

Basecamp Phase 2 Apartments– Water Demand Report



September 9, 2025

Ms. Amber Gregory, PE
City of Steamboat Springs – Utilities
137 10th Street
Steamboat Springs, Colorado 80477

**Re: Water Demand Report
Basecamp Phase 2 Apartments, Steamboat Springs, Colorado**

Dear Amber:

Landmark Consultants, Inc. (Landmark) is providing this Water Demand Report to accompany the Development Plan application for Basecamp Phase 2 Apartments (the Project) on the subject property. The objective of our study was to quantify and present the City with an estimated Equivalent Residential Unit (EQR) value.

This report was prepared using information from the City of Steamboat Springs 2020 Water Distribution and Wastewater Collection Infrastructure Master Plan, conceptual design information shared with Landmark, and serves to document the water and sewer impacts associated with the Project. Please note that modifications to the proposed project may require an update to that report.

If you have any questions during your review process, feel free to contact us.

Sincerely,

Landmark Consultants, Inc.

A handwritten signature in black ink, appearing to read 'Micah Gibbons', written over a light blue horizontal line.

Micah Gibbons, P.E.

Basecamp Phase 2 Apartments - Water Demand Report



1.0 INTRODUCTION, LOCATION, AND METHODOLOGY

This letter is an analysis of water demands required for the proposed construction of Basecamp Phase 2 Apartments (the Project). This letter includes all the base data, methods, assumptions and calculations used by Landmark Consultants, Inc. (Landmark). It was prepared in conjunction with the concurrent Development Plan application submitted for the project.

Landmark prepared this letter in accordance with Section 25-78 of the City of Steamboat Springs Municipal Code for the purpose of quantifying the water demanded per the proposal at the time of this letter. This letter may not be used by other parties without the express written consent of Landmark.

The facts and opinions expressed in this letter are based on Landmark's understanding of the project and data gathered from:

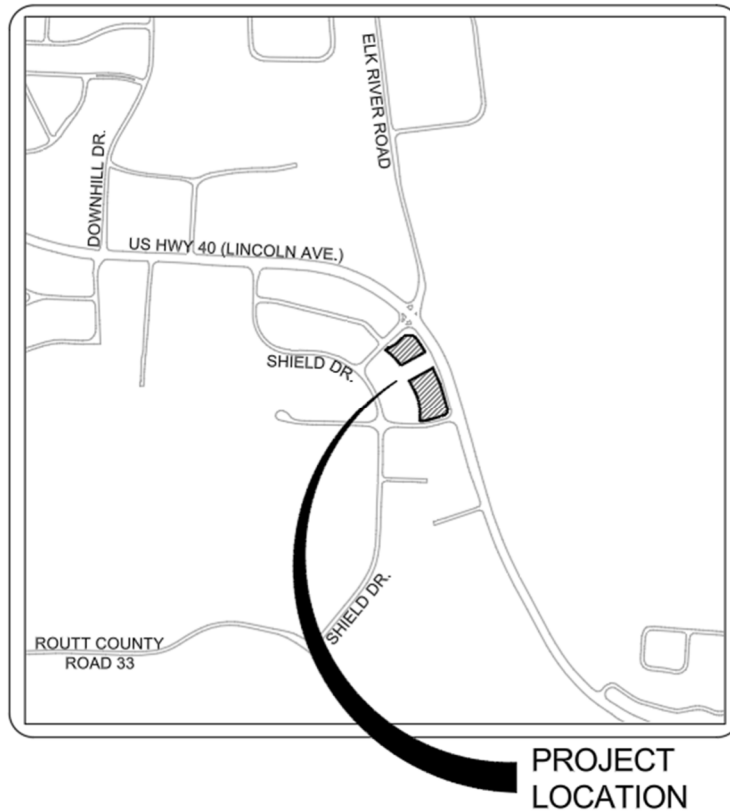
- Plans provided by **KASA**
- Water and Wastewater Master Plan Updates for the City of Steamboat Springs prepared by McLaughlin Water, December 2009 (referred herein as **Master Plan**)
- City and County of Denver Department of Public Works Sanitary Design Technical Criteria Manual, latest revision March 2008.
- City of Steamboat Springs Water/Sewer System Maps

The subject property is located on Lot 2 and Lot 3, Steamboat Basecamp, which is approximately 1.69 acres in total size. It is located in the South 1/2 of the Southwest 1/4, of Section 6, Township 6 North, Range 84 West of the 6th Principal Meridian, City of Steamboat Springs, Routt County, Colorado. Specifically, the property surrounded by Elk River Road, US Hwy 40, Big Bend Drive and Curve Court.

This project is a new, multifamily residential development where townhomes were previously planned with the approved Basecamp Phase 2 Development Plans. This project will also incorporate the planned commercial building located on Lot 2. The residential, multi-family portion of the development includes one, four-story, 80-unit condo building and will be located on the southeast portion of lot 3 and will be accessed by Big Bend Drive to the west.

Please refer to the included **Vicinity Map** for the subject property location.

Basecamp Phase 2 Apartments - Water Demand Report



Vicinity Map

2.0 EQUIVALENT RESIDENTIAL UNIT (EQR) METHODOLOGY

The Master Plan uses the Equivalent Residential Unit (EQR) method as a standard unit of measurement for equating water demands and wastewater flows for different user categories and describes an EQR for Steamboat Springs as a 'three-bedroom, 2-bathroom home up to 2,500 sf. (Master Plan, page 9)

The Project is proposing an 80-unit multifamily building and a 4,000SF future restaurant. Based on this proposal, Landmark completed the City's Water Demand Worksheet which calculated a daily use of gallon per day (GPD). The Master Plan provides a conversion factor of 200 GPD/EQR, so the resulting EQR value for the Project is **150 EQRs**. The completed worksheet is attached for reference.

Irrigation Demands:

Irrigation water demand was calculated using the City's Water Demand Spreadsheet and was accounted for in the total EQR.

Conclusion:

For the purpose of evaluating impacts to the City's system, we recommend using an EQR value of 150.

Basecamp Phase 2 Apartments - Water Demand Report



LIMITATIONS

This study is intended to estimate anticipated future water and sewer demands that could result from full buildout on the proposed subdivision in order for Mt. Werner Water and the City of Steamboat Springs to evaluate existing infrastructure capacities and review future capital improvements. It does not account for inflow and infiltration.

Landmark's assumptions, recommendations and opinions are based on the information described herein – discrepancies may exist. If any of the data is found to be inaccurate or the proposed site plan is changed, Landmark should be contacted to review this report and make any necessary revisions.

The data, opinions, and recommendations of this report are applicable to the specific design elements and location that is the subject of this report. This report is not applicable to any other design elements or to any other locations. Any and subsequent users accept all liability resulting from any use or reuse of the data, opinions, and recommendation without the prior written consent of Landmark Consultants, Inc.

Landmark Consultants, Inc. has no responsibility for construction means, methods, techniques, sequences, or procedures, or for safety precautions or programs in connection with the construction, for the acts or omissions of the contractor, or any other person performing any of the construction, or for the failure of any of them to carry out the construction in accordance with the Final Construction Drawings and Specifications.

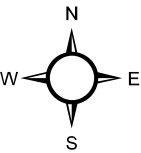
The only warranty or guarantee made by Landmark Consultants, Inc. in connection with the services performed for this project is that such services are performed with the care and skill ordinarily exercised by members of the profession practicing under similar conditions, at the same time, and in the same or similar locality. No other warranty, expressed or implied, is made or intended by rendering such services or by furnishing written reports of the findings.



EXHIBIT A

WATER SYSTEM MAP

The City of
Steamboat Springs
Water and Sewer Division
2015 Facilities Map



COORDINATE SYSTEM
NAD 1983 State Plane Colorado
North

DATE OF CONTOURS
2008

1 inch = 200 feet

LEGEND

- 10' Contour Line
- 2' Contour Line
- City Limits
- MWW District Boundary

WATER FEATURES

- ARV
- PRV
- Gate Valve
- Private 4" Valve
- Private 6" Valve
- Insertion Valve
- Acer Booster
- Firefly Repeater
- Gateway
- Hydrant
- Water Tank
- Public Water Main
- Private Water Main

SEWER FEATURES

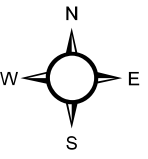
- Manhole
- Cleanout
- Sewer Main
- Sewer Service
- Storm Underdrain



This drawing shows the approximate locations and elevations of the City of Steamboat Springs facilities. The information shown hereon reflects a compilation of data from as-built drawings and field surveys. It is provided as a convenience to aid in future location of the facilities and as an inventory and planning tool. It is not a certified survey map. Exact locations, depths, and elevations must be obtained through field verification.

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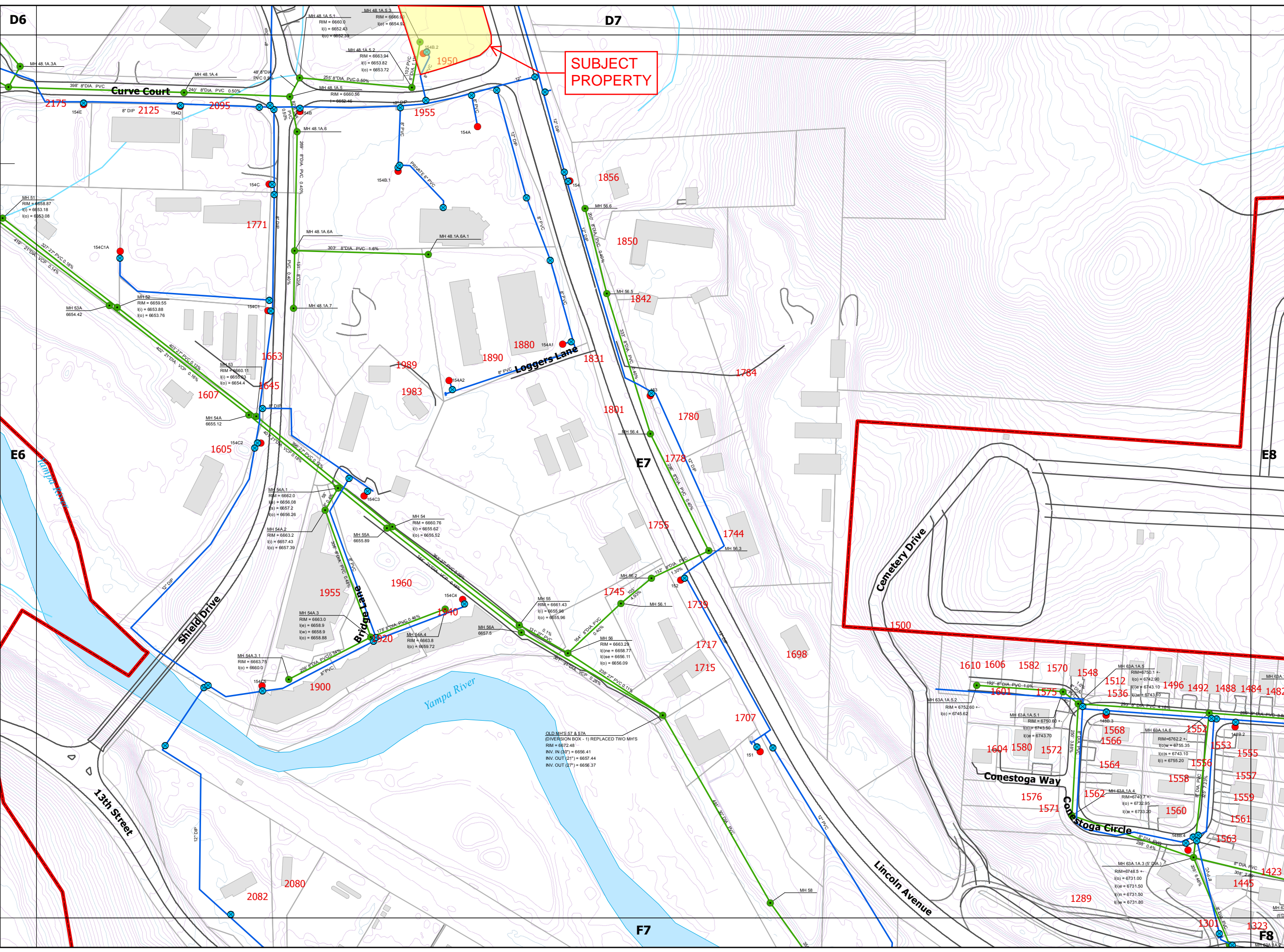




EXHIBIT B

CITY OF STEAMBOAT SPRINGS WATER DEMAND CALCULATION WORKSHEET

WATER DEMAND WORKSHEET

City of Steamboat Springs

Note to Applicants: Please complete all information. Additional comments to be entered under section 8 below.

Project Name: Basecamp Phase 2 Apartments
Contact Person: Micah Gibbons
Telephone: 970-734-7907
Email: micahg@landmark-co.com
Date: 9/9/2025

Description of Proposed Project: This project is a new, multifamily residential development where townhomes were previously planned with the approved Basecamp Phase 2 Development Plans. This project will also incorporate the planned commercial building located on Lot 2. The residential, multi-family portion of the development includes one, four-story, 80-unit condo building and will be located on the southeast portion of lot 3 and will be accessed by Big Bend Drive to the west

Location of Project: LOTS 2&3 STEAMBOAT BASECAMP

Total Area (square feet or acres): 1.69 Acres

Has this area been annexed into City limits?

Yes ☒
No

Is this project a redevelopment of existing lots and structures?

Yes ☒
No

If Yes, identify by water/sewer billing address:

7200 WISCONSIN AVE STE 500, BETHESDA, MD 20814

1. RESIDENTIAL INDOOR WATER DEMAND

A. Detached single family lots (number):	<u> 0 </u>
Average lot size:	<u> </u> square feet
B. Average floor area of house:	<u> 0 </u> square feet
(inclusive of garage and unfinished basement)	
C. Greater of A or A x B/3,000:	<u> 0 </u> single family equivalents (SFEs)
D. In-house demand (C x 0.392):	<u> 0 </u> acre-feet per year
E. Multi-family units (number):	<u> 80 </u>
(inclusive of duplex, condominium, townhouse, and apartment units)	
F. Average floor area of unit:	<u> 654 </u> square feet
(inclusive of garage and unfinished basement)	
G. Greater of E or E x F/3,000:	<u> 80 </u> single family equivalents (SFEs)
H. In-house demand (G x 0.336):	<u> 26.88 </u> acre-feet per year
I. Total indoor demand (D + H):	<u> 26.88 </u> acre-feet per year <u> 23997 </u> gpd
J. Total residential SFEs:	<u> 80.00 </u> SFEs

2. IRRIGATION WATER DEMAND

Describe irrigation methods (sprinkler, drip, etc.)

A. Average irrigated area per detached single family lot:	_____ square feet
B. Irrigated area (1A x 2A/43,560):	_____ 0 acres
C. Average irrigated area per multi-family unit:	_____ 353 square feet
D. Irrigated area (1E x 2C/43,560)	_____ 0.648301 acres
E. Other irrigated areas:	
1. Irrigated parks	_____ acres
2. Irrigated entry features	_____ acres
3. Irrigated street ROW	_____ acres
4. Common space	_____ acres
5. Total other	_____ 0 acres
F. Total irrigated area (2B + 2D + 2E5):	_____ 0.648301 acres
G. Total irrigation demand (2F x 2.5)	_____ 1.620753 acre-feet per year
	_____ 1447 gpd

3. OTHER OUTDOOR WATER USES

A. Pond water surface area:	_____ N/A square feet
B. Fountain water surface area:	_____ N/A square feet
C. Swimming pool:	
1. Surface area	_____ N/A square feet
2. Volume	_____ N/A gallons

4. OTHER INDOOR WATER USES

A. Retail (square feet x 0.000112)	_____ 0 square feet	_____ 0 0.10 gpd/sqft
B. Office (square feet x 0.000179)	_____ 0 square feet	_____ 0 0.16 gpd/sqft
C. Warehouse or Storage (square feet x 0.0000672)	_____ 0 square feet	_____ 0 0.06 gpd/sqft
D. Motel/hotel without kitchens (room x 0.1120)	_____ 0 guest rooms	_____ 0 100 gpd/room
E. Motel/hotel with kitchens (room x 0.1680)	_____ 0 guest rooms	_____ 0 150 gpd/room
F. Restaurant (seat x 0.0392)	_____ 133 seats	_____ 0 35 gpd/seat
G. Tavern	_____ 0 seats	_____ 0 20 gpd/seat
H. Other (describe)		
I. Total other indoor water usage		_____ 4655 gpd

Describe below the expected number of employees/guests/daily hours and anything that impacts the number of people using the facilities or special features such as swimming pools, hot tubs, or other indoor water features. Use the Comments worksheet if more space is needed:
The building will operate as standard multifamily residential building. No special considerations are expected.

5. AVERAGE ANNUAL CONSUMPTION USAGE (FOR CITY OF STEAMBOAT SPRINGS STAFF USE)

	Demand (acre-feet)	Consumptive Use (acre-feet)
A. Indoor usage		
B. Outdoor usage		
C. Total		

6. APPLICANT

Project Name: Yampa Street Mixed Use Project
By (print name): Scott Marr
(Owner/Authorized Representative)
Title:
Signature:
Date:

7. CITY

Verified by (print name):
(City employee)
Title:
Signature:
Date:

8. ADDITIONAL COMMENTS