

Town of Clayton
Manual Standard Specifications and Standard Details
Summary of Revisions
May 2, 2025

00950 - MEASUREMENT & PAYMENT (TOWN FUNDED PROJECTS)

- SECTION 1.2
V. RFID Marker Balls with iD Read/Write - **Remove Entirely**

02275 TRENCHING, BACKFILLING AND COMPACTION OF UTILITIES

- SECTION 2.2.3
Locator Wire - "To be installed when directed by the Engineering Director" - **Remove Entirely**

- SECTION 2.2.4
RFID Marker Ball with iD Ready/Write - **Remove Entirely**

- SECTION 3.4.1
11) - Installation of RFID Marker Balls - **Remove Entirely**

02510 - WATER DISTRIBUTION

- SECTION 2.3.4
RFID Marker Balls with iD Read/Write - **Remove Entirely**
ADD: Locator Wire #12 AWG blue insulated solid copper wire shall be installed above all water mains. Electrical conductivity along the pipe shall be continuous and uninterrupted between valve boxes. A sufficient excess length of wire shall be left in each valve box to provide at least a 6 to 12 inches length of wire above finished grade.

02530 - SANITARY SEWER

- SECTION 2.2.20
B. Locator Wire (for Force Mains) - "When ordered by the Engineering Director" - **Remove Entirely**

- SECTION 2.2.21
RFID Marker Balls with iD Read/Write - **Remove Entirely**

WATER & SEWER DESIGN

- SECTION 1.2 Water System Design Standards
 - 1.2.1 Distribution System
 - D. Piping Material Applications
 - 3. RFID Marker Balls - **Remove Entirely**
ADD: Locator Wire #12 AWG blue insulated solid copper wire shall be installed above all water mains. Electrical conductivity along the pipe shall be continuous and uninterrupted between valve boxes. A sufficient excess length of wire shall be left in each valve box to provide at least a 6 to 12 inches length of wire above finished grade.

BOOK 3 - TABLE OF DETAILS

- C01.04 RFID From Town of Clayton Marker Ball Locations Diagram (2 Sheets) - **Remove Entirely**

TOWN OF CLAYTON, NC PRE-APPROVED MATERIAL/PRODUCT LIST

- RFID Marker Balls with iD Read/Write - **Remove Entirely**

STANDARD DETAILS

- ❖ Detail 511.01, Water Main Pipe Laying Conditions, revised 11/6/2024: Note 2., See detail C01.04 for marker ball placement/location, **remove in its entirety.**
- ❖ Detail 511.01, Water Main Pipe Laying Conditions, revised 11/6/2024: The following update applies to All Water Main Pipe Laying Conditions- **Add #12 AWG Blue Insulated Solid Copper Locator Wire** shall be installed along the top of all pipe.
- ❖ Detail 519.01, 3/4" & 1" Water Meter Service Detail, revised 11/6/2024: **Update** minimum depth from 18" min for 3/4" service and 20" min for 1" service to 22" for 3/4" and 1" service
- ❖ Detail 519.01, 3/4" & 1" Water Meter Service, revised 11/6/2024: **Update** depth from lid to top of the setter from 7" min to 10" min.
- ❖ Detail 519.01, 3/4" & 1" Water Meter Service Detail, revised 11/24/2024: **Update** meter box opening from 18 3/8" min to 18 1/8".
- ❖ Detail 531.02, Sewer Force Main Pipe Laying conditions, revised 11/6/2024: **Note 1, See Detail C01.04 for RFID ball marker location requirements Remove entirety.** Update to **ADD #12 AWG Blue Insulated Solid Copper Locator Wire** shall be installed along the top of all pipe.
- ❖ Detail 531.03, Metallic Warning Tape Placement, revised 11/6/2024; **Remove** Note 1 in its entirety.
- ❖ Detail C01.04, RFID From Town of Clayton marker Ball Location Diagram, revised 11/6/2024: Detail has been **Voided and is not acceptable for use.**

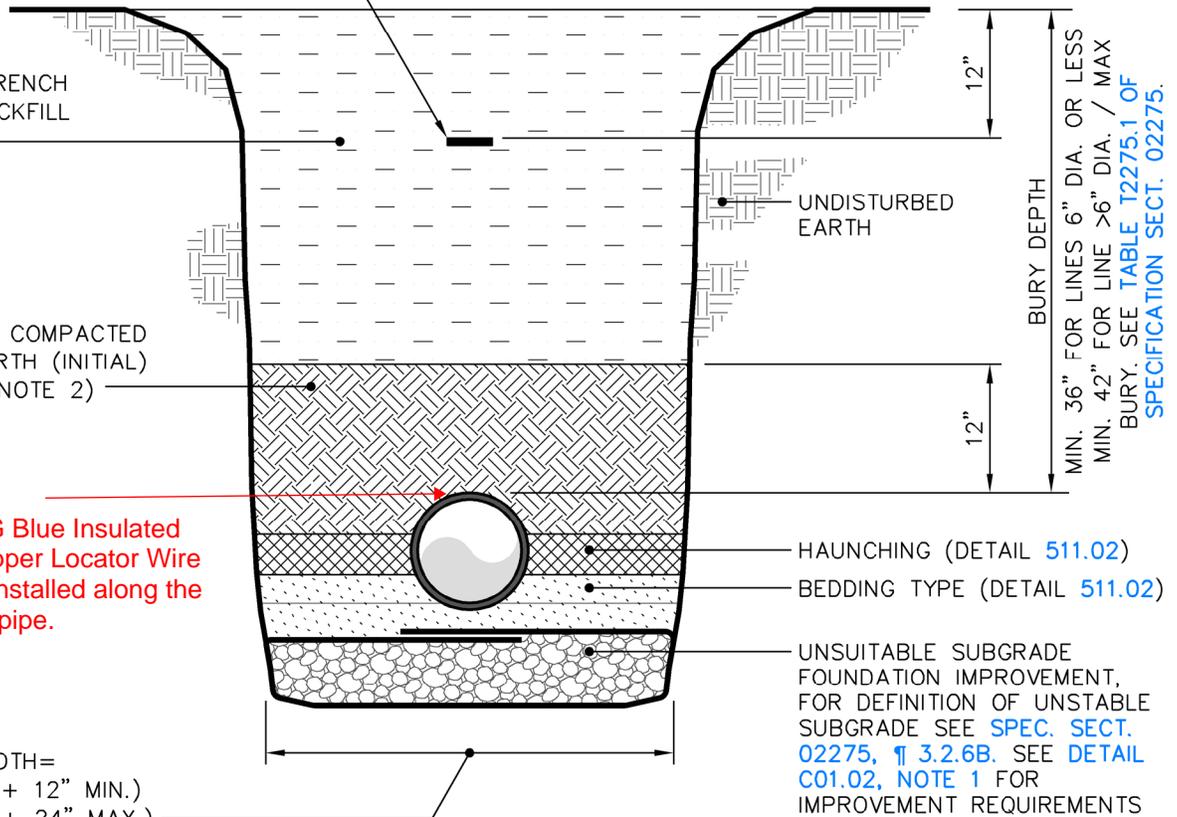
FOR ALL PIPE PLACE A METALLIC WARNING TAPE 12" TO 18" BELOW FINISHED GRADE

COMMON TRENCH (FINAL) BACKFILL (NOTE 2)

CAREFULLY COMPACTED SELECT EARTH (INITIAL) BACKFILL (NOTE 2)

#12 AWG Blue Insulated Solid Copper Locator Wire shall be installed along the top of all pipe.

TRENCH WIDTH= (PIPE O.D. + 12" MIN.) (PIPE O.D. + 24" MAX.)



BURY DEPTH
MIN. 36" FOR LINES 6" DIA. OR LESS
MIN. 42" FOR LINE >6" DIA. / MAX
BURY. SEE TABLE T2275.1 OF SPECIFICATION SECT. 02275.

HAUNCHING (DETAIL 511.02)
BEDDING TYPE (DETAIL 511.02)
UNSUITABLE SUBGRADE FOUNDATION IMPROVEMENT, FOR DEFINITION OF UNSTABLE SUBGRADE SEE SPEC. SECT. 02275, ¶ 3.2.6B. SEE DETAIL C01.02, NOTE 1 FOR IMPROVEMENT REQUIREMENTS

NOTES:

1. See specifications Section 02275, Part 2 - Products for composition of Select Earth Backfill and Common Trench Backfill.
2. ~~See detail C01.04 for marker ball placement / locations.~~



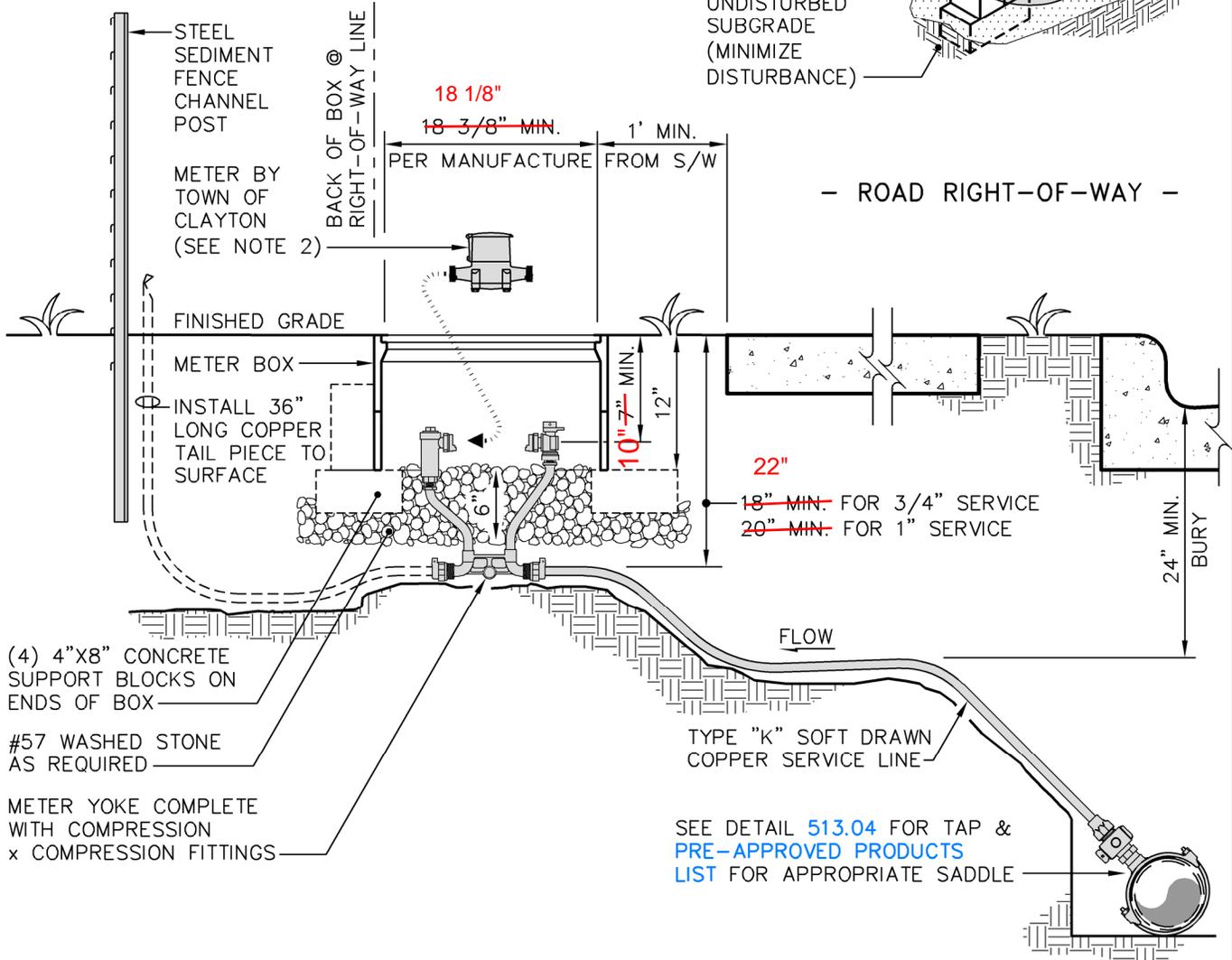
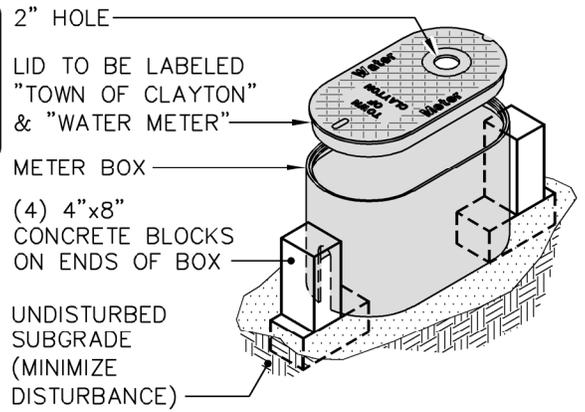
TOWN of CLAYTON

USE WITH THE TOWN of CLAYTON STANDARD SPECIFICATIONS ONLY

WATER MAIN PIPE LAYING CONDITIONS

SCALE: Not To Scale	DETAIL # 2511.01
REVISION DATE: April, 2024	SHEET #: 1 of 1

PART	MANUFACTURER MODEL / Cat. No.
METER BOX	SEE PRE-APPROVED PRODUCT LIST FOR MANUFACTURER AND MODEL NUMBER
METER	INSTALLED BY CLAYTON UPON PAYMENT OF FEES
TAPPING	SEE DETAIL 513.04



NOTES:

1. Contractor to place meter box in non-traffic area only.
2. Meter must be level across meter connections.
3. No service taps to be installed on hydrant legs.
4. Min 5' easement required on all sides of meter.
5. Town Maintenance ends at Right-of-Way.
6. All fittings and apparatus to be lead free.



TOWN of CLAYTON

USE WITH THE TOWN of CLAYTON STANDARD SPECIFICATIONS ONLY

3/4" & 1" WATER METER SERVICE DETAIL

SCALE: Not To Scale	DETAIL # 2519.01
REVISION DATE: Oct., 2022	SHEET #: 1 of 2

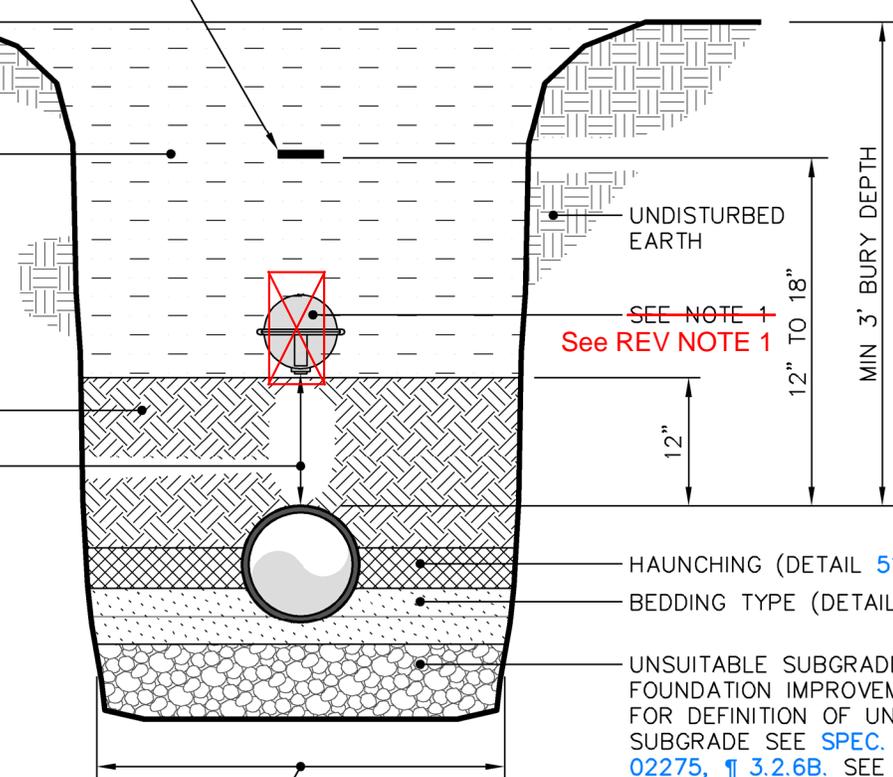
FOR ALL PIPE PLACE 3" WIDE
METALLIC WARNING TAPE 12"
TO 18" ABOVE PIPE

COMMON TRENCH
(FINAL) BACKFILL
(NOTE 2)

CAREFULLY COMPACTED
SELECT EARTH (INITIAL)
BACKFILL (NOTE 2)

NO CLOSER THAN 4"

TRENCH WIDTH=
(PIPE O.D. + 12" MIN.)
(PIPE O.D. + 24" MAX.)



~~SEE NOTE 1~~
See REV NOTE 1

UNDISTURBED EARTH

12"

12" TO 18"

MIN 3' BURY DEPTH

HAUNCHING (DETAIL 511.02)

BEDDING TYPE (DETAIL 511.02)

UNSUITABLE SUBGRADE
FOUNDATION IMPROVEMENT,
FOR DEFINITION OF UNSTABLE
SUBGRADE SEE SPEC. SECT.
02275, ¶ 3.2.6B. SEE DETAIL
C01.02, NOTE 1 FOR
IMPROVEMENT REQUIREMENTS

- NOTES:**
- 1. ~~See Detail C01.04 for RFID ball marker location requirements.~~
 - 2. See specifications Section 02275, Part 2 - PRODUCTS for composition of Select Earth Backfill and Common Trench Backfill.

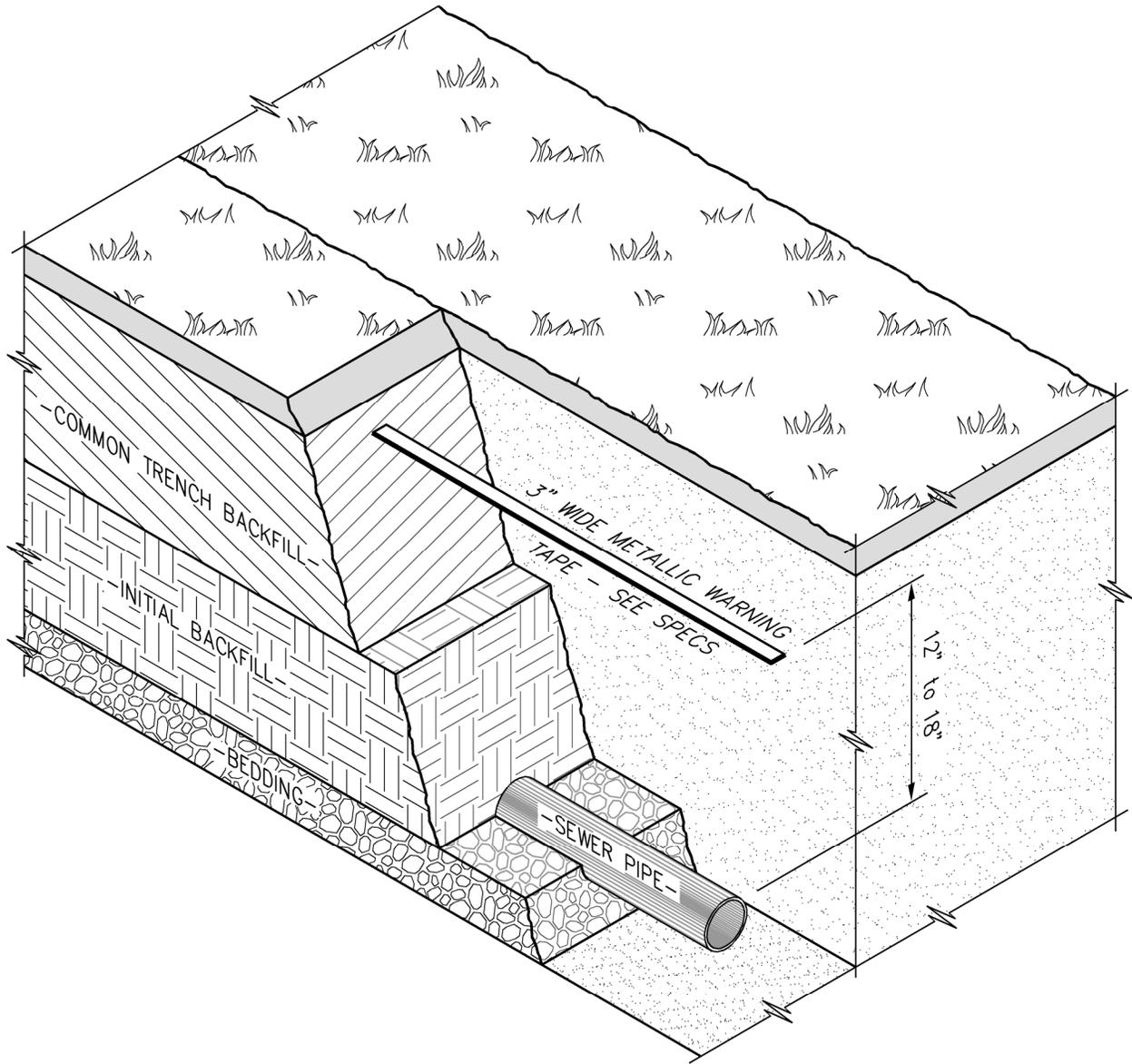


TOWN of CLAYTON

USE WITH THE TOWN of CLAYTON STANDARD SPECIFICATIONS ONLY

**SEWER FORCE MAIN PIPE
LAYING CONDITIONS**

SCALE: Not To Scale	DETAIL # 2531.02
REVISION DATE: Oct., 2022	SHEET #: 1 of 1



#12 AWG Blue Insulated Solid Copper Locator Wire shall be installed along the top of all pipe.

NOTES:

1. See [Detail 531.01](#) and, where applicable ~~as shown on [Detail C01.04](#), for RFID marker ball location guide.~~
2. See [pre-approved product list](#) for approved products.

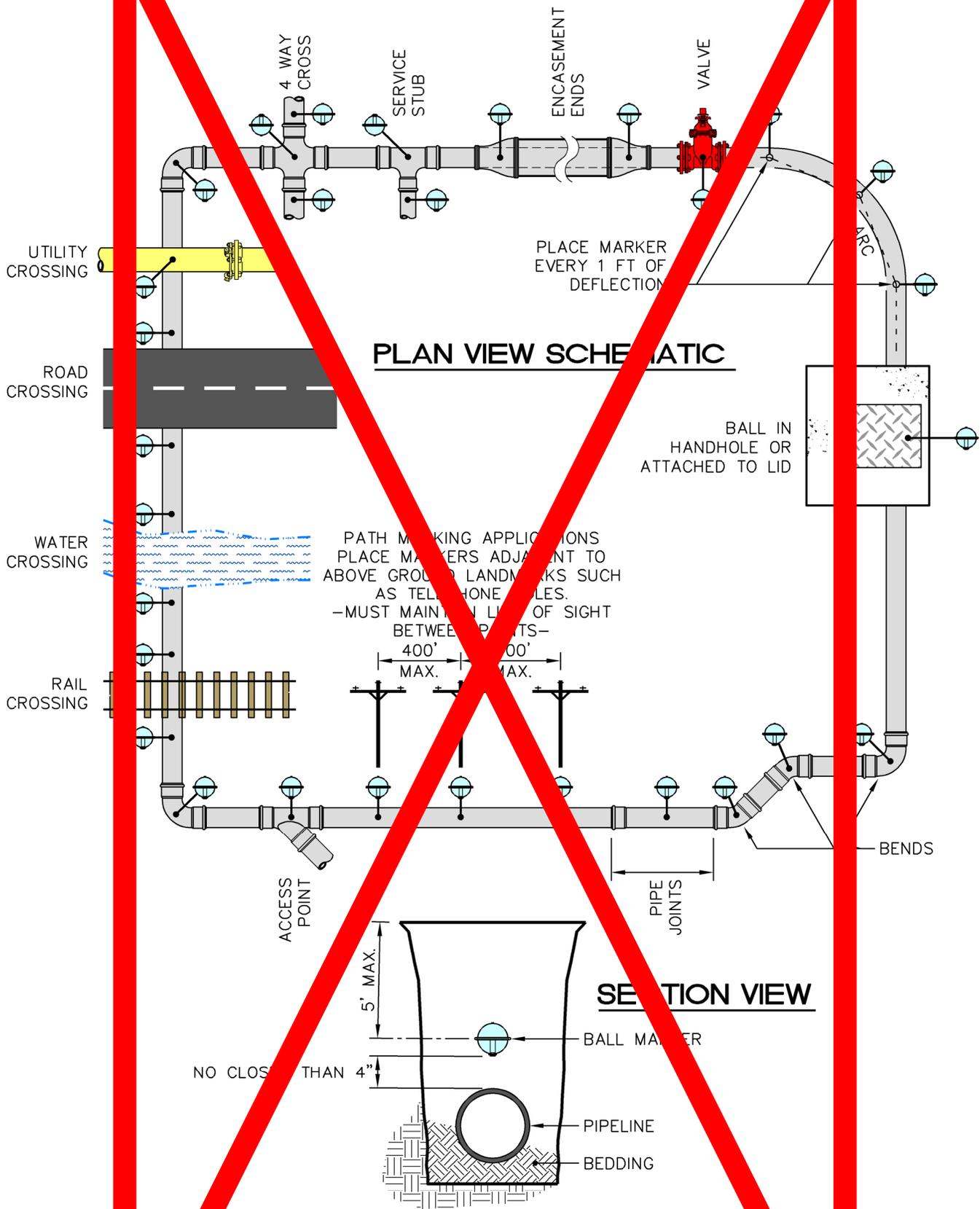


TOWN of CLAYTON

USE WITH THE TOWN of CLAYTON STANDARD SPECIFICATIONS ONLY

**METALLIC WARNING TAPE
PLACEMENT**

SCALE: Not To Scale	DETAIL # 2531.03
REVISION DATE: Oct., 2022	SHEET #: 1 of 1



TOWN of CLAYTON

USE WITH THE TOWN of CLAYTON STANDARD SPECIFICATIONS

RFID FROM TOWN OF CLAYTON MARKER BALL LOCATIONS DIAGRAM

SCALE: As Shown	DETAIL # 2 CO1.04
DATE: 2010	SHEET #: 1 of 2

