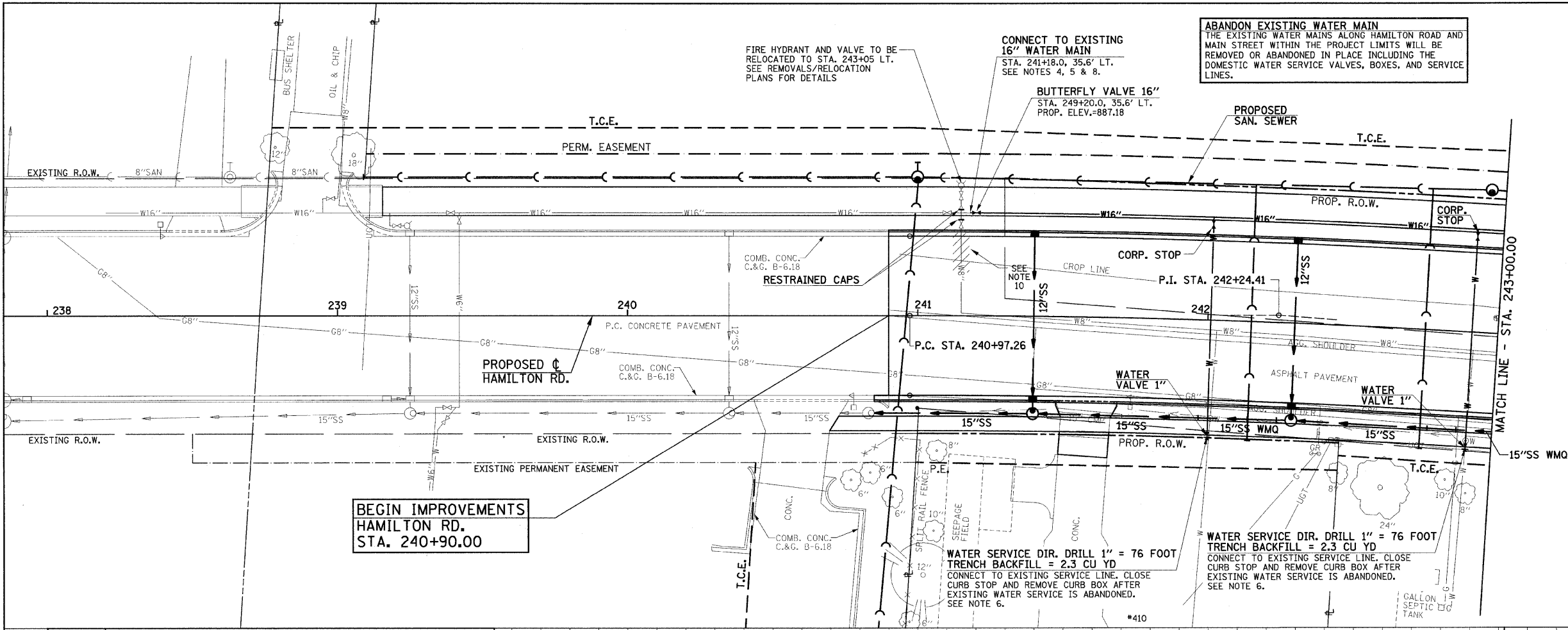


THE PROPOSED ELEVATIONS SHOWN FOR THE FIRE HYDRANTS AND THE WATER VALVES ARE THE FINISHED GRADE SURFACE ELEVATION ADJACENT TO THE HYDRANT OR THE VALVE. THE HYDRANT BREAKAWAY FLANGE ELEVATION IS 4" TO 6" ABOVE THE GROUND ELEVATION.

*A MINIMUM OF 20 FEET OF RESTRAINED JOINT PIPE IS REQUIRED ON EACH SIDE OF 16" BUTTERFLY VALVES.

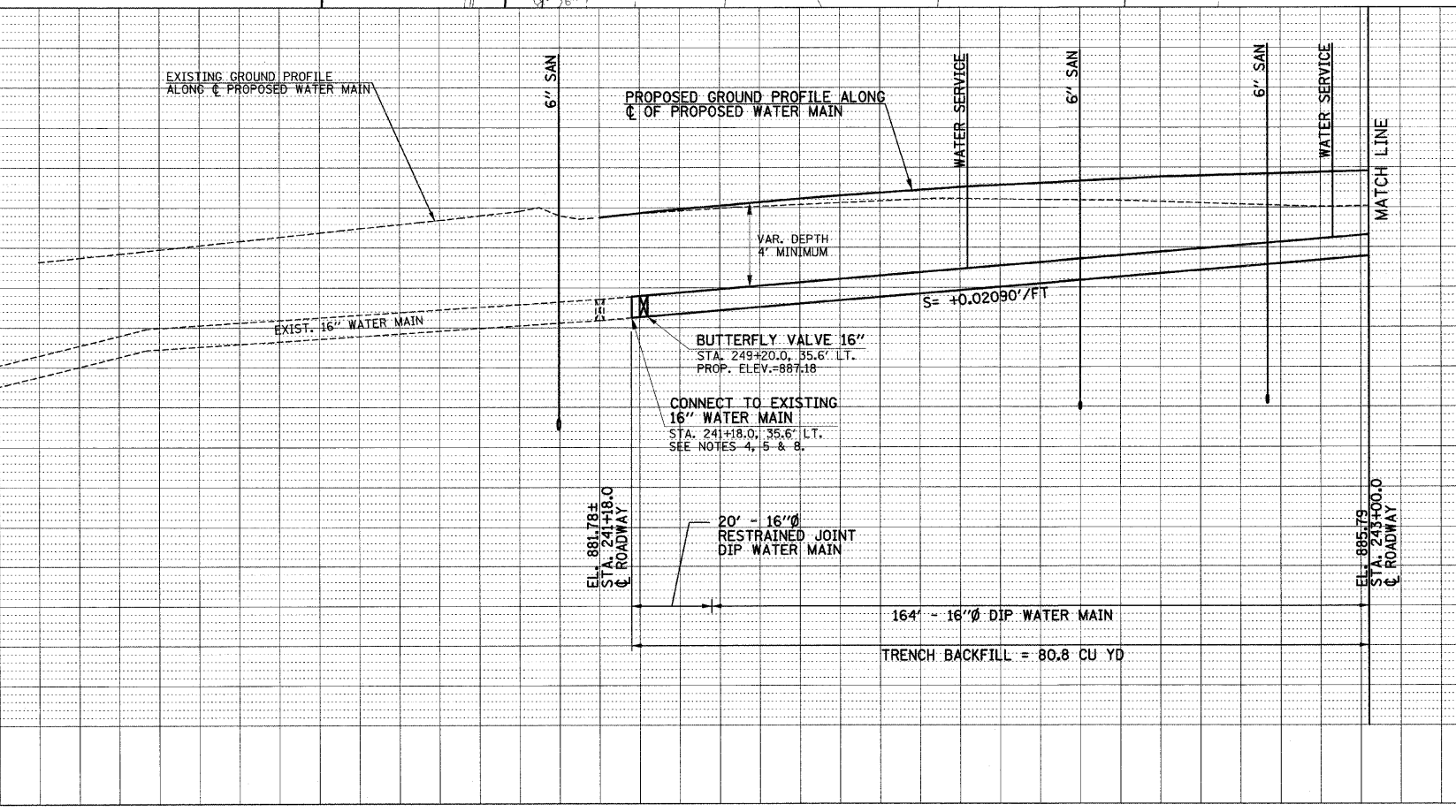
- NOTES
- ELEVATIONS ARE TOP OF PIPE FOR WATER MAIN.
 - IT WILL BE NECESSARY TO CONSTRUCT THE WATER MAIN IN VARIOUS STAGES. SEE THE TRAFFIC CONTROL AND MAINTENANCE OF TRAFFIC PLANS FOR STAGING PLAN.
 - ALL 16" BUTTERFLY VALVE OPERATORS SHALL BE PLACED ON SOUTH SIDE OF WATER MAIN TO AVOID PLACEMENT WITHIN THE PROPOSED BIKE TRAIL.
 - CONTRACTOR TO VERIFY DEPTH PRIOR TO CONSTRUCTION. WHEN CONNECTIONS ARE TO BE MADE TO EXISTING PIPING SHALL BE FIELD DETERMINED AND THE APPROPRIATE ADJUSTMENTS MADE.
 - CONTRACTOR TO PROVIDE ALL PIPING & GASKETS, FITTINGS, AND HARDWARE NECESSARY TO CONNECT TO EXISTING WATER MAIN.
 - CONTRACTOR TO FIELD VERIFY EXISTING WATER SERVICES ALONG HAMILTON RD. CONTRACTOR TO PROVIDE 1" MINIMUM WATER SERVICE LINE, VALVES AND NECESSARY FITTINGS AND HARDWARE FOR CONNECTION TO RESIDENTIAL SERVICES.
 - SEE THE REMOVAL/RELOCATION PLANS FOR THE VARIOUS PAY ITEMS TO BE ABANDONED, REMOVED, OR ADJUSTED.
 - CONTRACTOR TO PROVIDE FOR FLUSHING AND SAMPLING TAPS EVERY 1200 FEET AND AT EVERY CONNECTION.
 - PIPE SLOPES SHALL GOVERN UNLESS MINIMUM COVER SHOWN CANNOT BE MET.
 - THE EXISTING 16"x8" CROSS AT STA. 241+15, 35.6' LT. SHALL REMAIN. INSTALL RESTRAINED CAPS ON THE NORTH AND SOUTH SIDES OF THE EXISTING CROSS. ABANDON EXISTING 8" WATER MAIN SOUTH OF STA. 241+15, 32' LT. AFTER THE NEW WATER MAIN IS IN SERVICE. SEE STAGE CONSTRUCTION AND MAINTENANCE OF TRAFFIC PLAN.



BEGIN IMPROVEMENTS HAMILTON RD. STA. 240+90.00

BILL OF MATERIALS

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
895	20800150 TRENCH BACKFILL	CU YD	944
	XX005478 DUCTILE IRON WATER MAIN 6", RESTRAINED JOINT TYPE	FOOT	20
	XX005479 DUCTILE IRON WATER MAIN 8", RESTRAINED JOINT TYPE	FOOT	89
	XX005476 DUCTILE IRON WATER MAIN 12", RESTRAINED JOINT TYPE	FOOT	6
890	5000795 DUCTILE IRON WATER MAIN 14", RESTRAINED JOINT TYPE	FOOT	14
	XX005480 DUCTILE IRON WATER MAIN 16", RESTRAINED JOINT TYPE	FOOT	177
	56103400 DUCTILE IRON WATER MAIN 16"	FOOT	1925
	5000797 HDPE WATER MAIN DIRECTIONAL DRILL 14"	FOOT	120
	5000798 CASING 4"	FOOT	40
	5000799 CASING 18"	FOOT	22
885	XX003529 WATER SERVICE DIRECTIONAL DRILLING, 1" DIA.	FOOT	790
	56200700 WATER SERVICE LINE 2"	FOOT	85
	56104400 WATER VALVES 1"	EACH	10
	56104600 WATER VALVES 2"	EACH	7
880	56105000 WATER VALVES 8"	EACH	2
	56105760 BUTTERFLY VALVES 16"	EACH	4
	56109100 TAPPING VALVES AND SLEEVES 12"	EACH	1
	56400820 FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX	EACH	6
	44201741 CLASS D PATCHES, TYPE II 8"	SQ YD	25
875	56500500 DOMESTIC METER VAULT	EACH	1



Professional Engineer Signature
 PROFESSIONAL ENGINEER
 CLARK DIETZ, INC.
 DATE: 6/23/09
 LICENSE EXPIRES 11-30-09