



*Updated–Response to Public Comments
of the Agreement and Order Regarding
the Modification of the Consent Decree*

CIVIL ACTION No. 01-978-B-M3 (M.D. LA.)



February 27, 2009

Office of the Parish Attorney



City of Baton Rouge
Parish of East Baton Rouge

222 St. Louis Street
Post Office Box 1471
Baton Rouge, Louisiana
70821

225/389-3114
225/389-5554 (Fax)

MARY E. ROPER
Parish Attorney

February 27, 2009

CERTIFIED - RETURN RECEIPT REQUESTED

Mr. Michael T. Donnellan
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611

Ms. Mona Tates (6EN-WM)
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Mr. Ted R. Broyles II
Louisiana Department of Environmental Quality
602 N. Fifth Street
Baton Rouge, LA 70802

Re: City of Baton Rouge and Parish of East Baton Rouge
Consent Decree - Civil Action No. 01-978-B-M3 (M.D. La.)
Public Comments on the Agreement and Order Regarding Modification of the
Consent Decree (from: Mr. Steve Irving and Ms. Kathryn Lewis)

Dear Sirs and Madame:

The City of Baton Rouge and Parish of East Baton Rouge (City/Parish) hereby request that the proposed Agreement and Order regarding Modification of the Consent Decree (Agreement and Order) in United States of America and State of Louisiana v. City of Baton Rouge and Parish of East Baton Rouge, Civil Action No 01-978-B-M3 (M.D. La.) be entered.

As noted in the Agreement and Order paragraph E:

"E. EPA and LDEQ have reviewed the City/Parish's request to modify the approved Second RMAP as set forth in the 2008 Second RMAP2 modification proposal and determined that the proposed changes are consistent with the objectives set forth in Section V (objectives) of the 2002 Consent Decree, consistent with current industry standards, and provide for completion of all construction and fully operational status achieved by the same deadline set in the approved Second RMAP (i.e. January 1, 2015)."

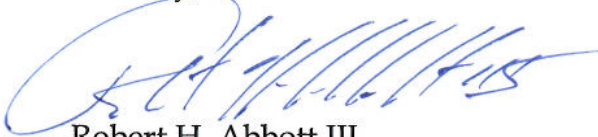
The Agreement and Order was to be lodged with the Court for public notice and comment for a period of not less than thirty (30) days in accordance with Department of Justice policy and in 28 C.F.R. § 50.7, and forty-five (45) days in accordance with the State of Louisiana Department of Environmental Quality La. R.S. 30:2050.7. The City/Parish was e-mailed two (2) public comments received by the Department of Justice in regards to the Agreement and Order on January 5, 2009.

The attached revised technical memorandum is the City/Parish's expanded response to the two (2) public comments received by the Department of Justice on December 17, 2008 from Mr. Steve Irving and Ms. Kathryn Lewis.

The City/Parish does not believe that the comments are relevant to the Agreement and Order regarding the Modification of the Consent Decree. The City/Parish urges that a timely approval of the modification be forthcoming, as the City/Parish has multiple projects impacted by the modification that are ready to begin design as soon as the Agreement and Order is approved by the Court.

I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified portions of this document for which I cannot personally verify their truth and accuracy, I certify as the official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification, that this is true, accurate and complete.

Sincerely,



Robert H. Abbott III

Sr. Special Assistant Parish Attorney

DOJ	1 copy
EPA	3 copies
LDEQ	3 copies

Cc: Honorable Melvin L. "Kip" Holden, Mayor-President
Mr. Mike Futrell, Chief Administrative Officer
Mr. Michael Donnellan, Environmental Enforcement Section, U.S. DOJ
Ms. Mona Bates, USEPA Region 6 (6EN-WM)
Mr. Ted Broyles, LDEQ
Mr. Peter Newkirk/Director DPW
Mr. Wade Shows, City of Baton Rouge/East Baton Rouge Parish Attorney
Mr. Bob Abbott, City of Baton Rouge/East Baton Rouge Parish Attorney's Office
Mr. Bryan Harmon, DPW
Mr. Mark LeBlanc, DPW
Ms. Amy Schulze, DPW
Ms. Cheryl Berry, DPW
Mr. Jim Hawley, CH2M HILL
Mr. Michael Ellis, CH2M HILL
Mr. Gordon Garner, CH2M HILL
Ms. Karen Johnson, CH2M HILL

UPDATED RESPONSE TO PUBLIC COMMENTS

Updated - Response to Public Comments of the Agreement and Order Regarding the Modification of the Consent Decree - Civil Action No. 01-978-B-M3 (M.D. La.)

PREPARED FOR: City of Baton Rouge/Parish of East Baton Rouge Department of Public Works

PREPARED BY: CH2M HILL

DATE: February 25, 2009

1.0 Introduction

The City of Baton Rouge, Parish of East Baton Rouge (C-P) has requested that the proposed Agreement and Order regarding the Modification of the Consent Decree in the United States of America and State of Louisiana v. C-P, civil action No. 01-978-B-M3 (M.D. La.) be entered. The Agreement and Order adopts the C-P's engineering and economic analysis that indicated that the operations of the Central Wastewater Treatment Plant (CWWTP) can be consolidated with the South Wastewater Treatment Plant (SWWTP) after implementation of improvements and expansion of the existing SWWTP facility. This consolidation will position the C-P for fiscal savings through the 25 year planning period

As part of the Consent Decree modification process, public comments were solicited regarding approval of the modification. Those comments that were received are summarized below, and addressed point by point for reference. Additional explanatory materials and excerpts from the public record of compliance with the Consent Decree are attached.

2.0 Summary of Public Comments

The public comments received do not appear to be relevant to the requested modification of the Consent Decree as they do not focus on the reason for the requested modification which is the consolidation of the Central and South Wastewater Treatment Plants. However, this response has been developed to address the legitimate concerns and specific comments received on December 17, 2008 by Mr. Steven Irving and Ms. Kathryn Lewis by providing information about the completed and ongoing work undertaken by the C-P to meet the requirements of the Consent Decree.

The C-P has attempted to provide the responses aligned with the specific comments in summary format and attached more detailed information where it might be helpful.

2.1 Response to Comments by Mr. Steven Irving:

2.1.1 Irving Comment 1. City's response to the poor condition of the sewer system has been limited.

Response Irving Comment 1:

Since the date of entry into the Consent Decree, the C-P has continued to implement complete and comprehensive remedial measures to correct the wastewater collection and conveyance system overflows and discharge permit violations cited at its wastewater treatment plants (WWTPs). System inspections, repair/replacement, and implementation of projects specifically targets relieving collection and conveyance overflows. These comprehensive remedial measures were defined through a series of programs set forth in the Consent Decree which included Supplemental Environmental Projects (SEP), Remedial Measures Action Plan 1 (RMAP1), and Remedial Measures Action Plan 2 (RMAP2). Progress on these programs is reported to the EPA in the required Quarterly and Annual Reports. Through the combination of maintenance, inspection, and construction projects under RMAP1 and RMAP2, the C-P is reducing the number, frequency, and severity of SSOs throughout the service area.

There are a total of ninety-five (95) RMAP1 and RMAP2 projects planned for the C-P SSO Control and Wastewater Facilities Program. The RMAP2 projects are estimated at a cost of \$1.2 billion (in September 2007 dollars), with roughly \$474 million to be appropriated through mid-year 2009. The RMAP1 projects were previously funded. Ninety-two (92) of these projects were included in the RMAP2 submittal (which was adopted in the Agreement and Order) addressing Consent Decree requirements. Three (3) additional projects were included in the RMAP1 submittal included in Exhibit F of the Consent Decree.

There are several other projects the C-P is executing outside of the Consent Decree that will improve the quality of life in Baton Rouge, such as the North WWTP Odor Control Project and Generator Project. The Generator Project, while not required by the Consent Decree, will virtually eliminate problems from SSOs caused by power outages at the hundreds of pump stations in the system. This project is estimated to cost \$43 million.

To date, there are eleven (11) RMAP1 projects already completed in line with Consent Decree requirements, with the final three (3) RMAP1 projects currently under construction. Also in response to specific Consent Decree requirements, the C-P has completed the five (5) required SEP, required in Section XX Supplemental Environment Projects of the Consent Decree.

In addition to the 11 completed RMAP1 projects, the C-P has begun design or construction on forty-six (46) RMAP1 and RMAP2 projects with an additional forty-nine (49) RMAP2 projects (for a total of 95 projects) to be phased and completed in compliance with Consent Decree deadlines by January 1, 2015. All of these projects are currently on schedule to meet the current Consent Decree deadline of January 1, 2015 and are consistent with the Consent Decree goals and objectives, mentioned in Section 3.0 Consent Decree Activities: General Overview. The projects developed

and outlined in the RMAP2 submittal were broken up into three (3) categories which are noted below:

- Comprehensive rehabilitation projects (\$300 million)
- Capacity improvement projects (\$600 million, this approximate cost doesn't include the RMAP1 projects)
- Wastewater treatment and storage improvement projects (\$300 million)

These three (3) types of projects should reduce the number of SSOs throughout the C-P, reduce the amount of rainfall dependent inflow and infiltration (I&I) into the wastewater collection system, provide capacity to convey existing and future flows to be treated at the WWTPs, and also meet National Pollution Discharge Elimination system (NPDES) permits at the WWTPs. Specifically, the comprehensive rehabilitation projects address the poor condition/structural defects of the sewer pipes such as collapsed pipe sections and leaking manholes, in addition to reduction of I&I into the sewer system thereby limiting a source of wet weather SSOs. Refer to Section 3.1 Category 1 – Comprehensive Rehabilitation Projects of this memorandum for more details.

The C-P is required to provide a summary of inspection activities such as sewer cleaning, CCTV inspection, smoke testing, manhole inspections, sewer lines repaired, and manholes rehabilitated, etc. in the Quarterly and Annual EPA Reports. These regular maintenance and inspection activities are required per Consent Decree Section IX Remedial Measures – Preventative Maintenance Program Plans, and Section XII Remedial Measures – Collection System Remedial Program Paragraph 35. These activities are also a critical part of the rehabilitation effort by identifying specific areas that need to be addressed and targeting the types of rehabilitation and repairs that are needed throughout the sewer system. These maintenance and inspection activities are the first step in leading to the rehabilitation of the sewers. As maintenance and inspection activities take place throughout the C-P (such as sewer cleaning, flushing, and root cutting, etc.), the risk for SSOs will be reduced. To date, the C-P has been spending approximately \$3,000,000 per year on these inspection and maintenance projects, which is required of them in the Consent Decree. Maintenance, inspection, and repair activity totals through December 2008 are detailed in Table 1, found in Section 5.0 Other Consent Decree Requirements later in this memorandum. Additionally a status summary of all of the RMAP1 and RMAP2 projects are provided in Attachment A

2.1.2 Irving Comment 2. SSOs occur throughout the C-P which can expose citizens to pathogenic organisms and other substances. There are a number of SSOs that regularly overflow in Baton Rouge. Some are designed to overflow into the streets and the drainage system in order to prevent the sewer system from otherwise entering the homes in some low lying areas. These SSOs are a violation, and something must be done.

Response Irving Comment 2:

The SSOs being addressed were not designed to overflow, but usually developed as the system aged and I&I of stormwater and groundwater increased. The grated

manhole situation is a subset of SSOs that are addressed specifically in other comment responses.

A sanitary sewer overflow (SSO) is a discharge of untreated, raw wastewater into local waterways. Though the make-up of the discharge may vary, the C-P has an approved pre-treatment program in place and is in compliance with this program that prohibits the discharge of regulated pollutants (including any regulated pharmaceuticals) into its sewer system as required by the Clean Water Act, EPA, and LDEQ. The sewer discharge may come from manholes, cracks and other defects in sewer lines, emergency relief outlets, and other sources within a sanitary sewer system. Under certain conditions, sanitary sewer systems may malfunction from disrepair or from being overloaded with more flow than they were designed to handle. Other causes of SSOs are blockages in sewer pipes, excess rainwater entering pipes, or pump station power outages. Typically, wet weather SSOs can be reduced or eliminated by reducing I&I into the wastewater collection system, and/or maximizing or expanding the capacity of the conveyance and treatment systems. Dry weather SSOs can generally be resolved through operational improvements and increased maintenance activities. Additional information about SSOs can be found on the Baton Rouge Sewer Program website:

http://www.brprojects.com/sewer/pages/programinfo_SSO.htm.

Residents can report SSOs to the C-P by using the local “311” dialing system, or through calling the C-P Department of Public Works main phone numbers. All SSOs reported to the C-P are reported to the EPA and LDEQ, with varying reporting criteria specified, dependent on the size/severity of the event. The C-P follows Section XI – Remedial Measures – Reporting of Unauthorized Discharges of the Consent Decree for the SSO events reported. SSO episodes are reported per Consent Decree requirements and tabulated in the Quarterly and Annual EPA Reports. All known unauthorized discharges (or SSOs), no matter the size, etc. are required to be reported to the EPA and LDEQ in the C-P Quarterly and Annual EPA Reports per Consent Decree requirements. In addition, those unauthorized discharges of over 100,000 gallons in a twenty-four (24) hour period are to be orally reported to the EPA and LDEQ by telephone within twenty-four (24) hours of the time the discharge occurs, and a written report notification of these discharges shall also be submitted in writing to the EPA and LDEQ within five (5) days of the event also in line with Consent Decree requirements. Some example SSO notification letters have been included in **Attachment B** of this response. Additional information is provided in Section 3.0 Consent Decree Activities: General Overview and Section 5.0 Other Consent Decree Requirements later in this memorandum and in the Quarterly and Annual EPA reports available on the program website:

http://www.brprojects.com/sewer/pages/Sewer_RegulatoryReporting.htm

Once a SSO is reported, the C-P implements the Sanitary Sewer Overflow Response Plan (SSORP), required under Consent Decree Section X Remedial Measures – Sanitary Sewer Overflow Response Plan. The SSORP includes detailed steps for responding, assessing, cleaning/disinfecting, sampling, testing, and reporting the overflow at a particular location. More specifically the primary objective of the SSORP is “protection of human health and welfare of those who may come in

contact with contaminated surface waters and to satisfy NPDES permit conditions that address procedures for managing SSOs.” The SSORP is designed to ensure every report of a confirmed sewage spill is immediately dispatched to the appropriate C-P personnel so that the effects of the overflow can be minimized with respect to its adverse impacts on beneficial uses, water quality of surface waters, and customer service. The SSORP includes procedures to ensure the safety of residents and for notification and reporting to the appropriate C-P staff, state, and federal authorities.”

The C-P has developed an aggressive comprehensive remedial plan with associated capital construction projects, in addition to incorporating regular maintenance and inspection activities to be implemented to get its SSO problem under control. The engineering studies and modeling inputs used for RMAP1 and RMAP2 development primarily focused on eliminating SSOs throughout the Parish. All three types of projects (comprehensive rehabilitation, pump station and transmission/capacity, and wastewater treatment and storage projects) included in the RMAP2 will help reduce the SSOs throughout the C-P. The C-P’s SSO implementation and completion of all RMAP1, RMAP2, and SEP projects is on schedule to be completed by January 1, 2015. After the recent hurricane activity in the region, the C-P is implementing the previously mentioned Generator Program in which every wastewater pump station and wastewater treatment facility throughout the C-P will have emergency stand-by power available to be put in place during power outages, eliminating overflows from this cause. This is a huge effort outside of the Consent Decree requirements to provide emergency back-up power to over the 400+ pump stations. This will lessen the number of SSOs due to power outages at the pump stations dramatically.

There are some manholes throughout the C-P that contain grated manhole covers. It is important to note that the C-P has not installed any new grated manhole covers in many years. The commenter’s referenced these grated manhole covers and provided photos of a few locations. These grated manhole covers were never designed as part of the original sanitary sewer system construction. They were put in place to provide emergency relief to nearby homes or businesses that were experiencing sewer backups in wet weather, or during rain events or to prevent a hazard to traffic from dislodged manhole covers. These types of manholes were in common use in many sewer systems before the Clean Water Act of 1972. Even after the Clean Water Act some kinds of wet weather relief for separate sewers were approved as a better solution to letting the sewage back up into homes and businesses. The SSO Control and Wastewater Facilities Program and its associated projects (RMAP2) adopted in the Agreement and Order in regards to the Modification of the Consent Decree will eliminate grated manholes from the system as soon as it is feasible to do so without risking damage to private property or a traffic hazard. In some cases, this will require large projects, millions of dollars of funding, and several more years to accomplish this task. See [Lewis Comment 5 Response](#) for more information on specific locations. **Attachment C** describes the approach being used in the SSO Control and Wastewater Facilities Program to identify and eliminate existing open grated manhole covers.

2.1.3 Irving Comment 3. The recent bond issue proposals demonstrate that the C-P is not viewing Consent Decree Compliance as a priority.

Response Irving Comment 3:

This comment seems to be a misunderstanding of how the C-P is financing the SSO Control and Wastewater Facilities Program required under the Consent Decree. It was never planned that the bond proposal referenced by the commenter's would ever include the Consent Decree work. The C-P's \$989 million dollar bond proposal was only to include renovations to the River Center, drainage improvements, traffic light synchronization, a larger prison, and new offices for the police, firefighters, and juvenile services, not wastewater improvement projects associated with the SSO Control and Wastewater Facilities Program and the Consent Decree. The Consent Decree **requires** the financing of all of the wastewater improvements which have been planned to help the C-P comply with the Consent Decree. The SSO Control and Wastewater Facilities Program has a multi-faceted funding stream that is already in place. The C-P has dedicated revenues to fund the sewer work needed to comply with Consent Decree requirements and are in compliance with the schedule of January 1, 2015. All projects are either on or ahead of schedule as reported in the Quarterly and Annual EPA Reports, also available on the program website at: (http://www.brprojects.com/sewer/pages/Sewer_RegulatoryReporting.htm). More specifically, the Program projects are to be funded through revenue/sales tax bonds, sewer user fees, sewer sales taxes, and other sources, totaling approximately \$1.2 billion dollars. These funds are solely to be used for the wastewater improvements as required by the Consent Decree and are funded through current revenue sources. Today, approximately \$324 million is appropriated for the wastewater improvements, with the potential for up to over \$150 million more in the next few months once the pending \$200 million in bonds are sold, for a total to date of approximately \$474 million dollars. In addition, the C-P has not been assessed any stipulated penalties in conjunction with the Consent Decree since they have been in compliance with the Consent Decree terms and schedule requirements and have been making significant progress as required by the EPA and LDEQ. The C-P does not anticipate paying any fines since they are still on or ahead of schedule with all RMAP1 and RMAP2 projects, and the SEP program projects which were completed on schedule.

2.2 Response to Comments by Ms. Kathryn Lewis:

2.2.1 Lewis Comment 1. The C-P has failed to comply with the existing Consent Decree.

Response to Lewis Comment 1:

The C-P is in full compliance with all of the requirements of the Consent Decree. Attachment D summarizes the C-P's detailed compliance with the Consent Decree.

The C-P has been in compliance with the following Consent Decree Requirements and has paid all stipulated penalties assessed to date:

- Section VIII - Elimination of Cross Connections

- Section IX - Preventative Maintenance Program Plans (for the collection system and treatment plants)
- Section X - Sanitary Sewer Overflow Response Plan
- Section XI - Reporting of Unauthorized Discharges (SSOs)
- Section XII - Collection System Remedial Program (First Remedial Action Plan or RMAP1, and Second Remedial Action Plan or RMAP2)
- Section XIII - Treatment Facility Assessment
- Section XIV - Environmental Results Monitoring Plan
- Section XV - Outreach and Public Awareness Plan
- Section XVIII - Reporting (Quarterly and Annual EPA Reports)
- Section XX - Supplemental Environmental Projects
- Section XXXII - Record Keeping

2.2.2 Lewis Comment 2. The Public Awareness Program required by the Consent Decree has not been implemented.

Response to Lewis Comment 2:

The C-P has a Public Awareness Program that has been in place since the date of entry into the Consent Decree (Consent Decree Exhibit H). The C-P has also supplemented the public awareness requirements and recently, a draft Updated Outreach and Public Awareness Program Plan was developed and is currently in the process of being finalized. When it is re-submitted and approved by the C-P, it will then be submitted to the EPA and LDEQ for their review and approval, per Consent Decree requirements. This all is expected to take place within the next six (6) months. The updated Outreach and Public Awareness Program Plan will be more comprehensive than the plan originally submitted and depicted in Consent Decree Exhibit H. Though the Updated Outreach and Public Awareness Program Plan is in the process of being finalized, associated public awareness efforts have been ongoing since the date of entry into the Consent Decree. Public information tools such as the website (<http://www.brprojects.com/sewer/pages/Sewer.htm>) are being continuously updated with new information about the program, public meetings, project information (including monthly progress reports detailing the status of the projects), regulatory information and associated reference documents, and news articles about the SSO Control and Wastewater Facilities Program, etc. Fact sheets and brochures have also been developed that can be accessed via the website, and have been handed out during public meetings that describes pertinent information and aspects about the C-P SSO Control and Wastewater Facilities Program. Program staff attends all City Council meetings, and have given presentations at various other public meetings such as the Baton Rouge Growth Coalition, professional societies, and other economic and planning groups throughout the C-P. Additionally, prior to any field work commencing in areas, informational door hangers are hung on those homes where inspection work will be taking place. Finally, a public survey has also been developed and distributed to several public groups in the C-P during the past few months. It is expected that the outreach and public awareness activities will increase as the SSO Control and Wastewater Facilities Program projects are executed in more neighborhoods. There are significant projects in the areas referenced by the Lewis comments shown in the map in **Attachment E**.

2.2.3 Lewis Comment 3. The C-P's use of time and money is driven by growth, not by Consent Decree requirements.

Response to Lewis Comment 3:

The primary driver for the RMAP1 and RMAP2 projects is to rehabilitate the sewer system and eliminate SSOs. The C-P has proactively planned the rehabilitation, capacity improvement, and wastewater treatment and storage improvement projects to eliminate present SSOs and prevent future SSOs. The primary goals of the Consent Decree require this, along with improving wastewater treatment plant performance in order to meet NPDES permit conditions. Consent Decree projects in the conveyance system are focused on wet weather flows, not system capacity for development. Please refer to Section 4.0 Capacity Improvement Project Planning in this memorandum for more details.

The C-P has an existing Capacity Reservation Program in place that tracks and assesses the capacity available throughout the sewer collection system whenever requests come in. Capacity is not allotted if there is not capacity shown available in this program. The existing Capacity Reservation Program is being streamlined and improved at this time, as better information, data, and tools are available.

An example of how information is being used to assess capacity needs for development is shown in Attachment F concerning the Rouzan development (and Pump Station #5) project which is located in the area of concern, highlighted by the commenter. The C-P requires a capacity assessment for all development requests and will not approve developments where capacity is inadequate unless the capacity deficiency is addressed. Major system upgrades are being done in this area to address both wet and dry weather capacity needs, using good planning and engineering criteria.

The Newkirk memo included in the comments addresses situations where the capacity may not be available, and provides that limited use of private system capacity may be allowed. This would not have any impact on the severity and frequency of SSOs.

In the Rouzan case, capacity will be provided in the system upgrade/rehabilitation based on the Master plan and the needs of the service area, not any particular development because existing capacity was deficient.

2.2.4 Lewis Comment 4. Promotion of the \$989 million dollar bond issue recently voted down in Baton Rouge didn't include sewage as a priority, even though it will cost \$1.2 billion dollars for these improvements.

Response to Lewis Comment 4:

See Response to Irving comment #3 on the next page for more details. This is a misunderstanding of how the consent decree projects are funded.

2.2.5 Lewis Comment 5. Sanitary Sewer Overflows have been underreported, and some of the system is designed to regularly overflow due to the use of grated manhole

lids. Pictures of a home on Peggy Street shown at a Planning Commission meeting is an example of the failing sewer system.

Response to Lewis Comment 5:

Sanitary sewer overflows are reported in compliance with the Consent Decree and can be viewed in the Quarterly and Annual EPA Reports via the website as mentioned in Response to Irving Comment #2 discussed earlier in this memorandum.

The C-P has researched its historical records/database and has found no reported overflows on Peggy Street. In addition, there have been no claims made to the C-P in regards to funds requested for damage to property on that street either. However, any problems that have occurred on this street will be identified and corrected through the Bluebonnet Boulevard – Jefferson Highway Rehabilitation project which is one of the SSO Control and Wastewater Facilities Program projects scheduled to meet Consent Decree requirements, taking place on and surrounding Peggy Street. In Attachment E the Sewer Program Project Map highlights the Peggy Street area and the projects planned in conjunction with the Consent Decree for that area. The area is surrounded by significant projects to be done as part of the Consent Decree work. These projects are further highlighted in the project summary tables shown in Attachment A.

While a few grated manhole lids were originally installed to relieve the sewer in extreme wet weather events to prevent damage to private property and reduce public health threats, they are no longer being installed. The C-P has recorded SSOs on the streets and there are six (6) comprehensive rehabilitation projects and nine (9) pump station and transmission/capacity projects identified to remediate the SSOs at the five (5) locations with grated manhole lids referred to in the public comments on Arrowhead Street, College Drive, Concord Avenue, Moss Side Lane, and Old Hammond Highway. See the map in Attachment E for more details. The projects are also highlighted in Attachment A.

2.2.6 Lewis Comment 6. The Consent Decree Modification (RMAP2 submittal) doesn't address the leaky sewer pipes.

Response to Lewis Comment 6:

The primary focus of the SSO Control and Wastewater Facilities Program is to address and handle the leaky sewer system and over \$300 million will be spent to fix "leaky sewer pipes". The comprehensive sewer rehabilitation and pump station and transmission improvement projects incorporated in the RMAP2 submittal were developed to minimize infiltration and inflow in the system. For additional information, please see Section 3.0 Consent Decree Activities: General Overview of this memorandum for more details.

2.2.7 Lewis Comment 7. The C-P must present its "Worst First List" and detailed engineering studies for solving failed infrastructure issues and elimination of SSOs.

Response to Lewis Comment 7:

The prioritization of projects in the RMAP2 schedule was developed after extensive engineering studies, computer modeling and in some cases evaluation of the practicality and feasibility of alternatives. While a "worst/first" factor is considered, it can only be applied when the technical feasibility allows it to be. For the entire plan to work, the system of large conveyance pipes and the wet weather capacity of the South WWTP must be constructed so that flows from some of the "worst/first" areas have a place to go. SSOs that are miles from the plant may be caused by a backup at the plant and in the lines and pump stations near the plant, so that a local solution does not exist or may not even be needed. The problem will be corrected when the wet weather system capacity upgrades are completed. This dictates that the large investments in the plant/storage facilities and large conveyance pipes come at the front end of the priority list. Because the time frames are so short and so much work is needed, the reality is that the C-P priorities have projects going on in all areas simultaneously and rehabilitation of pipes (approximately 950 miles), and the replacement and upgrading of 140 pumping stations are going on concurrently with treatment plant and storage projects. All RMAP1 projects are completed or are under construction. Currently approximately \$474 million is appropriated to fund the planned projects in the RMAP2 submittal, many of which are underway or soon to be awarded. The projects all have interim completion dates required by the Consent Decree, and progress is reported quarterly and annually as required. Specific project information is available on the website and from the project team. The response summary provides more details on the specific situations highlighted in the Lewis comments. It is fair to say that all of the projects listed in the Consent Decree RMAP2 schedule are needed and depending on where you live might be on a personal "worst first" list. However, there is no regulatory requirement for a "worst first" list and there is no guidance on how such a list might be compiled and factored into the Consent Decree RMAP2 schedule other than that it has been by good engineering and planning of the C-P and its consultants.

3.0 Consent Decree Activities: General Overview

The Agreement and Order in regards to the Modification of the Consent Decree (Agreement and Order) lodged on November 10, 2008 adopts the C-P's September 2008 Second Remedial Measures Action Plan (RMAP2) which was submitted to the Department of Justice, Environmental Protection Agency (EPA), and Louisiana Department of Environmental Quality (LDEQ). This revised RMAP2 submittal resulted from over a year of study and assessment including, sanitary sewer overflow (SSO) analysis, technical wastewater hydraulic modeling of the sewer system, engineering and study of the wastewater collection/transmission system and wastewater treatment plants (WWTP's) throughout the C-P.

This RMAP2 submittal is consistent with current industry standards and the 2002 Consent Decree, including Section V – Objectives:

"It is the express purpose of the Parties entering into this Consent Decree:

- To require the C-P to achieve and maintain compliance with its NPDES permits and CWA;
- To require the C-P to perform the Work required by this Consent Decree in compliance with the applicable schedules; and
- To further the goals and objectives of the CWA, particularly Sections 101, 301 and 307, 33 U.S.C. §§ 1251, 1311, and 1317.”

The RMAP2 submittal also does not extend the schedule beyond the January 1, 2015 deadline already imposed in the Court approved 2002 Consent Decree, and adheres to Section XXXIV Modification – Paragraph 118:

“118. Schedules for completion of the Work, except the deadline for completion of the Collection System Remedial Program set pursuant to Paragraph 34(D), may be modified by the agreement of EPA, LDEQ, and the C-P. All such modifications shall be made in writing.”

There are approximately a total of ninety-five (95) RMAP1 and RMAP2 projects being executed throughout the entire C-P as a part of the C-P SSO Control and Wastewater Facilities Program addressing Consent Decree requirements. The ninety-two (92) RMAP2 projects developed were broken up into three (3) categories which are noted below:

- Comprehensive rehabilitation projects
- Pump station and transmission (capacity) improvement projects
- Wastewater treatment and storage improvement projects

Many of these RMAP2 projects are currently underway, due to the tight schedule required by the Consent Decree. There are also multiple projects are currently ready to begin design as soon as the Consent Decree modification is approved.

3.1 Category 1: Comprehensive Rehabilitation Projects

Based on the Infoworks digital wastewater system model analysis and flow monitoring, approximately twenty-six (26) sub-basins within the collection system were identified as requiring comprehensive rehabilitation, and projects were identified for each. These projects total approximately \$300 million dollars (in Sept. 2007 dollars). Rehabilitation is the primary method of removing excessive infiltration and inflow (I&I) from the collection system. Basin investigation and source detection including cleaning, closed-circuit television (CCTV) inspection, manhole inspections, smoke testing, and dye testing data in each sub-basin are captured and reviewed. The cleaning prior to CCTV inspection alone will remove blockages, grease, debris, roots, etc. and help to prevent overflows by increasing the hydraulic capacity of many of the sewers in addition to providing a relief to customers that are experiencing problems. A process called Basin Characterization is then used to assess the overall condition of each of the sewer components independently of all other components within the basin. Assessments are based solely on the severity of I&I and the structural defects in each sewer component found from the data gathered during the basin investigation process, as well as basin field investigation and historical basin data analysis. Once this is completed, a plan is developed and executed for design in each of the sub-basins. Design and analysis of the first seven (7) sub-basins is currently in progress, with three (3) projects already under construction. Note that any pump station improvements were included in the projects listed in Category 2, Pump Station and Transmission Improvements.

Grated manhole lids have been sparsely used in the past when necessary to protect private property or eliminate a public health or safety hazard. No new lids of this type are being installed and older manhole lids are being eliminated as the system improvements allow. As RMAP2 projects are executed, any grated manhole lids (not standard lids used throughout the C-P) that are encountered will be replaced.

3.2 Category 2: Pump Station and Transmission Improvement Projects

The Infoworks digital wastewater system model was used to identify necessary increases in capacity of existing gravity trunk sewers, pump stations, and transmission mains in order to accommodate peak wastewater flows remaining in the rehabilitated collection system. There are approximately sixty (60) Category 2 projects, including the three (3) remaining RMAP1 projects as well. Of these projects there are approximately twenty-seven (27) projects currently in progress, with nineteen (19) projects in design and eight (8) projects in construction. As these projects are executed, any grated manhole lids (not standard lids used throughout the C-P) that are encountered will be replaced.

3.3 Category 3: Wastewater Treatment and Storage Projects

This category of projects includes improvements at the C-P WWTPs, as well as storage facilities throughout the service area.

Presently, there are not any RMAP2 projects that have been identified at the North WWTP. Also, the existing Central WWTP has insufficient flows to justify the cost of renovation and upgrading for future requirements, and will be retired when the RMAP2 projects are completed at the South WWTP. Flows predicted for the current central service area will be diverted to the South WWTP.

Wastewater Treatment Projects that are part of RMAP2 submittal are summarized below:

- Immediate Action Plan (IAP) South WWTP Project that includes screening improvements, primary treatment improvements, sludge handling improvements, and trickling filter improvement projects. Also, the effluent pumping improvements project has been completed. Note that these projects have been combined into one project for ease of project execution at the South WWTP.
- Phase 1 Improvements at the South WWTP for Wet Weather Flow including influent pumping and flow equalization, for a predicted flow of 365 MGD. Phase 1 also includes screening and grit removal for 200 MGD, and 64 million gallons of equalization storage at the South WWTP.
- Phase 2 Improvements at the South WWTP include wet weather flow treatment with a peak capacity of 200 MGD (as previously approved in the November 2006 RMAP2).

In addition, there are two storage projects sized to reduce peak flows to the North WWTP that are also a part of the RMAP2 submittal, and are listed below:

- Choctaw Storage Facility
- Hooper Storage Facility

These storage projects are part of the transmission system which permits retainage of peak wet weather peak flows and allows the stored flow to be released later for treatment at the treatment plant. All of the nine (9) projects of this type are already under design or have been advertised for construction, or have been completed.

4.0 Capacity Improvement Project Planning

Capacity improvement planning during the past year for the RMAP2 submittal was based on evaluating and replacing those facilities in the collection system where the SSO wastewater hydraulic modeling and field information indicated that the existing collection or transmission system is inadequate to appropriately handle the existing peak wet weather flows. Projects were delineated for the RMAP2 submittal with respect to the location and frequency of SSOs. Existing flows were modeled and capacity issues determined for both dry and wet weather flow conditions, and corresponding projects were delineated as a result.

- The C-P also was proactively planning for future flows/loads and future regulatory requirements through the year 2032 through the development of the Wastewater Master Plan. The Wastewater Master Plan includes projects that are needed to handle future flows in the wastewater collection/transmission system and future loads at the WWTPs, in addition to those projects needed to deal with the deteriorating condition of the collection system and WWTPs. Even though the Wastewater Master Planning effort was not a requirement of the Consent Decree, some elements of the Wastewater Master Plan have been incorporated into the RMAP2 submittal where practical, and when it met the criteria initially established for the RMAP2 projects during planning.

The C-P is being proactive with their planning of these types of projects by sizing the pipes/pump stations for future flow conditions were practical. This will help with preventing potential future SSOs from occurring, which is one of the primary goals of the Consent Decree. Other growth concerns expressed by the commenters are not Consent Decree issues and should be addressed by local planning and zoning processes.

5.0 Other Consent Decree Requirements

Since the date of entry into the Consent Decree, the C-P has been fulfilling many of the other requirements identified in the sections included in the Consent Decree to remain in compliance. For instance, the C-P has been reporting on a quarterly and annual basis per Consent Decree Section XVIII - Reporting and Exhibit I - Quarterly and Annual Report Format. These reports have also been posted on the C-P website for public access. These reports contain specific information that is to be periodically reported. For instance, unauthorized discharges or SSOs are summarized and reported per Consent Decree Section XI Remedial Measures - Reporting of Unauthorized Discharges. In addition, as a part of the quarterly and annual reporting process, the C-P is required to provide a summary of inspection activities such as sewer cleaning, CCTV inspection, smoke testing, manholes inspection, sewer lines repaired, and manholes rehabilitated, etc. A summary of some of these activities since the date of entry into the Consent Decree is provided in [Table 1](#). A more comprehensive list can be found in both the Quarterly and Annual EPA Reports.

TABLE 1
 Summary of Activity Totals
Gravity Collection System (8,510,000 lf & 38,000 manholes)

Activities	Approximate Totals	Percent (%) of Total
Lines Cleaned (lf.)	7,100,000	83
CCTV Inspected (lf.)	4,300,000	50
Smoke Tested (lf.)	4,900,000	58
Manholes Inspected (no.)	34,000	89
Lines Repaired (no.)	15,000	-
Manholes Rehabilitated (no.)	3,000	-

Note: This summary includes totals from date of entry into the Consent Decree through December 31, 2008, taken from the Quarterly EPA Reports. Much more of the collection system will be cleaned, inspected, repaired, rehabilitated, or replaced, etc. as the RMAP2 projects are executed.

The Quarterly and Annual EPA Reports also include project status summaries of the Consent Decree projects that the C-P has been working diligently on since the date of entry into the Consent Decree. Projects such as the First Remedial Measures Action Plan (RMAP1) projects, RMAP2 projects, and Supplemental Environmental Projects (SEP) are included.

6.0 Conclusion

The C-P believes that this memorandum provides a comprehensive response to the public comments received, and also highlights some of the extensive work that has been done to date, associated with the Consent Decree. The public comments received are not relevant to the Agreement and Order regarding the Modification of the Consent Decree. The C-P urges that a timely approval of the modification be forthcoming, as the C-P has multiple projects that are currently ready to begin design as soon as the Consent Decree modification is approved.

ATTACHMENT A
STATUS OF RMAP1 AND RMAP2 PROJECTS

RMAP1 Project Status Summaries

TABLE A1
 RMAP1 Project Status Summary
EPA Consent Decree RMAP1 Summary and Proposed RMAP1 Milestones

		RMAP1 Projects Completed	RMAP1 Projects Completed	Project Status Summary
Milestone Date		May 4, 2007	Proposed on September 1, 2008	
Construction Status		Complete	Complete	
Consent Decree Projects	Corresponding C-P Projects			
RMAP1 Projects				
N-05 PS 24 Area Upgrades	*PS 24/43 Area Upgrade (01-RMP-N05)	✓		
N-06 PS 43 Area Upgrades				
N-09 PS 44/46 Area Upgrades	PS 44/46 Area Upgrades (01-RMP-N09)	✓		
N-10 PS 240 Area Upgrades	PS 240 Area Upgrades (01-RMP-N10)	✓		
***N-99 North Further Investigations	NTSN SS Eval. Study (99-RMP-N-99)	✓		
	**Bellingrath Rehab. (03-RMP-N14) (NSRP)	✓		
	**Frenchtown Road Sewer Rehab. (03-RMP-N15)	✓		
	**North Area Comprehensive Rehab. (03-RMP-N23)	✓		
	**PS 45 Area Rehab. (00-RMP-N31)	✓		
C-03 PS 2 Area Rehabilitation	PS 2 Area Upgrades (01-RMP-C03)	✓		
S-01B SWWTP Influent PS	SSO SWWTP Infl. PS Upgrade (99-RMP-SO1B)	✓		
S-11 PS 40 Area Rehabilitation	S-11 PS 40 Area Rehabilitation	✓		
***S-99 South Further Investigations	SSO Engr-South (99-RMP-S99)	✓		
	PS 944 Area Upgrade Grv Sewer (99-RMP-S99)	✓		
	PS 944 Area Upgrade (99-RMP-S99)	✓		
	PS 177 Area Upgrade (99-RMP-S99)	✓		

TABLE A1
 RMAP1 Project Status Summary
 EPA Consent Decree RMAP1 Summary and Proposed RMAP1 Milestones

		RMAP1 Projects Completed	RMAP1 Projects Completed	Project Status Summary
Milestone Date		May 4, 2007	Proposed on September 1, 2008	
Construction Status		Complete	Complete	
Consent Decree Projects	Corresponding C-P Projects			
RMAP1 Projects				
	**PS 211 Area Upgrades (99-RMP-S11)	✓		
N-01 Choctaw Basin Return System	Choctaw Area Storage (04-RMP-N22)			Project suspended. Evaluating for inclusion in RMAP2 Plan. Project is included as RMAP2: Choctaw Storage.
N-13 North Choctaw Basin System	S-05 PS 58B Area Upgrades MWH RMAP2			Project suspended. Evaluating for inclusion in RMAP2 Plan. Project is included as RMAP2: Choctaw Storage PS.
N-04 PS 47 Area Upgrades	N-04 PS 47 Area Upgrades			Project suspended. Evaluating for inclusion in RMAP2 Plan. Project is included as RMAP2: Group Project 1B – Veterans Memorial Parkway PS FM.
N-07 PS 39/55 Area Upgrades	N-07 PS 39/55 Area Upgrades			Project suspended. Evaluating for inclusion in RMAP2 Plan. Project is included as RMAP2: Group Project 1B – Veterans Memorial Parkway PS FM.
N-11 PS 65 Area Upgrades	PS 65 and 65A Area Upgrades (01-RMP-N11)			Project suspended. Evaluated for inclusion in RMAP2 and Master Plan. Project proposed as a part of the Master Plan.
N-02 PS 49/52 Area Upgrades	PS 49/52 Area Upgrade (01-RMP-N02)		4 th Quarter 2008	80% complete with construction. Project in dispute with construction contractor. Both parties reached an agreement on terms and job was closed at 80% complete.
N-12 North Sewer Rehab Projects	North Sewer Rehab Projects (03-RMP-N12)		4 th Quarter 2007	Project completed.

TABLE A1
 RMAP1 Project Status Summary
 EPA Consent Decree RMAP1 Summary and Proposed RMAP1 Milestones

		RMAP1 Projects Completed	RMAP1 Projects Completed	Project Status Summary
Milestone Date		May 4, 2007	Proposed on September 1, 2008	
Construction Status		Complete	Complete	
Consent Decree Projects	Corresponding C-P Projects			
RMAP1 Projects				
S-08 Industriplex Area Upgrades	Industriplex Area PS 355 and FM Upgrades (99-RMP-S08)		2 nd Quarter 2010	Construction contract awarded. Finalizing permit agreement with gas pipeline company. Finalizing land acquisition. Construction expected to begin 2 nd quarter 2009.
S-14 Kleinpeter Area Upgrades	Kleinpeter Area Upgrades (03-RMP-S14)		2 nd Quarter 2010	Construction contractor selected. Construction on-going.
S-16 PS 136 Area Upgrades	PS 136 Area Upgrades (99-RMP-S16)		2 nd Quarter 2010	Construction contract awarded. Finalizing land acquisition. Construction expected to begin 1 st quarter 2009.

*Notes: This project was executed as a combination of two RMAP1 projects

**Notes: These projects were added as RMAP1 projects by the C-P after entry into the Consent Decree

***Notes: This RMAP1 project was split up into multiple projects for better execution

RMAP2 Project Status Summaries

The RMAP2 projects are separated into three categories with descriptions and schedules provided for all projects.

Category 1: Comprehensive Sewer Basin Rehabilitation

Table A2 presents the 26 Category 1 comprehensive rehabilitation sub-basin projects and anticipated delivery milestone schedules. Status summaries are also provided for those projects already underway.

Note that any pump station improvements are included in the projects listed in Category 2, Pump Station and Transmission Improvements on the following pages.

TABLE A2
 RMAP2 Project Status Summary Sewer Rehabilitation
 EPA Consent Decree RMAP2 Milestones for Category 1 Projects

	33% Construction Milestone	66% Construction Milestone	100% Construction Milestone	Project Status Summary
Milestone Date	4th QTR 2012	1st QTR 2014	4th QTR 2014	
Construction Status	Construction Functionally Complete	Construction Functionally Complete	Construction Functionally Complete	
Project Descriptions				
RMAP2 Projects				
Jefferson Hwy – HooShooToo Road	✓			Construction began early 4 th quarter 2008 and is approximately 60% complete. Construction is on-going and expected to be completed by the end of 3 rd quarter 2009
Staring Lane - Boone Drive	✓			Design completed. Advertisement for construction bids completed. Construction expected to begin 1 st quarter 2009.
Gardere Lane - Burbank Road	✓			Design completed. Advertisement for construction bids completed. Construction expected to begin 1 st quarter 2009.
Oak Villa Blvd - Choctaw Street	✓			Contractor completed the cleaning and inspection work in project areas. The basin observations/field reconnaissance was also completed. The Basin Characterization report was finalized. Design and survey completed. Advertisement for bids expected 1 st quarter 2009.
Scotland Avenue - Progress Road	✓			Cleaning and inspection (CCTV, smoke testing, manhole inspection, etc.) began 1 quarter 09.. Data analysis and draft basin characterization report expected to be completed 2 nd quarter 2009.
Elm Grove Garden Road - Harding Blvd	✓			Cleaning and inspection work completed. Basin observations/field reconnaissance on-going.
Sharp Road - Florida Blvd	✓			
Kenilworth Blvd - Boone Drive	✓			
Foster Drive - Government Street	✓			
Silverleaf Road - Ford Street	✓			
Brookstown Road - Evangeline Street	✓			
Bluebonnet Blvd - Jefferson Hwy		✓		
Highland Road - Washington Street	✓			

TABLE A2
 RMAP2 Project Status Summary Sewer Rehabilitation
EPA Consent Decree RMAP2 Milestones for Category 1 Projects

	33% Construction Milestone	66% Construction Milestone	100% Construction Milestone	Project Status Summary
Milestone Date	4th QTR 2012	1st QTR 2014	4th QTR 2014	
Construction Status	Construction Functionally Complete	Construction Functionally Complete	Construction Functionally Complete	
Project Descriptions				
RMAP2 Projects				
Stanford Avenue - Morning Glory Road	✓			
Airline Highway - Goodwood Blvd		✓		
Acadian Thruway - Claycut Road	✓			
Acadian Thruway - Perkins Road	✓			
Antioch Road - Chadsford Drive		✓		
Jones Creek Road - Tiger Bend Road		✓		
Scenic Highway - Spanish Town Road			✓	
Siegen Lane - Interstate 10		✓		
Interstate 110 - Hollywood Street		✓		
Ardenwood Drive - Winbourne Street			✓	
Flannery Road - Florida Blvd			✓	
East Boulevard - Government Street			✓	
North 38th Street - Gus Young Avenue			✓	

Category 2: Pump Station and Transmission Improvements

Table A3 presents a list of Category 2 capacity projects with project delivery milestone schedules. Project status summaries are provided for those projects already underway.

TABLE A3
 RMAP2 Project Status Summary Capacity
 EPA Consent Decree RMAP Milestones for Category 2 Projects
All RMAP2 Projects Will Have Milestone Completion Design Dates - 3rd Quarter 2013

	33% Construction Milestone	66% Construction Milestone	100% Construction Milestone	Project Status Summary
Milestone Date	4th QTR 2012	1st QTR 2014	4th QTR 2014	
Construction Status	Construction Functionally Complete	Construction Functionally Complete	Construction Functionally Complete	
Project Descriptions				
RMAP2 Projects				
Capital Lake Drive - Gayosa Street	✓			Preliminary design completed. 90% design expected to be submitted in 1 st quarter 2009. Railroad and levee permit application expected to be submitted 1 st quarter 2009.
Gurney Road - Joor Road	✓			Construction contract awarded. Construction on-going.
Multiple Pump Stations - Lovett Road Area	✓			Finalizing land acquisition. Constuction bids opened 1 quarter 09. Construction to begin 2 quarter 09.
Comite Road - Foster Road	✓			Project being designed and executed in two phases: Phase I and Phase II. Phase I – Construction contract awarded 1 quarter 09. Construction to begin 1 quarter 09. Phase II – 100% design is expected to be completed in 1 st quarter 2009.
Foster Road - Hooper Road	✓			100% design package is completed. Advertisement for construction contractor is expected to be done 1 st quarter 2009. Construction contract expected to be awarded 1 st quarter 2009.
Zachary Area Transmission Network Improvements		✓		(Previously called Red Mud Lakes and Hwy 61 Zachary/Baker) Preliminary routing and pump station locations finalized. 30% design expected to be submitted 1 st quarter 2009.
South Boulevard - St. Joseph Street	✓			Surveying and geotechnical investigations completed. Utility company coordination and permitting is on-going. Preliminary routing submitted. 60% design expected to be submitted 2 nd quarter 2009.
Downtown Area - PS59 Improvements	✓			Design expected to begin 1 st quarter 2009.
Downtown Area - PS15, PS19 & PS60 Improvements	✓			Design expected to begin 1 st quarter 2009.

TABLE A3
 RMAP2 Project Status Summary Capacity
 EPA Consent Decree RMAP Milestones for Category 2 Projects
All RMAP2 Projects Will Have Milestone Completion Design Dates - 3rd Quarter 2013

	33% Construction Milestone	66% Construction Milestone	100% Construction Milestone	Project Status Summary
Milestone Date	4th QTR 2012	1st QTR 2014	4th QTR 2014	
Construction Status	Construction Functionally Complete	Construction Functionally Complete	Construction Functionally Complete	
Project Descriptions				
RMAP2 Projects				
Highland Road - Buchanan Street	✓			Surveying and preliminary routing completed. 30% design submitted for review and approval. 60% design expected to be submitted 2 nd quarter 2009.
Citiplace/Essen Area - PS119 & Forcemain Improvements	✓			Preliminary design completed. 30% design expected to be submitted 1 st quarter 2009.
Group 1A - Veterans Memorial Parkway - Gravity Mains		✓		Design began 1 st quarter 2009.
Group 1B - Veterans Memorial Parkway - PS FM		✓		Design expected to begin 1 st quarter 2009.
Perkins/Old Perkins Area - Booster PS 514 Improvements		✓		
Group 2 - Small Pump Stations	✓			Design consultant selected. Preliminary design on-going.
Highland Road - Burbank Drive	✓			Preliminary design completed. Hydraulic modeling and the surveying and geotechnical studies are ongoing. Hydraulic modeling and 30% design expected to be completed 1 st quarter 2009.
Nicholson Dr - Highland Rd - Perkins Rd		✓		
Perkins Road - Dahlia Street		✓		
25th Street - North Acadian Thruway	✓			Advertised for design consultant selection 1 st quarter 2009.
Government St - South Acadian Thruway		✓		
Plank Road - Kleinpeter Road		✓		
O'Neal Lane - Jones Creek Road		✓		
O'Neal Lane - Tiger Bend Road		✓		

TABLE A3
 RMAP2 Project Status Summary Capacity
 EPA Consent Decree RMAP Milestones for Category 2 Projects
All RMAP2 Projects Will Have Milestone Completion Design Dates - 3rd Quarter 2013

	33% Construction Milestone	66% Construction Milestone	100% Construction Milestone	Project Status Summary
Milestone Date	4th QTR 2012	1st QTR 2014	4th QTR 2014	
Construction Status	Construction Functionally Complete	Construction Functionally Complete	Construction Functionally Complete	
Project Descriptions				
RMAP2 Projects				
Multiple PS - Nicholson Dr - Brightside Dr		✓		
PS 58A Overflow Pump Station		✓		Design consultant selected. Preliminary design expected to begin 2 nd quarter 2009.
Staring Lane FM A - Burbank to Highland	✓			Construction consultant contract approved. Construction expected to begin early 1 st quarter 2009.
Staring Lane FM B - Highland to Perkins	✓			60% design submitted and reviewed. 90% design expected to be submitted early 1 st quarter 2009.
Staring Lane FM C - Perkins to PS 58		✓		Survey completed. Design expected to begin 2 nd quarter 2009.
Multiple PS - Jefferson Hwy - Park Forest Dr		✓		
Airline Highway - Jefferson Highway		✓		
Essen Lane - Interstate 12			✓	
Multiple PS - Highland Road - Kenilworth Parkway			✓	
Multiple PS - Florida Blvd - Sherwood Forest Blvd			✓	
Multiple PS - Plank Road - Thomas Road			✓	
Multiple PS - Plank Road - Harding Boulevard			✓	
Multiple PS - Highway 61 - Plank Road			✓	
Multiple PS - Jones Creek Rd - Tiger Bend Rd			✓	
Airline Highway - Interstate 12			✓	

TABLE A3
 RMAP2 Project Status Summary Capacity
 EPA Consent Decree RMAP Milestones for Category 2 Projects
All RMAP2 Projects Will Have Milestone Completion Design Dates - 3rd Quarter 2013

	33% Construction Milestone	66% Construction Milestone	100% Construction Milestone	Project Status Summary
Milestone Date	4th QTR 2012	1st QTR 2014	4th QTR 2014	
Construction Status	Construction Functionally Complete	Construction Functionally Complete	Construction Functionally Complete	
Project Descriptions				
RMAP2 Projects				
Florida Boulevard - Sherwood Forest Boulevard			✓	
Goodwood Boulevard - South Flannery Road			✓	
Joor Road - Greenwell Springs Road			✓	
Plank Road - Port Hudson Pride Road			✓	
Essen Lane - Highland Road			✓	
Oak Villa Boulevard - Monterey Boulevard			✓	
Lovett Road - Greenwell Springs Road			✓	
Highland Road - Lee Drive			✓	
Multiple PS - Hooper Rd - Greenwell Springs Rd			✓	
Multiple Booster PS - Hooper Rd - Lovett Rd			✓	
Multiple PS - Prescott Rd - Greenwell Springs Rd			✓	
Multiple PS - O'Neal Ln - Interstate 10			✓	
Multiple PS - O'Neal Ln - S. Harrells Ferry Rd			✓	
Airline/Florida Boulevard Area - PS30 Improvements & New PS			✓	
Multiple PS - Burbank Drive - Siegen Lane			✓	
Central Consolidation - Central WWTP PS		✓		Consultant selection completed. Project definitions submitted for review and approval. Design expected to begin 1 st quarter 2009.

TABLE A3

RMAP2 Project Status Summary Capacity
 EPA Consent Decree RMAP Milestones for Category 2 Projects
 All RMAP2 Projects Will Have Milestone Completion Design Dates - 3rd Quarter 2013

	33% Construction Milestone	66% Construction Milestone	100% Construction Milestone	Project Status Summary
Milestone Date	4th QTR 2012	1st QTR 2014	4th QTR 2014	
Construction Status	Construction Functionally Complete	Construction Functionally Complete	Construction Functionally Complete	
Project Descriptions				
RMAP2 Projects				
Central Consolidation - Central WWTP FM		✓		Consultant selection expected 2 nd quarter 2009. Project definitions completed.
Central Consolidation Eastside PS's - PS 2, 3, 4, 5, 6, 7, & 10		✓		Consultant selection expected 2 nd quarter 2009. Project definitions completed.
Central Consolidation Eastside FM's - FM from PS 2, 3, 7, 10, & 5		✓		Consultant selection expected 2 nd quarter 2009. Project definitions completed.

Category 3: Wastewater Treatment and Storage

This category of projects includes improvements at the C-P WWTPs, as well as storage facilities throughout the service area. The details of the wastewater treatment and storage projects are listed in Table A4 below.

TABLE A4

RMAP2 Project Status Summary Wastewater treatment and storage
 EPA Consent Decree RMAP Milestones for Category 3 Projects
 All RMAP2 Projects Will Have Milestone Completion Design Dates - 3rd Quarter 2013

	33% Construction Milestone	66% Construction Milestone	100% Construction Milestone	Project Status Summary
Milestone Date	4th QTR 2012	1st QTR 2014	4th QTR 2014	
Construction Status	Construction Functionally Complete	Construction Functionally Complete	Construction Functionally Complete	
Project Descriptions				
RMAP2 Projects				
Choctaw Storage, PS 52A, PS 51A, PS 51AA, & FMs, & Return Pipe	✓			Conducted dynamic model runs. DPW reviewed/approved the project definition. Design Consultant notice to proceed is expected to be issued and design to begin 1 st quarter 2009.
Hooper Storage	✓			Advertised for design consultant, selection 1 st quarter 2009.

TABLE A4

RMAP2 Project Status Summary Wastewater treatment and storage

EPA Consent Decree RMAP Milestones for Category 3 Projects

All RMAP2 Projects Will Have Milestone Completion Design Dates - 3rd Quarter 2013

	33% Construction Milestone	66% Construction Milestone	100% Construction Milestone	Project Status Summary
Milestone Date	4th QTR 2012	1st QTR 2014	4th QTR 2014	
Construction Status	Construction Functionally Complete	Construction Functionally Complete	Construction Functionally Complete	
Project Descriptions				
RMAP2 Projects				
South WWTP IAP Consolidated – Screening, Primary Treatment, Trickling Filter Recirculation, Sludge Handling	✓			Four projects combined as one bid. Bids opened August 19, 2008. Evaluation of bids resulted in value engineering efforts and a re-design for the project. The re-design, advertisement, and construction contract approval completed. Construction expected to begin 2 nd quarter 2009.
South WWTP IAP- Effluent Pumping Improvements	✓			Project completed.
South WWTP - Phase 1		✓		Design Consultant selected. Design on-going. Huge issue with land acquisition since not all land is vacant – relocate owners, etc.
South WWTP - Phase 2			✓	Expected to advertise RFQ in 1st quarter 2009.

ATTACHMENT B

EXAMPLE SSO NOTIFICATION LETTERS



Department of Public Works
Wastewater Collection Division

City of Baton Rouge
Parish of East Baton Rouge
Post Office Box 1471
Baton Rouge, Louisiana
70821

February 7, 2008

U. S. Environmental Protection Agency
Compliance Assurance and Enforcement Division
Water Enforcement Branch (6EN-W)
1445 Ross Avenue
Dallas, Texas 75202-2733

Attention: Vivian Hare

Re: LPDES Permit No. LA0036412 AI#4841
9940 Great Smokey Dr. - Overflow - PS 051 Area

Dear Ms. Hare:

This letter is to provide information regarding an overflow at 9940 Great Smokey Drive. (Manhole 051-00194), which occurred from approximately 3:30 p.m. January 31, 2008 to 11:00 p.m. January 31, 2008. During this time, an estimated 127,968 gallons of untreated sewage was released to Dawson Creek.

The overflow was due to a heavy rainfall event, which consisted of approximately 4.00 inches of rain. Remedial measures action plan (RMAP) projects are being implemented to prevent recurrence of similar future overflows in this area due to wet-weather events. Procedures outlined in the SSO Response Plan were followed during the incident.

Should you require additional information concerning this matter, please let me know.

Sincerely yours,

Peter Newkirk
Department of Public Works Director

PN/rh

xc: Bryan Harmon, Deputy Director
Monica Sprull, Assistant Director
Rick Wright, P.E.
Cheryl Berry, P.E.
David Ratcliff, Wastewater Collection Systems Manager
Wade Shows, Parish Attorney



Department of Public Works
Wastewater Collection Division

City of Baton Rouge
Parish of East Baton Rouge
Post Office Box 1471
Baton Rouge, Louisiana
70821

February 26, 2008

U. S. Environmental Protection Agency
Compliance Assurance and Enforcement Division
Water Enforcement Branch (6EN-W)
1445 Ross Avenue
Dallas, Texas 75202-2733

Attention: Vivian Hare

Re: LPDES Permit No. LA0036412 AI#4841
11378 Ashbourne Dr. Overflow - PS 50 Area

Dear Ms. Hare:

This letter is to provide information regarding an overflow at 11378 Ashbourne Dr (Manhole 050-00526), which occurred from approximately 15:30 p.m. February 21, 2008 to 21:00 p.m. February 21, 2008. During this time, an estimated 145,050 gallons of untreated sewage was released to Jones Creek.

The overflow was due to a heavy rainfall event, which consisted of approximately 1.50 inches of rain. Remedial measures action plan (RMAP) projects are being implemented to prevent recurrence of similar future overflows in this area due to wet-weather events. Procedures outlined in the SSO Response Plan were followed during the incident.

Should you require additional information concerning this matter, please let me know.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Peter Newkirk".

Peter Newkirk
Department of Public Works Director

PN/rh

xc: Bryan Harmon, Deputy Director
Monica Sprull, Assistant Director
Rick Wright, P.E.
Cheryl Berry, P.E.
David Ratcliff, Wastewater Collection Systems Manager
Wade Shows, Parish Attorney



Department of Public Works
Wastewater Collection Division

City of Baton Rouge
Parish of East Baton Rouge
Post Office Box 1471
Baton Rouge, Louisiana
70821

February 7, 2008

U. S. Environmental Protection Agency
Compliance Assurance and Enforcement Division
Water Enforcement Branch (6EN-W)
1445 Ross Avenue
Dallas, Texas 75202-2733

Attention: Vivian Hare

Re: LPDES Permit No. LA0036412 AI#4841
9940 Great Smokey Dr. - Overflow - PS 051 Area

Dear Ms. Hare:

This letter is to provide information regarding an overflow at 9940 Great Smokey Drive. (Manhole 051-00194), which occurred from approximately 3:30 p.m. January 31, 2008 to 11:00 p.m. January 31, 2008. During this time, an estimated 127,968 gallons of untreated sewage was released to Dawson Creek.

The overflow was due to a heavy rainfall event, which consisted of approximately 4.00 inches of rain. Remedial measures action plan (RMAP) projects are being implemented to prevent recurrence of similar future overflows in this area due to wet-weather events. Procedures outlined in the SSO Response Plan were followed during the incident.

Should you require additional information concerning this matter, please let me know.

Sincerely yours,

A handwritten signature in black ink that reads "Peter Newkirk".

Peter Newkirk
Department of Public Works Director

PN/rh

xc: Bryan Harmon, Deputy Director
Monica Sprull, Assistant Director
Rick Wright, P.E.
Cheryl Berry, P.E.
David Ratcliff, Wastewater Collection Systems Manager
Wade Shows, Parish Attorney

ATTACHMENT C

GRATED MANHOLE REPLACEMENT PROGRAM

Existing Open Grated Manhole Covers in the Baton Rouge Sewer System

The purpose of the Baton Rouge Sewer System Overflow (BTRSSO) Program is to reduce sanitary sewer overflows while planning for the future. To meet this purpose, three types of projects will be implemented including comprehensive rehabilitation projects, capacity improvement projects, and wastewater treatment improvement/storage projects. The main goal of the comprehensive rehabilitation projects is to identify and reduce inflow and infiltration (I/I) sources in the existing sanitary sewer system. This goal is achieved through a process referred to as “Find and Fix.” The “Find” portion consists of CCTV and other inspection methods to identify defects and sources of I/I. The “Fix” portion consists of reviewing inspection data and making engineering recommendations for rehabilitation, repair, or replacement of components in the sewer system to reduce the effects of I/I. These projects will reduce overflow events and increase the existing sewer system’s service life.

One obvious source of inflow that has been identified is existing sanitary sewer manholes that have open grated covers. This source of I/I can easily be eliminated by replacing the open grated covers with a solid faced cover. As part of the comprehensive rehabilitation projects, the Program Management Team (PMT) is coordinating with City of Baton Rouge, Parish of East Baton Rouge (C-P) Department of Public Works (DPW) personnel to discover the location of these open grated manholes. In addition, as part of the “Find” portion of the rehabilitation process these manholes are identified and reported in the inspection data.

During review of the inspection data these manhole covers will be recommended to be replaced with new watertight bolt-down manhole covers. A list of these manholes will be created and either included in the rehabilitation area’s construction project or submitted to the C-P’s Annual Manhole Rehabilitation Contractor for work to be performed. Once completed, the work and description thereof is documented on the record construction drawings or the C-P’s Annual Manhole Rehabilitation workbook respectively.



ATTACHMENT D
BATON ROUGE SSO PROGRAM PROGRESS REPORTS

BATON ROUGE
SSO PROGRAM
PROGRESS
REPORT

JANUARY 2009

Prepared for

City of Baton Rouge/
East Baton Rouge Parish
Department of Public Works



Prepared by

CH2M HILL

In association with

SIGMA Consulting Group, Inc.



PROGRAM MANAGEMENT

The Baton Rouge Sanitary Sewer Overflow (SSO) Program is progressing on schedule entering into January 2009 with more than 30% of the program projects in design or construction phases of development. Currently, there are:

- 23 projects in design
- 3 projects under construction
- 9 projects near construction

To support the aggressive design, construction, and contracting schedule, the Program Management Team actively maintains Program planning and project control documents periodically. To this end, the Team recently updated the Program Delivery Plan (PDP) including added elements such as emergency generators, project costs, and project schedules for all 92 projects through December 31, 2014.

SSO Program Highlights

Maximizing Use of Local Consultants.

The SSO Program engaged numerous local firms, including more than 40 contractors, 19 prime design consultants, 2 CCTV contractors, and 6 prime construction contractors.

Capitalizing on Federal Resources, As Possible.

The SSO Program began a pre-qualification process with Louisiana Department of Environmental Quality (LDEQ) for redevelopment funds should Federal money become available.

Contributing to Emergency Preparedness and Public Safety.

Due to the impacts of Hurricane Gustav, the City-Parish will be installing emergency generators at all pump stations and wastewater treatment plants. The generator bids are scheduled for advertisement in late January, 2009 with installation scheduled to begin in July 2009. Site visits to gather data for generator sizing and drawing preparation began January 7 and are ongoing.

Committed to Meeting Reporting Requirements.

The 2008 Annual Report, as well as the 27th Quarterly EPA Report for the period ending December 31, 2008 will be submitted to the EPA in January.

Making Communication with the Community a Priority.

Program and project-specific public involvement plans are being developed which also includes actively engaging the City of Baton Rouge/East Baton Rouge Parish Metro Council members on SSO projects for their districts.

Watch Metro Council Channel 21 for a program called "Looking Great" airing every Tuesday (7:00PM) and Sunday (8:00PM) from January 20-February 3. SSO Program information will be presented on this TV broadcast by Miles Williams/President, Sigma Consulting.

IN THE SPOTLIGHT



The project area consists of 117,110 linear feet of pipe to be rehabilitated.



Rehabilitation construction continues in the Round Oaks Subdivision.

The Jefferson Highway – Hoo Shoo Too

rehabilitation project was scheduled to start construction in December 2008. However, due to the fact that this was a relatively small project area and we were able to begin design earlier than scheduled, construction started three months early in September 2008. In addition, good Southern Louisiana weather has allowed construction to be slightly ahead of schedule.



Construction began in the Round Oaks Subdivision and is currently 30% complete overall. The project involves the rehabilitation of the gravity collection system in the Jefferson Highway - Hoo Shoo Too area, including pipe repair and replacement. The project area consists of 117,110 linear feet of pipe and 553 manholes. Total construction cost is valued at \$2,239,936 (a savings of over \$760,000 from the Engineering Construction Estimate).

Construction is scheduled to end September 2009.

TECHNOLOGY FOCUS

Rehabilitation of the sewer collection system is a comprehensive physical investigation that includes cleaning and inspection of sewer pipes and manholes. Once cleaned, methods such as closed-circuit television (CCTV) equipment, smoke testing, and dye testing will help to identify trouble areas, such as cracked or broken pipes, offset pipe joints and blockages. Once the data is collected and analyzed, recommended repairs will be made. Typical rehabilitation repairs include pipe and manhole and replacement and trenchless technologies that minimize above ground disturbances such as cured-in-place pipe liners and repair of sewer laterals to the property line.



One of the first steps in rehabilitation includes a physical pipe inspection to identify blockages.



Rehabilitation may only require only cleaning the blocked sewer pipe.



ADVERTISED FOR CONSTRUCTION

Summaries of the 9 projects that are near construction are:

RMAP1 – Industriplex: RMAP1 – Industriplex: Six pump stations will be demolished and replaced with a new pump station and 16" forcemain. Construction contract was approved by Metro Council on January 14, 2009. Construction to begin early March 2009.

RMAP1 – PS136: Nine existing pump stations will be demolished and replaced with a new pump station, 2000 feet of forcemain, 12,500 linear feet of gravity pipe. Construction to begin early February 2009.

Staring Lane Forcemain-PS58 Phase I: A new forcemain will be installed. Phase I of the project is near Burbank Road – Highland Road area. Construction to begin early February 2009.

Gardere Lane – Burbank Road: Approximately 200,500 linear feet of pipe and 787 manholes will be cleaned, inspected and rehabilitated. Construction to begin mid February 2009.

Immediate Action Projects (combined): Primary treatment improvements, trickling filter improvements and sludge handling improvements will be made at the South Wastewater Treatment Plan. Construction bids scheduled for opening on January 27, 2009.

Foster Road – Hooper Road: The capacity of the Suburban Transportation Network will be increased and includes approximately 32,000 feet of pipe. Project advertised for construction bids on January 9, 2009.

Multiple PS – Lovett Road Area: Three pump stations and a portion of the gravity main upstream will be replaced to alleviate SSOs. Project advertised for construction bids on January 16, 2009.

Comite Drive – Foster Road: Three pump stations will be replaced as well as 2,000 linear feet of gravity pipe. Project advertised for construction bids on January 16, 2009.

Staring Lane – Boone Drive: Approximately 148,000 linear feet of pipe and 657 manholes will be cleaned, inspected and rehabilitated. Project advertised for construction bids on January 23, 2009.

CONSTRUCTION



3 projects are under construction, and are described below:



Jefferson Highway - Hoo Shoo Too Road: Rehabilitation of the gravity collection system, including approximately 117,110 linear feet of pipe and 553 manholes. Construction continues in January at 30% complete.



RMAP1 - Kleinpeter Area Upgrades: Conducting capacity upgrades to two pump stations, including 2,000 linear feet of new 4" forcemain. Construction mobilization started on January 14, 2009.



Gurney Road – Joor Road: Upsizing a pump station to meet future peak wet weather flows and alleviate SSOs. Construction notice to proceed was issued on January 5, 2009.

IT'S TOPICAL

Visit the Sanitary Sewer Overflow (SSO) web-site: www.brprojects.com which was redesigned in January 2009.

Under the new look, users can search by physical address to find a list of projects, active and future in that area.

Up-to-date calendar items are posted so that potential engineers and contractors will see important project dates, including design consultant selection dates and construction bid openings.

Residents of the City of Baton Rouge/East Baton Rouge Parish can find general program information as well as current, specific project details and public meetings.



Looking Ahead...

Foster Road – Hooper Road

1-9-09: Advertise for construction bids
1-27-09: Pre-bid conference at 9:00AM
2-3-09: Construction bid opening

Multiple PS – Lovett Road Area

1-16-09: Advertise for construction bids
2-3-09: Pre-bid conference at 1:00PM
2-17-09: Construction bid opening

Comite Road – Foster Road

1-16-09: Advertise for construction bids
2-3-09: Pre-bid conference at 10:00AM
2-10-09: Construction bid opening

PS58A Overflow Pump Station

1-16-09: Advertise for design consultant
1-29-09: Design consultant SOQs due to DPW
2-5-09: Project informational meeting at 4:15PM
2-12-09: Engineering consultant selection

Staring Lane – Boone Drive

1-23-09: Advertise for construction bids
2-10-09: Pre-bid Conference at 1:00PM
3-3-09: Construction bid opening

Upcoming Projects to Advertise for Construction Contractor Bids:

Oak Villa Blvd. – Choctaw Street (April)
Capitol Lake – Gayosa Drive (April)

Upcoming Projects to Advertise for Design Consultants:

SWWTP Wet Weather Improvements Phase II (February)
Central Consolidation Forcemain (April)
Central Consolidation East Pump Station (April)
Central Consolidation East Forcemain (April)

For detailed information on the projects above, please visit the web-site at
http://www.brprojects.com/sewer/pages/contractor_calendar.htm

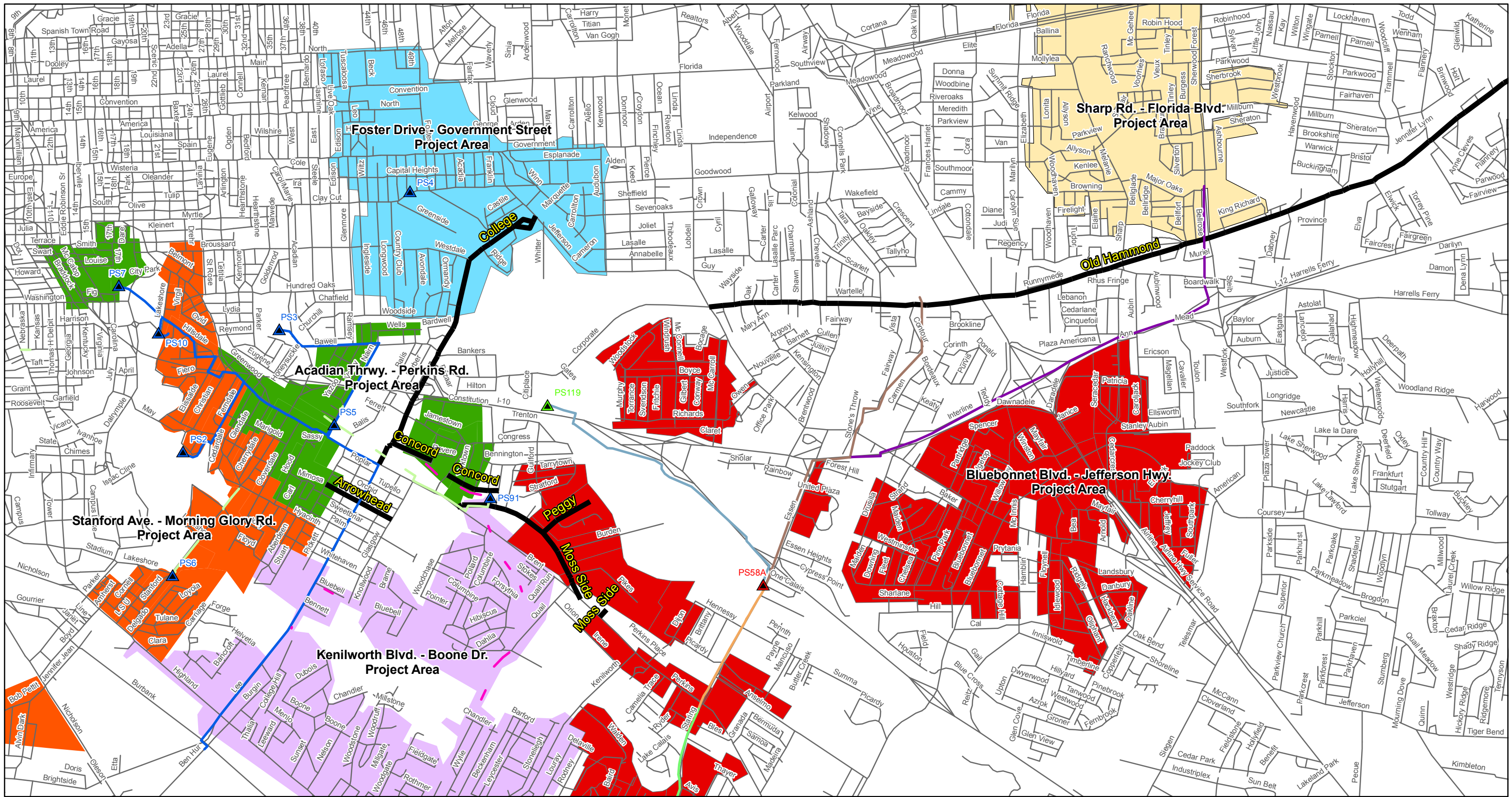


BATON ROUGE SSO PROGRAM PROGRESS REPORT

JANUARY 2009

300 North Boulevard, Room 208
Baton Rouge, LA 70802
(225) 389-3158
DPW@brgov.com

ATTACHMENT E
SEWER PROGRAM CAPACITY AND REHABILITATION
PROJECTS MAP



Legend

- Streets
- Commenter's Streets of Interest

Capacity PS Projects

- Central Consolidation - New PS (PS 2, 3, 4, 5, 6, 7, 10 and 91)
- PS 58A - New Overflow Pump Station
- PS 119 - New Pump Station

Rehabilitation Projects

- Bluebonnet Blvd. - Jefferson Hwy.
- Acadian Thruway - Perkins Rd.
- Stanford Ave. - Morning Glory Rd.
- Kenilworth Blvd. - Boone Dr.
- Sharp Rd. - Florida Blvd.
- Foster Dr. - Government St.

Capacity Projects

- Citiplace/Essen PS 119 FM Improvements
- Staring Lane FM-B - Perkins to Highland
- Staring Lane FM-C - PS 58 to Perkins
- Airline Hwy - I-12
- CC-EAST-FM - New FM from PS 2, 3, 7, 10 and 5
- Highland Rd. - Buchanan St.
- Essen Ln. - I-12
- Perkins Rd. - Dahlia St.

Sewer Program Capacity and Rehabilitation Projects In Commenter's Areas of Concern

Arrowhead Street, College Drive, Concord Avenue, Moss Side Lane, Old Hammond Highway (West), Peggy Street

SIGMA CONSULTING GROUP, INC.

Program

0 1,000 2,000 4,000 6,000 8,000 Feet

CH2MHILL

ATTACHMENT F
PUMP STATION #5
ROUZAN DEVELOPMENT PROJECT DOCUMENTS

Rouzan Development Sewer Plan

TO: Bob Abbott, Parish Attorney
Peter Newkirk/DPW
Bryan Harmon/DPW

COPIES: Doug Jenkins
Jim Hawley

FROM: Michael Ellis/CH2M HILL

DATE: October 23, 2008

Purpose

To illustrate the long term plan to provide sewer service to the proposed Rouzan Development Area.

Background

The City of Baton Rouge/East Baton Rouge Parish (C-P) has entered into a Consent Decree with the USEPA et. al. to eliminate sanitary sewer overflows (SSOs). In conformance with this Consent Decree, the C-P has planned for increased sewer capacity in new growth areas. Addressing SSOs requires a combination of:

- Rehabilitating the collection sewers to reduce extraneous flows
- Increasing gravity sewer and pumping system capacity to retain wet weather and dry weather flows in the system.

The Rouzan Development will be served by Pump Station 5 as shown on the following maps. The current capacity of Pump Station 5 is approximately 1740 gallons per minute (gpm) and as part of the Consent Decree Program will be replaced with a new major pump station with a capacity of 30,000 gpm. Based on 2005 estimates, the proposed Rouzan Development area projects a maximum sewer flow of 676 gallons per minute at build-out. Under the program, Pump Station 5 will more than adequately handle the anticipated flows from the development.

Attached to this memorandum are three maps describing the existing sewer systems as well as the proposed plan for the new development.

Map #1 Existing SSO Locations and Pump Station Areas

Map #1 delineates the three sewer service areas surrounding the development. Each of the three areas is served by an existing pump station as shown.

Pump Station 5 will receive the flows from the development after system improvements

Pump Station 56 and Pump Station 91 will receive no flows from the development after system improvements.

Map #1 also shows the locations of previously reported SSOs which will be eliminated by the Consent Decree Program prior to December 31, 2014.

Map #2 Rehabilitation Project Areas

Map #2 shows areas planned for rehabilitating the existing collection system for the purpose of reducing infiltration, reducing wet weather flows, and preventing sanitary sewer overflows. Collection system rehabilitation will occur in all three service areas surrounding the development.

Map #3 Capacity Sewer Projects

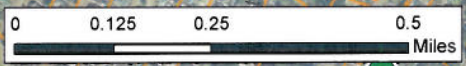
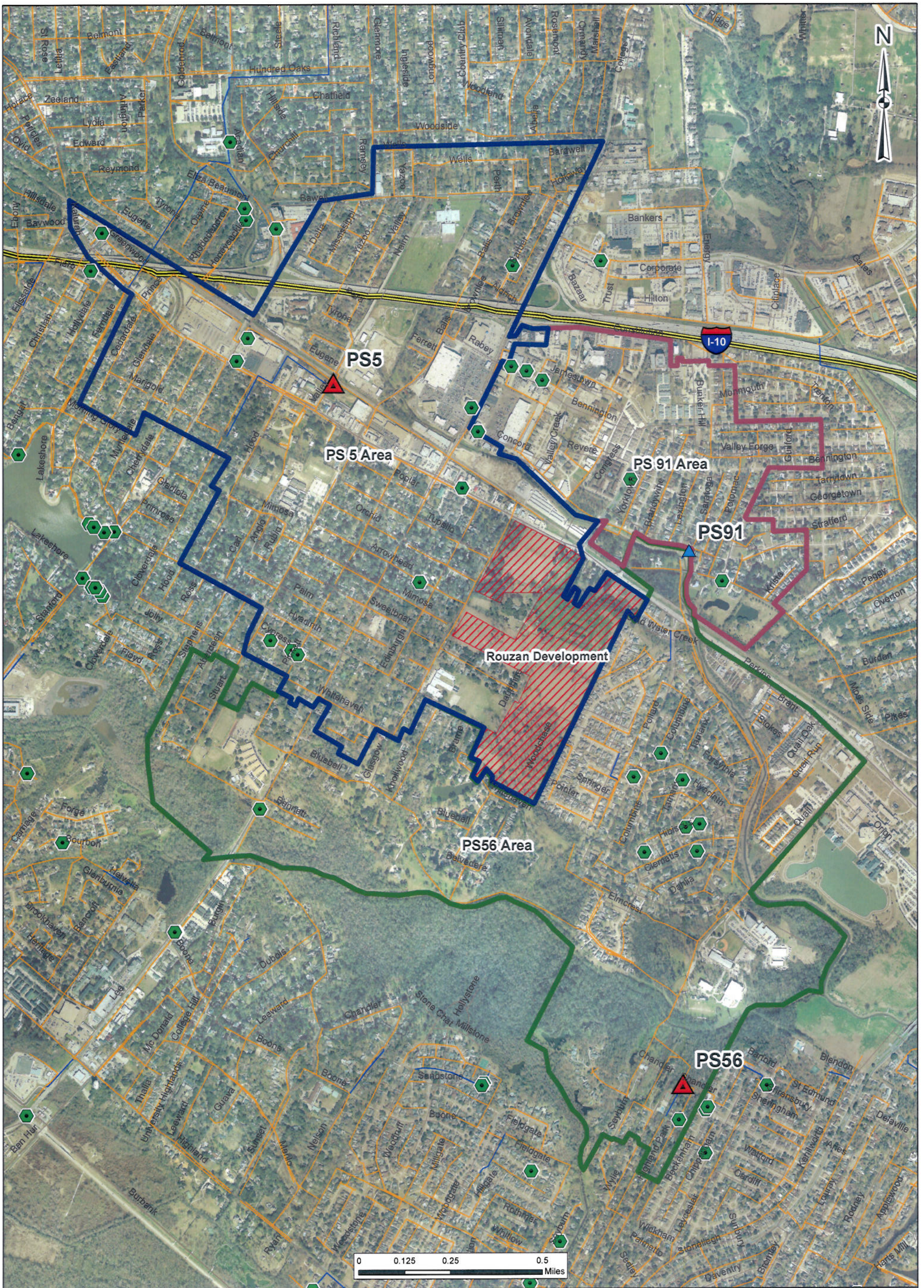
Projects shown on this map will increase the capacity of gravity trunk sewers, pump stations, and force mains in order to eliminate SSOs and provide capacity for growth, as projected in the three service areas including the Rouzan Development Area. The capacity of Pump Station 5 will be increased to serve the new development.

Map #4 Combined Rehabilitation Areas and Capacity Sewer Projects

Map #4 shows both the rehabilitation projects and the capacity sewer projects in the pump station areas that surround the Rouzan Development. This map illustrates that the sewer overflows are being addressed by either collection system rehabilitation projects, projects to increase sewer capacity, or a combination of both.

Conclusion

The C-P Plan for sewer improvements in the Rouzan Development Area is adequate to eliminate SSOs and provide for the increased capacity.



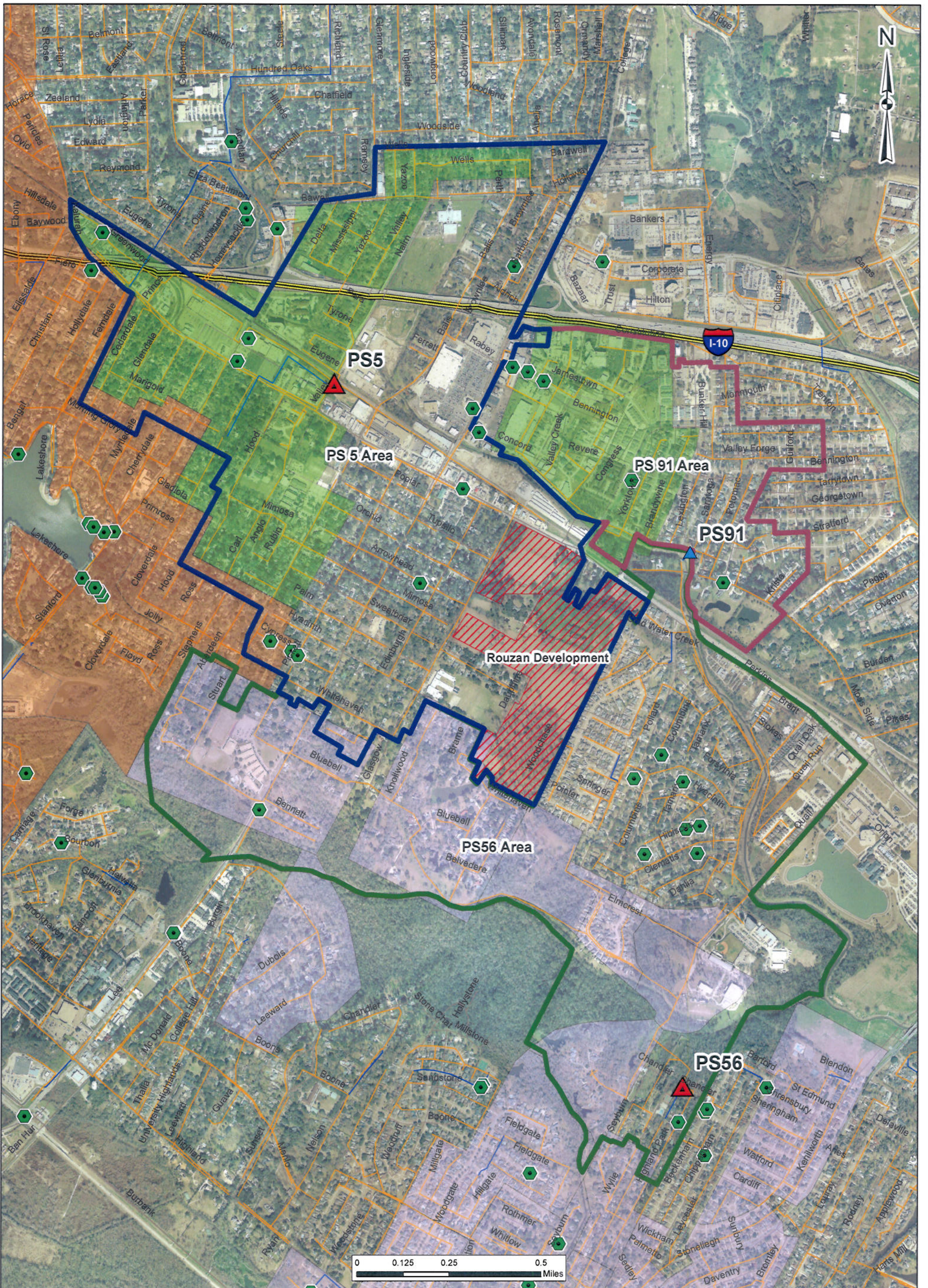
Legend

- Pump Station - To Be Up Sized
- Pump Stations
- SSO's
- Existing Force Main
- Existing Gravity Main
- PS5 Area
- PS91 Area
- PS56 Area
- Rouzan Development






Existing SSO Locations and Pump Station Areas
Map 1



CH2MHILL






Legend

-  Pump Station - To Be Up Sized
-  Pump Stations
-  SSO's
-  Existing Force Main
-  Existing Gravity Main

-  PS5 Area
-  PS91 Area
-  PS56 Area
-  Rouzan Development

Rehabilitation Areas

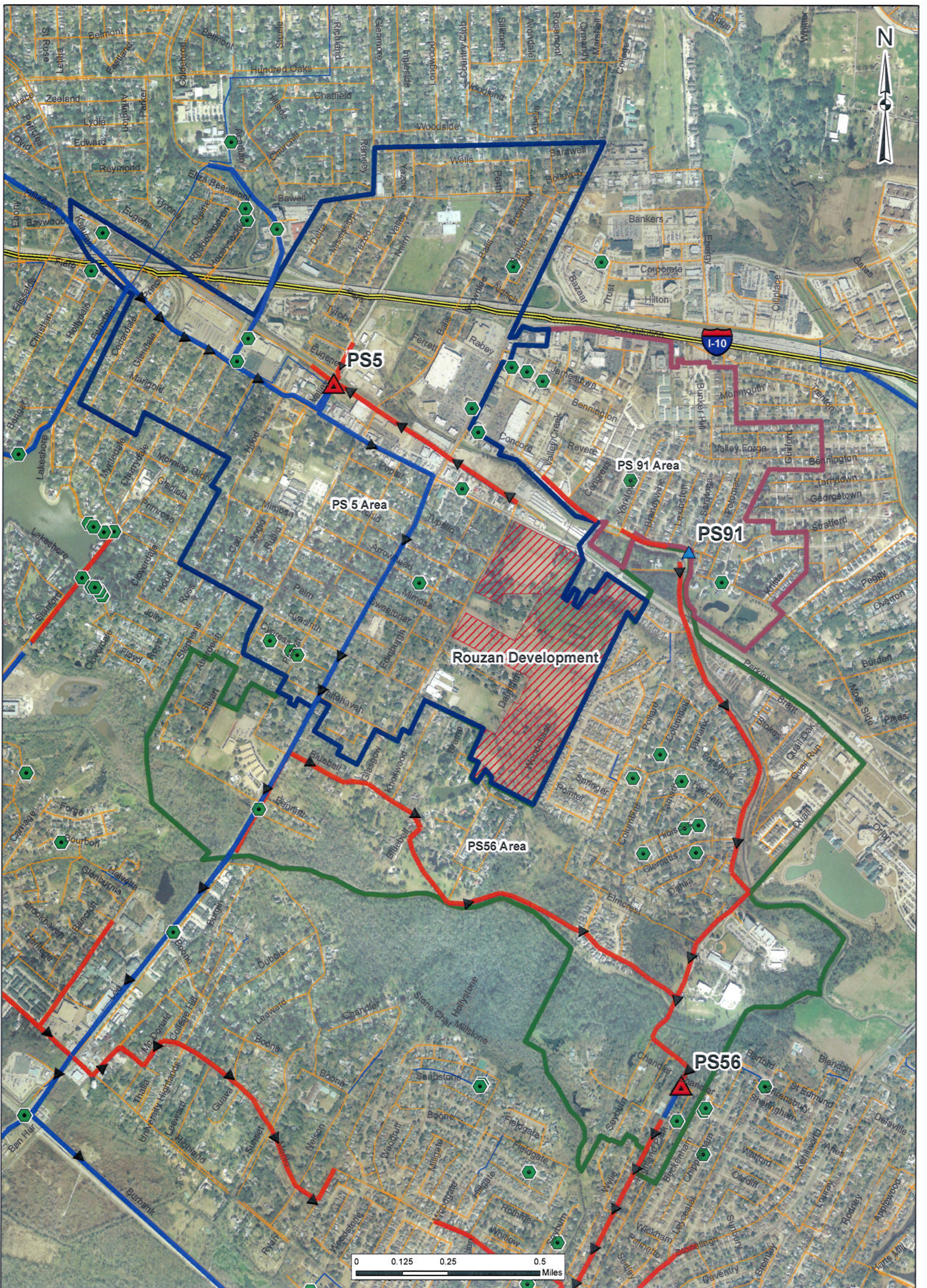
-  Acadian Thruway - Perkins Rd. - 2010
-  Stanford Ave. - Morning Glory Rd. - 2010
-  Kenilworth Blvd. - Boone Dr. - 2009

Rehabilitation Projects Areas

Map 2

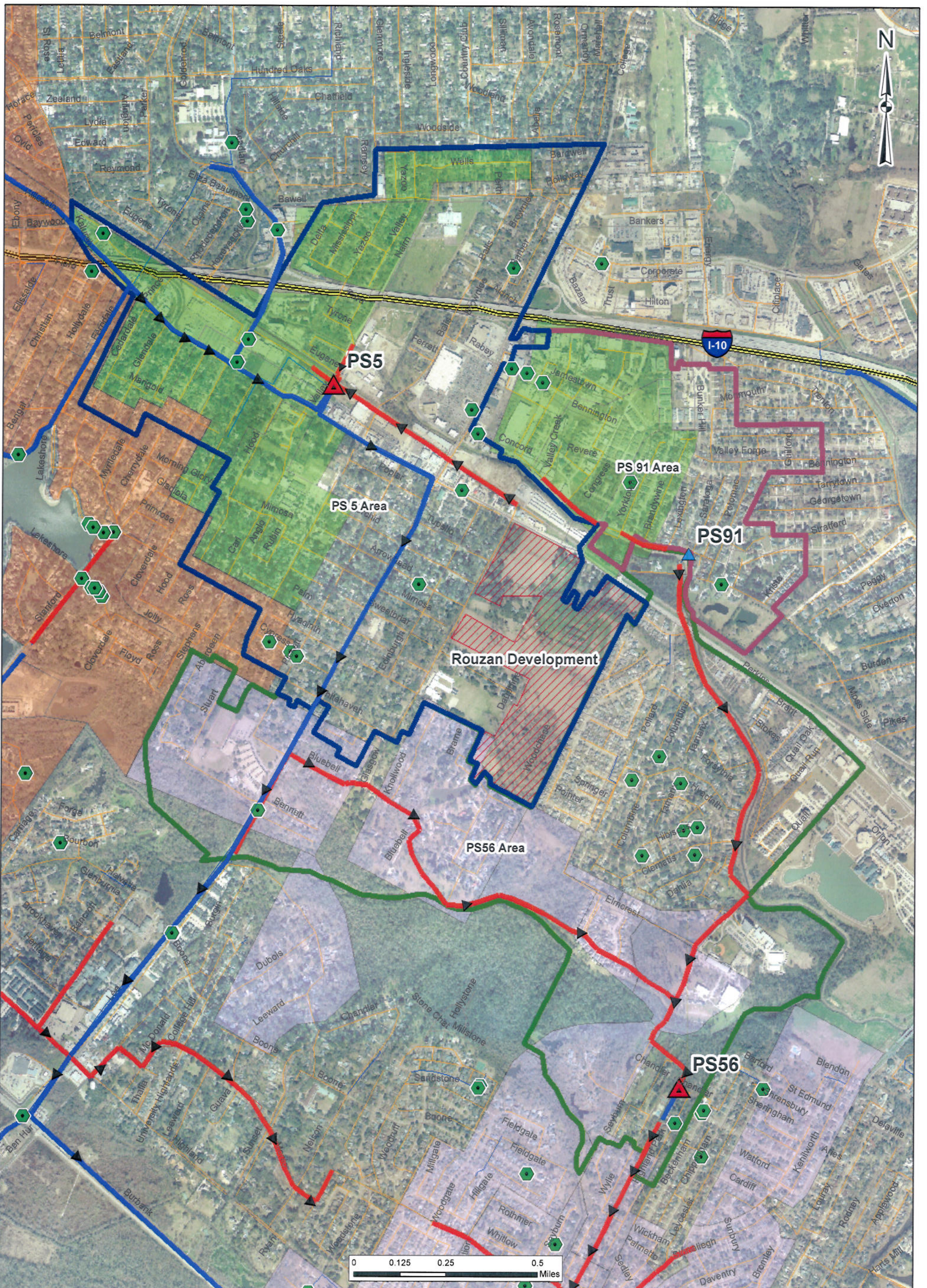


CH2MHILL



- Legend**
- Pump Station - To Be Up Sized
 - Pump Stations
 - SSO's
 - Existing Force Main
 - Existing Gravity Main
 - PS5 Area
 - PS91 Area
 - PS56 Area
 - Rouzan Development
 - Capacity Force Main Projects
 - Capacity Gravity Main Projects

Capacity Sewer Projects
Map 3



- Legend**
- Pump Station - To Be Up Sized
 - Pump Stations
 - SSO's
 - Capacity Force Main Projects
 - Capacity Gravity Main Projects
 - Existing Force Main
 - Existing Gravity Main

- Rehabilitation Project Areas**
- Kenilworth Blvd. - Boone Dr. - 2009
 - Stanford Ave. - Morning Glory Rd. - 2010
 - Acadian Thruway - Perkins Rd. - 2010
 - PS5 Area
 - PS91 Area
 - PS56 Area
 - Rouzan Development

Combined Rehabilitation Areas and Capacity Sewer Projects

Map 4

