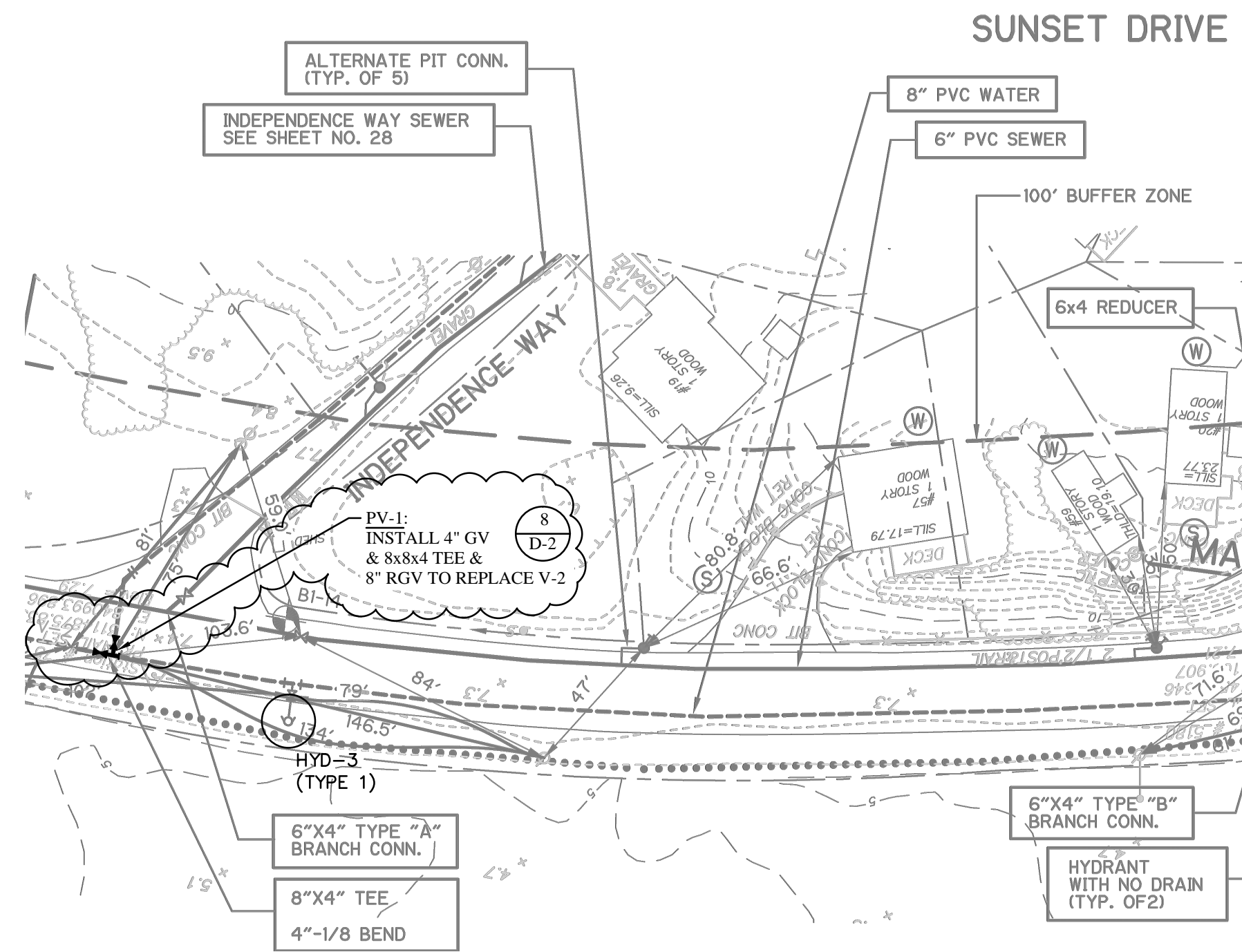
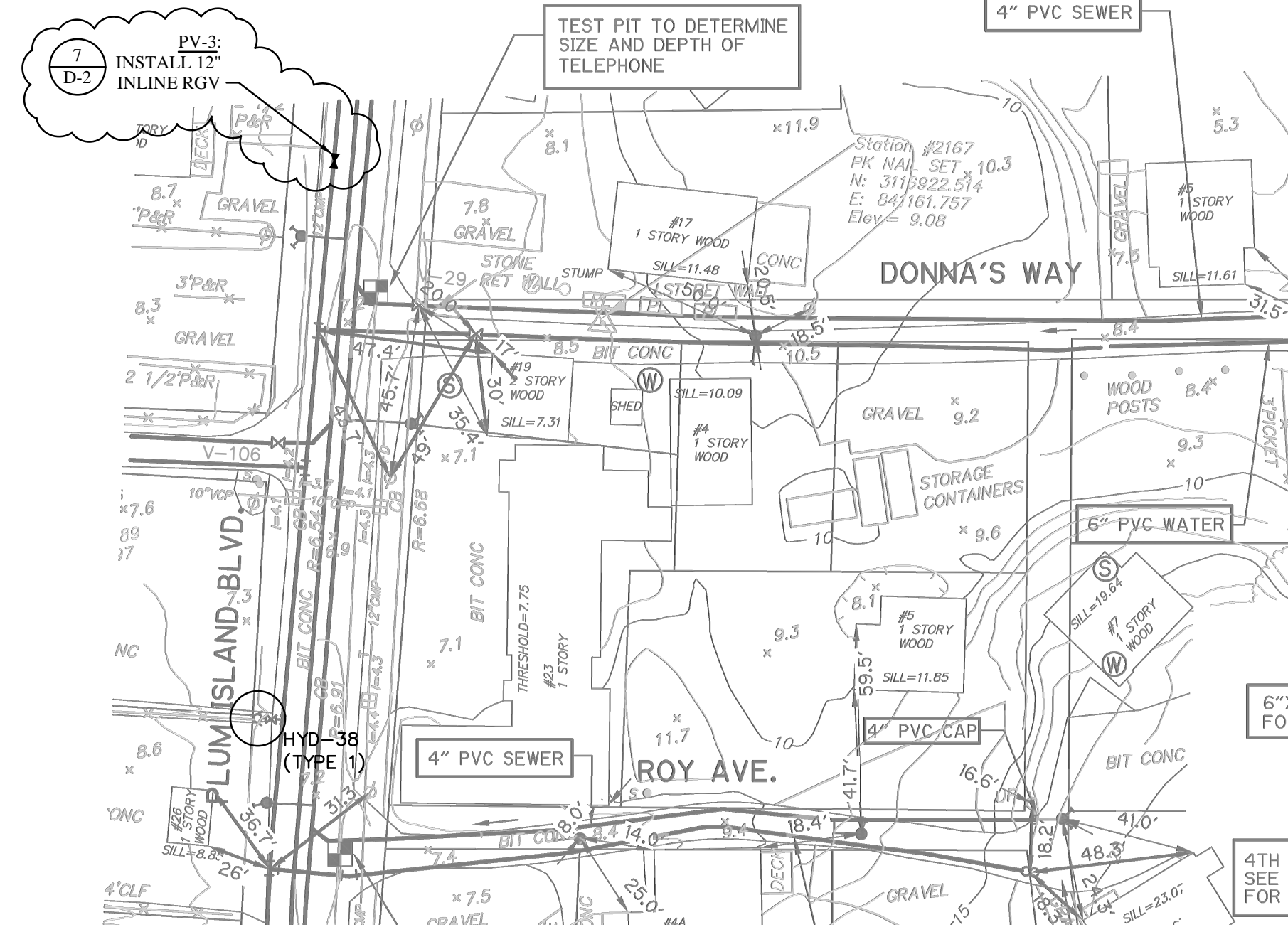


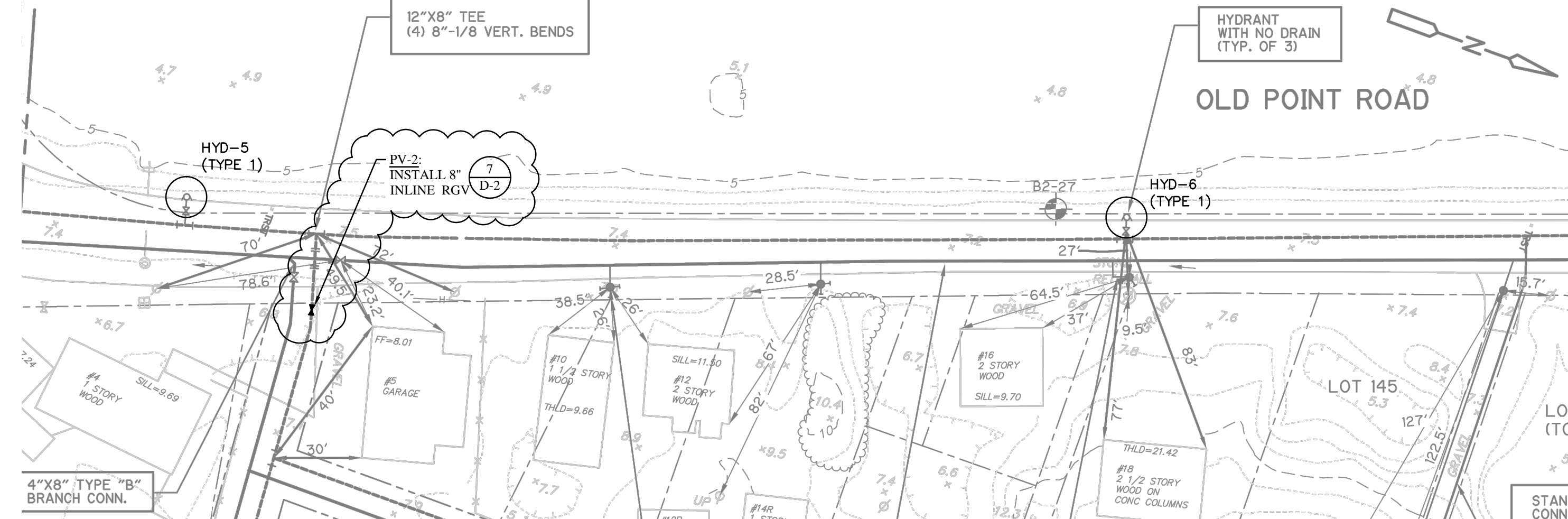
PV-1 INDEPENDENCE WAY @ SUNSET DRIVE



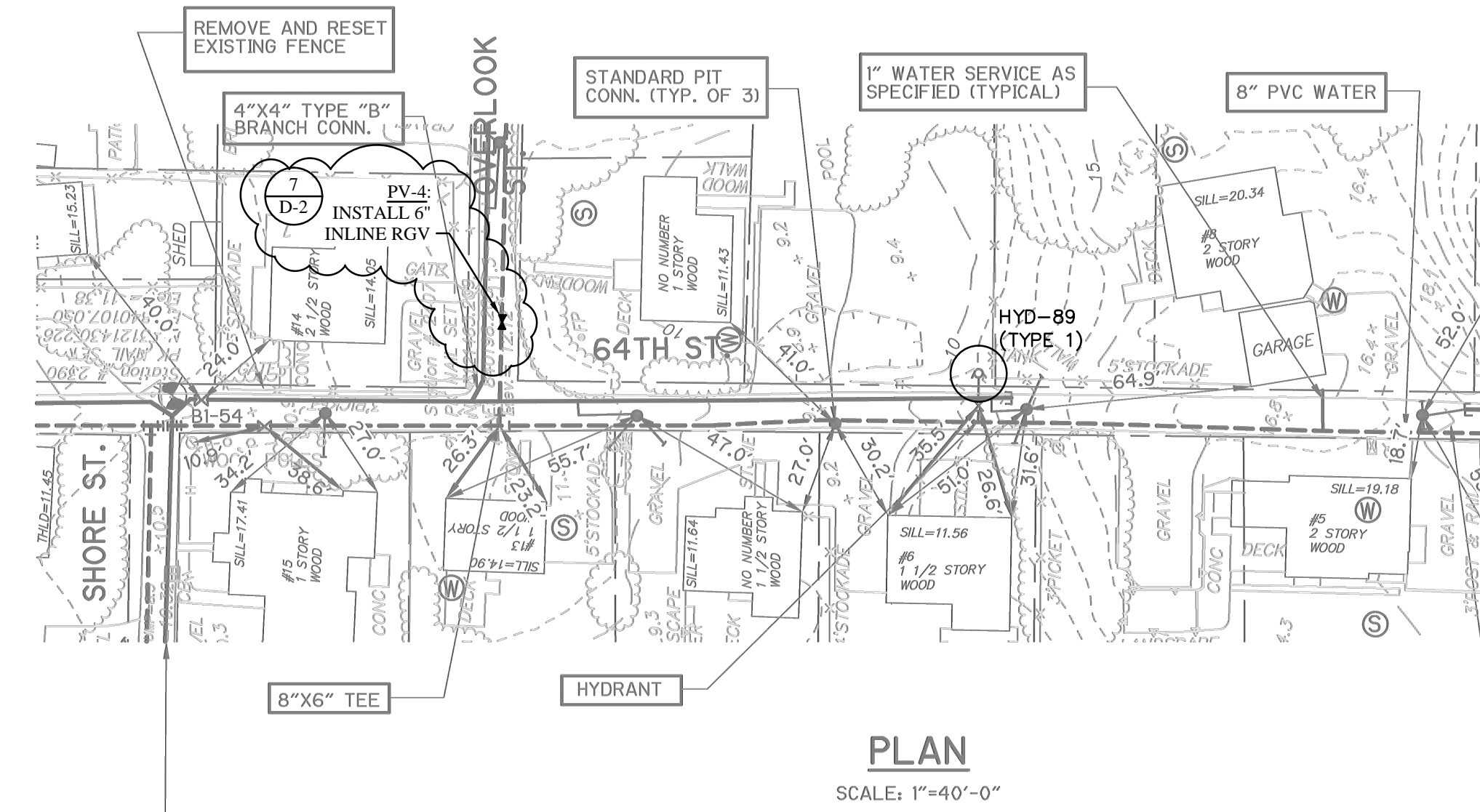
PV-3 DONNA'S WAY @ PLUM ISLAND TURNPIKE



PV-2 MACLEOD AVENUE @ OLD POINT ROAD



PV-4 OVERLOOK STREET @ 64TH ST



NOTES:
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16A PERRY WAY
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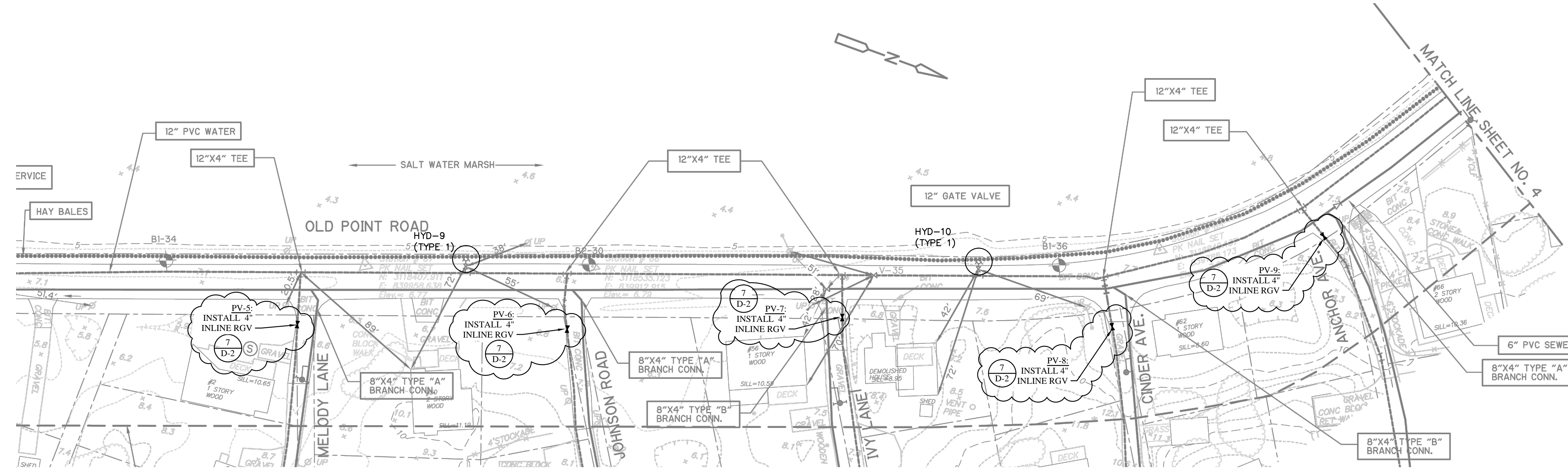
Designed By:
D. GAGNON
Checked By:
J.E. WHITE
Date:
APRIL 7, 2017

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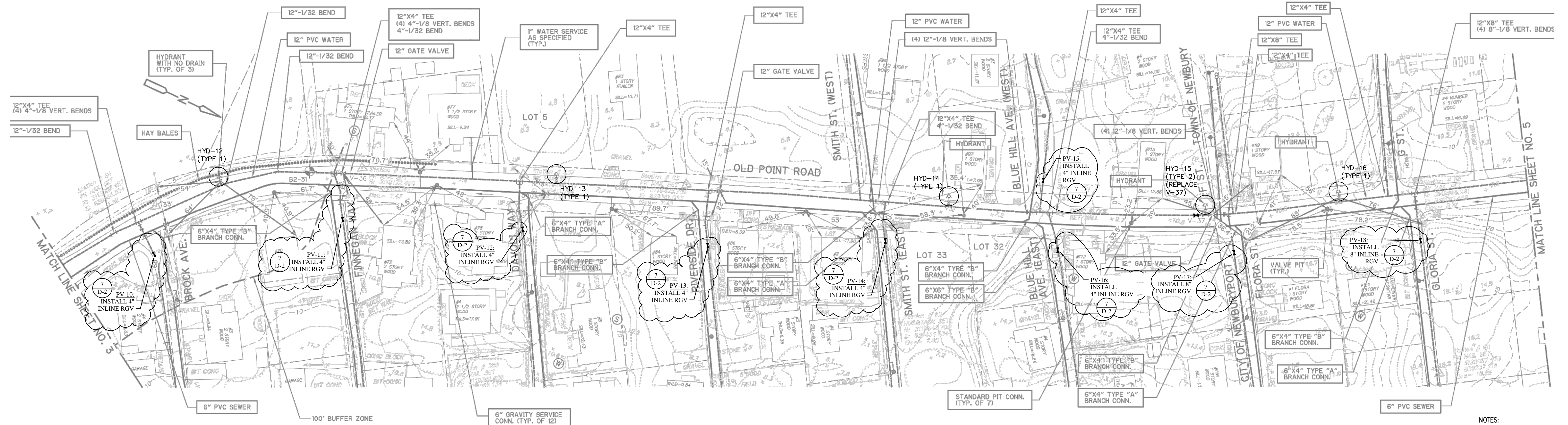
**PLUM ISLAND HYDRANT REPLACEMENT
PROPOSED VALVE LOCATION PLAN
PV-1 to PV-4**

Sheet No.
51 OF 60
PV-1

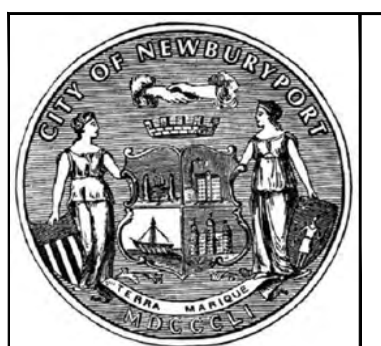
- PV-5 MELODY LANE @ OLD POINT ROAD
- PV-6 JOHNSON ROAD @ OLD POINT ROAD
- PV-7 IVY LANE @ OLD POINT ROAD
- PV-8 CINDER AVENUE @ OLD POINT ROAD
- PV-9 ANCHOR AVENUE @ OLD POINT ROAD



- PV-10 BROCK AVENUE @ OLD POINT ROAD
- PV-15 BLUE HILL AVENUE (WEST) @ OLD POINT ROAD
- PV-11 FINNEGAN WAY @ OLD POINT ROAD
- PV-16 BLUE HILL AVENUE (EAST) @ OLD POINT ROAD
- PV-12 DAVOLI WAY @ OLD POINT ROAD
- PV-17 FLORA STREET @ OLD POINT ROAD
- PV-13 RIVERSIDE DRIVE @ OLD POINT ROAD
- PV-18 GLORIA STREET @ OLD POINT ROAD
- PV-14 SMITH STREET (EAST) @ OLD POINT ROAD



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D. GAGNON

Checked By:
J.E. WHITE

Date:
APRIL 7, 2017

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**PLUM ISLAND HYDRANT REPLACEMENT
 PROPOSED VALVE LOCATION PLAN
 PV-5 to PV-18**

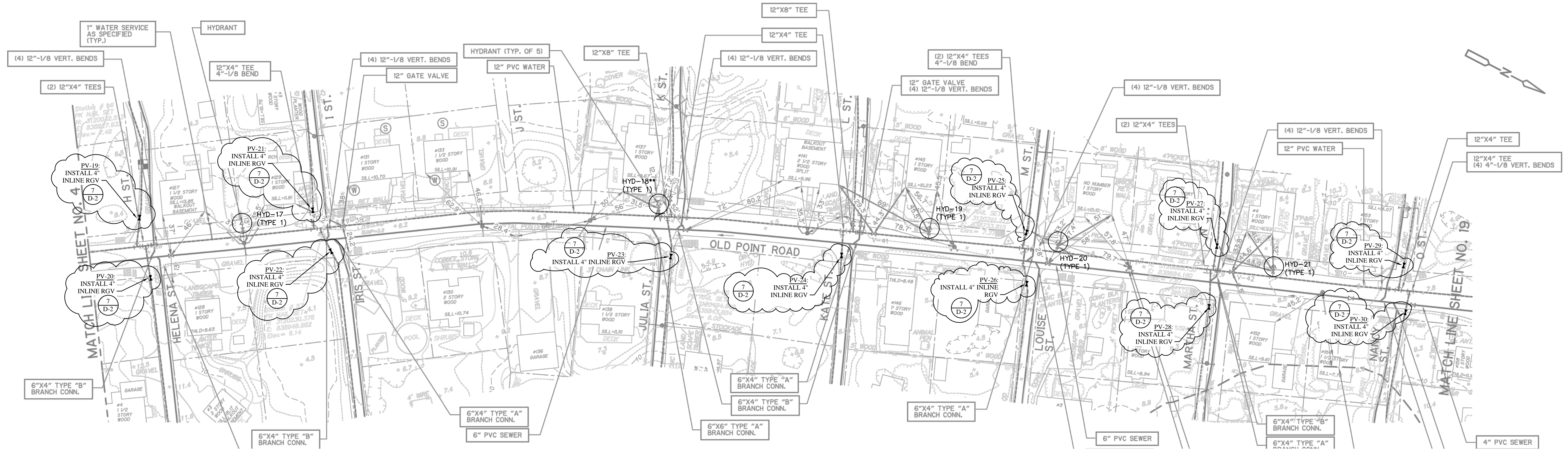
Sheet No.
52 OF 60

PV-2

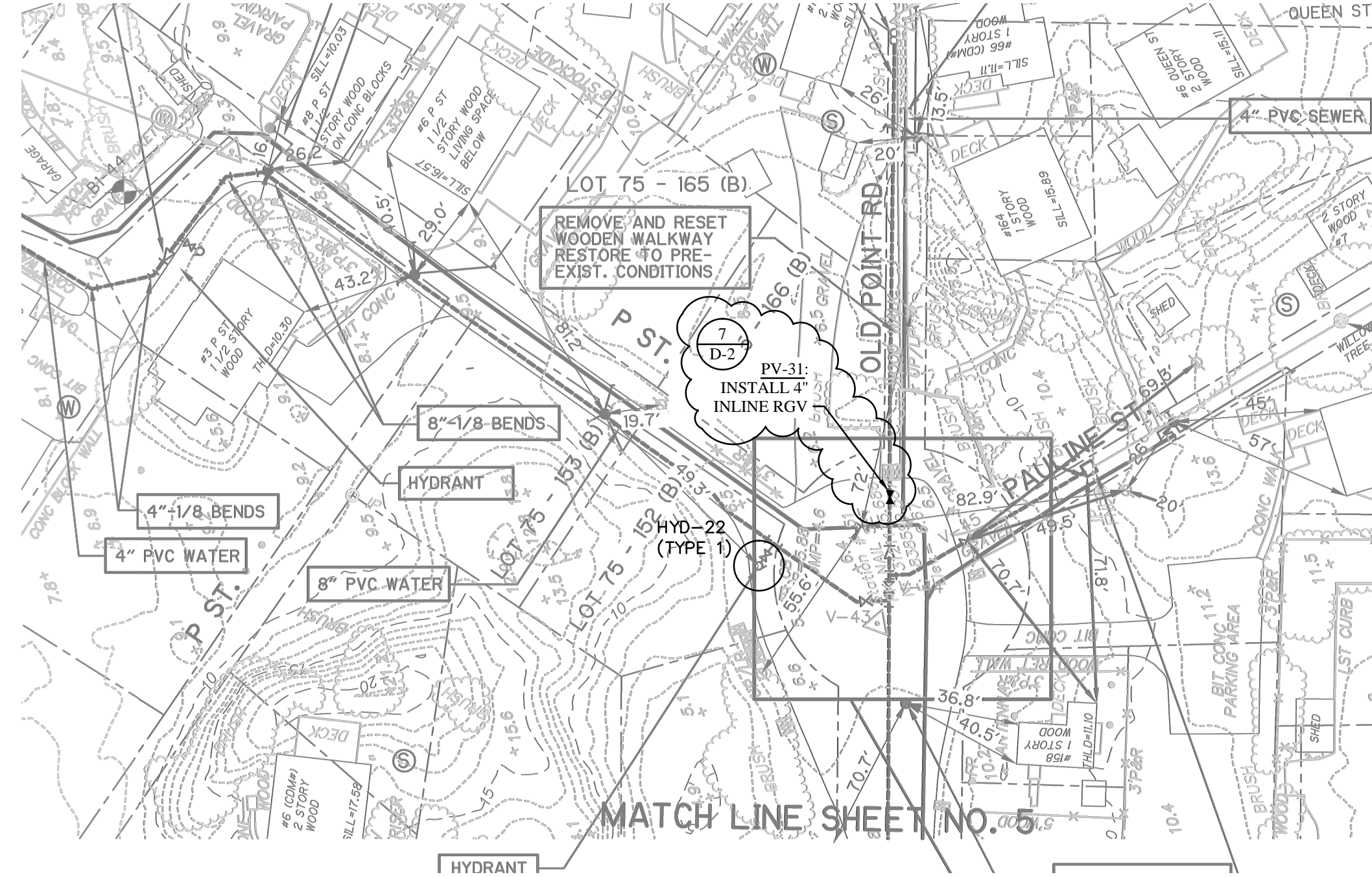
PV-19 H STREET @ OLD POINT ROAD
 PV-20 HELENA STREET @ OLD POINT ROAD
 PV-21 I STREET @ OLD POINT ROAD
 PV-22 IRIS STREET @ OLD POINT ROAD

PV-23 JULIA STREET @ OLD POINT ROAD
 PV-24 KATE STREET @ OLD POINT ROAD
 PV-25 M STREET @ OLD POINT ROAD
 PV-26 LOUISE STREET @ OLD POINT ROAD
 PV-27 N STREET @ OLD POINT ROAD

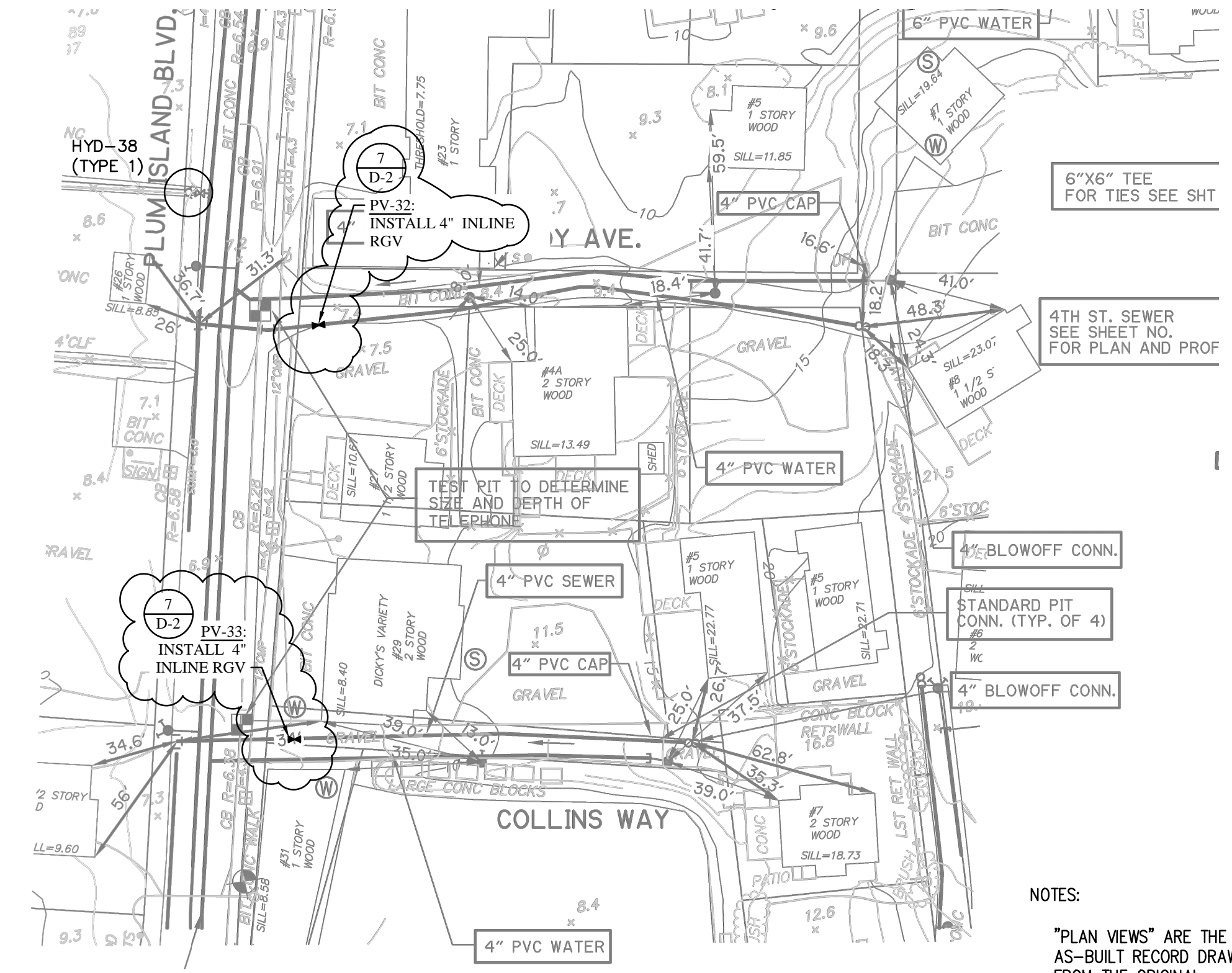
PV-28 MARTHA STREET @ OLD POINT ROAD
 PV-29 O STREET @ OLD POINT ROAD
 PV-30 NANCY STREET @ OLD POINT ROAD



PV-31 OLD POINT ROAD



PV-32 ROY AVENUE @ PLUM ISLAND TURNPIKE
 PV-33 COLLINS WAY @ PLUM ISLAND TURNPIKE



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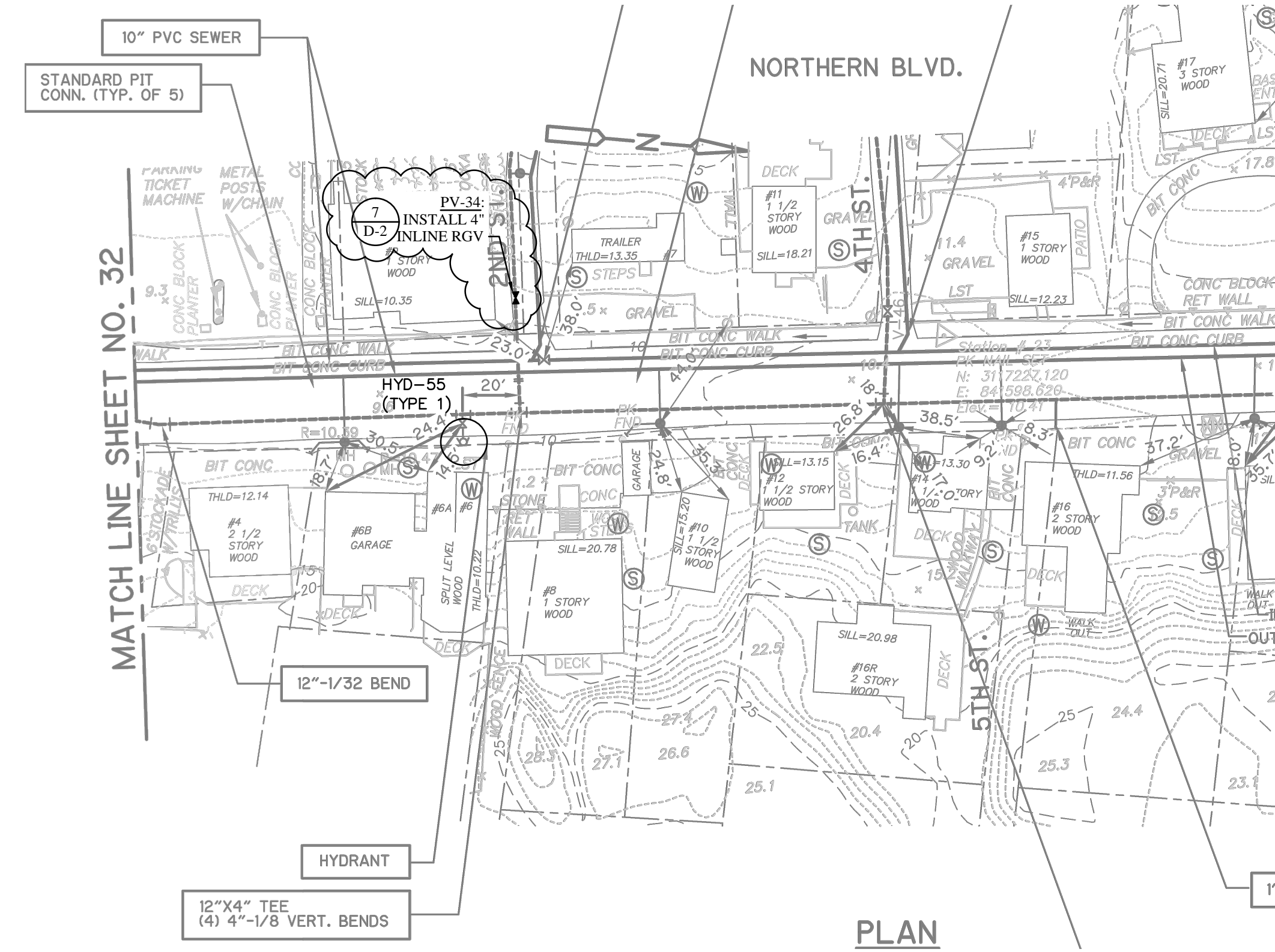
Designed By:
 D. GAGNON
 Checked By:
 J.E. WHITE
 Date:
 MARCH 24, 2017

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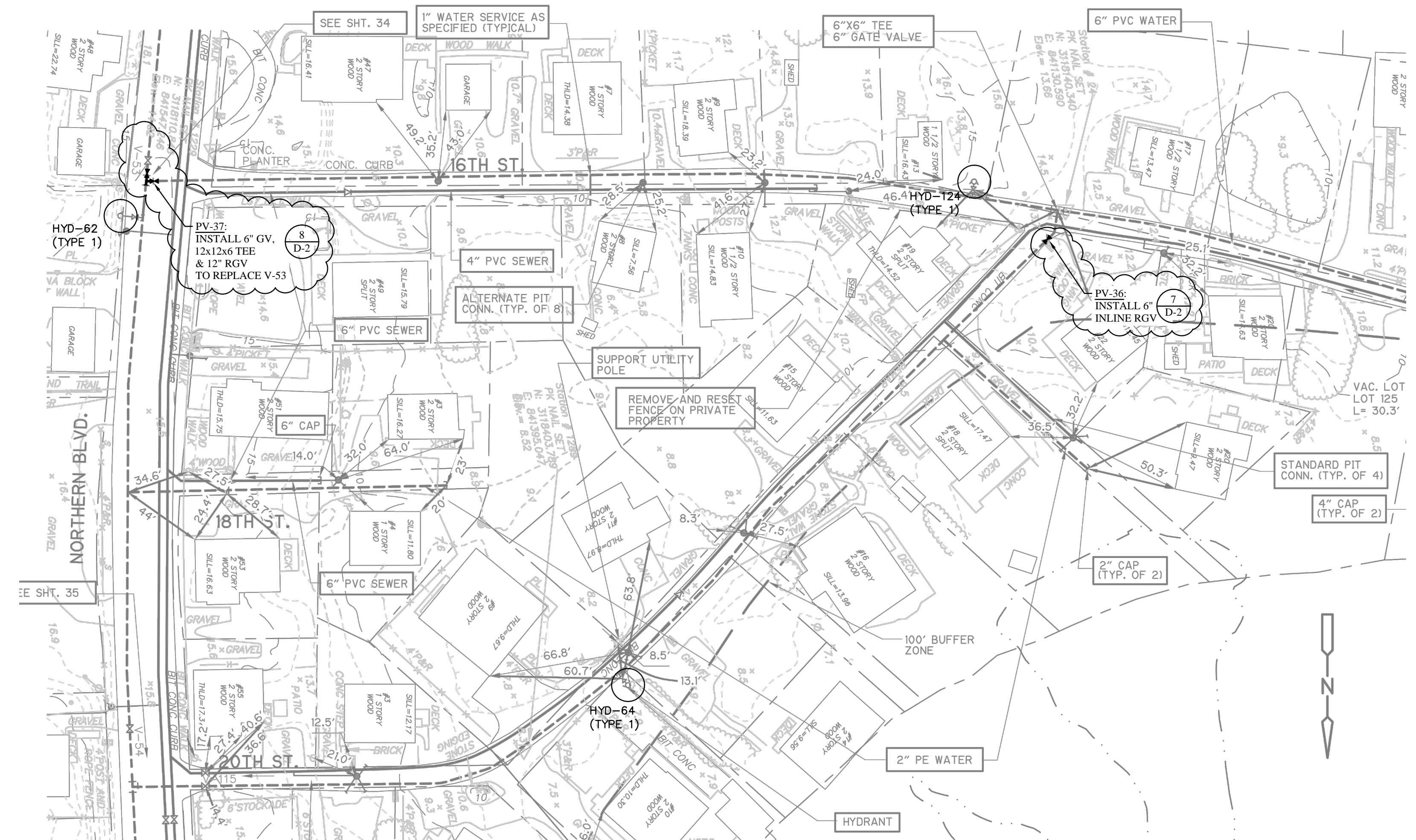
**PLUM ISLAND HYDRANT REPLACEMENT
 PROPOSED VALVE LOCATION PLAN
 PV-19 to PV-33**

Sheet No.
 53 OF 60
PV-3

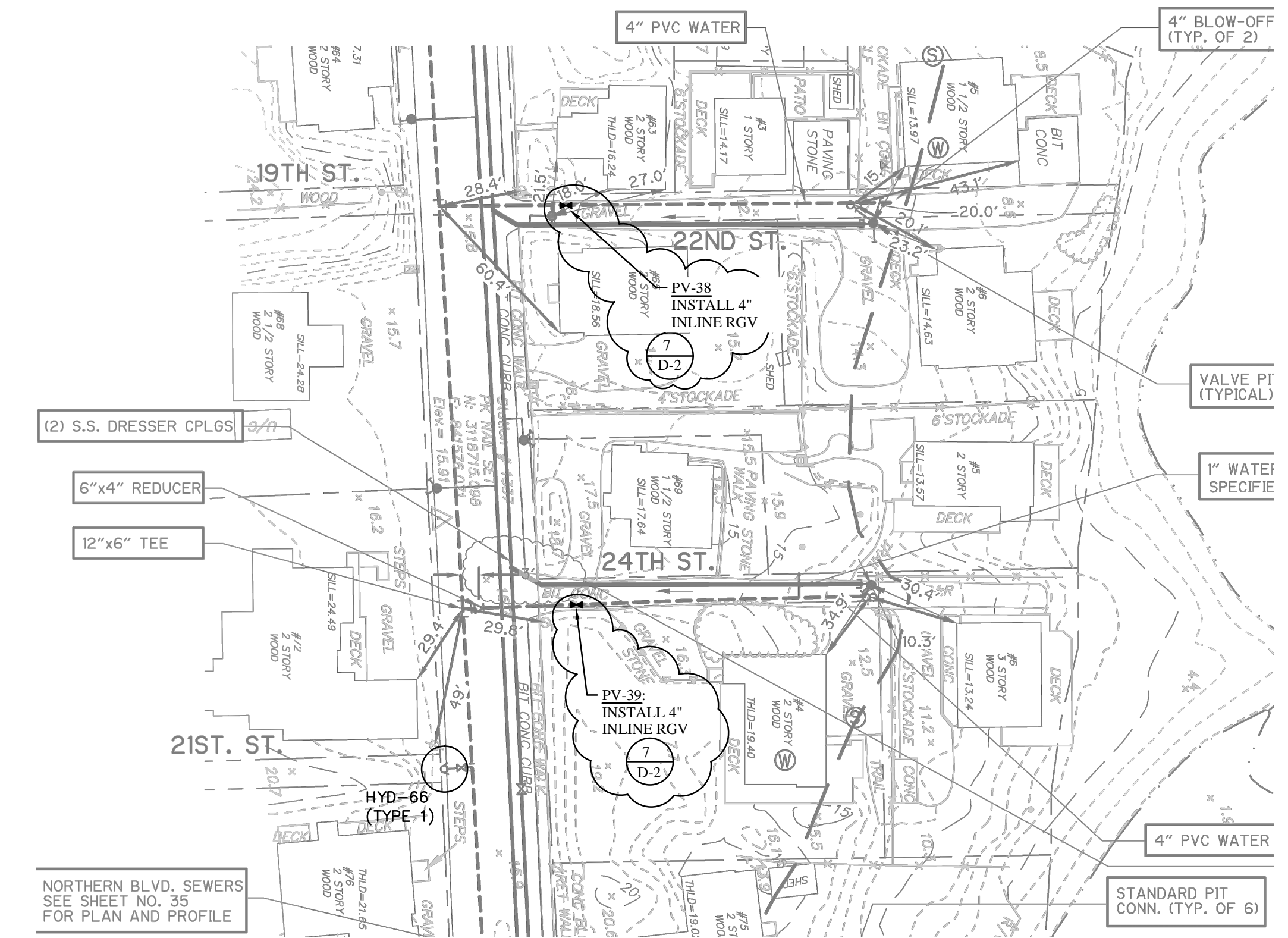
PV-34 2ND STREET @ NORTHERN BOULEVARD



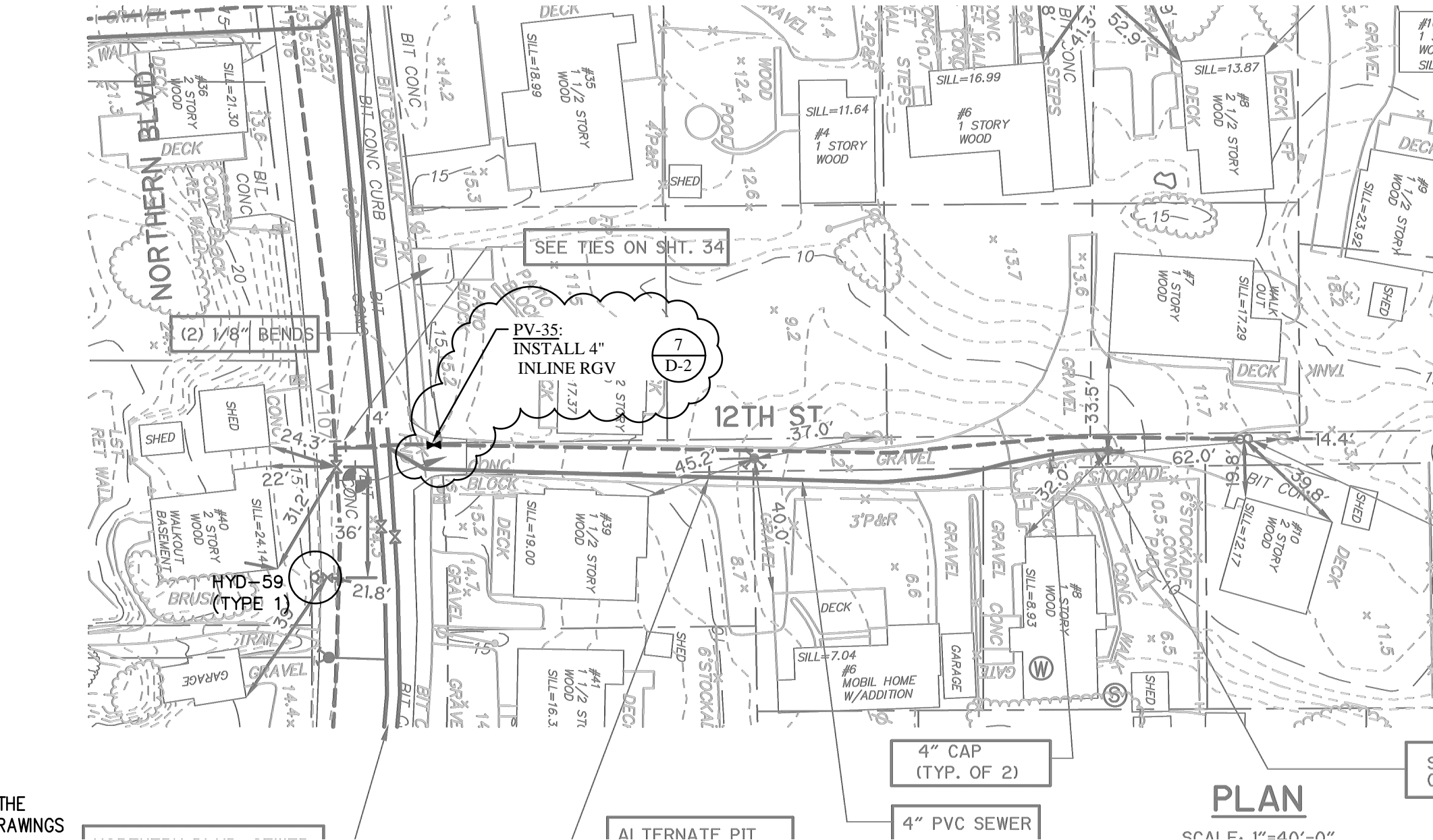
PV-36 20TH STREET @ 16TH STREET
PV-37 16TH STREET @ NORTHERN BOULEVARD



PV-38 22ND STREET @ NORTHERN BOULEVARD
PV-39 24TH STREET @ NORTHERN BOULEVARD



PV-35 12TH STREET @ NORTHERN BOULEVARD



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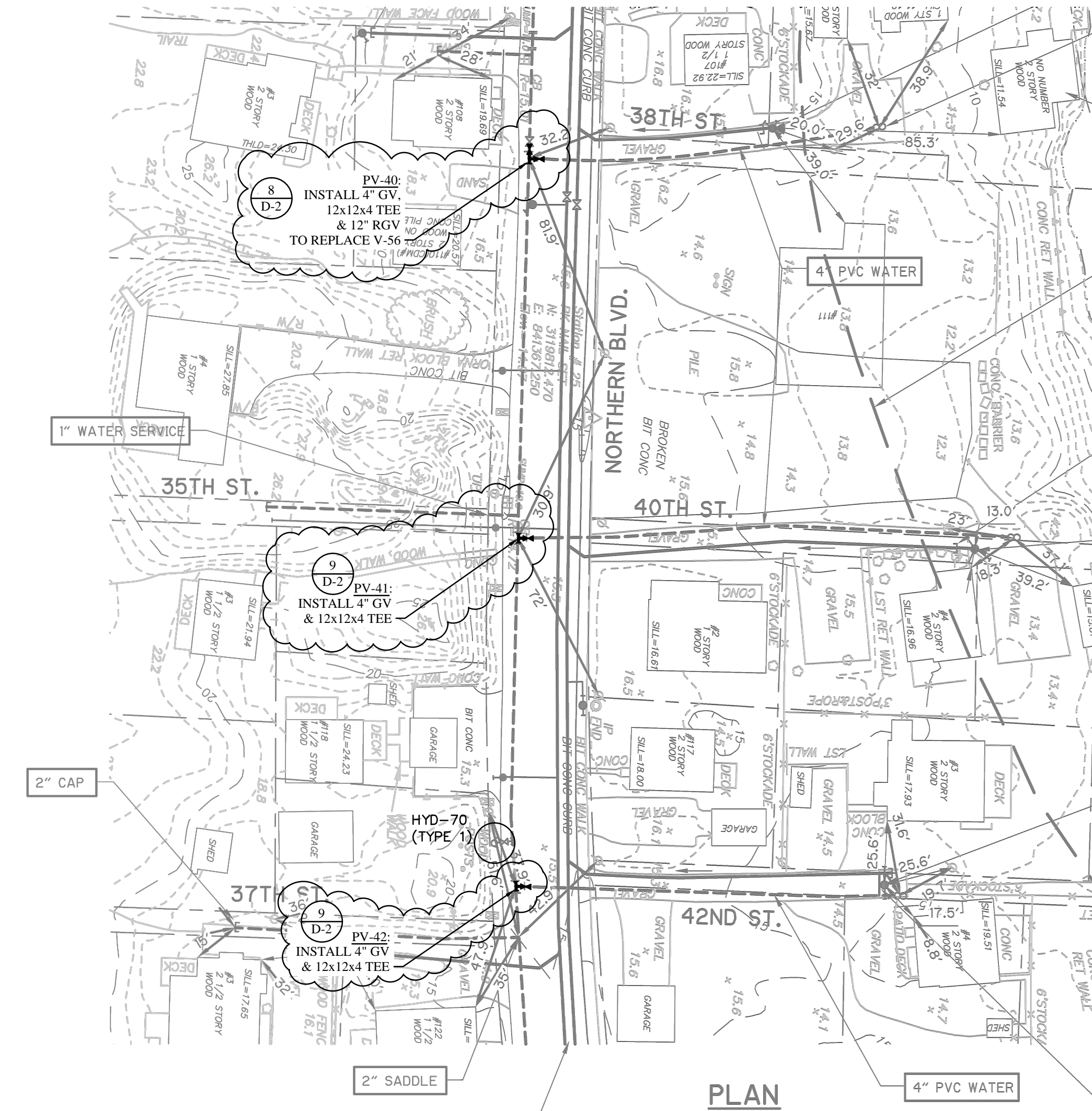
Designed By:
D. GAGNON
Checked By:
J.E. WHITE
Date:
APRIL 7, 2017

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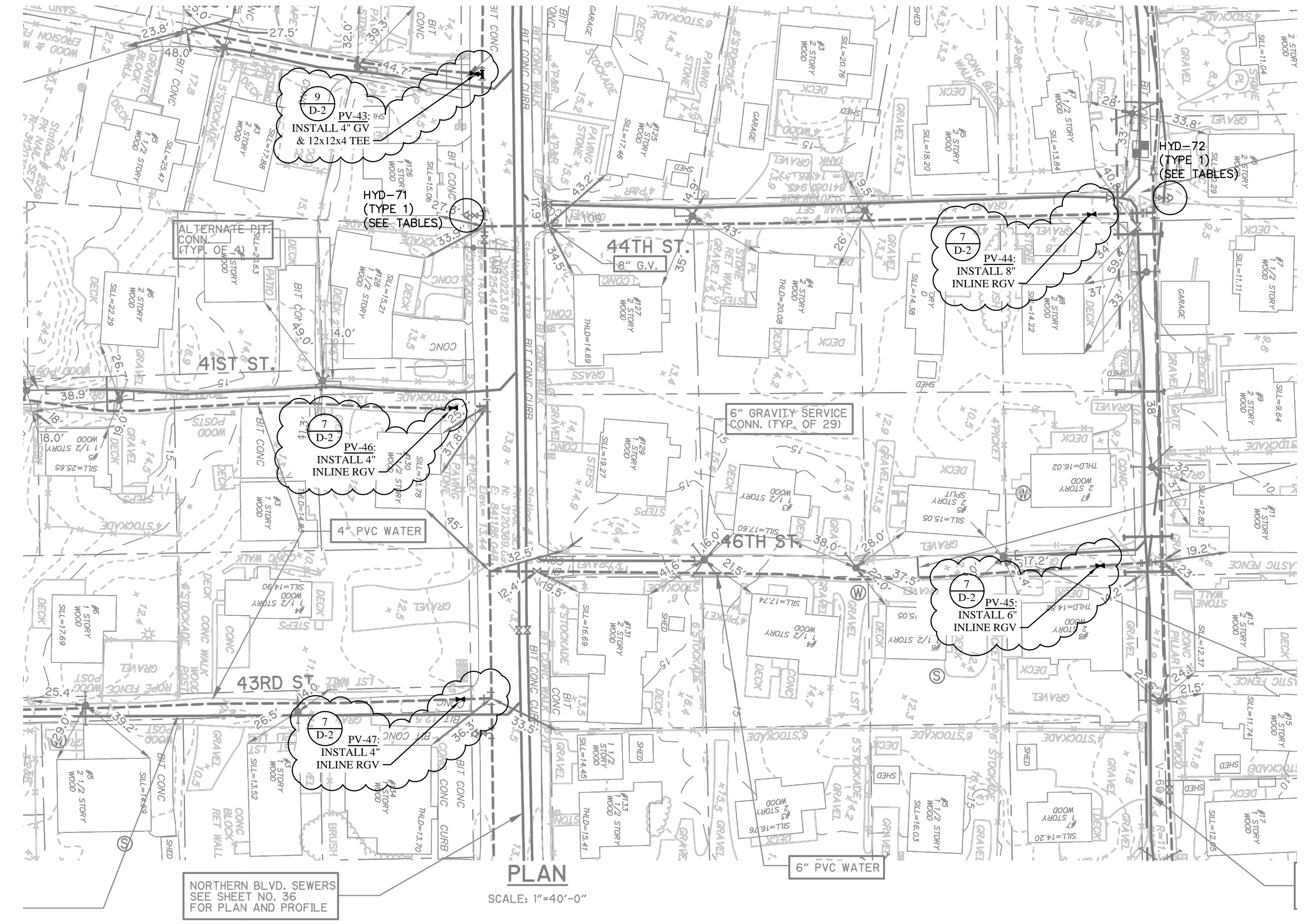
PLUM ISLAND HYDRANT REPLACEMENT
PROPOSED VALVE LOCATION PLAN
PV-34 TO PV-39

Sheet No.
54 OF 60
PV-4

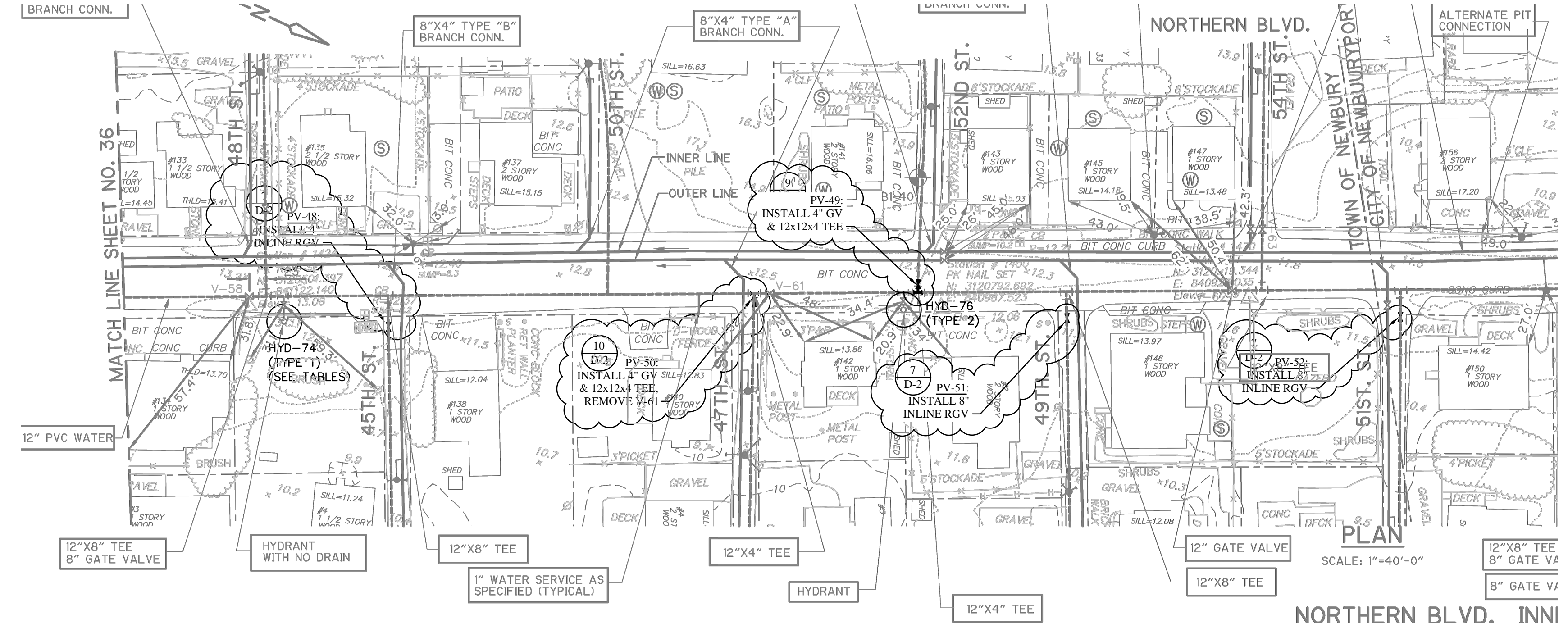
PV-40 38TH STREET @ NORTHERN BOULEVARD
 PV-41 40TH STREET @ NORTHERN BOULEVARD
 PV-42 42ND STREET @ NORTHERN BOULEVARD




PV-43 39TH STREET @ NORTHERN BOULEVARD
 PV-44 44TH STREET @ BASIN FRONT DRIVE
 PV-45 46TH STREET @ BASIN FRONT DRIVE
 PV-46 41ST STREET @ NORTHERN BOULEVARD
 PV-47 43RD STREET @ NORTHERN BOULEVARD



PV-48 45TH STREET @ NORTHERN BOULEVARD
 PV-49 52ND STREET @ NORTHERN BOULEVARD
 PV-50 47TH STREET @ NORTHERN BOULEVARD
 PV-51 49TH STREET @ NORTHERN BOULEVARD
 PV-52 51ST STREET @ NORTHERN BOULEVARD



NOTES:
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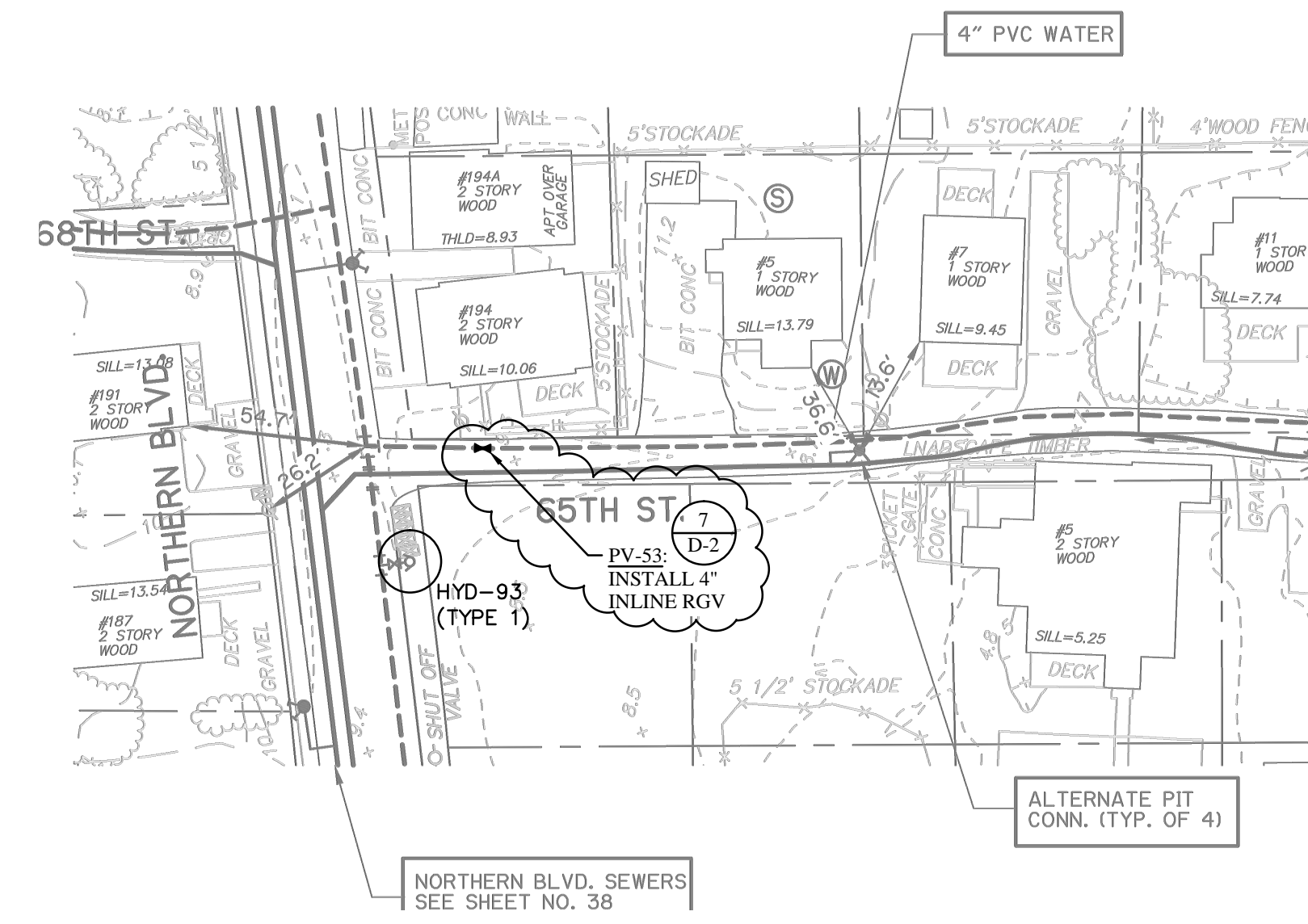
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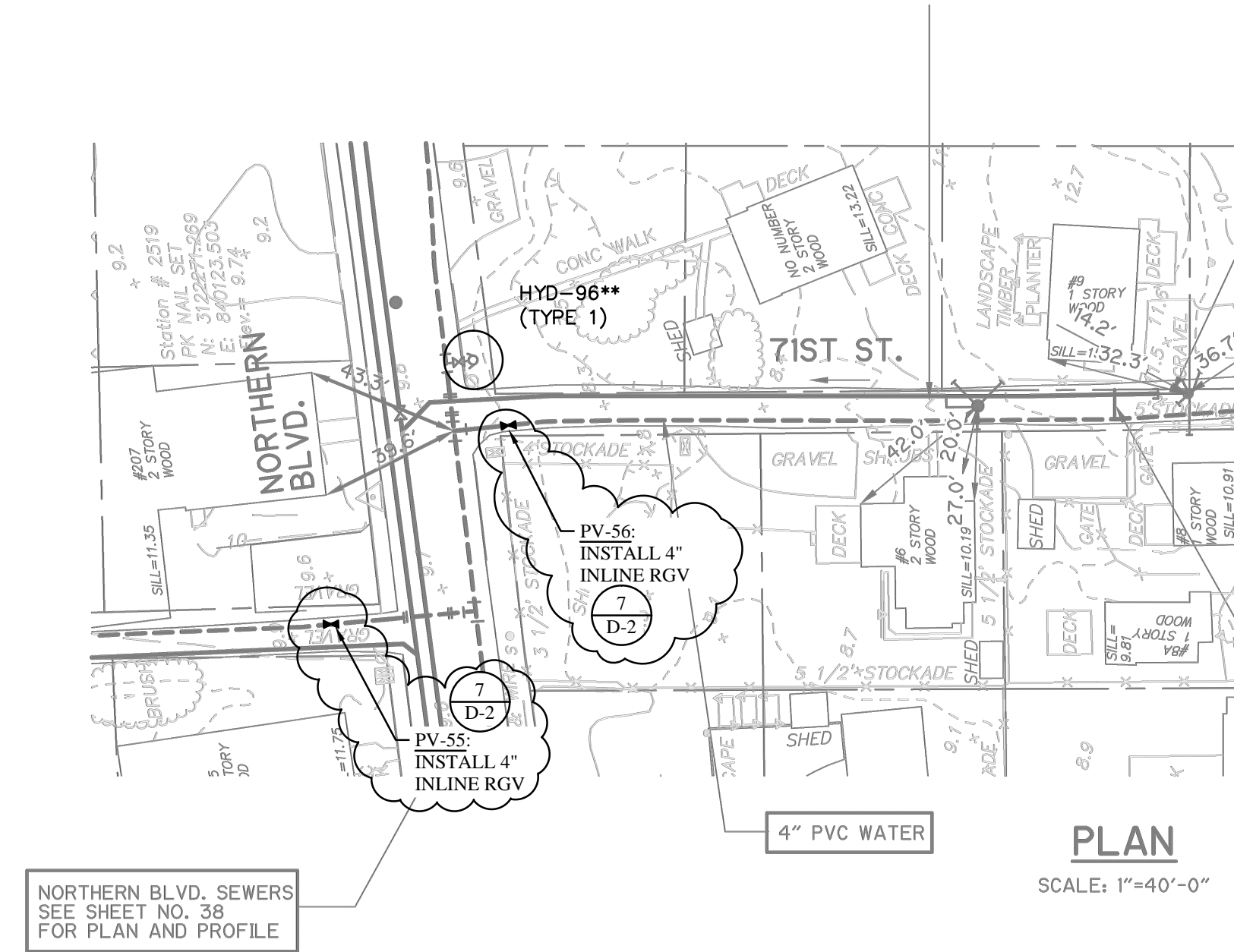
N.T.S

**PLUM ISLAND HYDRANT REPLACEMENT
 PROPOSED VALVE LOCATION PLAN
 PV-40 to PV-52**

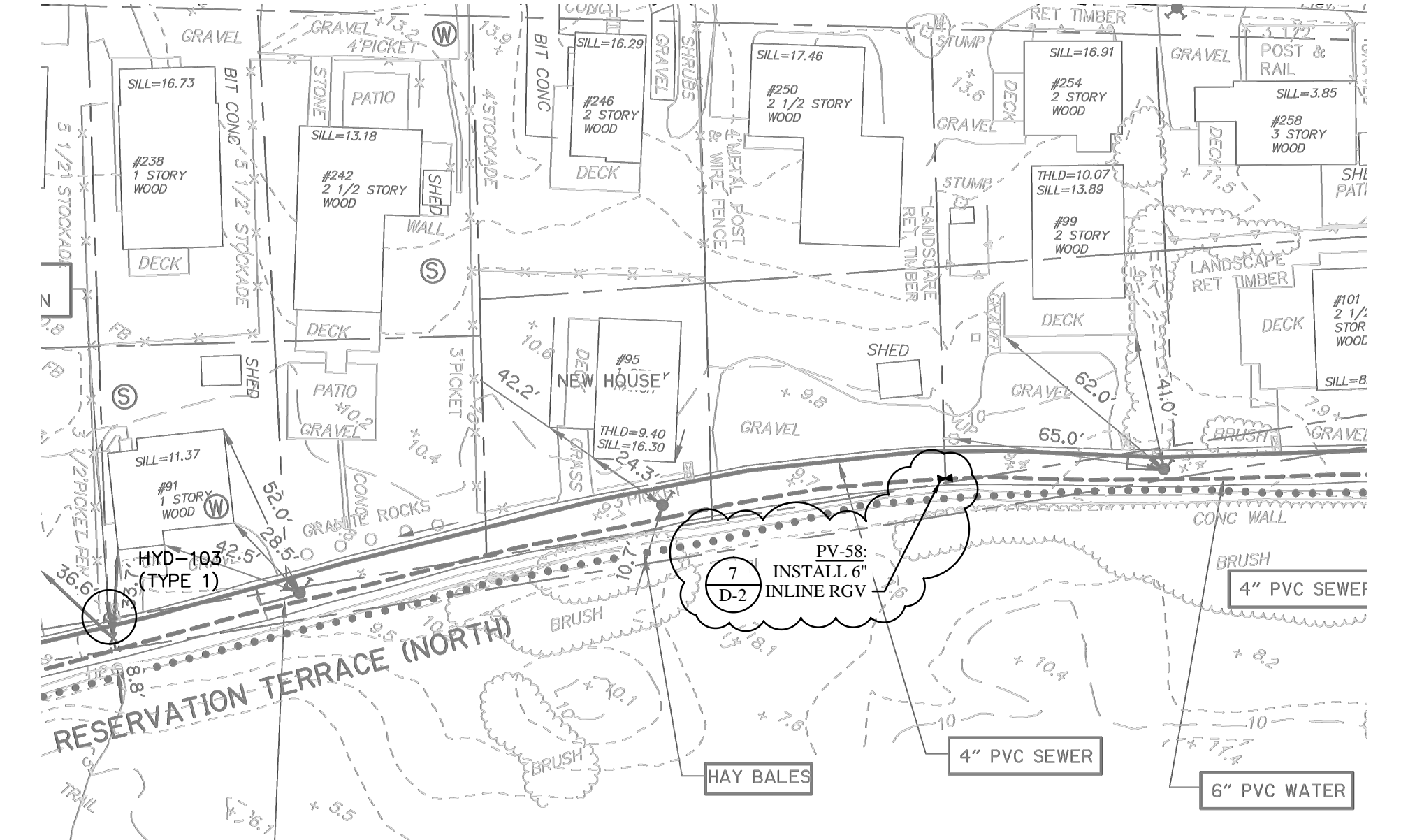
PV-53 65TH STREET @ NORTHERN BOULEVARD



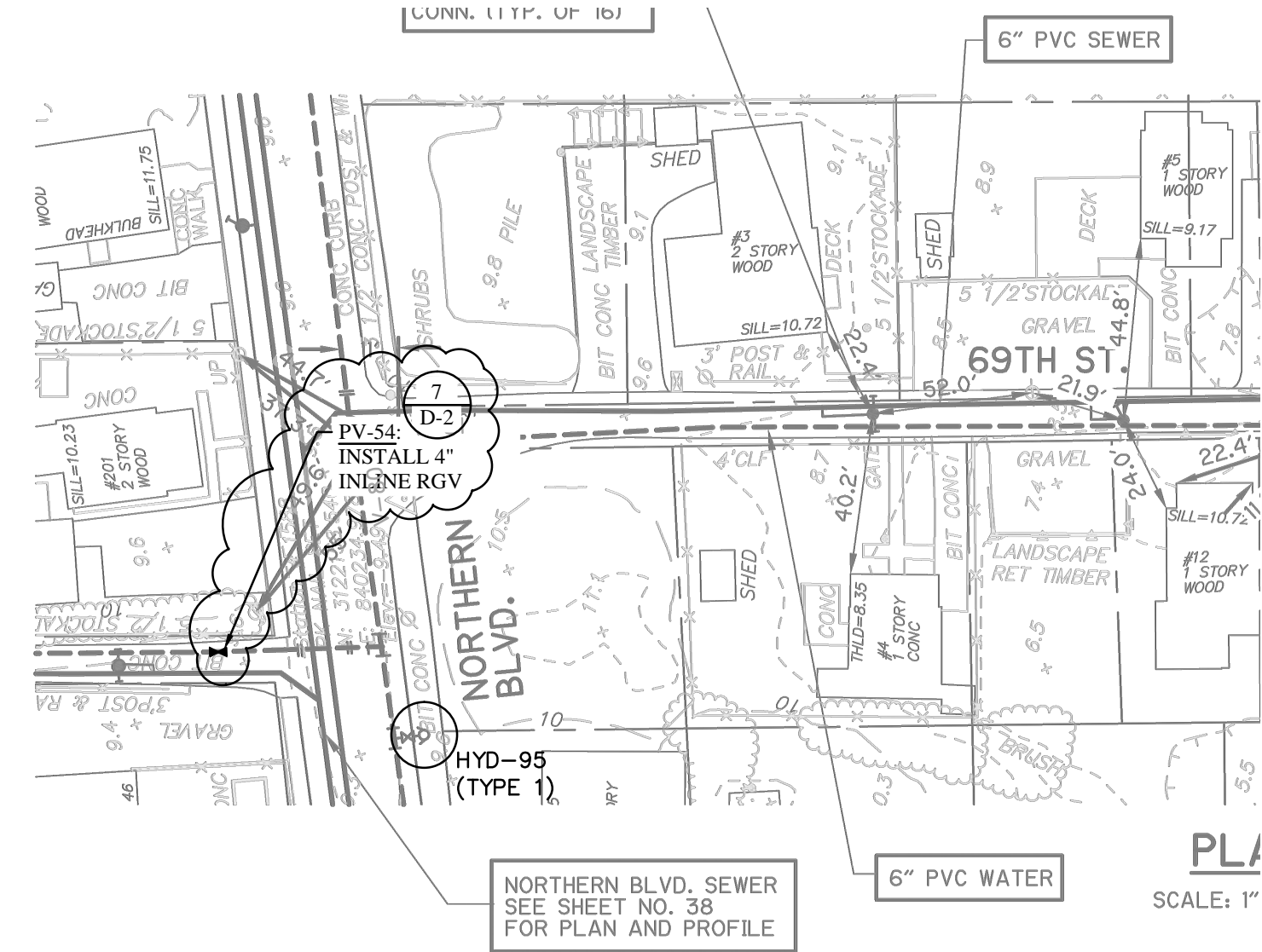
PV-55 72ND STREET @ NORTHERN BOULEVARD
PV-56 71ST STREET @ NORTHERN BOULEVARD



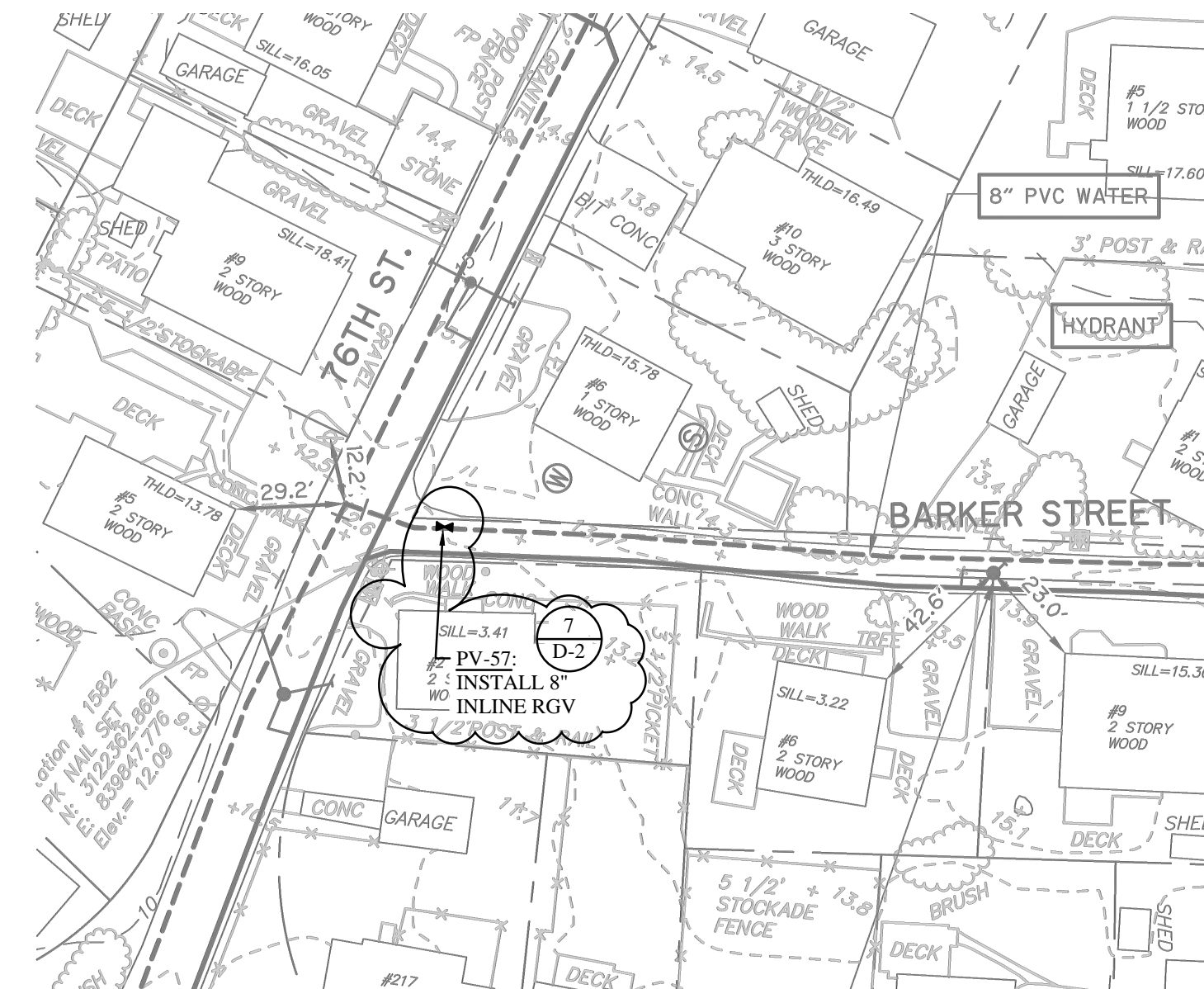
PV-58 RESERVATION TERRACE (NORTH)



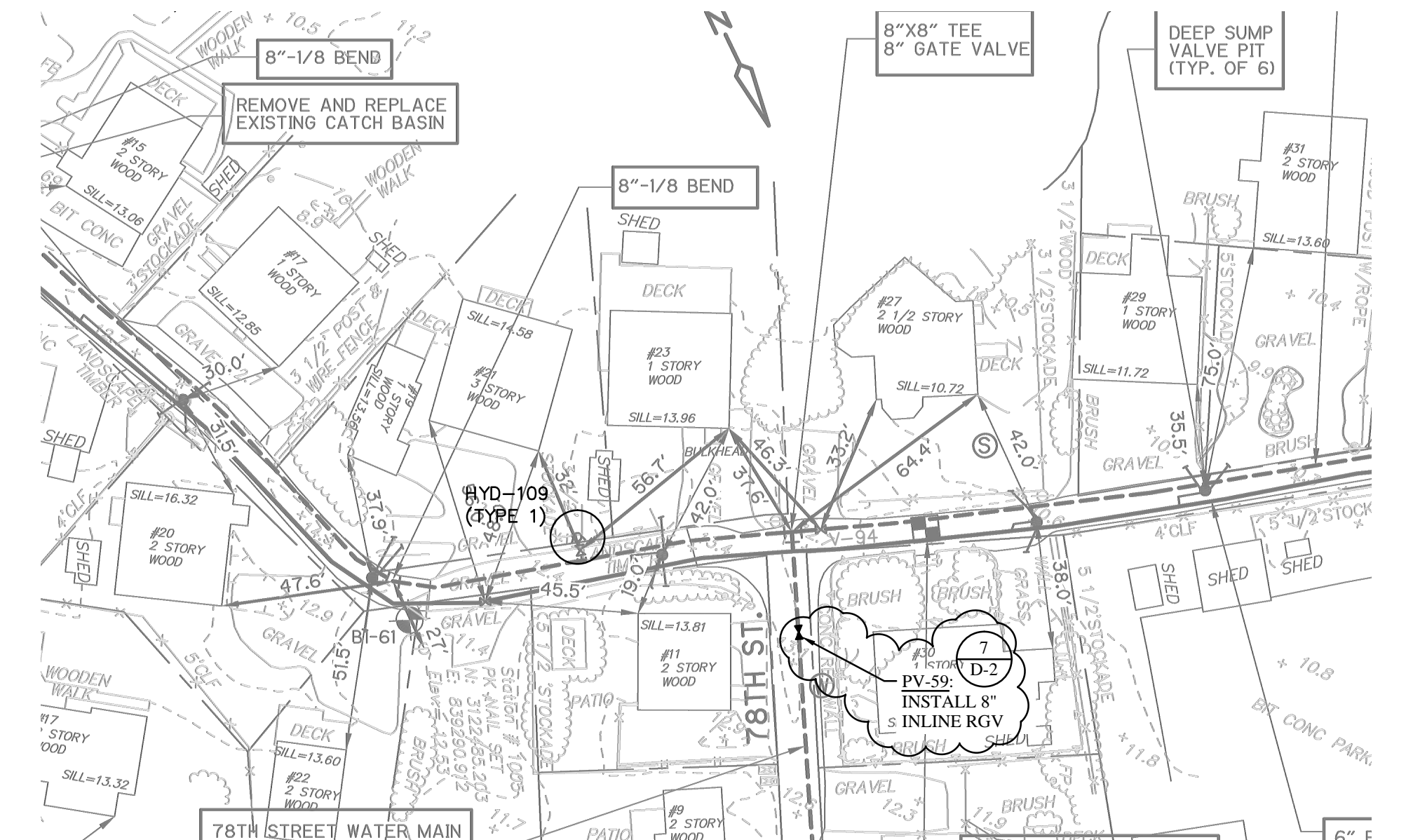
PV-54 69TH STREET @ NORTHERN BOULEVARD



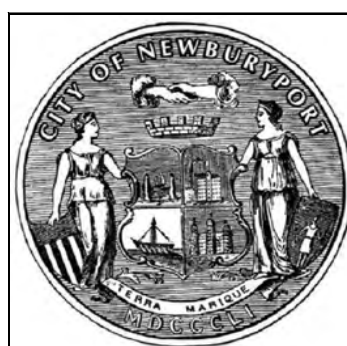
PV-57 BARKER STREET @ NORTHERN BOULEVARD



PV-59 78TH STREET @ HARBOR STREET



NOTES:
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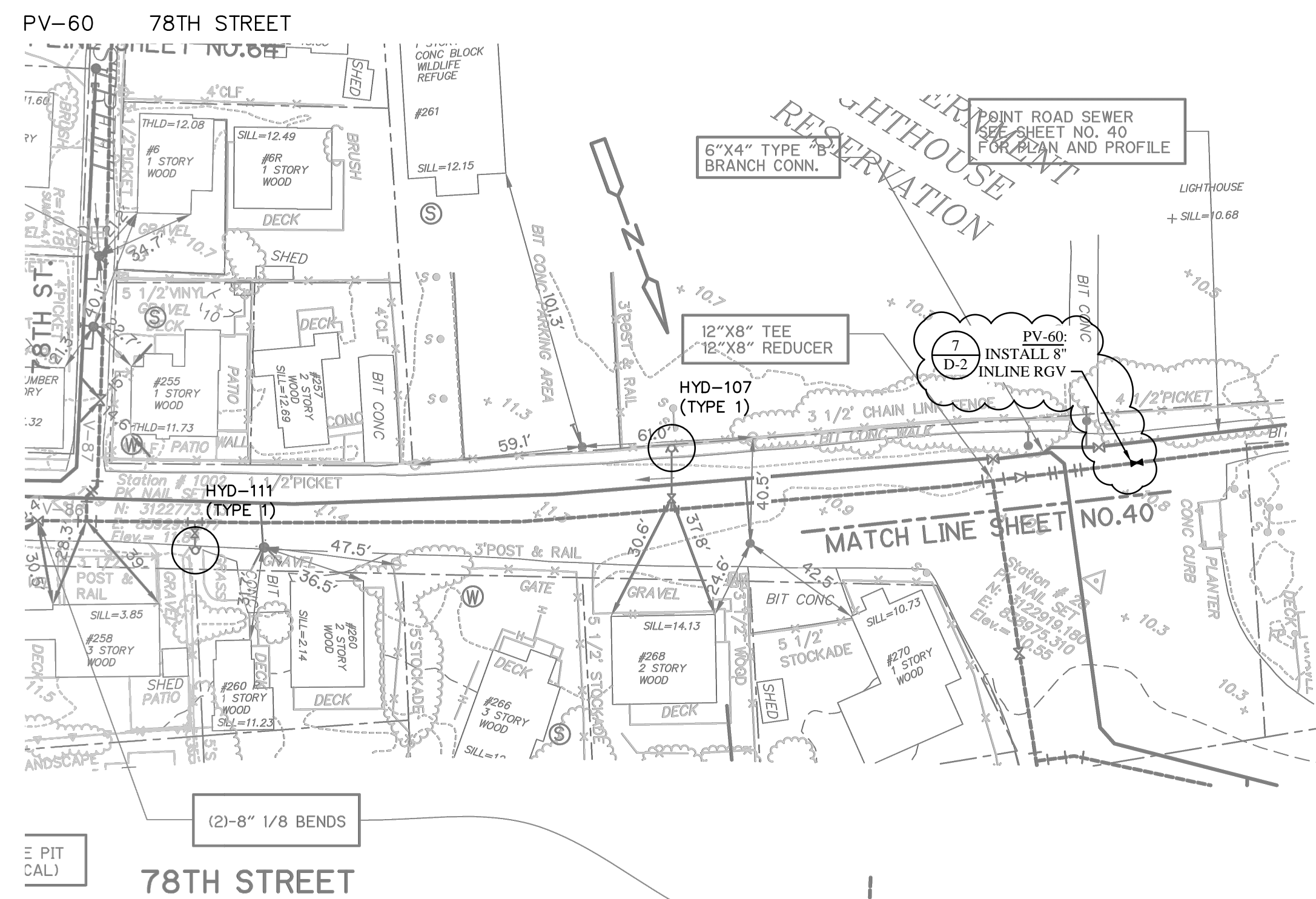
Designed By:
D. GAGNON
Checked By:
J.E. WHITE
Date:
APRIL 7, 2017

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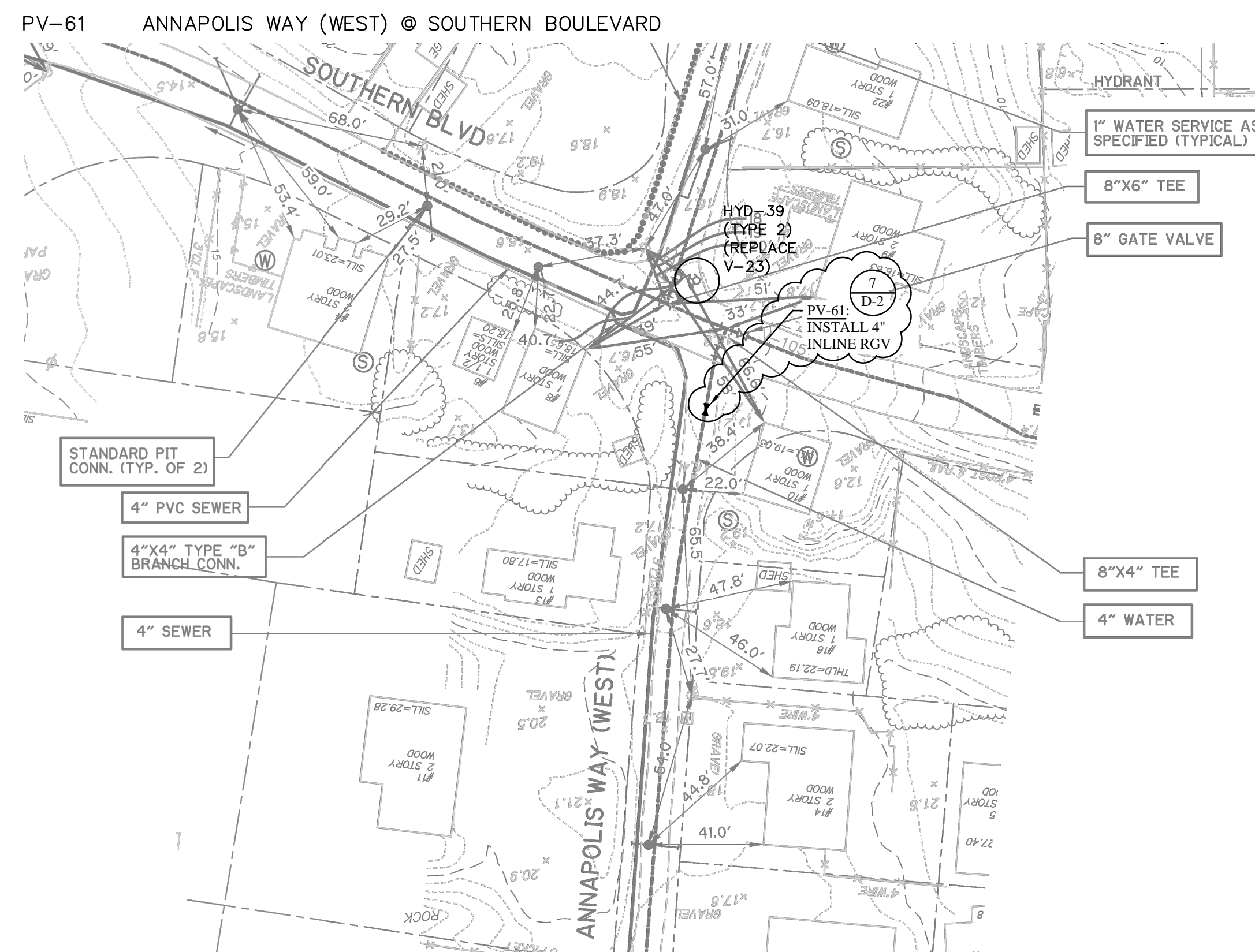
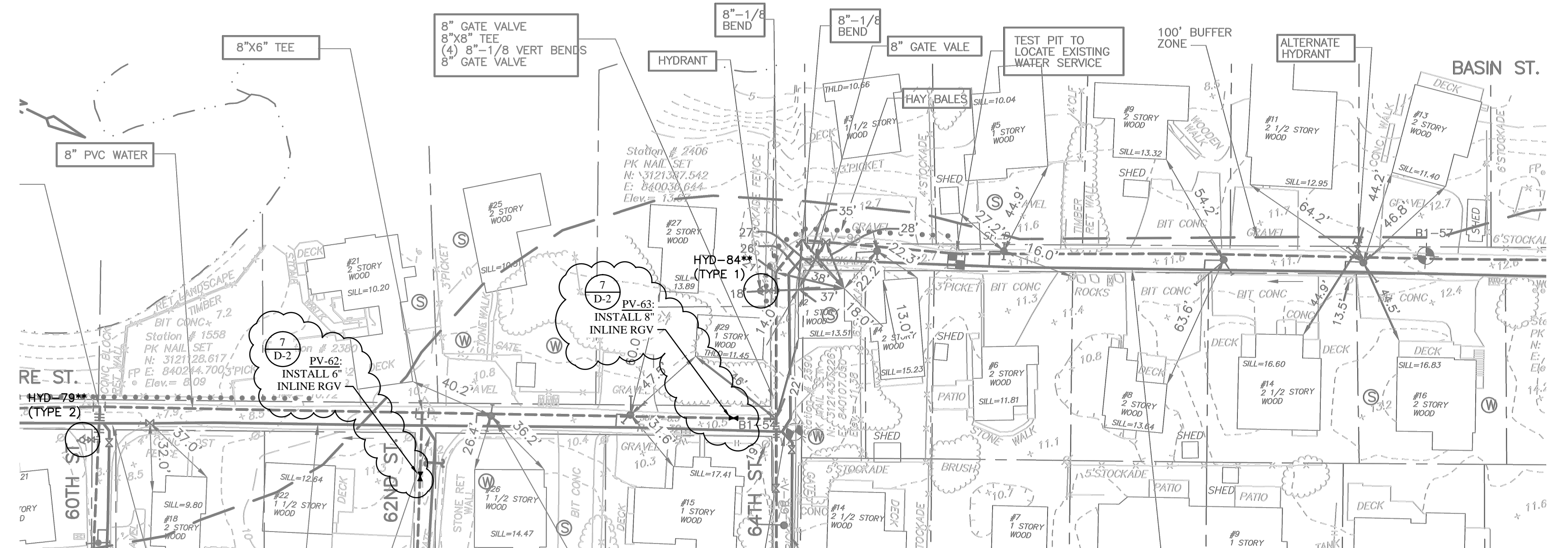
PLUM ISLAND HYDRANT REPLACEMENT
PROPOSED VALVE LOCATION PLAN
PV-53 to PV-59

Sheet No.
56 OF 60

PV-6



PV-62 62 ND STREET @ SHORE STREET
 PV-63 SHORE STREET @ 64TH STREET



NOTES:
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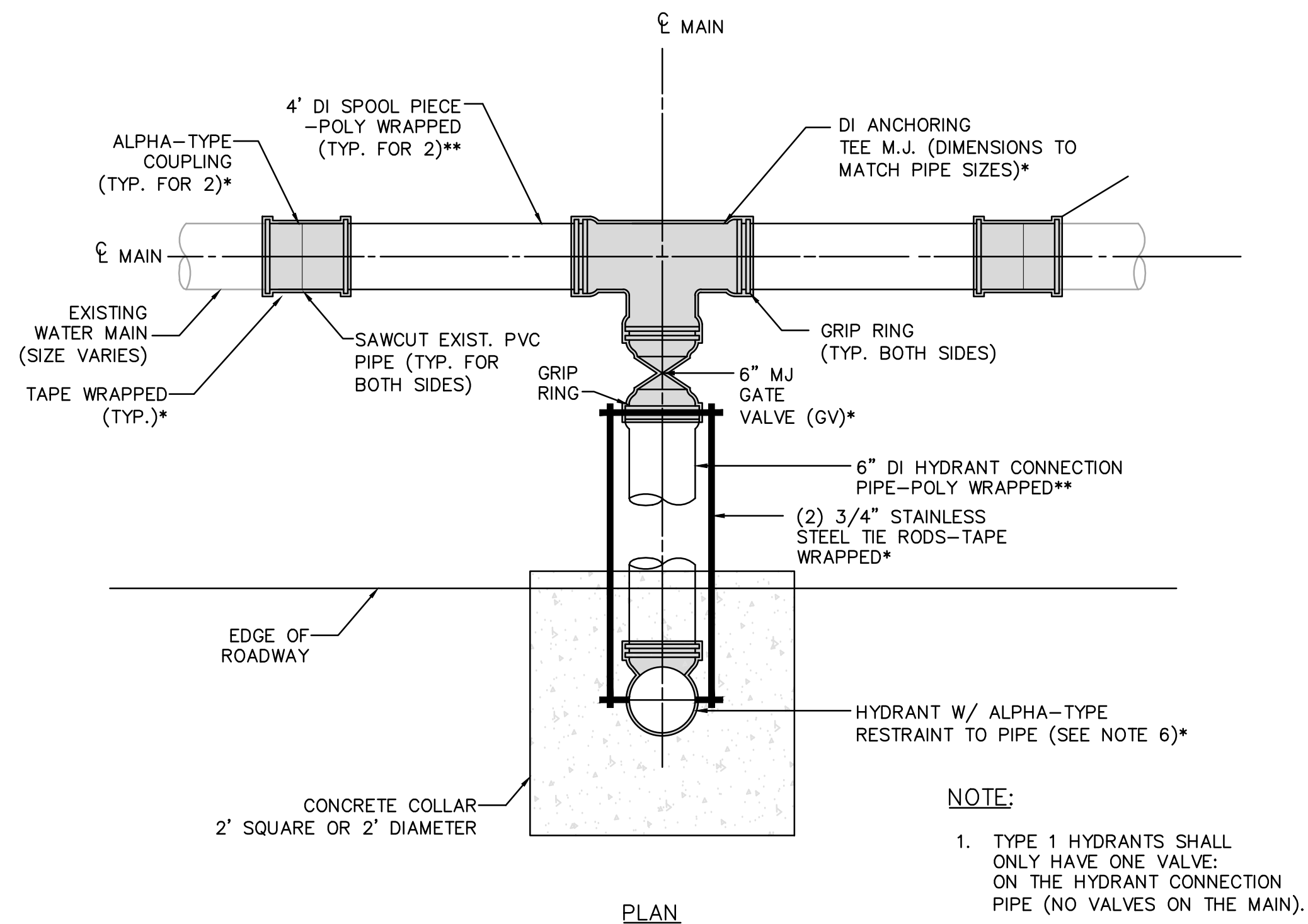
Date:
APRIL 7, 2017

N.T.S

**PLUM ISLAND HYDRANT REPLACEMENT
 PROPOSED VALVE LOCATION PLAN
 PV-60 to PV-63**

Sheet No.
57 OF 60

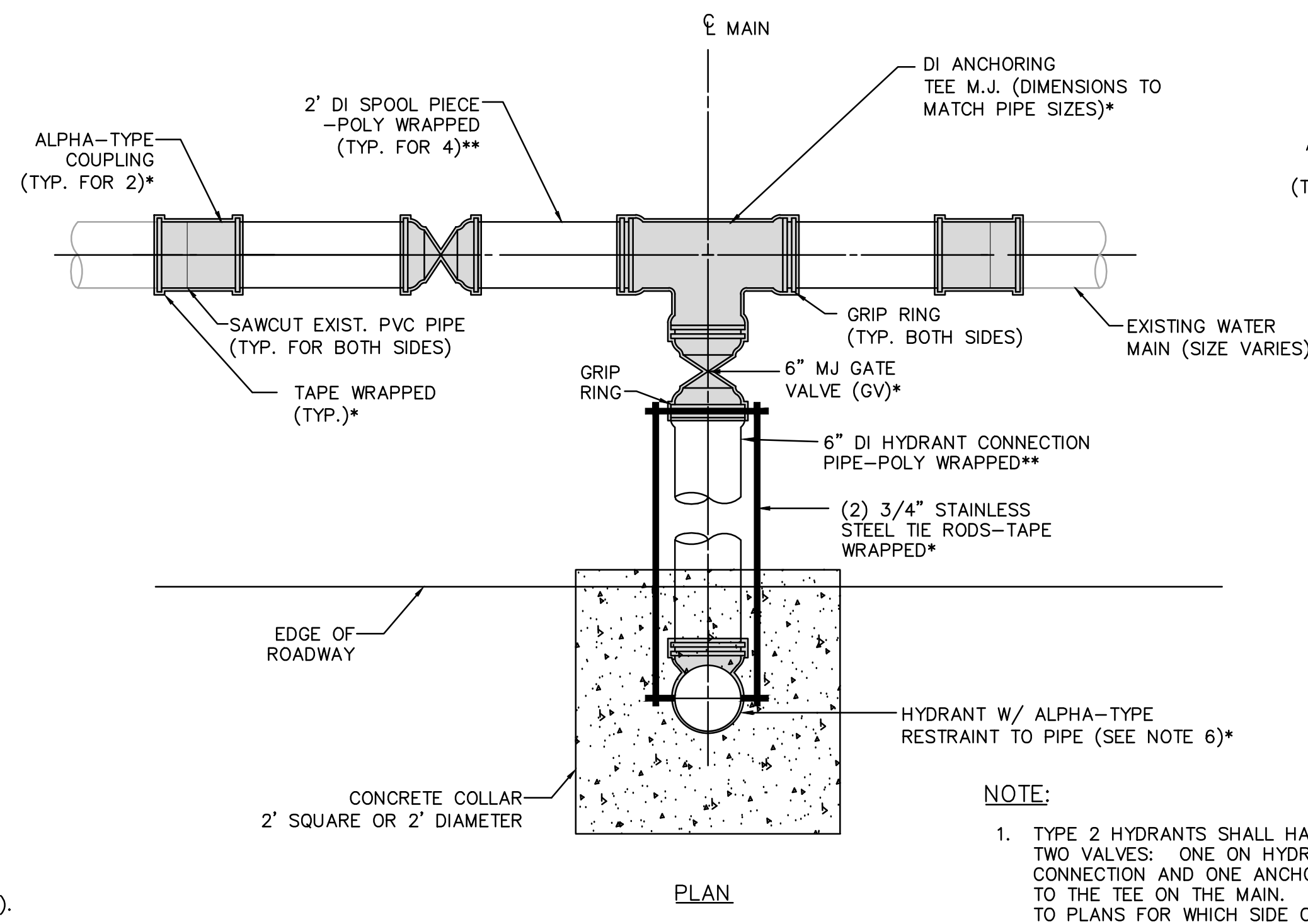
PV-7



1 HYDRANT ASSEMBLY TYPE 1 DETAIL
(ALL JOINTS RESTRAINED)

NTS

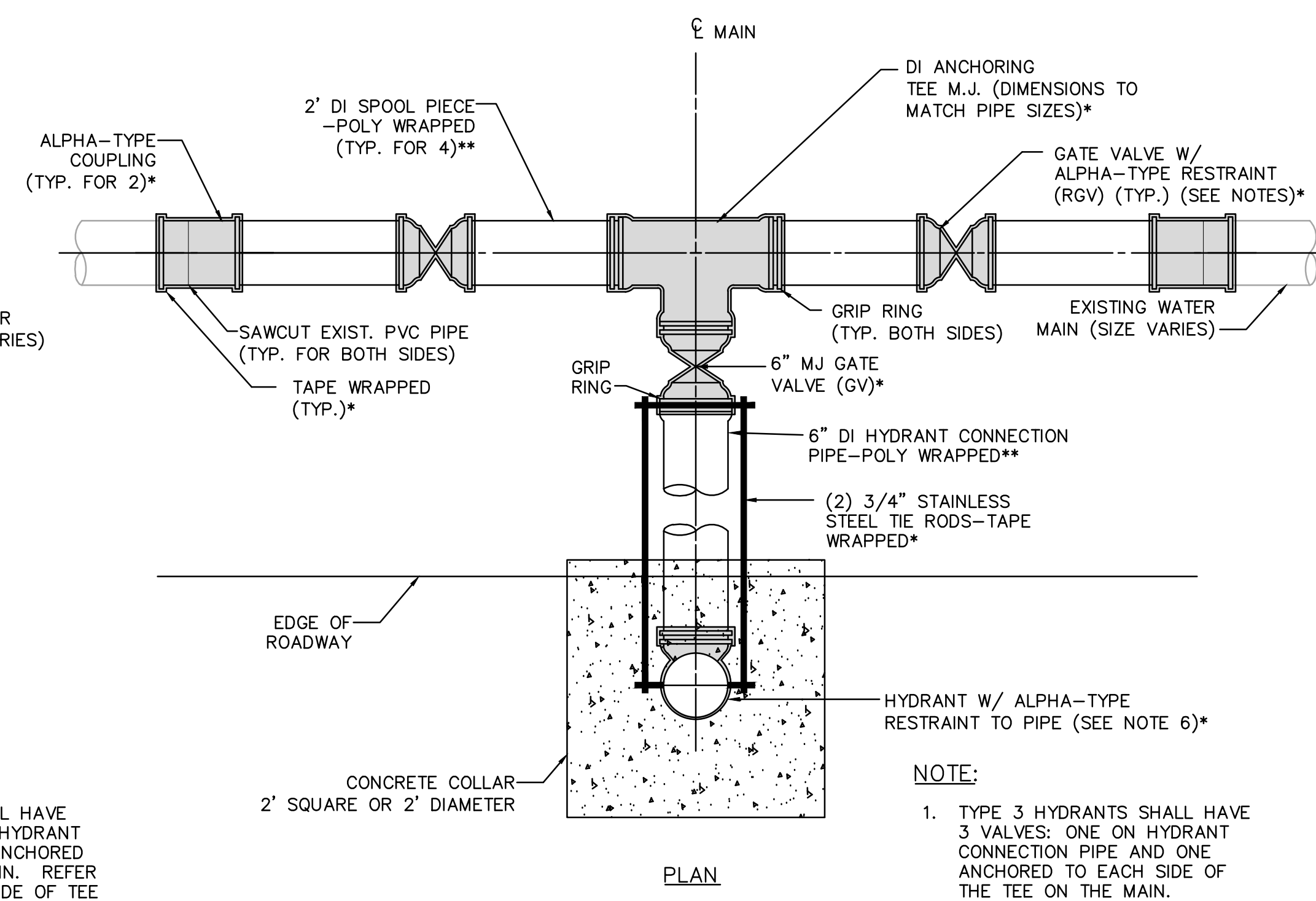
NOTE:
1. TYPE 1 HYDRANTS SHALL ONLY HAVE ONE VALVE: ON THE HYDRANT CONNECTION PIPE (NO VALVES ON THE MAIN).



2 HYDRANT ASSEMBLY TYPE 2 DETAIL
(ALL JOINTS RESTRAINED)

NTS

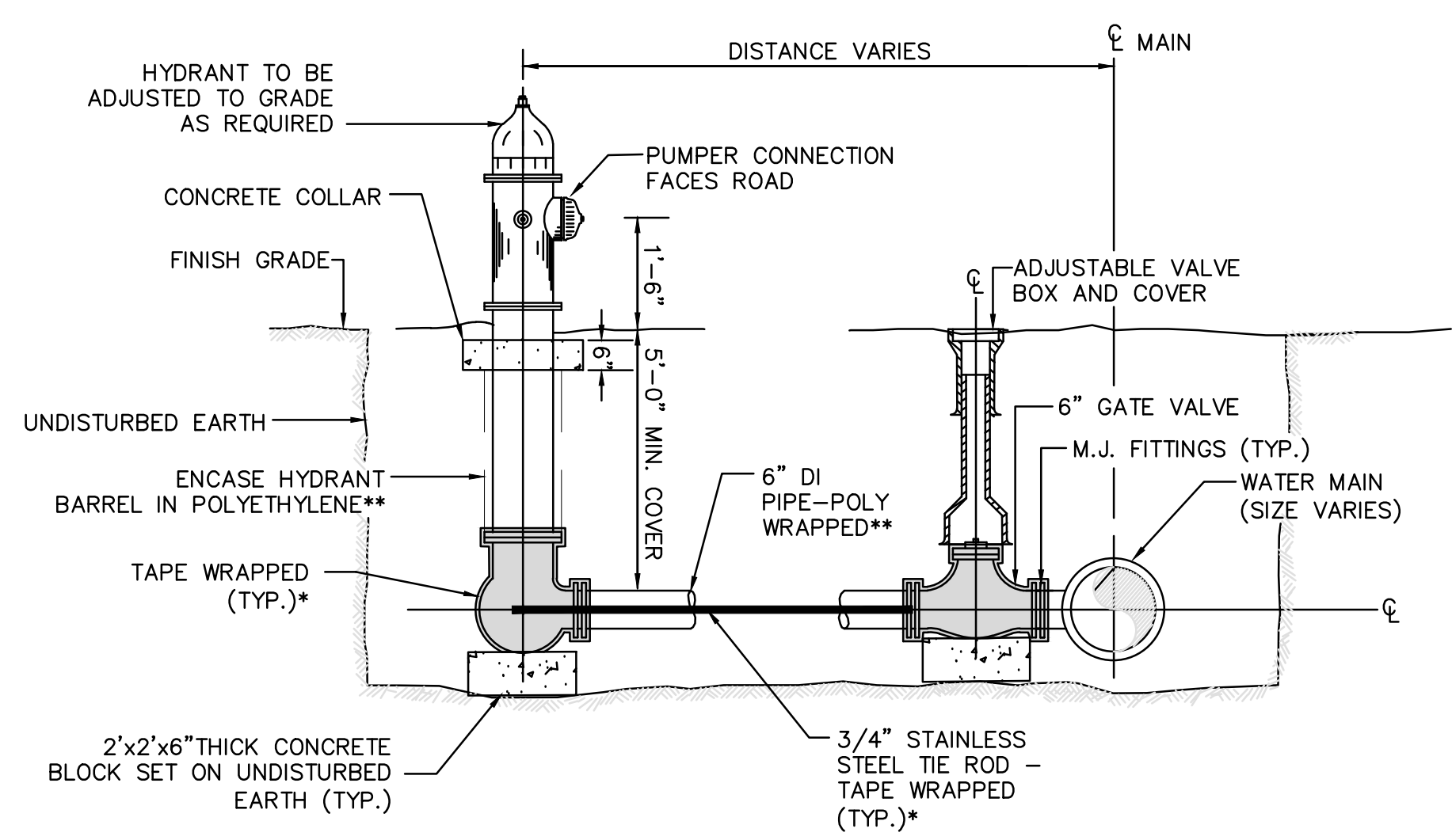
NOTE:
1. TYPE 2 HYDRANTS SHALL HAVE TWO VALVES: ONE ON HYDRANT CONNECTION AND ONE ANCHORED TO THE TEE ON THE MAIN. REFER TO PLANS FOR WHICH SIDE OF TEE TO INSTALL VALVE.



3 HYDRANT ASSEMBLY TYPE 3 DETAIL
(ALL JOINTS RESTRAINED)

NTS

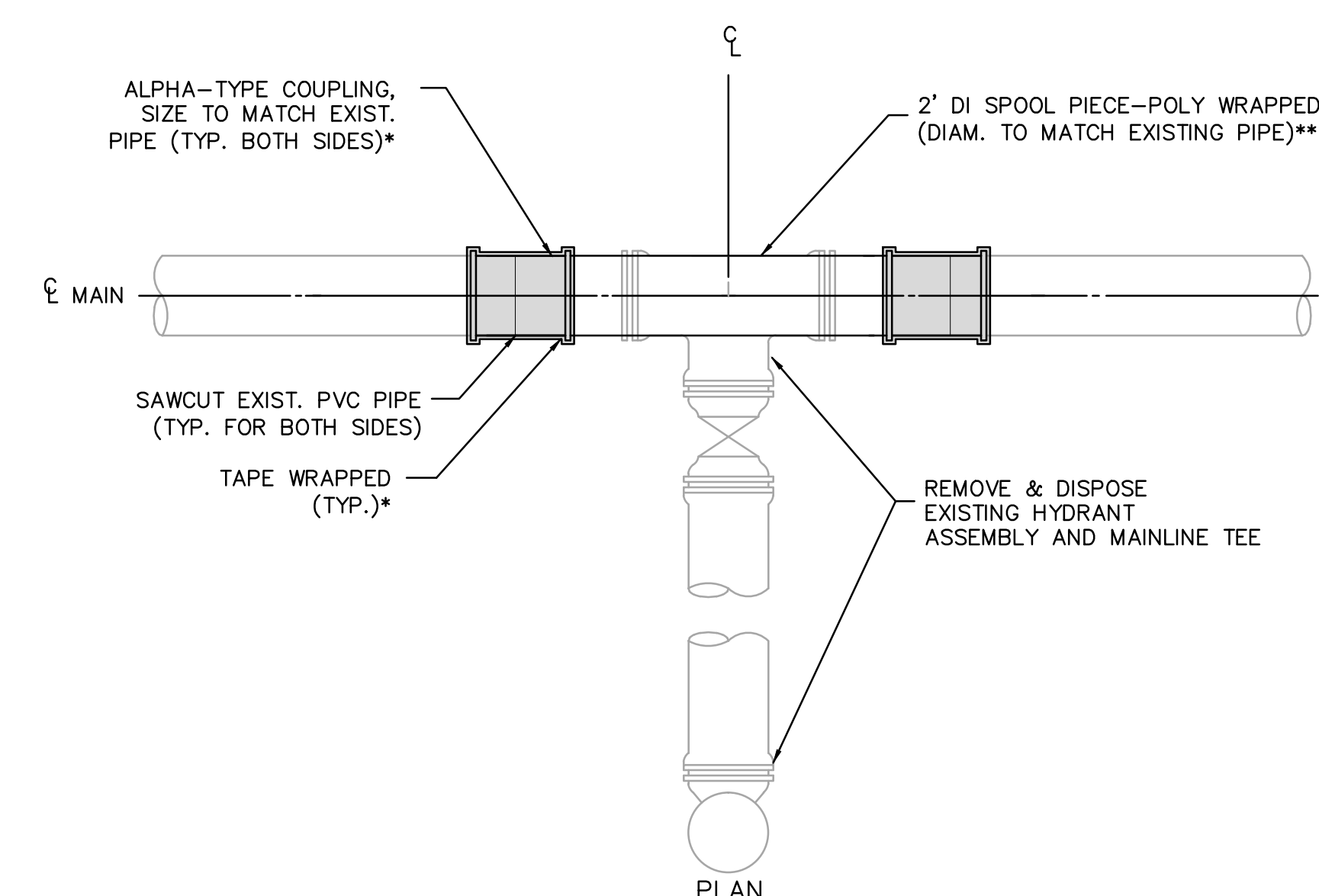
NOTE:
1. TYPE 3 HYDRANTS SHALL HAVE 3 VALVES: ONE ON HYDRANT CONNECTION PIPE AND ONE ANCHORED TO EACH SIDE OF THE TEE ON THE MAIN.



4 TYPICAL HYDRANT ASSEMBLY SECTION
(ALL JOINTS RESTRAINED)

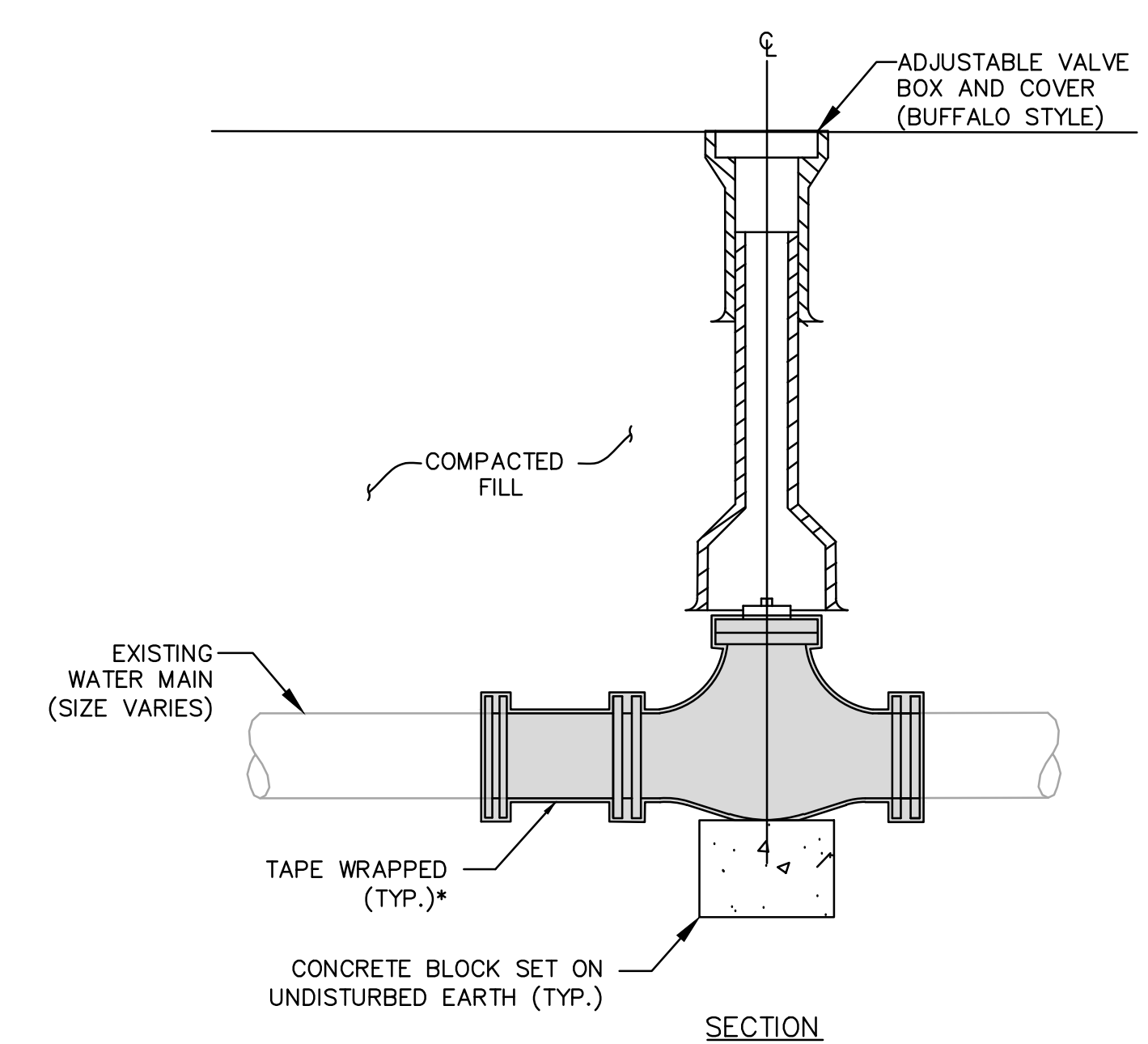
NTS

NOTES:
1. STAINLESS STEEL BOLTS AND APPURTENANCES TO BE WRAPPED IN WAX TAPE.
2. DI HYDRANT BARREL AND DI PIPE WILL BE WRAPPED IN POLYETHYLENE ENCASEMENT.



5 TYPICAL HYDRANT REMOVAL DETAIL

PLAN



6 GATE VALVE BOX AND COVER

NTS

DETAIL NOTES:
1. REFER TO TECHNICAL SPECIFICATIONS FOR MATERIALS SPECIFICATIONS AND INSTALLATION REQUIREMENTS.
2. CONTRACTOR TO TAKE TIES TO EXISTING HYDRANTS BEFORE REMOVING AND SHALL INSTALL NEW HYDRANT IN ITS EXACT CURRENT LOCATION, UNLESS OTHERWISE NOTED OR DIRECTED. REMOVE & DISPOSE EXISTING HYDRANT ASSEMBLY AND MAINLINE TEE.
3. ALL FITTINGS NOT SHOWN HEREIN, SHALL BE RESTRAINED WITH GRIP RINGS. ALL SPOOL PIECES NOT SHOWN HEREIN SHALL BE DI CL. ALL CONNECTION TO EXISTING PIPE SHALL USE AND ALPHA COUPLING.
4. * ALL RESTRAINTS AND HARDWARE SHALL BE STAINLESS STEEL AND TAPE-WRAPPED, WHICH INCLUDES JOINTS, BOLTS, NUTS, TIE RODS, COLLARS, AND GATE VALVE BODIES.
5. ** ALL DI PIPE SHALL BE WRAPPED IN POLYETHYLENE.



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DEPARTMENT OF PUBLIC SERVICES
16A PERRY WAY
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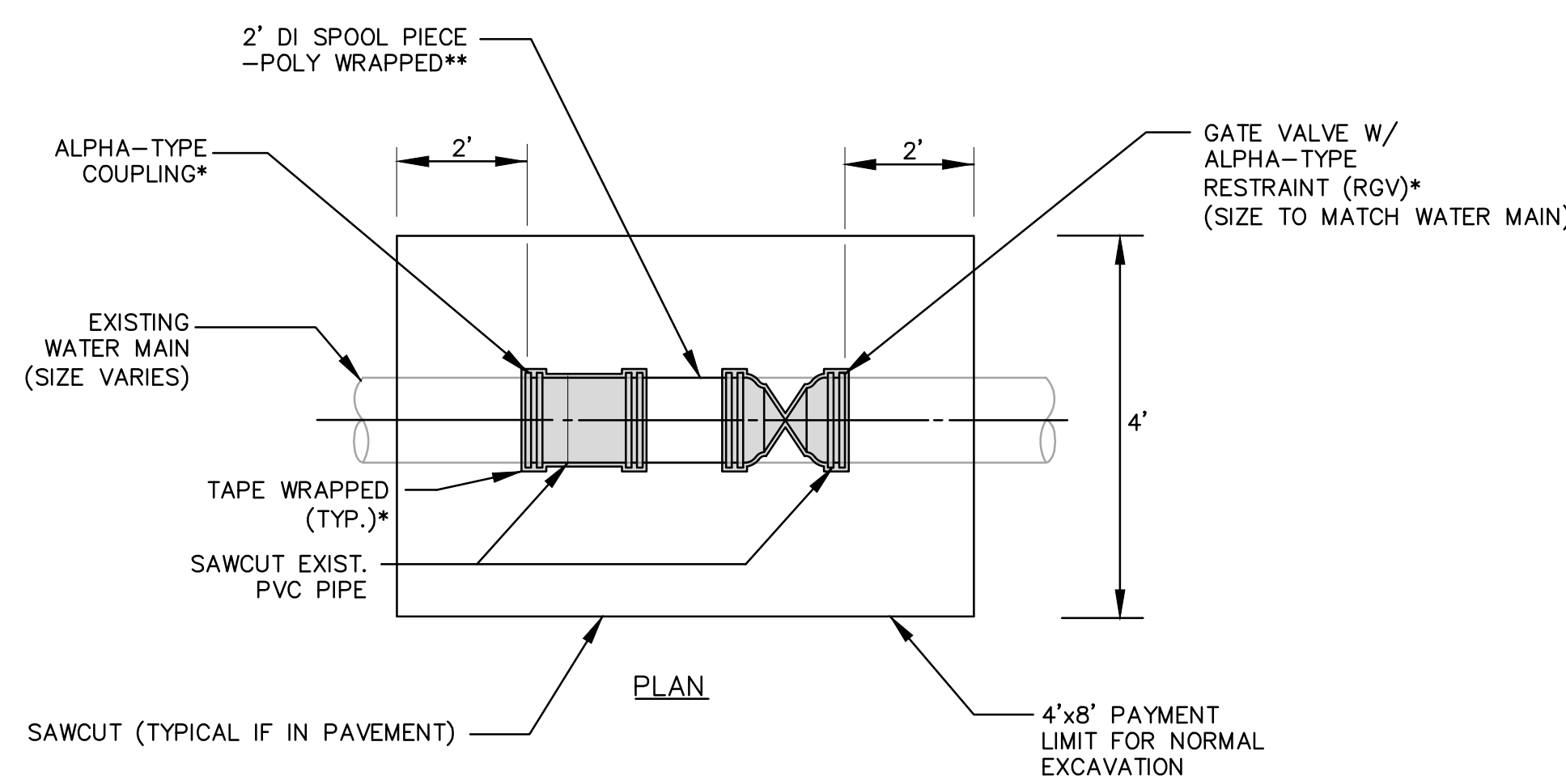
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Checked By:
J.E. WHITE
Date:
APRIL 7, 2017

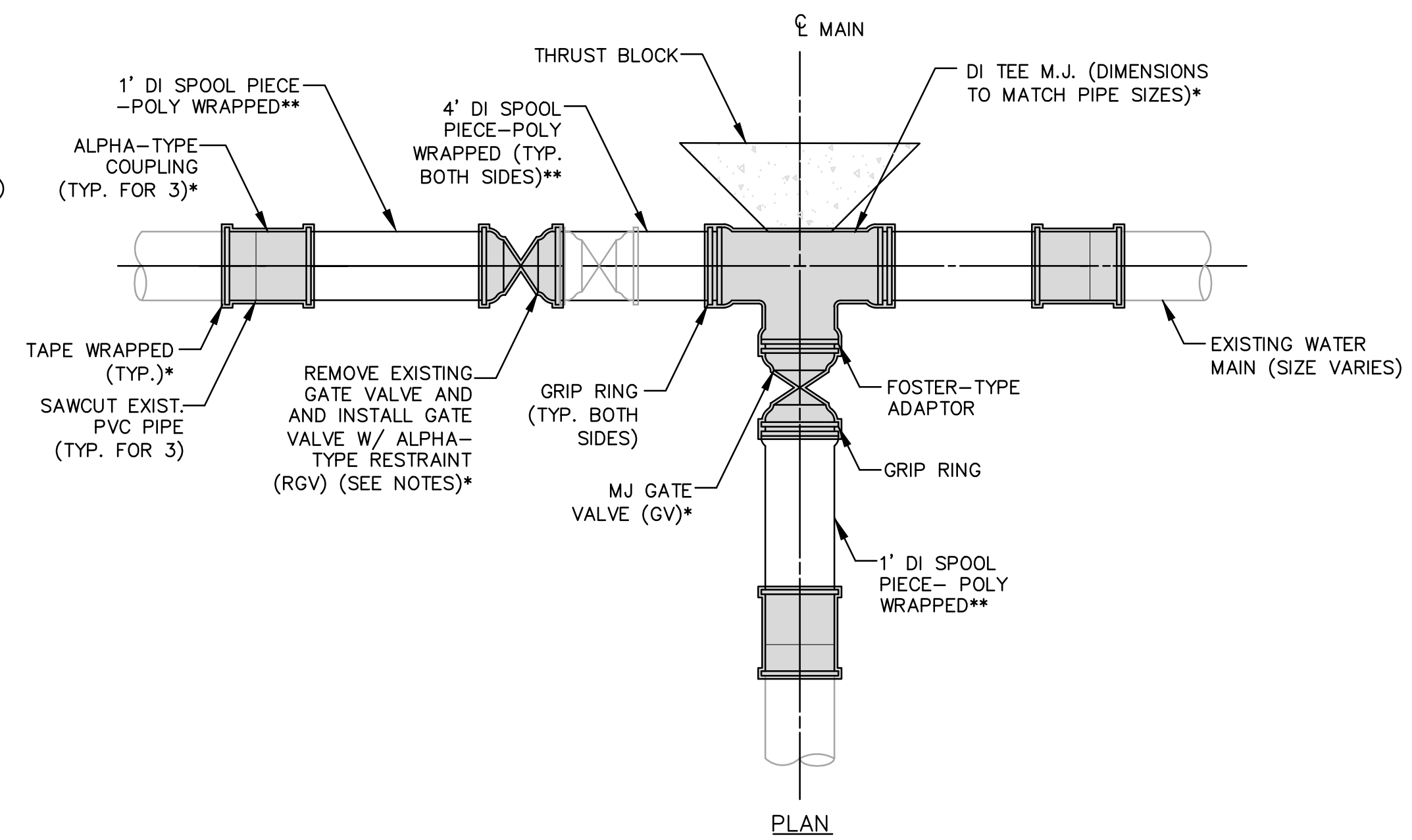
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PLUM ISLAND HYDRANT REPLACEMENT
DETAILS SHEET I

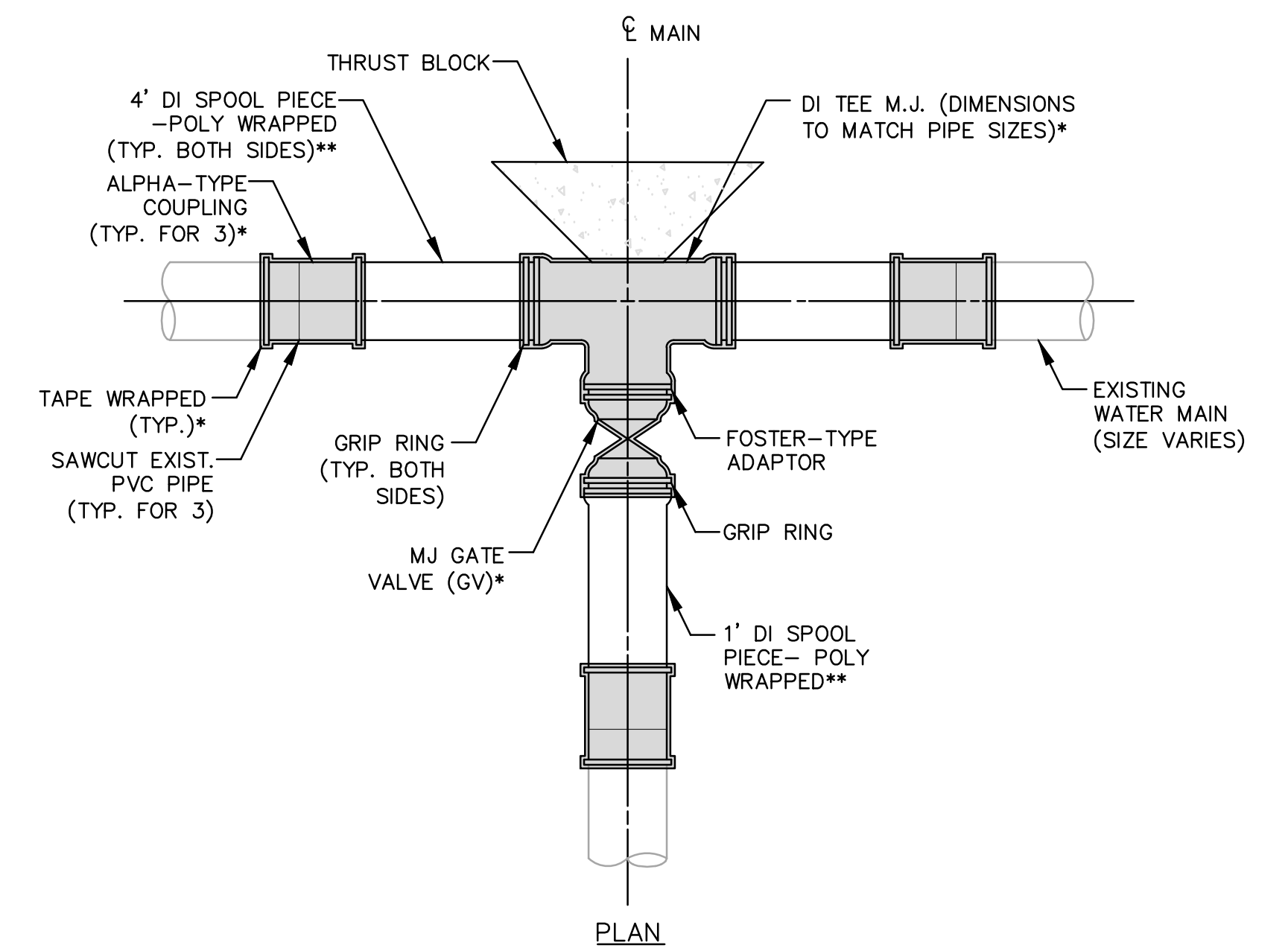
Sheet No.
58 OF 60
D-1



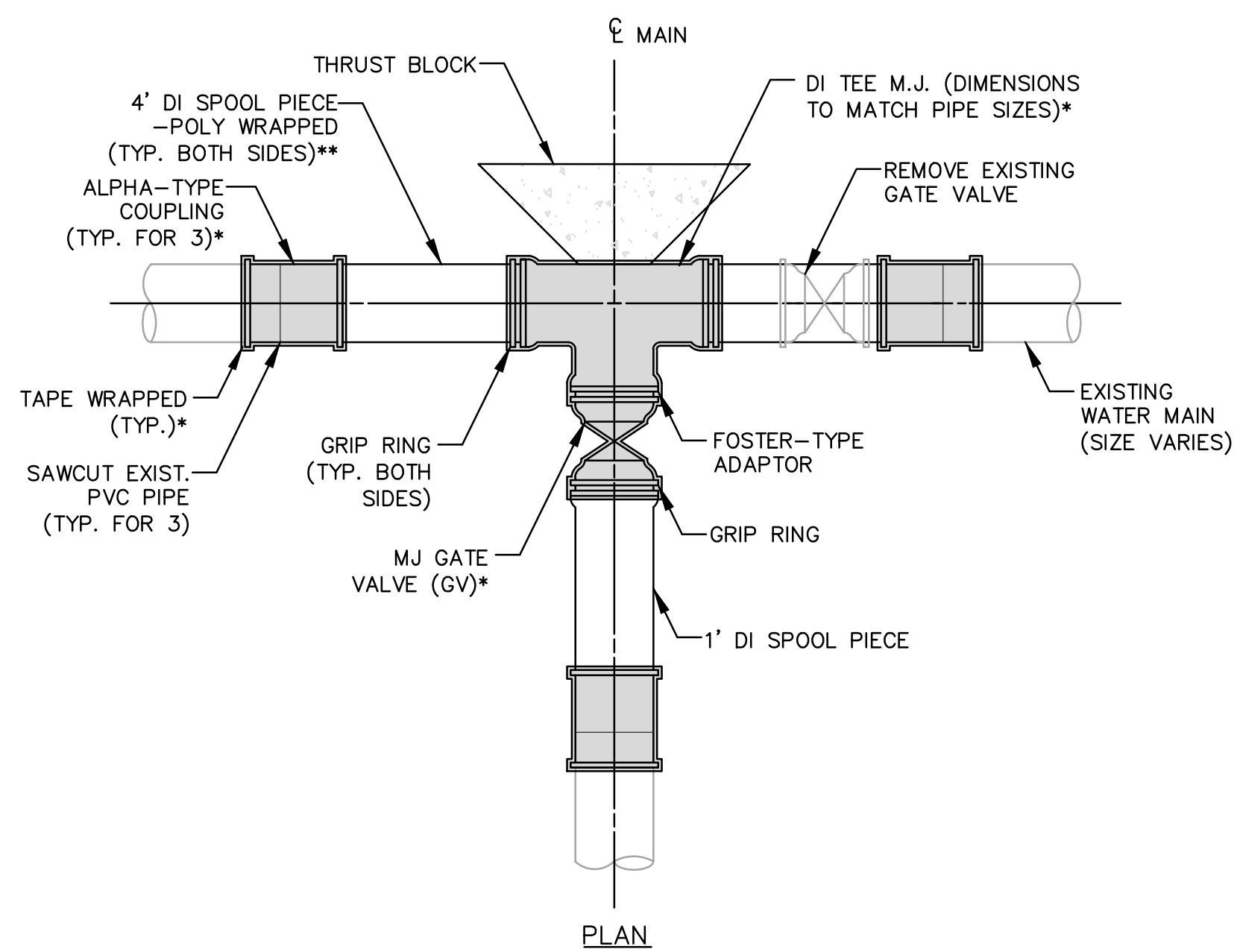
7 INLINE ISOLATION VALVE ASSEMBLY DETAIL
(ALL JOINTS RESTRAINED)
NTS



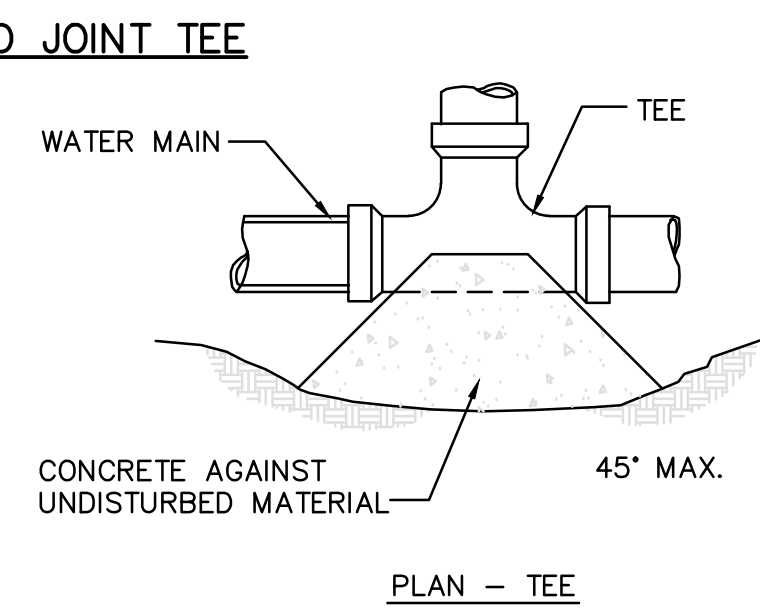
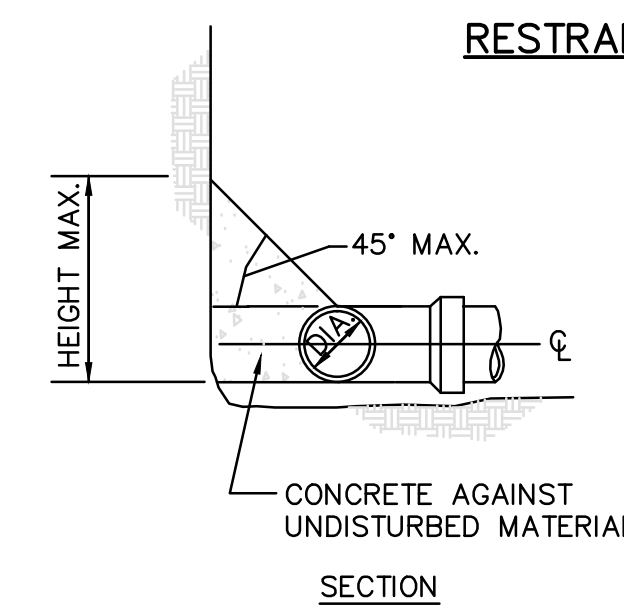
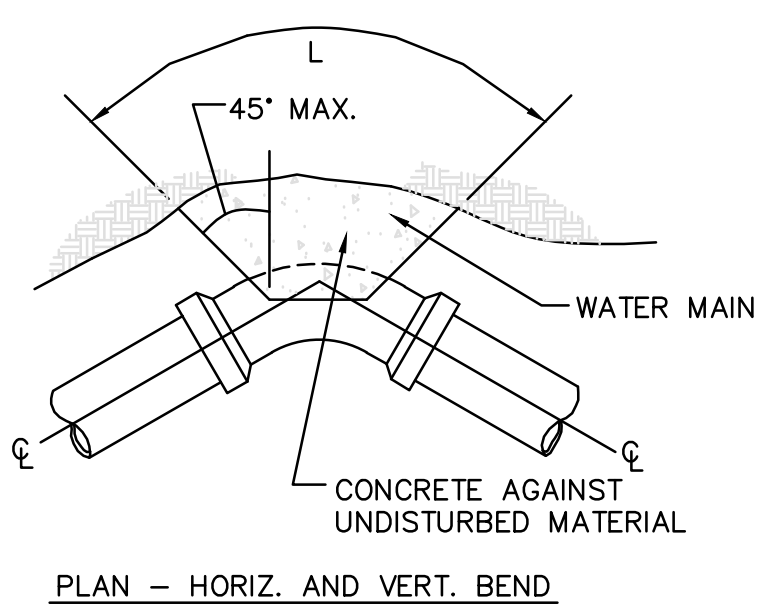
8 ISOLATION VALVE & TEE ASSEMBLY DETAIL
(EXISTING VALVE REPLACED)
(ALL JOINTS RESTRAINED AND DETAIL IS SIMILAR ON OTHER SIDE OF TEE)
NTS



9 ISOLATION VALVE & TEE ASSEMBLY DETAIL
(ALL JOINTS RESTRAINED)
NTS



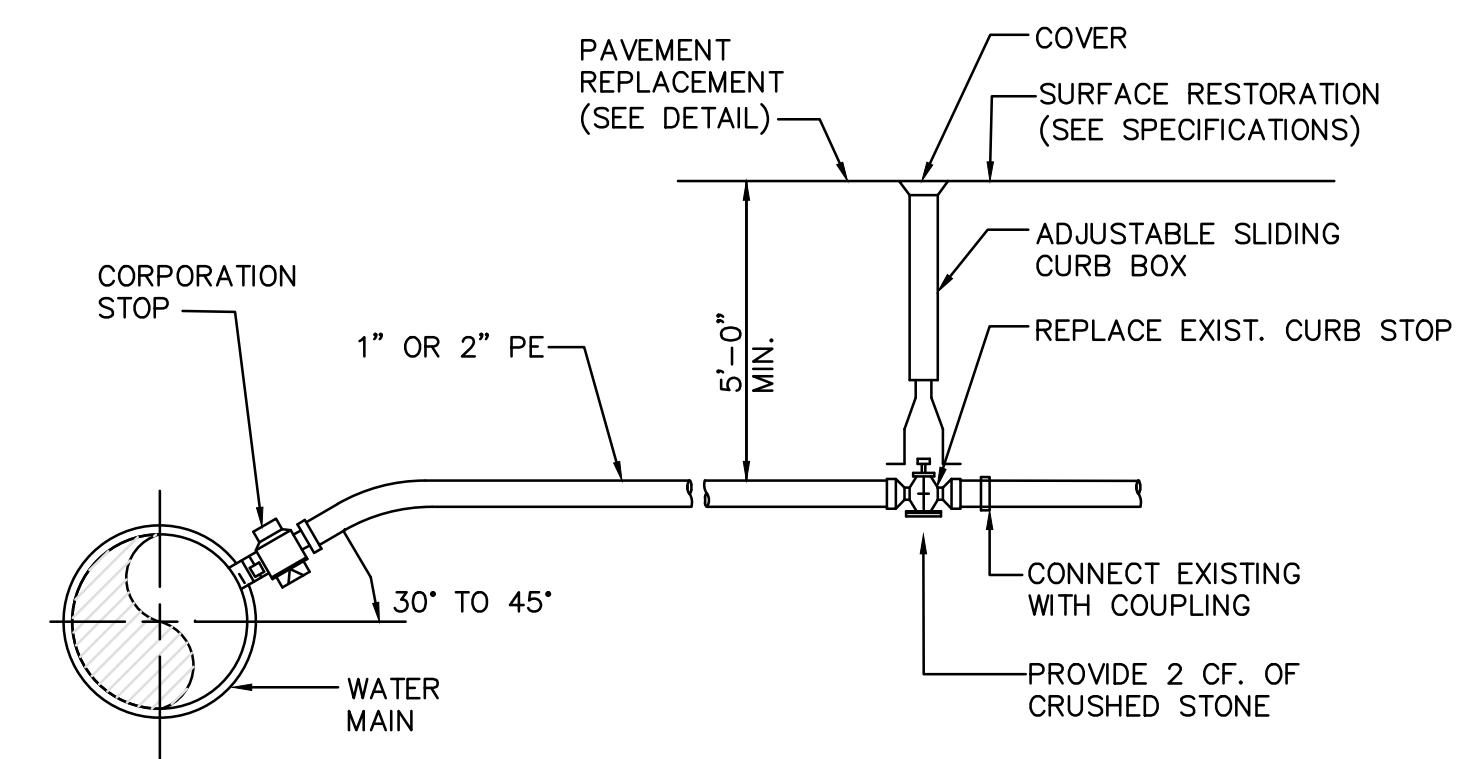
10 ISOLATION VALVE & TEE ASSEMBLY DETAIL
(EXISTING VALVE REMOVED)
(ALL JOINTS RESTRAINED)
NTS



FITTING	4" & LESS	6"	8"	10"	12"	16"
1/32 BEND (11 1/4')	2 S.F.	2 S.F.	2 S.F.	2 S.F.	3 S.F.	5 S.F.
1/16 BEND (22 1/2')	2 S.F.	2 S.F.	3 S.F.	3 S.F.	4 S.F.	5 S.F.
1/8 BEND (45')	2 S.F.	2 S.F.	3 S.F.	5 S.F.	7 S.F.	12 S.F.
1/4 BEND (90')	3 S.F.	3 S.F.	6 S.F.	9 S.F.	12 S.F.	21 S.F.
TEE / PLUG	2 S.F.	3 S.F.	4 S.F.	6 S.F.	9 S.F.	16 S.F.

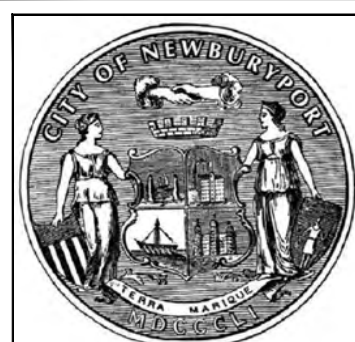
11 CONCRETE THRUST BLOCK DETAILS
NTS

- NOTE:
1. ALL ELBOWS, BENDS AND CAPS SHALL BE BRACED WITH CONCRETE THRUST BLOCKS. JOINTS SHALL NOT BE ENCASED IN CONCRETE.
 2. BEARING AREA IS AREA OF CONCRETE IN CONTACT WITH WALL OF TRENCH (H x L)
 3. HEIGHT AND LENGTH AS REQUIRED TO OBTAIN BEARING AREA SHOWN ON TABLE W/ H APPROX. 1/2 L.
 4. THRUST BLOCK SIZING BASED ON 150 PSI WATER PRESSURE AND 2000 PSI SOIL BEARING CAPACITY.



12 1" OR 2" PE WATER SERVICE CONNECTION DETAIL
NTS

*NOTE:
1. REFER TO NOTES ON SHEET D-1.



CITY OF NEWBURYPORT
DEPARTMENT OF PUBLIC SERVICES
16A PERRY WAY
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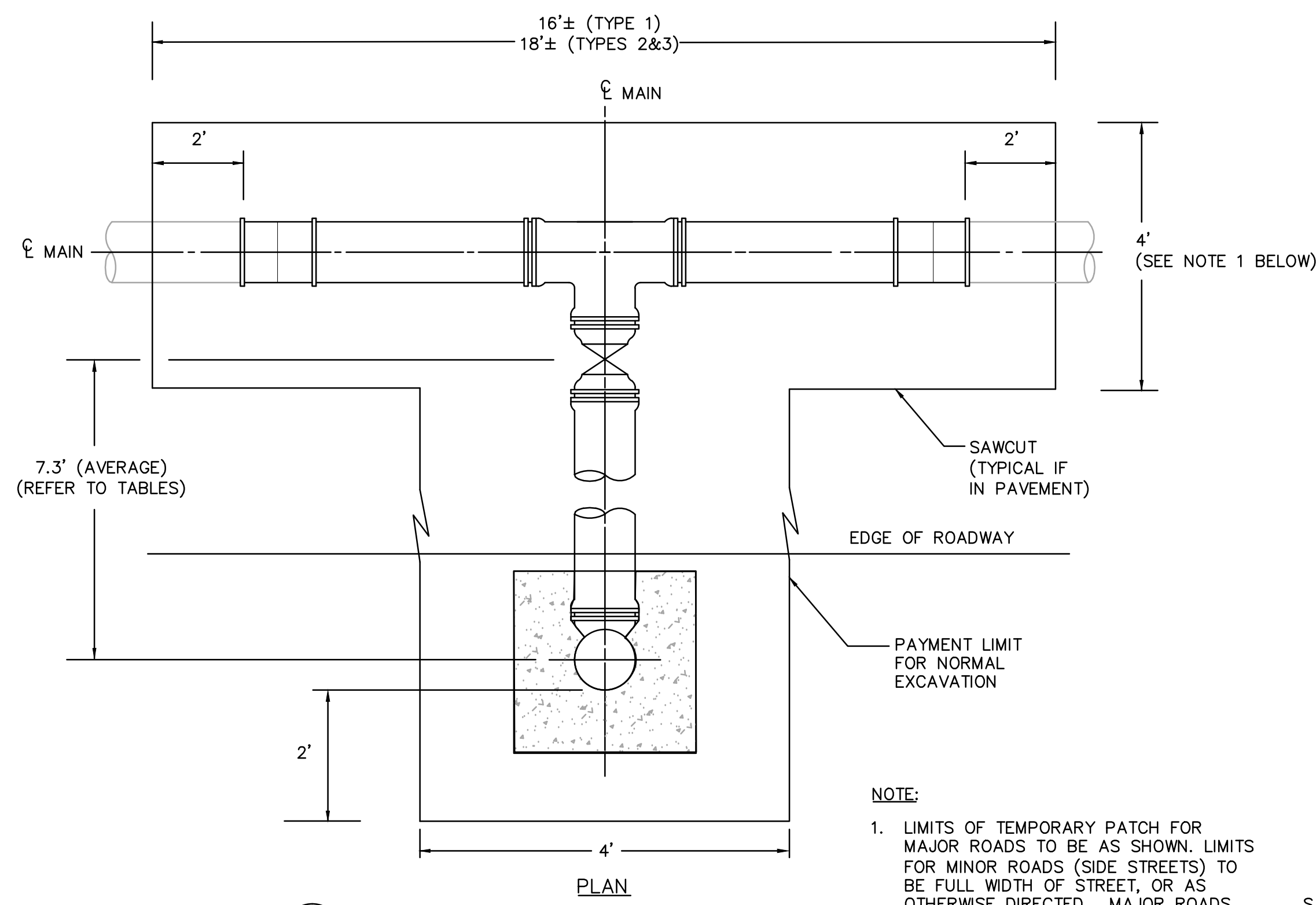
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Checked By:
J.E. WHITE
Date:
APRIL 7, 2017

SCALE: NTS

PLUM ISLAND HYDRANT REPLACEMENT
DETAILS SHEET II

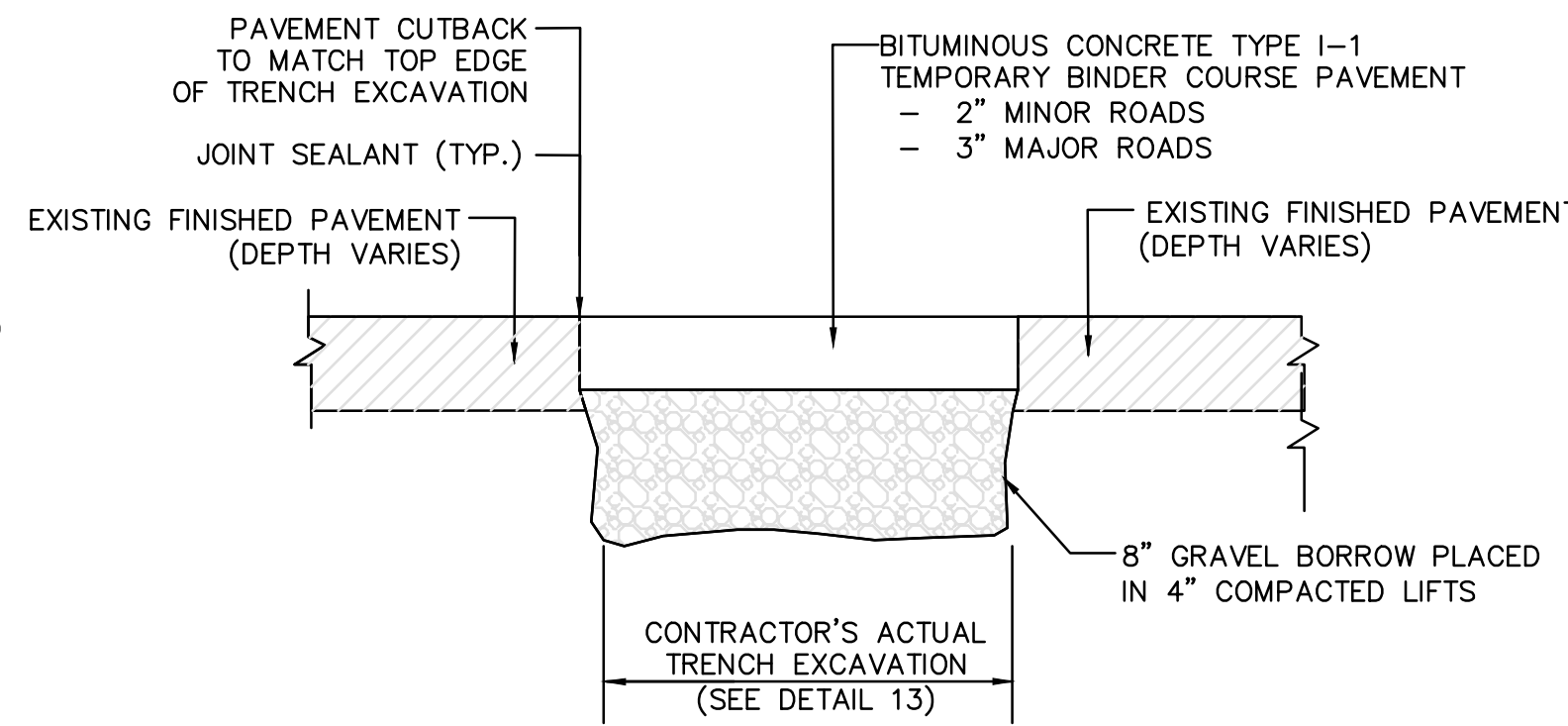
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D-2



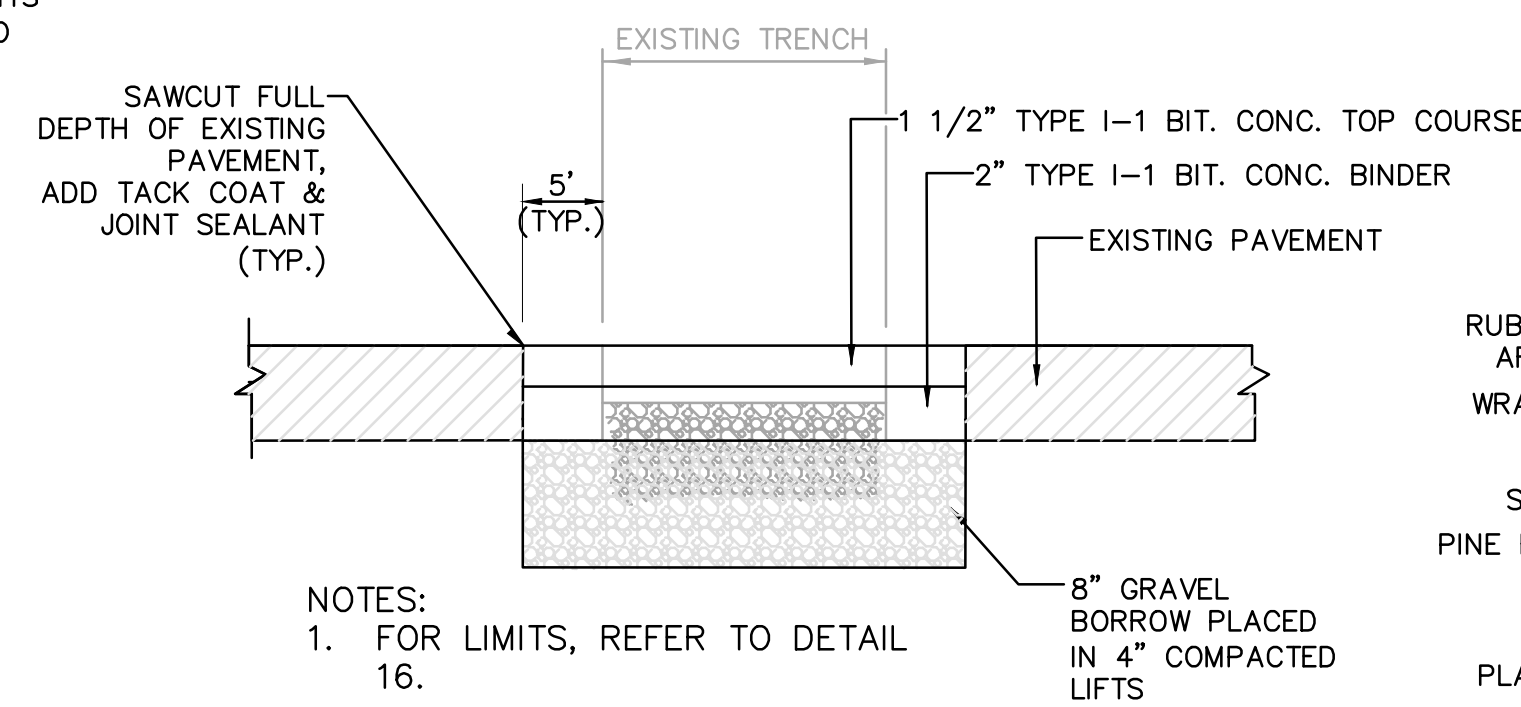
13 LIMITS OF EXCAVATION FOR ALL HYDRANT ASSEMBLY TYPES
N.T.S.

NOTE:
1. LIMITS OF TEMPORARY PATCH FOR MAJOR ROADS TO BE AS SHOWN. LIMITS FOR MINOR ROADS (SIDE STREETS) TO BE FULL WIDTH OF STREET, OR AS OTHERWISE DIRECTED. MAJOR ROADS ARE:
SUNSET DRIVE
OLD POINT ROAD
NORTHERN BLVD
SOUTHERN BLVD
PLUM ISLAND BLVD
PLUM ISLAND TURNPIKE



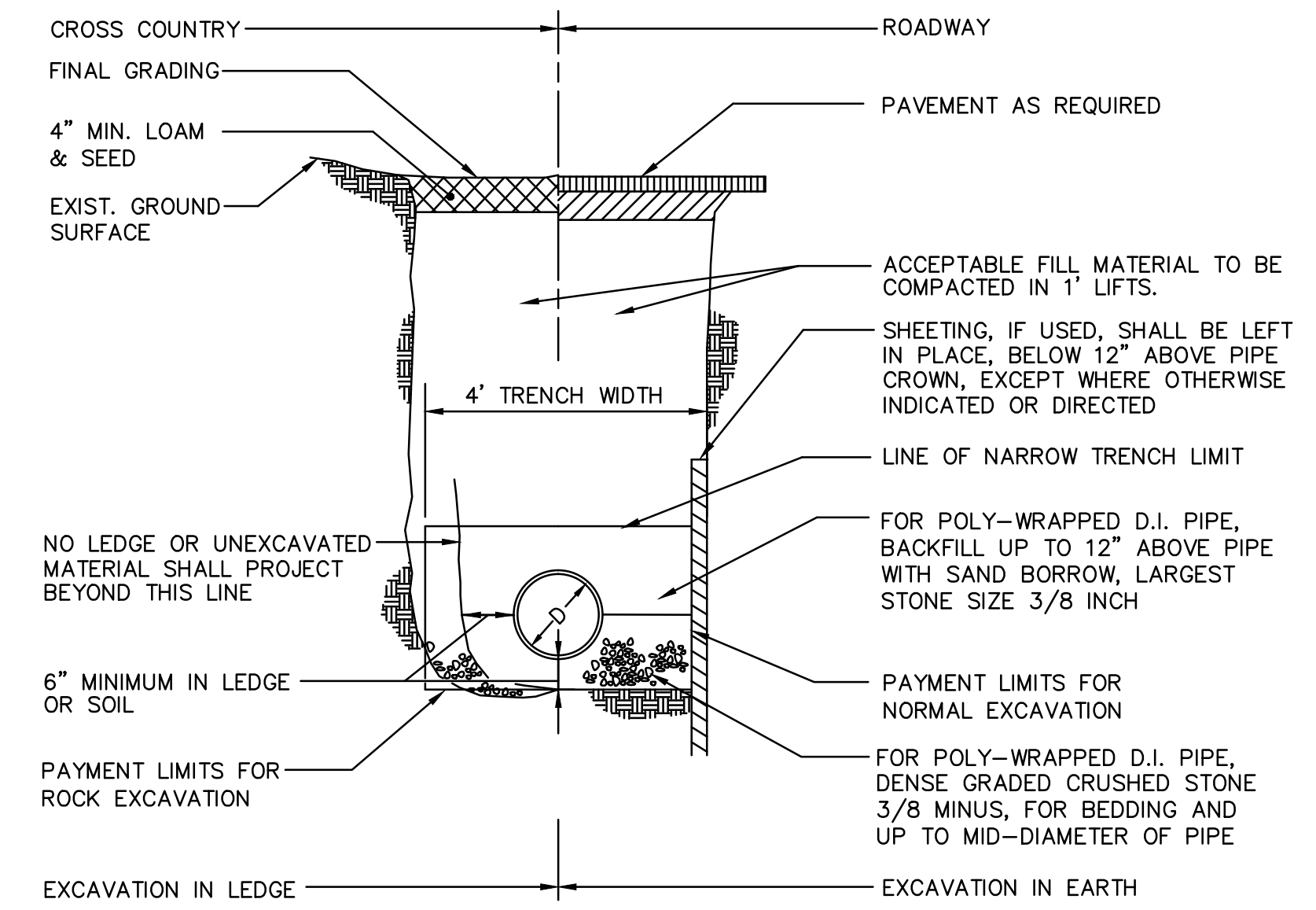
14 TEMPORARY TRENCH REPAIR
N.T.S.

NOTES:
TEMPORARY PAVEMENT PATCH SHALL REMAIN FOR ONE (1) YEAR BEFORE FINAL PAVING OR AS DIRECTED BY THE CITY. IF 1/2" OR GREATER SETTLING OCCURS, CONTRACTOR SHALL PROVIDE A LEVELING COURSE TO MATCH FINISH PAVEMENT.
MAJOR ROADS: SUNSET DRIVE, OLD POINT ROAD, NORTHERN BLVD, SOUTHERN BLVD, PLUM ISLAND BLVD, PLUM ISLAND TURNPIKE

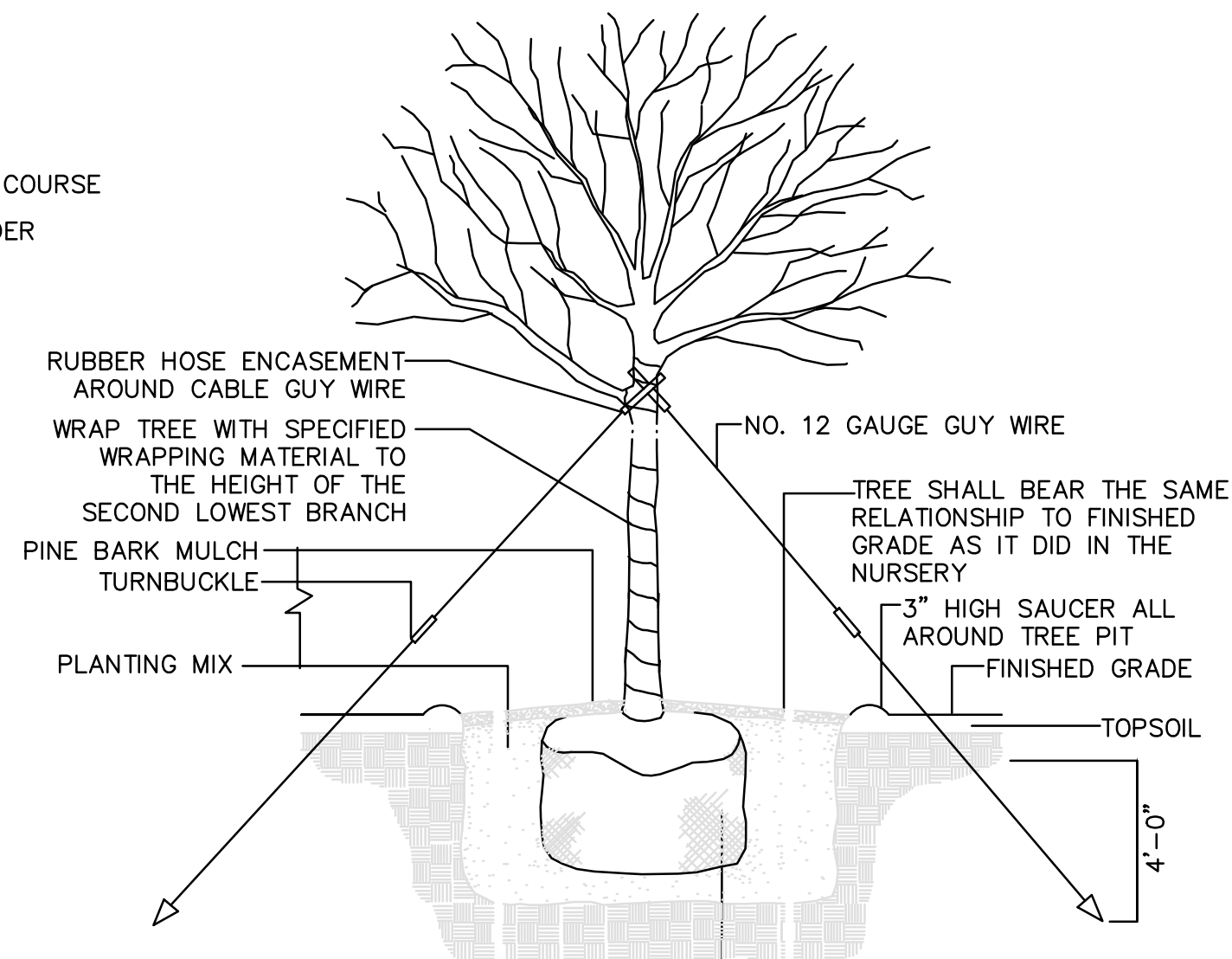


17 PERMANENT PAVEMENT REPAIR
N.T.S.

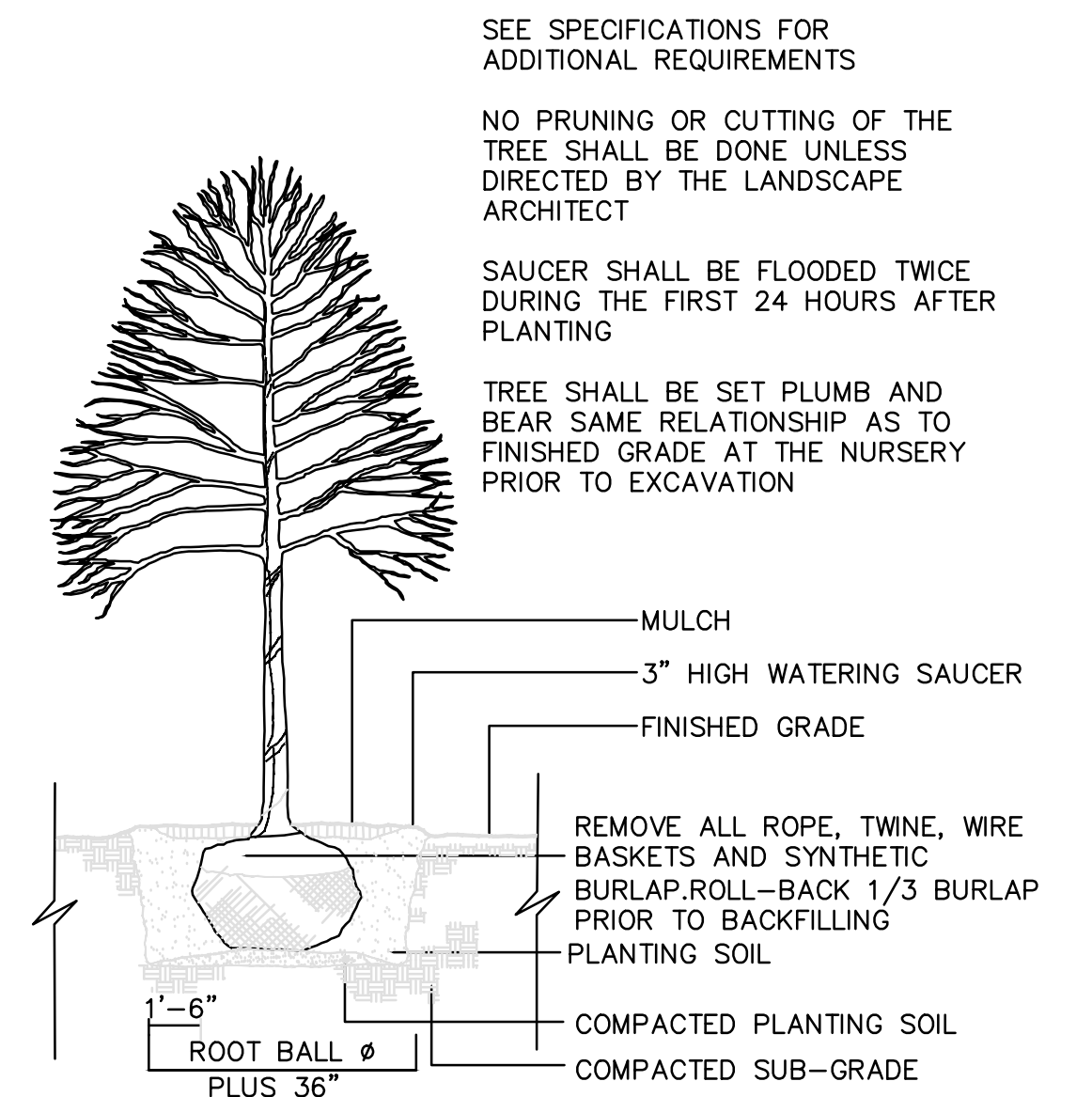
NOTES:
1. FOR LIMITS, REFER TO DETAIL 16.



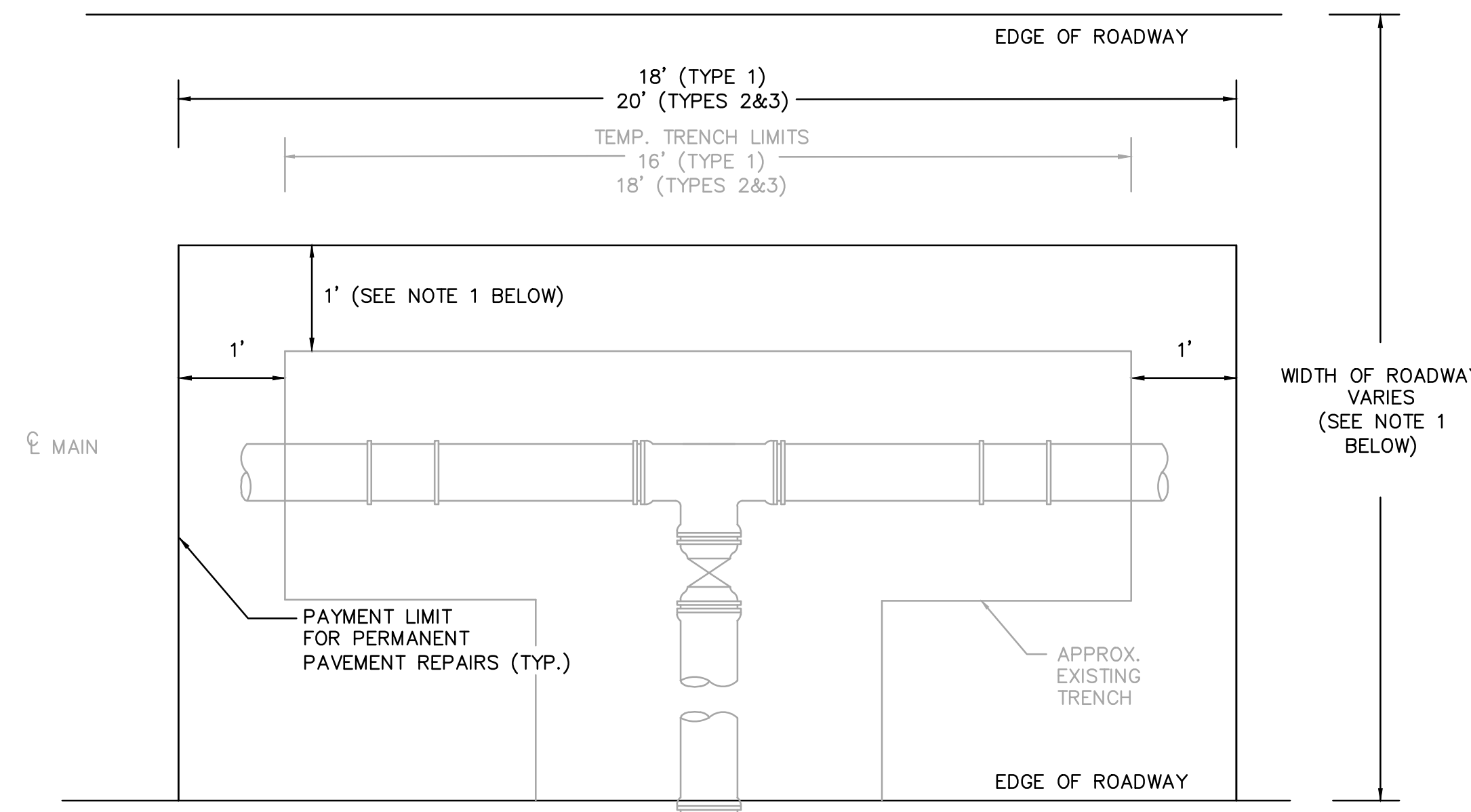
15 TYPICAL TRENCH SECTION
N.T.S.



18 TREE (GUY WIRE)
N.T.S.

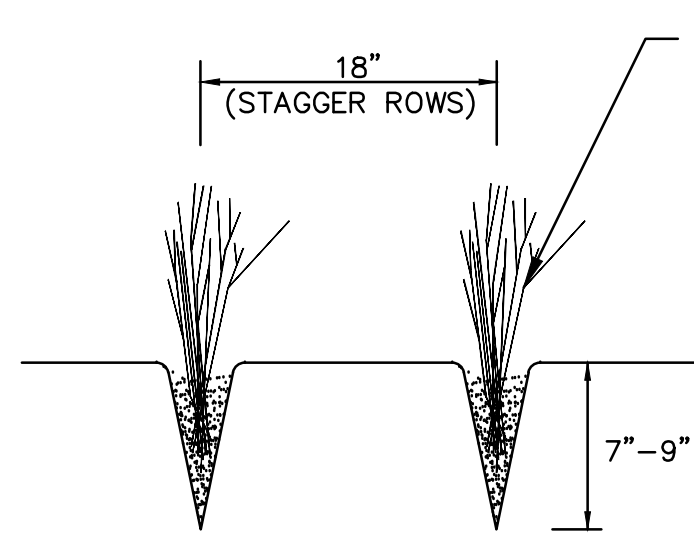


19 TREE
N.T.S.



16 TYPICAL LIMITS OF PERMANENT PAVEMENT REPAIR
N.T.S.

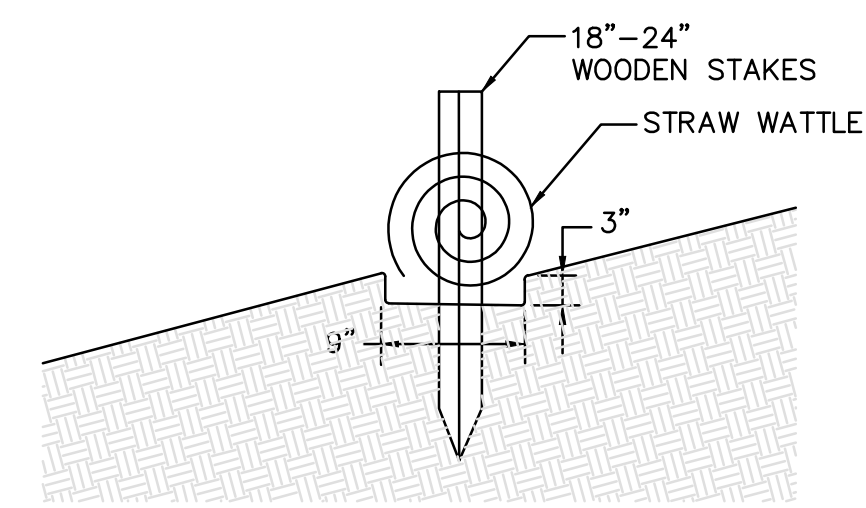
NOTE:
1. PERMANENT REPAIR FOR MAJOR ROADS TO BE AS SHOWN. REPAIR FOR MINOR ROADS (SIDE STREETS) TO BE FULL WIDTH OF STREET, UNLESS OTHERWISE DIRECTED. MAJOR ROADS ARE:
SUNSET DRIVE
OLD POINT ROAD
NORTHERN BLVD
SOUTHERN BLVD
PLUM ISLAND BLVD
PLUM ISLAND TURNPIKE



20 AMERICAN BEACH GRASS PLANTING DETAIL
N.T.S.

AMERICAN BEACH GRASS PLANTING NOTES:

1. PLANTS AND ROOTS MUST BE KEPT MOIST BEFORE AND DURING PLANTING.
2. PLANT SPACING SHALL BE 18" CENTER TO CENTER. TWO 18"-24" STEMS SHALL BE PLANTED IN A WHOLE 7"-9" DEEP. ROWS SHALL BE STAGGERED.
3. COMPACT THE SAND FIRMLY AROUND PLANTS
4. BEACH GRASS SHALL BE FERTILIZED. BROADCAST FERTILIZER OVER THE PLANTINGS AT A RATE EQUIVALENT TO 1.4 LBS. PER 1,000 SQ. FT. FERTILIZER SHALL BE APPLIED 30 DAYS AFTER THE PLANTING DATE, BUT NOT BEFORE APRIL 1ST.
5. SNOW FENCING SHALL BE PLACED AROUND NEW PLANTING FOR PROTECTION AGAINST VEHICULAR AND FOOT TRAFFIC



21 STRAW WATTLE EROSION CONTROL DETAIL
N.T.S.

STRAW WATTLE NOTES:

1. COMPACT SOIL FROM EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE.
2. STAKES SHALL BE DRIVEN THROUGH MIDDLE OF WATTLE LEAVING AT LEAST 2" TO 3" OF STAKE EXTENDING ABOVE WATTLE.
3. STAKES SHALL BE DRIVEN PERPENDICULAR TO SLOPE FACE.