

# **Combined Sewer Operation & Maintenance Plan**

**City of Belleville  
Wastewater Treatment Plant  
498 Environmental Drive  
Belleville, IL 62220  
(618)233-7146**

**REVISED: 07-2016**

## OBJECTIVES OF THE CSO OPERATION & MAINTENANCE PLAN

- Reduce total loading of pollutants and floatables entering the receiving stream.
- Ensure that we achieve compliance with water quality standards.

Our plan must include mechanisms and procedures to ensure:

- a. Collection system inspections on a regular basis.
- b. Sewer catch basin, regulator cleaning and sewer line maintenance are done on a regular basis.
- c. Inspection and maintenance is performed on all pump stations.
- d. Collection system replacement where necessary.
- e. Detection and elimination of illegal connections.
- f. Detection, prevention and elimination of dry weather overflows.
- g. Collection system is operated to maximize storage capacity and the combined sewer portions of the collection system are operated to delay storm entry into the system.
  - ▶ Includes new lift station specifications to have underground 24 hour storage.
  - ▶ Wier walls set at optimum height to store sewage in pipe before discharge from CSO - backup in homes.
  - ▶ Removal of grit and debris.
  - ▶ Continued sector cleaning and video inspection to maintain good wastewater flow and locate piping issues.
- h. That treatment systems are operated for maximize treatment and maximum flow through plant.

## DESCRIPTION OF BELLEVILLE ENVIRONS

The City of Belleville is the County seat of St. Clair County, Illinois. The city has a population of about 44,478 people and covers an area of 22.5 square miles. It is approximately 15 miles east of the City of St. Louis, Missouri.

### Topography and Drainage

The Belleville area is on an upland glacial fill plain with the topography ranging from gently rolling hills to level. On the west side, a line of bluffs separates the American Bottoms flood plain from this upland plain formation. A great deal of undermined area lies beneath the City of Belleville.

Four small creek systems provide the natural surface drainage primarily. These consist of:

Richland Creek	Located in the eastern and central portion flowing southerly to the Kaskaskia River
Schoenberger Creek	Located in the northwestern portion, flowing northwesterly to Harding Ditch that is tributary to the Mississippi River
Powdermill Creek	Located in the western portion, flowing westerly to Canal No. 1 that is tributary to the Mississippi River
Prairie du Pont Creek	Located in the southern portion, flowing westerly to Canal No. 1 that is tributary to the Mississippi River

There also exists a very small drainage basin located between the Powdermill Creek and Schoenberger Creek Basins in the northwest corner of the city. This basin drains northwest to Harding Ditch that is tributary to the Mississippi River.

## EXISTING SEWER SYSTEM

### Origin of Belleville's System

The first collection system in the City of Belleville was constructed in 1912. As the need arose, the collection system expanded to meet the needs of a growing population. Prior to World War II, a large number of combined sewers and overflow points had been constructed. Typically, most sewer systems are separated, with sewage being directed to a wastewater treatment plant and stormwater runoff being directed to holding ponds and streams. However, in older sewer systems, such as the City of Belleville's systems, these flows are combined and directed to the wastewater treatment plant. During large rain events, the volume of flows is larger than the capacity of the pipes. As a result, the excess sewage that cannot be conveyed by the pipes overflows into nearby streams or creeks. Each of these locations is known as a Combined Sewer Overflow (CSO). The combined sewer interceptors generally parallel Richland and East Creeks and, because of the city's early growth, also follow Main Street to the west. Sizes of pipe in the collection system range from 8 to 72 inches.

Of the 18.5 square miles within Belleville's city limits, combined sewers serve about 30 percent. The original system is tributary to Wastewater Treatment Plant Facility Permit No. IL0021873. 264 miles of sewer lines tributary to the Wastewater Treatment Plant Facility.

The second system was constructed in the mid-1960's as a separate wastewater collection system to transport only sanitary sewage. There are about 11 miles of sewer lines tributary to old Wastewater Treatment Plant No. 2, Permit No. IL0021881, discharge #0010.

Plant No. 2 was converted to a pump station with an excess holding basin. Plant No. 2 now pumps untreated wastewater to Stookey Township Treatment Facility for treatment. Belleville expanded its treatment plant during action item 1 of the Long Term Control Plan. A 4.4 million gallons per day wet plant was built, along with a pump station and several miles of pipe, to separate the majority of non-

combined sewage from specific areas of the city. This expansion eliminated six old pump stations and directed high strength sewage flows out of the combined sewage east plant as well as all associated CSO's.

## EXISTING SEWER SYSTEM

The collection system consists of about 275 miles of pipe of varying diameters and composition. Treatment Plant East at the south end of the city treats the flows from east, north and northeast area of the city including flows from 88th Street Pump Station/Swirl Concentrator.

A 42-inch interceptor collecting flow from the north is cross connected with a new 48-inch interceptor at Second Street and Cleveland Avenue and in a chamber west of Treatment Plant No. 1 at the south end of Church Street. At this point, flow is diverted into both lines to the plant. The ratio of flow collected by each line at this junction is not constant and is dependent upon hydraulic conditions of each storm. A 60-inch interceptor collects flow from the east. A 36-inch interceptor collects flow from the northeast and a 30-inch interceptor collects flow from the west, all discharging to Treatment Plant No. 1.

Treatment Plant/Pump Station No. 2, located on Route 15, primarily serves the west end of the city through a 18-inch line.

The City of Belleville has working relationships with three other collection system entities. They are Stookey Township, St. Clair Township, and the Village of Shiloh. Stookey Township takes the city's flow from what is now Plant 2 pumping station. The City of Belleville accepts part of Stookey's flow that is pumped from two Stookey owned lift stations to the city's 88th Street swirl concentrator and pumping station in the far western part of Belleville. The city treats part of St. Clair Township's flow from along West Boulevard in the eastern part of Belleville at the treatment plant facility. Flows from the Village of Shiloh come from the north east portion of town to the main plant via the Moore Tract and Loop Creek pump stations. The City of Belleville is unaware of any combined sewers or CSO's associated with either arrangement with Stookey Township, St. Clair Township or the Village of Shiloh.

## LIFT STATIONS AND PLANT

The Collection System for Plant No. 1 is served by 45 lift stations. The following table lists the lift stations by location. Ten (10) of the forty-five (45) stations have overflows. These are marked with an asterisk.

NAME	LOCATION	# OF PUMPS	G.P.M.
EMERALD	OLD CASEYVILLE RD. AT 161	2	100
GEOPPO	RTE. 15 AND 159	2	100
WOOD DR.	302 BELLEVUE PARK DR.	1	25
N. 2ND ST.	1010 N. 2ND. & "J" ST.	2	100
GASS AVE.	712 GASS AVE.	2	100
* S. 98TH ST.	100 CONCORD DR.	2	100
* S. 15TH ST.	417 S. 15TH ST.	2	75
ELMWOOD	5 ELMWOOD DR.	2	100
DELILA	E. "A" & 109 DELILA DR.	2	100
* OAK KNOLL	19 OAK KNOLL PLACE	2	100
* S. 88TH ST.	36 S. 88TH ST.	3	1 @ 200 / 2 @ 500
* N. 66TH ST.	101 N. 66TH ST.	2	80
BERRYWOOD	3 HIGH FOREST DR.	2	100
PLANT #2	6000 W. STATE RTE. 15	4	2 @ 350 / 2 @ 1200
FREEBURG AVE.	1000 FREEBURG & VAN BUREN	2	100
* S. 38TH ST.	4009 MICHELLE DR.	2	100
N. 60TH & W. "B"	6009 W. "B" ST.	2	100
N. 75TH ST.	212 N. 75TH ST.	2	100
* HAMLET COURT	6 HAMLET COURT	2	90
* S. 78TH ST.	S. 78TH ST. & RTE. 42	2	200
DUTCH HOLLOW	#1 DUTCH HOLLOW RD.	2	250
N. 98TH ST.	120 N. 98TH ST.	2	100
N. 79TH ST.	W. "B" ST. & N. 79TH ST.	2	100
ELM DR.	ELM & LEBANON RD.	2	100
DREW	DREW & LEBANON RD.	2	100
* N. 86TH ST.	#4 KILMAR WOODS	1	25
* N. 44TH ST.	20 N. 44TH ST.	2	80
CLAYMONT	7527 CLAYMONT CT.	2	150
PROSPECT	13 ROSE HAVEN DR.	2	100
LOOKOUT	HILLTOP DR.	2	100
ORCHARDS	PRO TOUR DR.	2	582
N. 51 <sup>ST</sup> ST.	N. 50TH ST.	2	145
GWEN COURT	524 N. 41ST ST.	2	100

NAME	LOCATION	# OF PUMPS	G.P.M.
SYCAMORE GLEN	65 PERIWINKLE CIRCLE	2	100
		4 TOTAL	
BELLE VALLEY		1 & 2	1200
INDUSTRIAL PARK	FREEBURG AVENUE	3 & 4	350
SCHEEL ST.	SCHEEL ST.	2	100
LOOP CREEK	HIGHWAY 177	2	1180
SOUTHWIND	2302 OLD COLLINSVILLE RD.	2	166
MOORE TRACT	2587 CARLYLE AVE.	2	610
EAST HIGH SCHOOL	2557 Z WEST BLVD.	2	100
WEST HIGH SCHOOL	4067 FRANK SCOTT PKWY WEST	2	100
ORCHARDS 2	2121 JACK NICKLAUS DR.	2	300
PLUM HILL	2500 PLUM GROVE DR.	2	325
FISCHER LUMBER	1598 E. STATE RTE. 15	2	600
REUNION	1950 RESERVE WALKWAY	2	410

East Treatment Plant, formally No. 1, located at 498 Environmental Drive, is the principle treatment facility, and provides treatment for the combined sewer. The plant has a design average flow (DAF) of 8.0 million gallons per day (mgd), and a design maximum flow (DMF) of 16.0 mgd. In early 1990 the city constructed a Combined Sewer Holding Basin to capture the First Flush, then reintroduce it to the treatment facility for full treatment.

As part of the city's Long Term Control Plan (LTCP), the west plant addition was constructed and put on line January 2015. This plant provides treatment for the non combined sewage that was separated as part of the LTCP. The West Plant has a Design Average Flow (DAF) of 4.4 mgd and DMF of 11.0 mgd. Also part of the LTCP is infrastructure and a large CSO pump station to collect all CSO flow from the collection system. This flow is pumped to two 10 acre Stormwater Management Basins (SWMB) for primary treatment and future disinfection should over flow be necessary. Normal operation allows for return flow from the SWMB to either the West Plant, East Plant or both for full treatment.

Currently both treatment plants that include the master lift station, CSO pump stations, the holding basins, digesters and tertiary filters are operated and maintained by certified operators 24 hours a day.

Inspections of these facilities are performed hourly each day to assure that maximum flow and proper treatment is maintained.

The City of Belleville performs regular preventive maintenance on all process equipment, structures and grounds. Inspection of the master lift station at each plant and CSO pump station is performed twice a year on all submersible pumps. This inspection encompasses pulling the pumps, inspecting and maintaining the pumps electrical and mechanical mechanisms. Any preventative repairs are made at this time. Three Parkson Aquaguard Screens for both plants and 2 Huber Rake Max 250 bar screens are inspected each shift and maintained and thoroughly cleaned weekly.

Inspections of the holding basin and Stormwater Management Basins (SWMB) are performed daily on the linings of the interior levee slopes and the influent and effluent structures. Valves are also inspected for proper seating and adjusted as appropriate. Maintenance records are kept at the plant office.

The pump station inspection program starts daily with the Lift Station Operators visual inspection of all 45 of our lift stations. In addition to daily meter reading checks, the lift station operator exercises controlling valves and inspects the check valves at three different lift stations each day. When a problem with a lift station is found, a maintenance crew is immediately dispatched and repairs are made.

When the lift station maintenance crew are not busy with emergency or high priority repairs, they concentrate on a regular lift station inspection and repair schedule. All things particular to the proper operation of the pump station are examined for electrical components, valves, piping, grease buildup and pump operation. Any necessary repairs are made at this time.

This pump station inspection program is on going and each pump station is serviced at least once per year. All inspections, problems and work completed are logged and kept on file at the Treatment Plant facility.

## **MONITORING AND PREVENTION**

Staff at the Belleville Wastewater Treatment Facility have been making great efforts to monitor the effects and impacts of Combined Sewer Overflows. In 1995, the Wastewater Division implemented regular inspection of all CSO points. Since then, the CSO program has evolved to consist of three employees trained in the inspection of our CSO's. Their duties consist of weekly dry weather inspections, as well as wet weather inspections during, if practicable, or within 24 hours of a rain event.

## **LONG TERM CONTROL PLAN**

On December 31, 2007, Illinois Environmental Protection Agency (I.E.P.A.) approved the City of Belleville's Long Term Control Plan (LTCP) (Attachment A). This plan was developed to bring the city into compliance with water quality control standards. The LTCP, when completely implemented, should eliminate or reduce all combined sewer overflows to four (4) events per year system wide. IEPA has since modified the LTCP to include additional action items that will also reduce the effects of Sanitary Sewer Overflow (SSO) within the city (Attachment A-1).

LTCP design began January 2, 2008. Construction followed on the first action item in December of 2010. Complete compliance is scheduled for September 2033. Three major action items have been completed that included construction of storm water management basins, CSO pump stations, plant expansion and upgrades, elimination of four (4) CSO's, combined sewage separation and a SSO project that corrected sewer backups to a large area of the city. The Southside CSO action item is presently being constructed that will eliminate four more CSO's upon completion in December of 2018. Design of the 9<sup>th</sup> & E and S. 23<sup>rd</sup> Street CSO improvements have been designed to be bid in September 2016. Several SSO projects are also on schedule per the revised LTCP.

Belleville's LTCP can be reviewed at the Wastewater Treatment Plant, located at 450 Environmental Drive, Belleville, Illinois. A summary is available on the city's website.

## CSO INSPECTION PROGRAM

1. Inspection will commence when possible after:
  - A. Precipitation period of a measurable amount.
  - B. A dry period of no precipitation.
  
2. CSO location:
  - A. Check manhole for:
    - a. manhole ring and manhole lid condition
    - b. condition of barrel and bench
    - c. flow through manhole
    - d. any signs of dry weather overflow
    - e. samples that might be present in a sample container
    - f. possible sample to lab for analysis if needed
    - g. diversion structures
    - h. any debris from flow channels and diversion structures
  
3. CSO outfall location:
  - A. Inspect:
    - a. waterways
    - b. slopes and banks
    - c. flapper gates (if applicable)
    - d. pipes
    - e. channels
  - B. Remove any and all debris.
  
4. Documentation:
  - A. CSO Field Report entries to be entered at the end of each CSO inspection (*Attachment B*)
  - B. Monthly Summarization Report or entries from each CSO Field Report (*Attachment C*)
  - C. Complete and place all reports in CSO Log Book

During the dry weather inspections, all diversion structures, manholes, flap gates, weir walls (baffles), and bar screens are inspected. The CSO's are checked and logged for any discharge (dry or wet weather), debris, if debris was removed, the overall condition of the CSO and the duration of the discharge if any.

From 1987 to 1991, infrastructure projects completed by the city reduced the number of overflows from 36 to 15. Recent separation, system maintenance, and LTCP design and implementation has further reduced the number to 9 which is explained in CSO Reductions/Addition section.

Since that time, the city has continued with CSO controls such as street cleaning, catch basin cleaning, regular sewer line sector cleaning, inspections, repairs, smoke testing, etc. to maintain and limit combined sewer overflows.

## OVERFLOW DESCRIPTION AND LOCATIONS

The type of diversion structures, basis of operation and whether we equip the CSO outfalls with flap gates will be listed here. *(See photos and diagrams in Attachment D)*

### **002 (A-1) Portland Avenue and Mascoutah Avenue**

Longitude: 089° 57' 45.08" Latitude: 38° 30' 17.16"

Portland Avenue and Mascoutah Avenue is equipped with a seventeen-inch cement covered brick weir. With excessive combined sewer flow, the overflow spills over the weir and discharges to a drainage ditch and ultimately to Richland Creek. There is no flapper gate at this location nor is one considered necessary.

### **004(B-1) South Church St. and Richland Creek (re-routed to CSO Facility)**

Longitude: 089° 58' 49.74" Latitude: 38° 29' 53.67"

### **005(B-2) Freeburg Avenue and Van Buren Street (re-routed to CSO Facility)**

Longitude: 089° 58' 41.19" Latitude: 38° 30' 14.60"

### **008(C-1) South Belt East and Route 159 (re-routed to CSO Facility)**

Longitude: 089° 59' 02.65" Latitude: 38° 30' 07.58"

### **011(C-3a) Garfield and Richland Creek (Will be eliminated in Phase 3)**

Longitude: 089° 59' 23.28" Latitude: 38° 30' 35.33"

Garfield and Richland Creek does not have a diversion structure. Sanitary flow drops from one 36" line to another 36" line to the treatment plant during low flows. During high flows, the combined sewer flow would have to rise 3 ½' to a 24" overflow pipe and spill into Richland Creek. This CSO has a flapper gate.

### **012(C-4) Centerville Avenue and Lincoln Street (Will be eliminated in Phase 3)**

Longitude: 089° 59' 30.19" Latitude: 38° 30' 41.05"

Centerville Avenue and Lincoln Street is equipped with an 18" cement covered brick weir. This is a leaping weir overflow structure as explained earlier on 008(C-1). The overflow flows into a 24" line to Richland Creek. This overflow does have a flapper gate.

**014(C-5) West Main Street and 6th Street (Will be eliminated in Phase 3 & 4)**

Longitude: 089° 59' 36.09" Latitude: 38° 30' 48.63"

West Main Street and 6th Street do not have a diversion structure. Sanitary flow is directed through one 36" pipe to another 36" pipe to the treatment plant during low flows. During high flows, the combined sewer flow would have to rise an additional 9' to a 24" overflow pipe and spill into Richland Creek. This CSO does have a flapper gate.

**020(D-1) 4th Street north of Monroe Street (Will be eliminated in Phase 3)**

Longitude: 089° 59' 23.94" Latitude: 38° 30' 34.42"

4th Street north of Monroe Street is equipped with a 24" brick weir. Sanitary flow is directed from a 42" pipe to another 42" pipe to the treatment plant. During excessive combined sewer flow, the flow spills over the weir and is transported by a 24" pipe to Richland Creek. This overflow does have a flapper gate.

**023(D-4) Southern Railroad and 23rd Street (Will be eliminated in Phase 4)**

Longitude: 090° 00' 28.72" Latitude: 38° 31' 23.50"

Southern Railroad and 23rd Street has no diversion structures. Sanitary flow flows from one 36" pipe to another 36" pipe to the treatment plant during low flows. During high flows, the combined sewer flow would have to rise 2 ½' to a 24" overflow pipe and is transported to a drainage ditch and ultimately Catawba Creek. There is no flapper gate nor is one considered necessary.

**030(D-9) 66th Street north of West Main**

Longitude: 090° 02' 21.00" Latitude: 38° 33' 19.55"

66th Street north of West Main Street has no diversion structures. Sanitary flow is directed from a 18" and a 24" pipe to a 24" pipe to the treatment plant. During high flows the combined sewer flow would have to rise 1' 8" to a 18" overflow pipe and is transported to a drainage ditch and ultimately to Schoenberger Creek. There is no flapper gate nor is one considered necessary.

**035(D-13) 88th Street at Lift Station**

Longitude: 090° 03' 23.43" Latitude: 38° 34' 14.63"

88th Street at Lift Station 14 is now equipped with a swirl concentrator preceded by a bar screen. During low flows, sanitary flows are pumped by one (1) 200 g.p.m. and two (2) 500 g.p.m. pumps to the main treatment plant. A 100 kw standby generator backs up these pumps. During times that flows would exceed the pumping capacity of the three submersible pumps. The bar screen and design of the swirl concentrator would eliminate (drop out) the majority of the solids and floatable from the overflow stream before discharging to a 24" pipe that drains to a ditch tributary to Powdermill Creek. This CSO does not have a flapper gate nor is one considered necessary.

**037(E-2) 370 feet North of "E" Street and 9th Street (Will be eliminated in Phase 4)**

Longitude: 089° 59' 39.71" Latitude: 38° 31' 13.43"

370 feet North of "E" Street and 9th Street is equipped with a 14" brick weir and channel wall. The normal sanitary flow line passes through a combined sewer manhole suspended in an open trough. When the discharge increases, the water depth rises and flows over the sides of the trough. Below the trough the combined flow passes into a 24" overflow pipe and is conveyed to Catawba Creek. This CSO does not have a flapper gate nor is one considered necessary.

**038 CSO STORMWATER MANAGEMENT BASINS**

Longitude: 089° 58' 36.22" Latitude: 38° 29' 51.20"

The Stormwater Management Basins (SWMB) are located south of the East Treatment Plant. Combined sewage passes thru screening before being pumped into the SWMB. During high combined flows, sewage that is unable to be retained for treatment runs into a 64" pipe SWMB's and then into Richland Creek. The discharge pipe is protected by a flapper valve.

As this narrative and the diagrams show, all of the CSO regulators are fixed. None of the CSO's in Belleville's system have regulating/bypass valves or "stop plank" diversion structures. All structures are either brick or concrete and cannot be mechanically adjusted

These CSO's are inspected weekly including the diversion structures and are inspected more frequently during wet weather events. All CSO's are inspected during dry weather and wet weather inspections.

#### CSO Reductions/Additions

Over the last twelve years, we have eliminated seven CSO's from our sewer system:

**028 (D-7)** North of Main Street at 51<sup>st</sup> Street was eliminated October 24, 2007 as a result of the West Main Street stormwater separation project.

**031 (D-10)** 78<sup>th</sup> Street and County Highway 42 was eliminated October 24, 2007 by sealing off an overflow pipe from our West Main Street interceptor.

**022 (D-11)** 79<sup>th</sup> Street and County Highway 42 was eliminated November 20, 2007. Locating buried manholes and new technology in sewer cleaning, re-established capacity in the sewer main associated with this overflow. The city has purchased the equipment necessary to clean this sewer main and will provide regular maintenance to this area now that all of the manholes have been located.

**038** The First Flush Basin that was eliminated as part of action item one of the LTCP January 1, 2015. Once the basin is full, flow to this basin is diverted automatically to the CSO Pump Station then on to the SWMB's for treatment and storage.

**004 (B-1)** South Church St. and Richland Creek, **005 (B-2)** Freeburg Avenue and Van Buren Street and

**008 (C-1)** South Belt East and Route 159 were eliminated as part of action item one of the LTCP

January 1, 2015.

## DRY WEATHER OVERFLOW

Since the implementation of the inspection program, no known dry weather overflow (DWO) event has occurred at any of the city's authorized CSO's. The city performs weekly inspections to ensure that the regulators are working properly and that a DWO event has not occurred. A portion of the CSO inspections are performed at higher sanitary sewer flow periods in the dry weather cycle. These observations document that the regulating mechanisms are adequate to control the peak dry weather flows, maximize the storage of pollutants in the collection system and minimize the discharge of pollutants from all CSO's.

If a DWO is detected, the city will implement the following emergency procedures to correct the situation:

- I.E.P.A. will be contacted within 24 hours of the detected DWO, in accordance with Standard Condition 12(f) of our current NPDES Permit.
- A summary of the alternatives considered and actions taken to correct the DWO will be submitted to I.E.P.A. as soon as it becomes available.
- Periodic reports will be submitted to I.E.P.A. on the progress of correcting the DWO and the completion of the correction.

As stated and confirmed in correspondence from I.E.P.A. dated June 19, 1996 (*This was a misprint, it should have been June 19, 1997, Attachment E*), none of Belleville's permitted CSO's discharge to sensitive areas. Sensitive areas are defined as any water likely to be impacted by a CSO discharge which meet one or more of the following criteria: (1) designated as an Outstanding National Resource Water; (2) found to contain shellfish beds; (3) found to contain threatened or endangered aquatic species or their habitat; (4) used for primary contact recreation; or, (5) within the protection area for drinking water intake structure. The City of Belleville has purchased warning signs for each of their CSO outfalls (*Attachment F*). These signs have been placed in locations that are accessible to the public and visible to all. Inspection and maintenance of these warning signs shall be included in with our regular CSO Inspection.

The city has posted CSO information on the city website ([www.belleville.net](http://www.belleville.net)) that includes monthly updates on CSO events. These updates provide location, duration and frequency of our permitted CSO's.

## STREET AND CATCH BASINS

### Street Sweeping

The City of Belleville Street Department maintains an effective street cleaning program. The city is divided into five (5) regions (*Attachments G*). Currently the city owns and operates two (2) street sweepers. Streets are swept on a regular basis covering the five (5) regions every month to month and half.

During the fall months, more emphasis is put on cleaning the areas of combined sewers and the more wooded areas. The purpose for this is to help reduce the problem with leaves and reduce the potential of clogging the catch basin or combined sewer lines. Records of street cleaning frequency are reviewed by both Street and Sewer Superintendents and copies kept on file in both offices.

### Catch Basin

The Street Department and Sewer Lines Department handle the task of cleaning and repair of some estimated 4300± catch basins located throughout the city boundaries. Identical to the Street Sweeping program, the city is divided into five (5) regions (*Attachments G*). Approximately 25% of the 4300± catch basins are inspected annually for deficiencies such as structural problem, sluggish flow, and debris. Solid and floatable material that has accumulated is removed with the city's vactor truck and disposed of properly. Inspection and maintenance records are kept on file at both departments.

### Collection Systems

The city has sanitary sewers, storm sewers and combination sewers throughout its' 22.5 square miles. In past years, the city performed inspections, cleaning, repair and replacement on an as needed basis or a re-active approach.

### Storm Sewers

The Street Department inspects and maintains the storm sewer with the assistance of the Sewer Lines Department. Inspection and maintenance records are kept at the Street Department office.

### Sanitary and Combined Sewer

As stated earlier in this report, there are about 275 miles of sewer lines located within the 22.5 square miles of the city. Approximately 11 miles of sanitary sewer lines are tributary to Treatment Plant Pump Station No. 2 and 264 miles are tributary to the east plant, of which about 30% is combined.

Belleville's Sewer Lines Department has two jet rodder trucks and two combination vactor rodder trucks for cleaning its sewer lines. The newest vactor/rodder is capable of cleaning larger high flow lines. Belleville has purchased its own video inspection equipment that provides information to help pinpoint I & I locations and trouble spots for future rehabilitation. The city now takes a pro-active approach to collection system rehabilitation.

A sector cleaning program has been implemented to foster proactive collection system cleaning. The sewer lines department is scheduled to clean approximately 264,000 feet or 50 miles of the sewer system this year and will continue each year hereafter. The majority of the lines cleaned are within the combined sewer system.

Inspections, cleaning and maintenance records are kept on file at the treatment plant office.

## ILLEGAL CONNECTION

The City of Belleville realizes the importance of finding and eliminating illegal connections to the collection system. As with the sewer line cleaning program, the city is also taking a pro-active approach to minimize these collection system problems.

At this time, our program consists of visual, smoke, dye and TV testing. Upon visual inspection or a particular area is suspected due to backup complaints during heavy rains, we follow these steps:

1. Post notices to inform public within the area of testing.
2. Inform police and fire departments.
3. We again notify the public, police and fire departments within the test area the day of testing.
4. Smoke is blown in.
5. Visual inspection of gutter downspouts, cellar, yard and area drains, lots for an abandoned building sewer, yards for faulty connections, and storm sewer catch basins.
6. Tests are documented and photos are taken of any illegal connection or problems.
7. Compliance letters are then sent out to residents found to have illegal connections (residents have 30 days to comply).
8. Follow up for compliance.

Dye tests are performed on suspected holes or grates in yards, lots and streets to locate other sources of I & I. Dye tests are used to verify results of our smoke testing program where needed.

The City of Belleville also uses televised inspections as part of our collection system operation and maintenance program. Television inspection is a helpful tool for inspecting and documenting sewer lines for grease and debris build up, joint and pipe conditions, connection conditions and sewer line repairs before and after.

These methods are used to detect I & I problems including illegal sewer connections. As stated before, any illegal connections discovered are dealt with immediately and eliminated within 30 days according to our sewer use ordinance. Any storm water catch basins discovered to be connected to a sanitary sewer are eliminated if possible. These inspection methods have led to much of our sewer line rehabilitation projects.

Inspections, maintenance and compliance records are kept to document all performed inspections, problems, compliance and corrective maintenance work completed.

***ATTACHMENT A***  
*Original has been revised,  
now in new NPDES Permit.*

---

***ATTACHMENT A***



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-3397  
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

217-782-0610

DEC 31 2007

City of Belleville  
Attn: The Honorable Mark W. Eckert  
101 South Illinois Street  
Belleville, Illinois 62220

Re: NPDES Permit No. IL0021873  
Long Term Control Plan Approval

Dear Mayor Eckert:

The Agency has reviewed the Long Term Control Plan (LTCP), received December 26, 2007, and has determined that the LTCP, as provided, will fulfill the requirements of Special Condition 13 of your NPDES permit once implemented. Please be advised that the action items and schedule dates as outlined below will be placed in your NPDES permit after Public Notice and opportunity for hearing. Should any of these dates or action items be incorrect please notify the Agency.

Action Item	Start Date	Completion Date
Design of new treatment plant, lift station, stormwater management basins, and Belle Valley interceptors	1-2008	7-2009
Bidding process and contract award	2-2010	5-2010
Construction of new treatment plant, lift station, stormwater management basins and Belle Valley interceptor	6-2010	11-2012
Design of Freeburg and SBE 159 gravity relief sewers	11-2009	12-2010
Bidding process and contract award	7-2011	10-2011
Construction of Freeburg and SBE 159 gravity relief sewers	11-2011	5-2013
Design of South Side Park lift station, relief sewers and forcemains	4-2011	10-2012
Bidding process and contract award	4-2013	7-2013
Construction of South Side Park lift station, relief sewers and forcemains	8-2013	10-2015

Design of 9th and E Street improvements and SRR 23 lift station and forcemain	1-2013	3-2014
Bidding process and contract award	9-2014	12-2014
Construction of 9th and E Street improvements	1-2015	9-2015
Construction of SRR 23 lift station and forcemain	11-2015	11-2016
Design Upper - End Basins, 66th Street / 88th Street improvements and monitor effects of Phase 1	7-2014	12-2015
Bidding process and contract award	7-2016	10-2016
Construction of Upper - End Basins and 66th Street / 88th Street improvements	11-2016	7-2018
Design of Portland Avenue improvements	5-2017	9-2017
Bidding process and contract award	10-2017	1-2018
Construction of Portland Avenue improvements	2-2018	3-2019
Design of upper-end disinfection	8-2018	7-2020
Design of low-end disinfection system	4-2019	3-2021
Bidding process and contract award for the upper-end disinfection system	2-2021	5-2021
Construction of upper-end disinfection system	6-2021	9-2022
Bidding process and contract award for the low-end disinfection system	10-2021	1-2022
Construction of the low-end disinfection system	2-2022	5-2023

---

Page 3.

Please note that approval of the LTCP does not constitute approval of the facility plan or eliminate construction permit requirements. Additionally, the schedule allows time for Agency review of permit applications. The schedule may be shortened or lengthened depending on the actual Agency review period.

Should you have any questions or comments regarding this approval letter please contact Richard E. Pinneo at the indicated address or telephone number.

Sincerely,



Toby Frevert, P.E.  
Manager  
Division of Water Pollution Control

TF:REP:07122801.daa

Attachment insert

cc: USEPA, Russell Martin  
Records  
Collinsville Region  
Compliance Assurance Section  
City of Belleville, Roger Carlisle  
Thouvenot, Wade & Moerchen, Inc.

*ATTACHMENT B*

---

*ATTACHMENT B*

CSO DMR FORM  
 PERMIT NUMBER IL 0021873  
 MONITORING PERIOD FROM

MONTH-DAY-YEAR \_\_\_\_\_ TO MONTH-DAY-YEAR \_\_\_\_\_

CSO OUTFALL & DISCHARGE NUMBER	Rainfall	Rainfall	Rainfall Month Total Inches	Duration of Discharge Hours/Month	Overflow Use Occurances Month Total	Receiving Water
	Duration	Minimum				
	Month Total Hours/Month	Inches Causing Overflow Event				
PORTLAND AVE. & MASCOUTAH AVE. 002(A-1) Longitude 089° 57' 45.08" Latitude 38° 30' 17.16"						Richland Creek
S. CHURCH ST. & RICHLAND CREEK 004(B-1) Longitude 089° 58' 49.74" Latitude 38° 29' 53.67"						Richland Creek
FREEBURG AVE. & VAN BUREN ST. 005(B-2) Longitude 089° 58' 41.19" Latitude 38° 30' 14.60"						East Creek
S. BELT EAST & RTE. 159 008(C-1) Longitude 089° 59' 02.65" Latitude 38° 30' 07.58"						Richland Creek
GARFIELD ST. & RICHLAND CREEK 011(C-3a) Longitude 089° 59' 23.28" Latitude 38° 30' 35.33"						Richland Creek
CENTERVILLE AVE. & LINCOLN ST. 012(C-4) Longitude 089° 59' 30.19" Latitude 38° 30' 41.05"						Richland Creek
W. MAIN ST. & S. 6TH ST. 014(C-5) Longitude 089° 59' 36.09" Latitude 38° 30' 48.63"						Richland Creek
4TH ST. NORTH OF MONROE ST. 020(D-1) Longitude 089° 59' 23.94" Latitude 38° 30' 34.42"						Richland Creek
SOUTHERN RR & 23RD ST. 023(D-4) Longitude 090° 00' 28.72" Latitude 38° 31' 23.50"						Catawba Creek
66TH ST. NORTH OF WEST MAIN ST. 030(D-9) Longitude 090° 02' 21.00" Latitude 38° 33' 19.55"						Schoenberger Creek
SOUTH 88TH ST. LIFT STATION 035(D-13) Longitude 090° 03' 23.43" Latitude 38° 34' 14.63"						Powdermill Creek
370 FEET NORTH OF "E" ST. & 9TH ST. 037(E-2) Longitude 089° 59' 39.71" Latitude 38° 31' 13.43"						Catawba Creek
#1 BASIN CSO 0380 Longitude 089° 58' 36.22" Latitude 38° 29' 51.20"						Richland Creek

WET WEATHER INSPECTION  
 DRY WEATHER INSPECTION

DATE: \_\_\_\_\_  
 RAINFALL: \_\_\_\_\_  
 DAYS SINCE .30": \_\_\_\_\_

**CSO FIELD REPORT**

DISCHARGE #	LOCATION	RCV. WATER*	PIPE SIZE	% OF FLOW	DURATION IN HOURS	CSO STATUS		DEBRIS		CLEANED			OVERALL CONDITION				
						DISCHARGING	NO-DISCHARGE	YES	NO	YES	NO	YES	NO	POOR	FAIR	GOOD	
002(A-1)	PORTLAND AVE. & MASCOUTAH AVE.	R.C.	72"														
004(B-1)	S. CHURCH ST. & RICHLAND CREEK	R.C.	24"														
005(B-2)	FREEBURG AVE. & VAN BUREN ST.	E.C.	48"														
008(C-1)	S. BELT EAST & RTE. 159	R.C.	42"														
011(C-3a)	GARFIELD ST. & RICHLAND CREEK	R.C.	24"														
012(C-4)	CENTERVILLE AVE. & LINCOLN ST.	R.C.	24"														
014(C-5)	W. MAIN ST. & S. 6TH ST.	R.C.	36"														
020(D-1)	4TH ST. NORTH OF MONROE ST.	R.C.	42"														
023(D-4)	SOUTHERN RR & 23RD ST. (pipe separating last section	C.C.	36"														
028(D-7)	NORTH OF MAIN ST. AT 51ST. ST.	S.C.	33"														
030(D-9)	66TH ST. NORTH OF WEST MAIN ST.	S.C.	18"														
031(D-10)	78TH ST. & COUNTY HIGHWAY 42	P.C.	12"														
032(D-11)	79TH ST. & COUNTY HIGHWAY 42	P.C.	24"														
035(D-13)	SOUTH 88TH ST. L.S.	P.C.	36"														
037(E-2)	370 FEET NORTH OF "E" ST. & 9TH ST.	C.C.	24"														

RCV. WATER\*  
 R.C. - RICHLAND CREEK  
 E.C. - EAST CREEK  
 C.C. - CATAWBA CREEK  
 S.C. - SCHOENBERGER CREEK  
 P.C. - POWDERMILL CREEK

RAINFALL IN INCHES AT:

PLANT 2: \_\_\_\_\_  
 S. 88TH STREET: \_\_\_\_\_  
 SOUTHWIND: \_\_\_\_\_

WET WEATHER INSPECTION  
 DRY WEATHER INSPECTION

DATE: \_\_\_\_\_  
 RAINFALL: \_\_\_\_\_  
 DAYS SINCE :30": \_\_\_\_\_

**CSO FIELD REPORT**

DISCHARGE #	LOCATION	RCV. WATER*	PIPE SIZE	% OF FLOW	DURATION IN HOURS	CSO STATUS		DEBRIS		CLEANED		OVERALL CONDITION		
						DISCHARGING	NO-DISCHARGE	YES	NO	YES	NO	POOR	FAIR	GOOD
002(A-1)	PORTLAND AVE. & MASCOUTAH AVE.	R.C.	72"											
004(B-1)	S. CHURCH ST. & RICHLAND CREEK	R.C.	24"											
005(B-2)	FREEBURG AVE. & VAN BUREN ST.	E.C.	48"											
008(C-1)	S. BELT EAST & RTE. 159	R.C.	42"											
011(C-3a)	GARFIELD ST. & RICHLAND CREEK	R.C.	24"											
012(C-4)	CENTERVILLE AVE. & LINCOLN ST.	R.C.	24"											
014(C-5)	W. MAIN ST. & S. 6TH ST.	R.C.	36"											
020(D-1)	4TH ST. NORTH OF MONROE ST.	R.C.	42"											
023(D-4)	SOUTHERN RR & 23RD ST. (pipe separating last section	C.C.	36"											
028(D-7)	NORTH OF MAIN ST. AT 51ST. ST.	S.C.	33"											
030(D-9)	66TH ST. NORTH OF WEST MAIN ST.	S.C.	18"											
031(D-10)	78TH ST. & COUNTY HIGHWAY 42	P.C.	12"											
032(D-11)	79TH ST. & COUNTY HIGHWAY 42	P.C.	24"											
035(D-13)	SOUTH 88TH ST. L.S.	P.C.	36"											
037(E-2)	370 FEET NORTH OF "E" ST. & 9TH ST.	C.C.	24"											

**RCV. WATER\***

R.C. - RICHLAND CREEK  
 E.C. - EAST CREEK  
 C.C. - CATAWBA CREEK  
 S.C. - SCHOENBERGER CREEK  
 P.C. - POWDERMILL CREEK

**RAINFALL IN INCHES AT:**

PLANT 2: \_\_\_\_\_  
 S. 88TH STREET: \_\_\_\_\_  
 SOUTHWIND: \_\_\_\_\_

*ATTACHMENT C*

---

*ATTACHMENT C*

ILLINOIS POLLUTION CONTROL BOARD  
November 19, 1987

G.H.  
info  
11/26/87

IN THE MATTER OF: )  
 )  
JOINT PETITION OF THE CITY OF ) PCB 85-218  
BELLEVILLE AND THE ILLINOIS )  
ENVIRONMENTAL PROTECTION AGENCY )  
FOR EXCEPTION TO THE COMBINED )  
SEWER OVERFLOW REGULATIONS )

OPINION AND AMENDED ORDER OF THE BOARD (by J.D. Dumelle):

This matter comes before the Board upon a December 30, 1985, Joint Petition for a combined sewer overflow (CSO) exception filed pursuant to 35 Ill. Adm. Code, Subtitle C, Chapter I, Part 306, Subpart D, by the City of Belleville (City) and the Illinois Environmental Protection Agency (Agency). Petitioners specifically request exception from 35 Ill. Adm. Code 306.305(a) and 306.305(b).

Joint Petitioner, IEPA, also filed a Motion For Modification And Clarification on November 10, 1987, which the Board hereby adopts in this Amended Order.

A public hearing was held on September 17, 1986 in Belleville, Illinois. No members of the public were present. Testimony and evidence was presented at that time by witnesses for both the City and the Agency. At the conclusion of the hearing Belleville agreed to tender additional documentation. On May 21, 1987 the hearing officer ordered Belleville to produce the additional information. The City responded to this order on August 27, 1987.

CSO REGULATIONS

The CSO regulations are set forth at 35 Ill. Adm. Code Subtitle C, Chapter I, Part 306. They were amended in R81-17, 51 PCB 383, March 24, 1983. Section 306.305 provides as follows:

All combined sewer overflows and treatment plant bypasses shall be given sufficient treatment to prevent pollution, or the violation of applicable water standards unless an exception has been granted by the Board.

Sufficient treatment shall consist of the following:

- a) All dry weather flows, and the first flush of storm flows as determined by the Agency, shall meet the applicable effluent standards; and
- b) Additional flows, as determined by the Agency but not less than ten times the average dry weather flow for the design year, shall receive a minimum of primary treatment and disinfection with adequate retention time; and
- c) Flows in excess of those described in Subsection (b) shall be treated, in whole or in part, to the extent necessary to prevent accumulations of sludge deposits, floating debris and solids in accordance with 35 Ill. Adm. Code 302.203, and to prevent depression of oxygen levels; or
- d) Compliance with a treatment program authorized by the Board in an exception granted pursuant to Subpart D.

Subpart D allows the discharger to file a petition for exception jointly with the Agency as Belleville has done. Such a Joint Petition must justify an exception according to the criteria set forth at Section 306.361. In reviewing whether a joint application justifies granting, this Board reviews the application evidence and proofs in conjunction with 35 Ill. Adm. Code Section 306.361(a), which requires the submission of data concerning receiving stream ratios, known stream uses, stream and side land accessibility, frequency and extent of overflow events, and inspections of unnatural deposits, odors, unnatural floating materials or color, stream morphology and limited chemical analysis.

Where the Petition fails to demonstrate a "minimal impact exception" (above) or where issuance of an exception would result in a modification of water quality standards an applicant must include additional information as required by 35 Ill. Adm. Code Section 306.361(a). Specifically, the additional data required concerns stream sediment analyses, biological surveys and stream chemical analyses.

The City and the Agency believe they have made a showing of the minimal impact showing pursuant to Section 306.361(a).

### SUPPORTING DOCUMENTS

Belleville has undertaken several studies of its CSO situation, the reports of which have been submitted as exhibits in support of the Petition. Those reports include the following: Ex. #1, First Flush Summary; Ex. #2, Study of Combined Sewer Overflow; Ex. #3, Combined Sewer Overflow Procedures; Ex. #4, Municipal Compliance Plan, Ex. #6, Flood Insurance Study. The City has also introduced the Department of the Army's interim report on Richland Creek (Ex. #7) and certain proposed procedures for determining compliance with the regulations, Ex. #5.

IEPA exhibits include the following: Ex. #2, Summary of Stream Survey; Ex. #3, Illinois Water Quality Report, pp. 12-16, 40, 41; an analysis of the City's ability to finance proposed changes and accompanying testimony.

### BACKGROUND

The City of Belleville is located in St. Clair County on Illinois Route #159, 4 miles south of Interstate Route #64. The City, with a population of 42,000, is home to a Heileman Brewery, Peerless appliance manufacturer, and other local industries.

The City owns, operates and maintains its own waste water collection facilities, with the first collection system constructed in 1912. This was a combined domestic waste/storm water system. Currently, 16,000 users are served by the City.

There are four different drainage basins in the Belleville area, but only three serve as receiving waters for CSO discharges (Powdermill, Schoenberger, and Richland Creeks). Richland Creek is the stream most impacted by CSO discharge. Discharges to Powdermill and Schoenberger Creeks have been or will be eliminated, which in this case, means operative only during excessive rainfall. Petitioner provided no stream-flow or environmental effects data for Powdermill or Schoenberger Creeks.

Data concerning Richland Creek high flows is as follows: The ten year flood is estimated to have a peak discharge of 3,260 MGD upstream, and 5,310 MGD downstream of Belleville's corporate limits. (Ex. #6 p. 6). This is higher than the "average bankfull channel capacity" of Richland Creek above and through the City. (Ex. #7 pp. 47-48). The average flow of Richland Creek is 67.2 MGD (USGA Report, p. 10). Low flow data for Richland Creek is 2.45 MGD for a 7-day, 10 year storm event.

The existing wastewater collection system consists of three separate systems. The original system is tributary to wastewater Treatment Plant No. 1; the second system (constructed in the mid 1960's) encompasses completely separate sanitary and storm sewers

and serves an area tributary to wastewater Treatment Plant No. 2; and the last system, which also includes completely separate sanitary and storm sewers, is tributary to wastewater Treatment Plant No. 3. In total, the City has approximately 90 miles of separate sewers and 50-60 miles of combined sewers. The combined sewers comprise 45% of the sewer system into Treatment Plant No. 1

Three interceptors, having total capacity of 16 MGD, transport sewage to Treatment Plant No. 1, which provides full treatment for dry weather flows, to a maximum of 8 MGD; collection and storage of excess flow up to 10.5 MGD; and primary treatment with disinfection for an additional 8 MGD. There are currently 17 combined sewer overflows. Previously there were 40 CSOs but 23 have been or will be eliminated. Eliminated, in this case, means only operative during excessive rainfall. Most combined sewers located near Richland Creek have a combined capacity of 20 MGD. Bypass stormwater flows from the interceptors directly into Richland Creek. The remaining combined sewers, with total capacity of 5 MGD, are scattered around the upper part of the sewer system and bypass storm flow to a storm sewer which discharges to a drainage ditch tributary to Richland Creek. These overflows do not operate until the wet weather first flush has passed. Bypassing begins at overflows located near Treatment Plant No. 1 during rains ranging from 0.5 to 1.0 in/hr. Most of the upstream overflows will operate at 1.5 in/hr rainfall; others rarely operate.

The City's treatment plant was upgraded in 1975; but that did not include facilities for nitrification and the required amount of CSO treatment.

The City claims that it has not received tangible inquiry or complaints from residents relative to its occasional discharges from overflow points. The major concern and complaints of the public are related to sewer backups. (Ex. No. 3 p. 14).

#### EXISTING CSO IMPACT

The result of an overflow can be significant discharge of pollutants such as organic materials, nutrients, sediment, microorganisms, oil and grease, metals. Concentrations are higher at the beginning of the overflow. (City Ex. No. 3, p. 2).

#### CSO PROPOSAL

The City presented a twofold plan intended to resolve the existing problem as much as possible. The proposal seeks to significantly reduce the City's adverse impact on Richland Creek, while avoiding the substantial costs of complete compliance or separation of the combined sewer system.

Non-structural recommendations included the use of periodic street cleaning, periodic sewer flushing and periodic catch basin cleaning. Additionally, reduction of excess inflow was proposed via enforcement of the City's ordinance requiring disconnection of downspouts.

Structural recommendations were as follows:

1. Bottle-neck eliminations:

There are three sections of the interceptor where pipe diameters are less than that of the incoming upstream interceptor section. These mis-matches create hydraulic bottle-necks which contribute to organic and solids build-up in the interceptor and increases the overflows. The proposal would replace these sections of the interceptor with piping of equal or greater diameter. The three bottle-necks undergoing modification are as follows: No. #1, the 18 to 24 in. interceptor along West Main Street between 73rd and 58th streets, will be replaced with a 30 in. diameter line; no. #2, the 18 to 24 in. interceptor along West Main Street between 51st and 37th streets will be replaced with a 36 in. line; no. #3, the 24 to 30 in. receptor along West 'A' Street between 23rd and 15th streets will be replaced with a 36 in. line. The City alleges that elimination of these bottle-necks will enable more of the stormwater runoff, containing the greatest quantity of pollutant load, to reach the proposed relief interceptor along Richland Creek. Municipal Compliance Plan Chapter VII, Section 7.2.7 p. 8.

2. Surge relief interceptors

The City has proposed that three new relief interceptors be constructed.

- a) Richland Creek Relief Interceptor: A new relief interceptor is proposed to parallel Richland Creek from "G" Street to the proposed pumping station at Treatment Plant No. 1. This line will intercept combined sewer overflow from thirteen overflow points.
- b) East Creek Relief Interceptor: A new relief interceptor is proposed to parallel the existing 24 in. diameter interceptor from McKinley and Park streets to the proposed pumping station near Treatment Plant No. 1. The existing interceptor will remain in use.

- c) East Side Relief Interceptor: A new relief interceptor is proposed to intercept the combined sewer overflow from site A-1 and deliver it to the proposed pumping station near Treatment Plant No. 1. A 36 in. diameter interceptor will parallel the existing 21 in. diameter interceptor from Portland and Mascoutah Avenues to, then along, Route #13, and then north of Treatment Plant No. 1 to Church Street, then finally, south to the proposed first flush pumping station near Treatment Plant No. 1. This interceptor will pick up overflow from the worst overflow site in the system, A-1. Municipal Compliance Plan Chapter VII, Section 7.2.7 p. 9.

3. Pumping station and holding basin

The above referenced new pumping station will be located north of Richland Creek, and will collect and pump flow from the three proposed relief interceptors. The combined wastewater will be pumped to a proposed holding basin located south of Richland Creek, opposite Treatment Plant No. 1. The holding basin will be approximately three acres and will hold 10.5 million gallons. This proposed holding basin will have a floating aeration system to keep the pollutants in suspension. After the rain ends, water in the holding basin will be treated at Treatment Plant No. 1 as capacity becomes available. During normal flow conditions, approximately 2 MGD can be pumped from the holding basin. Municipal Compliance Plan Chapter VII, Section 7.2.7 p. 10.

4. Improvements within the independent overflow points

The remaining overflow points (with a lesser discharge pattern) are located at the beginning of the Schoenberger and Powdermill Creeks watersheds. These overflow points will be individually improved. Also, various channel improvements -- in addition to paving of the downstream portion of the overflow points -- will be implemented to prevent future debris deposits. (Ex. No. 3 pp. 20-22).

Additionally, the City stated that it is continuing with its plan to eliminate overflow points. The City has expended a substantial amount of money to date and has reduced the amount of overflow points to seventeen from 40. (R. 60). This number will be further reduced by continuation of the City's current plan.

Petitioners admitted that their proposal was an "unorthodox case" -- but that 100 percent of the first flush volume "for

essentially any storm" will be captured in the first flush basin -- "and that is irregardless [sic] of the size of that storm." (R. 63).

#### ECONOMIC IMPACT

At hearing the City's witness, Mr. Ike Karaca asserted that complete separation of the storm sewers from the sanitary sewers would cost approximately sixty million dollars [\$60,000,000]. (R. 18). This same figure was used in the City's initial petition. It should be noted that IPCB regulations do not require a complete separation of the two sewer lines in order to achieve compliance.

During hearing Mr. Michael Bowers, an employee of Illinois Environmental Protection Agency, Water Pollution Control Division, testified on behalf of the Joint Petition. (Agency Ex. No. 5). (R. 74). Mr. Bowers concluded that his analysis, utilizing Agency accepted, preliminary review criteria for affordability of MCP projects, indicated that the City's current proposal with construction costs at \$11,112,075 is within its financial capability. (R. 78).

The Agency introduced evidence relative to the City's financial ability. The data indicated, inter alia, that the City has a 5 year average unemployment rate of 14.3%, and 19.2% of City residents are over 65 years old; "there is a significant portion of our population who can afford no additional sewer expense." (Agency Ex. No. 5). The area does include a brewery and some industrial manufacturers.

Originally, the City planned to proceed with construction only if a grant were obtained. However, the City later promised to proceed with construction with or without financial aid.

#### CONCLUSION

35 Ill. Adm. code Sections 306.350, 306.361(a)(b) establish the criteria to be considered by this Board in reviewing an application for exception to the performance criteria established by this Board.

The Board finds that Petitioner, the City of Belleville, has justified its proposal pursuant to 35 Ill. Adm. Code Section 306.361(a). The proposal will eliminate most CSO discharges into Richland Creek and absorb the entire first flush volume -- regardless of the size of a rainfall event. It should be noted that Petitioner's proposal will not fully treat the entire first flush: Stormflow in excess of the 10.5 MGD capacity of the holding basin will only be given primary treatment with disinfection. The proposal will also increase Belleville's retention and treatment capacity by 10 million gallons.

Additionally, the City, which has already eliminated 23 overflow points will continue to eliminate more overflow points -- although there is no firm commitment concerning the exact amount.

Overflow into Powdermill and Schoenberger Creeks, from CSO will be minimal. (Response to H.O. Order of May 21, 1987 p. 3). Impacts at these outfalls were previously found to be minimal (City Ex. No. 3) and the City's continued elimination of overflow points will act to further reduce any impacts on Powdermill and Schoenberger Creeks.

Richland Creek is the locus of most concern. This is the stream that is most impacted by Belleville's CSO. The proposal, by absorbing the entire first flush volume, will eliminate the single greatest problem caused by Belleville's current operation. Additionally, the proposal will increase the City's ability to collect, store and treat ten million gallons in excess of current capacity. Current dry weather flow is 4.71 MGD, (R. 29); with current dry weather design average of 8 MGD and maximum flow of 16 MGD (R. 38).

#### ORDER

On October 29, 1987 this Board entered an Order concerning this case. The following Order is adopted in response to the Agency's Motion For Clarification filed on November 10, 1987. The following is the final Order of this Board and the Order of October 29, 1987 is hereby vacated.

1. Petitioner, City of Belleville is granted an exception from 35 Ill. Adm. Code Section 306.305(a)(b) only as relates to First Flush.
2. Petitioner shall implement the structural and non-structural modifications contained in its Municipal Compliance Plan, [Exhibit No. 4]. These include, but are not limited to, the following: Reduction of excess inflow; street cleaning; periodic sewer flushing; catch basin cleaning; flow improvements for receiving streams; bottle-neck eliminations; construction of surge relief interceptors; construction of pumping station and holding basin and various improvements within the independent overflow points, all as identified in Petitioner's Municipal Compliance Plan.
3. The above construction and modifications shall be implemented regardless of grant funds or other economic aid.
4. The above construction and modification shall be done in accordance with the schedule agreed to by Petitioner and the Illinois Environmental Protection Agency

identified in the September 1986 Municipal Compliance Plan [Exhibit No. 4]. Three pages from that compliance plan have been reproduced and attached to this order and are hereby adopted by the Board and incorporated into this Order.

5. The exception does not preclude the Illinois Environmental Protection Agency from exercising its authority to require as a permit condition a CSO monitoring program sufficient to assess compliance with this exception, any other Board regulations, including Section 306.305(c) or other controls necessary for compliance with water quality standards.
6. This exception is not to be construed as affecting the enforceability of any provisions of this exception, other Board regulations on the Environmental Protection Act.

IT IS SO ORDERED.

Board Member B. Forcade dissented.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Amended Order was adopted on the 19<sup>th</sup> day of November, 1987 by a vote of 6-1.

  
\_\_\_\_\_  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board

BELLEVILLE, ILLINOIS  
 COMBINED SEWER OVERFLOW EXCEPTION

IMPLEMENTATION SCHEDULE

T A S K	Y	E	A	R	S
	1 9 8 7	1 9 8 8	1 9 8 9	1 9 9 0	1 9 9 1
1. Pumping Station and First Flush Holding Basin;					
a. Field Survey	X X				
b. Plans & Specs	X X	X			
c. Agency Submittal			X X		
d. Construction			X X X X		
2. East Side Interceptor					
a. Field Survey	X X				
b. Plans & Specs	X X	X			
c. Agency Submittal		X X			
d. Construction			X X X	X	
3. Misc. Overflow					
a. Field Survey	X				
b. Plans & Specs	X				
c. Agency Submittal	X				
d. Construction		X X			



T A S K

Y E A R S

1 9 9 1 1 9 9 2 1 9 9 3 1 9 9 4 1 9 9

6. East Creek  
Interceptor

a. Field Survey

X X

b. Plans & Specs

X X X

c. Agency Submittal

X X

d. Construction

X X X X

*ATTACHMENT D*

---

*ATTACHMENT D*

UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF ILLINOIS

NOV 22 1988

UNITED STATES OF AMERICA,  
and  
THE STATE OF ILLINOIS,  
Realigned Plaintiff,  
v.  
CITY OF BELLEVILLE, ILLINOIS,  
Defendant.

No. 88-5321 (Civil Action)

DECEMBER

MAY 11 1991

COMPLIANCE SECTION

CONSENT DECREE

Plaintiff, the United States of America ("United States"), on behalf of the United States Environmental Protection Agency ("U.S. EPA"), filed the Complaint herein on November 22, 1988, against Defendant, City of Belleville, Illinois, ("Belleville"), and the State of Illinois, ("Illinois"), alleging violations of the Clean Water Act, 33 U.S.C. § 1251 et seq. ("the Act"), and the terms and conditions of National Pollutant Discharge Elimination System ("NPDES") Permit Number IL 0021873;

The State of Illinois was joined as a Defendant pursuant to Section 309(e) of the Clean Water Act, 33 U.S.C. § 1319(e), and was realigned as a Plaintiff by order entered February 2, 1989, with the proviso that the United States' claim against Illinois under 33 U.S.C. § 1319(e) remains;

The United States, Illinois and Belleville have agreed that settlement of this matter and the entry of this Consent Decree without further litigation is in the public interest, and is the most appropriate means of resolving this matter:

NOW THEREFORE, before the taking of any testimony upon the pleadings, and without adjudication of any terms of fact or law, and upon consent of the parties hereto, it is hereby ORDERED, ADJUDGED, and DECREED as follows:

#### JURISDICTION

1. This Court has jurisdiction over the subject matter of this action and over the parties pursuant to Section 309 of the Act, 33 U.S.C. § 1319, 28 U.S.C. §§ 1345 and 1355. Venue is proper in this District pursuant to 28 U.S.C. § 1391(b) and (c) and 1395(a), and Subsection 309(b) of the Act, 33 U.S.C. § 1319(b). The Complaint states a claim upon which relief may be granted under Section 309 of the Act, 33 U.S.C. § 1319.

#### BINDING EFFECT

2. The provisions of this Consent Decree shall apply to and be binding upon the parties to this action, their officers, directors, agents, trustees, servants, employees, successors, assigns, attorneys, and all persons, firms, and corporations acting in concert or participation with them. Belleville shall provide a copy of this Consent Decree to any successor in interest at least thirty (30) days prior to transfer of that interest, in whole or in part, and shall simultaneously verify to

the United States Environmental Protection Agency ("U.S. EPA") and all other parties to this Consent Decree that notice has been given. In any action to enforce this Consent Decree, Belleville shall not raise as a defense the failure by any of its agents, servants, contractors or employees to take actions necessary to comply with this Consent Decree.

#### OBJECTIVES

3. It is the express purpose of the parties in entering this Consent Decree to further the objectives of the Clean Water Act, as enunciated at Section 101 of the Act, 33 U.S.C. § 1251. All plans, studies, construction, remedial maintenance, monitoring programs, inspections, pretreatment program activities, and other obligations in this Decree or resulting from the activities required by this Decree shall have the objective of causing Belleville to come into and remain in full compliance with the Act, including compliance with the terms and conditions of NPDES Permit Number IL 0021873, renewals or amendments to the NPDES permit, its Pretreatment Program, and the provisions of applicable federal and State laws and regulations governing Belleville's operation of and discharge from Belleville Wastewater Treatment Plant (WWTP #1).

#### DEFINITIONS

4. Unless otherwise defined herein, terms used in this Decree shall have the meaning given to those terms in the Clean Water Act, 33 U.S.C. § 1251 et seq., and the regulations promulgated thereunder (see 33 U.S.C. Section 1362 and 33 C.F.R.

Section 401.11), as well as the meanings given in any applicable NPDES permit.

#### FINDINGS OF FACT

5. Belleville is a municipal corporation organized and existing under the laws of the Illinois. Belleville owns and operates WWTP #1, located on South Church Street in the City of Belleville, St. Clair County, Illinois. WWTP #1 discharges pollutants into the Richland Creek, which flows into the Kaskaskia River.

6. On February 22, 1985, the Illinois Environmental Protection Agency ("IEPA") reissued NPDES permit IL 0021873 to Belleville. The NPDES permit sets effluent limitations on Belleville's discharge of pollutants into the Richland Creek. On October 25, 1985, IEPA modified the NPDES permit to include, among other things, a pretreatment program. The modified NPDES permit is currently effective and is attached hereto as Exhibit 1. From April 1985, through at least January 1989, Belleville discharged pollutants in excess of the effluent limitations set forth in its NPDES permit. From April 1985 to the present, Belleville has failed to fully implement its pretreatment program.

#### COMPLIANCE PROGRAM

7. Belleville shall achieve and thereafter maintain full compliance with the terms of its NPDES permit, and any renewals or amendments to that permit, and maintain full compliance with the Act and all applicable regulations. Belleville shall upgrade

its combined sewer overflow ("CSO") facilities and fully implement its pretreatment program.

Combined Sewer Overflow Compliance Program

8. Defendant Belleville shall upgrade its CSO facilities by constructing a first flush equalization basin, first flush pumping station, east side/Wabash interceptor sewers, Richland Creek interceptor, west main replacement interceptor and the East Creek interceptor, in accordance with the following compliance schedule:

<u>Milestone</u>	<u>Date</u>
* <u>CSO Phase I (First Flush Holding Basin/Pump Station)</u>	
- Design (Complete)	Complete
- Initiation of Construction	Nov. 1, 1989
- Completion of Construction	March 23, 1991
- Initiate Operation	July 31, 1991
* <u>CSO Phase II (Richland Creek Interceptor)</u>	
- Completion of Design	Complete
- Initiation of Construction	March 1, 1991
- Completion of Construction	Aug. 31, 1992
- Initiate Operation	Sept. 30, 1992
* <u>Phase III (Eastside/Wabash Interceptor)</u>	
- Completion of Design	Apr. 1, 1989
- Initiation of Construction	March 1, 1990
- Completion of Construction	July 13, 1991
- Initiate Operation	July 31, 1991
* <u>CSO Phase IV (West Main Replacement Interceptors)</u>	
- Initiation of Design	Oct. 1, 1990
- Completion of Design	May 1, 1991
- Initiation of Construction	March 1, 1992
- Completion of Construction	Aug. 31, 1993
- Initiate Operation	Aug. 31, 1993

\* Phase V (East Creek Interceptor)

- |                              |               |
|------------------------------|---------------|
| - Initiation of Design       | Oct. 1, 1990  |
| - Completion of Design       | May 1, 1991   |
| - Initiation of Construction | March 1, 1992 |
| - Completion of Construction | Aug. 31, 1993 |
| - Initiate Operation         | Aug. 31, 1993 |

Operation & Maintenance

9. Belleville shall continue to maintain and operate the plant and collection systems to minimize equipment breakdowns, interruptions of treatment, and overflows. Belleville shall develop a draft operation and maintenance manual for the plant and the wastewater treatment system, and shall submit the manual to U.S. EPA and IEPA for approval, on or before August 1, 1990. Upon approval of the final operation and maintenance manual, Belleville shall immediately implement the manual's procedures.

Pretreatment Program

10. Belleville's Pretreatment Program, approved by U.S. EPA, Region V, on June 25, 1985, consisting of Belleville's ordinance implementing the program, Ordinance No. 4162, entitled "City of Belleville Industrial Pretreatment Ordinance;" and Ordinance No. 4399, entitled "An Ordinance Amending Industrial Pretreatment Ordinances;" Chapter 8 of the Municipal Code of the City of Belleville, entitled "Sewers," and Special Condition 10 of Belleville's NPDES Permit, which requires Belleville to implement and enforce its Pretreatment Program, are hereby incorporated into this Consent Decree by reference as if set forth in full detail. These documents shall hereafter be

collectively referred to as the Belleville "Pretreatment Program."

11. Upon the date this Consent Decree is entered by the courts, Belleville shall fully implement and effectively enforce the provisions of the Pretreatment Program. Belleville's failure to fully and timely implement any provision of the Pretreatment Program shall constitute a violation of this Consent Decree.

12. Nothing herein shall be construed to limit the authority of the United States or Illinois to undertake any action against any person, including any industrial user of WWTP #1, who is in violation of the Act or regulations promulgated pursuant thereto.

13. Belleville's obligations under this Consent Decree with respect to enforcement of its Pretreatment Program include, but are not limited to the following:

(a) Within thirty (30) days of the entry of this Consent Decree, Belleville will conduct an industrial inspection and sampling of all parameters found in the industry's permit and the prohibitive and specific discharge standards found in Section 300.105 and 300.110, respectively, of the city's pretreatment ordinance for each of its categorical and significant industrial users. Belleville has defined significant industrial user to mean any industrial user of the POTW's wastewater disposal system which (i) has a discharge flow of 10,000 gallons or more per average work day, or (ii) has a discharge flow greater than 0.2 percent of the flow in the POTW's wastewater treatment system, or (iii) has in its wastewater incompatible pollutants as defined pursuant to Section 307 of the Act, or by State Statutes, or by applicable federal or states rules and regulations, or (iv) is found by the POTW, IEPA, or U.S. EPA to have

significant impact, either singly or in combination with other contributing industries, on the wastewater treatment system, the quality of sludge, the system's effluent quality, or air emissions generated by the system, or (v) is subject to any National Categorical Pretreatment Standard. Belleville will determine whether its industrial users are in compliance with the applicable federal categorical pretreatment standards, prohibited discharges as identified in 40 C.F.R. § 403.5, and the Pretreatment Standards as defined in the City's Industrial Pretreatment Ordinance. Belleville will continue such inspections and sampling visits on the schedule provided in Belleville's Pretreatment Program and will maintain a file on each industrial user. The file shall include but not be limited to all sampling data, inspection reports, self-monitoring reports, correspondence, telephone and meeting notes and chain of custody forms. Defendant Belleville will complete a chain of custody form for each sample obtained from an industrial user in accordance with Belleville's Pretreatment Program.

(b) Within sixty (60) days of the entry of this Consent Decree, Belleville will obtain from each of its significant industrial users all overdue 90-day final compliance reports, compliance schedule milestone reports, and self monitoring reports required by Belleville's Pretreatment Program; Belleville will continue to obtain all required reports from its significant industrial users on the schedule provided in Belleville's Pretreatment Program; Belleville will place all reports obtained in the industrial user's file, and if Belleville is unable to obtain required reports from an industrial user, Belleville will take appropriate enforcement action against that user.

(c) Within sixty (60) days of the entry of this Consent Decree, Belleville must issue new industrial users' permits to each significant industrial user. Each new permit will contain specific discharge limits based on all the federal, state, and local standards applicable to each industrial user. The permit will specify the monitoring and reporting requirements applicable to that user under Belleville's Pretreatment Program, and will prohibit the industrial user from discharging in excess of the discharge limits. The permits, at a minimum, also shall cite the City of

Belleville's legal authority which regulates the use of sewers, private wastewater disposal and the discharge of wastewater into the POTW's wastewater system, and specify sampling location(s).

(d) Within 120 days of the entry of this Consent Decree, Belleville will take appropriate and effective action to ensure compliance with the requirements of the Pretreatment Program. At a minimum, Belleville shall:

- (i) Identify and locate all possible Industrial Users which might be subject to the Pretreatment Program;
- (ii) Identify the character and volume of pollutants contributed to the POTW by the Industrial Users identified above;
- (iii) Notify industrial users of applicable federal categorical pretreatment standards, the general and specific prohibitions in 40 C.F.R. § 403.5 and local limitations in the City's Industrial Pretreatment Ordinance;
- (iv) Notify industrial users of any applicable requirements under section 204(b) and 405 of the Act and Subtitles C and D of the Resource Conservation and Recovery Act;
- (v) Receive and analyze self-monitoring reports and other notices submitted by Industrial Users in accordance with the Pretreatment Program;

(vi) Randomly sample and analyze the effluent from Industrial Users and conduct surveillance and inspection activities in order to identify, independent of information supplied by Industrial Users, occasional and continuing noncompliance with Pretreatment Standards.

(e) Within one hundred twenty (120) days of the entry of this Consent Decree, Belleville shall issue an enforceable compliance schedule for any industrial user found not to be in compliance, which may include the installation of the technology required to meet applicable federal categorical pretreatment standards, the general and specific prohibitions in 40 C.F.R. § 403.5, or local limits to every industrial user. The schedule shall be contained in a compliance order, as specified in Part 500 of Belleville's Ordinance No. 4162. The compliance schedule shall result in full compliance within one year of the date of the issuance of the compliance schedule, unless the final compliance date for the applicable federal categorical pretreatment standard is more than one year after the date of the issuance of the compliance schedule, in which case the permit shall contain a compliance schedule which results in compliance by the final compliance date for that categorical pretreatment standard.

(f) Within thirty (30) days after each significant industrial user is required to be in compliance with all applicable pretreatment standards in its wastewater discharge permit or compliance order, Belleville shall independently verify that the significant industrial user has attained compliance with all applicable pretreatment standards.

(g) Within sixty (60) days after entry of this Consent Decree, Belleville shall publish in a local newspaper a listing of significant non-complying industrial users for calendar year 1989, in conformance with the requirements of 40 C.F.R. § 403.8(f)(2)(vii), which list it shall update annually.

14. Belleville shall not allow any industrial user that will discharge its effluent into WWTP #1 to begin operations without first requiring the installation and operation of pretreatment facilities by the industrial user, commensurate with its level of production, and which pretreatment will be sufficient to prevent interference or pass through at WWTP #1.

Pretreatment Program Reporting

15. Consistent with Paragraphs 20 through 23 of the Decree, Belleville shall provide quarterly progress reports to the U.S. EPA, Region V Office, and IEPA, for the duration of this Consent Decree, detailing all actions taken during the reporting period in furtherance of its pretreatment program implementation. Such reports shall be submitted no later than the fifteenth (15th) day following the last day of the reporting period, and shall include:

- (a) a listing of all industrial users, including identification of significant industrial users;
- (b) a copy of permits issued by Belleville, during the reporting period, to significant industrial users, in accordance with the approved program. [The semi-annual report shall include copies of all permits issued prior to and during the reporting period. Subsequent reports shall include permits issued during the reporting period]
- (c) a summary of all reports of scheduled and nonscheduled significant industrial user inspections completed by Belleville;

- (d) a descriptive summary of compliance and enforcement activities undertaken by Belleville, with respect to significant industrial users, during the reporting period, including, but not limited to, any actions taken to enforce the program, such as Notices of Violation, Orders, and Compliance Directives, as well as the outcome of those actions;
- (e) an assessment of the compliance status of all significant industrial users, including descriptions of all pretreatment inspections of significant industrial users carried out by Belleville, and descriptions of significant industrial user compliance with pretreatment reporting requirements, permit requirements, discharge standards, and compliance schedules.

16. Within 120 days after the effective date of the modifications to 40 C.F.R. § 403, in response to the Domestic Sewer Study, the Defendant shall submit a program modification request to U.S. EPA and IEPA.

17. Defendant shall provide in the quarterly progress reports a description of all substantive changes it proposes to make to the pretreatment program, including, but not limited to, any change in Belleville's Sewer Use Ordinance, program administration, program structure, monitoring requirements, or program funding. Such notice shall be provided as soon as practicable after Belleville determines the change should be made, as required by special condition 11.B.1.c. of Belleville's permit.

Monitoring

18. Belleville shall monitor its influent, effluent, and sludge for the priority pollutants, on or before January 1, 1991, and shall report to U.S. EPA, and to IEPA, the results of these analyses no later than February 1, 1991.

19. All analyses conducted in accordance with this Decree shall be conducted using analytical procedures approved in 40 C.F.R. Part 136. Influent and effluent samples shall be taken on a 24-hour composite basis, except the volatile organic fraction, which shall be taken by grab sample, with sample results reported in milligram per liter. Sludge samples may be taken by grab sample, but must be taken at a point downstream of the anaerobic digesters. Results of sludge analyses shall be on a dry-weight basis and reported in mg/kg (milligrams per kilogram).

REPORTING

20. Beginning the first day of the first month subsequent to the entry of this Consent Decree, and for every calendar quarter thereafter until this Consent Decree terminates in accordance with Paragraph 41, below, Belleville shall submit written status reports to U.S. EPA and IEPA. In the reports, Belleville shall state the deadlines and other terms which it was required to meet during the reporting period, whether it met the requirements, the reasons for any noncompliance, and a projection of work to be performed pursuant to this Consent Decree during the following three-month period. Notification to U.S. EPA and

IEPA of any anticipated delay shall not, by itself, excuse the delay.

21. Subsequent to the submission of the first quarterly report, each quarterly report shall become due within fifteen (15) days after the end of the last month of each calendar quarter. Each report shall be signed by a duly authorized representative of Belleville, who has knowledge of the report's contents. Belleville shall not object to the admissibility in evidence of any quarterly report in any proceeding to enforce this Consent Decree. These quarterly progress reports are in addition to any other reporting requirements established in Belleville's Pretreatment Program or NPDES permit.

22. Belleville shall submit to U.S. EPA and IEPA, postmarked on or before the fifteenth (15th) day of each month, a Monthly Operating Report ("MOR"), containing analytical test results obtained during the previous monthly monitoring period, and a Discharge Monitoring Report ("DMR"). The MOR and DMR shall be submitted in the format approved by IEPA and shall contain the results of analyses of samples taken at the frequency and location specified for the Interim Effluent Limitation in the NPDES permit.

23. All written reports, notices, and submissions, required by this Consent Decree to be submitted to U.S. EPA, shall be addressed to: Director, Water Division, Attention: Chief, Compliance Section (5WQC-TUB-8), U.S. EPA, 230 South Dearborn Street, Chicago, Illinois 60604. All reports, notices and

submissions, required by this Consent Decree to be submitted to IEPA shall be submitted to the Division of Water Pollution Control, IEPA, 2200 Churchill Rd., P.O. Box 19276, Springfield, Illinois 62794-9276, Attention: Compliance Assurance Section.

#### FUNDING

24. Compliance with the terms of this Consent Decree by Belleville is not conditioned on the receipt of any Federal or State grant funds. In addition, failure to comply is not excused by the failure to obtain or a lack of Federal or State grant funds, or by any delay resulting from the processing of any applications for the same.

#### STIPULATED PENALTIES

25. If Belleville fails to comply with any requirements of this Consent Decree, Belleville shall pay to the United States the following stipulated penalties:

- (a) The sum of \$500 per day for each failure to comply with a compliance schedule milestone specified in Paragraph 8, above;
- (b) For any failure to maintain compliance with final effluent limitations contained in Belleville NPDES permit, as follows:

<u>Violation of each Parameter (e.g., BOD, TSS, pH (etc.))</u>	<u>Penalty</u>
Monthly Average Concentration Limit	\$5,000.00 per month per parameter
Monthly Average Load Limit	\$5,000.00 per month per parameter
Daily Maximum Load Limit	\$700.00 per day
Daily Maximum Concentration Limit	\$700.00 per day

- (c) The sum of \$500 per day for failure to comply with any pretreatment requirement specified in Paragraph 13, above.
- (d) For noncompliance with any of the pretreatment reporting and monitoring requirements of Paragraph 15 through 18, and reporting requirements contained in Paragraph 19 through 22 of this Consent Decree:
- (i) \$250.00 per day, for the first 60 days;
  - (ii) \$500.00 per day, for days 61 through 90;
  - (iii) \$1000.00 per day, for days 91 through 120;
- and
- (iv) \$1500.00 per day, for each violation beyond the 120th day.

26. If Belleville fails to comply with any requirements of this Consent Decree, Belleville shall, in addition to penalties set forth in paragraph 25 above, pay to Illinois the following stipulated penalties:

- (a) The sum of \$500 per day for each failure to comply with a compliance schedule milestone specified in Paragraph 8, above;
- (b) For any failure to maintain compliance with final effluent limitations contained in Belleville NPDES permit, as follows:

<u>Violation of each Parameter (e.g., BOD, TSS, pH (etc.))</u>	<u>Penalty</u>
Monthly Average Concentration Limit	\$5,000.00 per month per parameter
Monthly Average Load Limit	\$5,000.00 per month per parameter
Daily Maximum Load Limit	\$700.00 per day
Daily Maximum Concentration Limit	\$700.00 per day

- (c) The sum of \$500 per day for failure to comply with any pretreatment requirement specified in Paragraph 13, above.
- (d) For noncompliance with any of the pretreatment reporting and monitoring requirements of Paragraph 15 through 18, and reporting requirements contained in Paragraph 19 through 22 of this Consent Decree:
- (i) \$250.00 per day, for the first 60 days;
  - (ii) \$500.00 per day, for days 61 through 90;
  - (iii) \$1,000.00 per day, for days 91 through 120; and
  - (iv) \$1,500.00 per day, for each violation beyond the 120th day.

27. Nothing in this Section on stipulated penalties shall be construed to limit any other remedies available for violations of this Consent Decree, Belleville's NPDES permit, or any regulation or provision of law.

28. Any penalties incurred under this Section shall be paid by certified check or cashier's check, payable to "Treasurer, United States of America," and sent to U.S EPA, Region V, P.O. Box 70753, Chicago, Illinois 60673, by the fifteenth (15th) of the month following the month in which the violation(s) occurred. Accrued interest shall be assessed on any stipulated penalties overdue under the terms of this Consent Decree at the rate established by the Secretary of the Treasury, pursuant to 31 U.S.C. § 3717. A late payment handling charge of \$20.00 will be imposed after thirty (30) days, with an additional charge of \$10.00 for each subsequent thirty-day period over which an unpaid balance remains. In addition, a six percent per annum penalty

will be applied on any principal amount not paid within ninety days of the date that this Consent Decree is entered by the Court.

Any penalties incurred by Belleville to Illinois under this Section shall be paid by certified or cashier's check to: Treasurer, State of Illinois, Environmental Protection Trust Fund, 2200 Churchill Road, Springfield, Illinois 62794-9276.

CIVIL PENALTY

29. Belleville shall pay a civil penalty of \$130,000 in full satisfaction of the claims of the United States and State of Illinois against Belleville for violations as alleged in the complaint filed herein through the date of lodging of this Consent Decree. Payment shall be made within fifteen (15) days of entry of this Consent Decree by certified check or cashier's check, as follows: in the amount of \$100,000 payable to "Treasurer, United States of America," and sent to U.S. EPA, Region V, P.O. Box 70753, Chicago, Illinois 60673; and, in the amount of \$30,000 payable to Treasurer, State of Illinois, Environmental Protection Trust Fund, c/o IEPA Fiscal Services, 2200 Churchill Road, Box 19276, Springfield, Illinois 62794-9276. Belleville shall include on the check to the State of Illinois its FEIN #. A copy of each check and transmittal letter shall be sent to all parties. Such payment shall not be deductible for federal taxation purposes.

30. Accrued interest shall be assessed on any civil penalties overdue under the terms of this Consent Decree at the rate established by the Secretary of the Treasury, pursuant to 31 U.S.C. § 3717. A late payment handling charge of \$20.00 will be imposed after thirty (30) days, with an additional charge of \$10.00 for each subsequent thirty-day period over which an unpaid balance remains. In addition, a six percent per annum penalty will be applied on any principal amount not paid within ninety days of the date that this Consent Decree is entered by the Court.

RIGHT OF ENTRY

31. U.S. EPA and IEPA and their contractors, consultants, and attorneys shall have the right of entry into and upon the plant and any other facility covered by this Consent Decree, at all reasonable times, upon proper presentation of credentials, for the purposes of:

- (a) Monitoring the progress of activities required by this Consent Decree;
- (b) Verifying any data or information required to be submitted pursuant to this Consent Decree;
- (c) Obtaining samples and, upon request, splits of any samples taken by Belleville or its consultants;  
and
- (d) Otherwise assess Defendant Belleville's compliance with this decree.

~~This provision in no way limits or affects any rights of entry and inspection held by Plaintiff pursuant to applicable Federal or State laws, regulations, or permits.~~

## PERMIT OBLIGATIONS

32. This Consent Decree does not authorize or approve the construction of any physical structure or facilities, or the modification of any existing treatment works or sewer system. Approval for such construction or modification shall be by permit issued by the IEPA, or such other permits as may be required by applicable county or State laws, rules or regulations.

33. This Consent Decree is not and shall not be interpreted to be a permit or modification of any existing permit issued pursuant to Section 402 of the Act, 33 U.S.C. § 1342. Nor does this Consent Decree relieve Belleville of any obligation to apply for, obtain and comply with the requirements of any new or existing NPDES permit or to comply with any federal, state or local laws or regulations.

34. This Consent Decree does not affect Belleville's obligation to comply with any and all other Federal, State, or local laws, regulations, or permit conditions.

35. Nothing herein shall be construed to limit the authority of the United States or Illinois to undertake any action against any person, including Belleville, in response to conditions which may present an imminent and substantial endangerment to the public health, welfare, or the environment. Nothing contained in this Consent Decree shall be construed to prevent or limit the United States' right to obtain penalties or injunctive relief under the Act or other federal statutes or regulations, except as expressly provided herein.

36. This Consent Decree does not limit or affect the rights of Belleville, the United States, or Illinois, as against third parties, nor the rights of third parties, not party to the Consent Decree, against Belleville.

#### FAILURE OF COMPLIANCE

37. The United States and Illinois do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Belleville's complete compliance with this Consent Decree will result in compliance with the provisions of the Act or the NPDES permit. Notwithstanding U.S. EPA's or IEPA's review and approval of any plans, Belleville shall remain solely responsible for compliance with the terms of the Act, this Consent Decree, its NPDES permit, and all applicable state and federal regulations.

38. The United States and Illinois do not waive any rights or remedies available for any violation by Belleville of Federal or State laws, regulations, or permit conditions, following completion of the requirements of this Consent Decree.

39. The parties agree that it is the responsibility of Belleville to achieve and maintain complete compliance with all applicable Federal and State laws, regulations and permits, and that compliance with this Consent Decree shall not be a defense to any actions commenced pursuant to said laws, regulations or permits.

## DELAYS OR IMPEDIMENTS TO PERFORMANCE (FORCE MAJEURE)

40. If any event occurs which causes or may cause Belleville to violate any provision of this Consent Decree, Belleville shall notify all parties telephonically within seven (7) days of the event. Within thirty (30) days of the event, Belleville shall provide written notice to this court and all parties; such written notice shall specifically reference this section of the Decree, and describe in detail the anticipated length of time the violation may persist, the precise cause or causes of the violation, the measures taken or to be taken by Belleville to prevent or minimize the violation and any future violations, and the timetable by which those measures will be implemented. Belleville shall adopt all reasonable measures to avoid and minimize such violations. Failure by Belleville to comply with the notice requirements of this section shall render this section void and of no effect as to the particular incident involved, and shall constitute a waiver of Belleville's right to obtain an extension of time for its obligations under this section based on such incident.

41. U.S. EPA shall notify Belleville in writing of its agreement or disagreement with Belleville's claim of a delay or impediment to performance within 45 days of receipt of Belleville's notice provided under this section. Prior to notifying Belleville of its agreement or disagreement with Belleville's claim of a delay or impediment to performance,

U.S. EPA will consult with Illinois concerning Belleville's attempt to rely on this provision. If U.S. EPA agrees with Belleville that the violations have been or will be caused entirely by circumstances beyond the control of Belleville or any entity controlled by Belleville, and that Belleville could not have foreseen and prevented such violations by the exercise of due diligence, the parties may stipulate to an extension of the particular compliance requirement affected by the delay, by a period not exceeding the delay actually caused by such circumstance. Such a stipulation shall be filed as a modification to this Consent Decree. Belleville shall not be liable for stipulated penalties for the period of such delay.

42. If U.S. EPA does not agree with Belleville's claim of a delay or impediment to performance, Belleville may submit the matter to the Court for resolution pursuant to the Dispute Resolution procedures established in this Decree. If Belleville submits the matter to the Court for resolution and the Court determines that the violation has been or will be caused entirely by circumstances beyond the control of Belleville, or any entity controlled by Belleville, and that Belleville could not have foreseen and prevented such violation by the exercise of due diligence, Belleville shall be excused as to that violation, but only for the period of time the violation continues due to such circumstances.

43. Belleville shall bear the burden of proving that any delay or violations of any requirements of this Consent Decree was caused or will be caused entirely by circumstances beyond the control of Belleville or any entity controlled by Belleville. Belleville shall also bear the burden of proving the duration and extent of any delay or violation attributable to such circumstances.

44. Unanticipated or increased costs or expenses associated with the implementation of this Consent Decree, changed financial circumstances, or technical problems shall not, in any event, serve as a basis for changes in this Decree or extensions of time under this Decree.

45. Compliance with any requirement of this Consent Decree, by itself, shall not constitute compliance with any other requirement. An extension of one compliance date based on a particular incident does not necessarily result in an extension of an subsequent compliance date or dates. Belleville must make an individual showing of proof regarding each delayed incremental step or other requirement for which an extension is sought.

#### DISPUTE RESOLUTION

46. If the parties are unable to agree upon any plan, procedure, standard, requirement, or other matter described herein, or in the event a dispute should arise among the parties regarding the implementation of the requirements of this Decree, Belleville shall follow the instructions of the United States unless it files a petition with the Court for resolution of the

dispute within 30 days of receipt of the United States' instructions. In its petition to the Court, Belleville shall set out the nature of the dispute with a proposal for its resolution. The United States shall have 30 days to file a response to Belleville petition. Illinois shall also have 30 days to file a response. In any dispute, Belleville shall have the burden of proving that U.S. EPA's position is not in accord with the objectives of this Consent Decree and that Belleville's position will achieve compliance with the terms and conditions of its NPDES permit and the Act in an expeditious manner.

#### CONTINGENT LIABILITY OF STATE

47. This Consent Decree does not resolve the contingent liability of Illinois under Subsection 309(e) of the Act, 33 U.S.C. § 1319(e). The United States reserves, and this Decree is without prejudice to, any rights or claims that the United States has or may have against Illinois under Subsection 309(e). Illinois reserves, and this Decree is without prejudice to, any defenses that it may have to a suit pursuant to Subsection 309(e) of the Act, 33 U.S.C. §1319(e). Illinois specifically waives any right it may have to object to the right of Belleville to enter into this Consent Decree, and Illinois does not object to the implementation of the terms and conditions of this Consent Decree against Belleville.

## COSTS OF SUIT

48. Each party shall bear its own costs and attorney's fees in this action. In any action in which Belleville is determined to have violated the terms and conditions of this Consent Decree, upon petition to the court, Belleville shall be liable to the United States for any costs and attorney's fees incurred by the United States in any such action, in an amount to be determined by the court. In any action in which Belleville is determined to have violated the terms and conditions of this Consent Decree, upon petition to the court, Belleville shall be liable to Illinois for any costs and attorney fees incurred by Illinois in any such action, in an amount to be determined by the court.

## FORM OF NOTICE

49. Except as specified otherwise, when written notification to or communication with the United States, U.S. EPA Region V, Belleville, or Illinois is required by the terms of this Consent Decree, notifications or communications shall be addressed as follows:

As to the United States:

Chief, Environmental Enforcement Section  
Land and Natural Resources Division  
U.S. Department of Justice  
Post Office Box 7611  
Ben Franklin Station  
Washington, D.C. 20044  
Reference Case No. 90-5-1-1-3218

As to U.S. EPA Region V:

Compliance Section  
Water Compliance Branch  
Water Division  
U.S. Environmental Protection Agency  
Region V  
230 South Dearborn Street  
Chicago, IL 60604

As to Illinois:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Compliance Assurance Section  
2200 Churchill Road  
Box 19276  
Springfield, IL 62794-9276

Illinois Attorney General  
Environmental Control Division  
500 S. Second Street  
Springfield, IL 62706

As to Defendant:

City of Belleville  
101 South Illinois Street  
Belleville, IL 62220

Notifications to or communications with U.S. EPA or the United States shall be sent by certified mail, return receipt requested, and shall be deemed submitted on the date they are postmarked.

PUBLIC COMMENT

50. The parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the requirements of 28 C.F.R. §50.7, which provides for notice and an opportunity for public comment.

## SEVERABILITY

51. It is the intent of the parties hereto that the clauses hereof are severable, and should any clause(s) be declared by a court of competent jurisdiction to be invalid and unenforceable, the remaining clauses shall remain in full force and effect, except to the extent affected by the provisions which have been declared unenforceable, or except to the extent that an essential part of this Consent Decree has been defeated thereby.

## MODIFICATION

52. Except as provided herein, there shall be no modification of this Consent Decree without the written approval of all parties and of the Court.

## CONTINUING JURISDICTION

53. The Court shall retain jurisdiction of this case until termination of this Consent Decree, in order to enforce or modify the terms and conditions of this Consent Decree and to interpret the rights and obligations of the parties to the Consent Decree. During the pendency of this Consent Decree, either party may apply to the Court for any relief necessary to construe and effectuate this Consent Decree.

54. This Consent Decree shall terminate by motion of any party to the Court after Belleville has accomplished each of the following: has completed construction of the plant improvements and sewer rehabilitation/construction and other work describe in Paragraph 8, above; has complied with this Consent Decree, including achieving and maintaining compliance with the final

effluent limitations contained in its NPDES permit, for a period of twelve (12) consecutive months; has fully implemented its Pretreatment Program; has paid all penalties due, as certified in a letter to the Court by the United States; and has certified compliance to the Court and all parties, including U.S. EPA, provided that U.S. EPA has not contested Belleville's certification of compliance within 30 days of that certification being made. The Consent Decree shall remain in effect pending resolution of any dispute by the parties or the Court concerning whether Belleville has completed its compliance with the terms of this Consent Decree. The parties enter into this Consent Decree, subject to the public notice requirement of 28 C.F.R. §50.7., and submit it to the Court that it may be approved and entered.

UNITED STATES OF AMERICA:

Richard B. Stewart  
 RICHARD B. STEWART  
 Assistant Attorney General  
 Environment and Natural Resources  
 U.S. Department of Justice  
 Washington, D.C. 20530

DATED: 2/20/91

Frederick J. Hess  
 FREDERICK J. HESS  
 United States Attorney  
 Southern District of Illinois  
 750 Missouri Avenue  
 East St. Louis, Illinois 62201

DATED: 2-25-91

James M. Strock  
 JAMES M. STROCK  
 Assistant Administrator for  
 Enforcement  
 U.S. Environmental Protection Agency  
 401 M Street, S.W.  
 Washington, D.C. 20460

DATED: 2/19/91

Valdas V. Adamkus  
 VALDAS V. ADAMKUS  
 Regional Administrator  
 U.S. Environmental Protection Agency  
 Region V  
 230 South Dearborn Street  
 Chicago, Illinois 60604

DATED: Dec. 17<sup>th</sup> 1990.

RE: U.S. v. City of Belleville  
 Civil Action No. 88-5321

THE STATE OF ILLINOIS

By: Shawn W. Denney  
Shawn W. Denney  
First Assistant Attorney General

DATED: 11-8-90

By: Joseph E. Svoboda  
Joseph E. Svoboda  
General Counsel  
Division of Legal Counsel  
Illinois Environmental Protection Agency

DATED: 11-19-90

CITY OF BELLEVILLE, ILLINOIS

By: Richard A. Brauer  
Richard Brauer  
Mayor  
FEIN# 37-6001921

DATED: 31 October 1990

Consent Decree entered this 26<sup>th</sup> day of April  
1991

W.L. Beatty  
HONORABLE W.L. BEATTY  
Judge, United States District Court  
Southern District of Illinois

RE: U.S. City of Belleville  
Civil Action No. 88-5321

*ATTACHMENT E*

---

*ATTACHMENT E*

JUNE 23, 1999

Submitted 6/23/99

C.S.O. OUTFALL DRAWINGS.

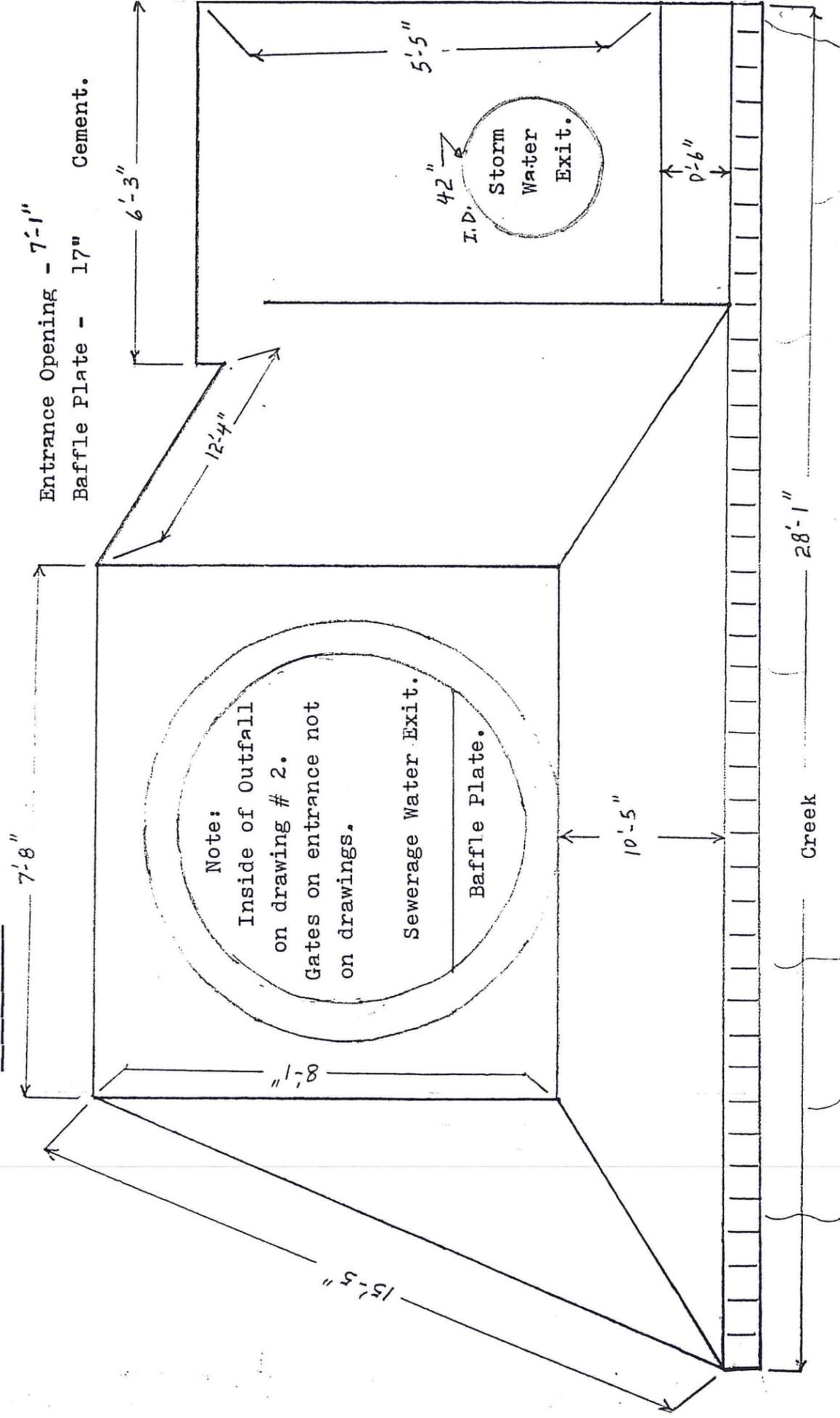
Discharge No., Location and brief primary drawings  
of Belleville, Il. C.S.O.'s.

---

( Note: Drawings not scale. )

Front View.

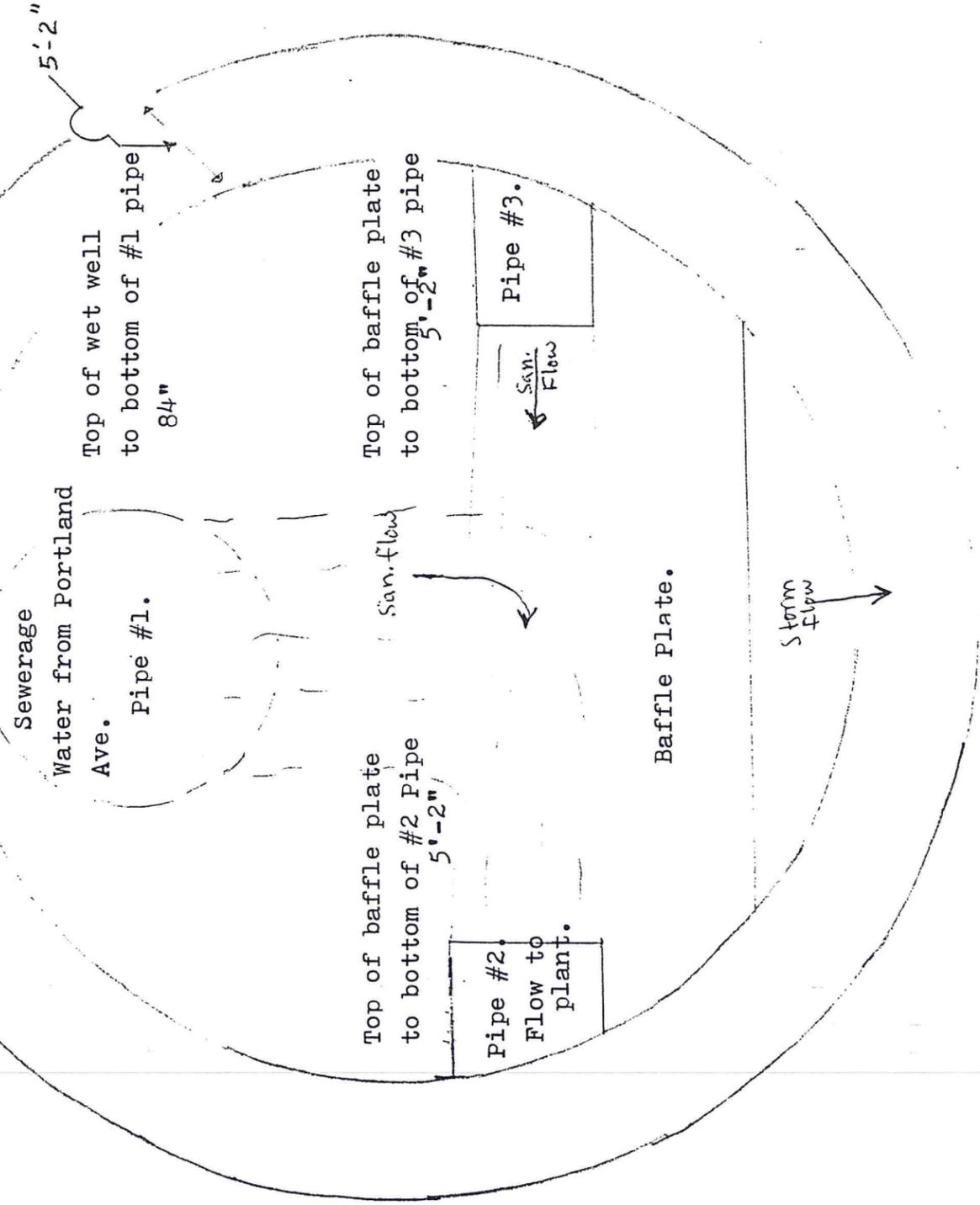
Note: Drawing # 1 of 2 drawings.  
Entrance Opening - 7'-1"  
Baffle Plate - 17" Cement.



View - Inside of entrance.

Looking towards Portland Ave and down towards bottom.

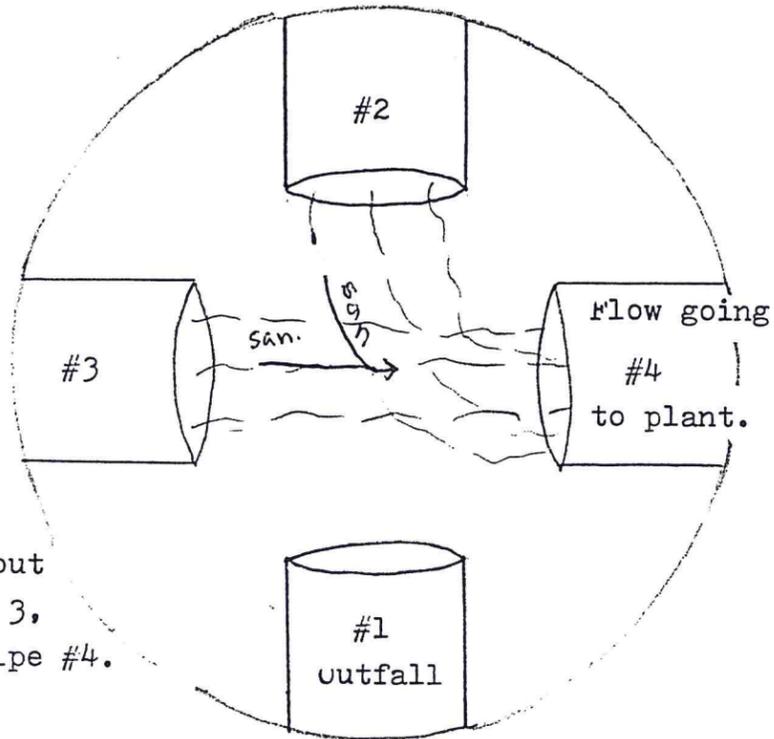
Note: Drawing #2 of 2 drawings.



- Pipe #1 - 72" I.D.
- Pipe #2 - 42" I.D.
- Pipe #3 - 36" I.D.

**RE-ROUTED TO CSO FACILITY (ELIMINATED)**

004 (B-1) S. CHURCH ST. & RICHLAND CREEK C.S.O. ( Note: Drawing not to scale. )



Flow coming out of pipes 2 & 3, going into pipe #4.

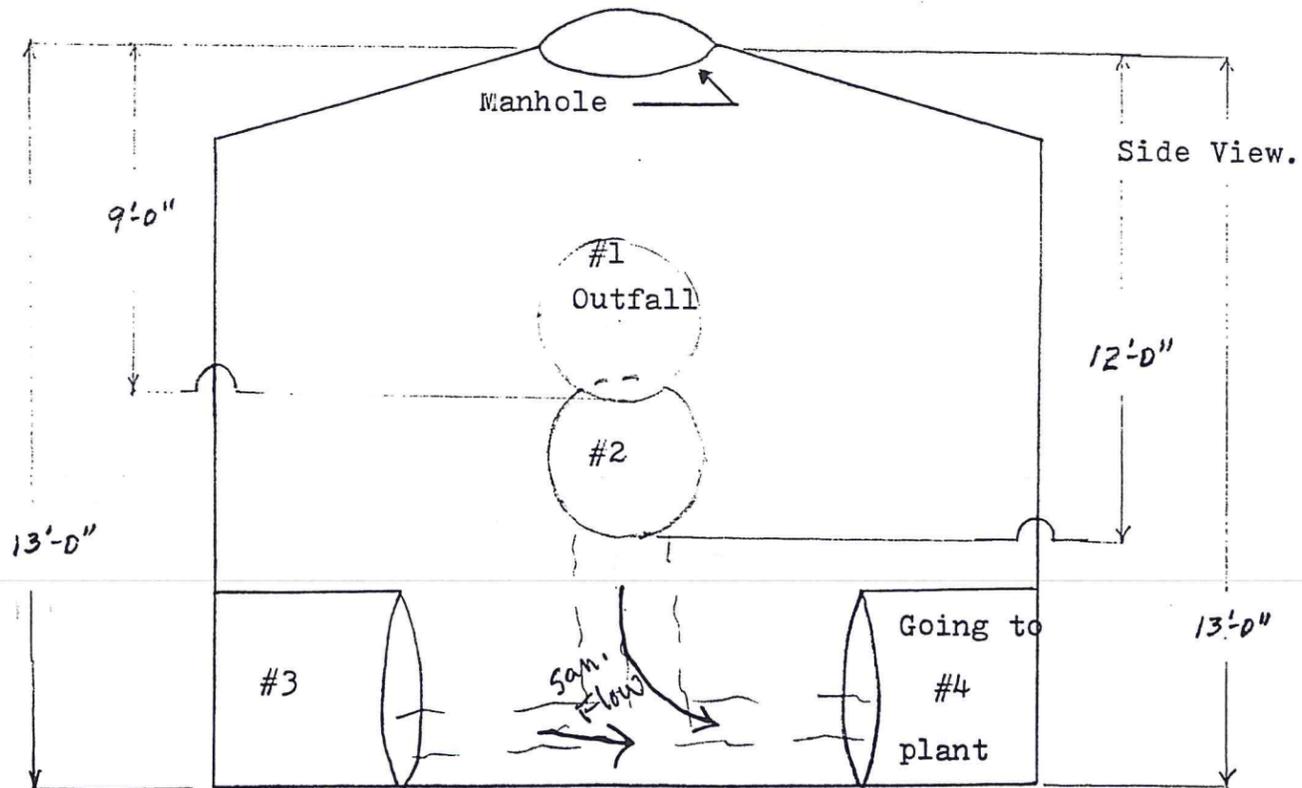
Top View.

Pipes #  
1 & 2 - 36"  
I.D.

Pipes #  
3 & 4 - 48"  
I.D.

No baffle plate

Manhole 24 1/4"  
O.D.

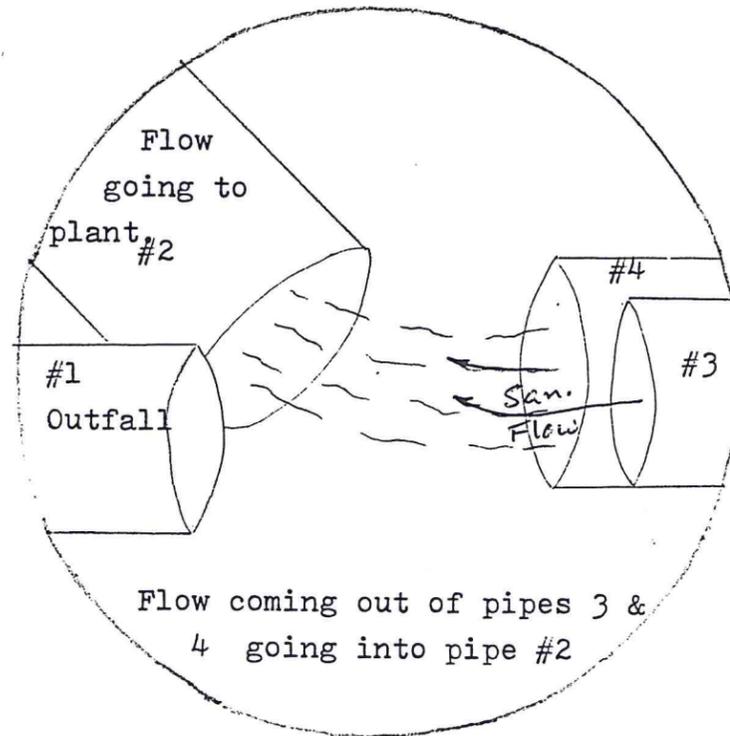


Side View.

**RE-ROUTED TO CSO FACILITY (ELIMINATED)**

005 (B-2) FREEBURG AVE. & VAN BUREN ST. C.S.O.

( Note: Drawing not to scale. )



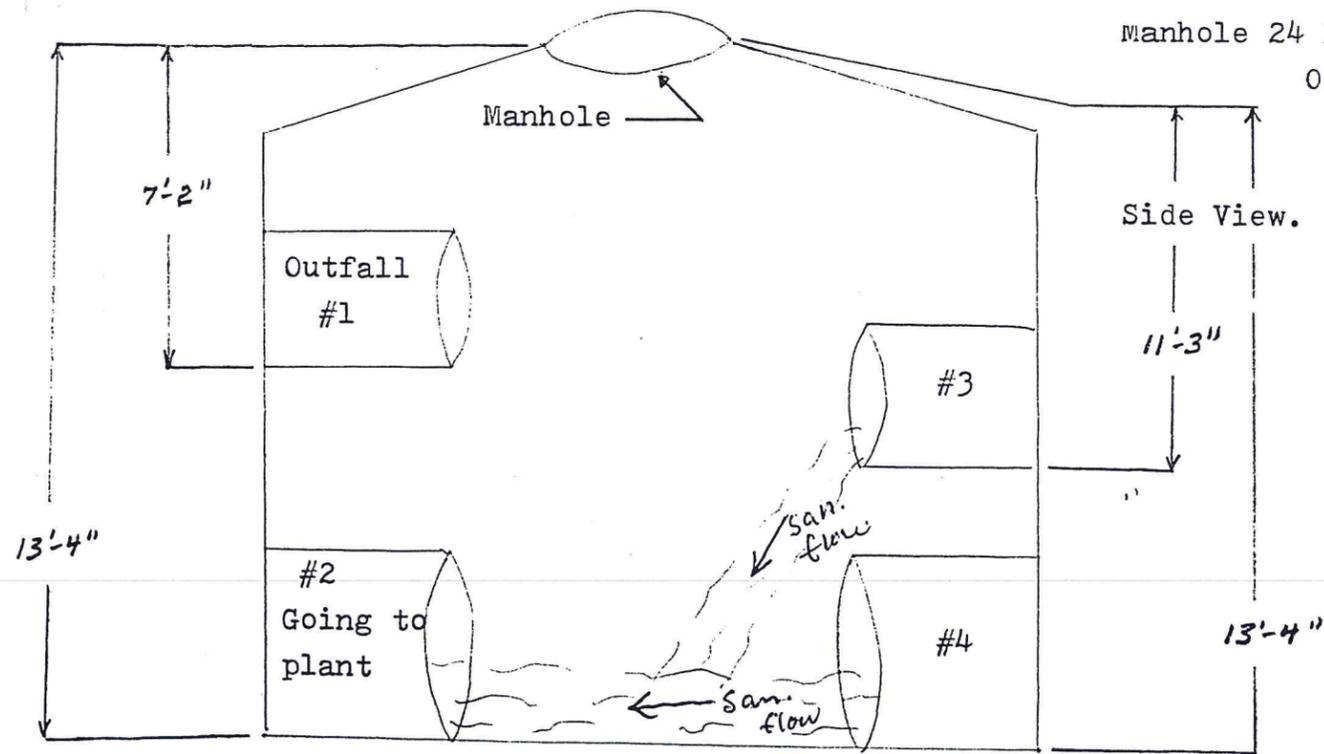
Top View.

Pipes #  
1 & 3 - 36"  
I.D.

Pipes #  
2 & 4 - 48"  
I.D.

No baffle plate

Manhole 24 1/4'  
O.D.

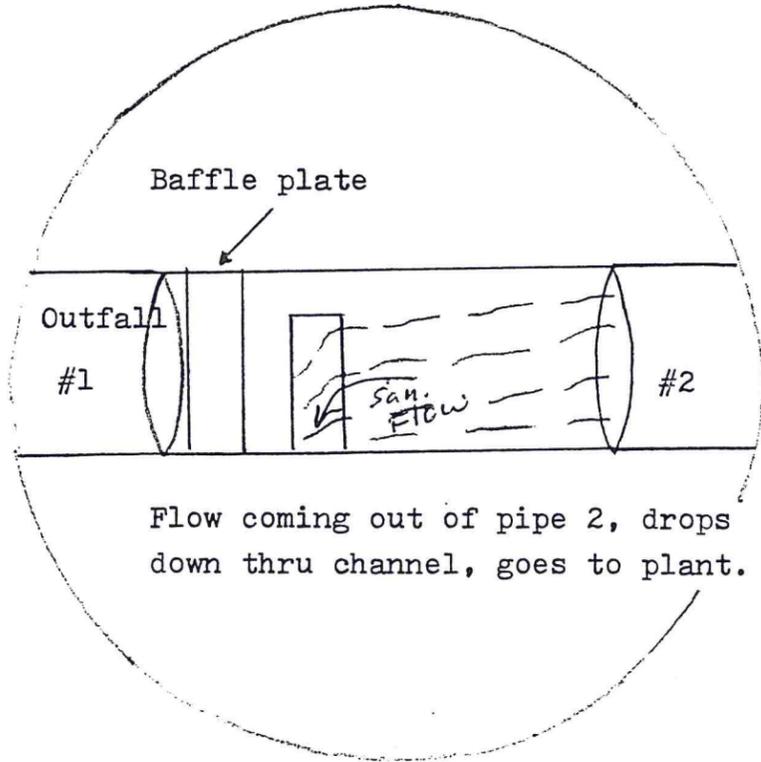


Side View.

**RE-ROUTED TO CSO FACILITY (ELIMINATED)**

008 (C-1) S. BELT EAST & RTE. 159 C.S.O.

( Note: Drawing not to scale. )



Top View.

Pipes #

1 & 2 - 42"

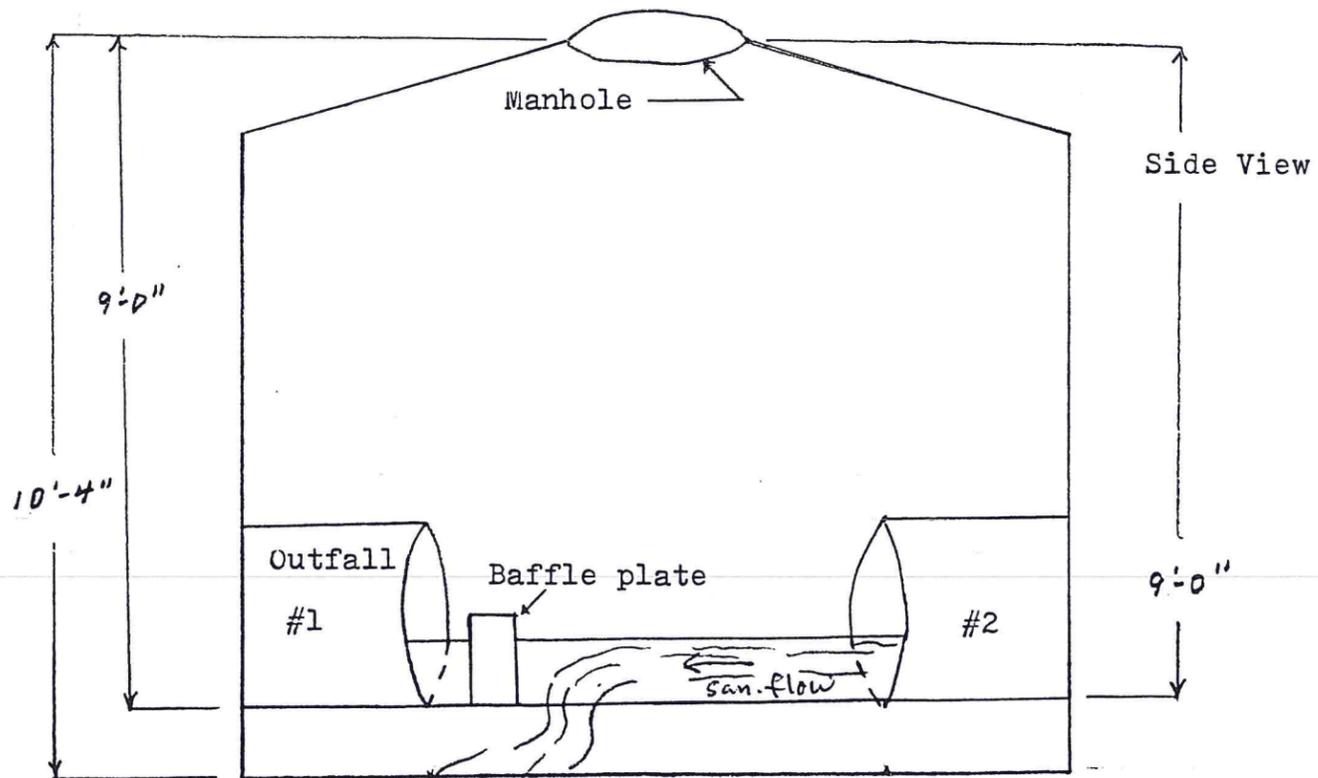
I.D.

Baffle plate

18" cement  
Brick

Manhole 24 1/4'

O.D.

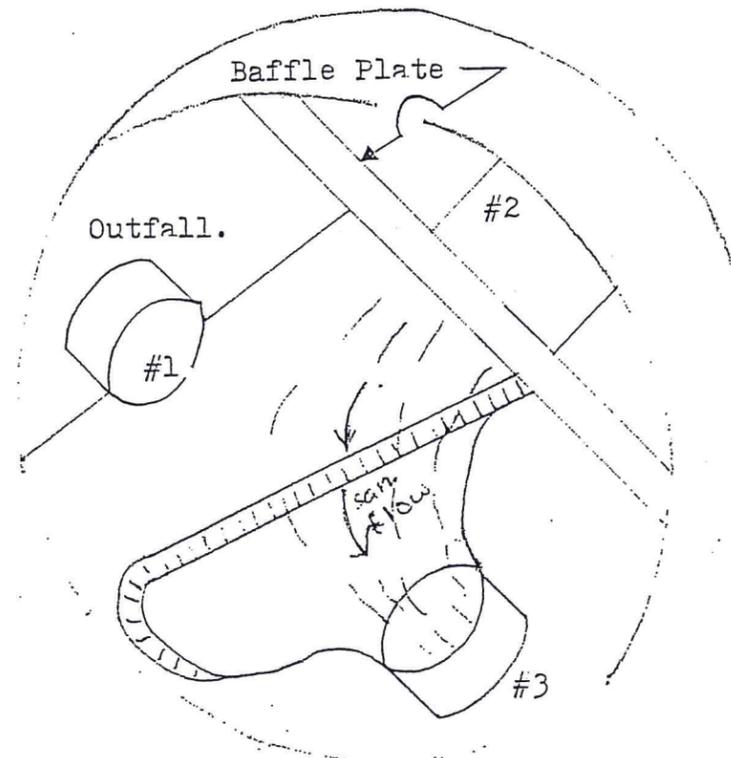


Side View

**WILL BE ELIMINATED IN PHASE 3**

011 (C-3a) GARFIELD ST. & RICHLAND CREEK. C.S.O.

( Note: Drawing not to scale. )



Top View.

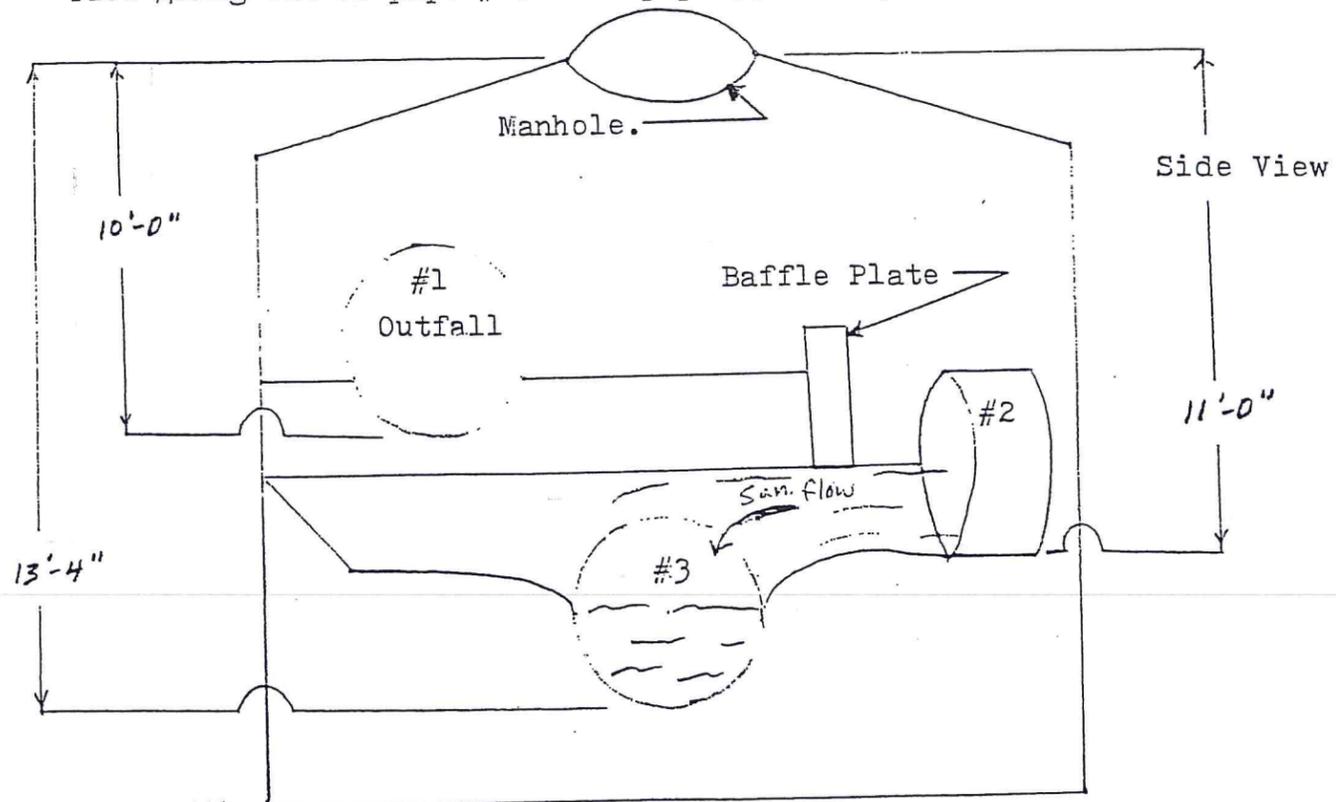
Pipe #  
1. - 24" I.D.

Pipes #  
2 & 3 - 36"  
I.D.

Baffle Plate  
4" x 36"  
Cement Brick

Manhole 25 1/2  
O.D.

Flow going out of pipe #2, into pipe #3 onto plant.

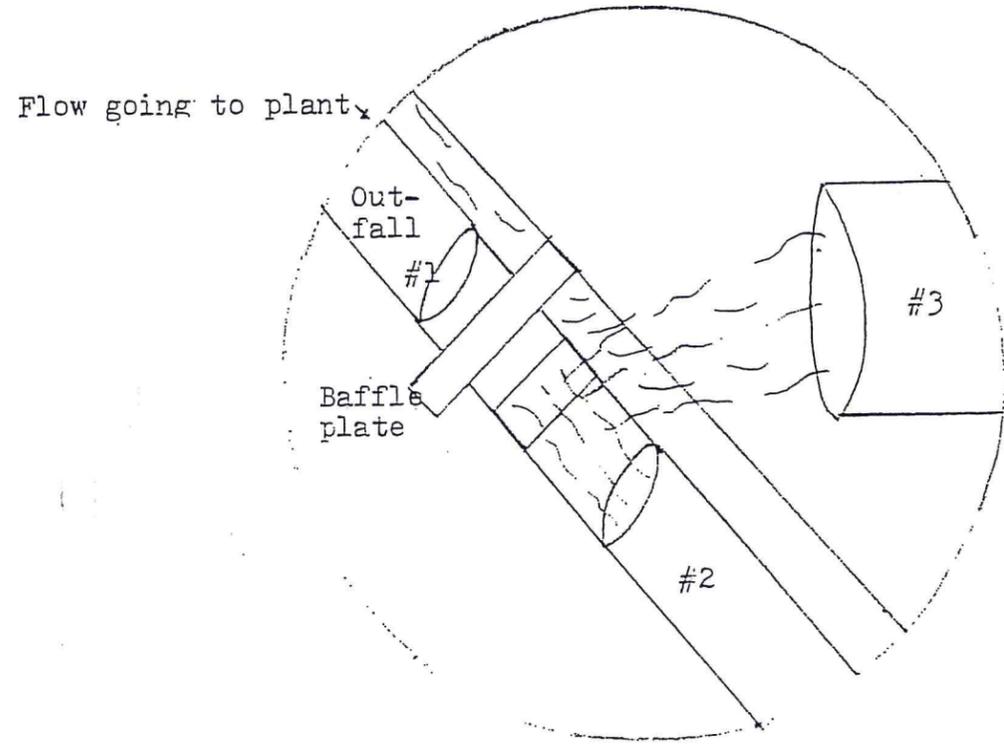


Side View

**WILL BE ELIMINATED IN PHASE 3**

012 (C-4) CENTERVILLE AVE. & LINCOLN ST.

( note: Drawing not to scale. )



Top View.

Pipes #  
1 & 2 - 24"

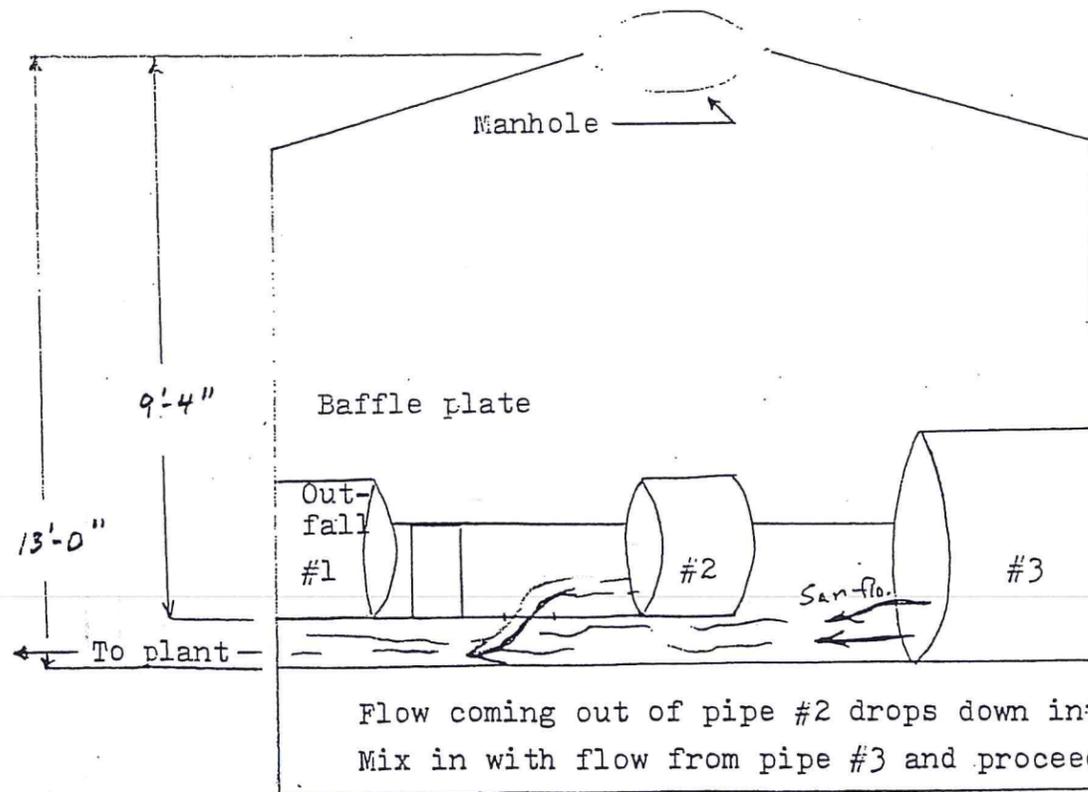
I.D.

Pipe #  
3 - 42"

I.D.

Baffle plate  
18" cement.  
BRICK

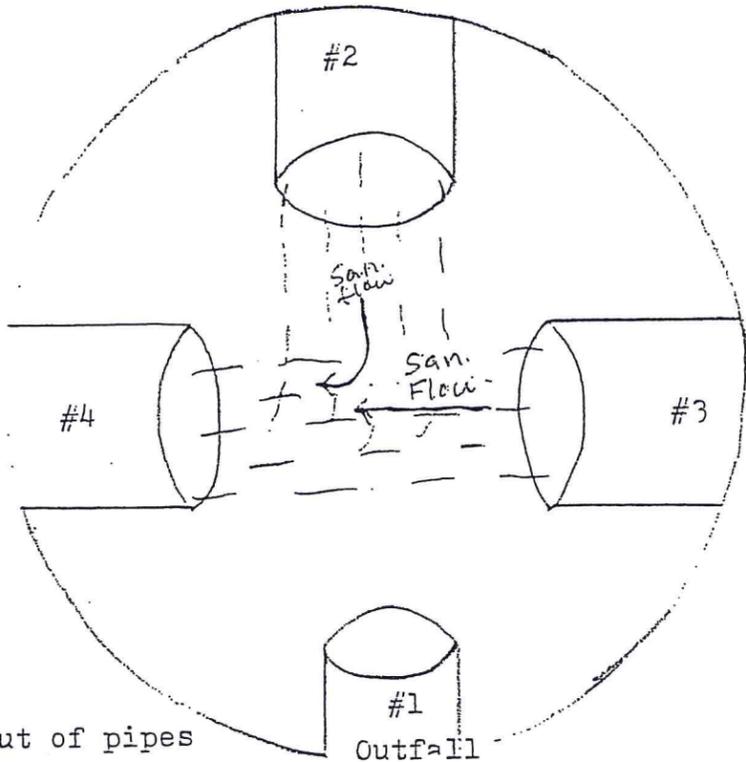
Manhole 24 1/4"  
O.D.



Side View

Flow coming out of pipe #2 drops down into bottom channel.  
Mix in with flow from pipe #3 and proceeds to plant.

( Note: Drawing not to scale.



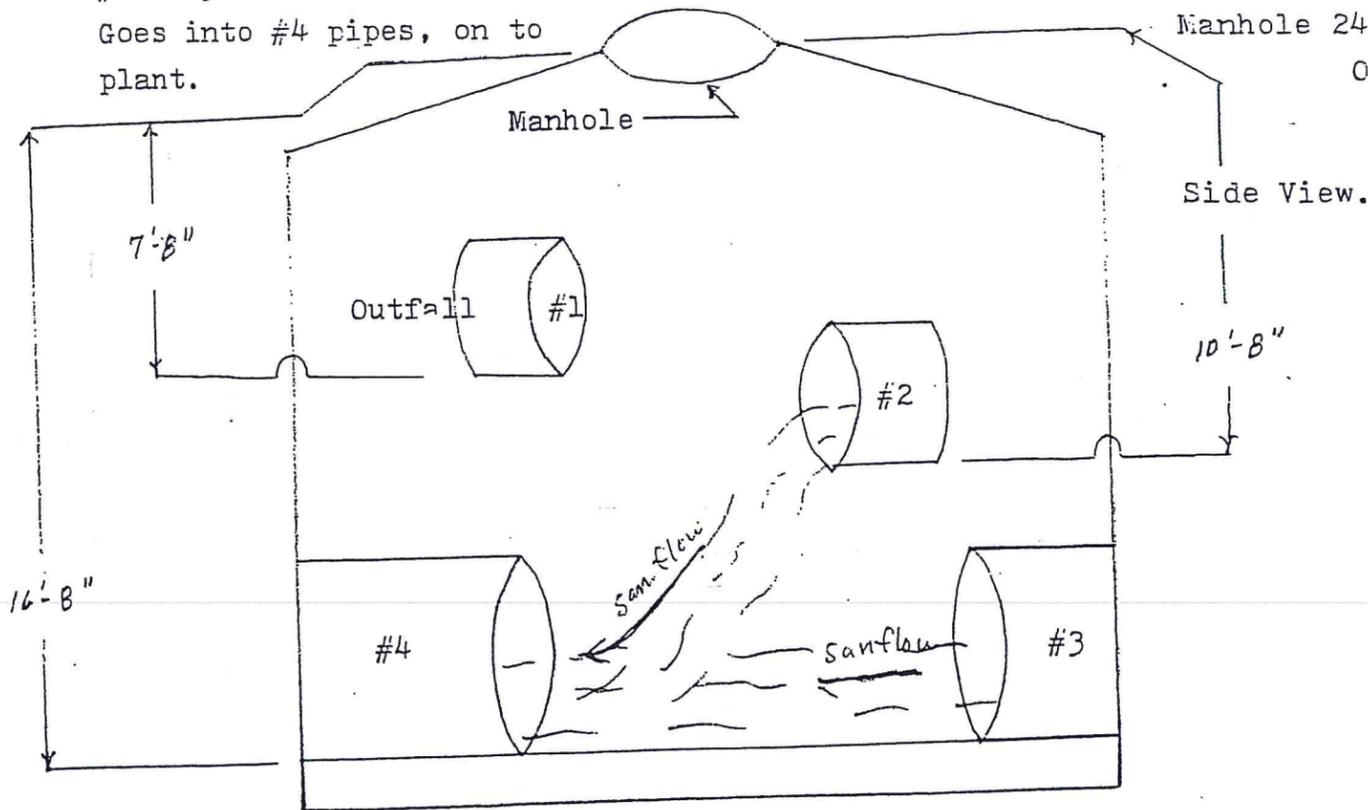
Top View.

- Pipe #1 - 24" I.D.
- Pipe #2 - 36" I.D.
- Pipes #3 & 4 - 36" I.D.

Flow comes out of pipes # 2 & 3. Goes into #4 pipes, on to plant.

No baffle plate

Manhole 24 1/4" O.D.

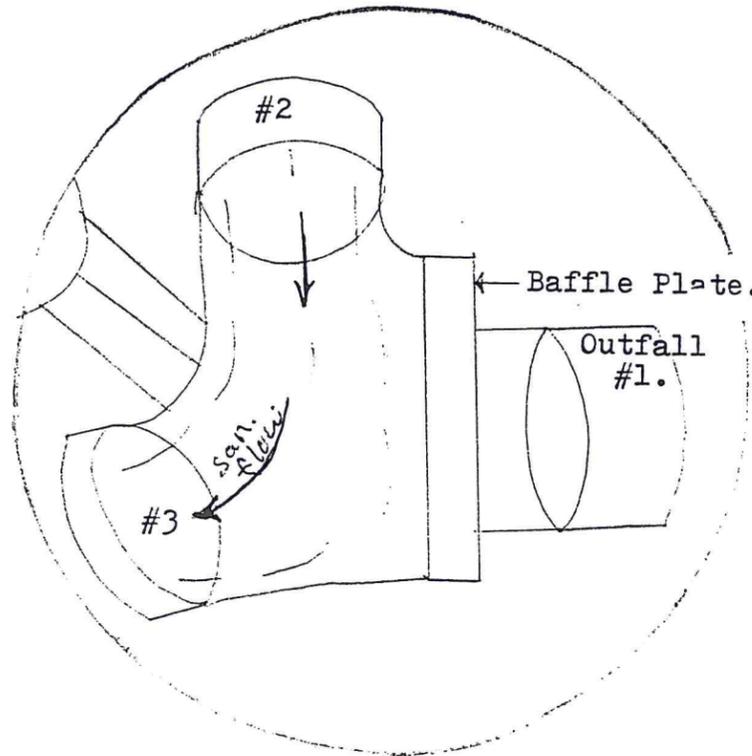


Side View.

**WILL BE ELIMINATED IN PHASE 3**

020 (D-1) 4TH. ST. NORTH OF MONROE ST. C.S.O.

( Note: Drawing  
not to scale )



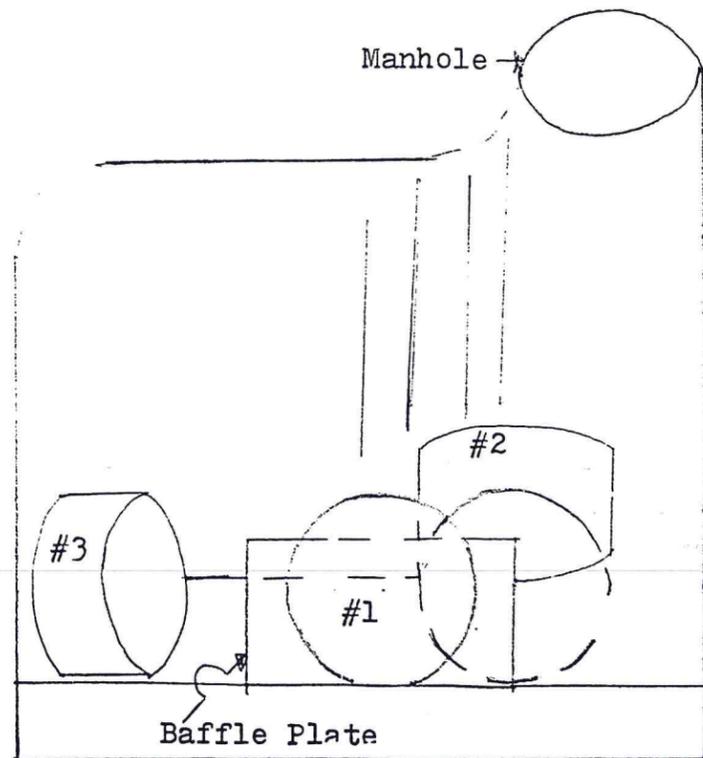
Top View.

Pipes #  
1, 2 & 3 - 42"  
I.D.

Baffle Plate  
24". Brick.

Manhole 25 3/4" O.D.

Flow comes out of #2 into #3, proceeds to plant.



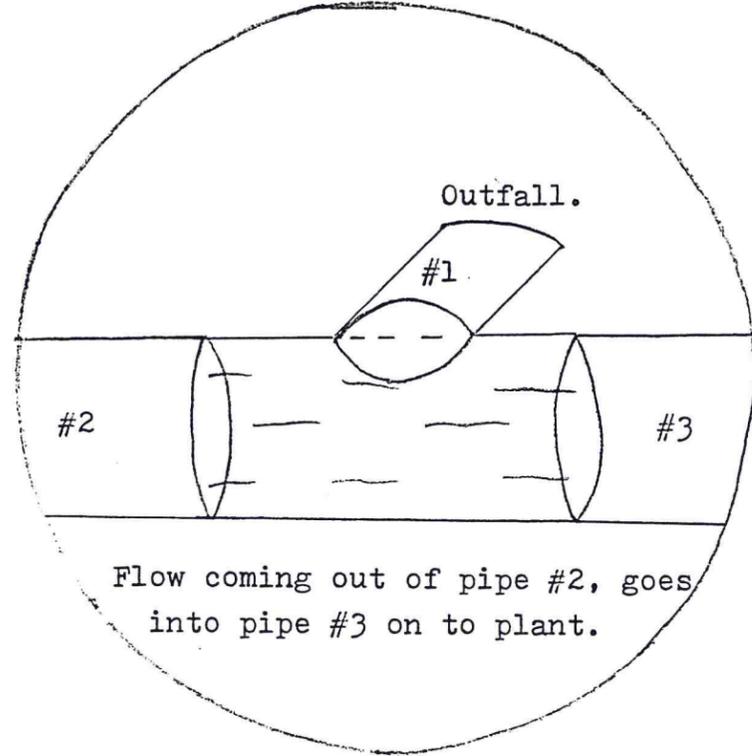
Side View.

Pipes # 1 - 2 & 3  
6'-0" from top  
of M/H to botto  
of pipes.

**WILL BE ELIMINATED IN PHASE 4**

023 (D-4) SOUTHERN R.R. & 23RD. ST. C.S.O.

( Note: Drawing  
not to scale.



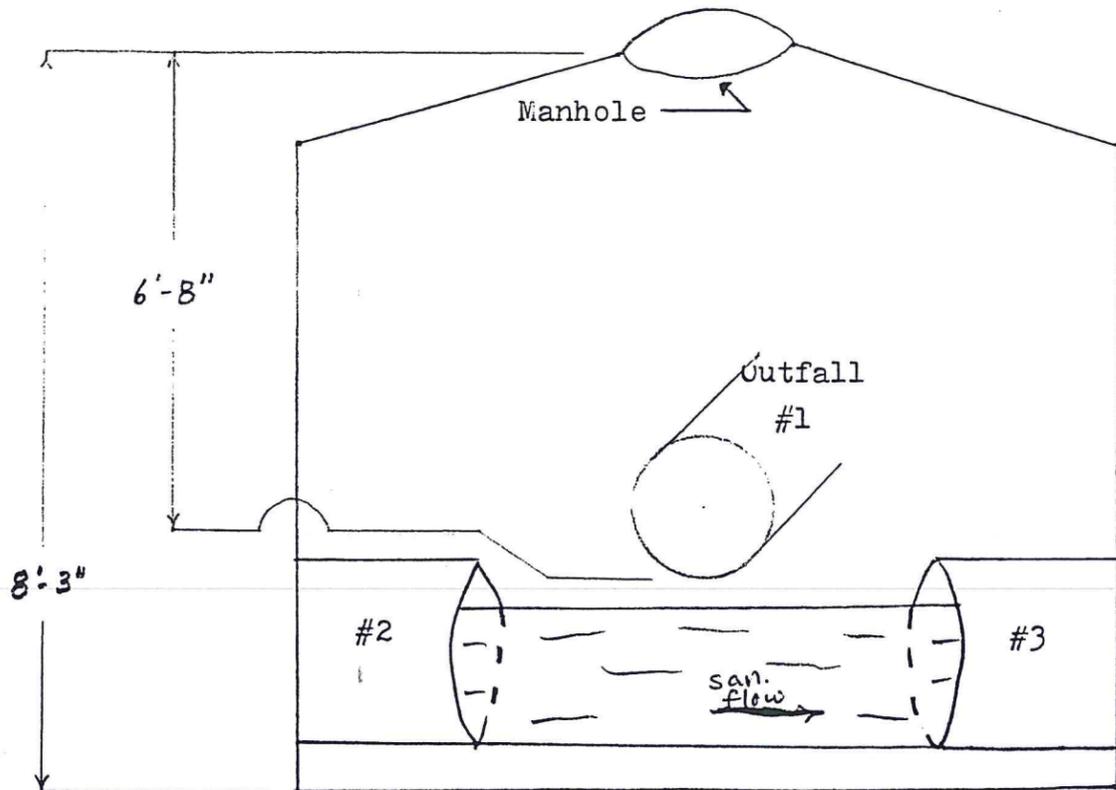
Top View.

Pipe #1 - 24"  
I.D.

Pipes #  
2 & 3 - 36"  
I.D.

No baffle plate

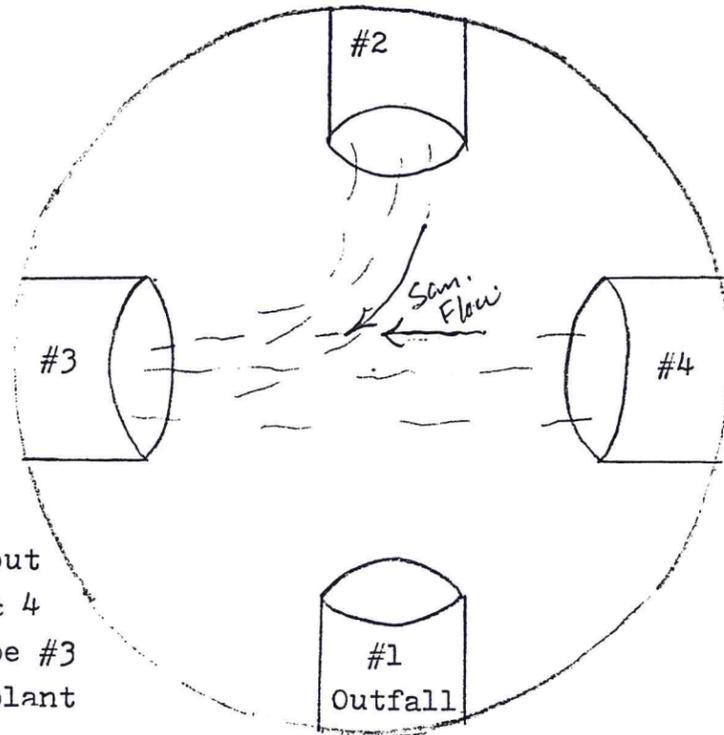
Manhole 24 1/4"



Side View

030 (D-9). 66TH. ST. NORTH OF WEST MAIN ST. C.S.O.

( Note: Drawing  
not scale. )



Flow coming out  
of pipes #2 & 4  
Goes into pipe #3  
Proceeds to plant

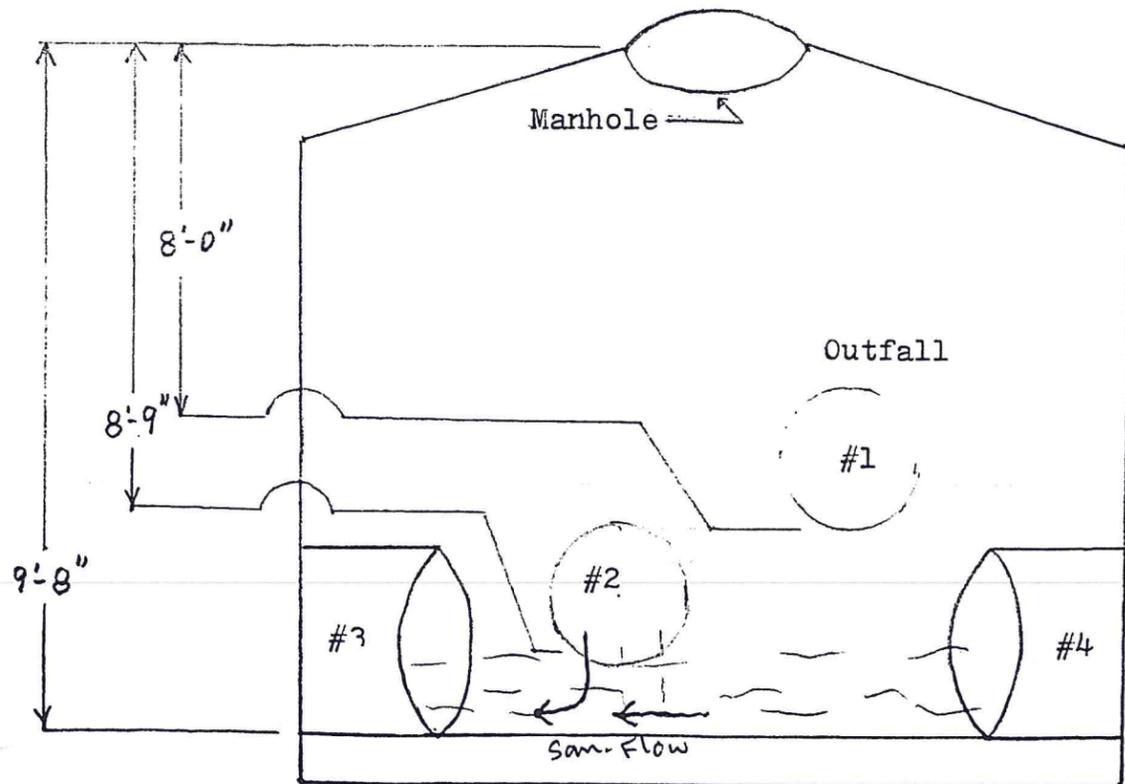
Top View

Pipes #  
1 & 2 = 18"  
I.D.

Pipes #  
3 & 4 = 24"  
I.D.

No baffle plate

Manhole 24 7/8'  
O.D.



Side View

035 (D-13) South 88<sup>th</sup> St. L.S.

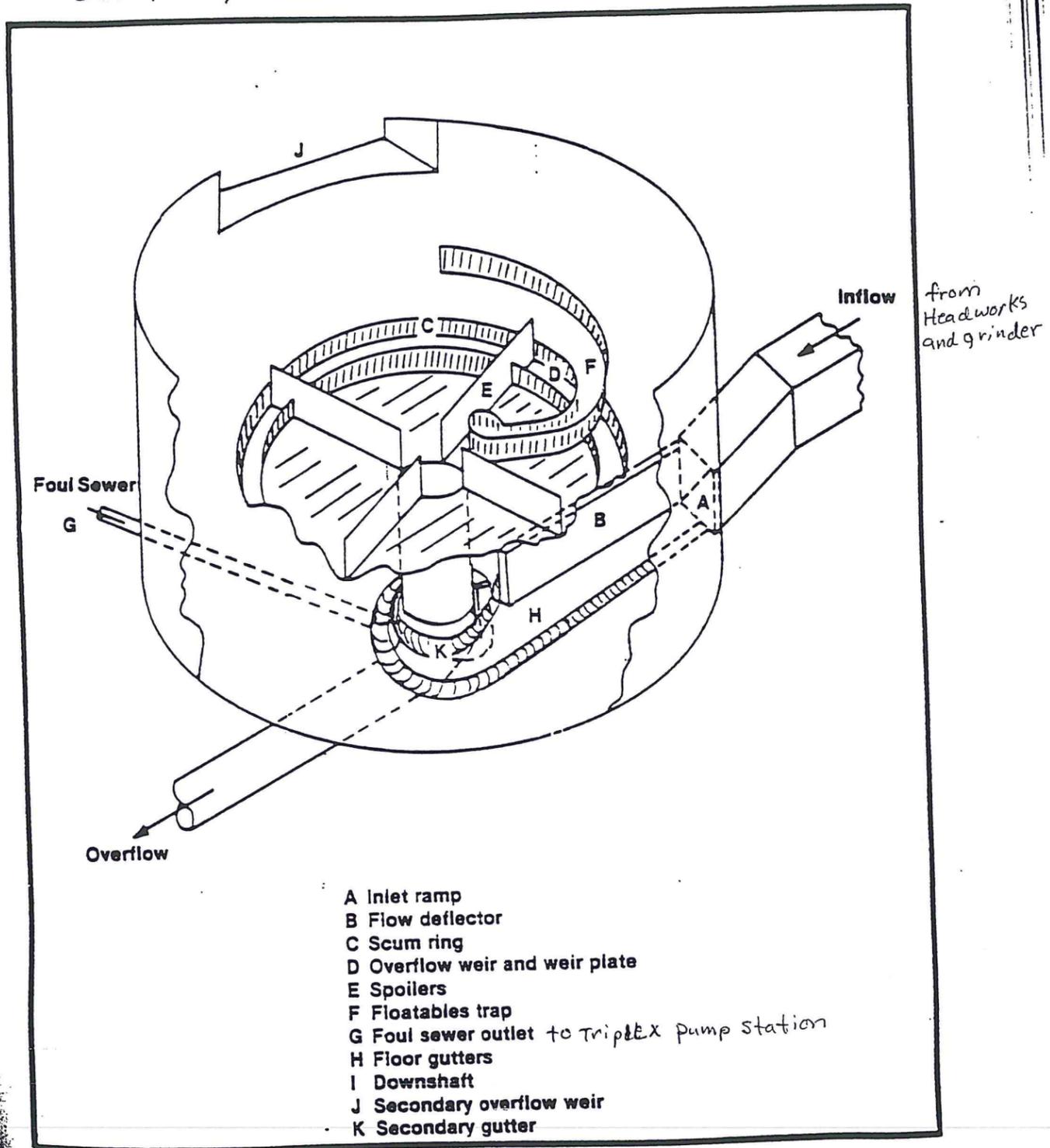


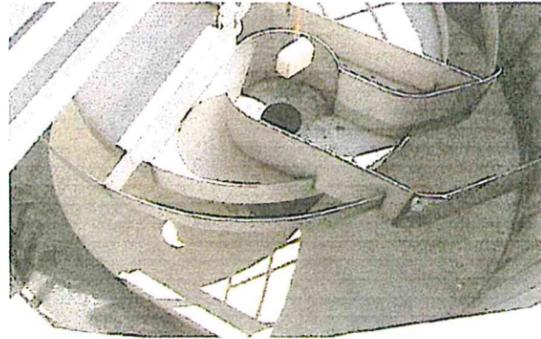
Figure 4 Isometric View of Swirl Combined Sewer Overflow Regulator/Separator



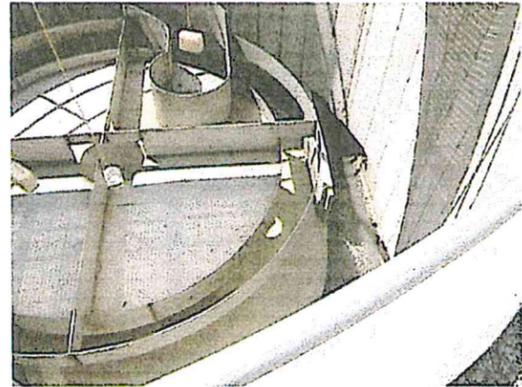
88<sup>th</sup> STREET GRINDER HEADWORKS



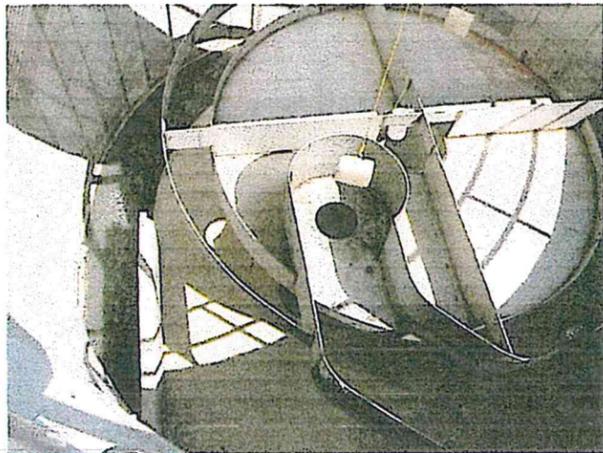
SWIRL CONCENTRATOR



SWIRL CONCENTRATOR



SWIRL CONCENTRATOR



SWIRL CONCENTRATOR



88<sup>th</sup> STREET CSO OUTFALL

**WILL BE ELIMINATED IN PHASE 4**

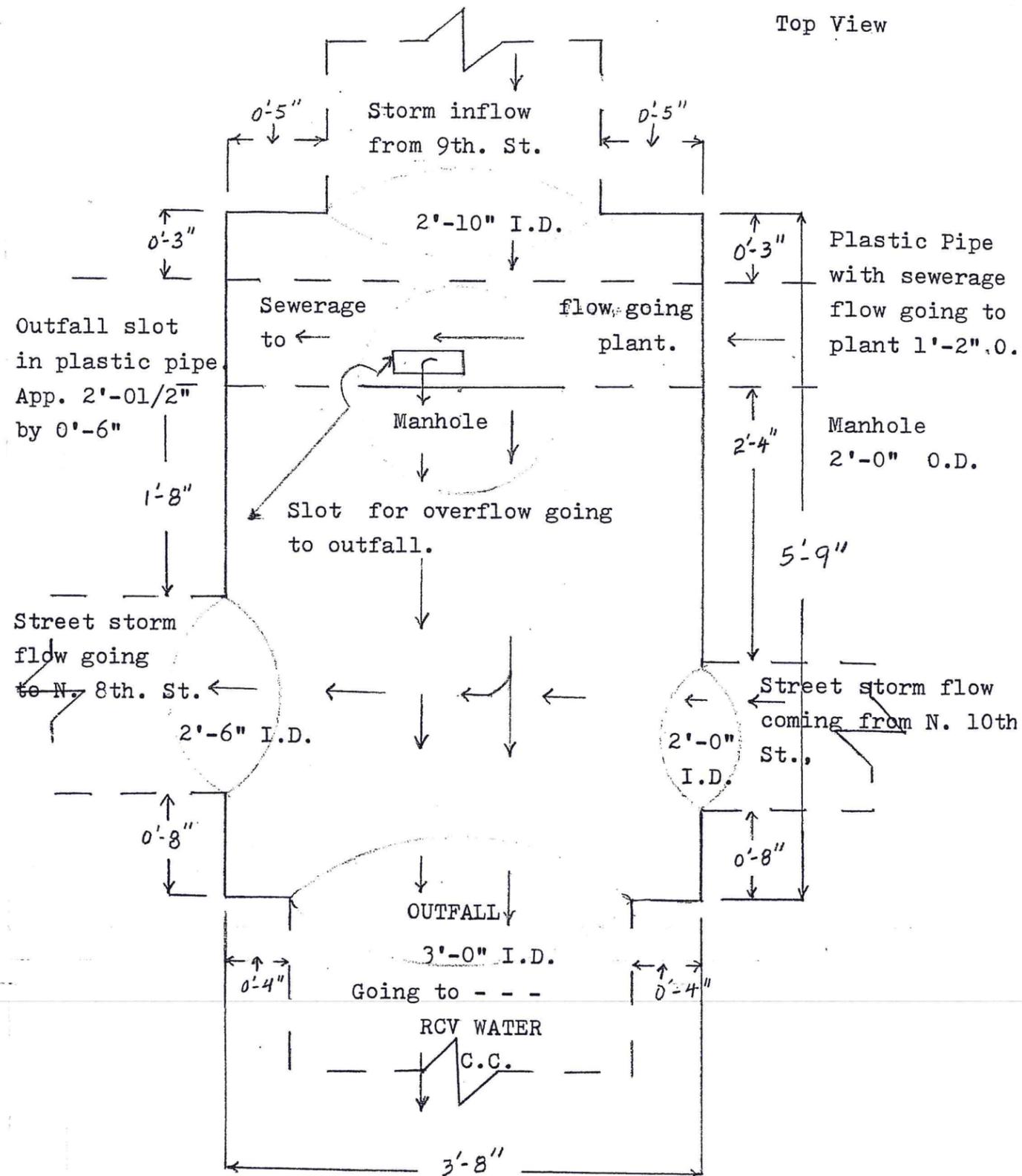
037 (E-2) 370 FEET NORTH OF "E" ST. & 9th. ST. C.S.O.

NEW OUTFALL

(Note: Drawing not to scale. )

Drawing #1 of 2)

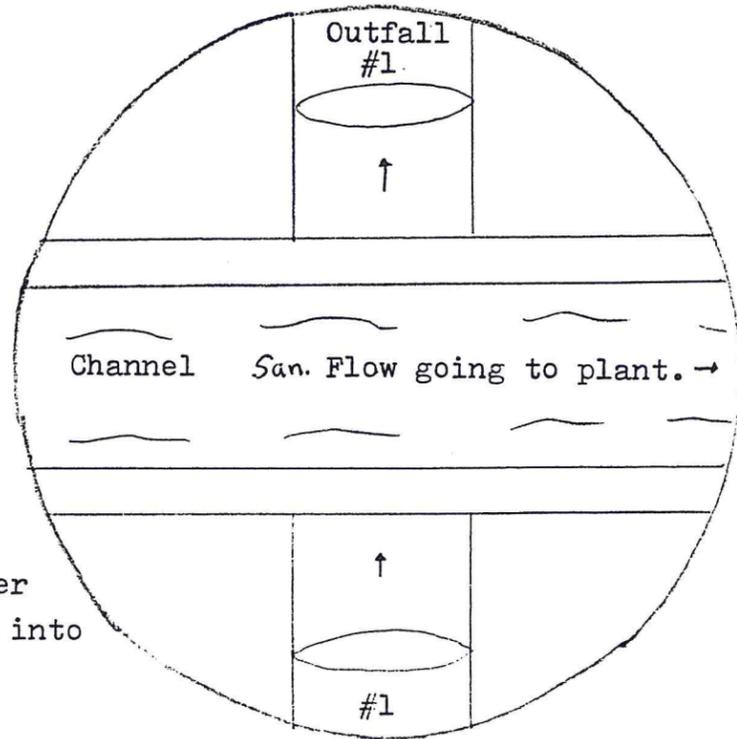
Top View



**WILL BE ELIMINATED IN PHASE 4**

037 (E-2) 370 FEET NORTH OF "E" ST. & 9TH. ST. C.S.O.

( Note: Drawing not to scale. )



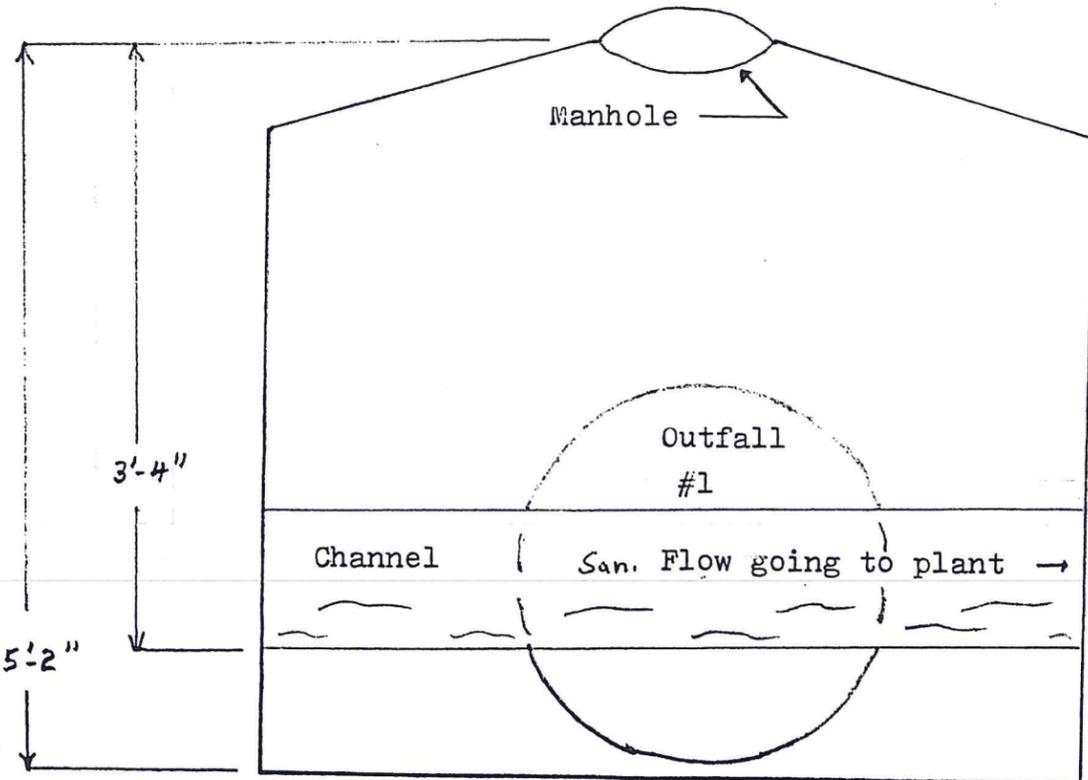
Top View

Flow goes over channel wall into outfall.

Pipe # 1  
24" I.D.

Baffle and channel wall  
14" Brick

Manhole 24 1/4'  
O.D.



Side View

**WILL BE ELIMINATED IN PHASE 4**

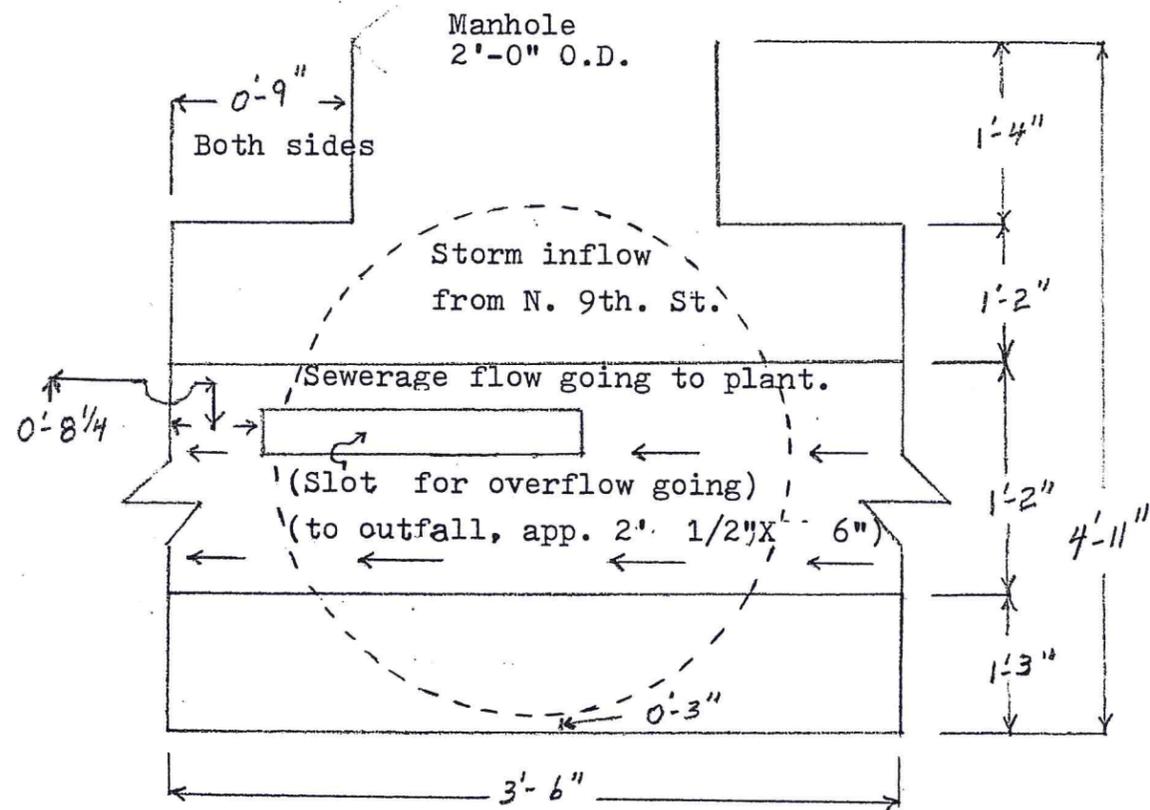
037 (E-2) 370 FEET NORTH OF "E" ST. & 9th. ST. C.S.O.

NEW OUTFALL

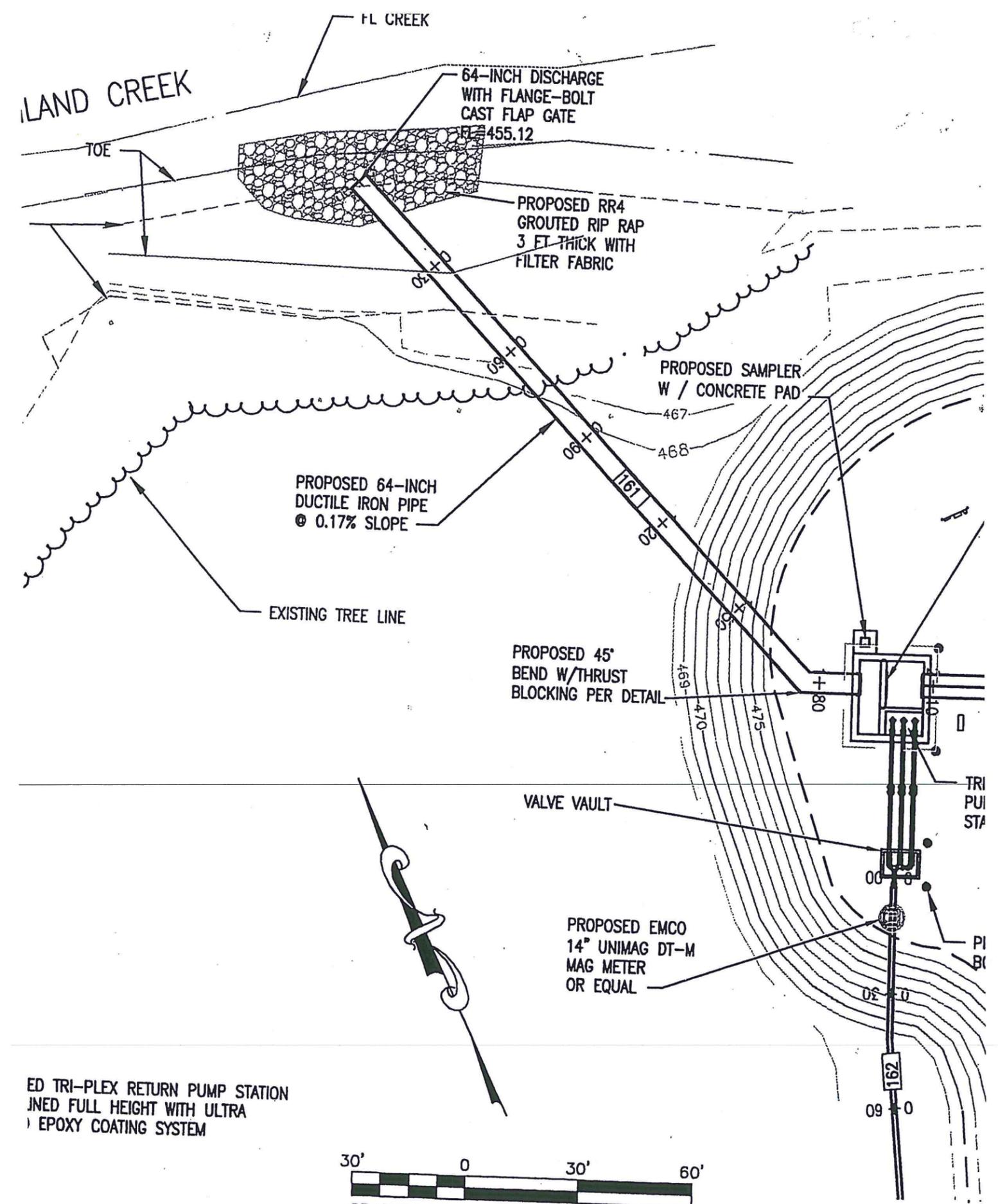
(Note: Drawing not to scale. )

Drawing #2 of 2

Side View

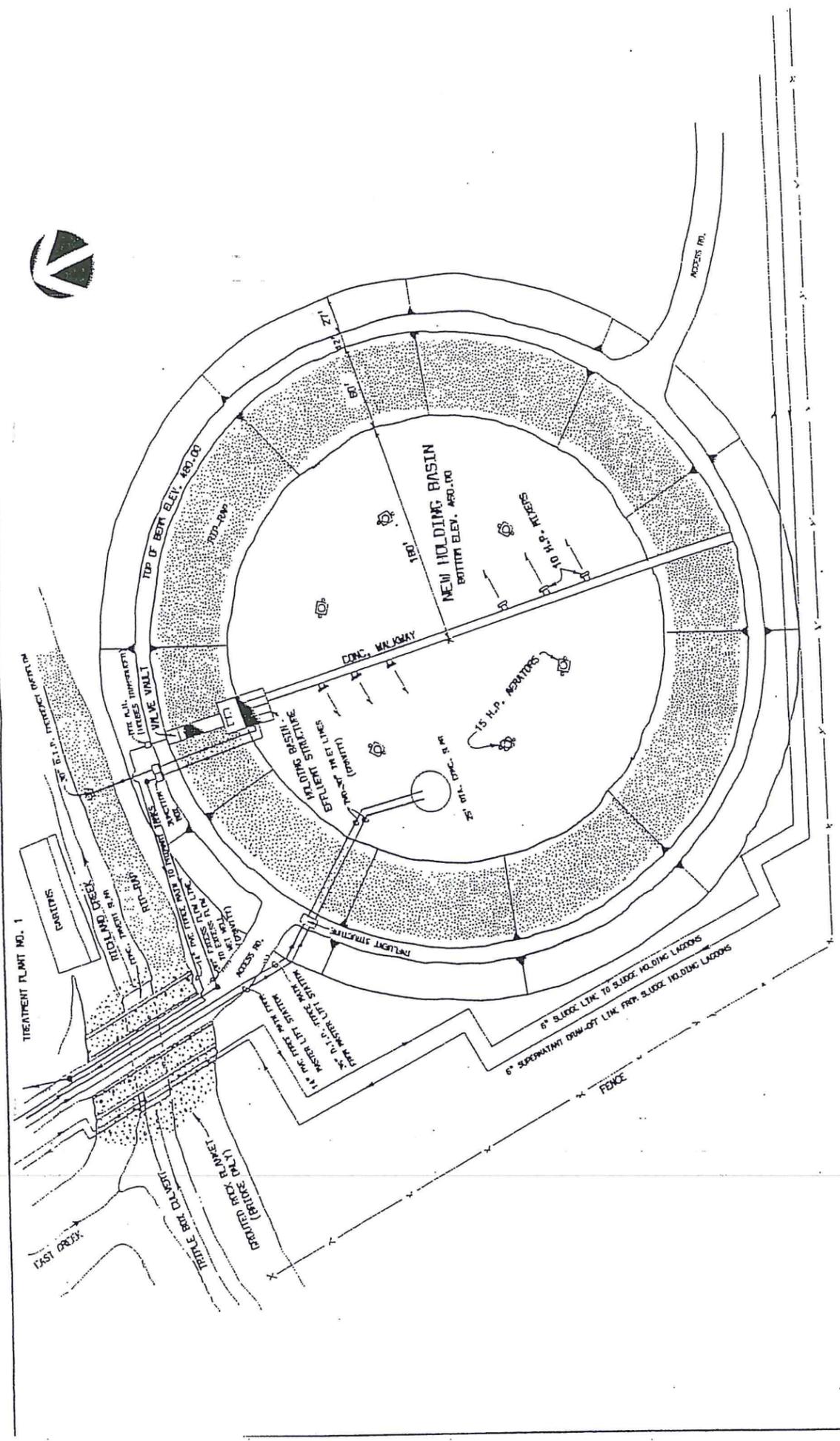


Plastic Pipe with sewerage flow going to plant 1'-2" O.D.



ED TRI-PLEX RETURN PUMP STATION  
 NED FULL HEIGHT WITH ULTRA  
 ) EPOXY COATING SYSTEM





First Flush Basin Layout

*ATTACHMENT F*

---

*ATTACHMENT F*



State of Illinois  
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director  
217/782-0610

2200 Churchill Road, Springfield, IL 62794-9276

June 19, 1996

Received 6/23/97  
JG

Mr. John Graham, Superintendent of Wastewater Division  
City of Belleville  
101 South Illinois Street  
Belleville, Illinois 62220-2105

Re: CSOs to Potentially Sensitive Areas  
CSO Pollution Prevention Plan and Compliance with the Nine Minimum Controls  
Sewer Use Ordinance  
City of Belleville  
NPDES Permit No. IL0021873, Special Condition 11, Paragraphs 6, 7, and 9

Dear Mr. Graham:

The Agency received a Phase I Report on November 18, 1996 and a Pollution Prevention Plan and sewer use ordinance on December 10, 1996, all prepared for the City of Belleville.

Based on the information contained in the Phase I Report, the Agency has determined that none of the CSOs authorized in the City of Belleville's NPDES permit (IL0021873) discharge to sensitive areas. However, if information becomes available in the future that causes the Agency to reconsider this determination, the NPDES permit may be reopened and modified, with Public Notice, to include additional CSO requirements.

The pollution prevention plan has been reviewed and appears to meet the objectives of Paragraph 6 of Special Condition 11 in the City of Belleville's NPDES permit (IL0021873). However, should adverse environmental impacts from any of the City's CSOs be discovered at a future date, this plan may be re-evaluated.

The City's NPDES permit requires that the City's sewer use ordinances contain specific requirements. These requirements are:

- a. prohibit introduction of new inflow sources to the sanitary sewer system;
- b. require that new construction tributary to the combined sewer system be designed to minimize and/or delay inflow contribution to the combined sewer system;
- c. require that inflow sources on the combined sewer system be connected to a storm sewer, within a reasonable period of time, if a storm sewer becomes available;
- d. provide that any new building domestic waste connection be distinct from the building inflow connection, to facilitate disconnection if a storm sewer becomes available; and,
- e. assure that CSO impacts from non-domestic sources are minimized by determining which non-domestic discharges, if any, are tributary to CSO's and reviewing, and, if necessary, modifying the sewer use ordinance to control pollutants in these dischargers.

Please indicate which section(s) of the ordinance meet(s) the requirements of (a), (b), (c), and (d).

Page 2

A CSO operational and maintenance plan was submitted on March 1, 1997 and a water quality demonstration plan was received on June 10, 1997. Correspondence regarding these will be sent to you in a separate letter.

I will await your response on the sewer use ordinance and the arrival of your operational and maintenance plan. If you have questions or concerns regarding this letter, please contact me at the phone number given above.

Sincerely,

A handwritten signature in black ink, appearing to read "Dean J. Studer". The signature is fluid and cursive, with a large, sweeping flourish at the end.

Dean J. Studer, P.E.  
Manager, Southern Municipal Unit  
Permits Section  
Division of Water Pollution Control

DJS:ds

cc: City Clerk, Belleville

*ATTACHMENT G*

---

*ATTACHMENT G*

# BELLEVILLE STREET DEPT.

801 Royal Height Road  
Belleville, IL 62226  
618-239-3454

## Record of Street Sweeping

\_\_\_\_\_  
Date                      Region                      Personnel

All paved streets within an area bordered by: \_\_\_\_\_  
On the North; to: \_\_\_\_\_ on the South; and  
by: \_\_\_\_\_ on the East; to: \_\_\_\_\_  
on the West.

Engine Hours Record:	Start Shift	End Shift	Initials
<b>BLOWER MOTOR HRS</b>			
Litter Vac	_____	_____	_____
Tymco	_____	_____	_____
Johnston	_____	_____	_____

Any Special Sweep Requests:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CITY OF BELLEVILLE  
STREET DEPARTMENT

FLOOD CONTROL POINTS SUMMARY

**REGION #1** West "A" St., between N. 35<sup>th</sup> & N. 36<sup>th</sup> (3 grates at surface)  
S. 98<sup>th</sup> Street (Culverts in ditch line, down hill, both sides)  
Melwood Dr. (Behind houses. Be sure to check behind #8 Melwood)  
6200 W. Main Retention Basin (Behind Medical Building)  
111 N. 60<sup>th</sup> (60<sup>th</sup> & B) -- grate in yard (added: 7-23-15)  
6000 N. Belt West (Brittany Lane)

---

**REGION #2**

405 E. Park Dr. – basin close to North Park  
3829 N. Park (inlet)  
136 N. 45<sup>th</sup> St. (rear) concrete ditch off N. Belt W. & between N. 44<sup>th</sup> & N. 45<sup>th</sup>  
703 N. 43<sup>rd</sup> Street (behind property)  
Erna – off N. 42<sup>nd</sup> St – Alley --- has a grate  
544 N. 41<sup>st</sup> St. (Catch Basin grate behind this property)  
447 N. 39<sup>th</sup> St. (Check for water ponding & advise if it needs to be pumped)  
West "A" Street between N. 35<sup>th</sup> & N. 36<sup>th</sup> (3 grates at surface)

---

**REGION #3** 900 S. 20<sup>th</sup> (Last house on left)

810 S. 20<sup>th</sup>  
S. 18<sup>th</sup> and Bunsen  
25 S. 11<sup>th</sup> Street – concrete culvert by green posts  
S. 10<sup>th</sup> by mobile homes (Near 10<sup>th</sup> St. railroad trestle)  
S. 10<sup>th</sup> & Union (southwest corner – 2 grates)  
S. 8<sup>th</sup> and Harrison (Ditch grate)  
S. 8<sup>th</sup> culvert  
S. 2<sup>nd</sup> and Cleveland  
Alley between S. 1<sup>st</sup> and S. 2<sup>nd</sup> off Monroe

---

**REGION #4** Lebanon Avenue (by Bach Auto Body)

East Creek Ditch between Sherman & Delaware  
Schilling to N. Belt East ditches --- **Kelso's Grate**

---

**REGION #5** Denvershire Drive

646 Fort Henry (behind this address, 3' culvert under railroad, off Vicksburg, behind Wal-Mart)  
625 Wabash – grate  
**McClintock & Douglas --- grates**  
1010 McClintock (rear, off alley- grate is by marker)  
402 S. McKinley Dr – in rear  
Grate on Rusty Will (behind Laderman Park)

---

**BELLEVILLE STREET DEPARTMENT**

**FLOODING STANDARD OPERATING PROCEDURE AS FOLLOWS:**

1. Remedy by clearing grates and/or ditch obstructions where flooding/ponding of water exists.
2. Check and clear each Flood Control Point listed.
3. Using a grid pattern, clear all storm water catch basin grates.

**FLOOD CONTROL POINTS: REGION #1**

**N. 60<sup>th</sup> & W. "B" (111 N. 60<sup>th</sup>) grate in yard (July 2015)**

6200 West Main Retention Basin (Behind Medical Building)

6000 N. Belt West (Brittany Ln)

S. 98<sup>th</sup> St. (Culverts in ditch line, down hill, both sides)

Melwood Dr. (behind houses)

Dutch Hollow, past Pyramid, vacant lot by Water Co

**REGION #1 BORDERED BY:**

On the West	Rt. 157
On the East	N. 57 <sup>th</sup> St
On the North	Rt. 161/Dutch Hollow Rd
On the South	Foley Dr.

**REGION #1** Flood Control Points and Catch Basins

\_\_\_\_\_

Date	Personnel	Truck #
------	-----------	---------

All Catch Basins within an area bordered by: \_\_\_\_\_

On the North; To: \_\_\_\_\_ on the South; and by:

\_\_\_\_\_ on the East; To: \_\_\_\_\_

on the West.

BELLEVILLE STREET DEPARTMENT

FLOODING STANDARD OPERATING PROCEDURE AS FOLLOWS:

1. Remedy by clearing grates and/or ditch obstructions where flooding/ponding of water exists.
2. Check and clear each Flood Control Point listed.
3. Using a grid pattern, clear all storm water catch basin grates.

**FLOOD CONTROL POINTS: REGION #2**

405 E. Park Dr. – basin close to North Park

3829 N. Park (inlet)

136 N. 45<sup>th</sup> Street (rear) concrete ditch off North Belt West & between N. 44<sup>th</sup> & N. 45<sup>th</sup>

4202 ERNA --- ALLEY HAS GRATE

544 N. 41<sup>st</sup> St. (Catch basin grate behind this property)

447 N. 39<sup>th</sup> St. (Check for water ponding & advise if it needs to be pumped)

West "A" St. between N. 35<sup>th</sup> St. and N. 36<sup>th</sup> St. (3 grates at surface grade)

113 N. 35<sup>th</sup> (down from 113 off the road in the grass is catch basin with grate)

4116 Betty Drive

2900 Vernier – large grate

**17<sup>th</sup> Street extension & South 11<sup>th</sup> Street**

**REGION #2 BORDERED BY:**

On the West	Frank Scott Parkway West
On the East	N. 17 <sup>th</sup> St./Windcliffe Dr
On the North	Rt. 161
On the South	28 <sup>th</sup> St.

**REGION #2** Flood Control Points and Catch Basins

Date	Personnel	Truck #

All Catch Basins within an area bordered by: \_\_\_\_\_

On the North; To: \_\_\_\_\_ on the South; and by:

\_\_\_\_\_ on the East; To: \_\_\_\_\_

on the West.

**BELLEVILLE STREET DEPARTMENT**

**FLOODING STANDARD OPERATING PROCEDURE AS FOLLOWS:**

1. Remedy by clearing grates and/or ditch obstructions where flooding/ponding of water exists.
2. Check and clear each Flood Control Point listed.
3. Using a grid pattern, clear all storm water catch basin grates.

**FLOOD CONTROL POINTS: REGION #3**

900 S. 20<sup>th</sup> (Last house on Left)

810 S. 20<sup>th</sup> St.

S. 18<sup>th</sup> St. and Bunsen

1812 West "F" Street - metal mat in gutter

25 S. 11<sup>th</sup> Street – concrete culvert by green posts

S. 10<sup>th</sup> St. by mobile homes (near 10<sup>th</sup> St. railroad tressel)

S. 10<sup>th</sup> & Union (southwest corner – 2 grates)

S. 8<sup>th</sup> St. and Harrison (ditch grate)

S. 8<sup>th</sup> St. culvert

S. 2<sup>nd</sup> St. and Cleveland

Alley between S. 1<sup>st</sup> St. and S. 2<sup>nd</sup> St. off Monroe

<b>REGION #3 BORDERED BY:</b>	On the West	Otto St.
	On the East	Rt. 159
	On the North	28 <sup>th</sup> St./Gilbert St.
	On the South	Lake Forest Drive

**REGION #3 Flood Control Points and Catch Basins**

\_\_\_\_\_ Date \_\_\_\_\_ Personnel \_\_\_\_\_ Truck #

All Catch Basins within an area bordered by: \_\_\_\_\_

On the North; To: \_\_\_\_\_ on the South; and by:

\_\_\_\_\_ on the East; To: \_\_\_\_\_

on the West.



**BELLEVILLE STREET DEPARTMENT**

**FLOODING STANDARD OPERATING PROCEDURE AS FOLLOWS:**

1. Remedy by clearing grates and/or ditch obstructions where flooding/ponding of water exists.
2. Check and clear each Flood Control Point listed.
3. Using a grid pattern, clear all storm water catch basin grates.

**FLOOD CONTROL POINTS: REGION #5**

Denvershire Drive

646 Fort Henry (behind this address, 3' culvert under railroad, off Vicksburg, behind Wal-Mart)

625 Wabash – grate

827 Portland – grate

**McClintock & Douglas – grates**

1010 McClintock (rear, off alley - grate is by marker)

402 S. McKinley Dr – in rear

Grate on Rusty Will (behind Laderman Park)

<b>REGION #5 BORDERED BY:</b>	On the West	Rt. 159
	On the East	Green Mount Rd/ Orchards Subdiv.
	On the North	E. Main/Carlyle Ave.
	On the South	Sandwedge Dr./Green Mount Ln.

**REGION #5 Flood Control Points and Catch Basins**

\_\_\_\_\_ Date \_\_\_\_\_ Personnel \_\_\_\_\_ Truck #

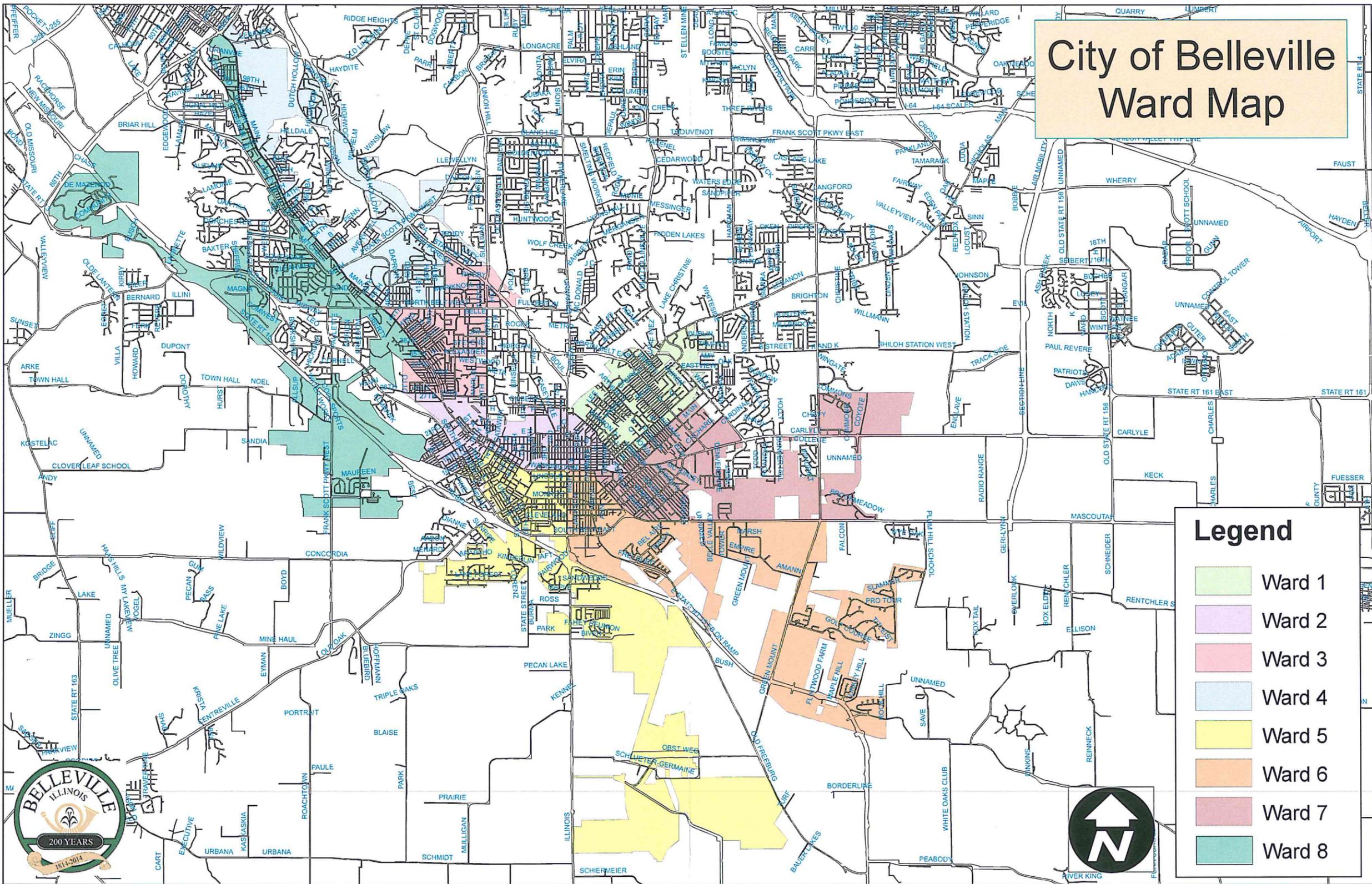
All Catch Basins within an area bordered by: \_\_\_\_\_

On the North; To: \_\_\_\_\_ on the South; and by:

\_\_\_\_\_ on the East; To: \_\_\_\_\_

on the West.

# City of Belleville Ward Map



## Legend

- Ward 1
- Ward 2
- Ward 3
- Ward 4
- Ward 5
- Ward 6
- Ward 7
- Ward 8

