

TABLE A-4

Inflow Influenced Peak Instantaneous I/I Values

Flow Meter	Day of Peak Instantaneous Flow	Time of Highest Peak Instantaneous Flow	Inflow Influenced Peak I/I (gpm)	Basin Area (Acre)	Total Upstream Basin Area (Acre)	Inflow Influenced I/I Rate (GPAD)
1	1/7/2009	23:39	95.8	338	338	408
2	(1)	(1)	(1)	367	705	(1)
3	1/7/2009	23:56	627.5	346	346	2,612
4	(1)	(1)	(1)	520	1,839	(1)
5	1/8/2009	0:02	206.9	247	247	1,206
6	(1)	(1)	(1)	726	726	(1)
7	(1)	(1)	(1)	280	280	(1)
8	(1)	(1)	(1)	420	700	(1)
9	(1)	(1)	(1)	464	464	(1)
10	1/7/2009	23:53	469.2	296	760	889
11	(1)	(1)	(1)	110	110	(1)
12	(1)	(1)	(1)	4,900	4,900	(1)
WWTP	1/7/2009	23:00	10,416.6	6,100	6,100	2,459

(1) Unable to calculate due to insufficient data.

The I/I rates from Tables A-3 and A-4 are summarized in Table A-5 along with the percentage of concrete sewer pipe from each flow meter basin. The results show that the City does have both infiltration and inflow. When compared with the WWTP effluent flow meter records as seen in Figure A-21, it is clear that I/I is a city-wide problem. The I/I rates in GPAD calculated from the flow meters are not extremely high for the majority of the basins, however, the flow monitoring period took place in a fairly dry winter with only one major storm event of 0.91 inches on January 7th, 2009. In addition, we did not capture data for all the flow meters during the one major storm event.

TABLE A-5

I/I Summary

Flow Meter	Basin % Concrete Sewer Pipe	Drainage Basin	Infiltration Influenced Peak Day I/I Rate (GPAD)	Inflow Influenced Instantaneous I/I Rate (GPAD)
1	63.1%	Lift Station #8	111	408
2	66.5%	Lift Station #10	(1)	(1)
3	88.7%	Lift Station #10	1,002	2,612
4	92.7%	Lift Station #10	(1)	(1)
5	77.7%	Lift Station #10	520	1,206
6	66.2%	Lift Station #10	(1)	(1)
7	93.3%	Lift Station #12	(1)	(1)
8	92.6%	Lift Station #12	782	(1)
9	46.6%	NE Gravity	329	(1)
10	72.8%	NW Gravity	330	889
11	100%	W Gravity	425	(1)
12	N/A	To WWTP	(2)	(1)
WWTP	N/A	Entire City and Portion of Edmonds	879	2,459

(1) Unable to calculate due to insufficient data.

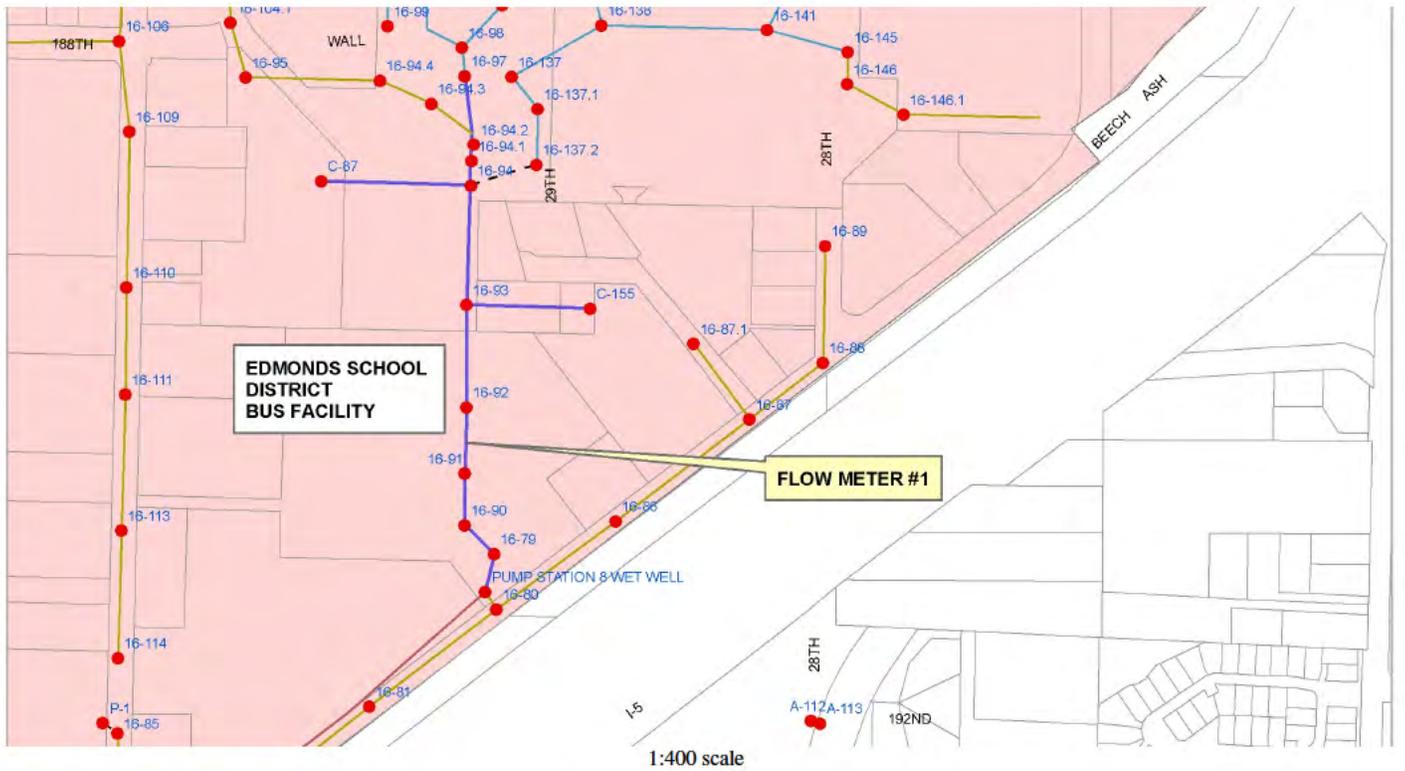
(2) Unable to calculate due to inaccurate flow meter readings.

The results shown above are not unexpected. The older areas of the City's older sewer system with more concrete sewer pipe are shown to have more infiltration and inflow. The areas which drain to Lift Station #10 and Lift Station #12, both at or near capacity are also shown to have more infiltration and inflow. The Flow Meter Basin #3 is shown to be the worst basin with respect to both infiltration and inflow. We expect that Flow Meter Basin #4 also has high I/I since it is a known problem area, but did not capture sufficient data for this basin. Flow Meter Basin #8 is shown to have a high rate of infiltration and we expect the results would show a high rate of inflow if the January 7th storm event was captured. Flow Meter Basin #5 is shown to have a moderate rate of both infiltration and inflow. The remainder of the Flow Meter Basins all show moderate to low rates of I/I.

FLOW METER SETUP REFERENCE SHEETS

FLOW METER #1

Location

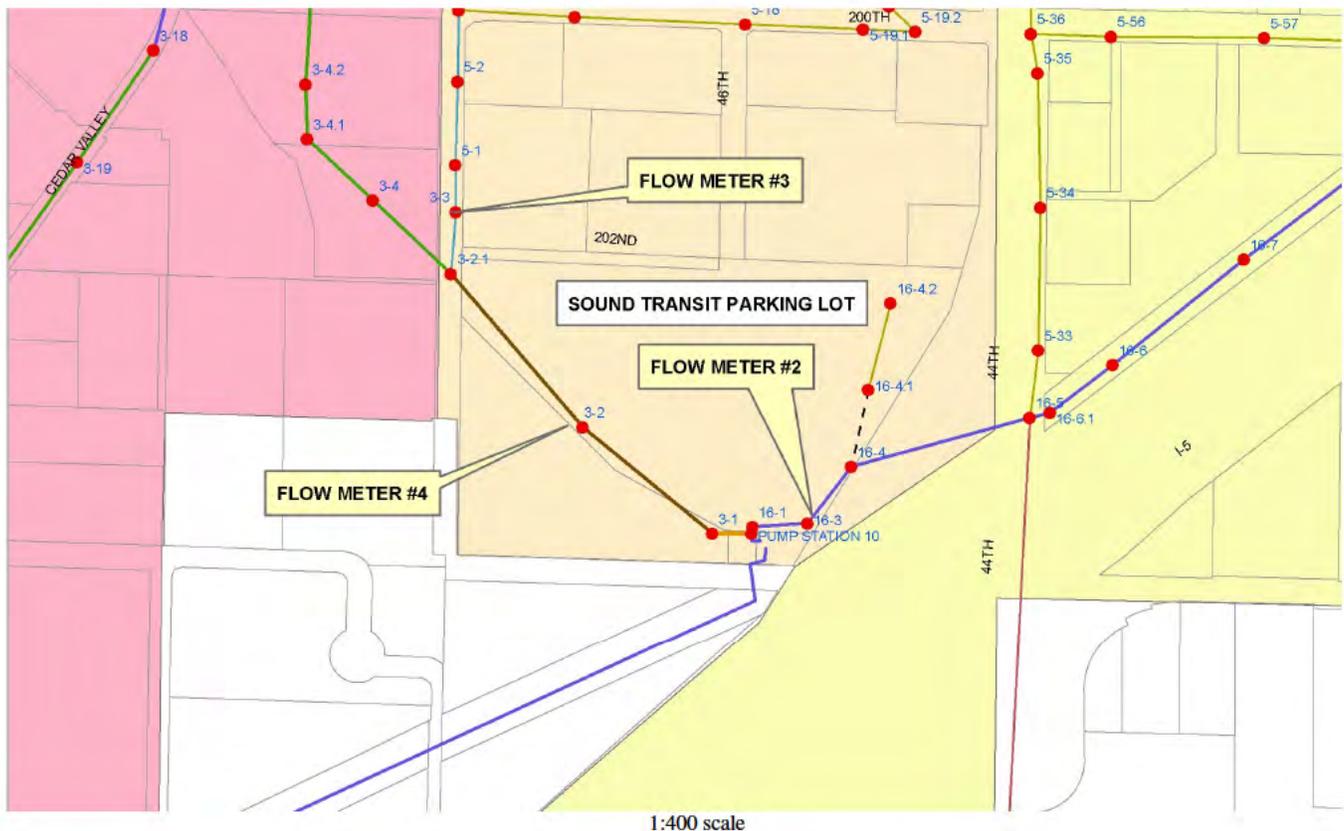


Basin: Lift Station #8

Notes: This site is located along the Alderwood Mall Parkway next to a roll-off dumpster within the Edmonds School District Bus Facility. (SSMH 16-91)

FLOW METER #2

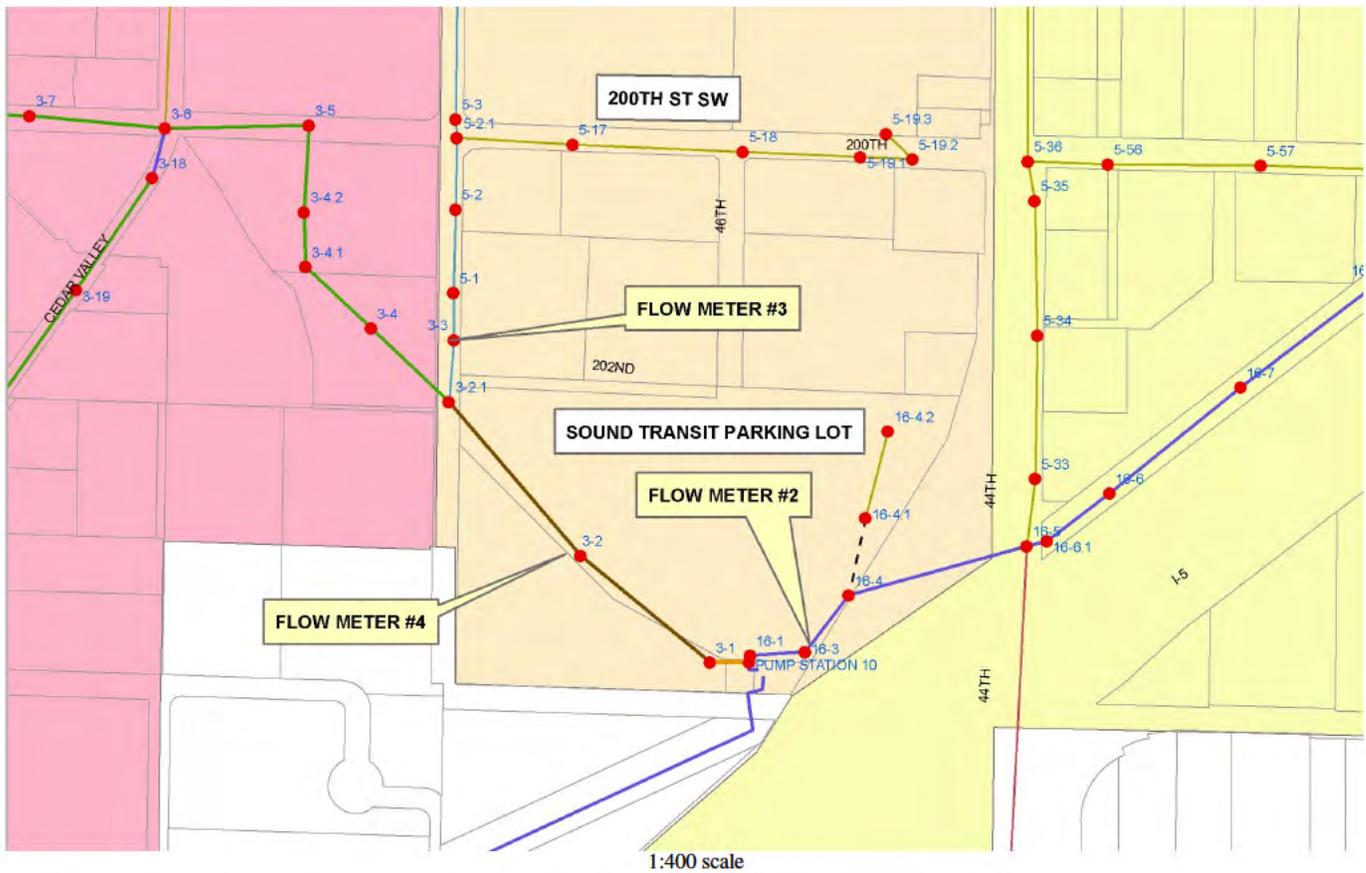
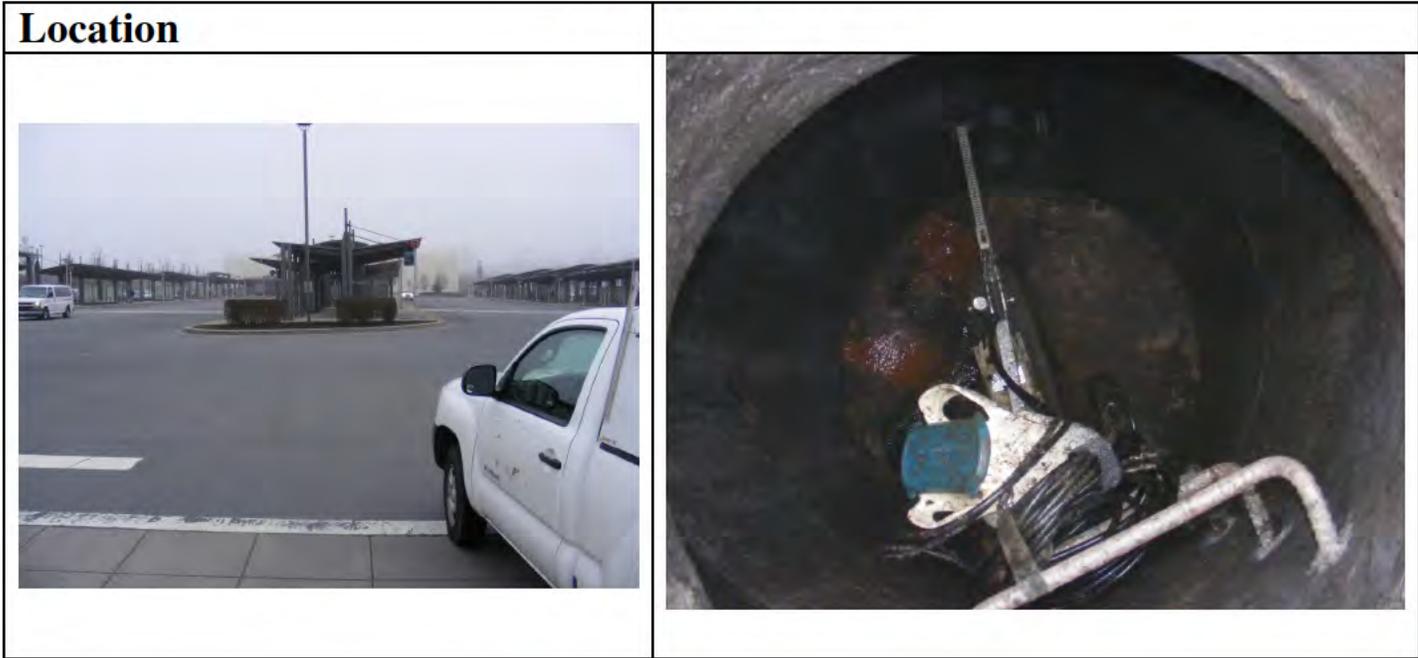
Location



Basin: Lift Station #10

Notes: This site is located along the Interurban trail near lift station #10 in the Levitz / mass transit parking lot. Mild infiltration was observed within this manhole (SSMH 16-3). One side sewer lateral from the northwest contributes some flow to this manhole not accounted for by the flowmeter. The subsequent manhole downstream was the preferred location for flow monitoring but this manhole channel directed flow in a manner which would cause significant measurement error.

FLOW METER #3

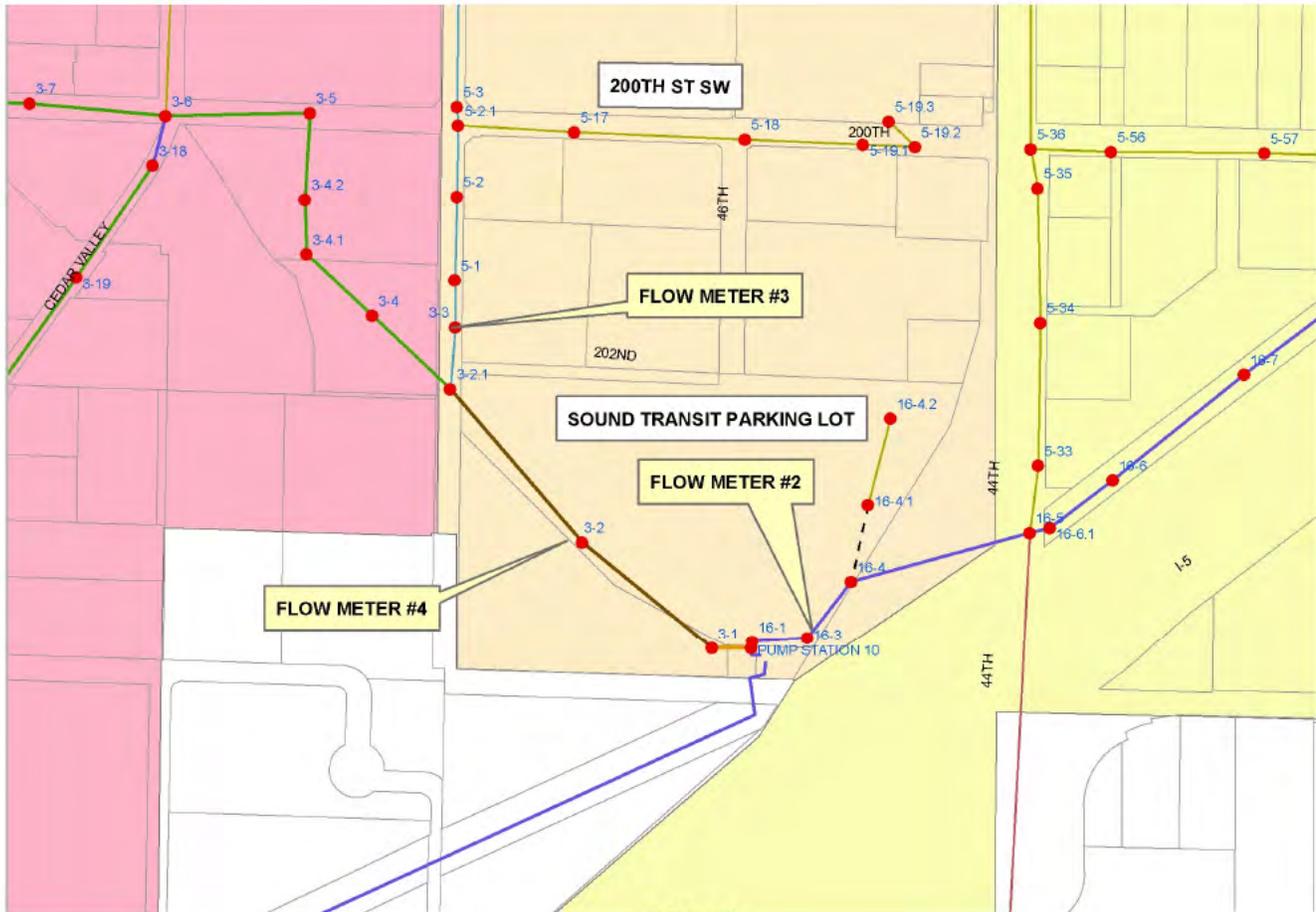


Basin: Lift Station #10

Notes: This site is located at the entrance to the Sound Transit Park and Ride off of 48th Ave. SSMH 3-3

FLOW METER #4

Location

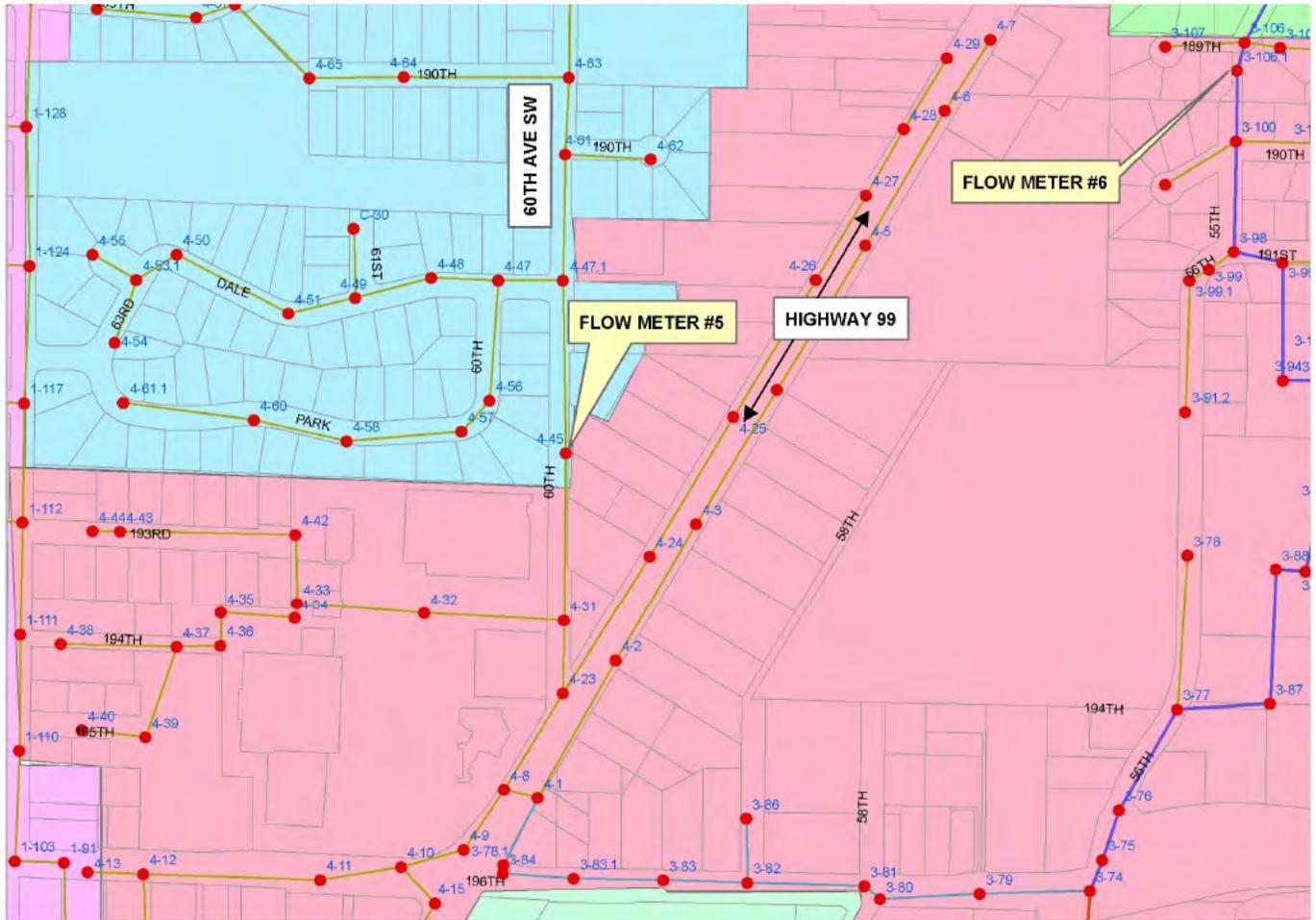


Basin: Lift Station #10

Notes: This site is located at the entrance to the Sound Transit Park and Ride off of 48th Ave. SSMH 3-2

FLOW METER #5

Location



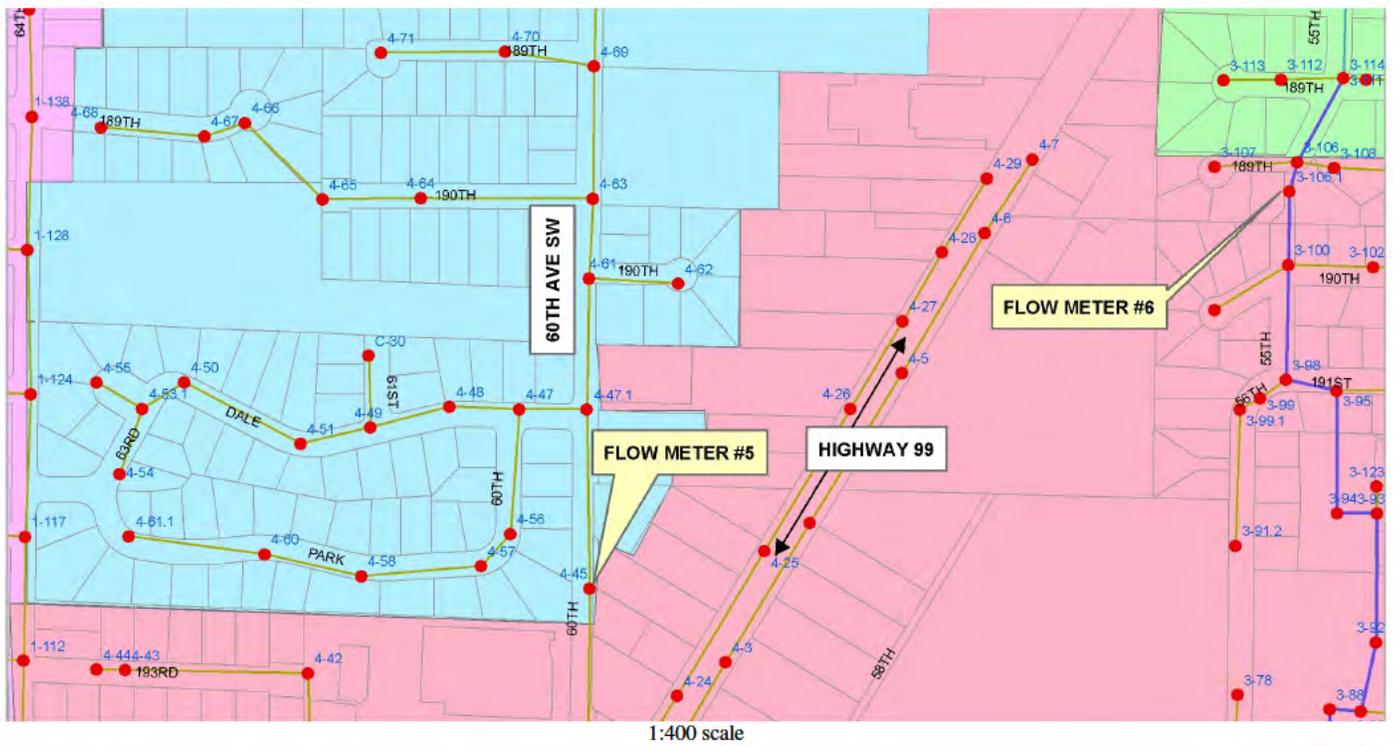
1:400 scale

Basin: Lift Station #10

Notes: This site is located along 60th Ave. outside of the north bound lane. SSMH 4-45

FLOW METER #6

Location

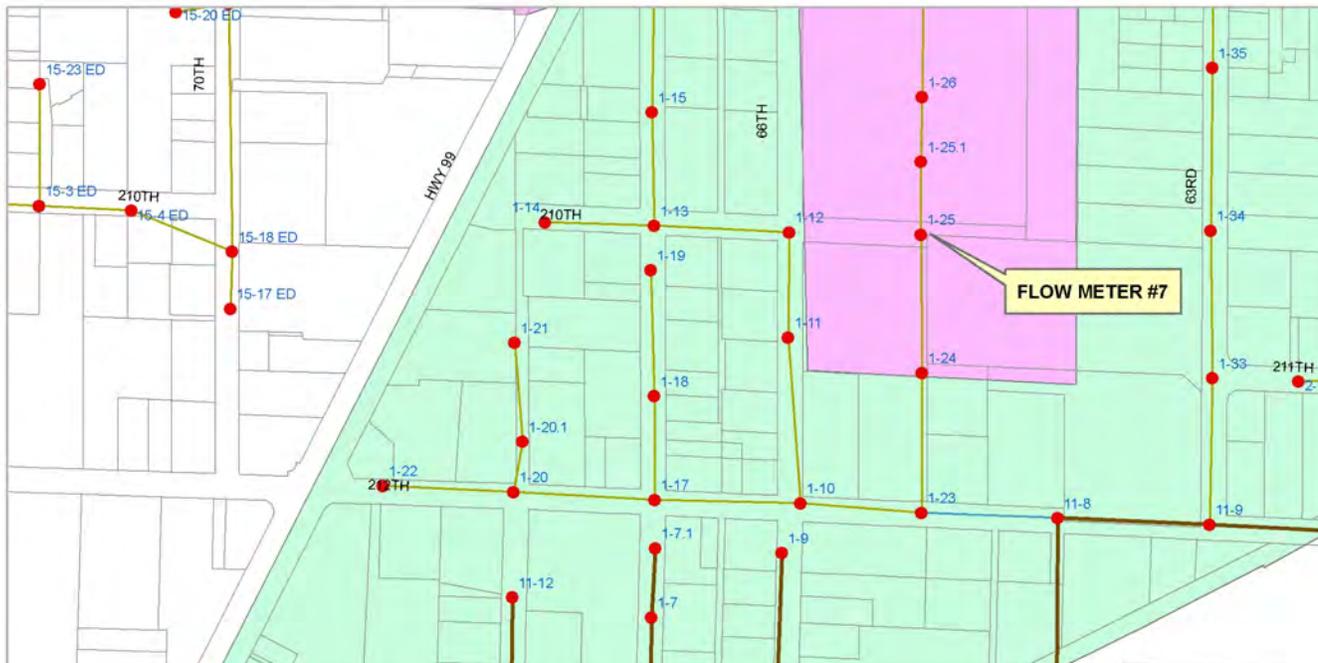
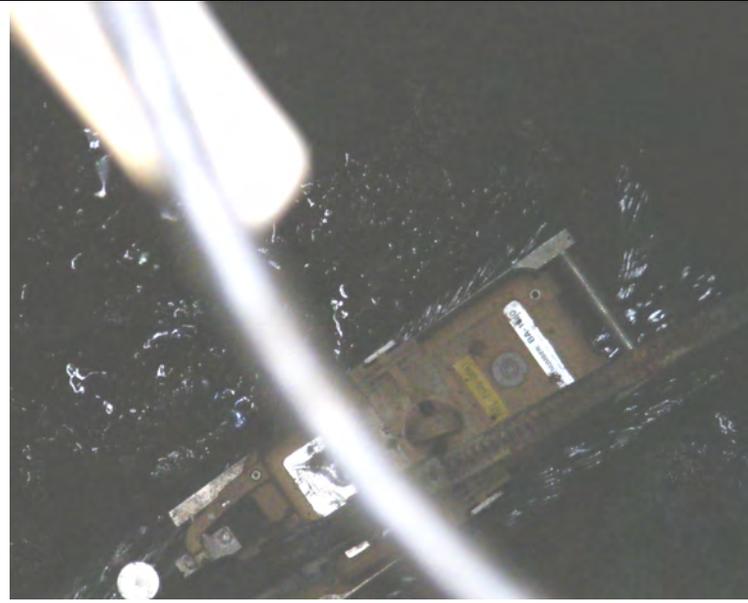


Basin: Lift Station #10

Notes: This site is located in a grassy easement between two cul-de-sacs at the end of 189th St. SW and 190th St. SW. The manhole was downstream of the preferred site SSMH 3-106. The preferred manhole was actively surcharging at the time of installation. This manhole SSMH 3-106.1 has surcharged since installation of the flowmeter.

FLOW METER #7

Location



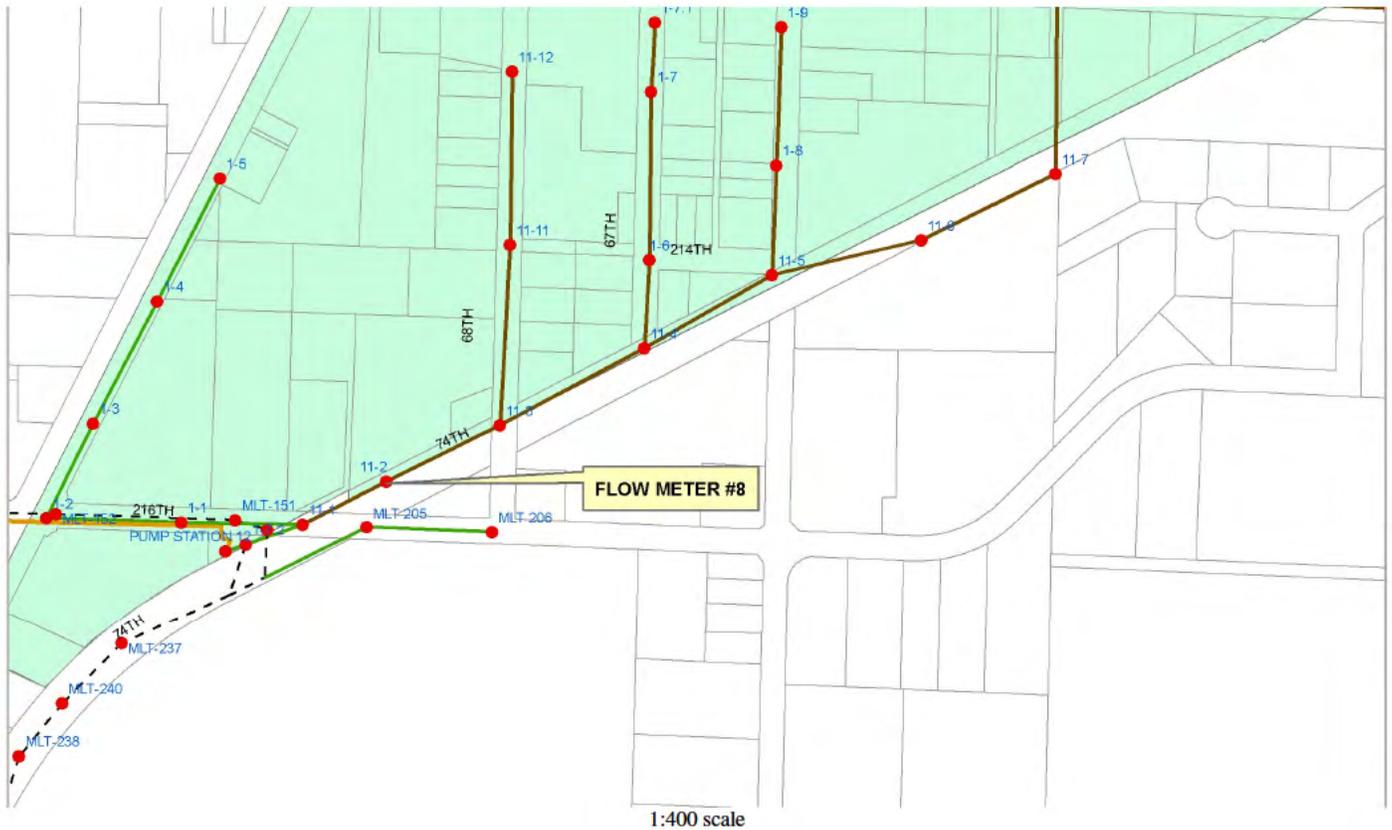
1:400 scale

Basin: Lift Station #12

Notes: This site (SSMH 1-25) is located at the end of a gravel easement adjacent to an apartment complex at approximately the intersection of 210th St. and 66th Ave. SW. The preferred flow monitoring location was at SSMH 1-24, but regular access to the site looked difficult.

FLOW METER #8

Location

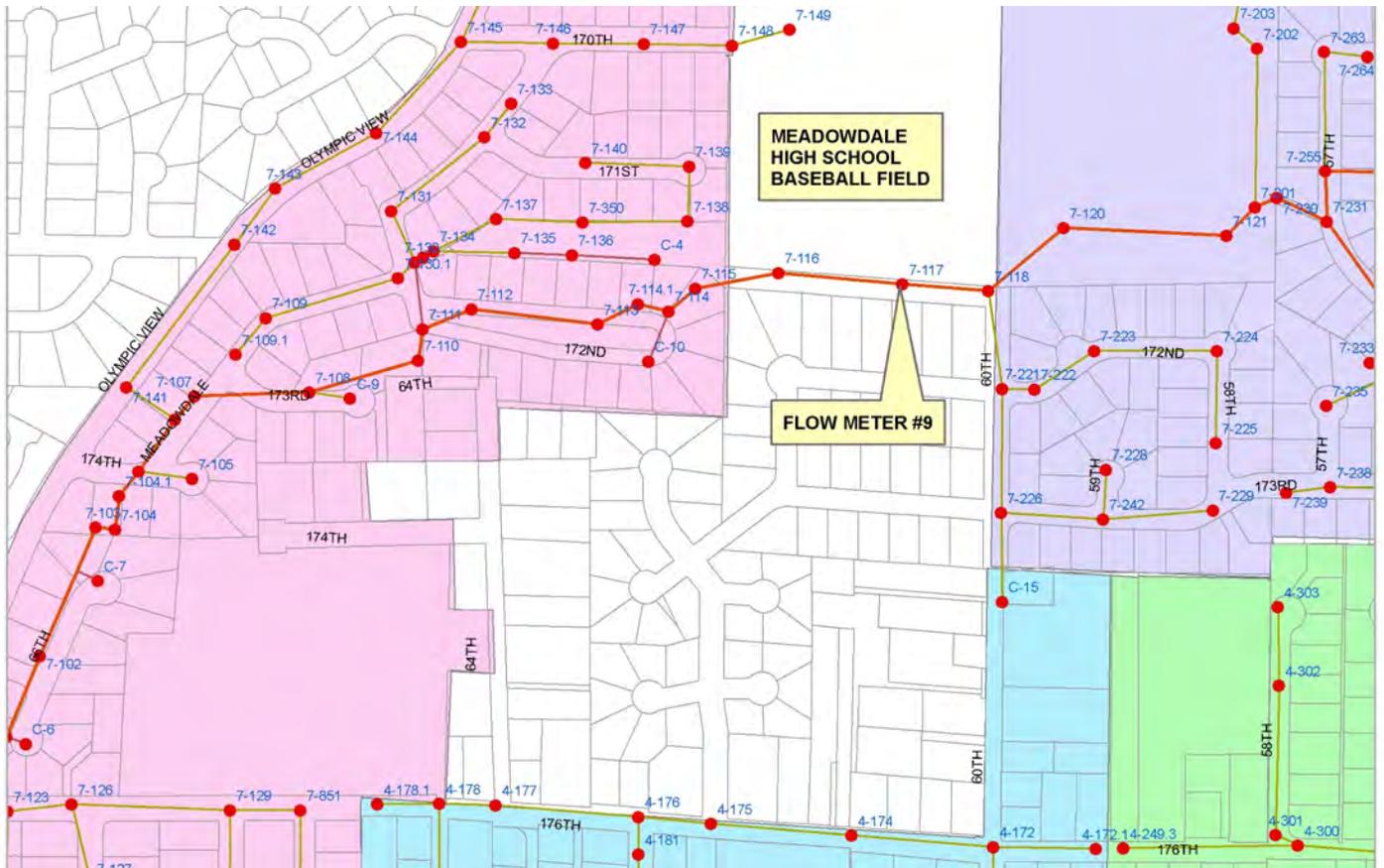


Basin: Lift Station #12

Notes: This site (SSMH 11-2) is located at the approximate intersection of the Interurban Trail and 216th St. SW.

FLOW METER #9

Location



Basin: NE gravity

Notes: This site (SSMH 7-117) is located in an easement at the back of the Meadowdale High School baseball field.

FLOW METER #10

Location

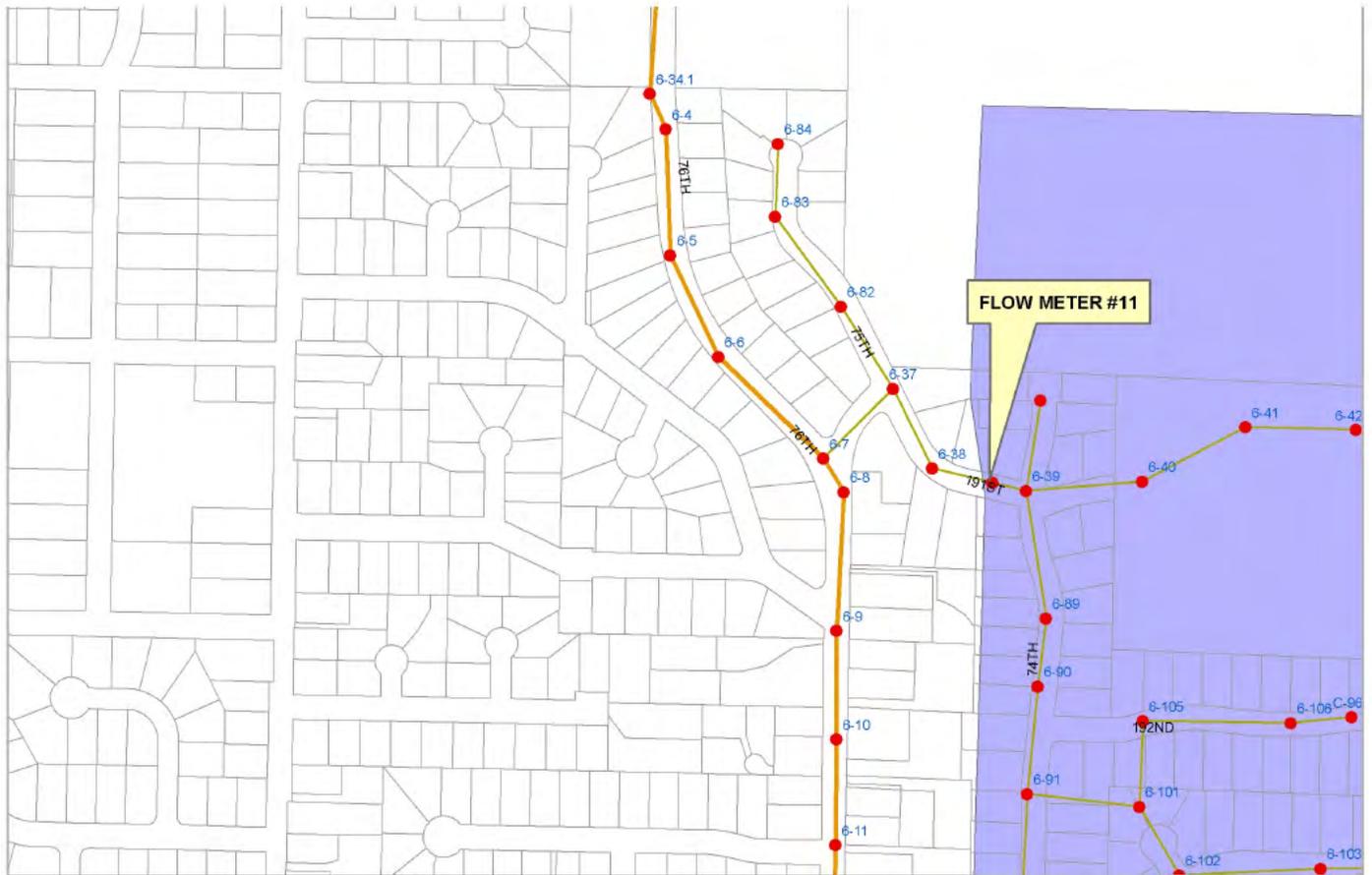


Basin: NW gravity

Notes: This site (SSMH 7-1) is located along the westbound lane of Olympic View Dr.

FLOW METER #11

Location



1:400 scale

Basin: W gravity

Notes: This site (SSMH 6-38.1) is located along the westbound shoulder of 191st St. SW.

FLOW METER #12

Location



Basin: To WWTP

Notes: This site (SSMH 8-10) is located along the northbound lane of 76th Ave. SW.

APPENDIX B

SMOKE TESTING

BACKGROUND

Gray & Osborne, Inc. conducted smoke testing in the City of Lynnwood during July and August of 2009. Smoke testing was performed by removing manhole covers and pumping liquid through a blower fan which then converted the liquid into smoke. The blower forced the non-toxic smoke throughout the sewer mains and side sewers. Generally, smoke is visible for approximately 400 LF in each direction from the blower MH location. The blower MH location was chosen to try to test numerous sewer runs from a single location.

The smoke testing was performed to locate leaks in the sewer system and illicit or cross-connected storm connections. Gray & Osborne crew walked the site and looked for sources of smoke. A crew of three to four people was used depending on the intensity of traffic in the areas tested. Storm connections included roof downspouts, yard and driveway drains, uncapped cleanouts, and leaky manhole lids indicating a source of inflow into the sewer system. Leaks included cracks in pavement, sidewalks, or leaks around manhole frames indicating a source of infiltration into the sewer system.

SMOKE TESTING LOCATION

Smoke testing was targeted for areas that showed greater infiltration during the flow monitoring and included section of Flow Meter Basins 3, 4, 5, 7 and 8. A total of approximately 106,500 linear feet of sanitary sewer pipe was smoke tested as a part of this study. In addition, 19,600 linear feet of sanitary sewer pipe in Flow Meter Basin 4 was smoke tested during the I/I Study in 1992. We did not re-test this area as part of this I/I study because the City indicated that any problems identified during the 1992 testing have not been repaired. The total length of pipe that was smoke tested in each Flow Meter Basin can be seen in Table B-1 below. The total portion of the City's sewer system that was smoke tested and the year the testing was performed can be seen in Figure B-1.

TABLE B-1

Smoke Testing Pipe Lengths

Flow Meter Basin	Sewer Pipe Smoke Tested (lf)
Flow Meter Basin #3	33,200
Flow Meter Basin #4	6,500
Flow Meter Basin #4 (1992)	19,600
Flow Meter Basin #5	29,900
Flow Meter Basin #7	24,300
Flow Meter Basin #8	32,200
Total	126,100

RESULTS

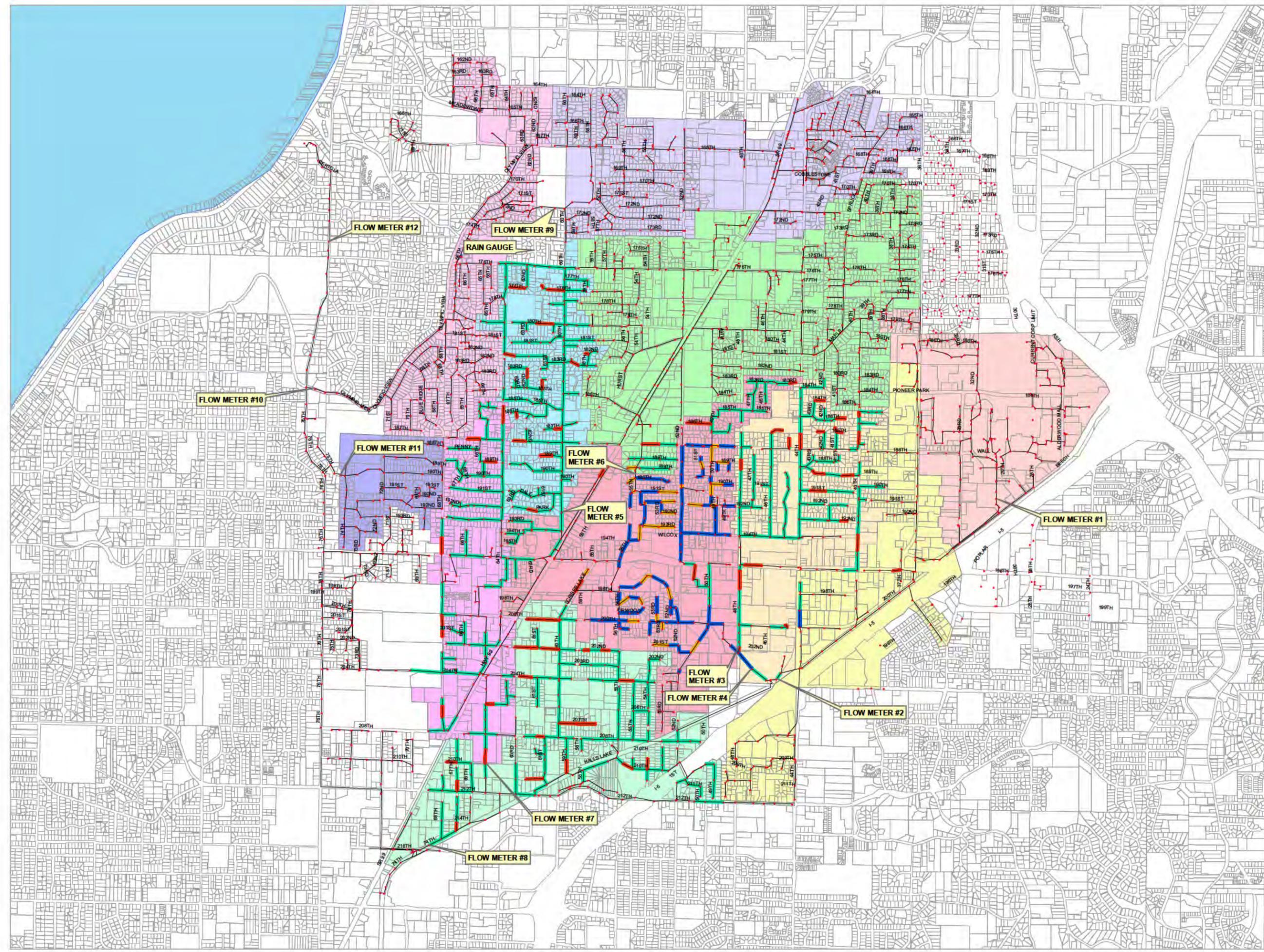
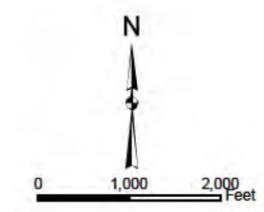
When a source of smoke was observed, the problem was documented with a sketch of the location, address, and a written description of the type of problem, along with the date and who documented the problem. These smoke testing problem logs can be found at the end of Appendix B. In addition, photos were taken of all the problems. The photos were organized to create a summary sheet for each identified problem. The summary sheets can also be found at the end of Appendix B. The locations of all the problems identified during the smoke testing can be seen in Figure B-1.

A total of 98 problems were identified through the smoke testing with 70 problems identified in 2009 and 28 problems identified in 1992. Each of the smoke testing problems identified were ranked by the severity of the problem. The severity of each problem was broken down into the following categories; Severe, Heavy, Medium, Light, Unknown, and None problems. The Severe category included the most severe problems and the Light category included least severe problems. The Unknown category included problems where the severity and the source of the problem is not known. An example of the Unknown category is smoke emanating from under a deck on private property. The None category includes problems located in the field which were later determined to not be problems. An example of the None category is smoke coming through a small hole in a cleanout cap. Results are seen in Table B-2.

TABLE B-2

Smoke Testing Problems Severity

Flow Meter Basin	Heavy	Medium	Light	Unknown	None	Total
Flow Meter #3 Basin	2	11	5	3	0	21
Flow Meter #4 Basin	0	4	0	0	0	4
Flow Meter #4 Basin (1992)	0	12	14	2	0	28
Flow Meter #5 Basin	0	10	2	1	0	13
Flow Meter #7 Basin	0	1	7	0	3	11
Flow Meter #8 Basin	0	7	6	7	1	21
Total	2	45	34	13	4	98



- LEGEND:**
- SEWER MANHOLES
 - SEWERLINES:
 - SMOKE TESTING PROBLEM IDENTIFIED - 1992
 - SMOKE TESTING PROBLEM IDENTIFIED - 2009
 - SMOKE TESTING PROBLEM IDENTIFIED - 1992
 - SMOKE TESTING PROBLEM IDENTIFIED - 2009
- FLOW METER BASINS:**
- BASIN #1 - 338 ACRES
 - BASIN #2 - 356 ACRES
 - BASIN #3 - 320 ACRES
 - BASIN #4 - 511 ACRES
 - BASIN #5 - 250 ACRES
 - BASIN #6 - 722 ACRES
 - BASIN #7 - 285 ACRES
 - BASIN #8 - 463 ACRES
 - BASIN #9 - 464 ACRES
 - BASIN #10 - 295 ACRES
 - BASIN #11 - 110 ACRES

CITY OF LYNNWOOD
 FIGURE B-1
 1992 & 2009 SMOKE TESTING RESULTS

The problems identified during smoke testing have been broken down into six categories: malfunctioning side sewer, downspout, faulty cleanout cap, yard or storm drain connection, manhole problem and unknown issue. A malfunctioning side sewer indicates that smoke was seen emanating from the ground or through joints in sidewalks along the side sewer alignment. While we could not identify specifically what each problem was, a properly functioning side sewer would trap all of the smoke. Downspout problems occurred when we saw smoke emanating from downspouts on the house, indicating storm water inflow into the sanitary sewer system. Faulty cleanout caps occurred when we viewed smoke emanating from cleanouts. The faulty cleanout cap problems varied however, including leaky seals, holes and missing cleanout caps. Yard or storm drain connections are instances where storm water discharges to the sanitary sewer system. Table B-3 also includes a category titled “None” which consists of issues originally identified as problems but later found not to be problems. The number of problems for each category are tabulated below in Table B-3.

TABLE B-3

Smoke Testing Problem Type

Problem Type	Number
Malfunctioning side sewers	19
Downspouts	13
Faulty cleanout cap	32
Yard or storm drain connection	9
Manhole problem	9
Unknown	12
None	4
Total	98

SUMMARY

A summary of results of each of the 98 problems identified during the smoke testing can be seen in Table B-4. This table contains all of the information about the problems including the location of the problem, a description of the problem, and the source of the flow entering the sewer system. The table includes a numbering system for the smoke testing problems so that can be used to reference the smoke testing summary sheets and photos at the end of Appendix B.

Also included in Table B-4 are the upstream and downstream manholes nearest to the problem. All the smoke testing problems were assigned a problem number related to the proximity to the upstream sanitary sewer manhole. The problem number is the upstream manhole number and the length downstream the mainline from the manhole. For example, a problem with the designation 5-152-25 is a problem that is located approximately 25 feet downstream from Manhole 5-152. This method of numbering problems is consistent with the numbering that is used for the problems identified by the

television inspection and manhole inspection. The majority of the smoke testing problems identified end in the designation N/A because the exact location downstream from the nearest sewer manhole was not known and many of the smoke testing problems were located on private property off the main sewer line.

**Table B-4
Smoke Testing Results Summary**

Reference Number	Problem Number	Upstream MH	Downstream MH	Location	Basin	Description	Potential Source of Flow	Severity	Year Tested	Category
S-1	5-104.6-N/A	5-104.6	5-104.6	40th Ave W and 185th Pl. SW, Lynnwood, WA.	3	Rubber ring around the MH is coming undone.	Stormwater entering through MH.	Light	2009	Maintenance Issue
S-2	5-104.3-N/A	5-104.3	5-104.1	18702 40th Ave, Lynnwood, WA	3	Uncapped cleanout in flower bed	Stormwater entering cleanout.	Light	2009	Maintenance Issue
S-3	5-84-N/A	5-84	5-83	4019 189th Pl. SW, Lynnwood, WA	3	Malfunctioning sewer connection (smoke seen along front door landing and stairs).	Stormwater runoff from flower bed. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-4	5-82-N/A	5-82	5-81	4221 189th Pl. SW, Lynnwood, WA	3	Malfunctioning sewer connection (smoke seen coming from gravel at the base of a rhododendron bush directly in back of the tree).	Stormwater runoff from front yard. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-5	5-79-N/A	5-79	5-49	4326 189th Pl. SW, Lynnwood, WA	3	Malfunctioning sewer connection (smoke seen coming from hole on the west side of the foundation in the flower bed).	Stormwater runoff from flower bed. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-6	5-77-N/A	5-77	5-76	4309 191st St. SW, Lynnwood, WA	3	Downspout connected to sewer. Cleanout lid cracked (Smoke seen coming from downspout and cleanout).	Stormwater runoff from the building roof.	Medium	2009	Maintenance Issue
S-7	5-32.2-N/A	5-32.2	5-32.1	4505 188th St SW, Lynnwood, WA	3	Storm drain cover connected to sanitary sewer.	Stormwater potentially connected to sanitary sewer.	Unknown	2009	Maintenance Issue
S-8	5-14-N/A	5-14	5-13	18827 48th Ave W, Lynnwood, WA	3	Large hole below grade covered by long grass on the north side yard (smoke seen coming from long grass).	Drains yard	Heavy	2009	Maintenance Issue
S-9	16-29-N/A	16-29	16-28.1	19427 40th Ave W, Lynnwood, WA	3	Loose cleanout cover behind Bail Bond by Nate	Possible future issue if cleanout cover is dislodged.	Light	2009	Maintenance Issue
S-10	5-112-N/A	5-112	5-111	4114 186th St. SW, Lynnwood, WA	3	Malfunctioning sewer connection (smoke seen through dirt along the driveway).	Stormwater runoff from driveway. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-11	5-50-N/A	5-50	5-49.1	18705 44th Ave W, Lynnwood, WA	3	Malfunctioning sewer connection or uncapped cleanout at grade (smoke seen coming out of a hole in ground in the front yard).	Stormwater entering through cracks or cleanout opening. Drains one-fourth of yard. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-12	5-101-N/A	5-101	5-99	4108 186th Pl. SW, Lynnwood, WA	3	Uncapped pipe laying on ground near garage	Unsure if there is a problem	Unknown	2009	Unknown
S-13	5-97-N/A	5-97	5-96	18632 42nd Ave, Lynnwood, WA	3	Downspouts connected to sanitary sewer (smoke seen coming from downspouts). Owner claims no connection.	Stormwater runoff from roof.	Unknown	2009	Maintenance Issue
S-14	5-80-N/A	5-80	5-79	4312 189th Pl. SW, Lynnwood, WA	3	Smoke seen in back yard.	Stormwater runoff from yard.	Medium	2009	Maintenance Issue
S-15	5-6-N/A	5-6	5-5	19701 48th Ave W, Lynnwood, WA	3	Cleanout missing plug.	Stormwater entering cleanout.	Light	2009	Maintenance Issue
S-16	3-3-N/A	3-3	3-2.1	48th Ave W in the Park and Ride Facility, Lynnwood, WA	3	Loose cleanout cap in shrubs	Stormwater entering cleanout.	Light	2009	Maintenance Issue
S-17	5-81-N/A	5-81	5-80	4305 189th Pl. SW, Lynnwood, WA	3	Smoke seen from a large hole in the ground in empty lot.	Stormwater runoff from empty lot. Hole is significantly below grade.	Heavy	2009	Maintenance Issue
S-18	5-107-N/A	5-107	5-106	18427 42nd Pl. W, Lynnwood, WA	3	Malfunctioning sewer connection (smoke seen coming through dirt and around concrete walkway slab.).	Stormwater runoff from yard and concrete walkway. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-19	5-30-N/A	CO	5-30	18638 44th Ave. W, Lynnwood, WA (Lynnwood Elementary (A))	3	Uncapped cleanout at grade in grass just off of the concrete slab on the south side of school.	Stormwater runoff from lawn outside of school.	Medium	2009	Maintenance Issue
S-20	5-30-N/A_2	CO	5-30	18639 44th Ave. W, Lynnwood, WA (Lynnwood Elementary (B))	3	Malfunctioning sewer connection (smoke seem coming from edges of the small concrete slab around cleanout). South side of School.	Stormwater runoff from lawn outside of school and awning. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-21	5-20-N/A	5-20	5-19	4419 200th St SW (in back of JD's Market)	3	Freezer/Refrigerator	Possibly draining area behind store.	Medium	2009	Maintenance Issue
S-22	C-25-N/A	C-25	5-199	18320 44th Ave W, Lynnwood, WA	4	Malfunctioning sewer connection (smoke seen coming from rockery and ground around the pond on the far west side of the street).	Stormwater runoff from flowerbed around the pond. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-23	5-123-N/A	5-123	5-122	5108 196th St. SW, Lynnwood, WA	4	Downspout connected to sanitary sewer (smoke seen coming from downspout on the east side of the building).	Stormwater runoff from the building roof.	Medium	2009	Maintenance Issue
S-24	3-68.1-N/A	3-68.1	3-68	Southwest corner of Scriber Lake Ave. and 198th St. SW, Lynnwood, WA	4	Malfunctioning sewer (smoke seen coming from crack in sidewalk and from the side of the sidewalk).	Stormwater entering pipe through runoff from sidewalk. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-25	3-70.1-N/A	3-70.1	3-68	5824 196th St SW, Lynnwood, WA (Jo-Ann Fabric)	4	Malfunctioning sewer connection (smoke seen coming from under concrete slab on southwest corner of Jo-Ann Fabric).	Stormwater entering pipe through runoff from sidewalk. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-26	3-101-N/A	3-101	3-100	5521 190th St SW Lynnwood, WA	4	Downspout connected to sanitary sewer.	Stormwater runoff from the building roof.	Medium	1992	Maintenance Issue
S-27	3-97-N/A	3-97	3-96	5230 190th St SW, Lynnwood, WA	4	Downspout connected to sanitary sewer.	Stormwater runoff from the building roof.	Medium	1992	Maintenance Issue
S-28	3-99-N/A	3-99	3-98	Intersection of 191st St SW and 56th Ave W, Lynnwood, WA	4	Missing cleanout caps.	Stormwater entering cleanout.	Light	1992	Maintenance Issue
S-29	3-123-N/A	3-123	3-93	Near 192nd St SW and 56th Ave W (Between MH 3-123 and MH 3-93) in Lynnwood, WA	4	Smoke emanating from ground. (Possibly cracked sewer pipe)	Stormwater runoff from concrete slab. Potential groundwater infiltration.	Medium	1992	Infiltration / Inflow
S-30	3-125-N/A	3-125	3-124	Near 192nd St SW and 52nd Ave W (Between MH 3-125 and MH 3-124) in Lynnwood, WA	4	Missing cleanout cap.	Stormwater entering cleanout.	Light	1992	Maintenance Issue
S-31	3-90-N/A	3-90	3-89	5215 193rd Pl SW, Lynnwood, WA	4	Smoke emanating from crack in concrete patch. (Possibly cracked sewer pipe)	Stormwater runoff from concrete slab. Potential groundwater infiltration.	Medium	1992	Infiltration / Inflow
S-32	3-91-N/A	3-91	3-90	19312 52nd Ave W, Lynnwood, WA	4	Missing cleanout cap.	Stormwater entering cleanout.	Light	1992	Maintenance Issue
S-33	3-90-N/A_2	3-90	3-89	5317 193rd Pl SW, Lynnwood, WA	4	Leaky cleanout inside of water meter box.	Stormwater entering cleanout.	Light	1992	Maintenance Issue

**Table B-4
Smoke Testing Results Summary**

Reference Number	Problem Number	Upstream MH	Downstream MH	Location	Basin	Description	Potential Source of Flow	Severity	Year Tested	Category
S-34	3-88-N/A	3-88	3-87	Near MH 3-87 and MH 3-88 in Lynnwood, WA	4	Leaking cleanout caps.	Stormwater entering cleanout.	Light	1992	Maintenance Issue
S-35	C-36-N/A	C-36	3-52	19828 Firwood Drive, Lynnwood, WA	4	Side sewer has gaps in pipe joints held together by duct tape.	Possibly stormwater and/or groundwater infiltrating pipe.	Medium	1992	Infiltration / Inflow
S-36	3-51-N/A	3-51	3-50	5512 Firwood Drive, Lynnwood, WA	4	Unsatisfactory cleanout cover.	Stormwater entering cleanout.	Light	1992	Maintenance Issue
S-37	3-60-N/A	3-60	3-59	5508 Firwood Drive, Lynnwood, WA	4	Unsatisfactory cleanout cover.	Stormwater entering cleanout.	Light	1992	Maintenance Issue
S-38	3-44-N/A	3-44	3-44	MH 3-44 in Lynnwood, WA	4	Brick and mortar missing in manhole neck.	Potential groundwater infiltration.	Light	1992	Maintenance Issue
S-39	3-45-N/A	3-45	3-45	MH 3-45 in Lynnwood, WA	4	Brick and mortar missing in manhole neck.	Potential groundwater infiltration.	Light	1992	Maintenance Issue
S-40	3-41-N/A	3-41	3-41	MH 3-41 in Lynnwood, WA	4	Smoke emanating from base of manhole frame and cover.	Stormwater runoff from area adjacent to manhole. Potential groundwater infiltration.	Light	1992	Maintenance Issue
S-41	3-60-N/A	3-60	3-59	5502 200th St SW, Lynnwood, WA	4	Missing cleanout cap and/or plug.	Stormwater entering cleanout.	Light	1992	Maintenance Issue
S-42	3-15-N/A	3-15	3-10	19925 53rd Ave W, Lynnwood, WA	4	Drain in front of garage at base of driveway.	Stormwater runoff from driveway	Medium	1992	Maintenance Issue
S-43	3-12-N/A	3-12	3-11	20020 53rd Pl W, Lynnwood, WA	4	Smoke emanating from joint between concrete sidewalk and asphalt. (Possibly either leaky side sewer pipe or unplugged cleanout under asphalt)	Stormwater runoff from concrete. Potential groundwater infiltration.	Medium	1992	Infiltration / Inflow
S-44	5-166-N/A	5-166	5-164	4905 189th St SW, Lynnwood, WA	4	Downspout connected to sanitary sewer.	Stormwater runoff from the building roof.	Medium	1992	Maintenance Issue
S-45	5-152-N/A	5-152	5-152	MH 5-152 in Lynnwood, WA	4	Manhole located in drainage way. Puddles form on manhole cover.	Stormwater entering through manhole. Potential groundwater infiltration.	Medium	1992	Issue, Infiltration/Inflow
S-46	5-152-N/A_2	5-152	5-151	4928 190th St SW, Lynnwood, WA	4	Loose cleanout cap under deck on rear of house.	Stormwater entering cleanout.	Light	1992	Maintenance Issue
S-47	C-71-N/A	C-71	3-70	19620 Scriber Lake Road, Suite A, Lynnwood, WA	4	Smoke emanating from hole next to sidewalk in planter.	Stormwater and/or groundwater entering cleanout cap. Potential groundwater infiltration through malfunctioning sewer pipe.	Unknown	1992	Unknown
S-48	3-27-N/A	3-27	3-26	5320 201st Pl SW, Lynnwood, WA	4	Drain in driveway.	Stormwater runoff from driveway	Medium	1992	Maintenance Issue
S-49	C5-131-N/A	C5-131	5-149	5103 192nd St SW, Lynnwood, WA	4	Smoke emanating from ground along fence line. (Likely broken side sewer.)	Possibly stormwater and/or groundwater infiltrating pipe.	Medium	1992	Infiltration / Inflow
S-50	3-20-N/A	3-20	3-19	20121 Cedar Valley Rd, Lynnwood, WA (Stoneway Electric Supply)	4	Smoke emanating from unknown source in ground. Source covered with stickers. Possibly a bad cleanout.	Stormwater and/or groundwater entering cleanout cap. Potential groundwater infiltration through malfunctioning sewer pipe.	Unknown	1992	Unknown
S-51	5-163-N/A	5-163	5-163	MH 5-163 in Lynnwood, WA	4	Manhole below grade.	Stormwater entering through manhole cover.	Light	1992	Issue,
S-52	5-160-N/A	5-160	5-159	18915 51st Pl W, Lynnwood, WA	4	Missing cleanout cap.	Stormwater entering cleanout.	Light	1992	Maintenance Issue
S-53	5-132-N/A	5-132	5-132.1	52nd Ave W and 191st St SW in Lynnwood, WA	4	Smoke emanating from ground near old house foundation with side sewer connection not plugged.	Stormwater and/or groundwater entering pipe through uncapped cleanout at grade and/or infiltration of side sewer.	Medium	1992	Maintenance Issue, Infiltration/Inflow
S-54	4-165-N/A	4-165	4-162	6013 178th St. SW, Lynnwood, WA	5	Downspout connected to sanitary sewer (smoke seen coming from downspout on east side of house).	Stormwater runoff from the building roof.	Medium	2009	Maintenance Issue
S-55	4-121-N/A	4-121	4-120	5813 182nd Pl. SW, Lynnwood, WA	5	Storm drain in depression at the bottom of driveway connected to sanitary sewer (smoke seen coming from storm drain).	Stormwater runoff from driveway.	Medium	2009	Maintenance Issue
S-56	4-105-N/A	4-105	4-104	6209 183rd Pl. SW, Lynnwood, WA	5	Malfunctioning sewer connection (smoke seen coming from gravel under a bush).	Stormwater runoff from portion of yard. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-57	4-101-N/A	4-101	4-100	18416 61st Pl. W, Lynnwood, WA	5	Loose concrete cleanout cap at grade.	Stormwater entering cleanout.	Light	2009	Maintenance Issue
S-58	4-98-N/A	4-98	4-96	6230 186th St. SW, Lynnwood, WA	5	Cleanout cap partially open. Unknown pipe leading into cleanout.	Stormwater entering cleanout.	Unknown	2009	Unknown
S-59	4-149-N/A	4-149	4-148	6026 180th St. SW, Lynnwood, WA	5	Downspouts connected to sanitary sewer (smoke seen coming from 3 downspouts; one on the southside of garage, one on the south side of house and one on the east side of house).	Stormwater runoff from the house and garage roofs.	Medium	2009	Maintenance Issue
S-60	4-184-N/A	4-184	4-183	6319 177th Pl. SW, Lynnwood, WA	5	Downspouts connected to sanitary sewer (smoke seen coming from 2 downspouts on the east side of the house).	Stormwater runoff from the building roof.	Medium	2009	Maintenance Issue
S-61	4-80-N/A	4-80	4-79	18630 60th Ave W, Lynnwood, WA	5	Downspout connected to sanitary sewer (smoke seen coming from downspout on northwest corner of house).	Stormwater runoff from the building roof.	Medium	2009	Maintenance Issue
S-62		4-167	4-166	6112 178th St. SW, Lynnwood, WA	5	Smoke seen coming from cleanout box.	Stormwater entering box	Light	2009	Maintenance Issue
S-63	4-117-N/A	4-117	4-116	5902 183rd St. SW, Lynnwood, WA	5	Storm drain in depression at the bottom of driveway connected to sanitary sewer.	Stormwater runoff from driveway.	Medium	2009	Maintenance Issue
S-64	4-71-N/A	4-71	4-70	6031 189th Pl. SW, Lynnwood, WA	5	Malfunctioning sewer connection (smoke seen coming under concrete porch).	Stormwater entering through crack. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-65	4-60-N/A	4-60	4-58	6131 Park Way, Lynnwood, WA	5	Malfunctioning sewer connection (smoke seen coming from surfaced pipe with no cap and ground around pipe).	Stormwater entering through pipe. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-66	4-76-N/A	4-76	4-75	6303 188th St. SW, Lynnwood, WA	5	Large uncapped cleanout in yard at grade (smoke seen from open cleanout).	Stormwater entering through large uncapped cleanout	Medium	2009	Maintenance Issue

**Table B-4
Smoke Testing Results Summary**

Reference Number	Problem Number	Upstream MH	Downstream MH	Location	Basin	Description	Potential Source of Flow	Severity	Year Tested	Category
S-67	1-146-N/A	1-146	1-145	6605 188th St SW, Lynnwood, WA	7	Uncapped pipe above grade near fern and bush in front yard	Direct inflow due to uncapped pipe	Light	2009	Maintenance Issue
S-68	1-57-N/A	1-57	1-56	20612 Hwy 99, Lynnwood, WA (Jack Carroll's Lynnwood Dodge)	7	Drain under carport in car wash on east side of building	Direct inflow due to open grate	None	2009	Not an Issue
S-69	1-94.1-N/A	1-94.1	1-94	20014 68th Ave W, Lynnwood, WA (International Students Welcome Center)	7	Uncapped pipe above grade on back side of house	Direct inflow due to uncapped pipe	Light	2009	Maintenance Issue
S-70	1-100-N/A	1-100	1-100	196th St SW and 68th Ave W, Lynnwood, WA	7	Manhole with bad seal in the middle of the intersection	Direct inflow through bad seal	Light	2009	Maintenance Issue
S-71	1-152-N/A	1-152	1-151	6326 186th St SW, Lynnwood, WA	7	Smoke emanating from water meter box, likely a cleanout	Direct inflow from hole in cleanout cap	None	2009	Not an Issue
S-72	1-60.2-N/A	1-60.2	1-50	6629 204th St SW, Lynnwood, WA	7	Smoke billowing out of downspout	Direct inflow from roof and downspout	Medium	2009	Maintenance Issue
S-73	1-29.1-N/A	1-29.1	1-29.1	6511 and 6533 208th St SW, Lynnwood, WA (Buildings G and H)	7	Water was infiltrating manhole from nearby stream	Infiltration through manhole walls	Light	2009	Infiltration / Inflow
S-74	1-25.1-N/A	1-25.1	1-25	6506, 6512, and 6514 208th St SW, Lynnwood, WA (Buildings C, F, and H)	7	Smoke emanating from base of manhole top, top is partially exposed	Direct inflow through incomplete manhole cover seal.	Light	2009	Infiltration / Inflow
S-75	1-26-N/A	1-26	1-25.1	6518 208th St SW, Lynnwood, WA (Bldg I) adjacent to parking stall # 266	7	Smoke emanating from cleanout, cleanout cap is missing and replaced by oven burner pan and duct tape.	Direct inflow through holes in oven burner pan and unsatisfactory seal.	Light	2009	Maintenance Issue
S-76	1-96-N/A	1-96	1-95	20107 68th Ave W, Lynnwood, WA (adjacent to 20113 68th Ave W)	7	Smoke emanating from yard	Direct inflow from open vent connected to sewer system	Light	2009	Maintenance Issue
S-77	1-96-N/A_2	1-96	1-95	20113 68th Ave W, Lynnwood, WA (in front of Divan Café)	7	Smoke emanating through hole in sewer cleanout cover	Direct inflow through small hole in cover	None	2009	Not an Issue
S-78	2-73-N/A	2-73	2-71	6001 202nd St. SW, Lynnwood, WA	8	Unknown source (smoke seen coming from ivy near a tree on the southwest corner of lot).	Stormwater and/or groundwater entering through leaky cleanout cap or malfunctioning sewer pipe.	Unknown	2009	Unknown
S-79	2-73-N/A_2	2-73	2-71	6001 202nd St. SW, Lynnwood, WA	8	Uncapped pipe in flowerbed on the east side of the building	Stormwater entering pipe.	Light	2009	Maintenance Issue
S-80	2-53-N/A	2-53	2-52	6109 208th St. SW, Lynnwood, WA	8	Cracked pipe cap just above grade on east side of abandoned house.	Stormwater entering pipe.	Light	2009	Maintenance Issue
S-81	2-68-N/A	2-68	2-68.1	6208 204th St. SW, Lynnwood, WA	8	Loose cleanout cap at grade (smoke seen coming from cleanout cap).	Stormwater runoff from driveway	Light	2009	Maintenance Issue
S-82	2-76-N/A	2-76	2-75	6208 202nd St. SW, Lynnwood, WA 1	8	Uncapped pipe in empty lot of trailer park on the southeast corner.	Stormwater entering pipe.	Light	2009	Maintenance Issue
S-83	2-76-N/A_2	2-76	2-75	6208 202nd St. SW, Lynnwood, WA (Unit 62 or 64)	8	Smoke seen in back yard from an unknown source at or below grade.	Stormwater and/or groundwater entering through leaky cleanout cap or malfunctioning sewer pipe.	Unknown	2009	Unknown
S-84	2-80-N/A	2-80	2-79	200th St. SW, Lynnwood, WA (near MH 2-80)	8	Malfunctioning sewer (smoke seen coming from base of no parking sign and crack in sidewalk).	Stormwater runoff from sidewalk. Potential groundwater infiltration.	Medium	2009	Infiltration / Inflow
S-85	2-129-N/A	2-129	2-128	5703 202nd St. SW, Lynnwood, WA	8	Unknown source (smoke seen coming from roof on the northeast corner in a suspicious way; downspout may be connected to sanitary sewer).	Possibly stormwater runoff from the building roof	Unknown	2009	Unknown
S-86	2-118-N/A	2-118	2-110	5523 204th St. SW, Lynnwood, WA	8	Downspout connected to sanitary sewer (smoke seen coming from the downspout on the southeast corner of the house).	Stormwater runoff from the building roof	Medium	2009	Maintenance Issue
S-87	2-56-N/A	2-56	2-55	5910 207th Pl. SW, Lynnwood, WA	8	Storm drain at bottom of driveway connected to sanitary sewer (smoke seen coming from drain).	Stormwater runoff from driveway	Medium	2009	Maintenance Issue
S-88	2-47-N/A	2-47	2-4	20923 59th Pl. W, Lynnwood, WA	8	Unknown source (smoke seen coming from water meter box).	Unknown	Unknown	2009	Unknown
S-89	2-14-N/A	2-14	2-10	6207 211th St. SW, Lynnwood, WA	8	Downspout connected to sanitary sewer (smoke seen coming from the downspout on the northwest corner of the house).	Stormwater runoff from the building roof.	Medium	2009	Maintenance Issue
S-90	1-14-N/A	1-14	1-13	21101 Hwy 99, Lynnwood, WA	8	Large drain used for washing cars under structure.	Stormwater runoff from parking lot	None	2009	Not an Issue
S-91	2-75-N/A	2-75	2-74	6125 202nd St. SW, Lynnwood, WA	8	Smoke seen coming from hole in ground in flowerbed on south side of building (possibly a uncapped cleanout below grade).	Drains flower bed	Medium	2009	Maintenance Issue
S-92	2-131-N/A	2-131	2-130	5823 202nd St. SW, Lynnwood, WA	8	Smoke seen coming from two holes in the ground in the lawn on the south side of the building (possibly uncapped cleanouts below grade).	Stormwater runoff from the yard.	Medium	2009	Maintenance Issue
S-93	2-57-N/A	2-57	2-56	5827 207th Pl. SW, Lynnwood, WA	8	Storm drain connected to sanitary sewer in driveway.	Stormwater runoff from driveway.	Medium	2009	Maintenance Issue
S-94	2-20-N/A	2-20	2-19	(Near 55th Ave W and 210th St. SW), Lynnwood, WA	8	Smoke seen from depression in the ground.	Stormwater and/or groundwater entering through leaky cleanout cap or malfunctioning sewer pipe.	Unknown	2009	Unknown
S-95	1-18-N/A	1-18	1-17	21116 67th Ave W, Lynnwood, WA	8	Unknown source (smoke seen coming from water meter box).	Unknown	Unknown	2009	Unknown
S-96	2-24-N/A	2-24	2-22	20903 54th Ave W, Lynnwood, WA	8	Unknown source (smoke seen coming from under deck).	Unknown	Unknown	2009	Unknown
S-97	2-81-N/A	2-81	2-80	6210 200th St. SW, Lynnwood, WA	8	Two loose cleanout caps at grade in the northeast corner of Lynnwood Bowl & Skate's parking lot.	Stormwater runoff from parking lot	Light	2009	Maintenance Issue

Table B-4

Smoke Testing Results Summary

Reference Number	Problem Number	Upstream MH	Downstream MH	Location	Basin	Description	Potential Source of Flow	Severity	Year Tested	Category
S-98	1-6-N/A	1-6	11-4	67th Ave W and 214th St SW, Lynnwood, WA	8	Manhole on side of hill in depression with a leaky seal.	Stormwater runoff depression on side of hill.	Light	2009	Maintenance Issue, Infiltration/Inflow

SMOKE TESTING FIELD INSPECTION REPORTS

CITY OF LYNNWOOD I/I STUDY

REF #: 5-1

DATE: 7/15/09

INSPECTOR: D.K.

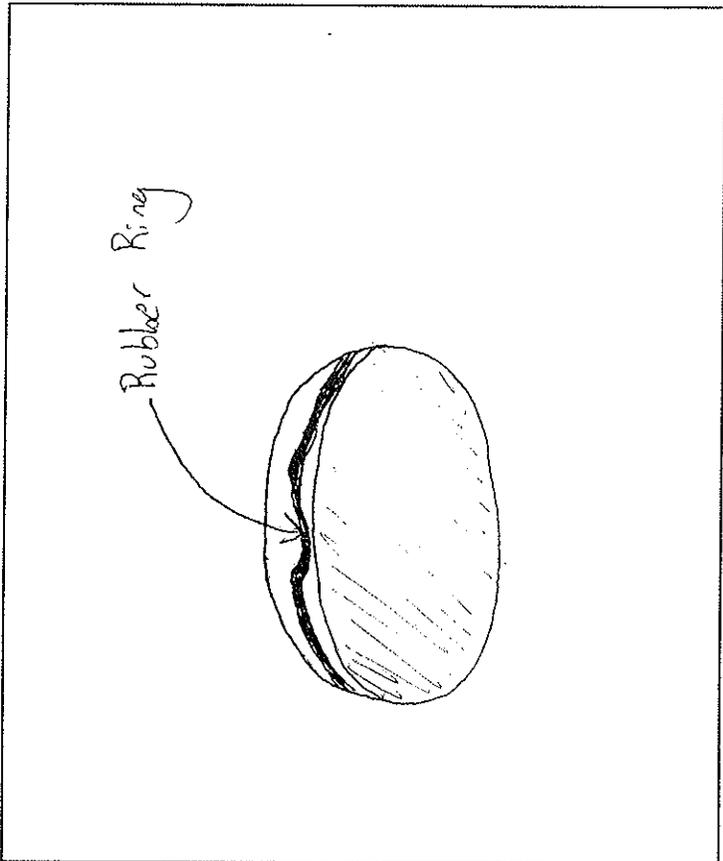
PHOTO NO. 17

#1

LOCATION: 40th 185th Pl. SW
Main Hole # 17-87.5

DESCRIPTION: Rubber ring around the man
hole is coming undone
-Minor

SKETCH



DATE:

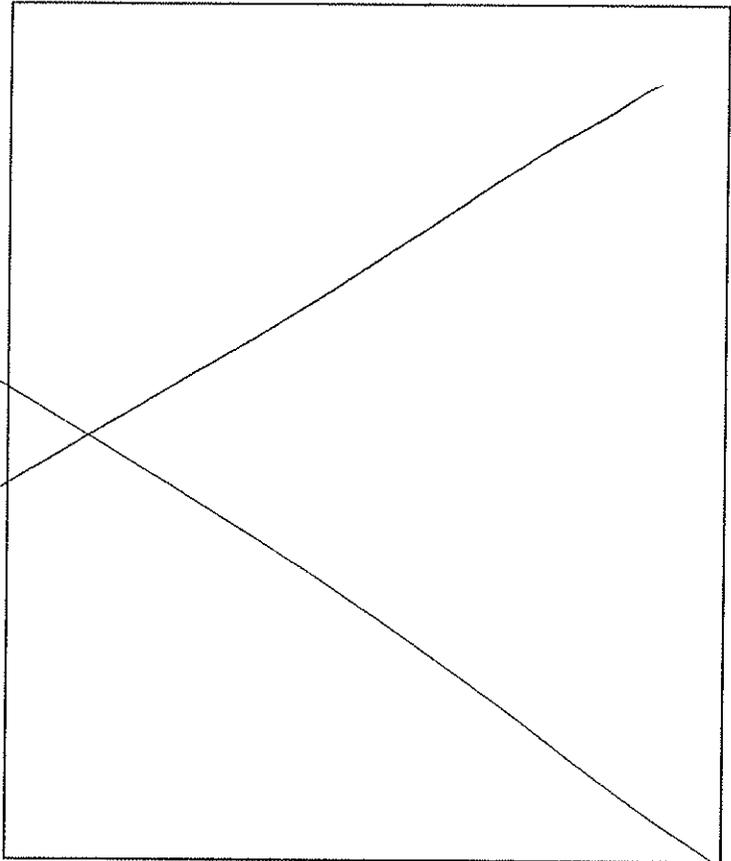
PHOTO NO.

INSPECTOR:

LOCATION:

DESCRIPTION:

SKETCH



CITY OF LYNNWOOD II/I STUDY

REF #: S-2

DATE: 7/15/09

INSPECTOR: DK

PHOTO NO. 19

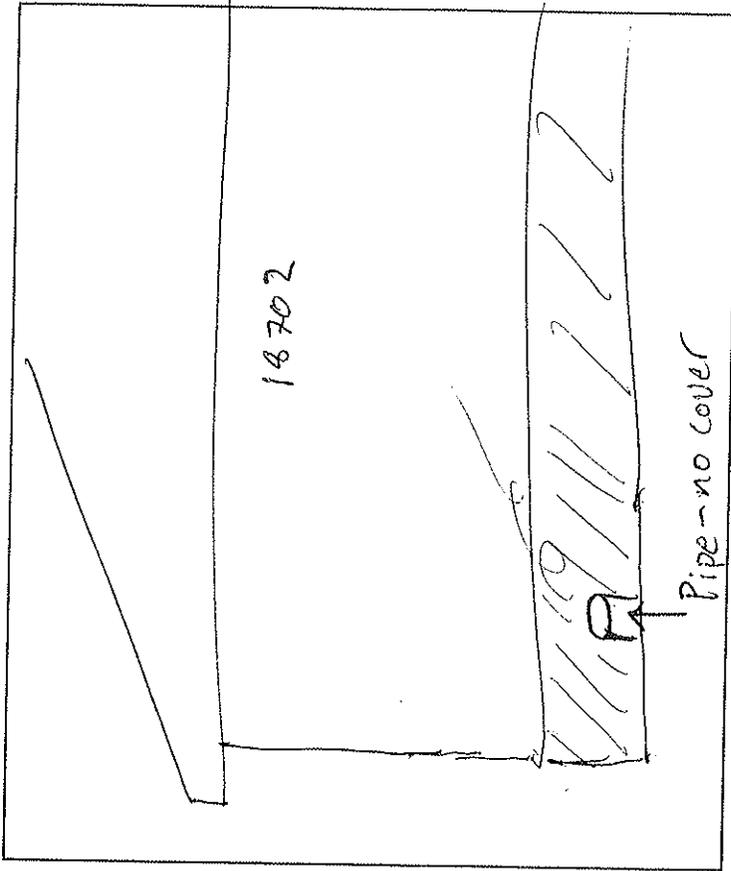
LOCATION: 18702 40th AVE

PHOTO NO. 3

DESCRIPTION:

Pipe in the flower bed - looks like there is tape covering it; Minor

SKETCH



REF #: 18

DATE: 7/15/09

INSPECTOR: David K

PHOTO NO. 2

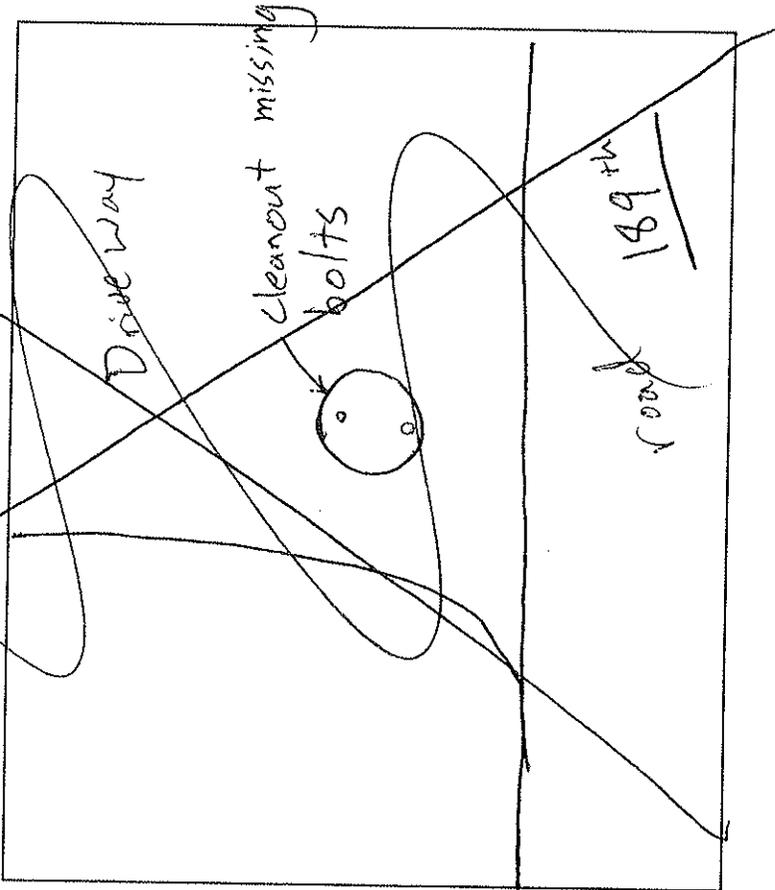
LOCATION: Drive way off of 48th 18615, 189th

PHOTO NO. 5

DESCRIPTION:

Cleanout missing bolts; Minor

SKETCH



CITY OF LYNNWOOD III STUDY

REF #: S-3

DATE: 7/15/09

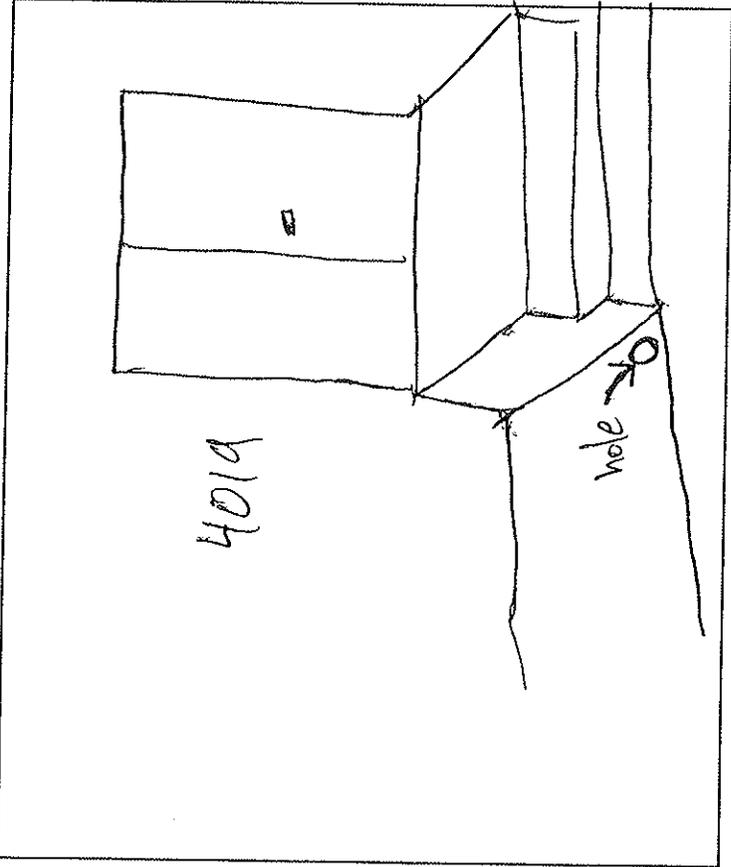
INSPECTOR: D.K. PHOTO NO. 20-27 (4-5)

LOCATION: 4019 189th PL SW

DESCRIPTION:

Small hole by steps to front door
- minor

SKETCH



REF #: S-4

DATE: 7/15/09

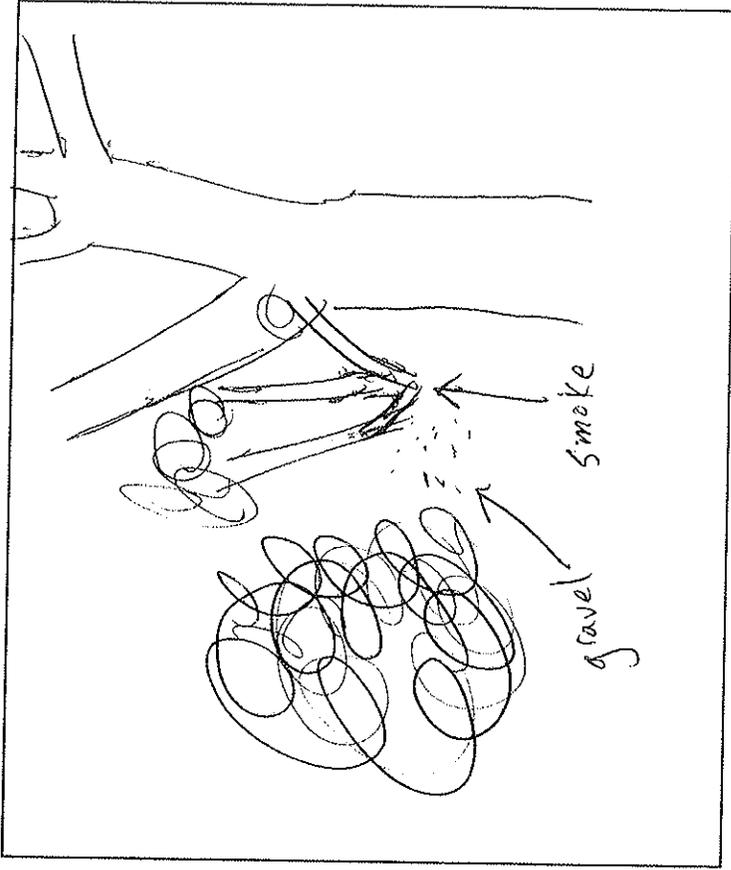
INSPECTOR: D.K. PHOTO NO. 23-24 (6-7)

LOCATION: 4221 189th SW
Near a cedarwood bush

DESCRIPTION:

The base of the bush directly
in back of the tree.
medium - drains front lawn.

SKETCH



CITY OF LYNNWOOD I/I STUDY

REF #: 5-7

DATE: 7/16/09

INSPECTOR: D.K.

PHOTO NO. 29-31

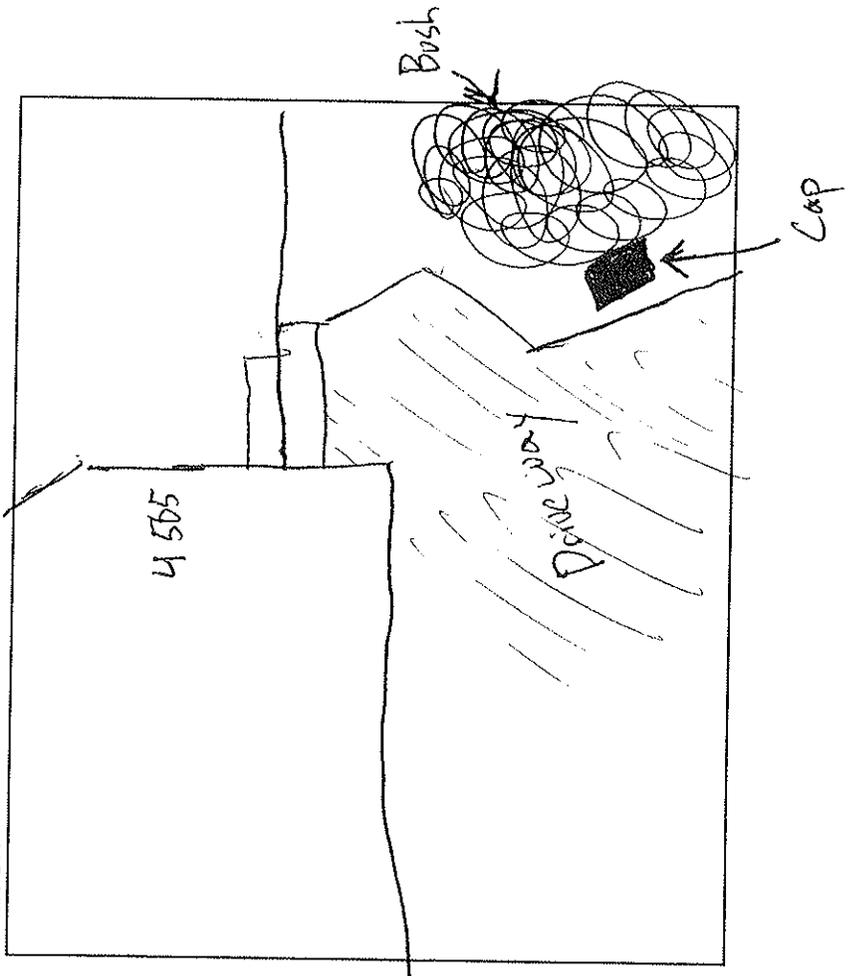
12-14

LOCATION: 4505 45th

DESCRIPTION:

A covering from a storm water cap - ~~medium~~

SKETCH



DATE: 7/17/09

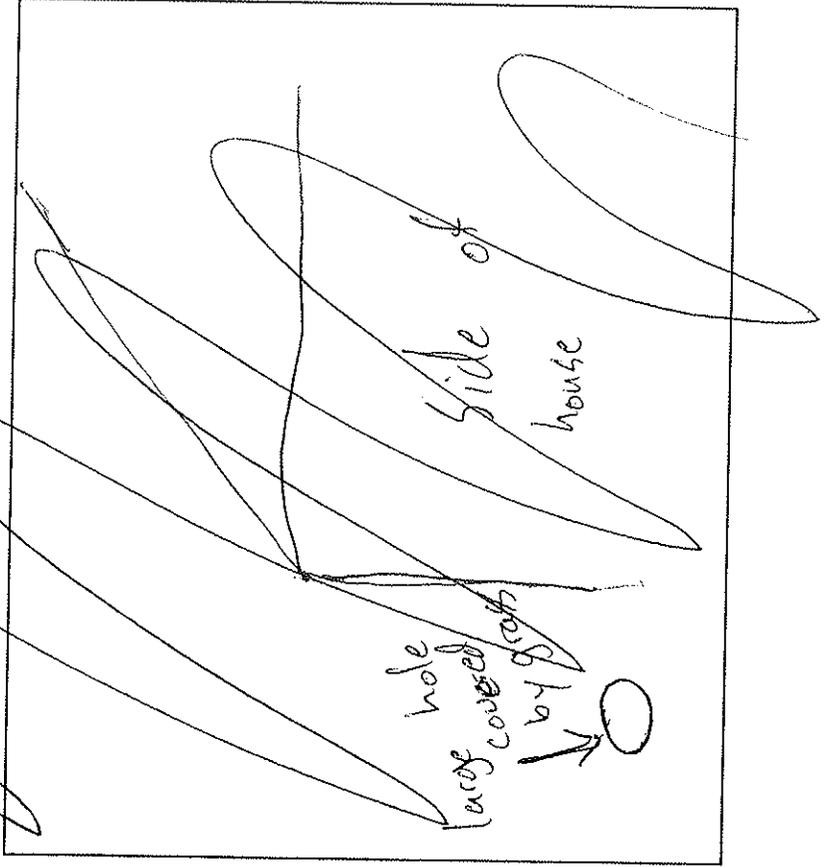
INSPECTOR: DK

PHOTO NO.

LOCATION: 1462 7 48th

DESCRIPTION:

SKETCH



CITY OF LYNNWOOD I/I STUDY

REF #: S-8

DATE: 7/17/09

INSPECTOR: D.K.

PHOTO NO. 10-12

PHOTO NO. Mike

LOCATION: 18827 48th St.

19427 40th Ave W

REF #: S-9

DATE: 7/17/09

INSPECTOR: D.K.

PHOTO NO. 17

PHOTO NO. Mike

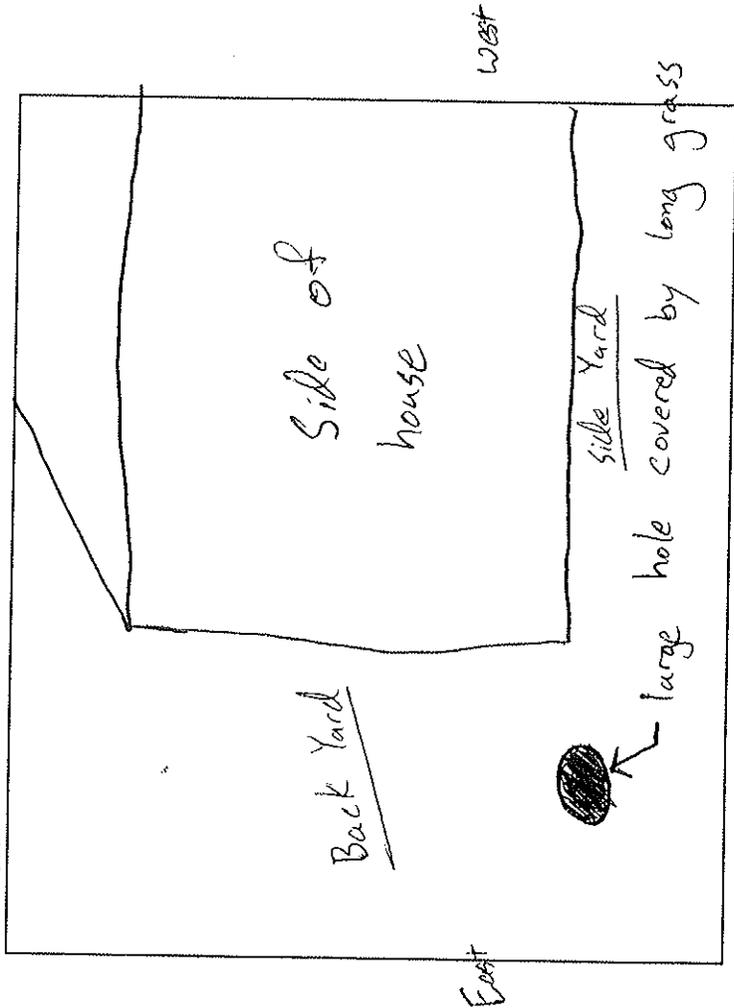
LOCATION: 19427 40th Ave W

19427 40th Ave W

DESCRIPTION:

Large hole covered by long grass on the ~~side yard~~ north side yard. Medium drains yard.

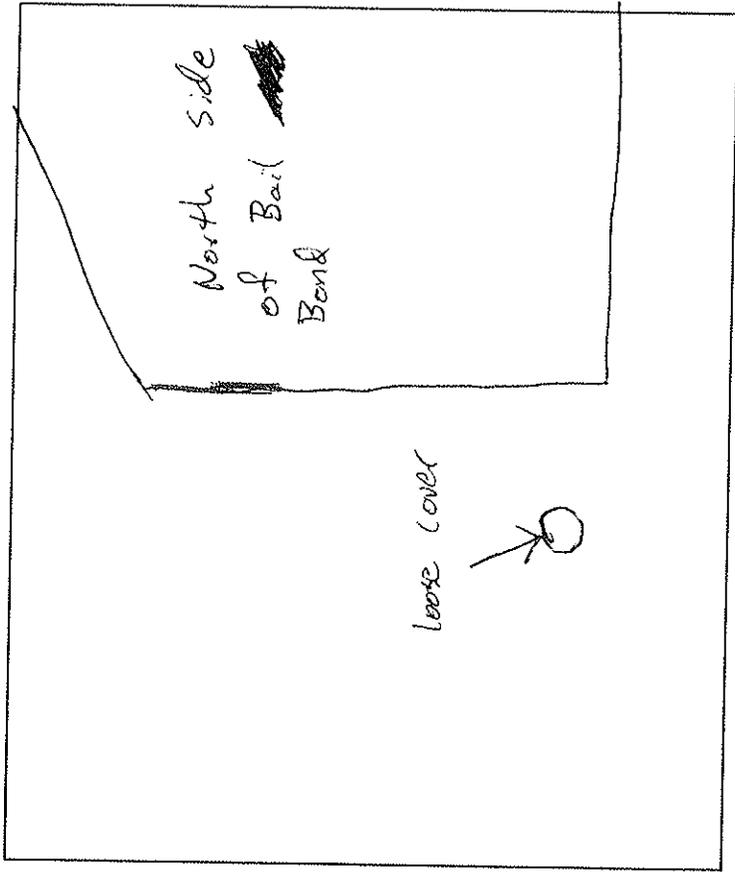
SKETCH



DESCRIPTION:

Very minor, probably not an issue. loose cover pushed up from smoke.

SKETCH



CITY OF LYNNWOOD III STUDY

REF #: S-10

DATE: 7-15

INSPECTOR: MSF

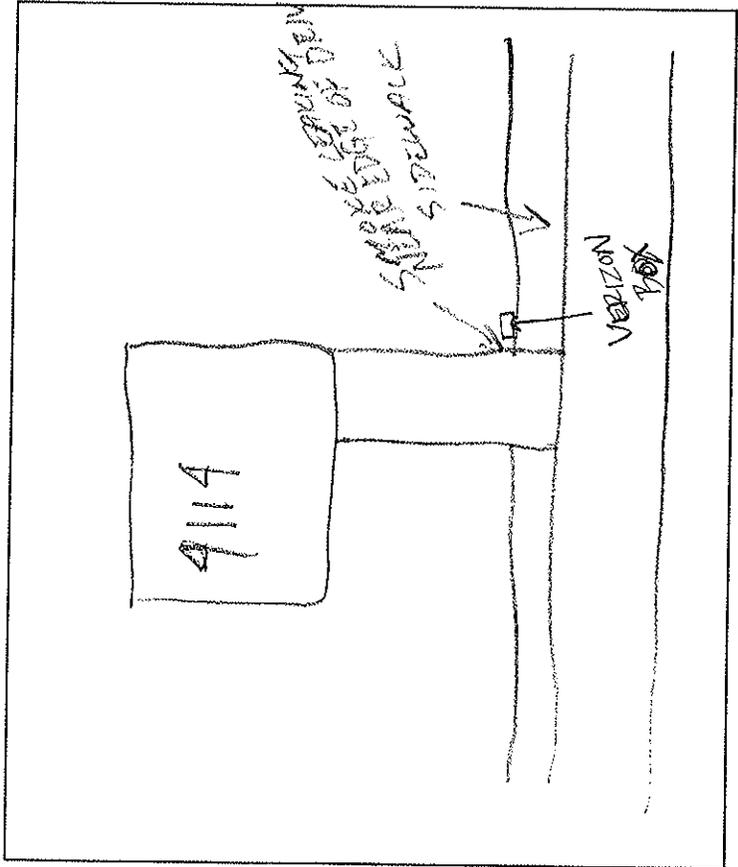
PHOTO NO.

LOCATION: 4114 186TH ST SW

DESCRIPTION:

~~SMOKE~~ LEAK THROUGH DRIVEWAY

SKETCH



REF #: S-11

DATE: 7-15

INSPECTOR: MSF

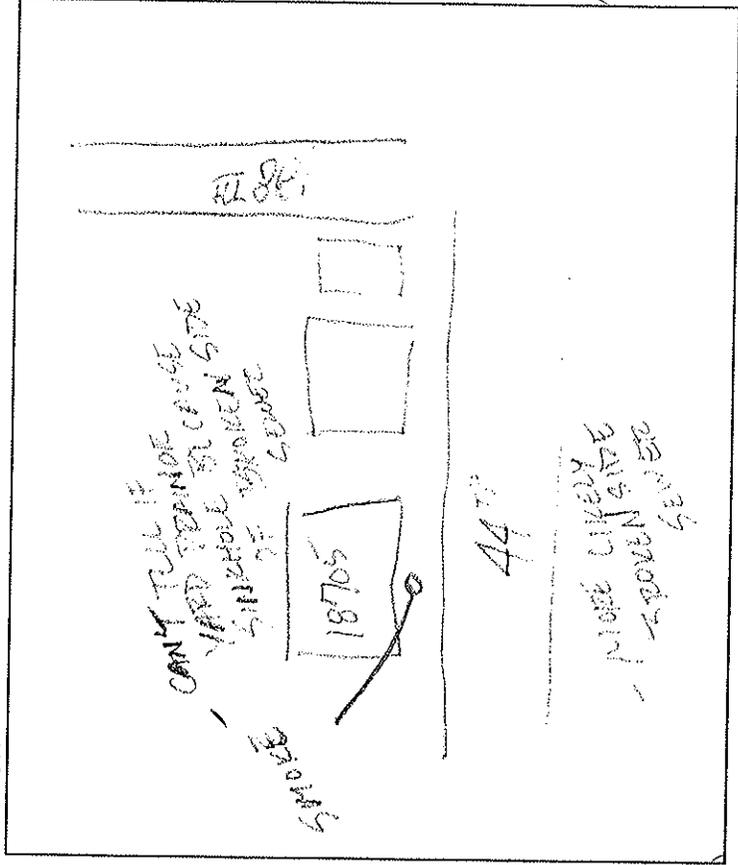
PHOTO NO.

LOCATION: 18705 44TH AVE

DESCRIPTION:

SMOKE COMING OUT OF
GROUND IN FRONT YARD
HOLE WHERE SMOKE COMES OUT

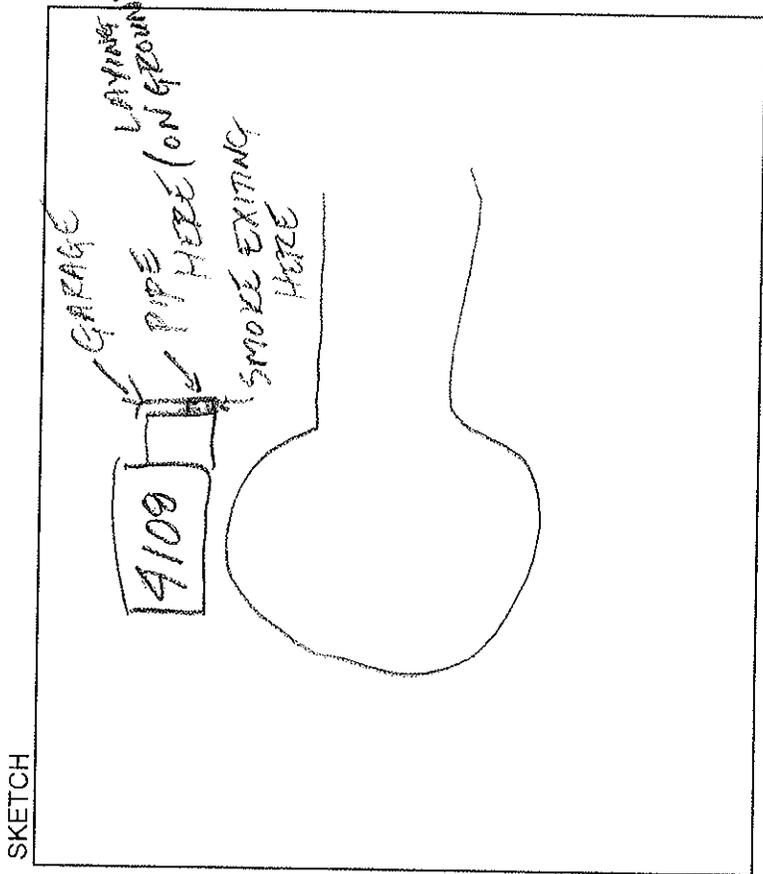
SKETCH



CITY OF LYNNWOOD I/I STUDY

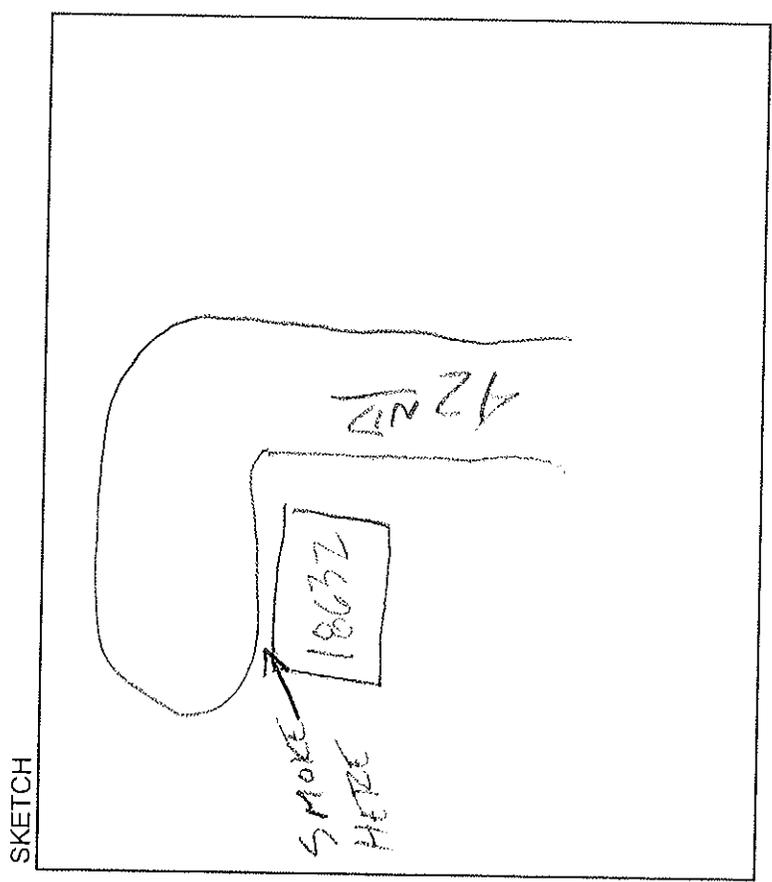
REF#: S-12 DATE: 7/15
INSPECTOR: MSF PHOTO NO.
LOCATION: 4108 106th SW

DESCRIPTION:
SMOKE POURING OUT OF
PIPE NEAR GARAGE



REF#: S-13 DATE: 7/15
INSPECTOR: MSF PHOTO NO.
LOCATION: 18632 42nd AVE

DESCRIPTION:
SMOKE COMING OUT
DOWNSPOUTS



CITY OF LYNNWOOD I/I STUDY

REF #: S-14

DATE: 7/15

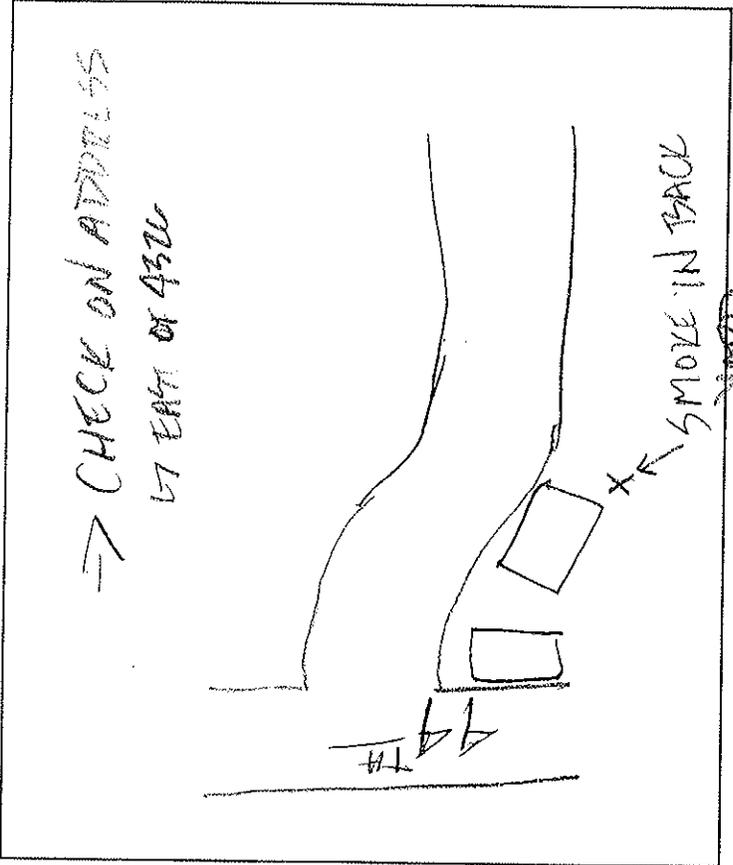
INSPECTOR: MSF

PHOTO NO.

LOCATION: 4312 189TH PL SW

DESCRIPTION: YARD DRAIN

SKETCH



REF #: S-15

DATE: 7/17

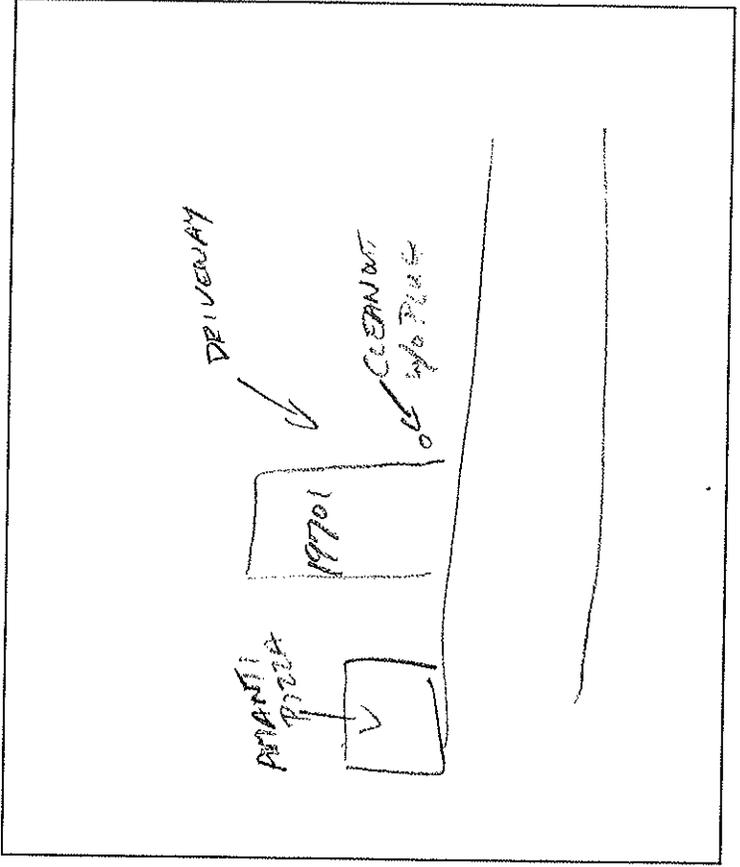
INSPECTOR: MSF

PHOTO NO.

LOCATION: 19701 48TH AVE

DESCRIPTION: CLEANOUT MISSING PLUG

SKETCH



CITY OF LYNNWOOD I/I STUDY

REF #: 5-16

DATE: 7/17

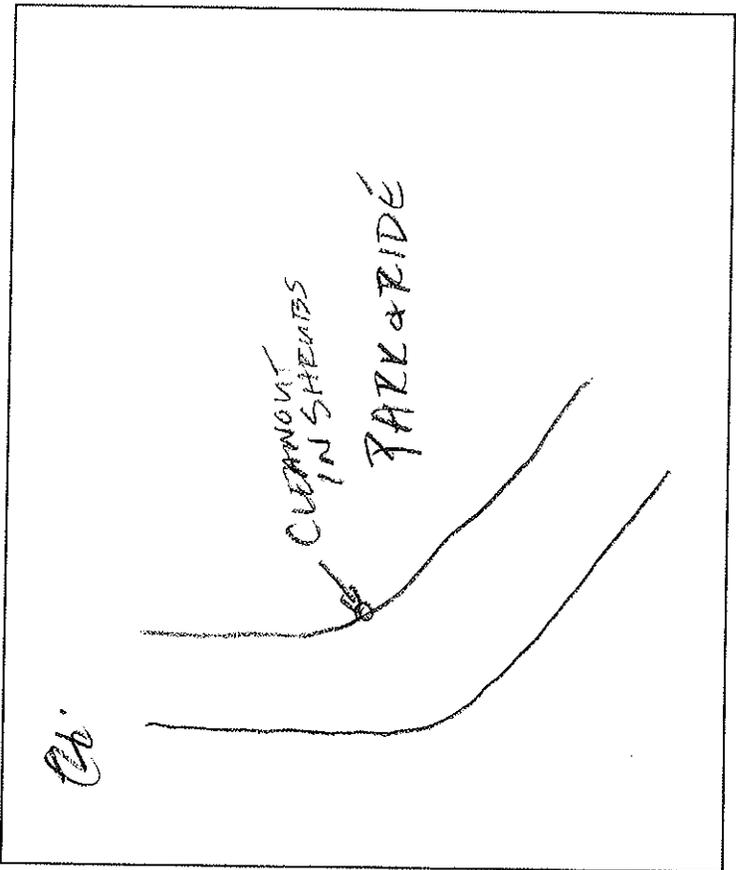
INSPECTOR: MSF

PHOTO NO.

LOCATION: 48th & (N.W. PARK & RIDE)

DESCRIPTION: CLEANOUT IN SHRUBS

SKETCH



DATE:

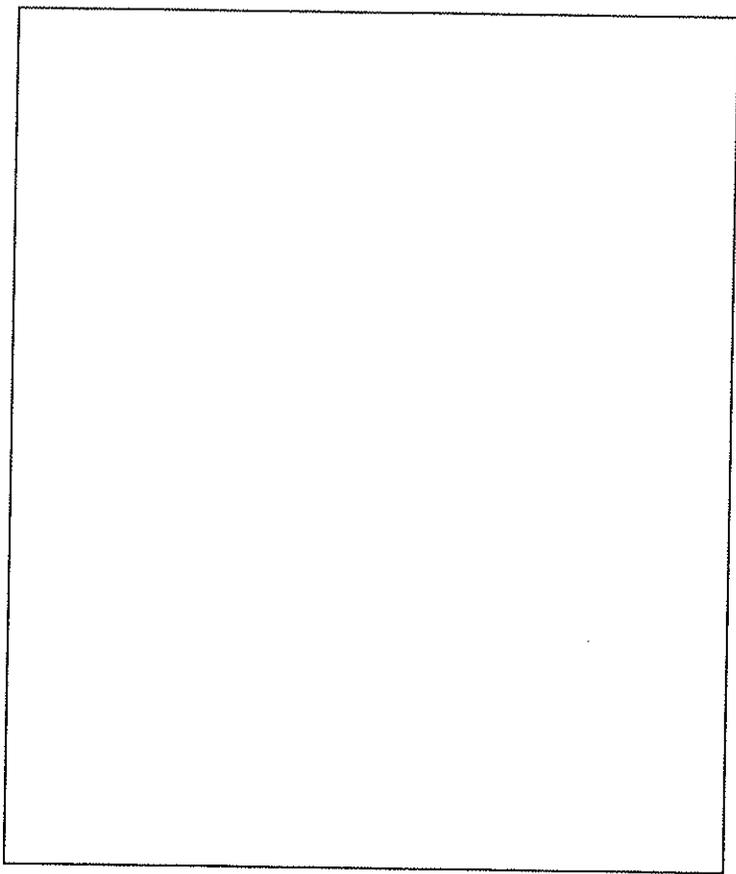
INSPECTOR:

PHOTO NO.

LOCATION:

DESCRIPTION:

SKETCH



CITY OF LYNNWOOD III STUDY

REF #: 5-17

DATE: 7/16

INSPECTOR: BS

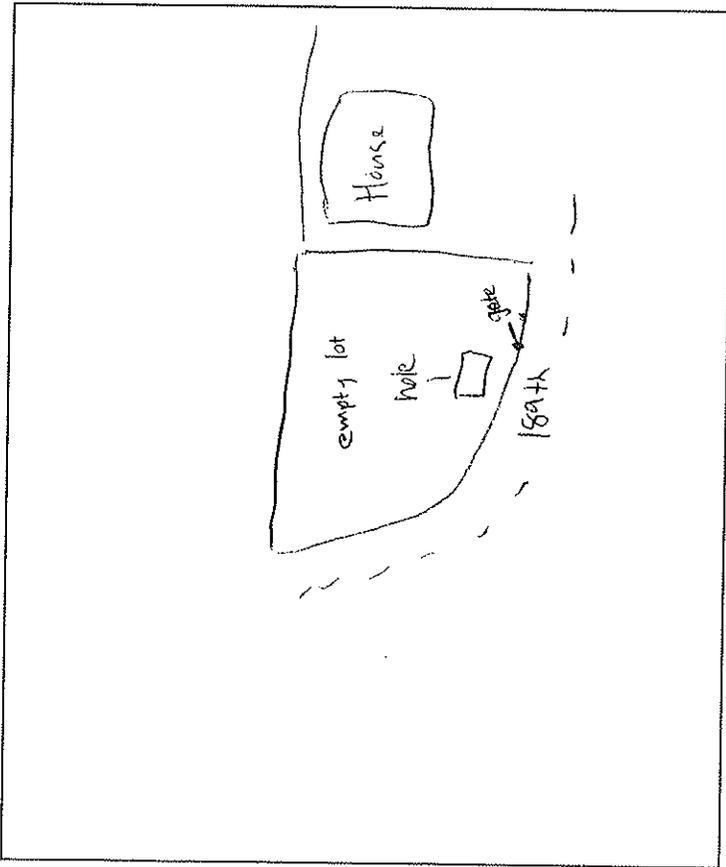
PHOTO NO.

LOCATION: Lot 4221 189th Pl SW

DESCRIPTION:

hole in ground in empty lot

SKETCH



①

REF #: 5-18

DATE: 7/16

INSPECTOR: BS

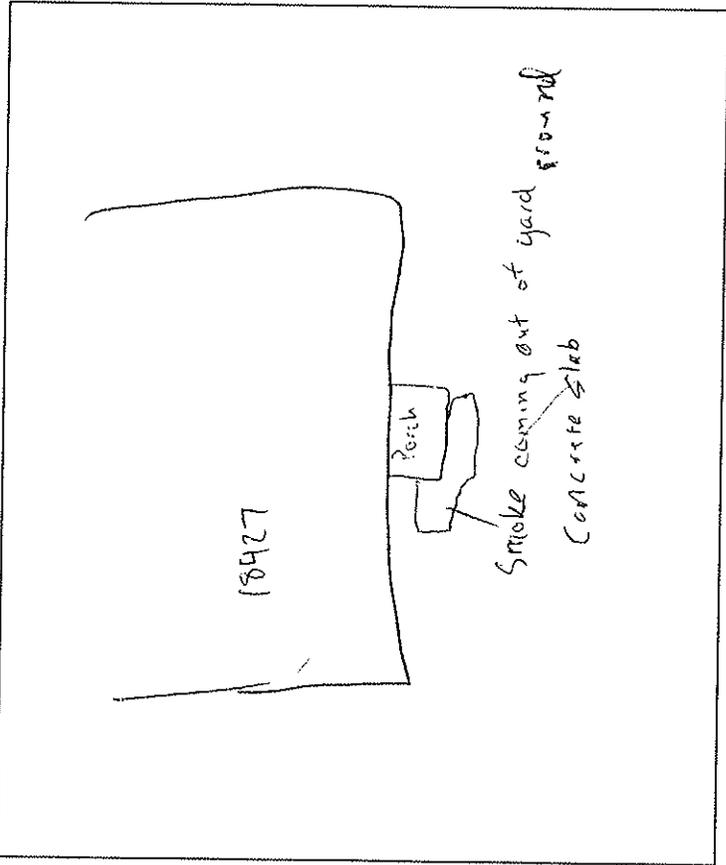
PHOTO NO.

LOCATION: 18427 42nd Pl W
18427

DESCRIPTION:

Smoke coming up through dirt around concrete slab. Pretty substantial

SKETCH



CITY OF LYNNWOOD III STUDY

3 A

REF #: S-19

DATE: 7/15

INSPECTOR: BS

PHOTO NO. 3

LOCATION:

Lynnwood Elementary S. side

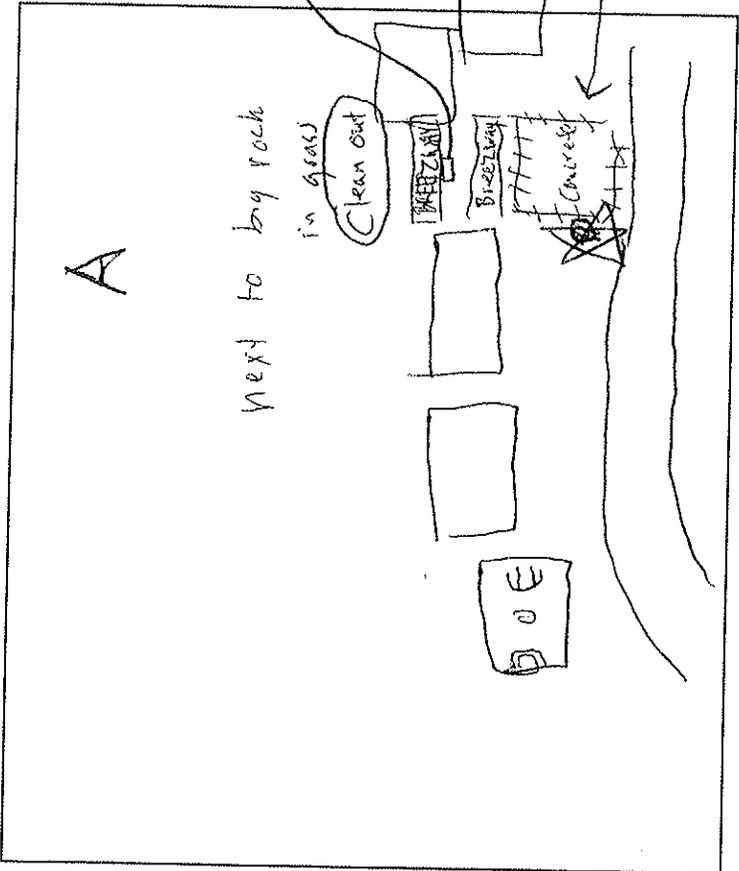
18638, 44th Ave. W

DESCRIPTION:

Cleared w/ loose lid in grass just off concrete slab.

Moderate potential for inflow

SKETCH



3 B

REF #: S-20

DATE: 7/15

INSPECTOR: BS

PHOTO NO. 4

LOCATION:

Lynnwood Elementary S. side

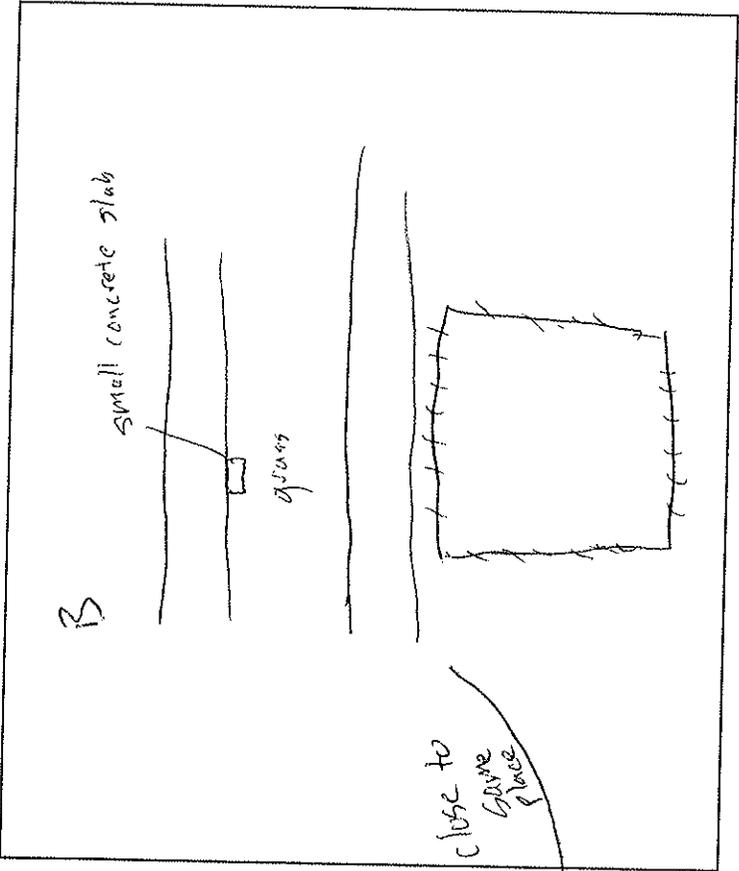
18638, 44th Ave. W

DESCRIPTION:

smoke coming from edges of slab

Moderate potential for inflow

SKETCH



CITY OF LYNNWOOD III STUDY

REF #: 5-21

DATE:

07/17/2009

INSPECTOR:

D F

PHOTO NO.

10:00a

LOCATION:

Back of JD's Market

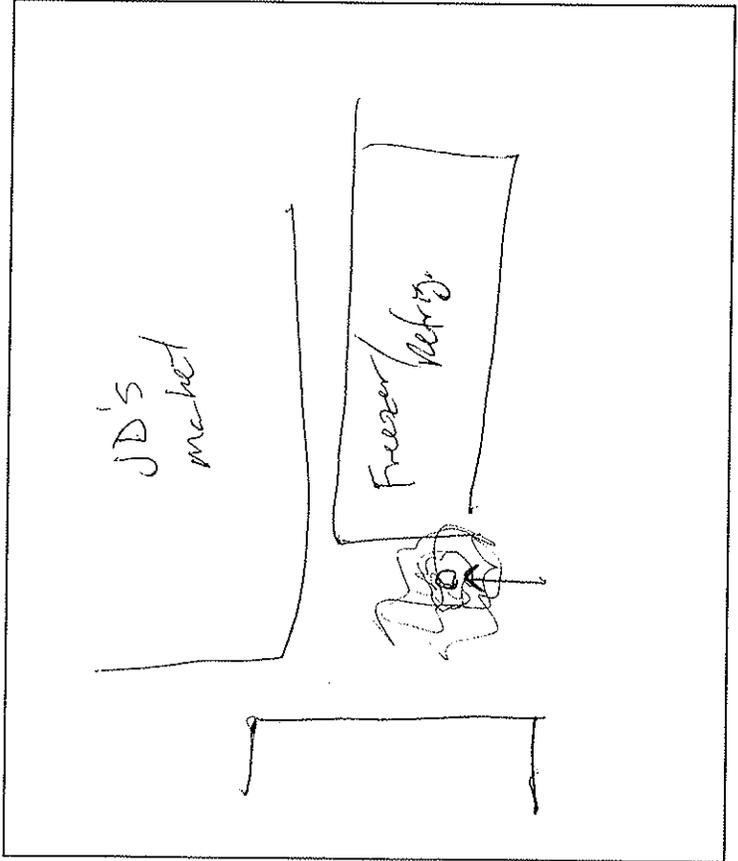
425 672 3477

4419 100th Ave

DESCRIPTION:

Cap loose on hole to sewer
behind freezer/refrig.

SKETCH

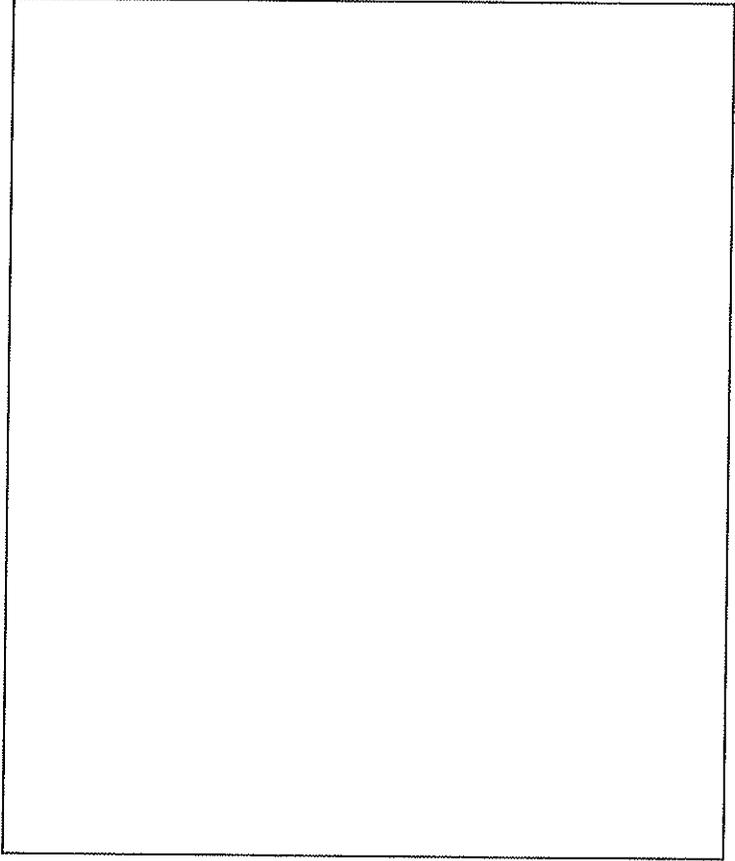


INSPECTOR:

LOCATION:

DESCRIPTION:

SKETCH



CITY OF LYNNWOOD I/I STUDY

REF #: 5-22

DATE: 7/30/09

INSPECTOR: D.K.

PHOTO NO. 7/30/09

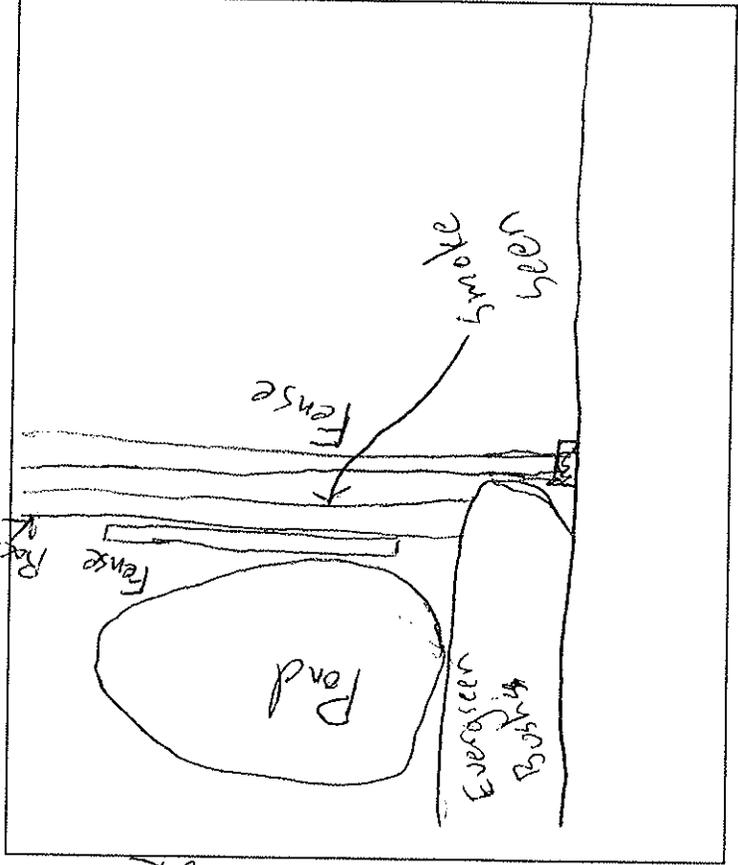
LOCATION: 13320 44th Ave W, Lynnwood, WA

13320 44th Ave W, Lynnwood, WA

DESCRIPTION:

Smoke coming from ground and ceiling

SKETCH



REF #: 5-23

DATE: 7/30/09

INSPECTOR: D.K.

PHOTO NO. 58-62

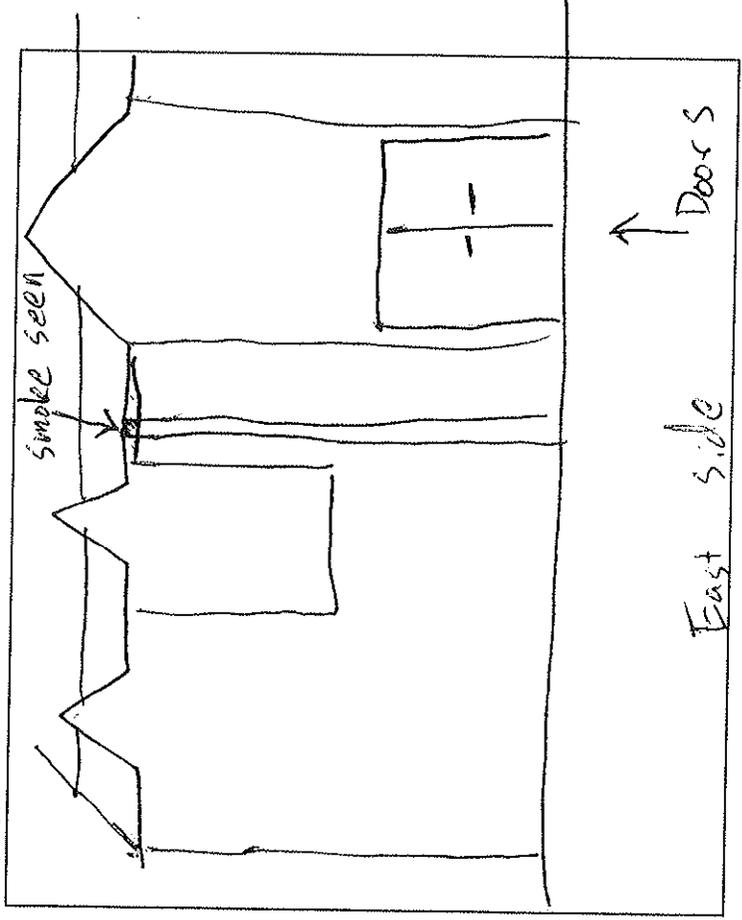
LOCATION: 5108 196th St SW

5108 196th St SW

DESCRIPTION:

East side of Building
Smoke seen from down spout

SKETCH



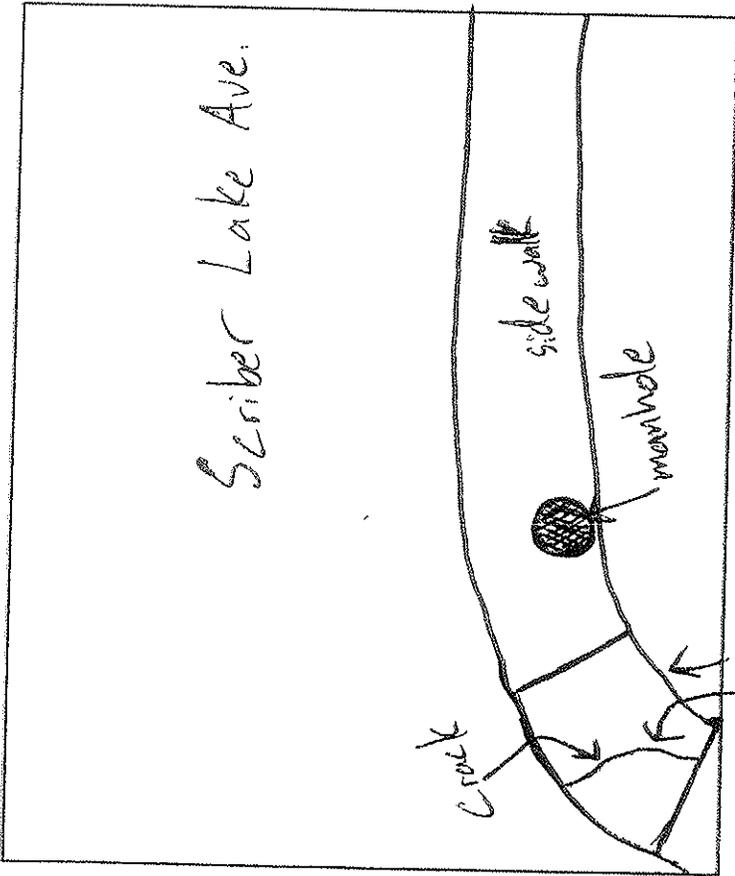
CITY OF LYNNWOOD III STUDY

REF#: S-24 DATE: 8/6/09
INSPECTOR: DK PHOTO NO. 81-~~84~~ 84

LOCATION: Scriber Lake Ave. and 198th St. SW
on the south west corner

DESCRIPTION: smoke coming from crack in sidewalk
and from pop hole of the side walk

SKETCH



8/6/09
DK

CITY OF LYNNWOOD III STUDY

REF #: S-25 DATE: 3-16-09

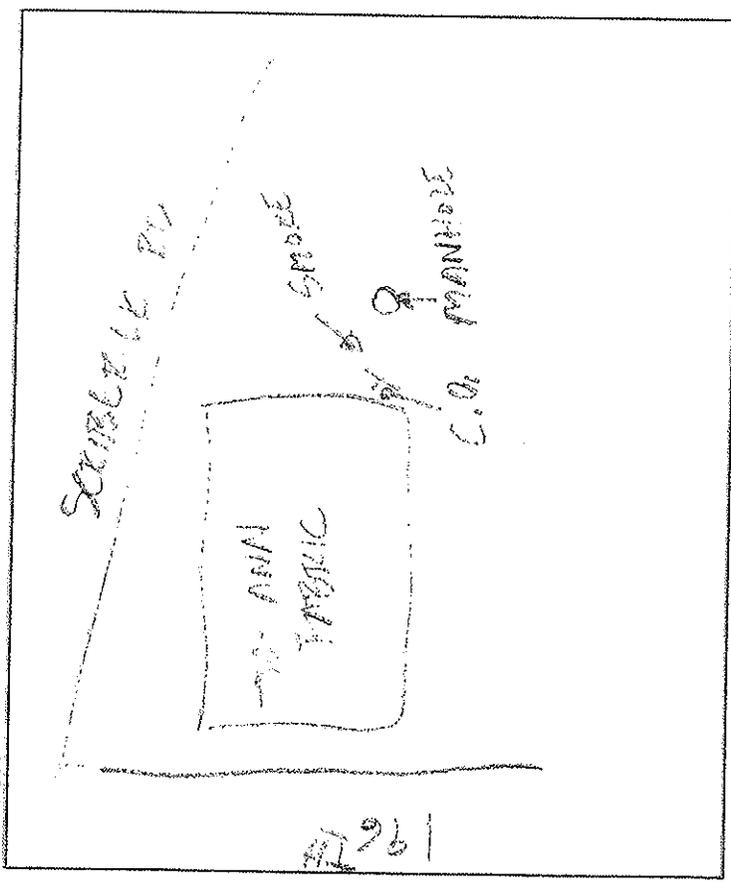
INSPECTOR: MSP PHOTO NO.

LOCATION: 50-ANN FABRIC MILLIK
196th & SCRIBBLE DR

5824 196th St. SW

DESCRIPTION: SAMPLE EXAMINATING FROM
UNDER CONCRETE

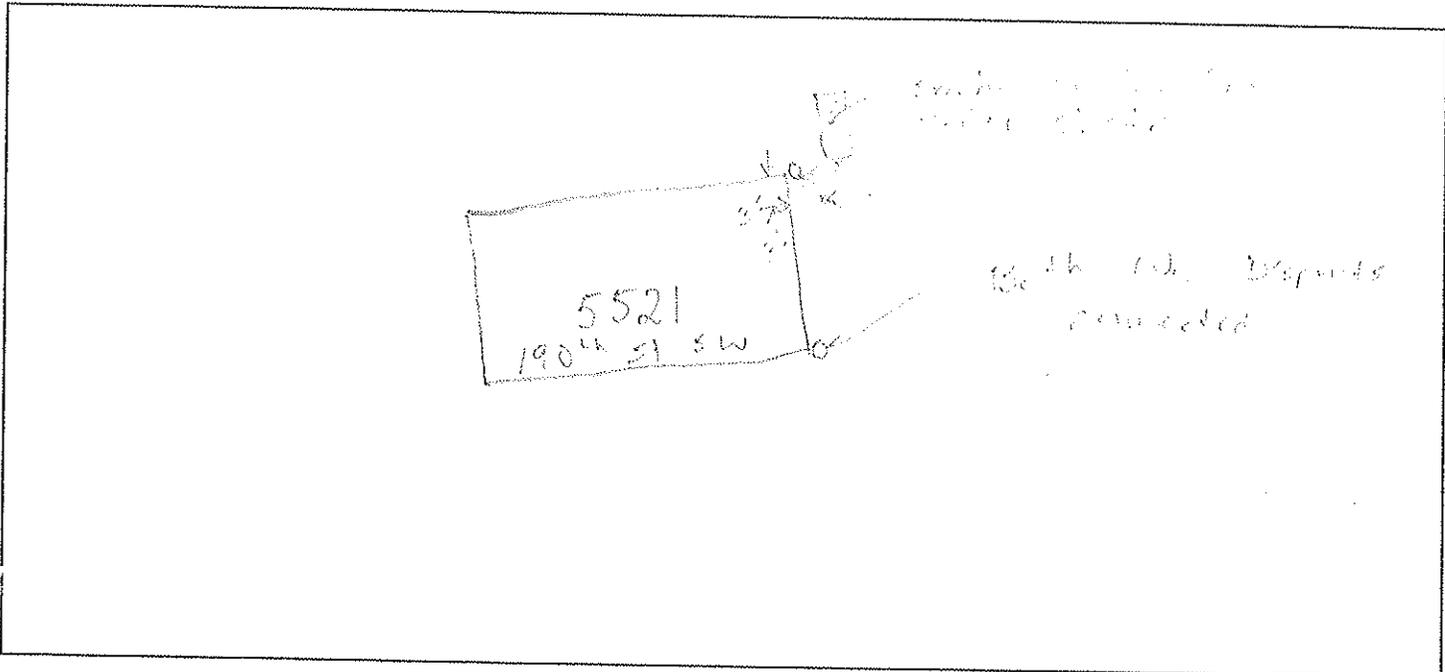
SKETCH



SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 12/3/92
 Time: 8:45 am
 Observer: Ron & PCF

Job Number: 91795.04
 Sewer Reach: MH3-100 to
MH3-101
 Smoke Bomb at MH: 3-701
 Smoke Return No.: _____
 Street Location: 190th St. SW

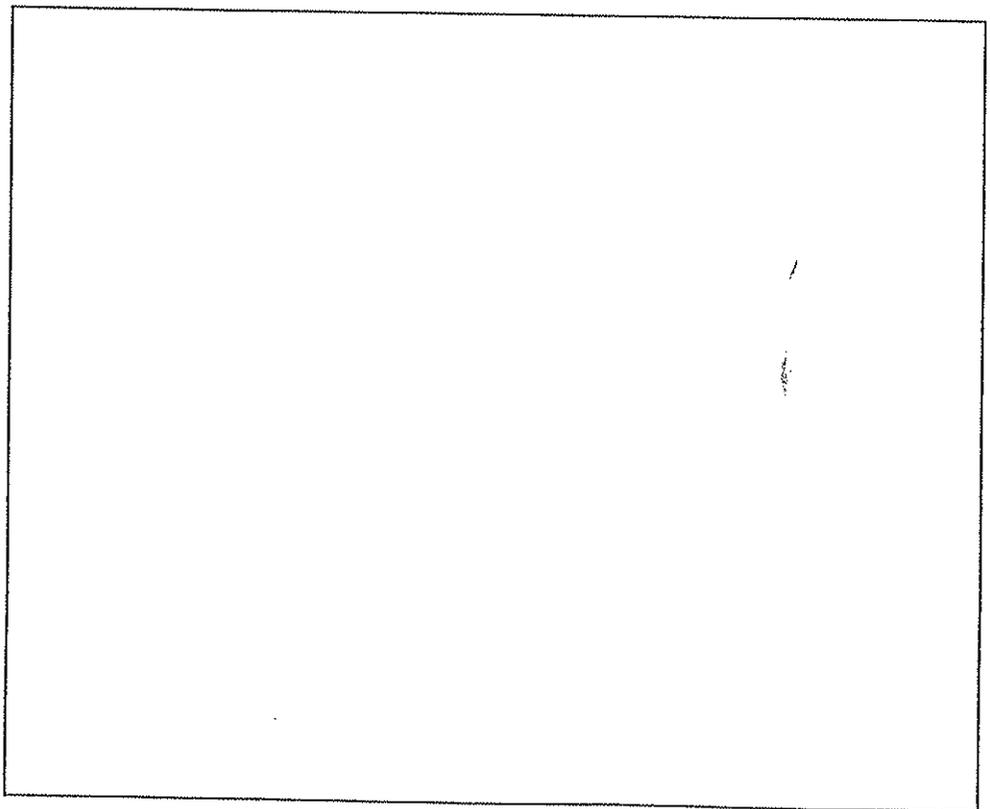


Observed Smoke Return

Photo No.: 1-4 ^{video} per
 Probable Cause: Sanitary
sewer line

Recommended

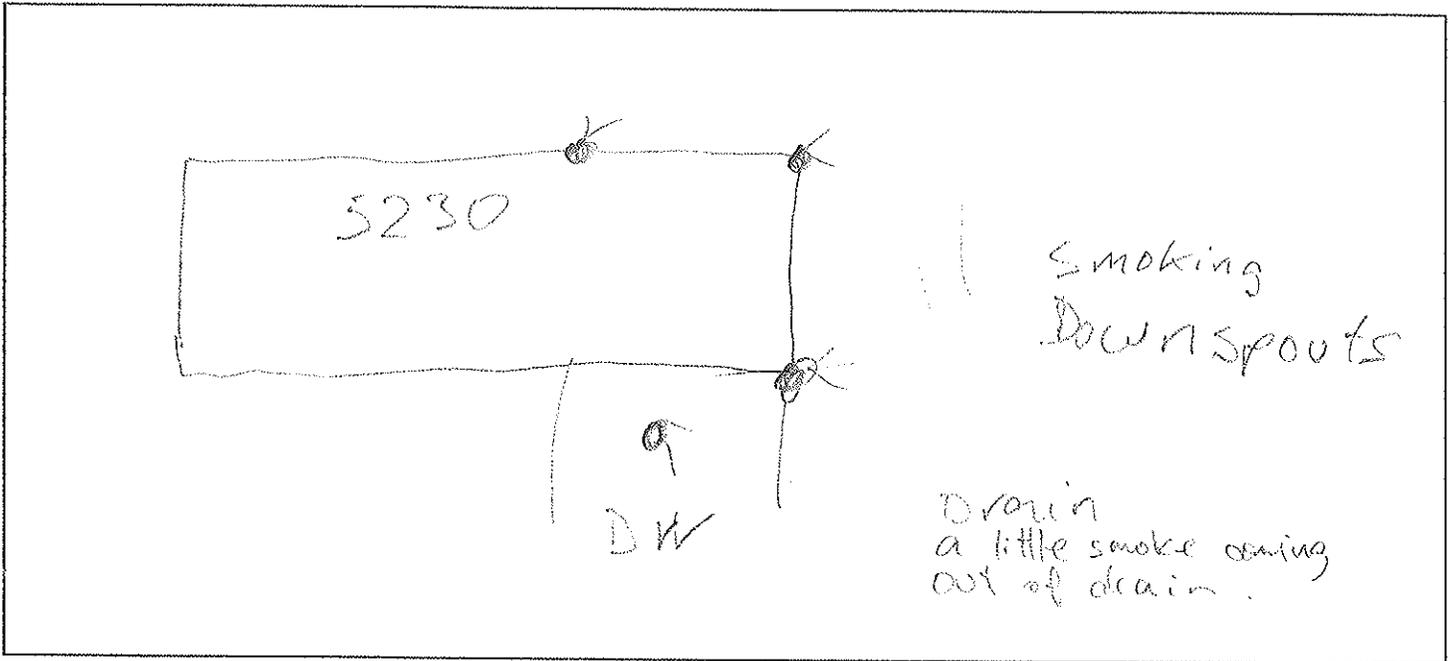
Rehab: Prop. owner
repair



SMOKE TEST RESULTS

Client: City of Lynnwood
Project: LS#10 I/I Study
Date: DEC 3
Time: 9:30
Observer: Ron J. Per

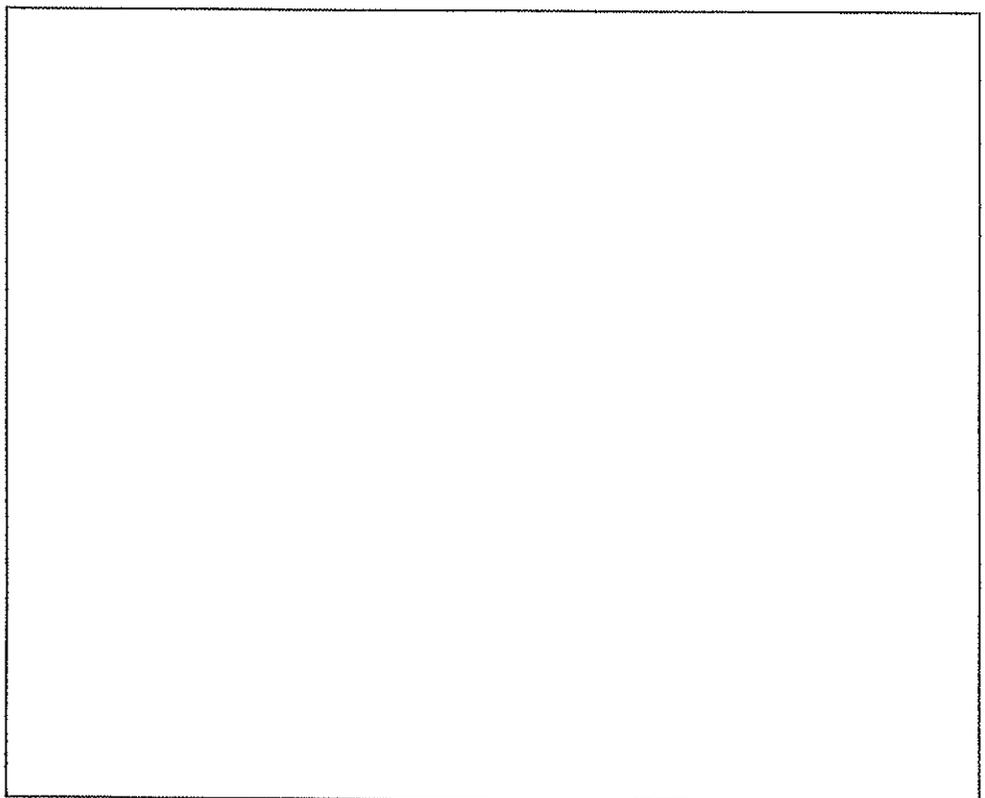
Job Number: 91795.04
Sewer Reach: MH 3,97 to
MH 3,95
Smoke Bomb at MH: _____
Smoke Return No.: _____
Street Location: 190th ST SW



Observed Smoke Return

Photo No.: 586
Probable Cause: _____

Recommended
Rehab: _____



5-28

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 12/2/92
 Time: 7:30
 Observer: _____

Job Number: 91795.04

Sewer Reach: MH 3-99 to
MH 3-99.2 398

Smoke Bomb at MH: 3-99.1

Smoke Return No.: _____

Street Location: 191st St. SW Lehigh

New division is missing caps on services. MH 3-99 is in low spot, as is 3-98. OK
 ↑ video

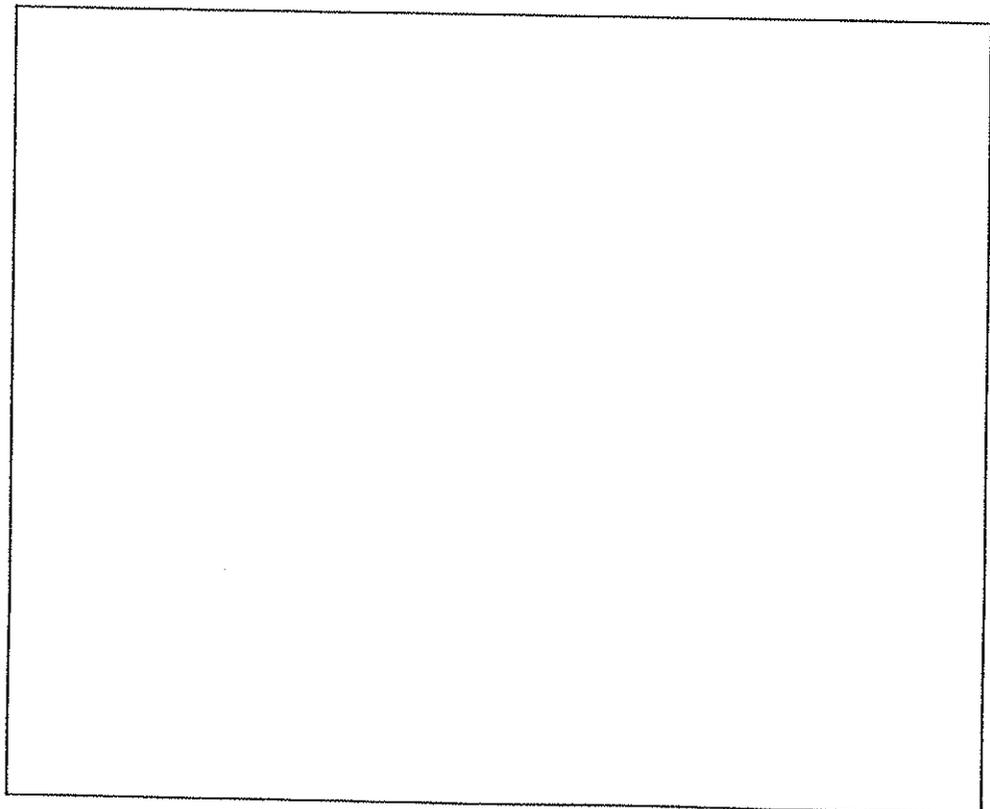
Observed Smoke Return

Photo No.: 340 #7

Probable Cause: _____

Recommended

Rehab: _____



S-29

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 8/15/00
 Time: 9:53
 Observer: Rand Lee

Job Number: 91795.04
 Sewer Reach: MH 3-123 to
MH 3-127
 Smoke Bomb at MH: 3-124
 Smoke Return No.: _____
 Street Location: 192nd St SW

Mult. spots where smoke came out
 at joint between MH 3-123 and MH 3-93.

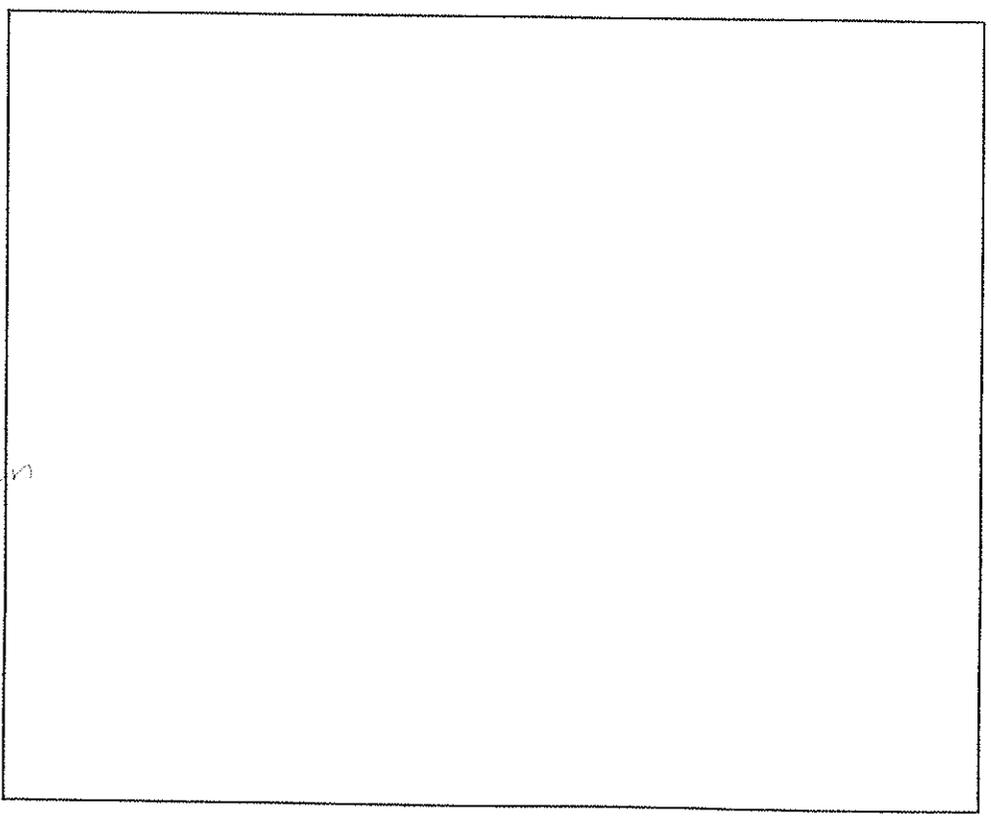
 Not on N. of 192nd & card missing CO. cap

Observed Smoke Return

Photo No.: Per # 829
 Probable Cause: missing cap,
2-1/2" outside vent
cooled pipe

Recommended

Rehab: Camera work
& visual inspection

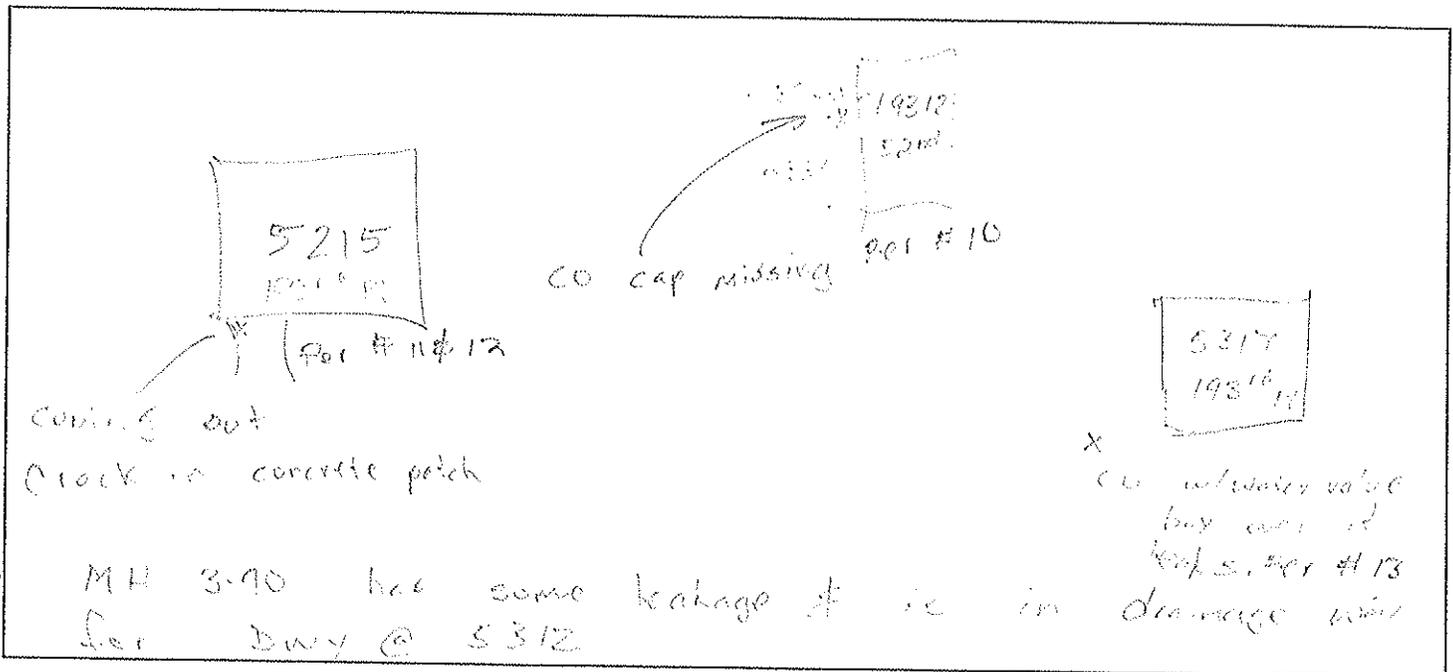


S-31, S-32, S-33

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 10/2/13
 Time: 2:25
 Observer: BJD

Job Number: 91795.04
 Sewer Reach: MH 3-89 to
MH 3-91
 Smoke Bomb at MH: 3-90
 Smoke Return No.: _____
 Street Location: 193rd 9L SW

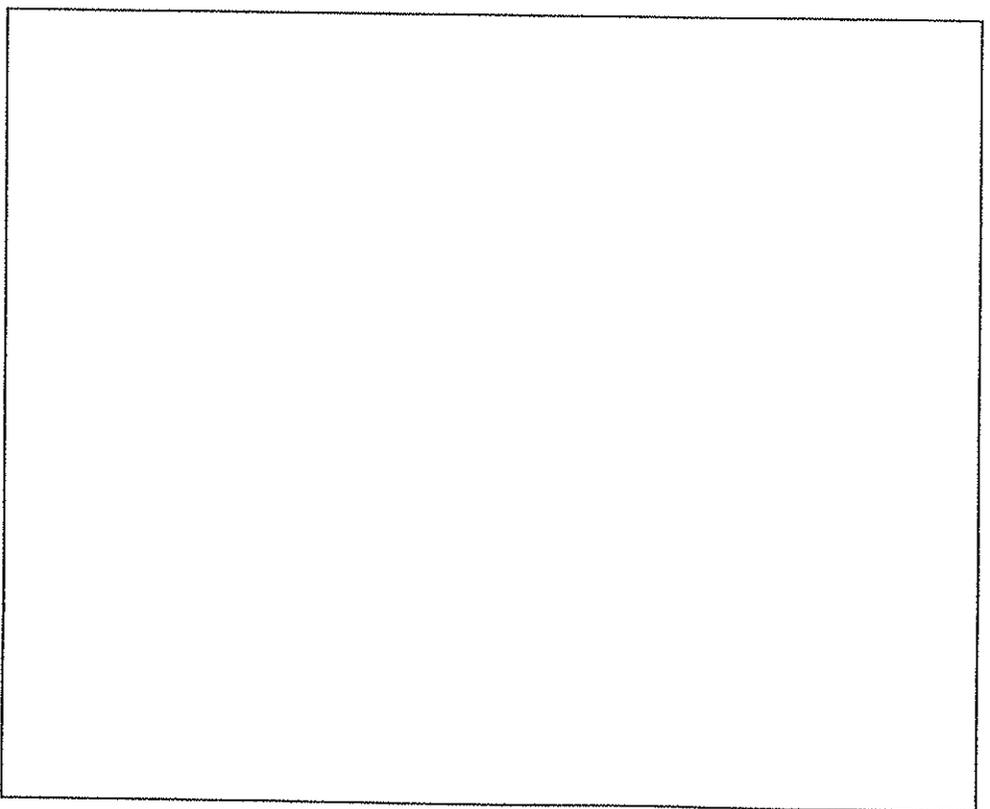


Observed Smoke Return

Photo No.: 261 no vid
10-13
 Probable Cause: CO's
minor pipe defect.

Recommended

Rehab: _____



SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: Dec 3
 Time: 1:30
 Observer: J. B. Ror

Job Number: 91795.04

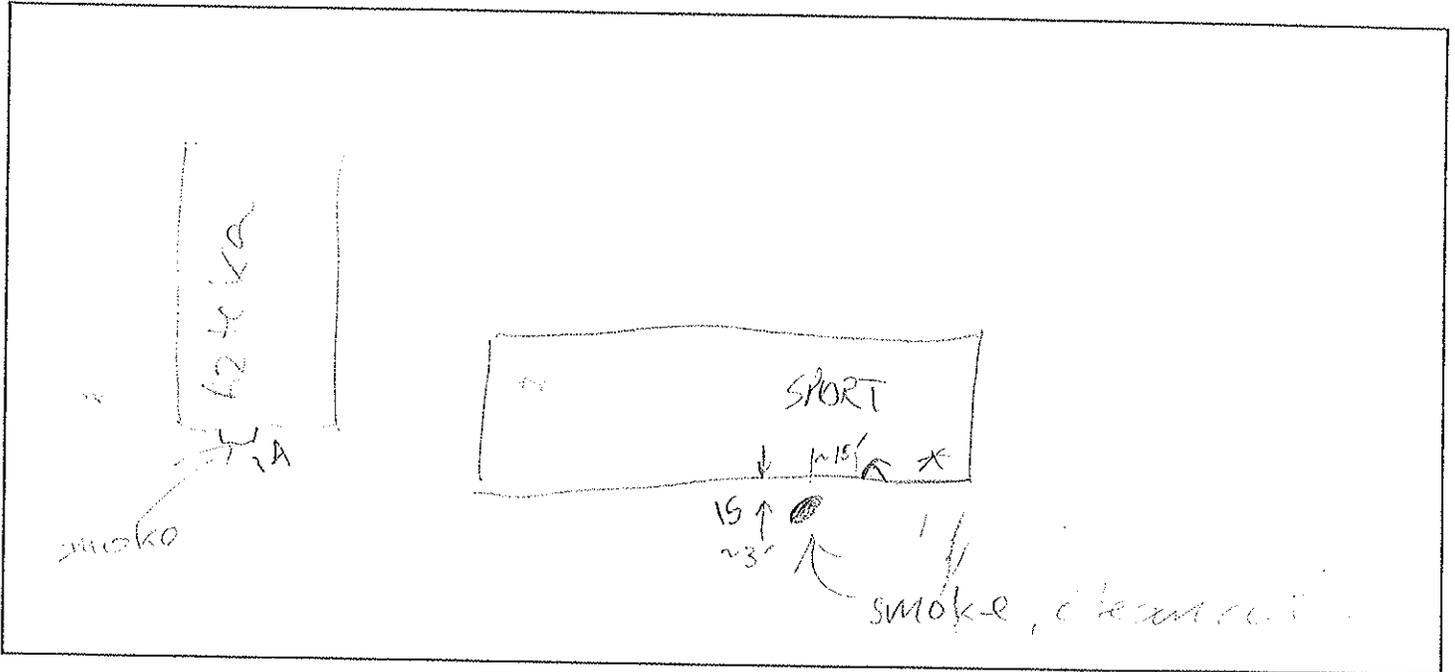
Sewer Reach: MH 3-77 to

MH 3-88

Smoke Bomb at MH: 3-87

Smoke Return No.: _____

Street Location: MALL

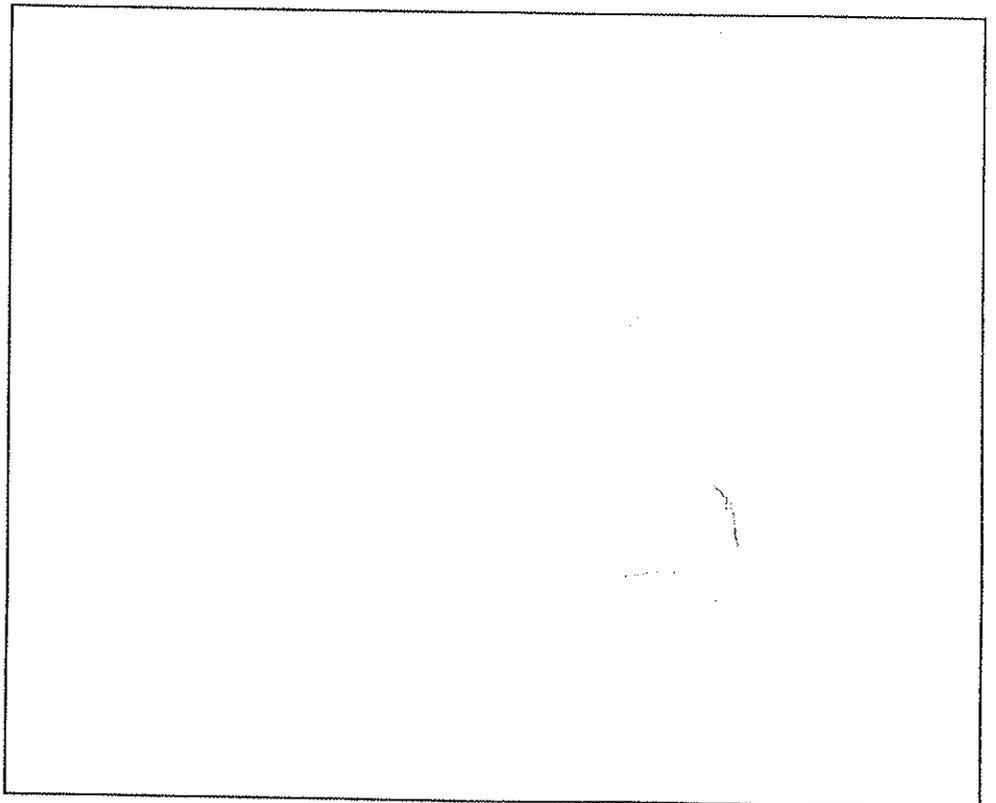


Observed Smoke Return

Per
 Photo No.: #14, 15
 Probable Cause: _____

Recommended

Rehab: _____



5-35

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 12.3.22
 Time: 2:50 PM
 Observer: V.P.

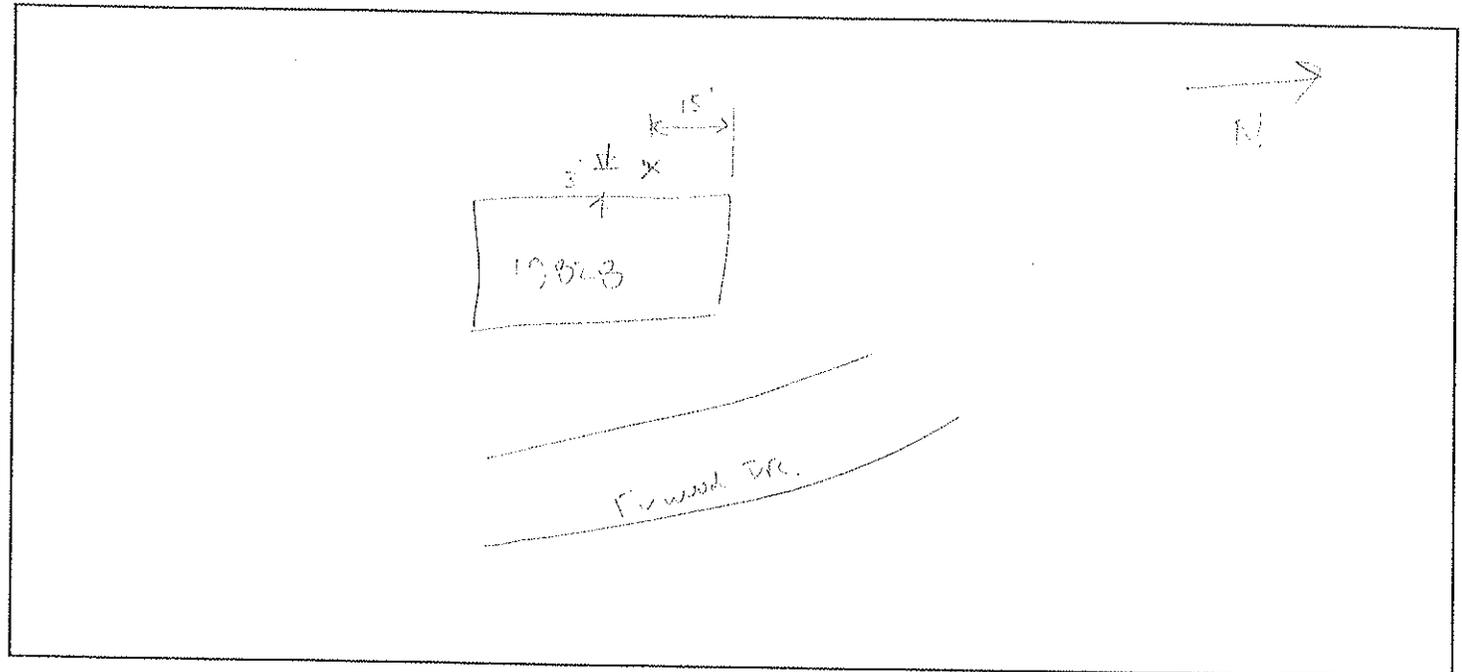
Job Number: 91795.04

Sewer Reach: MH 315 to
MH 310

Smoke Bomb at MH: 2.52

Smoke Return No.: _____

Street Location: 19828 Firwood Dr



Observed Smoke Return

Video RE

Photo No.: 4112 (BR)

Probable Cause: _____

S/S out from

of house has

gone to pipe

with duct tape &

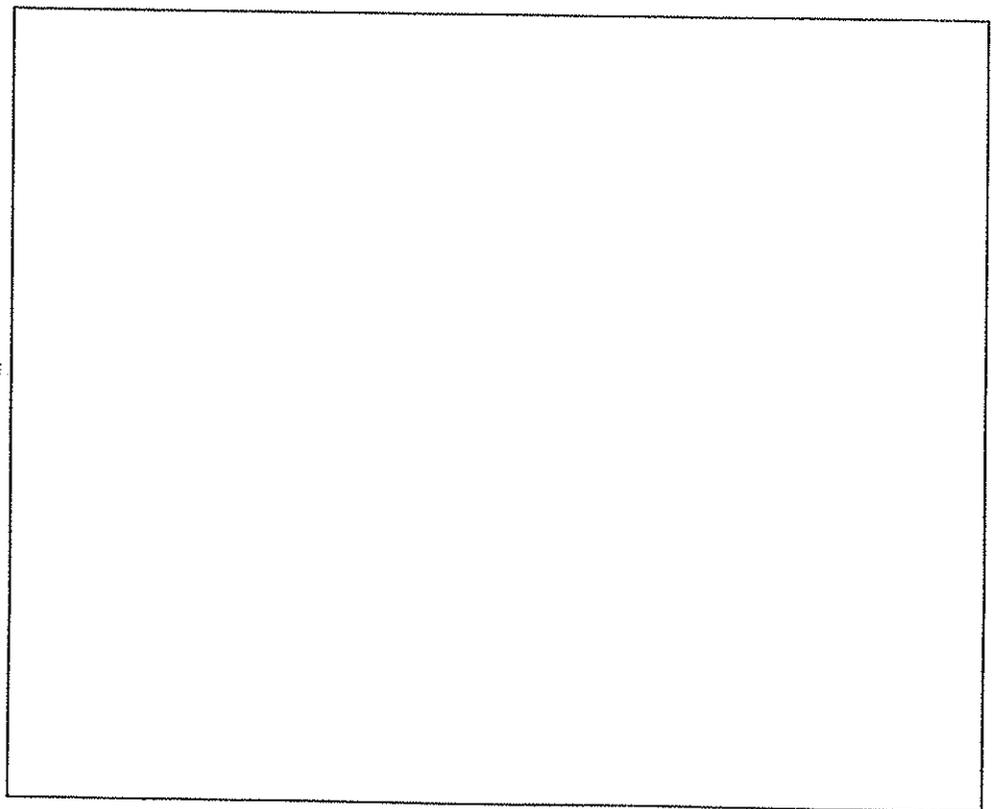
Also is a hole

Recommended that could collect

Rehab: _____

Rehab S/S piping

Next to house



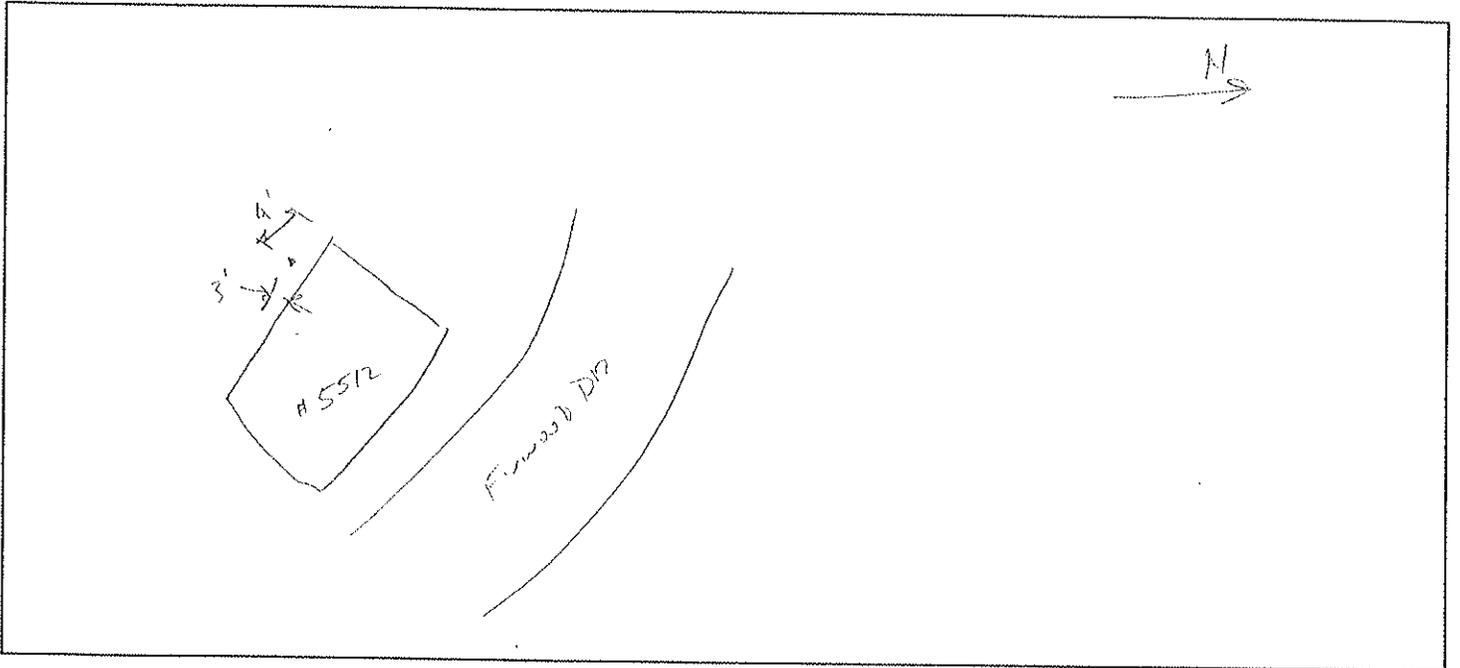
SMOKE TEST RESULTS

S-36

M

Client: City of Lynnwood
Project: LS#10 I/I Study
Date: 12-3-07
Time: 2:50 pm
Observer: D.P

Job Number: 91795.04
Sewer Reach: MH C.O. to
MH 3-50
Smoke Bomb at MH: 3 52
Smoke Return No.: _____
Street Location: 5512 Firwood DR



Observed Smoke Return

cliff Band by C.O.

Photo No.: PH 13 - still stills & Video

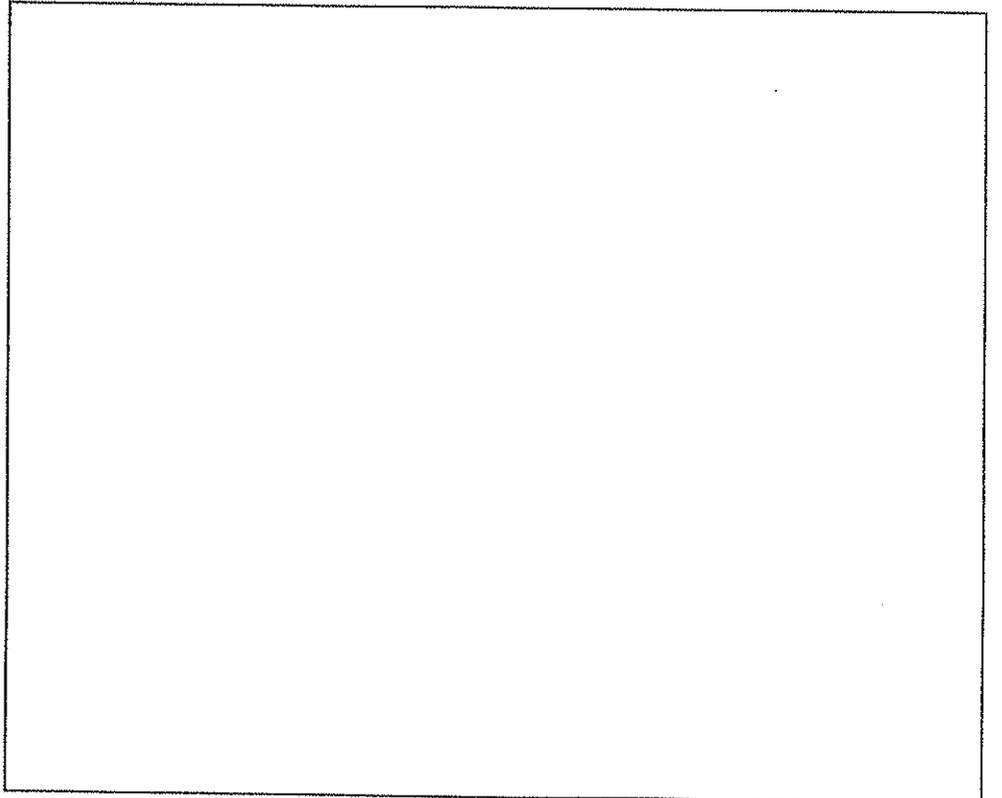
Probable Cause: _____

cleanout with
unsatisfactory cover -
(exist cover NO seal)

Recommended

Rehab: _____

Replace cover

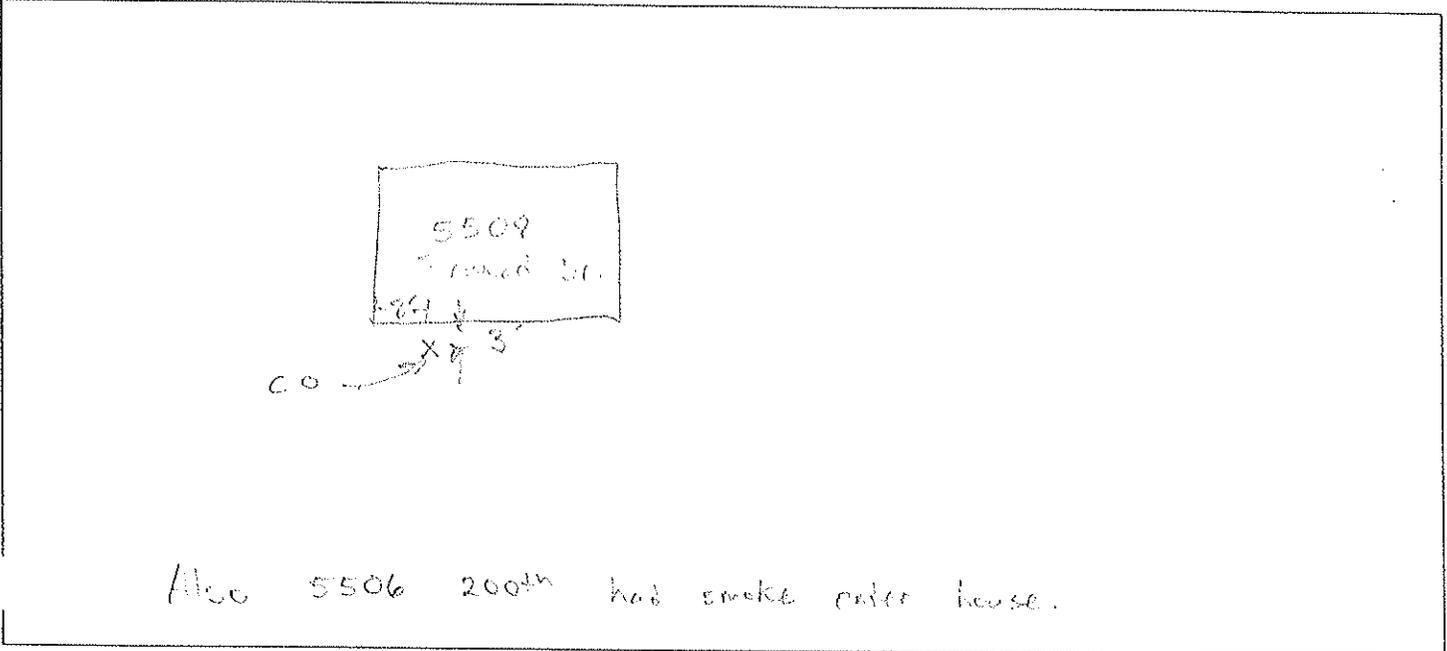


SMOKE TEST RESULTS

S-37.

Client: City of Lynnwood
Object: LS#10 I/I Study
Date: 12/4/12
Time: 10:40
Observer: _____

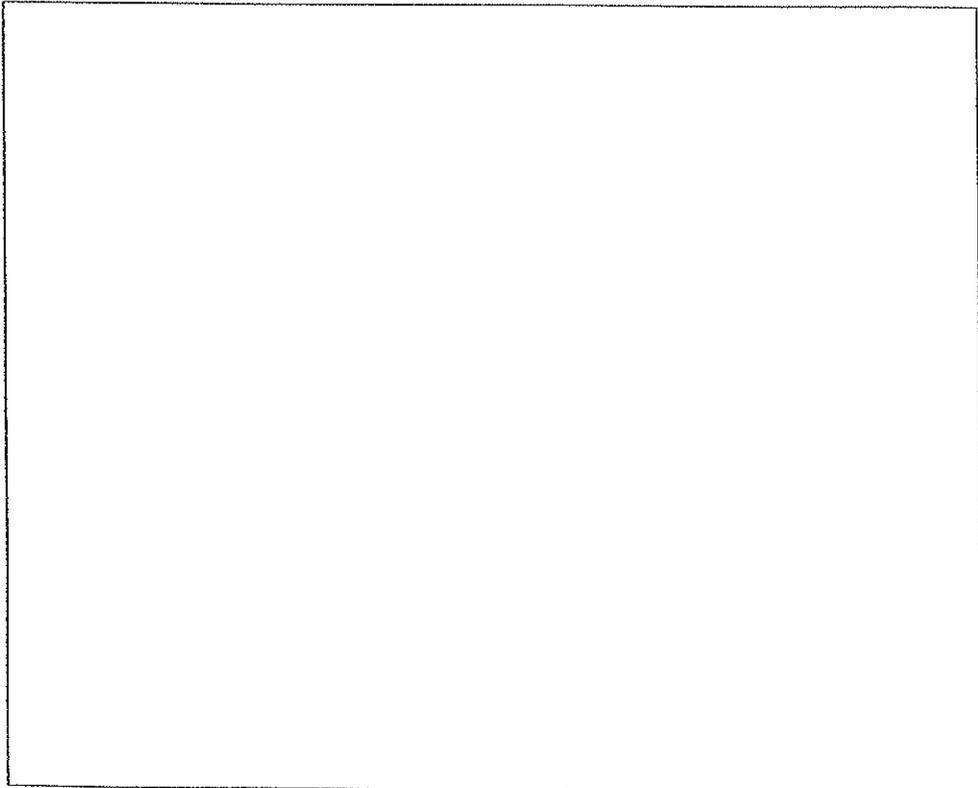
Job Number: 91795.04
Sewer Reach: MH 3-60 to
MH 3-58
Smoke Bomb at MH: 3-60
Smoke Return No.: _____
Street Location: 200th



Observed Smoke Return

Photo No.: Videos
Probable Cause: Bad CO cap

Recommended
Rehab: _____



5-38, 5-39

SMOKE TEST RESULTS

Client: City of Lynnwood
Subject: LS#10 I/I Study
Date: 5/7
Time: 1:30
Observer: [Signature]

Job Number: 91795.04

Sewer Reach: MH 3-45 to

MH 3-44

Smoke Bomb at MH: 3-45

Smoke Return No.: _____

Street Location: _____

MH'S 3-45 & 3-44 smoking from under frame & maybe neck.

Observed Smoke Return

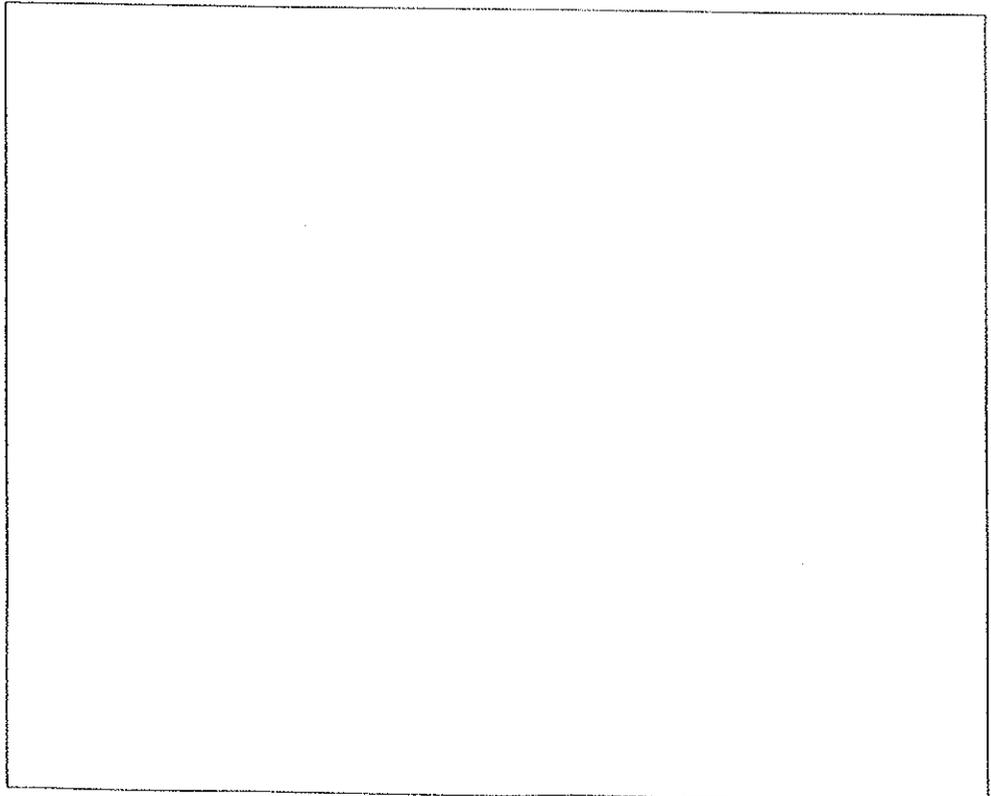
Photo No.: 1000

Probable Cause: Block neck

& riser at 3-45

Recommended

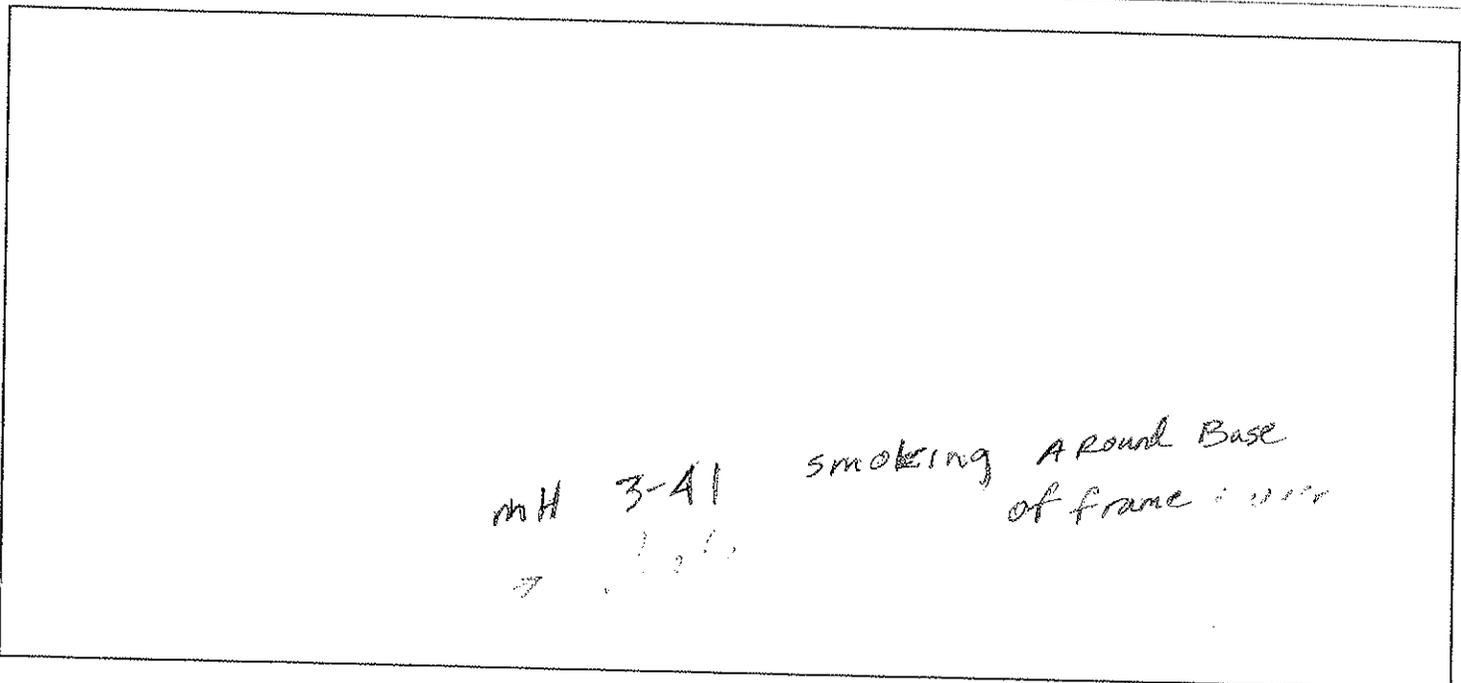
Rehab: yes



SMOKE TEST RESULTS

Client: City of Lynnwood
Project: LS#10 I/I Study
Date: 12-4-92
Time: 10:20 AM
Observer: D. R.

Job Number: 91795.04
Sewer Reach: MH to MH
Smoke Bomb at MH: 3-43
Smoke Return No.: _____
Street Location: Scriber Lake

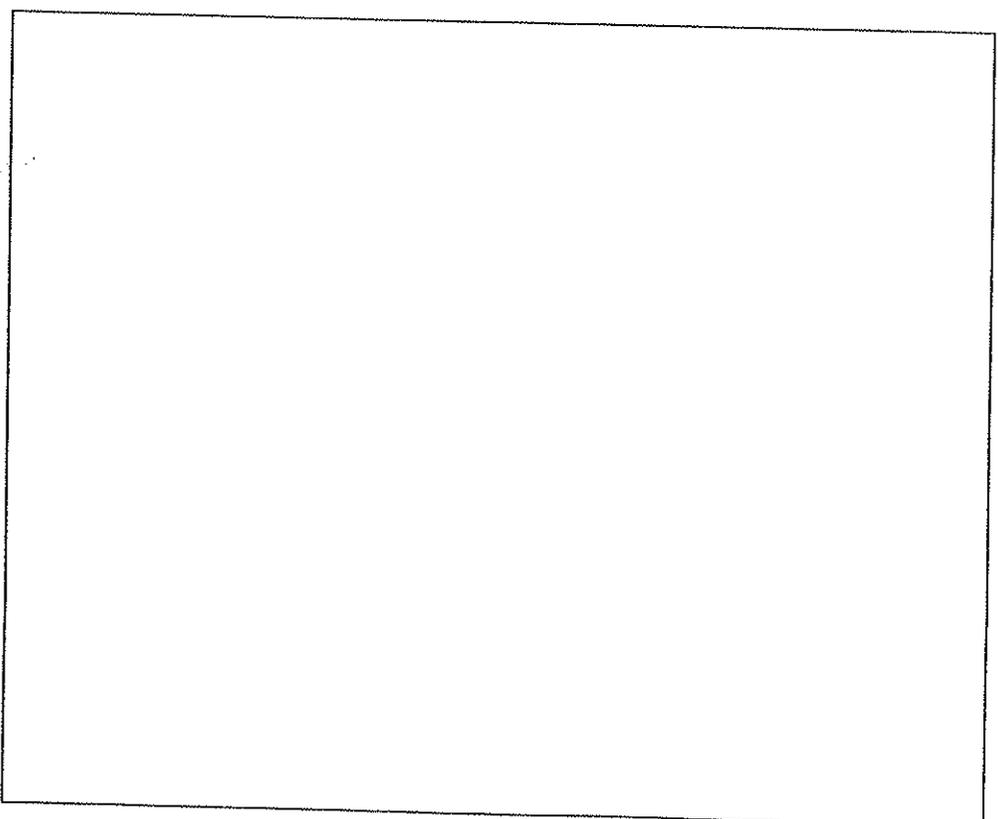


mH 3-41 smoking around Base of frame

Observed Smoke Return

Photo No.: DR 11A
Probable Cause: _____

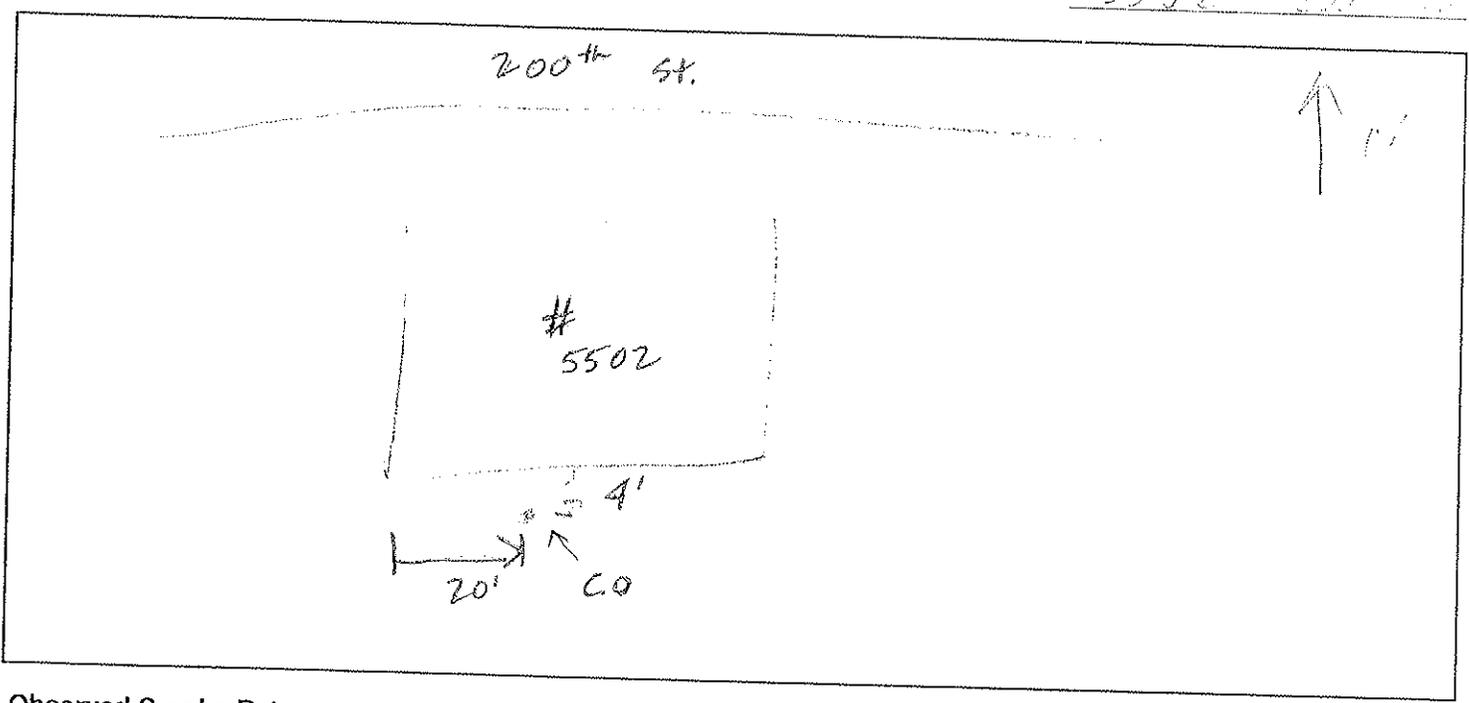
Recommended Rehab: replace frame
d. Dunbar



SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: _____
 Time: 10:55
 Observer: DK

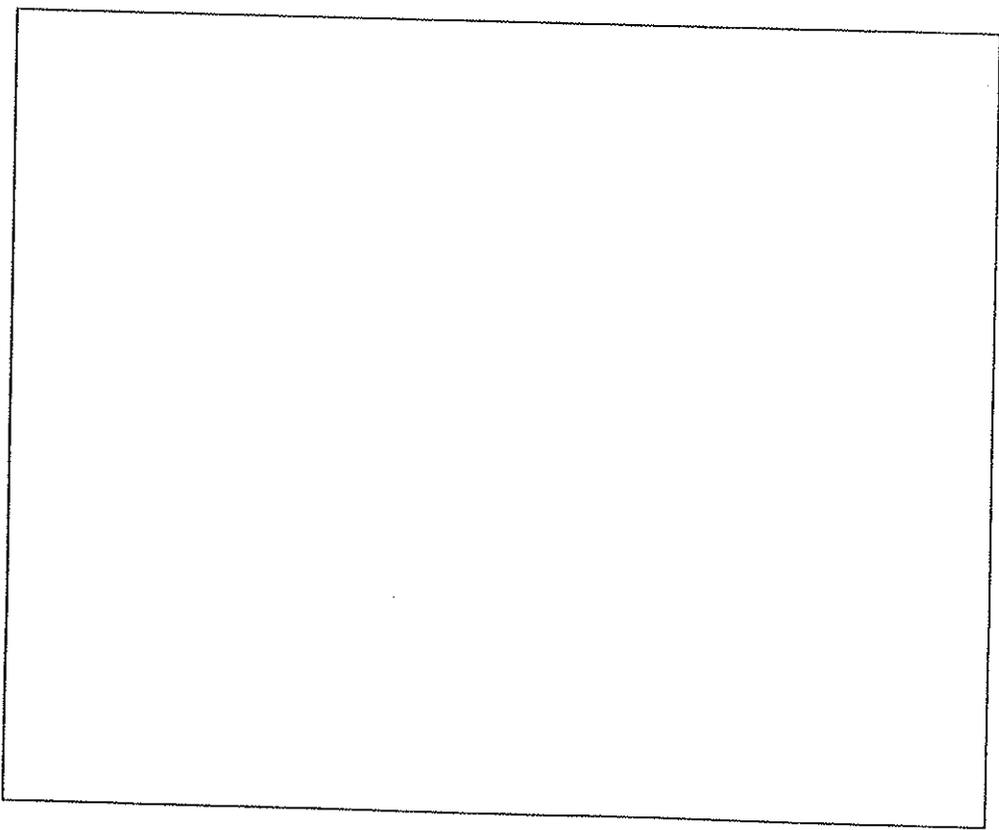
Job Number: 91795.04
 Sewer Reach: MH 3-53 to
MH 3-60
 Smoke Bomb at MH: 3-60
 Smoke Return No.: _____
 Street Location: 5502 200th St



Observed Smoke Return

Photo No.: DR 15 (DR)
 Probable Cause: _____
cleared inlet
MC cover on
plug

Recommended
 Rehab: _____
install plug in
cleared

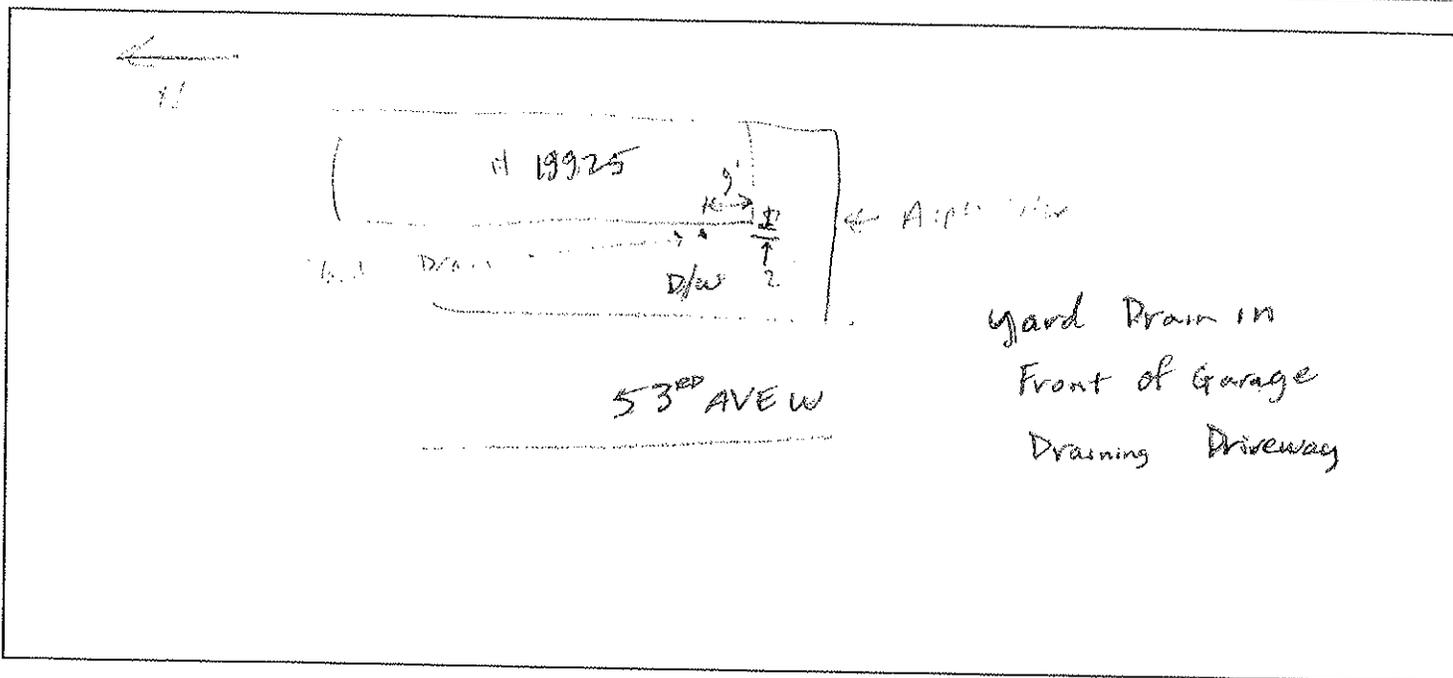


S-42

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 12-4-92
 Time: 1:40 PM
 Observer: DS

Job Number: 91795.04
 Sewer Reach: MH 3-5 to
MH 3-10
 Smoke Bomb at MH: 3-15
 Smoke Return No.: _____
 Street Location: 19925 53RD AVE



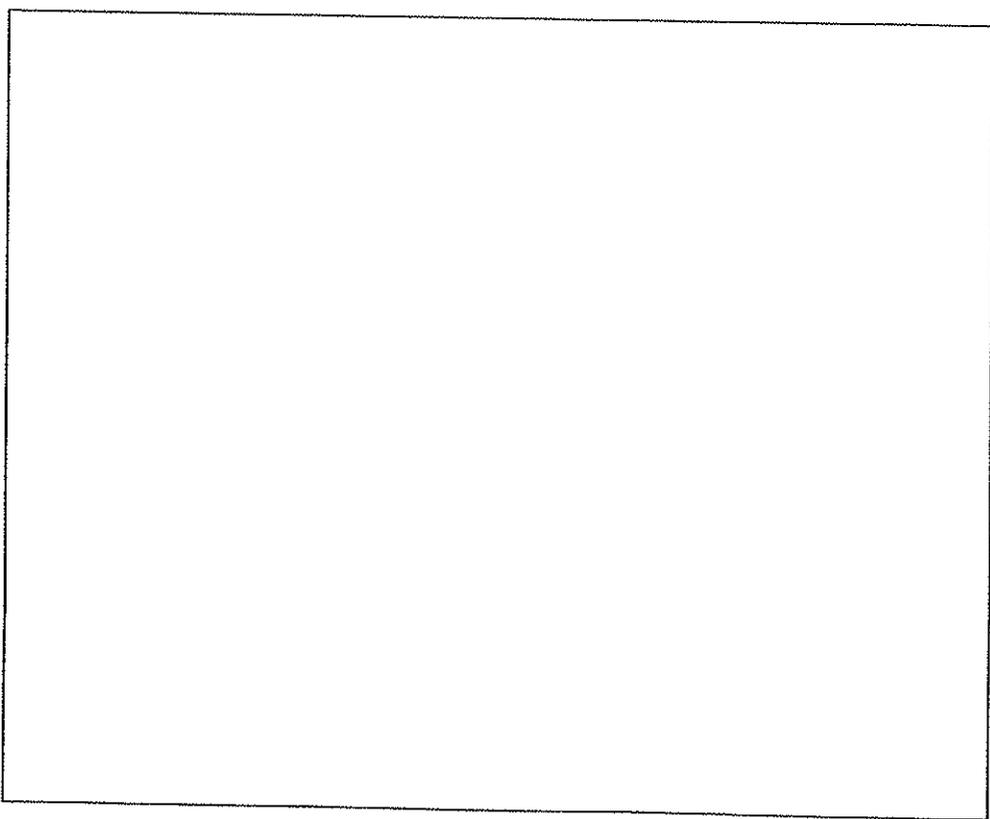
Observed Smoke Return

Photo No.: DR 16 (12)
 Probable Cause: _____

Yard Drain -
Very good source of
inflow - which
Drains Asph. Driveway

Recommended

Rehab: _____

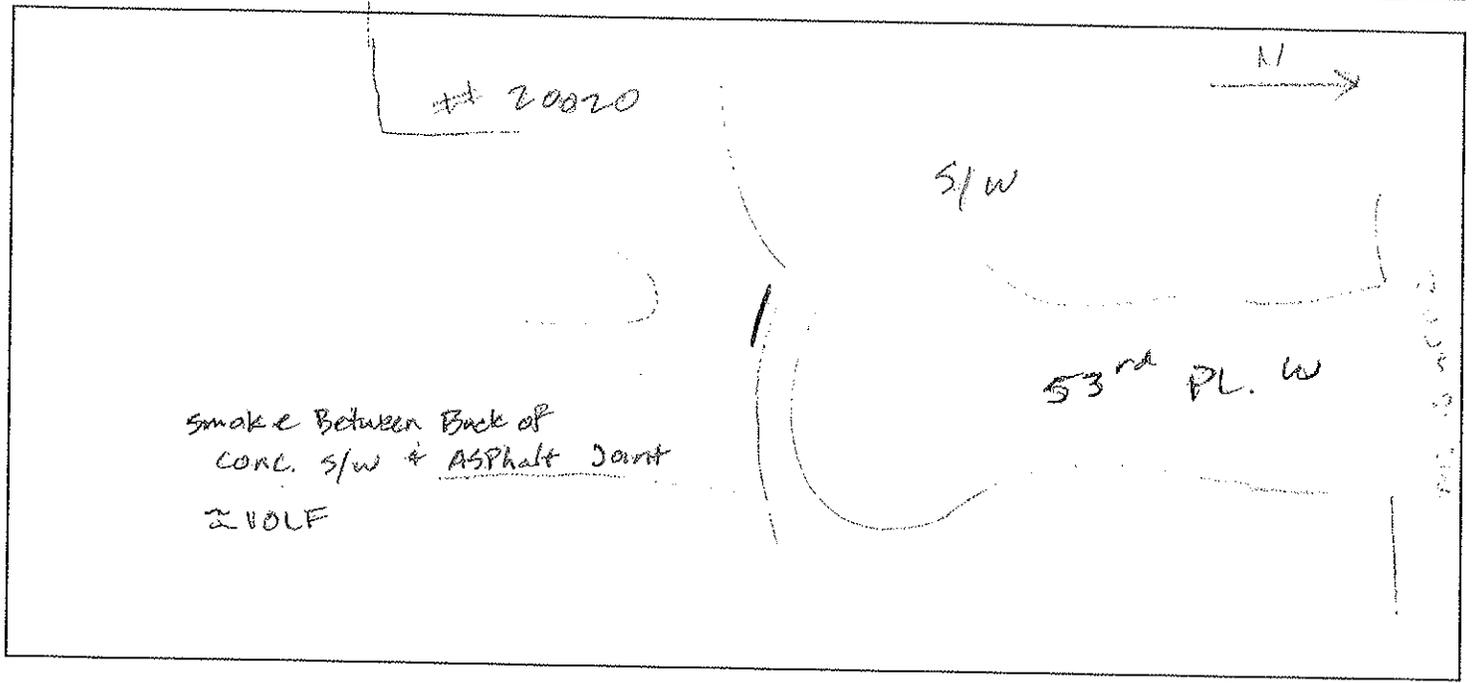


S-43

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: _____
 Time: 2:15 PM
 Observer: [Signature]

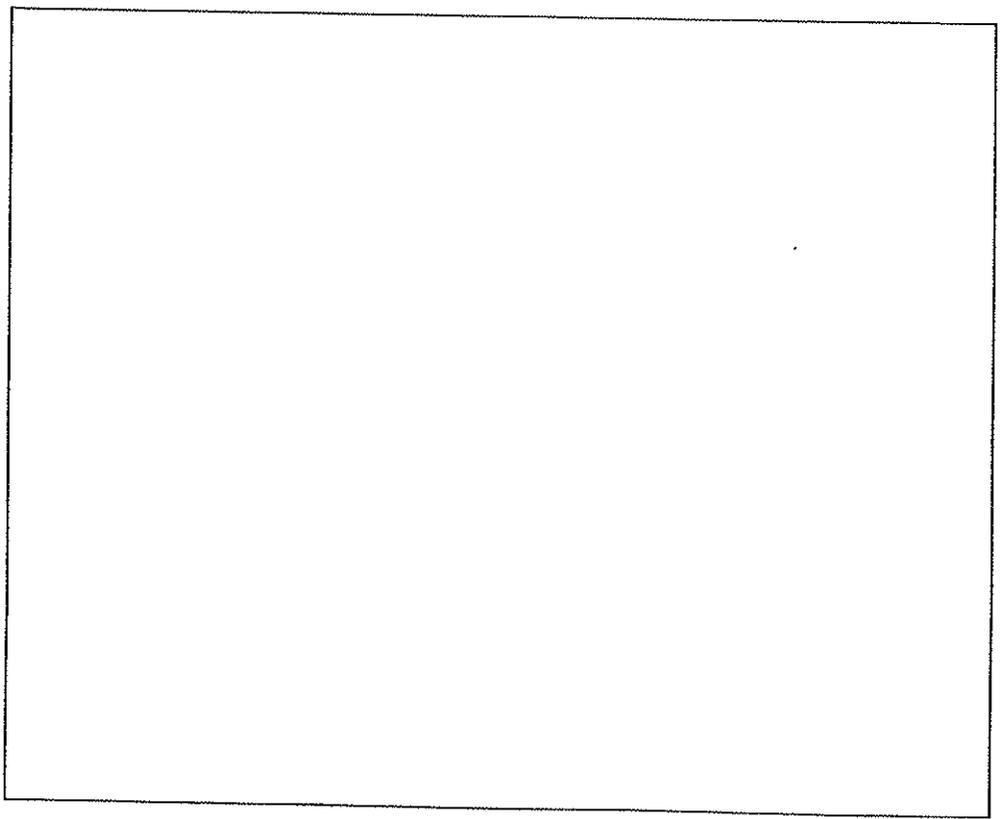
Job Number: 91795.04
 Sewer Reach: MH 3.5 to
MH 3.2
 Smoke Bomb at MH: S-12
 Smoke Return No.: _____
 Street Location: 20070 53rd Ave



Observed Smoke Return

Photo No.: DR17
11/11/10
 Probable Cause: _____
S/W seen
Leaking, possible
C.O. under asphalt
and plugged

Recommended
 Rehab: _____

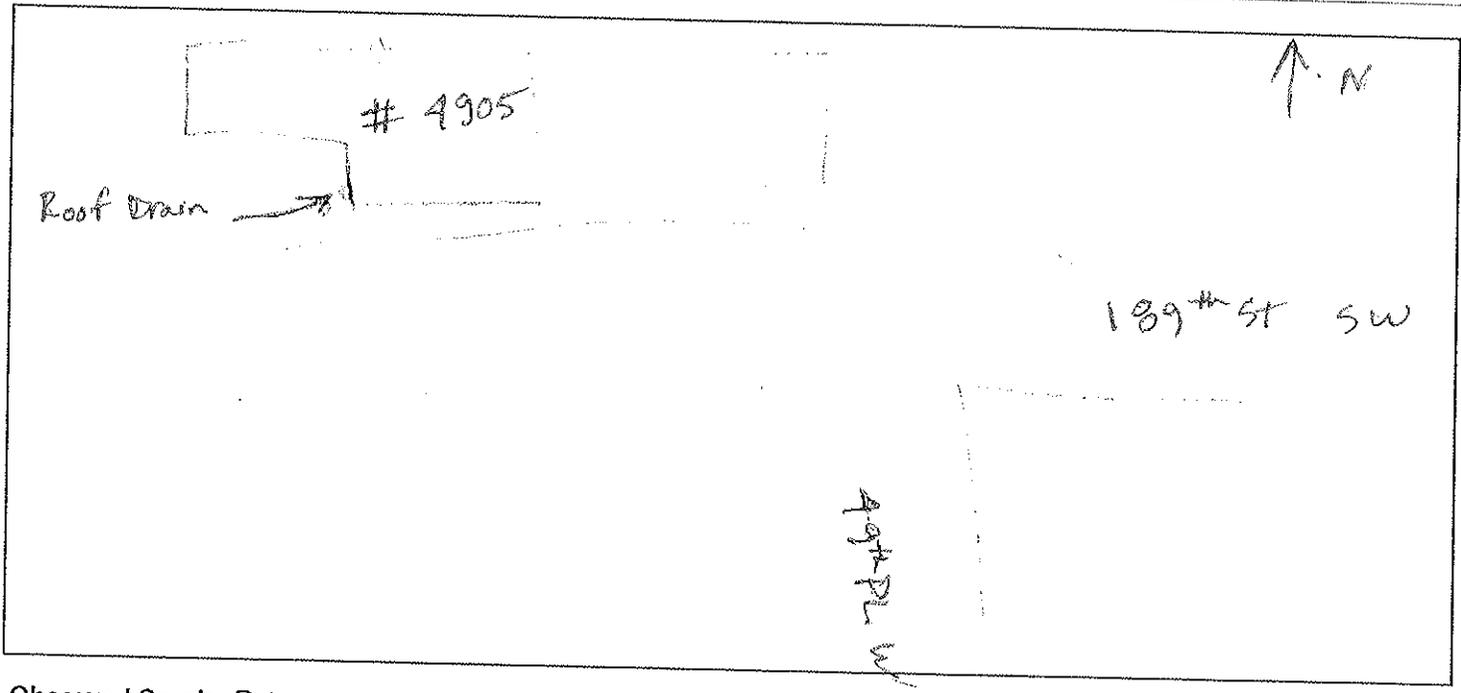


S-44

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 12/7/92
 Time: 9:10
 Observer: D, R

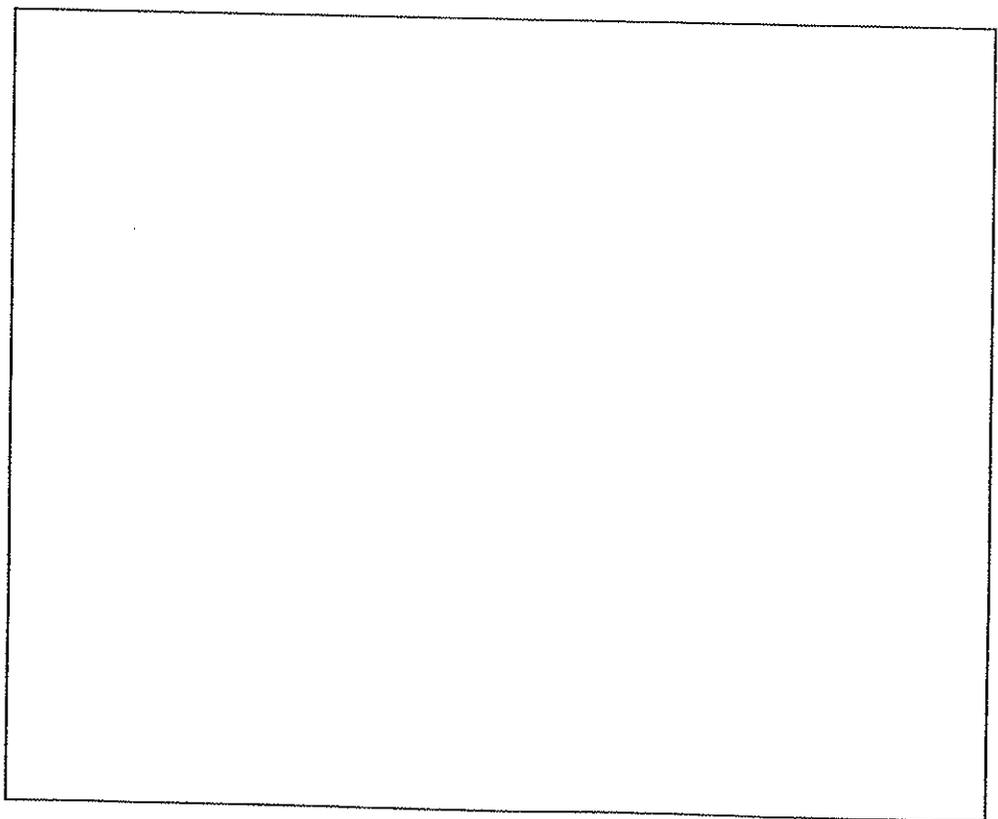
Job Number: 91795.04
 Sewer Reach: MH 5-167 to
MH 5-164
 Smoke Bomb at MH: 5-166
 Smoke Return No.: _____
 Street Location: 189th ST SW



Observed Smoke Return

Photo No.: OR 18
 Probable Cause: _____
Roof Drain @ #
4905 180th ST.
only one Roof Drain
smoking

Recommended
 Rehab: _____



S-45

SMOKE TEST RESULTS

Client: City of Lynnwood
Project: LS#10 I/I Study
Date: 12/7/92
Time: 10:00
Observer: D, R

Job Number: 91795.04
Sewer Reach: MH5-155 to
MH 5-152
Smoke Bomb at MH: 5-154
Smoke Return No.: _____
Street Location: 190th St. SW

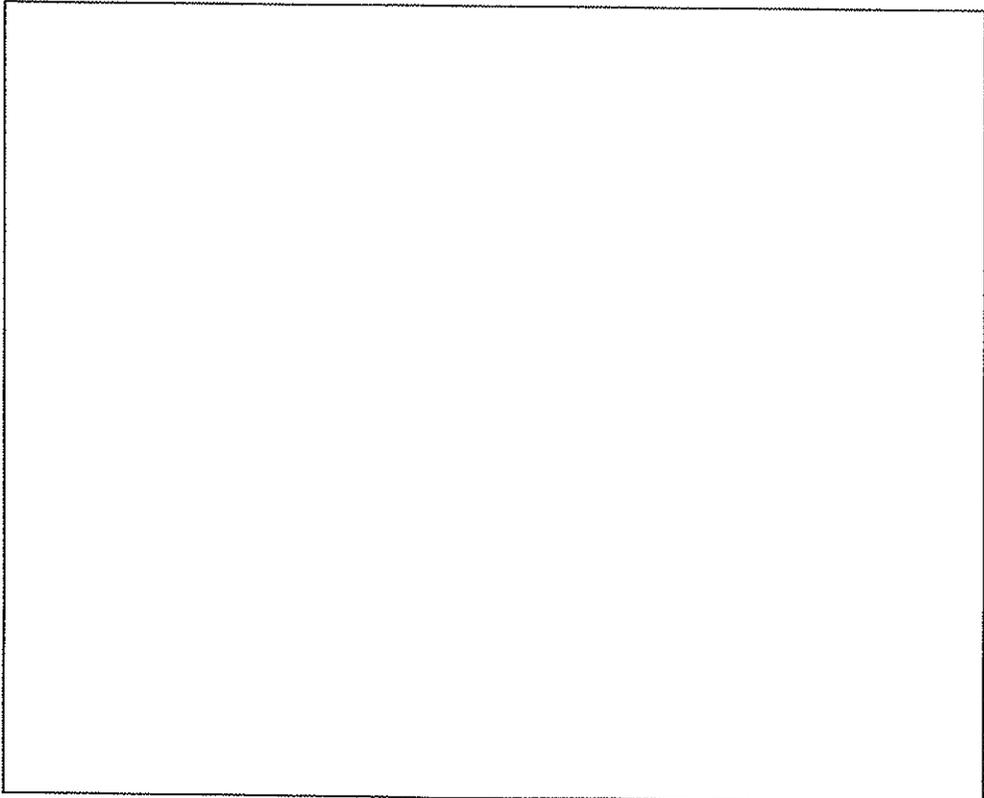
No sources observed

MH #5-152 is in drainage way puddles & should have been inspected

Observed Smoke Return

Photo No.: _____
Probable Cause: _____

Recommended
Rehab: _____



5-46

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 10/11/11
 Time: 10:40
 Observer: D, R

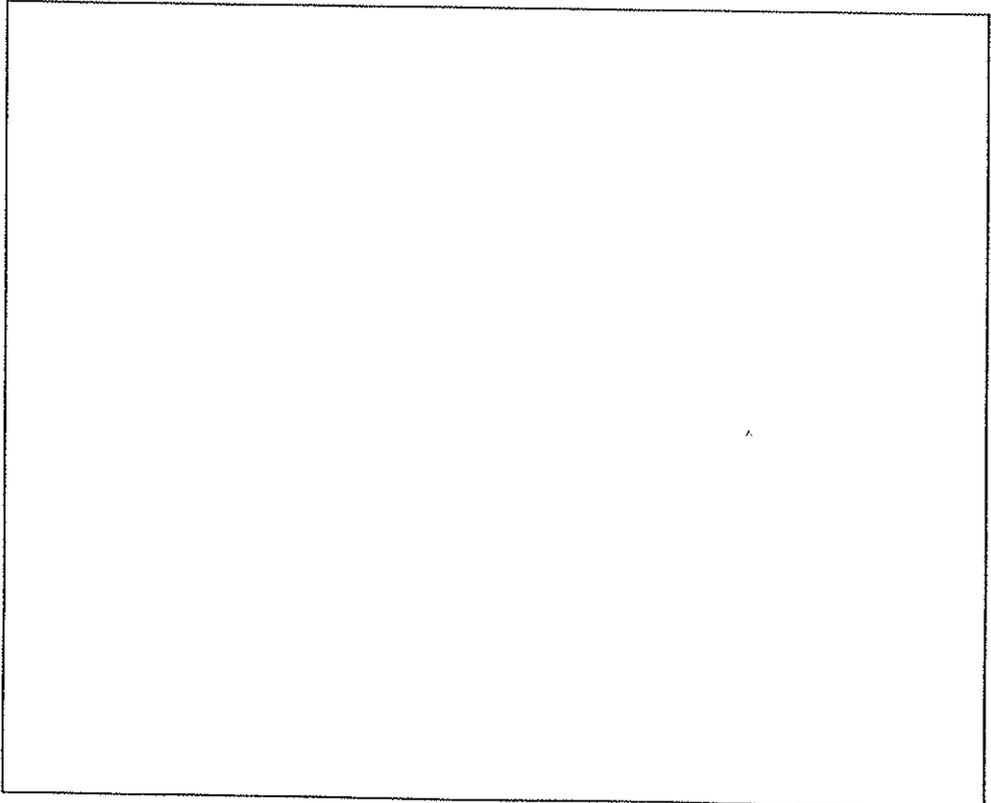
Job Number: 91795.04
 Sewer Reach: MH 5-156 to
MH 5-158
 Smoke Bomb at MH: 5-153
 Smoke Return No.: _____
 Street Location: _____

House @ 4928 190th St SW appears to have a loose CO cap under deck on rear of house. Is on high ground, doesn't look significant

Observed Smoke Return

Photo No.: _____
 Probable Cause: _____

 Recommended Rehab: _____

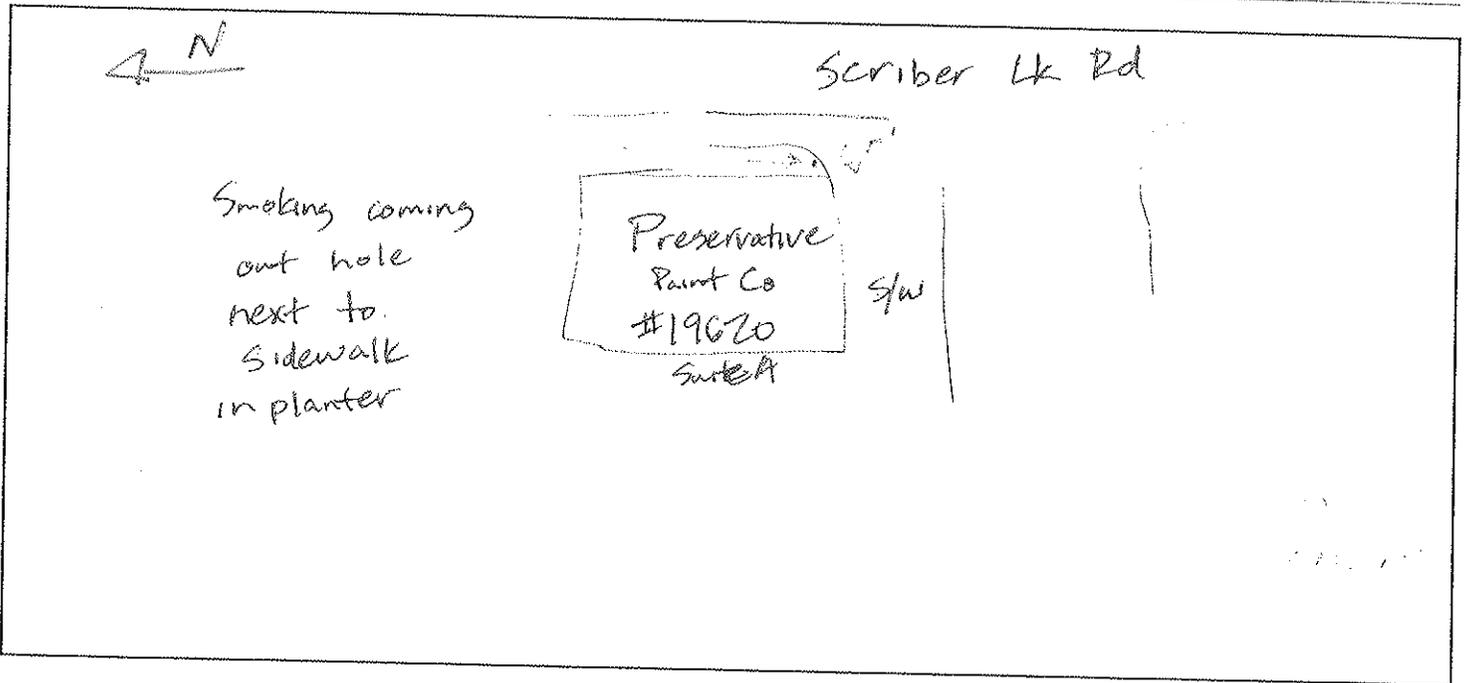


S-47

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 12-7-92
 Time: 11:30
 Observer: D.R.

Job Number: 91795.04
 Sewer Reach: MH to MH
 Smoke Bomb at MH: _____
 Smoke Return No.: _____
 Street Location: _____



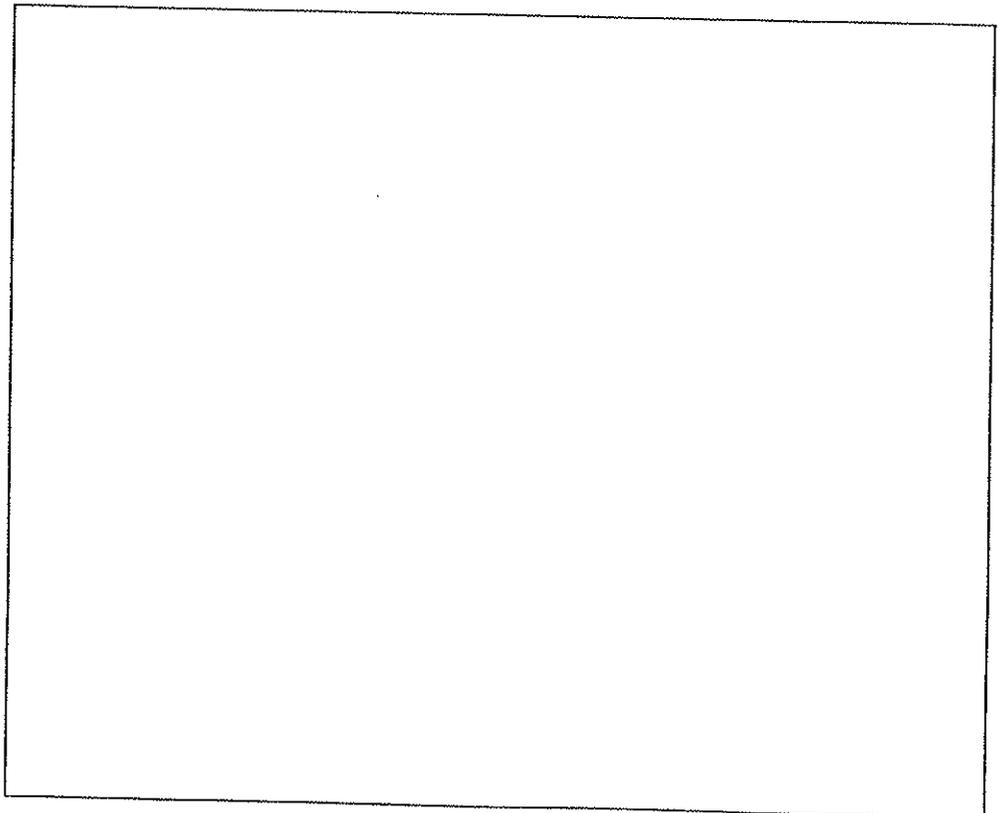
Observed Smoke Return

Photo No.: DR 19

Probable Cause: _____
Broken S/S
or Cleanout with
No Cover

Recommended

Rehab: _____

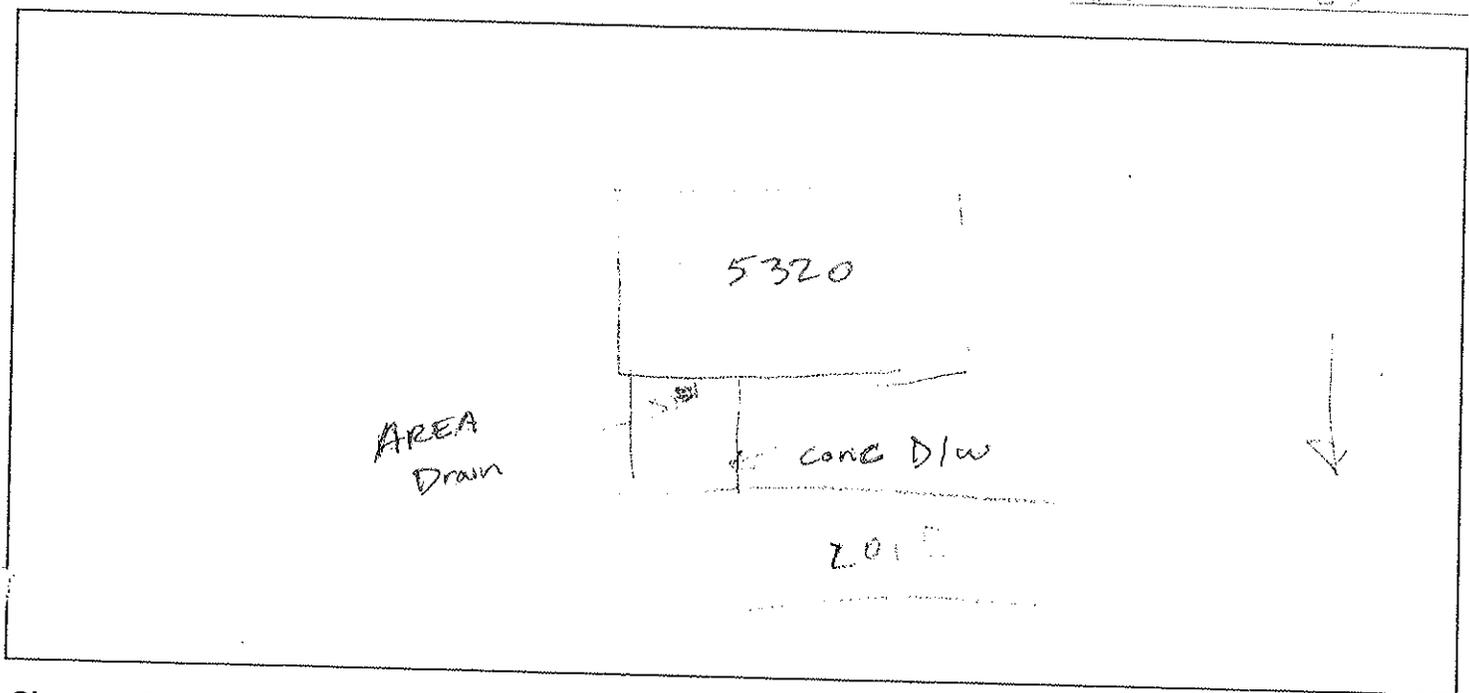


5-48

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 2-7-
 Time: 7:00 AM
 Observer: ---

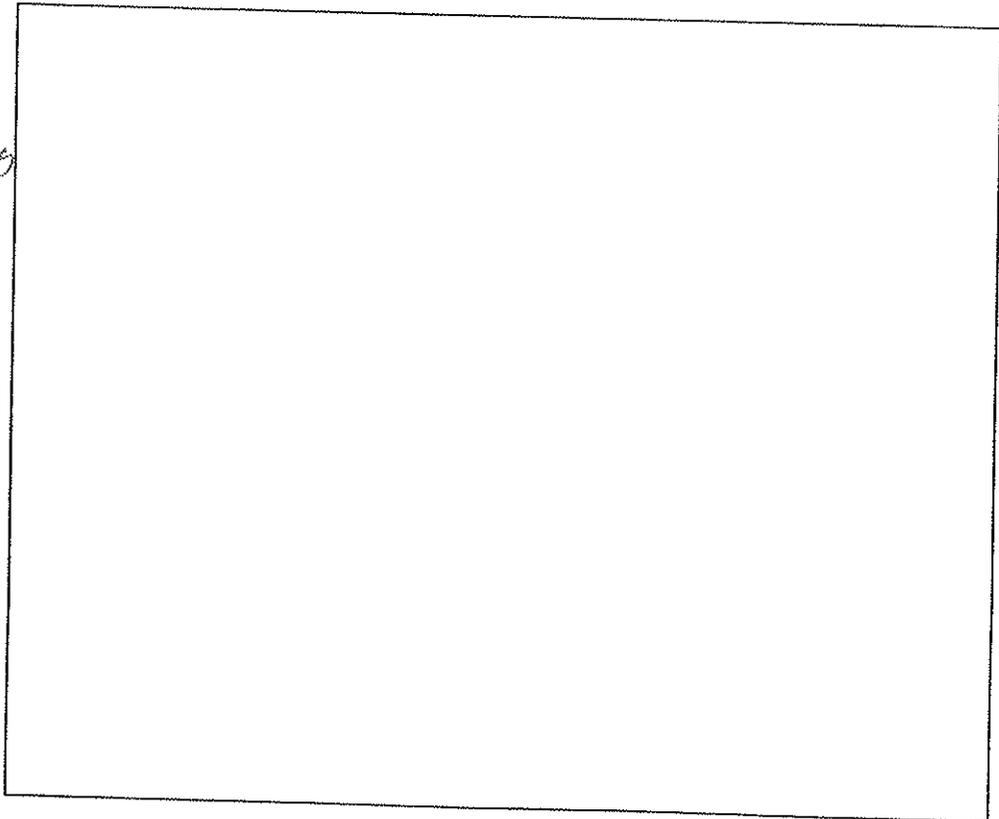
Job Number: 91795.04
 Sewer Reach: MH 327 to
MH 324
 Smoke Bomb at MH: 327
 Smoke Return No.: ---
 Street Location: 5300 22nd



Observed Smoke Return

Photo No.: 120
 Probable Cause: Area Drain collecting
All of DIW
Drainage

Recommended
 Rehab: _____

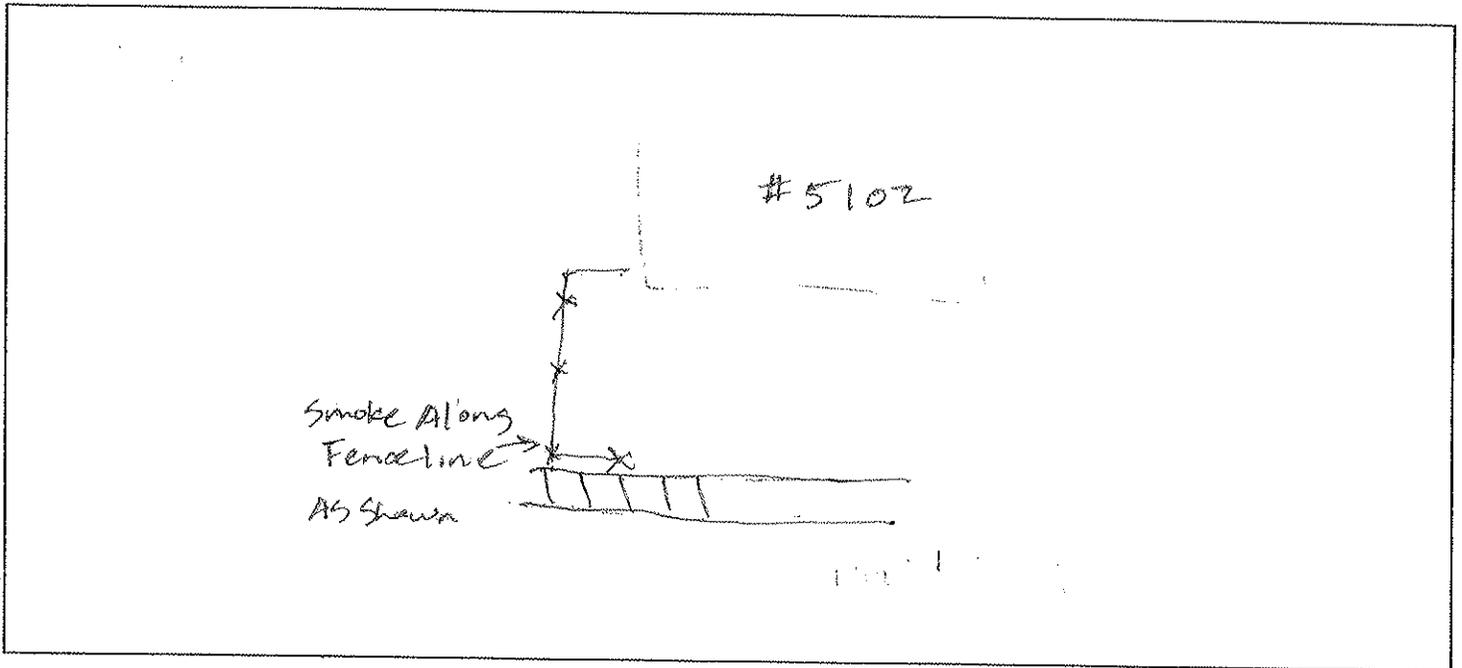


S-49

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 12-8-92
 Time: 4:30AM
 Observer: D.R.

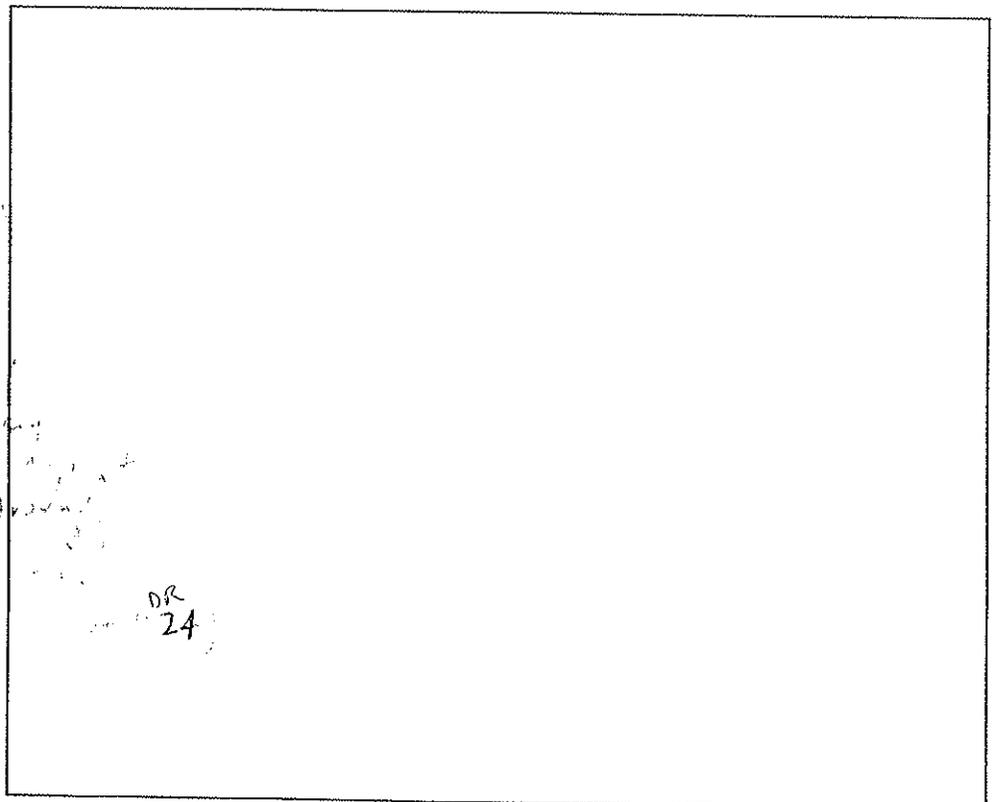
Job Number: 91795.04
 Sewer Reach: MH 5-150 to
MH 5-141 to 5-151
 Smoke Bomb at MH: 5-149
 Smoke Return No.: _____
 Street Location: _____



Observed Smoke Return

Photo No.: DR #21-23
 Probable Cause: _____
Broken Side Sewer
Smoke seen along
Fence line AS shown
50 LF

Recommended _____
 Rehab: _____



DR 24

SMOKE TEST RESULTS

Client: City of Lynnwood
Project: LS#10 I/I Study
Date: 12/8/02
Time: 10:50
Observer: _____

Job Number: 91795.04
Sewer Reach: MH3-2410
MH3-6
Smoke Bomb at MH: 320
Smoke Return No.: _____
Street Location: _____

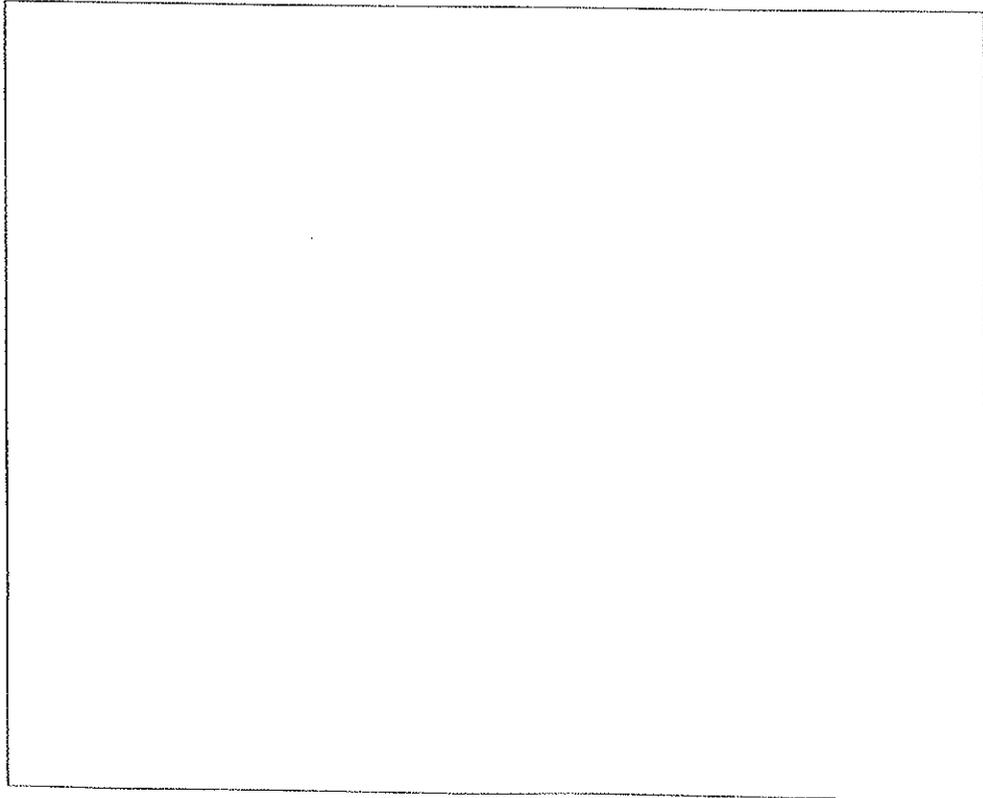
Source was covered w/ stickers, could not locate. Recommended area is cleared and source identified.

Cedar Valley

Observed Smoke Return

Photo No.: W.25
Probable Cause: _____

Recommended Rehab: _____



5-51

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 12/8/12
 Time: 2:50
 Observer: DLH

Job Number: 91795.04
 Sewer Reach: MH 5-16 to
MH
 Smoke Bomb at MH: 5-167
 Smoke Return No.: _____
 Street Location: S of 148th on line

Manhole 5-163 below grade
 -smoke from lift hole and on
 -recommend plugging hole at section lid
 -in bar spot susceptible to in they near control

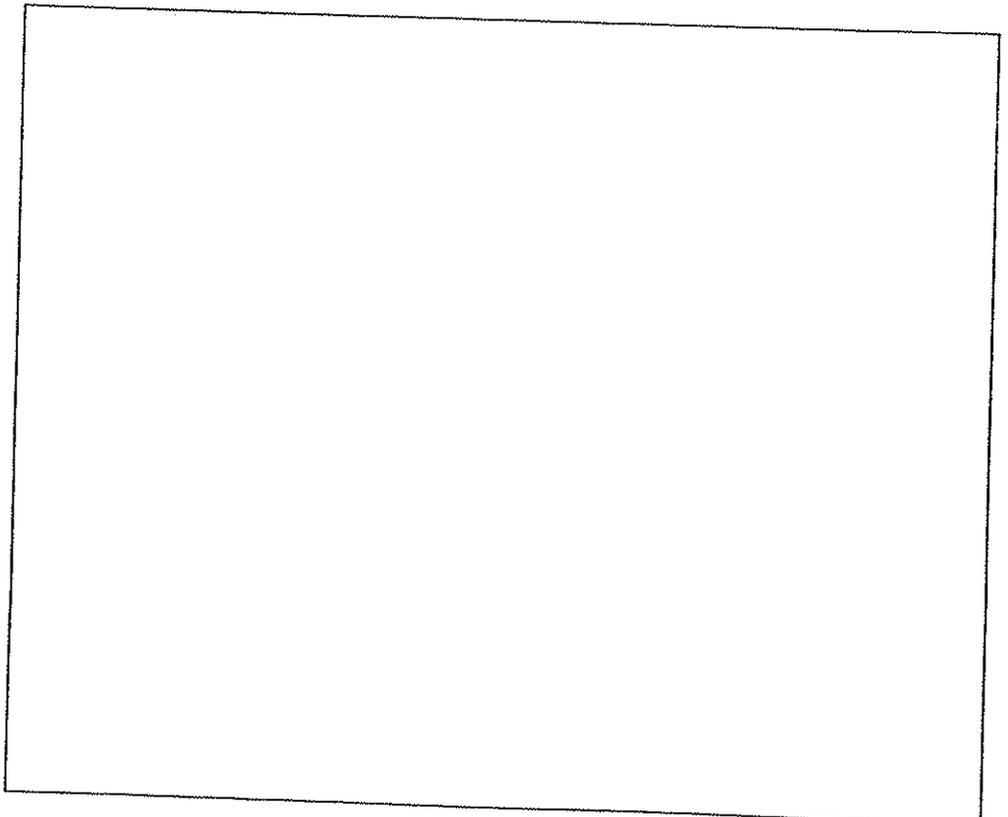
Observed Smoke Return

Photo No.: _____

Probable Cause: _____

Recommended

Rehab: _____

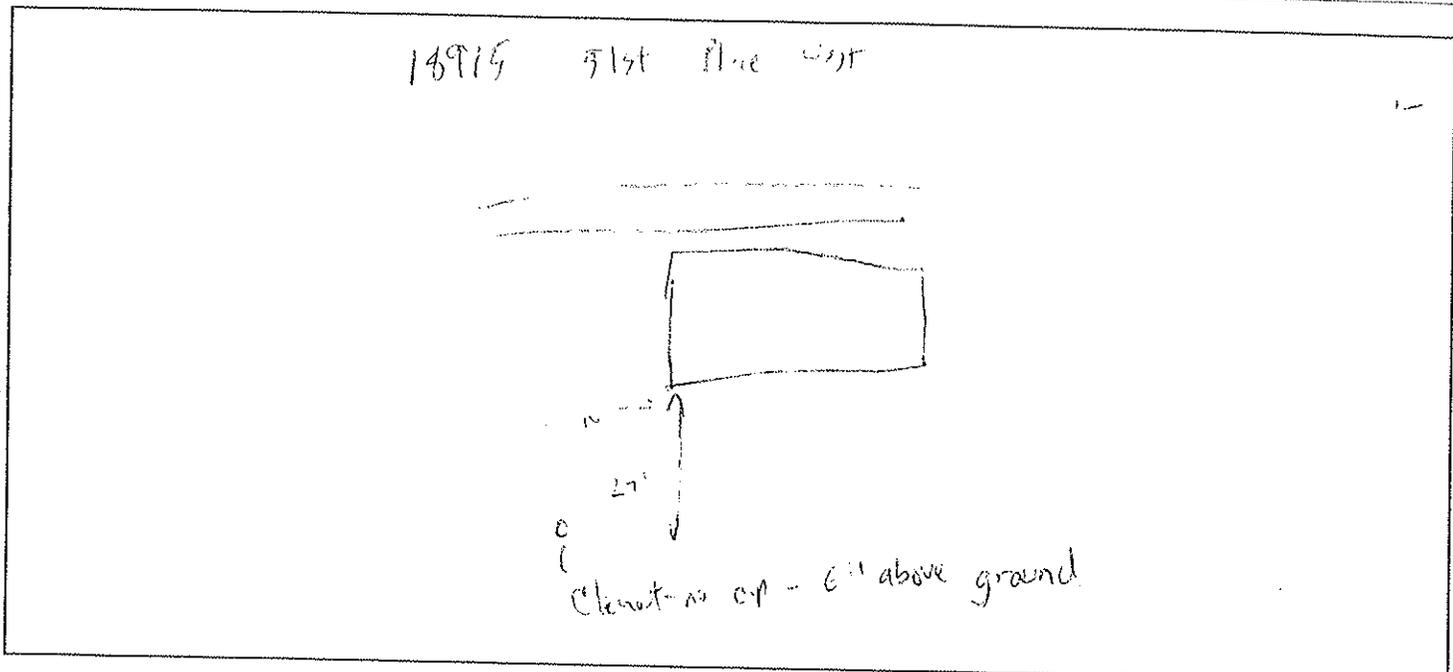


5-52

SMOKE TEST RESULTS

Client: City of Lynnwood
 Project: LS#10 I/I Study
 Date: 11/1/12
 Time: 1:30
 Observer: DRH

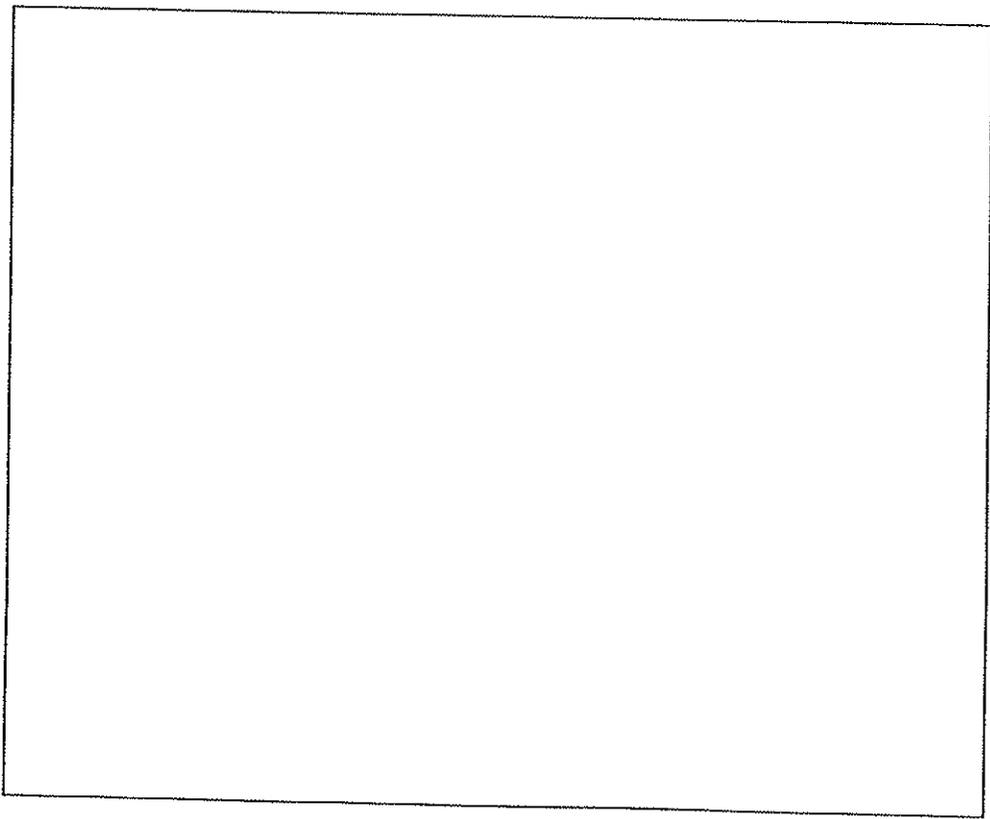
Job Number: 91795.04
 Sewer Reach: MH 5-113 to MH 5-113
 Smoke Bomb at MH: 5-113
 Smoke Return No.: _____
 Street Location: _____



Observed Smoke Return

Photo No.: DR-01
 Probable Cause: Cleanout
w. no cap

Recommended
 Rehab: inst cap

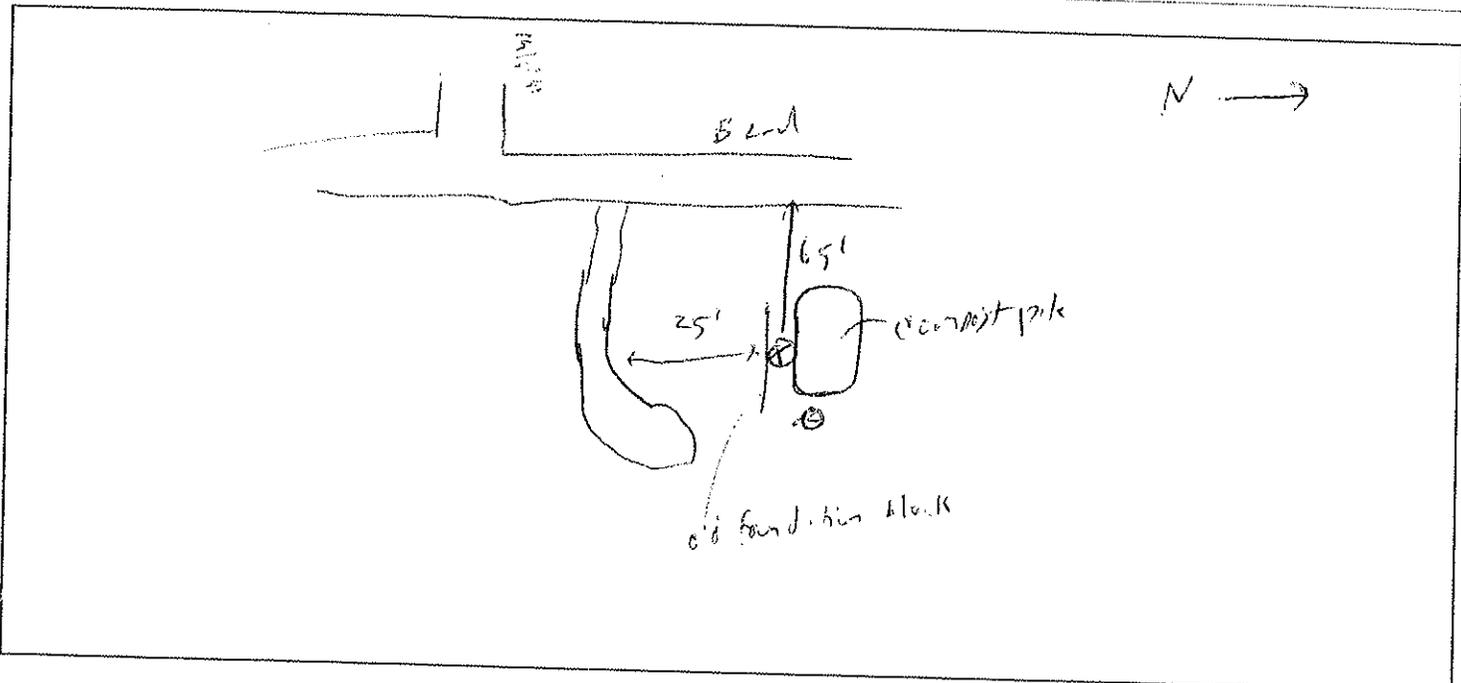


SMOKE TEST RESULTS

S-53

Client: City of Lynnwood
Project: LS#10 I/I Study
Date: 12/18/12
Time: 3:30
Observer: DWH

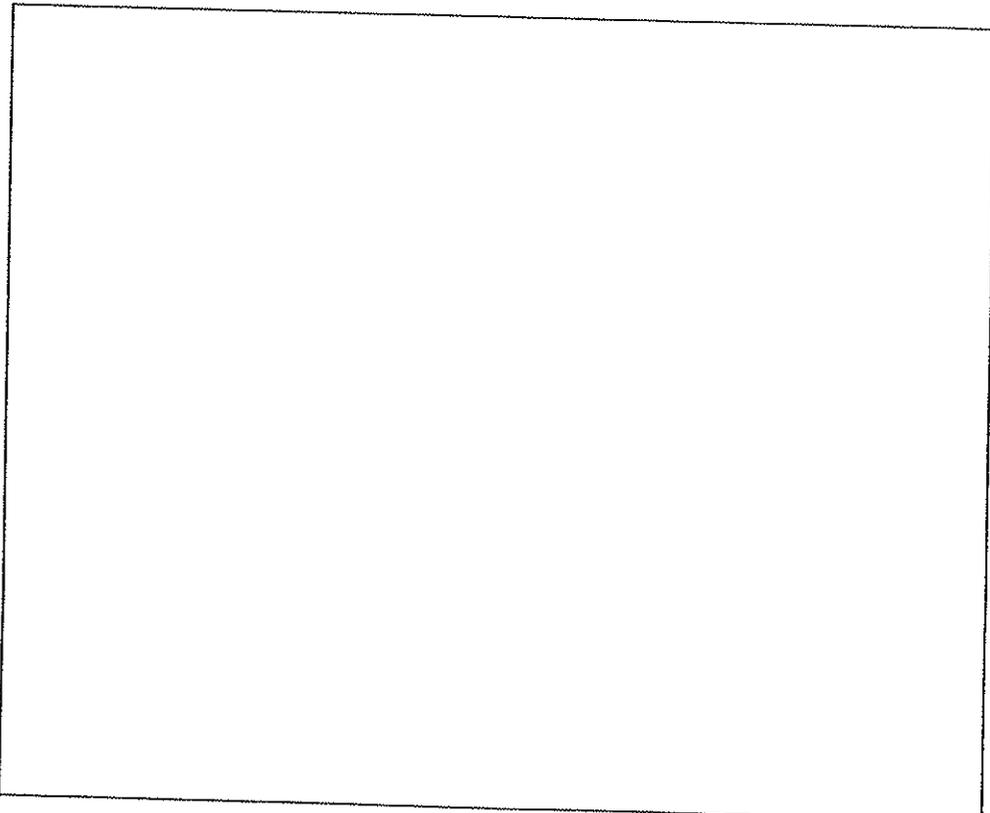
Job Number: 91795.04
Sewer Reach: MH 5-132 to
MH 5-130
Smoke Bomb at MH: 5-132
Smoke Return No.: _____
Street Location: 52nd ~ 1st St



Observed Smoke Return

Photo No.: 2
Probable Cause: _____
- old brick foundation with
SS connection not plugged
(buried, so hard to fill)

Recommended
Rehab: _____

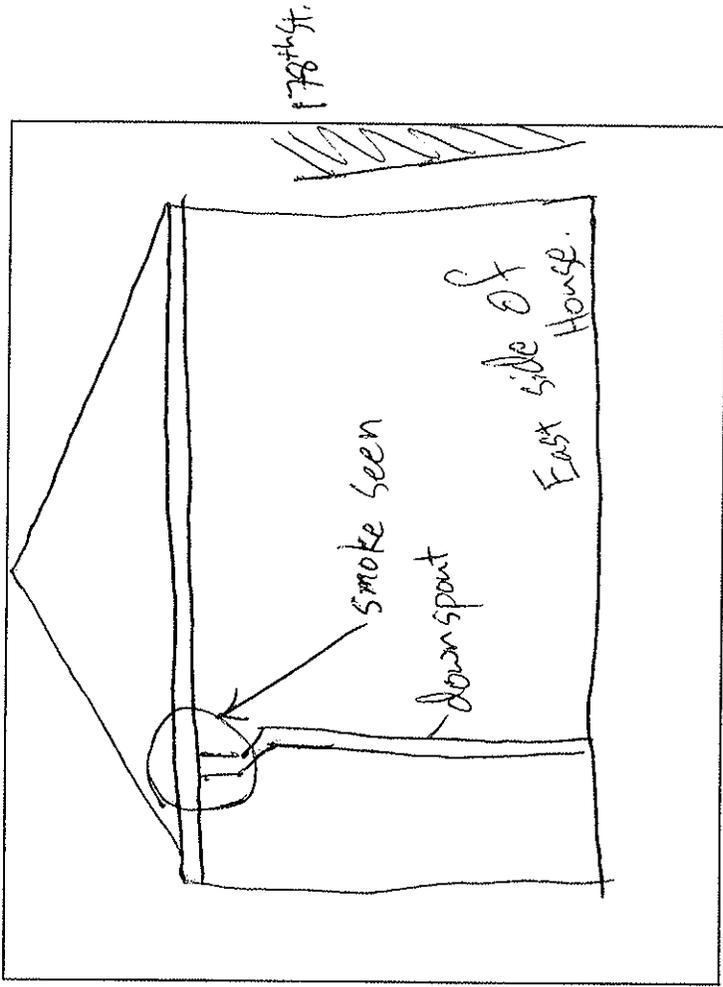


CITY OF LYNNWOOD I/I STUDY

REF #: S-54 DATE: 7/23/09
INSPECTOR: D.K. PHOTO NO. 38-41
LOCATION: 6013 178th St. SW

DESCRIPTION: 6013 178th St.
smoke seen coming from down
spout on East side of house

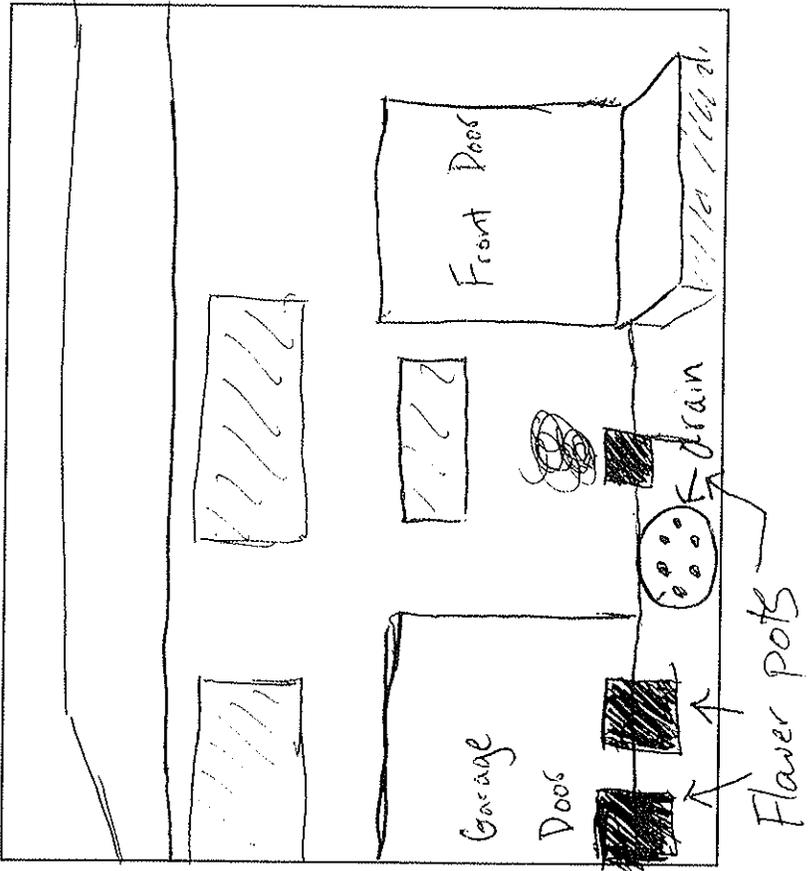
SKETCH



REF #: S-55 DATE: 7/23/09
INSPECTOR: D.K. PHOTO NO. 42-45
LOCATION: 5813 ~~182nd PL SW~~

DESCRIPTION: 5813
smoke seen ~~coming~~ coming from
large drain.

SKETCH

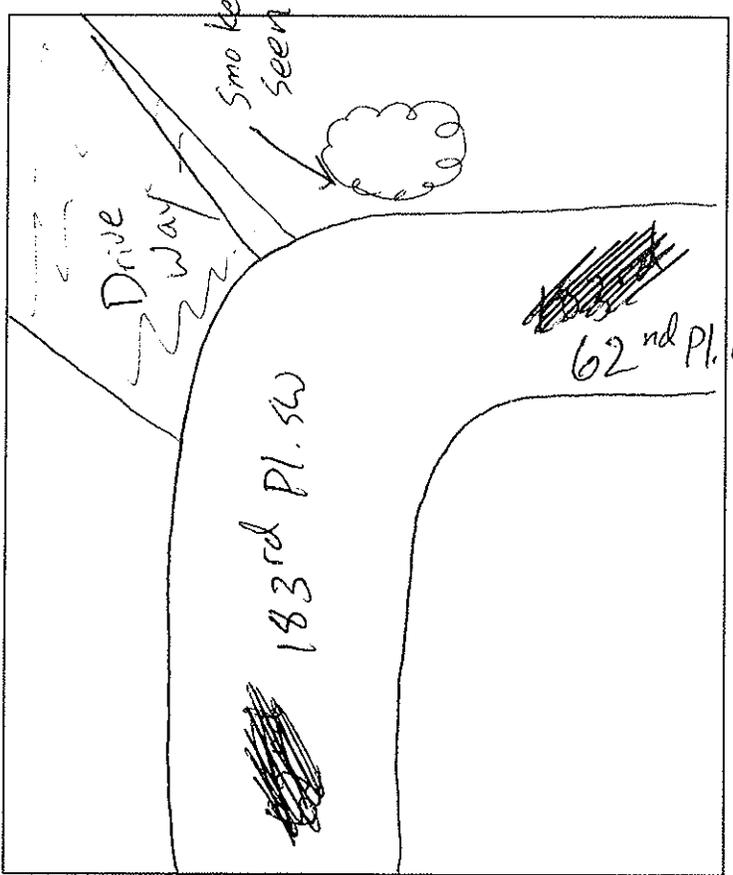


CITY OF LYNNWOOD III STUDY

REF#: 5-56 DATE: 7/23/09
INSPECTOR: D.K. PHOTO NO. 46-48
LOCATION: 6209 ~~183rd Pl. SW~~

DESCRIPTION: Smoke seen from gravel under bush, probably cracked sewer line.

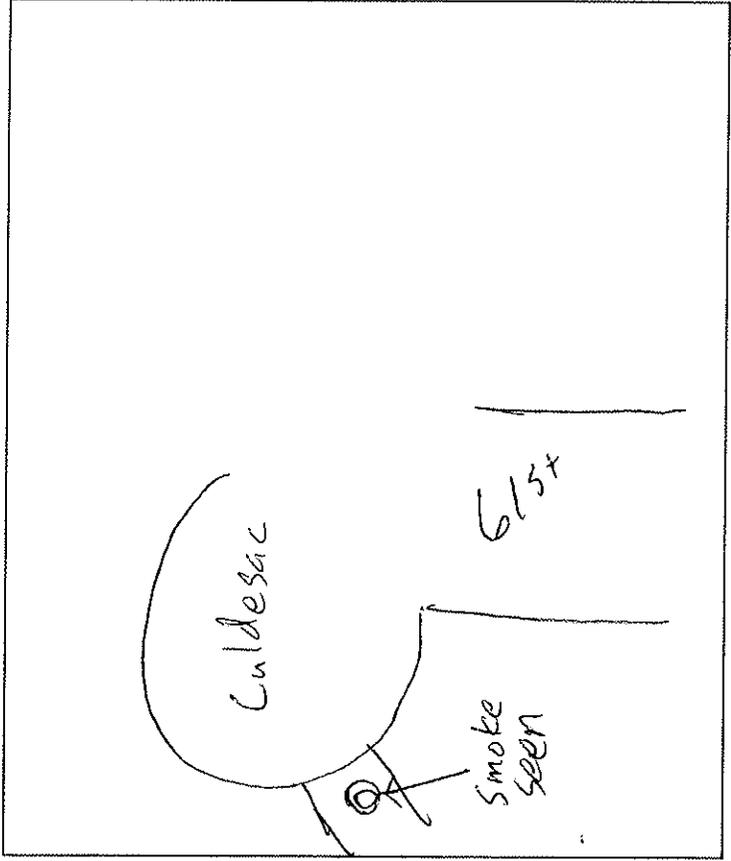
SKETCH



REF#: 5-57 DATE: 7/23/09
INSPECTOR: D.K. PHOTO NO. 49
LOCATION: 18416 61st ~~Pl. W~~

DESCRIPTION: loose concrete cap at grade. Minor

SKETCH



CITY OF LYNNWOOD I/I STUDY

REF #: 5-58

DATE: 7/24/09

INSPECTOR: D.K.

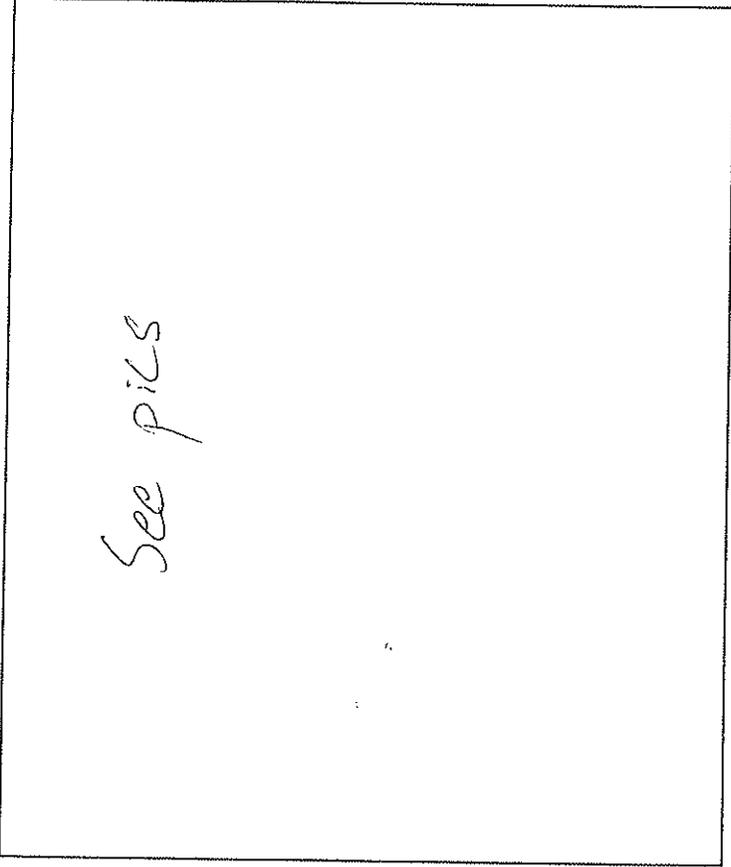
PHOTO NO. 50-54

LOCATION: 6230 ~~186~~ 186th St. SW

DESCRIPTION:

Open Cleanout in backyard
near pool with pipe running
into it.

SKETCH



DATE:

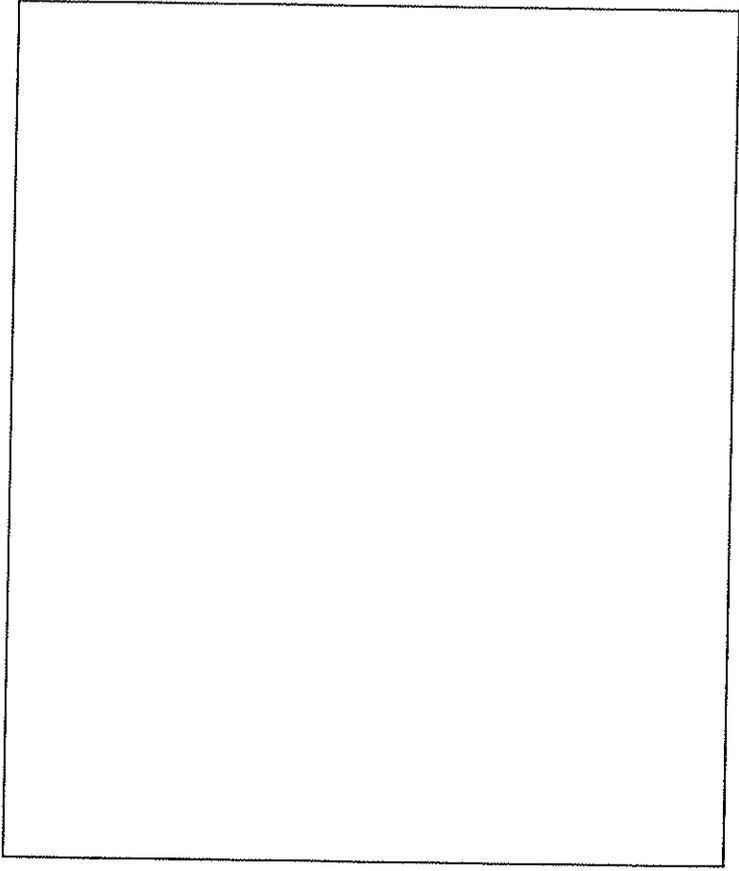
PHOTO NO.

INSPECTOR:

LOCATION:

DESCRIPTION:

SKETCH



CITY OF LYNNWOOD III STUDY

REF #: 5-59

DATE: 7/23/09

INSPECTOR: BS

PHOTO NO. 2

LOCATION: 4-148.1

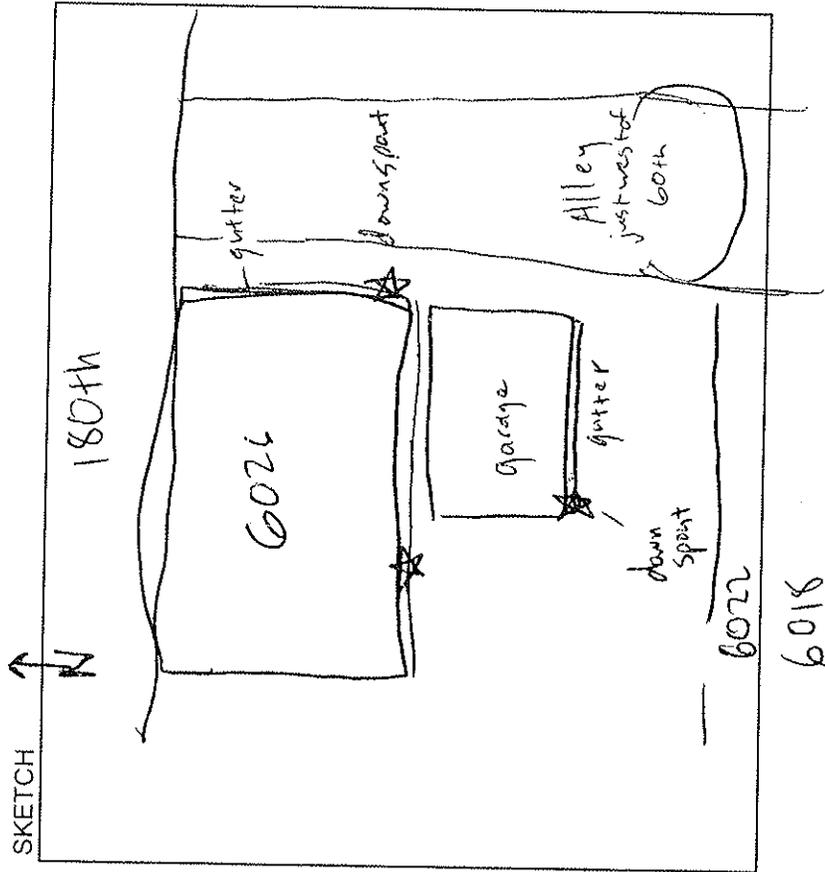
house SW of intersection

6026 (80th St SW)

DESCRIPTION:

3 gutter down spouts draining to sewer
2 on S side (1 garage) 1 on E side near kitchen window

SKETCH



REF #: 5-60

DATE: 7/23/2009

INSPECTOR: BS

PHOTO NO. 1

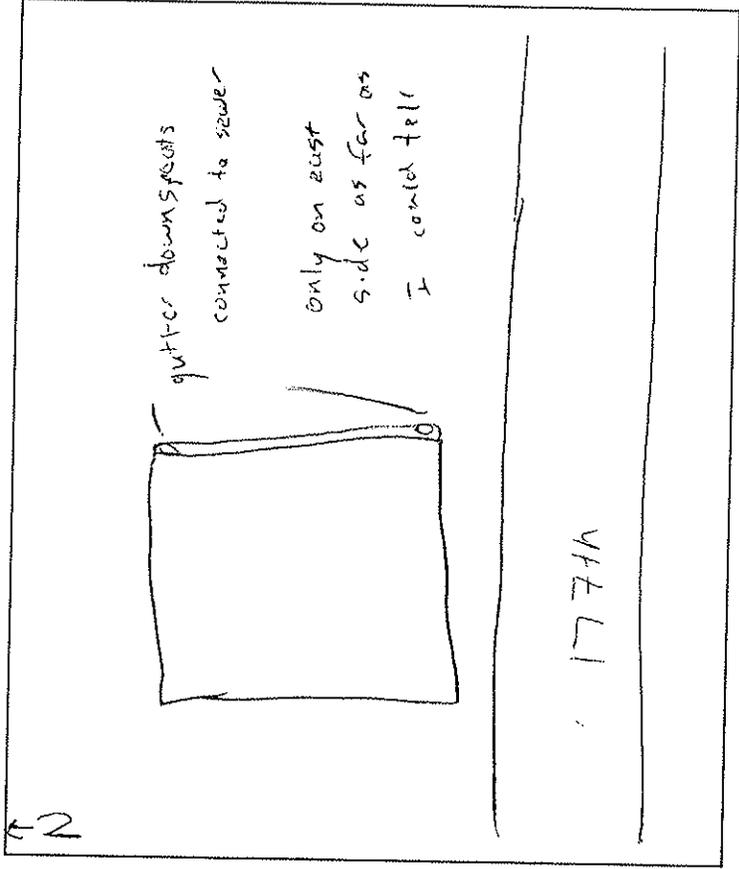
LOCATION: 6319 177th Pl SW

(just east of 64th)

DESCRIPTION:

two gutter down spouts striking on east side corner of house

SKETCH



CITY OF LYNNWOOD III STUDY

REF #: 5-61

DATE: 7/24/09

INSPECTOR: BS

PHOTO NO. 3

LOCATION: 9630 60th AVE.

DATE:

INSPECTOR:

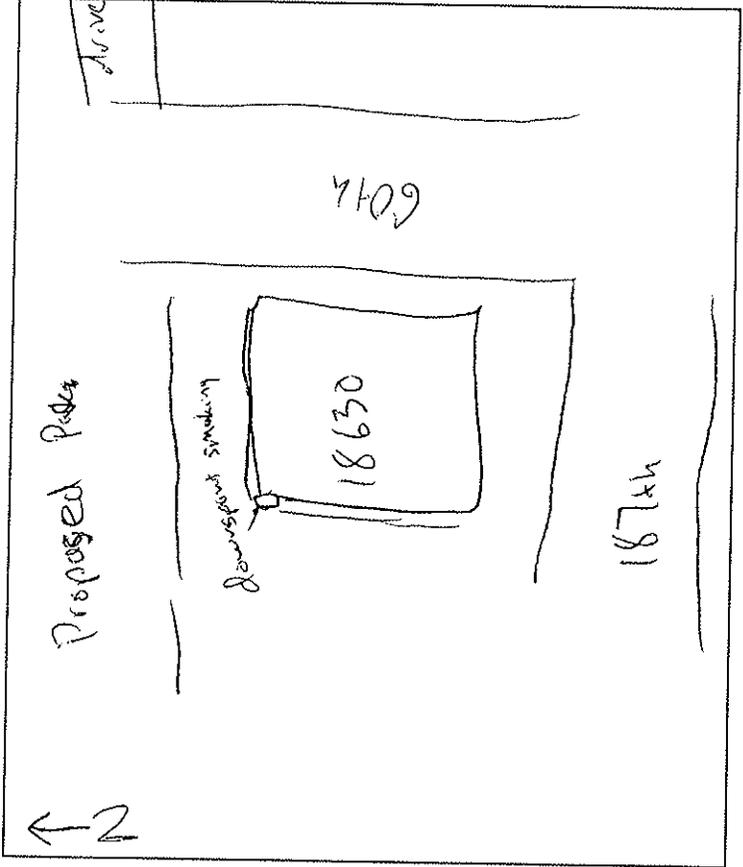
PHOTO NO.:

LOCATION:

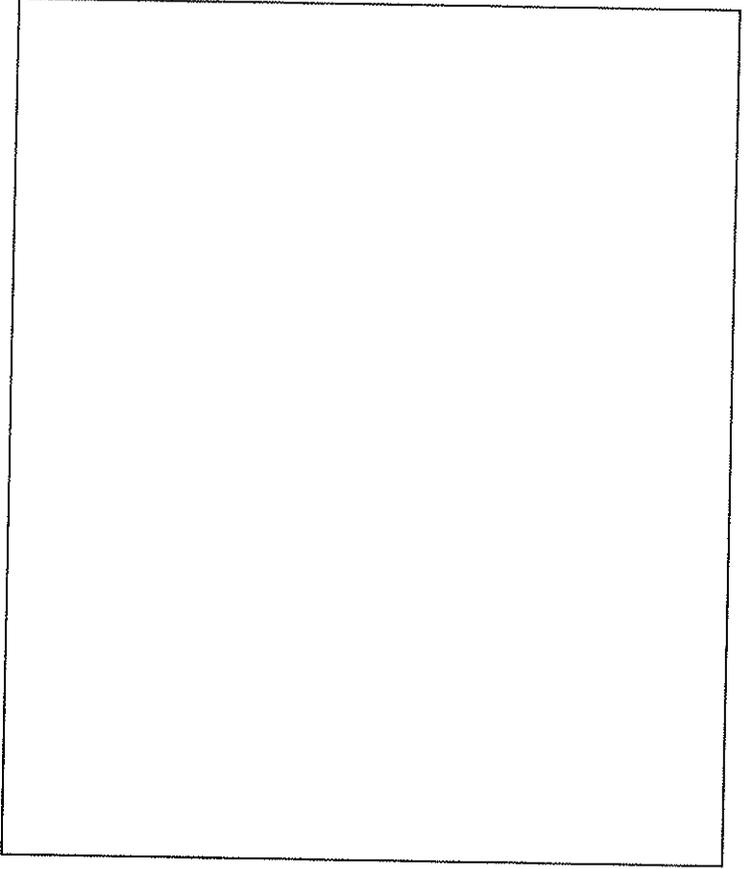
DESCRIPTION:

gutter smoking from W side of house
NW corner away from street

SKETCH



SKETCH



CITY OF LYNNWOOD I/I STUDY

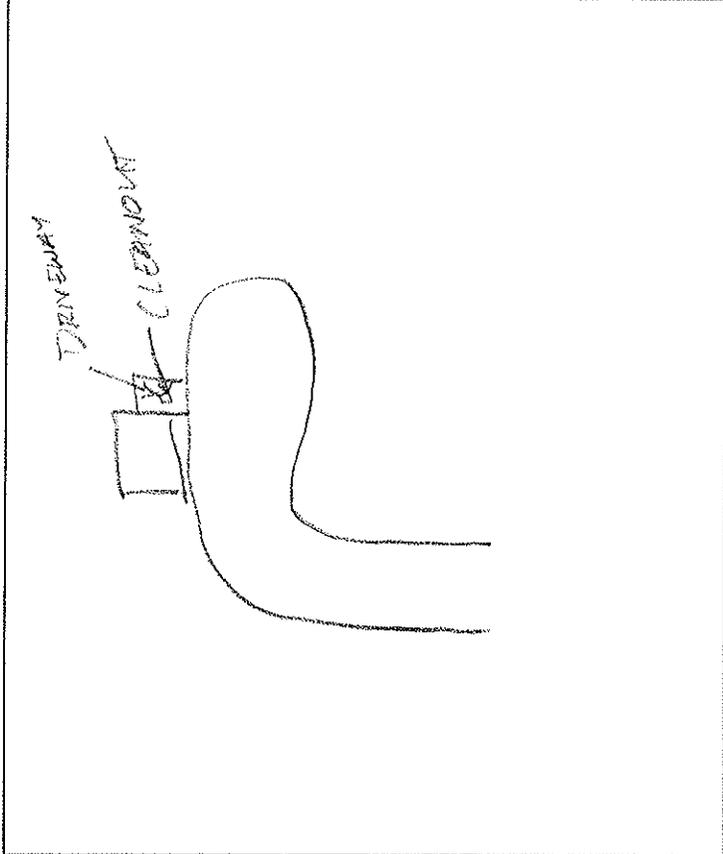
REF #: 5-62 DATE: 7/23/09

INSPECTOR: MSF PHOTO NO.

LOCATION: 6112 178th St SW

DESCRIPTION:
SMOKE COMING OUT OF
CLEANOUT BOX
NOT COMPLETELY SEALED

SKETCH



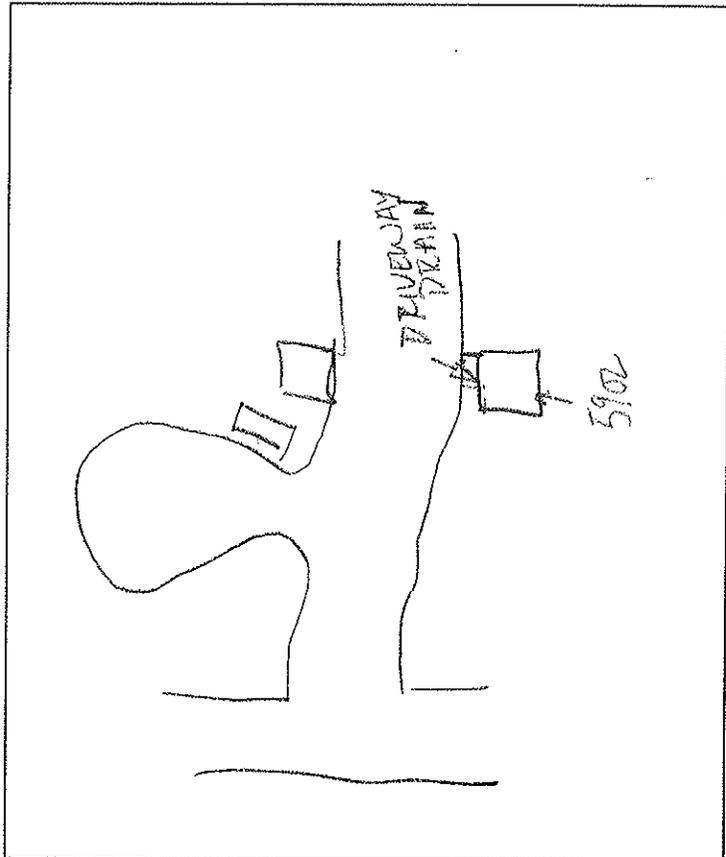
REF #: 5-63 DATE: 7/23/09

INSPECTOR: MSF PHOTO NO.

LOCATION: 5902 183rd St SW

DESCRIPTION:
DRAIN IN DRIVEWAY

SKETCH



CITY OF LYNNWOOD III STUDY

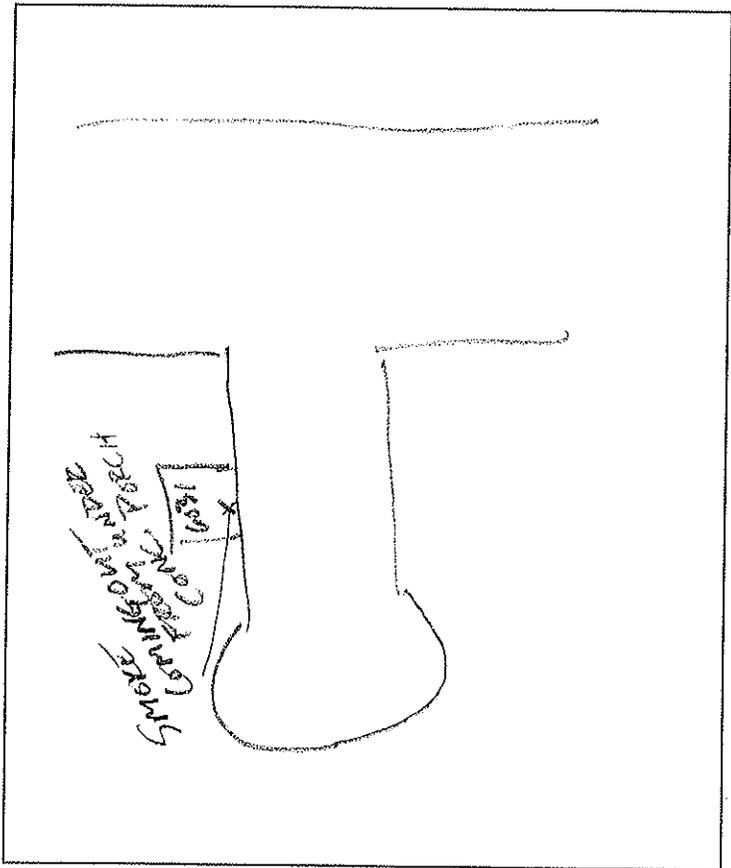
REF #: 5-64 DATE: 7/24/09

INSPECTOR: MSF PHOTO NO.

LOCATION: 6031 189TH PL SW.

DESCRIPTION: SMOKE COMING OUT FROM UNDER CONC. POCK

SKETCH



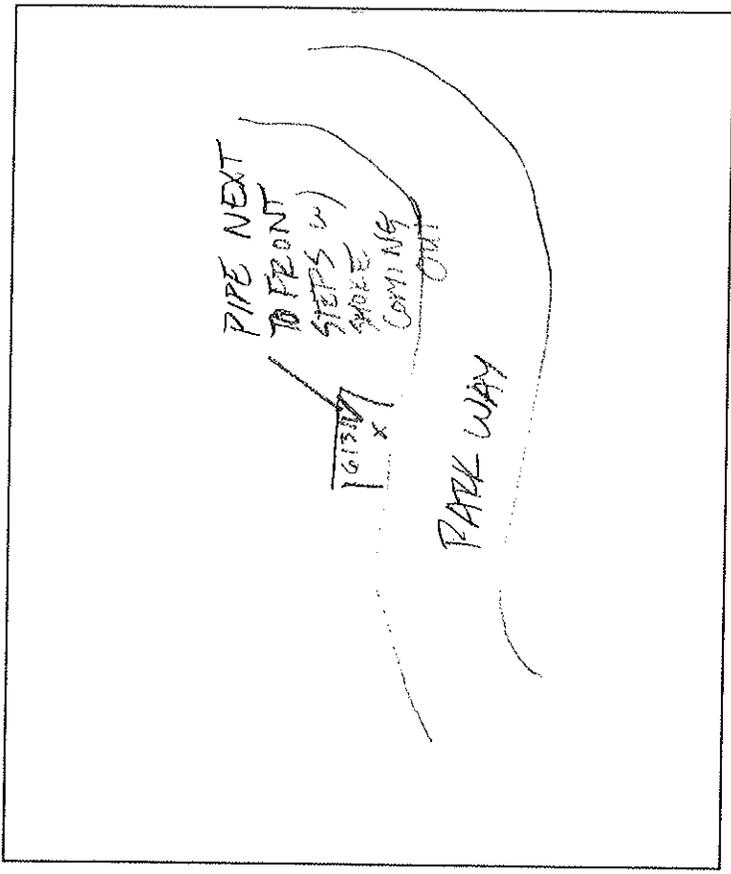
REF #: 5-65 DATE: 7/24/09

INSPECTOR: MSF PHOTO NO.

LOCATION: 6131 PARKWAY

DESCRIPTION: SURFACED PIPE THAT IS OPEN W/ SMOKE COMING OUT

SKETCH



CITY OF LYNNWOOD III STUDY

REF#: 5-66

DATE:

07/29/2009

INSPECTOR:

Dan Fergues

PHOTO NO.

LOCATION:

6303 108th St SW

INSPECTOR:

DATE:

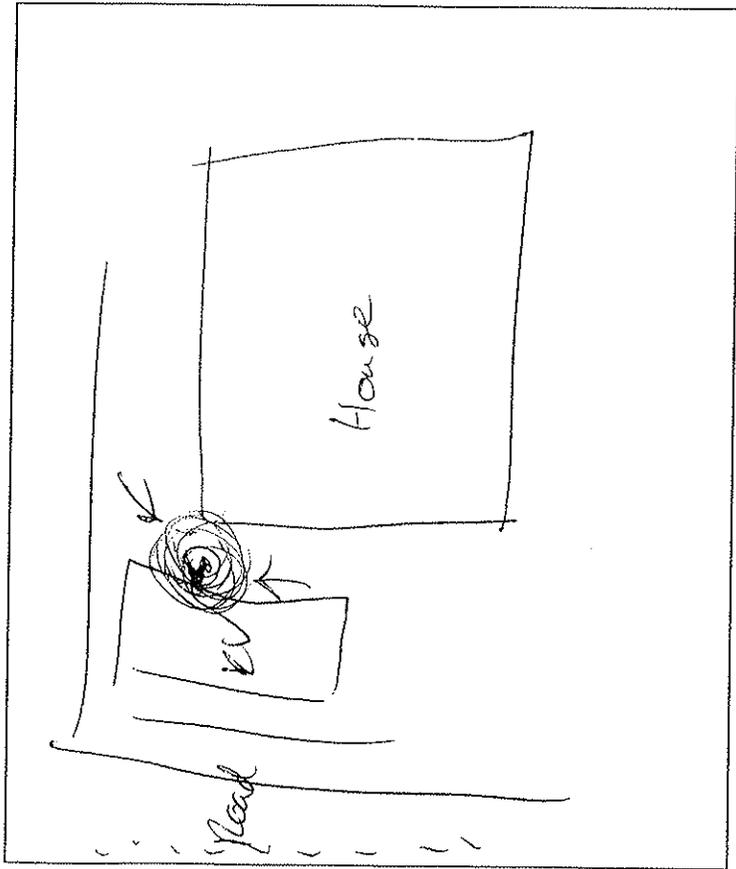
PHOTO NO.

LOCATION:

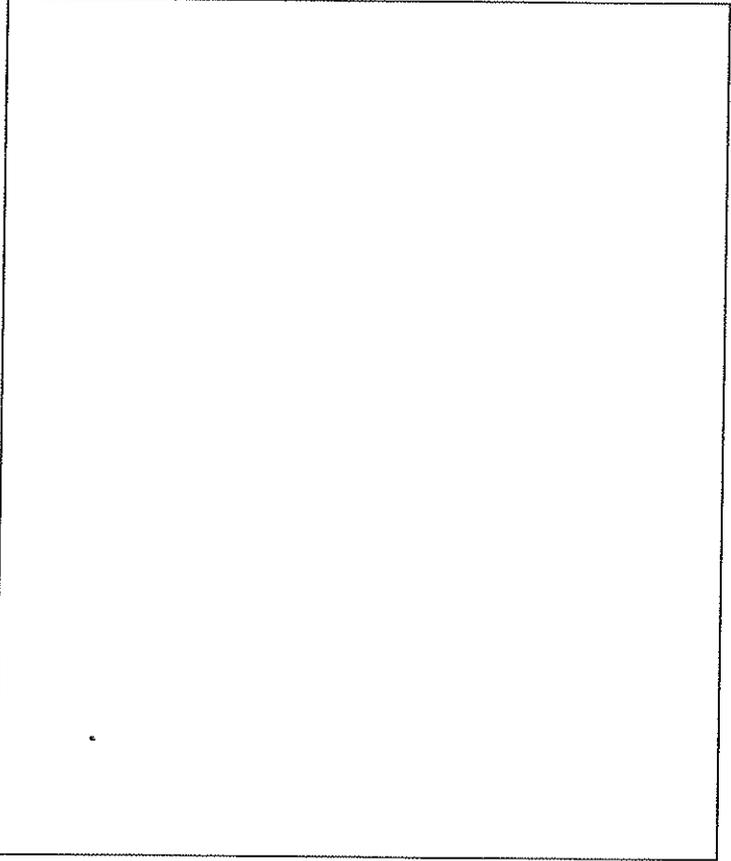
DESCRIPTION:

RV hook up leaking

SKETCH



SKETCH



CITY OF LYNNWOOD III STUDY

REF #: 5-67

DATE: 8/12/09

INSPECTOR: DK

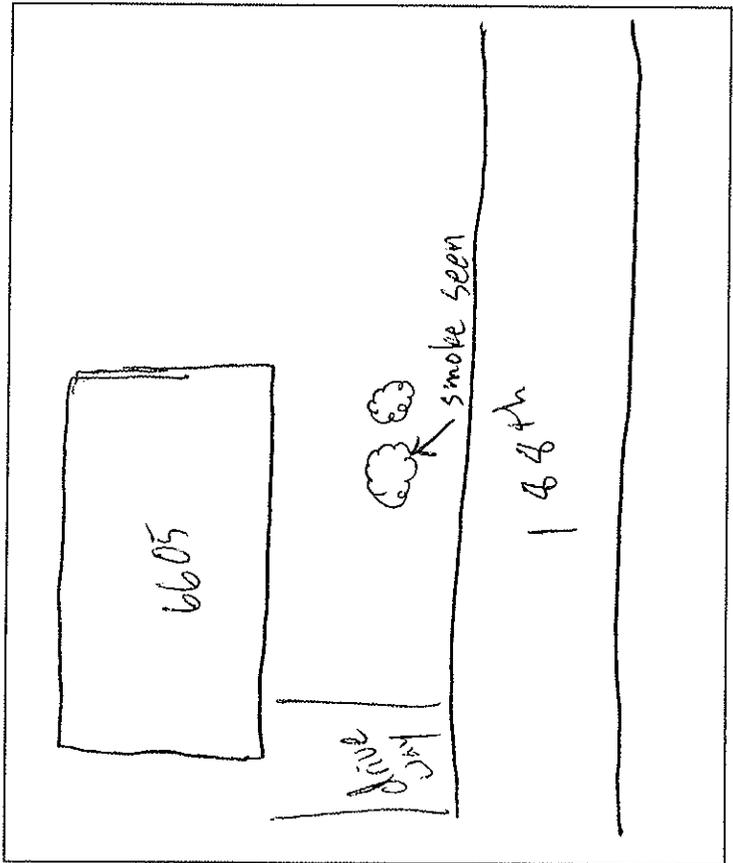
PHOTO NO. 109 - III

LOCATION: 6605 148th St SW

DESCRIPTION:

Uncapped pipe above grade near fern and bush in front yard

SKETCH



REF #: 5-68

DATE: 9/13/09

INSPECTOR: DK

PHOTO NO. 112 - 115

LOCATION: Jack Carroll's Lynnwood Dodge East side of building

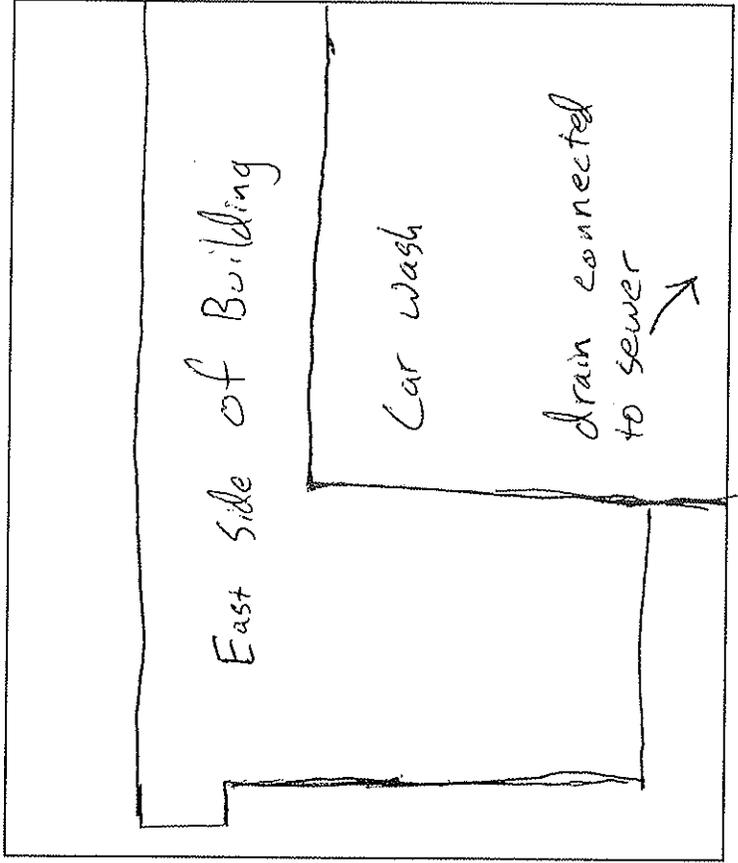
~~20606 68th Ave W.~~

20612 Hwy 99

Drain under car wash

DESCRIPTION:

SKETCH



68th St

CITY OF LYNNWOOD III STUDY

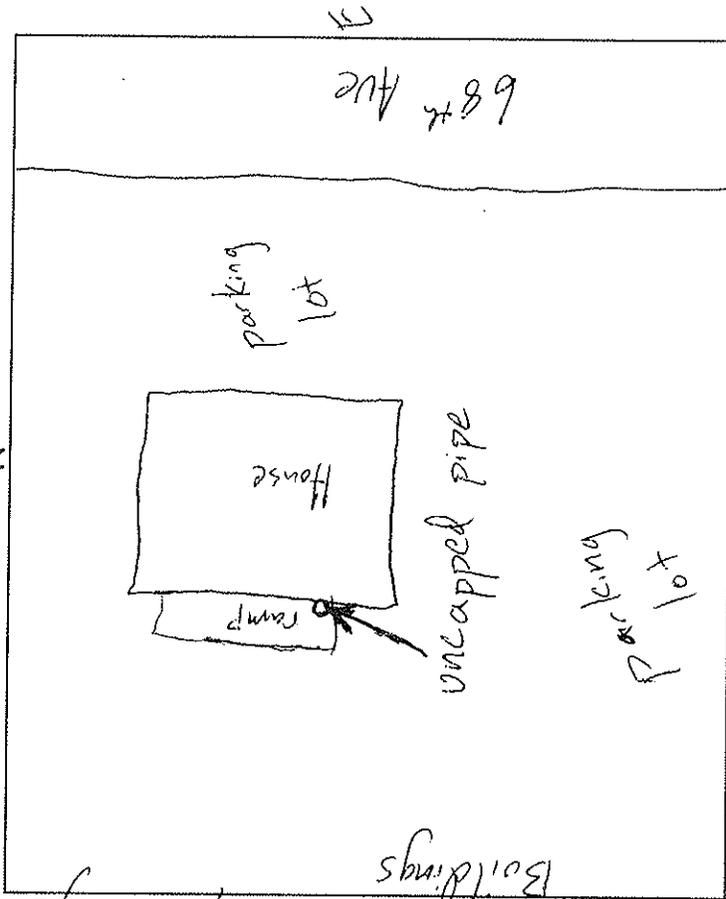
REF #: S-69 DATE: 8/13/09

INSPECTOR: DK PHOTO NO. 116-119

LOCATION: ~~20014 68th Ave W~~
20014 68th Ave W
Small house for International Students Welcome Center

DESCRIPTION: smoke seen from uncapped pipe on back side of house

SKETCH



REF #: S-70 DATE: 8/13/09

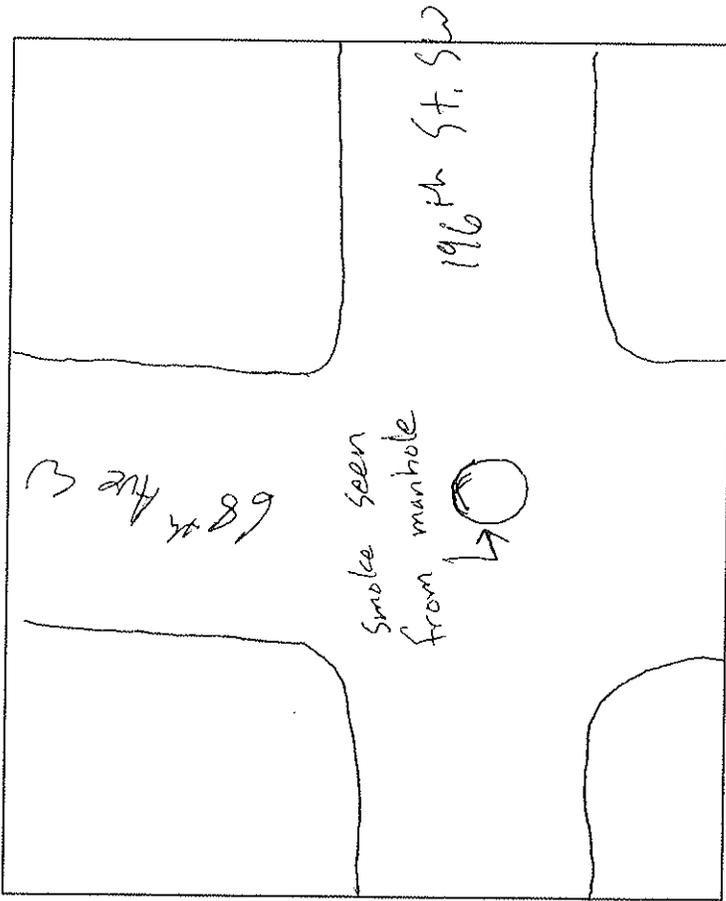
INSPECTOR: DK PHOTO NO. 120-121

LOCATION: 196th St SW and 68th Ave W

DESCRIPTION:

man hole saw pad seal in the middle of the intersection

SKETCH



CITY OF LYNNWOOD III STUDY

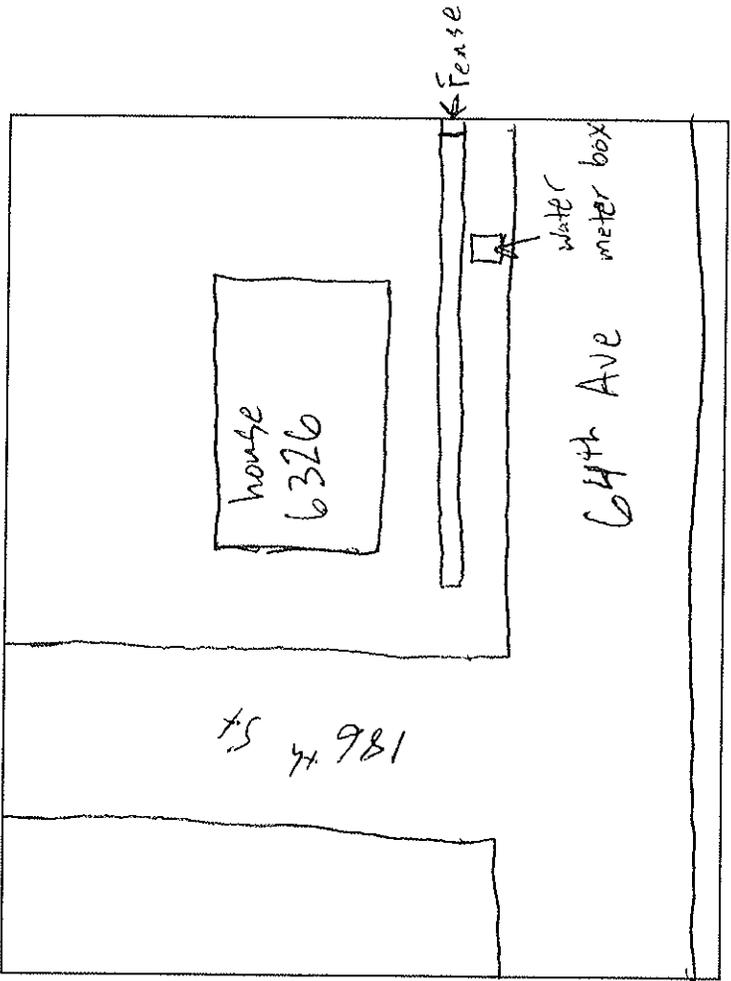
REF #: 5-71 DATE: 8/13/09

INSPECTOR: DK PHOTO NO. 122-124

LOCATION: 6326 186th St, SW

DESCRIPTION: Smoke coming from water meter box, probably just a cleanout.

SKETCH



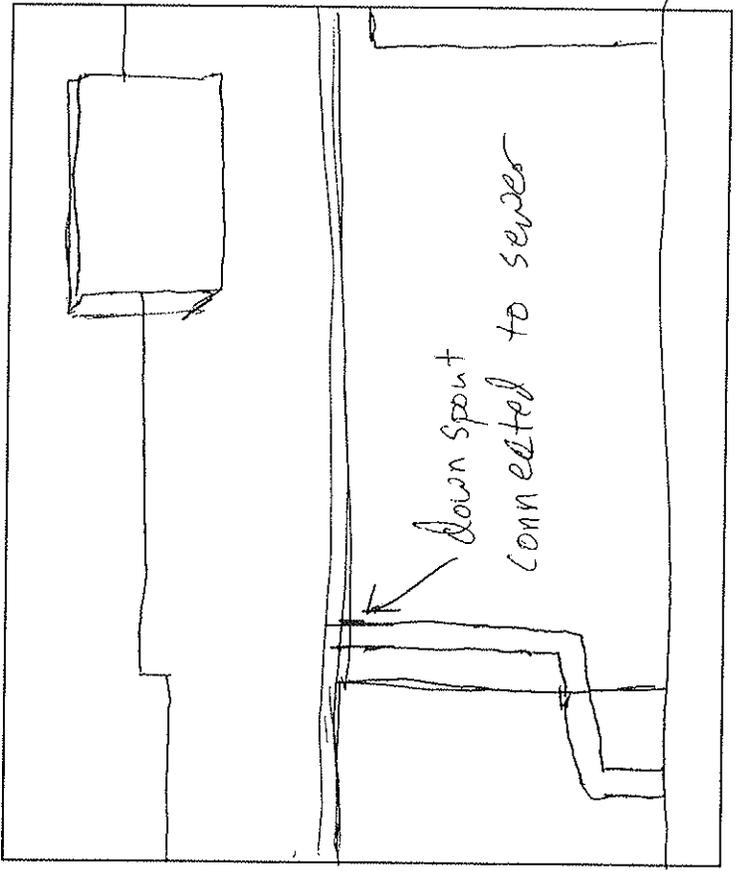
REF #: 5-72 DATE: 8/14/09

INSPECTOR: DK PHOTO NO. 125-128

LOCATION: 6629 204th

DESCRIPTION: Downspout connected to sewer

SKETCH



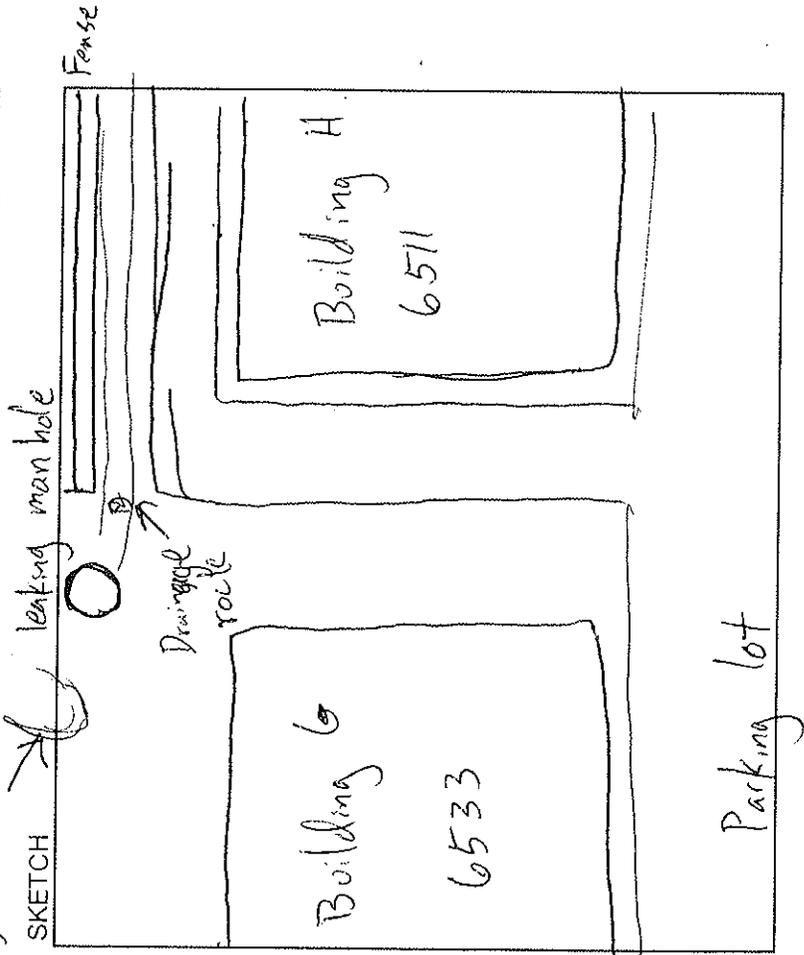
CITY OF LYNNWOOD III STUDY

REF #: 5-73 DATE: 8/14/09

INSPECTOR: DK PHOTO NO. 129-135

LOCATION: Between Buildings G 6533 and H 6511

DESCRIPTION: Small stream
Water was leak into manhole near stream



DATE:

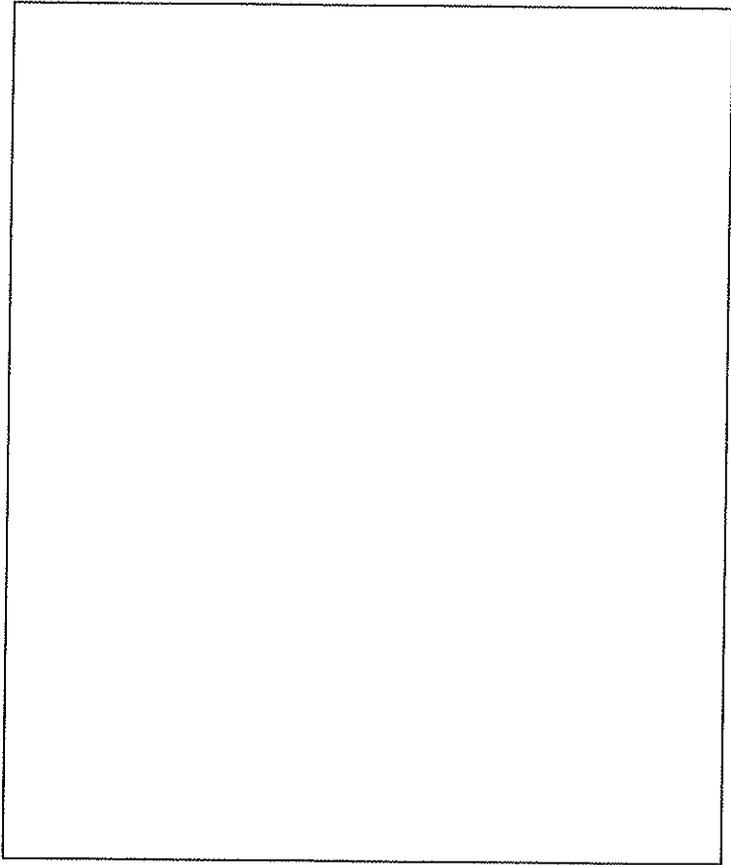
PHOTO NO.

INSPECTOR:

LOCATION:

DESCRIPTION:

SKETCH



CITY OF LYNNWOOD III STUDY

REF #: 5-74

DATE:

8/19/09

INSPECTOR:

MSF

PHOTO NO.

DATE:

INSPECTOR:

PHOTO NO.

LOCATION:

0506, 0512, 0514 7000E

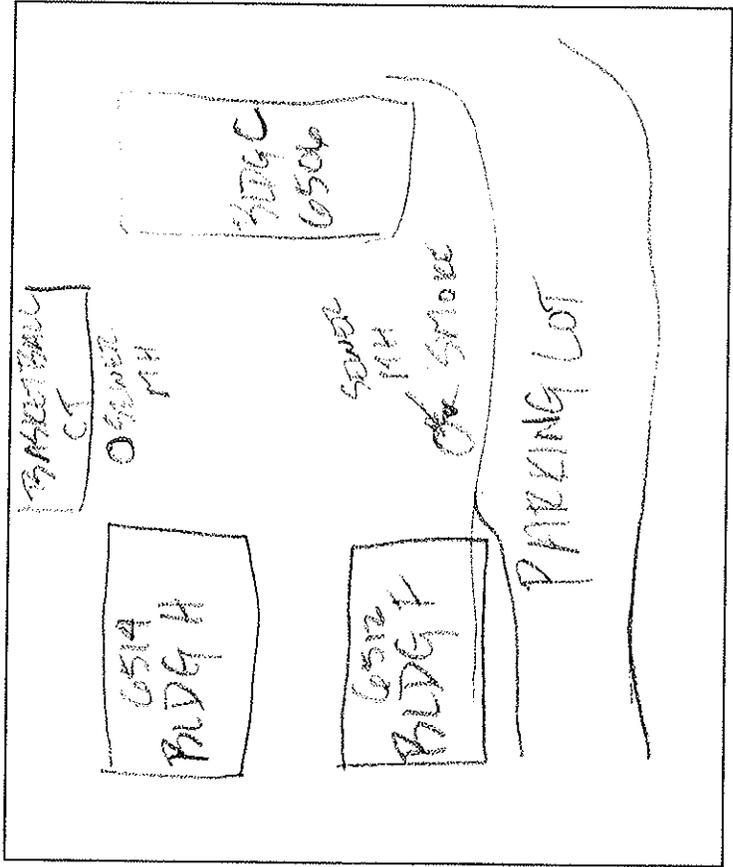
LOCATION:

DESCRIPTION:

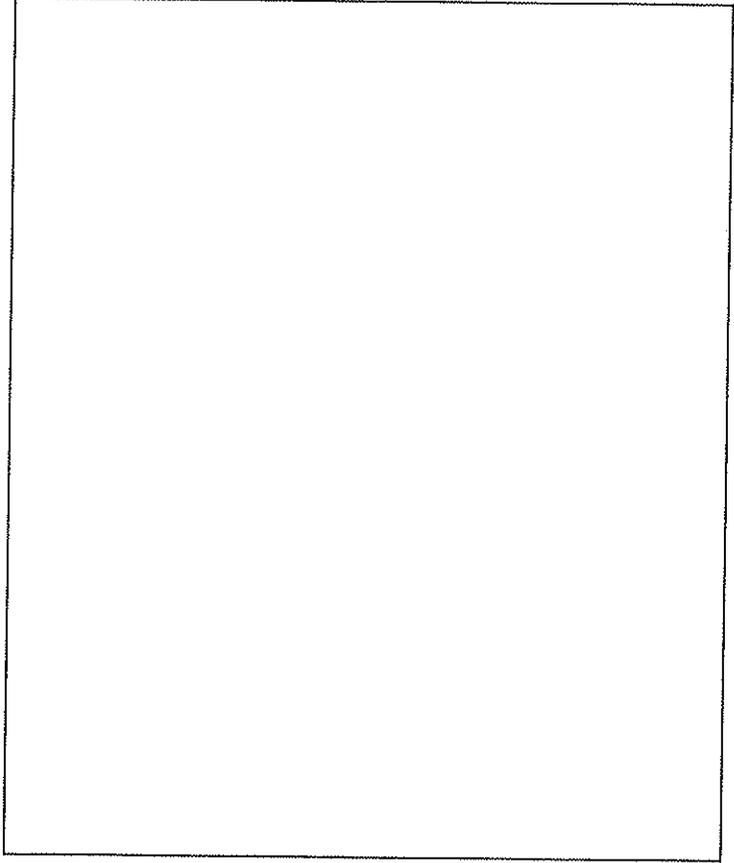
SMALL BUILDING OUT
BASE OF MF TOP
TOP PARTIALLY EXPOSED

DESCRIPTION:

SKETCH



SKETCH



Basin 7

REF #: S-75

DATE:

8/14

INSPECTOR:

BS

PHOTO NO.

1

LOCATION:

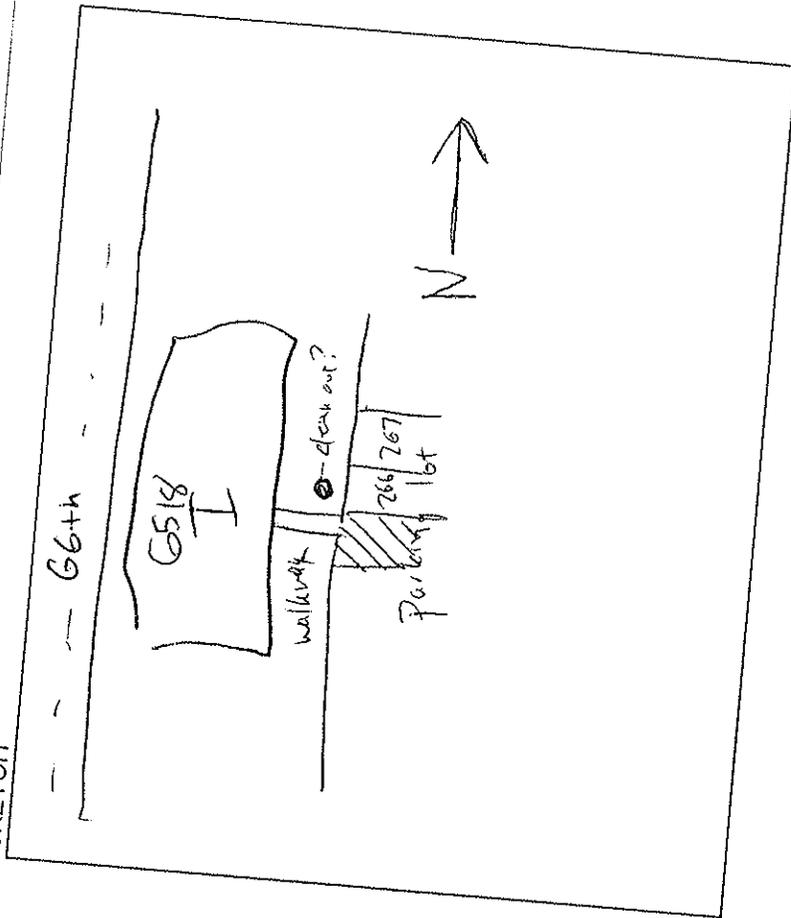
Next to parking stall 266

6514 Building I 208th

DESCRIPTION:

~~cleanout~~
Cleanout covered by stove dish
possible drain outlet?

SKETCH



CITY OF LYNNWOOD III STUDY

REF #: 5-76

DATE: 08/13/2009

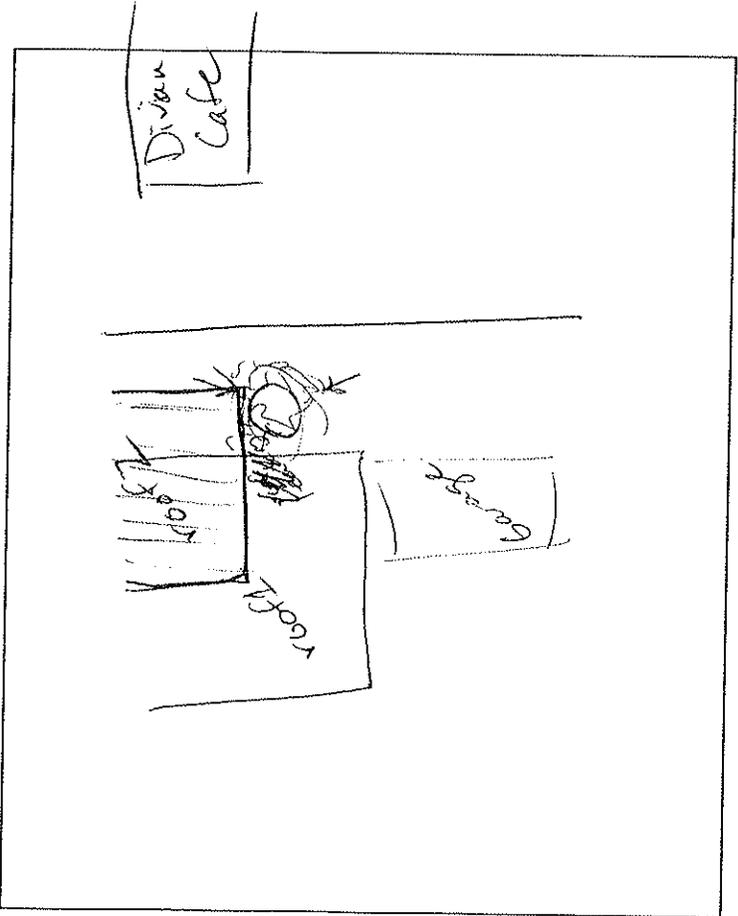
INSPECTOR: Dan Ferguson

LOCATION: 20107 68th Ave N / next to 20113 68th Ave N

DESCRIPTION:

yard seems to be vent small amount of smoke

SKETCH



REF #: 5-77

DATE: 08/13/2009

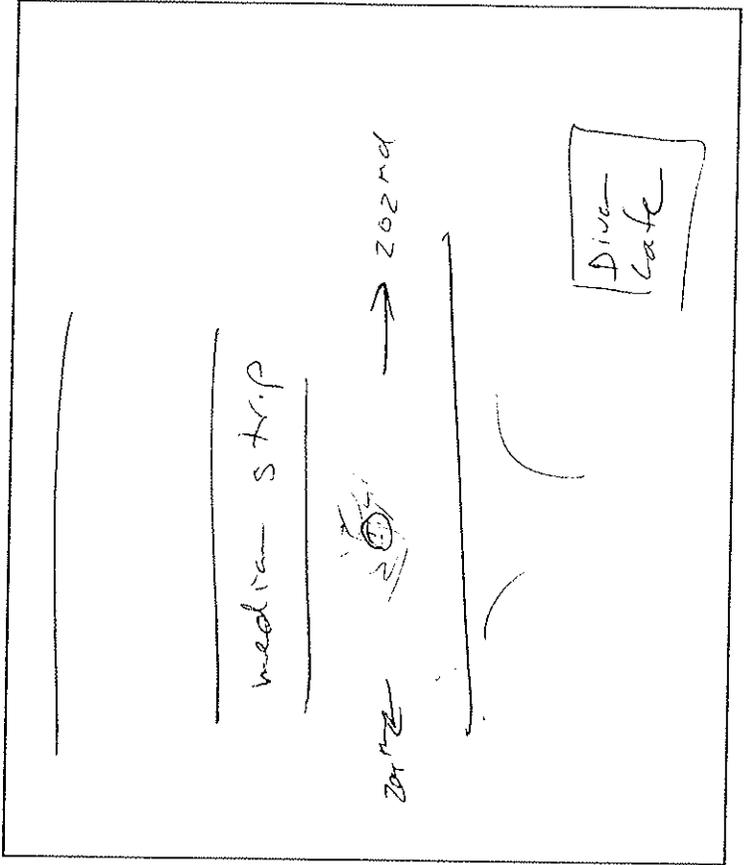
INSPECTOR: Dan Ferguson

LOCATION: In front of Divan Cafe 20113 68th Ave N

DESCRIPTION:

small sewer cover leaking a moderate amount of smoke

SKETCH



CITY OF LYNNWOOD I/I STUDY

REF #: S-78

DATE: 8/5/09

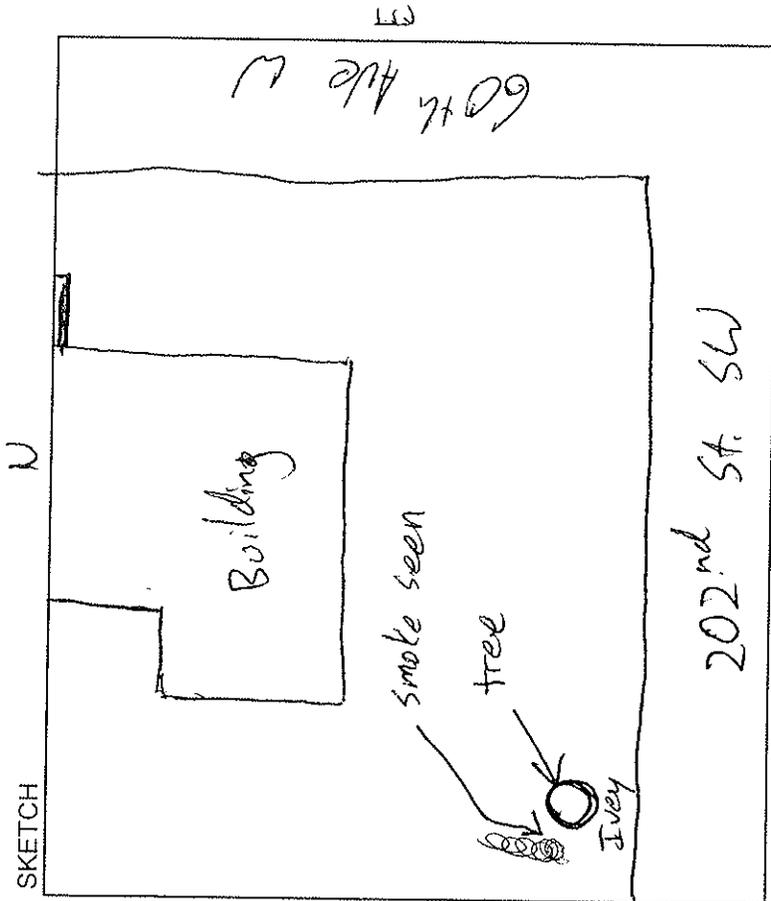
INSPECTOR: DK

PHOTO NO. 64-67

LOCATION: Smoke seen coming from ivy near a tree on the SW corner of the building
6001 202nd St. SW

DESCRIPTION: Unknown source, covered by ivy

SKETCH



REF #: S-79

DATE: 8/5/09

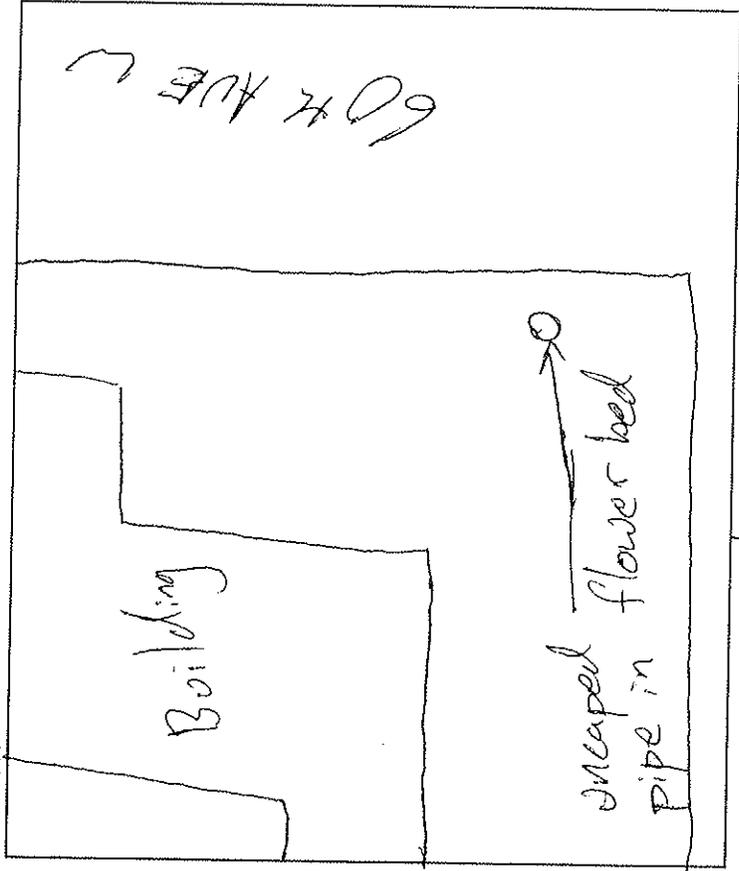
INSPECTOR: DK

PHOTO NO. ~~68-8~~

LOCATION: 6001 202nd St. SW

DESCRIPTION: Uncapped pipe in flower bed on east side of building

SKETCH



CITY OF LYNNWOOD III STUDY

REF#: 5-80

DATE: 8/5/09

INSPECTOR: DK.

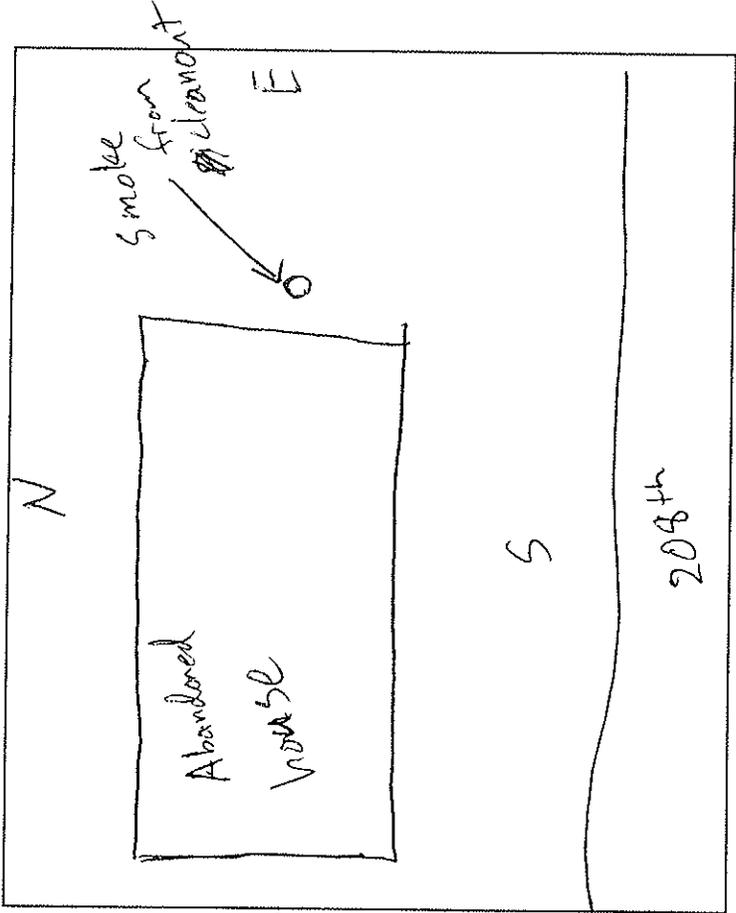
PHOTO NO. 71-73

LOCATION: 6109 208th St. SW

DESCRIPTION:

cracked cleanout on East side of base abandoned

SKETCH



REF#: 5-81

DATE: 8/5/09

INSPECTOR: DK.

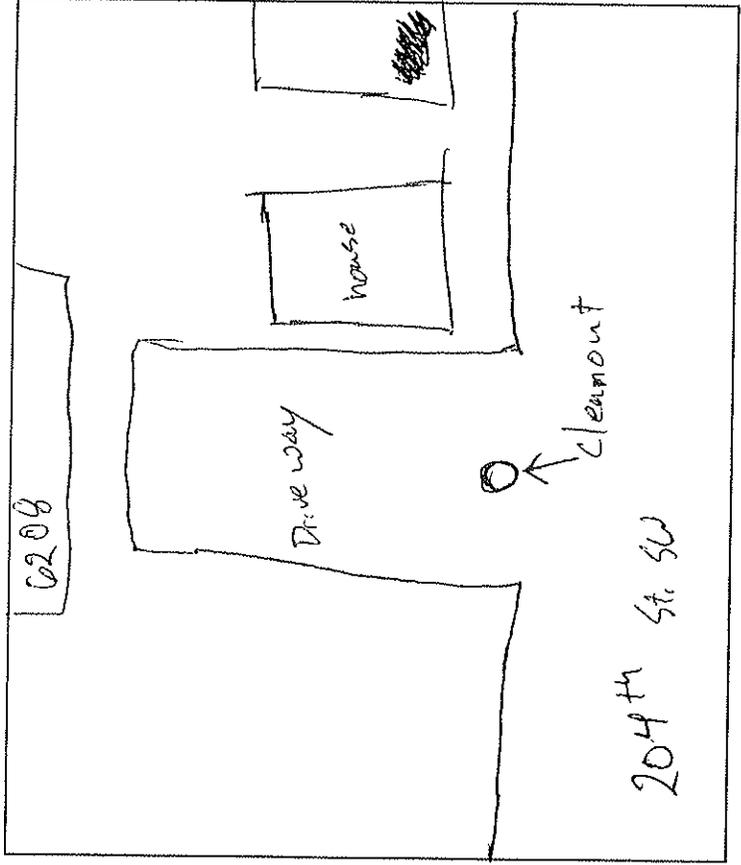
PHOTO NO. 74-76

LOCATION: ~~6208 A~~ 704th St. SW

DESCRIPTION:

loose cleanout cap

SKETCH



CITY OF LYNNWOOD I/I STUDY

REF #: 5-82

DATE:

6/5/09

INSPECTOR:

D.C.

PHOTO NO.

77 - 80

LOCATION:

trailer park marked on map off
of 204th St. SW

mobile - lyn mobile ranch 6208 202nd St SW

DESCRIPTION:

Empty lot, smoke coming from
sewer connection

DATE:

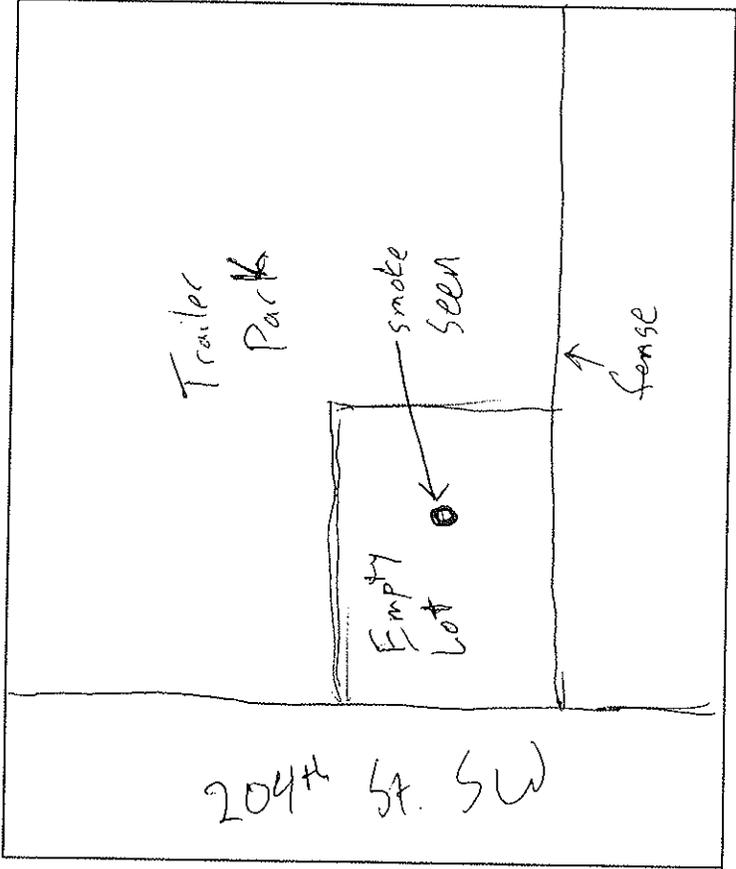
PHOTO NO.

INSPECTOR:

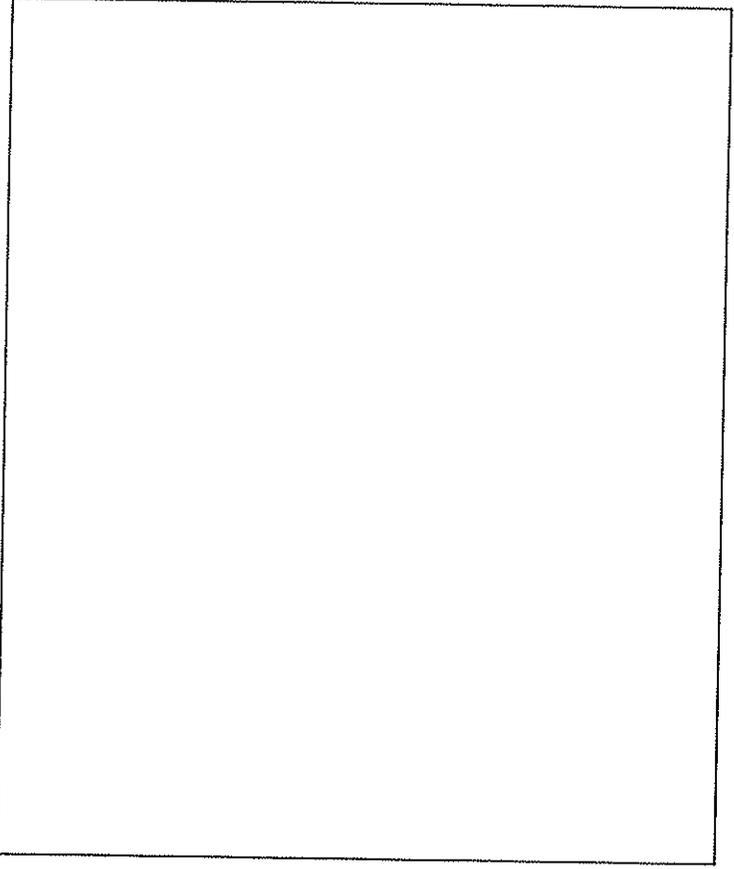
LOCATION:

DESCRIPTION:

SKETCH



SKETCH



REF #: S-84

DATE:

8/6/09

INSPECTOR:

DK

PHOTO NO.

95-89

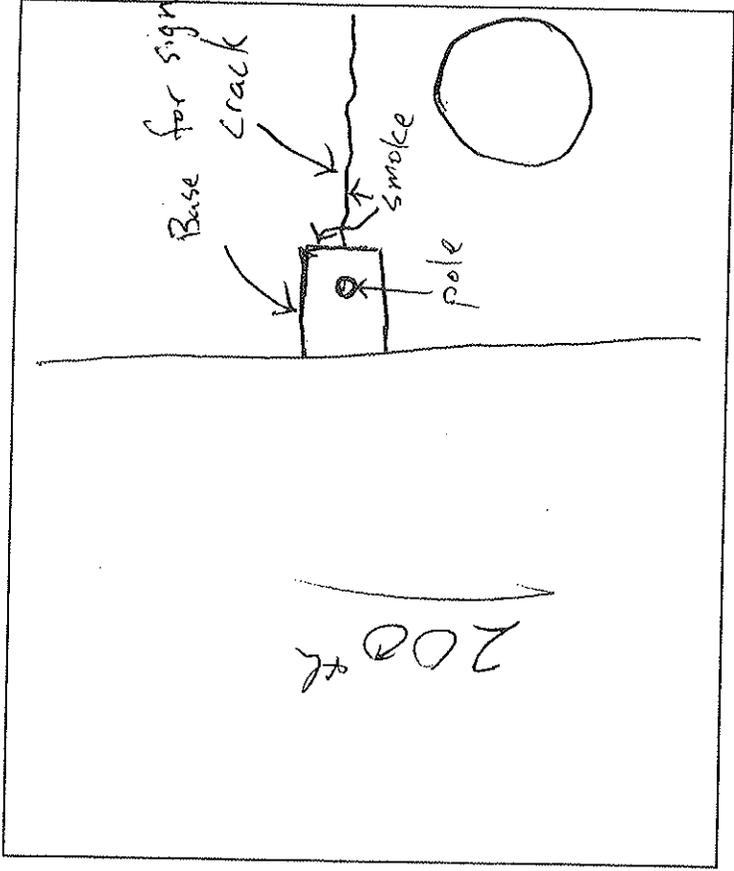
LOCATION:

near manhole # 2-80 on
200th St SW

DESCRIPTION:

~~crack~~ smoke coming from
crack in side walk and base
of no parking sign

SKETCH



CITY OF LYNNWOOD III STUDY

REF #: 5-83

DATE: 4/6/09

INSPECTOR: DK

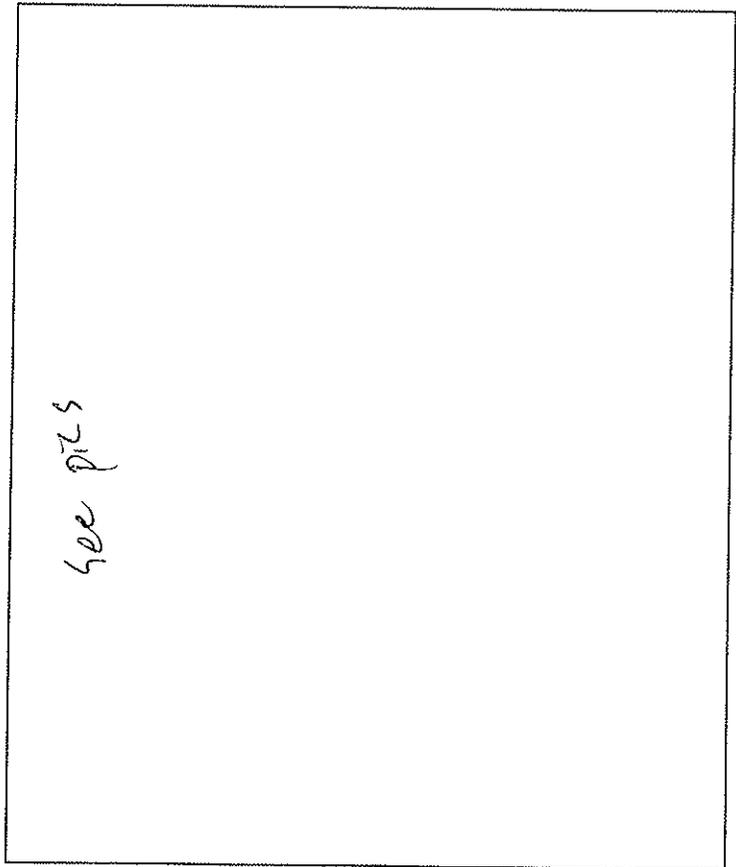
PHOTO NO. Brian's Camera

LOCATION: 6208 202nd ^{St SW} Medco-Lyn
6M 62 Mobile Ranch In the back
yard of mobile home # 64 or 62

DESCRIPTION:

Smoke seen in back yard

SKETCH



REF #: 5-85

DATE: 2/6/09

INSPECTOR: DK

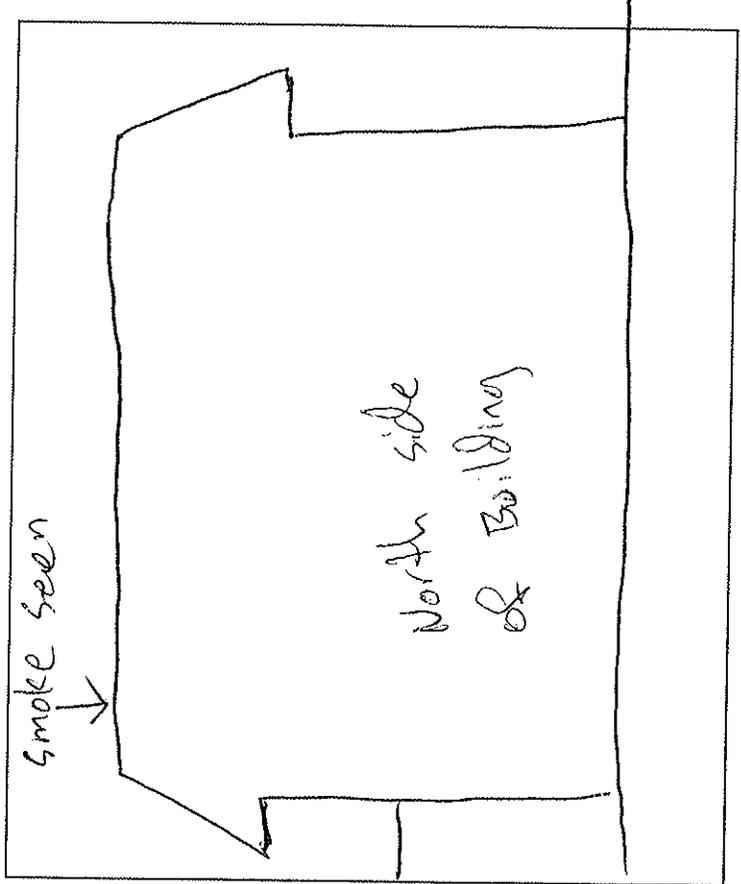
PHOTO NO. 40-92

LOCATION: 5703 202nd St. SW

DESCRIPTION:

Smoke seen from roof, not
sure from what

SKETCH

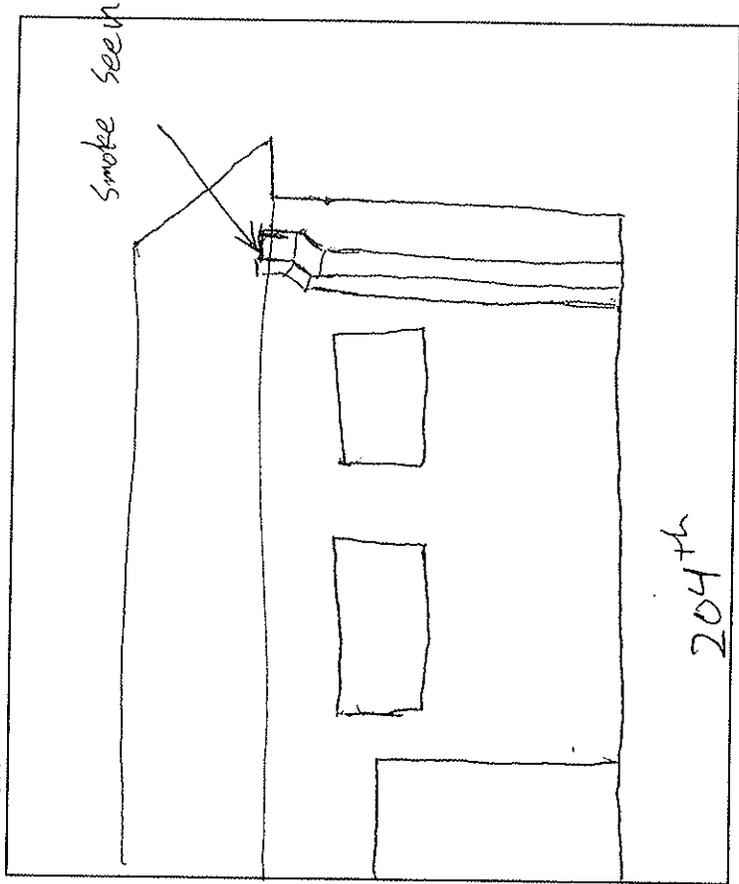


CITY OF LYNNWOOD III STUDY

REF#: S-86 DATE: 8/6/09
INSPECTOR: DK PHOTO NO. 93-96
LOCATION: 5523 204th St. SW

DESCRIPTION:
Gutter connected to sewer
on the south east corner

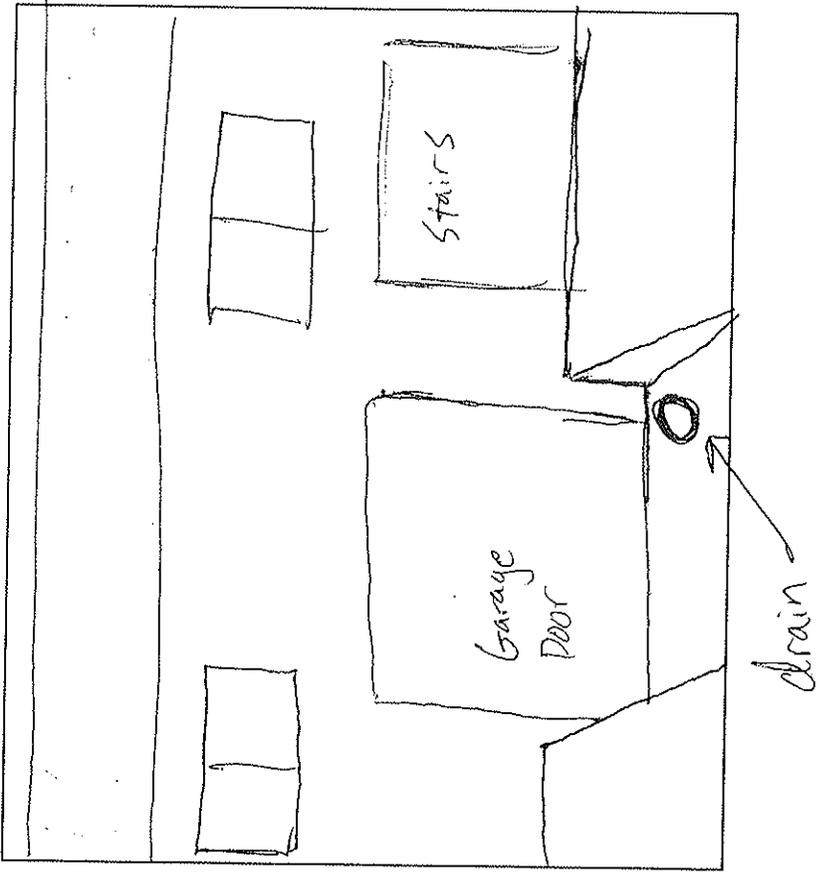
SKETCH



REF#: S-87 DATE: 8/7/09
INSPECTOR: DK PHOTO NO. 97-99
LOCATION: 5910 207th Pl SW

DESCRIPTION:
storm drain at bottom
of driveway connected to
sewer

SKETCH



CITY OF LYNNWOOD III STUDY

REF #: S-88

DATE: 8/7/09

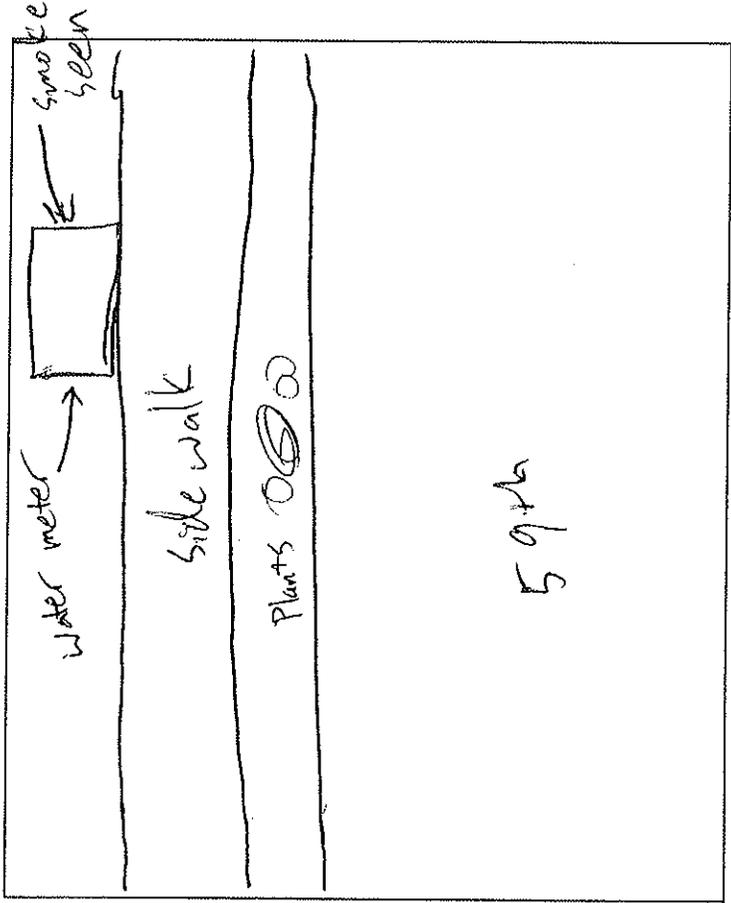
INSPECTOR: PK PHOTO NO. 100-101

LOCATION: 20923 54th Pl. W

DESCRIPTION:

Water meter? unsure if storm water or sewer

SKETCH



59th

REF #: S-89

DATE: 8/7/09

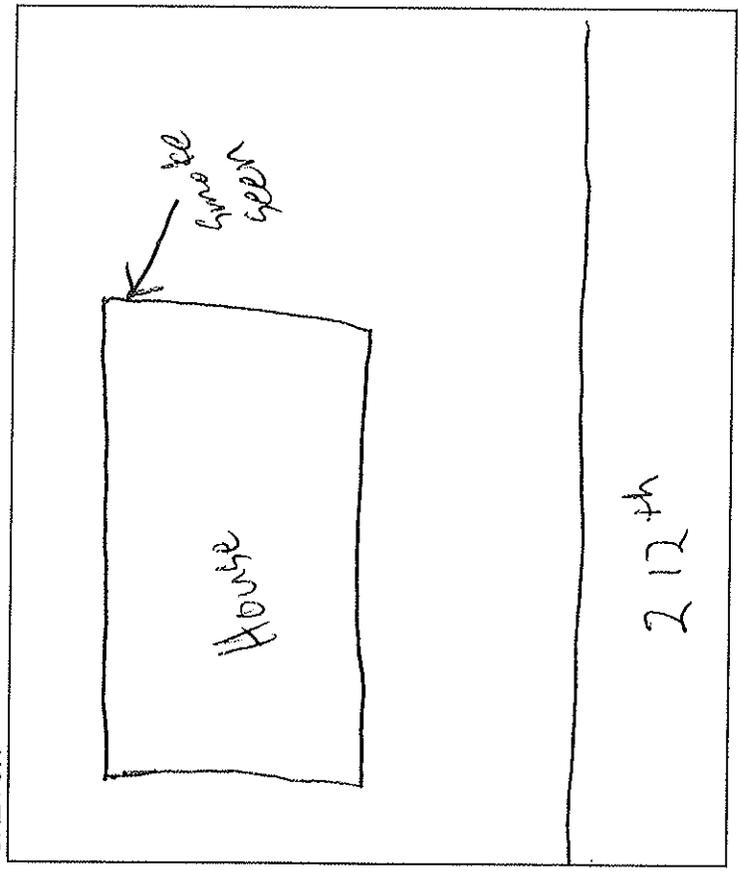
INSPECTOR: DK PHOTO NO. 102-105

LOCATION: 6207 ~~211th~~ 211th St. SW

DESCRIPTION:

Down spout connected to sewer on NW corner

SKETCH



CITY OF LYNNWOOD I/I STUDY

REF #: S-90

DATE: 8/7/09

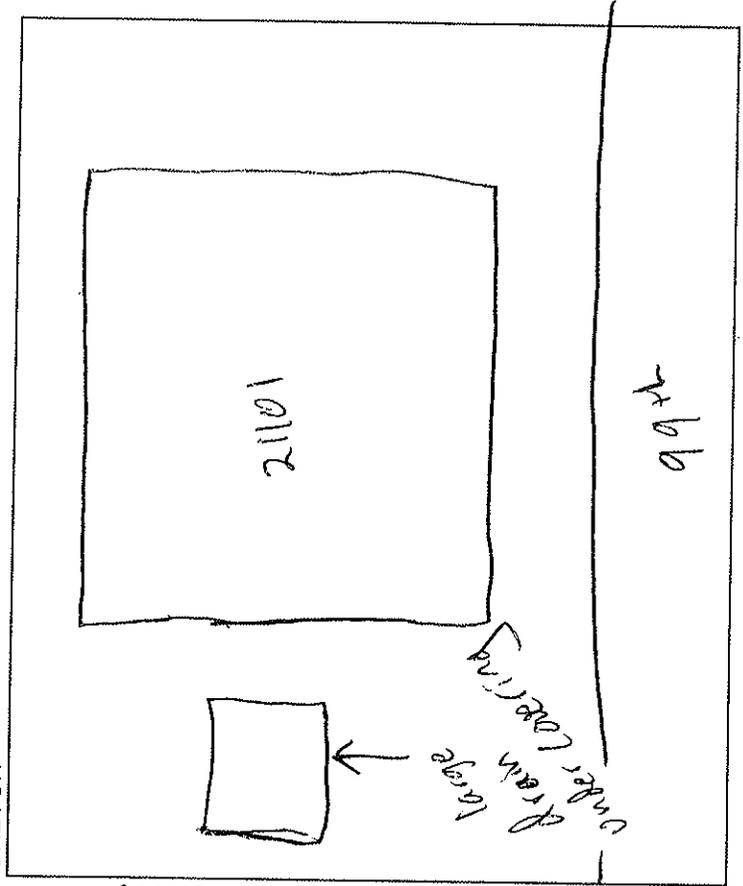
INSPECTOR: DK

PHOTO NO. 106-108

LOCATION: 21101 Hwy 99th on the East side of building

DESCRIPTION: large drain used for cars

SKETCH



DATE:

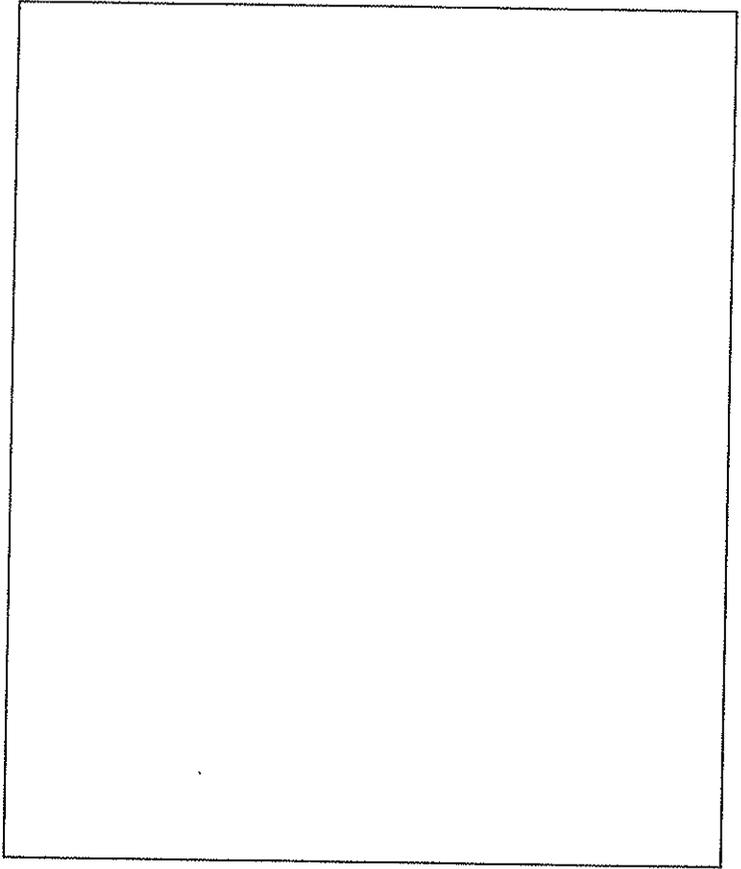
PHOTO NO.

INSPECTOR:

LOCATION:

DESCRIPTION:

SKETCH



REF #: 5-91 DATE: 8-6-09

INSPECTOR: MSF PHOTO NO.

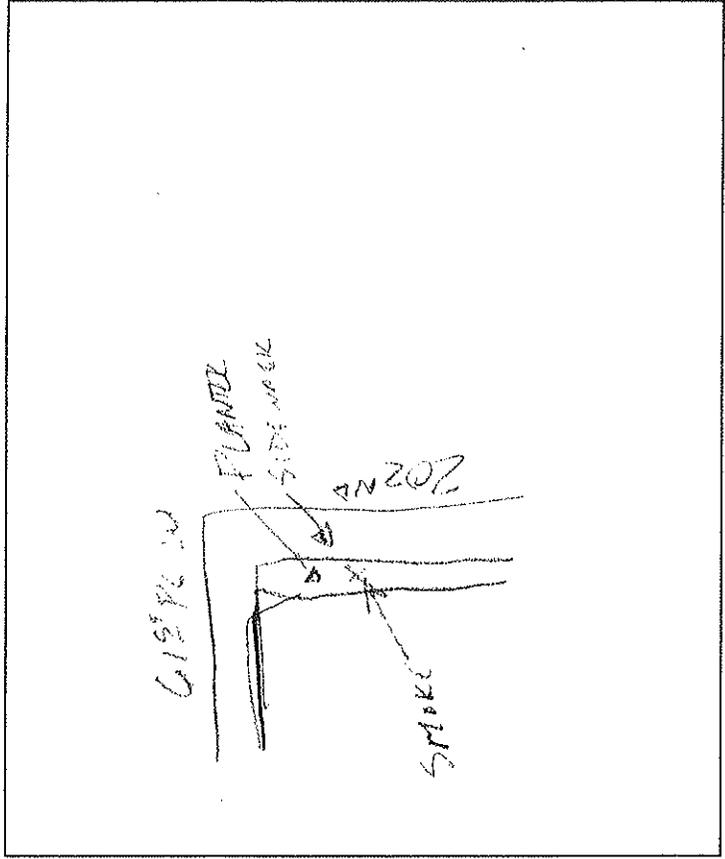
LOCATION: MacLEOD'S FLOOR COVERING

6125 202nd St. SW

DESCRIPTION: SMOKE EMANATING
FROM FLOOR IN GROUND

SKETCH

111



5

3

CITY OF LYNNWOOD I/I STUDY

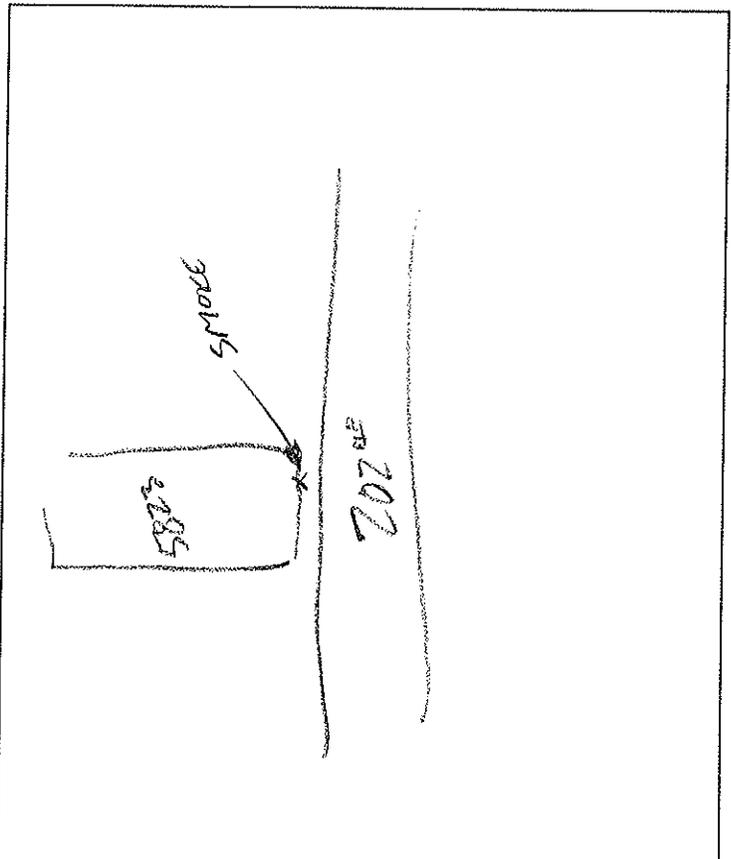
REF #: S-92 DATE: 8-6-09

INSPECTOR: MSF PHOTO NO.

LOCATION: 5823 202ND ST SW

DESCRIPTION:
SMOKE EMANATING
FROM HOLE IN GROUND

SKETCH



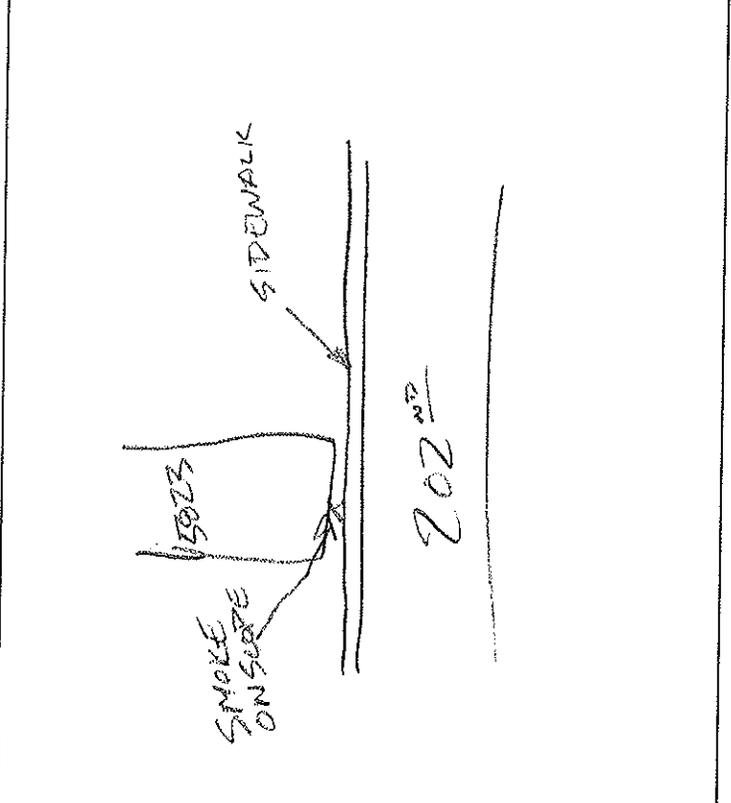
REF #: S-92 DATE: 8-6-09

INSPECTOR: MSF PHOTO NO.

LOCATION: 5823 202ND ST SW

DESCRIPTION:
SMOKE EMANATING
FROM HOLE ON SLOPE
NEXT TO SIDEWALK

SKETCH



CITY OF LYNNWOOD III STUDY

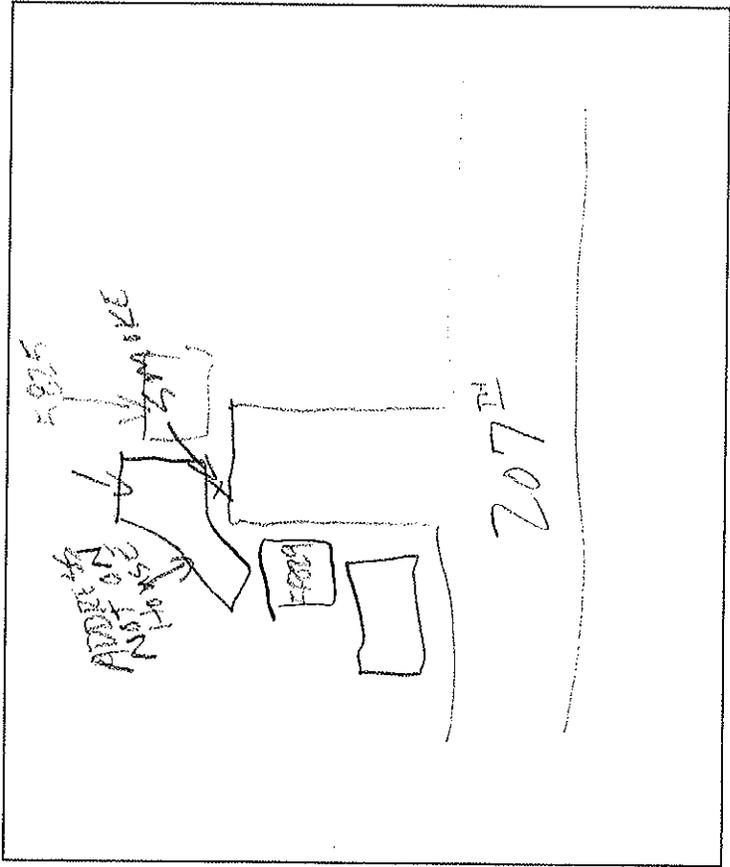
REF #: 5-93 DATE: 8-7-09

INSPECTOR: MSF PHOTO NO.

LOCATION: 5827 207TH PL SW

DESCRIPTION: AREA DRAIN IN DRIVEWAY

SKETCH



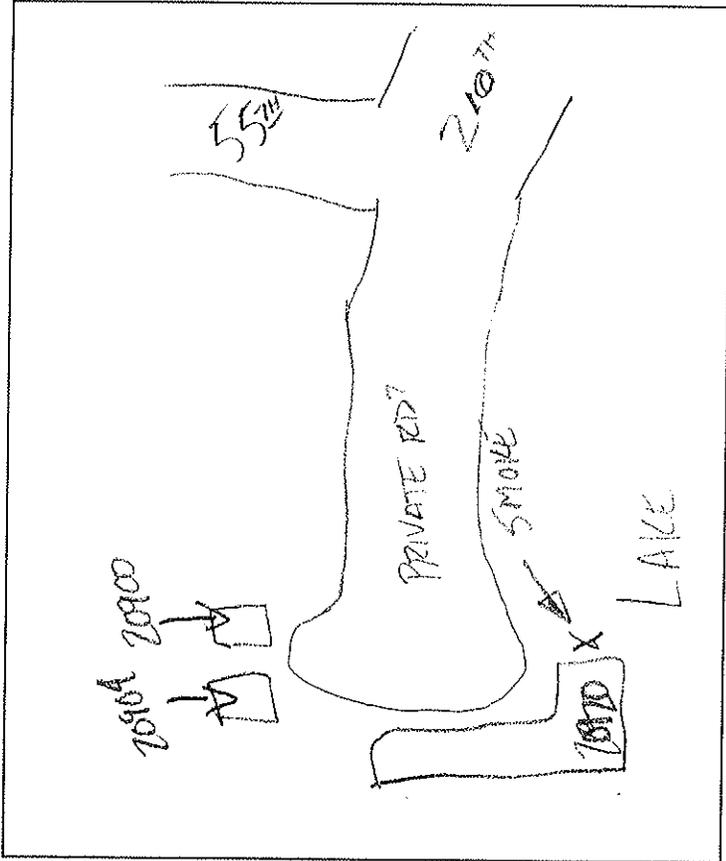
REF #: 5-94 DATE: 8-7-09

INSPECTOR: MSF PHOTO NO.

LOCATION: 20920 (NEAR 55TH)

DESCRIPTION: SMOKE EMANATING FROM LOW SPOT IN GROUND

SKETCH



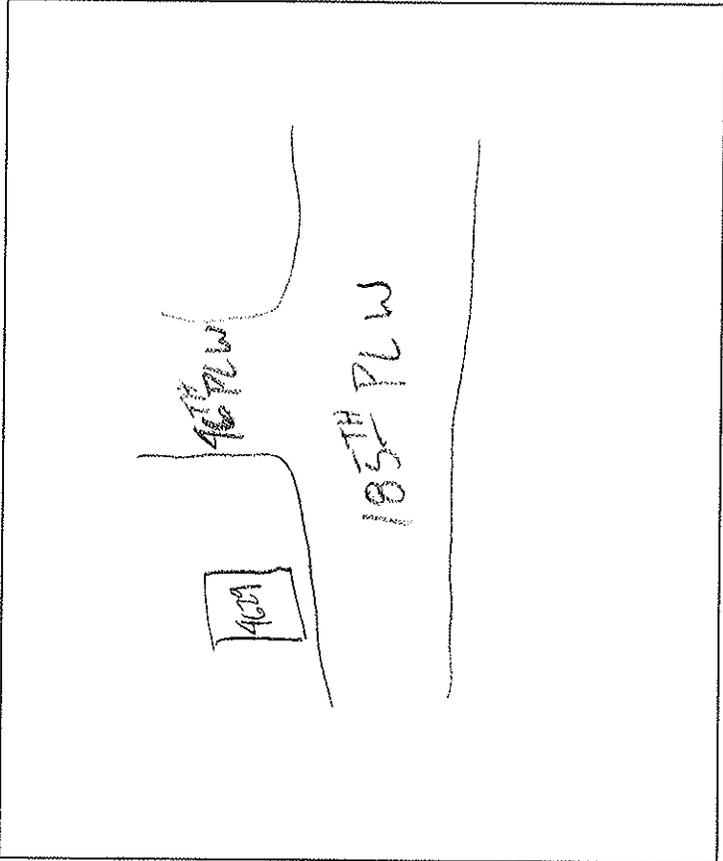
NOT RECORDED

CITY OF LYNNWOOD I/I STUDY

INSPECTOR: MBF DATE: 7/30/09
PHOTO NO. _____
LOCATION: 4629 185TH PL W

DESCRIPTION: COMPLAINED OF
SMOKE IN HOUSE

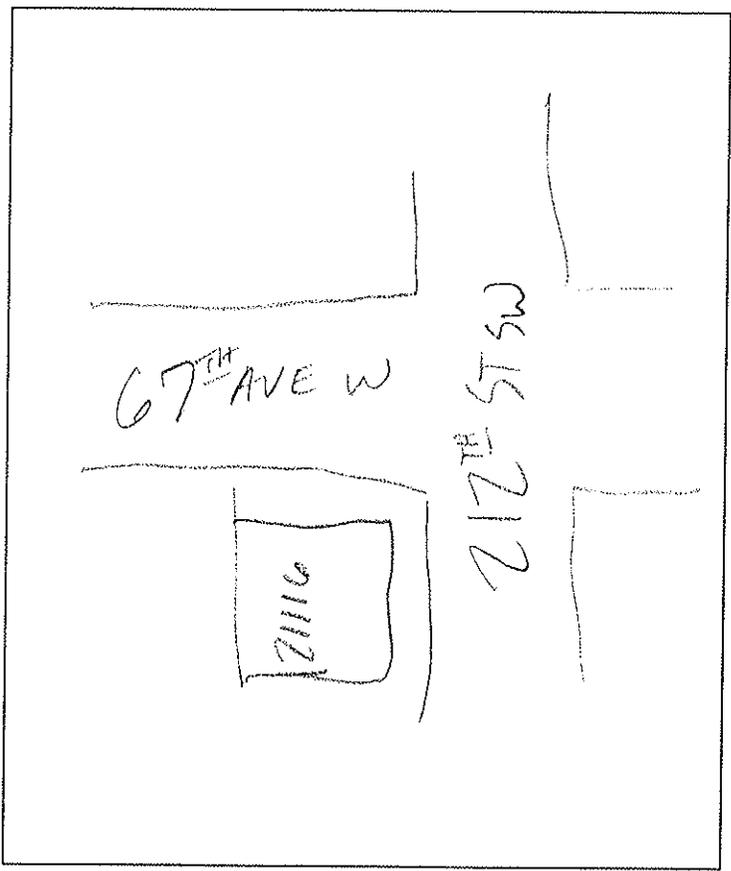
SKETCH



REF #: S-95 DATE: 8-7-09
INSPECTOR: MSF PHOTO NO. 8
LOCATION: 2119 67TH AVE WEST

DESCRIPTION: SMOKE BLOWING OUT
OF OPENING IN WATER
METER BOX COVERING

SKETCH



CITY OF LYNNWOOD III STUDY

REF #: 5-96

DATE: 6/7

INSPECTOR: BS

PHOTO NO. 2

LOCATION: 20903 54th

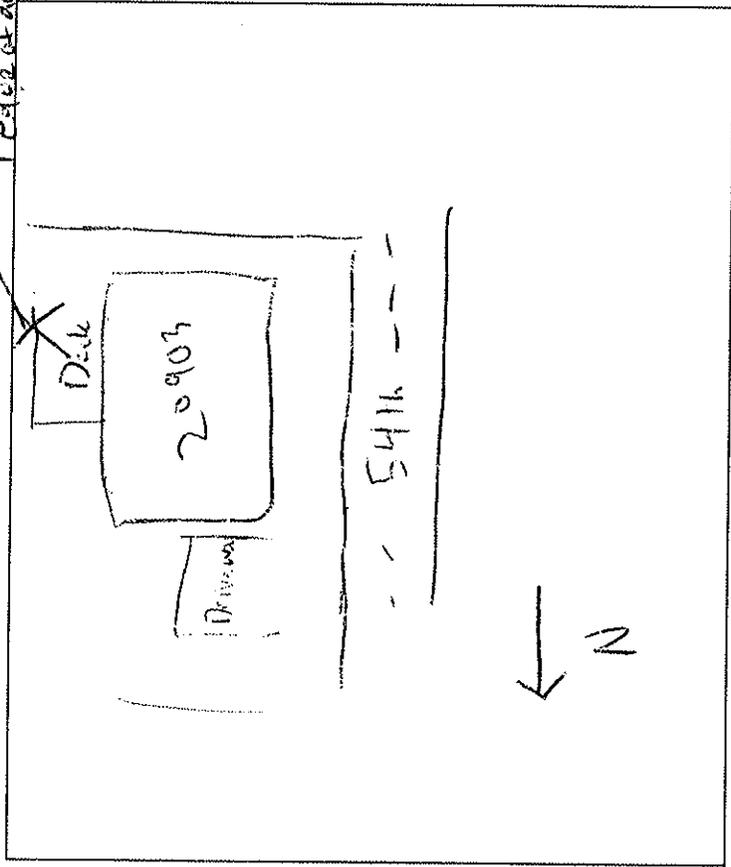
20903 54th

DESCRIPTION:

lots of smoke coming from under edge of deck

lots of smoke coming from under edge of deck

SKETCH



REF #: 5-97

DATE: 8/5

INSPECTOR: BS

PHOTO NO. 1

LOCATION: Lynnwood Bowl & Skate

210 200th

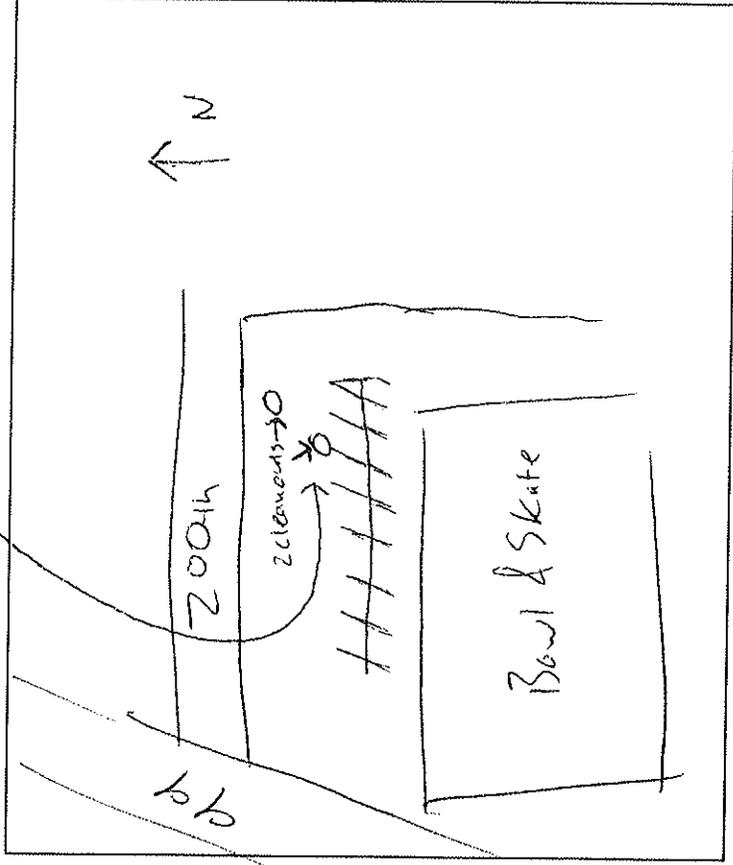
NE corner of parking lot

DESCRIPTION:

2 cleanout covers are loose

more SFA/cleanout is in slight depression

SKETCH



CITY OF LYNNWOOD III STUDY

REF #: 5-98

DATE: 8/14

INSPECTOR: BS

PHOTO NO. -

LOCATION: 67th & 214

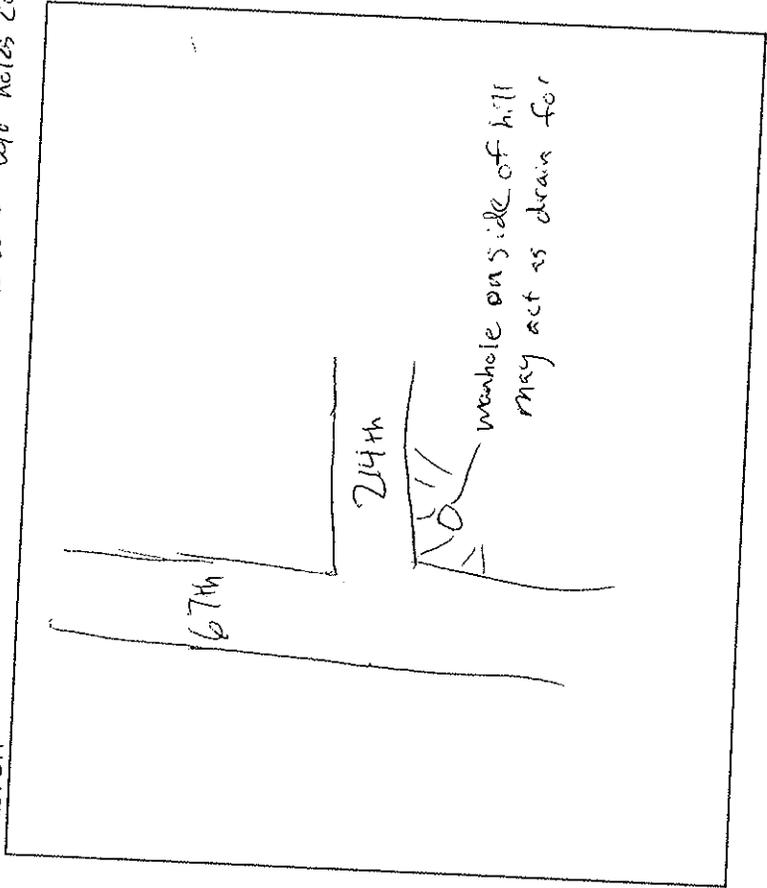
DESCRIPTION:

Basin & in depression

Manhole is on side of hill and may allow significant inflow during storm events.

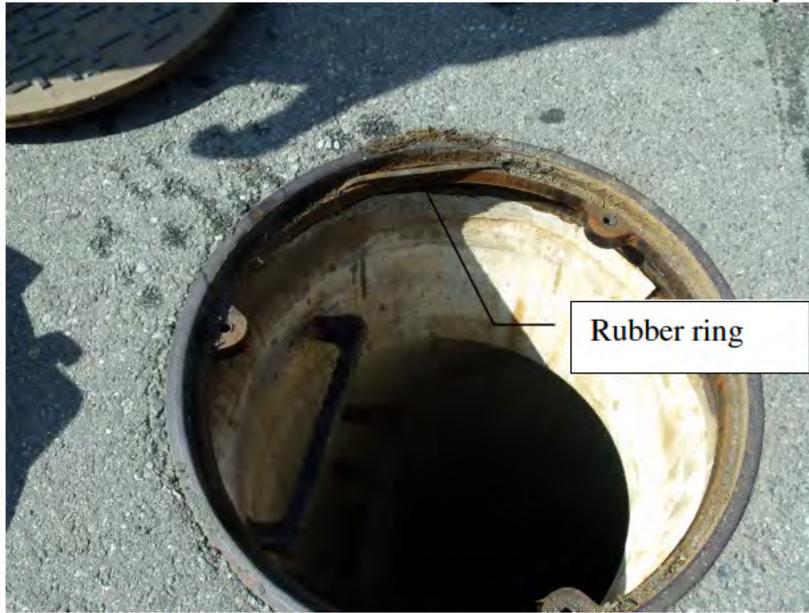
a new seal and manhole cover w/o holes could reduce inflow

SKETCH



SMOKE TESTING PROBLEMS PHOTOS

40th Ave and 185th Pl. SW, Lynnwood, WA. MH # 17-87.5 (S-1)



Rubber ring around the manhole rim is coming undone.

18702 40th Ave, Lynnwood, WA (S-2)



Uncapped cleanout

4019 189th Pl. SW, Lynnwood, WA (S-3)



Smoke seen from hole

View of front of house at 4019 189th Pl SW in Lynnwood



Smoke seen emanating from hole alongside front door landing.

4221 189th Pl. SW, Lynnwood, WA (S-4)



Second rhododendron bush
from the street

Rhododendron bush behind tree and bush



Smoke seen coming out of the gravel at the base of the bush.

4326 189th Pl. SW, Lynnwood, WA (S-5)



Smoke seen in flower bed along house

West side of house



Flower bed on west side of house

4309 191st. St. SW, Lynnwood, WA (S-6)



Smoke seen from cleanout lid

Southeast side of house



Smoke emanating from downspout.