

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



GENERAL PERMIT for SEWER EXTENSION CONSTRUCTION

The Missouri Department of Natural Resources hereby issues a permit to:

Construction Permit ID: MOGC00010
Title of Project: Stadium View Subdivision
Owner: Schuber Mitchell Homes
Address: 1621 Anderson Drive
Webb City, MO 64870

The project will also include general site work appropriate to the scope and purpose of the project and will include all the necessary appurtenances to make a complete and usable collection system. The construction of this project will be in the vicinity of the county below and discharge to Receiving Permit ID below:

County: Jasper Receiving Permit ID: MO0040185

for the construction of (described construction project):

Construction of approximately 2340 lf of 8-inch PVC SDR-35 with approximately 9 manholes to serve 75 homes with a design average flow of 27,800 gpd. This project is in the vicinity of Matthew Circle and Heather Lane in Webb City, Jasper County and discharges to an existing Webb City collection system, with waste to be treated at Center Creek WWTF, MO-0040185. Mr. John Biggs, Chairman of Center Creek, 201 Wastewater Treatment Board provided an acceptance memo dated May 21, 2015.

Construction of such proposed facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, RSMo, and regulation promulgated thereunder, or this permit may be revoked by the Department of Natural Resources (Department). As the Department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.

This permit applies only to the construction of water pollution control components; it does not apply to other environmentally regulated areas.

June 16, 2015

Issue Date

Sara Parker Pauley, Director
Department of Natural Resources

June 15, 2017

Expiration Date

John Madras
Director, Water Protection Program

APPLICABILITY

1. This permit authorizes the construction of gravity sewer extensions, force mains, and lift stations. Storage basins, considered part of the collection system, are also included. Earthen basins are not included under this General Sewer Extension Construction permit.
2. A Sewer Extension Construction Permit may be required by the department due to compliance and enforcement actions.
3. This permit does not apply to:
 - A. Earthen storage basins;
 - B. Projects located within an Approved Sewer Program. These include the City of Blue Springs, City of Columbia, City of Kansas City, City of Jefferson City, City of Joplin, City of Lebanon, City of Springfield, City of St. Peters, Duckett Creek Sewer District, and Metropolitan St. Louis Sewer District;
 - C. Projects funded by the Department of Natural Resources;
 - D. Projects that substantially deviate from the Design Guides in 10 CSR 20-8; and
 - E. Exempt projects unless requested by the applicant or required by enforcement.

PREREQUISITES:

1. The General Sewer Extension Construction Permit application, appropriate fee, and a schedule for construction with the date on which construction will begin and anticipated completion date.
2. The engineering report, as required, plans and specifications each signed and sealed by a professional engineer registered in the State of Missouri. A Summary of Design is an acceptable substitute for the engineering report required by this permit prerequisite.
3. The Design Certification form signed and sealed by a professional engineer registered in the State of Missouri certifying the design of the system was done in accordance with 10 CSR 20-6 and 10 CSR 20-8.
4. A statement from the continuing authority was received accepting the wastewater for treatment.
5. A statement from the continuing authority was received accepting the responsibility for operation, maintenance, and modernization of these facilities

PERMIT CONDITIONS:

1. Contact the department's appropriate regional office 48 hours prior to starting construction. Contact information can be found at <http://dnr.mo.gov/regions/regions.htm>.
2. This permit authorizes the activities and scope of work detailed in the plans and specifications submitted with the request.
3. The construction must be in accordance with the design certification stating the plans and specifications comply with 10 CSR 20-6 and 10 CSR 20-8.

PERMIT CONDITIONS: (continued)

4. State and Federal Law does not permit bypassing of raw wastewater, therefore steps must be taken to ensure that raw wastewater does not discharge during construction. If a sanitary sewer overflow or bypass occurs, report the appropriate information to the department's regional office per 10 CSR 20-7.015(9)(E)2.
5. Protection of drinking water supplies shall be in accordance with 10 CSR 20-8.120(10). "There shall be no physical connections between a public or private potable water supply system and a sewer, or appurtenance thereto which would permit the passage of any wastewater or polluted water into the potable supply. No water pipe shall pass through or come in contact with any part of a sewer manhole."
 - A. Sewers in relation to water works structures shall meet the requirements of 10 CSR 23-3.010 with respect to minimum distances from public water supply wells or other water supply sources and structures.
 - B. Sewer mains shall be laid at least ten feet (10') horizontally from any existing or proposed water main. The distances shall be measured edge-to-edge. In cases where it is not practical to maintain a ten foot (10') separation, the department may allow a deviation on a case-by-case basis, if supported by data from the design engineer. Such a deviation may allow installation of the sewer closer to a water main, provided that the water main is in a separate trench or on an undisturbed earth shelf located on either side of the sewer and at an elevation so the bottom of the water main is at least 18 inches above the top of the sewer. If it is impossible to obtain proper horizontal and vertical separation as described above for sewers, the sewer must be constructed of slip-on or mechanical joint pipe or continuously encased and be pressure tested to 150 pounds per square inch to assure water tightness.
 - C. Manholes shall be located with the top access at or above grade level.
 - D. Manholes should be located at least ten feet (10') horizontally from any existing or proposed water main.
 - E. Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. When it is impossible to obtain proper vertical separation as stipulated above, one of the following methods must be specified:
 - 1) The sewer shall be designed and constructed equal to the water pipe and shall be pressure tested to assure water tightness prior to backfilling; or
 - 2) Either the water main or sewer line may be continuously encased or enclosed in a watertight carrier pipe which extends ten feet (10') on both sides of the crossing, measured perpendicular to the water main. The carrier pipe shall be of materials approved by the department for use in water main construction.

PERMIT CONDITIONS: (continued)

6. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of one acre or more to obtain a Missouri State Operating Permit to discharge stormwater. The permit requires Best Management Practices sufficient to control runoff and sedimentation to protect waters of the state. Land disturbance permits will only be obtained by means of the department's ePermitting system available online at www.dnr.mo.gov/env/wpp/epermit/help.htm.

See www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm for more information.

7. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity will disturb any land below the ordinary high water mark of Jurisdictional Waters of the U.S. then a 404/401 will be required. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the department's Water Protection Program at (573) 751-1300 for more information.

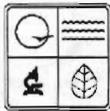
See www.dnr.mo.gov/env/wpp/401/ for more information.

8. If this project eliminates a wastewater treatment facility, then a full closure plan shall be submitted to the department's appropriate regional office for review and approval of any permitted wastewater treatment system being replaced. In accordance with 10 CSR 20-6.010(12), the closure plan must meet the requirements outlined in Standard Conditions Part III, Section I, of the Missouri State Operating Permit. Closure shall not commence until the submitted closure plan is approved by the department. Form J – Request for Termination of a State Operating Permit, shall be submitted to the department's appropriate Regional Office for termination of any existing Missouri State Operating Permit, once closure is completed in accordance with the approved closure plan.
9. Submit a Statement of Work Completed Form to the department following completion of construction. Submit an electronic copy of the as built plans if the project was not constructed in accordance with previously submitted plans and specifications.

MOGC 00010 C-141742
MO-0040185

RECEIVED

AP 21240



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
APPLICATION FOR CONSTRUCTION PERMIT
SEWER EXTENSION

MAY 15 2015

WATER PROTECTION PROGRAM

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED \$300.00	CHECK NO. 8404
DATE RECEIVED 5/15/15	

NOTE ► PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

1.0 APPLICATION INFORMATION (Note – If any of the questions in this section are answered NO, this application may be considered incomplete and returned.)

- 1.1 Is this a Federal/State funded project? YES N/A Funding Agency: _____ Project #: _____
 - 1.2 Has the Department of Natural Resources approved the proposed project's engineering report*? YES Date of Approval: _____ NO N/A
 - 1.3 Is a copy of the appropriate plans* and specifications* included with this application? YES NO
 - 1.4 Is a summary of design* included with this application? YES NO
 - 1.5 Is the appropriate fee included with this application? (See instructions for appropriate fee.) YES NO
- * Must be affixed with a Missouri registered professional engineer's seal, signature and date.

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT
Stadium View Subdivision

ADDRESS	CITY	STATE	ZIP CODE	COUNTY
West of N Madison Street	Webb City	MO	64870	Jasper

2.2 Legal Description: ¼, NE ¼, SE ¼, Sec. 12, T 28, R 33

2.3 Project Components (check all that apply):
 Gravity sewers Pumping stations Force mains Alternative sewer system Other (Describe below.)

2.4 PROJECT DESCRIPTION
2,380 LF 8" Sewer Main
9 Manholes

2.5 DESIGN INFORMATION

- A. Population or number of lots to be served by this extension: 278
- B. Estimated flow to be contributed by this extension: Design Average Flow: 27.8K gpd Design Peak Hourly Flow: 4633.3 gph
- C. Industrial Wastes: Type: n/a Flow: 0 gpd
- D. Receiving Sewer: Size: 8 inches Capacity: 711 gpm

3.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
Schuber Mitchell Homes	(417) 626-7000	dan@schubermitchell.com

ADDRESS	CITY	STATE	ZIP CODE
1621 Anderson Drive	Webb City	MO	64870

4.0 CONTINUING AUTHORITY: Permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the wastewater collection system.

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
City of Webb City	(417) 673-4651	cfrancis@webbcitypd.org

ADDRESS	CITY	STATE	ZIP CODE
200 S. Main Street	Webb City	MO	64870

4.1 A letter from the continuing authority, if different than the owner, is included with this application. YES NO N/A

5.0 ENGINEER

ENGINEER NAME / COMPANY NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
Bryan D. Osborn, PE / Anderson Engineering, Inc.	(417) 782-7399	bosborn@aeincmo.com

ADDRESS	CITY	STATE	ZIP CODE
811 E. 3rd Street	Joplin	MO	64801

6.0 RECEIVING WASTEWATER TREATMENT FACILITY

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
Center Creek WWTP	(417) 673-6297	wrangle@webbcity.org

MISSOURI STATE OPERATING PERMIT # MO-0040185		REMAINING CAPACITY (GPD) 3.3 million	
6.1 Has the receiving treatment facility agreed to accept the additional wastewater flow? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
6.2 A letter from the receiving wastewater treatment facility, if different than the continuing authority, is included with this application. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A			
7.0 PROJECT OWNER: I hereby certify that I am familiar with the information contained in this application and to the best of my knowledge and belief such information is true, complete, and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders, and decisions, subject to any legitimate appeal available to applicant under Missouri Clean Water Law.			
PROJECT OWNER SIGNATURE 			
PRINTED NAME Dan Mitchell		DATE 03/30/2015	
TITLE OR COPORATE POSITION President	TELEPHONE NUMBER WITH AREA CODE (417) 626-7000	E-MAIL ADDRESS dan@schubermitchell.com	
Mail completed copy to:		MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176	

RECEIVED

MAY 15 2015

WATER PROTECTION PROGRAM

ENGINEER'S REPORT FOR:
SEWER MAIN EXTENSION TO SERVE
Stadium View
WEBB CITY, MISSOURI

March 30, 2015

Existing Facilities:

Sanitary Sewer System: The wastewater collection system owned and operated by the City of Webb City, Missouri. The new construction will connect to an existing 8" PVC gravity main.

The purpose of this project is to provide sewer service for 75 newly platted residential lots. The new mains will connect to existing main at or near the subject property. The sewer will run within a sewer easement. No unusual complications are anticipated with the construction of the project.

Flooding is not anticipated to be an issue with the sewer location. The site is a fairly flat development with an engineered stormwater drainage system.

Owner:

City of Webb City
200 South Main Street
Webb City, Missouri 64870
417-673-6297

Proposed Improvements:

This project consists of constructing the following:

1. 2,380 LF 8" PVC Sewer Main
2. 9 Manholes
3. Required connections to serve 75 lots

Analysis of New Service:

1. Design Criteria
 - a. Proposed development is 75 single family residential lots
 - b. Total population will be 278 persons
(3.7 persons x 75 lots)
 - c. Flows and BOD load per capita

1. Flow is 100 gallons/person/day
2. BOD is 0.17 lbs/person/day
- d. All sewage shall be collected by a system of 8" piping and gravity transported to existing manholes in the City of Webb City, Missouri.

2. Design flows

- a. Average daily flow = 278 persons x 100 gallons/person
Average daily flow = 27,800 gallons per day
- b. Peak design flow = 4 x average daily flow
Peak design flow = 111,200 gallons per day
- c. BOD = 278 persons x 0.17 lbs/person/day
BOD = 47.26 lbs per day

Cost Estimate:

2,380 LF 8" Sewer Main @ \$17.00 = \$40,460
9 Manholes @ \$2,000.00 = \$18,000.00

Total = \$58,460.00

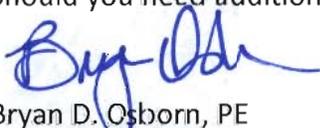
Effect on Existing Collection System:

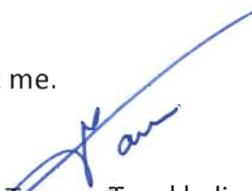
The project is not anticipated to have any negative effects on the existing collection system. The existing 8" gravity sewer has substantial capacity remaining. The existing system in the adjacent subdivision was designed anticipating the construction of the current project.

Effect on Existing WWTP:

WASTEWATER TREATMENT PLANT DESIGN CAPACITY (Permit # MO-0040185)	
Flow, Peak (GPD)	4,800,000
BOD, Average (Pounds per Day).....	4,180
PROPOSED EXTENSION	
Flow, Estimated Average Daily (GPD)	27,800
Peak Flow, Estimated (GPD)	111,200
BOD, Estimated (Pounds per Day).....	47.26
UNUSED CAPACITY (Capacity – Extension – Reserved)	
Flow, Average (GPD)	3,300,000
BOD, Average (Pounds per Day).....	4133

Should you need additional information please contact me.


Bryan D. Osborn, PE
ANDERSON ENGINEERING


Zannaz Tavakkoli
ANDERSON ENGINEERING

**CONTINUING AUTHORITY APPROVAL
FOR
SEWER LINE EXTENSION**

**CITY OF WEBB CITY
P. O. BOX 30
WEBB CITY, MISSOURI 64870**

Project Name: Stadium View Subdivision

Location: West of N Madison Street

PART 1- RECEIVING SEWER CAPACITIES

Plans for the above-named project have been reviewed. The City of Webb City hereby approves the routing and design of the proposed sewer line extension. We further agree to accept, operate, and maintain this extension after it has been successfully completed and passed all required tests and inspections, or within one (1) year thereafter. In accordance with Missouri Department of Natural Resources policy, information on the downstream lift station (if any) is attached. Also in accordance with Missouri Department of Natural Resources "Policy for Sewer Line Extensions", we certify the following:

PROPOSED EXTENSION

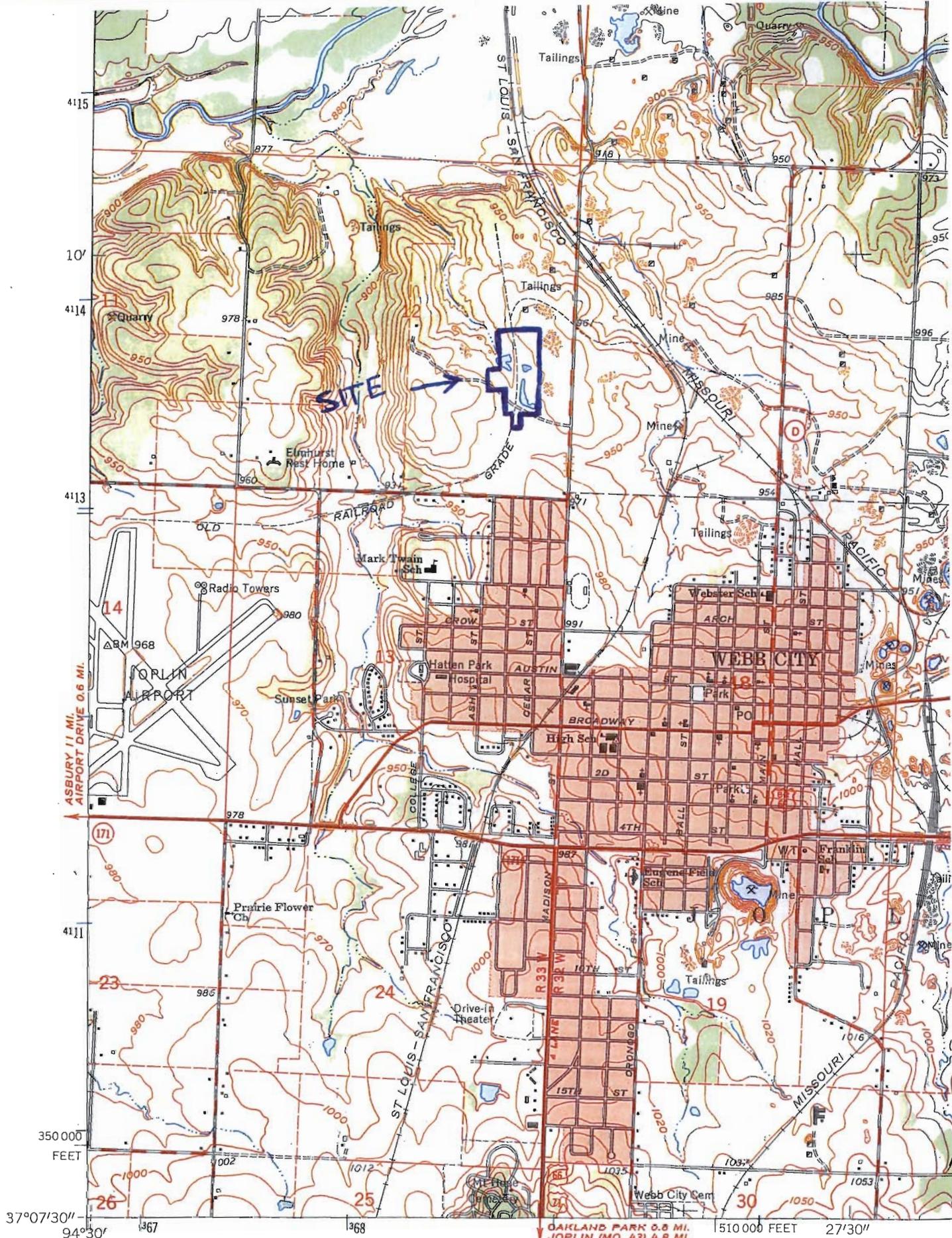
Flow, Estimated Average Daily (gallons per day)	27,800
Peak Flow, Estimated (gallons per day)	111,200
BOD, Estimated (Pounds per day)	47.26 lbs

RECEIVING COLLECTION SYSTEM REMAINING CAPACITY

Flow, Average Daily (gallons per day)	996,040
Flow, Estimated Peak (gallons per day)	912,640

Approved by City of Webb City:

By: 
Title: Waste Water Utilities Director
Date: 5-4-15



(JOPLIN WEST)
7058 II SE

Mapped, edited, and published by the Geological Survey
Control by USGS and USC&GS

Topography by photogrammetric methods from aerial
photographs taken 1961. Field checked 1963

Polyconic projection. 1927 North American datum
10,000-foot grid based on Missouri coordinate system, west zone

OAKLAND PARK 0.6 MI.
JOPLIN (MO. 43) 4.8 MI.

