2020 WATER MAIN IMPROVEMENTS
TOWN OF NAHANT, MASSACHUSETTS
APRIL 2020

DEPARTMENT OF PUBLIC WORKS
SUPERINTENDENT: ZACHARY TAYLOR

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LOCUS PLAN
1" = 1000'
1. PROP. 8" WATER MAIN AND APPURTENANT WORK ON MILLS TERRACE FROM STA. 2100+00 TO STA. 2102+00 IS INCLUDED IN BID ALT. 1.

2. (HYD-934) FOR TEMPORARY WATER SUPPLY AND COVER AND RESTORE AREA (TYP. 2)

3. (1) PROP. 8"X8"X6" DI ANCHOR TEE

4. (1) PROP. 8"X8"X8" DI TEE

5. SUPPORT EXIST. GAS MAIN DURING WATER MAIN CONSTRUCTION

6. REMOVE AND REPLACE EXIST. 1" WATER MAIN IN PLACE (2) PROP. 1" CAP AND PLUGS

7. ABANDON EXIST. 1" WATER MAIN IN PLACE (2) PROP. 1" CAP AND PLUGS

8. CONTRACTOR TO INSTALL GATE VALVE (WV-2011) FOR ISOLATION

9. CONTRACTOR TO CLOSE EXIST. GATE VALVE (WV-582) AT NAHANT ROAD FOR DRAINAGE

10. (1) PROP. 8" 22.5 DEGREE BEND

11. (1) PROP. 8" GATE VALVE

12. (1) PROP. 8" GATE VALVE (WV-2011) FOR TEMPORARY WATER SUPPLY TO EXIST. HYDRANT (HYD-938)

13. CONTRACTOR TO CONNECT TO EXIST. 8" CI WATER MAIN

14. CONTRACTOR TO CONNECT TO NEW 8" PVC WATER MAIN

15. CONNECT TO EXIST. 8" PVC WATER MAIN TO CROSS UNDER EXIST. 12" SEWER

16. (2) PROP. 8" COUPLINGS

17. (1) PROP. 8" PVC WATER MAIN TO CROSS UNDER EXIST. 12" DRAIN APPROX. DEPTH 5' TO INVERT.

18. SUPPORT EXIST. 6" AC SEWER DURING WATER MAIN CONSTRUCTION

19. CONTRACTOR TO PERFORM LIMITED SHUTDOWN WATER MAIN CONSTRUCTION

20. CONTRACTOR TO USE EXIST. HYDRANT

21. REMOVE AND REPLACE EXIST. 1" WATER MAIN

22. PROP. SEDIMENTATION BARRIER

23. REFER TO DETAIL (TYP. ALL)

24. REFER TO DETAIL

25. REFER TO DETAIL

26. REFER TO DETAIL

27. REFER TO DETAIL

28. REFER TO DETAIL

29. APPROX. INVERT DEPTH = 2', REFER TO DETAIL

30. DEPTH TO INVERT = 3'1" OTHER THAN EXIST. GATE VALVE TO CONNECT TO EXIST. 8" GATE VALVE

31. DEPTH TO INVERT = 4'4"

32. DEPTH TO INVERT = 6.2'

33. DEPTH TO INVERT = 4.3'

34. DEPTH TO INVERT = 5'5"

35. DEPTH TO INVERT = 4.8'

36. DEPTH TO INVERT = 4.3'

37. DEPTH TO INVERT = 6.6'
1. ALL HYDRANT, VALVE AND TEE JOINTS TO BE MECHANICALLY RESTRAINED JOINTS.

NOTE:
CRUSHED STONE
INSTALL 0.5 C.Y. OF 1/2" BURY LINE
HYDRANT

HYDRANT SETTING DETAIL

WATER MAIN
OR AS SHOWN
PRECAST PAD (TYP.)
LARGE FLAT STONE OR PIPE
6" PVC
5' MIN.
ANCHOR TEE
6" GATE VALVE
HYDRANT
GATE BOX
FINISHED GRADE

SCALE: N.T.S.

2. INSTALL CONCRETE THRUST BLOCK BEHIND HYDRANT.

CONCRETE THRUST BLOCK

3. HYDRANT TO BE SET AT LEAST 18" BEHIND FACE OF CURB OR EDGE OF PAVEMENT

TYPICAL WATER SERVICE CONNECTION
SCALE: N.T.S.

WATER MAIN CROSSING WITH SEWER OR DRAIN

NO. 1
1. HYDRANT TO BE SET AT LEAST 18" BEHIND FACE OF CURB OR EDGE OF PAVEMENT.

HYDRANT

INSTALL G.C. X. OF 1/2" CRUSHED STONE
CONCRETE THRUST BLOCK
WATER MAIN

NOTE:
1. ALL HYDRANT, VALVE AND TEE JOINTS TO BE MECHANICALLY RESTRAINED JOINTS.
2. INSTALL CONCRETE THRUST BLOCK BEHIND HYDRANT.
3. HYDRANT TO BE SET AT LEAST 18" BEHIND FACE OF CURB OR EDGE OF PAVEMENT

PERMANENT TRENCH PAVING DETAIL

NOTES:
1. FOR LOCATIONS WHERE LEDGE IS ENCOUNTERED, SAND BEDDING SHALL BE MINIMUM OF 6" IN THICKNESS.
2. ALL MATERIAL SHALL BE COMPACTED TO 95% PROCTOR DENSITY.

TYPICAL TRENCH DETAIL

NOTES:
1. REFER TO SPECIFICATION 02500.
2. TRENCH SHALL BE BACKFILLED AT THE END OF EACH WORKING DAY. CONTRACTOR TO PLACE 2.5" HOT MIX ASPHALT BINDER COURSE FOLLOWING BACKFILL AND SUCCESSFUL TESTING OF WATER MAIN.
3. FOLLOWING SETTLEMENT PERIOD, CONTRACTOR TO PLACE 1.5" HOT MIX ASPHALT TOP COURSE.
4. ALLOWABLE TRENCH WIDTH FOR MEASUREMENT AND PAYMENT OF PAVEMENT REPAIR SHALL BE PIPE DIAMETER + 3'-0" (48" MIN.)

HYDRANT SETTING DETAIL

TYPICAL WATER SERVICE CONNECTION

NOTES:
1. REFER TO SPECIFICATION 02500.
2. TRENCH SHALL BE BACKFILLED AT THE END OF EACH WORKING DAY. CONTRACTOR TO PLACE 2.5" HOT MIX ASPHALT BINDER COURSE FOLLOWING BACKFILL AND SUCCESSFUL TESTING OF WATER MAIN.
3. FOLLOWING SETTLEMENT PERIOD, CONTRACTOR TO PLACE 1.5" HOT MIX ASPHALT TOP COURSE.
4. ALLOWABLE TRENCH WIDTH FOR MEASUREMENT AND PAYMENT OF PAVEMENT REPAIR SHALL BE PIPE DIAMETER + 3'-0" (48" MIN.)
WATER GATE FRAME AND COVER
SET CAST IRON FRAME IN CONCRETE FOUNDATION
STANDARD ROADWAY TELESCOPING ACCESS BOX
PLACE MASONRY BLOCK FOUNDATION UNDER ACCESS BOX
RESILIENT SEATED GATE VALVE
DEPTH VARIES - (MIN. 5") 1/4" MAX.
EXISTING WATER MAIN
PROPOSED WATER MAIN

TYPICAL VALVE DETAIL

EROSION CONTROL DETAIL: SILT SACK AND STRAW WATTLE