

EMPLOYEE STANDBY PROGRAM POLICY

DEPARTMENT OF PUBLIC WORKS CITY OF DIXON

Effective February 1999

Revised June 26, 2006

Revised May 11, 2009

Revised February 8, 2013

I. PURPOSE

To establish guidelines for responses after normal working hours to “Emergency Situations” in order to protect the health and safety of the community. An Employee Standby Program insures employee availability to respond to emergency situations on weekends and holidays.

II. EMPLOYEES COVERED

All full-time Public Works Maintenance employees who have been trained and meet the qualifications will be scheduled on a rotating basis consistent with Assignment Procedures covered in Section V.

III. EMERGENCY AND NON-EMERGENCY SITUATIONS DEFINED

A. Emergency Situations:

The following is a list of typical emergencies where a response is appropriate:

1. Sanitary sewer main blockage, alarm at a sewer lift station, or problem at Wastewater Treatment Plant.
2. Hazardous material spill where barricades, spill confinement, and/or cleanup is required.
3. Major street problem, such as a severely damaged or missing stop sign, major depression in street or sidewalk, missing or seriously damaged drainage grate or manhole cover, and downed tree or large broken tree limb blocking the travelway.
4. Significant flooding of streets and/or buildings.
5. Traffic accident seriously affecting public safety involving a damaged traffic signal, hazardous street light, or large amount of debris on a City street.
6. Sprinklers running constantly in park or landscape area.
7. Emergency support requests by the Police Department or the Fire Department.
8. Malfunction of traffic signal.
9. Alarm set off, broken window, or door at public building.
10. Vandalism or graffiti at picnic areas.

B. Non Emergency Situations:

The following is a list of situations where an emergency response is not appropriate:

1. Minor street problem such as small bump, rough spot, or minor amount of glass, mud, or debris on the street.
2. Street light burned out or malfunctioning (cycling or on during the day).
3. Broken sprinkler head in park or landscaped area.
4. "Private" problems not in the public right-of-way.

C. Situations Not Covered:

When a request for emergency assistance is received and the situation is not clearly covered herein, the standby person shall evaluate the facts and act accordingly. If reasonable doubt exists as to the seriousness of the problem, respond to the request.

IV. RESPONSE PROCEDURES

A. Responsibility and Authority:

The standby person is responsible for determining whether or not the situation is a true emergency. The standby person should collect pertinent information (name, address, and telephone number of the reporting party) and a full description of the "emergency". If it is determined by the standby person that the situation is a true emergency, the standby person should respond to the scene of the emergency as soon as possible, and in most cases within a maximum of forty-five (45) minutes. If the situation is not an emergency, the standby person shall notify the reporting party that the request will be forwarded to the responsible party/agency at the start of the next business day.

Once contacted, the standby employee assumes full responsibility for the typical Public Works emergency. When providing public safety support, the Incident Commander has full responsibility. Employees shall participate in hazardous material cleanup only when trained and provided appropriate personal protective equipment (PPE) and gear.

B. Response Matrix: See attached Exhibit

C. Conduct and Behavior:

All employees on standby shall practice a professional commitment to "public service" while dealing with the specific emergency in a common sense and sensitive manner. Standby employees are expected to be familiar with all standby procedures and be available for calls at all times during their standby shift. Standby personnel, while on duty, shall

remain physically able to respond by refraining from activities which might impair the ability to respond and perform the necessary duties.

D. Obtaining Additional Help:

When faced with an emergency that requires additional human resources, a faster response time, or standby employee meets with an unforeseen delay, first contact any other Public Works Maintenance employee on standby (if applicable) and then proceed to call those Public Works Maintenance employees most qualified to offer assistance. Contractors may then be contacted to assist if Public Works employees are not available or the need exceeds the manpower available.

E. Incident Report:

A detailed permanent record of each emergency call-out by Police Dispatch shall be documented on a standard "Incident Report" form (in standby binder). Information to include:

1. Date, time, and name of reporting party.
2. Incident description listing type of call and location.
3. Action(s) taken and time involved.
4. Additional personnel called to assist and equipment used.
5. Any other pertinent information.

F. Call-Out Log

1. A person performing daily routine chores who finds vandalism (i.e., graffiti) will need to request a police report, take pictures, and document on call-out log.
2. If allotted time is not sufficient for tournament or party events documentation is required on call-out log.
3. In the event of rain when soccer games are scheduled, games will need to be canceled due to weather conditions and documented on call-out log.
4. Log sheets are located in the standby binder.
5. The information needed for the log is as follows:
 - a. Date, time, and name of reporting party.
 - b. Task description including specific details of special circumstances involved and location.
 - c. Action(s) taken and time involved.
 - d. Additional personnel called out to assist and equipment used.
 - e. Any other pertinent information

G. Vehicle and Equipment:

Employees on standby will be assigned the following:

1. City vehicle equipped with all the necessary emergency tools and equipment. Use of the City vehicle for personal uses is not allowed. Those on standby residing within the City limits shall take the City vehicle home. Those residing outside the City limits and within thirty miles of the City limits may take the vehicle home. Supervisors may take a City vehicle home as back-up to the “on-call” person.
2. Standby radio/phone which shall be the primary method used to contact the standby person by Solano County Dispatch.
3. Standby radio/phone shall be kept in the standby person’s possession at all times and is to be used for official business only.
4. Equipment such as vactor truck, backhoe, dump truck, emergency pumps, and other tools and equipment necessary to handle emergencies shall be fully fueled and readily accessible.
5. The Employee Standby Binder shall contain assignment schedules, phone numbers of qualified Public Works Maintenance employees, other City and county departments, emergency agencies, and local contractors. The binder shall also contain blank “Incident Report” forms and other pertinent information. This binder shall be kept in the “on-call” vehicle.
6. Maintenance Supervisors are required to keep binders current for the on-call personnel.

V. **ASSIGNMENT PROCEDURES**

A. Assignment Period:

The “Weekly” standby period typically begins at 4:30 p.m. on Monday and continues to 7:00 a.m. on the following Thursday. The “Weekend” standby period begins at 3:30 p.m. on Friday and continues until 7:00 a.m. Monday. A “Holiday” standby period begins at 7:00 a.m. on the holiday and continues to 7:00 a.m. on the day following the holiday(s).

B. Employee Qualifications:

To be eligible to serve in a standby status, employees must be pre-qualified as determined by the City based on the following criteria:

1. Employees’ training, skills, experience, and familiarity in handling the typical emergency situations.
2. A minimum of one of two employees will have possession of the required California driver’s license to operate the equipment typically used to handle emergencies. An example would be a Class B driver’s license to operate the vactor truck, when needed.

3. Employee's ability to respond to the scene typically within 45 minutes following notification unless a sooner response is needed by Police or Fire personnel. If that is the case, the stand-by person shall call out personnel who are able to respond within the time frame requested.
4. Employee may be tested on certain emergency situations, i.e. how to assist in vector truck operations and traffic control.

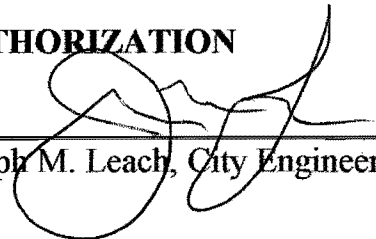
C. Personnel Assignments

An annual schedule will be prepared and issued quarterly with consideration given to the City's needs and employees' work schedule. Assignments will be made at intervals and of duration as deemed appropriate by the Public Works Supervisors or the City Engineer/Public Works Director to keep the standby program operating efficiently and effectively. Compensation shall be consistent with current labor agreement requirements.

D. Substitutions:

Substitutions shall be minimized and only done when absolutely necessary. The standby individual is responsible for finding a substitute. The substitute shall be on the approved standby list and the change shall have prior approval from the Public Works Supervisors or the City Engineer/Public Works Director.

VI **AUTHORIZATION**



Joseph M. Leach, City Engineer/ Public Works Director

2/7/13

Date

**“EXHIBIT”
RESPONSE MATRIX**

Situation

Response

<p>1. Sanitary sewer main blockage, alarm at a sewer lift station, or problem at Wastewater Treatment Plant.</p>	<p>Respond and resolve as necessary per Emergency Response Plan. Use outside contractor as necessary.</p>
<p>2. Hazardous material spill where barricades, spill confinement, and/or cleanup is required.</p>	<p>Respond and resolve as necessary. If situation warrants, contact the Fire Dept., Police Dept., or professional hazardous material contractor.</p>
<p>3. Major street problem, such as a severely damaged or missing stop sign, major depression/pothole in street or sidewalk, missing or seriously damaged drainage grate or manhole cover, and downed tree or large broken tree limb blocking the travelway.</p>	<p>Respond and resolve as necessary using additional Public Works personnel or private contractor if situation warrants.</p>
<p>4. Significant flooding of streets and/or buildings.</p>	<p>Respond and resolve as necessary using additional Public Works personnel. Severe situations may require assistance of Fire Dept. or Police Dept. Personnel.</p>
<p>5. Traffic accident seriously affecting public safety involving a damaged traffic signal, hazardous street light, or large amount of debris on a City street.</p>	<p>Respond and assist Police Dept. and Fire Dept. As necessary at accident scene. Other scenarios, resolve as necessary.</p>
<p>6. Sprinklers running constantly in park or landscape area.</p>	<p>Respond and resolve as necessary.</p>
<p>7. Emergency support requests by the Police Department or the Fire Department.</p>	<p>Respond and assist in appropriate manner requested.</p>

Situation**Response**

8. Malfunction of traffic signal.	Respond and switch panel to flashing red, set out temporary stops in all four directions, contact signal contractor or Caltrans if not a power failure. Contact PG&E if a power failure, contact Police Dept. & advise. Monitor situation periodically, ask Police to notify Public Works if situation resolved. Return to intersection, change panel back to normal operation, and remove temporary stop signs.
9. Alarm set off at public building.	Respond and attempt to find out what set off alarm. Reset alarm if possible. Contact Police Dept. if vandalism or burglary was cause. Contact alarm company if it appears to be a malfunction of alarm.
10. Vandalism or graffiti at picnic areas.	Respond and resolve as necessary.
11. Broken window or door at public building.	Respond and repair as necessary. It may be necessary to do temporary boarding up. Contact Police Dept. and have report made on incident.
12. Broken Fire Hydrant or leaking water.	Contact Cal Water or Severn Trent. Provide traffic control as necessary.

City of Dixon

Wastewater Collection's System Maintenance Plan

Work Procedure for Wastewater Collection's System

Maintenance, Cleaning, and CCTV Operations

1. Required Equipment, Training, Paperwork:

- a. Required Equipment_
 - i. Vacuum truck (Training, CDL B, tank and air brake endorsements).
 - ii. CCTV (Training, NASSCO)
 - iii. Atmosphere Monitors (training)
- b. Required Training & Certifications:
 - i. CWEA Collections System Maintenance Certification (Grade 1 or higher)
 - ii. Manhole & Lift Station Entry (Confined Space Entry Training)
 - iii. Pathogen Exposure (Personal Protective Equipment)
 - iv. Traffic Management (Flagger Training)
 - v. Collection System Response (Training)
- c. Required Paperwork:
 - i. Overflow Response Forms (SSO/PLSD/SSMP Overflow Forms, Training)

2. Purpose:

The purpose of this policy is to provide the City of Dixon's procedures for maintaining its sanitary sewer system. The system consists of about 78 miles of sewer main and two lift stations. These procedures are necessary to prevent sewer backups into homes, businesses, and the natural environment. Maintenance also protects and extends the life of the City's sanitary sewer system. The City will provide such maintenance in a safe and cost effective manner, keeping in mind safety, budget, personnel and environmental concerns. The City will use City employees, equipment, and/or private contractors to conduct this maintenance. City Council will be made aware of and participate in reviewing and updating this policy. City staff has posted this policy on the City's website under the wastewater division.

3. Sanitary Sewer line Routine Maintenance, Repair and Inspection:

- a. Scope of City's Responsibility:
 - i. The City will maintain the City's sanitary sewer mains only.
 - ii. Private property owners are responsible for the maintenance of their own service line connection all the way to the City's sewer main.
- b. Schedule:
 - i. The City will clean and CCTV every City sanitary sewer line at the maximum of every four years.
- c. Problem Area:
 - i. A problem area is an area that has had a sewer backup, blockage or a known problem such as grease accumulation or shallow slope. Staff will place these areas on a monthly problem manhole checklist. As needed, staff may clean

sewer lines at a frequency greater than every four years to prevent sanitary sewer backups.

- d. Cleaning Operations:
 - i. City staff will clean sanitary sewer mains with the City's vacuum truck or in unusual cases hire the City's contract contractor for specialty sewer maintenance services. The contractor response will depend upon the location, type of line and the nature of the problem.
- e. Television Inspection Operations:
 - i. Sanitary sewer mains will be inspected with the City's CCTV or in unusual cases hire the City's contract contractor for specialty sewer CCTV inspection services. The contractor response will depend upon the location, type of line and nature of the problem.
 - ii. Any mains that are located on a street where a street maintenance project is planned, will be inspected prior to those projects and after the completion of the projects to check for sewer line damage. The City will ensure that newly constructed mains, be CCTV inspected before the City takes ownership, by the contractor of the City.
- f. Visual Inspection:
 - i. Every four years, City staff will inspect all sewer manholes.
- g. Flushing Inspection:
 - i. City staff will flush every dead-end manhole annually to clean out the line and to determine if there are any problems with the flow.
- h. Grease Traps:
 - i. City staff will maintain a record of all grease traps and sand filters on the City collection system.
 - ii. City staff may inspect grease traps and sand filters to ensure compliance with the City of Dixon Municipal Code.
- i. Root Control:
 - i. The City controls root intrusions into the City's sewer mains with a mechanical root cutting cleaning head. In some cases, City staff may call in the City's contract contractor for specialty sewer root maintenance services.
 - ii. Older established developments in town with large trees, particularly buildings with clay sewer service lines, often experience root intrusions in moist and nutrient laden sewer waters. Private building owners will be responsible for root control in their private later service lines.
- j. Sanitary Sewer System Evaluation:
 - i. The City will conduct hydraulic studies of sewer mains. The study will evaluate wastewater flow bottlenecks, impact of growth and expansion, age, composition of existing mains and documented problem areas.
 - ii. From the studies, staff will update the City's Capital Improvement Plan (CIP).
- k. Sanitary Sewer System Repairs:

- i. The wastewater/collections division will repair manholes and mains as needed using the City's contract contractor. When the scope of repairs exceeds the operating budget or capability of wastewater/collections division, staff may add the needed work as a line item in the next budget or prioritized and tracked for future implementation by the CIP. The City Council reviews and approves the budget and CIP.
 - l. Sampling and Testing:
 - i. The wastewater/collections division may sample discharges into the collection system in order to monitor chemical or organic loads.
- 4. **Sanitary Sewer Lift Station Routine Maintenance, Repair and Inspection:**
 - a. Schedule:
 - i. The wastewater/collections division will maintain the sanitary sewer lift stations semi-annually using specific maintenance that is reasonable and recommended. Staff reflects the maintenance in the checklists for each lift station.
 - b. Hour/Amp Meters:
 - i. City staff will check the hour/amp meters at the lift stations on a daily basis to ensure that the lift stations are working properly and to detect any problems in the system.
- 5. **Sanitary Sewer Emergency Response:**
 - a. Definition:
 - i. An emergency response occurs in response occurs in response to a call from dispatch, citizens, fellow employees, or an alarm that indicates that there is a possible problem in the sanitary sewer system.
 - b. Response:
 - i. After receiving notice of a possible problem, an employee will respond and determine if there is a problem in the City's sewer system. If there is, he or she will remedy it based on accepted procedures. If necessary, the City employee will obtain assistance from other City employees or outside contractors such as plumbers, electricians or engineers.
- 6. **Sanitary Sewer Inflow/Infiltration:**
 - a. Definition:
 - i. Inflow is storm water misdirected into the sanitary sewer system through intentional connections such as sump pumps and roof leaders. Infiltration is storm and ground water getting into the sanitary sewer system through cracks or leaks in the sewer pipes or manholes. Inflow and infiltrations can lead to backups, overflows, and unnecessary and expensive treatment of storm water.
 - b. Inflow:
 - i. To reduce inflow, the City enforces ordinances banning illegal sewer connections and public education to encourage voluntary compliance.
 - c. Infiltration:
 - i. To reduce infiltration, the City employees will annually inspect manholes and repair any that contribute to this problem.

7. Training:

- a. The City will provide training on a regular basis to employees that will be involved in the routine maintenance and emergency response procedures. The training shall include equipment operations/maintenance, flagger training, atmospheric monitors and SSO/PLSD/SSMP emergency response paperwork and procedures at a minimum.

8. Work Schedule for City Employees:

- a. City employees will work 9/80 or 4/10 shifts. In emergencies, employees sometimes have to work in excess of 9/80 shifts.

9. Weather Conditions:

- a. Staff will conduct sewer maintenance operations only when weather conditions do not endanger the safety of City employees and equipment. Factors that may delay sewer maintenance operations include severe heat, cold, flooding, rain and wind.

10. Documentation:

- a. The City will document all of its inspections, maintenance, and emergency responses for its sanitary sewer system. The City will also document any circumstances where something has occurred that limits its ability to comply with this policy. Staff will keep these records in accordance with the City's record retention schedule.

11. Cleaning and CCTV Operations Schedule and/or Outline:

a. Work Schedule:

- i. Cleaning and CCTV inspections will take place on a weekly basis. Note: staff allocates one week per month for storm drain cleaning and inspections.

ii. Staffing:

- 1. The vacuum truck, unless the street is closed to traffic, will have a three-person crew at a minimum and four or more in high traffic areas.
- 2. CCTV truck two-person crew at a minimum and three or more in high traffic areas.

iii. Schedule:

- 1. Monday, Tuesday, Wednesday, Thursday – Cleaning or CCTV inspections.
- 2. Friday – Equipment schedule maintenance, food service establishment (FSE) inspections, data entry and paperwork.
- 3. Nighttime work – Some areas may need to be cleaned or CCTV inspected at night due to high traffic or CalTrans restrictions on SR 113.

- b. The City's sanitary sewer system is broken up into three major contribution areas (numbers refer to pages on sewer system map):

- i. Area 1 (Pitt School Lift Station Contribution Area).
- ii. Area 2 (Lincoln Street Lift Station Contribution Area).
- iii. Area 3-14 (all other gravity contribution areas).

- c. Cleaning and CCTV operations: Due to staffing levels varying during the week, days for cleaning versus CCTV inspection will vary. In general, each contribution area (1-3) will be cleaned and videoed in full before moving onto the next contribution area. Staff will

typically clean and inspect older neighborhoods before newer neighborhoods. Once all three contribution areas are complete, staff will start the citywide cycle over.

- d. Exceptions to the schedule:
 - i. Emergency Callouts.
 - ii. Approximately one week per month is reserved for storm water cleaning and CCTV inspections.
 - iii. Cleaning areas out of order to address problem areas that need to be cleaned more frequently.
 - iv. Lift station maintenance.
 - v. Other cleaning or CCTV inspections requested by other divisions.
 - vi. Equipment breakdowns or scheduled maintenance.
 - vii. Weather – including severe heat, cold, flooding, rain and wind.
 - viii. Safety – unsafe equipment, unsafe areas due to other department operations or constructions.
 - ix. Manpower – inadequate crew size due to vacations, illness, training or scheduled time off.
 - x. Outstanding restaurant inspections/issues.

SEWER LEGEND

- RCP SEWER PIPE
- - - PVC SEWER PIPE
- - - DIP SEWER PIPE
- - - PVC ENCASED IN STEEL
- - - RCP PIPE LINED WITH PVC
- 18" DIAMETER OF PIPE
- SEWER MANHOLE
- ABANDONED SEWER MANHOLE
- SEWER CLEANOUT



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APPROVED BY:
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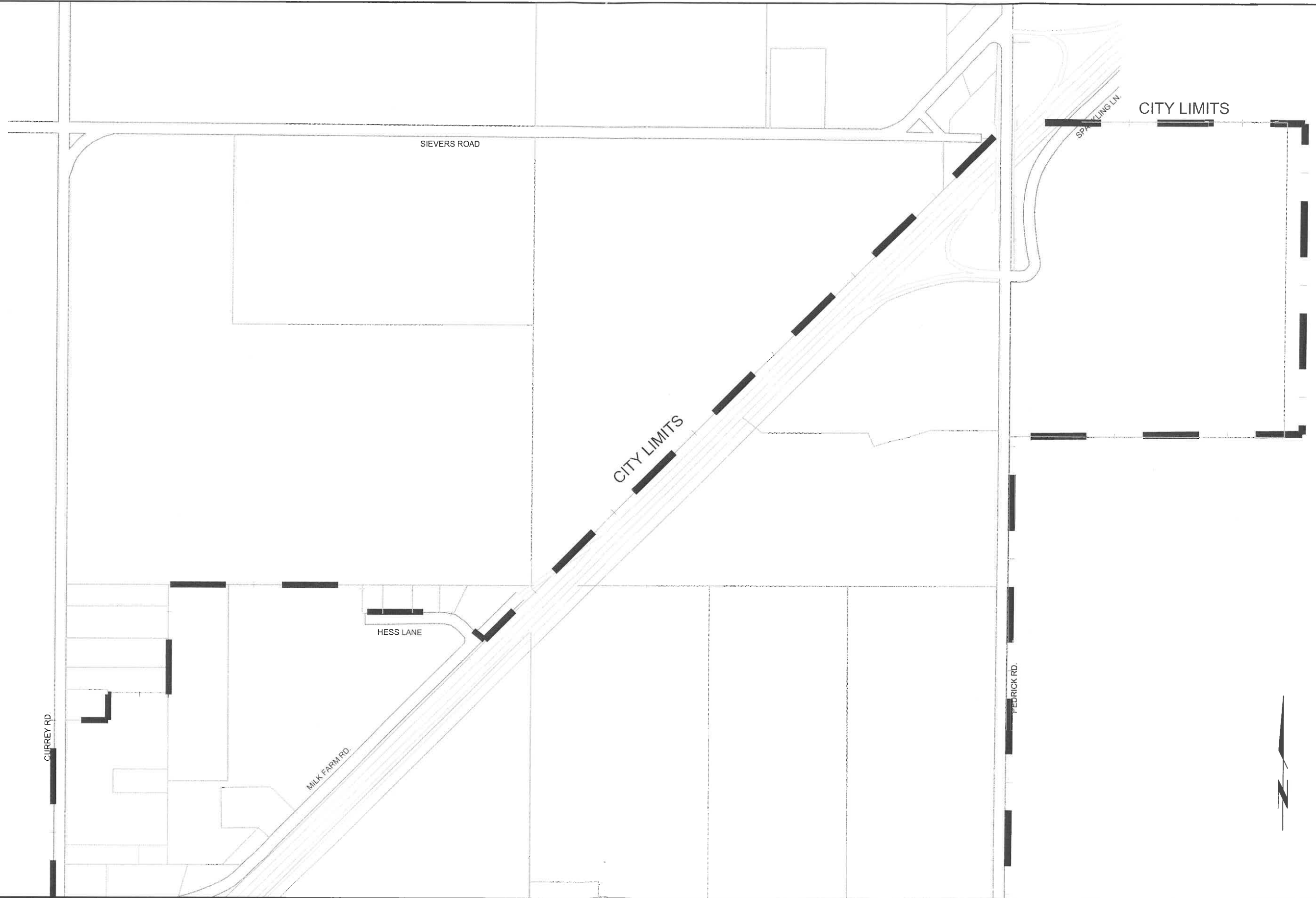
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CITY OF DIXON
SEWER SYSTEM MASTER PLAN

DATE:	AUG. 2008
SHEET	
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PROJ. ENG.:	RWC

APPROVED BY:
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SHEET	3 OF 15



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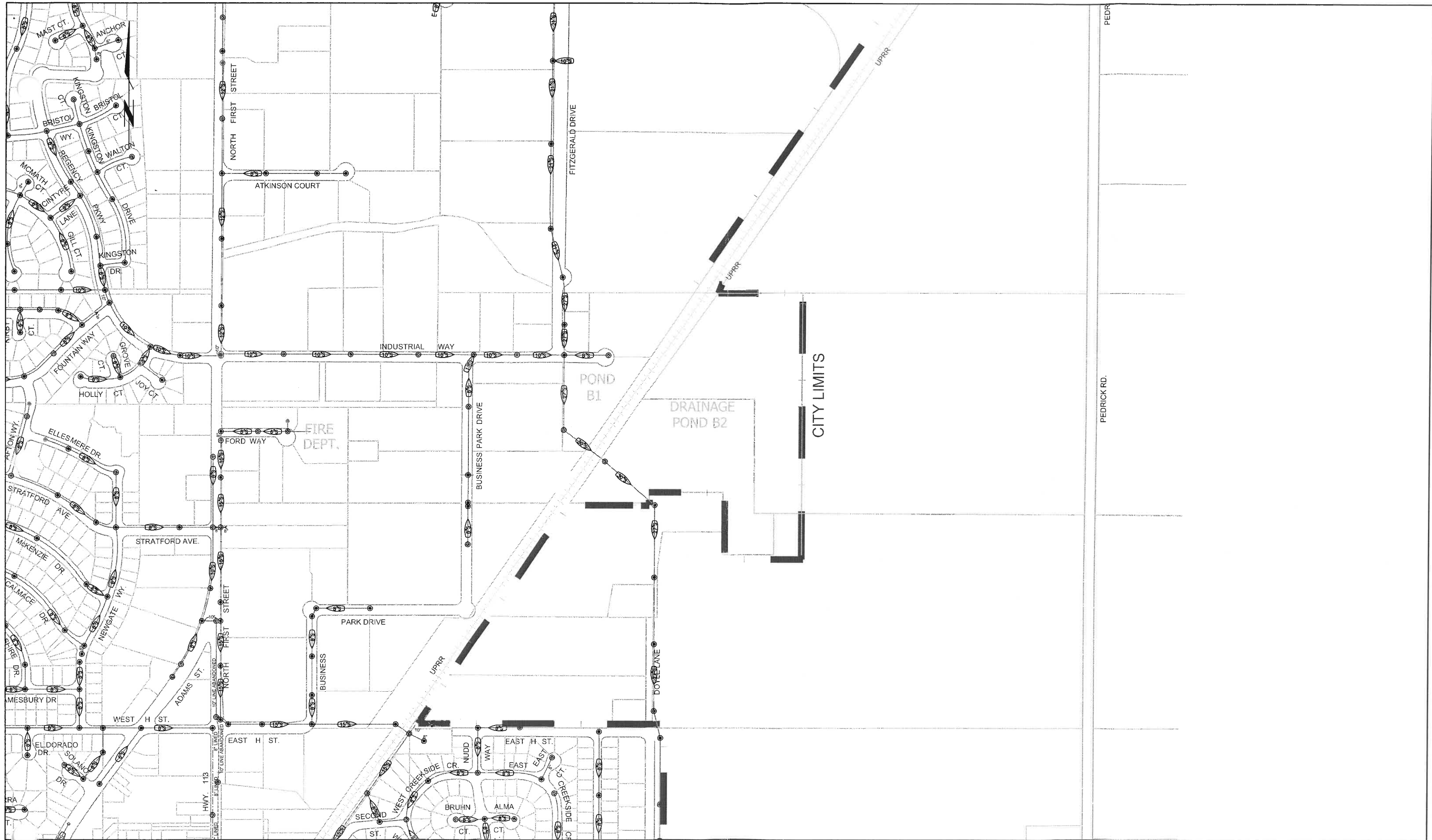
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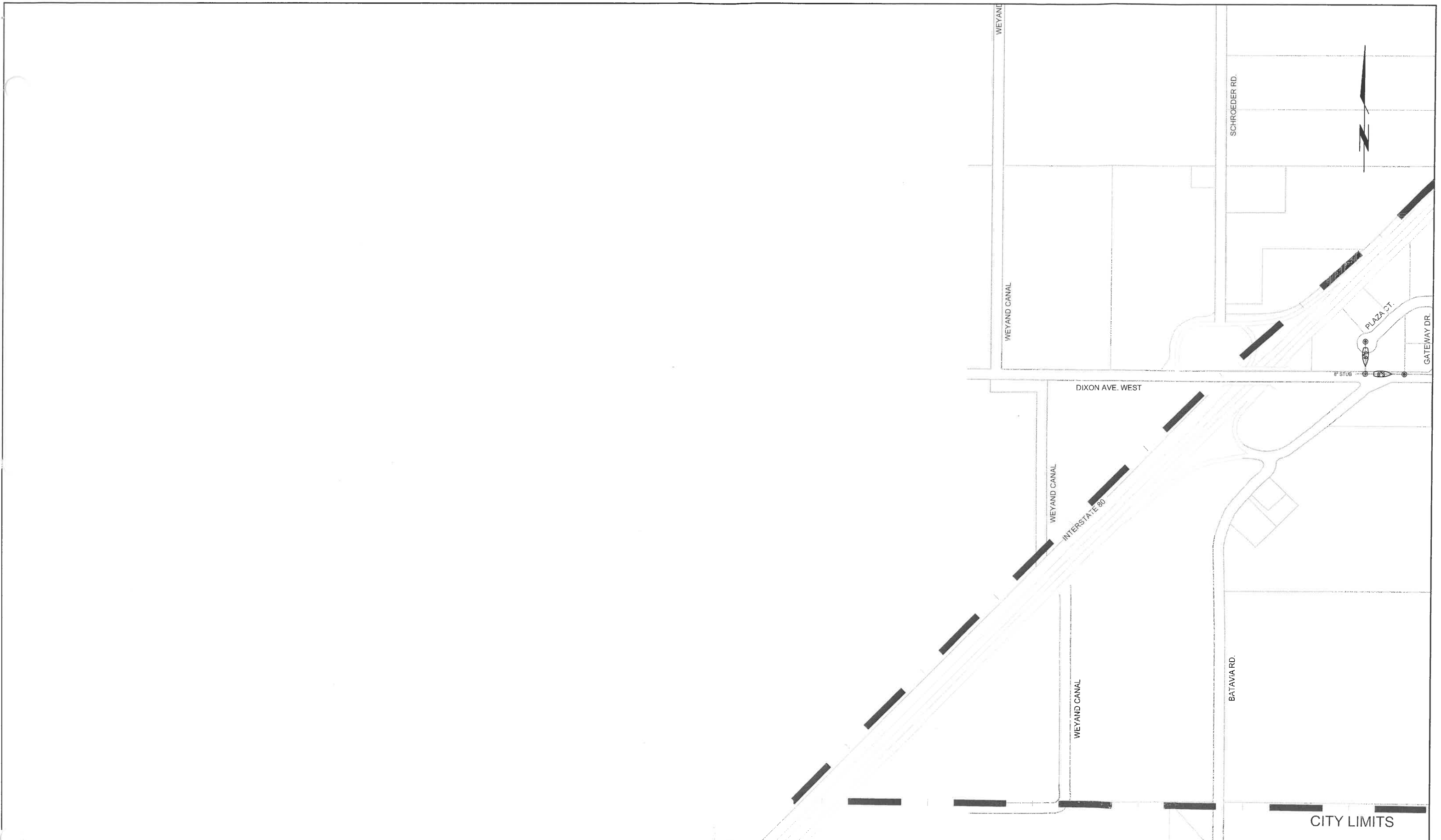
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SEWER SYSTEM MASTER PLAN

DATE:	AUG. 2008
SHEET	6 OF 15



1. GREENWOOD DR.
2. DOGWOOD CT.
3. PINEWOOD CT.
4. REDWOOD CT.
5. BLACKBERRY CT.
6. MAGNOLIA CT.
7. HAWTHORNE CT.
8. SNOWBERRY CT.
9. HAZELWOOD CT.

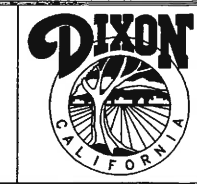
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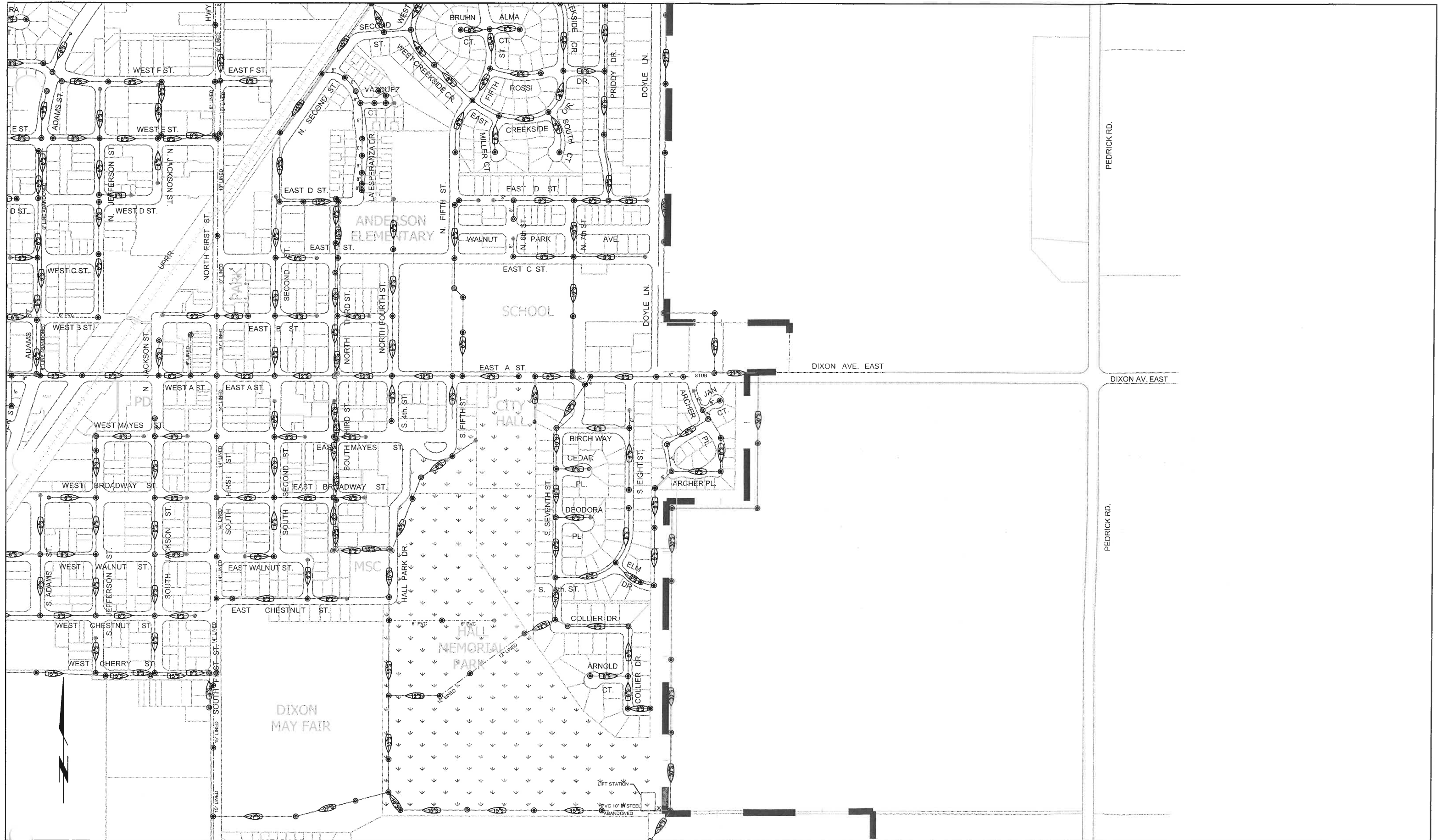
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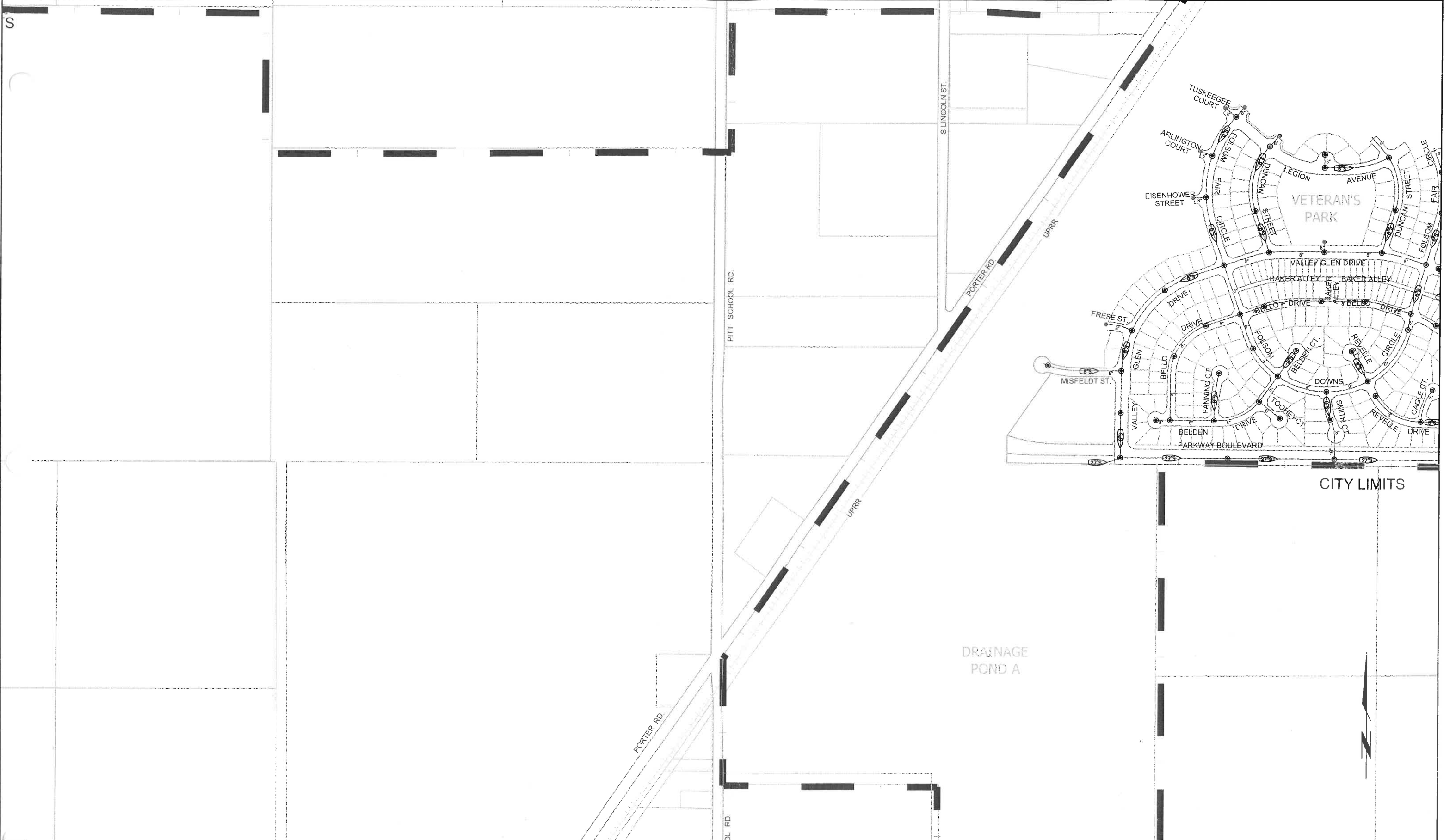
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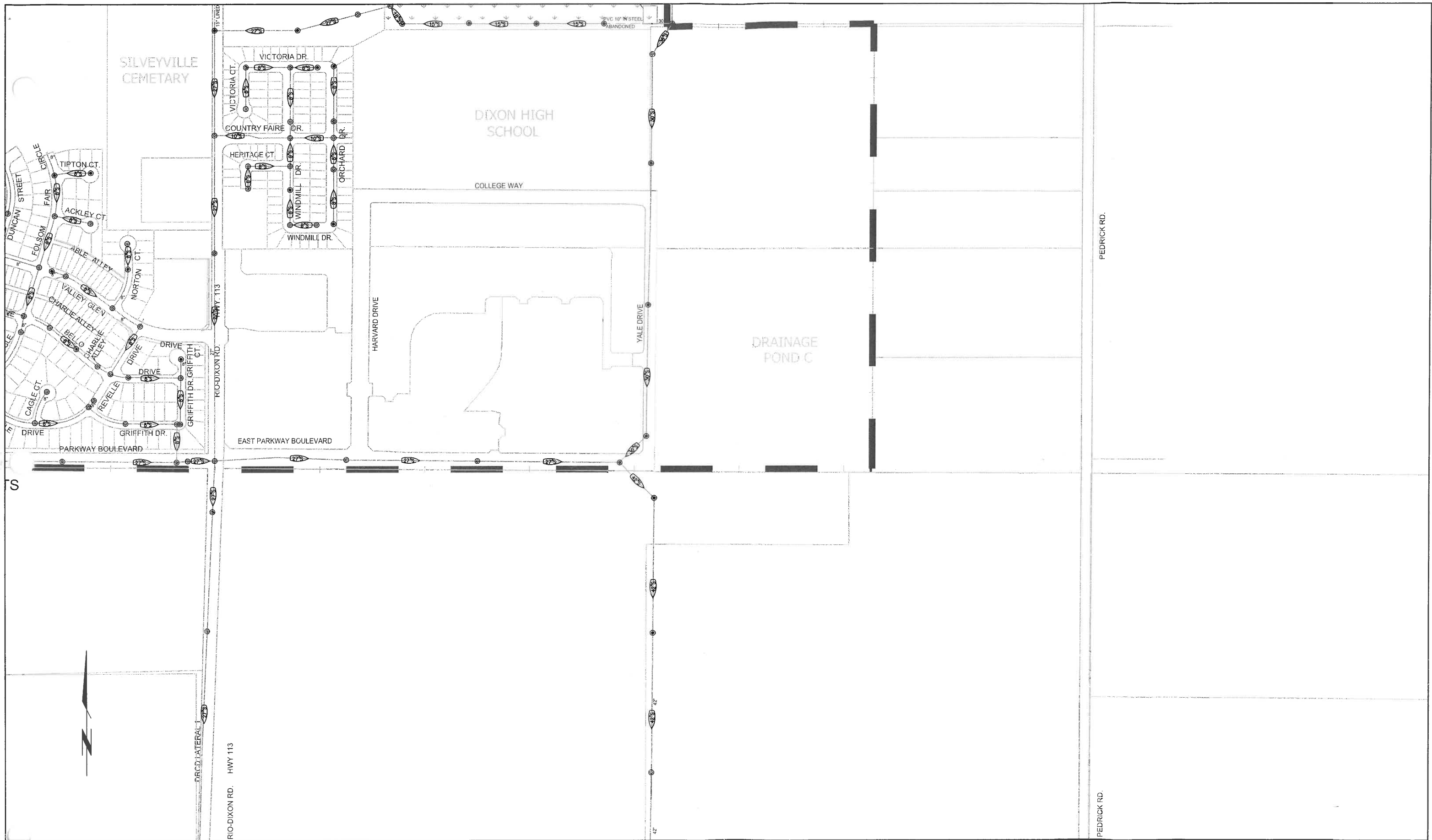
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CITY ENGINEER

ROYCE W. CUNNINGHAM, P.E.
R.C.E. 41985
EXP. 03/31/08



CITY OF DIXON
ENGINEERING DEPARTMENT
600 EAST A STREET, DIXON, CA 95620
PHONE: 707-678-7030 FAX: 707-678-7039

CITY OF DIXON
SEWER SYSTEM MASTER PLAN



NO.	DESCRIPTION	APPD.	DATE

SCALE	
HORIZ:	
VERT:	

BENCHMARK:	
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DRAWN:	JMR
DESIGNED:	JMR
CHECKED:	JMR
PROJ. ENG.:	RWC

APPROVED BY:
CITY ENGINEER

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CITY OF DIXON
SEWER SYSTEM MASTER PLAN

DATE:	AUG. 2008
SHEET	10 OF 15



REVISIONS	△			
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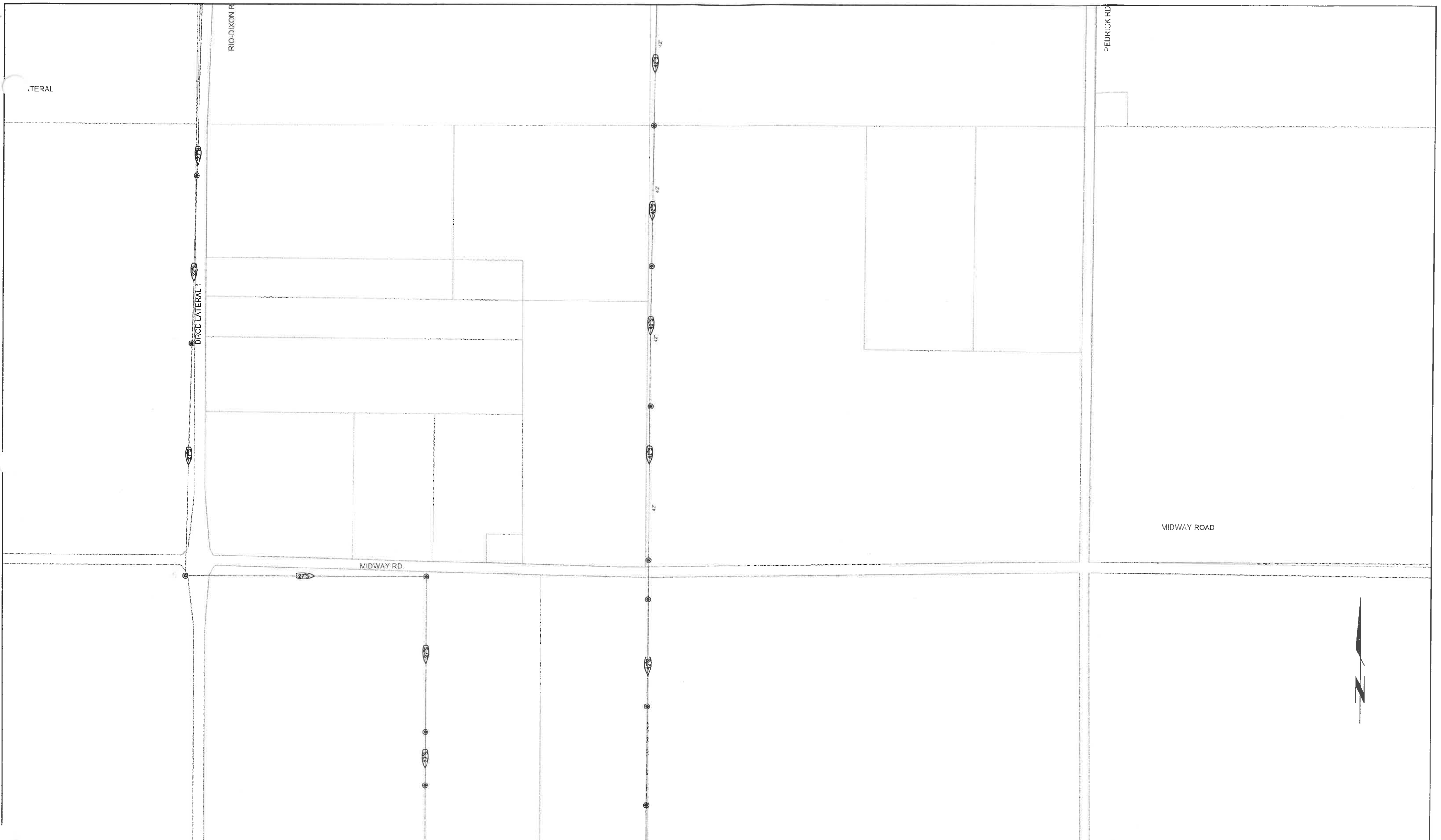
APPROVED BY:
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CITY OF DIXON
SEWER SYSTEM MASTER PLAN

DATE:
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 11 OF 15



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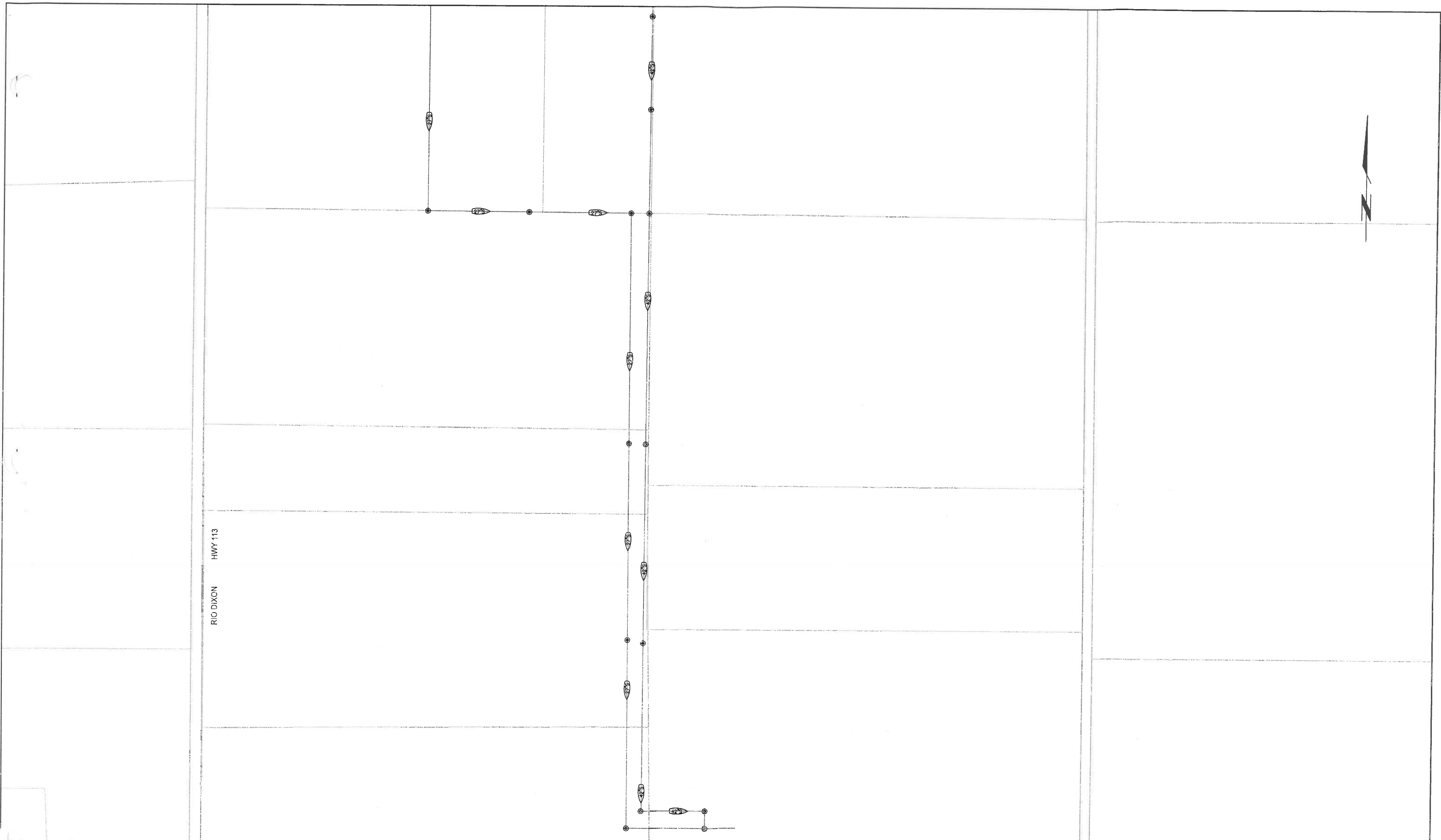


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CITY OF DIXON
SEWER SYSTEM MASTER PLAN

DATE: AUG. 2008
SHEET
12 OF 15





NO.	DESCRIPTION	APPD.	DATE

SCALE
HORIZ:
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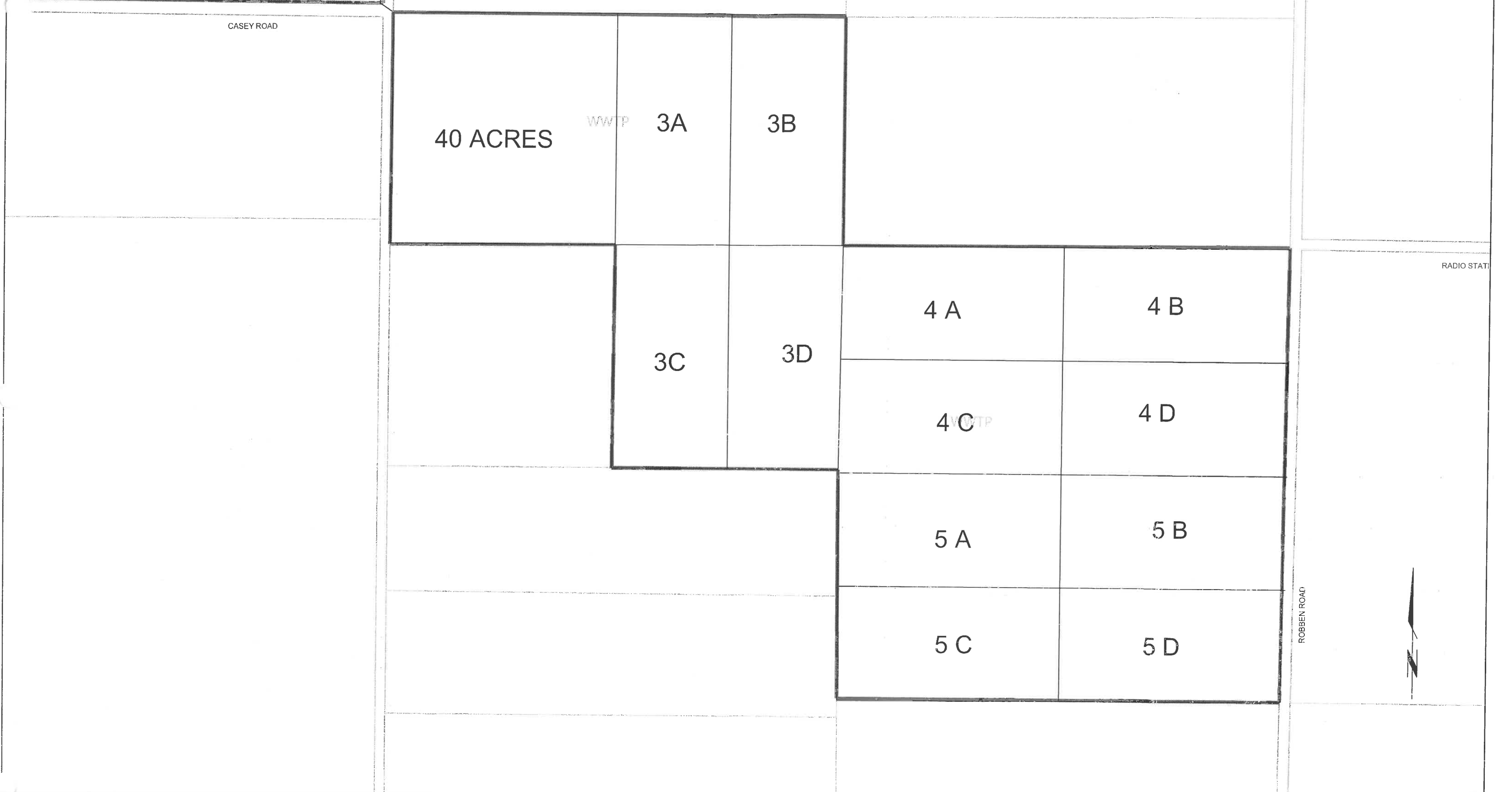


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CITY OF DIXON
SEWER SYSTEM MASTER PLAN

DATE: AUG. 2008
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13 OF 15

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DESIGNED: JMR

CHECKED: JMR

PROJ. ENG.: RWC

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CITY OF DIXON
SEWER SYSTEM MASTER PLAN

DATE:
AUG. 2008

SHEET
15 OF 15

CITY OF DIXON
5 YEAR CAPITAL IMPROVEMENT PROGRAM
(\$ in Thousands -- 000's Omitted)

CIP Number	Project Title	Prior Years	Year 1	Year 2	Year 3	Year 4	Year 5	Beyond 5 Yrs/ Unfunded
			2016-17	2017-18	2018-19	2019-20	2020-21	
Fund 102 COUNCIL DISCRETIONARY								
102 - 132	General Plan Update	574	241	120	0	0	0	0
Fund Total		574	241	120	0	0	0	0
Fund 310 WASTEWATER (NEW PROJECT)								
310 - 107	East-West Sewer Trunk Connector	0	0	790	791	0	0	0
Fund Total		0	0	790	791	0	0	0
Fund 315 WASTEWATER (REHAB)								
315 - 109	27" Sewer Trunk Line Rehabilitation Project	0	0	0	0	0	0	585
315 - 119	Rehabilitation of Sewer Mains & Manholes	675	199	199	199	199	199	398
315 - 123	Salt Reduction Program	612	0	0	0	0	0	0
315 - 125	State Revolving Loan Fund Studies/Application	253	0	0	0	0	0	0
315 - 126	North Lincoln Street Sewer Lift Station Improvements	0	0	742	0	0	0	0
Fund Total		1,540	199	941	199	199	199	983

PROJECT NAME: East-West Sewer Trunk Connector

PROJECT #: 310 - 107

SPONSORING DEPT: Public Works

PROJECT SCOPE:

1. DESCRIPTION:

A new gravity line from the s/w corner of Pitt School Road and West A Streets to the existing sewer trunk system on S. First Street at Parkway Boulevard (southeast corner of Valley Glen Subdivision). City will reimburse developers for project costs to remove the existing lift station at Pitt School Road and West A Streets and incremental costs to increase the size of the Valley Glen and the Southwest areas' sewer trunk line to accommodate flows from the City's existing upstream system and future General Plan area development. Project to be constructed by the Southwest Specific Plan area developers. City to provide supplemental funding only.

2. JUSTIFICATION:

A cost-benefit analysis performed for a 20-year period shows abandoning the existing lift station and connecting to the east-west sewer trunk line will cost approximately half the cost of operating and repairing the lift station. This approach will also reduce maintenance costs and increase infrastructure life expectancy.

3. STATUS:

Technical memo from the Engineering Department which analyzes pipe sizes and costs is complete. The Valley Glen Development Agreement set a cost share for their portion at 36% of the 27" line in Parkway Boulevard. The City and Southwest Area will split the remaining cost (32% each).

4. ADDITIONAL INFORMATION:

a. OTHER AGENCIES/JURISDICTIONS/PRIVATE ENTITIES INVOLVED:

Future development agreements with developers of the Southwest Area.

b. SPECIAL ISSUES:

Project is contingent upon the construction schedule of the remaining sewer trunk from Valley Glen to West A Street by the Southwest Area Developers.

5. SITE/ LOCATION MAP: Specify either Attached or Not Applicable (N/A)

Not Applicable

Project Budget:

1) Funding Sources	Prior Years	FY #1	FY #2	FY #3	FY#4	FY#5	Beyond 5 Years	Project Total
a) Bond Proceeds	0	0	0	0	0	0	0	0
b) Capital Project Funds	0	0	0	0	0	0	0	0
c) Developer Agreements	0	0	460	460	0	0	0	920
d) Developer Impact Fee	0	0	268	268	0	0	0	536
e) Gas Tax	0	0	0	0	0	0	0	0
f) Grants (specify)	0	0	0	0	0	0	0	0
g) Operation Funds	0	0	0	0	0	0	0	0
h) Redevelopment	0	0	0	0	0	0	0	0
i) Reimbursements	0	0	62	63	0	0	0	125
j) Other (specify)	0	0	0	0	0	0	0	0
Total	0	0	790	791	0	0	0	1581

2) Uses	Prior Years	FY #1	FY #2	FY #3	FY#4	FY#5	Beyond 5 Years	Project Total
a) Design/ Environmental	0	0	0	0	0	0	0	0
b) Land Acquisition	0	0	0	0	0	0	0	0
c) Construction	0	0	522	523	0	0	0	1045
d) Admin/ Proj Mgmt	0	0	0	0	0	0	0	0
e) Miscellaneous	0	0	268	268	0	0	0	536
f) Contingencies	0	0	0	0	0	0	0	0
g) Debt Service	0	0	0	0	0	0	0	0
Total	0	0	790	791	0	0	0	1581

(Funding Sources and Uses in \$1,000 Multiples)

PROJECT NAME: 27" Sewer Trunk Line Rehabilitation Project

PROJECT #: 315 - 109

SPONSORING DEPT: Public Works

PROJECT SCOPE:

1. DESCRIPTION:

Rehabilitation of the existing 27" sewer trunk from Hall Park to the Wastewater Treatment Plant and addition of manholes.

2. JUSTIFICATION:

Repairs are needed to eliminate roots, cracks, and joint separation which contribute to groundwater infiltration and the potential for major pipe failures. Manholes shall also be repaired. Additional manholes will be added as required to improve access for maintenance. The line is valuable for both redundant service to the City and future development.

3. STATUS:

The 27" line has been video surveyed. This line is presently inactive as a 42" trunkline conveys wastewater from the City to the WWTF. The Project was included in the 2013 Wastewater Rate Study approved by the City Council. Upon completion of the WWTF, the project schedule will be reviewed, including SRF Loan application, design and bid for construction.

4. ADDITIONAL INFORMATION:

a. OTHER AGENCIES/JURISDICTIONS/PRIVATE ENTITIES INVOLVED:

Solano County and Caltrans for work within their right-of-way.

b. SPECIAL ISSUES:

Project funding is State Revolving Fund loan program.

5. SITE/ LOCATION MAP: Specify either Attached or Not Applicable (N/A)

Not Applicable

Project Budget:

1) Funding Sources	Prior Years	FY #1	FY #2	FY #3	FY#4	FY#5	Beyond 5 Years	Project Total
a) Bond Proceeds	0	0	0	0	0	0	0	0
b) Capital Project Funds	0	0	0	0	0	0	0	0
c) Developer Agreements	0	0	0	0	0	0	0	0
d) Developer Impact Fee	0	0	0	0	0	0	0	0
e) Gas Tax	0	0	0	0	0	0	0	0
f) Grants (specify)	0	0	0	0	0	0	0	0
g) Operation Funds	0	0	0	0	0	0	0	0
h) Redevelopment	0	0	0	0	0	0	0	0
i) Reimbursements	0	0	0	0	0	0	0	0
j) Other (specify)	0	0	0	0	0	0	585	585
Total	0	0	0	0	0	0	585	585

2) Uses	Prior Years	FY #1	FY #2	FY #3	FY#4	FY#5	Beyond 5 Years	Project Total
a) Design/ Environmental	0	0	0	0	0	0	25	25
b) Land Acquisition	0	0	0	0	0	0	0	0
c) Construction	0	0	0	0	0	0	469	469
d) Admin/ Proj Mgmt	0	0	0	0	0	0	46	46
e) Miscellaneous	0	0	0	0	0	0	0	0
f) Contingencies	0	0	0	0	0	0	45	45
g) Debt Service	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	585	585

(Funding Sources and Uses in \$1,000 Multiples)

PROJECT NAME: Rehabilitation of Sewer Mains & Manholes

PROJECT #: 315 - 119

SPONSORING DEPT: Public Works

PROJECT SCOPE:

1. DESCRIPTION:

Repairs to City sewer mains and manholes based on results of video inspection surveys.

2. JUSTIFICATION:

Required to repair broken or damaged sewer mains and manholes in order to reduce infiltration into sewer system that reduces capacity at the Wastewater Treatment Plant. Mandated by Regional Board in May 2006 as part of the Sanitary Sewer Management Plan. Also, necessary as part of ongoing maintenance to keep system functioning and prevent backups into buildings.

3. STATUS:

Results of ongoing video inspection surveys are currently being evaluated to prioritize repairs to the City's wastewater collection system. The annual expenditure was included in 2013 Wastewater Rate Study approved by City Council. Combined previous CIP Project #315-119 (Sewer Mains) with #315-102 (Sewer Manholes) in order to bid and construct a larger project. FY15/16 included budget for Walnut Grove Ave, N 4th St & S 7th St. This project will be designed in Fall 2016, bid in Winter 2016 & constructed in Spring 2017. Additionally, \$300k will be allocated to rehab the sewer main/laterals as part of the S Jefferson St Rehab Project.

4. ADDITIONAL INFORMATION:

a. OTHER AGENCIES/JURISDICTIONS/PRIVATE ENTITIES INVOLVED:

b. SPECIAL ISSUES:

NOTE: SSMP requirements include budgeting for future replacement of the entire collection system.

5. SITE/ LOCATION MAP: Specify either Attached or Not Applicable (N/A)

Not Applicable

Project Budget:

1) Funding Sources	Prior Years	FY #1	FY #2	FY #3	FY#4	FY#5	Beyond 5 Years	Project Total
a) Bond Proceeds	0	0	0	0	0	0	0	0
b) Capital Project Funds	0	0	0	0	0	0	0	0
c) Developer Agreements	0	0	0	0	0	0	0	0
d) Developer Impact Fee	0	0	0	0	0	0	0	0
e) Gas Tax	0	0	0	0	0	0	0	0
f) Grants (specify)	0	0	0	0	0	0	0	0
g) Operation Funds	675	199	199	199	199	199	398	2068
h) Redevelopment	0	0	0	0	0	0	0	0
i) Reimbursements	0	0	0	0	0	0	0	0
j) Other (specify)	0	0	0	0	0	0	0	0
Total	675	199	199	199	199	199	398	2068

2) Uses	Prior Years	FY #1	FY #2	FY #3	FY#4	FY#5	Beyond 5 Years	Project Total
a) Design/ Environmental	44	12	12	12	12	12	24	128
b) Land Acquisition	0	0	0	0	0	0	0	0
c) Construction	534	157	157	157	157	157	314	1633
d) Admin/ Proj Mgmt	87	26	26	26	26	26	52	269
e) Miscellaneous	6	2	2	2	2	2	4	20
f) Contingencies	4	2	2	2	2	2	4	18
g) Debt Service	0	0	0	0	0	0	0	0
Total	675	199	199	199	199	199	398	2068

(Funding Sources and Uses in \$1,000 Multiples)

PROJECT NAME: Salt Reduction Program

PROJECT #: 315 - 123

SPONSORING DEPT: Public Works

PROJECT SCOPE:

1. DESCRIPTION:

Program includes a public education and outreach program regarding ways to reduce salt impacts to wastewater. Program also includes restrictions on new water softeners, and a Water Softener Removal Incentive Program, which expired in FY12/13.

2. JUSTIFICATION:

Reducing the salt content of Dixon's wastewater is required in order to comply with Regional Board requirements.

3. STATUS:

New ordinances placing restrictions on water softeners were adopted by the City Council in December 2008. Public education and outreach programs have been implemented and are ongoing. Project included in 2013 Wastewater Rate Study approved by City Council.

4. ADDITIONAL INFORMATION:

a. OTHER AGENCIES/JURISDICTIONS/PRIVATE ENTITIES INVOLVED:

Regional Water Quality Control Board

b. SPECIAL ISSUES:

N/A

5. SITE/ LOCATION MAP: Specify either Attached or Not Applicable (N/A)

Not Applicable

Project Budget:

1) Funding Sources	Prior Years	FY #1	FY #2	FY #3	FY#4	FY#5	Beyond 5 Years	Project Total
a) Bond Proceeds	0	0	0	0	0	0	0	0
b) Capital Project Funds	0	0	0	0	0	0	0	0
c) Developer Agreements	0	0	0	0	0	0	0	0
d) Developer Impact Fee	0	0	0	0	0	0	0	0
e) Gas Tax	0	0	0	0	0	0	0	0
f) Grants (specify)	0	0	0	0	0	0	0	0
g) Operation Funds	612	0	0	0	0	0	0	612
h) Redevelopment	0	0	0	0	0	0	0	0
i) Reimbursements	0	0	0	0	0	0	0	0
j) Other (specify)	0	0	0	0	0	0	0	0
Total	612	0	0	0	0	0	0	612

2) Uses	Prior Years	FY #1	FY #2	FY #3	FY#4	FY#5	Beyond 5 Years	Project Total
a) Design/ Environmental	0	0	0	0	0	0	0	0
b) Land Acquisition	0	0	0	0	0	0	0	0
c) Construction	0	0	0	0	0	0	0	0
d) Admin/ Proj Mgmt	57	0	0	0	0	0	0	57
e) Miscellaneous	555	0	0	0	0	0	0	555
f) Contingencies	0	0	0	0	0	0	0	0
g) Debt Service	0	0	0	0	0	0	0	0
Total	612	0	0	0	0	0	0	612

(Funding Sources and Uses in \$1,000 Multiples)

PROJECT NAME: State Revolving Loan Fund Studies/Application

PROJECT #: 315 - 125

SPONSORING DEPT: Public Works

PROJECT SCOPE:

1. DESCRIPTION:

Studies, financial plans and associated staff time needed to procure for a State Revolving Fund loan to fund expansion to the Wastewater Treatment Plant and other system improvements to meet Regional Board requirements. Studies include descriptions of specific projects included in the loan, a water balance study, application materials, and the facilities plan prepared under past CIP #315-108. Project is no longer used beyond FY14/15

2. JUSTIFICATION:

The State Revolving Fund (SRF) provides low-interest loans to cities in need of financial assistance to fund wastewater system improvements.

3. STATUS:

SRF application was submitted in Dec. 2013. SRF Installment Sale Agreement executed in Oct. 2014. Disbursement of funds began in Feb. 2015.

4. ADDITIONAL INFORMATION:

a. OTHER AGENCIES/JURISDICTIONS/PRIVATE ENTITIES INVOLVED:

Regional Water Quality Control Board

b. SPECIAL ISSUES:

N/A

5. SITE/ LOCATION MAP: Specify either Attached or Not Applicable (N/A)

Not Applicable

Project Budget:

1) Funding Sources	Prior Years	FY #1	FY #2	FY #3	FY#4	FY#5	Beyond 5 Years	Project Total
a) Bond Proceeds	0	0	0	0	0	0	0	0
b) Capital Project Funds	0	0	0	0	0	0	0	0
c) Developer Agreements	0	0	0	0	0	0	0	0
d) Developer Impact Fee	0	0	0	0	0	0	0	0
e) Gas Tax	0	0	0	0	0	0	0	0
f) Grants (specify)	0	0	0	0	0	0	0	0
g) Operation Funds	253	0	0	0	0	0	0	253
h) Redevelopment	0	0	0	0	0	0	0	0
i) Reimbursements	0	0	0	0	0	0	0	0
j) Other (specify)	0	0	0	0	0	0	0	0
Total	253	0	0	0	0	0	0	253

2) Uses	Prior Years	FY #1	FY #2	FY #3	FY#4	FY#5	Beyond 5 Years	Project Total
a) Design/ Environmental	0	0	0	0	0	0	0	0
b) Land Acquisition	0	0	0	0	0	0	0	0
c) Construction	0	0	0	0	0	0	0	0
d) Admin/ Proj Mgmt	53	0	0	0	0	0	0	53
e) Miscellaneous	200	0	0	0	0	0	0	200
f) Contingencies	0	0	0	0	0	0	0	0
g) Debt Service	0	0	0	0	0	0	0	0
Total	253	0	0	0	0	0	0	253

(Funding Sources and Uses in \$1,000 Multiples)

PROJECT NAME: North Lincoln Street Sewer Lift Station Improvements PROJECT #: 315 - 126

SPONSORING DEPT: Public Works

PROJECT SCOPE:

1. DESCRIPTION:

Reconstruct the sewer lift station located on North Lincoln Street to included new piping, overflow controls, above grade pumps, and service building.

2. JUSTIFICATION:

The existing lift station on North Lincoln Street is deteriorating and requires a significant amount of maintenance. The original lift station was located in the street and was relocated to its current location when North Lincoln Street was widened. The piping system was constructed to divert flow to the current lift station, however the pipe is cracked and needs to be replaced. The placement of the existing pumps in the well require maintenance staff to enter the confined space for routine and emergency service to the pumps. Locating the pumps above grade will reduce exposure of maintenance staff to hazardous conditions.

3. STATUS:

Public Works maintenance staff is currently repairing pipes and pumps at the lift station to keep the system operating however the repairs are becoming significant and will require reconstruction of the system. SRF Fund to fund construction with repayment from development fees & Operations and Maintenance fees. Project will be designed and advertised for bidding in FY2017/18.

4. ADDITIONAL INFORMATION:

a. OTHER AGENCIES/JURISDICTIONS/PRIVATE ENTITIES INVOLVED:

None.

b. SPECIAL ISSUES:

Reconstruction of the lift station will require bypass pumping the keep the system in operation during construction.

5. SITE/ LOCATION MAP: Specify either Attached or Not Applicable (N/A)

Not Applicable

Project Budget:

1) Funding Sources	Prior Years	FY #1	FY #2	FY #3	FY#4	FY#5	Beyond 5 Years	Project Total
a) Bond Proceeds	0	0	0	0	0	0	0	0
b) Capital Project Funds	0	0	0	0	0	0	0	0
c) Developer Agreements	0	0	0	0	0	0	0	0
d) Developer Impact Fee	0	0	0	0	0	0	0	0
e) Gas Tax	0	0	0	0	0	0	0	0
f) Grants (specify)	0	0	0	0	0	0	0	0
g) Operation Funds	0	0	0	0	0	0	0	0
h) Redevelopment	0	0	0	0	0	0	0	0
i) Reimbursements	0	0	0	0	0	0	0	0
j) Other (specify)	0	0	742	0	0	0	0	742
Total	0	0	742	0	0	0	0	742

2) Uses	Prior Years	FY #1	FY #2	FY #3	FY#4	FY#5	Beyond 5 Years	Project Total
a) Design/ Environmental	0	0	37	0	0	0	0	37
b) Land Acquisition	0	0	0	0	0	0	0	0
c) Construction	0	0	575	0	0	0	0	575
d) Admin/ Proj Mgmt	0	0	65	0	0	0	0	65
e) Miscellaneous	0	0	0	0	0	0	0	0
f) Contingencies	0	0	65	0	0	0	0	65
g) Debt Service	0	0	0	0	0	0	0	0
Total	0	0	742	0	0	0	0	742

(Funding Sources and Uses in \$1,000 Multiples)

Wastewater Collection Needs, Wants and Wish List

1. Needs

- a. **Cleaning Heads and Attachments for Vac-Con Equipment (as of present, the City does not own the proper cleaning nozzles/heads to clean every type and size of sewer line maintained by the City of Dixon, properly. Everything listed below will cover us for all of our cleaning needs for VCP, PVC, Roots, Protruding Laterals and Grease issues)**

i. **Bulldog Jet Cleaning Nozzle for 6" VCP & PCV..... \$900**

1. We would like to purchase a Bulldog Jet Cleaning Nozzle setup for our Vac-Con Truck for cleaning grease and debris out of 6" sewer lines. We have a Rotary Jet Nozzle we use for greasy lines called a Bulldog as well, which is designed for 8" sewer line and larger. This is the nozzle we were using on Jefferson Street in the 6" sewer line and was most likely the reason we had water burp up in the homeowner's toilet, because the nozzle had too much pressure for the small 6" line. (See Attached Flier)

ii. **Bulldog Cleaning Head Skid Attachments for 8" to 24" VCP & PVC..... \$500**

1. We have a Bulldog cleaning nozzle for cleaning 8" sewer lines and we would like to buy the skid attachments so it can be used on 10 to 24 inch sewer lines. (See Attached Flier)

iii. **Propeller Adjustable Nozzle for 24" to 48" VCP & PVC \$3,000**

1. We would like to purchase a Propeller Nozzle setup for our Vac-Con Truck for cleaning 24" to 48" sewer lines. (See Attached Flier)

iv. **Root & Lateral Cutter \$7,165**

1. We would like to purchase a Rotating Chain and Cable Scraper with all of the attachments to remove roots, scale and cut off protruding laterals for up to 16" sewer lines. We would also like to purchase the skid and attachments to allow it to be converted to handle pipe sizes from 16" to 32". (See Attached Flier and price Quote from MME)

b. **Critical Parts List and for Vac-Con w/Tax for SSMP Requirements. (This list was provided by Vac-Con, Inc.)..... \$3,979**

- i. (2 ea) V-662-0205 Hose Real Hycon Ball Valve
- ii. V-662-0053.....Main Water Relief Valve
- iii. U-UEMP625-600 1"x600' Polymer 2500psi Hose
- iv. V-624-0009..... Hydraulic Filter (Gresen)
- v. V-624-0083..... Hydraulic Filter (Rexroth)
- vi. V-624-0158..... Hydraulic Filter
- vii. V-642-0026..... Hose Real DBL 50, Chain 52"
- viii. (2 ea) V-642-0010 DBL Chain Link
- ix. V-663-0002..... Hose Real 1.25" Rotary Union
- x. (9 ft) V-680-0001 Vacuum Boom 8" Kanaflex Hose

- xi. V-631-1061.....Emergency Kill Switch
- xii. (2 ea) V-690-0847Rear Door Outlet Seals
- xiii. V-690-0848.....Vacuum Inlet Seal
- xiv. V-690-0440.....Vacuum Breaker Seal
- xv. V-690-0097.....Bearing Rear Door Lock
- xvi. V-642-0015.....DBL Roller Chain for Boom
- xvii. (2 ea) V-640-0002Water Pump 3 Groove Pump Belt R5VX950
- xviii. V-640-0020.....Hydrostatic Pump Power Band 5VX500
- xix. V-690-0023.....Debris Tank Auto Shutoff Float Ball

c. Lift Stations

i. Lincoln Street Lift Station.....\$?

- 1. Completely rebuild this lift station as a CIP project. This lift station was built in the mid 70's and is in need of extensive work and is monitored by a 3rd party alarm system. We would like this lift station rebuilt to modern standards, and an alarm system that is linked to our current S.C.A.D.A. computer system and a generator for a backup power source.

ii. Pitt School Lift Station.....\$?

- 1. Completely rebuild this lift station as a CIP project. This lift station was built in the late 80's and is in need of extensive work and is monitored by a 3rd party alarm system. We would like this lift station rebuilt to modern standards, and an alarm system that is linked to our current S.C.A.D.A. computer system and a generator for a backup power source.

d. Change Helix Blocks to Drip Helix System

- i. We are currently using a product from Weco Industries known as Helix blocks. Helix blocks are a solid grease inhibitor enzyme that is suspended in a manhole or lift station at the water surface that releases enzymes over time. We have been using them for a year and a half now, with great results. The grease build up in our lift stations have gone from two foot wide shelves, one foot thick in less than a month, to almost nothing. We would like to change to a liquid helix, metered drip system that does not rely on the helix block being in contact with the water surface to release the enzymes. Changing to the liquid, will ensure a more even distribution of helix enzyme over time, less waste and manpower changing blocks every week. *(See Attached price quote from Weco Industries)*
- ii. **The cost for the initial pump setup and shock treatment for the lift stations and the last 600 feet of sewer line leading to each lift stations would take 120 days, be performed by our crew and cost.....\$1669.68 for each lift station**
- iii. **The cost for each month after the 120 days startup period would be.....\$159.90 for each lift station per month**

2. Wants

- a. **CUES Mini Push Cameras System \$10,965**
- i. We would like to order a CUES Remote Mini Push Camera System with 300' of cable, which can be attached to the New CCTV Truck, so we can video sanitary sewer lines that have been lined, in the event that they are too small for the tractor cams go through. This push camera system can also be used to survey through a Roding Inlet where there is no manhole or through a homeowner's cleanout to survey the point of connection where the homeowners lateral connects to the City sewer main. *(See Attached flier and price quote from Weco Industries)*
- b. **CMMS Program Startup Fee plus \$2,000 min per year for License**
- i. A CMMS Internet based Management system would be a great asset to the Wastewater Treatment Plant and Collections System for the upkeep and maintenance of both systems. It can be used in conjunction with the CCTV truck for condition assessment for repair projects, maintenance projects, maintenance contracts, work orders, asset inventories, CIP projects and the list goes on and on.
- c. **Confined Space and Emergency Spill Equipment Trailer..... \$3,200**
- i. We would like to purchase at a minimum a 8'x12' enclosed trailer with a side door to house our confined space equipment and emergency spill response equipment so we can have it ready to hook up to any truck for a one man, quick mobilization unit in the event of an emergency or spill.
- d. **Trailer for Cones & Signs \$12,000**
- i. We would like to purchase a traffic control trailer identical to the Street Departments unit. It is equipped with holders for all stands, flags, sign, and cones and is equipped with a Port-a-Potty unit.
- e. **Arrow Sign Board..... Used \$5,000 New \$17,000**
- i. We would like to purchase a trailer mounted arrow/sign board identical to the Street Departments unit. The City is in dire need of two units because when you are working on Highway 113, Caltrans requires that 2 units be in operation when closing a lane on 113. During cleaning and CCTV work on 113, Pitt School Road and A Street we will need to close 1 lane. If the City owns 2 units, the Streets Department will no longer need to rent the second unit saving money.
- f. **Manhole Module for CCTV Truck..... \$3,198**
- i. We would like to purchase the Granite XP Manhole Inspection Module for the CCTV truck so we can create video/picture inspection/reports for manholes at the same time we are doing sewer line CCTV inspections. *(See Attached price quote from Weco Industries)*

3. Wishes

a. New Manholes

- i. Convert the 96 Roding Inlets/Cleanouts in the City's collection system to manholes\$800,000?**

- ii. Install 2 New Manholes on the 2 Sewer Lines in town that dead end in front of the Engineering Department and the front yard at 1080 West A Street.....\$20,000?**