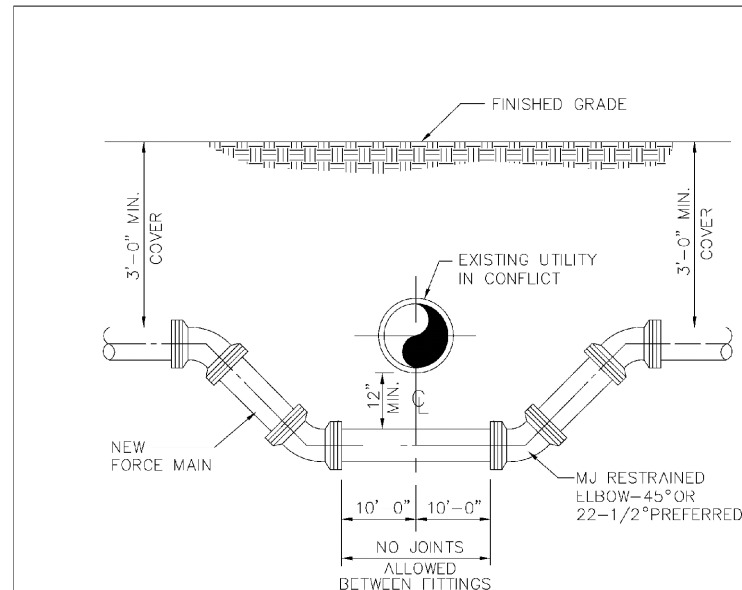


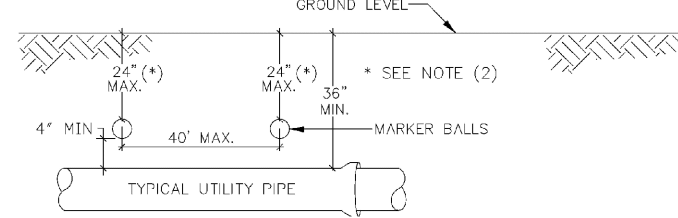
DRC
PZ24-12000003
10/02/2024



NOTES:
WHEN CONDITIONS PERMIT, PIPE DEFLECTION MAY BE USED
INSTEAD OF BENDS TO OBTAIN THE MINIMUM CLEARANCE.
FACTORY OFFSETS MAY BE USED.

TYPICAL CONFLICT DETAIL

| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|-----------------------------------|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | TYPICAL CONFLICT (SEWER) |
| S.S. JUNE 2022 | CITY OF POMPAÑO BEACH | | |
| S.S. 06/23/22 | | | |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 206-1 |

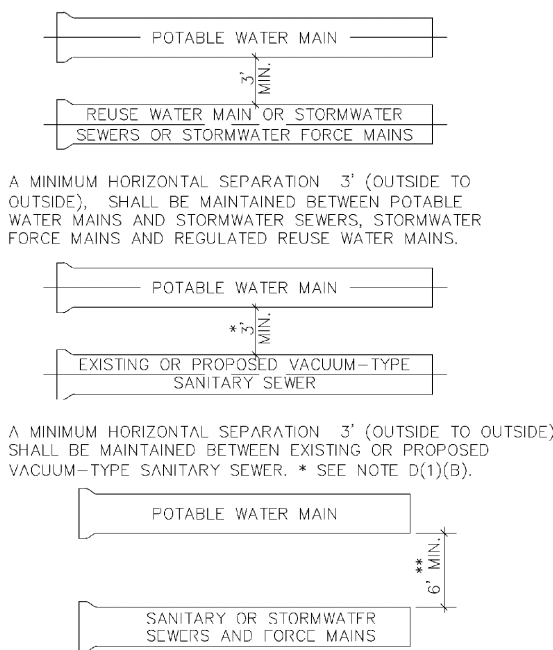


GENERAL NOTES:

- ALL UTILITY PIPE SHALL BE INSTALLED WITH 4" MARKER BALLS PLACED EVERY 40' AND A LIGHT FITTING FOR IDENTIFICATION AND MARKING PURPOSES. BUILT UP 200# 1/2" PIPE AT A MINIMUM DEPTH OF 24 INCHES OR AS APPROVED BY THE OWNER. IT SHALL BE COLOR CODED AND MARKED AS FOLLOWS:
SEWER SYSTEM
A. COLOR: GREEN
B. FITTING: SANITARY SEWER
C. FREQUENCY OF MARKER BALLS SHALL BE 121.6 KHZ.
D. THE MARKER BALLS CAN BE BORED IN ANY ORIENTATION.
E. THE MARKER BALLS SHALL BE IDENTIFIED BY STANDARD METAL IDENTIFICATION EQUIPMENT AND SHALL BE MANUFACTURED BY TEMPO OR 3M LOGATOR SYSTEM OR EQUIVALENT (FREQUENCY 121.6 KHZ.)
- FOR LARGE DIAMETER PIPE INSTALLED AT DEPTHS BELOW 4'-0" MARKER BALLS SHALL BE PLACED AT A MINIMUM DEPTH OF 4'-0" BELOW GRADE.

SEWER PIPE IDENTIFICATION

| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|-----------------------------------|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | SEWER PIPE IDENTIFICATION |
| S.S. 06/23/22 | CITY OF POMPAÑO BEACH | | |
| S.S. 06/23/22 | | | |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 207-1 |

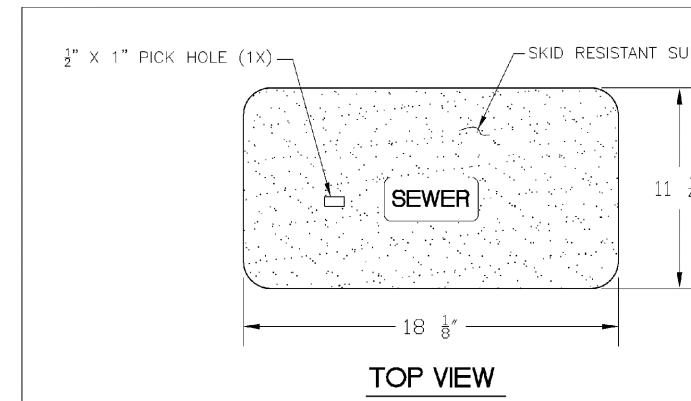


A MINIMUM HORIZONTAL SEPARATION OF 3' (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS AND STORMWATER SEWERS, STORMWATER FORCE MAINS AND REGULATED REUSE WATER MAINS.

A MINIMUM HORIZONTAL SEPARATION OF 3' (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS AND REUSE WATER MAINS OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAIN OR NOT REGULATED REUSE WATER MAIN. ** SEE NOTE D(1)(B).

MINIMUM HORIZONTAL SEPARATION REQUIREMENTS FOR POTABLE WATER, REUSE, STORMWATER AND SEWER LINES

| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|---|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | MIN. HORIZONTAL SEPARATION FOR SANITARY SEWER |
| S.S. 06/23/22 | CITY OF POMPAÑO BEACH | | |
| S.S. 06/23/22 | | | |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 209-1 |



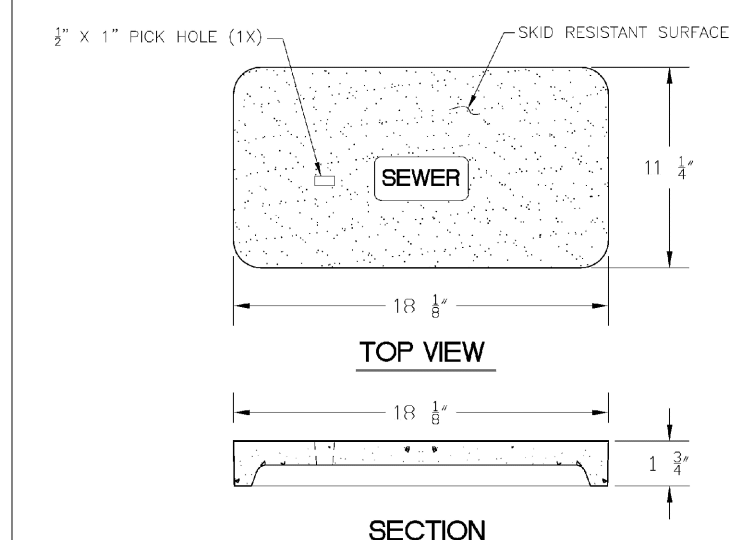
NOTE

- MATERIAL: FIBERGLASS REINFORCED POLYMER CONCRETE & FIBERGLASS REINFORCED POLYMER
- CO. OR. GREEN
- LOAD RATING: AS (ASTM C857)
- LOAD: SEWER

SEWER BOX AND COVER

| PRODUCT RATING - NON TRAFFIC | | | |
|------------------------------|---------------|------------------------------|------------|
| LOAD DESIGNATION | DESCRIPTION | DESIGN LOADS (LIVE & IMPACT) | TESTING |
| AASHTO H10 | TRUCK TRAFFIC | 8,000 | 22,568 (4) |
| | | 10,400 | 282 |

| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|-----------------------------------|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | SEWER BOX AND COVER |
| S.S. JUNE 2022 | CITY OF POMPAÑO BEACH | | CDR Part No. WB03-11B-12 |
| S.S. 06/23/22 | | | CDR Part No. WC02-11B-02 |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 210-1 |



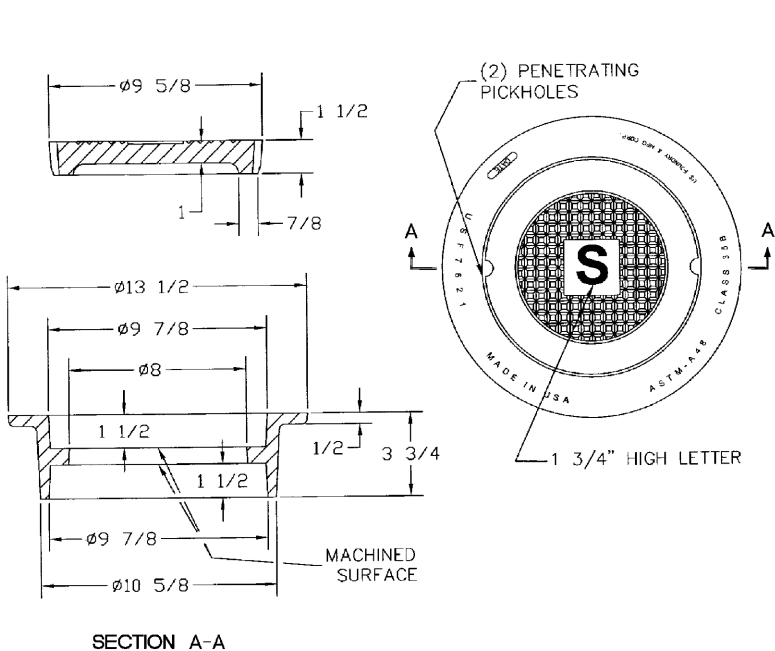
NOTE

- MATERIAL: FIBERGLASS REINFORCED POLYMER CONCRETE & FIBERGLASS REINFORCED POLYMER
- CO. OR. GREEN
- LOAD RATING: AS (ASTM C857)
- LOAD: SEWER

SEWER BOX AND COVER

| PRODUCT RATING - TRAFFIC | | | |
|--------------------------|----------------------|------------------------------|------------|
| LOAD DESIGNATION | DESCRIPTION | DESIGN LOADS (LIVE & IMPACT) | TESTING |
| AASHTO H15 | MEDIUM TRUCK TRAFFIC | 12,000 | 27,000 (5) |
| | | 15,600 | 225 |

| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|-----------------------------------|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | SEWER BOX AND COVER |
| S.S. JUNE 2022 | CITY OF POMPAÑO BEACH | | CDR Part No. WB03-11B-12 |
| S.S. 06/23/22 | | | CDR Part No. WC02-11B-02 |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 210-2 |

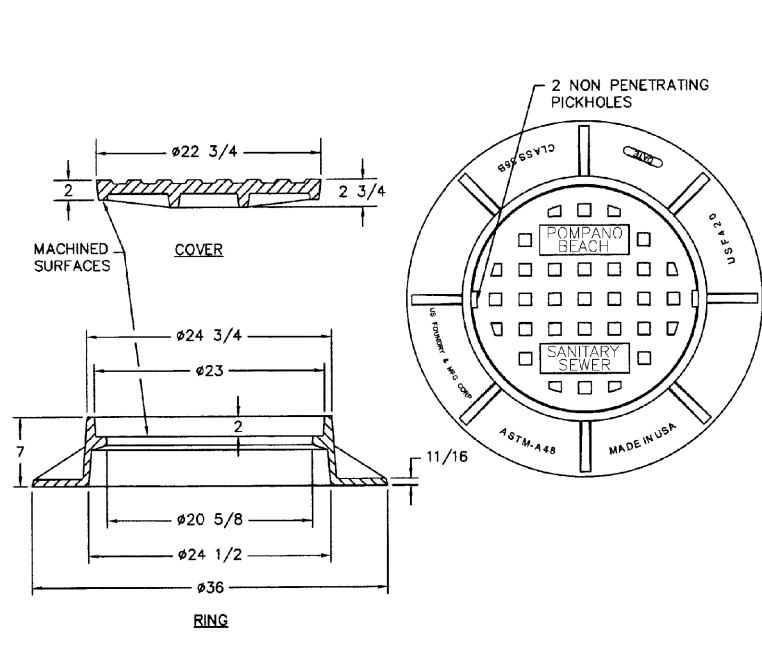


NOTE

- MATERIAL: Gray Cast Iron
ASTM-A48 Class 35B

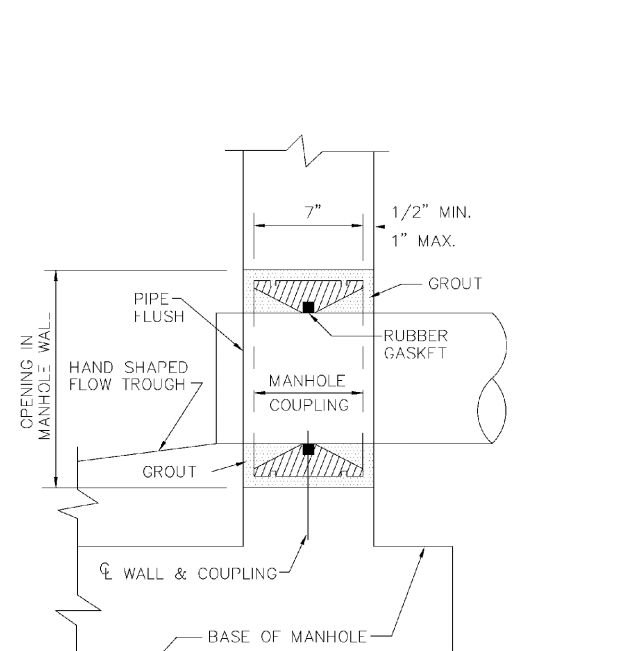
SEWER BOX AND COVER - HEAVY TRAFFIC

| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|-----------------------------------|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | SEWER BOX AND COVER |
| S.S. JUNE 2022 | CITY OF POMPAÑO BEACH | | HEAVY TRAFFIC |
| S.S. 06/23/22 | | | |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 210-3 |



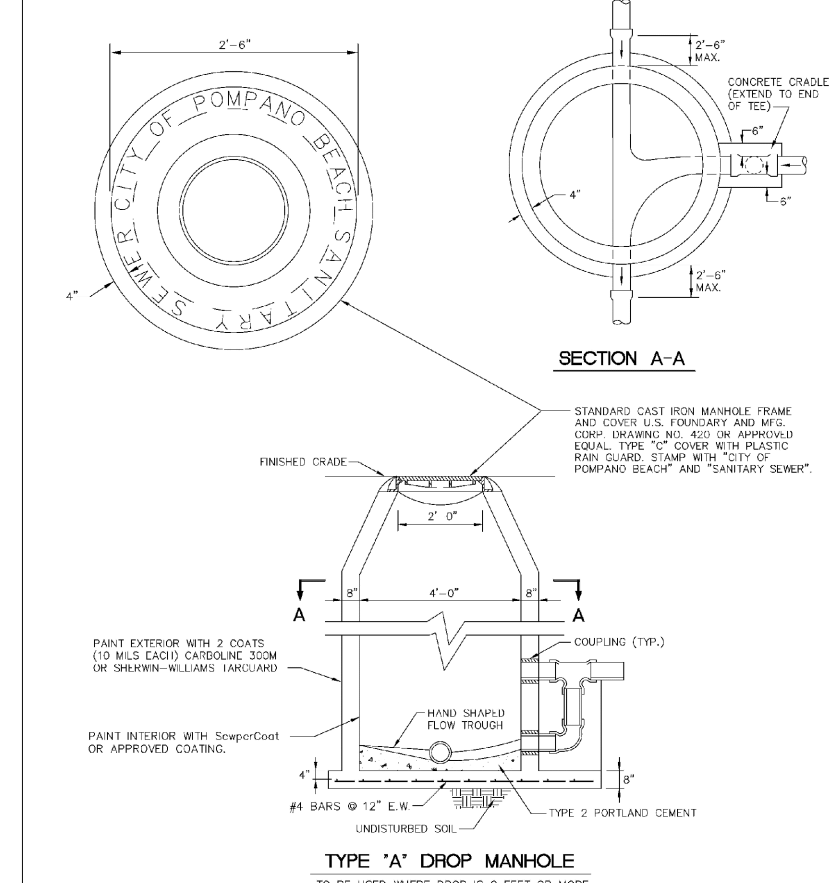
TRAFFIC RATED FRAME & COVER

| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|-----------------------------------|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | TRAFFIC RATED SEWER COVER |
| S.S. JUNE 2022 | CITY OF POMPAÑO BEACH | | |
| S.S. 06/23/22 | | | |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 211-1 |



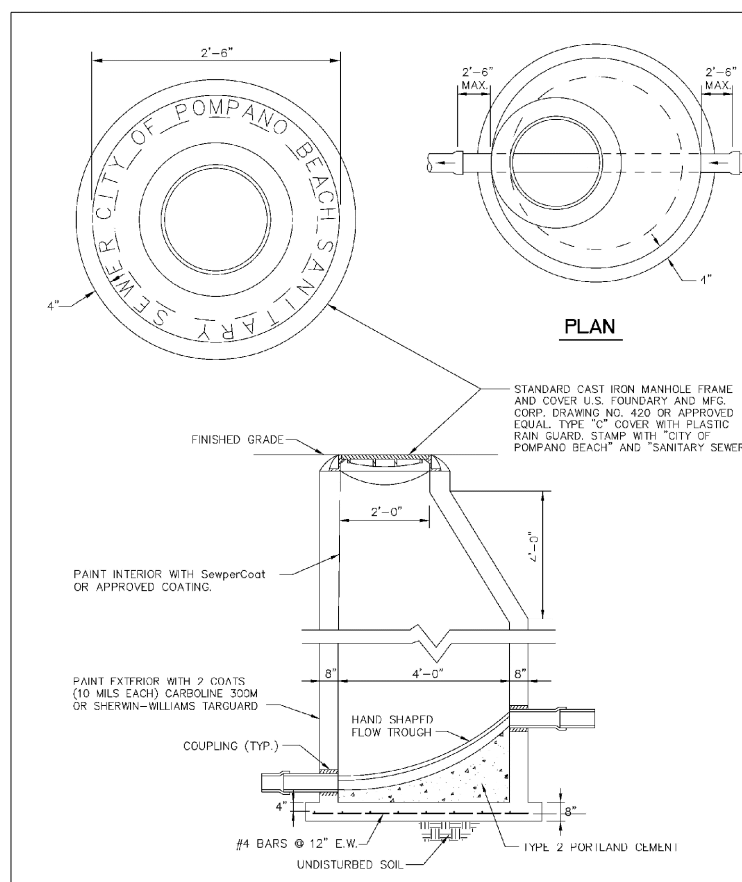
MANHOLE COUPLING

| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|-----------------------------------|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | MANHOLE COUPLING |
| S.S. JUNE 2022 | CITY OF POMPAÑO BEACH | | |
| S.S. 06/23/22 | | | |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 212-1 |



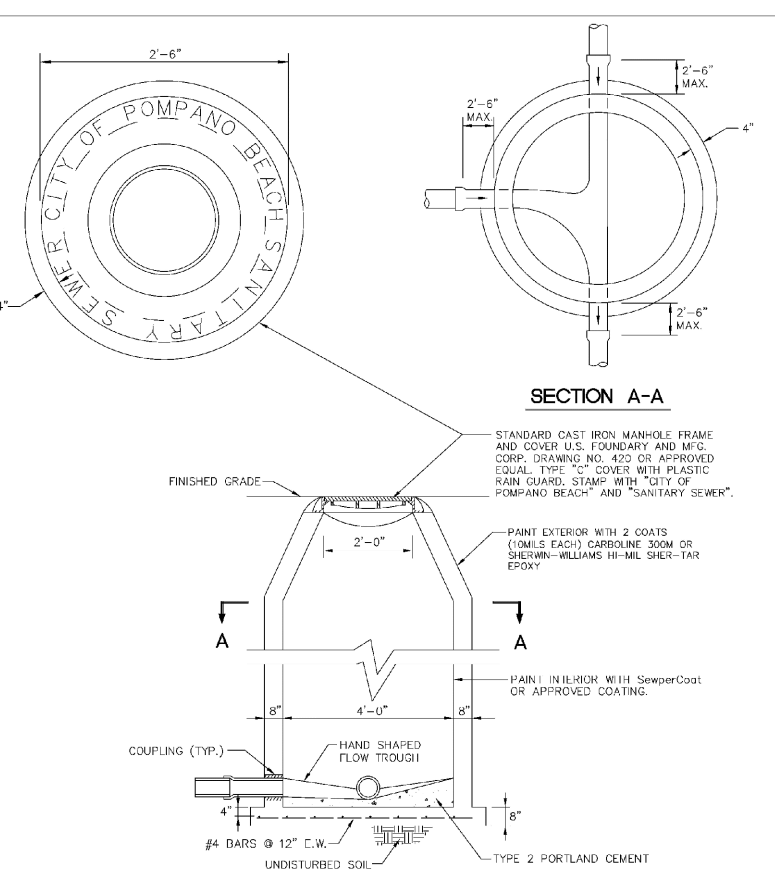
TYPE 'A' DROP MANHOLE

| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|-----------------------------------|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | TYPE 'A' DROP MANHOLE |
| S.S. JUNE 2022 | CITY OF POMPAÑO BEACH | | |
| S.S. 06/23/22 | | | |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 213-1 |



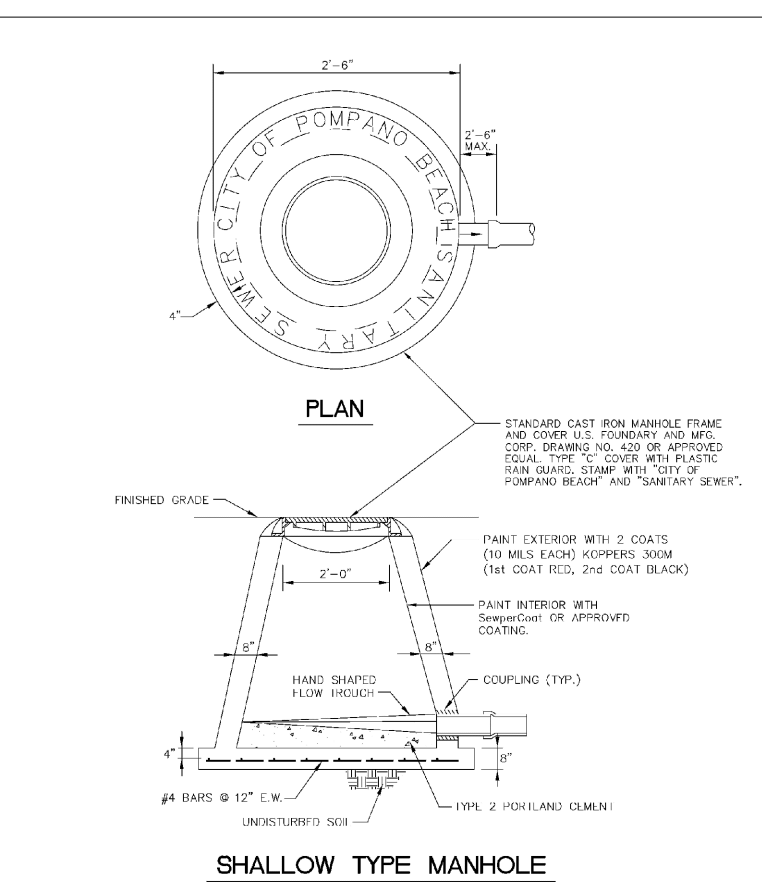
TYPE 'B' DROP MANHOLE

| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|-----------------------------------|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | TYPE 'B' DROP MANHOLE |
| S.S. JUNE 2022 | CITY OF POMPAÑO BEACH | | |
| S.S. 06/23/22 | | | |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 214-1 |



STANDARD MANHOLE

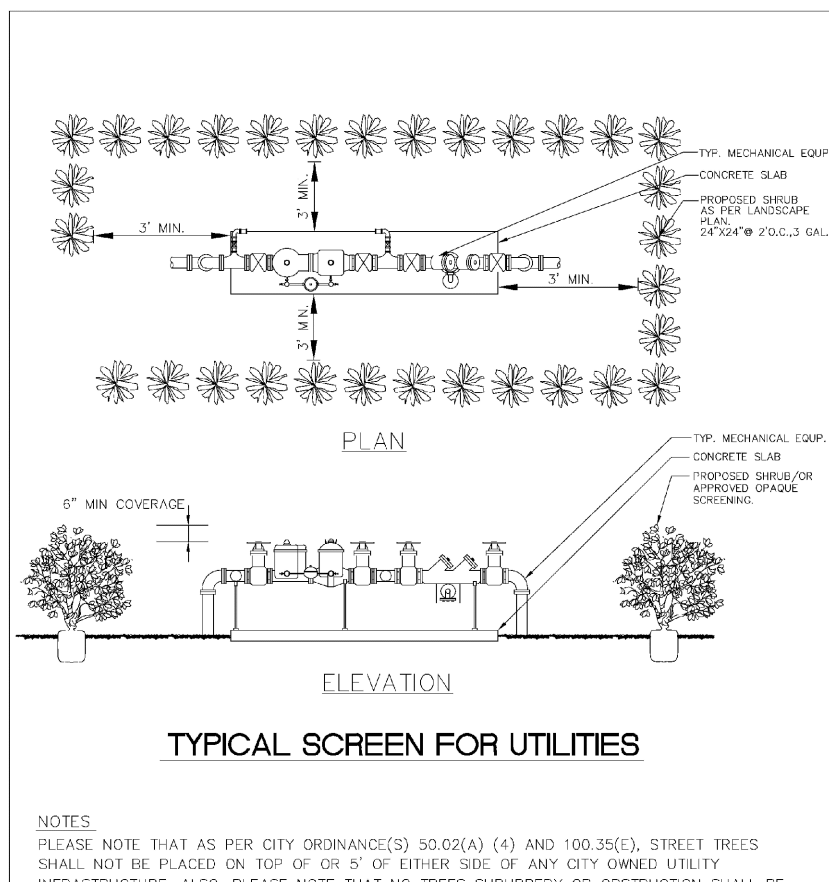
| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|-----------------------------------|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | STANDARD MANHOLE |
| S.S. JUNE 2022 | CITY OF POMPAÑO BEACH | | |
| S.S. 06/23/22 | | | |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 215-1 |



SHALLOW TYPE MANHOLE

| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|-----------------------------------|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | SHALLOW TYPE MANHOLE |
| S.S. JUNE 2022 | CITY OF POMPAÑO BEACH | | |
| S.S. 06/23/22 | | | |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 216-1 |

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Botek
Digitally signed by
Stephen Botek
Date:
2024.07.01
17:13:53
-04'00'



TYPICAL SCREEN FOR UTILITIES

| ENGINEERING STANDARDS 2022 | | | |
|----------------------------|-----------------------|------|-----------------------------------|
| REVISIONS | BY | DATE | DESCRIPTION |
| BY DATE | ENGINEERING DIVISION | | TYPICAL SCREEN FOR UTILITIES |
| S.S. JUNE 2022 | CITY OF POMPAÑO BEACH | | |
| S.S. 06/23/22 | | | |
| SCALE: N.T.S. | | | DATE: JUNE 2022 DWG. NO. 315-1 |

REVISIONS

| # | DATE | DESCRIPTION |
|---|------|-------------|
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NATHAN M. LEWIS
LICENSE
No. 86481
STATE OF FLORIDA
PROFESSIONAL ENGINEER
July 1, 2024

THIS DOCUMENT HAS BEEN
DIGITALLY SIGNED AND
SEALED BY NATHAN M. LEWIS,
P.E. ON THE DATE ADJACENT
TO THE SEAL.

PRINTED COPIES OF THIS
DOCUMENT ARE NOT
CONSIDERED SIGNED AND
SEALED AND THE SIGNATURE
MUST BE VERIFIED ON ANY
ELECTRONIC COPIES.

Celebrating
15 Years

WATER AND SANITARY SEWER DETAILS

580 BRINY
580 Briny Ave
Pompano Beach, FL 33062

Botek Thurlow
Engineering, Inc.
3400 NW 9th Avenue, Suite 102, Ft. Lauderdale, FL 33309
www.botekthurlow-eng.com P: 954-568-8888 F: 954-568-0757

BTE PROJECT #:
22-0804

PROJECT DATE:
10-23-22

SHEET #:
C-2.3