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SANITARY SEWER EVALUATION SURVEY
PLAN "B"

SMOKE TEST OBSERVATION AND RESULTS

PSO	0769
Facility Name	VA Hospital
Address	19050 N.E. 29 th . Avenue, Miami, Florida 33180
Time	June 2nd, 2011 at 11:00 A.M.
Weather	Clear

SMOKE TEST OBSERVATION AND RESULTS

The smoke was injected as per attached scheduled using Cherne 303-550 Air- Lock fan assembly smoke blower and Superior Smoke bomb for Testing Sanitary Sewers Each charge provides 156,000 cubic feet of smoke. Smoke made its way through the sewer system without obstruction and reached all vents. The observation and problems are reflected on the table below:



1.1 SMOKE TEST OBSERVATION AND RESULTS – SECTION “A”

	Point of Injection= Manhole # 12	Charge(c.f.)=48,000			
Segments	Description	Length (ft.)	Diameter (in)	Material	Results
A-1	From M.H. #12 to M.H. #16	94	10	D.I.P.	
A-2	From M.H. #16 to M.H. #17	32	10	D.I.P.	
A-3	From M.H. #17 to M.H. #19	91	10	D.I.P.	
A-4	From M.H. #19 to Building	8	8	CLAY	
A-5	From M.H. #17 to Building	76	8	D.I.P.	
A-6	From M.H. #12 to M.H. #13	117	10	CLAY	
A-7	From M.H. #16 to M.H. #13	65	10	D.I.P.	
A-8	From M.H. #13 to Building	139	8	D.I.P.	
B-1	From M.H. # 13 to Building	139	8	D.I.P.	Passed



Point of Injection: Manhole # 12

Testing Includes: M.H # 12, M.H. 13, M.H. 16, M.H 17, M.H. 19, Pump Station A and P.S. B and all associated piping of this section of the SSCY

Location: On concrete

Result: The smoke reached all part of the sanitary sewer collection system of the section being tested and their corresponding vents

Defect Rating: See below



Pump Station A: In compliance

Address: On the North West side within; main building. This ejector collects the waste water below the 1st floor and discharges it into M.H. # 19

Size and Material: 40 Ø x 10ö concrete precast structure

Surface: Concrete

Inflow Potential: None

Defect Rating: None

Task to be performed:

- No work required



Pump Station A: In compliance
Address: On the North West side within; main building. This ejector collects the waste water below the 1st floor and discharges it into M.H. # 19
Size and Material: 40 Ø x 10ö concrete precast structure
Surface: Concrete
Inflow Potential: None
Defect Rating: None
Task to be performed:

- No work required



Pump Station A: In compliance
Address: On the North West side within; main building. This ejector collects the waste water below the 1st floor and discharges it into M.H. # 19
Size and Material: 40 Ø x 10ö concrete precast structure
Surface: Concrete
Inflow Potential: None
Defect Rating: None
Task to be performed:

- No work required



Manhole # 12: Not In compliance
 Solids blocking flow of one channel
Address: South of the building on asphalt driveway

Inflow Potential: Moderate

Defect Rating: Moderate
Task to be performed:

- Install inflow dish
- Clean inflow lines



Manhole # 12: Not In compliance

Address: South of the building on asphalt driveway

Inflow Potential: Moderate

Defect Rating: Moderate
Task to be performed:

- Install inflow dish
- Clean inflow lines



Manhole # 13: Not in compliance
 Solids blocking flow of one channel
Address: South of the building on asphalt driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish
- Clean inflow and outflow lines



Manhole # 13: Not in compliance

Address: South of the building on asphalt driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish
- Clean inflow and outflow lines



Manhole # 13: Not in compliance

Address: South of the building on asphalt driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish
- Clean inflow and outflow lines



Manhole # 16: Not in compliance

Address: South of the building on asphalt driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



Manhole # 16: Not in compliance

Address: South of the building on asphalt driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



Manhole # 17: No in compliance

Address: South of the building on asphalt driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



Manhole # 17: Not in compliance

Address: South of the building on asphalt driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



Manhole # 19: Not in compliance

Address: South of the building on asphalt driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish

1.2 SMOKE TEST OBSERVATION AND RESULTS – SECTION “ B ”

	Point of Injection= M.H.#1 Charge(c.f.)= 48,000				
Segments	Description	Length (ft.)	Diameter (in)	Material	Results
C-1	From M.H.#1 to C.O.#2	105	8	CLAY	
C-2	From M.H.#1 to M.H.#7	74	8	CLAY	
C-3	From M.H.#7 to M.H.#8	265	8	CLAY	
C-4	From M.H.#8 to C.O.#4	11	10	CLAY	
C-5	From M.H.#8 to M.H.#9	255	8	CLAY	
C-6	From M.H.#9 to M.H.#10	84	8	CLAY	



Point of Injection: Manhole # 1

Testing Includes: M.H # 1, M.H. 7, M.H. 8, M.H 9, Pump Station 6A and P.S. 6B and all associated piping of this section of the SSCY

Location: On the northeast side of main building on asphalt driveway

Result: The smoke reached all part of the sanitary sewer collection system of the section being tested and their corresponding vents



Manhole # 7: Not in compliance

Address: Northeast side of main building, on concrete

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



Manhole # 7: Not in compliance

Address: West the building, on asphalt driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



Manhole # 8: Not in compliance

Address: East side of main building, on concrete driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



Manhole # 9: Not in compliance

Address: South east corner of main building, on concrete driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



Manhole # 9: Not in compliance

Address: South east corner of main building, on concrete driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish

1.3 SMOKE TEST OBSERVATION AND RESULTS – SECTION “B”

	Point of Injection= Manhole #6 Charge(c.f.)=36,000				
Segments	Description	Length (ft.)	Diameter (in)	Material	Results
C-7	From M.H. #6 to C.O. #01A	22	8	CLAY	
C-8	From C.O. #01 to M.H.#5	50	8	CLAY	
C-9	From M.H#5 to M.H.#4	94	8	CLAY	
C-11	From M.H#4 to Building	48	8	CLAY	
C-12	From M.H#4 to M.H.#3	55	8	CLAY	

C-13	From M.H#3 to M.H.#1	30	8	CLAY	
C-14	From M.H#6 to C.O.#1	74	8	CLAY	
C-15	From C.O.#1 to P.S. C	204	8	CLAY	
C-16	From P.S. C to Building	60	6	C.I.	



Point of Injection: Manhole # 6

Address: North of main building on sod

Testing Includes: Manhole # 4, M.H. # 4, M.H. # 5, M.H. # 6, M.H. # 5, C.O. # 1, C.O.1A; P.S. C and all associated piping of this section of the SSCS

Location: On sod area

Result: The smoke reached all parts of the sanitary sewer collection system of the section being tested and their corresponding vents



Pump Station C: In compliance

Address: On the North of a portable building. This ejector collects the waste of a single building and discharges it into M.H. # 6

Size and Material: 48" Ø x 7' concrete precast structure

Surface: Sod

Inflow Potential: None

Defect Rating: None

Task to be performed:

- No work required



Pump Station C: In compliance

Address: On the North of a portable building. This ejector collects the waste of a single building and discharges it into M.H. # 6

Size and Material: 48" Ø x 7' concrete precast structure

Surface: Sod

Inflow Potential: None

Defect Rating: None

Task to be performed:

- No work required



Pump Station C: In compliance

Address: On the northwest side of building. This ejector collects the waste of that section of the building and discharges it into M.H. # 6

Size and Material: 48" Ø x 7' concrete precast structure

Surface: Sod

Inflow Potential: None

Defect Rating: None

Task to be performed:

- No work required



Manhole # 3: Not in compliance

Address: North of the Medical center building, on concrete driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



Manhole # 3: Not in compliance

Address: North of the Medical center building, on concrete driveway

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



Manhole # 4: Not in compliance

The manhole rim is misaligned with the structure

Address: Northwest side of medical building the building, on sod

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish
- Line need cleaning
- Remove and re-set manhole rim



Manhole # 4: Not in compliance

Address: Northwest side of medical building
the building, on sod

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish
- Line need cleaning



Manhole # 6: Not in compliance

Address: North of main building, on sod

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



Manhole # 6: Not in compliance

Address: North of main building, on sod

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



C.O. # 1: Not in compliance

This 46 cast iron clean out is missing the
clean out ferrule and the plug

Address: West the building, on sod

Inflow Potential: Severe

Defect Rating: Severe

Task to be performed:

- Excavate to remove damage portion
of pipe
- Install new clean out



C.O. # 1: Not in compliance

This 4" cast iron clean out is missing the clean out ferrule and the plug

Address: West the building, on sod

Inflow Potential: Severe

Defect Rating: Severe

Task to be performed:

- Excavate to remove damage portion of pipe
- Install new clean out



C.O. # 1A #: In compliance

Address: West the building, on asphalt driveway

Inflow Potential: None

Defect Rating: None

Task to be performed:

- No work required

1.4 SMOKE TEST OBSERVATION AND RESULTS – SECTION “A”

	Point of Injection= Manhole #10	Charge(c.f.)= 24,000			
Segments	Description	Length (ft.)	Diameter (in)	Material	Results
C-17	From M.H. #10 to M.H. #11	86	8	CLAY	
C-18	From M.H. #11 to M.H. #12	201	8	CLAY	



Manhole # 10: Not in compliance

Address: South east side of building, on concrete driveway

Inflow Potential: None

Defect Rating: None

Task to be performed:

- Install inflow dish
- Jet clean line partially obstructed



Manhole # 10: Not in compliance

Address: South east side of building, on concrete driveway

Inflow Potential: None

Defect Rating: None

Task to be performed:

- Install inflow dish
- Jet clean line partially obstructed



Manhole # 11: Not in compliance

Address: South east side of building, on concrete driveway

Inflow Potential: None

Defect Rating: None

Task to be performed:

- Install inflow dish
- Jet clean line partially obstructed



Manhole # 11: Not in compliance

Address: South east side of building, on concrete driveway

Inflow Potential: None

Defect Rating: None

Task to be performed:

- Install inflow dish
- Jet clean line partially obstructed

PUMP STATION B- INSIDE BUILDING- SUB-BASIN OF SECTION A



Pump Station B: In compliance

Address: Located on the North West side of the building inside of it and discharge its content into Manhole # 19

Size and Material: 5ö concrete precast

Surface: Concrete

Inflow Potential: None

Defect Rating: None

Task to be performed:

- No work required



Pump Station B: In compliance

Address: Located on the North West side of the building inside of it and discharge its content into Manhole # 19

This ejector collects from plumbing lines below grade and discharges it into M.H. # 19

Size and Material: 5ö concrete precast

Surface: Concrete

Inflow Potential: None

Defect Rating: None



PUMP STATION D- IS A SUB-BASIN OF SECTION "C"



Pump Station D: In compliance
Address: North side of the building receiving the flow from grease trap # 1 and discharge its flow into manhole # 8

Size and Material: 5' concrete precast
Surface: Unpaved
Inflow Potential: None

Defect Rating: None

Task to be performed:

- No work required



Pump Station D: In compliance
Address: North side of the building receiving the flow from grease trap # 1. The pump discharge into M.H. 5 which is cover with concrete

Size and Material: 5' concrete precast
Surface: Unpaved

Inflow Potential: None
Defect Rating: None

Task to be performed:

- No work required

Pump Station D: In compliance
Address: North side of the building receiving the flow from grease trap # 1

Size and Material: 5' concrete precast
Surface: Unpaved

Inflow Potential: None

Defect Rating: None

Task to be performed:

- No work required



Grease Trap # 1: In compliance
Address: North Side of Main building on concrete driveway
Size and Material: 5öx 8ö concrete precast

Surface: Concrete

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



Grease Trap # 1: In compliance
Address: North Side of Main building on concrete driveway
Size and Material: 5öx 8ö concrete precast

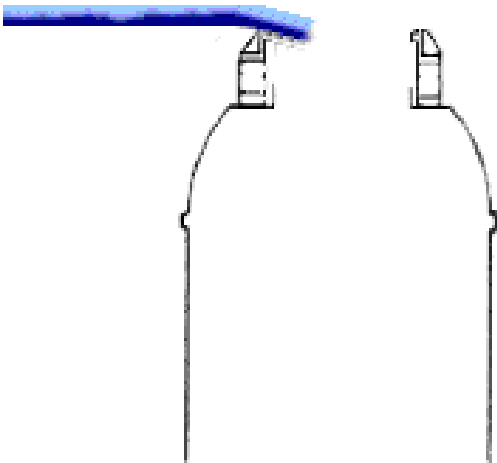
Surface: Concrete

Inflow Potential: Moderate

Defect Rating: Moderate

Task to be performed:

- Install inflow dish



During rainy weather, an average manhole contributes from 3,000 to 12, 000 gallons per day of rain water, to the treatment systems.

Task to be performed:

- Provide and Install Inflow Dish

STOP unwanted water inflow into your new or rehabilitated sanitary system through the manhole with this simple and inexpensive solution. Made of high density polyethylene, that meets ASTM D-1248 standards. INFLOW DISH can reduce the amount of surface water that limits your sanitary systems capacity as well as reducing the chance of a system overflow.

The INFLOW DISH is a simple and inexpensive solution to stop unwanted water inflow from entering the manhole through the manhole lid into your rehabilitated sanitary system.

Benefits:

Controls sewer odors in residential areas

By reducing the quantity of Rain water (inflow) in the sanitary sewer system improves its reliability by eliminating surcharges and backups caused by excessive flows.

Maintain compliance with Derm Discharge Permits during the rainy season

Reduce treatment costs and free up capacity at the WWTP

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