIFY D.E.C. BY SUBMITTING A REPORT WITHIN 72 HOURS OF THE DISCHARGE.

### RISK RE-EVALUATION

SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN A POTENTIAL CHANGE IN THE RISK THEN THE SELECTED CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL PERMITTING WITH VANR VIA RE-FILING OF THE REQUIRED MATERIALS UNDER THE CONSTRUCTION GENERAL PERMIT PROCESS.

## EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE WORK OUTLINED IN THIS NARRATIVE CONSISTS OF APPLYING MEASURES THROUGHOUT THE LIFE OF THE PROJECT MINIMIZING SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES AND OTHER POLLUTION PREVENTION CONTROLS.

EMPLOY TEMPORARY STABILIZATION PRACTICES IN INCREMENTAL STAGES AS CONSTRUCTION PROCEEDS. ADDITIONAL MEASURES MAY BE NEEDED DUE TO THE PHASING OF THE PROJECT AND AS DIRECTED BY THE ENGINEER. PREVENTING INITIAL SOIL EROSION IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. THEREFORE, STABILIZE ALL DISTURBED AREAS PROMPTLY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED. MAINTAINING VEGETATIVE BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE. (REFER TO THE LOW RISK SITE HANDBOOK, PERMIT REQUIREMENTS AND APPROPRIATE EROSION CONTROL PLAN AND DETAIL SHEETS FOR EACH PRACTICE REQUIRED ON THE PROJECT TO INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING)

### MARK SITE BOUNDARIES

BOUNDARIES ARE TO BE MARKED WITH PROJECT DEMARCATION FENCE PRIOR TO CONSTRUCTION

### STABILIZE CONSTRUCTION EXIT

STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED PRIOR TO CONSTRUCTION COMMENCING IN THAT AREA

### DIVERT UPLAND RUNOFF

NOT APPLICABLE

### CONSTRUCT PERMANENT CONTROLS

SEED AND MULCH DISTURBED SOILS, PAVE DISTURBED AREAS WITHIN ROADWAY

### WINTER STABILIZATION

SEE LOW RISK HANDBOOK AND FOLLOW VARIOUS WINTER SPECIFIC EROSION CONTROL MEASURES

### DEWATERING ACTIVITIES

USE FILTER BAG FOR DEWATERING

### LIMIT DISTURBANCE AREA

CONSTRUCTION SHALL FOLLOW THE PHASING PLAN AND DISTURBED AREAS SHALL BE LIMITED AS MUCH AS POSSIBLE

### INSTALL SILT FENCE AND DROP INLET PROTECTION

SILT FENCE SHALL BE INSTALLED PRIOR TO CONSTRUCTION COMMENCING IN THAT AREA  
DROP INLET PROTECTION SHALL BE INSTALLED PRIOR TO CONSTRUCTION COMMENCING IN THAT AREA

### SLOW DOWN CHANNELIZED RUNOFF

INSTALL CHECK DAMS WHERE INDICATED

### STABILIZE EXPOSED SOILS

SEED AND MULCH DISTURBED SOILS, PAVE DISTURBED AREAS WITHIN ROADWAY

### STABILIZE SOIL AT FINAL GRADE

SEED AND MULCH DISTURBED SOILS, PAVE DISTURBED AREAS WITHIN ROADWAY

### INSPECT YOUR SITE

INSPECT SITE IN ACCORDANCE WITH PERMIT AUTHORIZATION REQUIREMENTS

## PROJECT PHASING PLAN

AS THIS IS A LINEAR PROJECT WITH PRIMARILY BOX TRENCH EXCAVATION, CONSTRUCTION SHALL OCCUR ALONG THE PROJECT ROUTE. EROSION CONTROL MEASURES MUST BE INSTALLED PRIOR TO ANY EXCAVATION TAKING PLACE IN ANY GIVEN AREA AND SHALL REMAIN IN PLACE UNTIL PERMANENT SITE STABILIZATION HAS OCCURRED. ALL TRENCHES SHALL BE BACKFILLED AND COMPACTED AT THE END OF EACH CONSTRUCTION DAY. TEMPORARY PAVEMENT SHALL BE INSTALLED ON ALL EXCAVATIONS WITHIN THE ROADWAY AND EXCAVATIONS OUTSIDE OF THE ROADWAY SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS OF INITIAL SOIL DISTURBANCE.



PROJECT NAME: HARTFORD REST AREAS

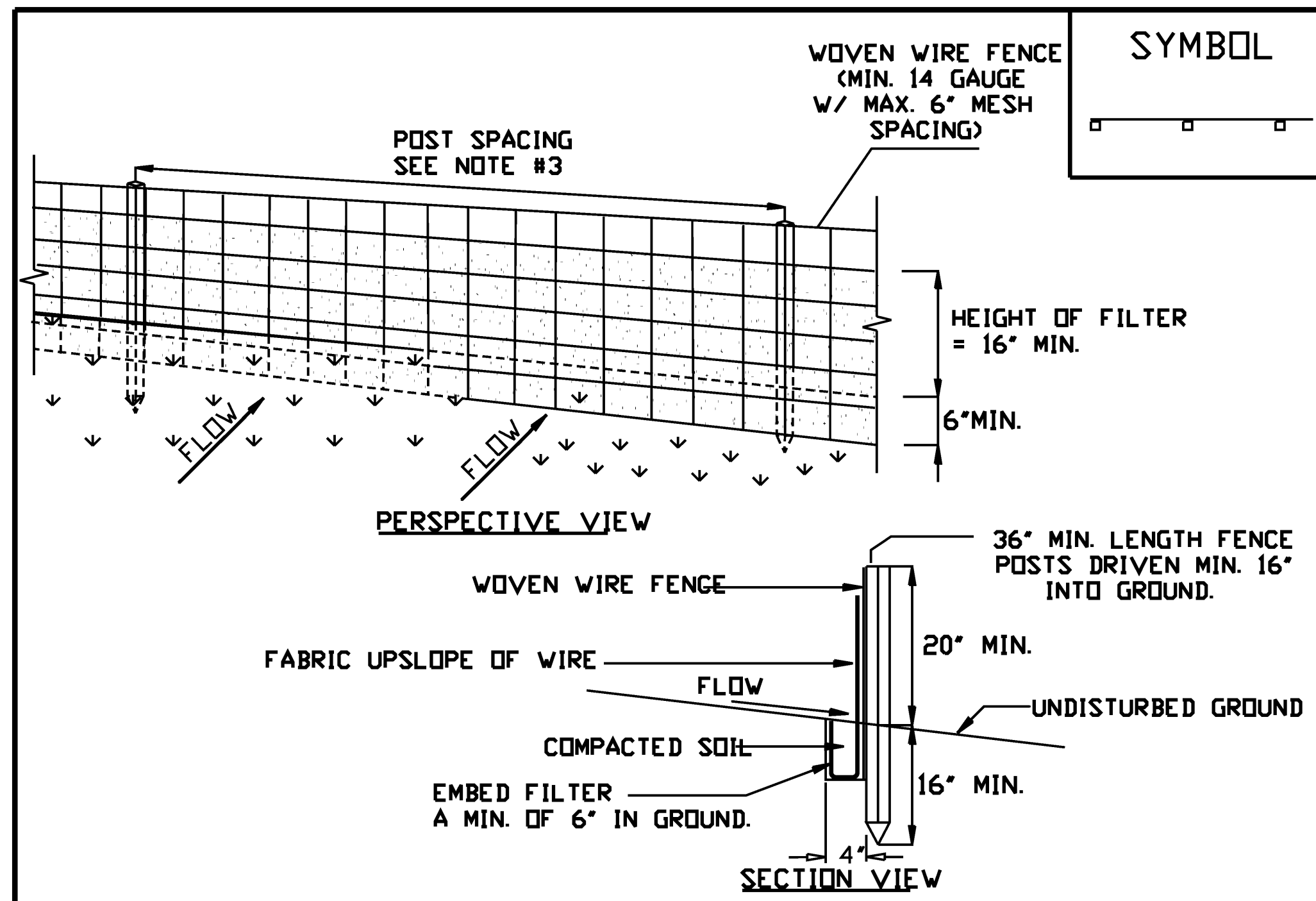
PROJECT NUMBER: IM BLDG(10)

FILE NAME: ...u04c026pit-ero\_Details.dgn PLOT DATE: 5/19/2008

PROJECT LEADER: JTM DRAWN BY: VTRANS

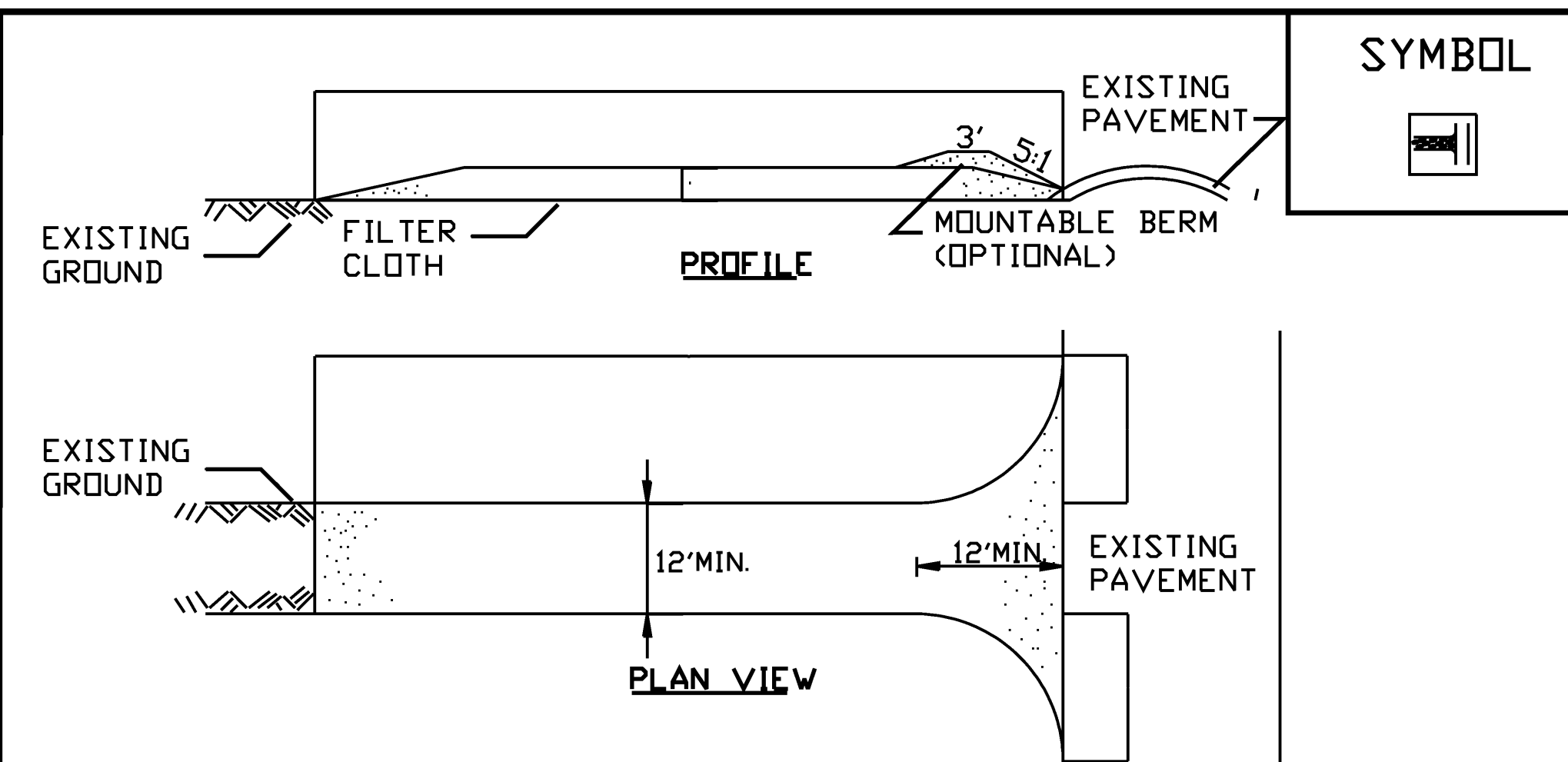
DESIGNED BY: VTRANS CHECKED BY: VTRANS

EP&SC NARRATIVE SHEET 20 OF 70



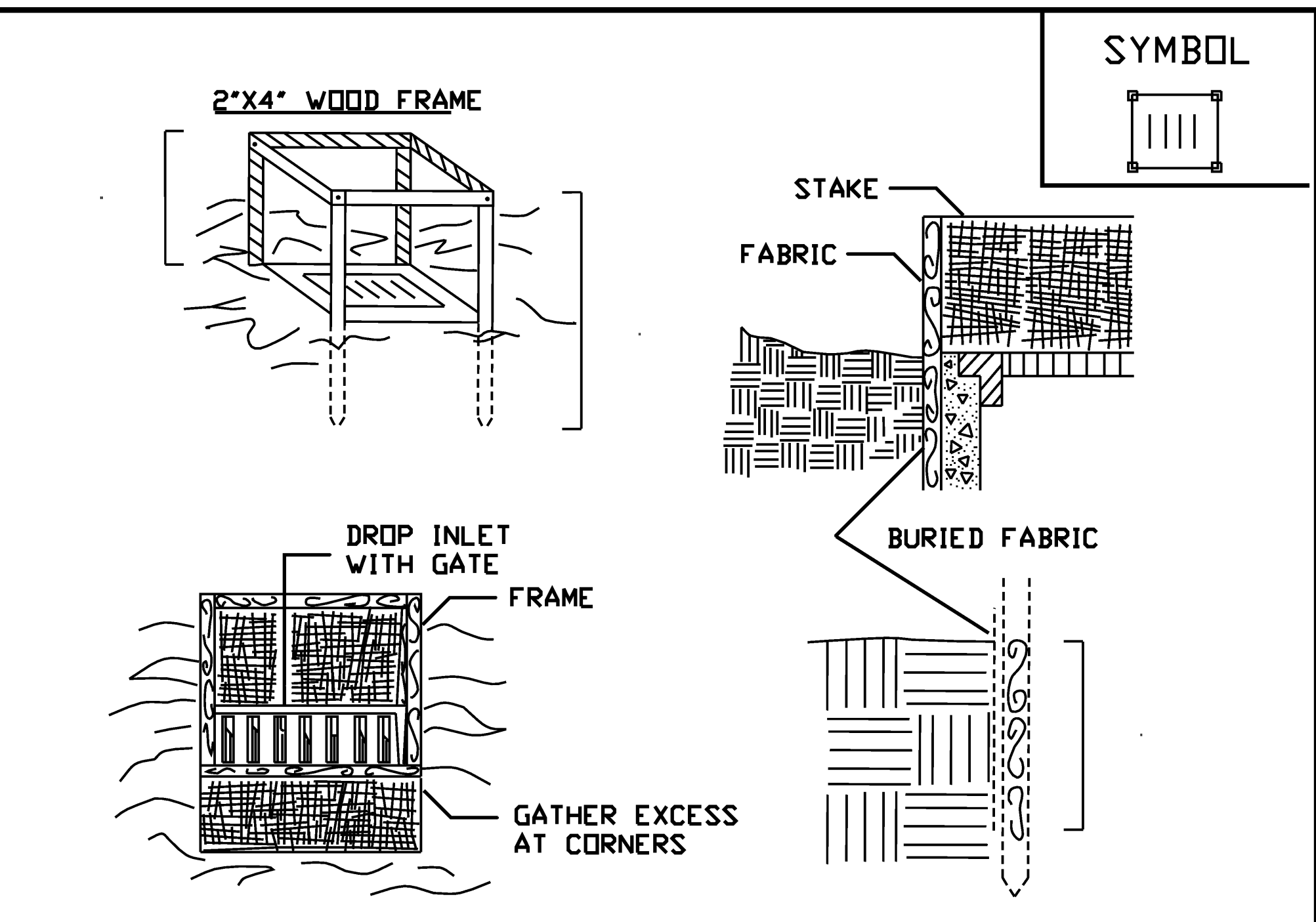
**CONSTRUCTION SPECIFICATIONS**

1. WOVEN WIRE FENCE REINFORCEMENT IS ONLY REQUIRED WITHIN 100 FT UPSLOPE OF RECEIVING WATERS.
2. WHERE REQUIRED FENCE SHALL BE WOVEN WIRE, MIN. 14 GAUGE WITH A 6" MAXIMUM MESH OPENING. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFL 100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4'. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED.
6. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
7. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.



**CONSTRUCTION SPECIFICATIONS**

1. STONE SIZE - USE 1-4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH APPLIES).
3. THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.



**CONSTRUCTION SPECIFICATIONS**

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
  2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
  3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET.
  4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
  5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
  6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
- MAXIMUM DRAINAGE AREA 1 ACRE

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**SILT FENCE**

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**STABILIZED  
CONSTRUCTION  
ENTRANCE**

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**FILTER FABRIC  
DROP INLET  
PROTECTION**

NOTES:  
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.  
  
THIS ITEM SHALL BE PAID FOR UNDER ITEM  
649.51 GEOTEXTILE FOR SILT FENCE (FILTER FABRIC ONLY FENCE)

NOTES:  
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.  
  
THIS ITEM SHALL BE PAID FOR UNDER ITEM  
653.35 VEHICLE TRACKING PAD

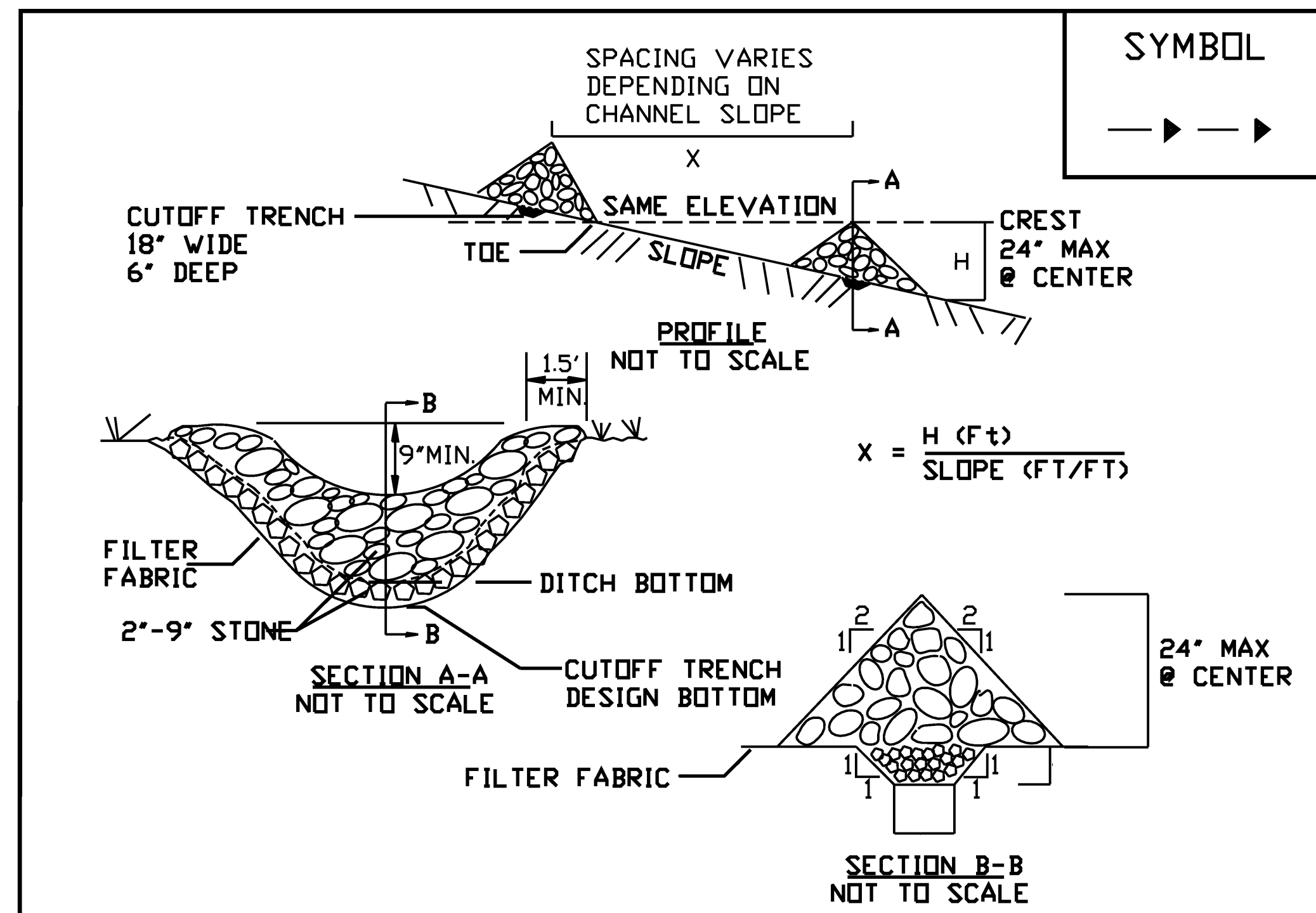
REVISIONS	
FEBRUARY 9, 2007	WHF
MARCH 8, 2007	JMF

NOTES:  
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.  
  
THIS ITEM SHALL BE PAID FOR UNDER ITEM  
653.40 INLET PROTECTION DEVICE, TYPE I

REVISIONS	
MARCH 8, 2007	JMF



PROJECT NAME: HARTFORD REST AREAS  
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FILE NAME: ...u04c026pit-ero.Details.dgn PLOT DATE: 5/19/2008  
PROJECT LEADER: JTM DRAWN BY: VTRANS  
DESIGNED BY: VTRANS CHECKED BY: VTRANS  
EP&SC DETAIL 1 SHEET 21 OF 70



SYMBOL

**CONSTRUCTION SPECIFICATIONS**

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. SET SPACING OF CHECK DAMS SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. MAXIMUM DRAINAGE AREA 2 ACRES.

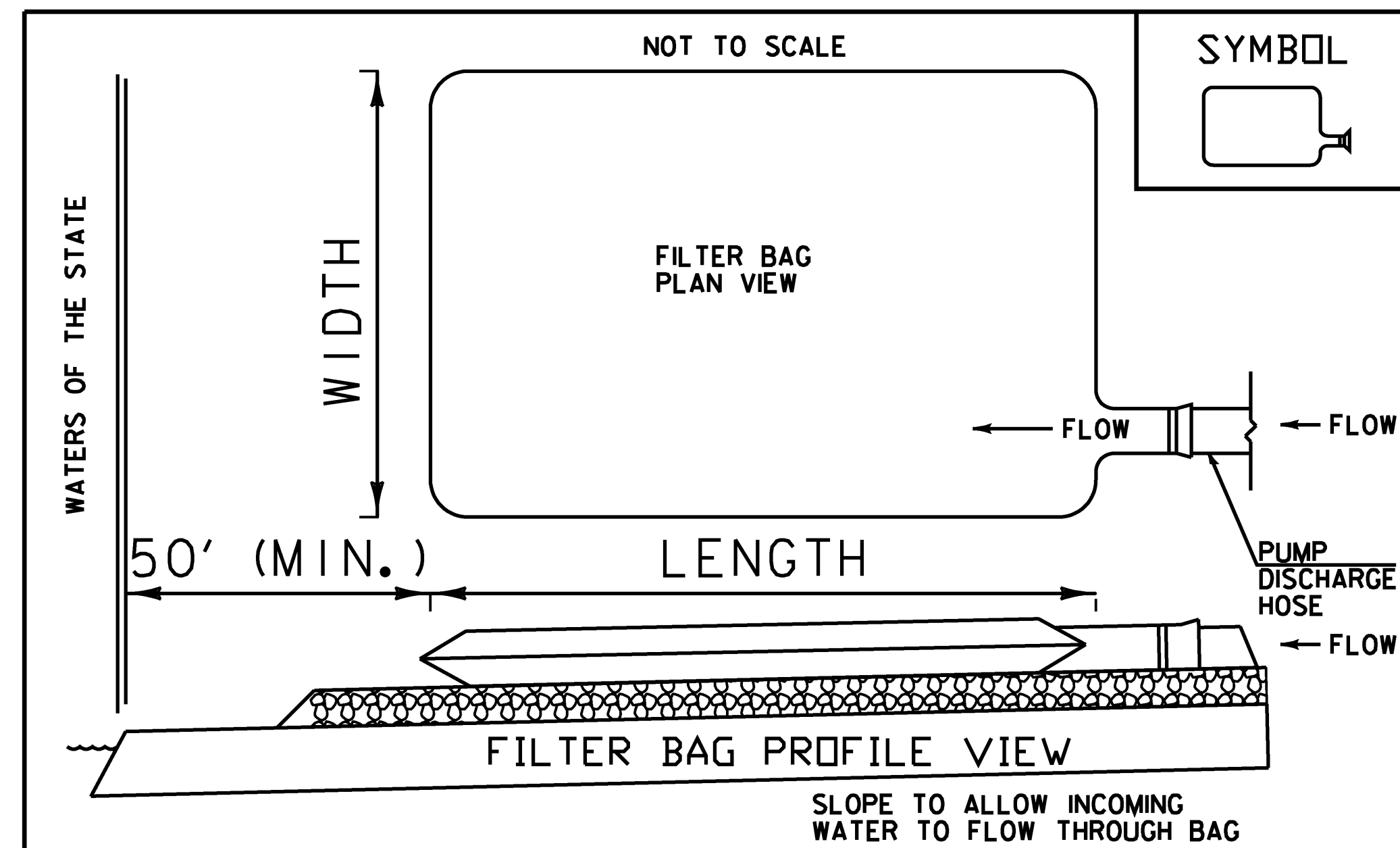
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CHECK DAM

NOTES:  
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS ITEM SHALL BE PAID FOR UNDER ITEM  
653.25 TEMPORARY STONE CHECK DAM, TYPE 1

REVISIONS	
MARCH 8, 2007	JMF



SYMBOL

**APPLICATION NOTES:**

THE PRIMARY PURPOSE OF THE FILTER BAG IS TO RETAIN SILT, SAND, AND FINES DURING DEWATERING OPERATIONS WHILE ALLOWING WATER TO PASS THROUGH THE BAG.

**GENERAL NOTES:**

1. FILTER BAG SHALL BE INSTALLED ON A VEGETATED SLOPE TO ALLOW INCOMING WATER TO FLOW THROUGH THE BAG.
2. FILTER BAGS MAY ALSO BE PLACED ON COARSE AGGREGATE, STONE, OR HAYBALES TO INCREASE FILTRATION EFFICIENCY.
3. FILTER BAG SHALL BE LOCATED A MINIMUM OF 50 FEET FROM WATERS OF THE STATE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
4. THE NECK OF THE FILTER BAG SHALL BE STRAPPED TIGHTLY TO THE DISCHARGE HOSE.
5. A FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR ALLOW WATER TO PASS AT A REASONABLE RATE.
6. FILTER BAG SHALL BE DISPOSED OF AS APPROVED IN THE EPSC PLAN OR AS DIRECTED BY THE ENGINEER.
7. FILTER BAG SHALL BE USED FOR DEWATERING WHERE DEWATERING IS REQUIRED.

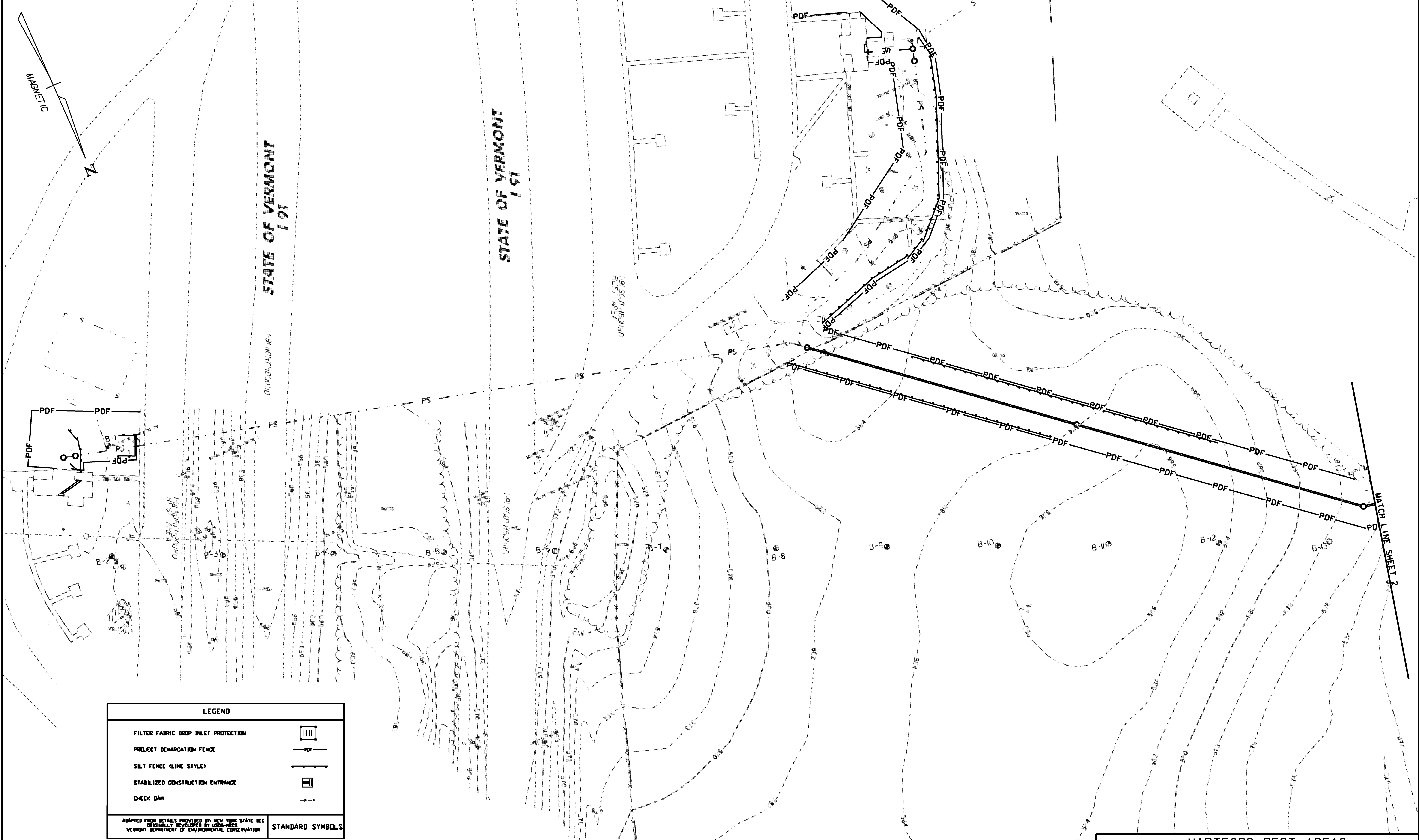
THIS ITEM SHALL BE PAID FOR UNDER ITEM  
653.45 FILTER BAG  
PAYMENT FOR STONE, CONTAINMENT BERM  
AND NECESSARY EARTHWORK SHALL BE  
INCIDENTAL TO ITEM 653.45 FILTER BAG

REVISIONS	
SEPTEMBER 18, 2007	WHF
DECEMBER 13, 2007	WHF



PROJECT NAME: HARTFORD REST AREAS  
PROJECT NUMBER: IM BLDG(10)

FILE NAME: ...u04026p1t-ero\_Details.dgn PLOT DATE: 5/19/2008  
PROJECT LEADER: JTM DRAWN BY: VTRANS  
DESIGNED BY: VTRANS CHECKED BY: VTRANS  
EP&SC DETAIL 2 SHEET 22 OF 70

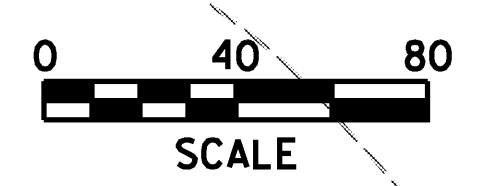


LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE (LINE STYLE)	
STABILIZED CONSTRUCTION ENTRANCE	
CHECK DAM	

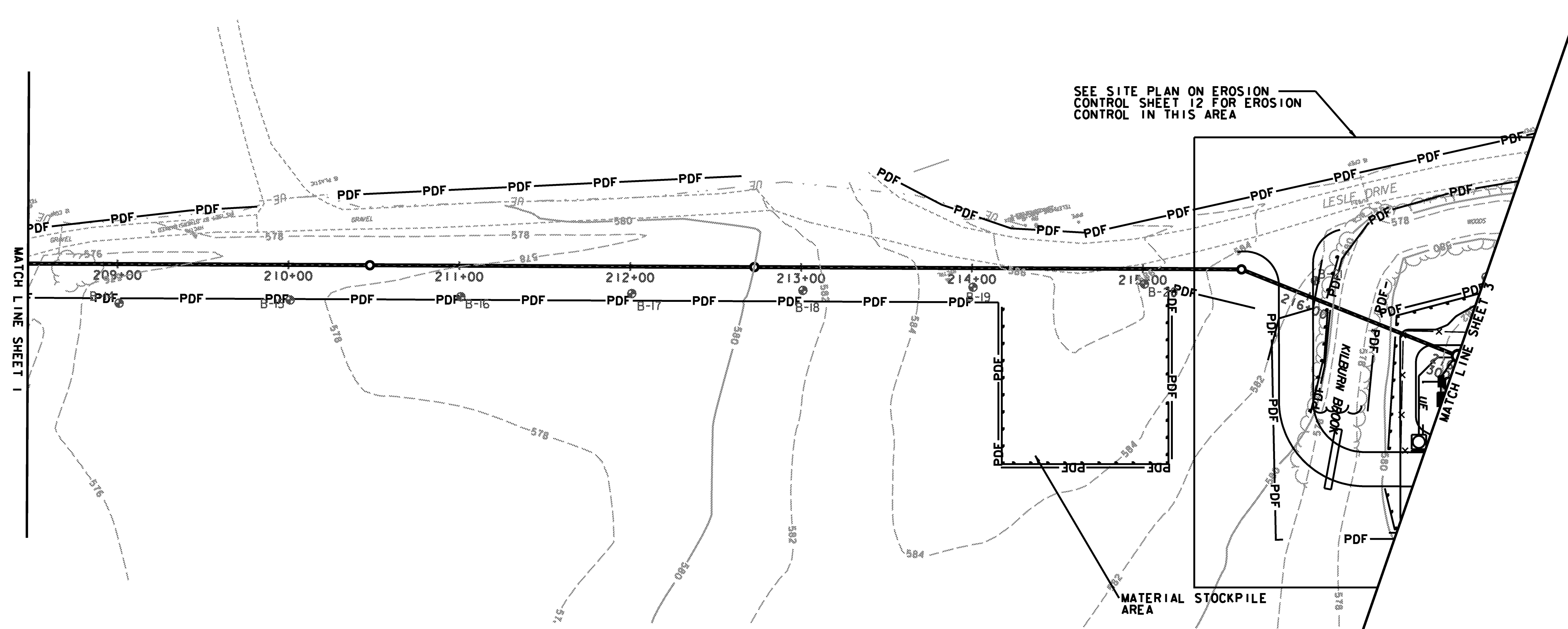
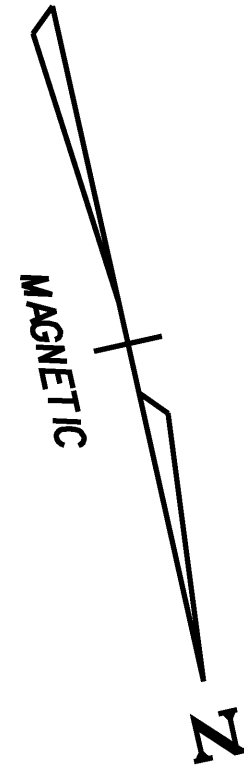
ADAPTED FROM DETAILS PROVIDED BY NEW YORK STATE DEC  
 ORIGINALLY DEVELOPED BY USDA-NRCS  
 VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NOTES:  
 REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION  
 PREVENTION & SEDIMENT CONTROL -2006-" FROM THE VT AGENCY OF  
 NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

STANDARD SYMBOLS

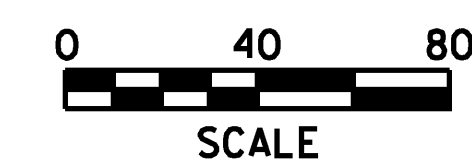


PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...\\plot files\04026pit-ero.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	
EROSION CONTROL SHEET 1	
DATE:	5/19/2008
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET 23	OF 70



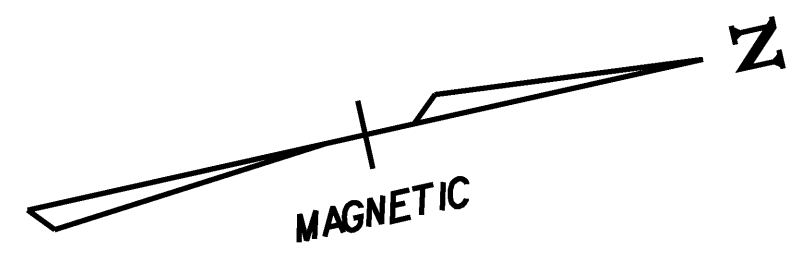
LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE (LINE STYLE)	
STABILIZED CONSTRUCTION ENTRANCE	
CHECK DAM	
<small>ADAPTED FROM DETAILS PROVIDED BY NEW YORK STATE DEC ORIGINALLY DEVELOPED BY US&amp;M-HICS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION</small>	
STANDARD SYMBOLS	

NOTES:  
REFER TO THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL, 2006, FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

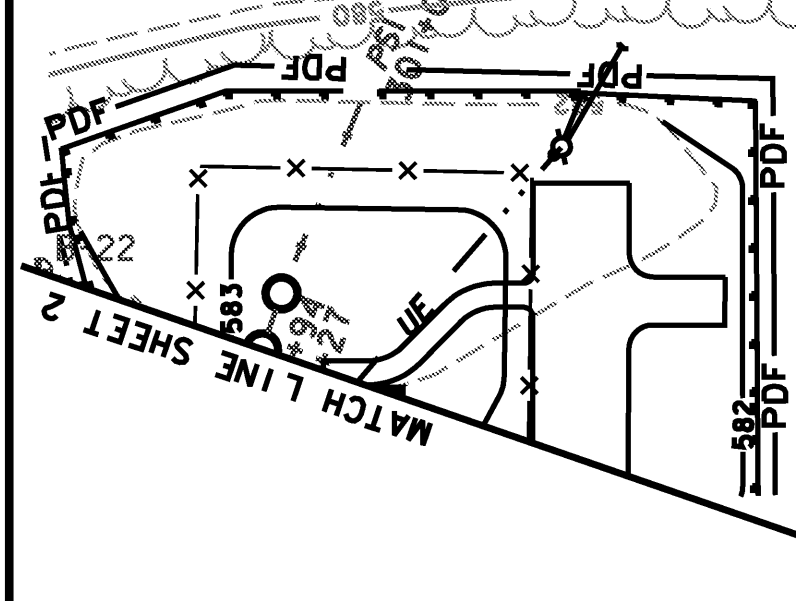
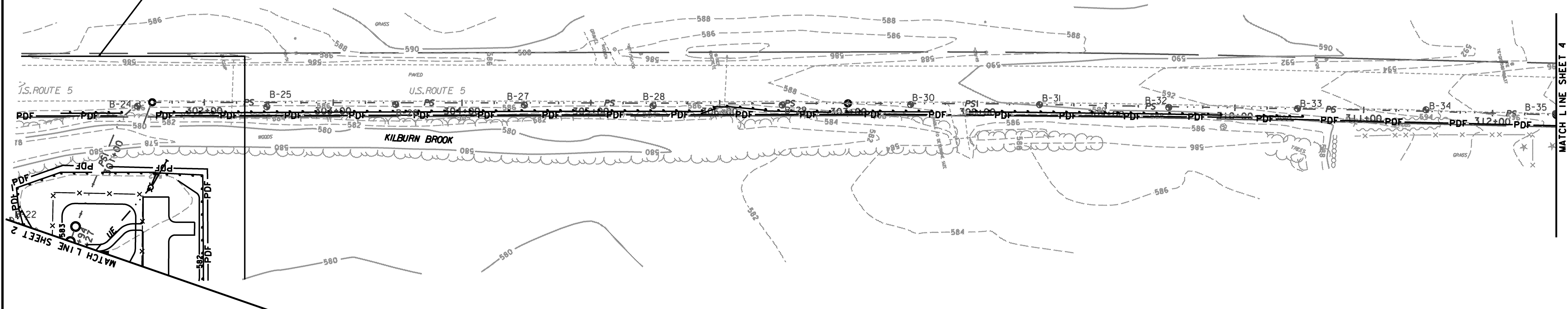


PROJECT NAME: HARTFORD REST AREAS  
PROJECT NUMBER: IM BLDG(10)

FILE NAME: ... \plot files\04026pit-ero.dgn PLOT DATE: 5/19/2008  
PROJECT LEADER: JTM DRAWN BY: PZA  
DESIGNED BY: JTM CHECKED BY: JTM  
EROSION CONTROL SHEET 2 SHEET 24 OF 70



SEE SITE PLAN ON EROSION CONTROL SHEET 12 FOR EROSION CONTROL IN THIS AREA

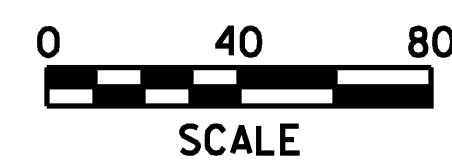


MATCH LINE SHEET 4

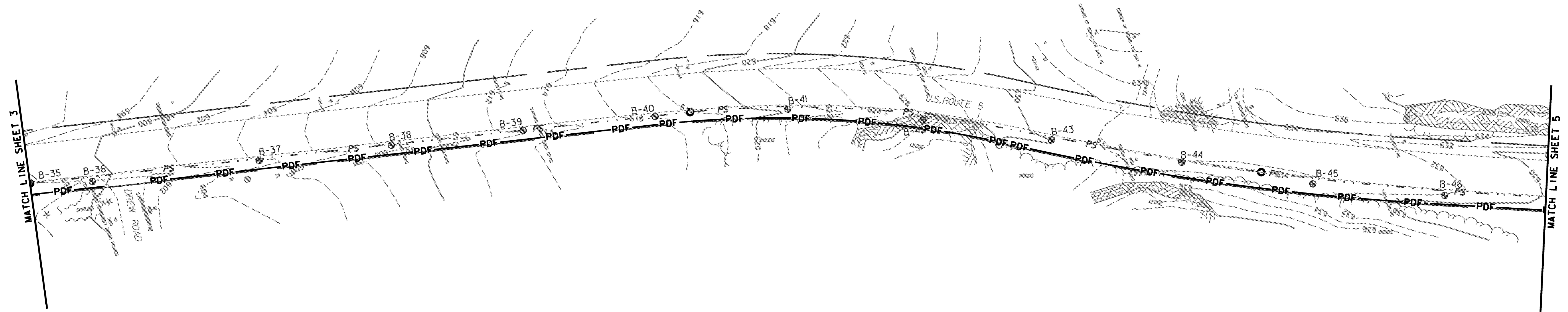
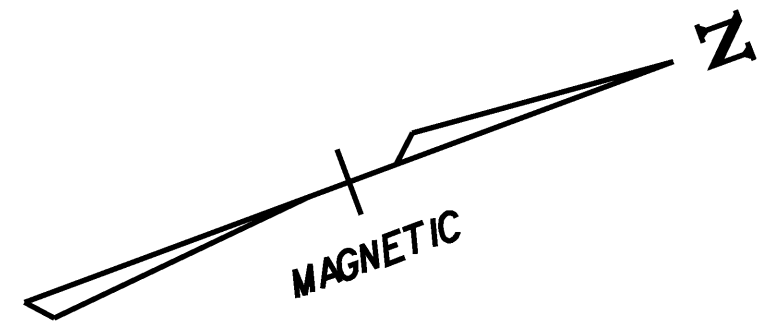
LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE (LINE STYLE)	
STABILIZED CONSTRUCTION ENTRANCE	
CHECK DAM	

NOTES:  
 REFER TO THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL, "BROOKS", FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

STANDARD SYMBOLS

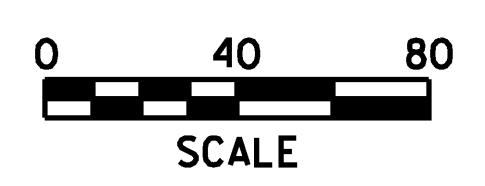


PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...plot files\04026pit-ero.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	PZA
EROSION CONTROL SHEET 3	CHECKED BY: JTM
	SHEET 25 OF 70

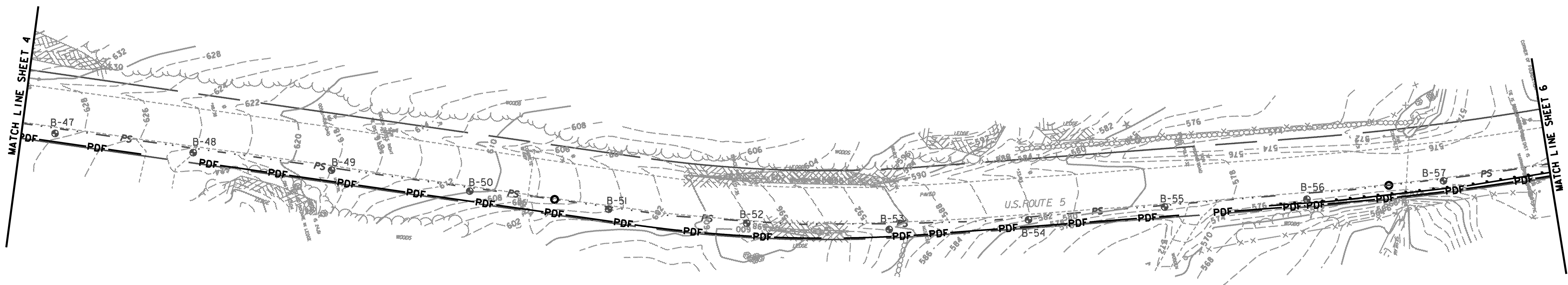
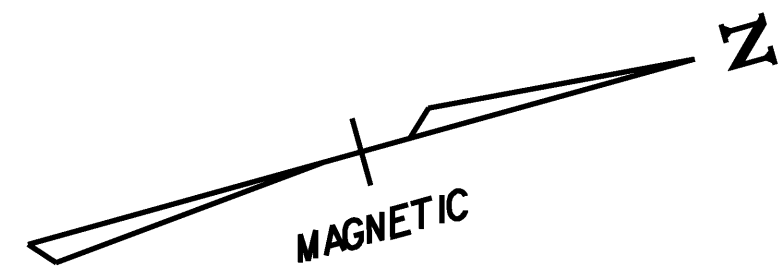


LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE (LINE STYLE)	
STABILIZED CONSTRUCTION ENTRANCE	
CHECK DAM	
<small>ADAPTED FROM DETAILS PROVIDED BY NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION</small>	
STANDARD SYMBOLS	

NOTES:  
REFER TO THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL - (SP-10) FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

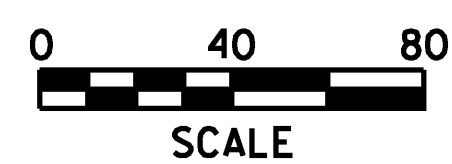


PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	... \plot files\04026pit-ero.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	JTM
EROSION CONTROL SHEET 4	
DATE:	5/19/2008
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET 26	OF 70

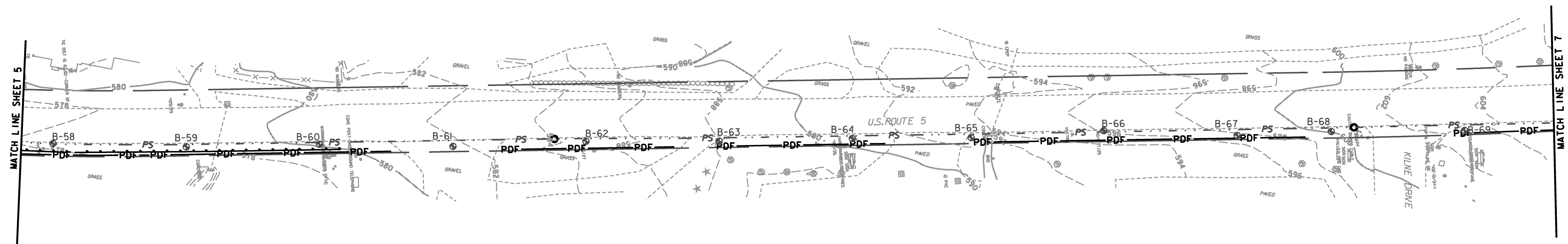
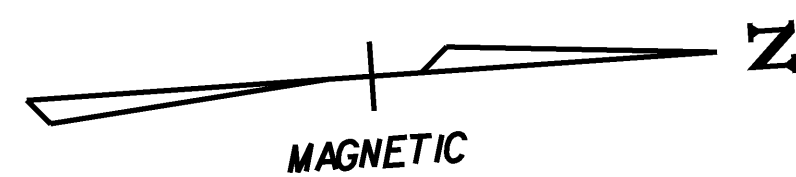


LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE (LINE STYLE)	
STABILIZED CONSTRUCTION ENTRANCE	
CHECK DAM	
ADAPTED FROM DETAILS PROVIDED BY NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USMA-ARCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	STANDARD SYMBOLS

NOTES:  
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL - 2006" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.



PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...\\plot files\04026pit-ero.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	JTM
EROSION CONTROL SHEET 5	
DATE:	5/19/2008
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET 27	OF 70

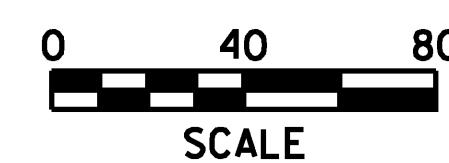


LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE G.L.I.E. STYLE	
STABILIZED CONSTRUCTION ENTRANCE	
CHECK DAM	

ADAPTED FROM DETAILS PROVIDED BY NEW YORK STATE DEC  
 ORIGINALLY DEVELOPED BY LEON-HINES  
 VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

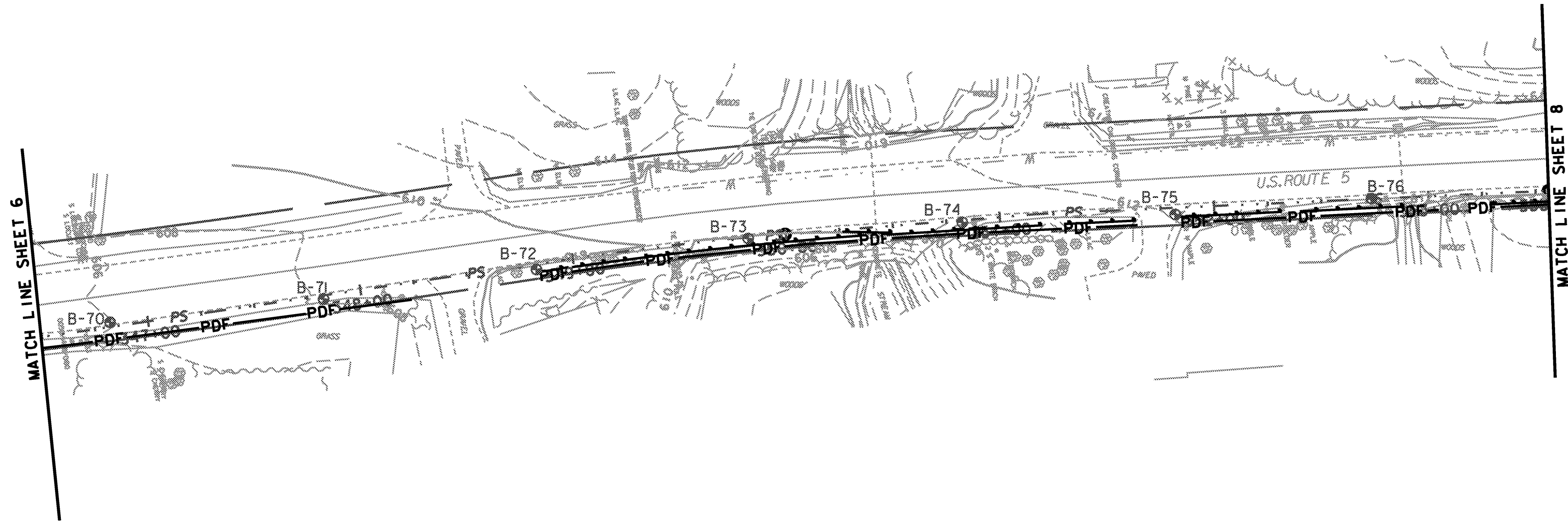
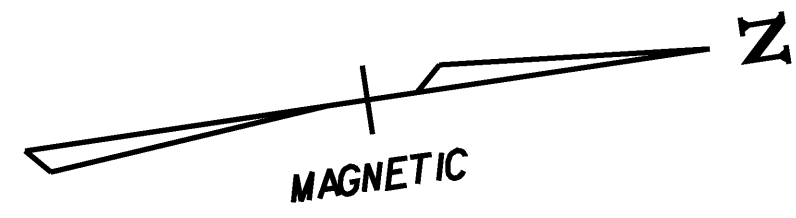
STANDARD SYMBOLS

NOTES:  
 REFER TO THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION  
 PREVENTION & SEDIMENT CONTROL - 2006 - FROM THE VT AGENCY OF  
 NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.



PROJECT NAME: HARTFORD REST AREAS  
 PROJECT NUMBER: IM BLDG(10)

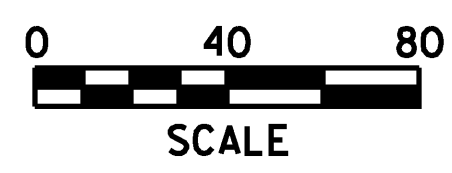
FILE NAME: ... \plot files\04026pit-ero.dgn PLOT DATE: 5/19/2008  
 PROJECT LEADER: JTM DRAWN BY: PZA  
 DESIGNED BY: CHECKED BY: JTM  
 EROSION CONTROL SHEET 6 SHEET 28 OF 70



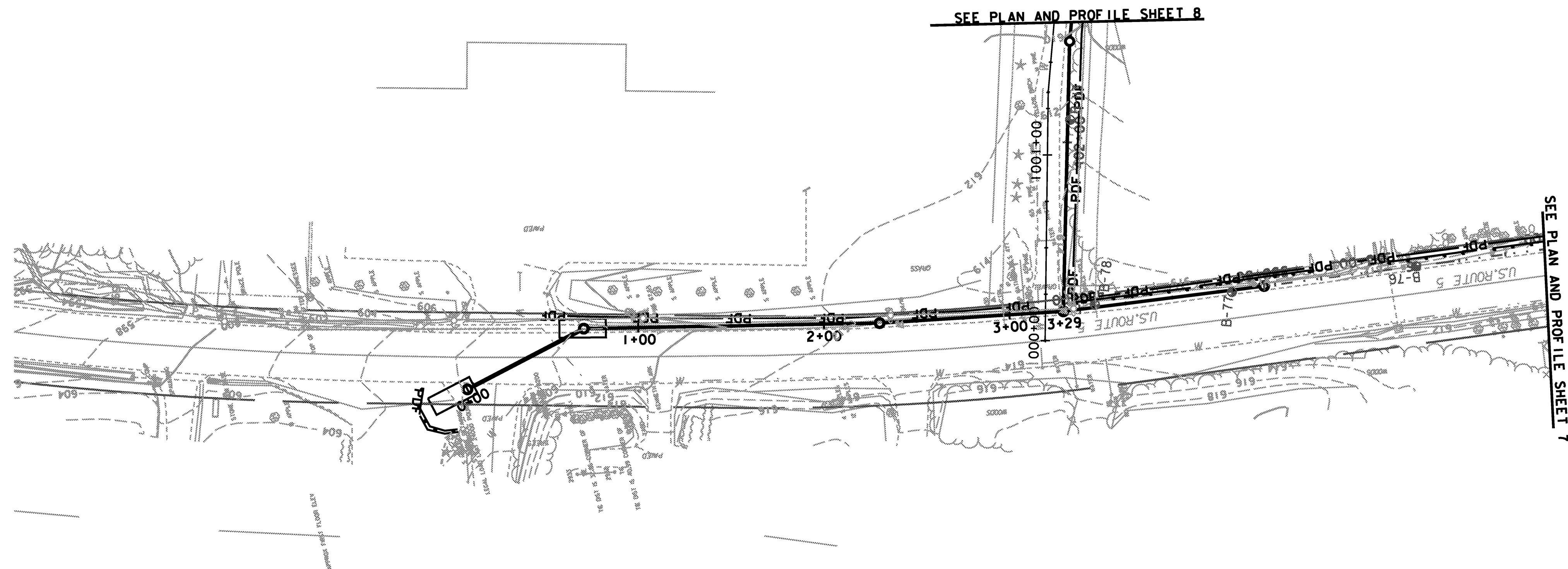
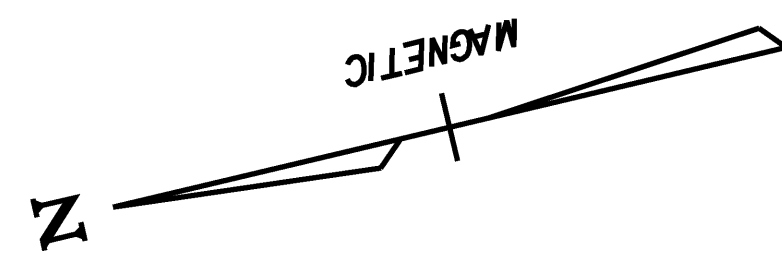
LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE (LINE STYLE)	
STABILIZED CONSTRUCTION ENTRANCE	
CHECK DAM	

NOTES:  
 REFER TO THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL, "PM-10", FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

STANDARD SYMBOLS

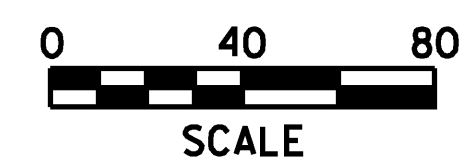


PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	... \plot files\04026pit-ero.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	
EROSION CONTROL SHEET 7	
PLLOT DATE:	5/19/2008
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET 29	OF 70



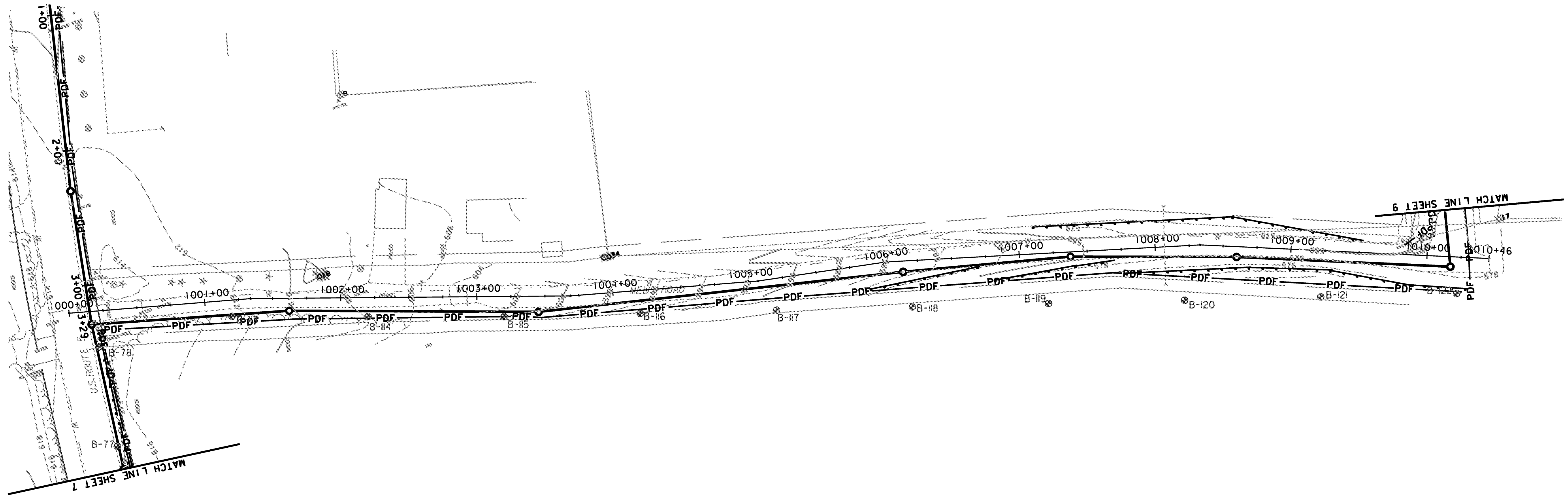
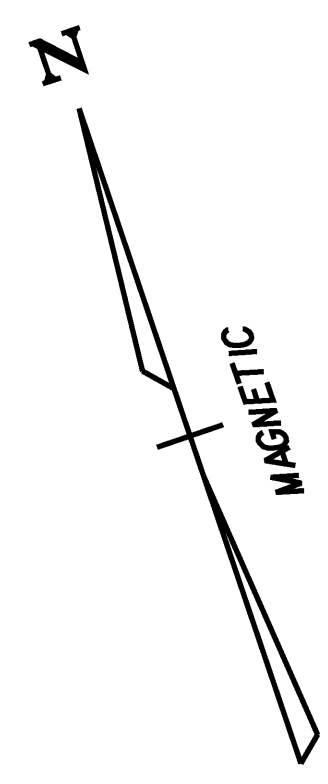
LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE (LINE STYLE)	
STABILIZED CONSTRUCTION ENTRANCE	
CHECK DAM	
<small>ADAPTED FROM DETAILS PROVIDED BY NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USACE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION</small>	
STANDARD SYMBOLS	

NOTES:  
REFER TO THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION  
PREVENTION & SEDIMENT CONTROL, "EM-5" FROM THE VT AGENCY OF  
NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.



PROJECT NAME: HARTFORD REST AREAS  
PROJECT NUMBER: IM BLDG(10)

FILE NAME: ... \plot files\04026pit-ero.dgn PLOT DATE: 5/19/2008  
PROJECT LEADER: JTM DRAWN BY: JSK  
DESIGNED BY: MEHP CHECKED BY: JTM  
EROSION CONTROL SHEET 7A SHEET 30 OF 70

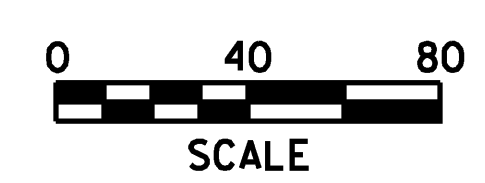


LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE (LINE STYLE)	
STABILIZED CONSTRUCTION ENTRANCE	
CHECK DAM	

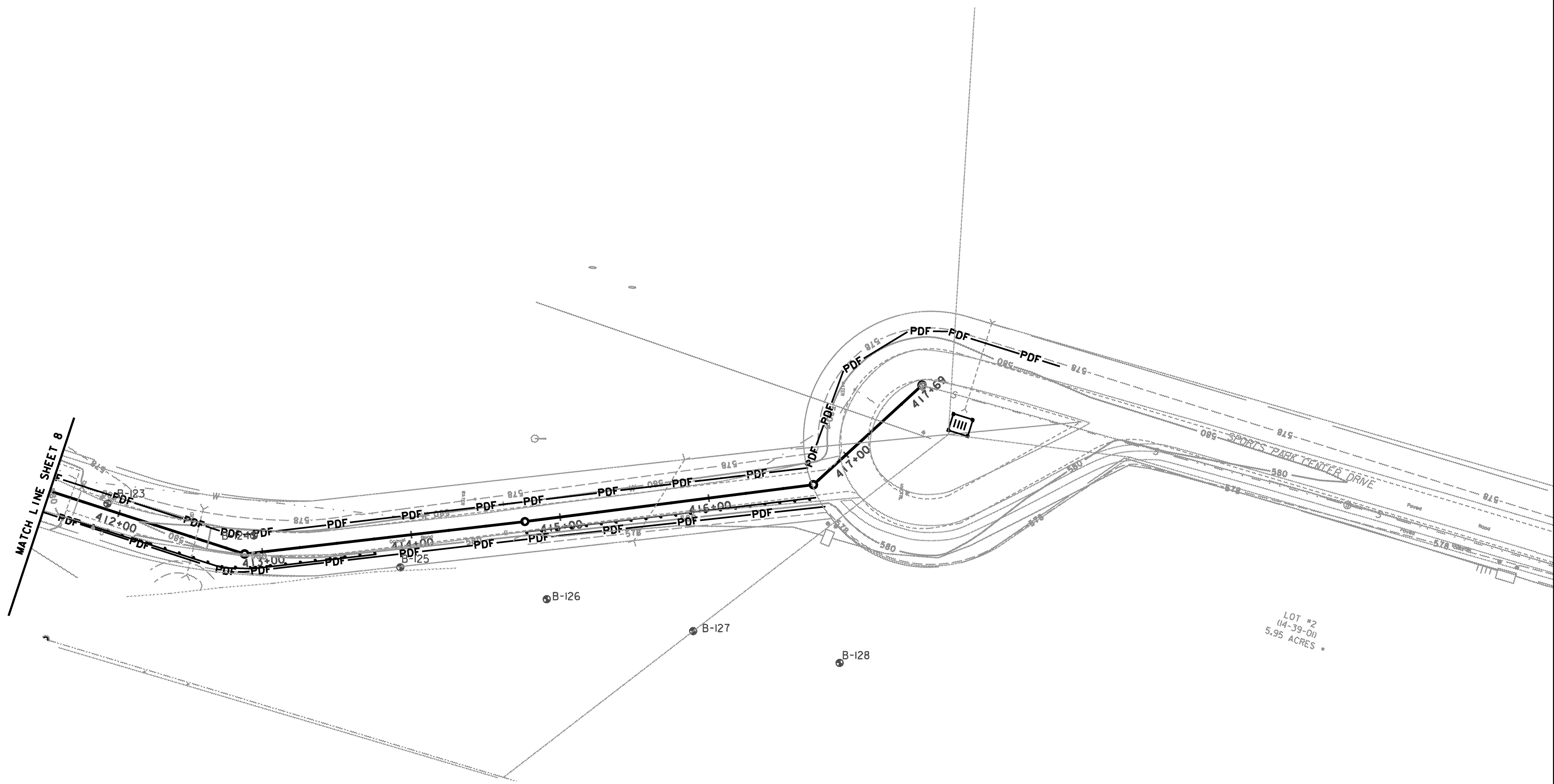
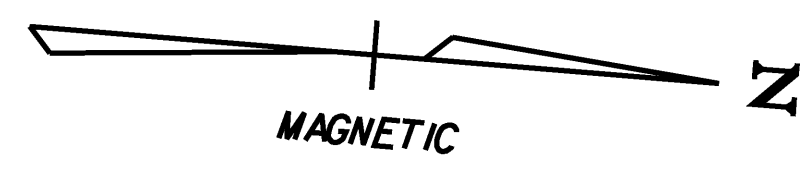
ADAPTED FROM DETAILS PROVIDED BY NEW YORK STATE DEC  
 ORIGINALLY DEVELOPED BY USM-MS  
 VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STANDARD SYMBOLS

NOTES:  
 REFER TO THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION  
 PREVENTION & SEDIMENT CONTROL, "2006", FROM THE VT AGENCY OF  
 NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

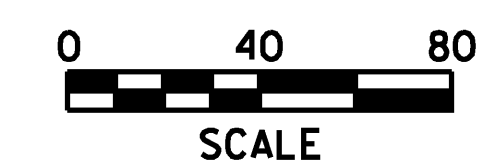


PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	... \plot files\04026pit-ero.dwg
PROJECT LEADER:	JTM
DESIGNED BY:	
EROSION CONTROL SHEET 8	
DATE:	5/19/2008
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET 31	OF 70

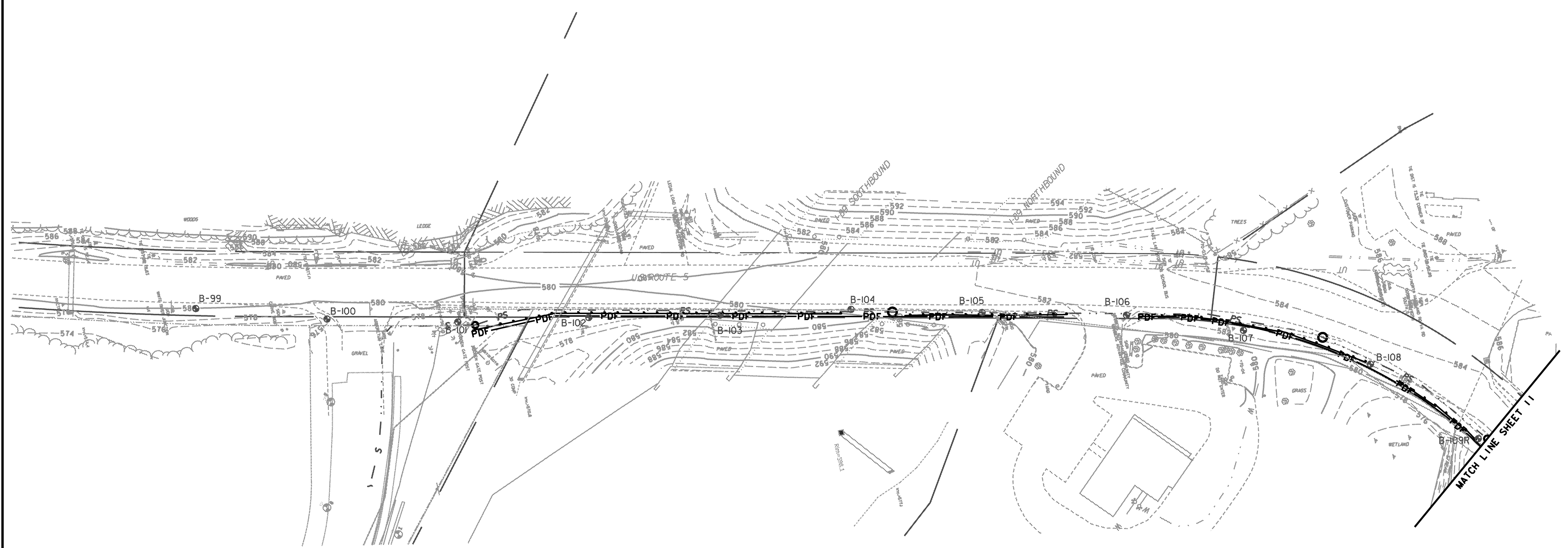
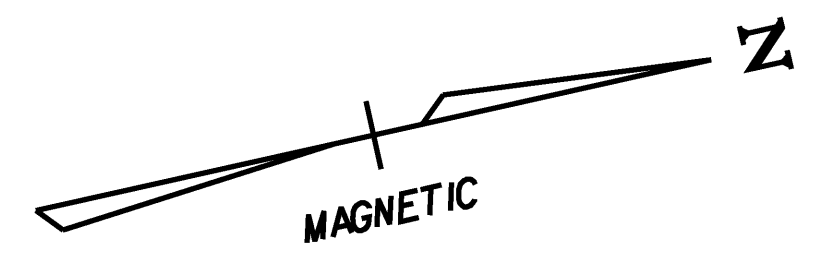


LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE (LINE STYLE)	
STABILIZED CONSTRUCTION ENTRANCE	
CHECK DAM	
<small>ADAPTED FROM DETAILS PROVIDED BY NEW YORK STATE DEC            ORIGINALLY DEVELOPED BY US&amp;HRCES            VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION</small>	
STANDARD SYMBOLS	

NOTES:  
 REFER TO THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION  
 PREVENTION & SEDIMENT CONTROL - 2006 - FROM THE VT AGENCY OF  
 NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

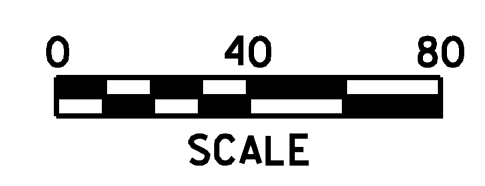


PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	... \plot files\04026pit-ero.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	
EROSION CONTROL SHEET 9	
LOT DATE:	5/19/2008
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET 32	OF 70

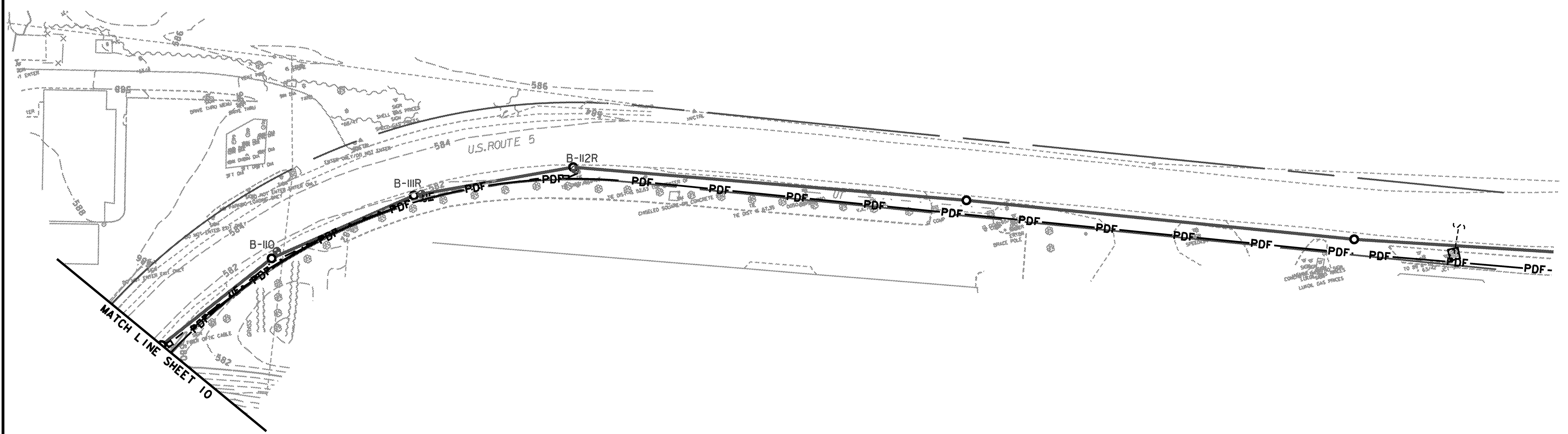
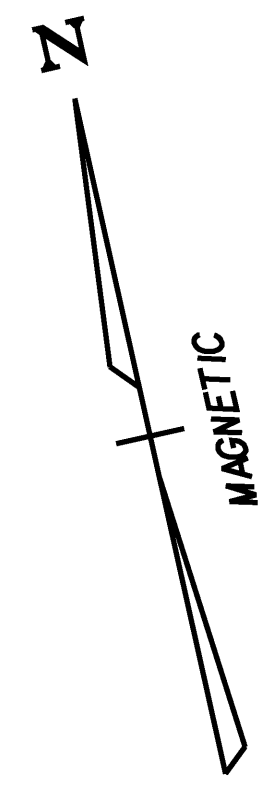


LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE (LINE STYLE)	
STABILIZED CONSTRUCTION ENTRANCE	
CHECK DAM	
ADAPTED FROM DETAILS PROVIDED BY NEW YORK STATE DEC ORIGINALLY DEVELOPED BY US&H/URS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	STANDARD SYMBOLS

NOTES:  
REFER TO THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL, "2006", FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

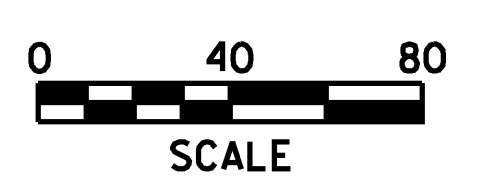


PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	... \plot files\04026pit-ero.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	PZA
EROSION CONTROL SHEET 10	CHECKED BY: JTM
	SHEET 33 OF 70

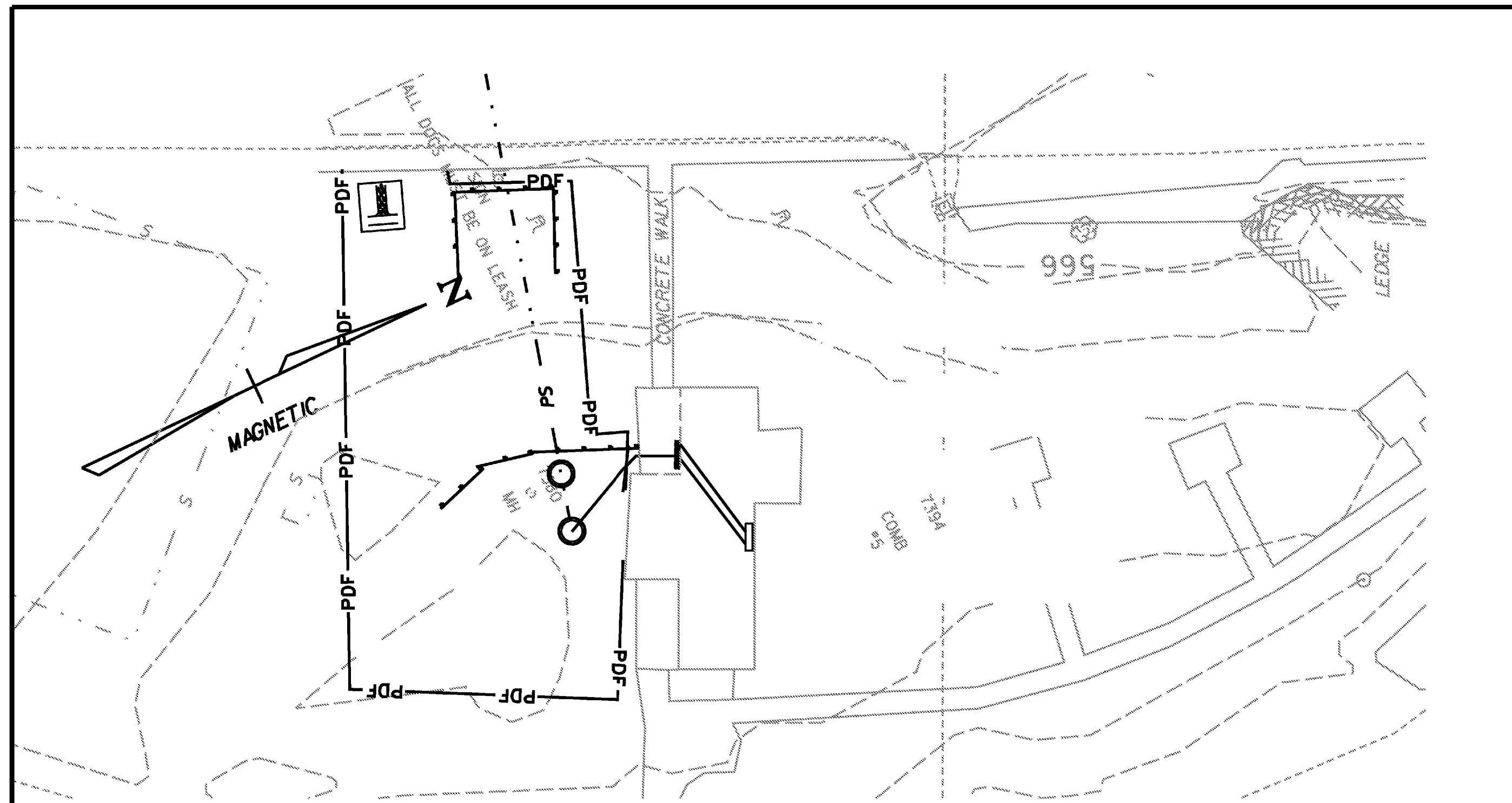


LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE (LINE STYLE)	
STABILIZED CONSTRUCTION ENTRANCE	
CHECK DAM	
<small>ADAPTED FROM DETAILS PROVIDED BY NEW YORK STATE DEC  ORIGINALLY DEVELOPED BY USDA-NRCS  VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION</small>	
STANDARD SYMBOLS	

NOTES:  
REFER TO THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION  
PREVENTION & SEDIMENT CONTROL, "2006" FROM THE VT AGENCY OF  
NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.



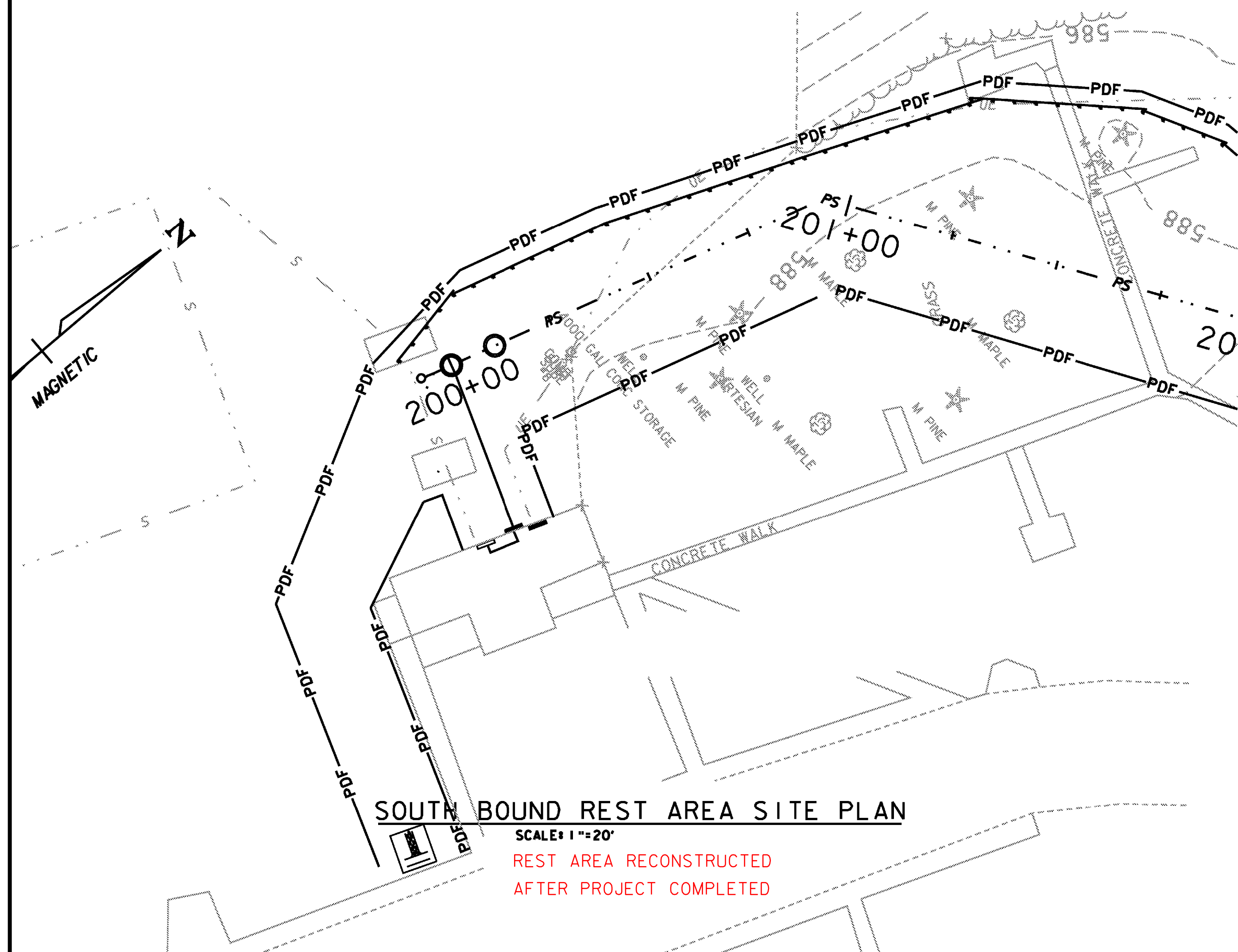
PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...\\plot files\04026pit-ero.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	PZA
EROSION CONTROL SHEET 11	SHEET 34 OF 70



**NORTH BOUND REST AREA SITE PLAN**

SCALE: 1"=20'

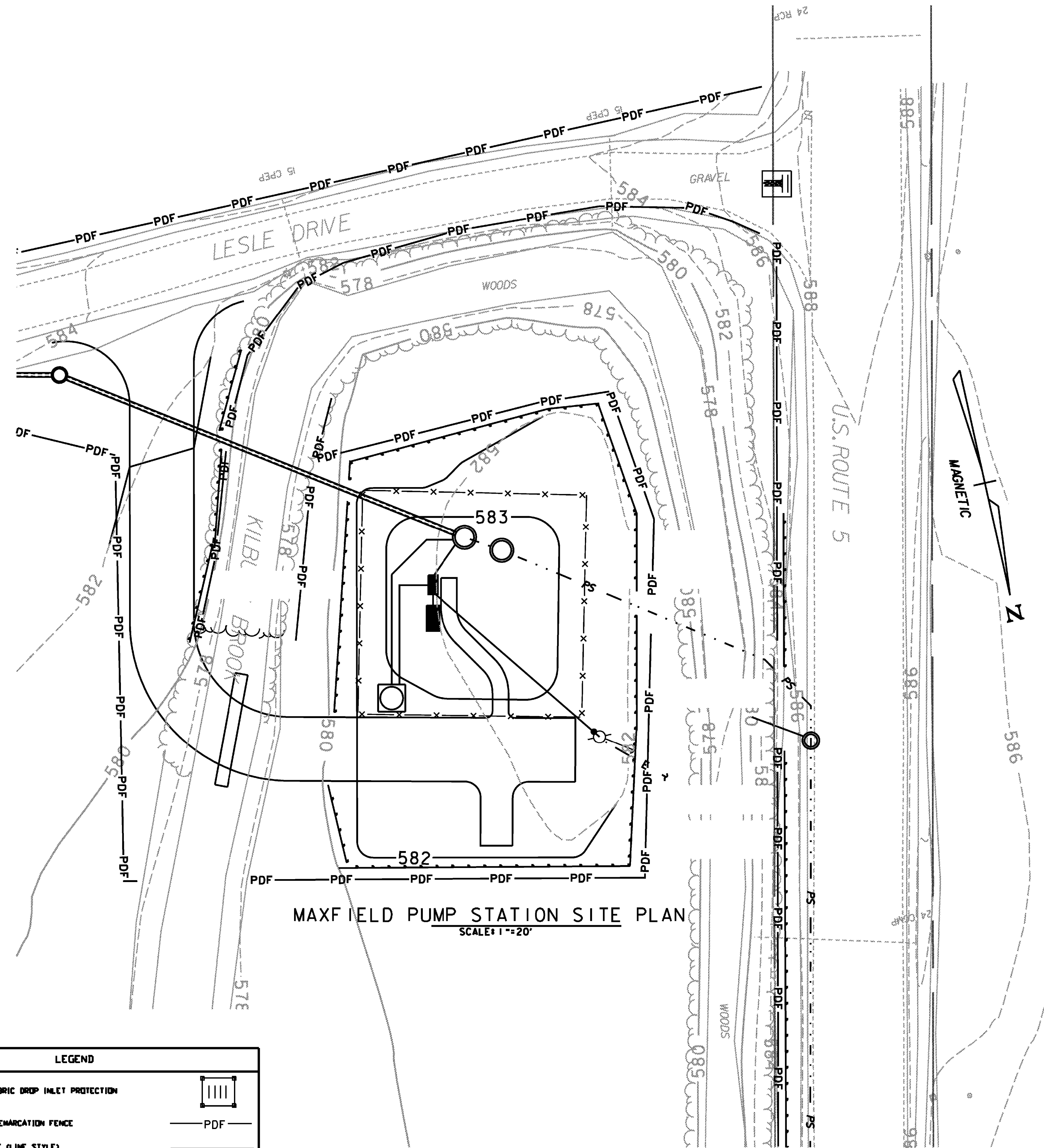
REST AREA CLOSED  
BUILDING REMOVED DURING PROJECT CONSTRUCTION



**SOUTH BOUND REST AREA SITE PLAN**

SCALE: 1"=20'

REST AREA RECONSTRUCTED  
AFTER PROJECT COMPLETED

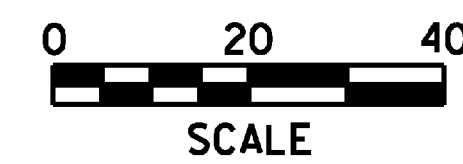


**MAXFIELD PUMP STATION SITE PLAN**

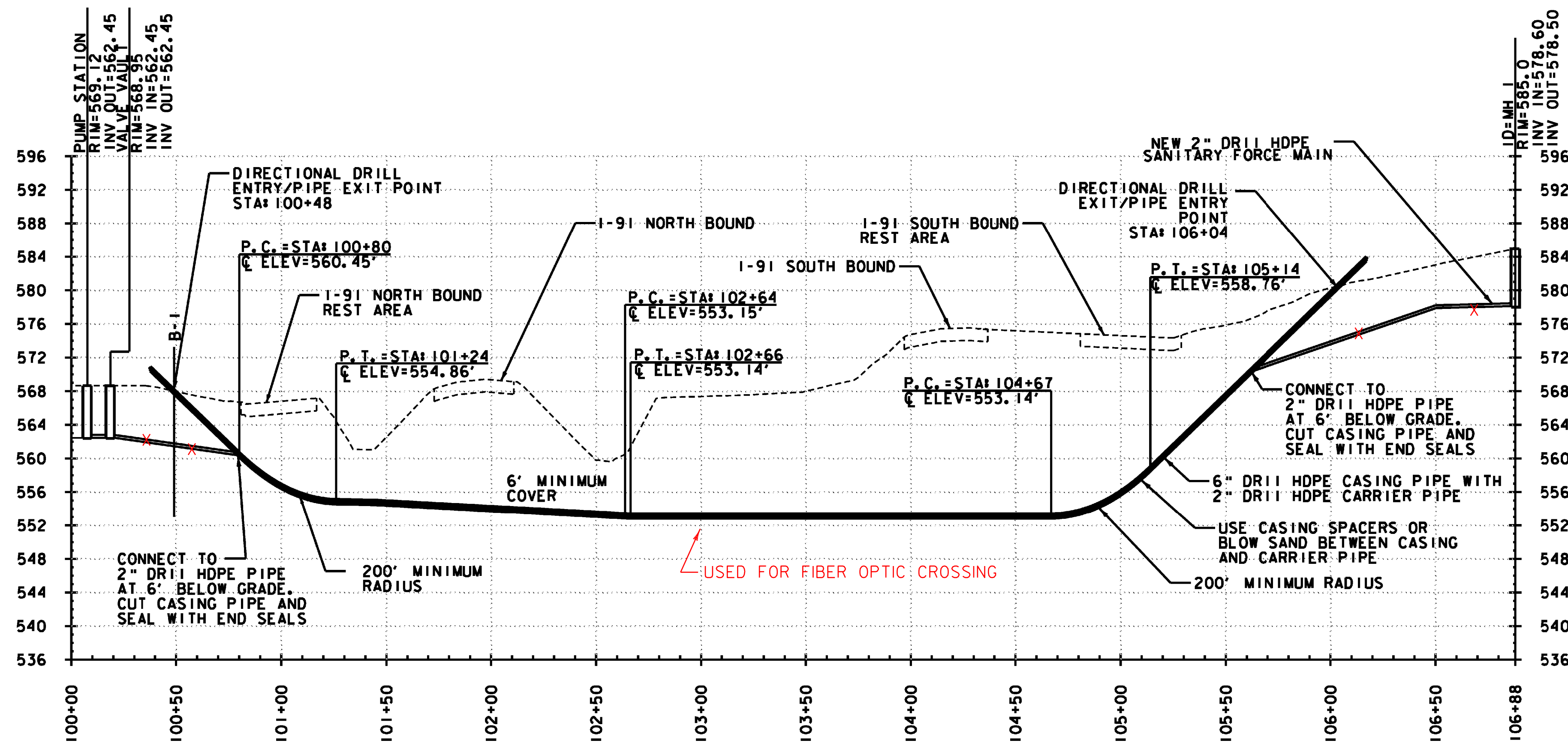
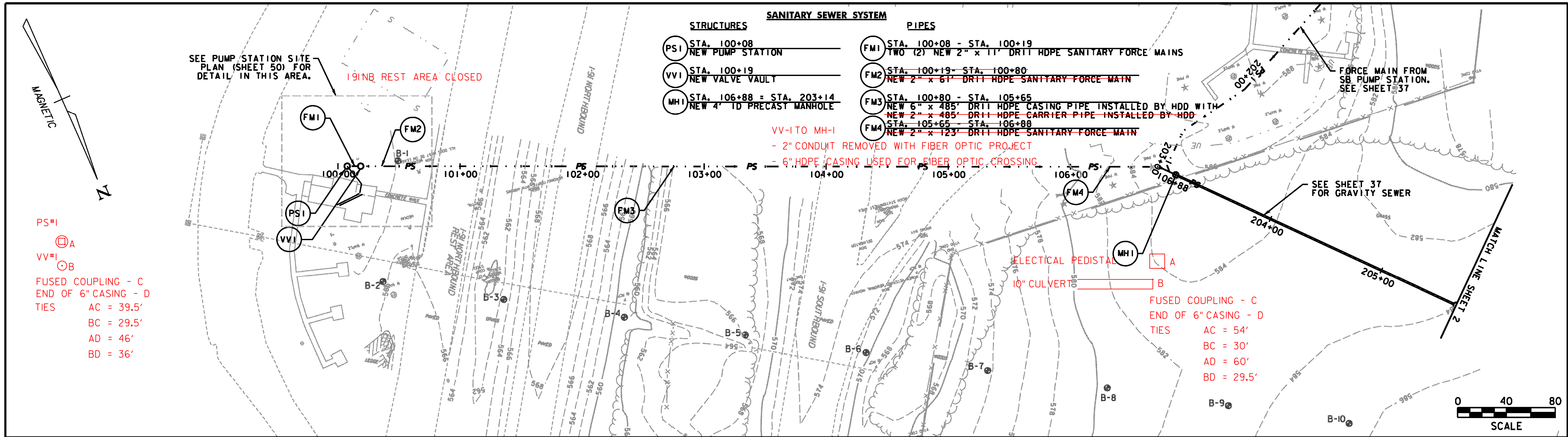
SCALE: 1"=20'

LEGEND	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	PDF
SILT FENCE (LINE STYLE)	
STABILIZED CONSTRUCTION ENTRANCE	
ROCK DAM	
ADAPTED FROM DETAILS PROVIDED BY NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USMA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	
STANDARD SYMBOLS	

NOTES:  
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL - 2006" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.



PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...u04a026pit-ErosionControl.SIF.pdf
PROJECT LEADER:	JTM
DESIGNED BY:	MEHP
EROSION CONTROL SHEET 12	
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET 35	OF 70



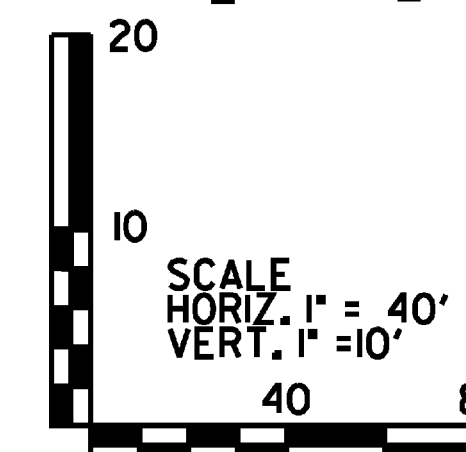
**NOTES:**  
 FOR PROFILE FROM MH 1 TO MH 2 SEE SHEET 37  
 FOR SOUTHBOUND REST AREA FORCE MAIN DETAILS SEE PLAN AND PROFILE SHEET 37

**DIRECTIONAL DRILLING NOTES:**

- PROPOSED DRILL PATH SHOWN IS APPROXIMATE AS SHOWN. CONTRACTOR SHALL SUBMIT, FOR APPROVAL, THE FINAL PROPOSED DRILL PATH PRIOR TO COMMENCEMENT OF DIRECTIONAL DRILL OPERATIONS.
- PLACEMENT OF HORIZONTAL DRILLING RIG IS NOT FIXED BY DESIGNATION OF ENTRY AND EXIT POINTS. DRILLING RIG PLACEMENT AND/OR THE USE OF DUAL RIGS SHALL BE AT THE CONTRACTOR'S OPTION.
- AREAS FOR ASSEMBLY OF HDPE PIPE PRIOR TO PULL BACK SHALL BE COORDINATED WITH PROJECT ENGINEER.

**DRILLED PATH NOTES:**

- DRILLED PATH STATIONING IS IN FEET BY HORIZONTAL AND IS REFERENCED TO CONTROL ESTABLISHED FOR THE DRILLED SEGMENT.
- DRILLED PATH COORDINATES REFER TO CENTERLINE OF PIPE.



PROJECT NAME: HARTFORD REST AREAS  
 PROJECT NUMBER: IM BLDG(10)

FILE NAME: ...plot files\04026plot-utl.dgn PLOT DATE: 5/19/2008  
 PROJECT LEADER: JTM DRAWN BY: PZA  
 DESIGNED BY: MEHP CHECKED BY: JTM  
 PLAN & PROFILE SHEET 1 SHEET 36 OF 70

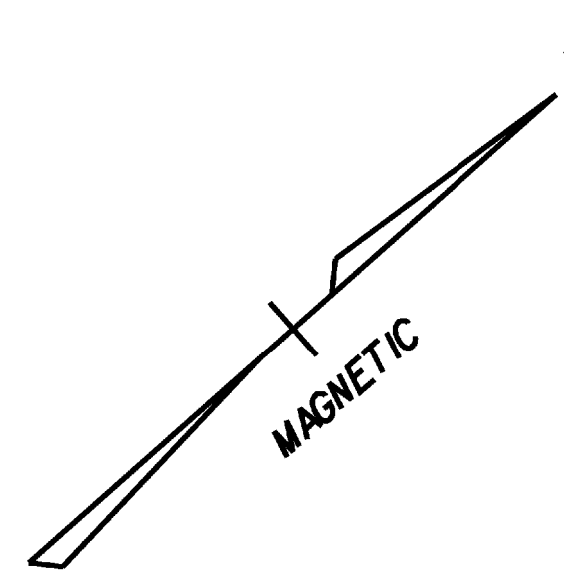
**SANITARY SEWER SYSTEM**

**STRUCTURES**

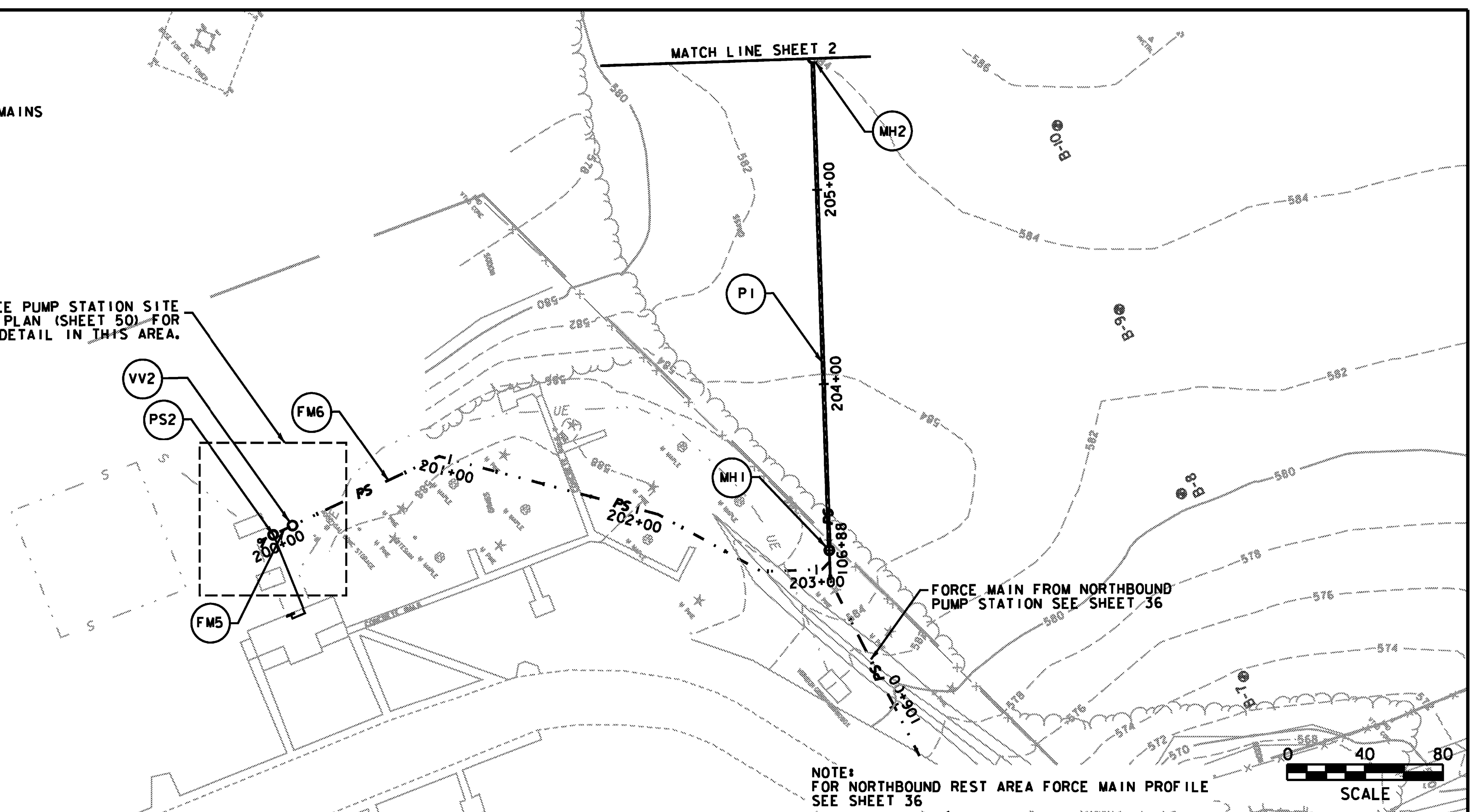
- PS2 STA. 200+00  
NEW PUMP STATION
- VV2 STA. 200+11  
NEW VALVE VAULT
- MH1 STA. 203+14 = STA. 106+88  
NEW 4' ID PRECAST MANHOLE
- MH2 STA. 205+68  
NEW 4' ID PRECAST MANHOLE

**PIPES**

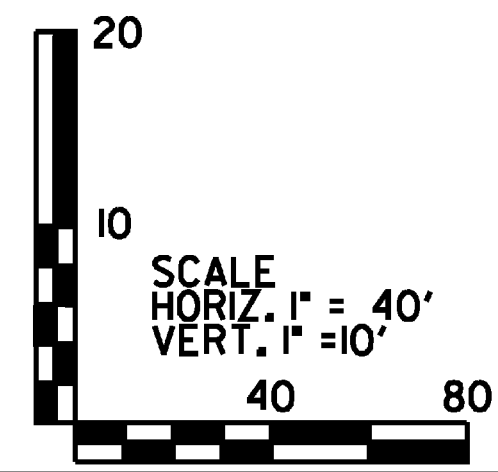
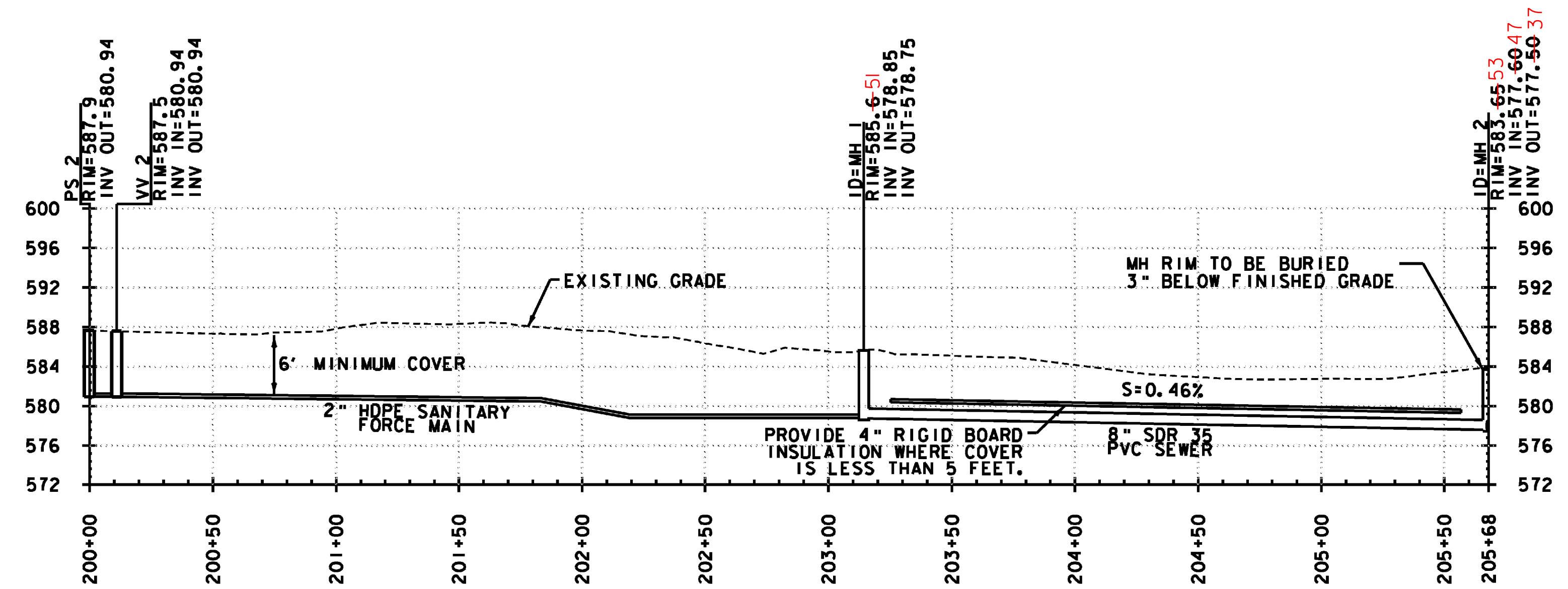
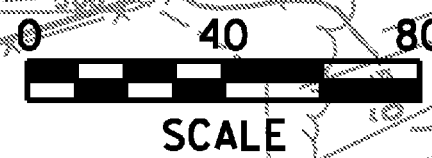
- FM5 STA. 200+00 - STA. 200+11  
TWO (2) NEW 2" x 11" DRTI HDPE SANITARY FORCE MAINS
- FM6 STA. 200+11 - STA. 203+14  
NEW 2" x 303' DRTI HDPE SANITARY FORCE MAIN
- PI STA. 203+14 - STA. 205+68  
NEW 8" x 254' SDR 35 PVC SEWER



SEE PUMP STATION SITE PLAN (SHEET 50) FOR DETAIL IN THIS AREA.



NOTE: FOR NORTHBOUND REST AREA FORCE MAIN PROFILE SEE SHEET 36



PROJECT NAME: HARTFORD REST AREAS	
PROJECT NUMBER: IM BLDG(10)	
FILE NAME: ... \plot files\04026plt-utl.dgn	PLOT DATE: 5/19/2008
PROJECT LEADER: JTM	DRAWN BY: PZA
DESIGNED BY: MEHP	CHECKED BY: JTM
PLAN & PROFILE SHEET 1A	SHEET 37 OF 70

**SANITARY SEWER SYSTEM**

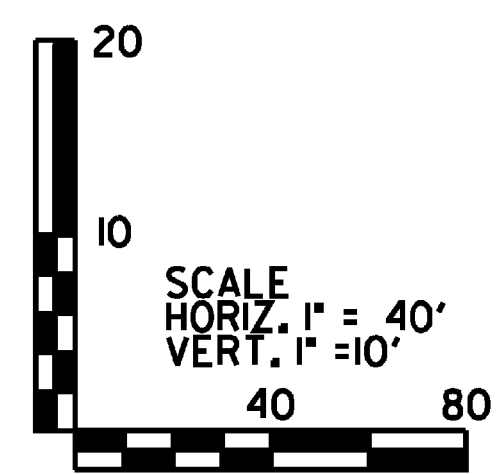
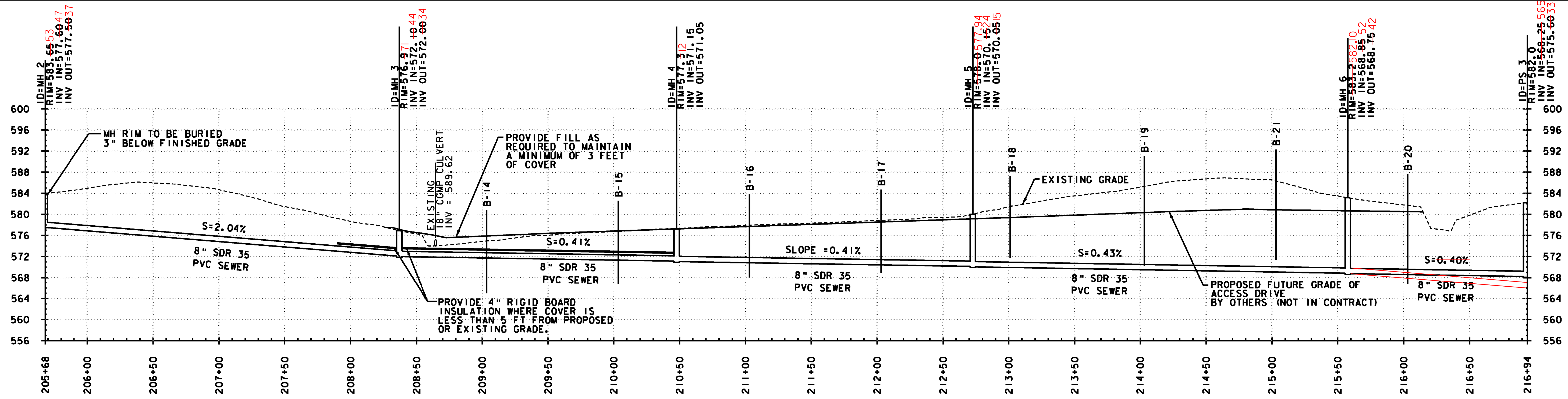
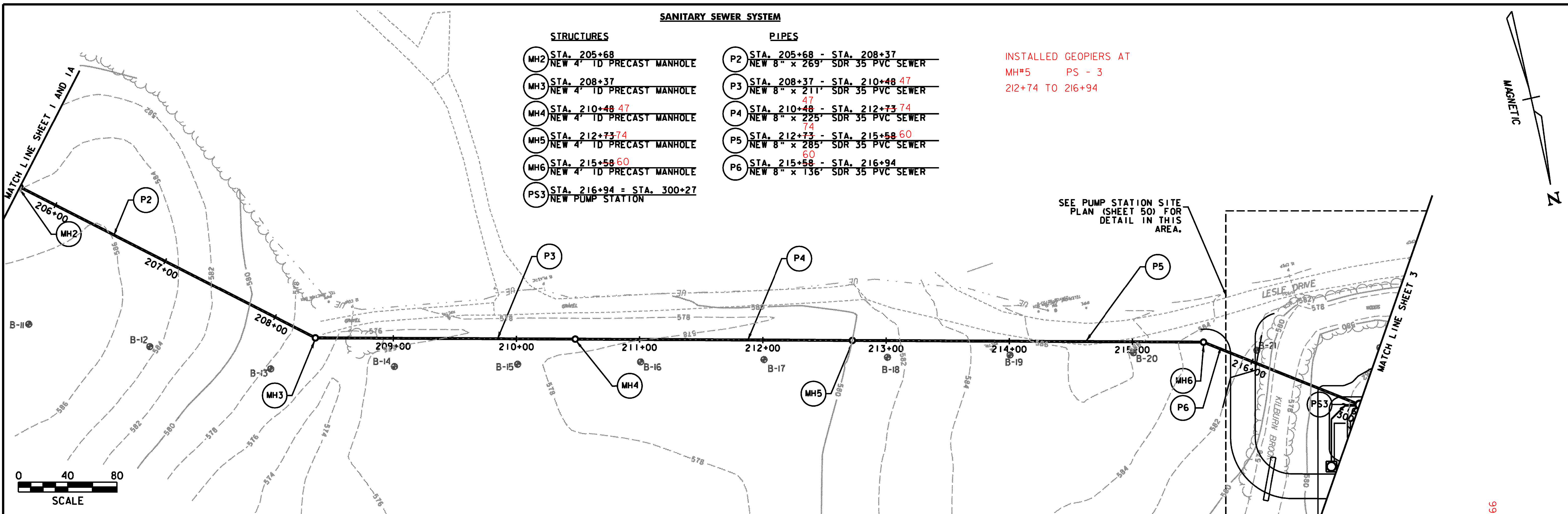
**STRUCTURES**

- MH2 STA. 205+68  
NEW 4' ID PRECAST MANHOLE
- MH3 STA. 208+37  
NEW 4' ID PRECAST MANHOLE
- MH4 STA. 210+48.47  
NEW 4' ID PRECAST MANHOLE
- MH5 STA. 212+73.74  
NEW 4' ID PRECAST MANHOLE
- MH6 STA. 215+58.60  
NEW 4' ID PRECAST MANHOLE
- PS3 STA. 216+94 = STA. 300+27  
NEW PUMP STATION

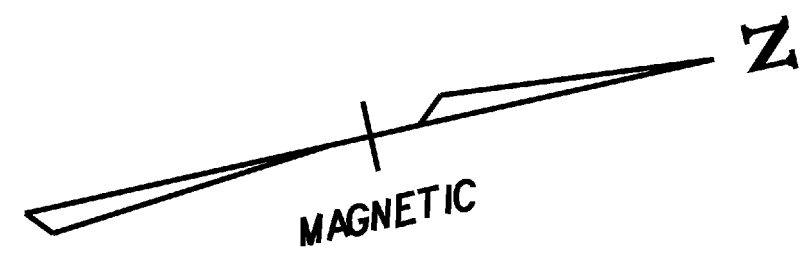
**PIPES**

- P2 STA. 205+68 - STA. 208+37  
NEW 8" x 269' SDR 35 PVC SEWER
- P3 STA. 208+37 - STA. 210+48.47  
NEW 8" x 211' SDR 35 PVC SEWER
- P4 STA. 210+48.47 - STA. 212+73.74  
NEW 8" x 225' SDR 35 PVC SEWER
- P5 STA. 212+73.74 - STA. 215+58.60  
NEW 8" x 285' SDR 35 PVC SEWER
- P6 STA. 215+58.60 - STA. 216+94  
NEW 8" x 136' SDR 35 PVC SEWER

INSTALLED GEOPIERS AT  
MH#5 PS - 3  
212+74 TO 216+94

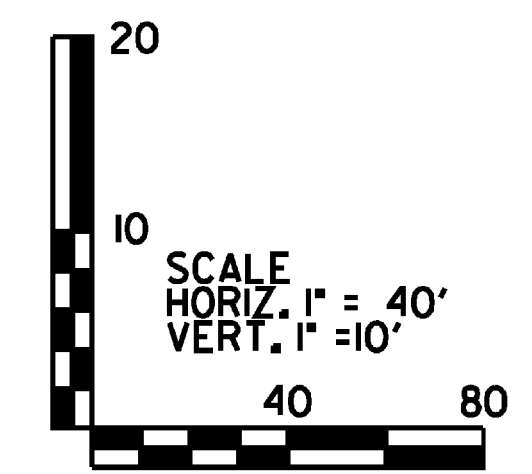
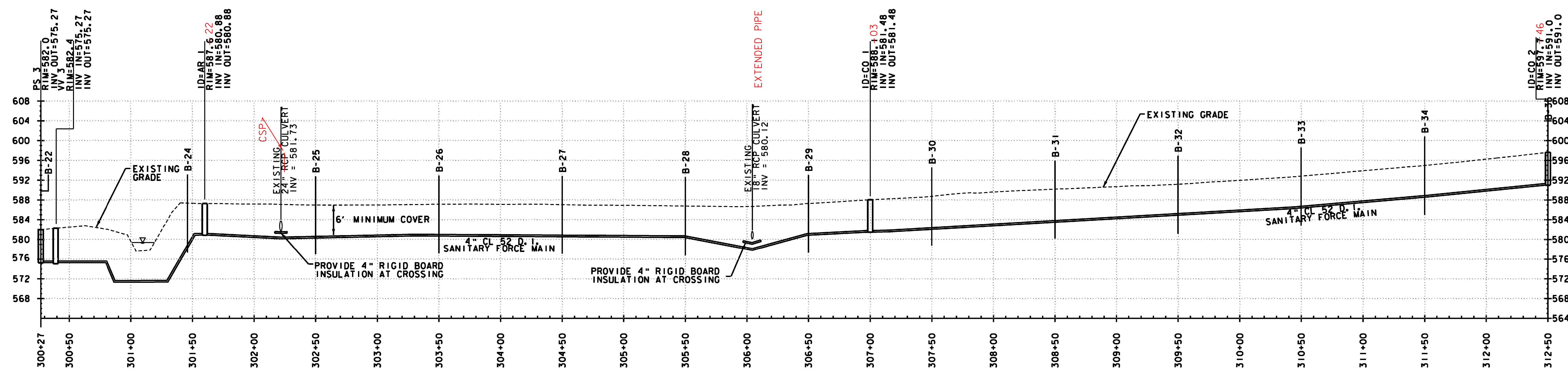
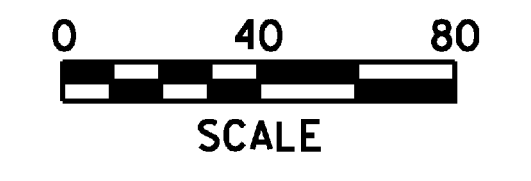
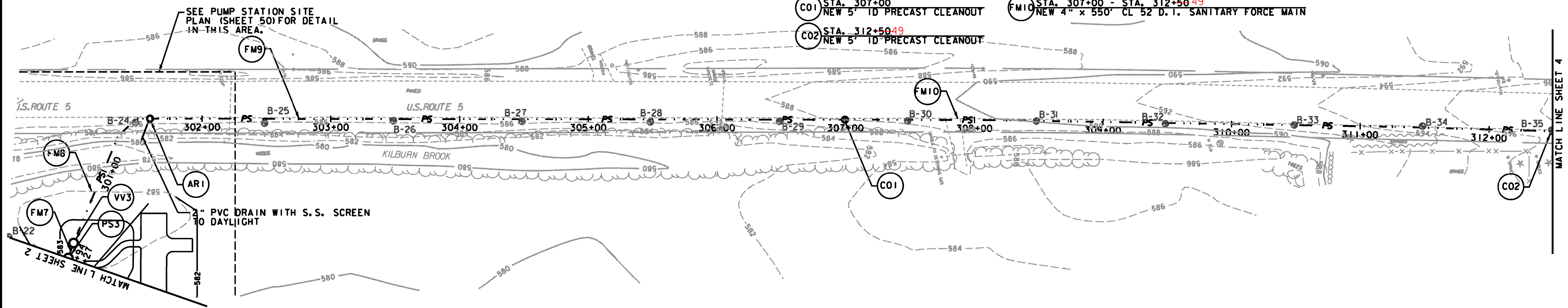


PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...plot files\04\026\pl-t\l.dgn
PLOT DATE:	5/19/2008
PROJECT LEADER:	JTM
DRAWN BY:	PZA
DESIGNED BY:	MEHP
CHECKED BY:	JTM
PLAN & PROFILE SHEET 2	SHEET 38 OF 70

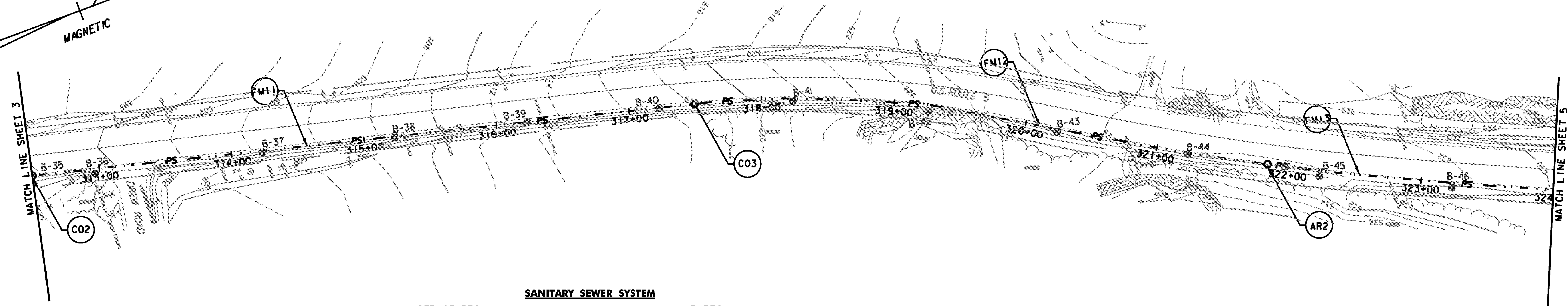
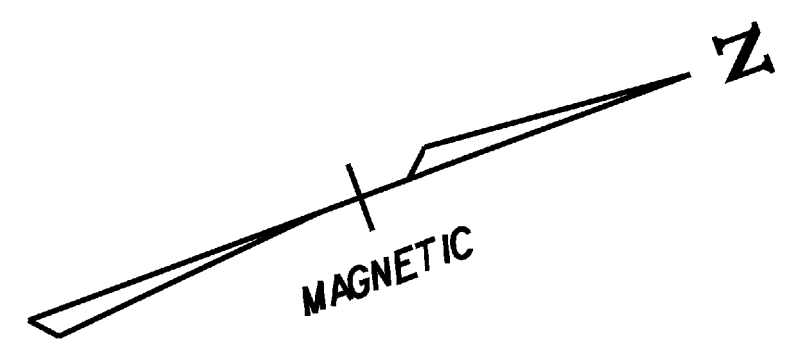


**SANITARY SEWER SYSTEM**

- |   |   |
|---|---|
| <b>STRUCTURES</b>                                   | <b>PIPES</b>  |
| PS3 STA. 300+27 = STA. 216+94<br>NEW PUMP STATION   | FM7 STA. 300+27 - STA. 300+39<br>TWO (2) NEW 4" x 12' CL 52 D.I. SANITARY FORCE MAINS |
| VV3 STA. 300+39<br>NEW VALVE PIT                    | FM8 STA. 300+39 - STA. 301+60.61<br>NEW 4" x 121' CL 52 D.I. SANITARY FORCE MAIN      |
| AR1 STA. 301+60.61<br>NEW 5" ID PRECAST AIR RELEASE | FM9 STA. 301+60.61 - STA. 307+00<br>NEW 4" x 540' CL 52 D.I. SANITARY FORCE MAIN      |
| CO1 STA. 307+00<br>NEW 5" ID PRECAST CLEANOUT       | FM10 STA. 307+00 - STA. 312+50.49<br>NEW 4" x 550' CL 52 D.I. SANITARY FORCE MAIN     |
| CO2 STA. 312+50.49<br>NEW 5" ID PRECAST CLEANOUT    |   |

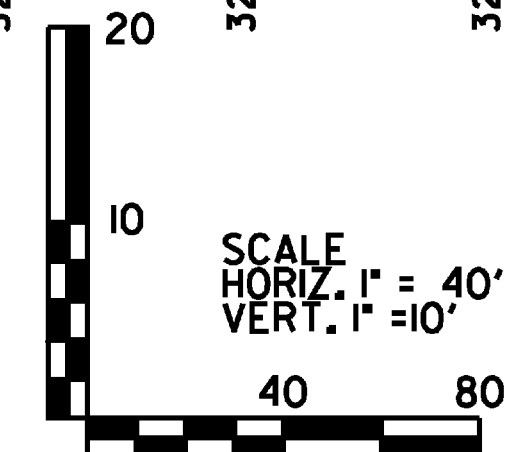
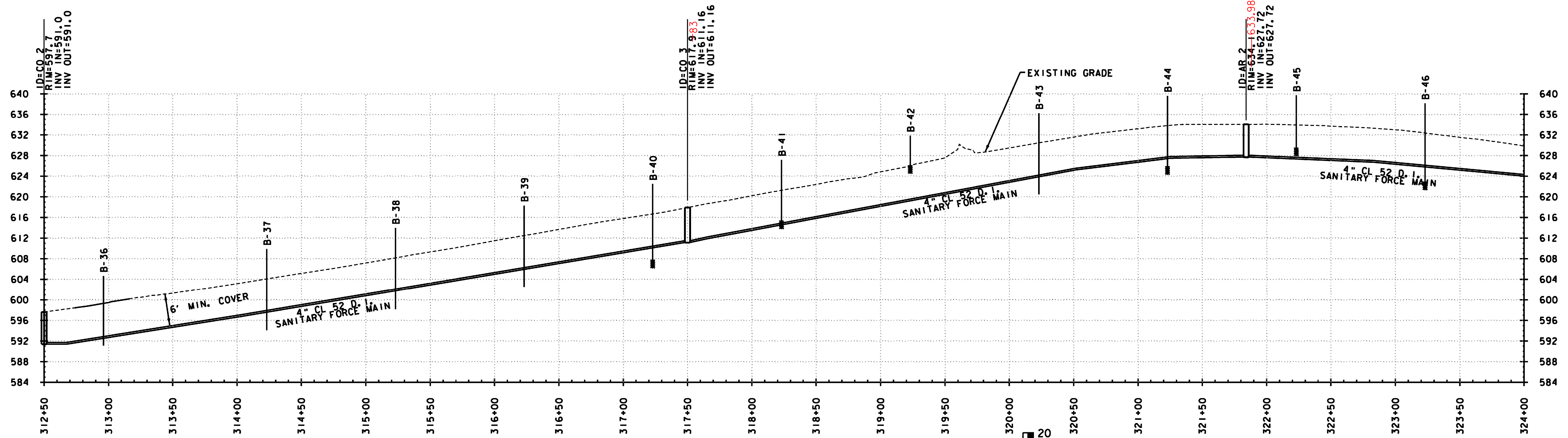
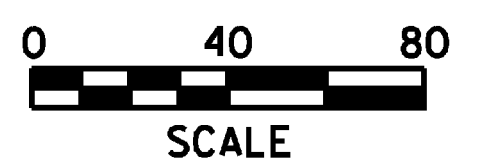


PROJECT NAME: HARTFORD REST AREAS  
 PROJECT NUMBER: IM BLDG(10)  
 FILE NAME: ...plot files\04a026pl+wt\dgnPLOT DATE: 5/19/2008  
 PROJECT LEADER: JTM DRAWN BY: PZA  
 DESIGNED BY: MEHP CHECKED BY: JTM  
 PLAN & PROFILE SHEET 3 SHEET 39 OF 70



**SANITARY SEWER SYSTEM**

STRUCTURES		PIPES	
C02	STA. 312+50 <sup>49</sup> NEW 5" ID PRECAST CLEANOUT	FMI 1	STA. 312+50 <sup>49</sup> - STA. 317+50 NEW 4" x 500' CL 52 D.I. SANITARY FORCE MAIN
C03	STA. 317+50 NEW 5" ID PRECAST CLEANOUT	FMI 2	STA. 317+50 <sup>85</sup> - STA. 321+84 <sup>85</sup> NEW 4" x 434' CL 52 D.I. SANITARY FORCE MAIN
AR2	STA. 321+84 <sup>83</sup> NEW 5" ID PRECAST AIR RELEASE	FMI 3	STA. 321+84 <sup>83</sup> - STA. 327+84 <sup>85</sup> NEW 4" x 600' CL 52 D.I. SANITARY FORCE MAIN



PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...plot files\04026pit-ut1.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	MEHP
PLAN & PROFILE SHEET 4	
PLOT DATE:	5/19/2008
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET 40	OF 70

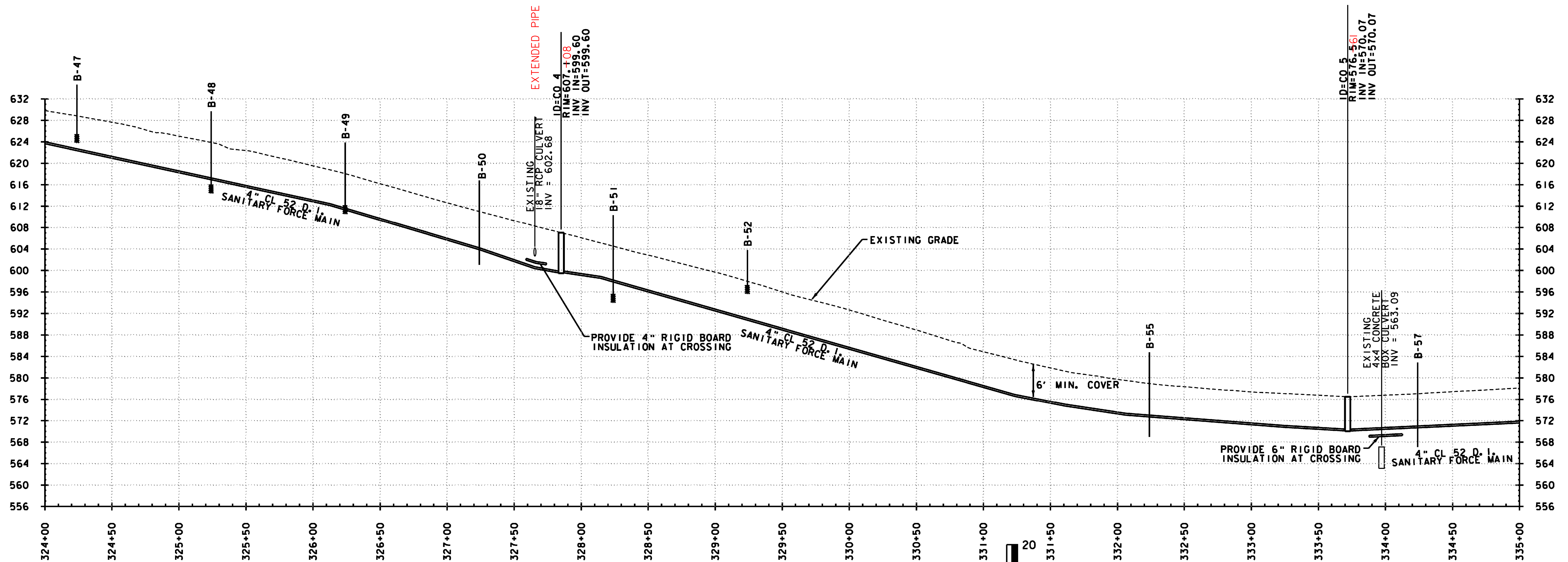
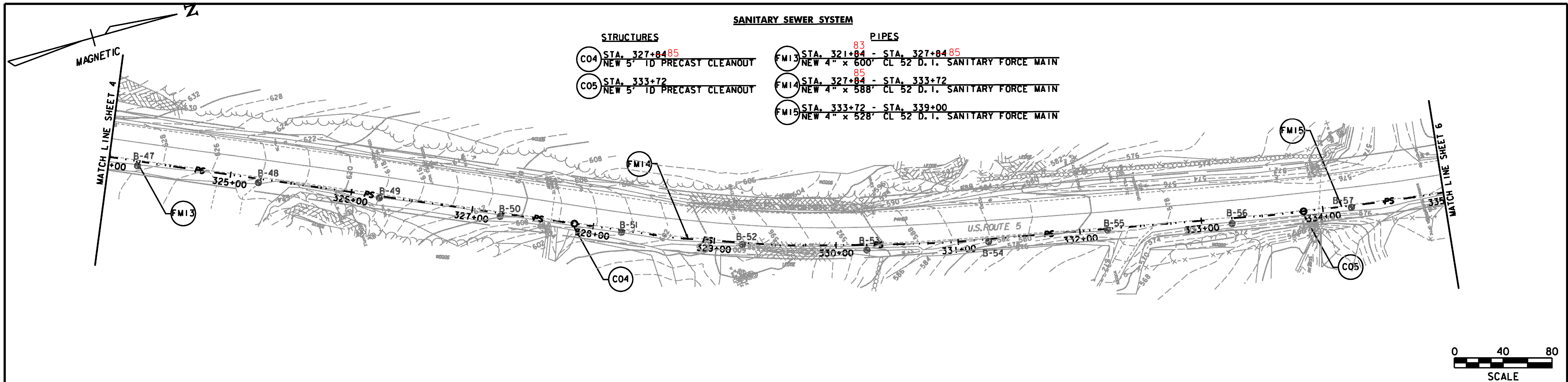
**SANITARY SEWER SYSTEM**

**STRUCTURES**

- C04 STA. 327+84.85  
NEW 5' ID PRECAST CLEANOUT
- C05 STA. 333+72  
NEW 5' ID PRECAST CLEANOUT

**PIPES**

- FM13 STA. 321+84 - STA. 327+84.85  
NEW 4" x 600' CL 52 D.I. SANITARY FORCE MAIN
- FM14 STA. 327+84 - STA. 333+72  
NEW 4" x 588' CL 52 D.I. SANITARY FORCE MAIN
- FM15 STA. 333+72 - STA. 339+00  
NEW 4" x 528' CL 52 D.I. SANITARY FORCE MAIN



PROJECT NAME: HARTFORD REST AREAS  
 PROJECT NUMBER: IM BLDG(10)  
 FILE NAME: \\... \plot files\04026\plot-utl.dgn PLOT DATE: 5/19/2008  
 PROJECT LEADER: JTM DRAWN BY: PZA  
 DESIGNED BY: MEHP CHECKED BY: JTM  
 PLAN & PROFILE SHEET 5 SHEET 41 OF 70

**SANITARY SEWER SYSTEM**

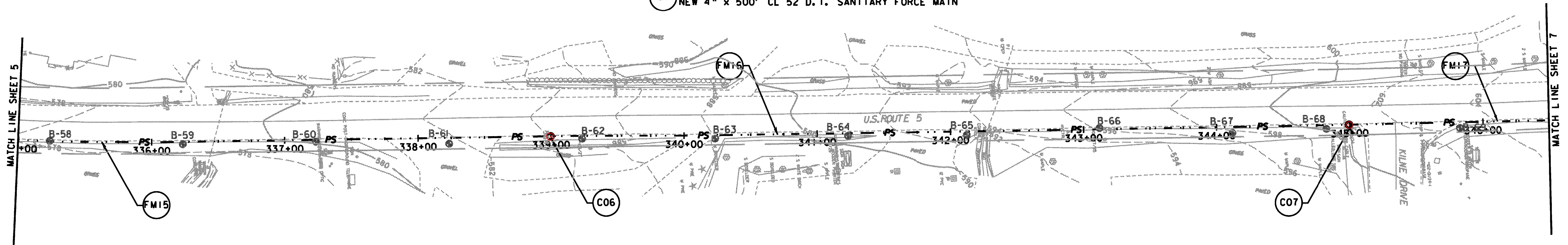
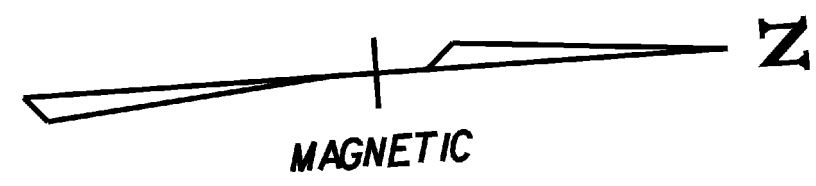
**RELOCATE MAILBOX**  
 STA. 341+25, RT.  
 STA. 345+03, RT.

**STRUCTURES**

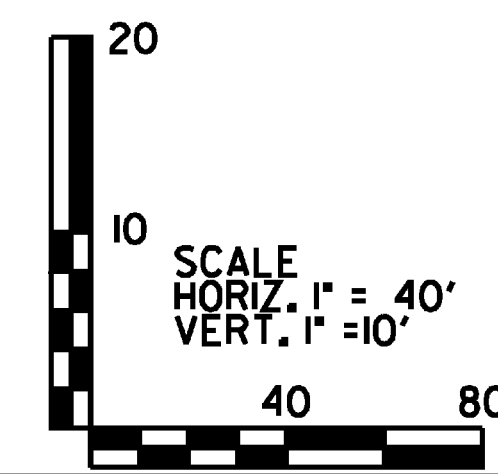
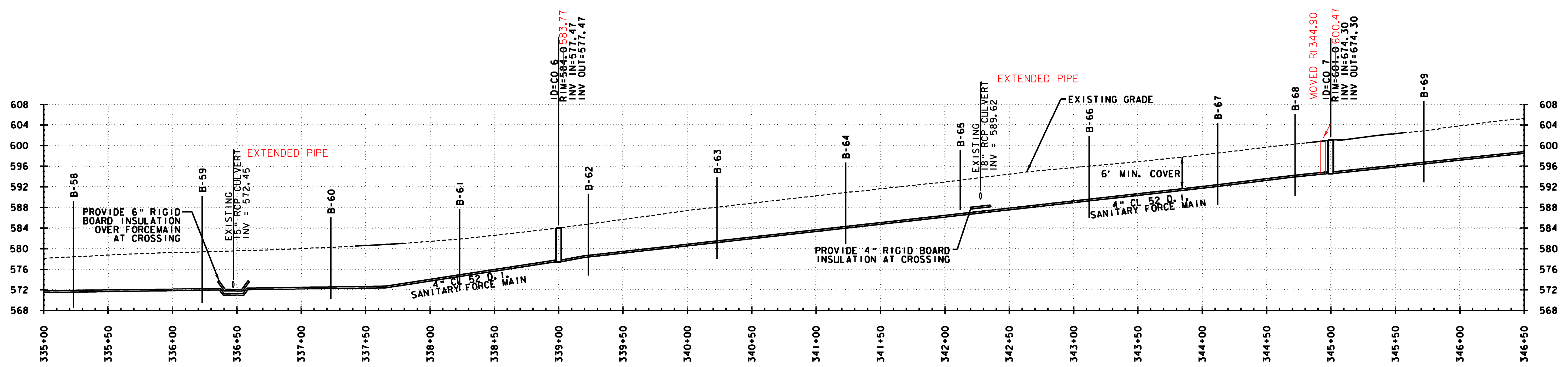
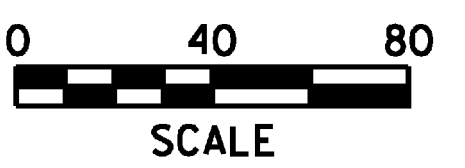
**PIPES**

- C06 STA. 339+00 - 338+99-3.0' RT  
 NEW 5" ID PRECAST CLEANOUT
- C07 STA. 345+00 - 344+90-3.8' RT  
 NEW 5" ID PRECAST CLEANOUT

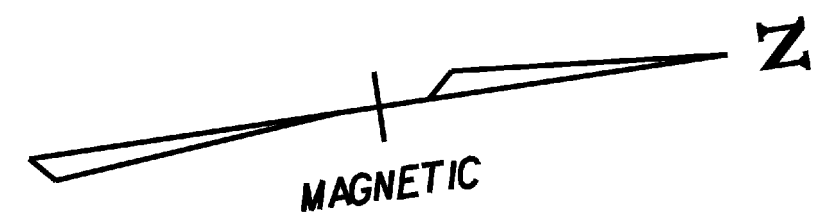
- FM15 STA. 333+72 - STA. 339+00 338+99  
 NEW 4" x 528' CL 52 D.I. SANITARY FORCE MAIN
- FM16 STA. 339+00 - STA. 345+00 344+90  
 NEW 4" x 600' CL 52 D.I. SANITARY FORCE MAIN
- FM17 STA. 345+00 - STA. 350+00 349+99  
 NEW 4" x 500' CL 52 D.I. SANITARY FORCE MAIN



NOTE:  
 1. MAILBOX RELOCATION PAID FOR AS  
 ITEM 617.10 - RELOCATE MAILBOX,  
 SINGLE SUPPORT



PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...plot files\04a026plt-utLdgnPLOT DATE: 5/19/2008
PROJECT LEADER:	JTM DRAWN BY: PZA
DESIGNED BY:	MEHP CHECKED BY: JTM
PLAN & PROFILE SHEET 6	SHEET 42 OF 70



**RELOCATE MAILBOX**  
 STA. 348+26, RT.  
 STA. 351+94, RT.

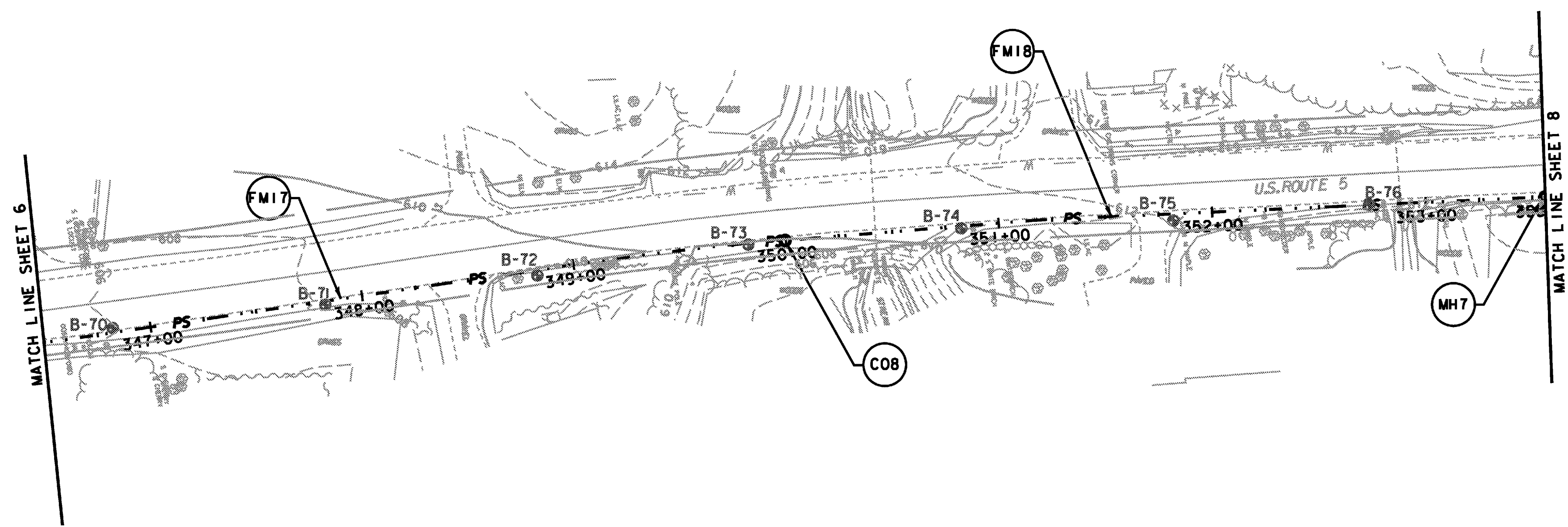
**SANITARY SEWER SYSTEM**

**STRUCTURES**

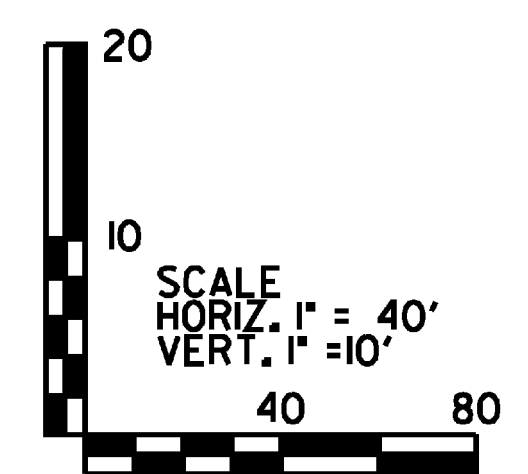
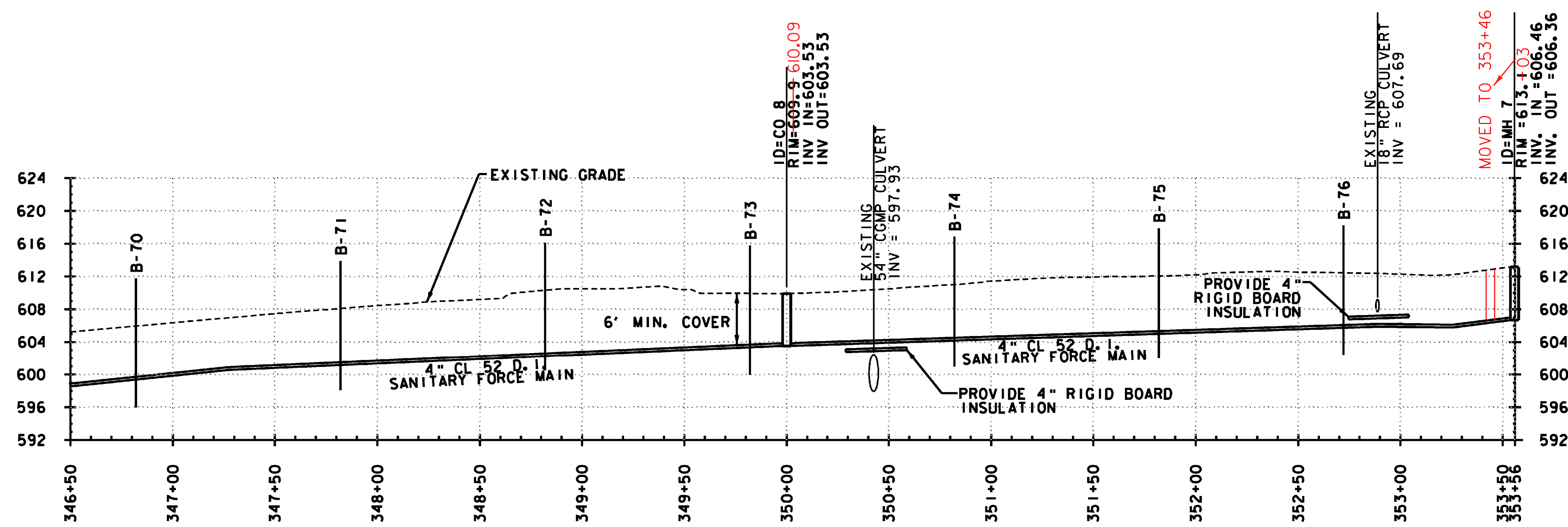
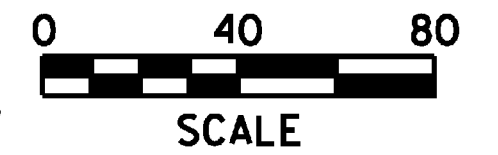
- COB STA. 350+00 - 349.99  
NEW 5' ID PRECAST CLEANOUT
- MH7 STA. 353+56 = STA. 400+00  
NEW 4' ID PRECAST MANHOLE

**PIPES**

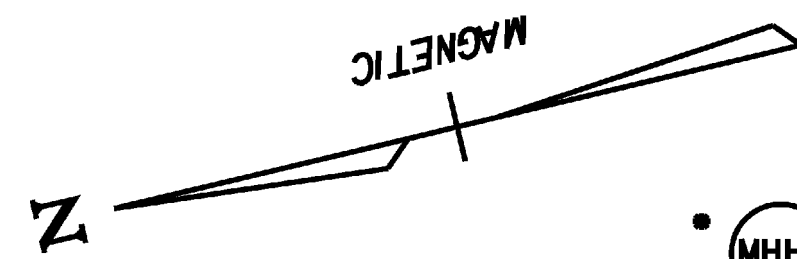
- FM17 STA. 345+00 - STA. 350+00 349.99  
NEW 4" x 500' CL 52 D.I. SANITARY FORCE MAIN
- FM18 STA. 349.99 - STA. 353+56 46  
NEW 4" x 356' CL 52 D.I. SANITARY FORCE MAIN



NOTE:  
 1. MAILBOX RELOCATION PAID FOR AS  
 ITEM 617.10 - RELOCATE MAILBOX,  
 SINGLE SUPPORT



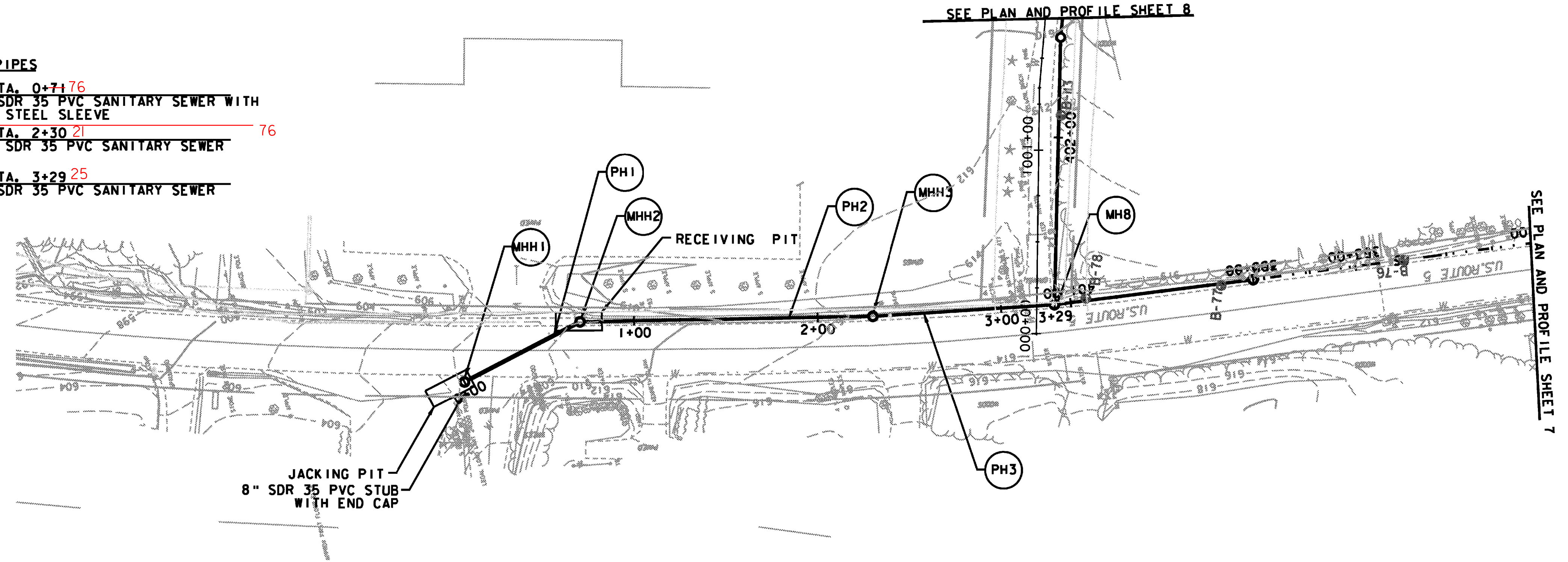
PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	... \plot files\04a026plt-ut1.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	MEHP
PLAN & PROFILE SHEET 7	
DATE:	5/19/2008
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET 43	OF 70



- STRUCTURES**
- (MHH1) STA. 0+00  
NEW 4' ID PRECAST MANHOLE
  - (MHH2) STA. 0+71.76  
NEW 4' ID PRECAST MANHOLE
  - (MHH3) STA. 2+30.21  
NEW 4' ID PRECAST MANHOLE
  - (MH8) STA. 3+29.25 = STA. 401+09  
NEW 4' ID PRECAST MANHOLE

**SANITARY SEWER SYSTEM**

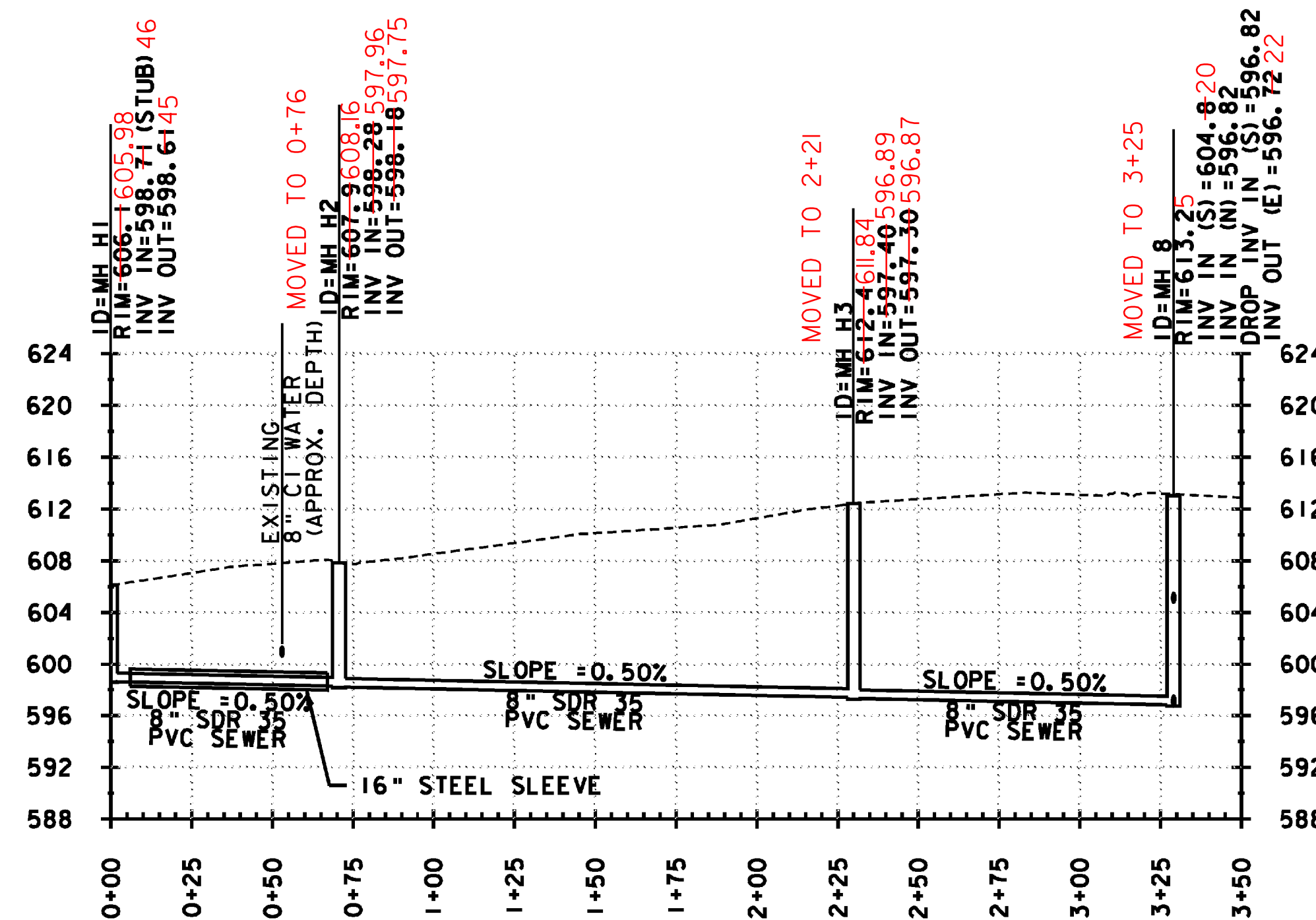
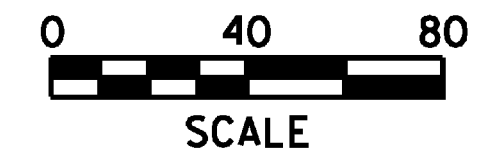
- PIPES**
- (PH1) STA. 0+00 - STA. 0+71.76  
NEW 8" x 71' SDR 35 PVC SANITARY SEWER WITH  
NEW 16" x 65' STEEL SLEEVE
  - (PH2) STA. 0+71.76 - STA. 2+30.21  
NEW 8" x 159' SDR 35 PVC SANITARY SEWER
  - (PH3) STA. 2+30.21 - STA. 3+29.25  
NEW 8" x 99' SDR 35 PVC SANITARY SEWER



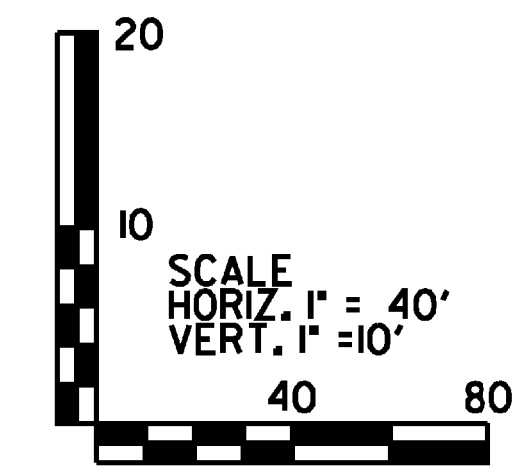
SEE PLAN AND PROFILE SHEET 8

SEE PLAN AND PROFILE SHEET 7

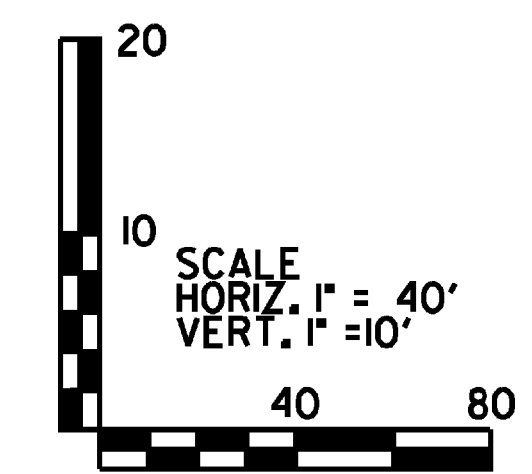
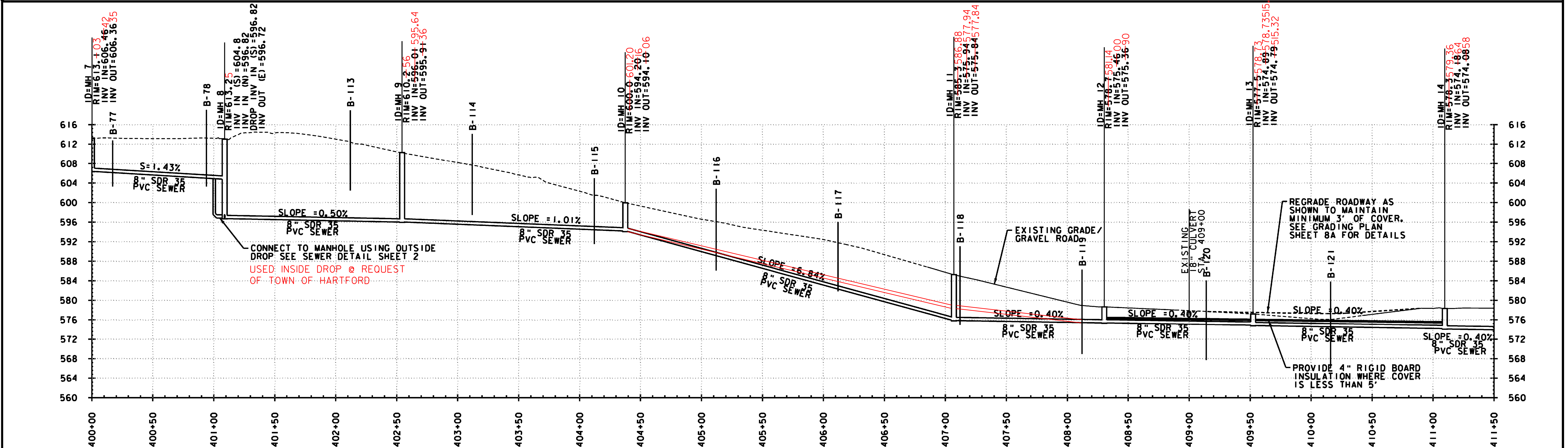
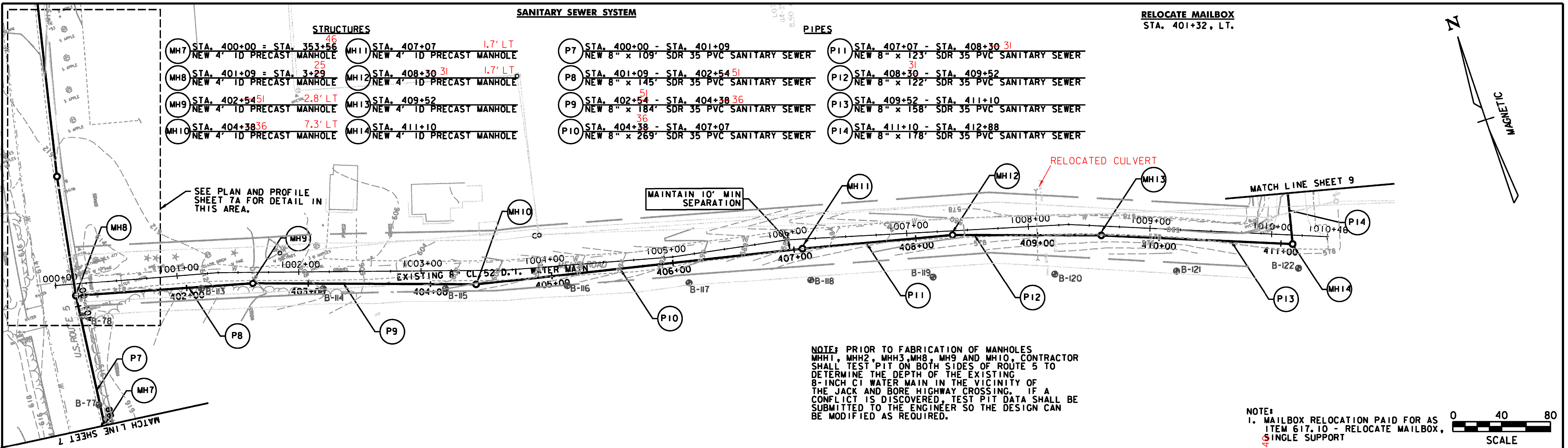
• NON-PARTICIPATORY WORK



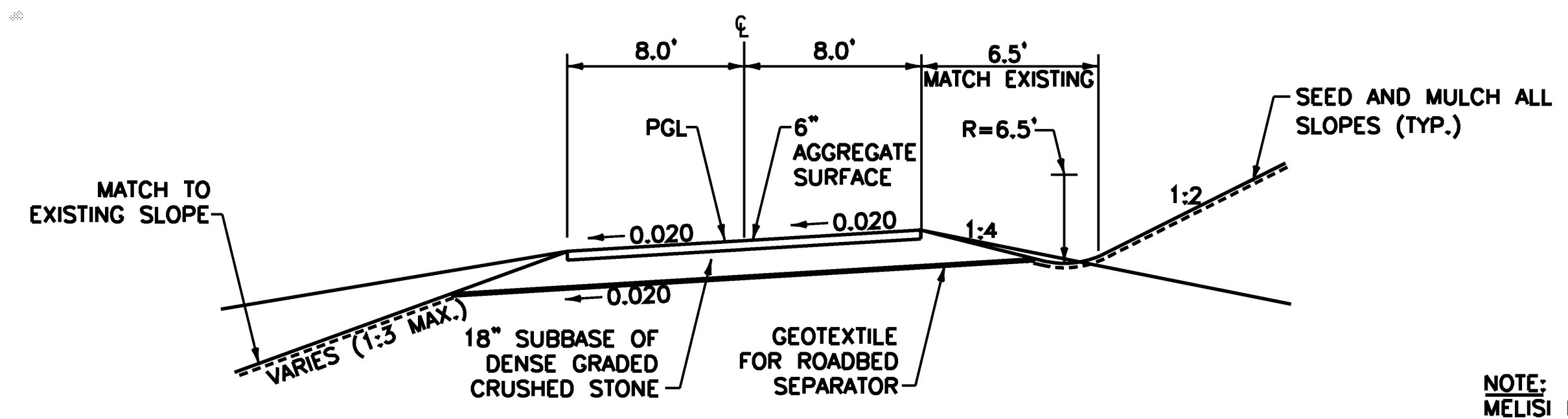
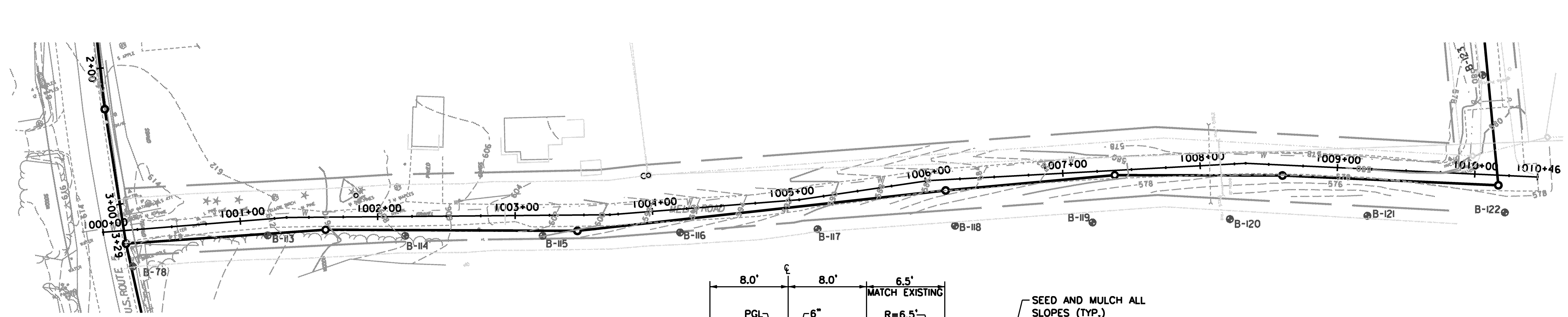
NOTE: PRIOR TO FABRICATION OF MANHOLES MHH1, MHH2, MHH3, MH8, MH9 AND MH10, CONTRACTOR SHALL TEST PIT ON BOTH SIDES OF ROUTE 5 TO DETERMINE THE DEPTH OF THE EXISTING 8-INCH CI WATER MAIN IN THE VICINITY OF THE JACK AND BORE HIGHWAY CROSSING. IF A CONFLICT IS DISCOVERED, TEST PIT DATA SHALL BE SUBMITTED TO THE ENGINEER SO THE DESIGN CAN BE MODIFIED AS REQUIRED.



PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	... \plot files\04a026pit-ut.l.dgn
PLOT DATE:	5/19/2008
PROJECT LEADER:	JTM
DRAWN BY:	PZA
DESIGNED BY:	MEHP
CHECKED BY:	JTM
PLAN & PROFILE SHEET 7A	SHEET 44 OF 70

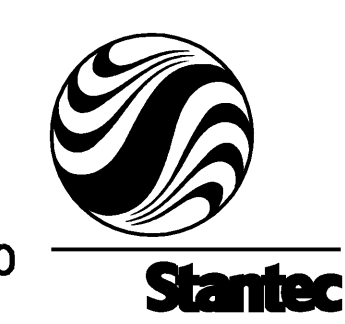
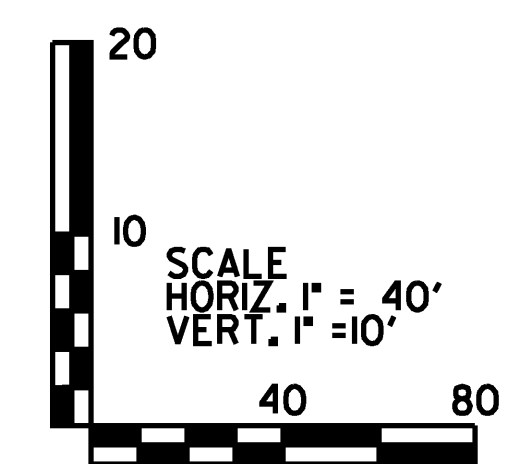
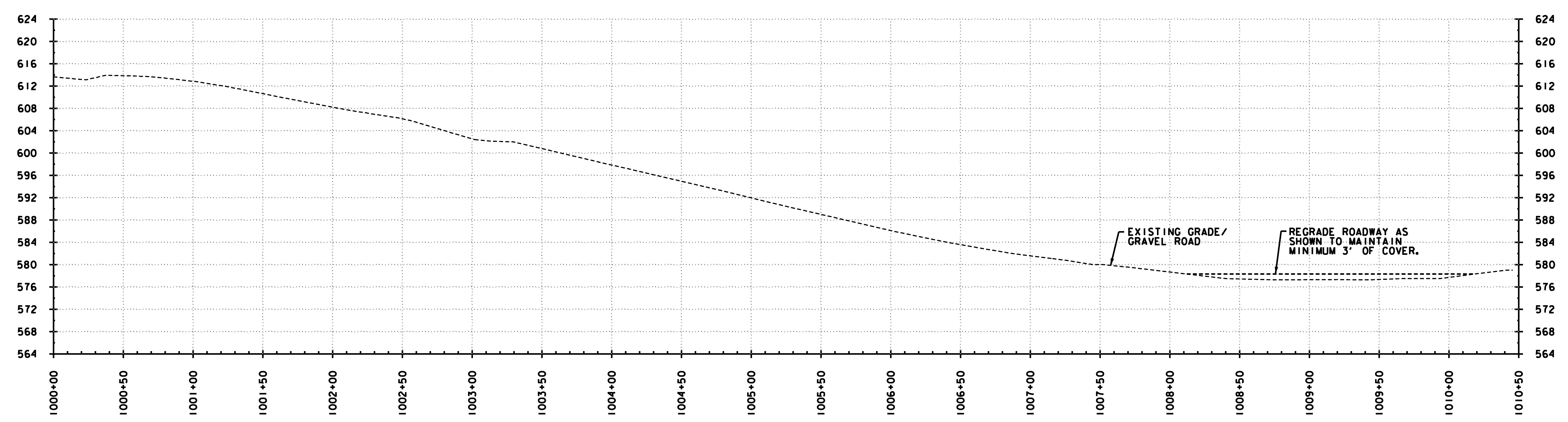
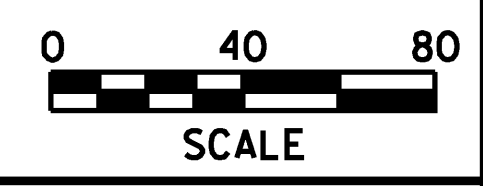


PROJECT NAME: PROPOSED SEWER EXTENSIONS  
 PROJECT NUMBER: IM BLDG(10)  
 FILE NAME: ... \plot files\040026pit-ut1.dgn PLOT DATE: 5/19/2008  
 PROJECT LEADER: JTM DRAWN BY: PZA  
 DESIGNED BY: MEHP CHECKED BY: JTM  
 PLAN & PROFILE SHEET 8 SHEET 45 OF 70

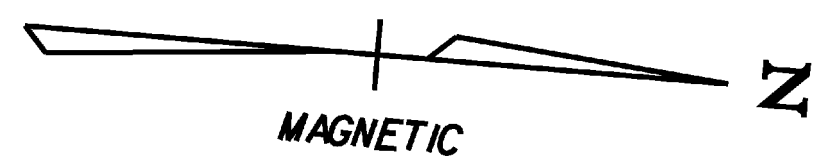


**MELISI ROAD TYPICAL**  
NOT TO SCALE

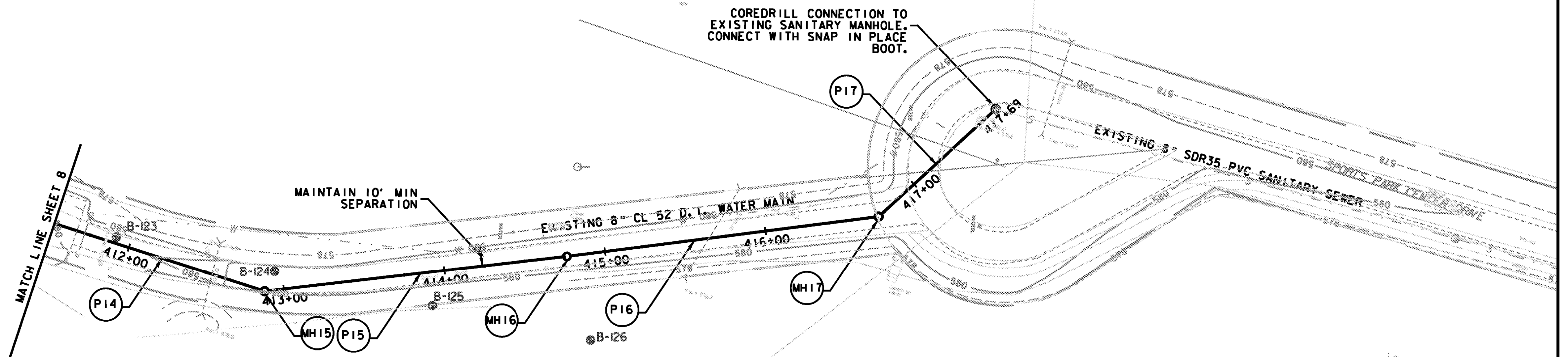
NOTE:  
MELISI ROAD TO BE COMPLETELY  
REGRADED WHERE NEW SEWER  
IS INSTALLED. EXISTING MATERIAL  
MAY BE REUSED IF SUITABLE.



PROJECT NAME: PROPOSED SEWER EXTENTIONS  
 PROJECT NUMBER: IM BLDG(10)  
 FILE NAME: ...U04A026PLT-melisi-grading.dgn PLOT DATE: 5/19/2008  
 PROJECT LEADER: JTM DRAWN BY: PZA  
 DESIGNED BY: MEHP CHECKED BY: JTM  
 GRADING PLAN SHEET 8A SHEET 46 OF 70



UTILITY X-ING



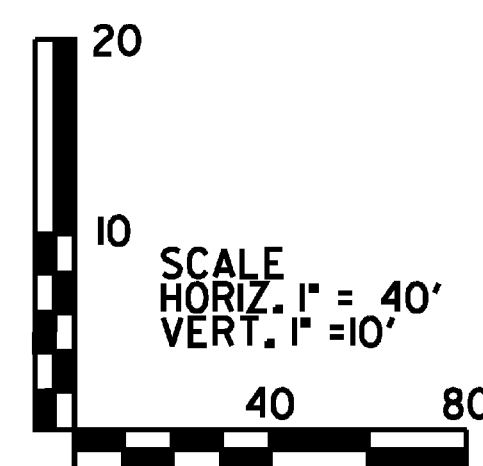
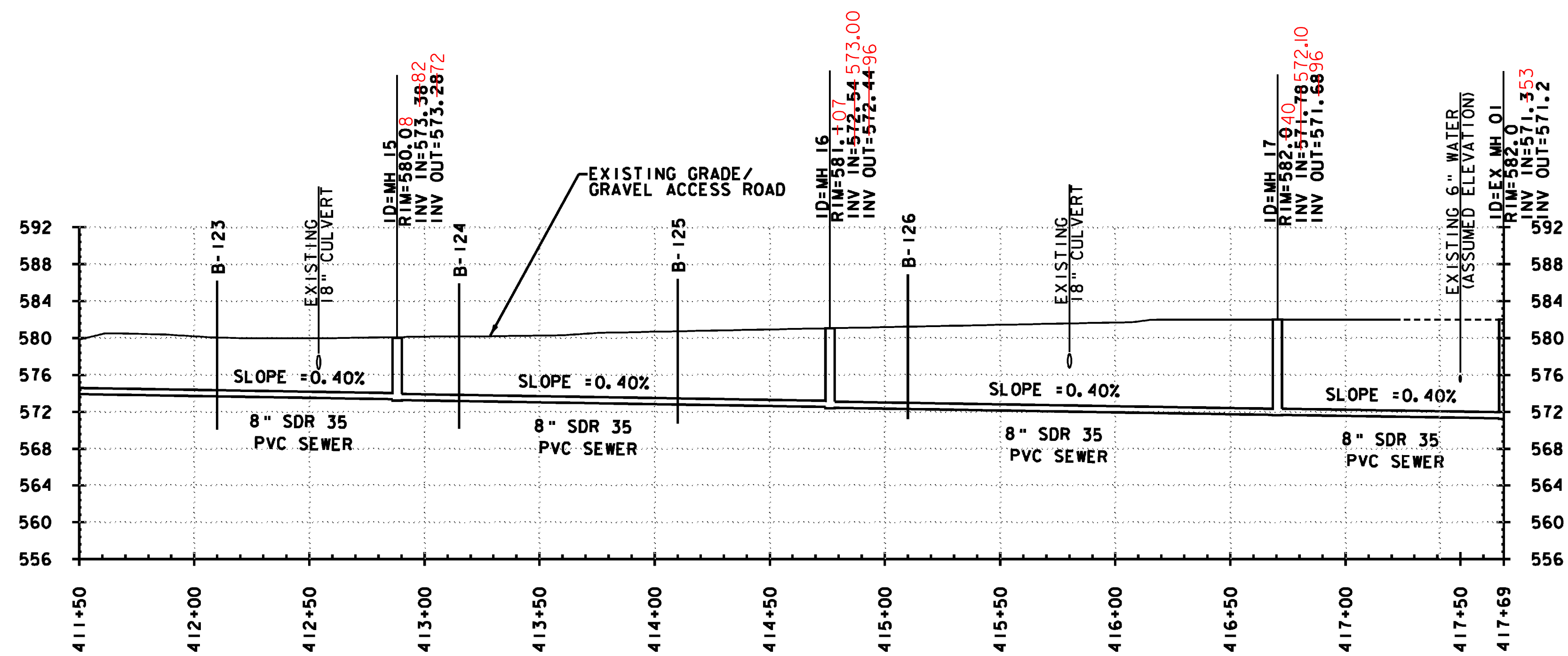
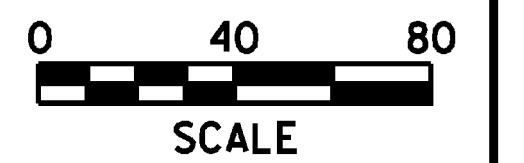
**SANITARY SEWER SYSTEM**

**STRUCTURES**

- MH15 STA. 412+88  
NEW 4' ID PRECAST MANHOLE
- MH16 STA. 414+75.54  
NEW 4' ID PRECAST MANHOLE
- MH17 STA. 416+69  
NEW 4' ID PRECAST MANHOLE

**PIPES**

- P14 STA. 411+10 - STA. 412+88  
NEW 8" x 178' SDR 35 PVC SANITARY SEWER
- P15 STA. 412+88 - STA. 414+75.54  
NEW 8" x 187' SDR 35 PVC SANITARY SEWER
- P16 STA. 414+75.54 - STA. 416+69  
NEW 8" x 194' SDR 35 PVC SANITARY SEWER
- P17 STA. 416+69 - STA. 417+69  
NEW 8" x 100' SDR 35 PVC SANITARY SEWER



PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	... \plot files\04026p1t-utl.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	MEHP
PLAN & PROFILE SHEET	9
PLOT DATE:	5/19/2008
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET	47 OF 70

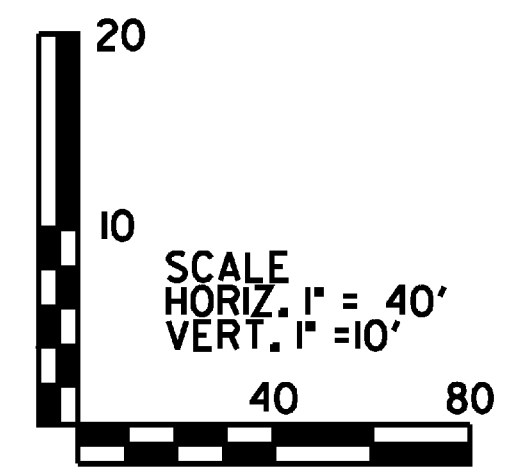
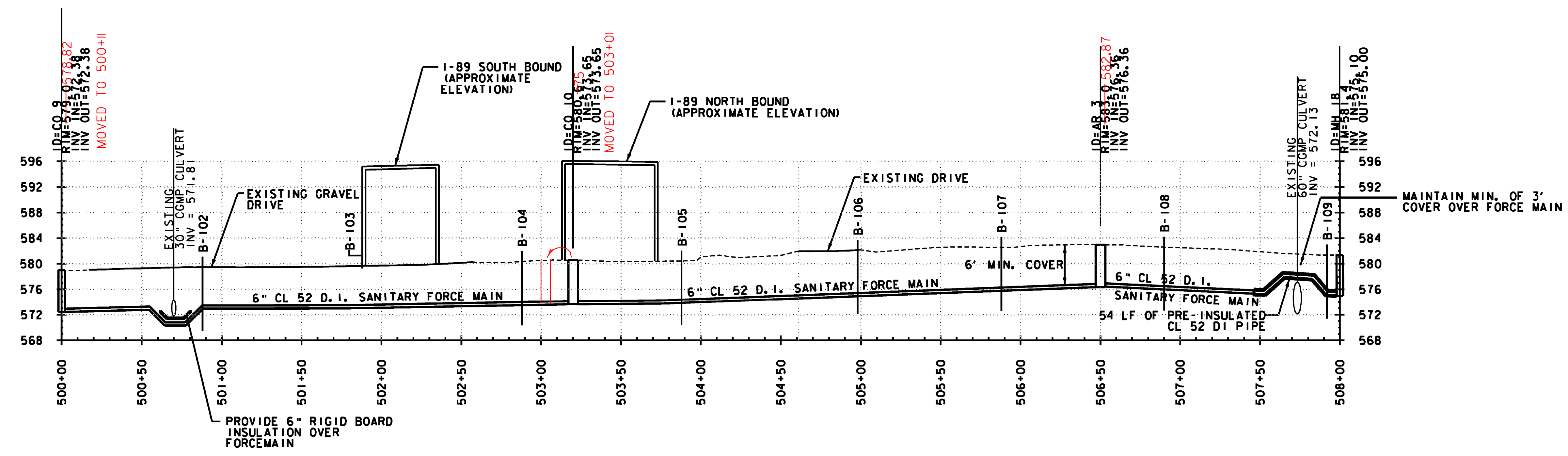
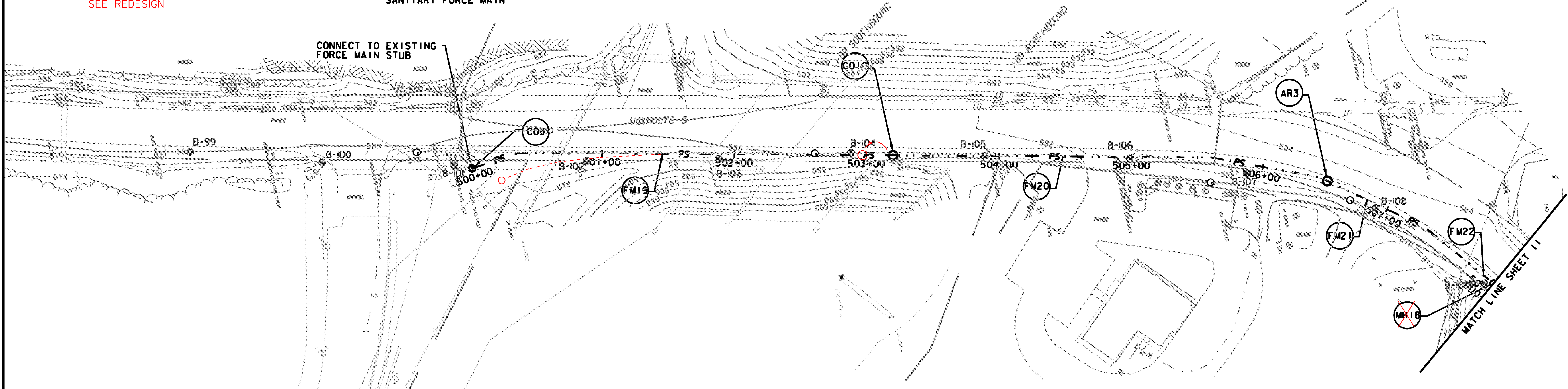
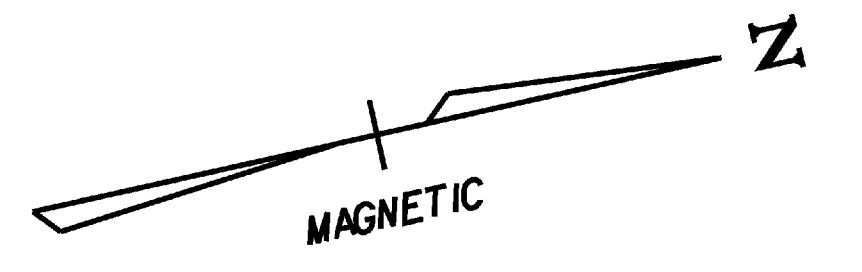
**SANITARY SEWER SYSTEM**

**STRUCTURES**

- C09 STA. 500+00-II  
NEW 6" ID PRECAST CLEANOUT
- C010 STA. 503+20-01  
NEW 6" ID PRECAST CLEANOUT
- AR3 STA. 506+50 3.6' RT  
NEW 6" ID PRECAST CLEANOUT W/ AIR RELEASE
- MH18 STA. 507+98 - STA. 600+00  
NEW 4" ID PRECAST MANHOLE  
SEE REDESIGN

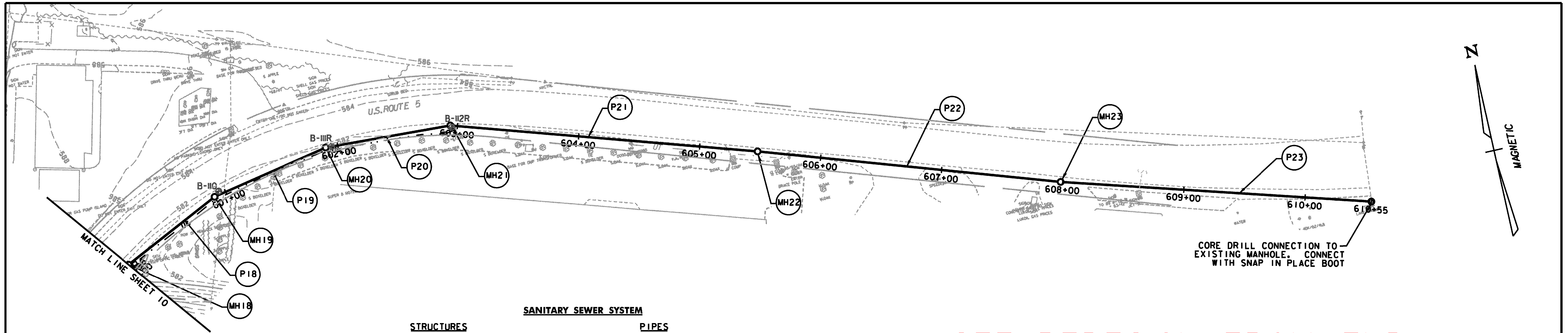
**PIPES**

- FM19 STA. 500+00 - STA. 503+20-01  
NEW 6" x 320' CL 52 D.I. SANITARY FORCE MAIN
- FM20 STA. 503+20-01 - STA. 506+50  
NEW 6" x 330' CL 52 D.I. SANITARY FORCE MAIN
- FM21 STA. 506+50 - STA. 507+44  
NEW 6" x 94' CL 52 D.I. SANITARY FORCE MAIN
- FM22 STA. 507+44 - STA. 507+98  
NEW 6" x 54' PRE-INSULATED CL 52 D.I. SANITARY FORCE MAIN



PROJECT NAME: HARTFORD REST AREAS  
 PROJECT NUMBER: IM BLDG(10)  
 FILE NAME: ... \plot files\04a026p1t-ut1.dgn PLOT DATE: 5/19/2008  
 PROJECT LEADER: JTM DRAWN BY: PZA  
 DESIGNED BY: MEHP CHECKED BY: JTM  
 PLAN & PROFILE SHEET 10 SHEET 48 OF 70

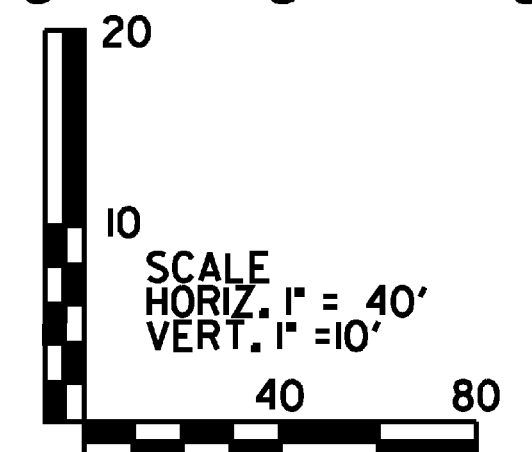
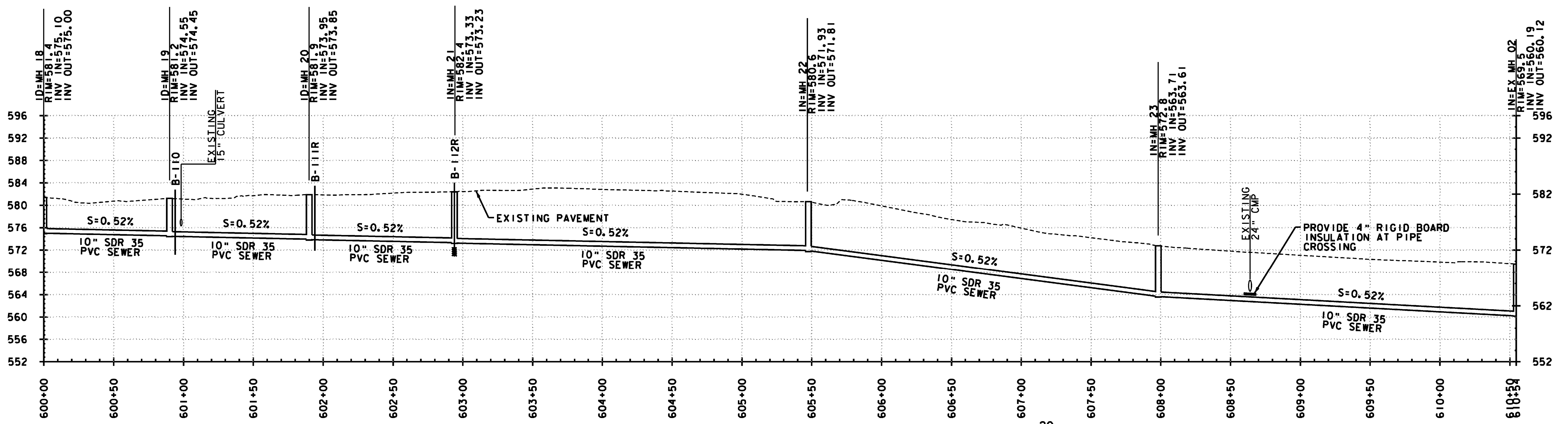
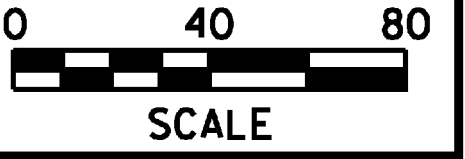




**SANITARY SEWER SYSTEM**

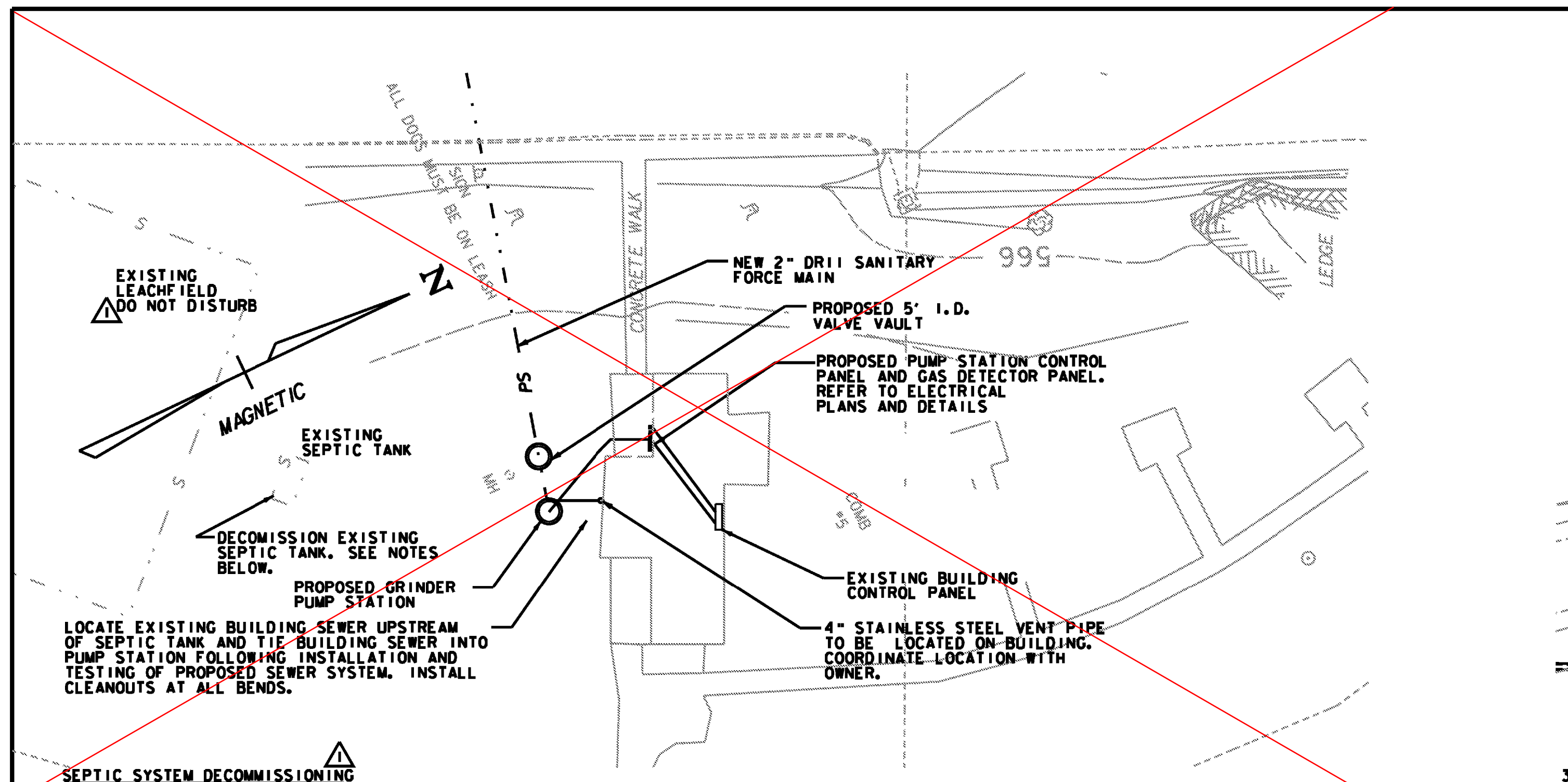
STRUCTURES		PIPES	
MH18	STA. 600+00 = STA. 507+98 NEW 4' ID PRECAST MANHOLE	P18	STA. 600+00 - STA. 600+90 NEW 10" x 90' SDR 35 PVC SANITARY SEWER
MH19	STA. 600+90 NEW 4' ID PRECAST MANHOLE	P19	STA. 600+90 - STA. 601+90 NEW 10" x 100' SDR 35 PVC SANITARY SEWER
MH20	STA. 601+90 NEW 4' ID PRECAST MANHOLE	P20	STA. 601+90 - STA. 602+94 NEW 10" x 104' SDR 35 PVC SANITARY SEWER
MH21	STA. 602+94 NEW 4' ID PRECAST MANHOLE	P21	STA. 602+94 - STA. 605+48 NEW 10" x 254' SDR 35 PVC SANITARY SEWER
MH22	STA. 605+48 NEW 4' ID PRECAST MANHOLE	P22	STA. 605+48 - STA. 607+98 NEW 10" x 250' SDR 35 PVC SANITARY SEWER
MH23	STA. 607+98 NEW 4' ID PRECAST MANHOLE	P23	STA. 607+98 - STA. 610+54 NEW 10" x 256' SDR 35 PVC SANITARY SEWER

SEE REDESIGN FROM END OF INSULATING PIPE



PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	... \plot files\04a026plt-utl.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	MEHP
PLAN & PROFILE SHEET 11	
DATE:	5/19/2008
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET 49	OF 70

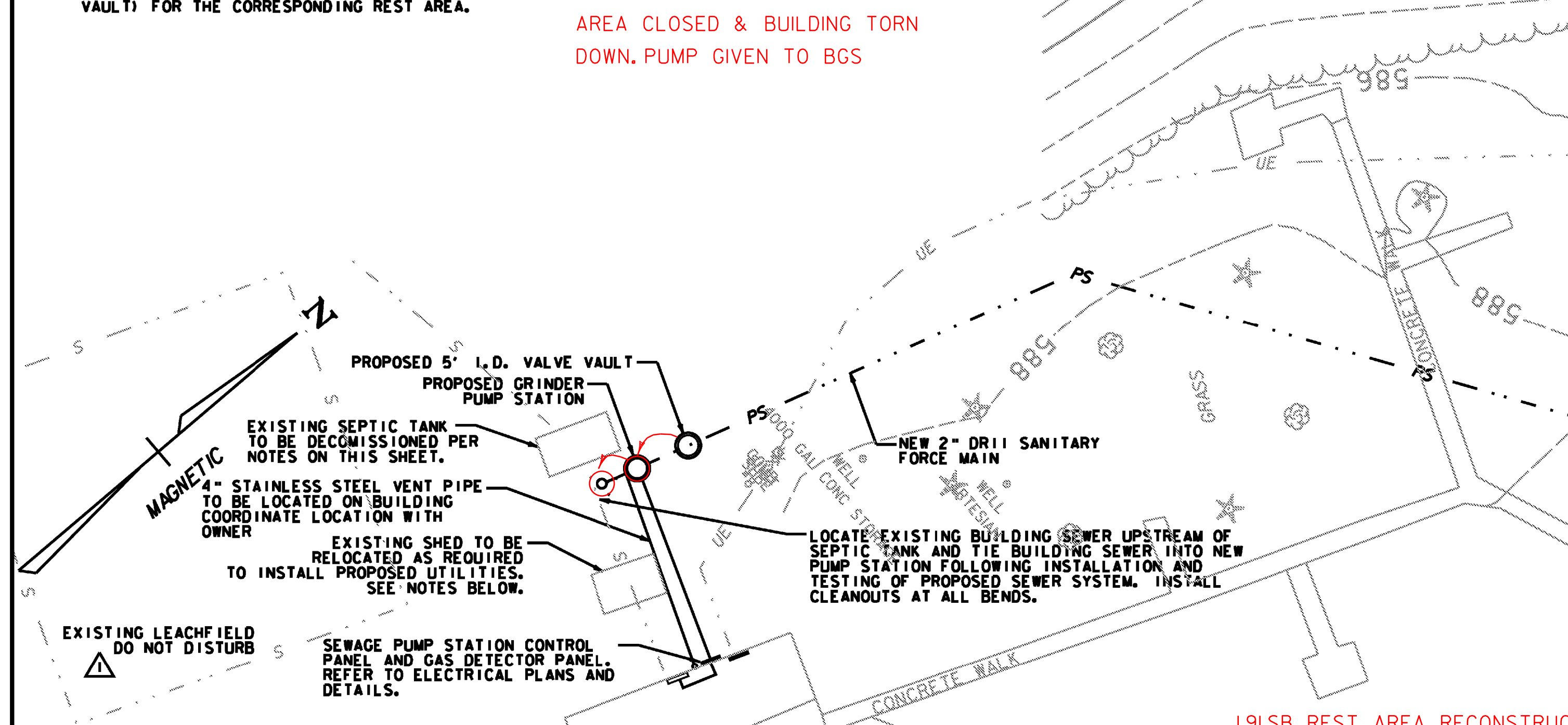




**NORTH BOUND REST AREA SITE PLAN**  
SCALE: 1"=20'-0"

- SEPTIC SYSTEM DECOMMISSIONING**
1. ALL SEPTAGE TO BE PUMPED OUT BY LICENSED SEPTAGE HAULER.
  2. BREAK A MINIMUM OF 4 HOLES (6" MIN. DIAMETER) IN BOTTOM OF SEPTIC TANK.
  3. FILL TANK COMPLETELY WITH CRUSHED GRAVEL (704, 05A-COARSE).
  4. PERFORM SURFACE RESTORATION.
5. THIS WORK SHALL BE INCIDENTAL TO ITEM 900.645, SPECIAL PROVISION (SEWAGE PUMP STATION W/ VALVE VAULT) FOR THE CORRESPONDING REST AREA.

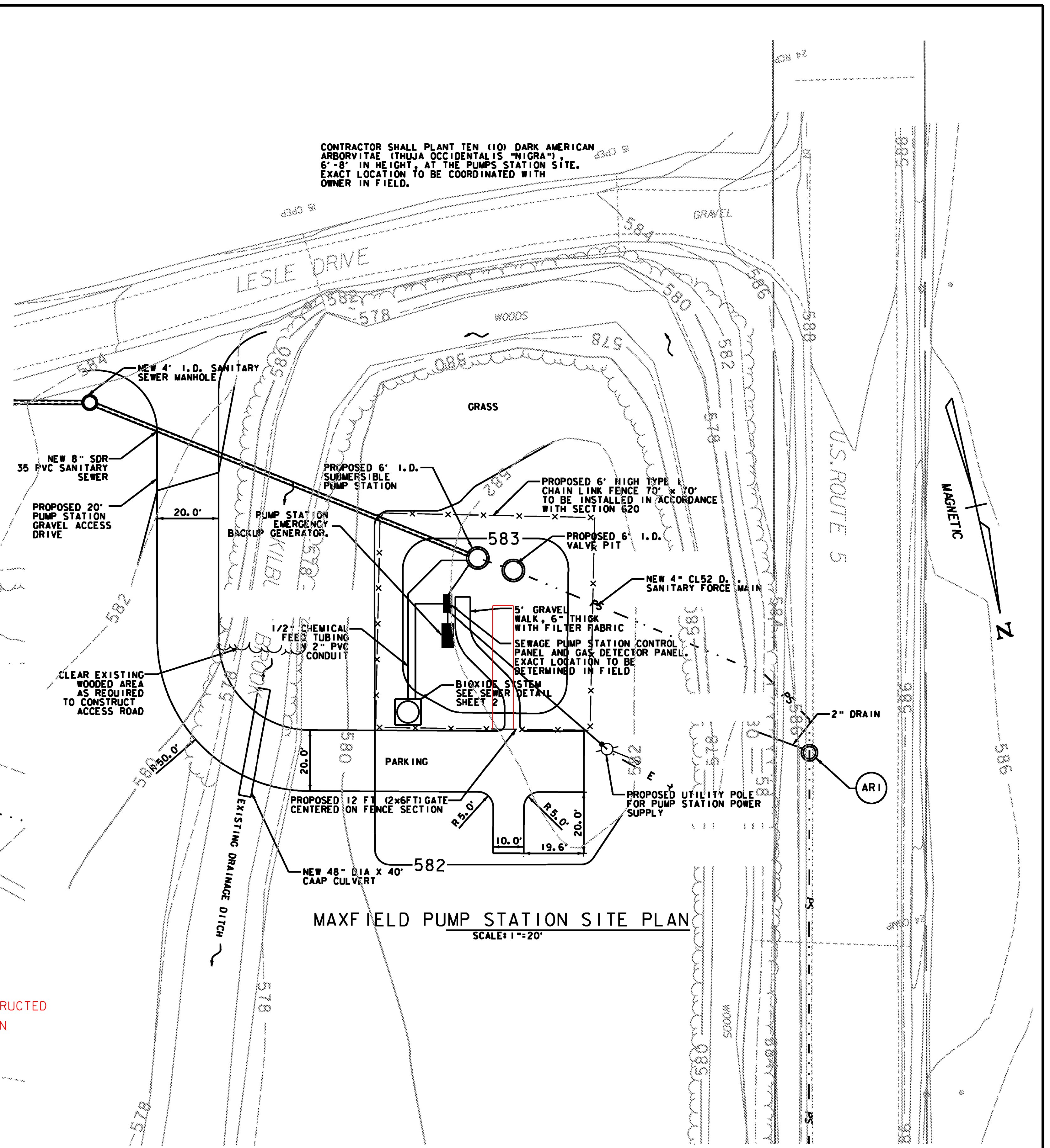
PS#1  
VV#1  
INSTALLED BUT ABANDONED REST AREA CLOSED & BUILDING TORN DOWN. PUMP GIVEN TO BGS



**SOUTH BOUND REST AREA SITE PLAN**  
SCALE: 1"=20'-0"

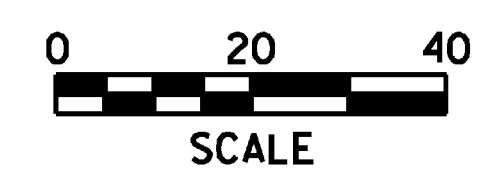
191SB REST AREA RECONSTRUCTED AFTER PROJECT COMPLETION

**SHED RELOCATION**  
EXISTING SHED IS BUILT ON 6" x 8" BOARDS AND COULD BE MOVED IF REQUIRED. IF THE SHED MUST BE MOVED TO PERFORM THE PROPOSED WORK THE POWER SHALL BE DISCONNECTED AND THE SHED SHALL BE MOVED TO A LOCATION APPROVED BY VERMONT BGS. FOLLOWING SEWER LINE/PUMP STATION WORK, THE SHED SHALL BE RETURNED TO ITS ORIGINAL LOCATION AND THE POWER RECONNECTED. THIS WORK SHALL BE INCIDENTAL TO ITEM 900.645, SPECIAL PROVISION (SEWAGE PUMP STATION W/ VALVE VAULT) (I-91 SOUTHBOUND).

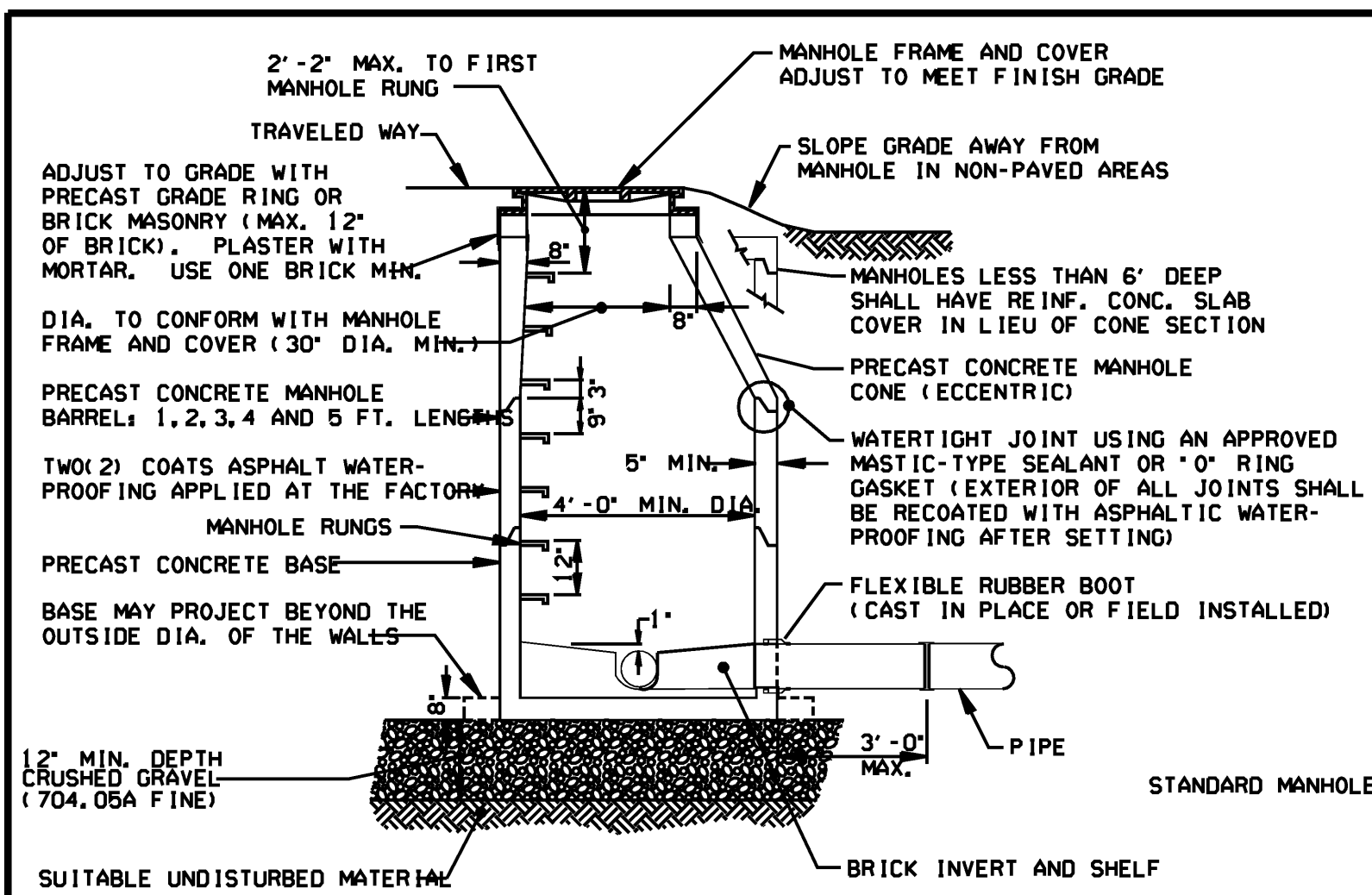


**MAXFIELD PUMP STATION SITE PLAN**  
SCALE: 1"=20'

REVISIONS	DATE	REVISIONS	BY
1	6-23-08	PLAN CLARIFICATION	JSK

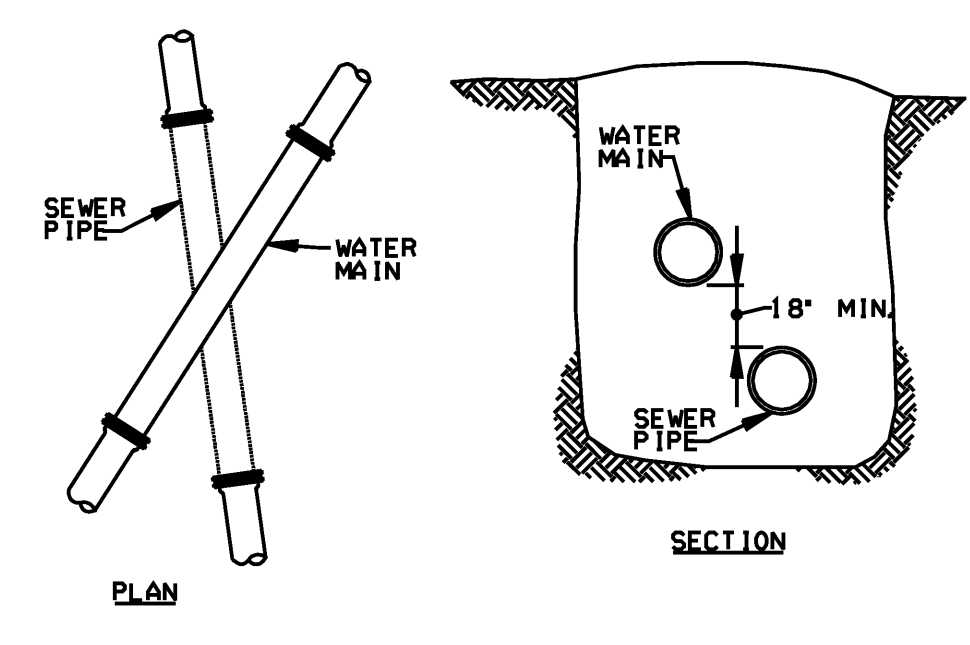


PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	U04026p1t-PumpStation.SitePlan
DATE:	6/23/2008
PROJECT LEADER:	JTM
DRAWN BY:	PZA
DESIGNED BY:	MEHP
CHECKED BY:	JTM
PUMP STATION SITE PLAN	SHEET 50 OF 70



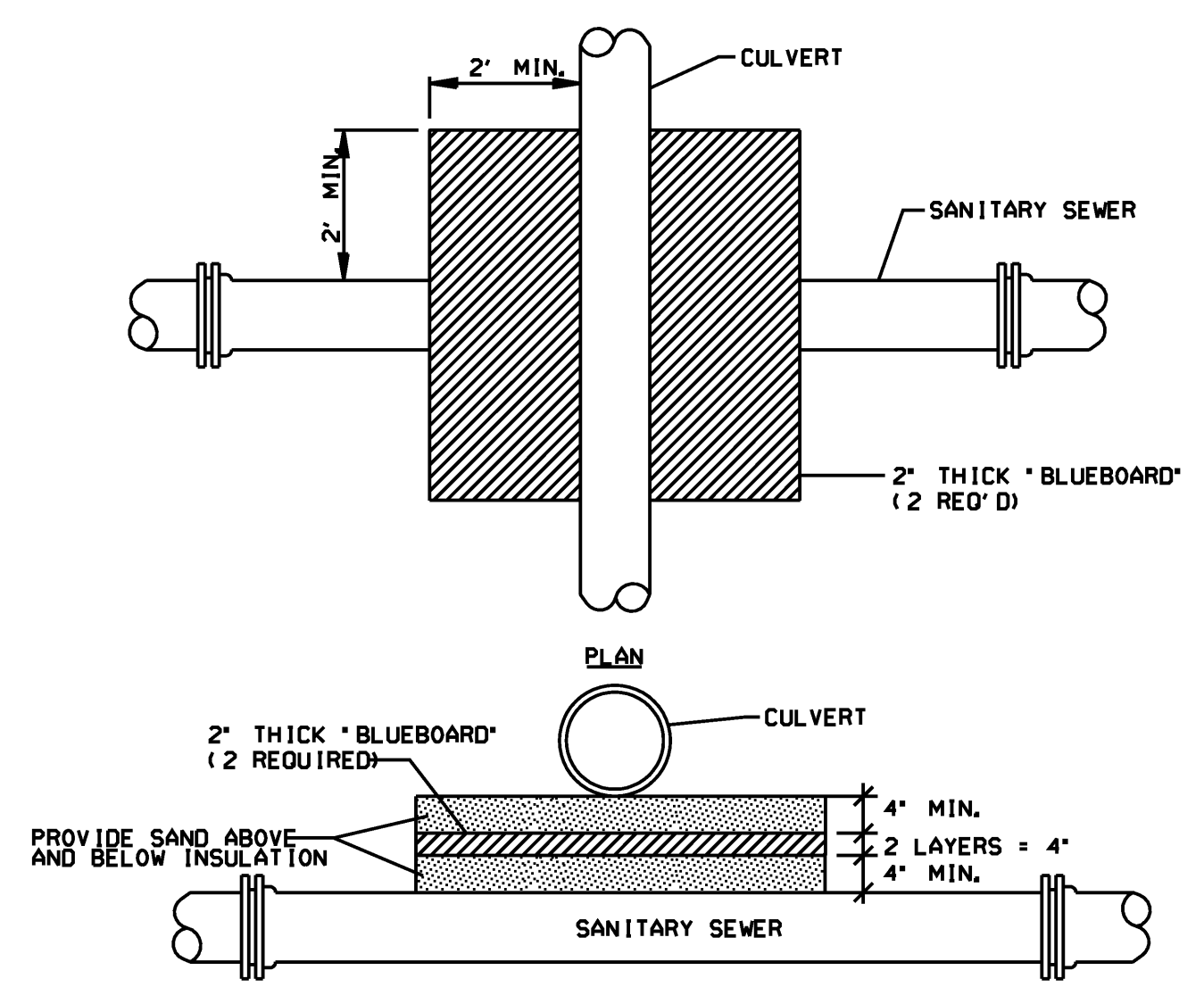
**PRECAST CONCRETE MANHOLE**  
NOT TO SCALE

NOTE: MANHOLE STRUCTURE TO BE CAPABLE OF SUPPORTING AASHTO H-20 LOADING

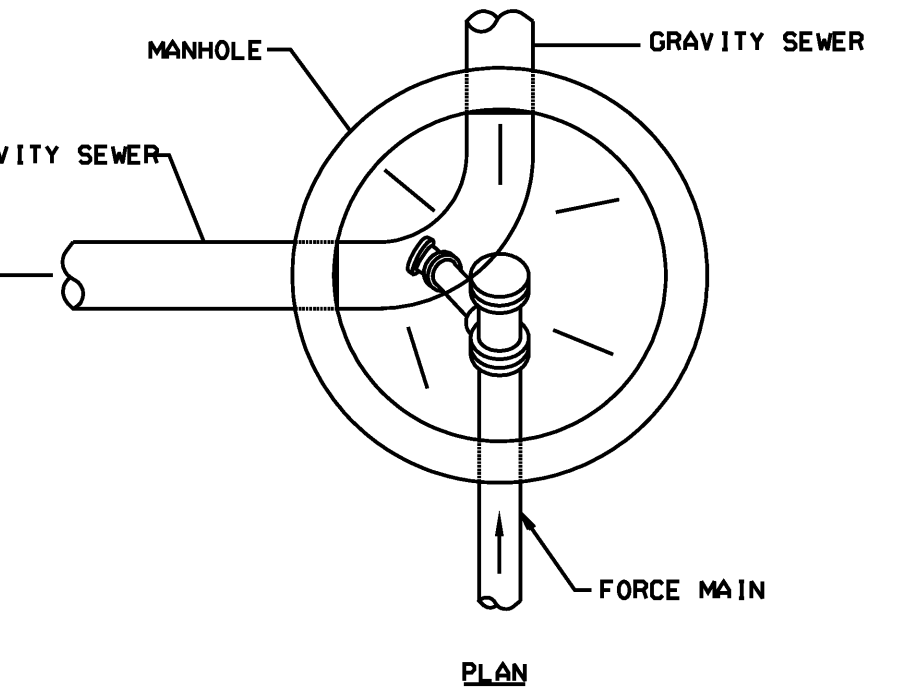
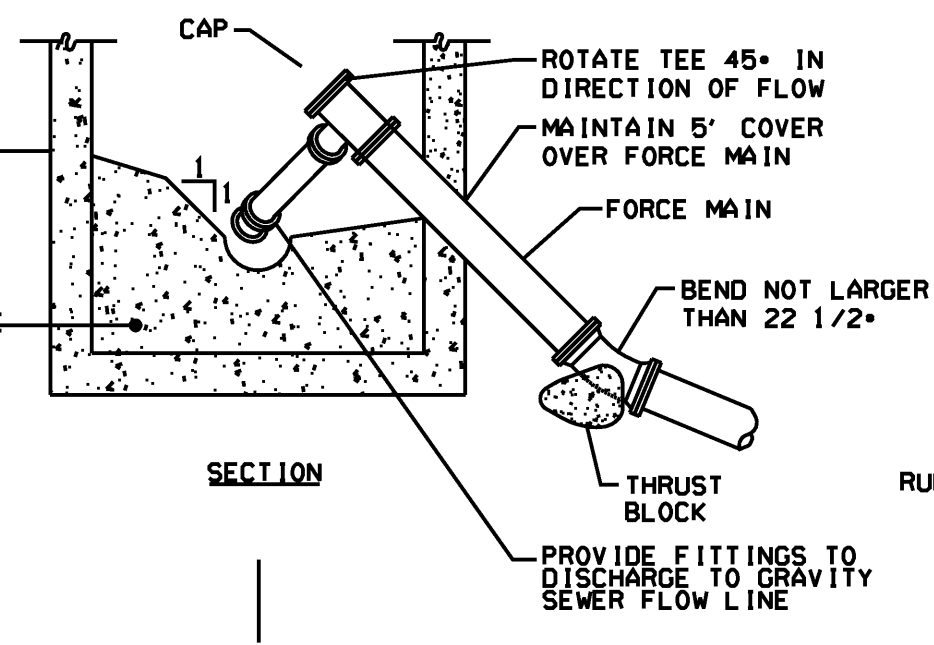


NOTE: AT WATER LINE CROSSINGS WHERE CLEARANCE BETWEEN WATER AND SEWER PIPES IS LESS THAN 18", SEWER PIPE SHALL BE SDR 26 PVC FOR A MIN. OF 20' EITHER SIDE OF THE CROSSING OR A TOTAL OF 3 PIPE LENGTHS, WHICHEVER IS GREATER. ONE FULL LENGTH OF SEWER PIPE SHALL BE CENTERED OVER WATER PIPE WITH SEWER JOINTS AS FAR AS POSSIBLE FROM WATER JOINTS. THE SEWER SECTION MUST BE PRESSURE TESTED TO MAINTAIN 50 PSI FOR 15 MINUTES WITHOUT LEAKAGE PRIOR TO BACKFILLING BEYOND ONE FOOT ABOVE THE PIPE TO ASSURE WATER TIGHTNESS.

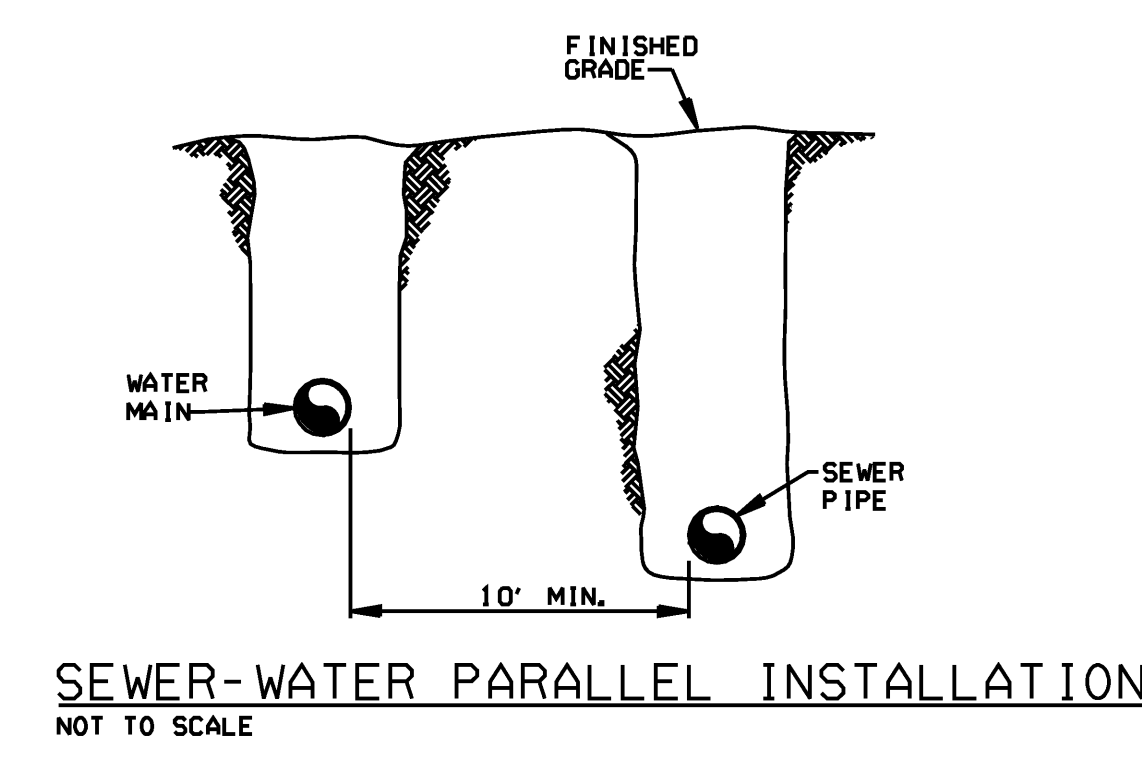
**SEWER PIPE AND WATER MAIN CROSSING**  
NOT TO SCALE



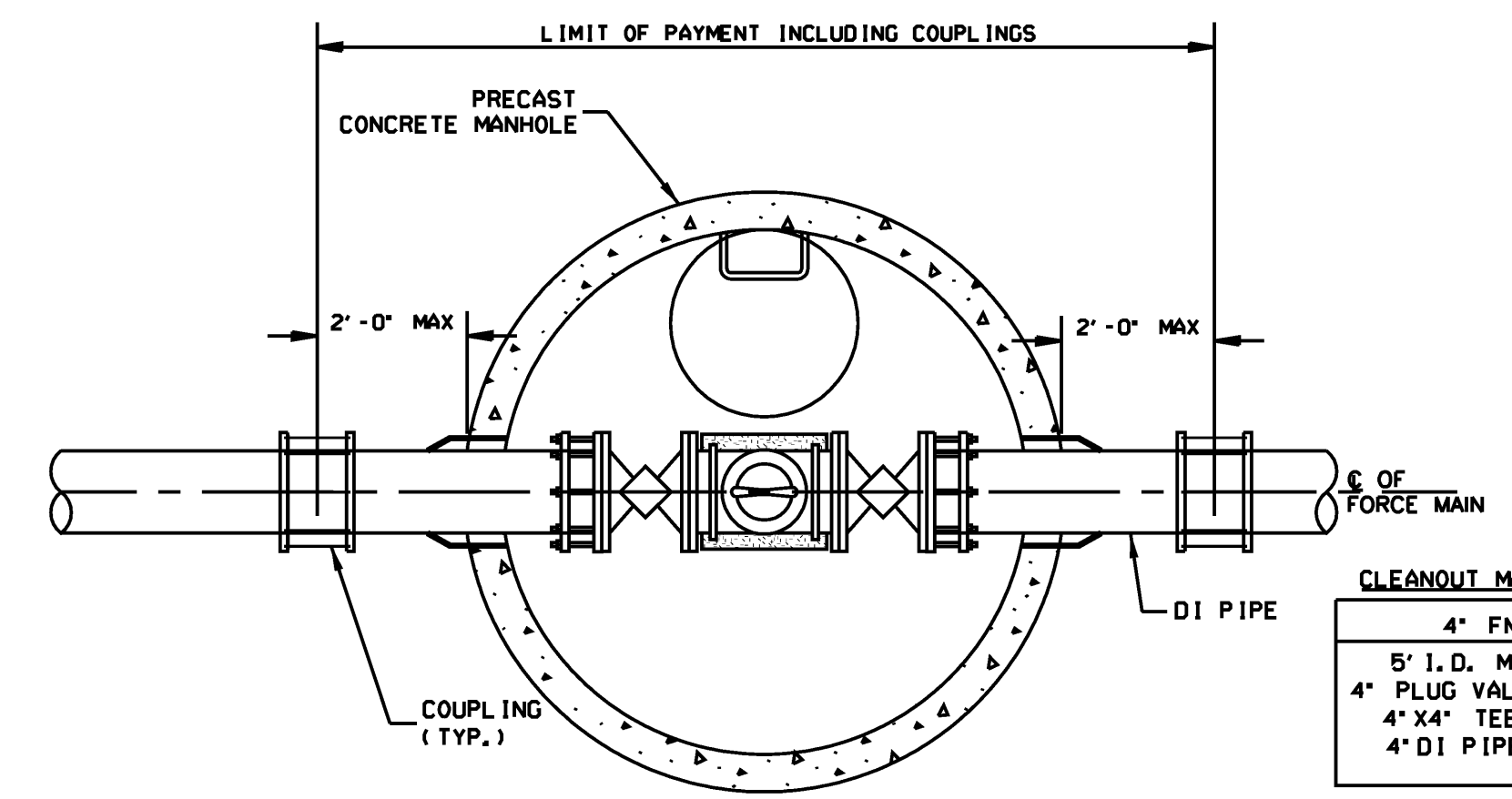
**SANITARY SEWER INSULATION DETAIL**  
NOT TO SCALE



**FORCE MAIN CONNECTION TO MANHOLE**  
NOT TO SCALE

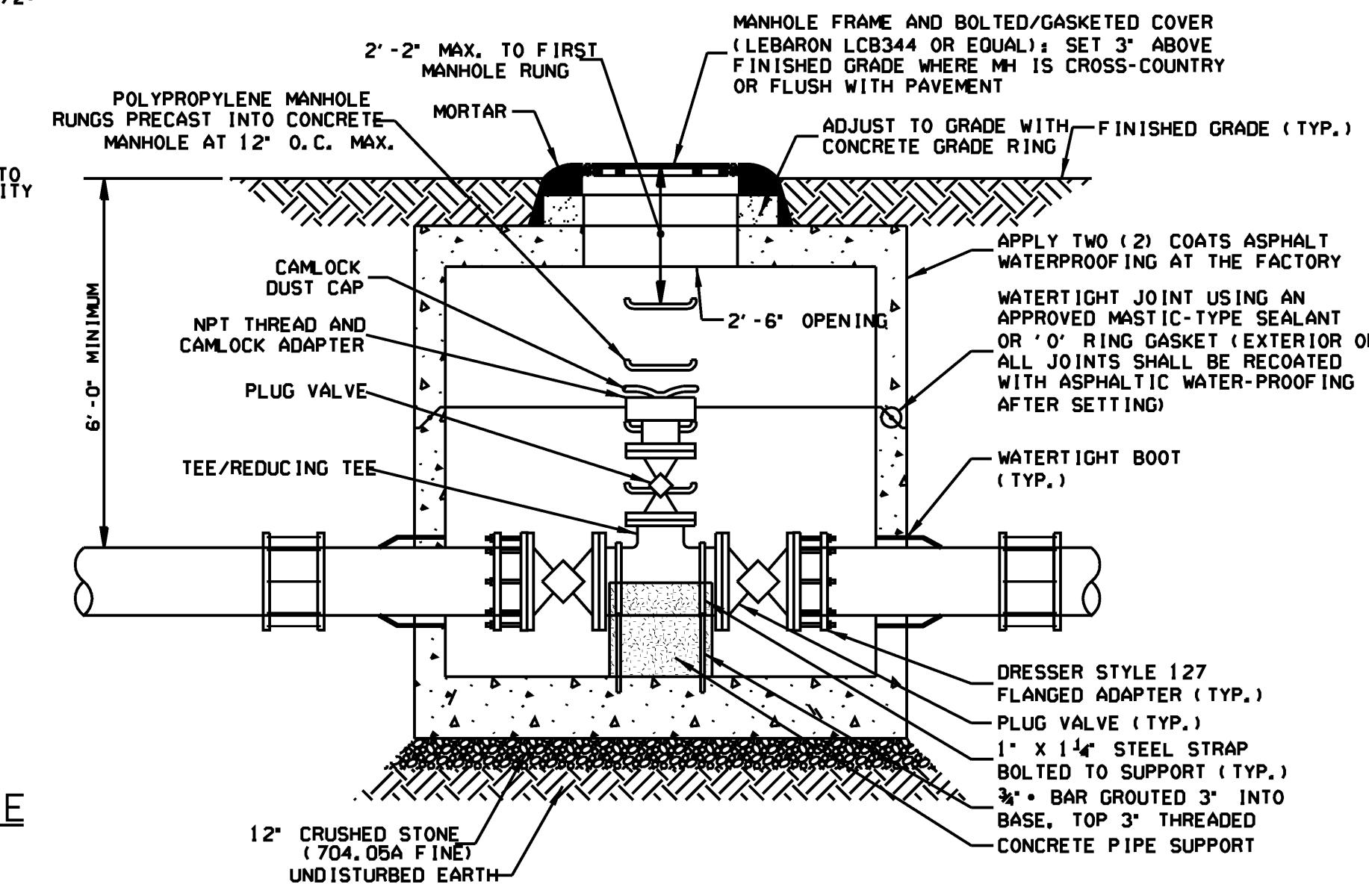


**SEWER-WATER PARALLEL INSTALLATION**  
NOT TO SCALE



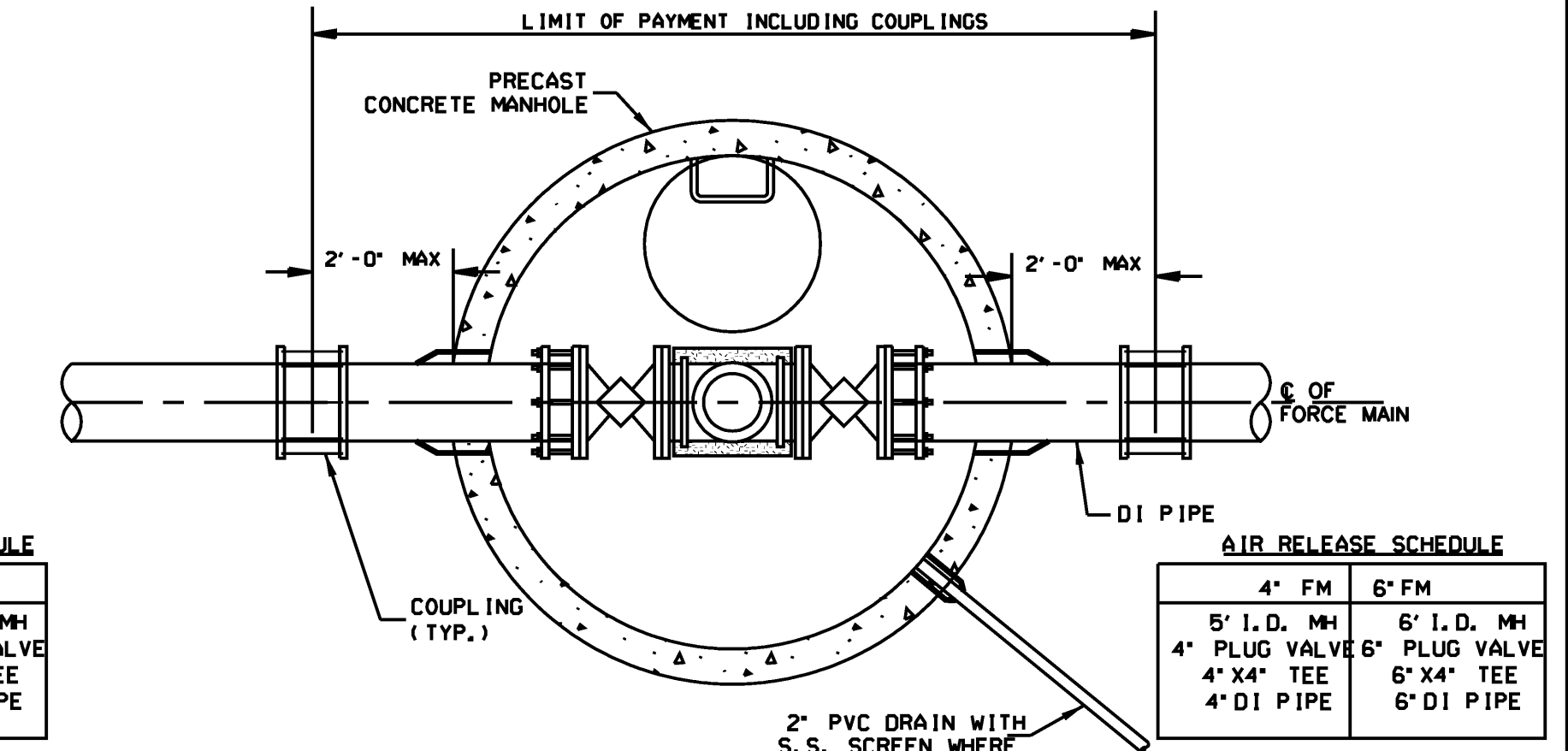
**CLEANOUT MANHOLE SCHEDULE**

4" FM	6" FM
5" I.D. MH	6" I.D. MH
4" PLUG VALVE	6" PLUG VALVE
4" X 4" TEE	6" X 4" TEE
4" DI PIPE	6" DI PIPE



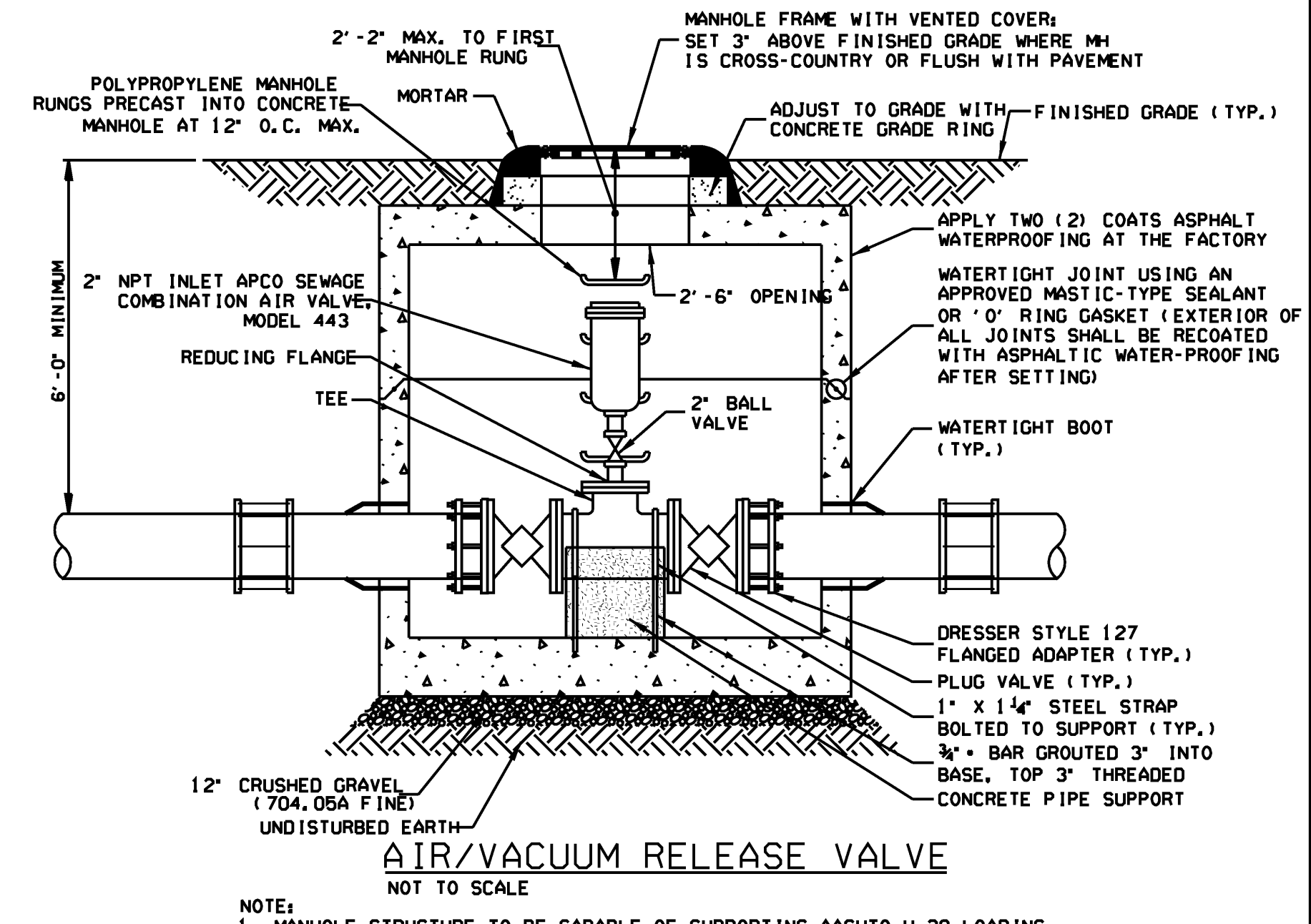
NOTES:  
1. MANHOLE STRUCTURE TO BE CAPABLE OF SUPPORTING AASHTO H-20 LOADING.  
2. SEE SCHEDULE FOR PART SIZES.

**TYPICAL GRAVITY SANITARY SEWER TRENCH DETAIL**  
NOT TO SCALE

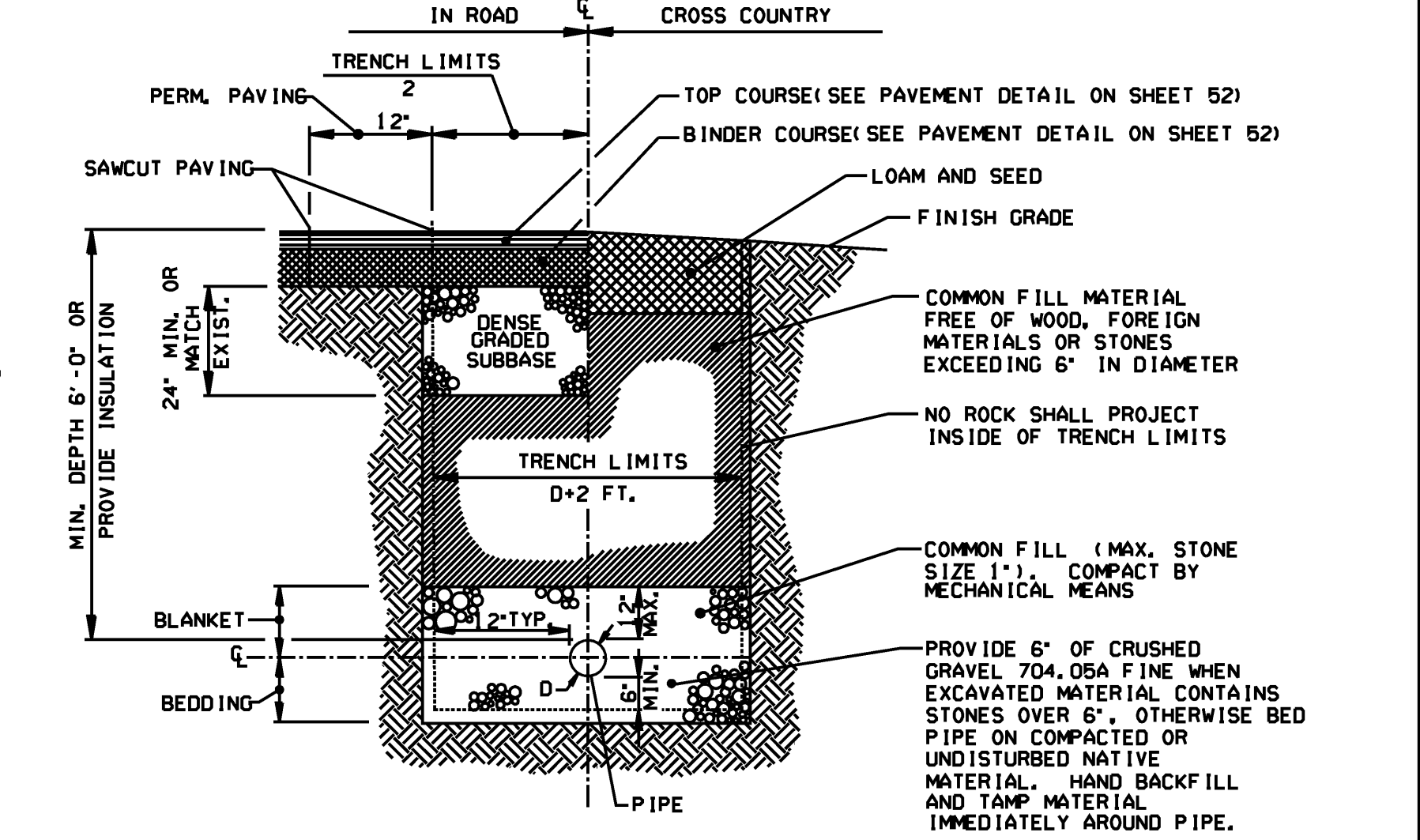


**AIR RELEASE SCHEDULE**

4" FM	6" FM
5" I.D. MH	6" I.D. MH
4" PLUG VALVE	6" PLUG VALVE
4" X 4" TEE	6" X 4" TEE
4" DI PIPE	6" DI PIPE



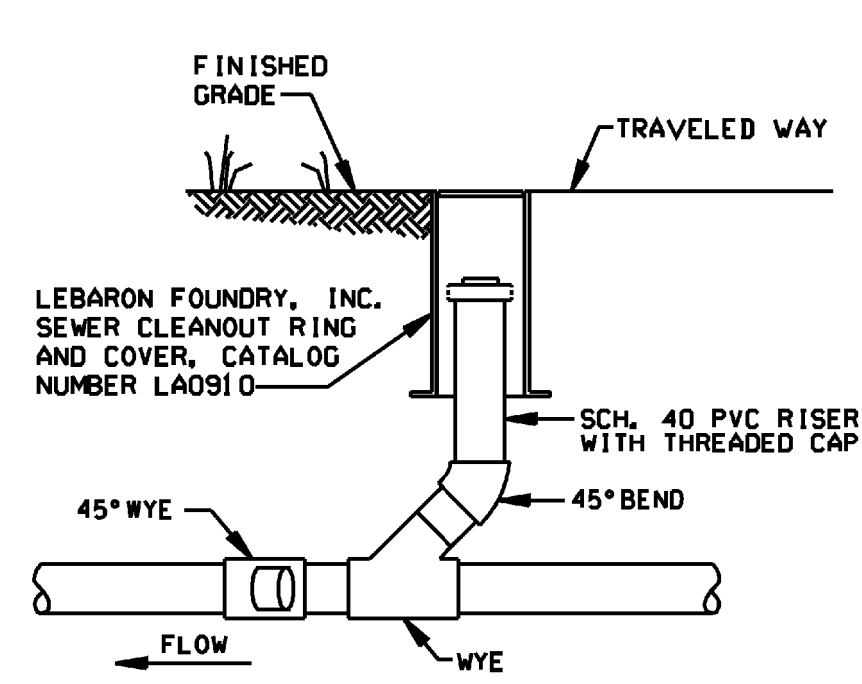
NOTES:  
1. MANHOLE STRUCTURE TO BE CAPABLE OF SUPPORTING AASHTO H-20 LOADING.  
2. SEE SCHEDULE FOR PART SIZES



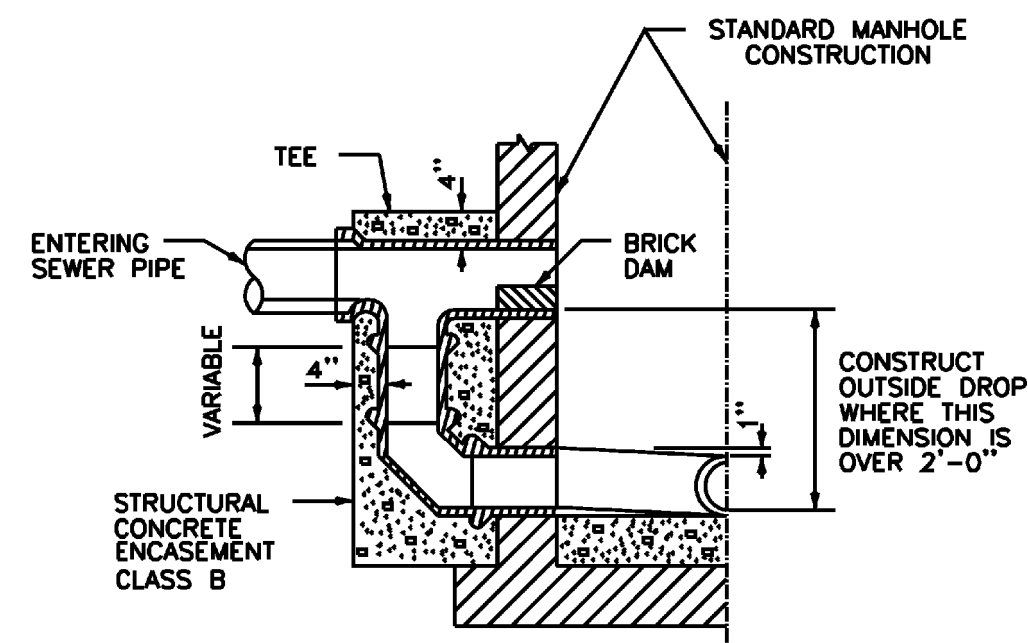
**DUCTILE IRON PIPE MAIN TRENCH DETAIL**  
NOT TO SCALE



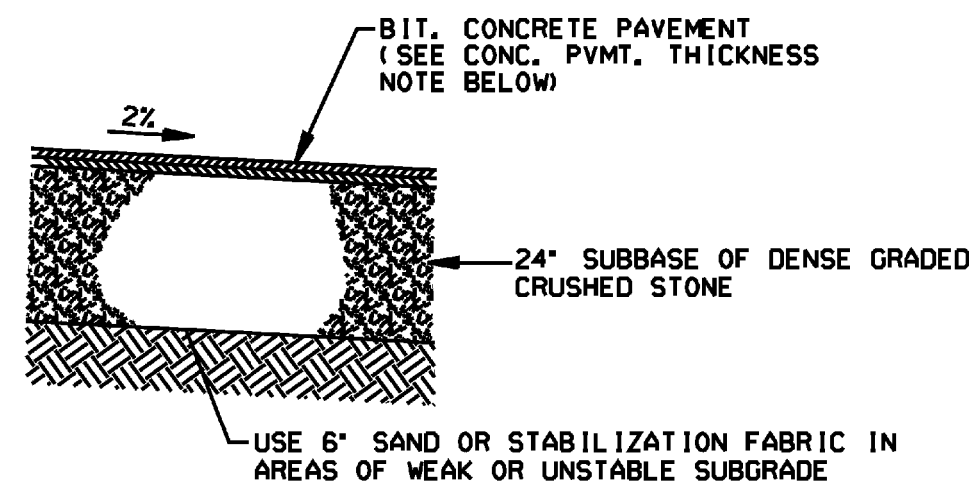
PROJECT NAME: HARTFORD REST AREAS  
PROJECT NUMBER: IM BLDG(10)  
FILE NAME: ...u04c026p1t-Sewer\_Details.dgn  
PROJECT LEADER: JTM  
DESIGNED BY: JTM  
DRAWN BY: JTM  
CHECKED BY: JTM  
SHEET 51 OF 70



**BUILDING SERVICE CLEAN OUT DETAIL**  
NOT TO SCALE



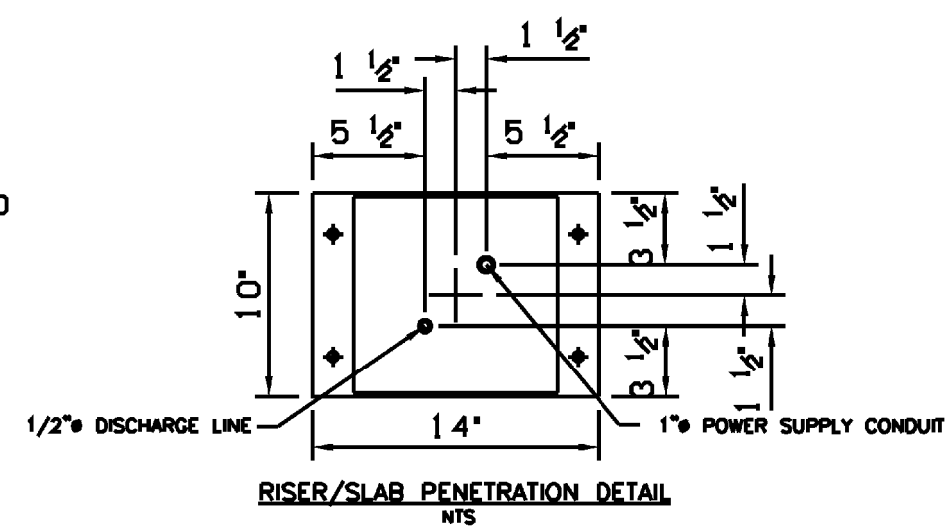
**OUTSIDE MANHOLE DROP DETAIL**  
NOT TO SCALE



**TYPICAL PAVEMENT SECTION**  
NOT TO SCALE

**NOTE:**  
MATERIALS TO COMPLY WITH VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION.

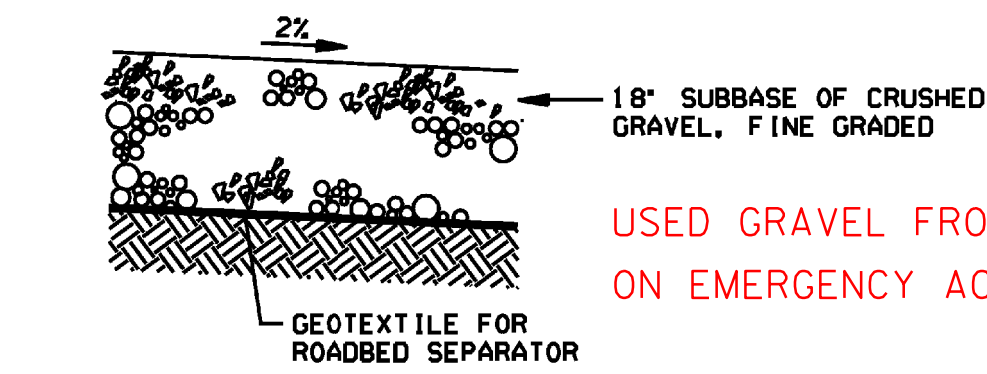
**BITUMINOUS CONCRETE PAVEMENT THICKNESS NOTE:**  
 \* 4" PERMANENT TRENCH PAVEMENT;  
 \* 2" TYPE III WEARING COURSE  
 \* 2" TYPE II BINDER COURSE



**RISER/SLAB PENETRATION DETAIL**  
NOT TO SCALE

**NOMENCLATURE**

- 1 CONTROL BOX ASSEMBLY (W/PUMPS)
- 2 OVERFILL SIGHT TUBE ASSEMBLY
- 3 #2" FILL PIPING ASSEMBLY
- 4 #1/2" HTI SUCTION PIPING ASSEMBLY
- 5 CALIBRATION STAND ASSEMBLY
- 6 PUMP(S)
- 7 14" x 10" SS PIPE STAND RISER
- 8 36" x 24" x 48" SS PIPE/UTILITY TANK STAND
- 9 1,500 GALLON TANK: 7'-2" DIAMETER, 6'-2" HIGH



**TYPICAL GRAVEL ACCESS ROAD SECTION**  
NOT TO SCALE

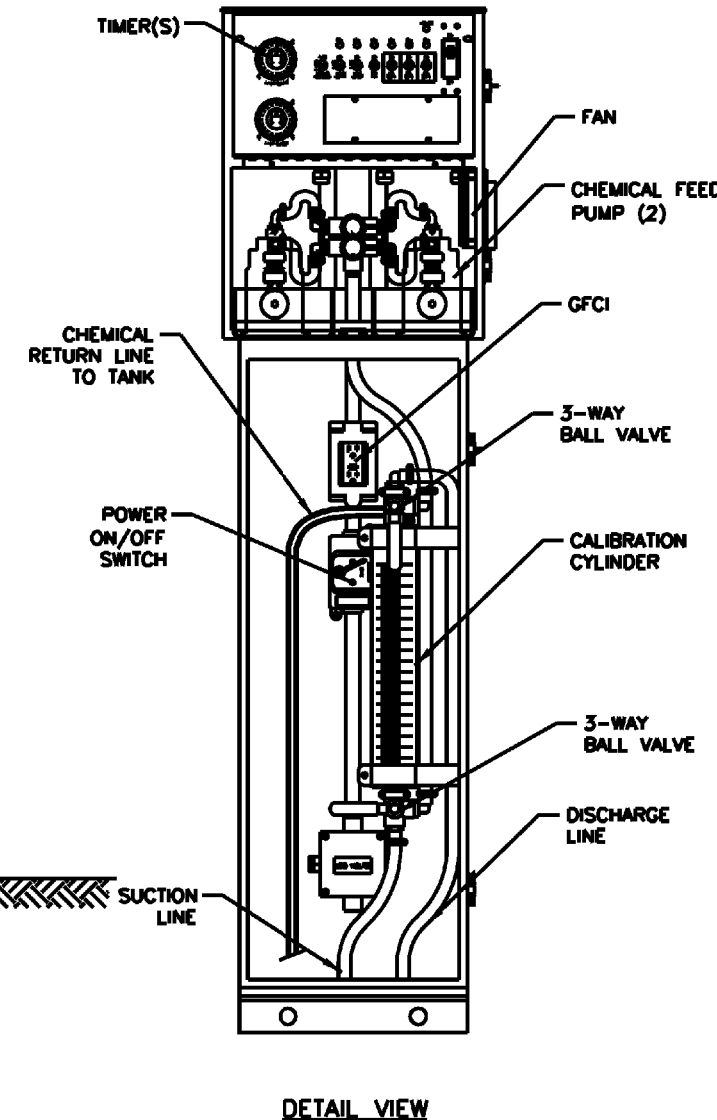
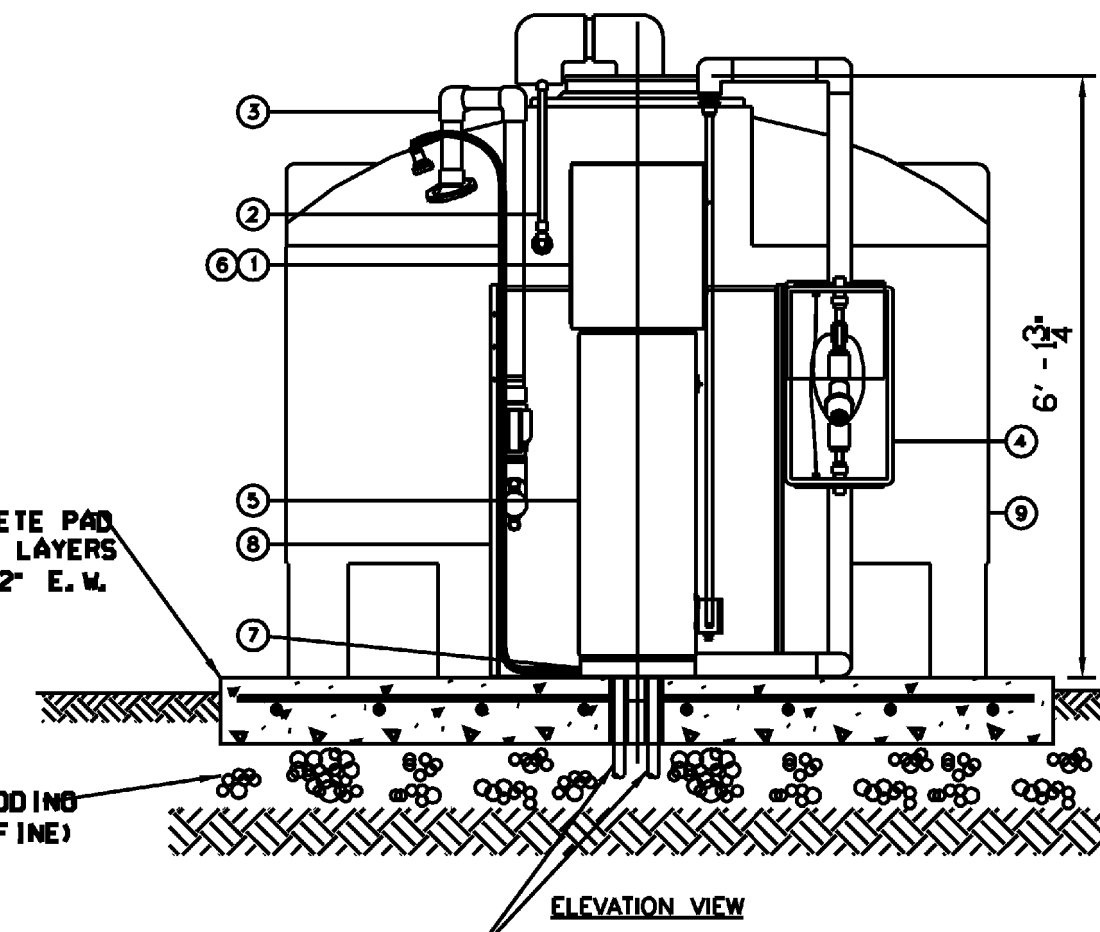
USED GRAVEL FROM MELISH ROAD ON EMERGENCY ACCESS ROAD

USED INSIDE DROP @ REQUEST OF TOWN OF HARTFORD

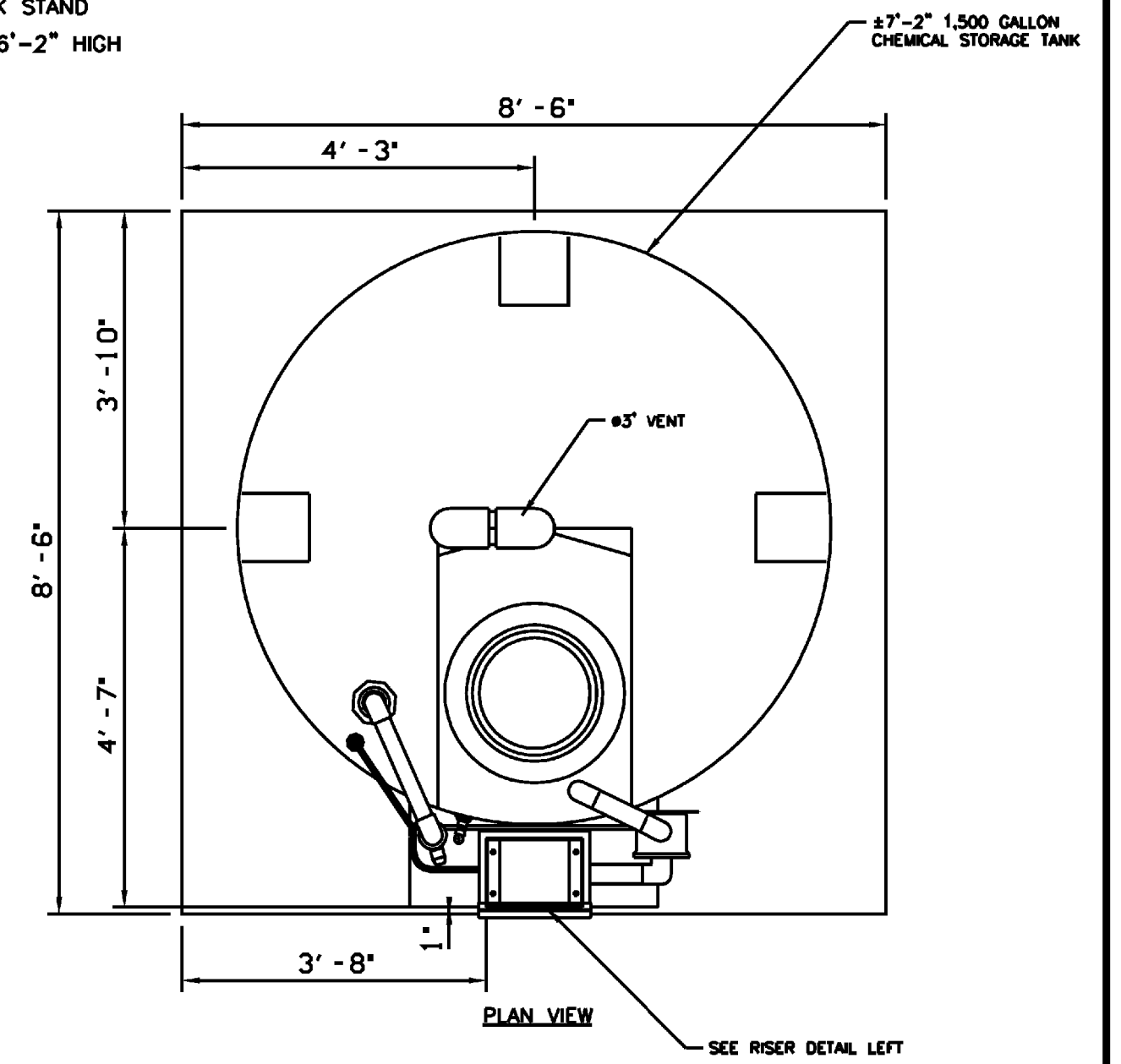
12" THICK CONCRETE PAD REINFORCED WITH 2 LAYERS #5 @ 12" E.M.

12" LAYER CRUSHED GRAVEL BEDDING 704,05A (FINE)

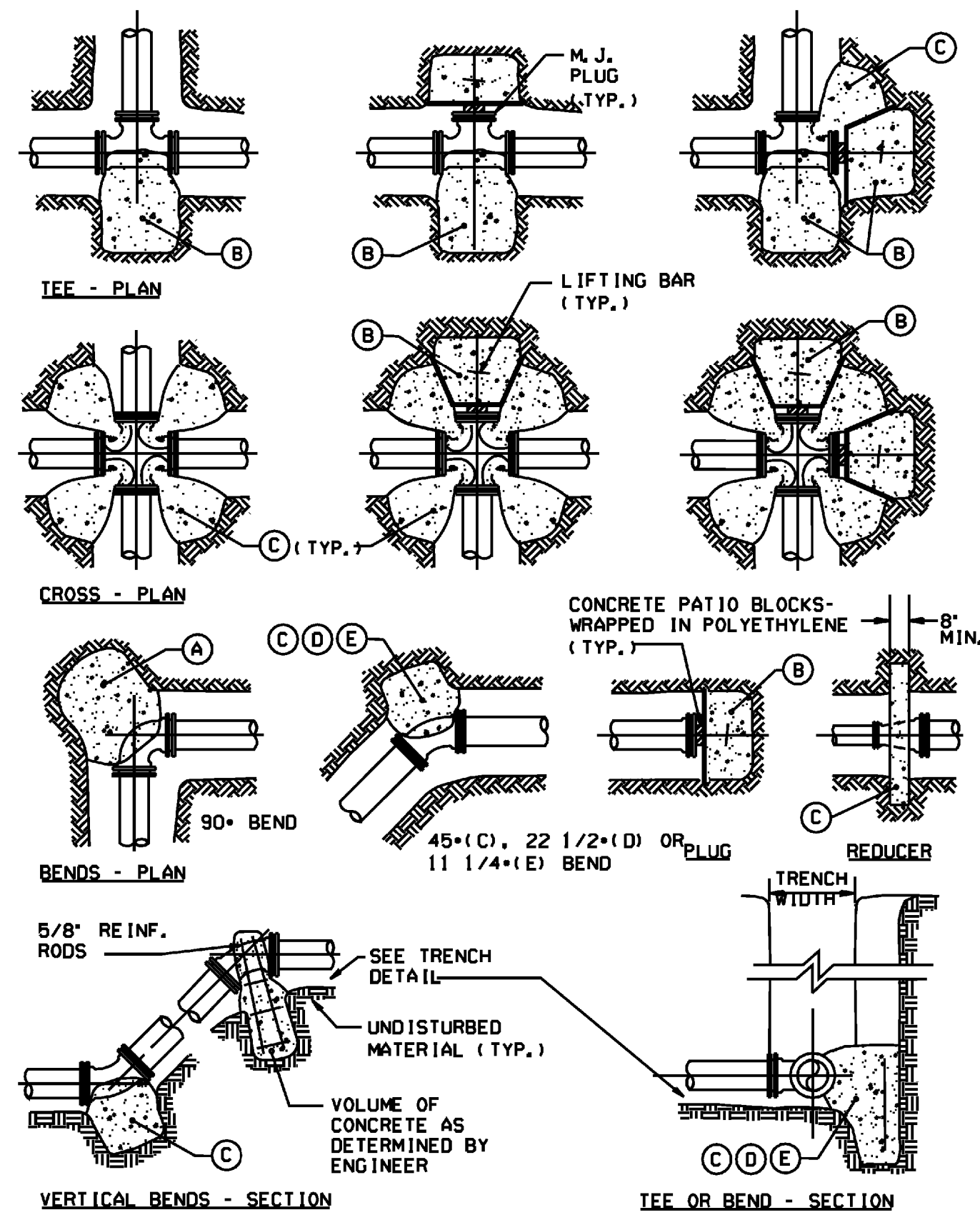
TWO (2) 4" STEEL SLEEVES CAST INTO SLAB FOR DISCHARGE LINE AND POWER SUPPLY



**BIOXIDE TANK DETAIL**  
SCALE: 1/2" = 1'-0"



**PLAN VIEW**  
SEE RISER DETAIL LEFT



**THRUST BLOCK DETAILS**  
NOT TO SCALE

THRUST BLOCK SCHEDULE SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL		
REACTION TYPE	PIPE SIZE	
	4"	6"
(A)	0.89	2.19
(B)	0.65	1.55
(C)	0.48	1.19
(D)	0.25	0.60
(E)	0.13	0.30

OTHER TEST PRESSURES FOR THE ABOVE REACTIONS: SQUARE FEET OF CONCRETE THRUST BLOCKING FOR OTHER TEST PRESSURES IS DIRECTLY PROPORTIONAL TO THE ABOVE TABLE. FOR INSTANCE, AT 200 PSI TEST PRESSURE FOR ABOVE NUMBERS DOUBLE.

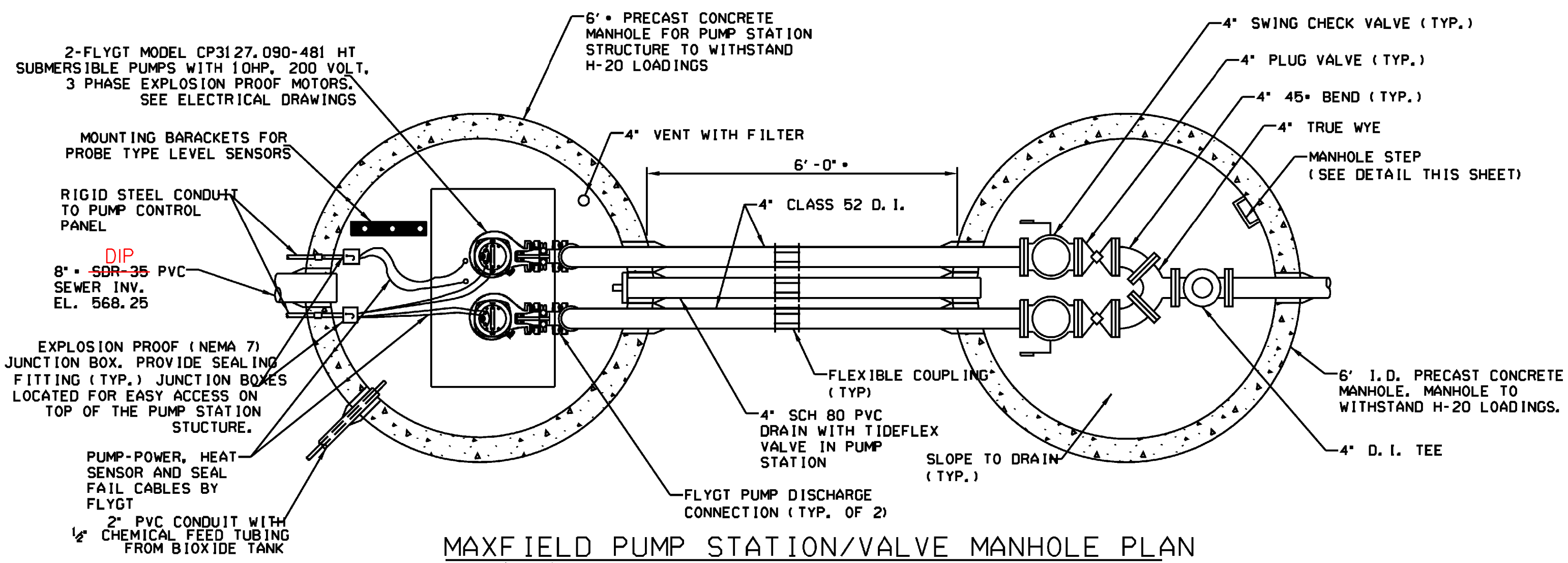
**NOTES:**

1. THRUST BLOCKS SHALL BE CONSTRUCTED WITH CLASS B CONCRETE. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3. PLACE CONCRETE PATIO BLOCKS IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCK.
4. REQUIREMENTS OF THE ABOVE TABLE PRESUME MINIMUM SOIL BEARING OF 1 TON PER SQUARE FOOT, AND MAY BE VARIED BY THE ENGINEER TO MEET OTHER CONDITIONS ENCOUNTERED.
5. MEGALUG RETAINER GLANDS ARE REQUIRED FOR ALL MECHANICAL JOINTS. THESE GLANDS DO NOT REDUCE THE REQUIREMENTS FOR THRUST RESTRAINT.
6. ALL FITTINGS SHALL BE WRAPPED IN POLYETHYLENE OR BUILDING PAPER PRIOR TO INSTALLATION OF CONCRETE RESTRAINT.
7. THREADED ROD SHALL BE ANSI A242 F150 PIPE RESTRAINT NUTS TO MATCH AWWA C111. THREADED RODS AND NUTS TO BE FIELD COATED WITH BITUMINOUS PAINT.
8. THRUST RESTRAINT IS REQUIRED FOR ALL TEES, BENDS, REDUCERS, CAPS, PLUGS, OR CROSSES. 9. INSTALL LIFT HOOKS INTO THRUST BLOCKS AT END CAPS AND PLUGS.

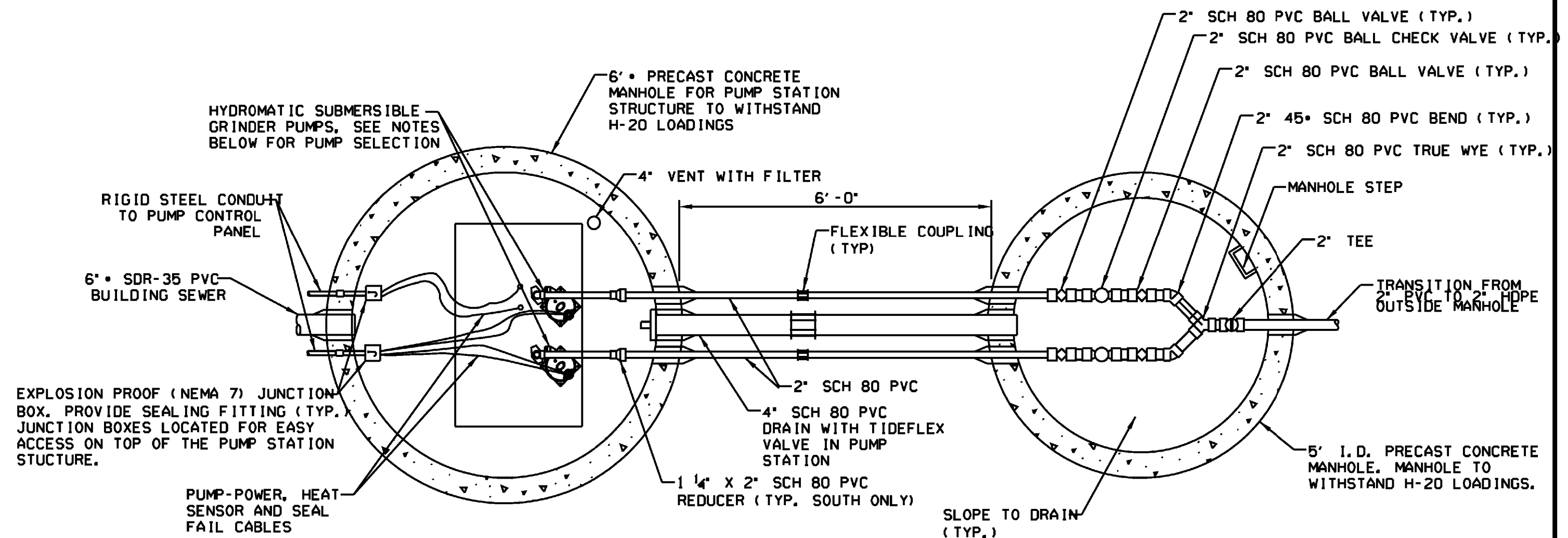


PROJECT NAME: HARTFORD REST AREAS  
PROJECT NUMBER: IM BLDG(10)

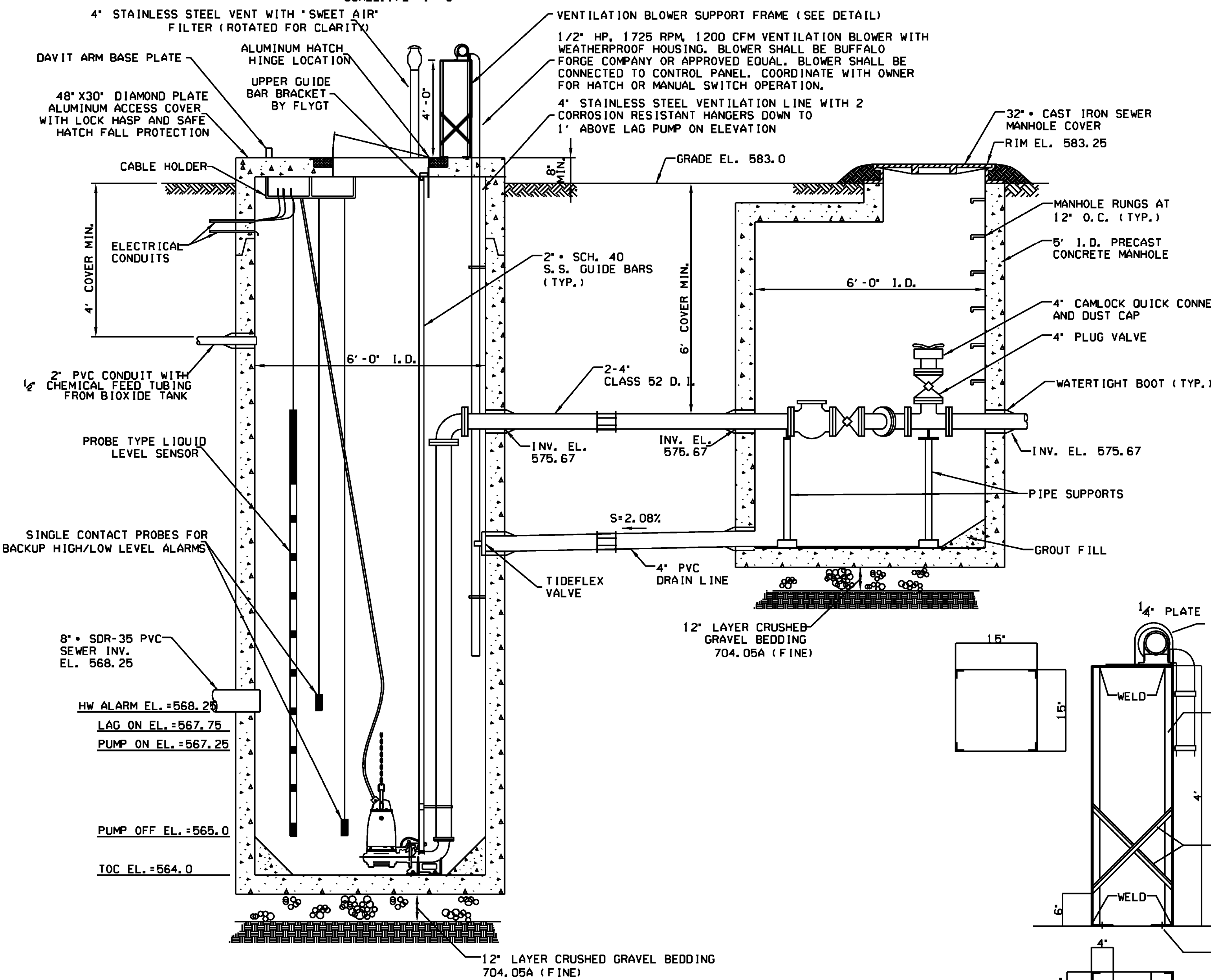
FILE NAME: ...\\u04026pit-Sewer\_Details.dgn PLOT DATE: 5/19/2008  
PROJECT LEADER: JTM DRAWN BY:  
DESIGNED BY: CHECKED BY: JTM  
SEWER DETAIL SHEET 2 SHEET 52 OF 70



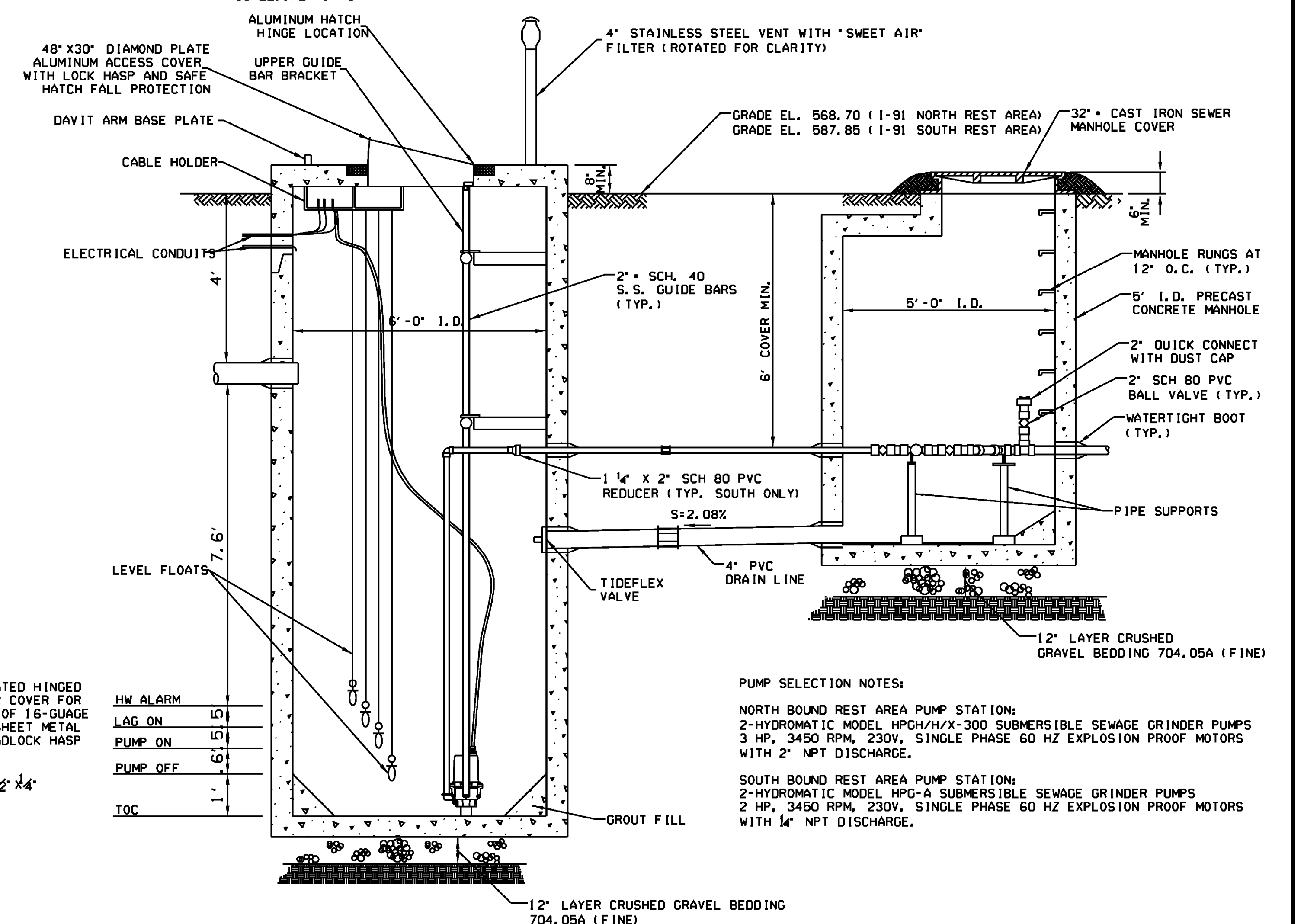
MAXFIELD PUMP STATION/VALVE MANHOLE PLAN  
SCALE: 1/2" = 1' - 0"



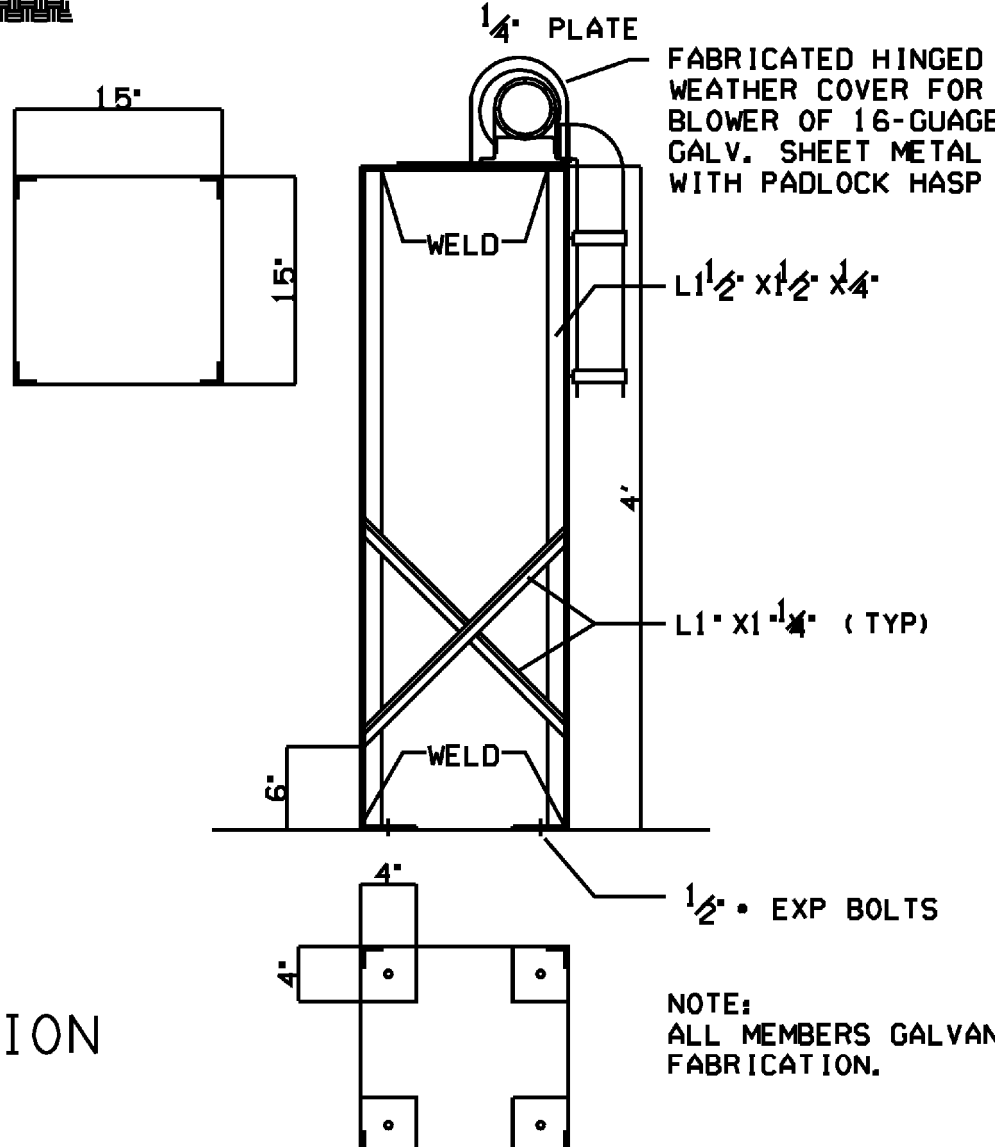
I-91 NORTH & SOUTH REST AREA PUMP STATION/VALVE MANHOLE PLAN  
SCALE: 1/2" = 1' - 0"



MAXFIELD SUBMERSIBLE PUMP STATION ELEVATION  
SCALE: 1/2" = 1' - 0"



I-91 NORTH & SOUTH REST AREA GRINDER PUMP STATION ELEVATION  
SCALE: 1/2" = 1' - 0"



VENTILATION BLOWER SUPPORT FRAME  
NOT TO SCALE

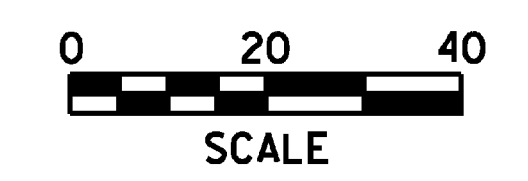
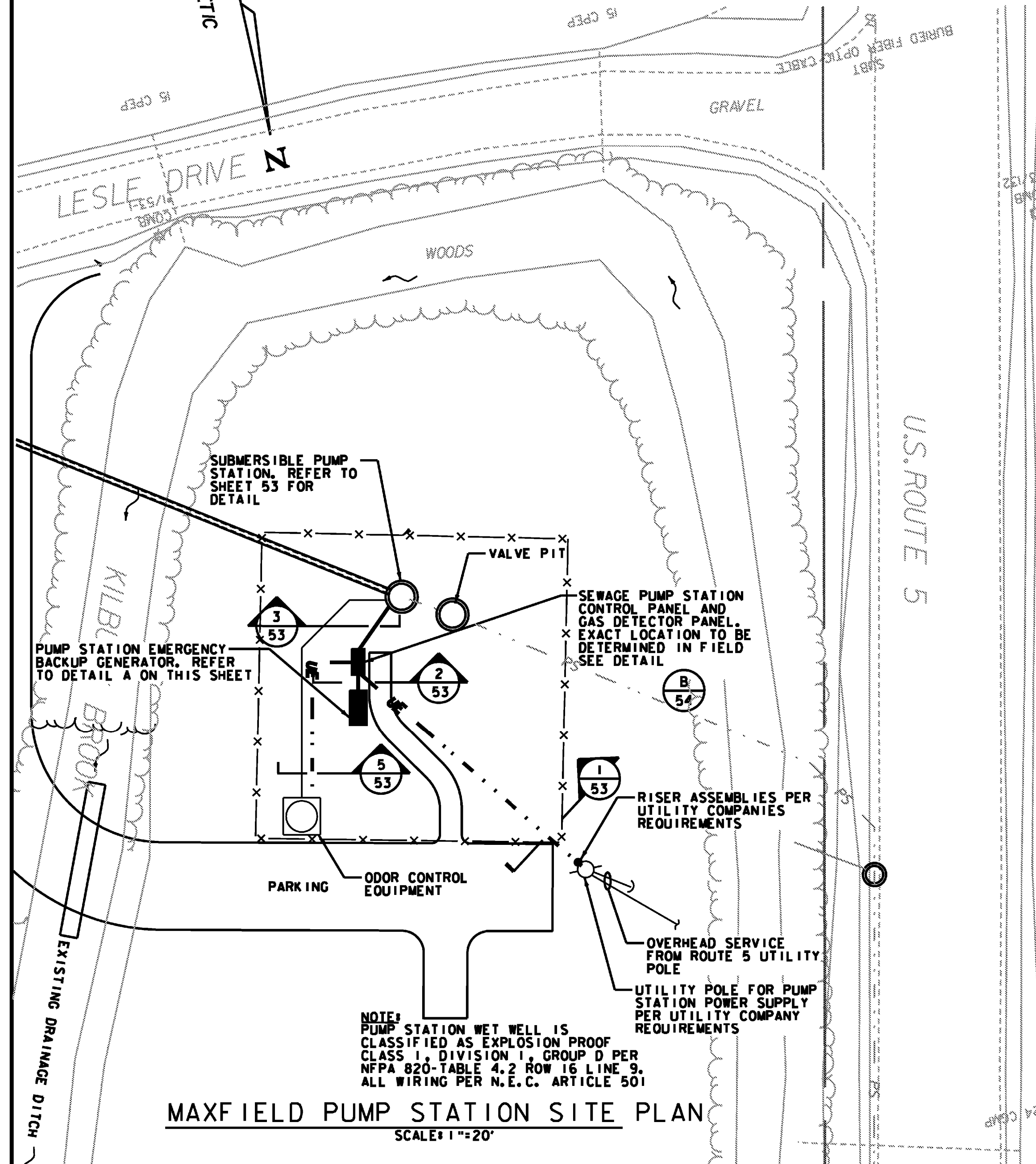
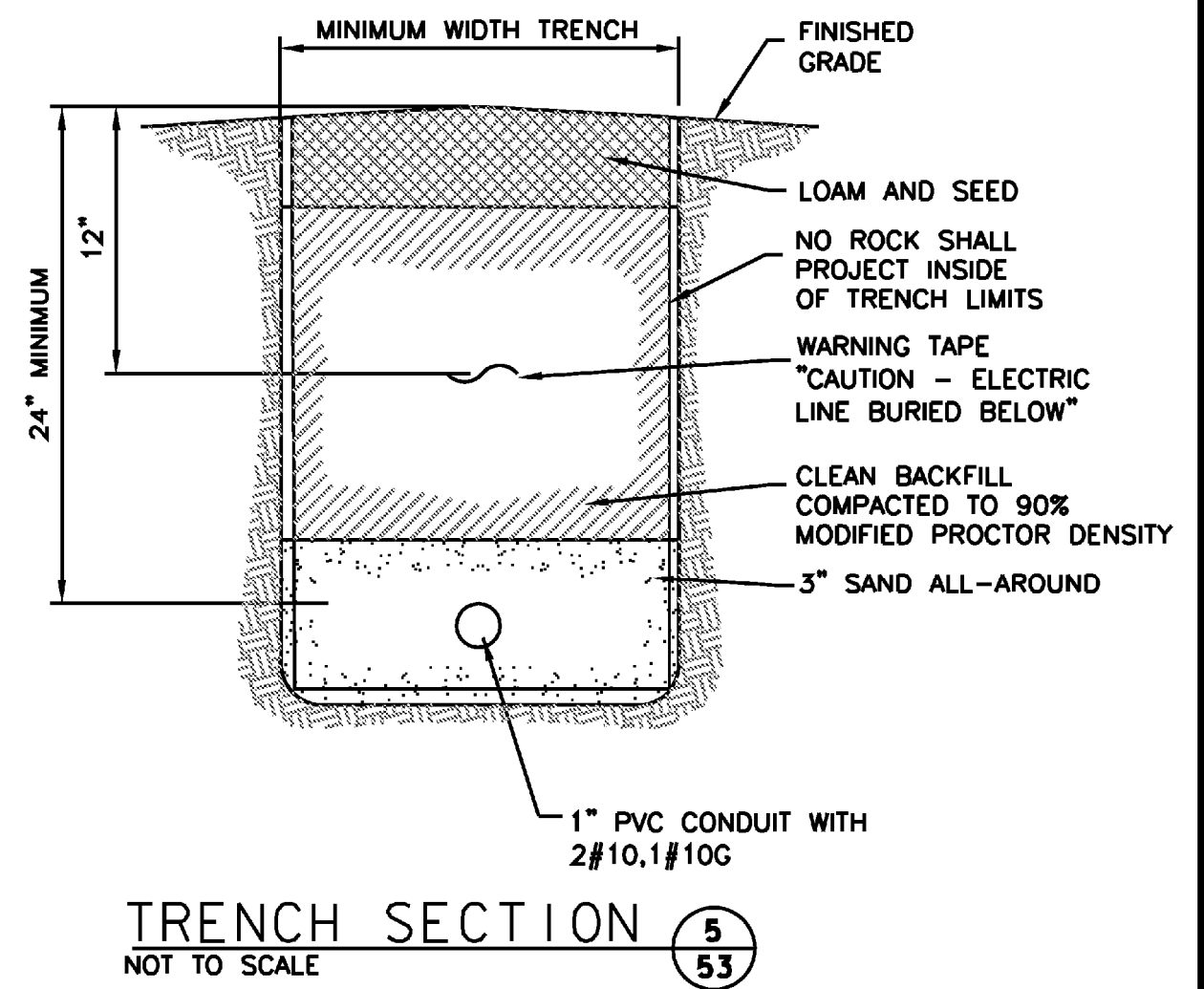
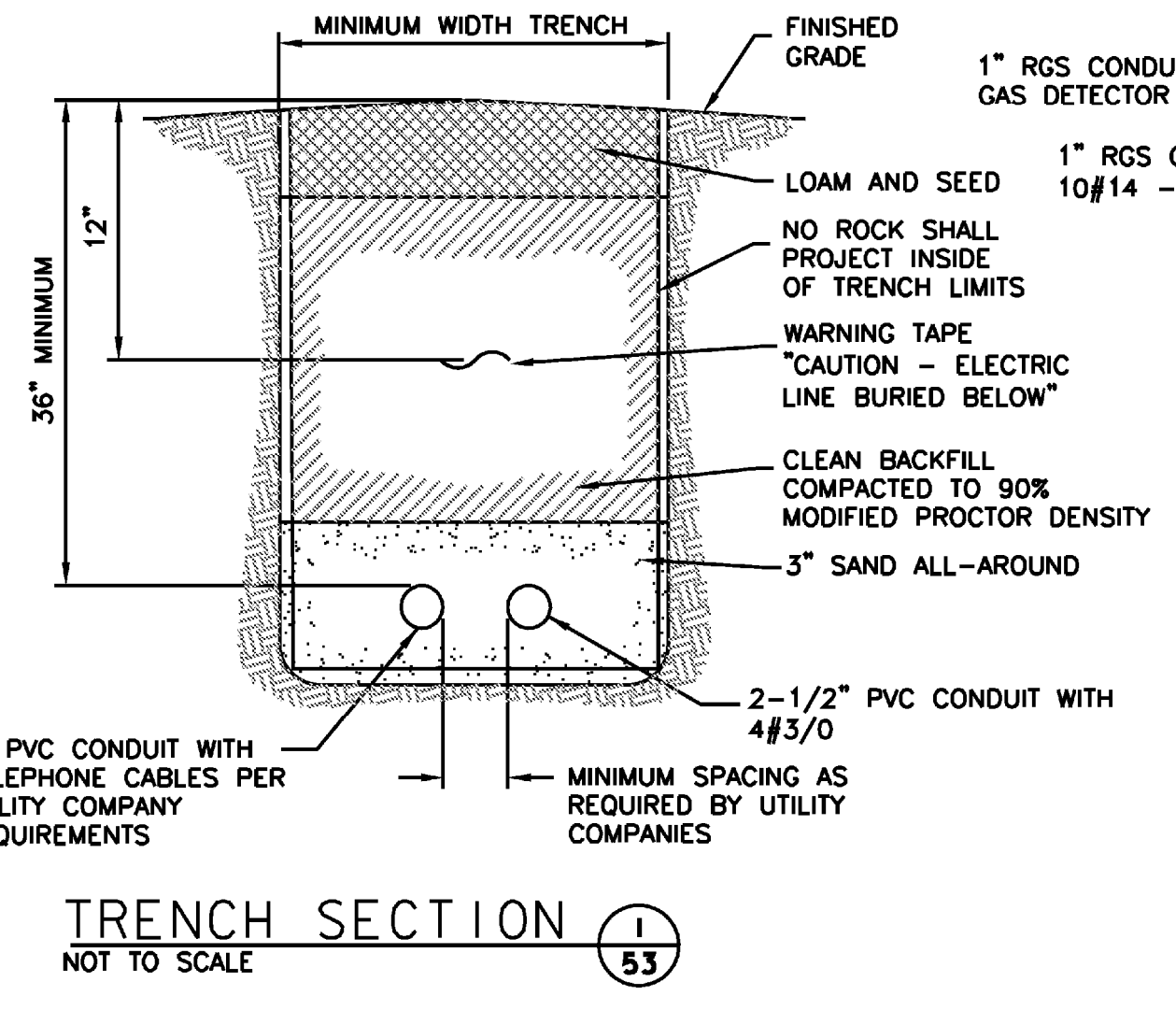
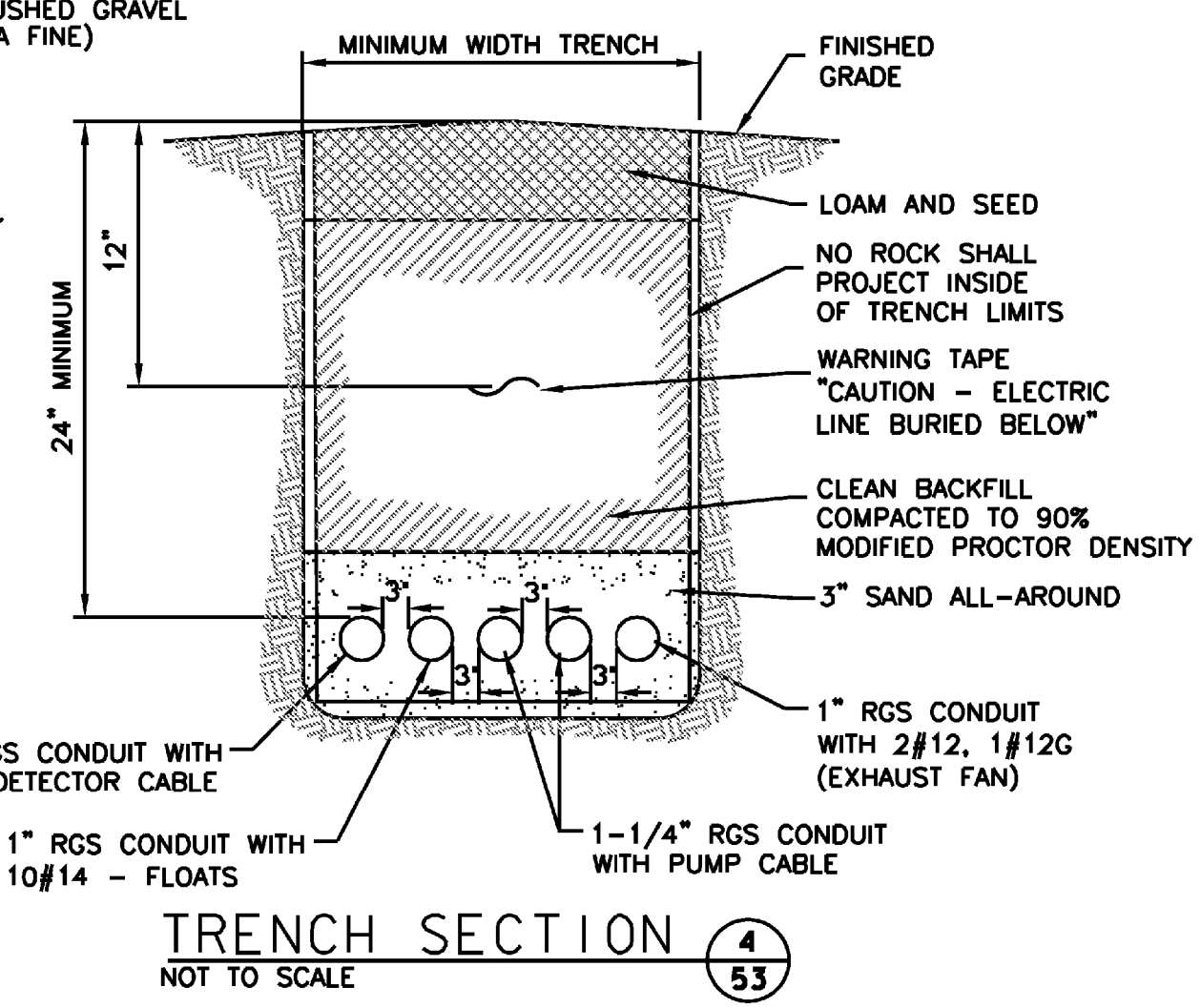
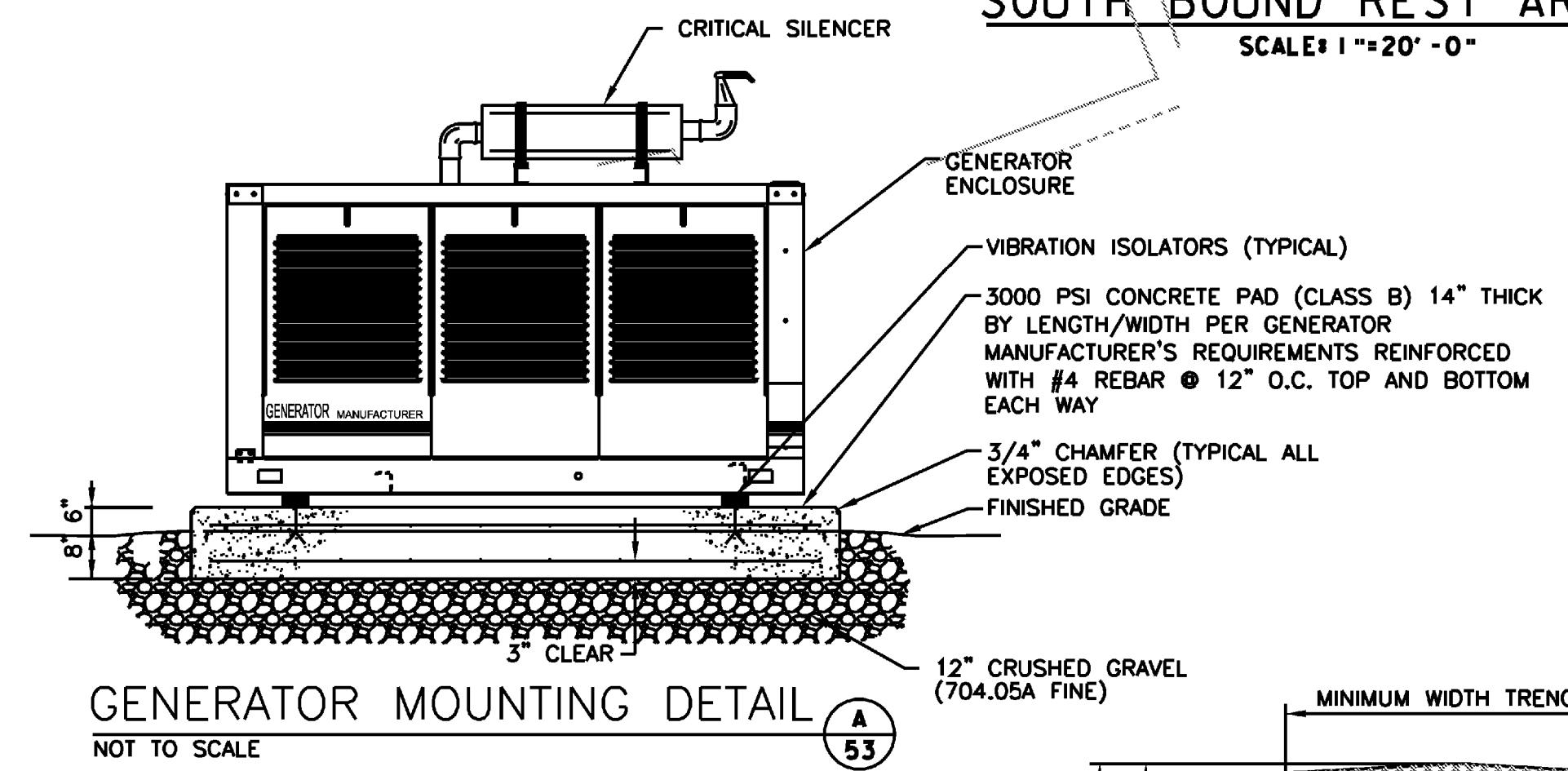
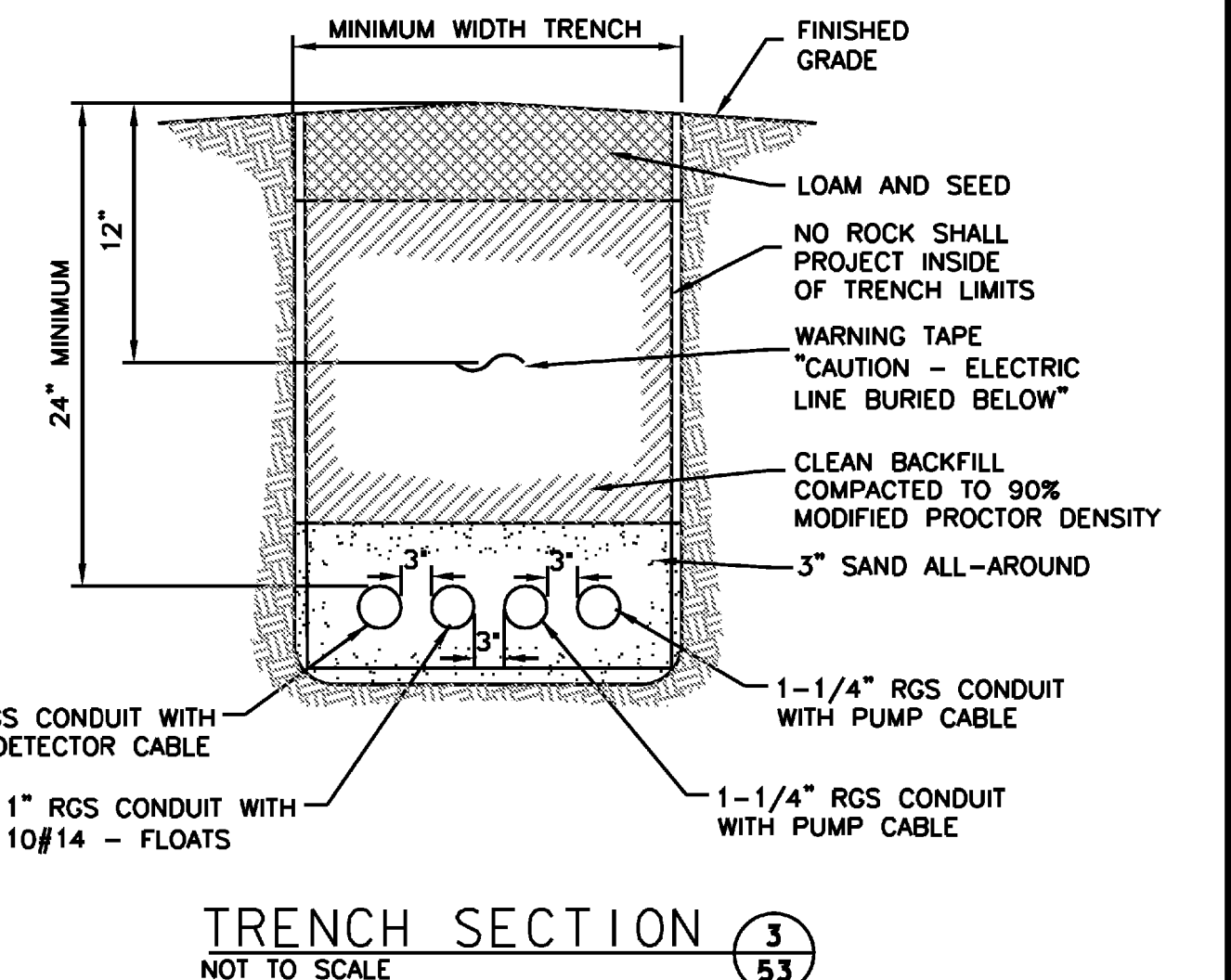
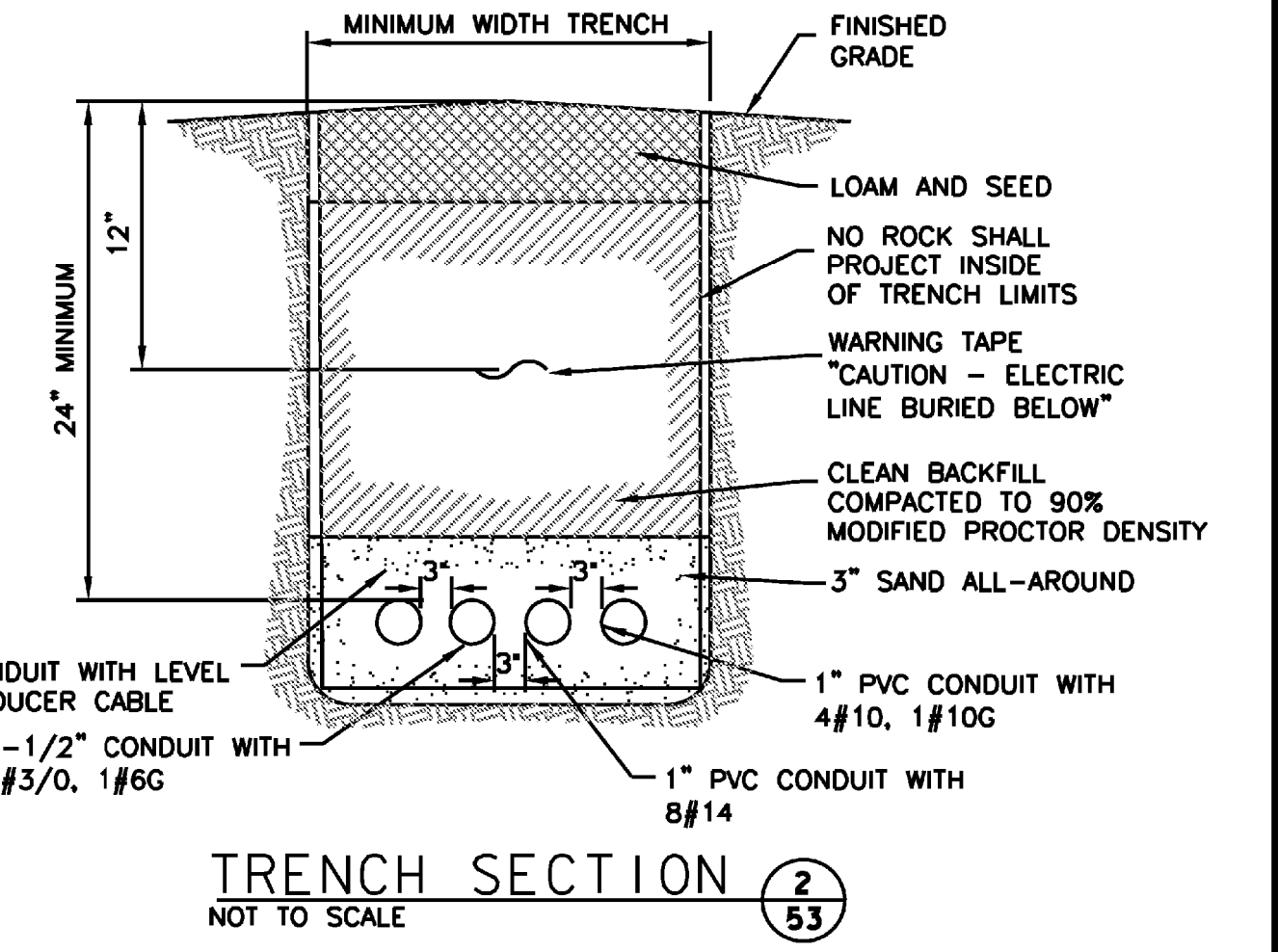
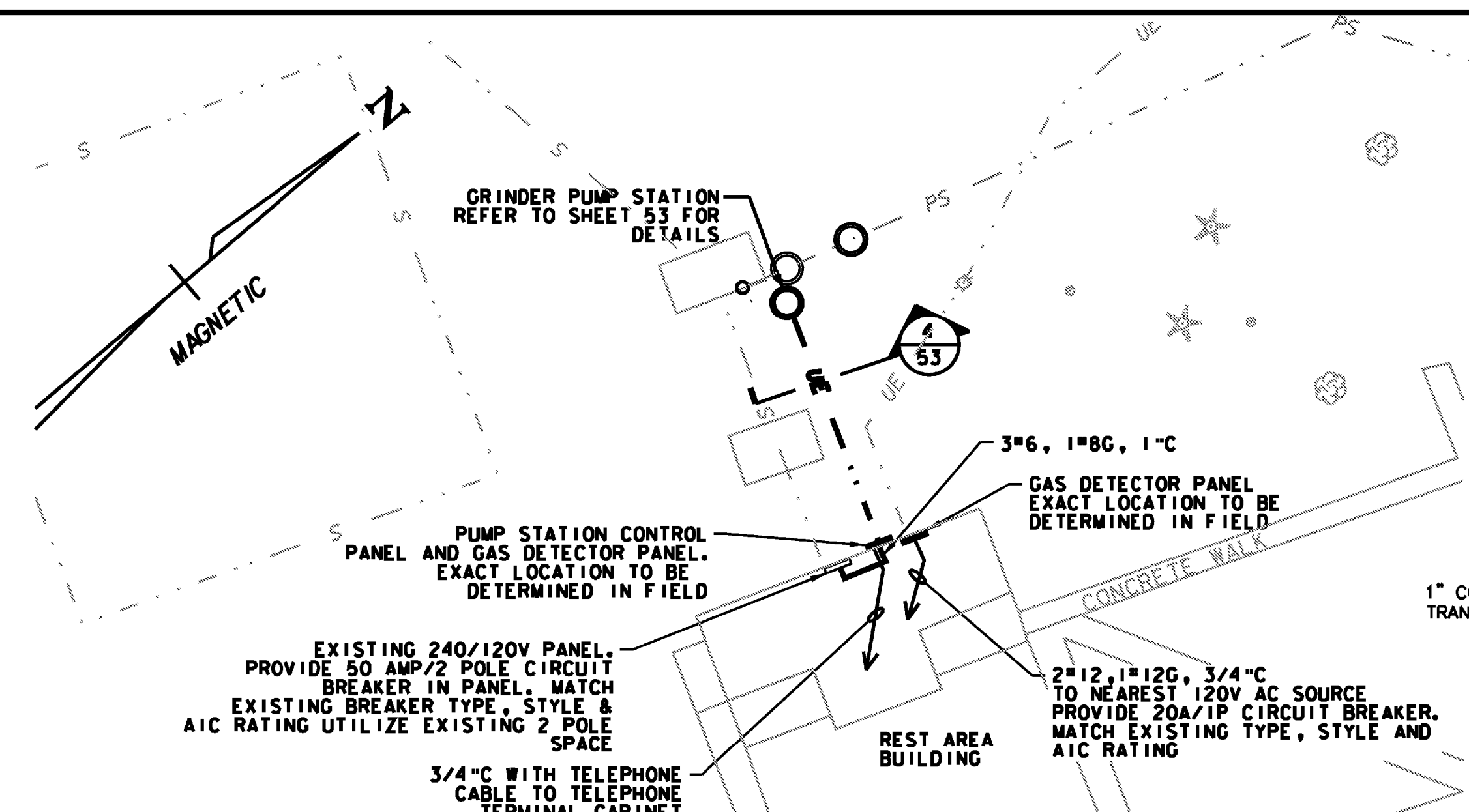
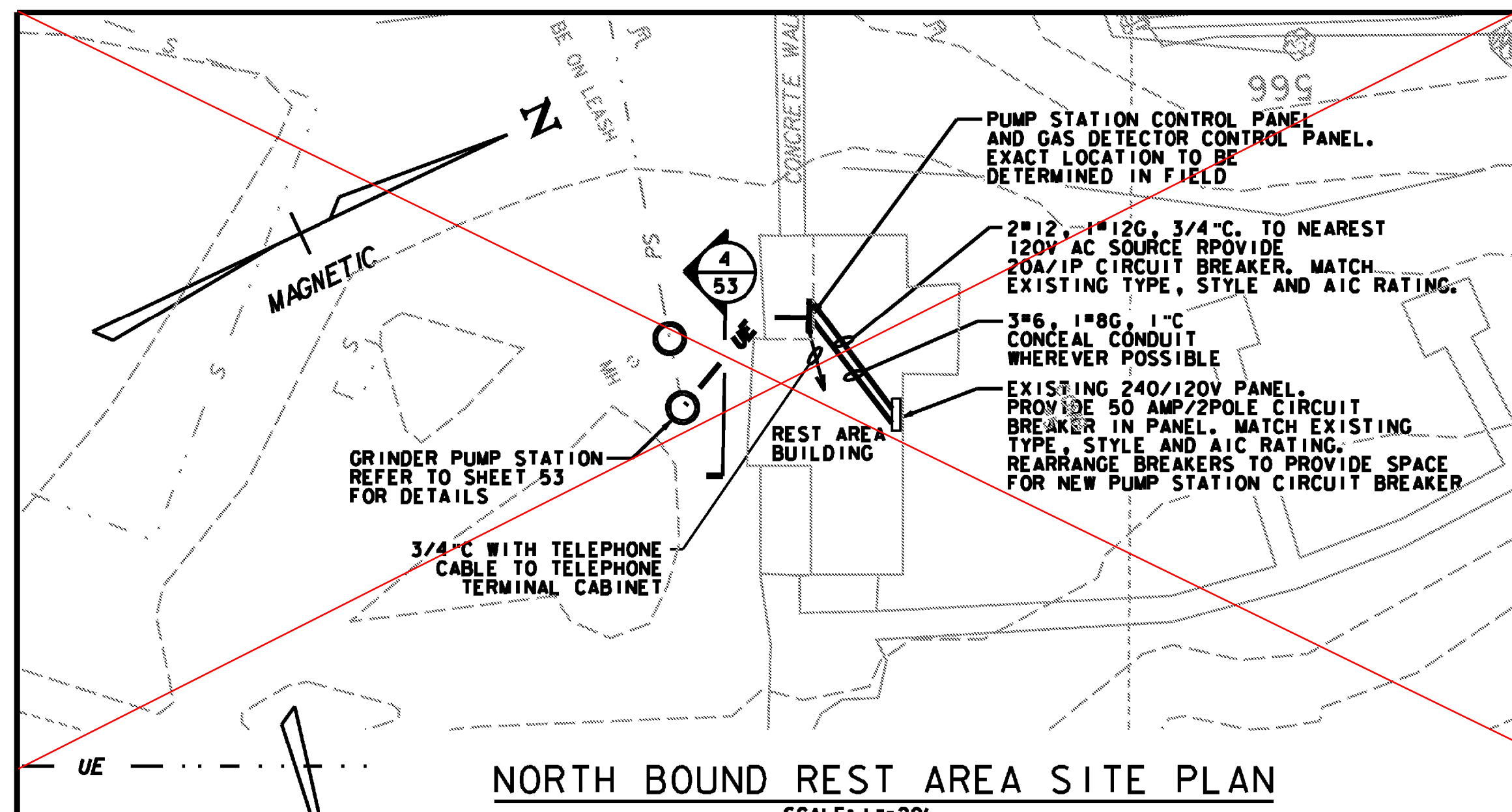
PUMP SELECTION NOTES:

NORTH BOUND REST AREA PUMP STATION:	2-HYDROMATIC MODEL HPGH/H/X-300 SUBMERSIBLE SEWAGE GRINDER PUMPS
	3 HP, 3450 RPM, 230V, SINGLE PHASE 60 HZ EXPLOSION PROOF MOTORS WITH 2" NPT DISCHARGE.
SOUTH BOUND REST AREA PUMP STATION:	2-HYDROMATIC MODEL HPG-A SUBMERSIBLE SEWAGE GRINDER PUMPS
	2 HP, 3450 RPM, 230V, SINGLE PHASE 60 HZ EXPLOSION PROOF MOTORS WITH 1 1/2" NPT DISCHARGE.

NOTE:  
ONE DBI SALA DAVIT ARM (\*800005), A SALALIFT WINCH (\*8101002) AND A SEALED SRL (\* 3403401) SHALL BE PROVIDED FOR CONFINED SPACE ENTRY. DBI SALA STAINLESS STEEL MOUNTING BASES (\* 8002040) SHALL BE PROVIDED AND INSTALLED AT EACH PUMP STATION CHAMBER FOR UTILIZING THE DAVIT ARM.



PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	u04026pit-PumpStation_Details.dwg
DATE:	5/19/2008
PROJECT LEADER:	JTM
DESIGNED BY:	MEHP
PUMP STATION DETAILS	
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET	53 OF 70



PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...u04o026pl1-Elec.SitePlan.dgn
PLOT DATE:	5/19/2008
PROJECT LEADER:	JTM
DRAWN BY:	PZA
DESIGNED BY:	MEHP
CHECKED BY:	JTM
ELECTRICAL PLANS & DETAILS I	SHEET 54 OF 70

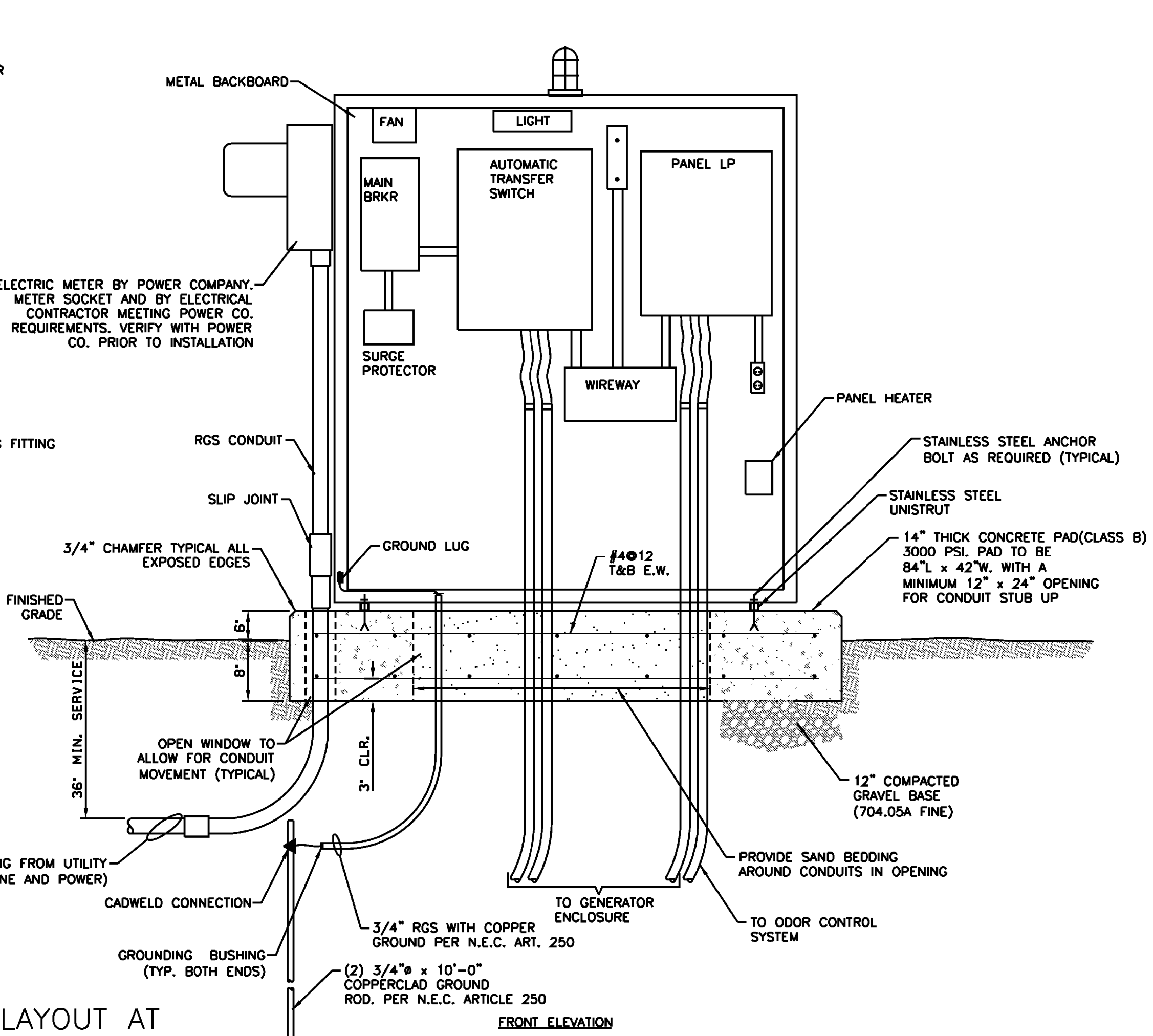
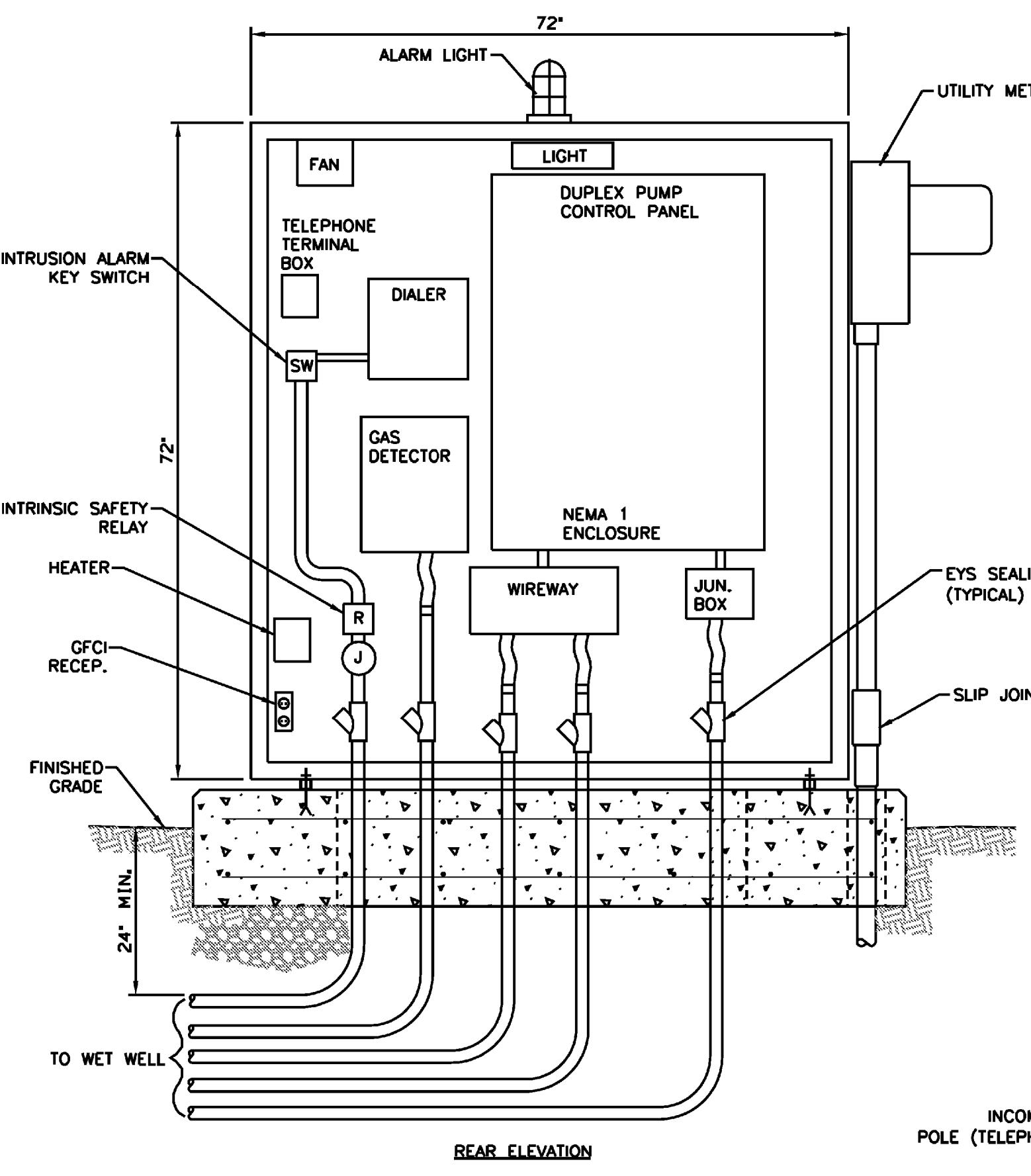
BUS RATING	100 AMPERE	PANEL No.	LP	LOCATION MOUNTING	SERVICE CABINET
PANEL RATING	TO KAIC			DRAWING No.	55 OF 70
SUPPLY VOLTAGE	208/120 VOLT				
SERVICE	1Ø, 3W WITH GROUND				

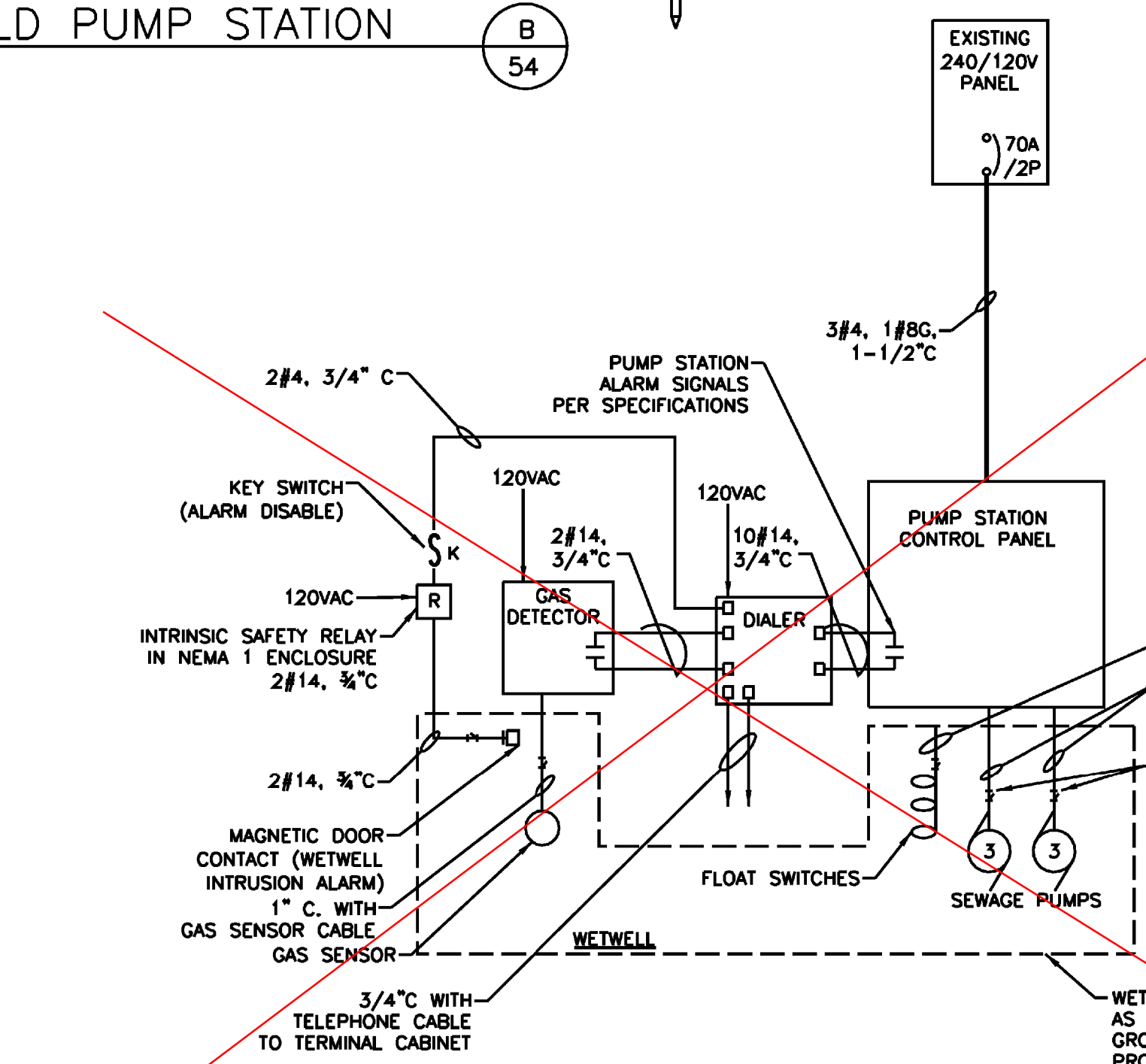
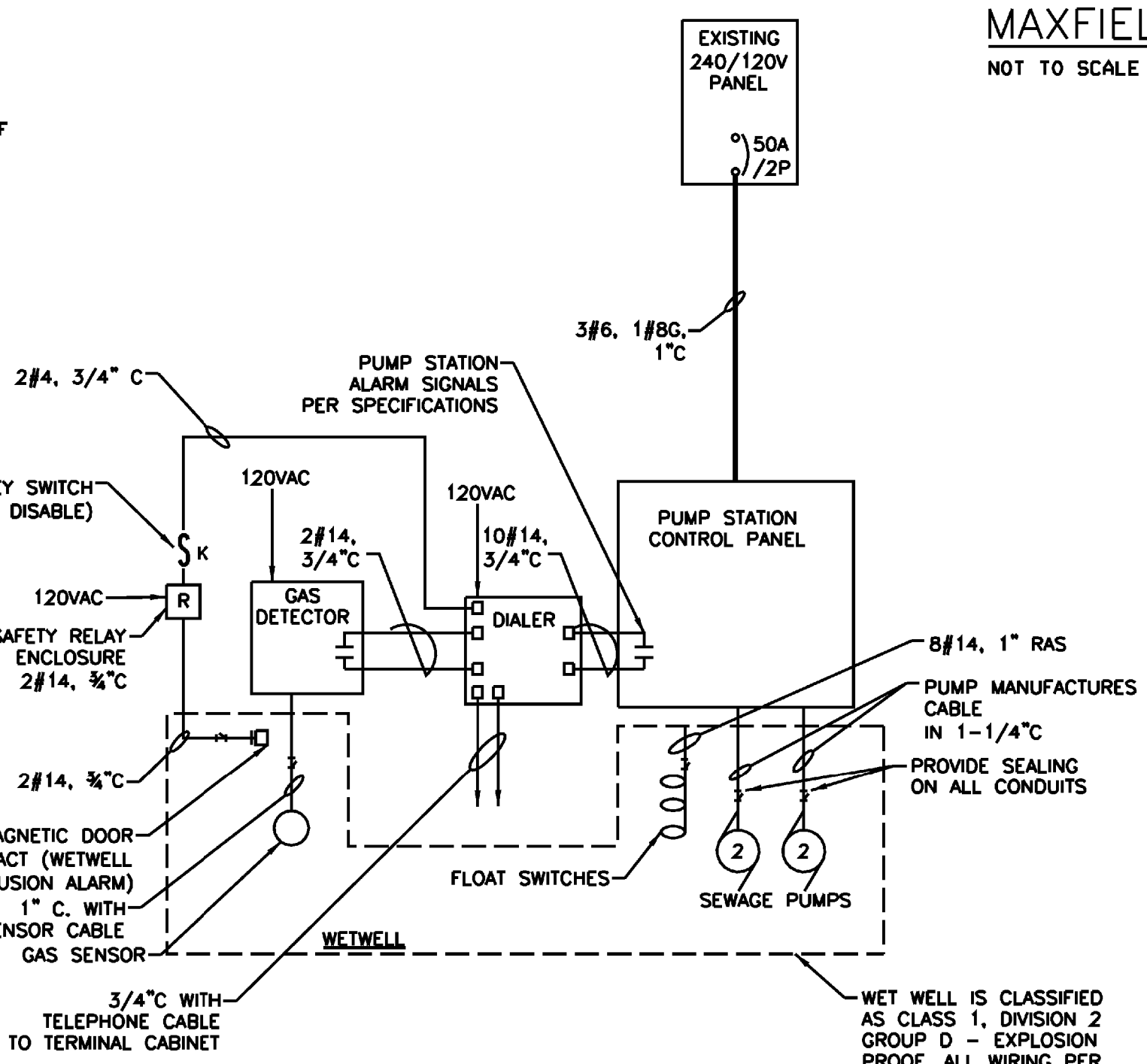
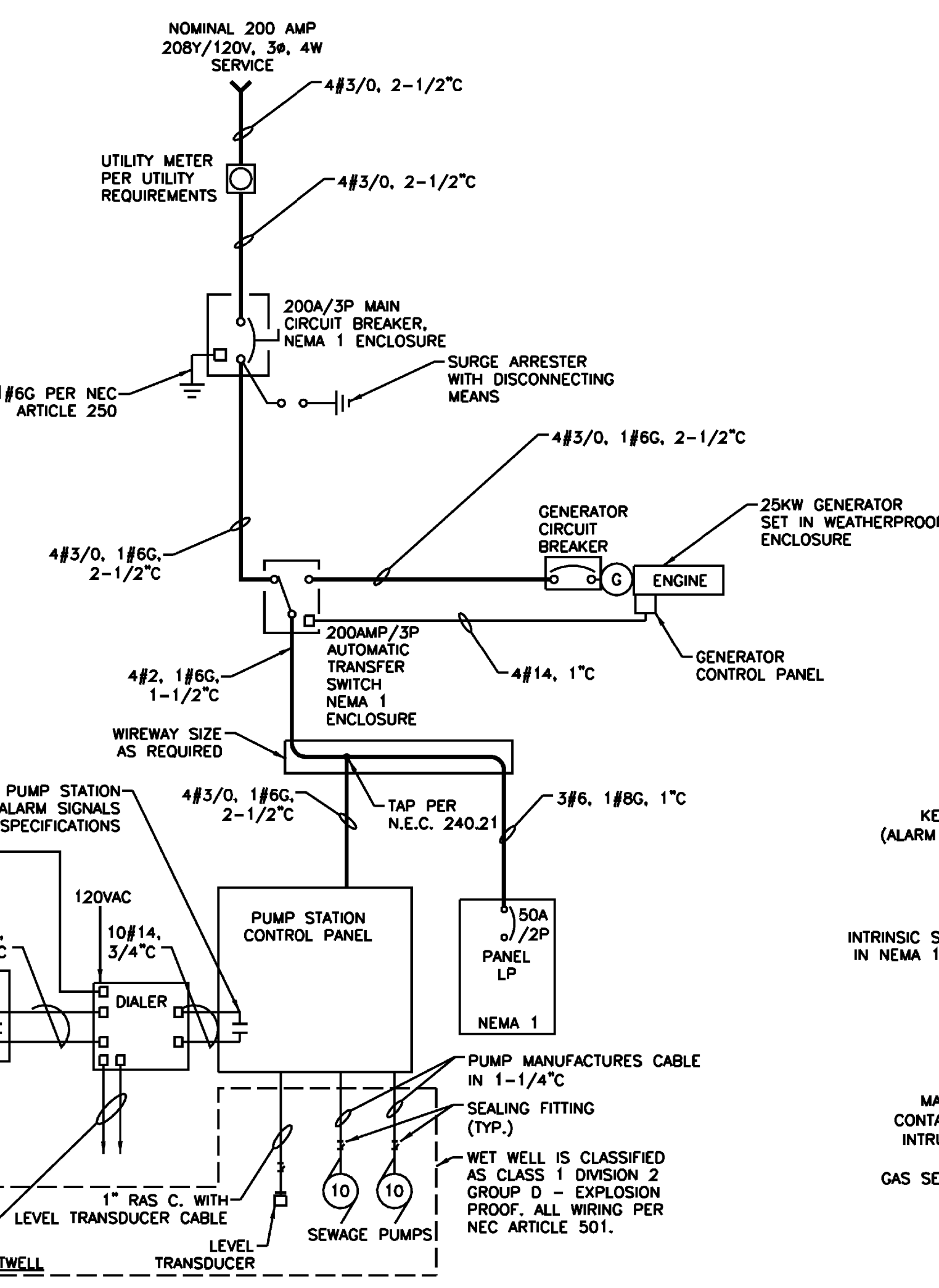
WIRING	COND	DESCRIPTION	VA OR W	BREAKER	CKT. NO	CONDUCTOR	POLE	A	ØA	ØB	DESCRIPTION	COND	WIRING
2#12, 1#12C	3/4"	PANEL LIGHT, RECP, HTR	542	1	15	3	x	2	2	20	1500	1	4#10, 1#10G
2#12, 1#12C	3/4"	GAS DETECTOR/CONTROLS	1130	1	20	5	x	6	1	20	200	1	2#10, 1#10G
2#12, 1#12C	1"	EXHAUST FAN		1	20	7	x	8	1	20	670	1	2#10, 1#10G
2#12, 1#12C	3/4"	FUTURE SCADA PANEL		1	20	9	x	10					
		DIALER	100	1	20	11	x	12					
		SPARE		1	20	11	x	12					
TOTAL 1			1772										
TOTAL 2			1700										
TOTAL 1 + 2			3472										
CONN. LOAD TOTAL			4972										
AMPERES			24										

MAIN BREAKER	50A/2P	MAIN LUGS	
FEEDER ENTRANCE	TOP	ENCLOSURE TYPE	NEMA 1
FEEDER SIZE	3#6, 1#8G, 1"	ACCESSORIES	
SOURCE	ATS		
PANEL TYPE	BOLT-ON		



- PARTIAL LEGEND**
- XP EXPLOSIONPROOF
  - RGS RIGID GALVANIZED STEEL
  - ⊕ JUNCTION BOX
  - ⊖ DUPLEX RECEPTACLE
  - GFCI DENOTES GROUND FAULT CIRCUIT INTERRUPTER, HEAVY DUTY NEMA 5-15R, LEVITON GF 5362



- NOTE:**
- CABINET TO BE U.L. LISTED, 72"x72"x36" DEEP MINIMUM WITH DOUBLE DOOR EACH SIDE, NEMA 3R RATED, STAINLESS STEEL OR ALUMINUM CONSTRUCTION, GREEN PAINT AND DRIP SHIELD.
  - CONDUIT TO BE MIN. 24" BELOW GRADE.
  - CONDUITS SHALL STUB UP THROUGH WINDOW IN CENTER OF SLAB OR THROUGH A SLEEVE IN THE SLAB TO ALLOW MOVEMENT OF SLAB.
  - DO NOT RIGIDLY CONNECT UNDER GROUND CONDUIT AND ELECTRICAL DEVICES. PROVIDE FLEXIBLE CONDUIT FROM DEVICE TO CONDUIT WITH ENOUGH SLACK TO ALLOW FOR SLAB MOVEMENT.
  - EXACT PANEL SIZE TO BE DETERMINED BY CONTRACTOR TO ALLOW PROVIDED EQUIPMENT TO FIT INSIDE PANEL.
  - PANEL DOORS AND HARDWARE ARE NOT SHOWN TO CLEARLY INDICATE INTERIOR ELECTRICAL EQUIPMENT.

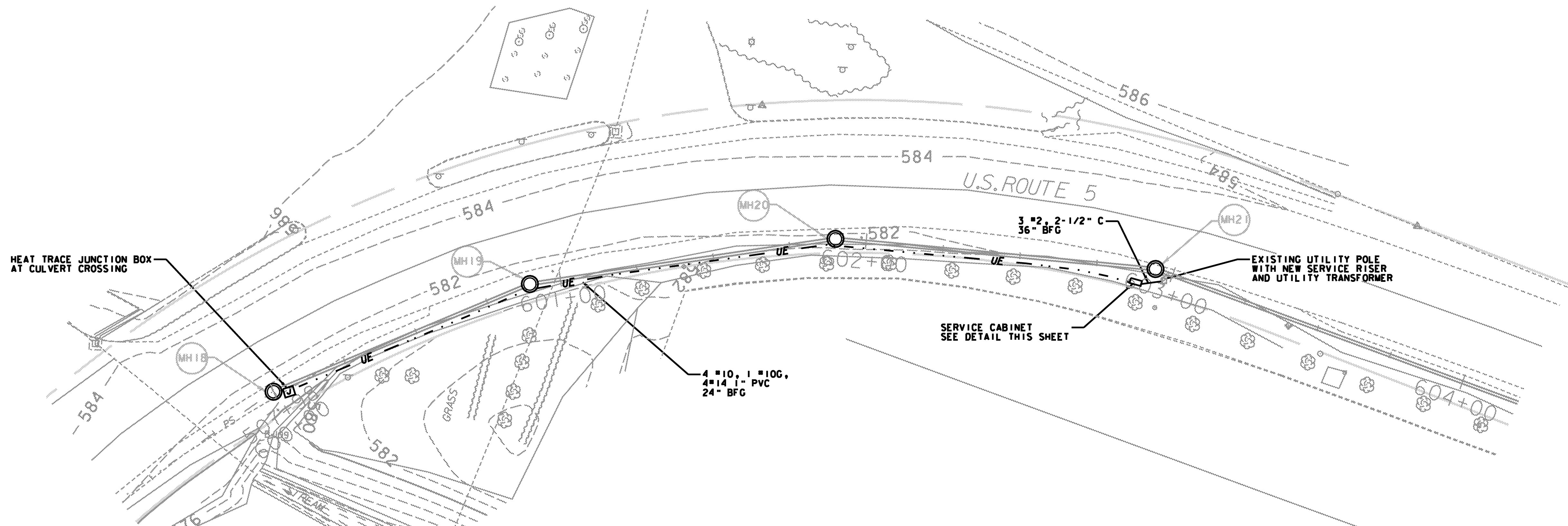
MAXFIELD PUMP STATION SINGLE-LINE DIAGRAM NOT TO SCALE

REST AREA PUMP STATION SINGLE-LINE DIAGRAM (SOUTH BOUND REST AREA) NOT TO SCALE

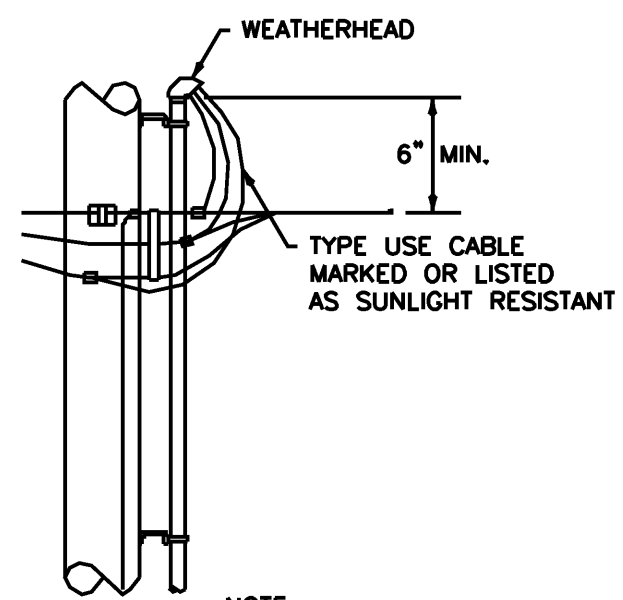
REST AREA PUMP STATION SINGLE-LINE DIAGRAM (NORTH BOUND REST AREA) NOT TO SCALE



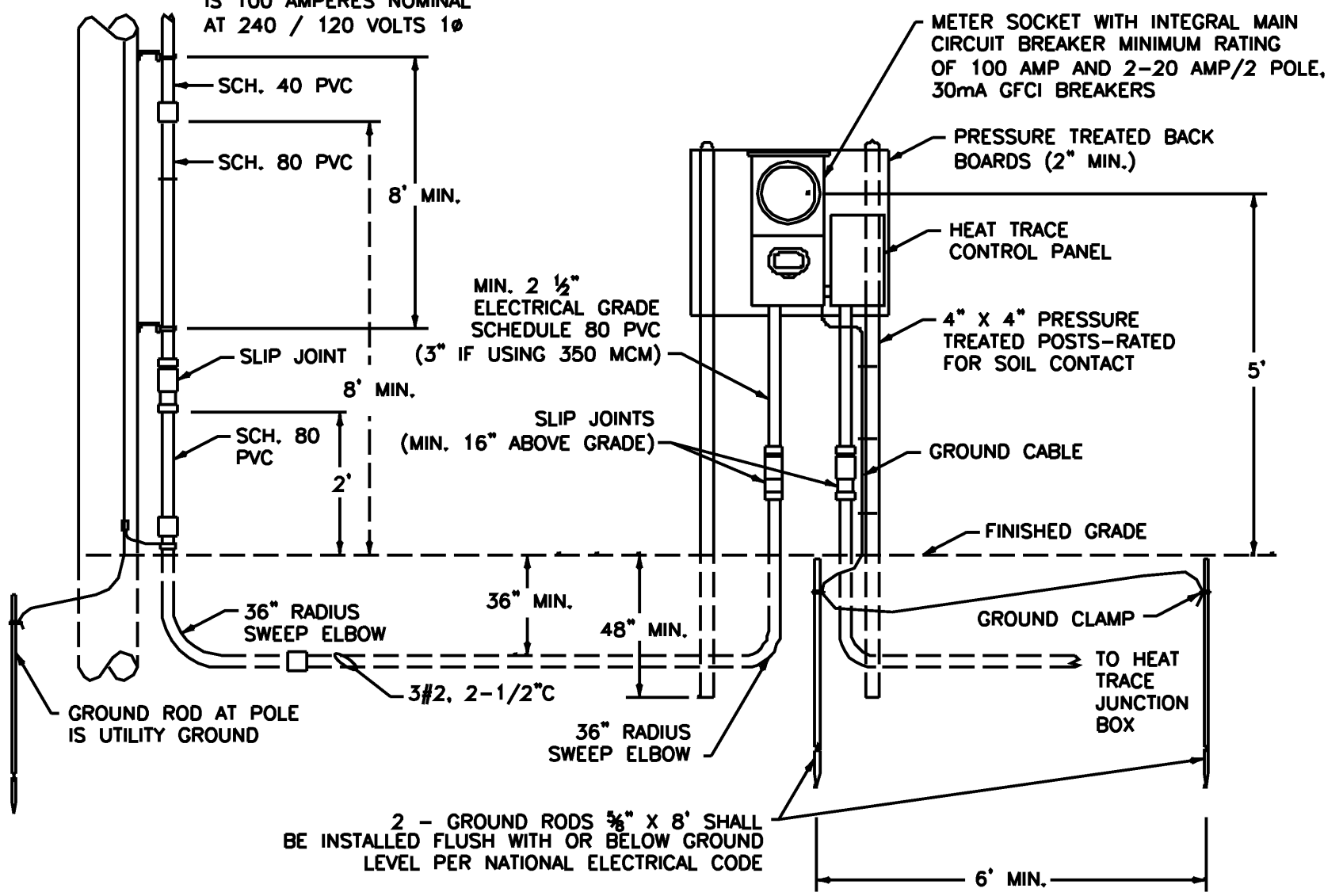
PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...u04a026pi1-Elec_Details.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	WHH
ELECTRICAL DETAILS II	
PLOT DATE:	5/19/2008
DRAWN BY:	JSK
CHECKED BY:	JTM
SHEET	55 OF 70



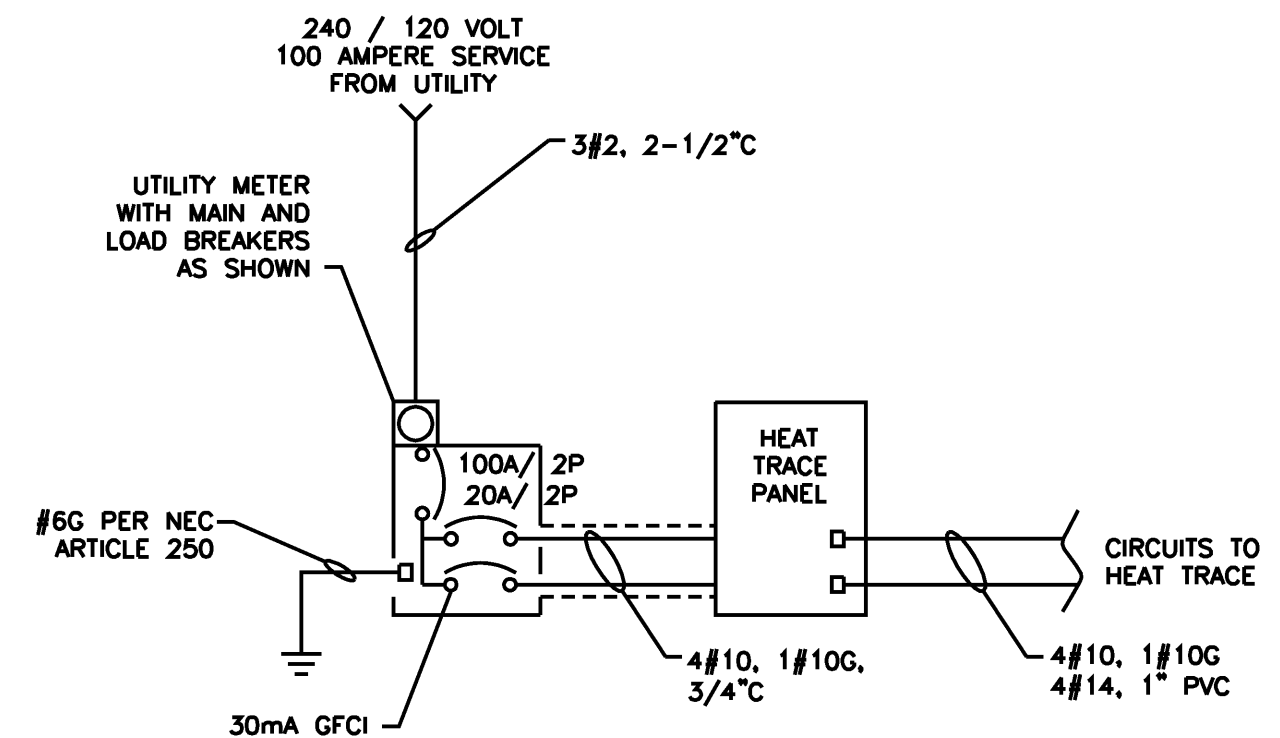
**HEAT TRACE SITE PLAN**  
SCALE: 1"=20'-0"



**NOTE:**  
SERVICE TO HEAT TRACE IS 100 AMPERES NOMINAL AT 240 / 120 VOLTS 1Ø



**CULVERT HEAT TRACE SERVICE ELEVATION**  
NOT TO SCALE

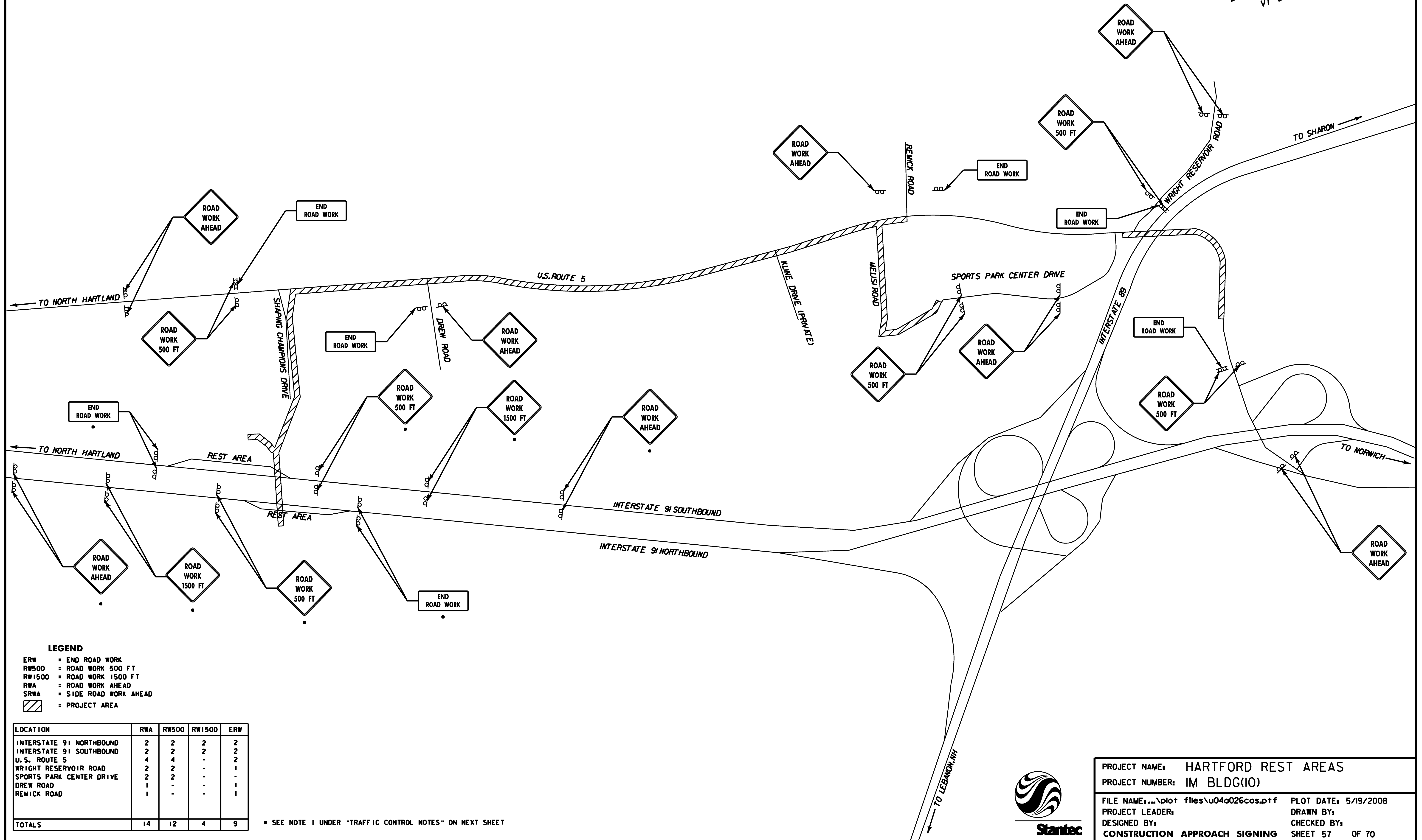
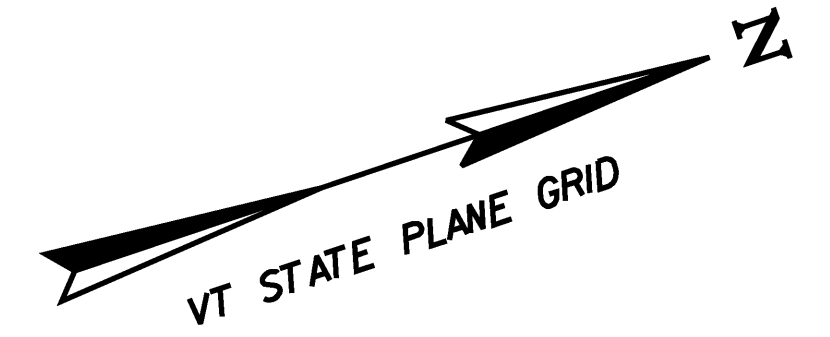


**CULVERT HEAT TRACE ONE-LINE DIAGRAM**  
NOT TO SCALE



PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...u04c026p1t-Elec_Details III.dgn
PROJECT LEADER:	JTM
DESIGNED BY:	WHH
ELECTRICAL DETAILS III	
DATE:	5/19/2008
DRAWN BY:	JSK
CHECKED BY:	JTM
SHEET	56 OF 70

**CONSTRUCTION APPROACH SIGNING**  
 NOT TO SCALE  
 SEE TRAFFIC CONTROL NOTES FOR ADDITIONAL DETAILS



**LEGEND**

- ERW = END ROAD WORK
- RW500 = ROAD WORK 500 FT
- RW1500 = ROAD WORK 1500 FT
- RWA = ROAD WORK AHEAD
- SRWA = SIDE ROAD WORK AHEAD
- [Hatched Box] = PROJECT AREA

LOCATION	RWA	RW500	RW1500	ERW
INTERSTATE 91 NORTHBOUND	2	2	2	2
INTERSTATE 91 SOUTHBOUND	2	2	2	2
U. S. ROUTE 5	4	4	-	2
WRIGHT RESERVOIR ROAD	2	2	-	1
SPORTS PARK CENTER DRIVE	2	2	-	-
DREW ROAD	1	-	-	1
REMICK ROAD	1	-	-	1
<b>TOTALS</b>	<b>14</b>	<b>12</b>	<b>4</b>	<b>9</b>

• SEE NOTE 1 UNDER "TRAFFIC CONTROL NOTES" ON NEXT SHEET



PROJECT NAME: HARTFORD REST AREAS  
 PROJECT NUMBER: IM BLDG(10)

FILE NAME: ... \plot files\04a026cas.prf PLOT DATE: 5/19/2008  
 PROJECT LEADER: DRAWN BY:  
 DESIGNED BY: CHECKED BY:  
**CONSTRUCTION APPROACH SIGNING** SHEET 57 OF 70

## TRAFFIC CONTROL NOTES

### INTRODUCTION

THE FOLLOWING TRAFFIC CONTROL INFORMATION OUTLINES GENERAL AND PHASE SPECIFIC REQUIREMENTS FOR TRAFFIC CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SPECIFIC DETAILS TO THE RESIDENT ENGINEER TO ADDRESS SPECIFIC SITUATIONS. IF THE CONTRACTOR DOES NOT WISH TO FOLLOW THE REQUIREMENTS IN THIS OUTLINE, HE/SHE MAY SUBMIT AN ALTERNATE PROPOSAL AT LEAST TWO (2) WEEKS PRIOR TO IMPLEMENTING THE PROPOSED CHANGES FOR REVIEW BY THE RESIDENT ENGINEER. ALL TRAFFIC CONTROL PLANS AND DETAILS MUST BE DESIGNED AND IMPLEMENTED IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND VTRANS STANDARDS E-100, E-101, E-102, E-103, E-106, E-107, E-107A, E-108, E-110, AND E-111.

### GENERAL

1. TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 641 OF THE STANDARD SPECIFICATIONS, THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), ITS REVISIONS AND AMENDMENTS, ANY PROVISION IN THE PLANS AND/OR PROPOSAL OF THIS PROJECT, AND THE STATE OF VERMONT STANDARDS. THE TRAFFIC CONTROL FOR THIS PROJECT SHALL BE COORDINATED THROUGH THE RESIDENT ENGINEER TO ACCOMMODATE THE TRAFFIC CONTROL SIGNING FOR THE HARTFORD LANDFILL BRIDGE OVER I-91 WHICH IS CURRENTLY UNDER CONSTRUCTION.
2. THE TRAFFIC CONTROL PLANS ARE CONSIDERED THE MINIMUM REQUIREMENTS FOR SAFE OPERATIONS. ADDITIONAL SIGNS AND/OR TRAFFIC CONTROL DEVICES MAY BE REQUIRED AS DETERMINED BY THE ENGINEER.
3. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO AVOID DAMAGING EXISTING PAVEMENT, CURBS AND SIDEWALK WHEN IT IS NECESSARY TO MOVE EQUIPMENT THROUGH LOCAL STREETS. THE CONTRACTOR SHALL OBSERVE THE RULES, REGULATIONS AND DIRECTIONS OF THE LOCAL MUNICIPALITIES REGARDING THE HANDLING OF EQUIPMENT AND SHALL TAKE SUCH PROTECTIVE MEASURES AS MAY BE ORDERED BY THE ENGINEER. DAMAGES INCURRED BY THE CONTRACTOR THROUGH DISREGARD SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE.
4. VEHICLES/EQUIPMENT PARKED WITHIN THE PROJECT LIMITS BELONGING TO THE CONTRACTOR AND/OR HIS EMPLOYEES SHALL BE KEPT TO A MINIMUM AND PARKED IN SUCH A MANNER THAT DOES NOT OBSTRUCT THE VIEW OF SIGNS, BARRIERS, BARRICADES OR ANY OTHER TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL NOT PARK VEHICLES/EQUIPMENT OR STORE MATERIALS IN ANY LOCATION WHERE IT IS DEEMED A SAFETY HAZARD BY THE ENGINEER.
5. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION OPERATIONS WITH THE ACTIVITIES OF THE UTILITY COMPANIES AND OTHER ENTITIES AFFECTED BY THE CONSTRUCTION.
6. ANY EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE CURRENT TRAFFIC CONTROL LAYOUT SHALL BE MASKED BY BLACK MASKING TAPE BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. PAINTING OUT, BURNING OR GRINDING EXISTING LINES WILL NOT BE ACCEPTABLE.
7. LANE WIDTHS THROUGH CONSTRUCTION ZONES SHALL BE A MINIMUM OF 10 FEET AS MEASURED FROM THE TRAFFIC SIDE FACE OF CHANNELIZING DEVICES OR BARRIERS.
8. CONTRACTOR SHALL MAINTAIN TRAVEL LANE WIDTH OF 12 FEET WHENEVER POSSIBLE. "ROAD NARROWS" SIGNS SHALL BE INSTALLED IN ADVANCE OF TWO WAY TRAFFIC OPERATIONS THROUGH THE CONSTRUCTION ZONE IF LANE WIDTHS ARE TO BE LESS THAN 12 FEET.
9. CONTRACTOR MUST PROVIDE ACCESS THROUGH WORK ZONES FOR EMERGENCY VEHICLES AT ALL TIMES. WHEN A LONGITUDINAL DROP-OFF CONDITION EXISTS ADJACENT TO THE TRAVEL LANE, CONTRACTOR SHALL UTILIZE NECESSARY CHANNELIZING DEVICES OR BARRIERS IN ACCORDANCE WITH VTRANS STANDARD E-108.
10. PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE USED IN ADVANCE OF CONSTRUCTION APPROACHES TO WARN MOTORISTS OF CONSTRUCTION ZONE, SPEED REDUCTIONS (IF NECESSARY), LANE SHIFTS, ETC.
11. CONTRACTOR SHALL MAINTAIN ACCESS TO PROPERTIES AND SIDE ROADS AT ALL TIMES FOR EMERGENCY VEHICLES. IF A TEMPORARY CLOSURE IS REQUIRED, THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE RESIDENT ENGINEER AND THE PROPERTY OWNER AT LEAST 2 WEEKS PRIOR TO TEMPORARY CLOSURE.
12. PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST DEVELOP A MAINTENANCE OF ACCESS AND PARKING PLAN FOR ALL EXISTING BUSINESSES TO MINIMIZE THE LOSS OF BUSINESS. CLEAR SIGNAGE MUST BE PROVIDED.
13. WORK HOURS SHALL BE RESTRICTED TO 6:00 AM TO 8:00 PM MONDAY THROUGH SATURDAY, EXCEPT DURING HOLIDAY PERIODS. THE HOLIDAY PERIOD SHALL BEGIN AT 12:00 NOON ON THE DAY BEFORE THE WEEKEND OR HOLIDAY, WHICH EVER APPLIES, AND SHALL END AT 7:00 AM ON THE DAY AFTER THE HOLIDAY OR THE WEEKEND, AS APPROPRIATE. ANTICIPATED HOLIDAYS OR WEEKENDS INCLUDE BUT ARE NOT LIMITED TO MEMORIAL DAY (BOTH OBSERVED DAYS), THE FOURTH OF JULY, LABOR DAY AND COLUMBUS DAY. THE CONTRACTOR SHALL WORK NIGHT TIME HOURS (AFTER 8:00 PM AND BEFORE 6:00 AM) ONLY WHEN APPROVED BY THE TOWN AND/OR THE RESIDENT ENGINEER. THE CONTRACTOR SHALL REQUEST APPROVAL AT LEAST ONE WEEK PRIOR TO BEGINNING NIGHT WORK. THE CONTRACTOR SHALL NOT CARRY ON CONSTRUCTION OPERATIONS ON SUNDAY EXCEPT AS AUTHORIZED BY THE ENGINEER. THE ABOVE LIMITATIONS WILL NOT APPLY FOR THE PURPOSES OF MAINTENANCE, EMERGENCY REPAIRS, AND PROPER PROTECTION OF THE WORK, WHICH INCLUDES, BUT IS NOT LIMITED TO, THE CURING OF CONCRETE AND FOR THE REPAIRING AND SERVICING OF EQUIPMENT. THE ABOVE LIMITATIONS IN NO MANNER WHATSOEVER RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY FOR THE WORK INVOLVED AS SET FORTH IN SUBSECTION 107.18, OR IN ANY OTHER APPLICABLE REQUIREMENT.
14. THE CONTRACTOR SHALL CONDUCT THE WORK AT ALL TIMES IN SUCH A MANNER AND IN SUCH SEQUENCE SO AS TO ENSURE THE LEAST INTERFERENCE WITH TRAFFIC. THE CONTRACTOR SHALL HAVE DUE REGARD TO THE LOCATION OF DETOURS AND TO THE PROVISIONS FOR HANDLING TRAFFIC. THE CONTRACTOR SHALL NOT OPEN UP WORK TO THE PREJUDICE OR DETRIMENT OF WORK ALREADY STARTED. THE ENGINEER MAY REQUIRE THE CONTRACTOR TO FINISH A SECTION ON WHICH WORK IS IN PROGRESS BEFORE WORK IS STARTED ON ANY ADDITIONAL SECTIONS IF THE OPENING OF SUCH SECTION IS ESSENTIAL TO PUBLIC CONVENIENCE.
15. WORK ZONE SAFETY SHALL BE PROVIDED FOR PEDESTRIANS. IN GENERAL, PEDESTRIANS SHOULD SEEK ALTERNATE ROUTES AS APPROPRIATE. IF THIS IS NOT ACHIEVABLE AND PEDESTRIANS NEED TO ENTER AND TRAVERSE THE WORK ZONE, AN ESCORT WEARING APPROPRIATE PROTECTIVE DEVICES SHALL PROVIDE A SAFETY ESCORT THROUGH THE WORK ZONE.
16. THE BID PRICE FOR PAY ITEM 641.10 TRAFFIC CONTROL SHALL BE PAID FOR AS A LUMP SUM, AND SHALL INCLUDE ALL CONSTRUCTION OF THE FOLLOWING APPROACH & ON-PROJECT CONSTRUCTION SIGNS WITH YIELDING POSTS, BARRELS, CONES, BARRICADES, DELINEATORS, OBJECT MARKERS, REMOVE AND RESET TEMPORARY TRAFFIC BARRIER, TEMPORARY REGULATORY AND WARNING SIGNS AND POSTS, AND ALL ADJUSTING, RELOCATING AND REMOVING OF THESE DEVICES. TEMPORARY ROADWAY WIDENING, INCLUDING SUBBASE AND PAVEMENT WILL ALSO BE INCLUDED. TEMPORARY PAVEMENT MARKINGS DEEMED TO BE REQUIRED BY THE RESIDENT ENGINEER SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 646 AND SHALL BE INCIDENTAL TO PAY ITEM 641.10, TRAFFIC CONTROL.
17. THE FOLLOWING ITEMS WILL BE PAID FOR UNDER THEIR SPECIFIC BID PRICES.

-621.90 - TEMPORARY TRAFFIC BARRIER  
-630.10 - UNIFORMED TRAFFIC OFFICERS  
-630.15 - FLAGGERS  
-641.15 - PORTABLE CHANGEABLE MESSAGE SIGN  
-641.16 - PORTABLE ARROW BOARD  
-646.86 - PAVEMENT MARKING MASK

## FLAGGERS AND UNIFORM TRAFFIC OFFICERS

FLAGGERS SHALL BE REQUIRED TO ATTEND A 4 HOUR APPROVED TRAINING COURSE. THE CONTRACTOR SHALL PROVIDE THE RESIDENT ENGINEER WITH COPIES OF ALL DOCUMENTATION OF THE CERTIFICATION OBTAINED FOR EACH FLAGGER ON THE PROJECT.

ALL FLAGGERS OR UTO SERVING AS A TRAINED FLAGGER SHALL WEAR SAFETY APPAREL MEETING REQUIREMENTS OF ISEA "AMERICAN NATIONAL STANDARD OF HIGH-VISIBILITY APPAREL" AND LABELED AS MEETING THE ANSI 107-1999 STANDARD PERFORMANCE CLASS 2 RISK EXPOSURE. INDIVIDUALS ENGAGED IN TRAFFIC CONTROL SHALL WEAR THE HIGH VISIBILITY VEST WITH "TRAFFIC CONTROL" VISIBLE WITHOUT EXCEPTION.

UNIFORM TRAFFIC CONTROL OFFICERS OR TRAINED FLAG PERSONS SHALL DIRECT TRAFFIC WHENEVER REQUIRED.

NOTE THAT THE UTO, UNDER AUTHORITY GRANTED BY LAW (TITLE 23 VSA) MAY DIRECT AND CONTROL TRAFFIC. SUITABLE EXAMPLES IN WORK ZONES MIGHT INCLUDE THE DIRECTION AND CONTROLS OF TRAFFIC AT INTERSECTIONS WHERE SIGNALS ARE NOT FUNCTIONING OR ARE MALFUNCTIONING. IN THESE CASES, THE PRESENCE OF THE BLUE LIGHT MAY NOT BE SUITABLE OR NECESSARY. THE WEARING OF DEPARTMENTALLY REQUIRED AND APPROVED REFLECTIVE GARMENTS IS REQUIRED.

FLAGGERS ARE ALLOWED TO STOP AND RELEASE TRAFFIC AS INDICATED IN THE 2003 MUTCD, SECTION 6E.04 FLAGGER PROCEDURES.

## SIGNAGE

1. SIGNS SHOWN ON THIS PLAN ARE INTENDED TO WARN MOTORISTS IN ADVANCE OF THE CONSTRUCTION ZONE. ADDITIONAL CONSTRUCTION SIGNS WILL BE REQUIRED TO WARN AND GUIDE MOTORISTS ABOUT AND THROUGH THE CONSTRUCTION ZONE DURING SPECIFIC CONSTRUCTION PHASES.
2. SEE VTRANS STANDARDS E-100, E-100A, E-101, E-102, E-102A, E-106, E-107, E-108 FOR SIGN PLACEMENT.
3. CONSTRUCTION APPROACH SIGNING SHALL BE INCIDENTAL TO PAY ITEM 641.10 TRAFFIC CONTROL.
4. INTERSTATE 91 CONSTRUCTION APPROACH SIGNS SHALL BE REMOVED UPON COMPLETION OF REST AREA WORK.
5. WORK ZONE SIGNS SHALL NOT OBSCURE EXISTING TRAFFIC CONTROL DEVICES.
6. ALL DIAMOND SHAPED SIGNS SHALL BE A MINIMUM OF 48" x 48" AND INSTALLED ON TWO POSTS EACH.
7. ALL CONSTRUCTION SIGNS SHALL BE NEW OR IN LIKE-NEW CONDITION.

## PHASING

THE INTENTION OF THIS TRAFFIC MAINTENANCE PLAN IS TO PROVIDE THE CONTRACTOR WITH A LOGICAL, SUCCESSIVE PLAN THAT DEMONSTRATES HOW TO CONSTRUCT THE PROJECT AND MAINTAIN TRAFFIC FLOW ALONG THE ENTIRE PROJECT CORRIDOR.

THE CONTRACTOR SHALL PROVIDE ADDITIONAL PLAN AND PROJECT SEQUENCING, WHICH SHALL BE APPROVED BY THE ENGINEER. THIS WILL BE THE CASE, SPECIFICALLY, BUT NOT LIMITED TO INTERSECTIONS.

THE CONTRACTOR IS ENCOURAGED TO CONCENTRATE CONSTRUCTION EFFORTS ALONG LOGICAL SEGMENTS OF THE PROJECT AND COMPLETE ALL STAGES OF THE PLAN IN ONE AREA PRIOR TO BEGINNING WORK IN OTHER AREAS.

### PHASE 1

1. CORE DRILL CONNECTION TO EXISTING MANHOLE AT STA. 610+54. CONSTRUCT GRAVITY SEWER FROM STA. 610+54 TO STA. 600+00.
2. CONSTRUCT FORCE MAIN FROM STA. 507+98 TO STA. 500+00. CONNECT TO EXISTING PIPE AT STA. 500+00.
3. RESET SALVAGED SIGNS AND RELOCATED MAILBOXES BETWEEN STA. 500+00 AND STA. 610+54.
4. USE FLAGGED CONSTRUCTION WHEN NECESSARY

### PHASE 2

1. CORE DRILL CONNECTION TO EXISTING MANHOLE AT STA. 417+69 ALONG MELISI ROAD. CONSTRUCT GRAVITY SEWER FROM STA. 417+69 TO STA. 400+00.
2. REPAIR ANY DAMAGED AREAS ALONG MELISI ROAD.
3. CONSTRUCT GRAVITY SEWER FROM STA. 0+00 TO STA. 3+29, CONNECTING TO MH 8 AT STA. 401+09.
4. CONSTRUCT FORCE MAIN FROM STA. 353+56 TO STA. 300+27.
5. RESET SALVAGED SIGNS AND RELOCATED MAILBOXES ALONG U.S. ROUTE 5 BETWEEN STA. 300+27 AND STA. 353+56.
6. CONSTRUCT PUMP STATION AT STA. 300+27.
7. USE FLAGGED CONSTRUCTION WHEN NECESSARY

### PHASE 3

1. CONSTRUCT GRAVITY SEWER FROM STA. 216+94 TO STA. 203+14.
2. CONSTRUCT FORCE MAIN FROM STA. 200+00 TO STA. 203+14.
3. CONSTRUCT PUMP STATION 2 AT SOUTHBOUND REST AREA STA. 200+00. REST AREA TRAFFIC TO BE MAINTAINED DURING CONSTRUCTION.

### PHASE 4 (MAY BE COMBINED WITH OTHER PHASES - COORDINATE WITH THE RESIDENT ENGINEER)

1. CONSTRUCT PUMP STATION 1 AT THE NORTHBOUND REST AREA STA. 100+00. REST AREA TRAFFIC TO BE MAINTAINED DURING CONSTRUCTION.
2. DIRECTIONAL DRILL STA. 100+48 TO STA. 106+04 UNDER INTERSTATE 91.
3. CONSTRUCT FORCE MAIN FROM STA. 100+00 TO CONNECTION OF HDPE PIPE ON NORTHBOUND SIDE OF INTERSTATE 91.
4. CONSTRUCT FORCE MAIN FROM HDPE CONNECTION ON SOUTHBOUND SIDE OF INTERSTATE 91 TO STA. 106+88. COORDINATE ALL WORK ASSOCIATED WITH THE REST AREA FACILITY WITH THE BGS ATTENDANT.



PROJECT NAME: HARTFORD REST AREAS

PROJECT NUMBER: IM BLDG(10)

FILE NAME: ...\\plot files\04026tc..notes.plot DATE: 5/19/2008

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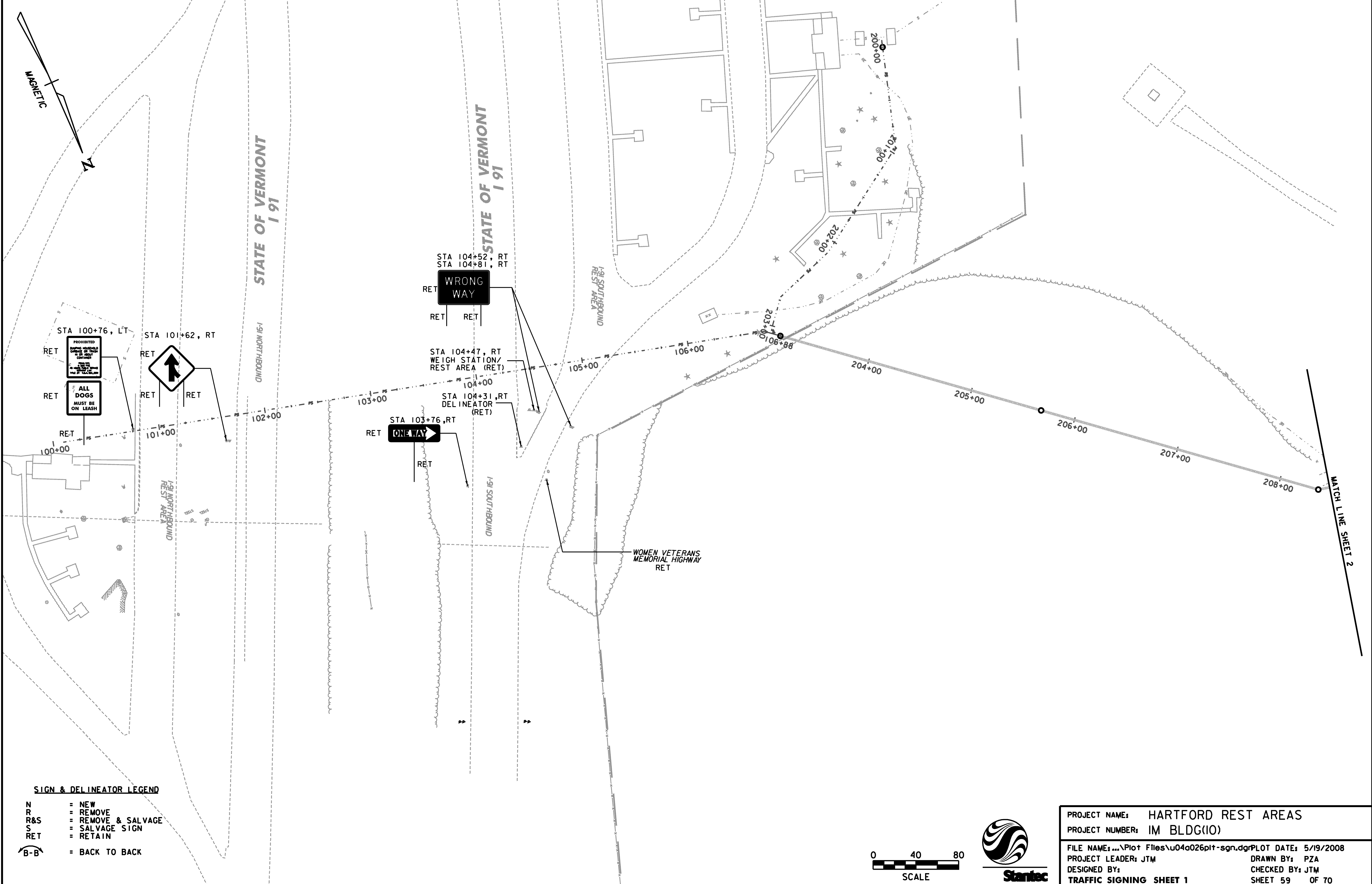
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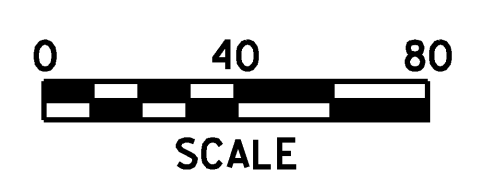
TRAFFIC CONTROL NOTES

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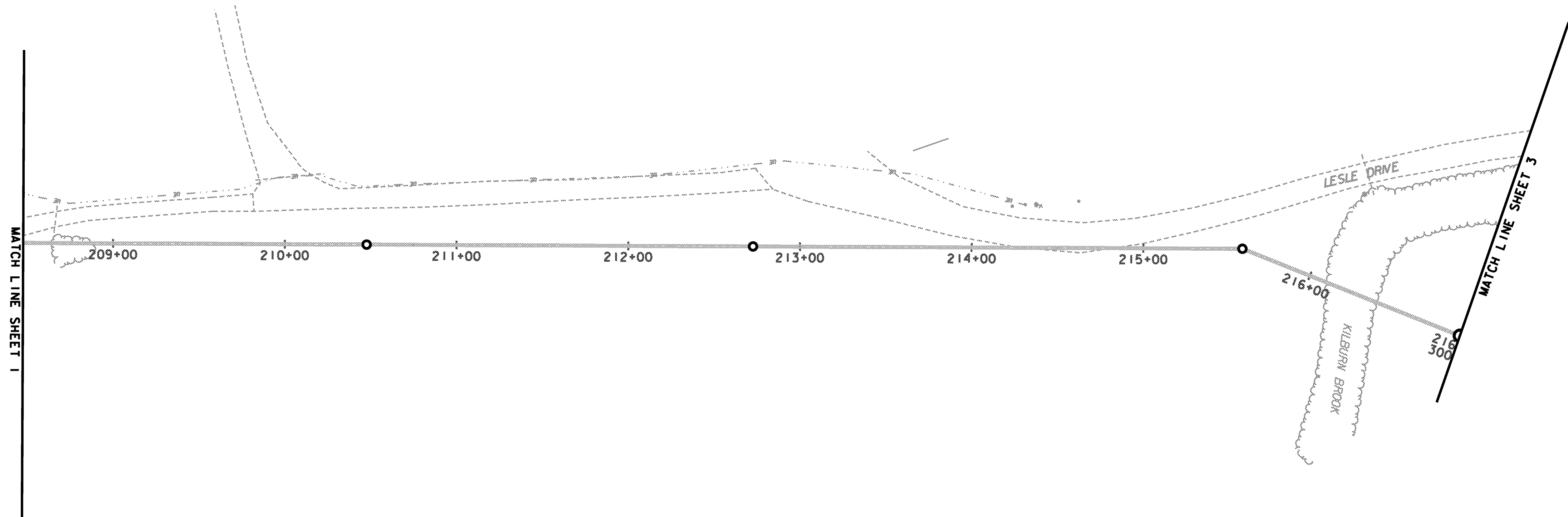
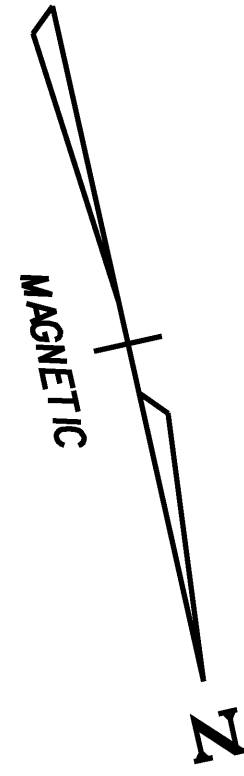


**SIGN & DELINEATOR LEGEND**

- N = NEW
- R = REMOVE
- R&S = REMOVE & SALVAGE
- S = SALVAGE SIGN
- RET = RETAIN
- B-B = BACK TO BACK

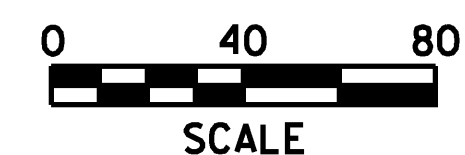


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PROJECT NUMBER: IM BLDG(10)	
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PROJECT LEADER: JTM	DRAWN BY: PZA
DESIGNED BY: JTM	CHECKED BY: JTM
TRAFFIC SIGNING SHEET 1	SHEET 59 OF 70

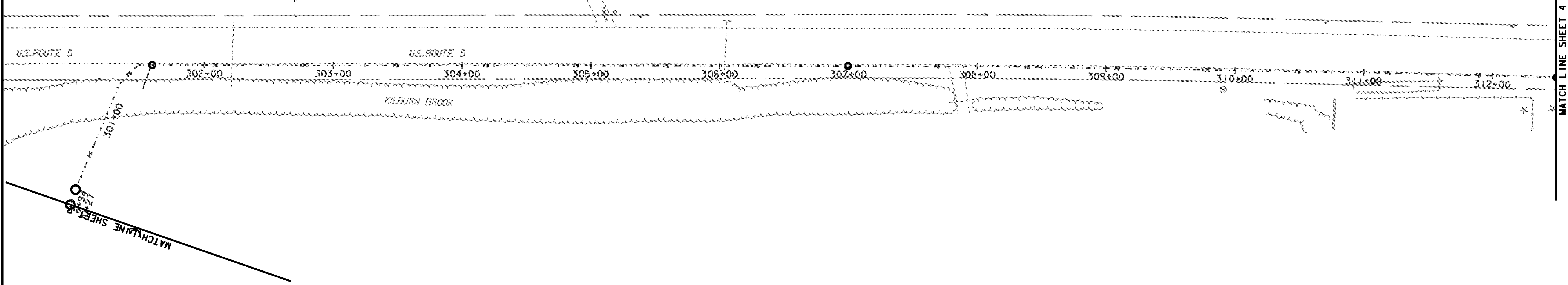
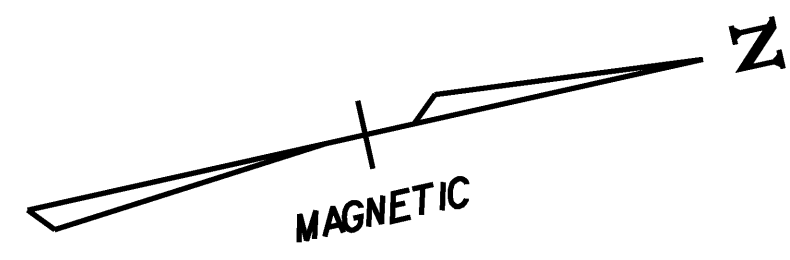


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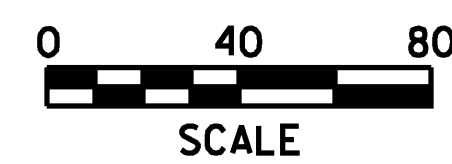


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FILE NAME: ... \Plot Files\04a026plt-sgn.dgn	DATE: 5/19/2008
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DESIGNED BY:	CHECKED BY: JTM
TRAFFIC SIGNING SHEET 2	SHEET 60 OF 70

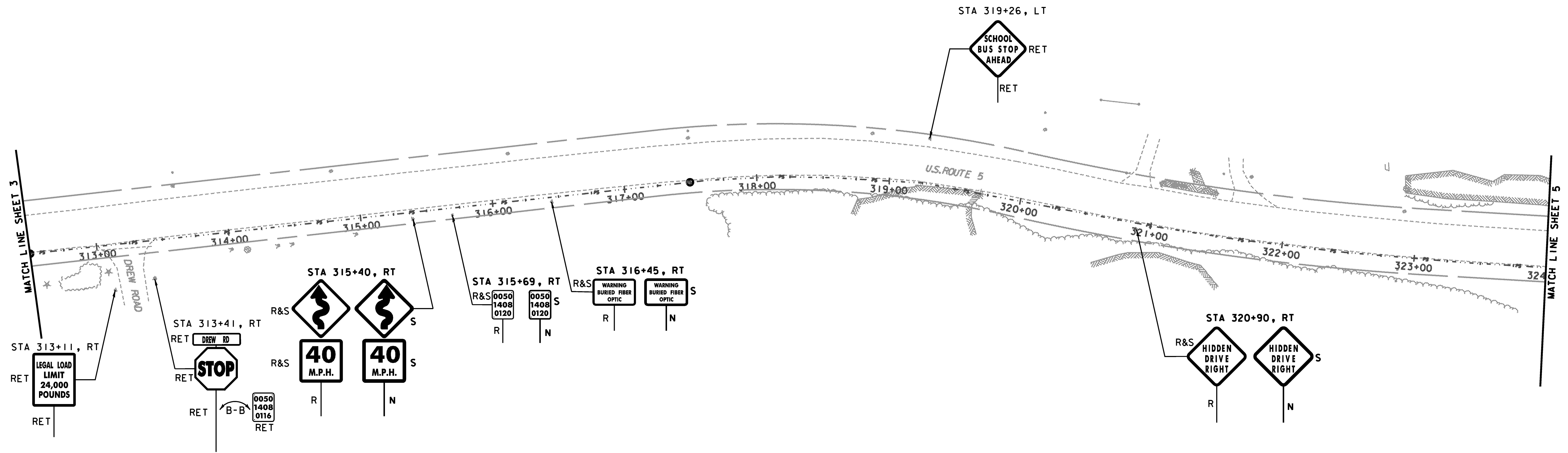
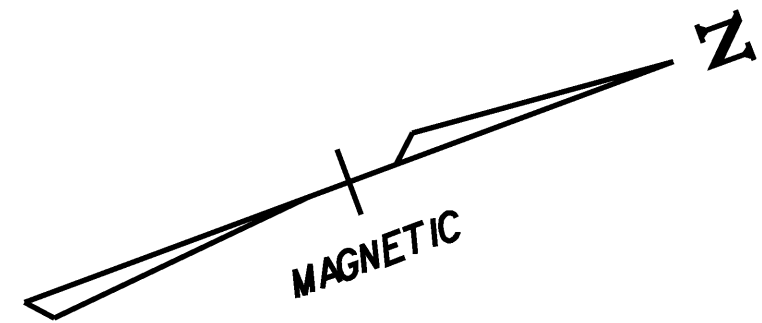


**SIGN & DELINEATOR LEGEND**

- N = NEW
- R = REMOVE
- R&S = REMOVE & SALVAGE
- S = SALVAGE SIGN
- RET = RETAIN
- (B-B) = BACK TO BACK

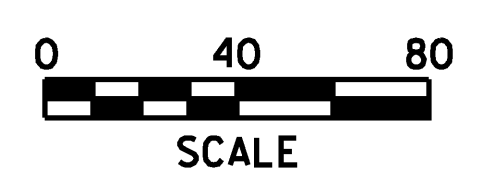


PROJECT NAME: HARTFORD REST AREAS	
PROJECT NUMBER: IM BLDG(10)	
FILE NAME: ... \Plot Files\04a026plt-sgn.dgn	PLOT DATE: 5/19/2008
PROJECT LEADER: JTM	DRAWN BY: PZA
DESIGNED BY:	CHECKED BY: JTM
TRAFFIC SIGNING SHEET 3	SHEET 61 OF 70

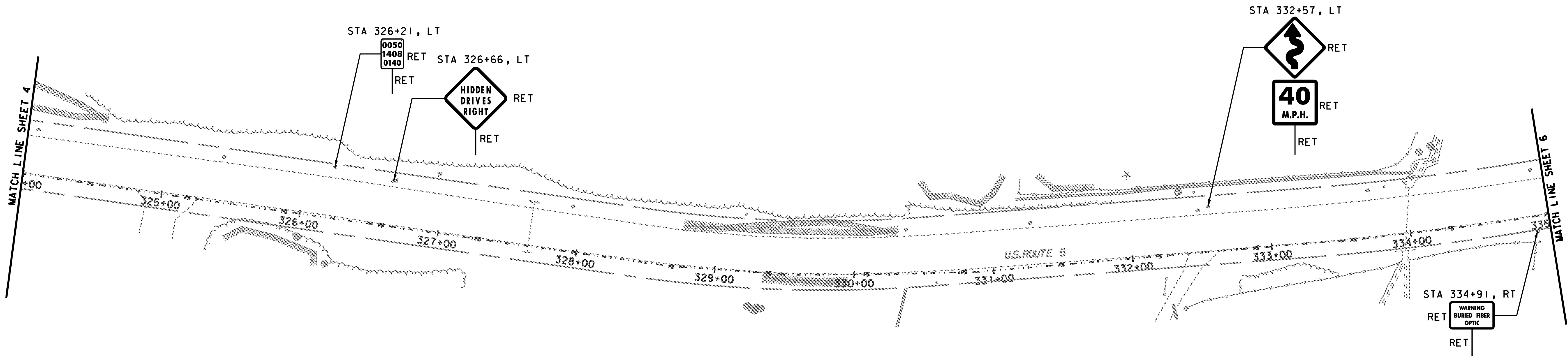
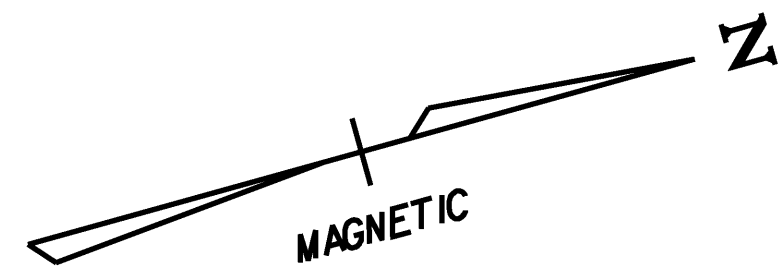


**SIGN & DELINEATOR LEGEND**

- N = NEW
- R = REMOVE
- R&S = REMOVE & SALVAGE
- S = SALVAGE SIGN
- RET = RETAIN
- (B-B) = BACK TO BACK

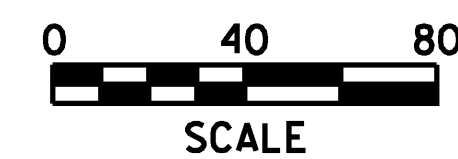


PROJECT NAME: HARTFORD REST AREAS	
PROJECT NUMBER: IM BLDG(10)	
FILE NAME: ... \Plot Files\04a026plt-sgn.dgn	DATE: 5/19/2008
PROJECT LEADER: JTM	DRAWN BY: PZA
DESIGNED BY:	CHECKED BY: JTM
TRAFFIC SIGNING SHEET 4	SHEET 62 OF 70



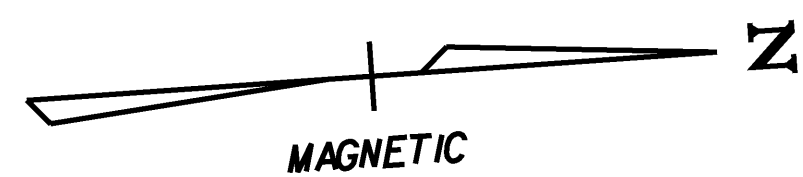
**SIGN & DELINEATOR LEGEND**

- N = NEW
- R = REMOVE
- R&S = REMOVE & SALVAGE
- S = SALVAGE SIGN
- RET = RETAIN
- (B-B) = BACK TO BACK

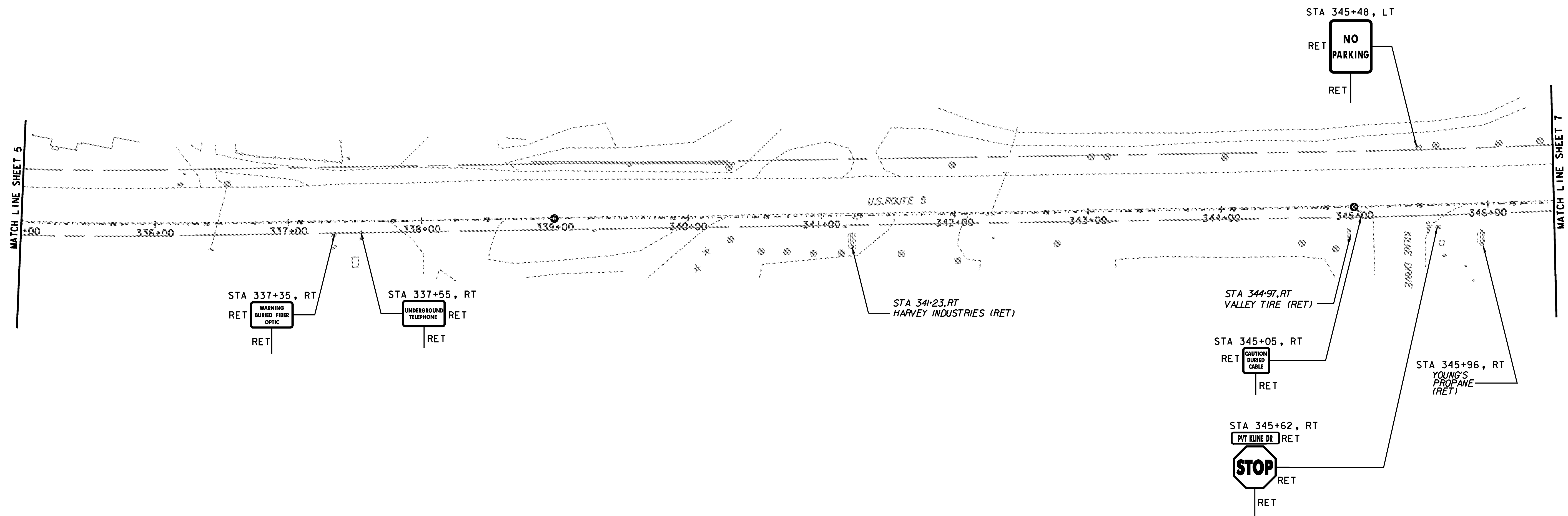


PROJECT NAME: HARTFORD REST AREAS  
 PROJECT NUMBER: IM BLDG(10)

FILE NAME: ... \Plot Files\04a026plt-sgn.dgn PLOT DATE: 5/19/2008  
 PROJECT LEADER: JTM DRAWN BY: PZA  
 DESIGNED BY: CHECKED BY: JTM  
 TRAFFIC SIGNING SHEET 5 SHEET 63 OF 70

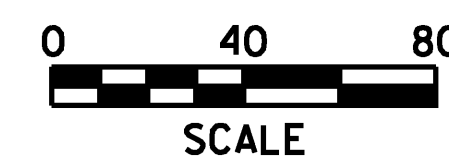


MATCH LINE SHEET 5



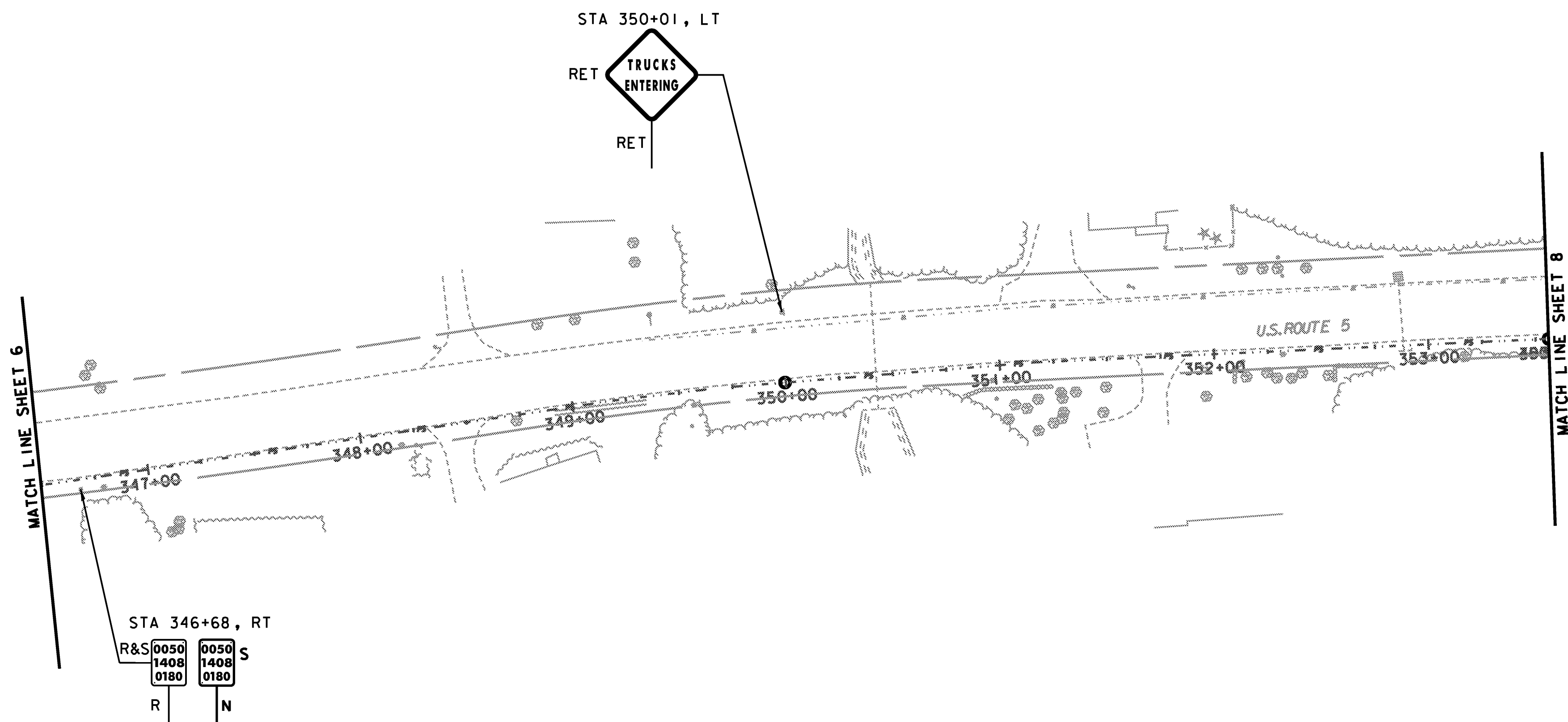
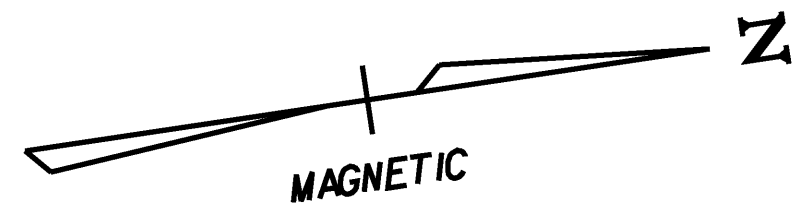
5  
SIGN & DELINEATOR LEGEND

- N = NEW
- R = REMOVE
- R&S = REMOVE & SALVAGE
- S = SALVAGE SIGN
- RET = RETAIN
- B-B = BACK TO BACK



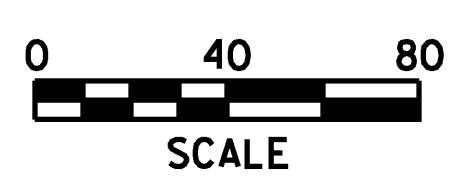
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PROJECT NUMBER: IM BLDG(10)

FILE NAME: ... \Plot Files\04a026plt-sgn.dgn PLOT DATE: 5/19/2008  
PROJECT LEADER: JTM DRAWN BY: PZA  
DESIGNED BY: CHECKED BY: JTM  
TRAFFIC SIGNING SHEET 6 SHEET 64 OF 70

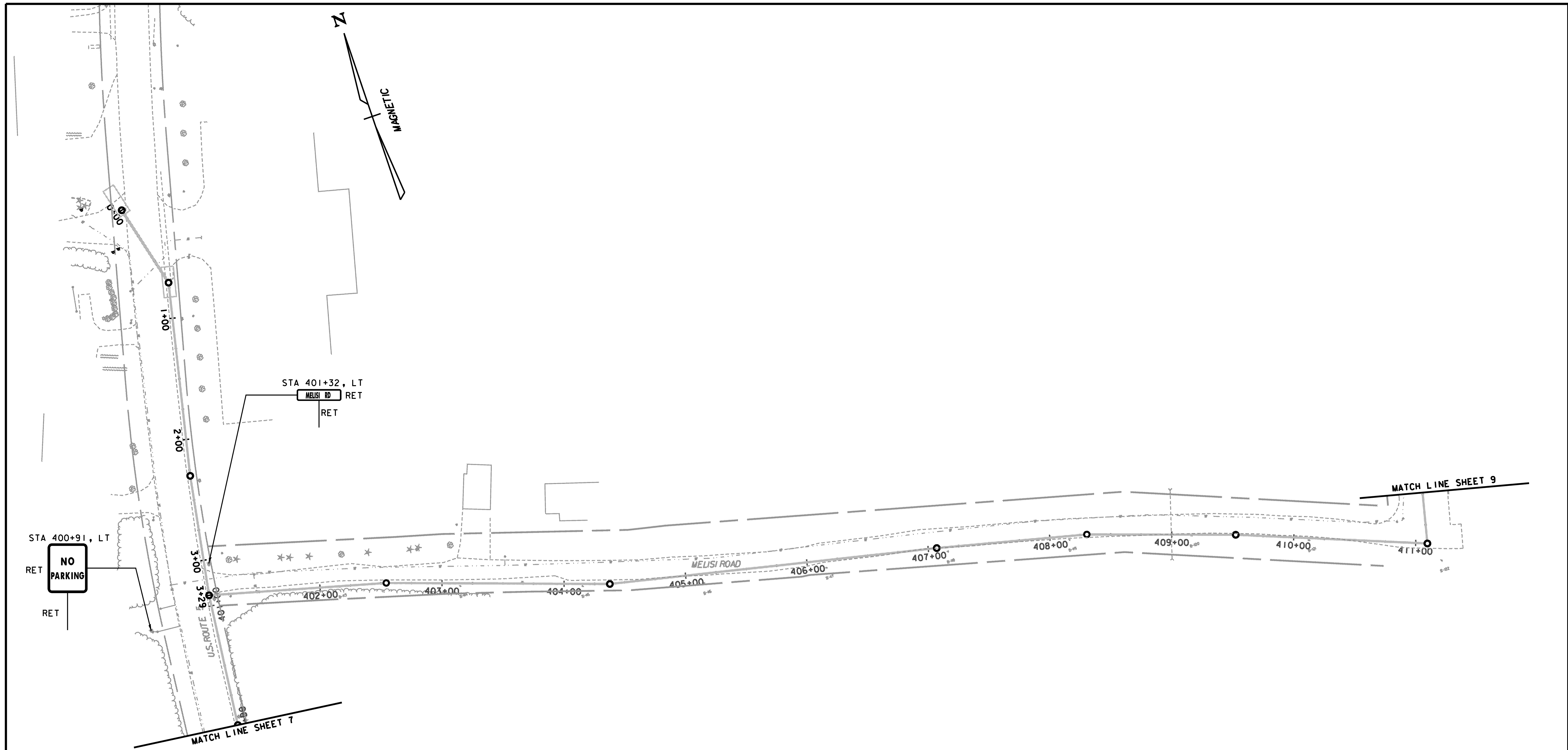


**SIGN & DELINEATOR LEGEND**

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- RET = RETAIN
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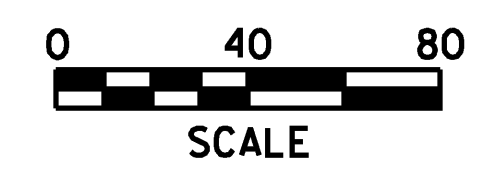


PROJECT NAME: HARTFORD REST AREAS	
PROJECT NUMBER: IM BLDG(10)	
FILE NAME: ... \Plot Files\04a026plt-sgn.dgn	DATE: 5/19/2008
PROJECT LEADER: JTM	DRAWN BY: PZA
DESIGNED BY:	CHECKED BY: JTM
TRAFFIC SIGNING SHEET 7	SHEET 65 OF 70

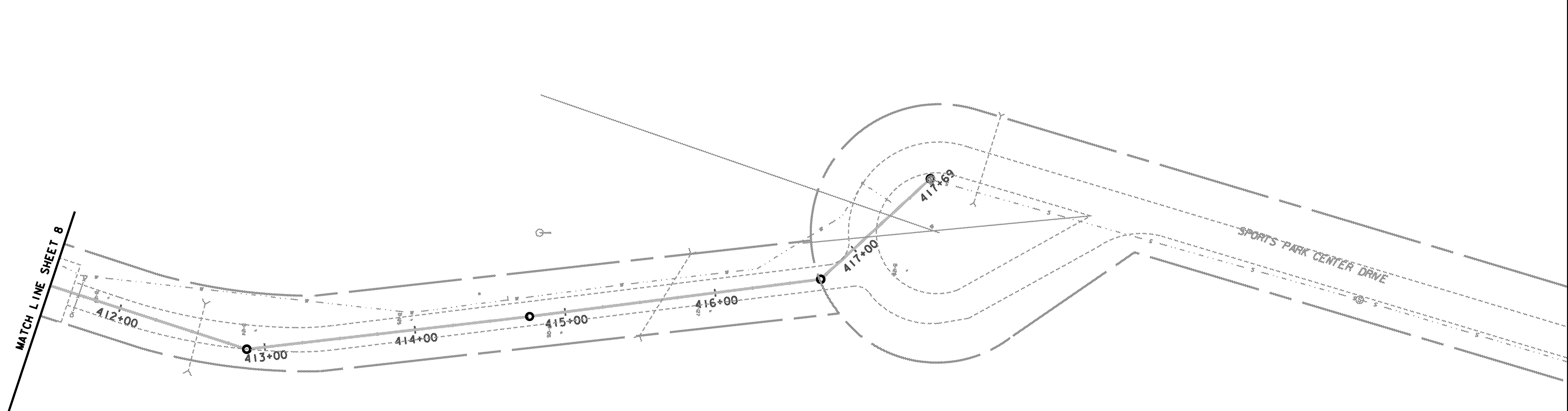
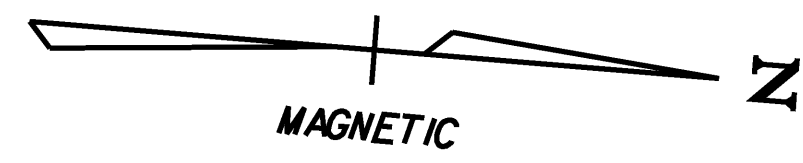


**SIGN & DELINEATOR LEGEND**

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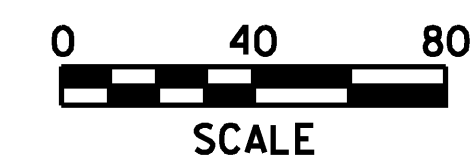


PROJECT NAME: HARTFORD REST AREAS	
PROJECT NUMBER: IM BLDG(10)	
FILE NAME: ... \Plot Files\04a026pl1-sgn.dgn	DATE: 5/19/2008
PROJECT LEADER: JTM	DRAWN BY: PZA
DESIGNED BY:	CHECKED BY: JTM
TRAFFIC SIGNING SHEET 8	SHEET 66 OF 70



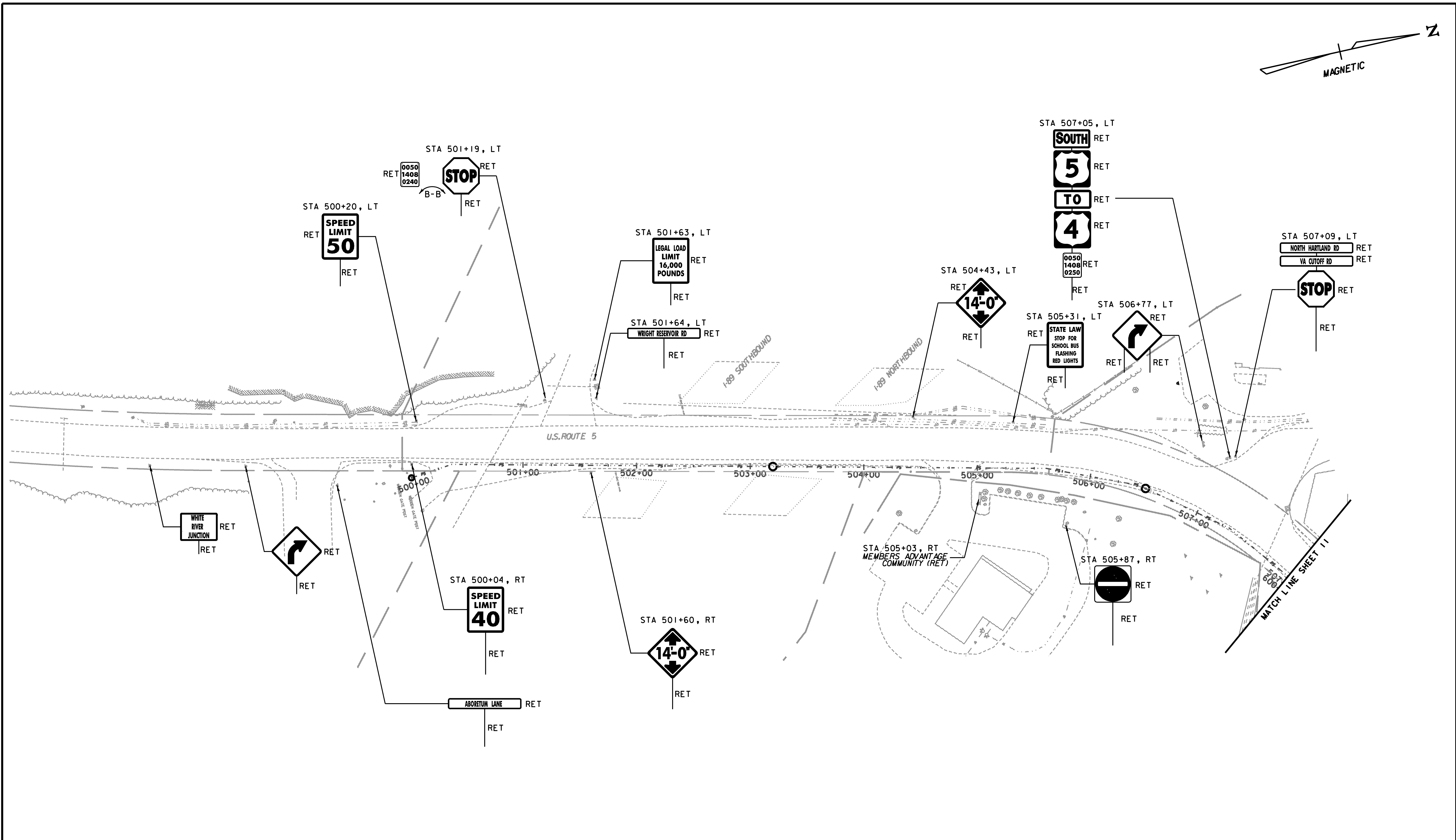
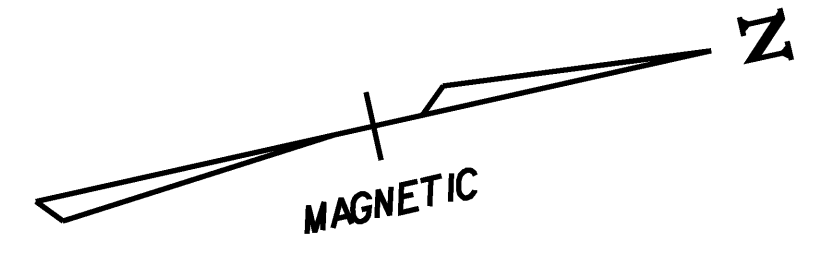
**SIGN & DELINEATOR LEGEND**

- N = NEW
- R = REMOVE
- R&S = REMOVE & SALVAGE
- S = SALVAGE SIGN
- RET = RETAIN
- (B-B) = BACK TO BACK



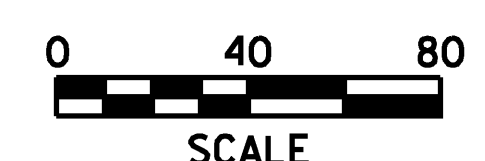
PROJECT NAME: HARTFORD REST AREAS  
PROJECT NUMBER: IM BLDG(10)

FILE NAME: ...\\Plot Files\04a026plt-sgn.dgn PLOT DATE: 5/19/2008  
PROJECT LEADER: JTM DRAWN BY: PZA  
DESIGNED BY: JTM CHECKED BY: JTM  
TRAFFIC SIGNING SHEET 9 SHEET 67 OF 70

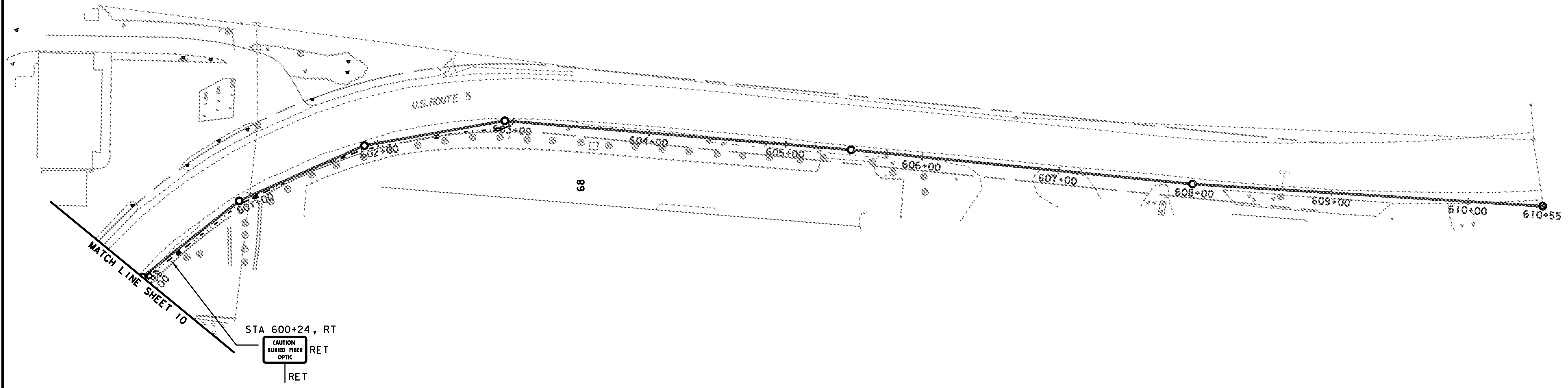
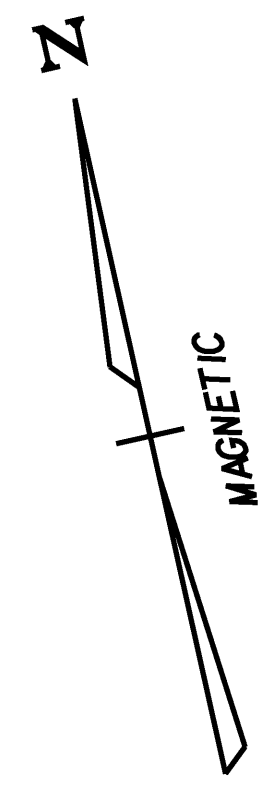


**SIGN & DELINEATOR LEGEND**

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- RET = RETAIN
- B-B = BACK TO BACK

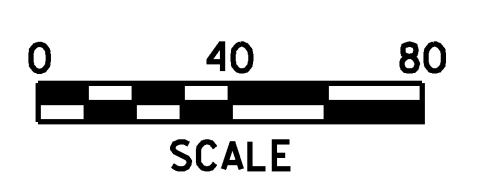


PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	... \Plot Files\04a026pl1-sgn.dgn
DATE:	5/19/2008
PROJECT LEADER:	JTM
DESIGNED BY:	JTM
TRAFFIC SIGNING SHEET	10
DRAWN BY:	PZA
CHECKED BY:	JTM
SHEET	68
OF	70



**SIGN & DELINEATOR LEGEND**

- N = NEW
- R = REMOVE
- R&S = REMOVE & SALVAGE
- S = SALVAGE SIGN
- RET = RETAIN
- B-B = BACK TO BACK



PROJECT NAME:	HARTFORD REST AREAS
PROJECT NUMBER:	IM BLDG(10)
FILE NAME:	...\\Plot Files\\u04a026plt-sgn.dgn
PLLOT DATE:	5/19/2008
PROJECT LEADER:	JTM
DRAWN BY:	PZA
DESIGNED BY:	JTM
CHECKED BY:	JTM
TRAFFIC SIGNING SHEET 11	SHEET 69 OF 70

