



TOWN OF ELIZABETH

**BOARD OF TRUSTEES WORKSHOP
PROST PRESENTATION
Tuesday, April 22, 2025, at 6:30 PM**

**BOARD OF TRUSTEES REGULAR MEETING UPDATED 4/21/2025
Tuesday, April 22, 2025, at 7:00 PM
Town Hall, 151 S. Banner Street**

Conferencing Access Information: This is viewing-only access.

<https://us02web.zoom.us/j/83385763443?pwd=elzYWQaV1awNChf9PouNaGFA9yh3ga.1>

Join via phone at 1 669 900 9128 Meeting ID: 833 8576 3443

Meeting Passcode: 646323

CALL TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

PUBLIC COMMENT

This is a meeting of the Board of Trustees held in public. We welcome you here and thank you for your time and concerns. When you are recognized, please stand and state your name and address to the Board. Your comments will be limited to 5 minutes. If many speakers are anticipated, the Mayor may (a) shorten the time limit; (b) ask speakers to limit themselves to new information and points of view not already covered by previous speakers; and/or (c) limit the total time of public comment to allow the Board to proceed to consider items set on the regular meeting agenda. The Board of Trustees may not respond to your comments during this meeting, but rather take your comments and suggestions under advisement and your questions will be directed to the appropriate person or department for follow-up. Personal attacks against Board Members, Administrative Staff, or Employees will not be recognized. If a response from Staff is requested, the Mayor will direct Staff to have a response at the next regularly scheduled Board meeting.

AGENDA CHANGES

CONSENT AGENDA

1. Minutes of the Regular Meeting of April 8, 2025
2. Swear in Officer Brett Cutler

PROCLAMATION

3. Arbor Day

**ACTION MAY BE TAKEN ON ANY AND ALL ITEMS LISTED ON THE AGENDA
ACCOMMODATIONS FOR DISABILITIES MAY BE MADE UPON REQUEST.**

- [4.](#) National Police Week
- [5.](#) 56th Annual Professional Municipal Clerk’s Week

PUBLIC HEARING

This matter requires the Board to conduct a quasi-judicial hearing, which means the Board must find facts and base its decision upon the application of the adopted regulation standards/criteria and the competent, substantial, and material evidence received during the hearing.

- [6.](#) Dads of Elbert County Special Event Application – Michelle Oeser

NEW BUSINESS

- 7. Discussion and possible action on the approval of the Dads of Elbert County Special Event Application – Michelle Oeser

PUBLIC HEARING

This matter requires the Board to conduct a quasi-judicial hearing, which means the Board must find facts and base its decision upon the application of the adopted regulation standards/criteria and the competent, substantial, and material evidence received during the hearing.

- [8.](#) Town of Elizabeth, Friday Night Market Summer Series Special Event Liquor License application – Michelle Oeser

NEW BUSINESS

- 9. Discussion and possible action on approval of the Town of Elizabeth’s Special Event Liquor License application for the Friday Night Market Summer Series – Michelle Oeser
- [10.](#) Discussion and possible action on posting the open Board of Trustee seat – Michelle Oeser
- [11.](#) Discussion and possible action on Ordinance 25-06, an Ordinance to Adoption of 2025 Water and Sewer Standards – Mike DeVol
- [12.](#) Discussion on the Model Traffic Code Ordinance 25-07, an Ordinance repealing and reenacting Article 1 of Chapter 8 of the Elizabeth Municipal Code adopting by reference the 2024 Model Traffic Code – Patrick Davidson
- [13.](#) Discussion and possible action on Resolution 25R18, a Resolution authorizing the Director of Public Works, or his designee, to enter into a contract for the construction and completion of the Depot Parking Lot – Mike DeVol
- [14.](#) Discussion on possible action on Resolution 25R19, a Resolution approving a Scope of Work Proposal agreement with Applied Ingenuity of Hudson, Colorado for the cleaning and re-equipping of the Denver Well – Mike DeVol, Patrick Davidson

MANAGEMENT MONITORING REPORTS

- [15.](#) Management Monitoring Reports

STUDENT LIAISON REPORT

- [16.](#) Student Liaison Report – Landen Sherlock

BOARD OF TRUSTEES REPORTS

- 17. Board Reports

ACTION MAY BE TAKEN ON ANY AND ALL ITEMS LISTED ON THE AGENDA
ACCOMMODATIONS FOR DISABILITIES MAY BE MADE UPON REQUEST.

MINUTES

[18.](#) Minutes of the Main Street Board of Directors Meeting of March 10, 2025

ADJOURNMENT

MEETING PROTOCOL AND STANDARDS OF CONDUCT

Public Participation

Public comment is encouraged and will be listed as an agenda item at every regular Board meeting.

Each individual wishing to be heard during the public comment period will be given up to three (3) minutes to make a comment.

The public comment period will not be used to make political endorsements or for political campaign purposes.

Questions from the Board will be for clarification purposes only. Public comment will not be used as a time for problem solving or reacting to comments made but, rather, for listening to the comments of citizens without taking any formal action.

The Board may direct the Town Administrator to provide information requested by a speaker during the public comment period.

Speakers are not allowed to make belligerent, accusatory, impertinent, slanderous, threatening, abusive, or disparaging comments.

The Mayor may elect to defer public comment on a specific issue that appears on the regular agenda until that specific item is addressed.

The Mayor may call for order when sidebar conversations occur in the audience. Those conversations are distracting from the Board addressing the topics at hand.

Members of the public who do not follow proper conduct after a warning in a public meeting may be barred from further participation at that meeting or removed from the Board Chambers pursuant to the Elizabeth Municipal Code and Colorado Revised Statutes.



TOWN OF ELIZABETH

BOARD OF TRUSTEES

BOARD OF TRUSTEES – RECORD OF PROCEEDINGS APRIL 8, 2025

CALL TO ORDER

The Regular Meeting of the Board of Trustees of the Town of Elizabeth was called to order on Tuesday, April 8, 2025, at 7:00 p.m. by Mayor Angela Ternus.

ROLL CALL

Mayor Angela Ternus, Mayor Pro Tem Tracy Hutchins, and Trustees Loren Einspahr, Shannon Downs, Dave Conley, Michael Schroder, and Steve Gaither were present. There was a quorum to do business.

Also present were Town Administrator Patrick Davidson, Town Clerk Michelle Oeser, Public Works Director Mike DeVol, Assistant Public Works Director James McErnie, Police Chief Jeff Engel and Town Attorney Corey Hoffmann.

PLEDGE OF ALLEGIANCE

Mayor Ternus led the Board in the Pledge of Allegiance.

PUBLIC COMMENT

Paul Schwarzkopf – Town of Elizabeth Resident.

Mayor Ternus asked Mr. Davidson to address the concerns Mr. Schwarzkopf raised.

Mr. Davidson addressed the Capital Improvement Fund (CIP), reusable water, and street repairs.

AGENDA CHANGES

No agenda changes from the Administration.

No Agenda changes from the Board.

Agenda set.

CONSENT AGENDA

1. Minutes of the Regular Meeting of March 25, 2025

Motion by Mayor Pro Tem Hutchins, seconded by Trustee Schroder, to approve the consent agenda as presented.

The vote of those Trustees present was 7 in favor and 0 opposed. The motion passed unanimously.

PRESENTATIONS

2. Eagle Scout Project

Mr. Davidson provided background to Mathew Webster's Eagle Scout bench project.



TOWN OF ELIZABETH

BOARD OF TRUSTEES

Mr. Webster spoke to the Board about the process and people involved in his Eagle Scout project.

NEW BUSINESS

3. Discussion and possible action on Resolution 25R17, a Resolution authorizing the Mayor to execute an amended License Agreement between the Town of Elizabeth, Colorado and The Elizabeth Brewing Company for Year 2025

Mr. Davidson provided a Staff report.

Tony Briggs spoke with the Board as the representative and owner of The Elizabeth Brewing Company.

Motion by Trustee Einspahr, seconded by Trustee Schroder, to approve Resolution 25R17, a Resolution authorizing the Mayor to execute an amended License Agreement between the Town of Elizabeth, Colorado and The Elizabeth Brewing Company for Year 2025.

The vote of those Trustees present was 7 in favor and 0 opposed. The motion passed unanimously.

4. Discussion and possible action on authorization of The Elizabeth Brewing Company Festival Permit Application

Ms. Oeser provided a Staff report.

Tony Briggs spoke with the Board as the representative and owner of The Elizabeth Brewing Company.

Motion by Trustee Schroder, seconded by Trustee Conley, to approve the authorization of the Elizabeth Brewing Company Festival Permit Application.

The vote of those Trustees present was 7 in favor and 0 opposed. The motion passed unanimously.

5. Todd Leopold 2025 Strategic Plan Report

Todd Leopold presented the Strategic Plan that was derived from the Board Retreat.

A Board Workshop is set for May 3, 2025, from 9:00 a.m. to 12:00 p.m.

6. Discussion on Water and Sewer Standards

Mr. DeVol provided a Staff report.

7. Discussion and possible action on the reinstatement of Michael Hussey and Brandon Jeffress to the Main Street Board of Directors for a term of three years through April 30, 2028

Mr. Davidson provided a Staff report.

Motion by Mayor Pro Tem Hutchins, seconded by Trustee Einspahr, to approve the reinstatement of Michael Hussey and Brandon Jeffress to the Main Street Board of Directors for a term of three years through April 30, 2028.

The vote of those trustees present was 7 in favor and 0 opposed. The motion passed unanimously.



TOWN OF ELIZABETH

BOARD OF TRUSTEES

MANAGEMENT REPORTS

- Town Administrator Patrick Davidson:
 - Discussion was held about the June 24th Board meeting. The consensus was to cancel the meeting.
 - Discussion on problems with road conditions in the Wildpoint Commercial District.
 - Discussion on Morrison Police equipment and vehicles available for purchase.
 - Discussion on hiring a new Police Officer that is not included in the 2025 budget.
- Police Chief Jeff Engel:
 - Update on Brayden Campbell's Academy progress.
 - Police applicant Brett Cutler has completed the hiring process and will be extended a job offer.
 - Discussion on hiring a new SRO Officer.
 - The police department received a donation of a drone from Douglas County Search and Rescue.
 - Jason Rogers completed his car seat inspection certification.
 - The Public Safety Academy will be held May 26th through May 30th.
 - Sean Bigler was rear-ended in his marked squad car on his way to work.
- Public Works Director Mike DeVol:
 - A new Water / Wastewater employee has been hired.
- Town Clerk Michelle Oeser:
 - Ms. Oeser discussed the upcoming Meat In event.
 - Discussion on a 135th Town Birthday sticker design contest.
 - DAR has provided free tea lights to recognize Paul Revere's Ride on April 18th.
 - Student Liaison Landen Sherlock will be receiving a STARS Award.
 - Mayor Ternus had a question about Ms. Ritters, comment regarding vetting for donations in her report.
- Town Attorney Corey Hoffmann
 - Mayor Ternus asked about Vested Property Rights.

STUDENT LIAISON REPORT

- Student Liaison Landen Sherlock
 - A written report was provided to the Board.

BOARD OF TRUSTEE REPORTS

- Ward 1: Tracy Hutchins:
 - Ms. Hutchins will be unavailable next week.

▪ PO Box 159, 151 S. Banner Street ▪ Elizabeth, Colorado 80107 ▪ (303) 646-4166
▪ Fax: (303) 646-9434 ▪ www.townofelizabeth.org



TOWN OF ELIZABETH

BOARD OF TRUSTEES

- Ward 3: Dave Conley:
 - Mr. Conley continues to work on setting up a meeting with the Elizabeth School District Superintendent to discuss partnering with them.
- Ward 2: Trustee Steve Gaither:
 - Mr. Gaither will be attending the STARS Banquet.
- Mayor Ternus:
 - Discussion on funding grants.
 - Discussion on the Town's Emergency Management Plan.

ADJOURNMENT

Motion by Mayor Pro Tem Hutchins, seconded by Trustee Conley, to adjourn the meeting at 9:47 p.m. The vote of those Trustees present was unanimously in favor. Motion carried.

Town Clerk Michelle Oeser

Mayor Angela Ternus



TOWN OF ELIZABETH

STATE OF COLORADO)

COUNTY OF ELBERT) SS.

TOWN OF ELIZABETH

OATH OF OFFICE

I, Brett Cuttler, do solemnly swear that I will support the Constitution of the United States and of the State of Colorado and Ordinances of the Town of Elizabeth, and faithfully perform the duties of the office of Police Officer, upon which I am about to enter.

Brett Cutler

Subscribed and sworn to before me this 22nd day of April 2025.

Michelle M. Oeser, Town Clerk

Arbor Day Proclamation

Whereas, In 1872, J. Sterling Morton proposed to the Nebraska Board of Agriculture that a special day be set aside for the planting of trees, and

Whereas, the holiday, called Arbor Day, was first observed with the planting of more than a million trees in Nebraska, and

Whereas, Arbor Day is now observed throughout the nation and the world, and

Whereas, trees can reduce the erosion of our precious topsoil by wind and water, lower our heating and cooling costs, moderate the temperature, clean the air, produce oxygen and provide habitat for wildlife, and

Whereas, trees are a renewable resource giving us paper, wood for our homes, fuel for our fires and countless other wood products, and

Whereas, trees in our city increase property values, enhance the economic vitality of business areas, and beautify our community, and

Whereas, trees, wherever they are planted, are a source of joy and spiritual renewal,

NOW, THEREFORE, I Angela Ternus Mayor of the City of
Elizabeth, do hereby proclaim
May 10, 2025 as

Arbor Day

in the City of Elizabeth, and I urge all citizens to celebrate Arbor Day and to support efforts to protect our trees and woodlands, and

Further, I urge all citizens to plant and care for trees to gladden the heart and promote the well-being of this and future generations.

Dated this April day of 22 in the year 2025

Mayor _____

PROCLAMATION
NATIONAL POLICE WEEK MAY 11TH- 17TH, 2025

WHEREAS, there are more than 800,000 law enforcement officers serving in communities across the United States, including the dedicated members of the Elizabeth Police Department:

WHEREAS, since the first recorded death in 1786, there are currently 24,067 law enforcement officers in the United States who have made the ultimate sacrifice and been killed in the line of duty, including 0 members of the TOWN OF ELIZABETH;

WHEREAS, the names of these dedicated public servants are engraved on the walls of the National Law Enforcement Officers Memorial in Washington, DC.

WHEREAS, 282 new names of fallen heroes were added to the National Law Enforcement Officers Memorial in the spring of 2024, including 118 officers killed in 2023, bringing the total number of names on the memorial to 24,067;

WHEREAS, the service and sacrifice of all officers killed in the line of duty will be honored during the National Law Enforcement Officers Memorial Fund's 37th Candlelight Vigil, on the evening of May 13, 2025;

WHEREAS, the Candlelight Vigil is part of National Police Week, which will be *observed* this year May 11th-17th;

WHEREAS, May 15 is designated as Peace Officers Memorial Day, in honor of all fallen officers and their families and U.S. flags should be flown at half-staff;

THEREFORE, BE IT RESOLVED that the TOWN OF ELIZABETH will observe May 11-17, 2025, as National Police Week ELIZABETH, and publicly salute the service of law enforcement officers in our community and communities across the nation.

THEREFORE, I, Angela Ternus, Mayor of the Town of Elizabeth, Colorado, do hereby proclaim the third week in May, as NATIONAL POLICE WEEK.

Angela Ternus, Mayor

Attest: Michelle M. Oeser, Town Clerk

Proclamation

56th ANNUAL PROFESSIONAL MUNICIPAL CLERKS WEEK

May 4 - 10, 2025

Whereas, The Office of the Professional Municipal Clerk, a time-honored and vital part of local government exists throughout the world, and

Whereas, The Office of the Professional Municipal Clerk is the oldest among public servants, and

Whereas, The Office of the Professional Municipal Clerk provides the professional link between the citizens, the local governing bodies, and agencies of government at other levels, and

Whereas, Professional Municipal Clerks have pledged to be ever mindful of their neutrality and impartiality, rendering equal service to all.

Whereas, The Professional Municipal Clerk serves as the information center on functions of local government and community.

Whereas, Professional Municipal Clerks continually strive to improve the administration of the affairs of the Office of the Professional Municipal Clerk through participation in education programs, seminars, workshops, and the annual meetings of their state, provincial, county, and international professional organizations.

Whereas, It is most appropriate that we recognize the accomplishments of the Office of the Professional Municipal Clerk.

Now, Therefore, I, Angela Ternus, Mayor of Elizabeth, do recognize the week of May 4 through 10, 2025, as Professional Municipal Clerks Week, and further extend appreciation to our Professional Municipal Clerks, Michelle Oeser, Harmony Malakowski, and Allison Ritter, and to all Professional Municipal Clerks for the vital services they perform and their exemplary dedication to the communities they represent.

Dated this 22nd day of April 2025

Mayor

Attest: _____



Annual Professional Municipal Clerks Week

FACT SHEET

Sponsored by the International Institute of Municipal Clerks

Professionalism In Local Government Through Education

PURPOSE

To recognize the vital and appreciated services performed by Municipal and Deputy Clerks in serving the changing needs of their communities.

HISTORY

The annual Professional Municipal Clerks Week was initiated in 1969 by IIMC and is endorsed by all of its members throughout the United States, Australia, Belgium, Bermuda, Bulgaria, Canada, England, Italy, the Netherlands, New Zealand, South Africa, and Wales. In 1984 and in 1994, Presidents Ronald Reagan and Bill Clinton, respectively, signed a Proclamation officially declaring Professional Municipal Clerks Week the first full week of May and recognizing the essential role Municipal Clerks play in local government.

TYPICAL RESPONSIBILITIES OF THE MUNICIPAL AND DEPUTY CLERK:

- Maintains the official council minutes, ordinance books and all records and documents.
- Indexes all official actions of council.
- Issues licenses and permits.
- Processes contracts and agreements.
- Keepers of community history and vital records.
- Receives, distributes and files correspondence from citizens and other governmental agencies.
- Administers elections, registration and voting.
- Acts as a key liaison between local government and its citizens.
- Handles significant financial responsibilities including preparation of tax rolls, special assessments and budgets.
- Provides central services such as personnel, purchasing, etc.

IIMC is a professional association of City, Village, Town, Township, Borough and County Clerks, Secretaries and Recorders. IIMC prepares its members to meet the challenges of the diverse role of the Municipal and Deputy Clerk by providing services and continuing professional development opportunities to benefit members and the government entities they serve.



TOWN OF ELIZABETH

MICHELLE M. OESER TOWN CLERK/ADMINISTRATIVE SERVICES DIRECTOR

TO: Honorable Mayor and Board of Trustees
FROM: Michelle Oeser Town Clerk
DATE: April 22, 2025
SUBJECT: Special Event Liquor Permit

SUMMARY

On March 26, 2025, the Dads of Elbert County applied for a Special Event Liquor License for the 5th Annual Meat In Event. Posting has been provided at 366 Grant Street.

Justin Hundley will be the event manager for the Meat In Event. Both Mr. Hundley and Mr. Decker will be present at the Board meeting to answer any questions the Board has.

The map that is included depicts where the licensed area is located and the general mapping for the event. The event will be expanded to include a closure of Grant Street running east to west from Banner Street to Garland Street.

The Elizabeth Police Department does not have any issues that would affect the approval of this license application.

STAFF RECOMMENDATION

Staff recommend approval of the Dads of Elbert County Special Event License.

ATTACHMENTS

Special Event Application

Application for a Special Events Permit

Departmental Use Only

Town of Elizabeth

MAR 26 2025

RECEIVED

Town of Elizabeth

In order to qualify for a Special Events Permit, You Must Be a Qualifying Organization Per 44-5-102 C.R.S. and One of the Following (See back for details.)

- | | | |
|--|---|---|
| ☒ Social | ☐ Athletic | ☐ Philanthropic Institution |
| ☐ Fraternal | ☐ Chartered Branch, Lodge or Chapter | ☐ Political Candidate |
| ☐ Patriotic | ☐ National Organization or Society | ☐ Municipality Owned Arts Facilities |
| ☐ Political | ☐ Religious Institution | |

LIAB Type of Special Event Applicant is Applying for:

- | | |
|--|--------------------------|
| 2110 ☐ Malt, Vinous And Spirituous Liquor | \$100.00 Per Application |
| 2170 ☒ Fermented Malt Beverage | \$100.00 Per Application |

DO NOT WRITE IN THIS SPACE

Liquor Permit Number

1. Name of Applicant Organization or Political Candidate

State Sales Tax Number (Required)

Dads of Elbert County

2. Mailing Address of Organization or Political Candidate (include street, city/town and ZIP)

3. Address of Place to Have Special Event (include street, city/town and ZIP)

366 E Germ St
ELIZABETH CO 80107

4. Authorized Representative of Qualifying Organization or Political Candidate

Date of Birth Phone Number

Clint Decker

Authorized Representative's Mailing Address (if different than address provided in Question 2.)

Elizabeth CO 80107

5. Event Manager

Date of Birth Phone Number

Justin Hundley

Event Manager Home Address (Street, City, State, ZIP)

Email Address of Event Manager

Elizabeth CO 80107

6. Has the Applicant or Political Candidate been issued a Special Event Permit this Calendar Year?

7. Is the premises for under the Colorado Liquor or Beer codes?

No Yes How many days?

No Yes License Number

8. Does the Applicant Have Possession or Written Permission for the Use of The Premises to be Licensed? Yes No

List Below the Exact Date(s) for Which Application is Being Made for Permit

Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To
5/17/25 12:00 P.m. 12:00 P.m.				
Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To
Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To

Oath of Applicant

I declare under penalty of perjury in the second degree that I have read the foregoing application and all attachments thereto, and that all information therein is true, correct, and complete to the best of my knowledge.

Signature

Title

Date

President

3/31/25

Report and Approval of Local Licensing Authority (City or County)

The foregoing application has been examined and the premises, business conducted and character of the applicant is satisfactory, and we do report that such permit, if granted, will comply with the provisions of Title 44, Article 5, C.R.S., as amended.

THEREFORE, THIS APPLICATION IS APPROVED.

Local Licensing Authority (City or County)

☐ City
☐ County

Telephone Number of City/County Clerk

Signature

Title

Date

DO NOT WRITE IN THIS SPACE - FOR DEPARTMENT OF REVENUE USE ONLY

Liability Information

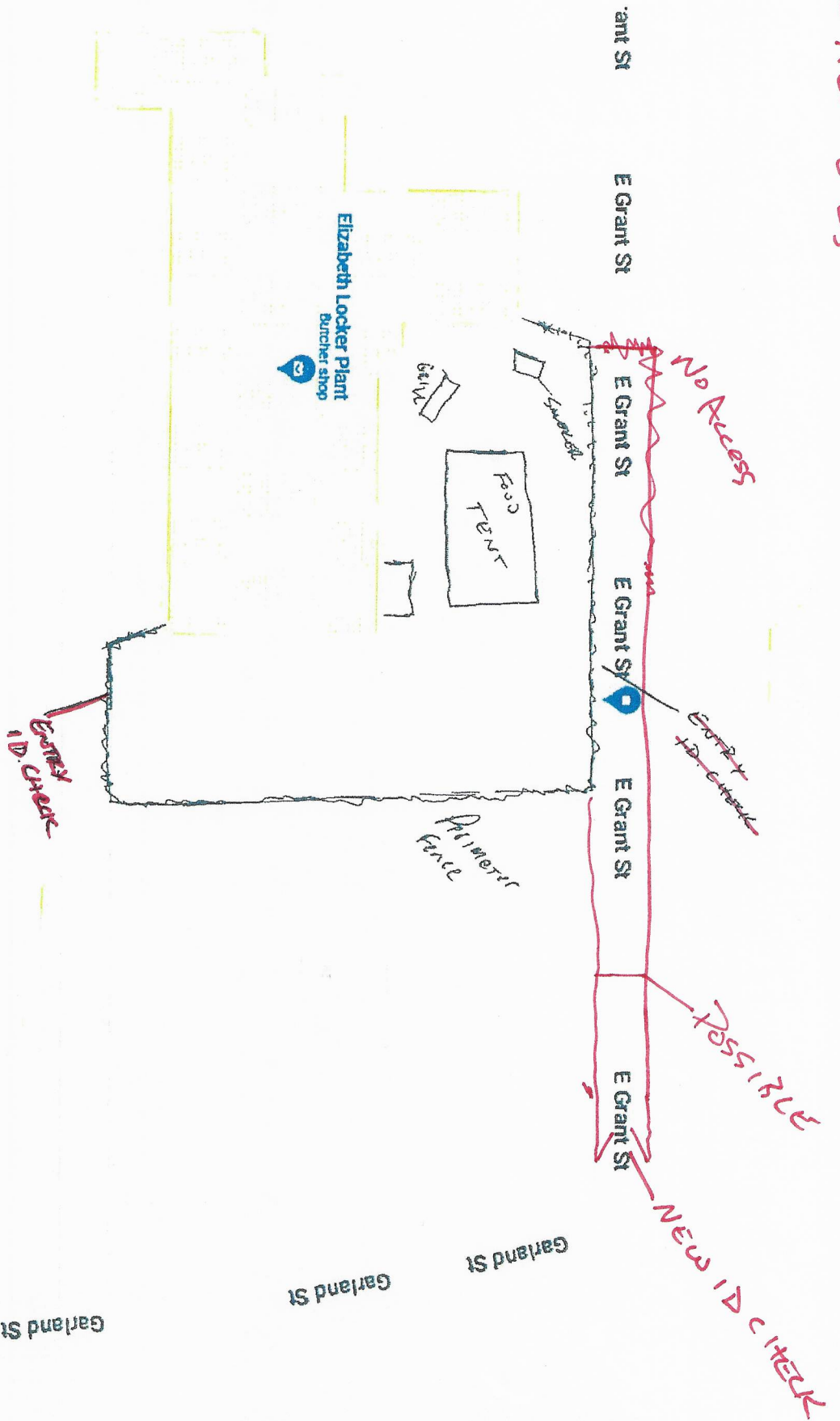
License Account Number

Liability Date

State

Total

NEW 2025



DEPENDING ON HOW
MANY VENDORS WE HAVE
WE MAY SLIDE THE ID CHECK TO THE POSSIBLE LINE

RECEIVED

MAR 26 2025

Town of Elizabeth



Michael D. Hundley
President

Justin N. Hundley
Vice-President

Elizabeth, Co 80107-0160
Phone (303) 646-4020 Fax (303) 688-2240

This letter is to confirm that the Elizabeth Locker Plant has given Dad's of Elbert County (DOEC) permission to use the property located at 366 Grant St. in Elizabeth, CO. for an event on May 17th 2025. The event is a fundraising event for the local community. We understand that there will be alcohol on the premises under controlled conditions. This event will take place from 12:00pm and end at 5:00pm with allotted time to setup and cleanup after. If there are any questions please feel free to contact Justin Hundley V.P. of Elizabeth Locker Plant.

Respectfully,

A handwritten signature in black ink, appearing to read "Justin Hundley".

Justin Hundley
Vice President





TOWN OF ELIZABETH

MICHELLE M. OESER TOWN CLERK / ADMINISTRATIVE SERVICES DIRECTOR

TO: Honorable Mayor, Mayor Pro Tem, and Board of Trustees
FROM: Michelle Oeser Town Clerk
DATE: April 22, 2025
SUBJECT: Town of Elizabeth Friday Night Market

SUMMARY

On April 1, 2025, the Town of Elizabeth applied for a Special Event Liquor License for the Town's Summer Friday Night Market. Posting has been provided at Running Creek Park.

Mr. Briggs was at the previous Board meeting and discussed the logistics of the Friday Night Markets. He answered Board questions and was directed that he did not need to attend tonight's meeting.

The map that is included depicts where the stage, serving areas and check point gates will be located for the event.

The Elizabeth Police Department does not have any issues that would affect approval of this license application.

STAFF RECOMMENDATION

Staff recommends approval of the Town of Elizabeth's Friday Night Market Special Event License application.

ATTACHMENTS

Special Event Application

Application for a Special Events Permit

Departmental Use Only

RECEIVED

RECEIVED APR 01 2025

APR 15 Town of Elizabeth

Town of Elizabeth

Town of Elizabeth

In order to qualify for a Special Events Permit, You Must Be a Qualifying Organization Per 44-5-102 C.R.S. and One of the Following (See back for details.)

- ☐ Social ☐ Athletic ☐ Philanthropic Institution
☐ Fraternal ☐ Chartered Branch, Lodge or Chapter ☐ Political Candidate
☐ Patriotic ☐ National Organization or Society ☒ Municipality Owned Arts Facilities
☒ Political ☐ Religious Institution

LIAB Type of Special Event Applicant is Applying for:		DO NOT WRITE IN THIS SPACE
2110 ☒ Malt, Vinous And Spirituous Liquor	\$100.00 Per Application	Liquor Permit Number
2170 ☐ Fermented Malt Beverage	\$100.00 Per Application	

1. Name of Applicant Organization or Political Candidate State Sales Tax Number (Required)

Town of Elizabeth

2. Mailing Address of Organization or Political Candidate (include street, city/town and ZIP)

PO Box 159
Elizabeth, CO 80107

3. Address of Place to Have Special Event (include street, city/town and ZIP)

500 E. Kiowa Ave.
Elizabeth, CO 80107

4. Authorized Representative of Qualifying Organization or Political Candidate

Patrick Davidson

Authorized Representative's Mailing Address (if different than address provided in Question 2.)

Same as above

5. Event Manager

Carlyle Baker

Date of Birth Phone Number

Email Address of Event Manager

Elizabeth Brewing Company@gmail.com

6. Has A Special Event Permit this Calendar Year?

No Yes How many days?

Under the Colorado Liquor or Beer Codes? License Number

8. Does the Applicant Have Possession or Written Permission for the Use of The Premises to be Licensed? Yes No

List Below the Exact Date(s) for Which Application is Being Made for Permit

Date 6-13-24 Hours From 4:00p.m. To 9:00p.m.	Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To
Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To
Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To
Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To	Date Hours From To

Oath of Applicant

I declare under penalty of perjury in the second degree that I have read the foregoing application and all attachments thereto, and that all information therein is true, correct, and complete to the best of my knowledge.

Signature Title Date
Town Administrator 4-1-25

Report and Approval of Local Licensing Authority (City or County)

The foregoing application has been examined and the premises, business conducted and character of the applicant is satisfactory, and we do report that such permit, if granted, will comply with the provisions of Title 44, Article 5, C.R.S., as amended.

THEREFORE, THIS APPLICATION IS APPROVED.

Local Licensing Authority (City or County) ☐ City ☐ County Telephone Number of City/County Clerk

Signature Title Date

DO NOT WRITE IN THIS SPACE - FOR DEPARTMENT OF REVENUE USE ONLY

Liability Information

License Account Number	Liability Date	State	Total

(Instructions on Reverse Side)



Security and Control Plan

For Alcohol Beverage Service at The Elizabeth Friday Night Market

Prepared for: The Elizabeth Brewing Company

Date: April 01, 2025

This Security and Control Plan is provided to and agreed upon by The Elizabeth Brewing Company, the participating licensee for The Elizabeth Friday Night Market held from June 20th through August 15th, 2025, at Running Creek Park, 500 E Kiowa Ave, Elizabeth, CO 80107. The plan outlines the procedures and measures to ensure the safe, legal, and responsible service, storage, and management of alcohol beverages during the event.

1. Hours of Service of Alcohol Beverages

Alcohol beverages will be served only during the following designated hours:

- **Start Time:** 4:00 PM
- **End Time:** 9:00 PM

Service will cease promptly at 9:00 PM each event night (Fridays from June 20th through August 15th, 2025), with no exceptions, and all alcohol sales and consumption will comply with applicable local and state laws.

2. Entries and Exits

- **Controlled Access Points:** The market will have two pedestrian entrances located at the Northeast corner and Southwest corner of Running Creek Park. Each entrance will be staffed by TIPS (Training for Intervention Procedures)-trained individuals who will:
 - Check identification to verify attendees are 21+ for alcohol consumption.
 - Issue wristbands to identify individuals of legal drinking age.
 - Inspect coolers, bags, strollers, and similar items for prohibited items, including outside alcohol.

- **Exit Monitoring:** TIPS-trained staff will monitor exits to prevent alcohol from being removed from the premises and to ensure the safety of departing attendees.

3. Alcohol Storage and Security

- **Setup Phase:** Alcohol will be transported to Running Creek Park by 2:00 PM on each event day in a lockable trailer (or similar vehicle) and remain under the supervision of event staff. The trailer will be secured with padlocks, and only event staff will have access to the alcohol.
- **During the Market:** Alcohol will be stored in locked coolers or behind a staffed bar area and dispensed only by TIPS-certified event staff. Any excess inventory will remain in the lockable trailer, inaccessible to the public, and under staff supervision.
- **Post-Market:** After each market night concludes, all remaining alcohol will be inventoried, secured in the lockable trailer, and removed from Running Creek Park no later than 11:59 PM. It will be returned to its point of origin for secure storage by The Elizabeth Brewing Company.

4. Handling Visibly Intoxicated Parties

- **Training:** All event staff dispensing alcohol and monitoring the licensed area will be TIPS-certified and trained to recognize signs of visible intoxication (e.g., slurred speech, unsteady movement, aggressive behavior).
- **Procedure:**
 - If an individual appears visibly intoxicated, service will be immediately denied.
 - Staff will notify security personnel (trained volunteers or Elizabeth Police Department members), who will escort the individual to a designated safe area away from alcohol service zones.
 - If necessary, transportation (e.g., taxi, rideshare) will be arranged, or law enforcement will be contacted if the individual poses a risk to themselves or others.
- **Documentation:** Incidents involving intoxicated individuals will be logged with details including time, description, and actions taken.

5. Preventing Underage Consumption and Purchases

- **Age Verification:**

- All individuals purchasing or consuming alcohol will present valid, government-issued photo identification at the point of sale or entry.
- Wristbands will be issued only to those 21 and older by TIPS-trained staff, and alcohol service will be restricted to individuals displaying these wristbands.
- **Staff Oversight:** TIPS-certified event staff and security (including trained volunteers and at least two members of the Elizabeth Police Department) will monitor the event to prevent alcohol from being passed to underage persons.
- **Signage:** Clear signage will be posted at all alcohol service areas stating: “No alcohol sales or service to individuals under 21. ID required.”
- **Enforcement:** Any person under 21 found attempting to purchase or consume alcohol will be escorted from the alcohol service area by security personnel, and their guardian (if applicable) or law enforcement may be notified. Vendors caught serving minors will face immediate suspension of alcohol service privileges.

6. Security Personnel

- **Staffing:** Security on site will include trained volunteers and a minimum of two members of the Elizabeth Police Department. These individuals will assist with monitoring entrances, exits, and the licensed area to ensure compliance with this plan and local regulations.

Agreement:

By signing below, The Elizabeth Brewing Company acknowledges receipt of this Security and Control Plan and agrees to comply with its terms and conditions to ensure a safe and lawful event from June 20th through August 15th, 2025, at Running Creek Park, 500 E Kiowa Ave, Elizabeth, CO 80107.

- Licensee Name: The Elizabeth Brewing Company
 - Representative Name: _____
 - Title: _____
 - Signature: _____ Date: _____
-

Certification by Local Licensing Authority:

The Town of Elizabeth, as the local licensing authority, has reviewed and approved this Security and Control Plan for The Elizabeth Friday Night Market.

- Representative Name: Angela Ternus
- Title: Mayor
- Signature: Angela Ternus Date: 4-8-25

Note: This plan is subject to final approval by The Town of Elizabeth and may be amended as required.



TOWN OF ELIZABETH

MICHELLE M. OESER TOWN CLERK/ADMINISTRATIVE SERVICES DIRECTOR

TO: Honorable Mayor and Board of Trustees
FROM: Michelle Oeser Town Clerk
DATE: April 22, 2025
SUBJECT: Posting Open Board Seat

SUMMARY

On April 18, 2025, Shannon Downs turned in her resignation due to moving out of town. With Shannon's resignation there is a seat open for Ward 3. An open board seat is open as an appointed position for 60 days. If not filled within 60 days a Special Election will need to be held.

A special election to fill a vacancy is "subject to the municipal election code" and must "be held as soon as practicable..." C.R.S. 31-4-303. The municipal election code requires a special election to be called at least 60 days ahead of time, and it can be held on any Tuesday that is not within the 90 days preceding a regular election or within the thirty-two days before or after a primary, general, or congressional vacancy election. C.R.S. 31-10-108.

The Town Clerk is requesting direction from the Board to post the open seat.

If given direction to post the position, information on submitting a letter of interest will be posted in the Ranchland News and on the Town website.

RECOMMENDATION

Staff recommends the Board approve posting information on the open Ward 3 Trustee position straightaway.

Michelle Oeser

From: Shannon Downs
Sent: Friday, April 18, 2025 5:14 PM
To: Angela Ternus; Patrick Davidson; Michelle Oeser; cyh@hpwclaw.com
Subject: Notice of Resignation of Position as Trustee

Hello Mayor, Patrick, Michelle and Corey:

This email is not something I thought I would have to send but I need to inform you of the decision my husband and I have made to purchase a piece of property outside of the town limits of Elizabeth. This was not a plan when I ran for the position - I would most certainly never have done so had we had any idea of going anywhere. When this property was made known to us, after a LOT of discussion, thought and prayer we made the decision that it is something we needed to do for our future. We still own the Gold Creek Valley home but did put it on the market this week. I hope I can continue on the board as long as we own the property, however for the most part we are now living at the new place. We are still in Elizabeth but not within the town boundaries.

I take the position of Trustee very seriously and am terribly sorry to have to let it go. I hope to find some other way to be of service to the community in the possibility of other boards or organizations and absolutely intend to volunteer at events and such put on by the town.

Please let me know how you would like me to proceed. I am happy to continue as long as I can, however if I need to step off in order to get someone else in from my ward as soon as possible I do understand. I have appreciated getting to know everyone and the knowledge I have gained regarding the workings of a town board and how the impact of their decisions is so important. I am grateful to have been a part of it even if only for a short time.

Sincerely and with sadness,

Shannon Downs
Trustee - Town of Elizabeth



TOWN OF ELIZABETH

MICHAEL DEVOL/PUBLIC WORKS DIRECTOR

TO: Mayor, Mayor Pro-Tem, and Town Board of Trustees
FROM: Mike DeVol, Town of Elizabeth Public Works Director
DATE: April 22, 2025
SUBJECT: DENVER WELL PROPOSAL COST APPROVAL MEMO

Madam Mayor, Mayor Pro-Tem, and Board of Trustees,

Public Works is presenting a bid proposal approval for the Denver Well Bid Cost for the board of trustees to clean and re-equip the well for 2025. The Denver well was last pulled and cleaned in October of 2013. As discussed during previous board meetings the Denver Well production in 2024 went from 130-150 gallons per minute down to 50 gallons per minute. The pump was set at 450 feet in 2013 most likely due to cost and budget constraints at the time. The well is currently drilled to a depth of 1,460 feet, the proposal is to drop the new pump to a depth of 1,200 feet to keep the pump at a safe distance from the bottom of the well where sedimentation takes place. The bid includes the new pump, motor, 1,200 feet of piping, and airline to enable the depth measurements recordation in the towns SCADA (Supervisory Control and Data Acquisition) system for water depth levels 24 hours a day. The pump and motor are being upsized to achieve our allotted 150 gallons per minute permitted by the state at the deeper elevation of 1,200 feet. Attached to this memo will be a resolution and bid cost proposal for approval of the board. The cost of the proposal is not included in the 2025 budget as this was not a foreseen issue until early 2025 after camera inspection and water level information was compiled.

Regards,

Mike DeVol
Town of Elizabeth
Public Works Director
303-913-6453
mdevol@townofelizabeth.org

ORDINANCE 25-06

AN ORDINANCE AMENDING SECTION 13-6-60 OF THE TOWN OF ELIZABETH
MUNICIPAL CODE AND ADOPTING THE TOWN OF ELIZABETH WATER AND
SEWER STANDARDS DATED APRIL 2025

BE IT ORDAINED BY THE BOARD OF TRUSTEES FOR THE TOWN OF ELIZABETH, COLORADO,
THAT:

Section 1. Section 13-6-60 of the Town of Elizabeth Municipal Code is hereby repealed
and reenacted to read as follows:

Sec. 13-6-60 Adoption.

The Town, through its Board of Trustees, hereby adopts the *Town of Elizabeth Water and Sewer Standards*, dated April 2025. One (1) copy of said Standards shall be maintained on file at the office of the Town Clerk and may be inspected during regular business hours.

A copy of the *Town of Elizabeth Water and Sewer Standards*, dated April 2025 is attached hereto and identified as **Exhibit A**.

Section 2. Severability. If any section, paragraph, clause or provision of this Ordinance shall for any reason be held to be invalid or unenforceable, the invalidity or enforceability of such section, paragraph, clause or provision shall not affect any of the remaining provision of this Ordinance, the intent being that the same are severable.

Section 3. The Board of Trustees hereby finds, determines and declares that this Ordinance is promulgated under the general police power of the Town, that it is promulgated for the health, safety and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Board of Trustees further determines that the Ordinance bears a rational relation to the proper legislative objective sought to be attained.

Section 4. This Ordinance shall become effective thirty (30) days after publication.

Read and approved at the meeting of the Board of Trustees of the Town of Elizabeth, Colorado, this 22nd day of April 2025.

Passed by a vote of ____ for and ____ against and ordered published.

Angela Ternus, Mayor

ATTEST:

Michelle Oeser, Town Clerk

WATER AND SEWER STANDARDS



FOR THE
TOWN OF ELIZABETH

FINAL DRAFT

APRIL 2025

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SECTION 5 BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL

STANDARD DETAILS

GENERAL

G1	-	STANDARD APPROVAL BLOCK
G2	-	TYPICAL WATER AND SEWER STREET PLAN
G3	-	SEWER AND WATER LINE CROSSING
G4	-	CONCRETE ENCASEMENT
G5	-	SURFACE MARKER
G6	-	BORE CASING
G7	-	HARNES LUGS – BORE CASING

SEWER SYSTEM

S1	-	SEWER PIPE TRENCH
S2	-	STANDARD MANHOLE
S3	-	DROP MANHOLE
S4	-	FLAT TOP MANHOLES
S5	-	CAST-IN-PLACE MANHOLE BASES
S6	-	GREASE INTERCEPTOR
S7	-	SAND & OIL INTERCEPTOR

WATER SYSTEM

W1	-	WATER PIPE TRENCH
W2	-	HORIZONTAL THRUST BLOCKS
W3	-	VERTICAL THRUST BLOCKS

- W4 - MECHANICAL THRUST RESTRAINT**
- W5 - TRACER WIRE**
- W6 - BURIED VALVES**
- W7 - FIRE HYDRANT**
- W8 - BLOW-OFF**
- W9 - AIR RELIEF VALVE**

SERVICE LINES

- L1 - TYPICAL RESIDENTIAL SEWER SERVICE**
- L2 - SEWER SERVICE WYE CONNECTION**
- L3 - SEWER SERVICE LINE CLEANOUT**
- L4 - TYPICAL NEW SINGLE FAMILY DETACHED
RESIDENTIAL WATER SERVICE**

SECTION 1

APPLICABILITY AND DEFINITIONS

SECTION 1

APPLICATION AND DEFINITIONS

1.1 APPLICABILITY

These standards are to be applied in conjunction with the other administrative and procedural requirements of the Town of Elizabeth.

1.2 DEFINITIONS

Unless the context specifically indicates otherwise, the meaning of terms used herein shall be as follows (In addition, see Section 5 for backflow prevention specific definitions)

Acceptance shall mean formal notification by the Town to the Applicant that all the requirements of the "Checklist" have been met.

Actual Cost shall mean all direct costs applicable to the construction of a given facility, including surveys, preliminary and design engineering, construction, inspection, administrative, regulatory agency fees, bond fees, all required easements and/or rights-of-way, plan approval fees, "as-built" drawings, attorneys' fees, and other costs necessary for completion.

Applicant shall mean the person(s), firm, joint venture, partnership or corporation which is requesting service from the Town. In this document, the words "applicant" and "developer" have been used interchangeably.

Board and Board of Trustees shall mean the governing body of the Town of Elizabeth.

B.O.D. (Denoting 5-Day, 20 degrees centigrade Biochemical Oxygen Demand) shall mean the amount of oxygen which is utilized in the aerobic decomposition of Sewage under laboratory procedures in accordance with the current "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, the American Water Works Association and the Water Environment Federation.

Contractor shall mean the entity working on behalf of the developer to construct utilities or other physical improvements.

CDPHE shall mean the Colorado Department of Public and Health and Environment.

Cross-Connection means any physical arrangement whereby a public water supply is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture or other device which contains, or may contain, contaminated water, sewage or other waste or liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water supply as a

result of backflow. Bypass arrangements, jumper connections, removable sections, swivel or changeover devices, and other temporary or permanent devices through or because of which backflow could occur are considered to be cross connections.

Customer shall mean any person, company, corporation or governmental authority or agency authorized to use the public water or sewer systems under a permit issued or otherwise authorized by the Board of Trustees or the Town Administrator.

Developer shall mean the person(s), firm, joint venture, partnership or corporation which is the owner or operator of land and which seeks to have the land served by the Town.

Engineer shall mean the engineering firm, or duly authorized representative (engineer), designated by the Town to act on its behalf in all engineering and related matters. This item includes an Inspector employed by the Engineer.

Engineer of Record shall mean the Professional Engineer, registered with the State of Colorado, who is responsible for the design of utilities or other improvements on behalf of the Developer.

EQR This is an abbreviation for Equivalent Residential Unit which is an average single-family detached residence or the equivalent, from a systems demand standpoint.

Inspector shall mean the Manager, Superintendent, Engineer, agent, officers, employees of the Town or other person so designated by the Manager to perform inspections pursuant to these Standards or other Rules and Regulations of the Town.

Local Facilities are those facilities generally designed primarily to serve individual subdivisions or plats. Examples are: water distribution systems, collector sewer lines and storm drainage collection systems.

Manager shall mean Manager of the Town, Public Works Director or, the Manager's duly authorized agent.

Owner shall mean the land's record title holder or lessee with planning powers.

Oversize Costs this item is applicable to part of the construction costs of a water distribution line or sewer main to be installed within, or for, a subdivision; but which the Town has also assigned a transmission function which results in the need for a larger pipeline. Oversize costs are the difference between the actual costs of the size line required by the Town and the size required by the Developer; however, for purposes of determining oversize, the minimum size shall be assumed to be 12-inch diameter for water and 10-inch diameter for sewer. Engineering and inspection costs are not included, only construction costs. The additional cost for the oversize may be negotiated between the Town and the Developer.

PRV shall mean pressure reducing valve.

PVC shall mean poly vinyl chloride.

Permit shall mean written permission of the Board of Trustees authorizing connection to water or a sewer main of the Town granting applicant a license to use the system or to receive service from the system owned, operated or served by the Town.

Person shall mean any individual, firm, company, association, society, corporation or group.

Raw Water shall mean water that has not been treated.

Regional Facilities shall mean those facilities generally serving the Town's service areas as a whole. Examples are: water sources, water treatment plants, wastewater treatment plants, lift stations, tanks, and water transmission lines or trunk sewer mains.

Sewage shall mean any liquid waste containing animal or vegetable matter in suspension or solution from residences, commercial buildings, institutions, and industrial establishments.

Sewer or Sewer Main shall mean a Town-owned sewer pipeline, carrying sanitary sewage or approved industrial wastes only, and shall be installed in a public street or easement.

Sewer Service Line shall mean the privately owned sewer line extending from the building to the sewer main and shall include the tap onto the sewer main.

Shall is mandatory; "May" is permissive.

Town shall mean the Town of Elizabeth or the Board of Trustees of the Town.

Water Main shall mean a Town-owned water pipeline, carrying potable water only and shall be installed in a public street or easement.

Water Service Line shall mean the water line extending from the water main to the Customer's building, and shall include the tap on the main, corporation cock, curb stop and box and meter installation (see Section 4 for ownership responsibilities).

SECTION 2

SYSTEM REQUIREMENTS, DESIGN AND SIZING

SECTION 2

SYSTEM REQUIREMENTS, DESIGN AND SIZING

2.1 PURPOSE

Local sewerage and water facilities are considered to be engineered improvements which are designed for specific applications. All designs, drawings and specifications must be prepared by, or under the direction of a Professional Engineer registered in Colorado, whose seal must be on a record set of documents. Local collection systems and water distribution systems are the responsibility of the Developer, who is responsible for design and construction and the costs thereof and for payment of actual costs of design reviews and other reviews and inspections provided by the Town. The standard details and specifications contained herein are minimum design standards which the Town will accept in order to facilitate perpetual operation and maintenance procedures.

2.2 OWNERSHIP OF FACILITIES

All existing and future Regional and Local Facilities connected with and forming an integral part of the Systems and accepted for operation and maintenance pursuant to these Standards shall become and are the property of the Town, unless a contract between the Town and the Owner provides otherwise. That portion of all existing and future Service Lines extending from a main to each resident, unit or building for each customer that is connected with the System shall become and is the property of the Owner/Customer (See Section 4 for further descriptions of Customer Ownership).

2.3 DRAWINGS

Unless otherwise approved by the Town, all design drawings shall be 24" x 36" in size. Drawing scale for area plans shall be 1" = 50'. Submission of ½ size sets (at scale) are acceptable for review purposes.

Prior to the construction or installation of any Local Facilities, the Developer shall submit Design Documents with appropriate fees to the Town for review and approval. [The Developer is encouraged to submit preliminary designs for review of the overall layout, prior to producing this set of design drawings for review.] Each review package submitted to the Town shall consist of four (4) sets, and a cover letter describing the project. Two copies are for the Town, and two copies are for review by the Town's Engineer. The Developer must also make an independent submittal to the Elizabeth Fire Department. The Town and/or its Engineer may request additional documentation or calculations, depending on the complexity of the application.

The cover sheet of each design drawing set shall have an "approval block" affixed thereto which provides for the signatures of authorized representatives of the Town of Elizabeth, the Town's Engineer, and the Elizabeth Fire Department. The "approval block" shall be a facsimile of that appended to these Standard Specifications, "Standard Approval Block," Drawing G1. Drawings

submitted for approval must be stamped and signed by a Professional Engineer registered in Colorado.

Construction may not begin until the Design Documents have been approved by the Town. The construction contractor(s) must have a copy of the signed, approved design documents in their possession at the construction site.

After completion of construction, the Developer shall also provide a complete set of record drawings for the facilities. The record drawings shall show sufficient dimensioned ties to reasonably permanent surface features for all buried facilities to allow for future locating. One copy of the record drawings, stamped and signed by the P.E. must also be submitted for the Town's records, along with an electronic copy on CD in the latest version of AutoCAD and also in PDF format.

2.4 EASEMENTS

Where Local Facilities are to be located out of the public right-of-way, the Developer shall be responsible for obtaining easements required for the construction, maintenance, and operation of the facilities. The Town will not accept alignments that could present access or construction problems in present or in the future (e.g., steep slopes or difficult vehicular access).

The legal description for the easements shall be prepared by a Professional Land Surveyor, registered in the State of Colorado. Easements shall be in a form acceptable to the Town and shall be shown on the construction drawings. The Town will not approve the Contract Documents until all required easements have been deeded to the Town.

In general, the minimum width of easements for pipelines shall be 30 feet. Temporary construction easements shall have a minimum width of 40 feet. Wider easements may be required for deep sections of pipeline, multiple lines, storm sewers, or where otherwise required by the Town. In general, an easement containing a water line and a sewer line shall be no less than 36 feet in width. No water line shall be located less than 5 feet from the edge of easement and no sewer main shall be located less than 10 feet from the edge of easement.

2.5 SEWER COLLECTION SYSTEM REQUIREMENTS

The Sewer Collection System is for the disposal of water contaminated by biodegradable wastes. No Person shall make connection of roof downspouts, exterior foundation drains, areaway drains, surface drains or other sources of surface runoff or groundwater to a building sewer or building drain which in turn is connected directly or indirectly to the Sewer Collection System. In order to protect the Sewer Collection System from damage, destruction, deterioration, misuse or malfunction and to guard against health hazards and the creation of public nuisance, the following regulations shall apply relative to the discharge of Sewage containing deleterious wastes.

A septic facility may not be utilized within the Town Service Area unless a waiver is obtained from the Town.

2.5.1 Specially Regulated Wastes

- a) Industrial Wastes. No Person or Persons shall discharge or cause to be discharged any Industrial Waste of any type into the Sewer Collection System unless written permission is received from the Town.
- b) Inflow/Infiltration. No Person or Persons shall discharge or cause to be discharged into the Sewer Collection System, storm drainage from ground surface, roof ladders, catch basins or any other source, or sub-surface drainage or ground water.
- c) Other Wastes. Industrial cooling water, unpolluted process waters, bakery/restaurant wastes, car washing wastes, swimming pool drainage and floor drainage from enclosed and covered areas may be connected to the Sewer Collection System only by a special Permit from the Town. The application for such a Permit, in addition to information normally required for a Permit application, shall include the following:
 - Name and address of the Owner.
 - Location of the property for which the request is made.
 - Description of the facility or operation requested for connection.
 - Estimated quantities and qualities of the waste to be discharged including maximum rates.
 - Plans and specifications of related waste generating processes and any pretreatment processes.

Such Permits issued by the Town may contain the following conditions:

- the construction of flow measuring and/or sampling devices;
- the construction of valves or gates to stop flows on an emergency basis;
- the construction of grease, oil or sand interceptors, or other pretreatment facilities;

or the Town may place other restrictions on the Permit as reasonably required under the circumstances. Nothing in this Section shall prohibit the Town from denying an application for a Permit if the Town determines that the demand on the System(s) impairs the Town's existing operations or use.

2.5.2 Prohibited Wastes

Toxic or non-biodegradable waste or any other waste which results in effluent not being within state standards after providing conventional treatment shall not be discharged into the Sewer Collection System. No drain accepting discharge from vehicle wash racks, filling stations, restaurants or other building sewers as specified by the Town shall be connected to any Sewer Service Line unless the discharge first passes through an acceptable grease, oil or sand interceptor. Except as provided herein, no Person shall discharge or cause to be discharged any of the following described waters or wastes to the Sewer Collection System:

- a. Any liquid or vapor having temperatures higher than one hundred and four degrees Fahrenheit (104° F).
- b. Any water or waste which may contain more than one hundred parts per million (100 ppm) by weight of animal or vegetable fat, oil or grease.
- c. Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid, gas, oil or grease, distilled alcohol
- d. Any garbage that has not been properly shredded to less than one-half inch (½") in the largest dimension.
- e. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastic, wood, paunch manure or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper and normal operation of the Sewer Collection System.
- f. Any waters or wastes having pH lower than 5.0 or higher than 9.0, or having any other corrosive or toxic property capable of causing damage or hazard to structures, equipment or personnel of the Sewer Collection System.
- g. Any water or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any Sewage treatment process, constitute a hazard to humans, animals or fish, or create any hazard in the receiving waters of the sewer treatment plant effluent.
- h. Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewer treatment plant.
- i. Any noxious substances or malodorous waste, waters, gases or substance capable of creating a public nuisance, either in the sewer or at the sewer treatment plant.
- j. A five (5) day B.O.D. concentration greater than three hundred parts per million (300 ppm).
- k. A concentration of more than three hundred parts per million (300 ppm) of suspended solids.
- l. Concentrated wastes from septic tanks and portable sanitary devices.
- m. A peak flow rate greater than five (5) times the average flow rate.
- n. Any chemicals having a twenty-four (24) hour proportionate composite sample concentration at the point of discharge in excess of the following:

Cadmium	0.10 mg/L
Chromium	5.0 mg/L
Copper	3.0 mg/L
Cyanides	2.0 mg/L
Iron	15.0 mg/L
Phenol	10.0 mg/L
H ₂ S (Hydrogen Sulfide)	1.0 mg/L
Zinc	2.0 mg/L

2.5.3 Pretreatment

Where necessary, as determined by the Town, whose determinations shall be final, the Customer shall provide, at its sole cost and expense, such preliminary treatment as may be deemed

necessary. Where preliminary treatment facilities are provided for any waste or water, they shall meet with the approval of the Town for adequacy of design, and once built, shall be maintained continuously in satisfactory and effective operation by the Customer. When required by the Town, the Customer of any property served by a Service Line carrying Industrial Wastes shall install a suitable control manhole or monitoring point in the building sewer to facilitate observation, sampling and measurement of the Industrial Wastes. Such manhole or monitoring point shall be accessible and safely located and constructed in accordance with plans and specifications approved by the Town. The manhole or monitoring point shall be installed and maintained by the Customer at its expense.

2.5.4 Sump Pumps and Illegal Devices

No plumbing fixture, device, construction or plumbing system shall be installed within any building or improvement which will provide a connection between the Sewer Collection System, directly or indirectly, or with a Sewer Service Line for the purpose of draining ground or surface waters into the Sewer Collection System, and no physical connections shall be permitted whereby a Sewer Service Line is connected to a sump pump or other facility in such a manner that through either the manipulation of valves, the lack of back pressure valves, or as a result of any other arrangement or connection, it is possible to drain flood, overflow, storm or ground water directly or indirectly into the Sewer Collection System. Any Person having connected, or permitting to be connected, such a system to a Sewer Service Line or a Sewer Main, may be given notice to immediately disconnect such device or pumping system at his cost, and upon failure to do so, the Town may forthwith disconnect any Sewer Service Line from the property containing such a forbidden device or pumping system at the Sewer Main. The cost of such disconnection shall be a lien and charge against the property involved. No Sewer Service Line shall thereafter be connected to the Sewer Collection System without payment of the re-connection fee to the Town, and all costs and expenses of the Town relative thereto and positive proof that such improper and illegal connection or device has been removed and will not thereafter be re-connected to the Sewer Collection System.

2.5.5 Grease, Oil or Sand Interceptors

- a) General - Design, Installation and Location. Grease, oil or sand interceptors shall be provided and installed at the sole cost and expense of the Customer when, in the opinion of the Manager, they are necessary for the proper handling of liquid wastes containing greases, oil, etc., in excessive amounts, or any flammable wastes, sand or other harmful ingredient. Fixtures that must be connected include, but are not limited to all kitchen service drains, scullery sinks, pot and pan sinks, dishwashing machines, soup kettles, garbage disposals and floor drains located in areas where materials containing grease may exist. Toilets, urinals, and similar fixtures shall not be connected to the interceptor. Upon prior approval by the Town, interceptors will not be required for facilities where food is served but not cooked at the facility, and/or no equipment or utensils associated with the preparation or service of cooked foods are washed at the facility. At a minimum, the interceptor shall be designed in accordance with the 2012 International Plumbing Code (IPC). The Customer shall also submit the proposed menu as part

of the sizing calculations. The Town reserves the right to adjust the proposed sizing based on the proposed menu. All interceptors shall be located as to be readily available and accessible for cleaning and inspection. Grease, oil or sand interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. Interceptors shall be watertight, and, if necessary, as determined by the Town, gastight and vented.

- b) **New Buildings:** Interceptors for new buildings shall be approved by the Town and shall have a minimum of two (2) compartments with fittings designed for grease, oil and/or sand retention. There shall be at least two (2) manholes lids for each interceptor to provide access for cleaning and inspection of all fixtures and compartments. Interceptors for new buildings shall be located outside of the facility served and will not be allowed in drive-through driveways or next to main entranceways. Location of all interceptors shall be approved by the Town and shall be shown on the approved final development plan. Grease interceptors shall conform to Detail S6 and sand/oil interceptors shall conform to Detail S7, as applicable. The volume of a grease interceptor shall be determined by multiplying the total rate of flow in gallons per minute from each fixture required to be connected to the interceptor times a minimum retention time of not less than 15 minutes, the resulting volume expressed in gallons. The minimum acceptable grease interceptor volume shall be not less than 750 gallons. The flow rate from each fixture is provided in the following schedule:

TYPE OF FIXTURE	RATE OF FLOW (GPM)
Floor drain/sink	10
Restaurant kitchen sink	15
Single compartment scullery sink	20
Three compartment sinks	35
Two single compartment sinks	25
Two double compartment sinks	35
Restaurant dishwasher:	
up to 30 gallon water capacity	15
30 to 50 gallon water capacity	25
50 to 100 gallon water capacity	40
Garbage disposal/grinder	35

The volume of a sand/oil interceptor shall be determined as depicted in the following with a minimum acceptable volume of not less than 500 gallons.

Parking Garage – A base of forty-five (45) gallons plus eight (8) gallons per ten (10) vehicles
 Repair Garage, Warehouse – A base of Forty-five (45) gallons plus eight (8) gallons per one hundred (100) square feet of building area.

- c) Maintenance and Inspection. Where installed, all grease, oil or sand interceptors shall be maintained by the Customer at its sole cost and expense, in continually efficient operation at all times. The Town requires a monthly or periodic cleaning and pumping of any grease, oil or sand interceptors. The Customer shall maintain

a cleaning and maintenance record. At a minimum, the previous two years' maintenance records shall be filed at the property for periodic review by the Town. The Town may make inspections of grease, oil or sand interceptors and in the event the Customer/Owner is in violation of these requirements, the Customer/Owner may be liable for payment of a penalty (Per EMC 13-6-50). The cost of the Town's inspections may be billed directly by the Town to the Customer and/or Owner and, in addition, may include all other costs incurred by the Town in inspecting the interceptor.

2.5.6 Private Lift Stations

The Town will allow the construction and use of a private lift station if the customer or the engineer or representative working on behalf of the customer has exhausted all avenues of providing a gravity lateral sewer. In the event a private lift station is installed, the private lift station is the sole responsibility of the customer. The lift station shall be designed and permitted (if applicable) in conformance with CDPHE standards. Expenses associated with operating and maintaining the lift station shall be the responsibility of the customer. The Town shall be granted access to inspect the lift station upon request and reserves the right to isolate the system due to any violations of these Standards. .

2.5.7 Swimming Pools

No public or private swimming pool shall be connected to the Sewer Collection System without first obtaining a special Permit from the Town. Such Permit shall define and specify the hours during which water may be discharged from such pools into the Sewer Collection System.

2.6 SEWER MAIN DESIGN / SIZING

Collection sewer system design is intended to provide gravity service only. Before the start of design, the Developer is to contact the Town Engineer to confirm the connection point with the existing sewer system. Sewer line sizing is to be approved by the Town Engineer. The Town may direct the Developer to provide sewer line capacity in excess of the Developer's requirements. In such cases, the Town may negotiate reimbursement to the developer for the incremental cost of the oversize. Sewage lift stations and force mains will not be permitted unless specifically authorized by the Town.

Collection sewers shall be designed to carry not less than the projected peak flow rates flowing half full (safety factor = 2.0), unless otherwise approved by the Town Engineer. The minimum size collection sewer shall be 8" diameter. Sewers shall be so designed and constructed to give mean velocities, when flowing full, of not less than 2 feet per second.

When located in public streets, sewer mains shall be positioned on the west and south sides of the street center line. The mains shall be located proximately 5 to 10 feet from road center line and a minimum distance of 5 feet from the lip edge of the gutter pan (See Drawing G2). Sewers

shall generally be designed with sufficient depth to serve basements by gravity. The minimum cover shall be 6 feet from top of sewer to finished grade.

Water and sewer lines shall have a 10 feet minimum horizontal separation. Where this separation is impractical, the Town may permit other separation requirements, in accordance with applicable standards. If a water line passes under a sewer main or service, or if it lies within 10 feet of the sewer, the water line is to be protected per Drawing G3 and Drawing G4. When specifically authorized by the Engineer, other encasement or water line protection alternatives may be permitted. Manholes shall be located at a maximum spacing of 300 feet center-to-center and also at changes in sewer pipeline alignment and/or grade and at the end of each line. Sewers shall be laid with uniform slope between manholes.

Drop manholes (per Drawing S3) are to be provided for any pipeline whose invert entering the manhole is greater than 24" above the invert out.

2.7 WATER SYSTEM REQUIREMENTS

The Town Water Distribution System has been planned and constructed to provide Potable Water for conventional domestic and commercial uses and fire protection and irrigation. Any application for industrial or a high-demand commercial water supply, which use could be expected to require large quantities of water or unusual demand rates, shall be required to submit demand data before a Permit will be issued and said Permit may contain use limitations as determined to be necessary by the Town.

Water from the Water Distribution System and water from any other source shall be distributed through systems entirely independent of each other and Cross-Connection between such supplies is prohibited. Where any potential of backflow is present, a protective device or system, acceptable to the Town, shall be installed to prevent its occurrence. The installation, testing and maintenance of the protection device shall comply with the Backflow Prevention and Cross-Connection Control standards presented in Section 5.

All lawn sprinkler systems shall be equipped with a vacuum breaker approved by the Town.

2.8 WATER DISTRIBUTION DESIGN / SIZING

Water mains shall be designed to meet the more stringent of the following two conditions:

- a. Maximum hourly demand with pressures not less than 40 psi at any point of the distribution system, or
- b. Maximum daily demand rate plus fire flow demand (as determined by ISO guidelines) with delivery pressures of not less than 20 psi at the hydrant.

The normal minimum size water distribution main shall be 12" or 8" for short looped lines in single-family residential areas. Six-inch mains may be individually approved by the Town for

dead-end mains serving no more than 15 residences with a fire hydrant near the end of the line, if this location and delivery rate meet the requirements of the Elizabeth Fire Department. Main line gate valves shall be located at a minimum frequency of every 600 feet and at all intersections. Crosses or tees shall include isolation valves on all legs, unless otherwise directed by the Town.

Water main sizing and connections shall be reviewed with the Town's Engineer prior to final detailing and drafting. The systems shall be designed to maximize interconnections and strengthening of the Town's water system. Where certain lines may also have a transmission function, in the opinion of the Town, the Town may direct that such lines be oversized.

Regulations normally require a 10-foot minimum horizontal separation between water and sewer mains. When located in public streets, potable water pipelines shall normally be positioned on the east or north sides of the street center line. The mains shall be located proximately 5 to 10 feet from road center line and a minimum distance of 5 feet from the lip edge of the gutter pan (See Drawing G2). Curved water line alignments are to be avoided if the water line is laid in the same easement or roadway as a sewer line.

2.9 INSPECTIONS

New installations, replacements, or repairs to the water distribution or sewer conveyance lines shall be inspected and approved by the Town or the Town's designated Inspector. All work shall be performed in accordance with accepted workmanship practices and the specifications set forth and referenced herein. Any work not accepted by the Town shall be redone until compliant with these Standards. All appropriate permits and approved plans shall be kept on the job site during construction. After receipt of approved plans from the Town the Applicant shall give at least 48 hours notice to the Town prior to starting construction.

2.10 ACCEPTANCE CHECKLIST

Checklist for Acceptance of Town Facilities. To be completed after construction and prior to any service connections.

1. Construction of all Town facilities completed to Town Standards and to the approved plans.
2. All facilities tested to Town Standards and accepted by the Town's Engineer. (Furnish copies of soils compaction and materials tests).
3. Permanent survey monuments set at the corners of all easements.
4. Record drawings meeting Town Standards and sealed by a registered Professional Engineer (Hard and Electronic Copies).
5. Furnish a summary of total construction costs (including design costs) of all applicable water and sewer facilities. Include only facilities to be deeded to the Town.

6. Warranty Deed for all facilities to be owned by the Town.
7. Two-year Maintenance Bond to begin after the date of acceptance, except that if deficiencies are identified and repaired, a new two-year maintenance bond for the repaired Work is to begin starting on the date of acceptance of the repaired Work.
8. Payment of all fees and confirmation from Town's Attorney that the applicant for dedication of the facilities is not in default under any agreements within the Town.
9. Electronic Copy (CD) of sewer main video following initial acceptance (see Section 3.5.3)

SECTION 3

LOCAL SEWER AND WATER STANDARDS

SECTION 3

LOCAL SEWER AND WATER STANDARDS

3.1 PURPOSE

The standard details and specifications contained herein are minimum design standards which the Town will accept in order to facilitate perpetual operation and maintenance procedures. In addition, the engineer must also design in accordance with the minimum standards of other regulatory agencies. Review and approval of local facilities designs by the Town, its Engineer or other agencies (Elizabeth Fire Department) shall not relieve the Engineer of Record from responsibility for adequate design.

3.2 SANITARY SEWER MATERIALS

Pipe: Sewer pipe and fittings, 15 inches and smaller, shall be polyvinyl chloride (PVC), SDR 35 minimum thickness conforming to ASTM D3034. Joints shall be of the "slip on" type with integrally cast bell having an elastomeric gasket. For non-standard sewer line applications (e. g.: steep terrain; crossings of streams, ditches or drainages), the Town Engineer will issue project-specific requirements on request.

Manholes: Manhole bases, barrels and tops shall be precast concrete units conforming with ASTM C-478. Concrete for manhole bases and other similar items shall have a 28-day compressive strength of not less than 3,000 psi. All reinforcement required shall be standard deformed reinforcement conforming to the requirements set forth in ASTM A615, Grade 40.

The top section required for change of diameter shall be eccentric cone or flat top as depicted on Standard Drawings S2, S3, and S4. To bring the manhole cover to the correct elevation, the adjustment section of each manhole shall be pre-cast concrete grade adjustment rings. These rings shall be not less than 6 inches wide and furnished in heights to allow for 1-inch adjustment. Total adjustment height with grade rings, shall not exceed 12 inches.

Gaskets (O - rings) or flexible connection boots for connecting PVC pipe to manhole sections shall be specifically manufactured for that purpose. The gasket on boot shall be provided by the manhole manufacturer.

Manhole Joints: the joints between precast manhole sections are to be sealed with Ram-Nek LTM by Henry Company, or approved alternate gasket material.

External Joint Sealing: In addition to the gasket material used within the joints between sections of the manhole, an external joint wrap is required. Wrap is to be no less than 8" wide and is to be ConSeal CS-202 Butyl Rubber external joint wrap or Ram-Nek or approved equal.

Manholes for sewers of 15" diameter or less shall have a minimum inside diameter of 4 feet. Consult the Town's Engineer for requirements for larger sewers. Manholes shall be constructed and installed in accordance with the Standard Drawings S2, S3, S4 and S5. Manholes in open

fields shall be designated with surface markers (see Drawings G5). Surface markers shall be flexible plastic manufactured by Carsonite or approved equal and shall be yellow in color with imprinted letters identifying sewer size and manhole number.

Manhole Covers: Manhole frames and covers shall be cast iron with the word "SEWER" cast on the cover. Unless otherwise specified, manhole lids shall be gasketed, unbolted lids, per Neenah R-1500 "self-sealing", or approved equal. If a gasketed, bolted lid is called for, it shall be Neenah Model R-1915-S1, or approved equal. Manhole covers shall include plastic infiltration inserts to protect against drainage inflow.

Manhole Steps shall be treaded, injection-molded polypropylene encapsulating a 112" grade 60 reinforcing rod. Shall be M.A. Industries step, Model PS-1 PF, or approved equal.

3.3 WATER MAIN MATERIALS

All water mains shall be Blue C900 or C905 PVC, conforming to ASTM 2241. Pipe joints shall be push-on type.

Fittings shall be ductile-iron, minimum 250 psi minimum working pressure, conforming to AWWA G153 or C110 with mechanical joint connections meeting AWWA C111. Fittings shall have a cement mortar lining meeting AWWA 104 and bituminous exterior coating.

Sheathing: All ductile-iron, valves, and fittings shall be polyethylene sheathed in accordance with ANSI A21.5, AWWA C105, 10 mil minimum thickness.

Tracer Wire: A ten-gauge insulated tracer wire shall be required for all water mains. Wire termination boxes shall be provided, as depicted in Drawing W5.

Location Tape: All water lines shall be marked using blue detectable utility marking tape placed 8 to 10 inches below grade. The tape shall be PVC material 6-inches wide with a thickness of four (4) mils.

Surface Markers: Gate valves in open fields shall be designated with surface markers (see Drawings G5). Surface markers shall be flexible plastic manufactured by Carsonite or approved equal and shall be blue in color with imprinted letters identifying main size and valve number.

Pipeline Insulation: Where required at depths less than specified. Insulation shall be Dow STYROFOAM 115 or approved equal.

Line Valves: Line valves shall be provided to allow isolation of parts of the system for maintenance or repair. They are required approximately every 600 feet, or more frequently at intersections of mains to allow isolation of loops and branches. Line valves shall be provided on the legs of all cross and tee fittings, unless otherwise approved by the Town. A line valve is required between fire hydrants. Line valves shall comply with requirements for "Buried Valves."

Buried Valves: Valves, 12" and smaller, shall be non-rising stem, bronze mounted gate valves with mechanical joint ends conforming with AWWA C509. Valves shall have 2" square operating nuts and open left (counterclockwise rotation). Valves shall be Mueller, Clow, Waterous, or approved equal.

Valve Boxes: Each buried valve shall be provided with a cast-iron valve box and round cover. The box shall have a minimum inside diameter of 5 1/4" and be adjustable in length and of the screw type. The word "WATER" shall be cast on the cover. Valve boxes shall be "wide oval base" by Tyler, Clow, or approved equal. Valve boxes shall allow for at least 3 additional extensions above the level required for final grade at the time of installation. The top of all valve stems (including extensions) shall be located between 42" and 48" below final grade (See Drawing W6).

Fire Hydrants: Fire hydrants shall be of the dry barrel type and conform with AWWA C502. Hydrants shall have a 5 1/4" main valve, two 2-1/2" hose connections and one 4 1/2" pumper connection. Hydrants shall have 6- inch mechanical joint connections and safety traffic flange. Operating and cap nuts must be 1 1/2", Number 17 National Standard hex main valve that opens left. Fire hydrants shall be Mueller Centurion No. A-423, Waterous Pacer WB-67 with bronze seat ring, or approved equal (See Drawing W7).

Blowoffs: Blowoffs shall comply with Drawing W8. The top of all blowoff valve stems (including extensions) shall be located between 42" and 48" below final grade.

Air-Release Valves: Shall be provided at high points in the water distribution system. This may take the form of a fire hydrant or 2" blowoff (both manually operated), or an automatic air-release valve (See Drawing W9). The proposed location and use must be pre-approved by the Town.

Mechanical Joint Restraint: Joint restraint devices shall be made of ductile iron. Joint restraint devices shall be EBAA Iron, Inc., Megalug Series 1100 or 1700 or Uni-Flange Corp. Series 1400 or accepted equal.

Casing Spacers: Carrier pipes to be installed inside casings shall be installed with self-restrained casing spacers. Casing spacers shall provide axial thrust restraint to prevent pipe joint deflection during and after installation. They shall also provide dielectric insulation between the carrier pipe and the casing and facilitate installation of the carrier pipe into the casing. Spacers shall be installed at a maximum of every ten (10) feet of the pipeline to support the pipe barrel and the weight of its contents. Casing spacers shall be manufactured by Uni-Flange or Cascade Waterworks or approved equal.

3.4 INSTALLATION

3.4.1 Sewer Installation

The sewer system shall be installed in a thorough, workmanlike manner in accordance with the Design Documents that have been approved by the Town. The minimum bedding and backfill requirements shall be as shown on Drawing S1 and described in these standards.

The minimum cover shall be 6-feet from top of sewer line to finished grade. A minimum of 5-feet of cover will be allowed if at least 2 inches of an approved pipeline insulation is provided, per Drawing S1. If insulation is installed, use approximately 6-inches of sand or squeegee for the pipe zone materials above and beneath the insulation to protect it from breakage during backfill.

If the bottom of the excavation is soft or unstable, and in the opinion of the Town, is not a satisfactory support for the pipeline, further depth and/or width shall be excavated and refilled to 6-inches below the pipe outside diameter (excluding bells) with Trench Stabilization Material, as specified in Section 3.4.6.

Each pipe length and fitting interior, interior surface of bells, and exterior surface of spigots shall be cleaned of all foreign material before placing it in the trench and shall be kept clean all times thereafter. Each item must also be examined for cracks and other defects before installation.

Pipe shall be cut, only whenever necessary, to conform to location of manholes or connections. All cuts shall be straight, true, and at right angles to the axis of the pipe unless otherwise noted or directed by the Engineer. The cutting process shall leave a smooth end without damaging the pipe. All burrs shall be removed from the ends of cut pipe, and the end chamfered and lightly rasped or filed. All tools used in cutting pipe shall be subject to the Engineer's approval. The manufacturer's requirements for lubrication and gaskets must be followed.

Pipe laying shall proceed upgrade with the spigot ends of pipe pointing in the direction of the flow, unless otherwise approved by the Engineer. Each pipe length shall be laid true to line and grade in such manner as to form a close concentric joint with the adjoining pipe and to prevent sudden offsets to the flow line. Pipe shall be laid in an unwatered trench and shall not be used for draining water from the trench. Pipes are to be kept clean by capping or plugging ends.

3.4.2 Manholes

Manholes shall be constructed to conform to the Standard Details. The invert channels shall be smooth and semi-circular in shape, conforming to the inside of the incoming and outgoing sewer pipelines. Changes in direction of flow shall be made with a smooth curve of as large a radius as the size of the manhole will permit. Changes in size and grade of the channels shall be made gradually and evenly. Where differences in invert elevations exist, sloped flow channels shall be formed so the sewage does not undergo a vertical drop. The invert channels may be formed directly in the concrete of the manhole base. The floor of the manhole outside of the channel shall have a rough broom finish and shall slope toward the channels not less than 1 inch per foot nor more than 2 inches per foot. The top circumference of the base shall be finished level and

smooth to permit obtaining a watertight joint between the precast manhole sections and the cast in place base. The manhole covers shall be set with their tops at the grades set forth in the approved drawings. When a manhole top is above the ground line, the exposed ring shall be encased in non-shrink grout as shown on the Standard Details. Manhole tops without bolted, gasketed covers shall not be set at or below surrounding grade, except in paved roadways. The site shall be graded so that drainage is away from the manhole.

Each joint of the precast manhole barrel shall have at least one continuous Ram-Nek gasket placed on the lower ledge before the barrel immediately above is lowered into place.

For poured-in-place bases (See Drawing S5), joints between the precast manhole barrel sections and the cast in place manhole bases shall have two continuous gaskets and shall be grouted inside and outside using approved non-shrink grout. With a poured-in-place base, the surface of the precast barrels and the cast in place bases shall be smooth and sound. The joint surfaces shall be cleaned to remove any concrete projections or dirt which may prevent a water-tight seal from being established. The joints shall be prepared and the gaskets shall be placed in accordance with the manufacturer's recommendations.

External Joint Sealing Wrap is to be applied to clean concrete surfaces per manufacturer's requirements. Must be applied immediately prior to backfilling, so when backfill is compacted the earth pressure forces bituminous wrap into concrete surfaces. Temperature of manhole sections and of backfill materials must be above 40 deg. F from time of applying wrap to time of backfilling.

3.4.3 Underdrains

The Town does not allow the use of underdrains laid in the same trench as a sanitary sewer line.

3.4.4 Waterline Installation

Water pipelines shall be installed in a thorough and workmanlike manner in accordance with the Design Documents that have been approved by the Town. The minimum bedding and backfill requirements are depicted on Drawing W1 and described in Section 3.4.6. The minimum cover shall be 5 feet from top of water line to finished grade. Pipelines shall not be placed deeper than 10 feet without prior approval by the Town.

A minimum of 3 feet 6-inches of cover will be allowed if at least 8 inches of an approved pipeline insulation is provided, per Drawing W1. If insulation is installed, use approximately 6-inches of sand or squeegee for the pipe zone materials above and beneath the insulation to protect it from breakage during backfill.

If the bottom of the excavation is soft or unstable, and in the opinion of the Town, is not a satisfactory support for the pipeline, further depth and/or width shall be excavated and refilled to 6-inches below the pipe outside diameter (excluding bells) with Trench Stabilization Material, as specified and detailed in Section 3.4.6.

All pipeline fittings (i.e., bends, tees, plugs, and caps) shall be installed with concrete thrust blocks adequately designed for the specific application and mechanically restrained for at least 40 feet in all directions. Thrust blocks shall be cast-in-place from concrete having a minimum compressive strength of 3,000 psi. Minimum requirements for horizontal and vertical thrustblocks are as shown on Drawing W2 and W3.

Alternate means of thrust restraint may be considered and approved for use where proved to provide similar restraint. Supplemental restraint may also be required where the Engineer believes the soil bearing pressures to be inadequate, or where the Engineer is concerned about subsequent movement due to slope or other conditions of service. See Drawing W4 for mechanical joint restraint lengths and details. Valves near a fitting must be tied back to that fitting, using rodding or mechanical joints.

All dead ends shall be terminated with a fire hydrant or blow-off.

3.4.5 Fire Hydrant Installation

Fire hydrants shall be located as required by the Town and the Elizabeth Fire Department and shall be placed at a maximum interval of every 500 feet. The Developer shall be required to obtain the approval by the Elizabeth Fire Department for fire hydrant locations. In general, hydrants shall be located at a minimum of 18-inches behind curbs or sidewalks. Fire hydrants shall be installed in accordance with Drawing W7. Each hydrant shall be connected to the main by a six-inch (6") branch line. An independent six-inch (6") gate valve shall be installed on the tee off the water main. The length of the branch fire line shall be a maximum of 50 feet and no service line connections shall be made on the fire hydrant branch line.

3.4.6 Sewer and Water Main Pipe Bedding and Backfill

- a. Trench Zones. The terms "Bedding Zone", "Pipe Zone" and "Backfill Zone" shall refer to the trench zones identified in the Standard Details S1, and W1.
 - 1) Bedding zone. The Bedding Zone shall consist of all material placed below the pipe invert or, when permitted, the native materials graded and prepared for direct placement of the pipe.
 - 2) Pipe zone. The Pipe Zone shall consist of all material placed above the pipe invert to an elevation shown on the details.
 - 3) Backfill zone. The Backfill Zone shall consist of all material above the Pipe Zone.
- b. Material. All bedding and backfill material shall have the approval of the Engineer. All bedding and backfill material shall be free of frozen material, organic material and debris. The materials to be used in each trench zone are indicated on the Standard Details and these materials are described below. All materials may be subject to gradation tests and compaction tests prior to approval of the use of that material. The test results shall be submitted to the Engineer for approval and verified as to their accuracy. These tests shall be performed at no cost to the Town or its agents.

- 1) Sand bedding or sand backfill material. This material shall be a clean, well-graded sand and shall conform to the following limits when tested by means of laboratory sieves:

Well-Graded Sand

Sieve Size	Total Percent Passing by Weight
3/18 – inch	100
No. 4	70 - 100
No. 8	36 - 93
No. 16	20 - 80
No. 30	8 - 65
No. 50	2 - 30
No. 100	1-10
No. 200	0 - 3

- 2) Roadbase bedding material or roadbase backfill. This material shall be Class 6 aggregate base course as specified by the latest version of the State of Colorado Department of Highways; and shall meet the following gradation:

Sieve Size	Total Percent Passing by Weight
¾ – inch	100
No. 4	30 - 65
No. 8	20 - 55
No. 200	3 - 12

- 3) Squeegee Sand. This material shall be clean, well graded and conform to the following limits when tested by means of laboratory sieves:

Sieve Size	Total Percent Passing by Weight
3/8 – inch	100
No. 200	0 – 5

- 4) Granular bedding or granular backfill material. This material shall be imported crushed rock or angular surfaced gravel and meet the following gradation (ASTM D448, No. 67):

Sieve Size	Total Percent Passing by Weight
1 – inch	100
¾ - inch	90 – 100
3/8 – inch	20 -55
No. 4	0 – 10
No. 8	0 - 5

- 5) Select material. Select material shall not be permitted unless authorized by the Engineer. This material shall consist of suitable material screened from the excavated earth having no rocks or stones greater in size than $\frac{3}{4}$ -inch.
- 6) Trench stabilization material. This material shall be a $\frac{3}{4}$ inch to $1\frac{1}{2}$ inch uniformly-graded, crushed rock or concrete aggregate.
- 7) Backfill material. Backfill material shall consist of suitable material from the excavated earth, meeting all the requirements of these standards.

No boulders over 6 inches in any dimension shall be allowed in the top 12 inches of the trench. All boulders shall be carefully placed so that no damage will be done to the pipeline. No backfill material shall have boulders larger than 24 inches in any dimension and the amount of boulders larger than 8-inches shall be less than 15% of the backfill volume. Boulders larger than 8 inches in any dimension shall be carefully lowered into the trench until the backfill is 4 feet over the top of the pipe.

c. Bedding and Backfill Installation:

- 1) General. The compaction requirements for the backfill zone shall conform to maximum dry density according to ASTM D698, Moisture-Density Relations of Soils (Standard Proctor). For the bedding and pipe zones, and when the ASTM D698 test is not applicable, the percentage compaction requirements shall conform to ASTM D4253, Test for Relative Density of Cohesionless Soils.

The Developer is responsible for providing (at no cost to the Town) adequate materials testing and/or geotechnical engineering resources to provide proper Quality Control and response to Quality Assurance directives by the Town or its agents. At a minimum, moisture density tests shall be taken one test for every 24-inch lift per 200 linear feet of trench and at every above ground appurtenance (i.e. valve box, manhole, hydrant, etc.)

When required by the Town, the Developer shall excavate backfilled trenches for the purpose of performing compaction tests at locations and depths required by the Engineer. The Developer shall be responsible for reinstalling and compacting the test excavations at no additional cost to the Town.

- 2) Bedding zone installation. Bedding material shall consist of the material on which the pipe is placed in accordance with the Drawings S1 and W1. Bedding material shall be placed to the required elevation of the pipe invert. Tamping and/or vibratory equipment shall be used to thoroughly tamp the bedding material to a minimum 75 percent relative density.

- 3) Pipe zone installation. After bedding material has been placed and approved and after the pipe has been installed and approved, the pipe zone backfill shall be installed to an elevation shown on the Standard Drawings.

The pipe zone material shall be as specified on the details and shall be placed and compacted in distinct, separate lifts not to exceed 6 inches of loose depth; except that the first loose lift shall not be higher than the pipe centerline (springline). If select backfill materials are permitted in this zone but acceptable select backfill material (suitable for placement within 12 inches of the pipe barrel) is not available at any particular location, the Developer shall use imported granular backfill material. Compaction shall meet the requirements of "Bedding Zone Installation," utilizing T-bars or mechanical tamping equipment.

- 4) Backfill zone installation. Unless otherwise provided in the Special Construction Provisions, the following method of installation shall apply. After the pipe zone backfill has been placed and approved, the trench shall be backfilled. All backfill above the pipe zone backfill shall be carefully placed in the trench in lifts no greater than 2 feet loose lifts. Each lift shall be compacted by mechanical equipment to 95 percent of laboratory dry density. After the trench is backfilled to the ground surface, the trench line shall be wheel rolled. If the backfill is depressed below the finished grade elevation, the depressed area shall be refilled and compacted. The backfill shall be mounded higher than the adjacent ground to allow for settlement.
- 5) Backfill zone installation in roads and streets. Beneath all traveled ways in roads and streets, highway shoulders and within 15 feet of pavement in State Highway Department rights-of-way (unless otherwise specified on the plans) backfill shall be carefully placed and compacted up to the limit of base course material or to gravel. Compaction shall be by mechanical tamping in 8-inch maximum loose lifts using mechanical or hand tampers, weighing not less than 20 pounds, or vibratory rollers. All other means must be approved in writing by the Engineer. All backfill shall be compacted to 95% of maximum laboratory dry density or 70 percent relative density. The material shall be within 2.0 percent of optimum moisture content. Finished backfill surface shall be proof rolled and exhibit no deflections.

The Developer may request approval of alternate means of compaction. Such request must be submitted from a registered engineer to the Town in writing. Approval of the compaction method will be made by the Town only in writing. Use of specified or approved compaction methods does not relieve the Developer from providing a completed project meeting the intent of this Specification.

- d. Maintenance of Backfill. All backfill shall be maintained in a satisfactory condition and all places (including pavement) showing signs of settlement shall be filled and maintained for a period of two years following the date of final acceptance of all work performed. When the Developer discovers or is notified by the Engineer or the Town that

any backfill is not in compliance with these requirements, the Developer shall correct such condition at once. Any utilities and road surfacing damaged by such settlement shall be repaired by the Developer to the satisfaction of the Town and Engineer. In addition, the Developer shall be responsible for the cost to the Town of all claims for damages filed with the Court and actions brought against the said Town for, and on account of, such damage.

- e. Dewatering. All pipe trenches shall be kept free from water during pipe installation and other related work. The method of dewatering shall provide for a completely dry trench bottom. Dewatering shall be accomplished by the use of well points, sump pumps, rock or gravel drains placed below subgrade or subsurface pipe drains. All water shall be disposed of in a suitable manner without being a menace to public health or causing public inconvenience. No water shall be drained into other work being completed or under construction. The dewatering operation shall continue until such time as it is safe to allow the water table to rise in the excavation. Pipe trenches shall contain enough backfill to prevent pipe flotation.
- f. Trench Sub-grade in Poor Soils. In excessively wet, soft, spongy, unstable or similarly unsuitable material is encountered at the surface upon which the bedding material is to be placed, the unsuitable material shall be removed to a depth as determined in the field by the Town or it's designated representative and replaced with Trench Stabilization material.

3.5 TESTING

3.5.1 Sanitary Sewer Line Testing

The following testing procedures are intended to determine if the sanitary sewer line meets the Town's minimum quality standards. Alternative procedures meeting or exceeding the intent of these procedures, as determined by the Town's Engineer, may be acceptable. In any case, however, proposed alternative testing procedures must be included in the design plans and specifications.

The Contractor shall notify the Town's Inspector - no less than 48 hours prior to the desired test time.

The Town's Inspector shall witness all tests and verify the accuracy and acceptability of the equipment utilized. The Town's Engineer will inform the Contractor regarding acceptable methods of repair in the event that one or more sections fail to pass any test.

3.5.1.1 Pipeline Flushing

The Contractor shall flush the pipelines, as the work progresses by means that are in accordance with good practice, to insure that earth, sand, rocks or other foreign materials are removed from the interior of the pipeline. Proper environmental and erosion control

prevention measures shall be employed meeting CDPHE latest Standards and Regulations.

3.5.1.2 Alignment and Grade

Sewer pipelines will be checked by the Town to determine whether any displacement of the pipe has occurred after the trench has been bedded. The test will be as follows:

A light will be flashed between manholes, or if the manholes have not as yet been constructed, between the locations of the manholes, by means of a flashlight or by reflecting sunlight with a mirror. If the illuminated interior of the pipelines shows poor alignment, displaced pipe, earth, or other debris in the pipe, or any other kinds of defects, the defects, determined by the Town, shall be remedied by the Contractor. The test will be repeated following completion of backfilling and any poor alignment, displaced pipe, or other defects, determined by the Town, shall be corrected at no cost to the Town.

3.5.1.3 Leakage Testing by Exfiltration

Tests for water tightness shall be made by the Contractor in the presence of the Town's Inspector. The Contractor shall provide assistance to the Town's Inspector in development of a detailed record of the testing program. The sewer and connections shall not leak in excess of the following rate for a 24-hour test period:

MAXIMUM ALLOWABLE SEWER LEAKAGE	
Pipe Size Inches	Leakage Gal/Foot/24 Hours
18	0.68
15	0.57
12	0.45
10	0.38
8	0.30
6	0.23

Each reach of pipeline between manholes shall be tested individually. Any individual reach that leaks in excess of the amount allowed in the previous paragraph shall be considered as failing, and shall be repaired and retested.

At the discretion of the Town, the time for leakage rate test may be shortened to four (4) hours.

The tests and measurement of infiltration or exfiltration shall be conducted in a manner as approved by the Town's Inspector. The minimum head for the exfiltration tests shall be 2 feet above the top of the pipe at its highest point in the test section. Sections shall be bulk-headed so that during any test the head on the sewer at its lowest elevation will not be more than 10'. This restriction does not apply to ductile-iron pipe.

The Contractor shall repair the sewer in a manner that is satisfactory to the Town and re-test at the contractors' expense until a satisfactory installation is obtained.

3.5.1.4 Leakage Testing by Infiltration

Infiltration tests will be used if the groundwater table is likely to be 1 foot or more above the invert of the finished sewer. Otherwise, exfiltration tests will be used. The allowable leakage rates are as tabulated for section 3.5.1.3, Leakage Testing by Exfiltration.

3.5.1.5 Low-Pressure Air Test

At the option of the Contractor, low-pressure air testing of the installed sewer pipe may be used instead of the leakage exfiltration test.

The following criteria and procedure shall be utilized, unless otherwise approved by the Town's Inspector.

- 1) Plug Restraint. It is extremely important and essential that all plugs be installed and braced in such a way that blowouts are prevented. It is recommended that every plug be positively braced and that no one be allowed in the manhole adjoining a line being tested so long as pressure is maintained in the line.
- 2) Relief Valve. All pressurizing equipment used for low-pressure air testing shall include a regulator or relief valve set no higher than 9 psig to avoid over pressurizing and displacing temporary or permanent plugs. As an added safety precaution, the pressure in the test section should be continuously monitored to make certain that it does not at any time exceed 9 psig.
- 3) Plug Design. Either mechanical or pneumatic plugs may be used. All plugs shall be designed to resist internal testing pressures without the aid of external bracing or blocking. However, the Contractor should internally restrain or externally brace the plugs to the manhole wall as an added safety precaution throughout the test.
- 4) Singular Control Panel. To facilitate test verification by the inspecting Engineer, all air used shall pass through a single, above ground control panel.
- 5) Equipment Controls. The above ground air control equipment shall include a shutoff valve, pressure regulating valve, pressure relief valve, input pressure gauge, and a continuous monitoring pressure gauge having a pressure range from 0 to at least 10 psi. The continuous monitoring gauge shall be no less than 4 inches in diameter with minimum divisions of 0.10 psi and an accuracy of 0.04 psi.

- 6) Separate Hoses. Two separate hoses shall be used to: (1) connect the control panel to the sealed line for introducing low-pressure air, and (2) a separate hose connection for constant monitoring of air pressure build-up in the line. This requirement greatly diminishes any chance for over-pressurizing the line.
- 7) Pneumatic Plugs. If pneumatic plugs are utilized, a separate hose shall also be required to inflate the pneumatic plugs from the above ground control panel.
- 8) Laterals, Stubs, and Fittings. During sewer construction all service laterals, stubs, and fittings into the sewer test section shall be properly capped or plugged so as not to allow air loss that could cause an erroneous air test result. It may be necessary and is always advisable to restrain gasketed caps, plugs, or short pipe lengths with bracing stakes, clamps and tierods, or wire harnesses over the pipe bells.
- 9) Plug Installation and Testing. After manholes have been tested for alignment and grade, and a manhole-to-manhole reach of pipe has been backfilled to final grade and prepared for testing, the plugs shall be placed in the line at both manholes and secured.

It is advisable to seal test all plugs before use. Seal testing may be accomplished by laying one length of pipe on the ground and sealing it at both ends with the plugs to be checked. The sealed pipe should be pressurized to 9 psig. The plugs shall hold against this pressure without bracing and without any movement of the plugs out of the pipe. No persons shall be allowed in the alignment of the pipe during plug testing.

The upstream end of the line shall be plugged first to prevent any upstream water from collecting in the test line.

- 10) Line Pressurization. Low pressure air shall be slowly introduced into the sealed line until the internal air pressure reaches 4.0 psig.
- 11) Pressure Stabilization. After a constant pressure of 4.0 psig is reached, the air supply shall be throttled to maintain that internal pressure for at least 2 minutes. This time permits the temperature of the entering air to equalize with the temperature of the pipe wall.
- 12) Timing Pressure Loss. When temperatures have been equalized and the pressure stabilized at 4.0 psig, the air hose from the control panel to the air supply shall be shut off or disconnected. The continuous monitoring pressure gauge shall then be observed while the pressure is decreased to no less than 3.5 psig. The timing pressure loss test shall then commence at

a pressure reading of 3.5 psig, or any convenient observed pressure reading between 3.5 psig and 4.0 psig. (Except as adjusted for groundwater as follows.)

- 13) Air Pressure Adjustment. An air pressure correction, which must be added to the 3.5 psig normal test starting pressure, shall be calculated by dividing the average vertical height, in feet of groundwater above the invert of the sewer pipe to be tested, by 2.31. The result gives the air pressure correction in pounds per square inch to be added. (For example, if the average vertical height of groundwater above the pipe invert is 2.8 feet, the additional air pressure above the pipe invert is 2.8 divided by 2.31 or 1.2 psig. This would require a minimum starting pressure of 3.5 plus 1.2 or 4.7 psig). The allowable pressure drop of 1.0 psig and the timing in Table I are not affected and shall remain the same. In no case however should the starting test pressure exceed 9.0 psig.
- 14) Determination of Line Acceptance. If the time shown in Table I for the designated pipe size and length, elapses before the air pressure drops 1.0 psig, the section undergoing test shall have passed.

TABLE 1
SPECIFICATION TIME REQUIRED FOR A 1.0 PSIG PRESSURE DROP
FOR SIZE AND LENGTH OF PIPE INDICATED FOR Q = 0.0015

1 (min:sec) Pipe Diameter (in.)	2 Minimum Time (min:sec)	3 Length for Minimum Time (ft)	4 Time for Longer Length (sec)	100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft
4	3:46	597	.380 L	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	.854 L	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24
8	7:34	298	1.520 L	7:34	7:34	7:34	7:34	7:36	8:52	10:08	11:24
10	9:26	239	2.374 L	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48
12	11:20	199	3.418 L	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38
15	14:10	159	5.342 L	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04
18	17:00	133	7.692 L	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41

3.5.1.6 Deflection

All PVC sewer pipelines shall be tested for vertical deflection after placement and compaction of backfill unless testing is specifically excepted by the Town's Inspector. Method of testing shall be by deflectometer of the rigid GO/NO-GO type device. Alternative methods will be permitted only by written permission of the Town's Inspector. Maximum allowable deflection shall be five (5) percent of the pipe diameter.

Any and all pipe with vertical deflection greater than the allowable shall be excavated, removed from the pipeline, replaced, backfilled and compacted as specified and retested.

The Town reserves the right to direct the Developer to retest sewer lines after 10-12 months of service, if the Town has concerns about the condition of certain sections of pipe. Sections would be selected for retesting based on the results of the initial tests, the outcome of the television inspection (per Section 2.73), depth of cover, or other technical factors. The Developer shall perform such retesting at no cost to the Town.

3.5.2 Manholes

During the construction of the manholes, the Contractor shall, in accordance with good practice, ensure that no earth, sand, rocks or other foreign material exists on the joint surface during assembly of the sections. The Town's Inspector shall check each manhole to determine whether the manhole fulfills the requirements of the Drawings and Town's Standards.

3.5.2.1 Visual Examination

The Town shall visually check each manhole, both exterior and interior, for flaws, cracks, holes, or other inadequacies which might affect the operation or watertight integrity of the manhole. Should any inadequacies be found, the Contractor shall make any repairs deemed necessary by the Town's Inspector.

3.5.2.2 Leakage Test

All manholes shall be tested for leakage and all tests shall be witnessed by the Town's Inspector. The leakage test shall be conducted prior to backfilling around the manhole and shall be carried out in the following manner:

- 1) All lines leading into or out of the manhole shall be tightly plugged
- 2) The manhole shall be filled with water to a level at least 2 inches above the uppermost step. The water shall be allowed to stand for two hours to allow for normal water absorption into the manhole material. At the end of the two-hour stabilization period, if the water level in the manhole has dropped below the top step, additional water will be added to bring the level above the step as before. Any visible external leakage or drop in water level noted within the one-hour test period shall constitute failure and the Contractor shall repair or replace the defective work and retest.
- 3) Vacuum Testing. At the option of the Contractor, vacuum testing of the installed manholes may be used instead of the leakage test. All pipes entering and exiting the manhole shall be temporarily plugged, taking care to securely brace the pipes and plugs to prevent them from being drawn into the manhole.

The test head shall be placed at the top of the manhole and the seal inflated in accordance with the manufacturer's recommendations.

A vacuum of 10-inches of mercury shall be drawn on the manhole, the valve on the vacuum line of the test head shall be closed, and the vacuum pump shut-off. The time shall be measured for the vacuum to drop to 9-inches of mercury.

The manhole will be declared unacceptable if the time to drop from 10-inches of mercury to 9-inches of mercury is less than 60 seconds. This test interval is valid for 48" MH of up to 24' depth, 60" MH up to 18' deep and 72" MH up to 14' deep. The Town Engineer will establish test intervals for other situations on a case-by-case basis.

3.5.3 Television Inspection

The Developer shall perform television inspections of each segment of the sewer line and record this inspection on a CD, which is to be turned over to the Town. The format for labeling and stationing of this record is to be approved by the Town prior to performing the TV inspection. The Developer is to provide a one week notice prior to the TV inspection, so that a representative from the Town may be present to observe the inspection in progress. There shall be two TV inspections performed, one at the initial acceptance and one at the end of the two year warranty. The warranty inspection is to be performed no earlier than 22 months after acceptance of the sewer construction by the Town. The CD is to be submitted to the Town no later than 23 months after the date of Town acceptance. Performance of the two TV video inspections shall be completed at no cost to the Town.

3.5.4 Water Main Testing

All finished water lines, after reaction blocking is in place, shall be pressure and leakage tested at not less than 150 psi for a two-hour period. If working pressure is greater than 100 psi, the test shall be performed at 1.5 times the expected working pressure. Unless approved by the Engineer no lines longer than 1200' shall be tested at one time.

No pipeline installation will be acceptable until the leakage is less than the amount computed by the following formula:

$$L = \frac{SD(P)^{0.5}}{133,200}$$

Where:

L = Allowable leakage in gallons (per hour)

S = Tested length of pipe (feet)

D = Nominal diameter of pipe, inches

P = Average test pressure during the test, psi

3.5.5 Water Main Disinfection

All water piping shall be disinfected in accordance with AWWA C601 after all construction work has been completed. Chlorine shall be added to the water at the necessary locations in the amount to form a 50-ppm free chlorine residual. The chlorine solution shall be left in the pipelines for not less than 24 hours, during which time all valves and fire hydrants shall be operated in order to disinfect the appurtenances. After that length of time, the chlorine residual of the solution, at any place in the system, shall not be less than 10 ppm. All chlorination work must be done in the presence of the Engineer. At the end of 24 hours, a bacteriological test is to be performed by the local health authority to ensure adequate disinfection, at the cost of the Developer. Special provisions (at no additional cost to the Town) must be made to ensure any highly chlorinated water is not discharged to the ground. The Developer must submit the "method of disposal" for this chlorinated water prior to any testing.

SECTION 4

SERVICE LINE STANDARDS

SECTION 4

SERVICE LINE STANDARDS

4.1 GENERAL

No service line may be constructed without prior approval from the Town. The Applicant must provide adequate information describing the nature of the building or development to be connected, the proposed service line size, and the proposed connection point of the service line to the main. A site plan, showing the location of the proposed service line relative to other utilities on and adjacent to the property must be presented. The drawing must show the location of buildings served and parts of the site that are to be paved or otherwise intended to be kept clear of snow, and must also show service line slope and depth of cover over the service line.

The sizing of the service lines shall be the responsibility of the Applicant. When requested by the Town, the Applicant shall, at his expense, furnish data, plans, calculations, or other information as required for the evaluation of the service size. Service lines are the responsibility of the Developer or Applicant, who is responsible for design and construction and the costs thereof and for payment of actual costs of review and inspection provided by the Town.

All service lines are to be constructed in accordance with applicable codes, generally accepted good construction practices, and the minimum standards and criteria contained in this document. The details are provided for standardization purposes only, and represent minimum design standards which may require upgrading for specific applications.

No water service line shall be connected to a main which has not been pressure tested, disinfected and accepted by the Town.

4.2 OWNERSHIP AND MAINTENANCE

Ownership and maintenance responsibilities are defined under the following categories of Sewer Service, New Single-Family Detached Residential Water Service, Existing Single-Family Detached Residential Water Service and Commercial/Multifamily Water Service.

Sewer Service: The sewer service line is defined as beginning at the wye connection of the main line to the point of connection to the building(s) and is the property of the customer of the resident, unit or building served (see Drawing L1). Repairs, maintenance cleanings and pipe replacement of the service line are the responsibility of the customer.

New Single Family Detached Residential Water Service: A new single family detached residential water service is defined as a service constructed on or after January 1, 2011 in accordance with these standards and the details shown on Drawing L4. Starting at the property line the customer shall own and be responsible for maintenance and replacement of the service line and appurtenances including the stop and waste valve (curb stop), buried piping, internal piping, meter and meter box, valves, PRV and backflow preventer to the premise served. The stop and waste valve (curb stop) and meter box shall be located in a convenient, accessible

location and kept in good working order and clean of debris. Any meter or valve box not conforming to these maintenance standards shall be cleaned, repaired or replaced by the property owner. Failure by the property owner to comply may cause the Town to complete the required maintenance with the costs thereof billed to the owner. In addition, the Property Owner shall be responsible for the thawing of frozen service lines and appurtenances starting at the stop and waste valve to the premise served.

Existing Single Family Detached Residential Water Service: An existing single family detached residential water service is defined as a service constructed before January 1, 2011. If a property has a stop and waste valve located and installed in accordance with the details on Drawing L4, the customer, starting at the property line, shall own and be responsible for maintenance and replacement of the service line and appurtenances including the stop and waste valve (curb stop), buried piping, internal piping, meter and meter box, valves, PRV and backflow preventer to the premise served.

If a property does not have a private water system in accordance with the detail shown on Drawing L4, the service shall be considered non-conforming. Any repairs to a non-conforming water service line shall require the installation of a stop and waste valve A Pressure Reducing Valve (PRV) is not required at the time of the stop and waste installation; however, it is the responsibility of the property owner to maintain proper operating water pressures for individual water service. If a property has a non-conforming water system, the property owner shall own and be responsible for maintenance and replacement of the service line, and appurtenances including the corporation stop, stop and waste valve (curb stop), buried piping, internal piping, meter and meter box, valves, PRV and backflow preventer from the premise served to the corporation stop on the main line.,

The stop and waste valve and meter box shall be located in a convenient, accessible location and kept in good working order and clean of debris. Any meter or valve box not conforming to these maintenance standards shall be cleaned, repaired or replaced by the property owner. Failure by the property owner to comply may cause the Town to complete the required maintenance with the costs thereof billed to the owner.

The Town, depending on the on extent of ownership, shall be responsible for the replacement of Town improvements such as sidewalks, curb & gutter and roadway in repairing or replacing any service line (the replacement of private landscaping and fencing is not included). For non-conforming services, the property owner will be responsible for all Town improvement costs associated with a service repair or replacement.

The Town will not be responsible for the thawing of frozen service lines under private ownership.

Commercial/Industrial/Multifamily Water Service: Each individual Commercial or Industrial structure or Multifamily unit shall be served by separate service lines. At the discretion of the Town, depending on unit ownership, single lines serving Multifamily units may be allowed.

Typically separate lines shall be installed for fire suppression systems. The Town may allow combined service lines for potable use and fire suppression. Potable services must be isolated and protected from the fire suppression system as per these Standards defined in Section 5. . The Town assumes no obligation for the adequacy of private fire protection systems.

Water services ownership begins at the stop and waste valve if one is installed; or at the isolation valve if there is no stop and waste valve; or at the corporation stop on the mainline if there is no isolation valve or stop and waste valve. Starting at the point of ownership (corporation stop, isolation valve, or stop and waste valve) the customer shall own and be responsible for maintenance and replacement of the service line and appurtenances included buried piping, internal piping, meter and meter box or vault, valves, PRV and backflow preventer. The meter or meter box/vault shall be located in a convenient, accessible location and kept in good working order and clean of debris. Any meter or vault not conforming to these maintenance standards shall be cleaned, repaired or replaced by the property owner. Failure by the property owner to comply may cause the Town to complete the required maintenance with the costs thereof billed to the owner. In addition, the Town will not be responsible for the thawing of frozen lines and appurtenances under private ownership.

4.3 SERVICE CONNECTION

No connection between the sewer or water system of the Town and the service of the owner may be made except in a public street adequate to accommodate the sewer or water facilities or in a similar place to which the Town has as a free right of access as it would have in a public street.

Where parallel or approximately parallel to a structural wall, the service shall be at least 5' from the wall. Penetrations through structures shall be approximately at right angles and shall provide flexibility such that the service will not be damaged by settlement of the structures.

Water and sewer service lines shall have 10 feet minimum of horizontal separation. Where this separation is impractical, the Town may permit other separation requirements, in accordance with applicable standards. If a sewer service line passes over a water main or service, or if it lies within 10 feet of the water main or service, the service is to be modified as specified in Drawing G3.

The minimum cover shall be 6 feet from top of sewer service line to finished grade and 5 feet from top of water service line to finish grade.

The applicant for a service shall notify the Town when the service line is ready for connection to the public sewer or water main, and the connection shall not be made until after inspection and approval by the Town. The service line shall meet the requirements of the International Plumbing Code (IPC). The connection to the main shall be made in the presence of and approved by the Town Inspector. The trench of each service line must be open (not backfilled) from the building to the tap, to allow inspection by the Town prior to backfilling.

If practicable, pre-installed wye fittings shall be used for sewer service connections; otherwise the connection of the building sewer service to the main shall be made as follows: A saddle tee

shall be used to connect 4" or 6 sewer service lines to 8" to 15" sewer mains. No saddle wyes are allowed. The service line connection shall conform to the Drawing L1. To simplify later location of service connection points in plastic pipe, bury 1-2 pound piece of magnetic material within 12" of the joint and approx. 12" above.

Each sewer service line is to have a 4" cleanout installed within 20' of the building served, per Drawing L2. Cleanouts are required for any significant change in service line direction and at intervals of no greater than 90'.

Water services lines shall be laid at a uniform grade and in straight alignment. A reference mark shall be placed on the curb above the line.

4.4 SEWER SERVICE SIZING

The size and slope of the building service sewer shall be subject to the approval of the Town, but in no event shall the diameter be less than 4". Minimum grade and slopes shall be as follows:

4"	2.0% Normal, 1.0% Minimum
6"	1.00%
8"	0.60%

4.5 WATER SERVICE SIZING

Sizing. Sizing for potable water services shall be made in general conformance with AWWA Manual M22, "Sizing Water Service Lines and Meters." When requested by the Town, the Applicant shall, at his expense, furnish data, plans, calculations, or other information as required for the evaluation of the service size.

Cross Connections. Cross connections of any type that permit a backflow condition from any source other than the Town's potable water mains are prohibited. The Town will not provide water service to any customer unless the potable water supply is protected from potential or actual cross connections as required in Section 5. . Each service shall include an approved back flow prevention device. All water services larger than 1-inch and all fire suppression systems shall include an approved backflow prevention device as defined in Section 5.

Pressure Regulation. A pressure reducing valve (PRV) is recommended. It is the responsibility of the property owner to maintain proper operating pressures, commonly not exceeding 70 psi, for the individual water service. If a PRV is installed, it shall be located upstream of all uses.

4.6 SEWER SERVICE MATERIALS AND INSTALLATION

Sewer service pipe shall be PVC, with a thickness not less than SDR 35. Sanitary Sewer Service Pipe shall be green or other acceptable color.

The line shall be water tight and on a constant grade in a straight line, and not closer than 5' from any bearing wall.

4.7 WATER SERVICE MATERIALS

Water Service Pipeline: The water service pipeline shall be Type K, soft copper conforming to ASTM 888, unless otherwise specifically approved by the Town. Fittings shall be brass or copper alloy. Connections shall be by flared joints and no soldered joints shall be permitted underground.

Corporation Stops: Corporation stops shall be used for the connection of services (2- inch and smaller) to the water main. Corporation stops shall be brass and conform with AWWA C800. The inlet shall be standard AWWA corporation stop inlet thread and the outlet shall be for compression type "K", 1" or less, copper service pipe. Corporation stops shall be Mueller H-15000, Ford F-600, or approved equal, provided with an insulating coupling for potable service.

Curb Stops: Curb stops (sometimes called "stop & waste boxes") shall be provided as detailed on Drawing L3 for all services. Curb stops shall be brass and conform with AWWA C800. Connections shall be for compression type "K" copper service pipe. Curb stops shall be Mueller H-15204, Ford 8-22, or approved equal.

Service Saddles: Service saddles shall be used for all water taps on any pipe other than DIP (Ductile Iron Pipe). For DIP, 3/4" and 1" taps may be made without using a service saddle on pipe 8" mains or larger. All other DIP taps shall be made with a double strap bronze saddle, Smith Blair No. 357, Rockwell No. 323 or approved equal.

Meters. Unless otherwise approved, water meters shall be housed in an exterior meter pit in accordance with the standard drawings. Meters shall be bronze case Sensus SR-II TR/LP with sealed register and touch read/pit lid adapters. Meter shall be set with a coppersetter having an integral angle curb valve on the inlet side. Coppersetter shall be Ford 80 series or approved equal.

Meter Pits. Meter pits shall be pre-cast polyethylene with minimum nominal wall thickness of 0.55-inches, vertical crush strength exceeding 20,000 lbs, white interior color and black exterior color manufactured by Mid-States Plastics or approved equal. Concrete pits (H20 traffic load rating) with stackable section is also acceptable.

Meter Pit Covers. Covers shall be constructed of cast iron with rubber or plastic inner frost lid. The top lid shall include a worm type lock operated by a pentagon head. The lid and cover shall be Ford Wabash No. W3 or approved equal. The top lid shall be tapped for mounting the touch read pad. Radio transmitting units maybe required by the Town. Pit locations in driveways and alleyways shall have covers rated for H20 traffic loading.

4.8 WATER SERVICE INSTALLATION

The service line connection shall be constructed as shown in Drawing L4.

All excavations for water service installations shall be adequately guarded with barricades and lights so as to protect the public from hazards. Utilities, streets, sidewalks, parkways, and other public or private property disturbed in the course of work shall be restored to their original condition in a manner satisfactory to the Town of Elizabeth or other affected owners or jurisdictions.

All excavations required for the installations of a water service shall be open-trench work, unless otherwise approved by the Town. The services shall be bedded and backfilled in accordance with the minimum cover and/or insulation requirements of Section 3. The bedding and pipe zone material within 12" of the water service line shall be select native soils with 3" max. diameter rock. Backfill materials shall be select native soils with 6" maximum diameter rock. If insulation is installed, use approximately 6" of sand or squeegee for the pipe zone materials above and beneath the insulation to protect it from breakage during backfill.

4.9 DOCUMENTATION

The Applicant shall submit a dimensioned sketch to the Town, showing the location of the point of connection, relative to visible and reasonably permanent surface features, such as building corners, property pins or power flight poles. As-built drawings of the entire system, including curb-stops, shall be required at system dedication and pursuant to the Town's Municipal Code.

SECTION 5

BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL

SECTION 5

BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL

5.1 Purpose.

The purpose of backflow prevention and cross-connection control is to protect the Town of Elizabeth public potable water supply from the possibility of contamination or pollution by isolating or containing within the consumer's internal distribution system(s) or the consumer's private water system(s) such contaminants or pollutants that could backflow into the public water system; To promote the elimination or control of existing cross connections, actual or potential, between the consumer's in-plant/in-house potable water system(s) and non-potable water systems, plumbing fixtures, and industrial piping systems; and To provide for the maintenance of a continuing program of cross-connection control that will systematically and effectively prevent the contamination or pollution of the potable water system.

5.2 Definitions.

The definitions of terms used in this section are those contained in the Colorado Department of Health and Environment's Cross Connection Control Manual as the same may be amended from time to time, unless otherwise defined below:

"Active date" means the first day that a backflow prevention assembly or backflow prevention method is used to control a cross-connection in each calendar year.

"Air gap" is a physical separation between the free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel installed in accordance with standard AMSE A112.1.2.

"Approved Backflow Device" A backflow device or air gap meeting the standards and installation requirements of the A.S.S.E. (American Society of Sanitary Engineers), the latest edition of the Colorado Department of Health and Environment's Colorado Cross Connection Control Manual and/or the requirements of these standards. Approval by the Town will be dependent upon the hazard(s) assessed, but shall not be less than the Colorado Department of Health and Environment's Colorado Cross Connection Control Manual requirements for potable water system protection. "Approved" status shall also be contingent on inspection, testing and passing of such test by a Certified Cross Connection Control Technician. Any variation or exception may be by direction from the current edition of the Colorado Department of Health and Environment's Colorado Cross Connection Control Manual.

"Backflow" means the undesirable reversal of flow of water or mixtures of water and other liquids, gases or other substances into the public water distribution system from any source or sources other than its intended source.

"Backflow contamination event" means backflow into the public water system from an uncontrolled cross connection such that the water quality no longer meets the Colorado primary Drinking Water Regulations or presents an immediate health and/or safety risk to the public.

“Backflow prevention assembly” means any mechanical assembly installed at a water service line or at a plumbing fixture to prevent a backflow contamination event, provided that the mechanical assembly is appropriate for the identified contaminant at the cross connection and is an in-line field-testable assembly.

“Backflow prevention method” means any method and/or non-testable device installed at a water service line or at a plumbing fixture to prevent a backflow contamination event, provided that the method or non-testable device is appropriate for the identified contaminant at the cross connection.

“Certified cross-connection control technician” means a person who possesses a valid Backflow Prevention Assembly Tester certification from one of the following approved organizations: American Society of Sanitary Engineering (ASSE) or the American Backflow Prevention Association (ABPA). If a certification has expired, the certification is invalid.

“Containment” means the installation of a backflow prevention assembly or a backflow prevention method at any connection to the public water system that supplies an auxiliary water system, location, facility, or area such that backflow from a cross connection into the public water system is prevented.

“Containment by isolation” means the installation of backflow prevention assemblies or backflow prevention methods at all cross connections identified within a customer’s water system such that backflow from a cross connection into the public water system is prevented.

“Controlled” means having a properly installed, maintained, and tested or inspected backflow prevention assembly or backflow prevention method that prevents backflow through a cross connection.

“Cross connection” means any connection that could allow any water, fluid, or gas such that the water quality could present an unacceptable health and/or safety risk to the public, to flow from any pipe, plumbing fixture, or a customer’s water system into a public water system’s distribution system or any other part of the public water system through backflow.

“Multi-family” means a single residential connection to the public water system’s distribution system from which two or more separate dwelling units are supplied water

“Service Connection” The terminal end of the water supplier service connection from the Town’s potable water distribution system to the threads on the curb stop if present, or corporation stop on water main line, where the Water Department loses jurisdiction and sanitary control and consumer ownership begins. “Service connection” shall also include water service connection from a fire hydrant and all other temporary or emergency water service connections from the Town’s potable water system.

“Single-family” means:

- i. A single dwelling which is occupied by a single family and is supplied by a separate service line; or
- ii. A single dwelling comprised of multiple living units where each living unit is supplied by a separate service line.

“Uncontrolled” means not having a properly installed, maintained and tested or inspected backflow prevention assembly or backflow prevention method, or the backflow prevention assembly or backflow prevention method does not prevent backflow through a cross connection.

“Thermal Expansion” Increase in linear dimensions of a solid or in volume of a fluid because of rise in temperature

“Water supply system” means a water distribution system, piping, connection fittings, valves and appurtenances within a building, structure, or premises. Water supply systems are also referred to commonly as premise plumbing systems.

5.3 Authority.

- (1) The authority for the Town to implement this program is contained in the following statute, legislation and regulations and acts:
 - a. Article 1-114 and Article 1-114.1 of Title 25 of the Colorado Revised Statutes (CRS)
 - b. Section 39 of 5 CCR 1002-11, Colorado Primary Drinking Water Regulations (Regulation 11) Effective date May 1, 2015
 - c. Colorado Plumbing Code
 - d. International Plumbing Code

The Town shall have the authority to survey all service connections within the distribution system to determine if the connection is a cross-connection.

The Town shall have the authority to control all service connections within the distribution system if the connection is a cross-connection.

The Town may control any service connections within the distribution system in lieu of a Cross Connection Survey as long as the service connection is controlled with a Reduced Pressure Zone (RPZ) backflow prevention assembly that is annually tested.

The Town may collect fees for the administration of this program.

The Town shall maintain records of cross-connection surveys and the installation, testing and repair of all backflow prevention assemblies installed for containment and containment by isolation purposes.

Except as otherwise provided herein, the Town shall administer, implement and enforce the provisions of this Section.

5.4 Applicability.

This Section applies to all commercial, industrial and multi-family residential service connections (Non-Single Family Residential) within the Town water system and to any persons outside the Town who are, by contract or agreement with the Town, users of the Town water system. This Section may apply to single-family-residential service connections if the Town becomes aware of, or suspects a possible cross connection at the single family connection.

5.5 General Policy.

The Town shall be responsible for the protection of the Town's potable water distribution system from contamination or pollution due to the backflow of contaminants or pollutants through water service connections. If, in the judgment of the Town, an approved backflow-prevention assembly is required at the consumer's water service connection; or, within the consumer's private water system for the safety of the water system, the Town shall give notice in writing to said consumer to install such an approved backflow prevention assembly(s) at specific location(s) on his/her premises. The consumer shall install such approved assembly(s) within the time frame set forth in the notice and at his/her own expense; and, failure, refusal, or inability of the consumer to install, have tested, and maintain said assembly(s) shall constitute grounds for discontinuing water service to the premises until such requirements have been satisfactorily met.

5.6 Requirements.

- (a) Commercial, industrial and multi-family service connections shall be subject to a survey for cross connections. If a cross connection has been identified an appropriate backflow prevention assembly and or method shall be installed at the customer's water service connection within 120 days of its discovery. The assembly shall be installed downstream of the water meter or as close to that location as deemed practical by the Town. If the assembly or method cannot be installed within 120 days the Town must take action to control or remove the cross connection, suspended service to the cross connection or receive an alternative compliance schedule from the Colorado Department of Public Health and Environment. At the consumers expense all new connections requiring a backflow device shall be inspected and tested by a Certified Cross Connection Control Technician.
- (b) Changes in Service. Any changes in service including, but not limited to, reconnection, change in the number of fixture values, or change in the type of water service, shall require installation of an approved backflow device.

In no case shall it be permissible to have connections or tees between the meter and the containment backflow prevention assembly. In instances where a reduced pressure principle backflow preventer cannot be installed, the owner must install approved backflow prevention devices or methods at all cross-connections within the owner's plumbing system.

- (c) Backflow prevention assemblies and methods shall be installed in a location which provides access for maintenance, testing and repair.
- (d) Reduced pressure principle backflow preventers shall not be installed in manner subject to flooding.
- (e) Provisions shall be made to provide adequate drainage from the discharge of water from reduced pressure principle backflow prevention assemblies. Such discharge shall be conveyed in a mater which does not impact waters of the state.
- (f) All assemblies and methods shall be protected to prevent freezing. Those assemblies and methods used for seasonal services may be removed in lieu of being protected from freezing. The assemblies and methods must be reinstalled and then tested by a certified cross-connection control technician upon reinstallation.
- (g) Where a backflow prevention assembly or method is installed on a water supply system using storage water heating equipment such that thermal expansion causes an increase in pressure, a device for controlling pressure shall be installed.
- (h) All backflow prevention assemblies shall be tested at the time of installation and on an annual schedule thereafter. Such tests must be conducted by a Certified Cross-Connection Control Technician.
- (i) The Town shall require inspection, testing, maintenance and as needed, repairs and replacement of all backflow prevention assemblies and methods, and of all required installations within the owner's plumbing system in the cases where containment assemblies and or methods cannot be installed.
- (j) All costs for design, installation, maintenance, testing and as needed repair and replacement are to be borne by the customer.
- (k) No grandfather clauses exist except for fire sprinkler systems where the installation of a backflow prevention assembly or method will compromise the integrity of the fire sprinkler system.
- (l) New water system connection and/or new building to the Town water system must have the following: plans submitted to the public water system and approved prior to the issuance of water service. Building plans must show:
 - 1) Water service type, size and location
 - 2) Meter size and location
 - 3) Types of water use at the property
 - 4) Backflow prevention assembly size, type and location

- 5) Fire sprinkler system(s) service line, size and type of backflow prevention assembly.
 - a) All fire sprinkling lines shall have a minimum protection of an approved double check valve assembly for containment of the system.
 - b) All glycol (ethylene or propylene), or antifreeze systems shall have an approved reduced pressure principle backflow preventer for containment.
 - c) Dry fire systems shall have an approved double check valve assembly installed upstream of the air pressure valve.
 - d) In cases where the installation of a backflow prevention assembly or method will compromise the integrity of the fire sprinkler system the Town can chose to not require the backflow protection. The Town will measure chlorine residual at a location representative of the service connection once a month and perform periodic bacteriological testing at the site. If the Town suspects water quality issues the Town will evaluate the practicability of requiring that the fire sprinkler system be flushed periodically.
 - e) At the consumers expense all new connections requiring a backflow device shall be inspected and tested by a Certified Cross Connection Control Technician.
 - f) Variance. Upon written application by the consumer to the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division (WQCD), the Town may vary from this requirement.

5.7 Installation.

Installation of backflow prevention assembly in compliance with this Section is a condition to receiving water service from the Town. All connections to the municipal water system, including all existing connections, shall conform or be brought into conformance with the following requirements:

- a. Backflow prevention assemblies installed in violation of this Section shall be removed and replaced at the water customer's expense. Any such repair or replacement shall be made with an approved backflow prevention assembly within ten (10) days of discovery by the user, a certified technician, or the Town and/or its designee, unless arrangements satisfactory to the Town are made. Should the hazard presented to the water system be determined to present a significant health risk, immediate service discontinuance may be necessary until such repair or replacement is accomplished.
- b. Backflow prevention assemblies shall be installed in a safe and accessible location to facilitate maintenance, testing, repair and drainage in accordance with all applicable codes and regulations. No backflow prevention assembly shall be installed in a pit, vault or location where toxic gases are present. No backflow prevention assembly shall be installed over electrical lines or other equipment where water could cause a hazard.

- c. Containment backflow prevention assemblies shall be installed immediately downstream of the water meter, prior to any service connections, in compliance with all applicable codes and regulations.
- d. Access for inspection, testing, repair, maintenance and/or replacement of backflow prevention assemblies that serve more than one (1) property, such as a master-metered facility, shall not be contingent on access of a private residence or business. Such installations shall be located in an area accessible from the exterior, such as a mechanical room or an ASSE 1060-certified enclosure that is protected against freezing and meeting all installation criteria identified herein.
- e. Before installing a backflow prevention assembly, pipelines shall be thoroughly flushed to remove foreign material.
- f. Thermal expansion equipment shall be installed on all water systems contained by a backflow prevention assembly.
- g. Backflow prevention assembly valves shall not be used as the inlet or outlet valve of the water meter. Test cocks shall not be used as supply connections.
- h. All costs for design, installation, maintenance, repair and testing shall be borne by the utility customer.

5.8 Testing and maintenance.

Backflow prevention assemblies shall be tested and maintained as described below:

- a. Backflow prevention assembly testing shall be conducted by a Certified Cross Connection Control Technician using the latest test procedures as specified by one of the following councils (A.S.S.E., A.B.C., A.B.P.A.).
- b. All backflow prevention assemblies shall be tested by a certified technician at the time of installation, prior to issuance of a certificate of occupancy.
- c. Backflow prevention assemblies shall be tested immediately upon installation, repair, replacement or alteration of plumbing upstream of the assembly.
- d. The Town retains the right to test or otherwise check the installation and operation of any testable assembly at any time to assure proper operation at the property customer's expense.
- e. Should a backflow prevention assembly not be installed in conformance with Town standards, the test report shall reflect such information and be recorded as a failure.
- f. All backflow prevention assemblies not meeting requirements shall be repaired or replaced at the water customer's expense. Any such repair or replacement shall be made with an approved backflow prevention assembly within ten (10) days of discovery by the user, a certified technician or the Department and/or its designee, unless arrangements satisfactory to the Department and/or its designee are made. Should the hazard presented to the water system be determined to present a significant health risk, immediate service discontinuance may be necessary until such repair or replacement is accomplished.

5.9 Record keeping.

- a. The certified technician shall report on a form approved by the Town
- b. Records of all tests, inspections, repairs and replacements of backflow prevention assemblies shall be kept by the water customer, the certified technician and the Town for a period of three (3) years.
- c. The certified technician is required to send copies of all passed test reports to the owner and the Town within ten (10) business days after testing, inspecting or repairing any backflow prevention assembly. The certified technician should repair a failed assembly immediately, if possible. When an assembly failure is a potential threat to the potable water system or the environment and cannot be repaired immediately, the certified technician must report the failure verbally to the owner and the Town and/or its designee. The technician must send written notification to the owner and the Town and/or its designee within three (3) working days.
- d. Copies of records of test reports, repairs and retests shall be submitted to the Town by mail or e-mail by the testing company or testing technician. Information on test reports shall include, but may not be limited to:
 1. Test reports to be provided on company letter head
 2. Company information (name, address, phone number)
 3. Assembly or method type
 4. Assembly or method location address (For multiple businesses on a single protection device, list on the report each business name and address information for each protected)
 5. Assembly make, model and serial number
 6. Assembly size
 7. Test date and results including all results that would justify a pass or fail outcome.
 8. Certified cross-connection control technician certification agency
 9. Technician's name
 10. Technician's certification number
 11. Technician's certification expiration date
 12. Test kit manufacturer, model and serial number
 13. Test kit calibration date

5.10 Right of entry.

- a. The Town representative and/or his or her designee assigned to inspect premises relative to possible hazards shall carry proper credentials of his or her office and, upon exhibit of which, said representative shall have the right of entry to inspect any and all buildings and premises for cross-connections in the performance of his or her duties. If such entry is refused, the Town administrative authority or the designated authorized representative thereof shall have recourse to every remedy provided by law to secure entry.

- b. This right of entry shall be a condition of water service in order to provide assurance that the health, safety and welfare of the people throughout the Town's potable water distribution system are maintained. Where building security is required, the backflow assembly or assemblies should be located in an area not subject to security. Questions regarding proper credentials should be directed to the Town.

5.11 Compliance.

- a. Customers shall cooperate with the installation, inspection, testing, maintenance, and as needed repair and replacement of backflow prevention assemblies and with the Cross Connection Survey process. For any identified uncontrolled cross-connections, the Town will complete one of the following actions within sixty (60) days of its discovery:
 - 1. Control the cross connection
 - 2. Remove the cross connection
 - 3. Suspend service to the cross connection
- b. Service of water to any premises may be discontinued by the Town if unprotected cross-connections exist on the premises, if any defect is found in an installed backflow prevention assembly or if a backflow prevention assembly has been removed or bypassed. Service shall not be restored until such conditions or defects are corrected.
- c. Discontinuance of service may be summary, immediate and without written notice whenever, in the judgment of the Town Administrator or the designated representative thereof, upon the recommendation of the Town or a registered certified cross-connection control technician, such action is necessary to protect the purity of the public potable water supply or the safety of the water system.
- d. Suspended Disconnection. At the Town's discretion, severing the service connection will be performed if degree of hazard warrants such action in order to protect the Town's potable water supply. Discontinuance of service may be summary, immediate, and without written notice whenever, in the judgment of the Town, such action is necessary to protect the Town's potable water supply or the distribution system.
- e. The Town will give notice in writing to any owner whose plumbing system has been found to present a risk to the public waters system's distribution system through an uncontrolled cross connection. The notice and order shall state that the owner must install a backflow prevention assembly or method at each service connection to the owner's premises to contain the water service. The notice and order will give a date by which the owner must comply.

5.12 Requirements of the Consumer.

- (a) All “Non-Single Family Residential” consumers must complete and submit a Cross Connection Survey to the Town, unless, they have a reduced pressure zone (RPZ) Backflow Prevention Assembly that is tested annually.
- (b) Cross-Connection(s). The consumer shall be responsible for the elimination or protection of all cross-connections (known or unknown by the Town) on his/her premises by an approved backflow device at his/her expense. Such backflow device expenses shall include installation, maintenance, protection, testing, repair, removal or replacement of said device(s) as required by the Town as a condition of service.
- (c) Any consumer determined by the Town to be an “Unacceptable Health and/or Safety Risk” shall have an acceptable (for the level of risk) backflow assembly installed and tested annually. All test reports shall be submitted to the Town.
- (d) The consumer or those occupying any premise shall not bypass, disable, remove, or modify any backflow device without written consent by the Town. Any such modifications shall result in termination of service.
- (e) The consumer or those designated by him or her shall comply with current N.F.P.A. standards and/or the current Town Standards, as amended, when designing, installing and maintaining any fire suppression system as a condition of service. The Consumer and/or those whom are designated for the design and installation of the system will need to provide verification of approval by the Elizabeth Fire District.

5.13 Plan approval.

All building and/or construction plans involving water/sewer service, plumbing plans for additions or alterations to existing plumbing systems, and/or irrigation system installation submitted to the Town at owner’s expense, shall be reviewed by the Town and/or its designee and approved prior to issuance of a permit.

5.14 Fees.

The Board of Trustees may establish and adopt a schedule of fees to be paid by the developer/builder to defray the expenses of the Town in reviewing plans and/or inspecting work. Further, the Town may charge a reasonable fee for copies of any documents.

5.15 Violations and Penalties.

Any person, whether as principal, agent, employee or otherwise, who violates any of the provisions of Section 5 of these Standards shall be subject to the general penalties as set forth in Section 1-4-20 of the Town Code.

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STANDARD DETAILS

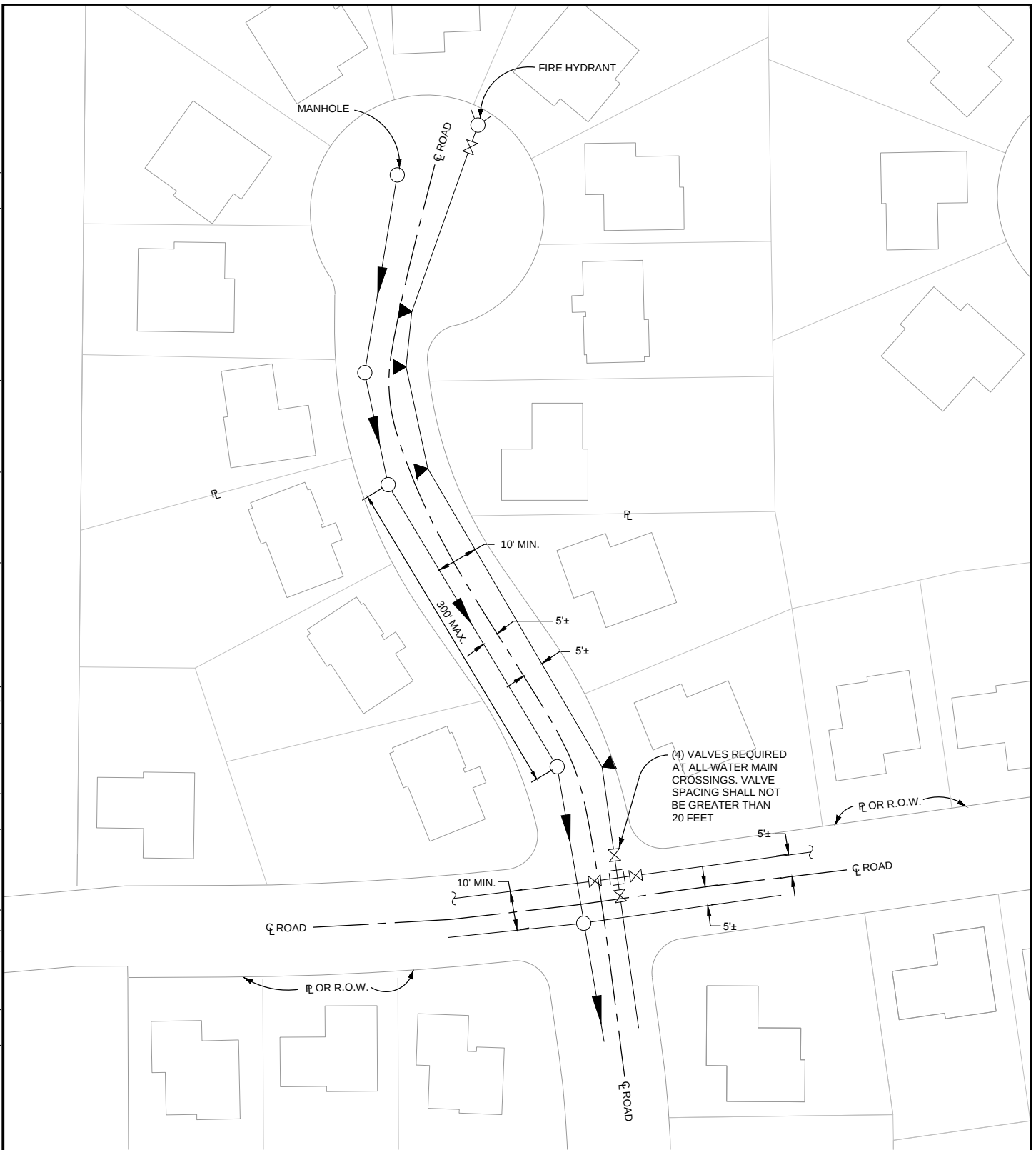
STANDARD DETAILS - GENERAL

THESE DESIGNS, PLANS, AND CONTRACT DOCUMENTS ARE REVIEWED FOR CONCEPT AND GENERAL CONFORMANCE TO THE TOWNS' MINIMUM STANDARDS ONLY, AND THE PRIMARY RESPONSIBILITY FOR DESIGN ADEQUACY IS TO REMAIN WITH THE ENGINEER OF RECORD. THIS REVIEW DOES NOT IMPLY RESPONSIBILITY BY THE TOWN OF ELIZABETH, OR THE TOWN ENGINEER FOR COMPLETENESS, ACCURACY OR CORRECTNESS OF CALCULATION. THE REVIEW DOES NOT IMPLY THAT QUANTITIES OF ITEMS INDICATED ON THE PLANS ARE THE FINAL QUANTITIES REQUIRED. THE REVIEW SHALL NOT BE CONSTRUED FOR ANY REASON AS ACCEPTANCE OF FINANCIAL RESPONSIBILITY BY THE TOWN FOR ADDITIONAL ITEMS AND ADDITIONAL QUANTITIES OF ITEMS SHOWN THAT MAY BE REQUIRED DURING THE CONSTRUCTION PHASE.

APPROVED FOR CONSTRUCTION WITHIN ONE YEAR OF THE EARLIEST OF THESE DATES:

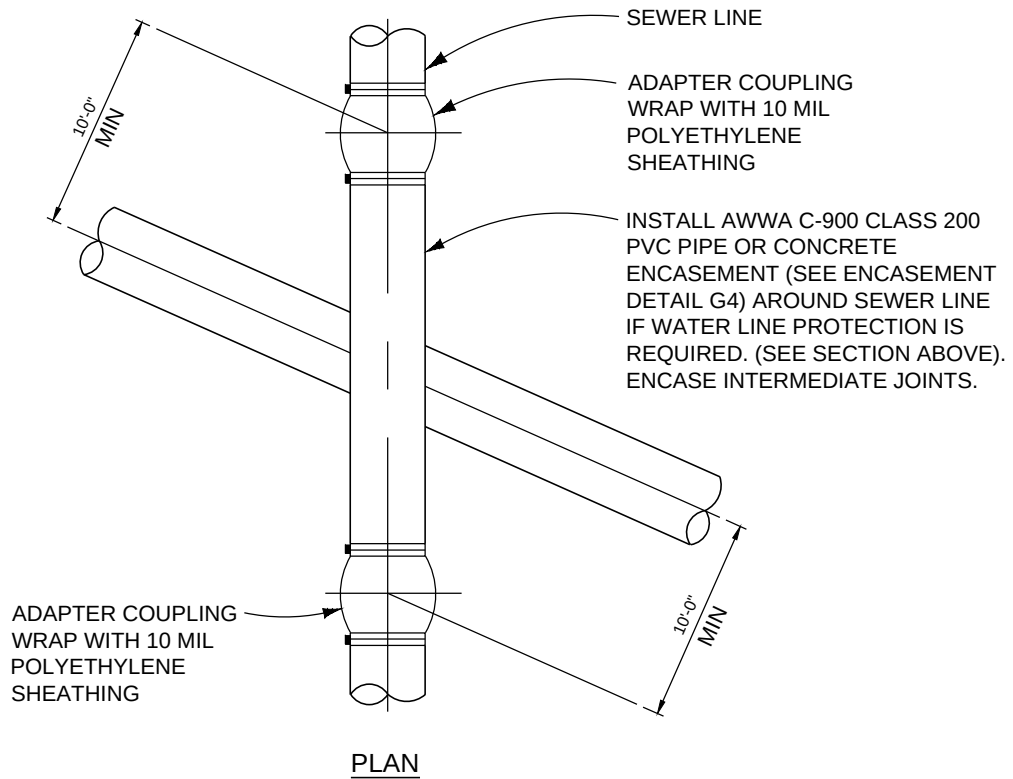
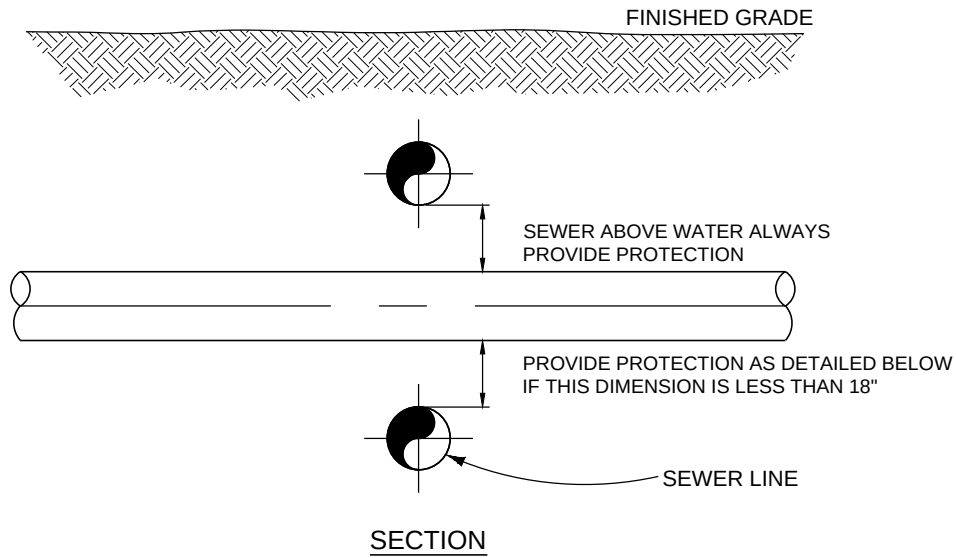
BY	_____	_____
	TOWN ENGINEER	DATE
BY	_____	_____
	TOWN OF ELIZABETH-PUBLIC WORKS DIRECTOR	DATE
BY	_____	_____
	TOWN OF ELIZABETH-TOWN ADMINISTRATION	DATE
BY	_____	_____
	ELIZABETH FIRE DEPARTMENT	DATE

		TOWN OF ELIZABETH	
STANDARD APPROVAL BLOCK			
SCALE: NTS		DATE: APRIL 2025	
LAST REVISED: FEBRUARY 2017			
WATER AND SEWER STANDARDS			

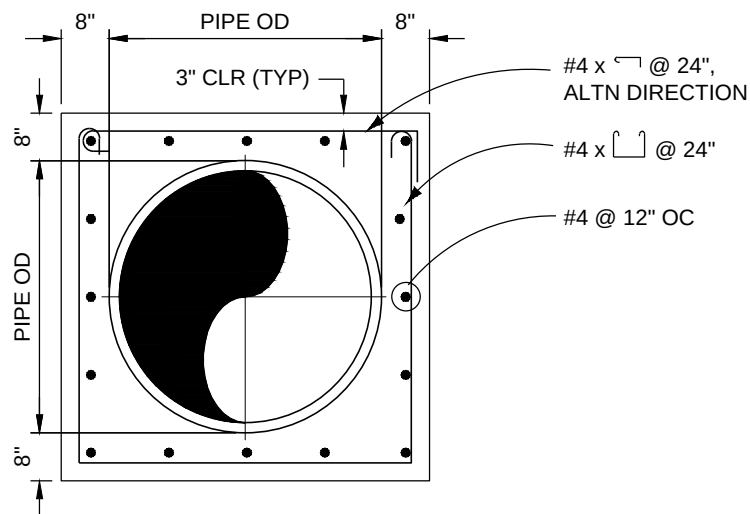


 TOWN OF ELIZABETH	
TYPICAL WATER AND SEWER STREET PLAN	
SCALE: NTS	DATE: APRIL 2025
LAST REVISED: FEBRUARY 2017	
WATER AND SEWER STANDARDS	





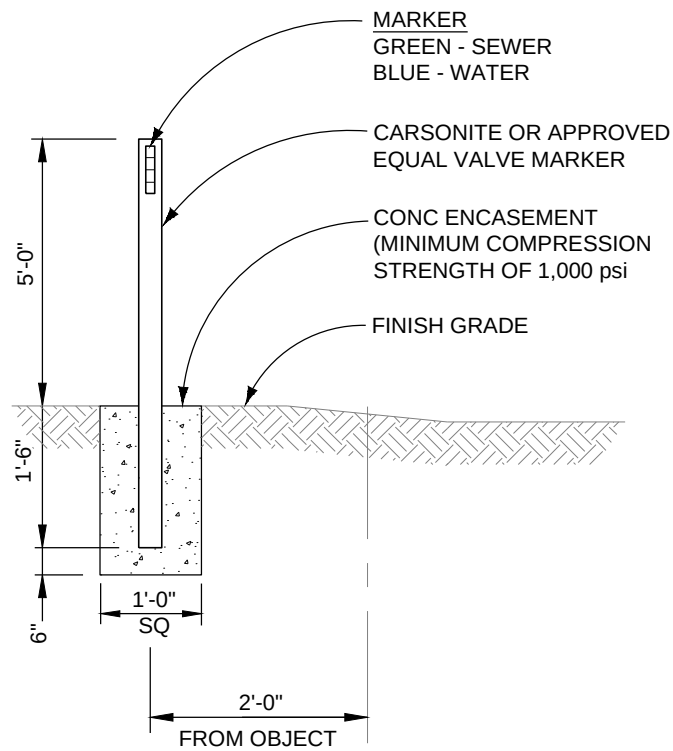
 TOWN OF ELIZABETH	
SEWER AND WATER LINE CROSSING	
SCALE: NTS	DATE: APRIL 2025
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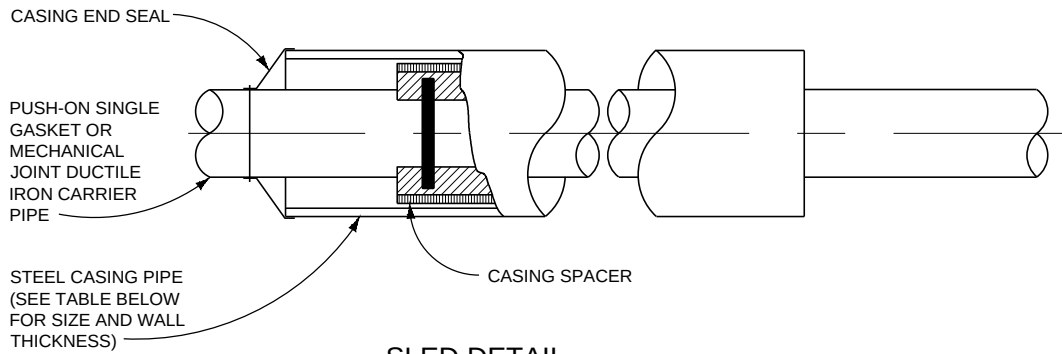
NOTES:

1. FOR TIE-INS TO STRUCTURES EXTEND LONGITUDINAL REINFORCING INTO WALL OR SLAB, PROVIDE DOWELS AT EACH END.
2. PROVIDE TWO FLEXIBLE JOINTS WITHIN SIX FEET OF EACH END OF ENCASEMENT.
3. USE GR 40 REINF. BARS.
4. CONCRETE SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 3,000 psi AT 28 DAYS

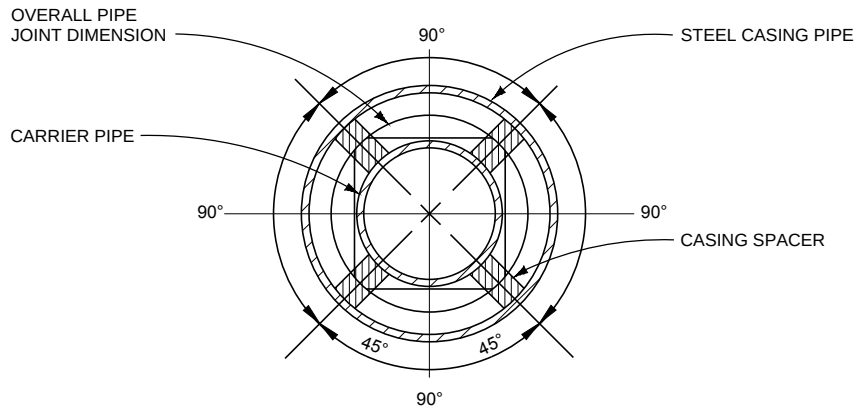
 TOWN OF ELIZABETH	
CONCRETE ENCASEMENT	
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 TOWN OF ELIZABETH	
SURFACE MARKER	
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SLED DETAIL



PIPE CASING DETAIL

CARRIER PIPE NOMINAL DIA.	CASING PIPE	
	MIN. O.D.	MIN. WALL THICK
4"	12"	0.188"
6"	16"	0.250"
8"	18"	0.282"
12"	22"	0.344"
16"	28"	0.406"
20"	32"	0.469"

NOTES:

1. NEOPRENE OR PVC RUNNERS MAY BE USED FOR CASING SPACERS.
2. TRENCH LAID CASINGS SHALL BE DESIGNED AND INSTALLED TO CONDUIT STANDARDS.
3. USE HARNESS LUGS FOR WATER MAIN RESTRAINT (SEE DWG G7).

TOWN OF ELIZABETH

BORE CASING

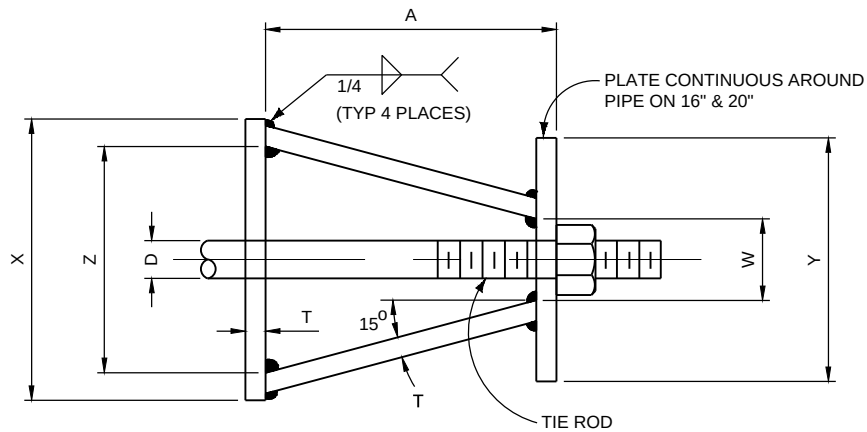
SCALE: NTS

DATE: APRIL 2025

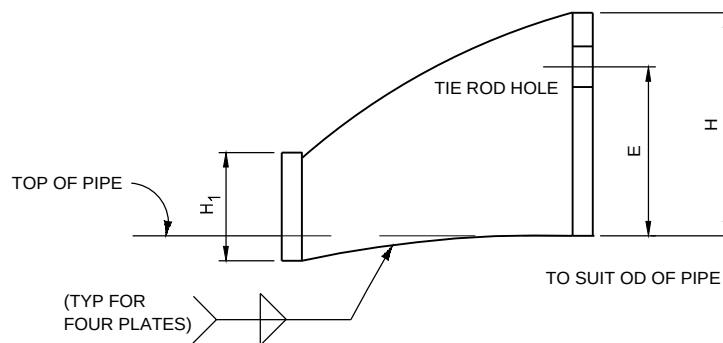
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WATER AND SEWER STANDARDS



TOP VIEW



SIDE VIEW

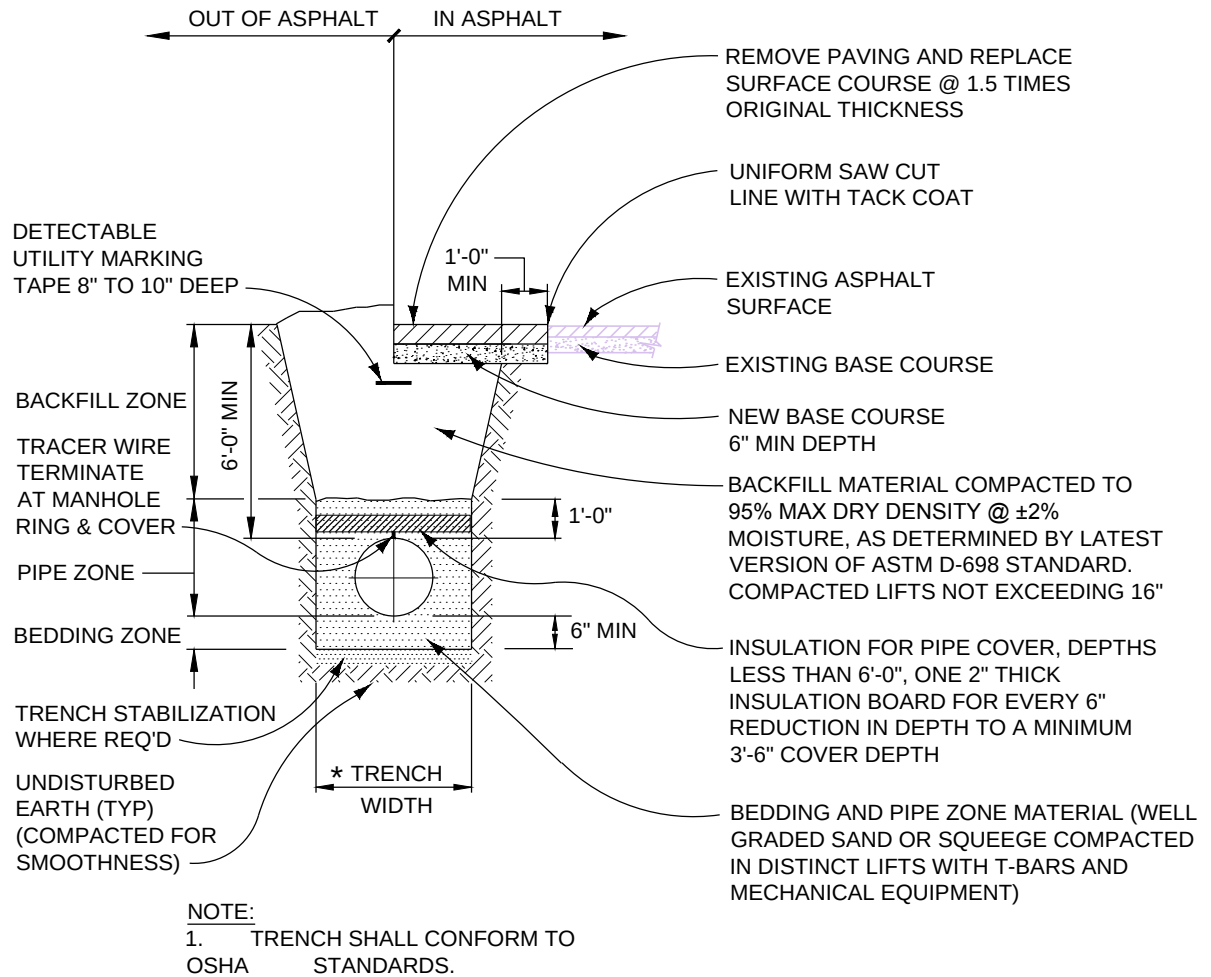
	CARRIER PIPE NOMINAL DIA.	STUD DIA. D	A	W	Z	T	H	E	H ₁	Y	X
W/O FLANGED LUGS	4" TO 12"	3/4"	5"	1-1/2"	3-3/4"	3/8"	4-1/8"	3-1/8"	2"	4-1/2"	5"
	16"	1"	5-3/4"	1-3/4"	4-1/2"	1/2"	4-1/2"	3-1/4"	2"	RING	6"
	20"	1-1/4"	7-1/2"	2"	5-3/4"	5/8"	5"	3-3/4"	2-1/2"	RING	7-1/2"

NOTES:

1. USE TWO HIGH STRENGTH STAINLESS STEEL TIE RODS AT END OF CASING.
2. TIE ROD HOLE DIAMETER 1/8" LARGER THAN STUD DIAMETER.
3. BOTTOM EDGE OF ALL PLATES SHAPED TO FIT OD OF PIPE.
4. HARNESS LUGS AS PER AWWA MANUAL M-II.
5. WARP W/ 10 MIL POLYETHYLENE SHEATHING.

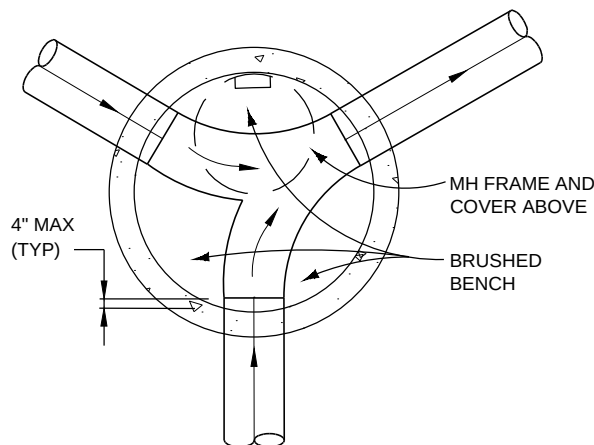
 TOWN OF ELIZABETH	
HARNESS LUGS - BORE CASING	
SCALE: NTS	DATE: APRIL 2025
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STANDARD DETAILS – SEWER SYSTEM

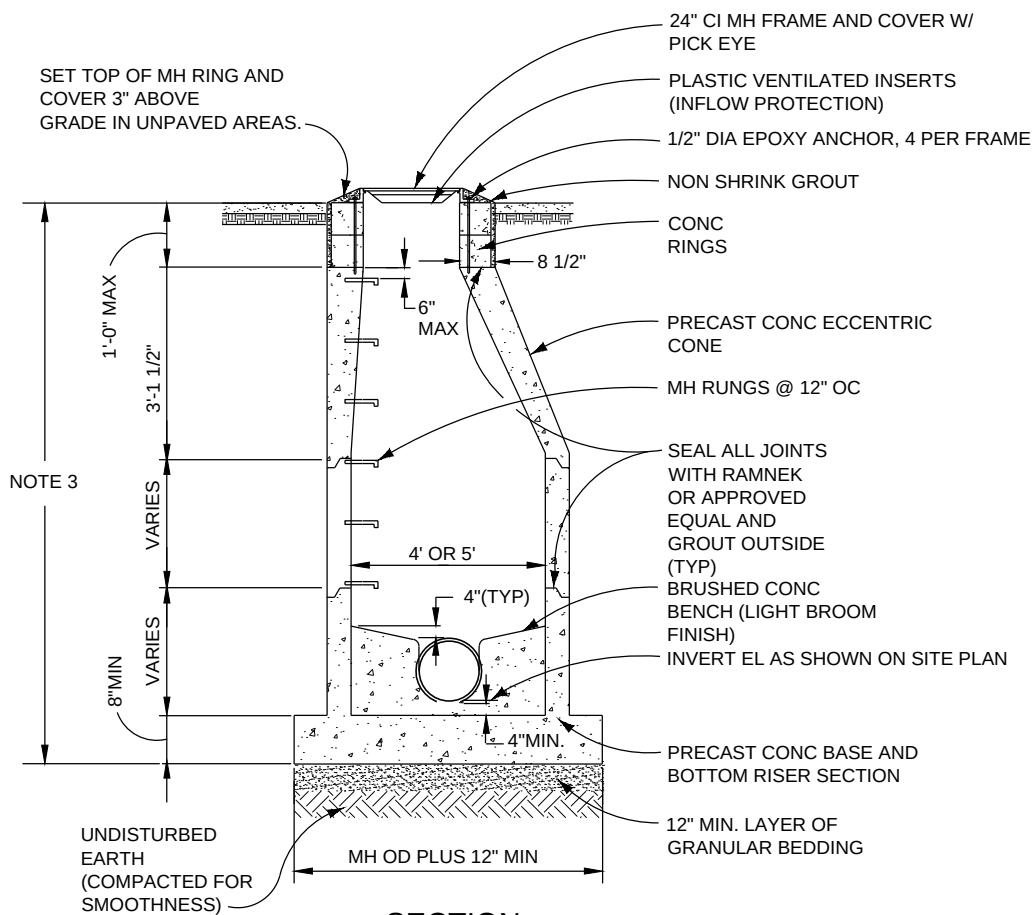


* MAXIMUM TRENCH WIDTH = 24" + NORMAL PIPE DIAMETER

 TOWN OF ELIZABETH	
SEWER PIPE TRENCH	
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WATER AND SEWER STANDARDS	
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TYPICAL PLAN

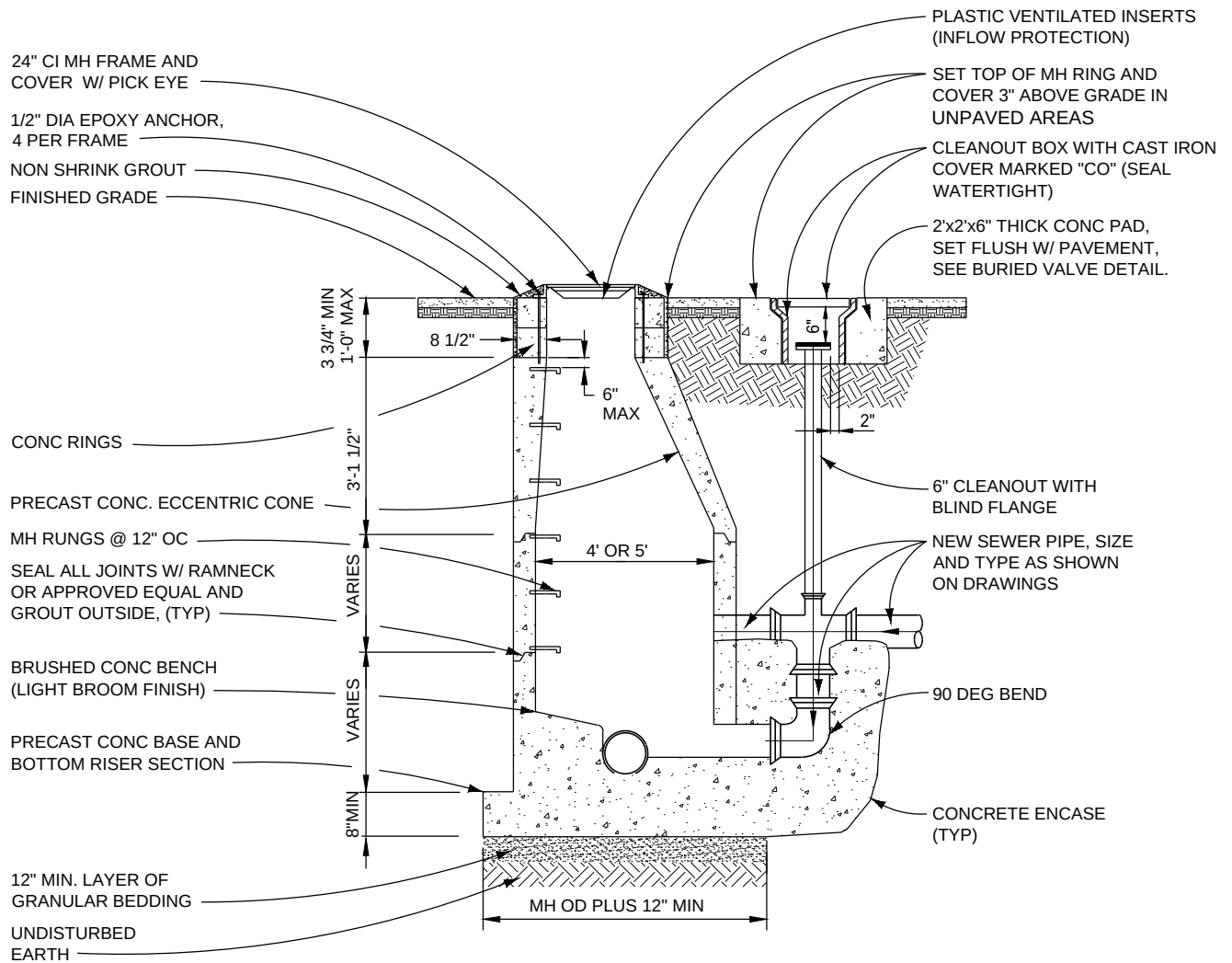


SECTION

NOTES:

1. ALL COMPONENTS SHALL BE CAPABLE OF HS-20 LOADING.
2. INSTALL ALL PIPES INTO MANHOLES WITH FLEXIBLE PIPE-TO-MANHOLE CONNECTORS.
3. USE PRECAST FLAT TOP COVER FOR SEWER DEPTHS LESS THAN 6'-0" (SEE DWG. S4).

 TOWN OF ELIZABETH	
STANDARD MANHOLE	
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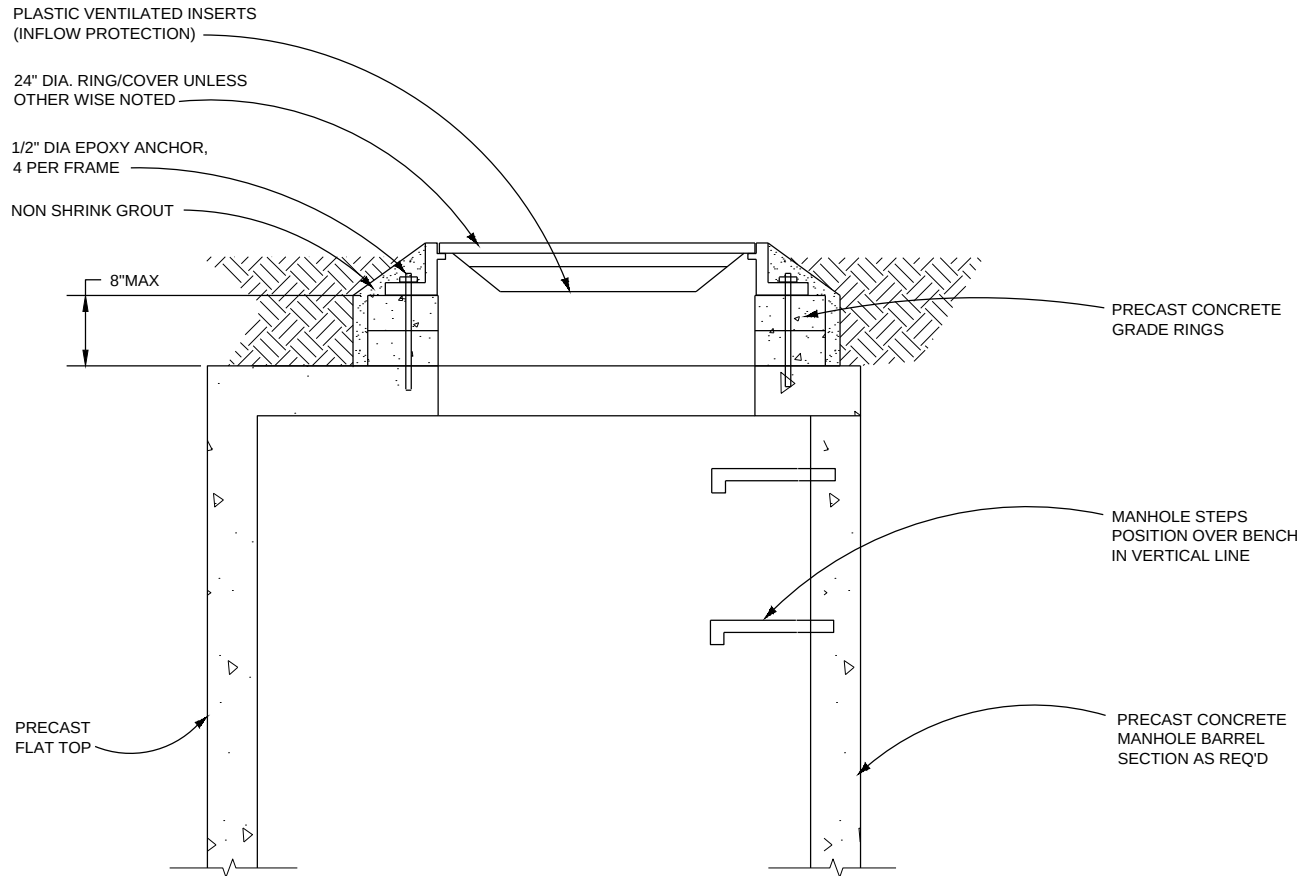


SECTION

NOTES:

1. ALL COMPONENTS SHALL BE CAPABLE OF HS-20 LOADING.
2. INSTALL ALL PIPES INTO MANHOLES WITH FLEXIBLE PIPE-TO-MANHOLE CONNECTORS.
3. DROP MH SHALL BE USED FOR ALL SITUATIONS WHERE INVERT OF PIPES ENTER MH AT 24" OR HIGHER ABOVE THE INVERT OUT ELEVATION.
4. MIN OF 18" CONC REQUIRED BENEATH 90° BEND.

 TOWN OF ELIZABETH	
DROP MANHOLE	
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- NOTES:
1. PRECAST SECTIONS TO CONFORM TO ASTM-C-478.
 2. RING/COVER AND GRADE RINGS TO BE SET ON FULL BED OF MORTAR.

 TOWN OF ELIZABETH	
FLAT TOP MANHOLES	
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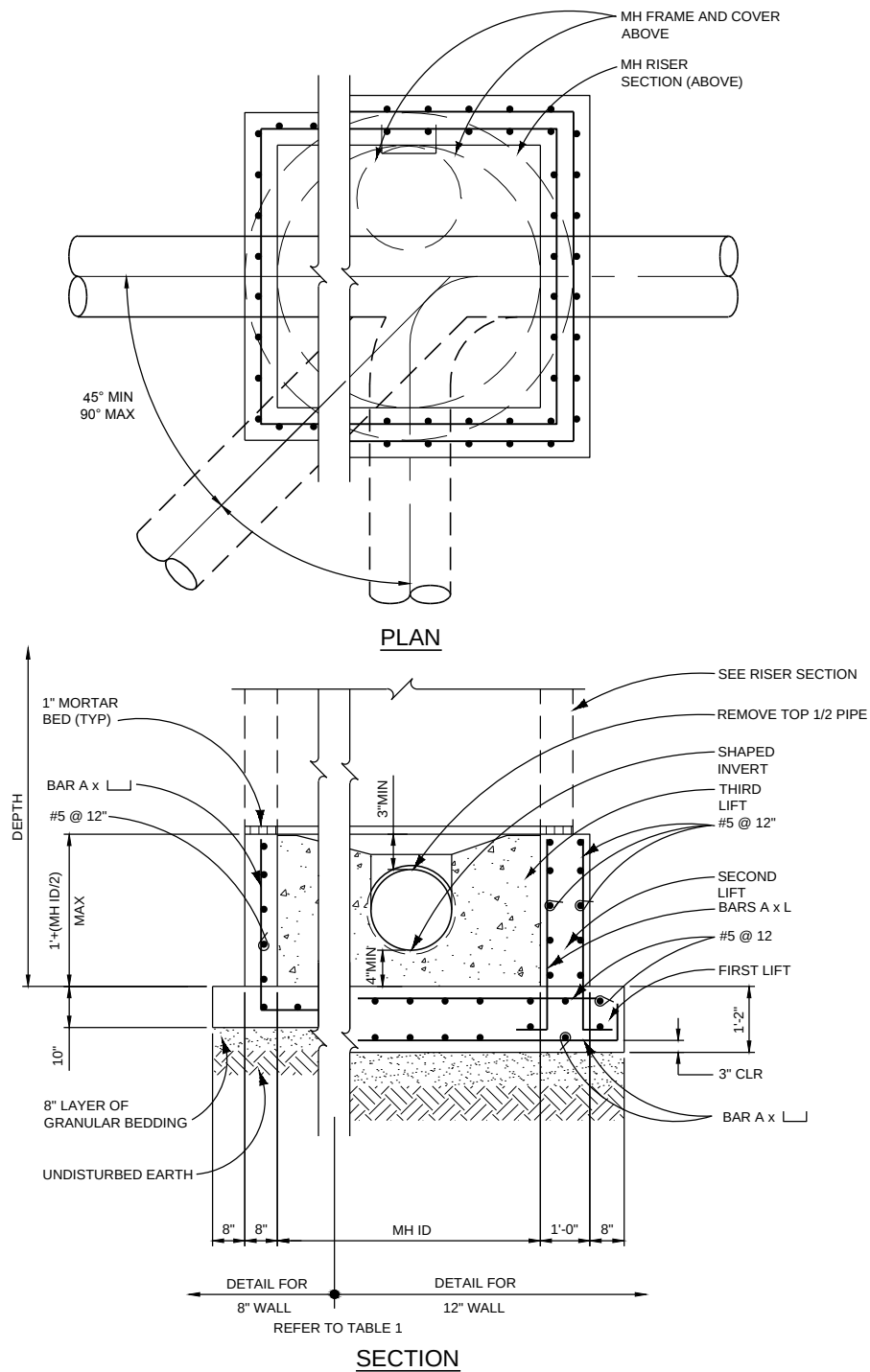


TABLE 1			
MANHOLE RISER SECTION DIA	DEPTH BELOW FINISHED GRADE	REQD WALL	BARS A
4' ID	0 TO 8'	8"	#5 @ 12"
	8' TO 10'	8"	#5 @ 6"
	10' TO 20'	12"	#6 @ 12"
5' ID	0 TO 6'	8"	#5 @ 12"
	6' TO 10'	8"	#5 @ 6"
	10' TO 15'	12"	#6 @ 12"
6' ID	15' TO 20'	12"	#6 @ 6"
	0 TO 6'	8"	#5 @ 12"
	6' TO 9'	8"	#5 @ 6"
7' ID	9' TO 14'	12"	#6 @ 12"
	14' TO 20'	12"	#6 @ 6"
	0 TO 6'	8"	#5 @ 12"
7' ID	6' TO 9'	8"	#5 @ 6"
	9' TO 12'	12"	#6 @ 12"
	12' TO 20'	12"	#6 @ 6"

* MINIMUM CONCRETE COVER OVER BARS SHALL BE 2" UNLESS NOTED OTHERWISE


TOWN OF ELIZABETH

**CAST-IN-PLACE
MANHOLE BASE**

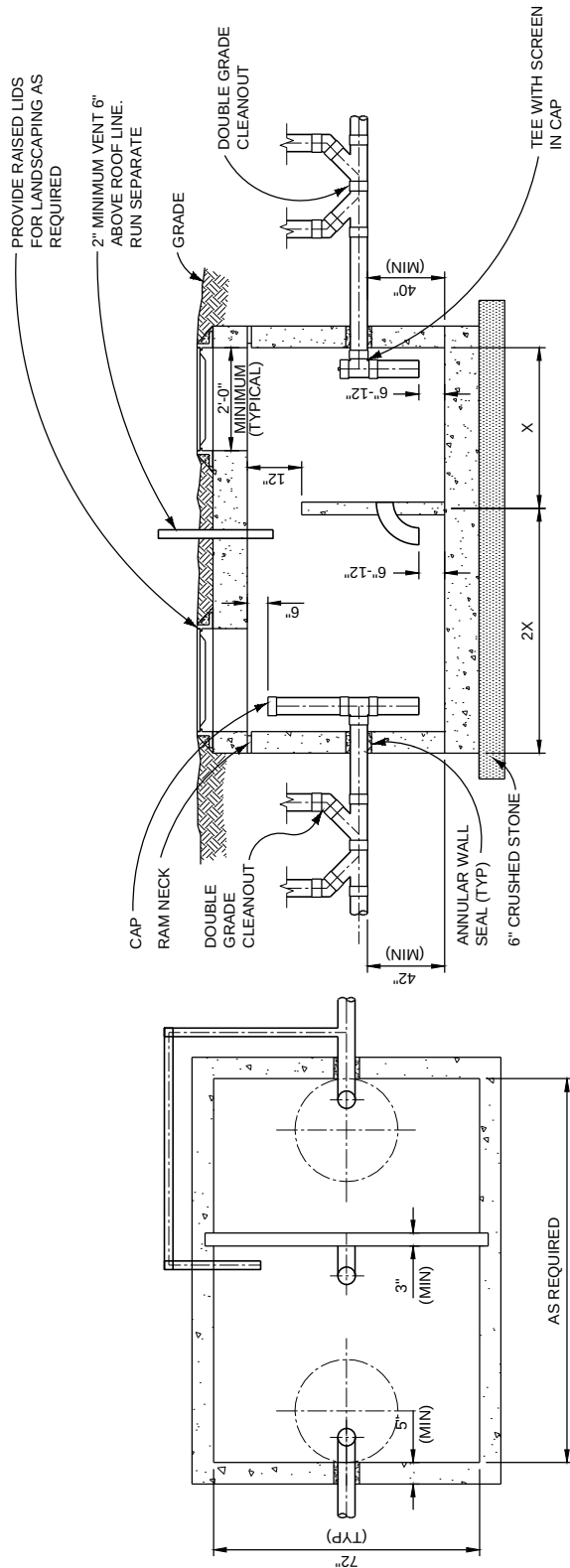
SCALE: NTS

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PLAN

SECTION

NOTES:

1. SIZE GREASE INTERCEPTOR PER TOWN WATER AND SEWER STANDARDS.
2. EXTERIOR PIPE AND FITTINGS SHALL BE SDR-35 PVC, 4" DIAMETER MINIMUM.
3. MANHOLE RING AND COVER SHALL BE HS-20 TRAFFIC RATED.
4. FIBERGLASS TANKS ARE ACCEPTABLE AS ALTERNATE TO CONCRETE. FLOATATION CALCULATIONS WILL BE REQUIRED.
5. BACKFILL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
6. FINAL STRUCTURAL/REINFORCING AND RESISTANCE TO FLOATATION DESIGN OF PRECAST STRUCTURE TO BE COMPLETED BY MANUFACTURER OR PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO.
7. INTERIOR PIPING SHALL BE GLUED SCHEDULE 40 PVC, 4" DIAMETER MINIMUM.
8. MINIMUM INTERCEPTOR SIZE SHALL BE 750 GALLONS.

EXTERIOR GREASE INTERCEPTOR

NTS



TOWN OF ELIZABETH

EXTERIOR
GREASE INTERCEPTOR

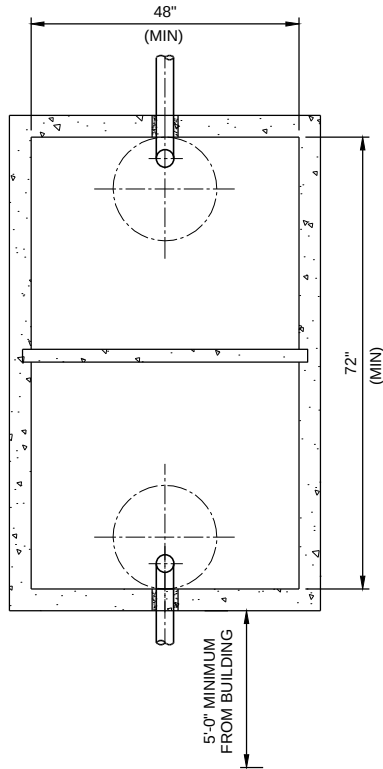
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DATE: APRIL 2025

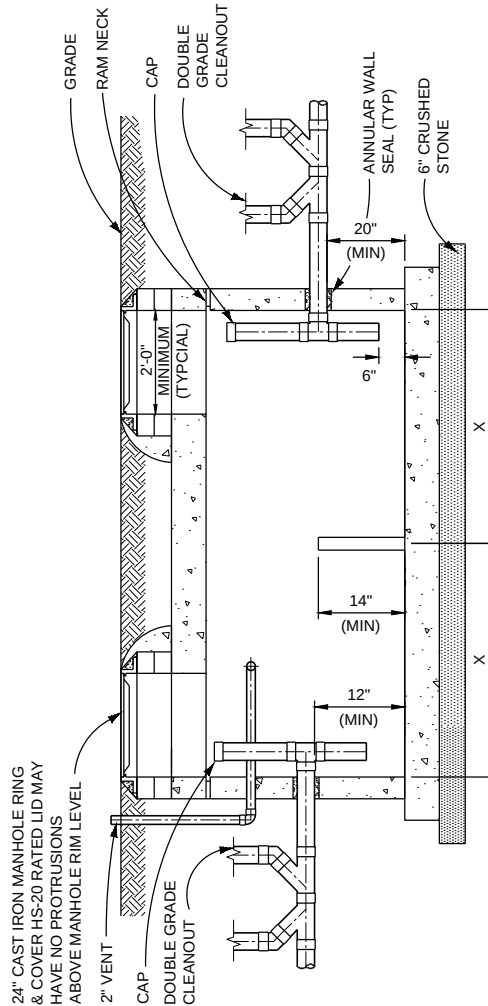
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WATER AND SEWER STANDARDS



24" CAST IRON MANHOLE RING & COVER HS-20 RATED LID MAY HAVE NO PROTRUSIONS ABOVE MANHOLE RIM LEVEL



NOTES:

1. TOP OF VAULT BELOW FINISHED GRADE OR AT GRADE. IF BELOW GRADE, RING AND COVER SHALL BE ADJUSTED TO FINAL GRADE USING A MINIMUM OF 4" GRADE RING(S) AND A MAXIMUM OF 12" GRADE RING(S). FOR DEPTHS OVER 12", A MAN HOLE BARREL SECTION WILL BE REQUIRED. WITH A FLAT TOP FOR DEPTHS OF 4" OR LESS AND AN ECCENTRIC CONE TOP FOR DEPTHS GREATER THAN 4".
2. FIBERGLASS TANKS ARE ACCEPTABLE AS AN ALTERNATIVE TO CONCRETE. FLOATATION CALCULATIONS WILL BE REQUIRED.
3. BACKFILL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS; NO BACKFILL MATERIAL SHALL BE 3" OR GREATER IN DIAMETER.
4. FINAL STRUCTURAL/REINFORCING AND RESISTANCE TO FLOATATION DESIGN OF PRECAST STRUCTURE TO BE COMPLETED BY MANUFACTURER OR PROFESSIONAL ENGINEER LICENSED IN THE STATE OF COLORADO.
5. INTERIOR PIPING SHALL BE GLUED SCHEDULE 40 PVC, 4" DIAMETER MINIMUM.
6. EXTERIOR PIPING SHALL BE SDR-35, 4" DIAMETER MINIMUM.
7. MINIMUM INTERCEPTOR SIZE SHALL BE 500 GALLONS.

SAND AND OIL INTERCEPTOR
NTS



TOWN OF ELIZABETH

**SAND AND OIL
INTERCEPTOR**

SCALE: NTS

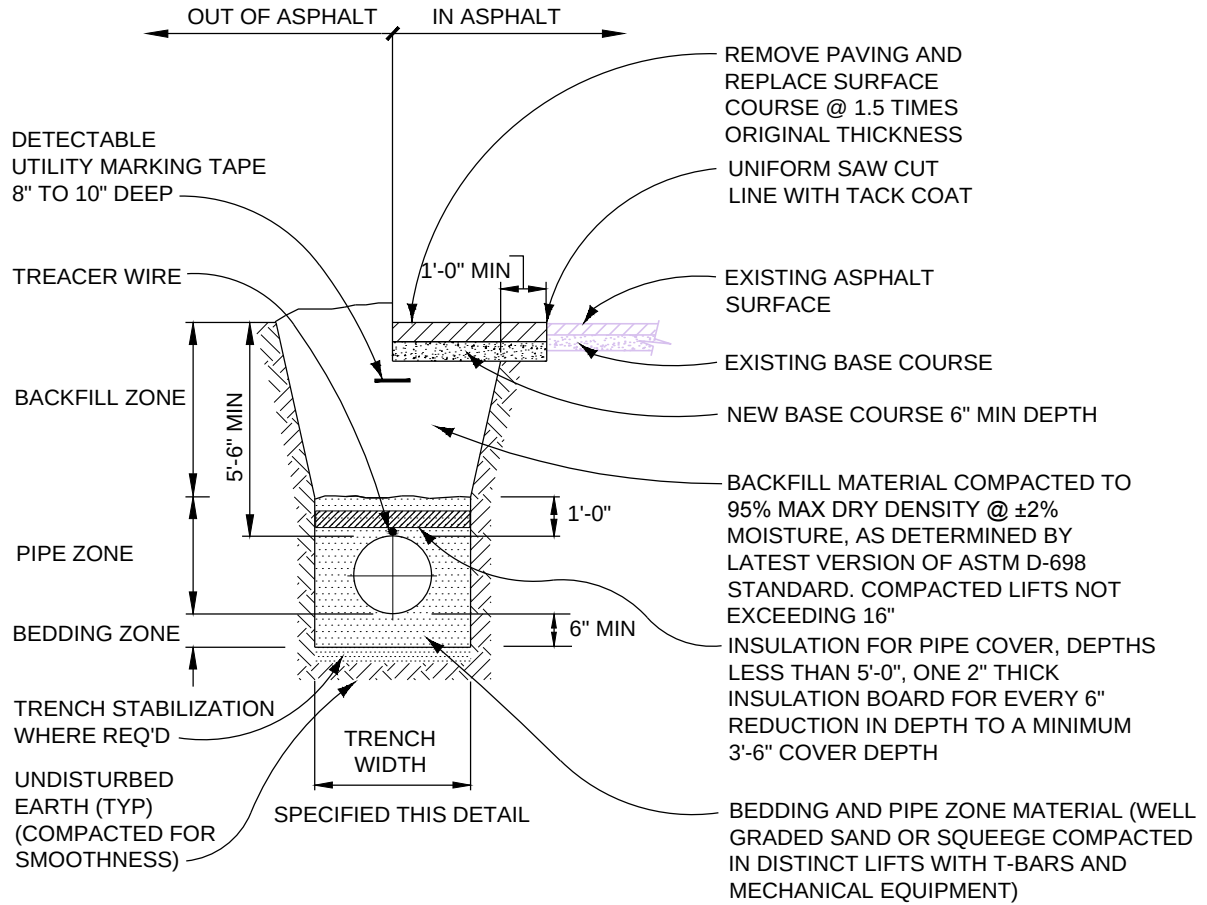
DATE: APRIL 2025

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WATER AND SEWER STANDARDS

STANDARD DETAILS – WATER SYSTEM



NOTE:
1. TRENCH SHALL CONFORM TO OSHA STANDARDS.

TRENCH WIDTH SHALL CONFORM TO THE FOLLOWING:

PIPE I.D.	MIN. WIDTH	MAX. WIDTH
4" OR SMALLER	1'-4"	2'-4"
6"	1'-6"	2'-6"
8"	1'-8"	2'-8"
12"	2'-0"	3'-0"
16"	2'-4"	3'-4"

TOWN OF ELIZABETH

WATER PIPE TRENCH

SCALE: NTS
DATE: APRIL 2025

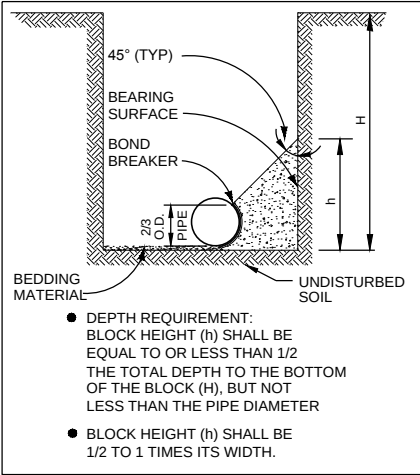
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WATER AND SEWER STANDARDS
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2/14/17 12:12 ARC56862 R19 P:\0 - MASTER DETAILS\OTHER FIRMS DETAILS\ELIZABETH STANDARD DETAILS\ELIZABETH.JPG; 2-9-17\DETAILS\W2-THRUST BLOCK.DWG IMAGES: P:\0 - MASTER DETAILS\OTHER FIRMS DETAILS\ELIZABETH STANDARD DETAILS\ELIZABETH.JPG;

GENERAL:

- 1. ALL BURIED PIPING FITTINGS SHALL BE PROVIDED WITH CONCRETE THRUST BLOCKS AT ALL DIRECTION CHANGES UNLESS OTHERWISE NOTED.
- 2. IN ADDITION TO THRUST BLOCKS, ALL FITTINGS AND VALVES SHALL BE RESTRAINED FOR AT LEAST 40 FEET IN ALL DIRECTIONS. MEGALUGS MAY BE USED ON DIP AND PVC PIPE FOR RESTRAINT EXCEPT IN LOCATIONS WHERE FLEXIBLE JOINTS ARE REQUIRED.
- 3. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH OR STRUCTURAL BACKFILL.
- 4. KEEP CONCRETE CLEAR OF JOINT, BOLTS, NUTS, CLAMPS, AND OTHER ACCESSORIES.
- 5. THRUST BLOCKS SHALL NOT BE LOCATED OR SIZED TO ENCASE ADJACENT PIPES OR FITTINGS.
- 6. A BOND BREAKER SHALL BE PLACED BETWEEN THE PIPE AND THRUST BLOCK.
- 7. DO NOT COVER ANY BOLT CONNECTIONS.



TYPICAL CROSS SECTION

FITTING SIZE (IN)	A ₁	A ₂			
	TEE, WYE PLUG OR CAP (SF)	90° BEND (SF)	45° BEND (SF)	22 1/2° BEND (SF)	11 1/4° BEND (SF)
4	1.4	2.0	1.1	1.0	1.0
6	3.2	4.5	2.4	1.2	1.0
8	5.7	8.0	4.3	2.2	1.1
10	8.8	12.5	6.8	3.4	1.7
12	12.7	18.0	9.7	5.0	2.5
14	17.3	24.5	13.3	6.8	3.4
16	22.6	32.0	17.3	8.8	4.4
18	28.6	40.5	21.9	11.2	5.6
20	35.3	50.0	27.1	13.8	6.9
24	50.9	72.0	39.0	19.9	10.0

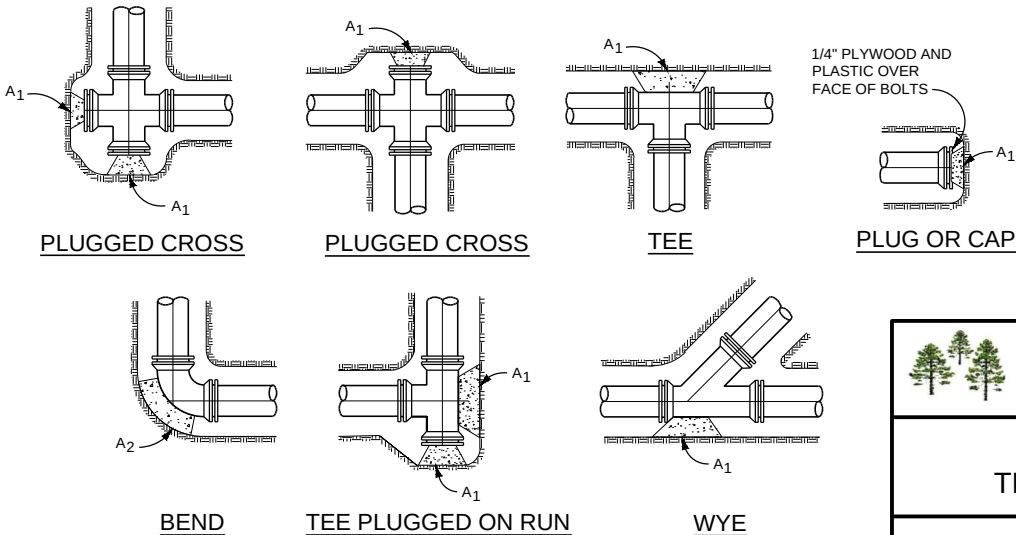
TABLE 1 - BEARING AREA OF THRUST BLOCKS IN SQUARE FEET (HORIZONTAL BENDS & VERTICAL UPWARD BENDS)

HORIZONTAL BENDS AND VERTICAL UPWARD BENDS:

- 1. BEARING AREAS (TABLE 1) BASED ON TEST PRESSURE OF 150 psi, AN ALLOWABLE SOIL BEARING PRESSURE OF 2,000 psf AND A SAFETY FACTOR OF 1.5, TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING PRESSURES, USE THE FOLLOWING EQUATION:

BEARING AREA = (TEST PRESSURE / 150 psi) x (2,000 / SOIL BEARING PRESSURE psf) x (TABLE 1 VALUE)

- 2. UNLESS OTHERWISE NOTED ON THE GENERAL DRAWINGS IN THE GENERAL NOTES OR SPECIFICATIONS, USE SOIL BEARING PRESSURE = 2000 psf FOR THIS PROJECT.
- 3. BEARING AREA OF THRUST BLOCK SHALL NOT BE LESS THAN 1.0 SQUARE FOOT.
- 4. IF THE DEPTH REQUIREMENT (SEE TYPICAL CROSS SECTION) CAN NOT BE ACHIEVED, THE ENGINEER SHALL BE NOTIFIED.



TOWN OF ELIZABETH

HORIZONTAL THRUST BLOCKS

SCALE: NTSDATE: APRIL 2025

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WATER AND SEWER STANDARDS

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**TABLE 2 - VOLUME OF THRUST BLOCK IN CUBIC YARDS
(VERTICAL DOWNWARD BENDS)**

FITTING SIZE (IN)	V ₁			ROD SIZE	EMBEDMENT (FT)
	45° BEND (CY)	22 1/2° BEND (CY)	11 1/4° BEND (CY)		
4	0.5	0.3	0.1	#6	2.5
6	1.1	0.6	0.3	#6	2.5
8	2.0	1.1	0.5	#6	2.5
10	3.1	1.7	0.9	#6	2.5
12	4.4	2.4	1.2	#6	2.5
14	6.1	3.3	1.7	#8	3.0
16	7.9	4.3	2.2	#8	3.0
18	10.0	5.4	2.8	#8	3.0
20	12.3	6.7	3.4	#8	3.0
24	17.8	9.6	4.9	#8	3.0

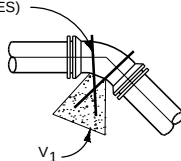
VERTICAL DOWNWARD BENDS:

1. VERTICAL BENDS THAT REQUIRE A THRUST BLOCK VOLUME EXCEEDING 5 CUBIC YARDS REQUIRE SPECIAL BLOCKING DETAILS. SEE DRAWINGS FOR VOLUMES SHOWN TO LEFT OF HEAVY, BOLD LINE IN TABLE 2.
2. THRUST BLOCK VOLUMES (TABLE 2) FOR VERTICAL DOWNWARD BENDS HAVING UPWARD RESULTANT THRUSTS ARE BASED ON TEST PRESSURE OF 150 PSI, THE WEIGHT OF CONCRETE = 4050 LBS/CUBIC YARD, AND A SAFETY FACTOR OF 1.5. TO COMPUTE VOLUMES FOR DIFFERENT TEST PRESSURES AND CONCRETE WEIGHTS, USE THE FOLLOWING EQUATION:

$$\text{VOLUME} = (\text{TEST PRESSURE} / 150) \times (4,050 / \text{CONCRETE WEIGHT}) \times (\text{TABLE 2 VALUE})$$

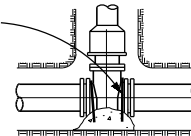
3. VOLUME OF THRUST BLOCK IN CUBIC YARDS FOR VALVES SHALL BE THE SAME VOLUME USED FOR 11 1/4° BENDS.

GALVANIZED OR EPOXY
COATED RODS OVER
FITTING AND EMBEDDED
IN CONCRETE (SEE TABLE
2 FOR SIZES)



VERTICAL DOWNWARD BEND

GALVANIZED OR EPOXY
COATED RODS OVER
FITTING AND EMBEDDED
IN CONCRETE
(SEE NOTE 3)



VALVE

THRUST RESTRAINTS

NTS

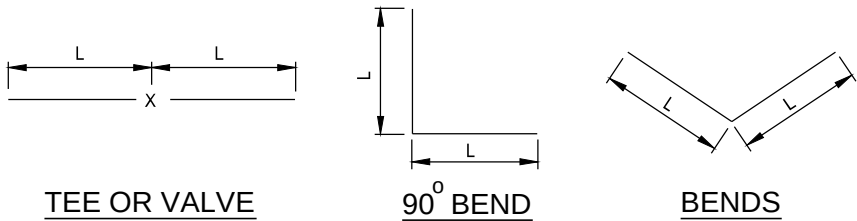
 TOWN OF ELIZABETH	
VERTICAL THRUST BLOCKS	
SCALE: NTS	DATE: APRIL 2025
LAST REVISED: FEBRUARY 2017	
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LENGTH OF RESTRAINED PIPE

PIPE SIZE	FITTING	90° BEND, TEE, PLUG, OR VALVE	45° BEND	22 1/2° BEND	11 1/4° BEND
4"	L	30'	9'	1'	-
6"	L	45'	13'	4'	-
8"	L	60'	18'	5'	1'
12"	L	90'	25'	7'	2'
14"	L	100'	28'	7'	2'
16"	L	110'	32'	8'	2'
20"	L	130'	39'	10'	3'
24"	L	160'	45'	12'	3'

- NOTES:
1. LENGTH OF RESTRAINED PIPE MEASURED EACH WAY FROM VALVES AND BENDS.
 2. BASED ON 100 PSI INTERNAL PRESSURE.
 3. LENGTH REFERS TO THE AMOUNT OF PIPE WHICH MUST BE TIED TOGETHER.
 4. FOR LENGTH OF RESTRAINED PIPE AT DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION:
 5. IF A VALVE IS WITHIN DISTANCE "L" OF A FITTING. THE VALVE MUST BE TIED TO THAT FITTING.
 6. CROSSES MUST BE RESTRAINED IN ALL APPLICABLE DIRECTIONS.
 7. LENGTH OF RESTRAINED PIPE CHART IS ALSO FOR THE LENGTH OF JOINT RESTRAINT FOR MEGALUGS, OR OTHER RESTRAINT SYSTEM.

LENGTH OF RESTRAINED PIPE = (TEST PRESSURE/100 PSI) x (TABLE VALUE)



STANDARD THRUST BLOCKS

TOWN OF ELIZABETH

MECHANICAL

THRUST RESTRAINT

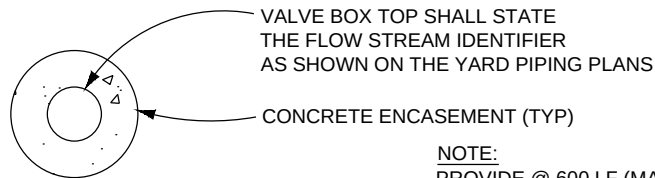
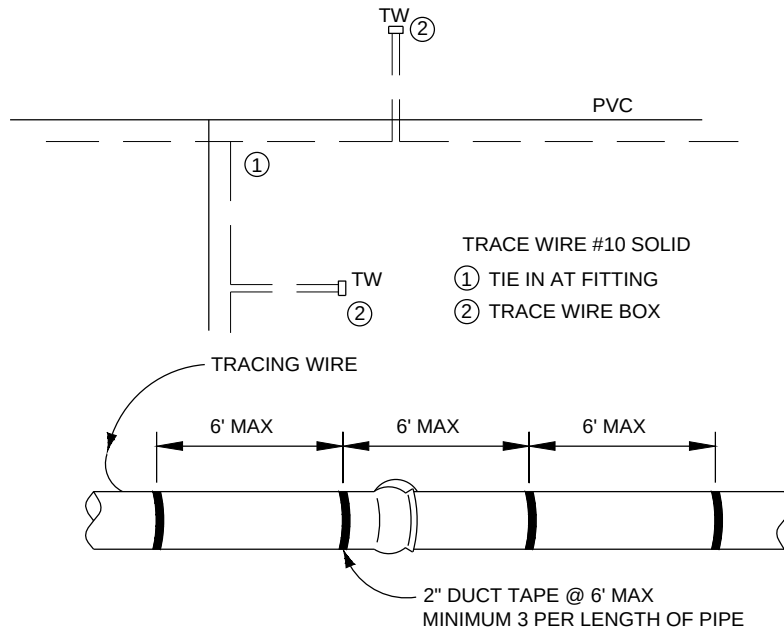
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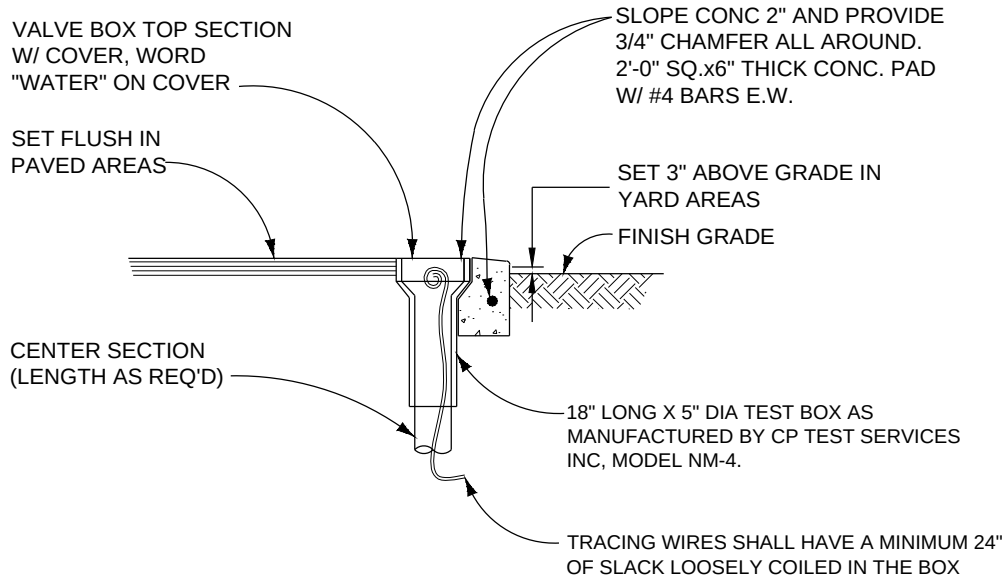
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WATER AND SEWER STANDARDS

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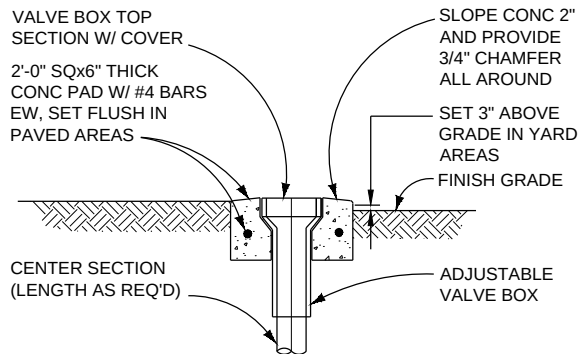


NOTE:
 PROVIDE @ 600 LF (MAX) SPACING AND
 AT ALL VALVES.

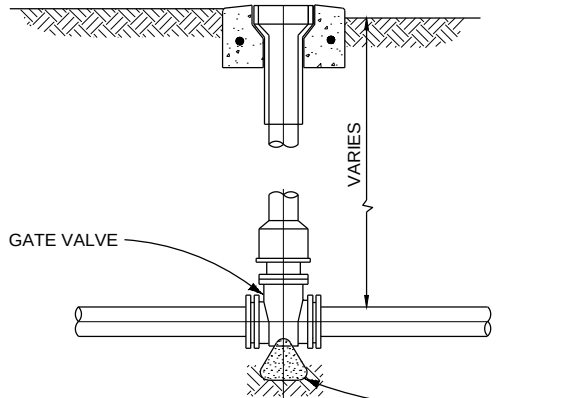


VALVE BOX PAD

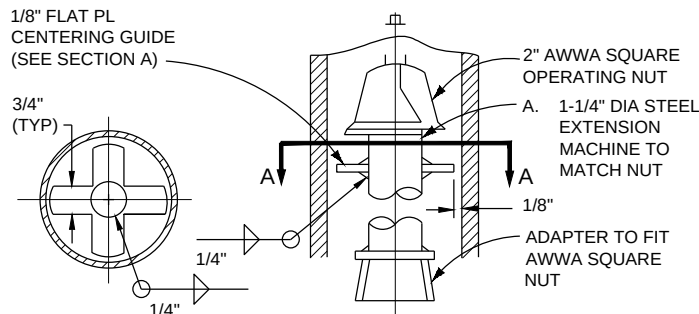
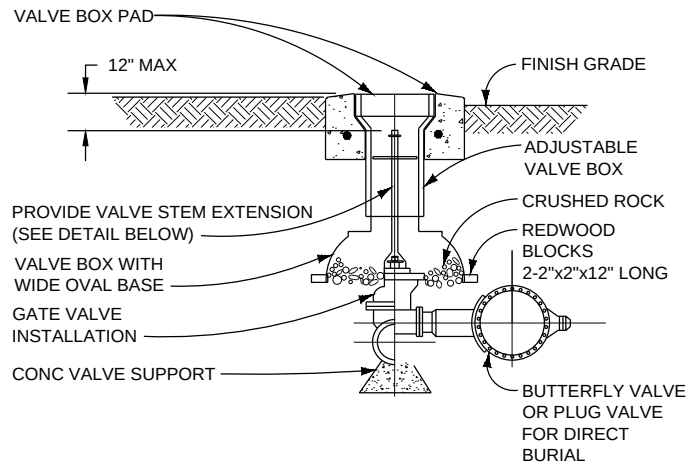
 TOWN OF ELIZABETH	
TRACER WIRE	
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VALVE BOX PAD



VALVE BOX

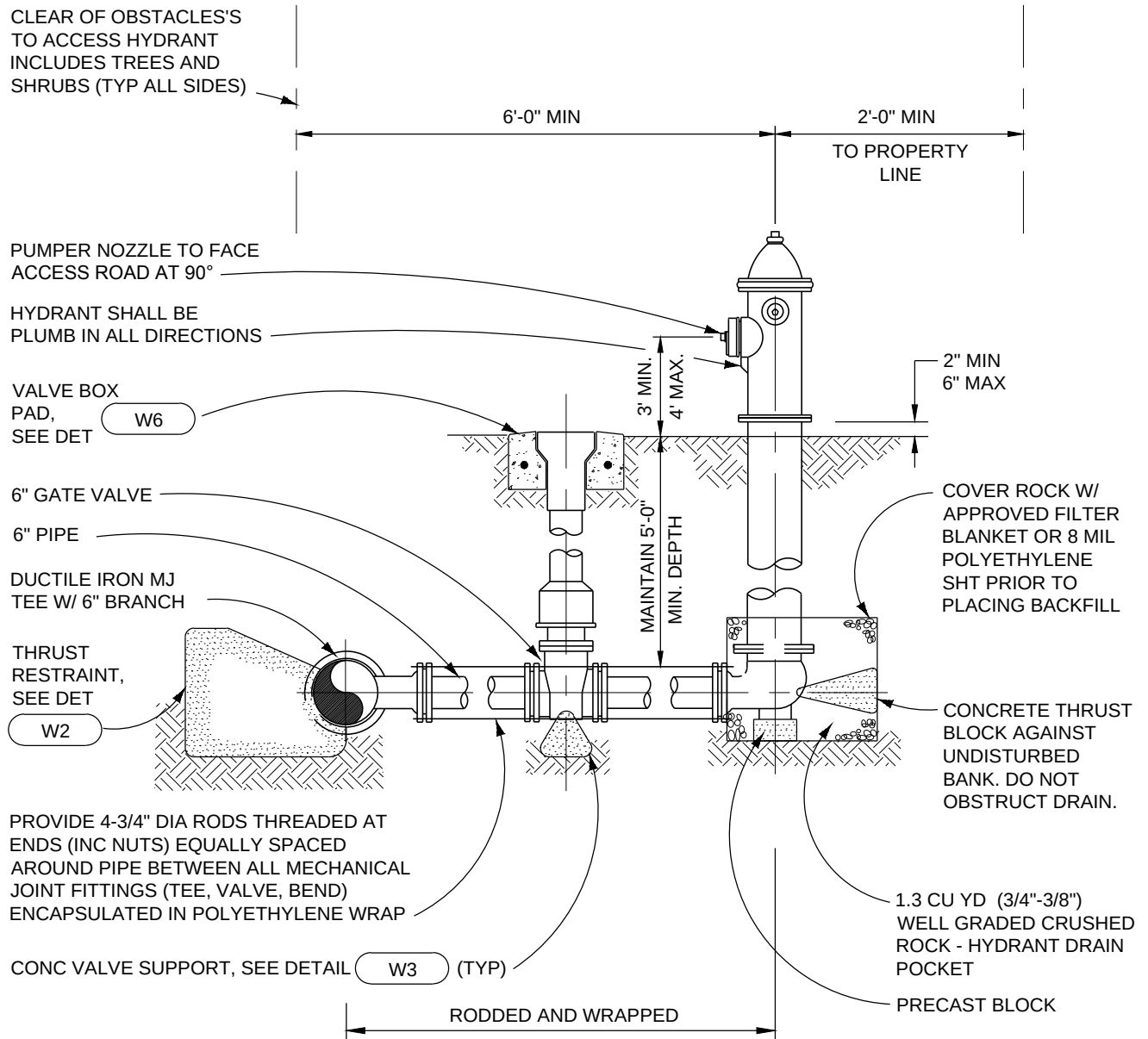


SECTION A

NOTE:
1. PROVIDE PROTECTIVE COATING TO EXTERIOR SURFACES OF VALVE BODY, VALVE BOX, EXTENSION STEM AND APPURTENANCES.

BURIED VALVE INSTALLATION

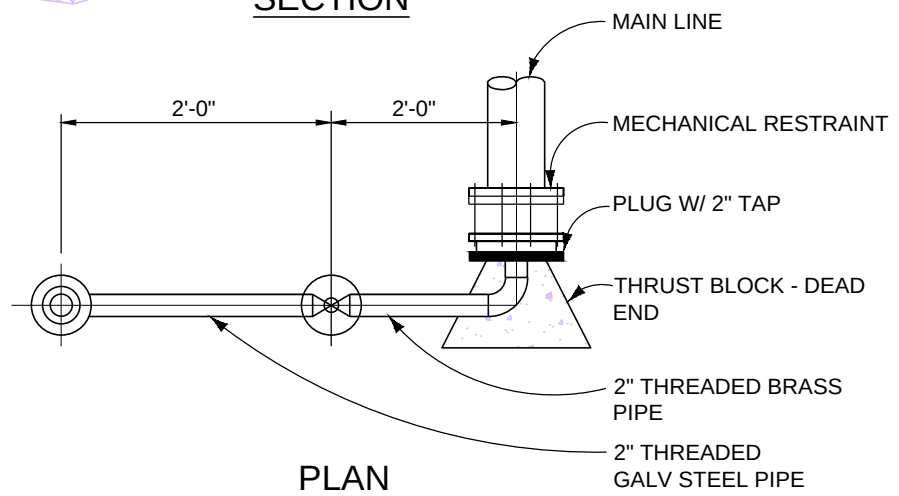
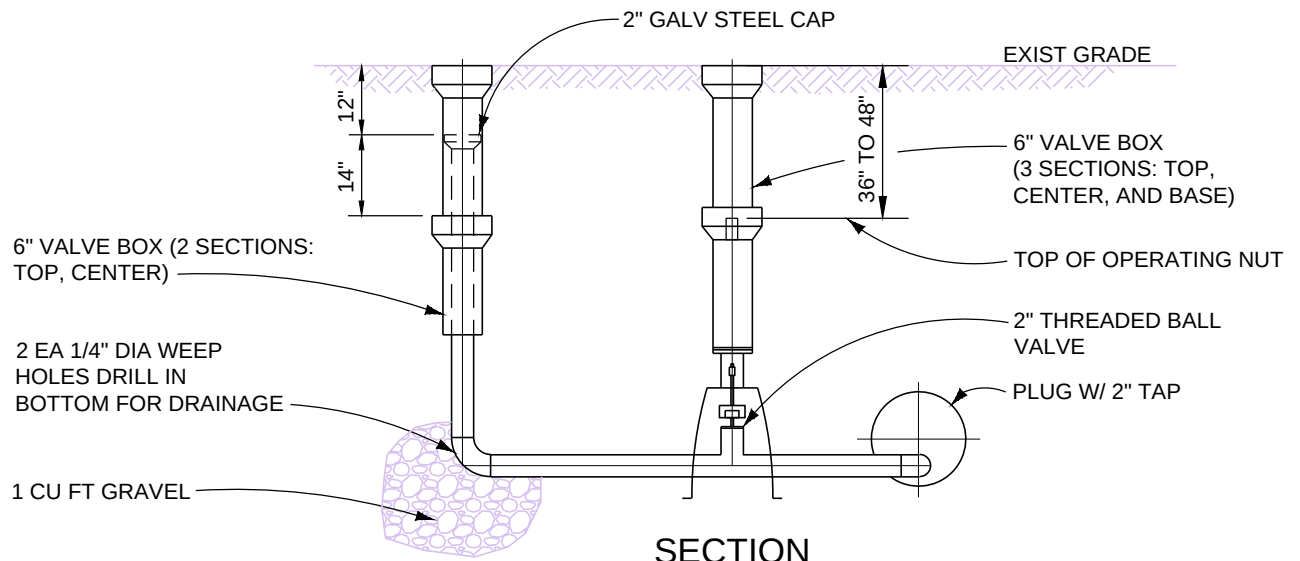
 TOWN OF ELIZABETH	
BURIED VALVES	
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FIRE HYDRANT

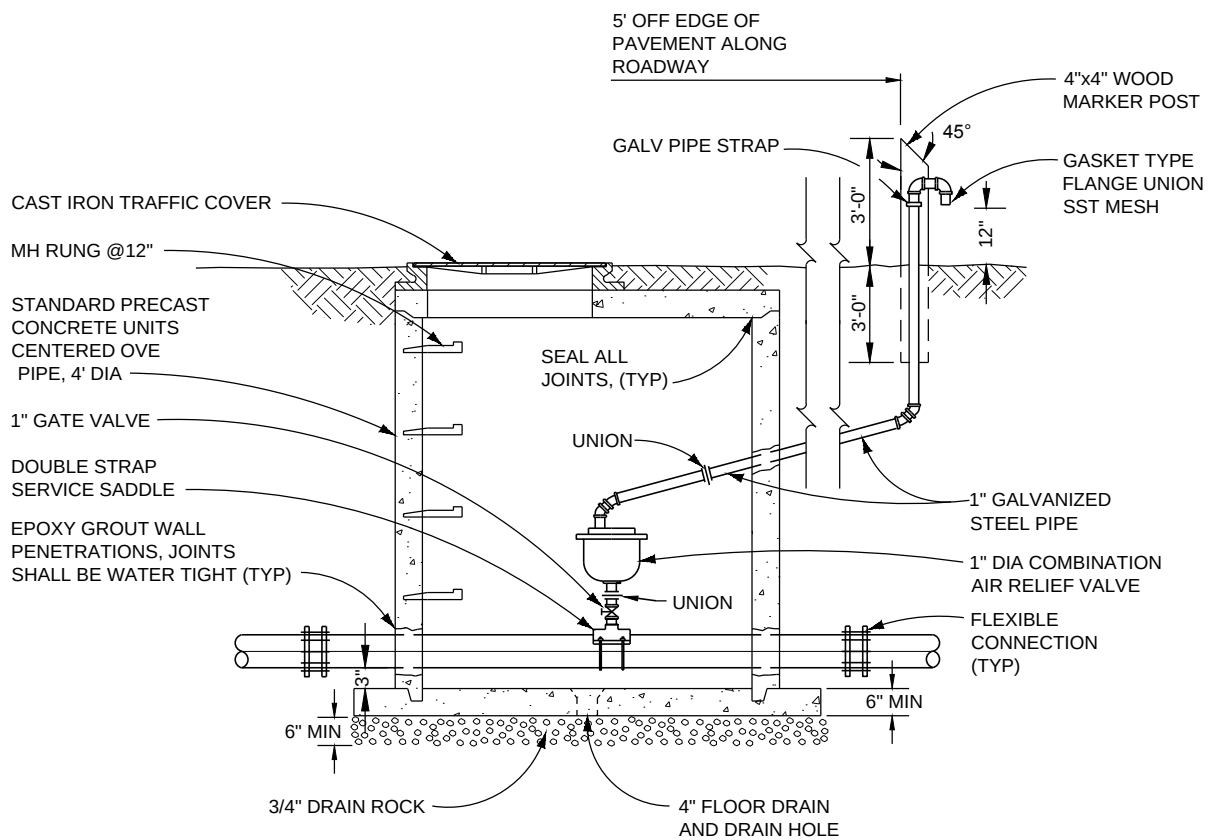
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 TOWN OF ELIZABETH	
FIRE HYDRANT	
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BLOWOFF
NTS

 TOWN OF ELIZABETH	
BLOW-OFF	
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TOWN OF ELIZABETH

AIR RELIEF VALVE

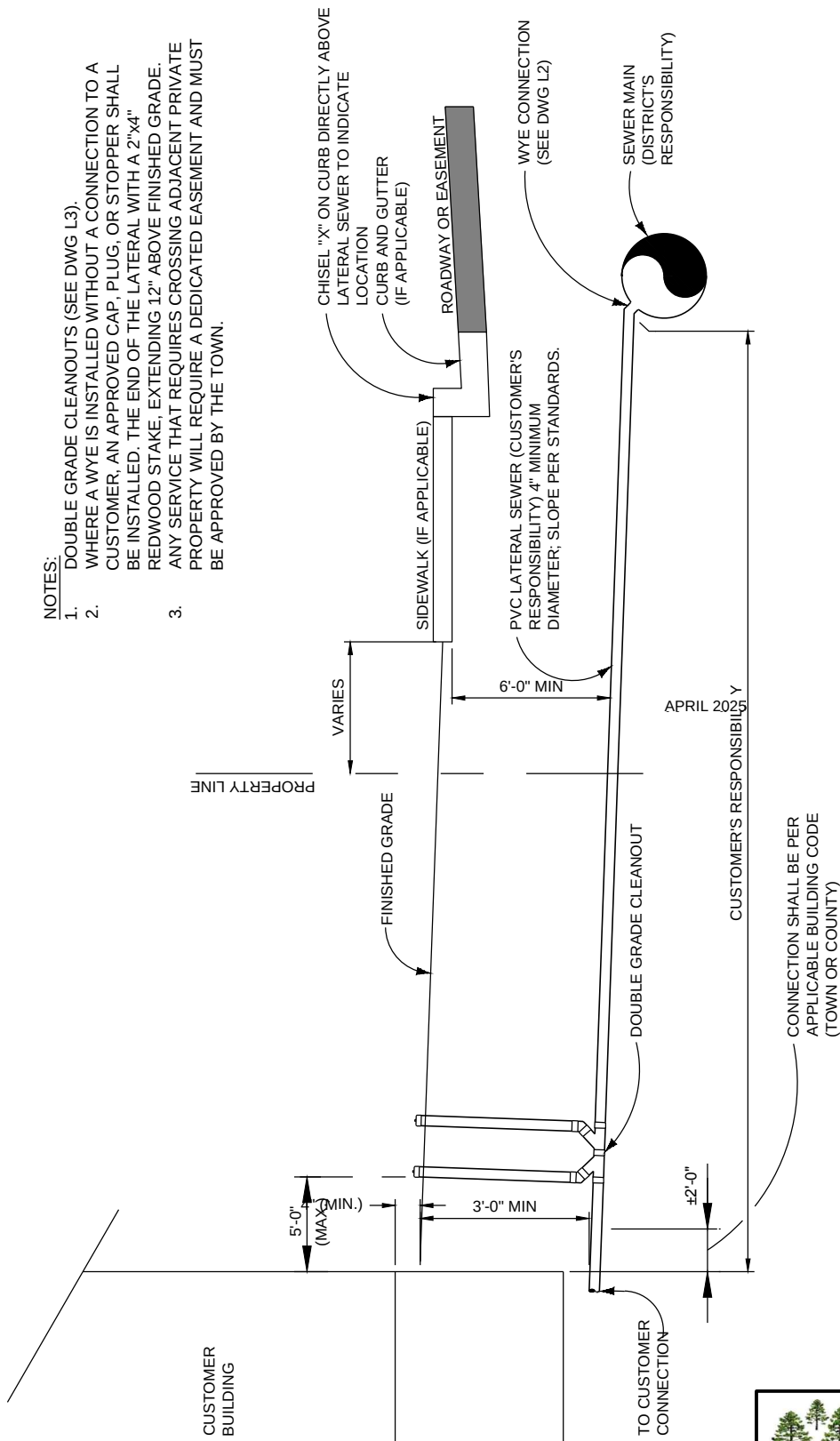
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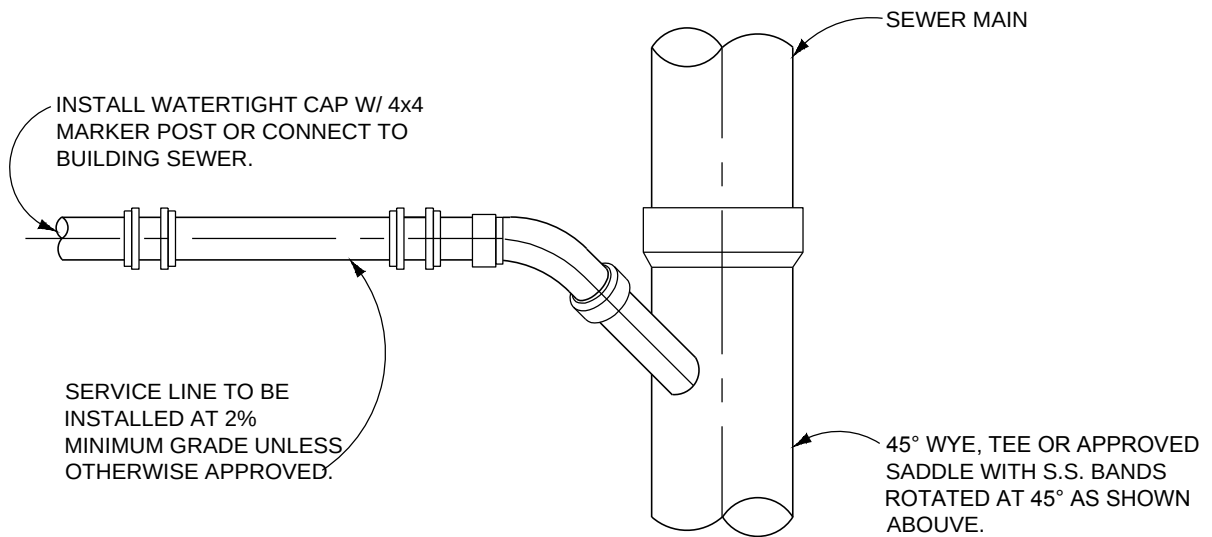
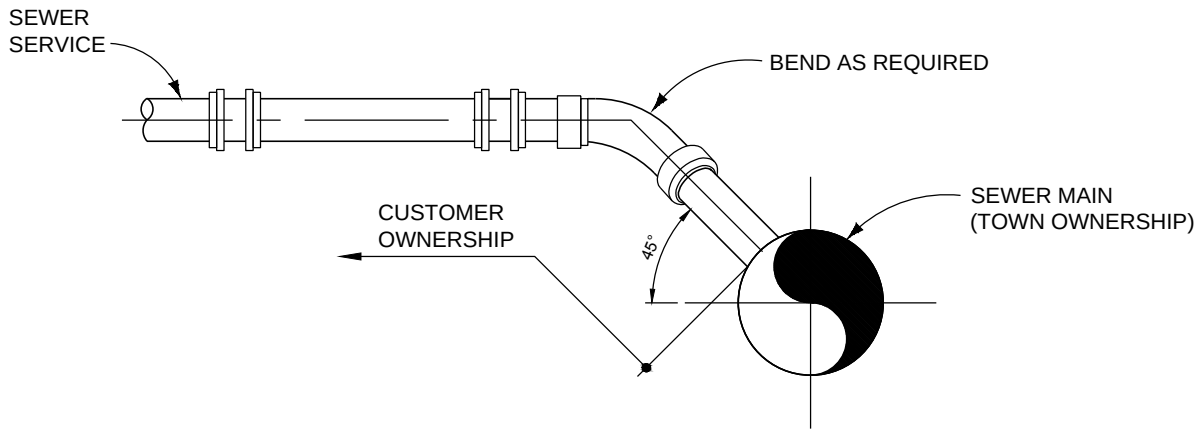
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WATER AND SEWER STANDARDS

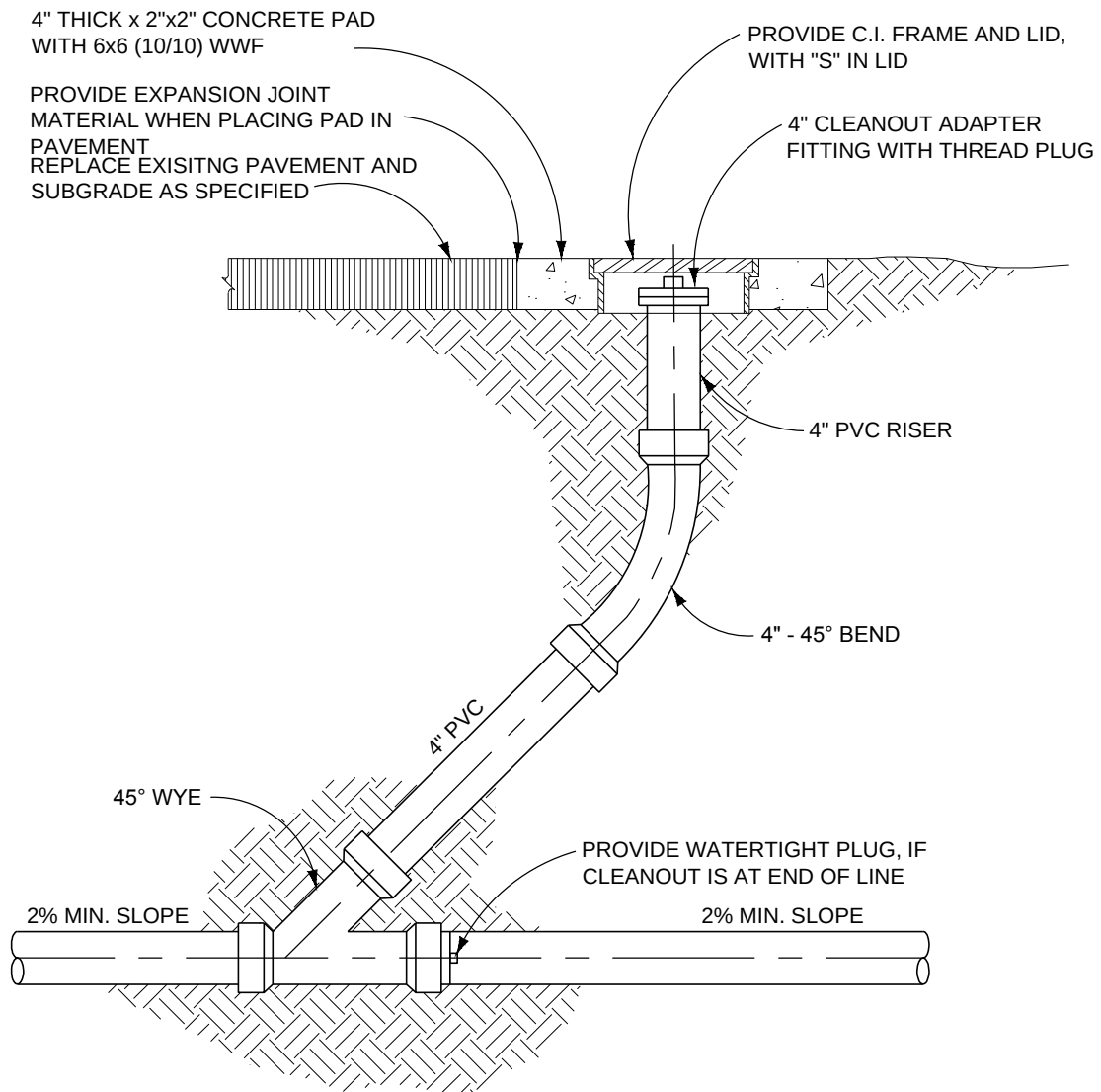
STANDARD DETAILS – SERVICE LINES



 TOWN OF ELIZABETH	
TYPICAL RESIDENTIAL SEWER SERVICE	
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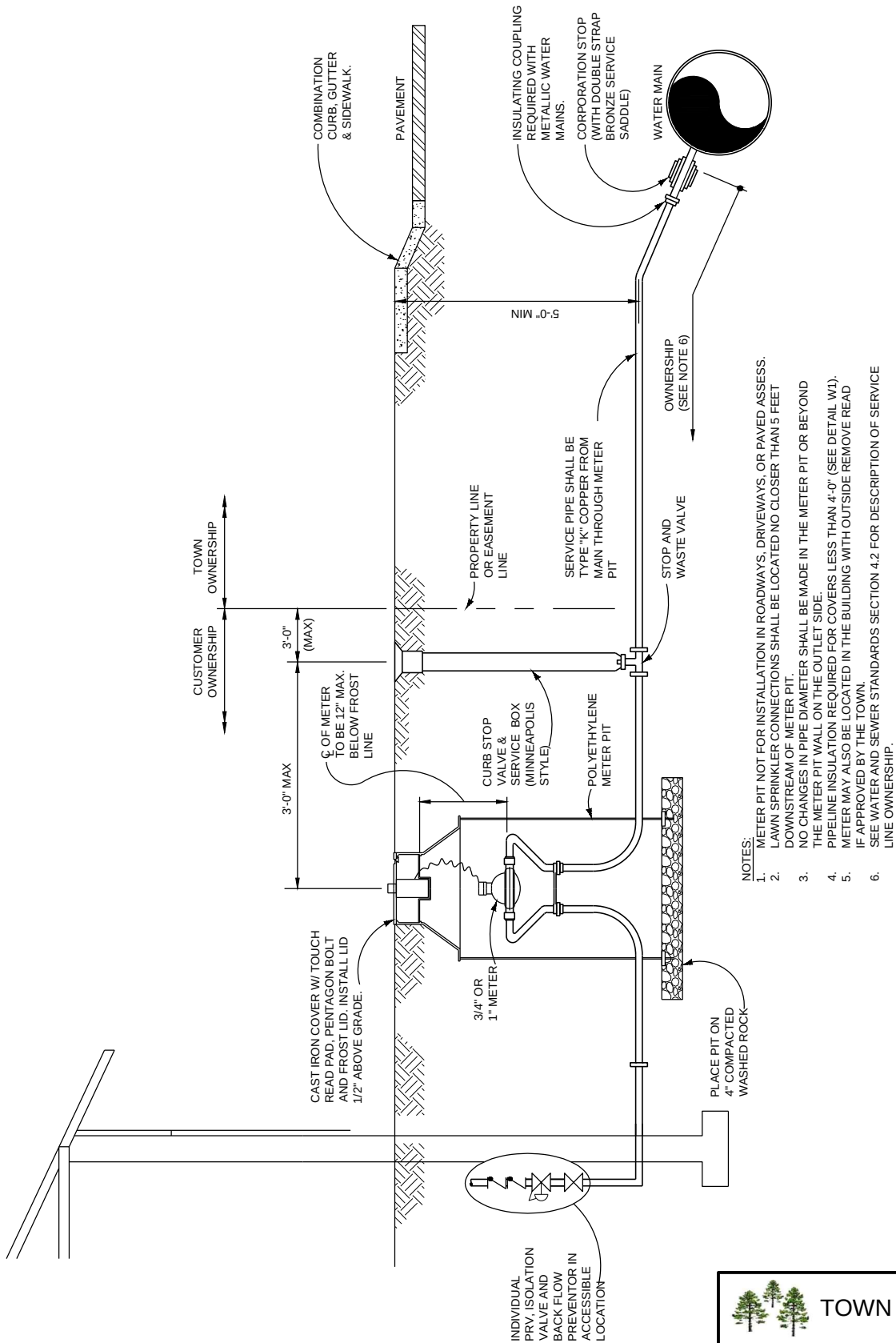
 TOWN OF ELIZABETH	
SEWER SERVICE WYE CONNECTION	
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NOTE:

1. BEND & WYE TO BE GASKETED, NO GLUE JOINTS. PIPE MATERIAL AS SPECIFIED FOR SERVICE LINE.
2. FOR LOCATIONS IN PRIVATE LANDSCAPING AREA TERMINATE CLEANOUT 4" ABOVE GRADE. CAST IRON COVER NOT REQUIRED.

 TOWN OF ELIZABETH	
SEWER SERVICE LINE CLEANOUT	
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WATER AND SEWER STANDARDS	



- NOTES:
1. METER PIT NOT FOR INSTALLATION IN ROADWAYS, DRIVEWAYS, OR PAVED ASSESS.
 2. LAWN SPRINKLER CONNECTIONS SHALL BE LOCATED NO CLOSER THAN 5 FEET DOWNSTREAM OF METER PIT.
 3. NO CHANGES IN PIPE DIAMETER SHALL BE MADE IN THE METER PIT OR BEYOND THE METER PIT WALL ON THE OUTLET SIDE.
 4. PIPELINE INSULATION REQUIRED FOR COVERS LESS THAN 4'-0" (SEE DETAIL W1).
 5. METER MAY ALSO BE LOCATED IN THE BUILDING WITH OUTSIDE REMOVE READ IF APPROVED BY THE TOWN.
 6. SEE WATER AND SEWER STANDARDS SECTION 4.2 FOR DESCRIPTION OF SERVICE LINE OWNERSHIP.

 TOWN OF ELIZABETH	
TYPICAL SINGLE FAMILY DETACHED RESIDENTIAL WATER SERVICE	
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TOWN OF ELIZABETH

PATRICK G. DAVIDSON, TOWN ADMINISTRATOR

TO: Honorable Mayor, Mayor Pro Tem, and Board of Trustees
FROM: Patrick Davidson, Town Administrator
DATED: April 22, 2025
SUBJECT: Model Traffic Code Adoption

BACKGROUND

In 1952 the Colorado Legislature approved the State's "Model Traffic Code" with the intention of creating uniformity and clarity for all jurisdictions within the State of Colorado. In total, the Code is regularly updated to reflect changes in vehicle safety, traffic safety, and societal changes. The most recent update occurred in 2024. For certain laws to be appropriately enforced within the Town of Elizabeth, the Model Traffic Code should be approved and adopted through the 2024 standards.

ANALYSIS

The updated Model Traffic Code may be approved by reference, in whole or in part, if specific procedures are followed by the Town. The adoption by reference is a two-step process. First, the Town *must introduce the Ordinance at a public meeting, for the matter to then be held later for a public hearing*. [The process is akin to having two readings of the Ordinance.] As such, the agenda item is for purposes of providing notice of the proposed adoption of the 2024 edition of the Model Traffic Code, with the formal adoption of the Ordinance to occur on May 27, 2025. The approval by reference process also requires that the proposed action be noticed twice by posting and publication prior to the possible adoption of the Ordinance.

STAFF RECOMMENDATION

Staff recommends that the Board approve the notice and publication of the proposed action; with the matter being set for public hearing and action on Tuesday, May 27, 2025 at 7:00PM; and publication and notice occurring on two separate occasions prior to the date of the public hearing.

BUDGET CONSIDERATIONS

N/A

ATTACHMENTS

Notice of Public Hearing

ORDINANCE 25-07

AN ORDINANCE REPEALING AND REENACTING ARTICLE 1 OF CHAPTER 8 OF THE ELIZABETH MUNICIPAL CODE ADOPTING BY REFERENCE THE 2024 MODEL TRAFFIC CODE

WHEREAS, the Town desires to adopt the 2024 edition of the Model Traffic Code for Colorado as promulgated by the Colorado Department of Transportation by reference;

WHEREAS, a public hearing for this ordinance was properly noticed in a newspaper of general circulation within the Town once at least fifteen (15) days before the hearing, and again at least eight (8) days before the hearing; and

WHEREAS, a public hearing for the adoption of this ordinance was properly held on May 27, 2025.

BE IT ORDAINED BY THE BOARD OF TRUSTEES FOR THE TOWN OF ELIZABETH, COLORADO, THAT:

Section 1. Article 1 of Chapter 8 of the Elizabeth Municipal Code is hereby repealed and reenacted as follow:

Sec. 8-1-10. Adoption.

Pursuant to Parts 1 and 2 of Article 16 of Title 31, C.R.S. there is hereby adopted by reference the 2024 edition of the Model Traffic Code promulgated and published as such by the Colorado Department of Transportation, Traffic Engineering and Safety Branch, 2829 W. Howard Place, Denver, Colorado 80204, as amended. The subject matter of the Model Traffic Code relates primarily to comprehensive traffic control regulations for the Town. The purpose of this Ordinance and the Code adopted herein is to provide a system of traffic regulation consistent with state law and generally conforming to similar regulations throughout the state and the nation. One (1) copy of the Model Traffic Code adopted herein is hereby filed with the office of the Town Clerk and may be inspected during regular business hours.

Sec. 8-1-20. Deletions.

The 2024 edition of the Model Traffic Code is adopted as if set out in length, save and except for the following articles or sections that are declared to be inapplicable to this Town and are expressly deleted: none.

Sec. 8-1-30. Additions or modifications.

The 2024 edition of the Model Traffic Code is adopted as if set out in length with the following additions or modifications: none.

Sec. 8-1-40. Application.

This Article shall apply to every street, alley, sidewalk area, driveway, park and to every other public way or public parking area within the corporate limits of the Town, the use of which the Town has jurisdiction and authority to regulate. The provisions of Sections 1401 and 1402, and Part 16 of the adopted *Model Traffic Code*, respectively concerning reckless driving, careless driving, and accidents and accident reports, shall apply not only to public places and ways but also throughout the Town.

Sec. 8-1-50. Interpretation.

This Article shall be so interpreted and construed as to effectuate its general purpose to conform with the State's uniform system for the regulation of vehicles and traffic. Article and section headings of this Article and the adopted Model Traffic Code shall not be deemed to govern, limit, modify or in any manner affect the scope, meaning or extent of the provisions of any article or section thereof.

Sec. 8-1-60. Certification; copy on file.

The Town Clerk shall certify to the passage of the ordinance codified herein and make not less than one (1) copy of the adopted code available for inspection by the public during regular business hours.

Sec. 8-1-70. Jake brakes prohibited.

(a) It is unlawful for the operator of a vehicle driven upon any public or private street within the Town to use, or employ the use of, a Jake brake.

(b) For purposes of this Section, a Jake brake means any device mounted on or adjacent to the engine of a commercial motor vehicle which, when employed, reduces engine speed and causes the vehicle to slow without use of the vehicle's braking system.

Sec. 8-1-80. Penalties.

The following penalties, herewith set forth in full, shall apply to this Article:

(1) It is unlawful for any person to violate any of the provisions of this Article.

(2) Every person convicted of a violation of any provision of this Article shall be punished as set forth in Section 1-4-20 of this Code.

Section 2. Severability. If any section, paragraph clause, or provision of this Ordinance shall for any reason be held to be invalid or unenforceable, the invalidity or enforceability of such section, paragraph, clause, or provision shall not affect any of the remaining provisions of this Ordinance, the intent being that the same are severable.

Section 3. The Board of Trustees hereby finds, determines, and declares that this Ordinance is promulgated under the general police power of the Town, that it is promulgated for the health, safety, and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Board of Trustees further determines that the Ordinance bears a rational relation to the proper legislative object sought to be attained.

Section 4. This Ordinance shall become effective thirty (30) days after publication.

Read and approved at a meeting of the Board of Trustees of the Town of Elizabeth, Colorado, this _____ day of _____, 2025.

Passed by a vote of _____ for and _____ against and ordered published.

Angela Ternus, Mayor

ATTEST:

Michelle M. Oeser, Town Clerk

NOTICE OF PUBLIC HEARING

NOTICE is hereby given of a public hearing before the Board of Trustees of the Town of Elizabeth, at 7:00 P.M. on May 27, 2025, at Town Hall in the Town of Elizabeth, Colorado, 151 S. Banner Street, Elizabeth, Colorado 80107 for the purpose of considering the adoption by reference of the "Model Traffic Code" 2024 Edition, as the comprehensive traffic control regulations and traffic ordinance of the Town of Elizabeth.

Copies of the above referenced code are on file at the office of the Town Clerk and may be inspected during regular business hours. If enacted as an ordinance of the Town, this code will not be published in full, but in accordance with state law, copies will be kept on file.

The above referenced code is published by the Colorado Department of Transportation, Traffic Engineering and Safety Branch, 2829 West Howard Place, Denver, Colorado 80204. The subject matter of the Model Traffic Code relates primarily to comprehensive traffic control regulations for the Town. The purpose of the Ordinance and the Code adopted therein is to provide a system of traffic regulations consistent with state law and generally conforming to similar regulations throughout the state and nation.

This notice is given and published by the order of the Board of Trustees.

DATED this _____ day of _____, 2025.

TOWN OF ELIZABETH, COLORADO

/s/ _____

First Notice of hearing published on _____, 2025

Second notice of hearing published on _____, 2025



TOWN OF ELIZABETH

MICHAEL DEVOL/PUBLIC WORKS DIRECTOR

TO: Mayor, Mayor Pro-Tem, and Town Board of Trustees
FROM: Mike DeVol, Town of Elizabeth Public Works Director
DATE: April 22, 2025
SUBJECT: BOARD ACTION MEMO FOR BID AWARD FOR DEPOT LOT PARKING

Madam Mayor, Mayor Pro-Tem, and Board of Trustees,

Public Works and Terracina Engineering received four bids for the Depot Parking lot project on Monday April 14, 2025, at 2p.m. The four bids have been evaluated and found that the bids ranged from lowest \$1,327,423.13 to highest at \$2,277,481.33 with two other bids at \$1,703,325.89 and \$1,591,134.00 for the project. After careful review, evaluation, and reference checks Public Works recommends awarding the bid to RME Ltd., LLC d/b/a Elite Surface Infrastructure for the Bid Price of \$1,327,423.13. The budget for the Depot Parking Lot in Capital and Streets Capital is budgeted for \$1,400,000.00 for 2025. The amount spent to date is \$20,685.85 leaving a balance of \$1,379,314.15 which would leave a contingency of \$51,891.02 savings on the project or for any unforeseen possible change orders.

The Board can proceed with approving the contract with RME Ltd., LLC d/b/a Elite Surface Infrastructure during the May 13, 2025, Board Meeting. This would cause a two (2) week delay in mobilization and construction of The Depot. In the alternative, a Resolution is also presented which allows the Director of Public Works, or his designee to enter the contract. Either method is acceptable, with an understanding of any associated time delays.

Public Works recommends approval for the Bid of \$1,327,423.15 for Elite Surface Constructors, and the Town Administrator recommends a Resolution authorizing the Public Works Director to execute the documents.

Regards,

Mike DeVol
Town of Elizabeth
Public Works Director
303-913-6453
mdevol@townofelizabeth.org

RESOLUTION 25R18

A RESOLUTION AUTHORIZING THE DIRECTOR OF PUBLIC WORKS, OR HIS DESIGNEE, TO ENTER INTO A CONTRACT FOR THE CONSTRUCTION AND COMPLETION OF THE DEPOT PARKING LOT.

NOW THEREFORE BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ELIZABETH, COLORADO AS FOLLOWS:

Section 1. By and through the Town of Elizabeth's 2024 Budget Process, the Board of Trustees specifically budgeted funds for the construction and development of The Depot Parking Lot in the amount of one million, four hundred thousand dollars (\$1,400,000.00). The funding for this project is from Account Number 31-80-6510 in the amount of \$770,000.00 and from Account Number 32-49-9115 in the amount of \$630,000.00.

Section 2. Terracina Design, in conjunction with Elizabeth Public Works published a request for proposals, and a bid opening was held on April 14, 2025. A total of four (4) bids were received as follows: RME Ltd., LLC d/b/a Elite Surface Infrastructure in the amount of \$1,327,423.13; Elite Industries, Inc. in the amount of \$1,591,134.00; QP Services, LLC in the amount of \$1,703,325.89; and Triple M Construction, LLC in the amount of \$2,277,481.32.

Section 3. The apparent lowest qualified bidder is RME Ltd., LLC d/b/a Elite Surface Infrastructure of Englewood, Colorado with a total bid of one million, three hundred twenty-seven thousand, four hundred twenty-three dollars and thirteen cents (\$1,327,423.13)

Section 4. Town Staff are seeking authorization to enter into an agreement with RME Ltd., LLC d/b/a Elite Surface Infrastructure to expedite mobilization and construction of The Depot without further formal action by the Board of Trustees.

NOW THEREFORE BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ELIZABETH, COLORADO AS FOLLOWS:

The Director of Public Works, or his designee is hereby authorized to enter a contract with RME Ltd., LLC d/b/a Elite Surface Infrastructure of Englewood, Colorado in the amount of one million, three hundred twenty-seven thousand, four hundred twenty-three dollars and thirteen cents (\$1,327,423.13)

PASSED, APPROVED, and ADOPTED this 22nd day of April 2025, by the Board of Trustees of the Town of Elizabeth, Colorado, on first and final reading, by a vote of _____ for and _____ against.

Angela Ternus, Mayor

ATTEST:

Michelle M. Oeser, Town Clerk



TOWN OF ELIZABETH

MICHAEL DEVOL/PUBLIC WORKS DIRECTOR

TO: Mayor, Mayor Pro-Tem, and Town Board of Trustees
FROM: Mike DeVol, Town of Elizabeth Public Works Director
DATE: April 22, 2025
SUBJECT: DENVER WELL PROPOSAL COST APPROVAL MEMO

Madam Mayor, Mayor Pro-Tem, and Board of Trustees,

Public Works is presenting a bid proposal approval for the Denver Well Bid Cost for the board of trustees to clean and re-equip the well for 2025. The Denver well was last pulled and cleaned in October of 2013. As discussed during previous board meetings the Denver Well production in 2024 went from 130-150 gallons per minute down to 50 gallons per minute. The pump was set at 450 feet in 2013 most likely due to cost and budget constraints at the time. The well is currently drilled to a depth of 1,460 feet, the proposal is to drop the new pump to a depth of 1,200 feet to keep the pump at a safe distance from the bottom of the well where sedimentation takes place. The bid includes the new pump, motor, 1,200 feet of piping, and airline to enable the depth measurements recordation in the towns SCADA (Supervisory Control and Data Acquisition) system for water depth levels 24 hours a day. The pump and motor are being upsized to achieve our allotted 150 gallons per minute permitted by the state at the deeper elevation of 1,200 feet. Attached to this memo will be a resolution and bid cost proposal for approval of the board. The cost of the proposal is not included in the 2025 budget as this was not a foreseen issue until early 2025 after camera inspection and water level information was compiled.

Regards,

Mike DeVol
Town of Elizabeth
Public Works Director
303-913-6453
mdevol@townofelizabeth.org

RESOLUTION 25R19

A RESOLUTION APPROVING A SCOPE OF WORK PROPOSAL AGREEMENT WITH APPLIED INGENUITY OF HUDSON, COLORADO FOR THE CLEANING AND RE-EQUIPPING OF THE DENVER WELL.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ELIZABETH, COLORADO AS FOLLOWS:

The Bid Work and Proposal with Applied Ingenuity for the cleaning and re-equipping as per the attached bid for a total amount of **\$83,228.00**, attached hereto, is hereby approved and the Mayor is authorized to execute same on behalf of the Town.

PASSED, APPROVED AND ADOPTED this 22nd day, 2025 by the Board of Trustees of the Town of Elizabeth, Colorado, on the first and final reading by a vote of _____ for and _____ against.

Angela Ternus, Mayor

ATTEST:

Michelle M. Oeser, Town Clerk

Applied Ingenuity PM, LLC.
39601 E 136th Avenue
Hudson, CO. 80642
Ph. (303) 289-2280 Fax (303) 289-1026

Scope of Work and Proposal

Attn: Mr. Ken Timm
Date: April 9, 2025
Project: Denver (Upper Well)
From: Scott Martin, Applied Ingenuity. LLC

Thank you for asking *Applied Ingenuity* to provide you with this proposal for cleaning and re-equipping your well per your request.

Scope of Work: *Applied Ingenuity* proposes the following scope of work and equipment for this project.

- Furnish the following equipment:

Motor.....	Hitachi 30 HP 460 v. 3 phase
Pump.....	Grundfos 150S300-17
Cable.....	1200' #4 3C Flat
Drop Pipe.....	1200' 4 ½" 8 Rnd
PVC.....	1200' 1 ¼" PVC
Level Probe	Dynotek 500 psi w/ 1200' Poly Cable
Airline.....	2400' ¼" Nylon 2500 psi burst
Check Valve.....	2) New 4 ½" Poppit
Misc.....	Banding, tape and HTH for disinfection crosovers, etc.

Price New Pump Installed.....\$63,139

Cleaning,
Mobilize jet truck and rig to site. Jet well screens to 1450' TD, with focus on lower screens. Bail well to 1460'. Color Video Survey well.

Price Jet.....\$20,089

Total Lump Sum, Materials & Labor: \$83,228

Terms and Conditions of Purchase

Freight: Will be added to equipment pricing, if applicable.

Taxes: No Federal, State or local use or sales taxes are included. These will be added where applicable at the time of invoicing.

Delays: *Applied Ingenuity* shall be liable for no penalty, charge or cost for delays in performance by *Applied Ingenuity* caused by weather, acts of God, shortage of materials or labor, strikes or circumstances outside the control of *Applied Ingenuity*.

Warranty: *Applied Ingenuity* shall extend the manufacturers normal warranty and shall not be liable for any charges and/or expenses beyond the normal warranty extended by the manufacturer.

Payment: Payment terms are net 30 days from date of invoice. Retainage is not allowed. A service charge of **2% PER MONTH (24% PER ANNUM)** shall be added on any past due accounts and if the account is not paid when due the buyer agrees to pay all reasonable costs of collection. Payment to *Applied Ingenuity* is not contingent on other payments to Purchaser by other third parties or upon any other thing or event other than receipt of the equipment.

Conditional Proposal: The proposal is conditioned upon *Applied Ingenuity* receiving written notice of its acceptance within 30 days from the date of the offer.

Bonding: Performance Bonding has not been included in the Purchase Order Agreement.

Attorneys Fees: In the event of a default under or breach of the terms of this contract, the defaulting party shall pay the non-defaulting party all costs incurred in enforcing the terms of this agreement, including court costs and attorney's fees in a reasonable amount and including all costs of arbitration, if any, all fees and costs of arbitrators, all costs of discovery and depositions and copies, expert witness fees, travel expenses and any other cost or expense of litigation.

Thank you for the opportunity to quote this project. If *Applied Ingenuity, LLC* is selected for this work, please sign below, and return to *Applied Ingenuity, LLC* with your purchase order.

Accepted by:

Date

From: [Patrick Davidson](#)
To: [Angela Ternus](#); [Tracy Hutchins](#); [Loren Einspahr](#); [Michael Schroder](#); [Dave Conley](#); [Shannon Downs](#); [Steve Gaither](#)
Cc: [Patrick Davidson](#)
Subject: Weekly Update for 3-28-2025
Date: Friday, March 28, 2025 11:50:48 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Good morning, Mayor, Mayor Pro Tem, and Members of the Board of Trustees. Here is your newest update.

January 2025 Financials. Financials have been posted to the website. Drawing your attention to the Sewer Fund (page 23), you will note a couple of lines that would initially appear to be in error. These numbers are a result of expenditures occurring in 2024 that were then not booked until 2025. They could be caused by time delays in billing/invoicing to the Town, delays in payment, etc. This is normal based on our accrual accounting activity. You will notice in the first few months of the year; everything will begin to balance out accordingly.

In addition, the layout of the financials will have changed from what you may be used to. As you know, Colorado law now requires websites and government generated documents to be more ADA accessible. In the past, financial documents were converted from Caselle to Excel to .pdf for posting on the website. Those documents are not ADA complaint. To be ADA compliant, the process is to be converted from Caselle to Excel to .pdf to "Common Look" and then convert to tables for posting on the website. The last time this was done it took over 8 hours to complete due to the amount of information being converted by the computer system. Hannah has shortened the conversion process by creating a new Excel spreadsheet for the transfer from Caselle, allowing the Clerk's Office to then shorten the conversion. The information provided is still the same as in the past, but it will look different.

Quarterly Meeting with CORE Electric. I had my quarterly meeting with Angie Bedolla with CORE. She would like to update the BOT as to new changes at CORE, and their steps to meet electrical demand, comply with State mandates, and to answer any questions the Board may have. We are working to set up a time for her to come to Elizabeth for a regular board meeting. I will keep you posted.

Update on Main Street Streetscape. There was a coordination meeting on Thursday to discuss updates on timelines and progress on the project. The property owners on the East side of the 200 block were notified of work commencing next week. That will include demo and concrete replacement. In addition, a portion of the Gesin Lot will be now used for the assembly of the light fixtures for street lighting to be installed. We are trying to make up time based on weather and related conflicts.

Have a great weekend!

Patrick

Patrick G. Davidson, Town Administrator
151 S. Banner Street
Elizabeth, CO 80107
(720) 351-4504
pdavidson@townofelizabeth.org



From: [Patrick Davidson](#)
To: [Angela Ternus](#); [Tracy Hutchins](#); [Loren Einspahr](#); [Michael Schroder](#); [Shannon Downs](#); [Dave Conley](#); [Steve Gaither](#)
Cc: [Patrick Davidson](#)
Subject: Weekly Update for 4-4-2025
Date: Friday, April 4, 2025 12:55:45 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[Morrisom PD-04042025124638.pdf](#)

Good afternoon, Mayor, Mayor Pro Tem, and Members of the Board of Trustees. Here is your newest weekly update.

Police Staffing. We have a candidate who is POST certified, having served previously in law enforcement, and who has passed all the other required testing. We intend to offer him the position, with a starting date of mid-April. The candidate will then begin field training (FTO) for the Town, for a period of 8 weeks. Recall that we also still have one cadet at the academy. That candidate will require 16 weeks of FTO. This will likely mean that we will have two new officers by May to assist in policing the community, but they will be on Field Training (FTO). With these 2 replacement officers, we will still be one short of fully staffed under our current structure. However, this last position is not funded through the 2025 budget.

Along this same topic, we do likely have an opportunity for a lateral transfer from another agency to fulfill our obligations to the School District for another SRO. Currently, we are to have two (2) committed officers to SRO, which we are doing through backfilling. This transfer would provide that necessary staffing for the position. This potential officer is likewise POST certified, and after 8 weeks of FTO will be able to operate independently. This will create a fully staffed department by mid to late summer. I believe the Chief will ask for some direction on Tuesday evening about this possible topic. Hannah will also be present to answer any financial questions you may have as well.

Public Works Staffing. The public works department is down two (2) employees currently: one in water/wastewater and one in parks/streets. PW is running interviews as applications are received. We hope to have the position filled within the next couple of weeks.

Community Development Staffing. We have received only one new application for the position. The applicant lacks experience in either Planning or Economic Development and therefore will not be interviewed.

April 8 Meeting. Corey will be attending our meeting on the 8th rather than the 22nd this month.

Outback Express Participation. Bill Mock provided me information regarding the number of riders to take advantage of the Outback Express. It is averaging about 7 riders per month.

This was a follow up to a question raised by the Mayor on senior access to transportation through the service.

Motorized Vehicles on Trails, South 40. We continue to have issues with individuals operating motorized vehicles on the trails and the South 40. It is a combination of golf carts, ATV, UTV, motorcycles and other vehicles. We will again publish notices on the website, social media, and other locations. I will be visiting with Corey as to ways to seek enhanced penalties for such activities, but those are likely limited.

Morrison Police Equipment. Several weeks ago, the Board discussed the possibility of acquiring used PD equipment from Morrison's Police Department. Attached please find an attachment that indicates what Morrison would be willing to sell to Elizabeth, and the costs associated with the purchase. In addition, my notation as to suggested purchases are made in red. Of course, none of these items are in the 2025 budget because the closure of Morrison and the opportunity to purchase equipment at a discounted rate was not envisioned.

Have a great weekend!

Patrick

Patrick G. Davidson, Town Administrator
151 S. Banner Street
Elizabeth, CO 80107
(720) 351-4504
pdavidson@townofelizabeth.org



From: [Patrick Davidson](#)
To: [Angela Ternus](#); [Tracy Hutchins](#); [Loren Einspahr](#); [Michael Schroder](#); [Shannon Downs](#); [Dave Conley](#); [Steve Gaither](#)
Cc: [Patrick Davidson](#)
Subject: Weekly Update for 4-11-2025
Date: Thursday, April 10, 2025 3:57:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Good afternoon, Mayor, Mayor Pro Tem, and Members of the Board of Trustees. As you may recall, I am out Friday the 11th, hence you are receiving this Weekly Update early.

IOOF Building. We have received several comments from the public regarding the prep work on the IOOF building. Some are concerned about the painting, others the repairs, and finally some about the removal of the front siding to reveal the older structure. Some have indicated the Town should force the building owner to stop the repairs. I have tried to explain that it is a privately owned building, unassociated with the Town, and that the building owner is making some necessary changes and repairs. Because you too may be contacted, I wanted you aware.

June 24th Board Meeting. As discussed, the Board meeting currently set for June 24th is cancelled. Should something arise during that time that requires a Board meeting, we will try to set an agenda as soon as possible either the week before or the week after the 24th.

Tentatively Scheduled Agenda Items. During the first week of each year, the Department Heads and I start to formulate the agenda for the upcoming year. The process is based on prior years' items as well as known discussion items going forward. Here is the tentative list of proposed workshops going into the Spring and Summer.

April 22nd – Workshop – PROST Team Update [update on parks, trails, and open spaces study]

May 13th – Workshop – Wards Discussion

May 27th – Workshop – Board Meeting with Judge White regarding update from the judiciary

June 10th – Workshop – Initial Budget Workshop. This meeting will also include vested property rights, building moratoriums, etc.

July 8th – Workshop – Hillside Paving Discussion [necessary for 2026 direction on projects as well as budget considerations]

July 22nd – Workshop – joint meeting of the BOT and the Main Street Board of Directors and Wade Park design discussion.

August 12th – Workshop – Budget Meeting

August 26th – Workshop – Abatement (previously scheduled for June 24th)

Have a great weekend!

Patrick

Patrick G. Davidson, Town Administrator

151 S. Banner Street

Elizabeth, CO 80107

(720) 351-4504

pdavidson@townofelizabeth.org



From: [Patrick Davidson](#)
To: [Angela Ternus](#); [Tracy Hutchins](#); [Loren Einspahr](#); [Michael Schroder](#); [Shannon Downs](#); [Dave Conley](#); [Steve Gaither](#)
Cc: [Patrick Davidson](#); [Michael DeVol](#); [James McErnie](#)
Subject: Town Clean Up Day and Arbor Day
Date: Monday, April 14, 2025 8:01:00 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Good morning Members of the Board of Trustees,

I wanted to provide an update regarding the Town's Clean Up Day. The event will be held on **Saturday, May 10th, from 8:00 am to 12:00 pm**. The event takes place at the Town's Shop at 303 Washington Street. Staff will be at the Shop around 7:00 am, and generally lines will begin to form around 7:30 am or slightly later.

The event is only open to Town residents, and residency is ensured by requiring participants to bring a current water bill. Generally, a member or members of the BOT assist in checking billing to allow them to continue with the process. From there, the resident will be directed to the appropriate areas for dumping their trash. We will have several different stations depending on what the type of debris is involved: (1) household trash; (2) metal; (3) electronics; and (4) paper shredding; and (5) waste motor oil. Some residents will need to stop at more than one location at the shop to ensure things are dropped off accordingly. Staff and/or members of the BOT will direct them through the route, as necessary.

This is what is being provided on social media:

Bring your water bill to show proof of Town residency.

Water bills are available as hard copies mailed and emailed.

Items allowed:

Household Trash/Debris—2 pickup loads or equivalent

Waste Motor Oil in sealed containers

**4 boxes (copy paper size) of paper material to be shredded
Electronics/ TV/Stereo/Computers/Printers/Monitors/Batteries We
ACCEPT APPLIANCES/Fridge/Dishwasher/Washers/Dryers Hot
Water Heaters/ Stoves/Oven/Range**

NO TIRES, NO

MATTRESSES, NO BOX SPRINGS NO BIOHAZARD WASTE

NO PAINT OR STAIN OF ANY TYPE

Trees/Brush/Limbs are accepted year-round

Contact 303-284-1709 with questions.

If you intend to assist in unloading vehicles, please wear appropriate footwear, and be cautious. We will have PW employees present to lift larger items and to assist in all phases of clean up day, so do not feel obligated to do anything that you are not comfortable or physically able to do. We always need help directing traffic, visiting with residents, and ensuring things go smoothly. It also provides a perfect opportunity for members of the board to interact with the citizens.

Please let me know if you have any questions or need anything else. The link to the website is here: [Town Clean Up Day and Arbor Day Rescheduled | Elizabeth CO](#)

If any members of the BOT have items to dispose of, we can help either immediately before the start of the event, or after the event is over. Just let James or I know you have items, and we will make sure to get them taken care of.

Have a great week!

Patrick

Patrick G. Davidson, Town Administrator
151 S. Banner Street
Elizabeth, CO 80107
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pdavidson@townofelizabeth.org





TOWN OF ELIZABETH POLICE DEPARTMENT

CHIEF OF POLICE JEFF ENGEL

ELIZABETH POLICE DEPARTMENT ACTIVITY STATISTICS REPORT

Period: 03/30/2025 to 04/12/2025



ELIZABETH POLICE DEPARTMENT'S MISSION STATEMENT:

"The Elizabeth Police Department is committed to service excellence in protecting life and property, impartial enforcement of law, and building community with those who live, work, and visit, the Town of Elizabeth."

The following is an informational breakdown of EPD police activity from **03/30/2025 at 12:01 a.m. to 04/12/2025 at 11:59 p.m.** This information is compiled from our Records Management System (RMS), identified as New World (NW), as well as Douglas County Regional Dispatch (DCRD) records.

***All suspects/defendants are presumed innocent until proven guilty in a Court of Law. ***



425 S. Main St., P.O. Box 1527, Elizabeth, Colorado, 80107
Phone: 303-646-4664 Fax: 303-646-0616
Email: Police@townofelizabeth.org
www.townofelizabeth.org



Colorado Association of
Chiefs of Police



TOWN OF ELIZABETH POLICE DEPARTMENT

CHIEF OF POLICE JEFF ENGEL

Total Calls for Service:

274

Traffic Stops:

Total Stops:	Penalty Assessments:	Written Warnings:	Verbal Warnings:	Assists to Other Agencies:
37	10	26	1	0

Other Calls for Service:

Call Type:	Number of Calls:
911 Landline	6
911 Rapid SOS	2
Alarm-Business Burglary	2
Animal Barking	1
Animal Complaint	3
Assault	1
Assist to Fire Department	1
Assist to Other Agency	6
Attempt to Contact	1
Business Check	22



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TOWN OF ELIZABETH POLICE DEPARTMENT

CHIEF OF POLICE JEFF ENGEL

Child Abuse	3
Citizen Assist	11
Citizen Contact	17
Crime Prevention	3
Death	1
Disturbance	1
Fight	1
Flock	1
Follow Up	46
Fraud	1
Harassment	3
House Watch	1
Increased Patrol	29
Informational Report	3
Medical Assist	9
Menacing	1
Missing Child	1
Motorist Assist	5
Municipal Ordinance Violation	3
Motor Vehicle Accident with Injuries	1
Motor Vehicle Accident with Property Damage	2



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TOWN OF ELIZABETH POLICE DEPARTMENT

CHIEF OF POLICE JEFF ENGEL

Motor Vehicle Accident with Unknown Injuries	2
Parking Complaint	6
Report Every Drunk Driver Immediately	1
Repossession	1
School Education	2
Sex Offense	1
Suspicious Circumstance	4
Suspicious Person	1
Suspicious Vehicle	7
Traffic Complaint	4
Traffic Hazard	5
Traffic Stop	37
Unknown Trouble	1
VIN Verify	9
Welfare Check	3



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TOWN OF ELIZABETH POLICE DEPARTMENT

CHIEF OF POLICE JEFF ENGEL

Open Patrol Division Criminal Investigations:

Case Number:	Call Type:	Details:
23-5311	Financial Crimes	Investigation into financial crimes.
25-1079	Financial Crimes	Investigation into fraud at a local business.
25-1130	Financial Crimes	Investigation into fraud of a citizen
25-1373	Extortion	Investigation into a citizen who was extorted.
25-1496	Vehicle Trespass/Burglary	Investigation into several vehicle trespasses.
25-1736	Financial Crimes	Investigation into fraud of a citizen.
25-2266	Arson	Investigation into an illegal burn.
25-2316	Drug Offense	Investigation into a subject property in Town.
25-2420	Child Abuse	Investigation into reported Child Abuse
25-2437	Assault	Investigation into an assault involving juveniles.
25-2491	Death Investigation	Investigation into an unattended death.



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TOWN OF ELIZABETH POLICE DEPARTMENT

CHIEF OF POLICE JEFF ENGEL

Open Community Services Division Municipal Ordinance Violations:

Case Number:	Call Type:	Notes:
24-4492	Municipal Ordinance Violation	Investigation into accumulation of debris on a property in Town
25-1355	Municipal Ordinance Violation	Investigation into accumulation of debris on a property in Town

**Please note that limited information regarding open investigations is available. This is to protect the integrity of the investigations. **

Closed Case/Incident Reports:

Case/Incident Number:	Call Type:	Details:
25-2326	Critical Incident Response	EPD Officers assigned to the 23 rd Judicial District's Critical Incident Response Team (C.I.R.T.) responded to assist with an investigation for an Officer Involved Shooting (OIS) in Elbert County.
25-1742	Assault	EPD investigated an assault that had occurred months prior which was not being reported. After investigation, probable cause was found that a crime had occurred, and the suspect was issued a municipal summons for a criminal offense.
25-2188	Assist to Elbert County	EPD assisted Elbert County Sheriff's Office with a DUI investigation.



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CHIEF OF POLICE JEFF ENGEL

25-2315	School Threat	EPD received information regarding an alleged school threat. After an extensive investigation, it was determined that the threat was uncredible, and no crime had occurred.
24-4382	Sex Offense	EPD closed a case regarding an alleged sex offense. After an investigation which included numerous search warrants, there was insufficient probable cause to support criminal charges.
25-2439	Animal Complaint	EPD responded to a located dog. The dog was taken to the kennel.
25-2374	Harassment	EPD responded to a local school on report of harassment. After investigation, there was insufficient probable cause to support criminal charges. The case was turned over to the school for administrative discipline.
25-2378	Harassment	EPD responded to a local school on a report of harassment. After investigation, probable cause existed to support criminal charges. The defendant was issued a summons for a criminal offense.
25-2525	Child Abuse	EPD received a report of a cold child abuse. Due to the allegations being serious, forensic interviews were completed. Probable cause was found for criminal charges. The suspect was contacted and arrested. They were booked into the Elbert County jail.
25-2486	Assault & Child Abuse	EPD Officers responded to a local park on a reported assault. After investigation, there was probable cause to existed to support criminal charges. The suspect was arrested and booked into the Elbert County jail.



425 S. Main St., P.O. Box 1527, Elizabeth, Colorado, 80107

Phone: 303-646-4664 Fax: 303-646-0616

Email: Police@townofelizabeth.org

www.townofelizabeth.org



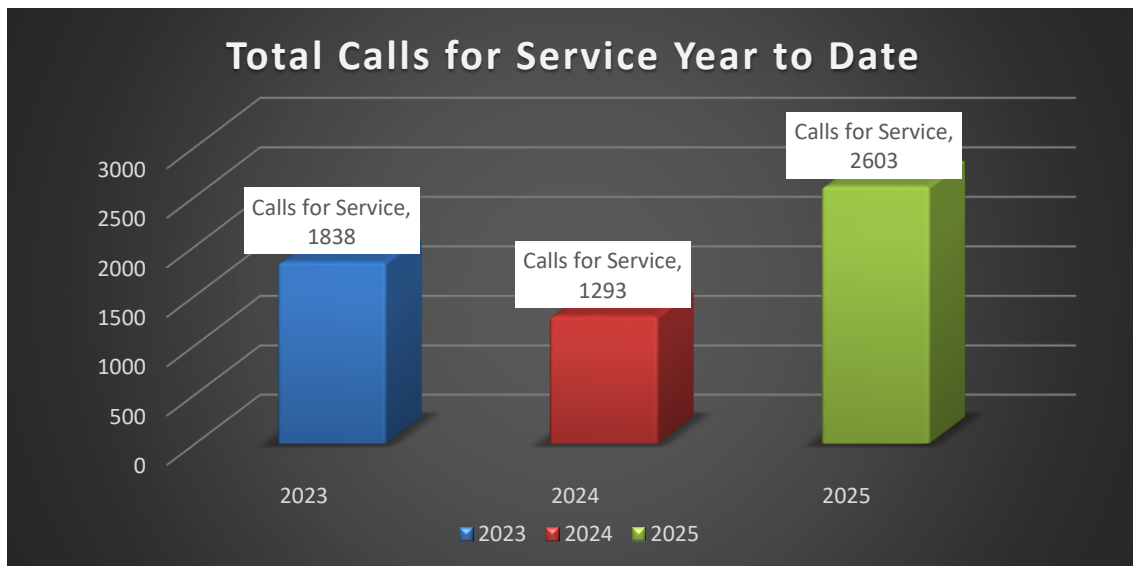
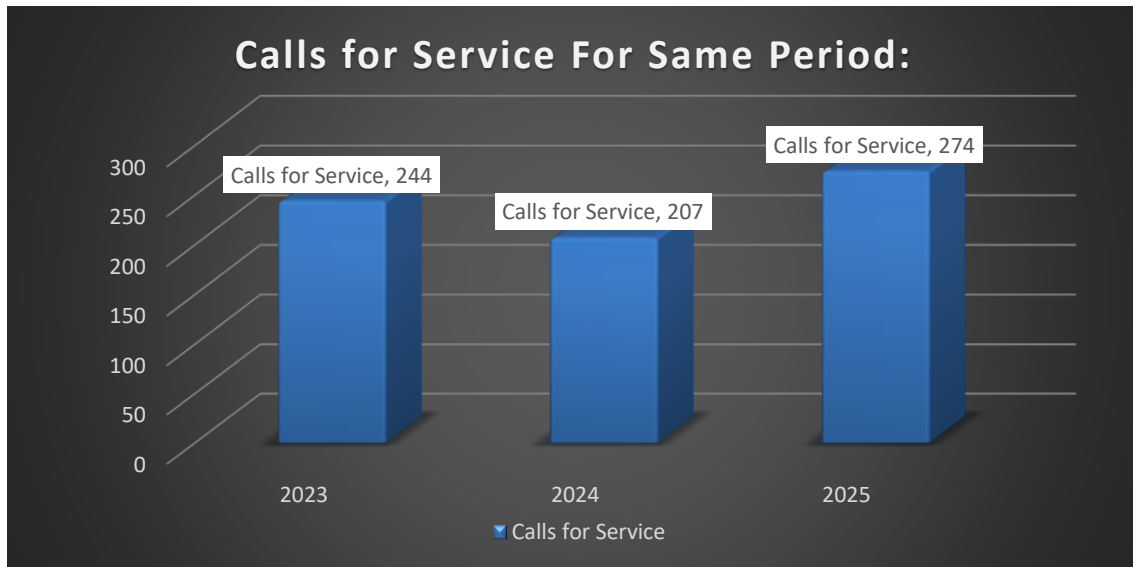
Colorado Association of
Chiefs of Police



TOWN OF ELIZABETH POLICE DEPARTMENT

CHIEF OF POLICE JEFF ENGEL

Historical Data:



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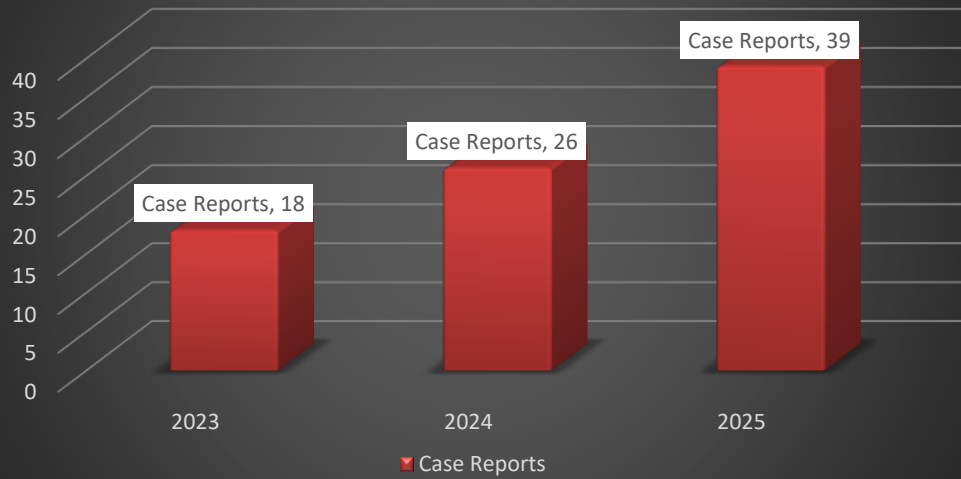
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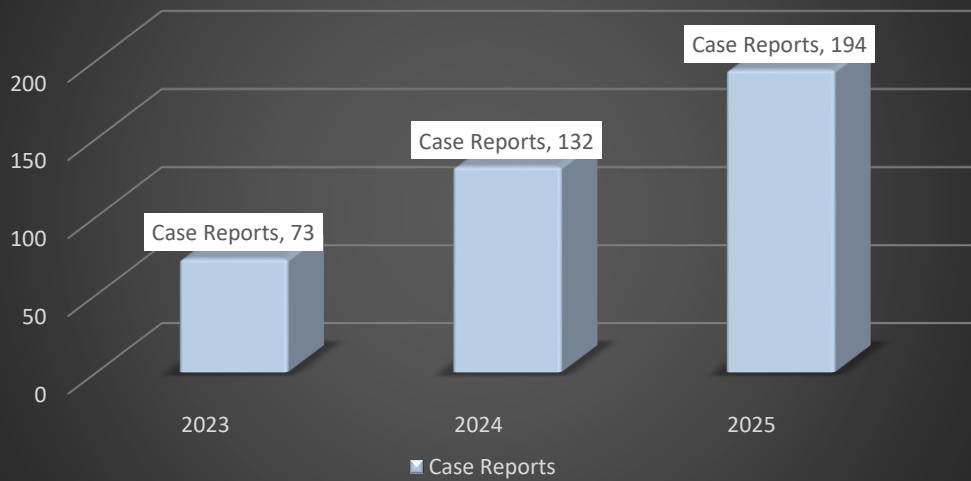
TOWN OF ELIZABETH POLICE DEPARTMENT

CHIEF OF POLICE JEFF ENGEL

Case Reports Pulled For Same Period:



Total Case Reports Pulled Year to Date:



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Officer Updates

- Brett Cutler has started with EPD. He completed his administrative week and has entered field training with Officer Lamas.
- Officer Campbell's graduation is set for May 15, 2025. Upon successful completion he will begin his field training.

Departmental Updates

- Planning for the rodeo and parade are in full swing.
- Chief Engel is participating in a nationwide pod cast addressing officer wellness.
- EPD has teamed up with First Responder neurofeedback, a non-profit organization, that will provide free neurological feedback sessions for officers.
- Neurofeedback is a non-invasive technology that provides real-time feedback on brain activity to promote resilience, sharpened focus, improved reaction times, better sleep, and enhance emotional regulation.
- We are getting Morrison PD equipment
- Town of Morrison Purchases
 - **Issue with the Chevy Tahoe purchased from Morrison**
 - After a short trip out of Morrison, a number of critical engine lights came on
 - The Tahoe was returned to Morrison.
 - The Town of Morrison agreed to tow the Tahoe to Elizabeth Auto for examination.
 - If there are major issues with the Tahoe, the Town of Morrison said they will take the Tahoe back.
 - It is suspected that the problem stems from a battery issue.
 - The ATV is in good condition
 - **We also received some additional equipment at no cost**
 - One ballistic shield
 - Trauma kit
 - Traffic control supplies (traffic cones)
 - Body armor
 - AED
 - Two radars
- There is the potential for more equipment at no cost to the Town of Elizabeth.
- Sgt. Bigler and Chief Engel are now fully ABLE (Active-Bystandardship for Law Enforcement) certified.



TOWN OF ELIZABETH

MIKE DEVOL, PUBLIC WORKS DIRECTOR

TO: Honorable Mayor, Mayor Pro-Tem and Town Board of Trustees
FROM: Mike DeVol, Public Works Director
DATE: April 22, 2025
SUBJECT: Public Works Monitoring Report

Public Works has a zoom meeting with CDPHE Permit writers on Monday April 21, 2025 at 08:30 to discuss individual permits for Gold Creek Plant and Singing Hills Wastewater Plant for personalized sampling, compliance and overall expectations as a follow up from the blanket permit across the state.

***Town Street Paving Improvements Project:**

1. Ongoing projects for the year 2025.

***Town Main St. Decorations:**

1. Will remain down for Mainstreet Streetscape project.

***Town Wells, Tanks and Effluent:**

1. Denver D-1 Well bid proposal and findings discussed in packet

***Town Water Line (NON) Emergency Repair:**

1. No Frozen Services during this reporting period.

***Town Hall/ Repairs/ Landscaping Plan:**

***Town Walkway Repairs:**

1. PW will be completing a sidewalk repair at E. Elm St and S Elbert St using a Foam Jacking technique as a demonstration for longevity and cost effectiveness. The contractor is local and lives in Hillside Village.

2. PW continues to monitor three areas of concern for sidewalks that are heaving due to freeze and thaw conditions consistent for our area.

***Town Street Maintenance/Striping Projects:**



TOWN OF ELIZABETH

MIKE DEVOL, PUBLIC WORKS DIRECTOR

1. Striping will take place in the spring/summer of 2025 as needed.

*Town Snow Plowing and Street Sweeping: SNOW SEASON is almost completed for 2025

1. The Town Newsletter included Town Plowing Code and Snow Route "NO PARKING" information.
2. PW has been plowing and applying salt/sand as needed. Clean-up continues as storms subside.
3. PW continues educating property owner's of their responsibilities and the Town's actions during and after storms.
4. Public Works has begun sweeping of the streets and removing ice and snow as needed.

*Town New Wells at Ritoro/Gold Creek Valley:

1. The new Wells building is complete, and PW is planning an Open House Grand Opening in the spring of 2025.
2. Landscaping will take place in 2025 and PW will work with the 4 adjacent property owners for their approval of the landscape sketch to ensure that we conceal as much of the building as possible from their views.

*Town Trail Project:

1. Town Trails are cleared of snow as soon as the storm has stopped for use by the public.
2. PW has seen increased parking along Hwy 86, Harvest Bible and RC Elementary school for trail enthusiasts.

*Gold Creek Lift Station Improvements:

1. Completion of project has begun warranty period and filing completion with CDPHE Permitting.

*Eligibility Surveys for Water and Wastewater Capitol projects have been completed for 2024/2025 and accepted by Colorado Department of Public Health and Environment



(CDPHE). The eligibility surveys allow for the town to be in line for any funding that may be available for future projects.

***Gold Creek Wastewater Treatment Plant (GCWWTP)**

The state sampling of the plant after maintenance all came back at 98% removal of all constituents that are required. It was an excellent slow start up of Train 2 and the plant is back at 100% capacity.

Maintenance has been concluded on Train 2 of the plant. PW did a slow 2-week plant start up on Train 2 of the plant to allow bugs/bacteria to acclimate and begin their life cycle. The combination of Bug population, Dissolved Oxygen and liquid temperature are the biggest contributors to a happy healthy working bug population as they work chemical free to complete the process of naturally treating the waste water.

1. NO CHANGES AS OF THIS REPORT
2. Just a quick review of the Wastewater Plant: It is designed to treat 500,000 (.5MGD) gallons of Raw Sewage per day. Train 1 and Train 2 share that equally. The Plant currently is treating 170,000 (.170MGD) average gallons per day while maintaining our minimal 85% reduction of constituent removals (currently 93%-99% removal) that are set by CDPHE in our Permit. When the time comes that the wastewater Plant is treating at 80% (400,000 gallon) (.4MGD) of the Total Capacity the Town must start to show Plant Expansion Plans to CDPHE. The current WTP upgrade Budget is currently in good shape for funding. Reference of constituent removal: Please see attached Laboratory Sampling Analysis for actual numbers. Note all numbers/results are shown as milligrams per liter (mg/L) this equates from metric to Standard as parts per million (ppm). Plant is 100% Biological/Bacteria (Bugs) NO CHEMICALS

Bio-chemical Oxygen Demand (BOD) minimum 85% removal (current average 99% removal)

Total Suspended Solids (TSS) minimum 85% removal (current 93%-99% removal)

Nitrogen/Ammonia (NH₃) minimum 85% removal (current 99% removal)

E. Coli maximum 115 parts per million (ppm) (current <1 ppm) U.V. Light neuters bacterial for no reproduction and does not kill the bacterial which in turn means no chemicals and cost savings to the Town residents.



TOWN OF ELIZABETH

MIKE DEVOL, PUBLIC WORKS DIRECTOR

*Town Clean Up Day/ Paint Round-Up/Arbor Day

1. Town Clean Up Day is re-scheduled for May 10th at PW yard located at 303 Washington St from 8am-1200 noon. Due to conflicting “Meat-In” festivities.

*Town Public Works News

1. Public Works has filled one Water/Wasterwater position open for 2025 and have an opening for a Streets/Parks position.

*Town Farmers Market:

1. PW is gearing up for the 2025 season.

*Town Parks and Right of Way

Upcoming Projects:

1. PW has completed 2024 the CDPHE Annual Reporting:
2. Annual Biosolids has been completed for 2024 and sent to CDPHE.
3. Regulation 85 Nutrient Monitoring/Accepted by CDPHE
4. PW has completed a round of PFAF's (radiation/radiological). Results have been reported to CDPHE.
5. Water Augmentation and Recording
6. Water Lead and Copper sampling
7. Water Constituents Metals Sampling
8. Annual DMR (Daily Monitoring Report) Gold Creek Wastewater Plant
9. Tree City USA Application/ Accepted and approved by Tree City USA
10. Trail DOLA findings and Inspections/ Addition of Willow Cuttings Planted
11. PW has completed Highway User Tax Fund (HUTF) reporting and data processing.
12. PW is completing Lead and Copper testing per CDPHE guidelines for 2024
13. Flushing of the entire town's water supply system is completed every 6 months.

Mike DeVol
Town of Elizabeth
Public Works Director
GCWWTP Operations
303-913-6453



TOWN OF ELIZABETH

MIKE DEVOL, PUBLIC WORKS DIRECTOR

mdevol@townofelizabeth.org



TOWN OF ELIZABETH

CLERK'S/FINANCE OFFICE MANAGER'S REPORT

April 22, 2025

The Clerk's / Finance report reflects updates provided by individual Staff members.

Hannah

- Hannah does not have a report this week.

Allison

- I "Clerked" my first meeting this week. This included learning to put together an agenda packet, upload the meeting audio to the website, and draft the minutes of the meeting. I enjoyed the entire experience and look forward to doing more of this in the future.
- I have been busy receiving business license renewal applications and issuing 2025 Business Licenses. I have issued just over 40 so far, which is about 40%.

Harmony

- Harmony is attending the Laserfiche Conference this week, so she does not have anything to report this week.

Michelle

- An Estate Planning Class was held on Wednesday April 16th. There were 38 people in attendance.
- I received a scholarship from the CMCA (Colorado Municipal Clerks Association) that will help cover the cost of registration for the IIMC Conference I am attending in May.
- Hannah has taken on the job responsibility of payroll and is doing a bang-up job.
- Had a productive meeting on the Flower Sale Fundraiser. This fundraiser will benefit the Presbyterian Church and the Town's Senior Engagement Project. It is good to be involved in such a positive event.
- I appreciate all the help the Administration Department receives from the Community Development Department.
- A big thank you to James and Clayton for installing new outside lights at Town Hall. We appreciate the new look and the functioning fixtures.



TOWN OF ELIZABETH

LONDON SHERLOCK STUDENT LIAISON

Good evening everyone!

Glad that the cold is finally over! It is very nice to be reaching the end of the year. Our freshman and sophomore classes took their PSAT test and juniors the SAT last week! The senior class had a luncheon and were able to do their superlatives.

Our sports have begun the tail of their season with league matches being played! The girls soccer team is currently 5-5-1 with a match on Thursday evening, the Boys baseball team is 8-3 with a match Thursday as well. Our sports team completed their season in tragic fashion as all 3 teams lost in a tiebreaker in regional games. Fbla students like myself will be traveling for state Monday through Wednesday to compete at the Gaylord hotel!

Apologies for the lack of attendance, very busy this time of year but I always try to watch the meetings virtually!



TOWN OF ELIZABETH

MAIN STREET BOARD OF DIRECTORS

MAIN STREET BOARD OF DIRECTORS – RECORD OF PROCEEDINGS

March 10, 2025

CALL TO ORDER

The Regular Meeting of the Elizabeth Main Street Board of Directors was called to order on Monday, March 10, 2025, at 8:37 AM by President Carrie Wedel.

ROLL CALL

Present were President Carrie Wedel and Directors Jeff Struthers, Kurt Prinslow, and Linda Bulmer. Vice President Brandon Jeffress and Directors Tedd Lipka and Mike Hussey were not present. There was a quorum to conduct business.

Also present were Planner/Project Manager Alexandra Cramer, Planning Technician Dianna Hiatt, and Deputy Town Clerk Harmony Malakowski.

PUBLIC COMMENT

There was no public comment.

AGENDA CHANGES

No changes from Administration.

No changes from the Board.

Agenda set.

CONSENT AGENDA

1. Minutes of the Regular Meeting of February 10, 2025

Motion by Director Bulmer, seconded by Director Struthers, to approve the Consent Agenda as presented.

The vote of those Directors present was unanimously in favor. Motion carried.

NEW BUSINESS

2. Introduction of Prospective Board Member – David Cox

Ms. Cramer provided a Staff report. Mr. Cox provided background information and answered questions. Discussion followed.



TOWN OF ELIZABETH

MAIN STREET BOARD OF DIRECTORS

Director Hussey joined the meeting at 8:50 AM.

3. Discussion regarding Main Street Grand Reopening & Stampede Booth

Ms. Cramer provided a Staff report. Discussion followed.

STAFF REPORT

- Director Struthers had a question regarding Running Creek Park facilities.
- Planner/Project Manager Alexandra Cramer provided updates regarding:
 - Streetscape
 - Main Street NOW Conference
 - Façade Grant awards
 - Ornaments
 - Locable website
 - Mural on the Oddfellows building
 - Main Street promotional video
 - Main Street flowers
 - RFP going out this week for the parking lot
 - Meeting with Amanda Love regarding 5K event
 - Thanks to Director Prinslow for his service on the Board
 - Main Street banners

BOARD REPORTS

There were no further Board reports.

ADJOURNMENT

Motion by Director Hussey, seconded by Director Prinslow, to adjourn the meeting at 9:44 AM.
The vote of those Directors present was unanimously in favor. Motion carried.

President Carrie Wedel

Assistant Town Clerk Allison Ritter

