Roger Tidball, Town Supervisor
Jennifer Howe, Town Clerk
Brandy Fall, Deputy Town Clerk
William Reed, Highway Superintendent

John D. Ganther, Council Member
Francis R. Potter, Council Member
Jeffrey Senecal, Council Member
William Wenzel, Council Member

Thursday March 12, 2020
Regular Town Board Meeting
Meeting Time: 7:00PM

Meeting called to order by Supervisor Tidball at 7:00PM

Present: Supervisor Tidball, Council Members Potter, Senecal and Wenzel, Town Clerk Jennifer Howe, Town Attorney Terresa Bakner
Absent: Council Member Ganther, Highway Superintendent Reed

Pledge of Allegiance
Prayer/Moment of Reflection offered by Pastor McHeard

Resolution 56-20: Council Member Potter motioned, seconded by Council Member Wenzel to approve the Town Board Meeting minutes of Thursday, February 27, 2020.
Motion carried, 4 ayes

Town Clerk, Jennifer Howe, read the Town Clerk's Report for February 2020 (see attached).
Supervisor, Roger Tidball, read the Supervisor's Report for February 2020 (see attached).

Resolution 57-20: Council Member Potter motioned, seconded by Council Member Senecal to pay the following claims:
Motion carried, 4 ayes

Vouchers to be Paid

March 12, 2020

General Fund:	**$80,620.12**
Highway Fund:	**$173,800.41**
SD#1 Fund:	**$12,533.28**
SD#2 Fund:	**$11,726.76**
SD#3 Fund:	**$4,888.03**
Total To Be Paid:	**$283,568.60**

Highway: Council Member Potter reported that the highway department is filling potholes and cleaning up along the sides of the roads. They are noticing damage on some roads and work will need to be done on them.

Public Safety: Supervisor Tidball reported that there was a meeting last night and the county is putting together a taskforce in regards to the corona virus.

Parks: Council Member Wenzel reported a member of the committee was walking the state trails and noticed that some of the trails need to be remarked. They are going to be putting up a net in the pavilion at VanPatten park to keep the birds from nesting up in the eves and droppings falling on the tables. The committee is still looking for members.

Sewer District #1, 2 &3: Council Member Senecal reported that they are doing standard maintenance. See attached report.

Technology: Supervisor Tidball reported that they are working on putting together a summary of houses and roads to give to the providers to get the projects numbered and then see if we can get quotes for them. Supervisor Tidball read a letter from Ben Moore Photography/ Video offering his services and providing a quote. Supervisor Tidball will reach out to him to meet up and talk about this possibility.

There will be a meeting on March 31st @ 7pm located at the Duanesburg Volunteer Ambulance Corp. to review the town's Solar Use Law.

Notes:
Supervisor Tidball spoke with County Legislator Holly Vellano who was looking for a representative from our area to help with the census in our town. Supervisor Tidball reached out to past board member Charles Leoni who volunteered. We thank him for volunteering.

Council Member Potter read an email from a concerned resident who just wanted to bring our attention to the News Channel 10 report about the incinerator in Cohoes, NY and the burning of the firefighter foam.

Town Attorney Bakner reported that Town Clerk Howe will be going through our Emergency Management Plan and updating the necessary contact information.

Supervisor Tidball brought up an article that resident Annabelle Felton had shown him in regards to the NYS Comptroller doing an audit on the Public Service commission and the use of the funds being used toward broadband.

Business Meeting:

Resolution 58-20: Council Member Potter motioned, seconded by Council Member Senecal to authorize the Town Supervisor to submit documentation to the NYS EFC to obtain the funds to pay Professional Services Invoice No. 2 and upon receipt of such funds authorizes payment to Delaware in the amount of $9,165.
Motion carried,4 ayes

Resolution 59-20: Council Member Potter motioned, seconded by Council Member Senecal to request Schenectady County to do a speed limit reduction study on Bramans Corners Road.
Motion carried, 4 ayes

Resolution 60-20: Council Member Wenzel motioned, seconded by Council Member Potter to request Schenectady County to do a speed limit reduction study on Schoharie Turnpike. Motion carried, 4 ayes

Privilege of the Floor: Opened at 7:23 p.m.

Lynne Bruning read a statement (see attached).

Charles Parker asked a few questions with the topics of DVAC and the proposed paid EMTs, the town website, proposed sewer/septic system in Duane Lake area, status report on the new asst. code enforcement officer and the current virus situation. Supervisor Tidball responded.

Floor Closed: 7:40 p.m.

Supervisor Tidball motioned, seconded by Council Member Senecal to adjourn the meeting. Motion carried, 4 ayes

I, Jennifer Howe, Town Clerk of the Town of Duanesburg, so hereby certify that this is a true and accurate transcript of the Regular Town Board Meeting held on Thursday March 12, 2020 at the Duanesburg Town Hall, 5853 Western Turnpike, Duanesburg, New York 12056.

Clerk's Monthly Report
February 01, 2020 - February 29, 2020

Account#	Account Description	Fee Description	Qty	Local Share
	Freedom Of Information	Freedom Of Information	17	48.74
	Misc. Fees	Certified Copies - Marriage	4	40.00
	Operating Permit	Operating Permit	1	30.00
	septic repair	septic repair	1	50.00
			Sub-Total:	**$168.74**
A1255	Conservation	Conservation	2	3.60
			Sub-Total:	**$3.60**
A2544	AFTER 30 DAYS	AFTER 30 DAYS	2	10.00
	Dog Licensing	Female, Spayed	9	126.00
		Male, Neutered	12	168.00
		Male, Unneutered	1	22.00
			Sub-Total:	**$326.00**
B2555	Building Permits	Building Permits	7	1,025.00
			Sub-Total:	**$1,025.00**
			Total Local Shares Remitted:	**$1,523.34**

Amount paid to: NYS Ag. & Markets for spay/neuter program 24.00

Amount paid to: NYS Environmental Conservation 61.40

Total State, County & Local Revenues: $1,608.74

Total Non-Local Revenues: $85.40

To the Supervisor:

Pursuant to Section 27, Sub 1, of the Town Law, I hereby certify that the foregoing is a full and true statement of all fees and monies received by me, Jennifer Howe, Town Clerk, Town of Duanesburg during the period stated above, in connection with my office, excepting only such fees and monies, the application of which are otherwise provided for by law.

Supervisor Date Town Clerk Date

Monthly Statement of the Town Supervisor

TO THE TOWN BOARD OF THE TOWN OF DUANESBURG, NEW YORK:

Pursuant to Section 119 of Town Law, I hereby render the following statement of all money received and disbursed by this office during the month February 2020.

Revenues

Fund	Amount
General Fund	$ 48,259.87
Highway Fund	$ 0.00
Fire Protection	$ 458,435.00
Parks & Recreation	$ 0.00
Parklands	$ 0.00
Service Award	$ 0.00
Sewer District #1	$ 0.00
Sewer District #2	$ 28,291.30
Sewer District #3	$ 0.00
Total	**$ 534,986.17**

Disbursements

General Fund	$ 162,205.33
Highway Fund	$ 274,430.33
Fire Protection	$ 204,716.00
Park & Recreation	$ 0.00
Parklands	$ 0.00
Sewer District #1	$ 18,937.86
Sewer District #2	$ 18,533.25
Sewer District #3	$ 7,124.55
Total	**$ 685,947.32**

Dated March 11, 2020

Supervisors Office – Town of Duanesburg

Monthly Report February 2020

Submitted by: Dale Warner 3/5/2020

DEC – Annual Inspection of WWTP 1 & 2 - 1/23/20 need to provide response by March 10, 2020
Dale – Asked Andrew to provide DMR's for July, September, October, November, and December of 2019 both districts. 1/24/20
Tim-would like to take class and testing for Grade 3 Operator 2/3/20
Cory – Took plow to upstate plow because ram was leaking. Need to register plow for them to work on it. 2/11/20
Sewer Meeting 2/13/20 Andrew, Cory, Tim, John and Dale
Cory installed mud flaps on truck 2/23/20

SD#1

Plant:

1. **Cory & ACS worked on SBR Pump #2 in Tank #1 not working contact dealer/manufacturer 2/2/20**
2. **Cory – Plowed snow at WWTP and Pump stations 2/7/20**
3. **Cory – cleaned up snow at WWTP 2/8/20**
4. **Cory – Greased Blowers – Routine Maintenance 2/14/20**
5. **Cory – Check on Mud well – Andrew says not working – found no power to pump need to contact ACS to check panel. 2/26/20**
6. **Cory & ACS no power to Mud well Pump #2 changed contactors and pump. 2/29/20**

Collection System:

1. **Cory –**

SD#2

Plant:

1. **Cory & Andrew – worked on Decanter in SBR#2 tried to thaw. Purchased a heater 2/3/20**
2. **Cory & Andrew – thawed decanter in SBR#2 cleaned out rags that where clogging it. 2/4/20**
3. **Cory- Plowed snow at WWTP and Pump Stations. 2/7/20**
4. **Cory - Cleaned up snow at WWTP 2/8/20**
5. **Cory – Plowed snow at WWTP 2/10/20**
6. **Cory – Plowed snow at WWTP 2/13/20**
7. **Cory – Greased blowers – Routine Maintenance 2/14/20**
8. **Cory – Flow is very low at plant Chart reader says 1500 gal. went out to check pump stations. 2/15/20**
9. **Cory – Changed Disc Filter pump – pump full of rags – brought to A-Team to service. 2/25/20**
10. **ACI – replaced Chart Reader also calibrated PH Meter. 2/27/20**

Collection System:

1. **Cory – Installed degreaser in pump stations 159, Hilltop, Spring Rd. S Shore #1 and #2, and Island Dr. 2/10/20**

2. Cory - 159 Pump Station pump #1 not running due to rag caught in pump
3. Cory – 243 Hillside Residential Grinder Pump tank full, pumped down and reset pump, tested ran ok. 2/12/20
4. Cory – Pulled pump #1 S Shore Pump Station #1 wire had come loose not connected made repairs and tested. 2/13/20
5. Cory – Called to 250 Hillside Residential Grinder pump – Tank was full pumped down and found float wires broken – wires are to short to repair will have to dig up tank and install new wires. 2/14/20
6. Cory on phone with ACI concerning S Shore Rd. Pump Station #1 - why not communicating with Mission Control. 2/19/20
7. Cory- 194 Mill Rd. Residential Grinder Pump high water alarm- pumped down will come back in morning 2/20/20
8. Cory- S Shore Rd. Pump Station #2 reset pump #1 rags in pump. 2/21/20
9. Cory – Returned to 194 Mill rd. Residential Grinder Pump changed off float - will need to return in spring and pull new wires. 2/21/20
10. Cory – Returned to 194 Mill Rd. Residential Grinder Pump changed on float. 2/22/20
11. Cory – S Shore Rd. Pump Station #2 – pulled Pump #1 – pump full of rags. 2/24/20
12. Cory – S Shore Rd. Pump Station #1 – reset float levels and tied – 2/24/20
13. Cory – S Shore Rd. Pump Station #2 pulled pump #1 had Blue Diamond pump out rags at bottom of tank. Pump would not reseat properly need to change housing on slide rail. 2/26/20

SD#3

Collection System:

1.

Town of Duanesburg Sewer Department

Dale Warner
Sewer District Coordinator
5853 Western Turnpike
Duanesburg, NY 12056
518-895-2040

Mr. James E. Malcolm, PE
Professional Engineer I
Region 4 – Division of Water
1130 North Westcott Road
Schenectady, NY 12306-2014

March 5, 2020

Re: Annual Sewer District #1, 2, 3 Town of Duanesburg, Schenectady County Report response

Dear Jamie Malcolm,

The Town of Duanesburg is pleased to provide you with the information requested for I & I for Sewer District # 1 Delanson WWTP (SPDES NY0261271)
I am responding to questions concerning the Inflow and Infiltration. I have attached our inspection of Sewer District #1 for the calendar year 2019. This was our main focus for all Manhole basins. The inspections were conducted in rainy weather to identify any leaks or deficiencies. In addition to Route 7 (Duanesburg Rd.) Pump station was identified as having a leak around the main conduit allowing ground water into pump station in April of 2019 the work to repair was completed within days of identifying.

Sewer District #2 Mariaville WWTP (SPDES NY0268437)
For the calendar year 2020 attached we will focus on Mariaville manhole basins and grinder pumps for I & I. For the calendar year 2019 we also identified and repaired the following leaks. February MH was hit by a plow and repairs made to riser and cover resealed and lowered. March, run times indicated flow changes at Island Drive, Spring Rd., and South Shore Rd. May, a residential GP basin was replaced at 594 S. Shore Rd. which had split and was allowing groundwater into basin. June, broken basin cover was identified and replaced at 245 S. Shore Rd. August, Repairs to a broken lateral hub in the street was identified and repaired see attached photos. The leak was located in-front of 137 Shore Rd. This property had previously lined their pipe but, with the addition of our camera system we were able to identify the exact location of the leak and make the proper repairs. September a grinder pump basin cover was identified as broken and replaced with new cover at 7675 Mariaville Rd. November, Island Drive Pump Station was identified as having a leak around the Electrical Conduit which entered the station approximately four feet down. The outside of the tank was hand dug and repairs made.

Sewer District #3 Duanesburg with discharge to Delanson WWTP

June, we identified and repaired MH 103 riser and cover which had been knocked loose from basin.

Of the ninety-seven (97) buildings (Residential and Commercial) eighty-three (83) have connected into Sewer District#3. Five (5) have obtained permits to connect with anticipation of connecting in the spring which leaves eight (9) remaining without permits, one (1) is a vacant structure. The Town Board is working with Code Enforcement on a solution to this matter. Court appearances is likely the next step.

I have attached Andrew Dennis Plant Operator response to question #4 for Sewer District #1
I have also attached Delaware Engineering Summary of the Grinder Pump Station Service Inspections/Repairs date November 2018.
Any further questions concerning these matters please let me know.
Sincerely,

Dale Warner
Sewer District Coordinator
Cc: File
Sewer Board Members
Andrew Dennis, WWTP Operator

Dear Jamie Malcolm,

After carefully looking into the Departments concerns with the MLSS at our Delanson Wastewater Treatment Plant, this is what we have found. The Aqua-Aerobic manual states that you should pick a "target number" for your MLSS (our target number for the winter is 3,000 mg/l), even though they suggest a much higher number of 4,500 mg/l we feel as if that leaves way too little room for error is a large volume were to come into plant. Past practice of the plant suggest the 3,000 mg/l during winter months but have been much higher in the past.

Aqua Aerobic System Manual states "Maintenance of the exact target value for the system mass is normally difficult and it is not strict requirement for successful wastewater treatment. For this specific installation, a range of approximately plus or minus 10% of the target system mass should be maintained during normal operations".

For SBR 1, we were not wasting at the beginning of the month until we went above our 3,000 target number in which we started to waste 1,100 gallons a day. For SBR 2 We were wasting 1,100 Gallons a day until our MLSS dropped from our 3,000 target to 2,200 after decanting our digesters. We left our wasting off until the end of the month in hopes to get back to our target number. Our five minute and thirty minute settleability times for SBR 1 range from 500-900 for the five minute and 230-650 for the thirty in which during the 650 event we had already began wasting and had the 30 minute down to 450 within three days and 300 withing ten days . Our five and thirty-minute settleability times for SBR 2 range from 450-560 for the five minute and 230 and 300 for the thirty. These numbers were collected at the end of the fill-react cycle or react cycle as per Aqua-Aerobic manual.

The sample in which was collected on January 23, 2020 was taken at the 4 minute mark of the react-fill cycle which was approximately 90 minutes prior than manufacture and plant operations suggests. The sample was only being aerated for about four minutes instead of 90 minutes. We believe this was the root cause for the numbers not matching up to the previous weeks numbers as far as settleability and SVI .

Going forward we will strive to get the numbers closer together. Attached is the MLSS work sheet, the settleability times, excerpts from Aqua Aerobic manual, and the wasting rate sheet. If there are any further questions we will be more then happy to answer. Thank you for your continued support.

Andrew Dennis

Chief Operator

Town of Duanesburg.

Mlss ,Svi Sludge Blanket Record

Month: Jan

Year: 2020

	MLSS	SVI	MLSS	SVI	BLANKET	
Date	SBR 1	SBR 1	SBR 2	SBR 2	SBR 1	SBR 2
1						
2						
3	2600		3700			
4						
5						
6			3380			
7						
8	2900					
9						
10			3290			
11						
12						
13						
14	3690					
15			2220			
16						
17			2330			
18	3270					
19						
20			2500			
21						
22	3900					
23						
24			2600			
25						
26						
27	3450					
28						
29			2650			
30						
31						

MLSS SLUDGE PUMPING RECORD

Month:

Year:

Date	Pump Run Time & Gallons Pumped					Amount Decanted (gal)	
	SBR # 1		SBR # 2			Digester 1	Digester 2
	Minutes	Gallons	Minutes	Gallons	Total		
1	—	—	2x0x5	1100	1100		
2	—	—	2x0x5	1100	1100		
3	—	—	2x0x5	—	1100		
4	—	—	2x0x5	1100	1100		
5	—	—	2x0x5	1100	1100	20" C.V	
6	—	—	2x0x5	1100	1100		
7	—	—	2x0x5	1100	1100		
8	—	—	2x0x5	1100	1100		
9	—	—	—	—	—		
10	—	—	—	—	—		
11	—	—	—	—	—		
12	—	—	—	—	—	48" C.V	
13	—	—	—	—	—		
14	—	—	—	—	—		
15	2x5	1100	2x0x5	1100	2200		
16	2x0x5	1100	—	—	1100		
17	2x0x5	1100	—	—	1100		
18	2x0x5	1100	—	—	1100		
19	2x0x5	1100	—	—	1100		
20	2x0x5	1100	—	—	1100		
21	2x0x5	1100	—	—	1100		
22	2x0x5	1100	—	—	1100		
23	2x0x5	1100	—	—	1100		
24	2x0x5	1100	—	—	1100		
25	2x0x5	1100	—	—	1100		
26	2x0x5	1100	—	—	1100		48"
27	2x0x5	1100					
28							
29	2x0x5	1100	—	—	1100		
30	2x0x5	1100	—	—	1100		
31	2x0x5	1100	—	—	1100		

Digester Volume 229/Inch

Sludge Pump Pumping Rate: _____

Month: Jan

Year: 2010

	PH Meter Calibration								5 min settle		30 min settle		75 min settle		Eff. DO	End of Mix fill	
Date	Buff. 1	Buff. 2	PH 7	Temp	Slope	PH7	phosphorous	Ammonia	No.: 1	No.: 2	No.: 1	No.: 2	No.: 1	No.: 2		No.: 1	No.: 2
1	4	7	10	20	53.4	7											
2	4	7	10	18	54.8	7										CA	
3	4	7	10	19	54.1	7.0			500	490	270	260					
4	4	7	10	19	54.1	7.0											
5	4	7	10	23	54.5												
6	4	7	10	17	53.7	7.0											
7	4	7	10	19	53.5	7				450		240			8.2	✓	
8	4	7	10	18	53.7	7.0			480		230						
9	4	7	10	19	53.9	7.0											
10	4	7	10	18	53.8	7.0											
11	4	7	10	18	53.7	7.0				470		250					
12	4	7	10	20	53.6	7.0											
13	4	7	10	19	53.2	7.0											
14	4	7	10	18	54.8	7.0									8.0	✓	
15	4	7	10	18	54.4	7.0			700	~~500~~	650						
16	4	7	10	18	54.5	7.0				500		250					
17	4	7	10	18	54.1	7.0											
18	4	7	10	11	56.7	7.0			700		450						
19	4	7	10	8	55.6	7.0											
20	4	7	10	5	55.7	7.0				460		230					
21	4	7	10	18	54.3	7.0									8.2	✓	
22	4	7	10	18	53.4	7.0			600		380						
23	4	7	10	17	53.0	7.0											
24	4	7	10	20	56.0	7.0											
25	4	7	10	9	55.8	7.0			550		300						
26	4	7	10	9	55.0	7.0				550		300					
27	4	7	10	5	54.4	7.0											
28	4	7	10	19	53.2	7.0									8.1	✓	
29	4	7	10	8	53.1	7.0				560		290					
30	4	7	10	19	52.9	7.0											
31	4	7	10	11	53.1	7.0											

See the "System F/M and Mass Control Calculations" at the end of Section 4 for the calculation of the reactor volume at low water level.

The normal time for sampling of mixed liquor is after the completion of a "fill" cycle (Mix Fill & React Fill). At this point in time, the reactor is typically in an aerated and fully mixed mode of operation, thus providing a representative sample of mixed liquor. Due to variations in the plant influent flow rate, the measured SWD (at the time of sampling) will likely vary from day to day. In order to avoid the task of calculating the reactor volume for every sample taken, the measured MLSS

The operating system mass should be calculated on a routine basis to maintain efficient treatment. If the organic loading to the plant is at or near the design value, then the system should be operated at the design mass. Otherwise, the "target" value for the system mass may need to be adjusted in order to maintain a successful wastewater treatment system. A process engineer at Aqua-Aerobic Systems, Inc. may be contacted for assistance in the determination of this new target value.

Maintenance of the exact target value for the system mass is normally difficult, and it is not a strict requirement for successful wastewater treatment. For this specific installation, a range of approximately plus or minus 10 % of the target system mass should be maintained during normal operations. Observations with respect to the efficiency of solids/liquid separation should also be utilized to develop a suitable operating system mass for the reactor.

The plant operator can maintain the system mass within the plus or minus 10 % target envelope simply by adjusting the quantity of solids discharged from the reactor during the Waste Sludge phase of operation. The duration of the Waste Sludge phase can easily be changed in order to increase, decrease, or eliminate the amount of solids discharged from the reactors. The proper monitoring of

Delaware Engineering, D.P.C.
55 South Main Street Tel: 607.432.8073
Oneonta, NY 13820 Fax: 607.432.0432

Town of Duanesburg
Summary of Grinder Pump Station Service Inspections/Repairs
November 2018

The Town of Duanesburg constructed a new sanitary sewer collection system during 2016 and 2017 to provide sewer service to the hamlet of Duanesburg (Sewer District #3). Flow collected from this system is pumped to an existing sanitary manhole located on Cole Road, the end of the existing Delanson sanitary sewer system (Town Sewer District #1). Waste water is treated at the Town's Delanson WWTP (SPDES #NY 026 1271).

The new SD#3 system was placed into service during the spring of 2018, upon the completion of upgrades at the Delanson WWTP. Town residents were permitted to begin connection to the new system, and collected flow pumped to Delanson for treatment.

The new SD#3 system is comprised of gravity and pressurized piping components. Generally, flow from the hamlet drains by gravity to a pump station located adjacent to the fire department building located on NYS Rt 7. From there flow, is pumped through a force main to Cole Road, where it is discharged into the existing Delanson collection system.

Three of the service connections within the hamlet area are serviced by grinder pump stations due to their location relative to the sanitary mainline. These stations pump directly to the gravity piping in the hamlet. Connections along the forcemain section which extends along NYS Rt 7 from the fire hall to Cole Road are also serviced by grinder pump stations. 19 grinder stations are connected to the forcemain along NYS Rt 7. Additionally, seven vacant parcels had service connections installed, with no pump stations, to facilitate future connections should these lots be developed. Connections at the vacant lots were made based on requests from property owners during construction of the system.

During summer and fall of 2018, with the new SD#3 system in service, and residents progressively connected to the system, leaks were observed along the forcemain and at grinder station service connections. At each occurrence, the location at which the leak was observed was excavated, piping inspected, and repaired. The location of the leak at each occurrence was observed to be at the fittings along the grinder station services that were connected to the force main.

The grinder pump stations are connected to the 6" HDPE forcemain with 1.25" diameter HDPE service piping. There are three fittings along each service, one connecting the grinder station to the service piping, an inline shutoff/check valve, and finally the connection of the service piping to the forcemain itself. At the vacant lot locations there are only two fittings, one at the foremain, and a second at the shutoff/check valve. No

pump stations are installed at these lots currently. Should owners elect to develop the lot, a pump station would be installed, and piping to connect from the new station to the installed shutoff valve.

All fittings utilized for the grinder station services were compression style fittings.

During the inspection of the identified leaks the cause was attributed to the installation of these fittings, where the piping was not fully seated within the fitting, and/or components of the fitting itself (e.g., compression rings/o rings, etc.) were out of place. Over time, with the system in service, leaks developed at these locations, and eventually rose to the surface, at which time they were observed and repaired.

Based on the condition of the fittings observed during these inspections and repairs, a concern for a larger problem became evident.

Discussions with the contractor resulted in the decision to excavate, inspect, and repair as needed additional service connections where leaks had not been observed. The contractor identified that three of their crews had worked on the grinder station service installation during summer of 2017. Of the initial identified leaks, installations at these locations were conducted by two of these three crews.

An inventory of all service connections was prepared, locations of all installed fittings identified and staked to allow for excavation/inspection/repair.

To facilitate any needed repairs, the forcemain was taken out of service during the excavations. The station was pumped down and turned off for the day, and level monitored. A septic hauler was retained, the forcemain was drained at a bypass located at the pump station. The septic hauler remained on call throughout the day to pump down the station as needed. At the end of the day, when excavations/repairs completed the station and forcemain was placed back into service. This process was utilized throughout the three days which excavations and repairs were conducted.

On November 12, 2018 the contractor mobilized to the site with approximately ten employees, along with equipment to excavate and backfill service connections. They also had a variety of piping and fittings to make any repairs that should be required.

Between November 12 and November 14 the contractor performed 42 excavations of service fittings. Temperatures on these days were in the 20's and 30's, wintry mix and windy conditions occurred for the majority of the time work took place. High groundwater was encountered in many of the excavations.

Fittings were disassembled to confirm proper installation and then reassembled. Any that were not fully seated within the fittings had the piping extended to allow for full seating/engagement within the fitting. Extension entailed cutting back a section of pipe, and splicing in a slightly longer section of piping, utilizing a compression couple to facilitate the splice connection.

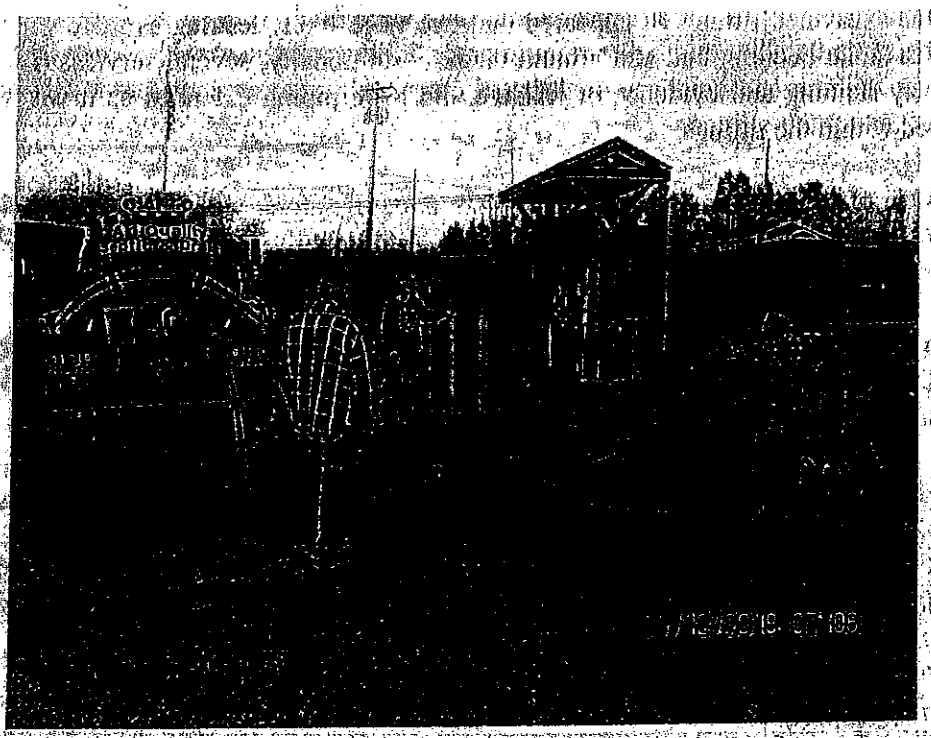
Of the excavated fittings, it appeared that two were likely leaking as there was staining on the stone bedding and soil around them. Additionally, several services that did not display staining and evidence of leakage, did have piping extended as it was not fully seated within the fittings.

A table of the various service connections is below along with notes indicating which points were excavated, and the result listed. Additionally photos with brief descriptions follow the table.

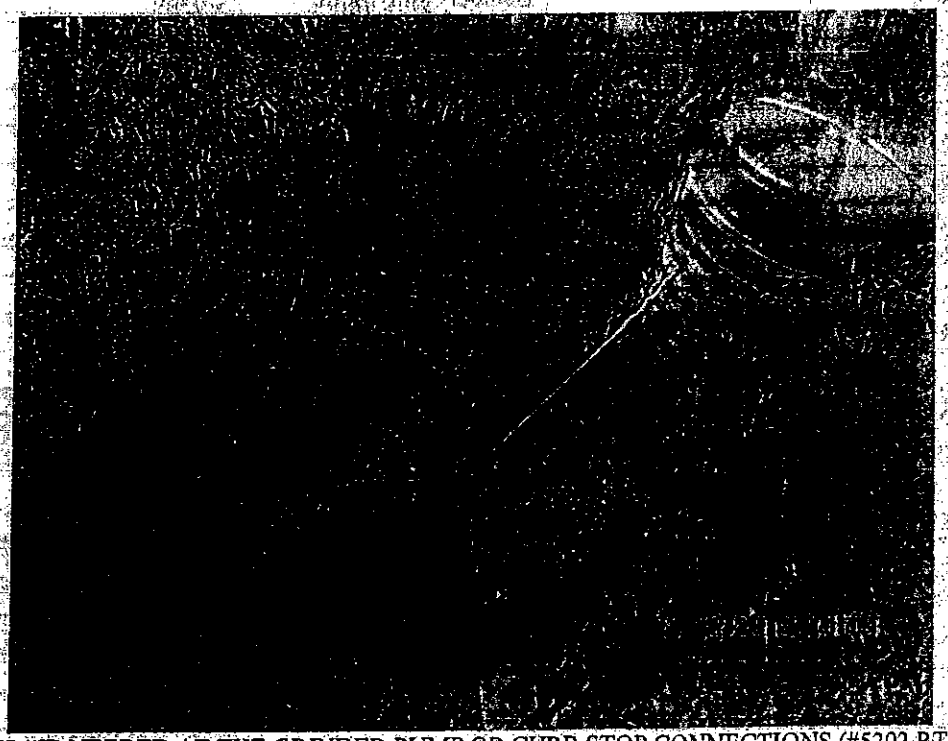
In addition to the inspections and repairs conducted in November 2018, the contractor will be providing the Town an extended warranty for all service connections installed under the SD#3 project.

Address	Corp Fitting	Shutoff Fitting	Pump Station Fitting
5202 Rt 20		Clean	Clean
6535 Rt 7		Piping Extended	Piping Extended
7000 Rt 7		Piping Extended	Piping Extended
Rt 7 (vacant lot)			
Rt 7 (vacant lot)			
Rt 7 (vacant lot)		Clean	
7791 Rt 7		Clean	Clean
7817 Rt 7		Piping Extended	Clean
7832 Rt 7		Leak- repair made	Clean
7868 Rt 7			Piping Extended
7871 Rt 7			Clean
7898 Rt 7			Piping Extended
7917 Rt 7	Clean*	Clean	Clean
7951 Rt 7	Clean	Piping Extended	Piping Extended
7990 Rt 7	Clean	Clean	Clean
8020 Rt 7	Clean	Clean	
8055 Rt 7			Piping Extended
8081 Rt 7		Clean	Piping Extended
Rt 7 (vacant lot)		Clean	
8119 Rt 7		Clean	Clean
Rt 7 (vacant lot)		Clean	
Rt 7 (vacant lot)		Clean	
8254 Rt 7		Extended Piping	
8175 Rt 7		Clean*	Clean
8298 Rt 7			
8313 Rt 7	Leak – repair made	Extended Piping	Clean
8342 Rt 7			
8374 Rt 7		Clean	
8385 Rt 7			

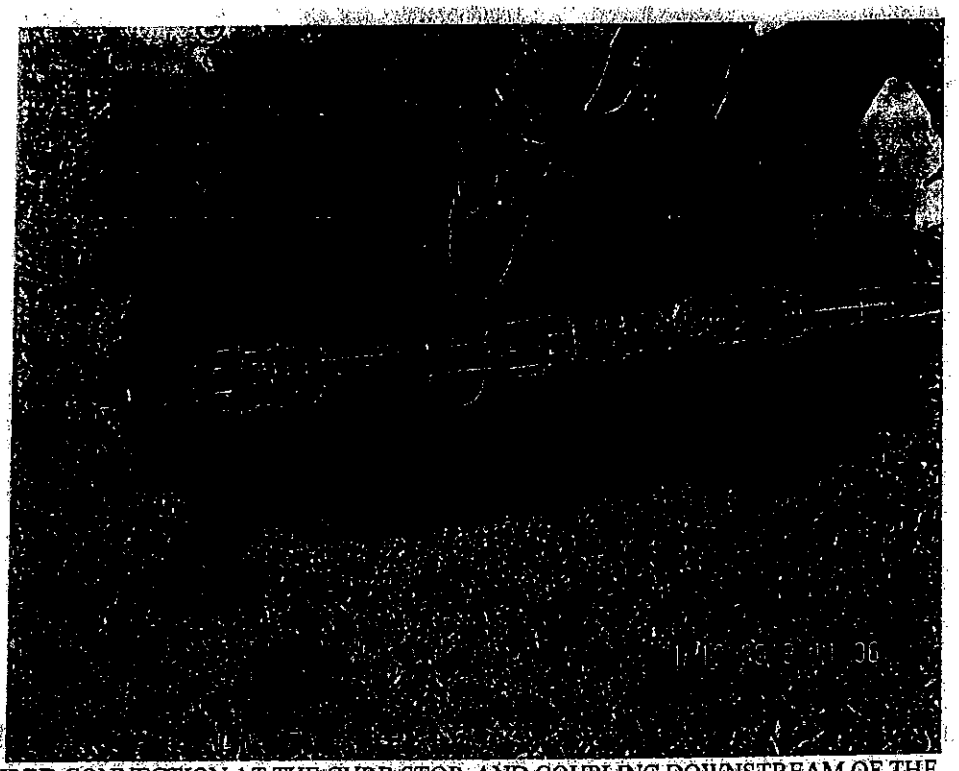
*- Fitting was intact, but was damaged during excavation and required repair



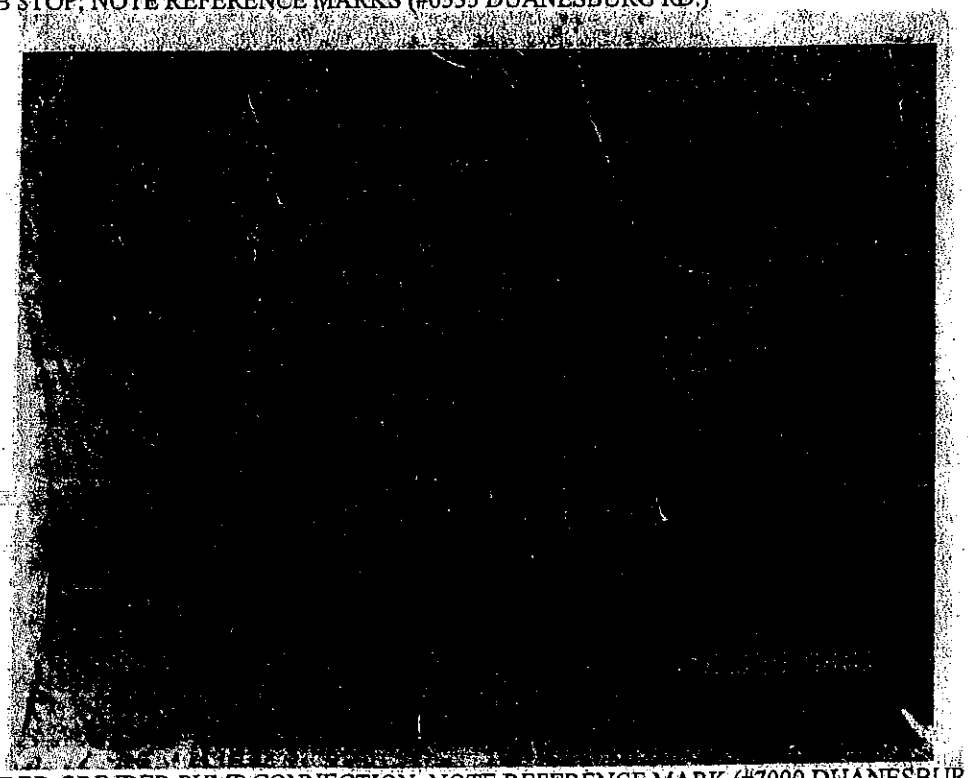
DRAINING OF THE FORCE MAIN, TYPICAL.



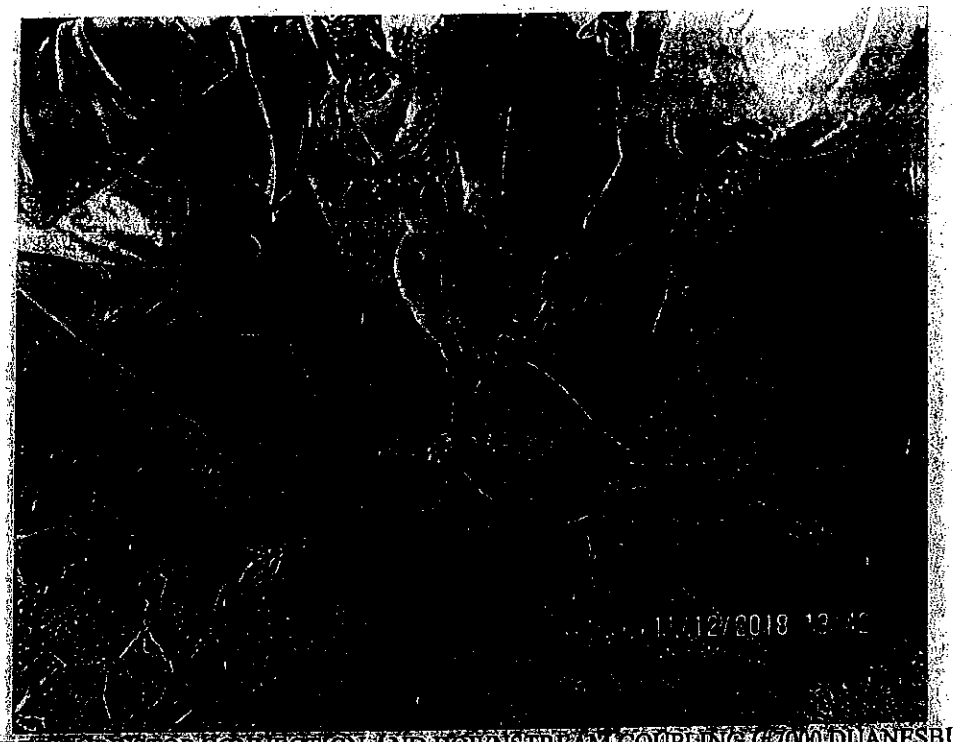
NO REPAIR NEEDED AT THE GRINDER PUMP OR CURB STOP CONNECTIONS (#5202-RT. 20)



REPAIRED CONNECTION AT THE CURB STOP, AND COUPLING DOWNSTREAM OF THE CURB STOP; NOTE REFERENCE MARKS (#6535 DUANESBURG RD.)



REPAIRED GRINDER PUMP CONNECTION; NOTE REFERENCE MARK (#7000 DUANESBURG RD.)

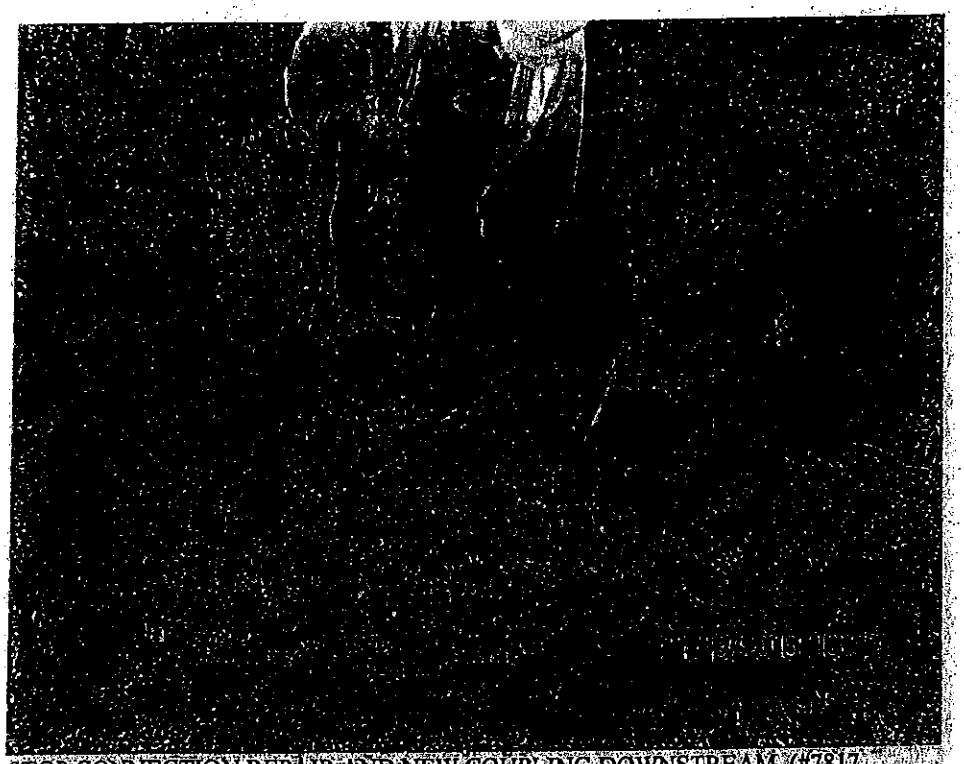


REPAIRED CURB STOP CONNECTION AND DOWNSTREAM COUPLING (#7000 DUANESBURG RD.)

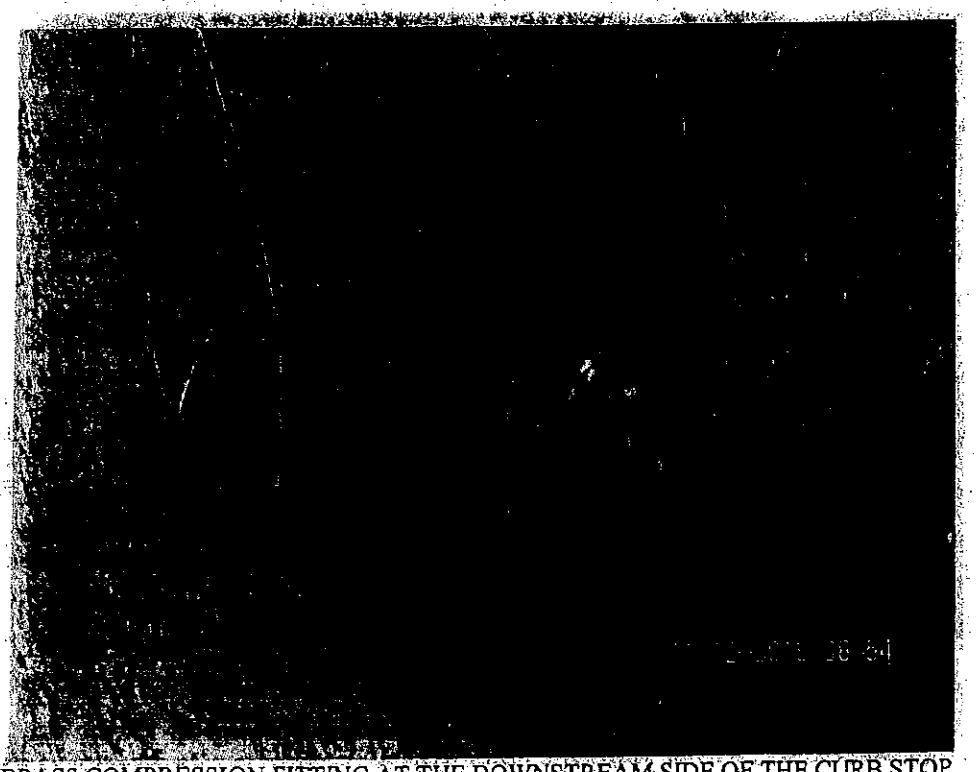
NO REPAIR NECESSARY AT THE CURB STOP CONNECTION, NOTE REFERENCE MARKS (#7791 DUANESBURG RD.)

NO REPAIR NECESSARY AT THE GRINDER PUMP CONNECTION (#7791 DUANESBURG RD.)

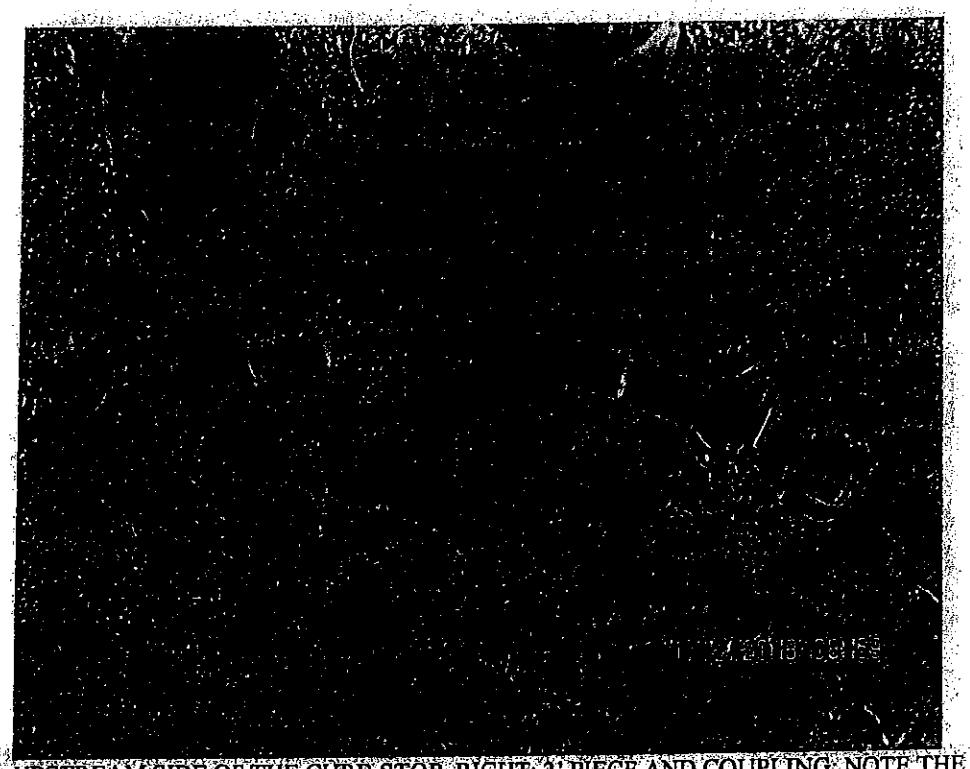
NO REPAIR NECESSARY AT THE GRINDER PUMP CONNECTION (#7817 DUANESBURG RD.)



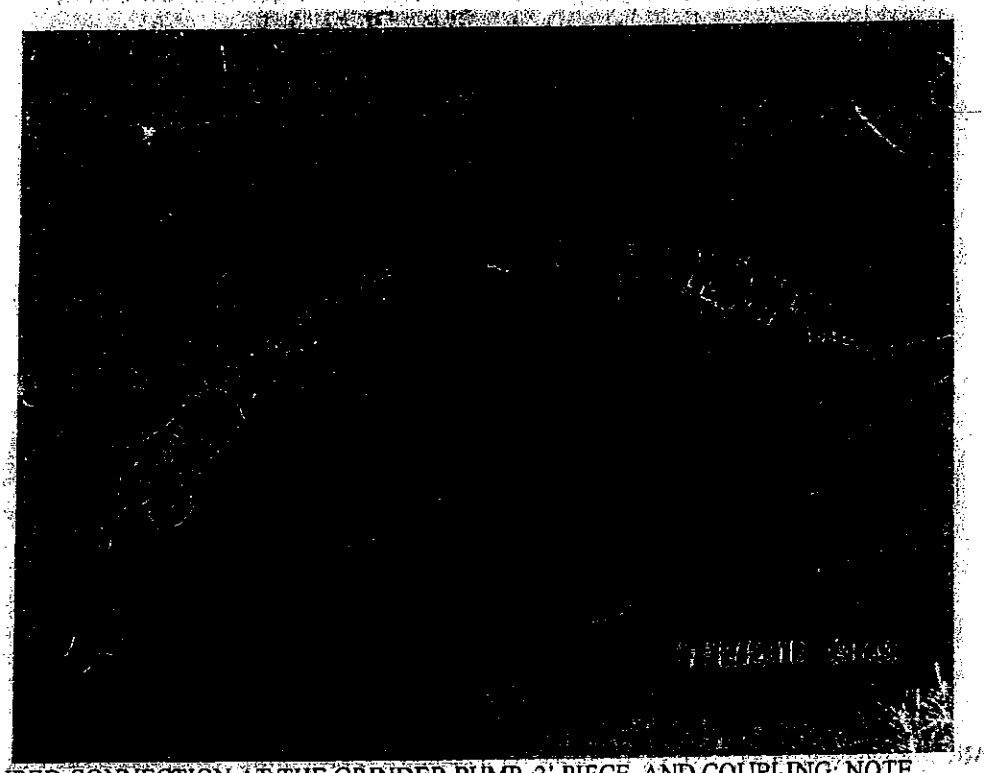
CURB STOP CONNECTION REPAIR AND NEW COUPLING DOWNSTREAM (#7817 DUANESBURG RD.)



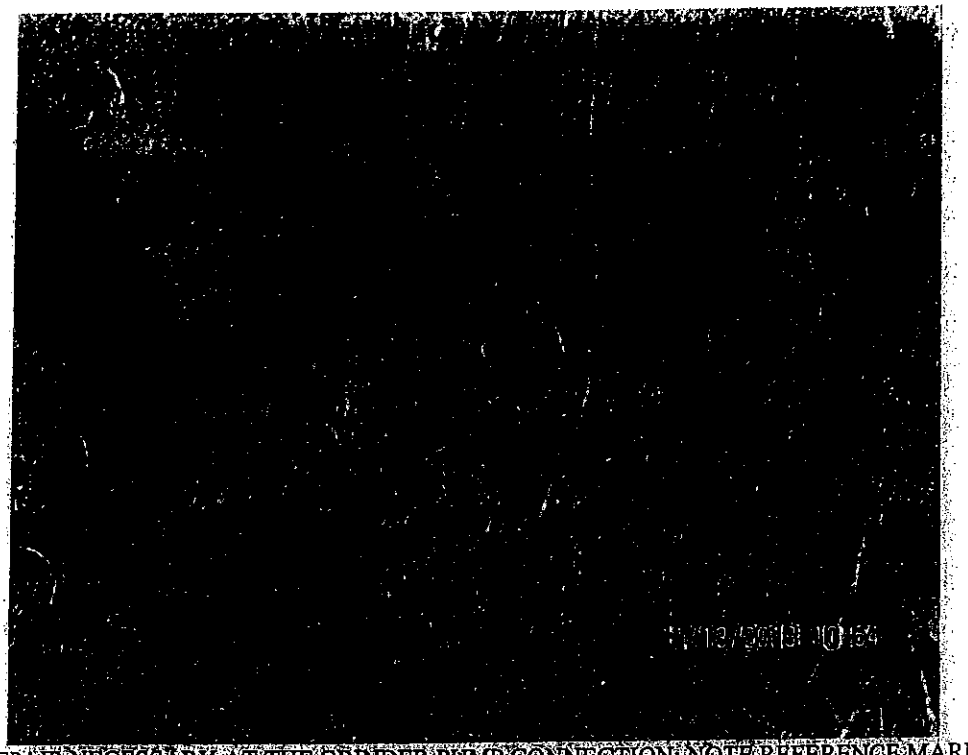
NEW BRASS COMPRESSION FITTING AT THE DOWNSTREAM SIDE OF THE CURB STOP (#7832 DUANESBURG RD.)



LEFT: UPSTREAM SIDE OF THE CURB STOP. RIGHT: 2' PIECE AND COUPLING; NOTE THE REFERENCE MARKS MADE ON THE PIPE. (#7832 DUANESBURG RD.)



REPAIRED CONNECTION AT THE GRINDER PUMP, 2' PIECE, AND COUPLING; NOTE REFERENCE MARKS (#7868 DUANESBURG RD.)

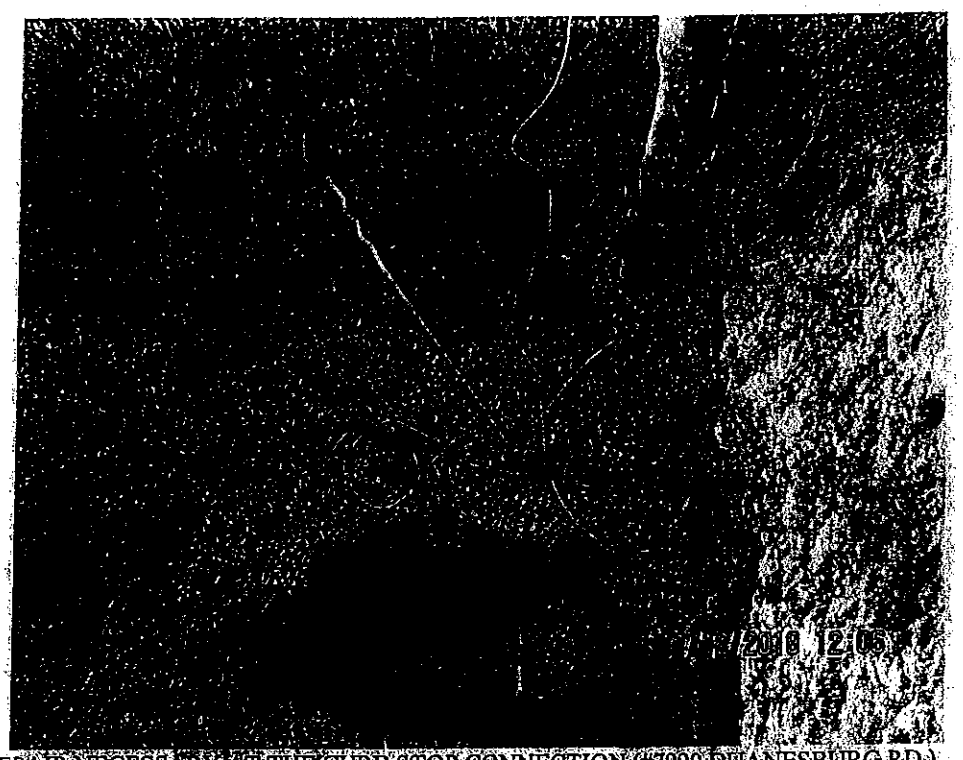


NO REPAIR NECESSARY AT THE GRINDER PUMP CONNECTION; NOTE REFERENCE MARK (#7871 DUANESBURG RD.)

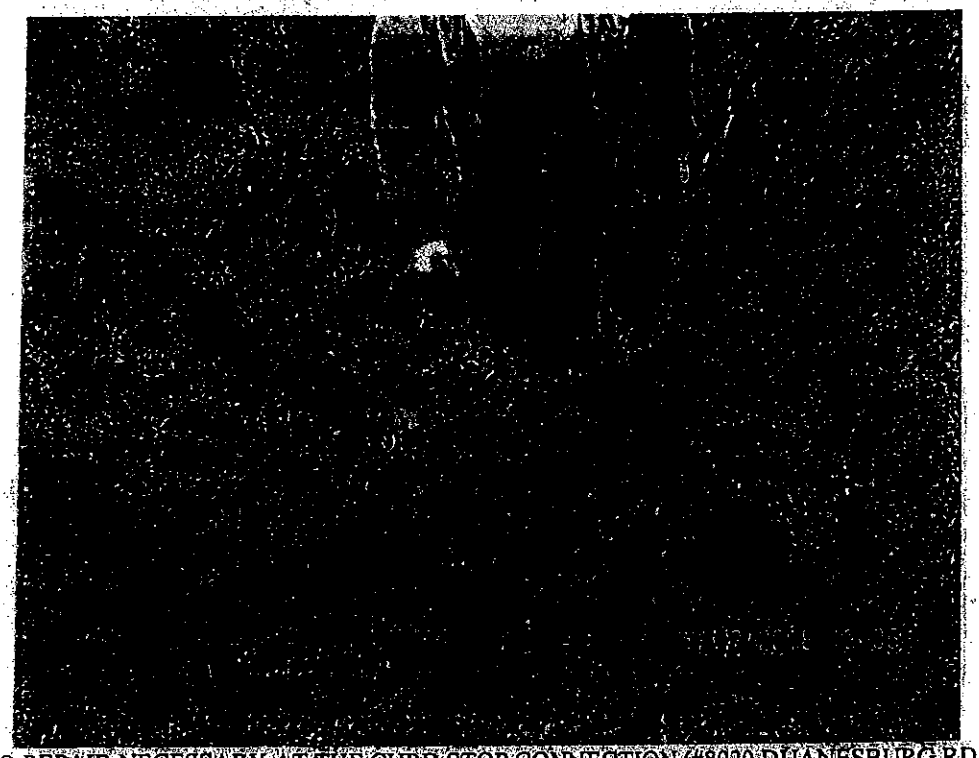
REPAIRED CONNECTION, AND COUPLING, AT THE GRINDER PUMP; NOTE REFERENCE MARKS (#7898 DUANESBURG RD)

REPAIRED CONNECTION AT THE GRINDER PUMP (#7951 DUANESBURG RD.)

NO REPAIR NECESSARY AT THE GRINDER PUMP CONNECTION; NOTE THE REFERENCE MARK (#7990 DUANESBURG RD.)

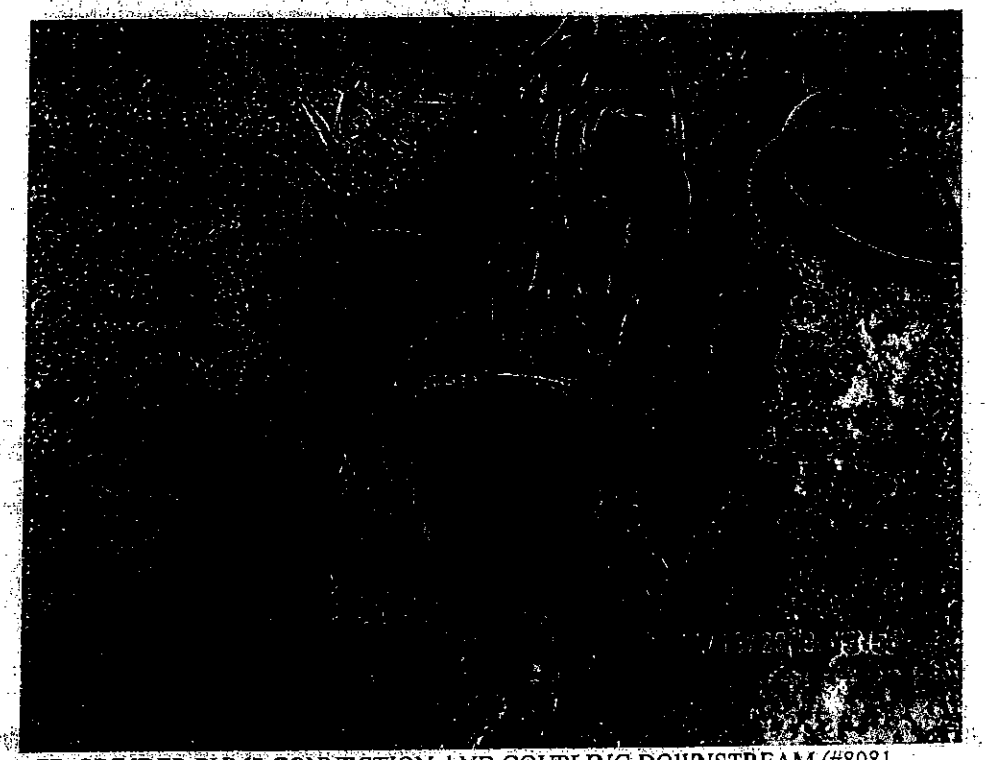


NO REPAIR NECESSARY AT THE CURB STOP CONNECTION (#7990 DUANESBURG RD.)

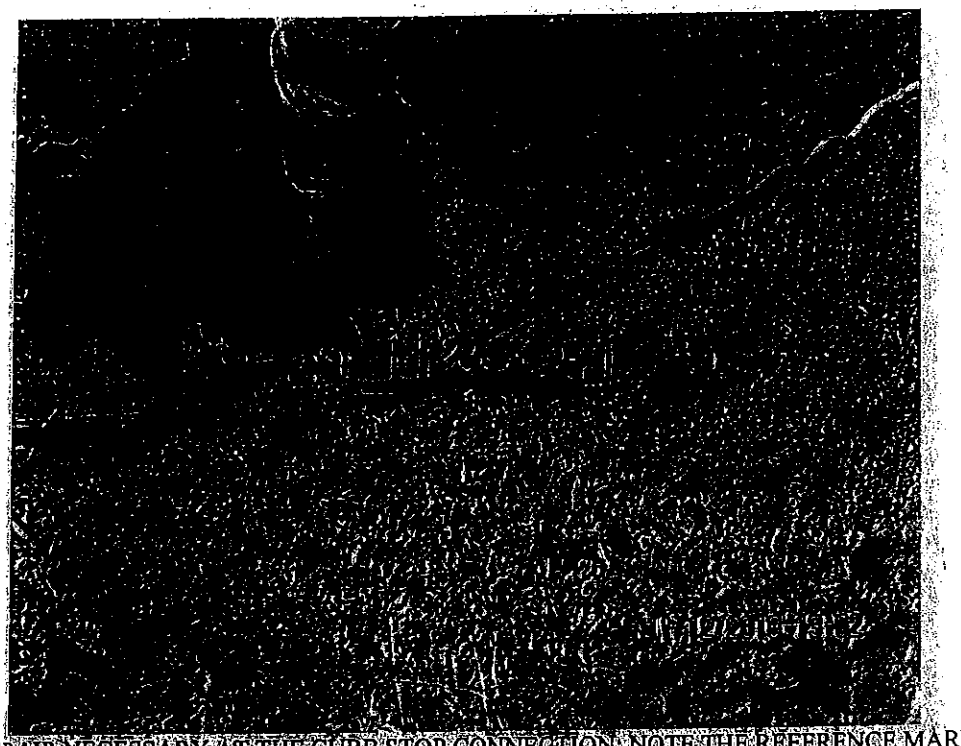


NO REPAIR NECESSARY AT THE CURB STOP CONNECTION (#8020 DUANESBURG RD.)

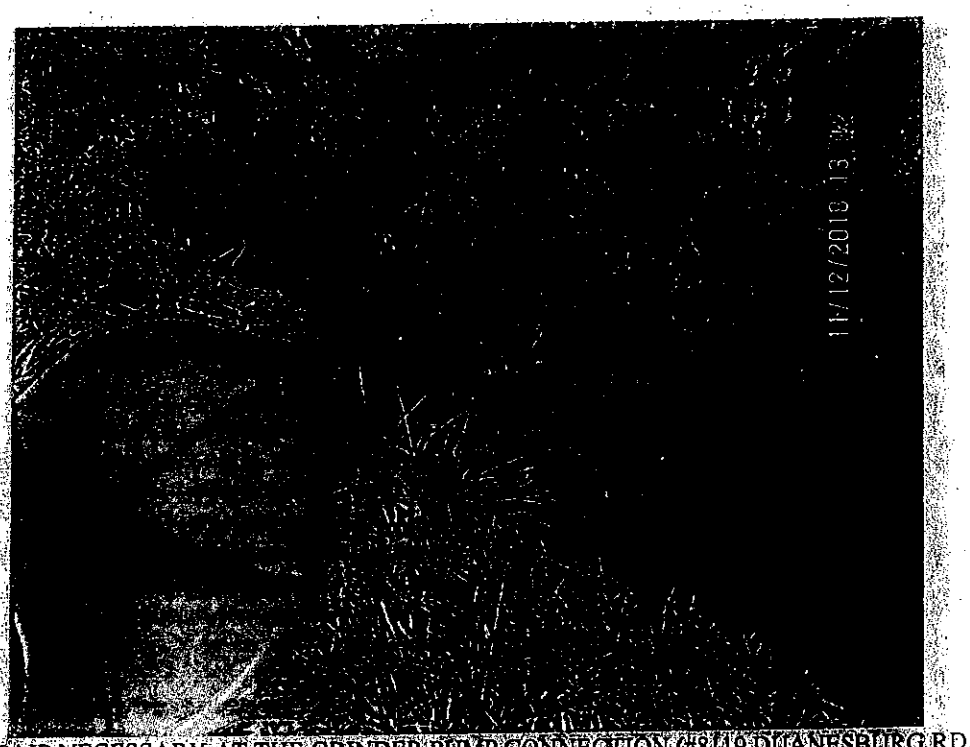
REPAIRED GRINDER PUMP CONNECTION AND COUPLING DOWNSTREAM (#8055 DUANESBURG RD.



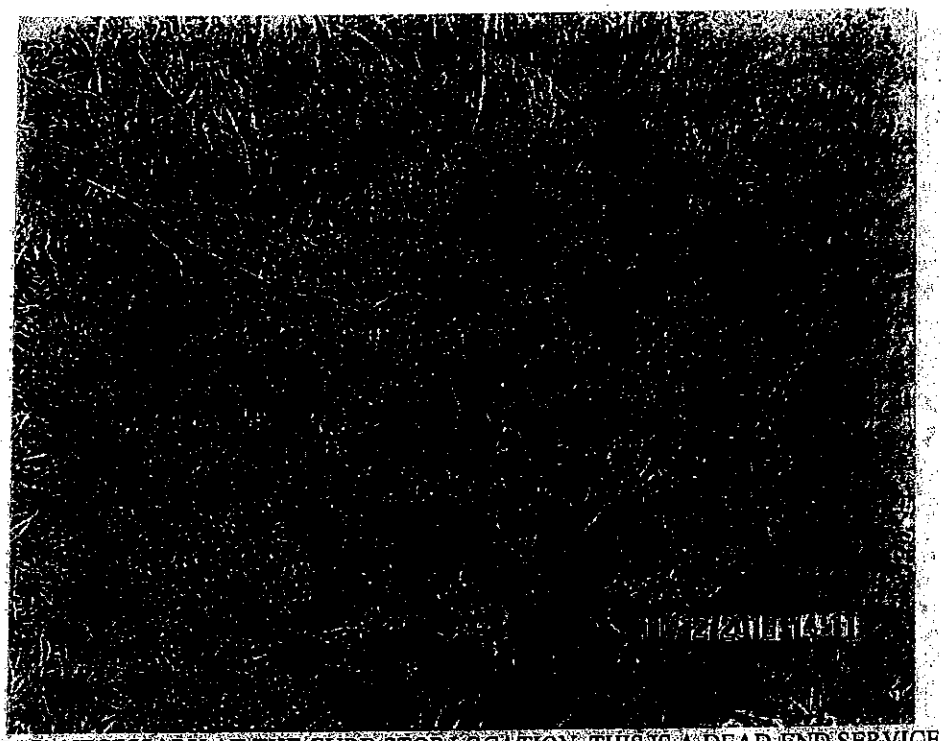
REPAIRED GRINDER PUMP CONNECTION AND COUPLING DOWNSTREAM (#8081 DUANESBURG RD.)



NO REPAIR NECESSARY AT THE CURB STOP CONNECTION. NOTE THE REFERENCE MARKS.
THIS IS A DEAD-END SERVICE (VACANT LOT EAST OF #8119 DUANESBURG RD.).



NO REPAIR NECESSARY AT THE GRINDER PUMP CONNECTION (#8119 DUANESBURG RD.)



NO REPAIR NECESSARY AT THE CURB STOP LOCATION, THIS IS A DEAD-END SERVICE
(VACANT LOT WEST OF #8119 DUANESBURG RD.)

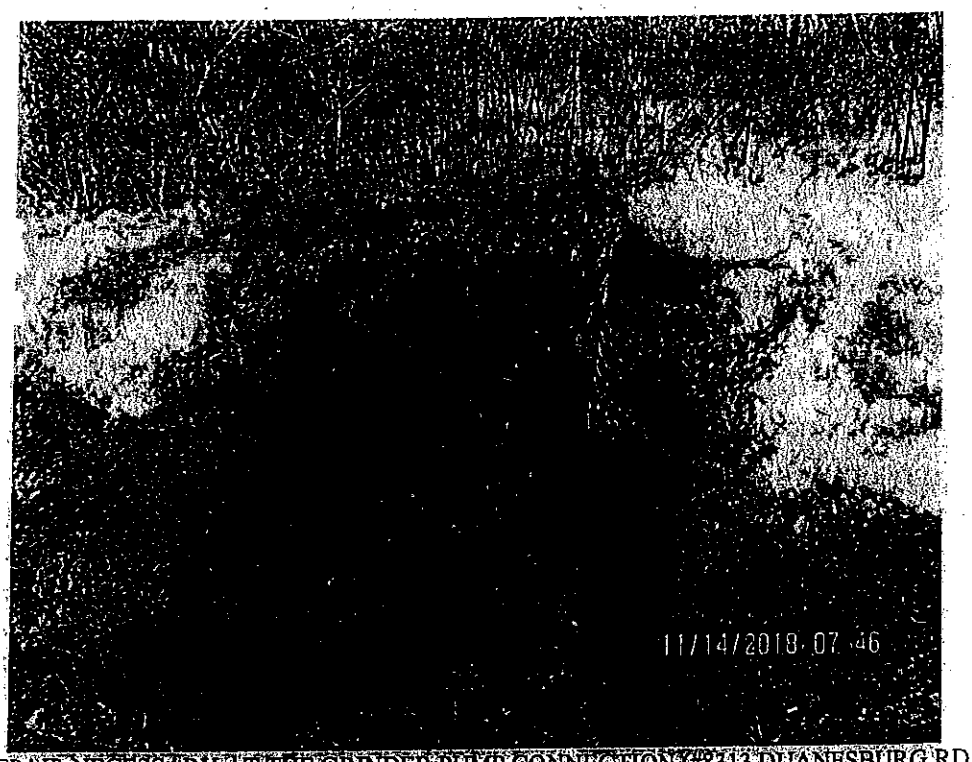
NO REPAIR NECESSARY AT THE CURB STOP LOCATION, THIS IS A DEAD-END SERVICE
(VACANT LOT EAST OF #8254 DUANESBURG RD.)

REPAIR AT CURB STOP CONNECTION AND COUPLING UPSTREAM OF CURB STOP (#8254 DUANESBURG RD.)

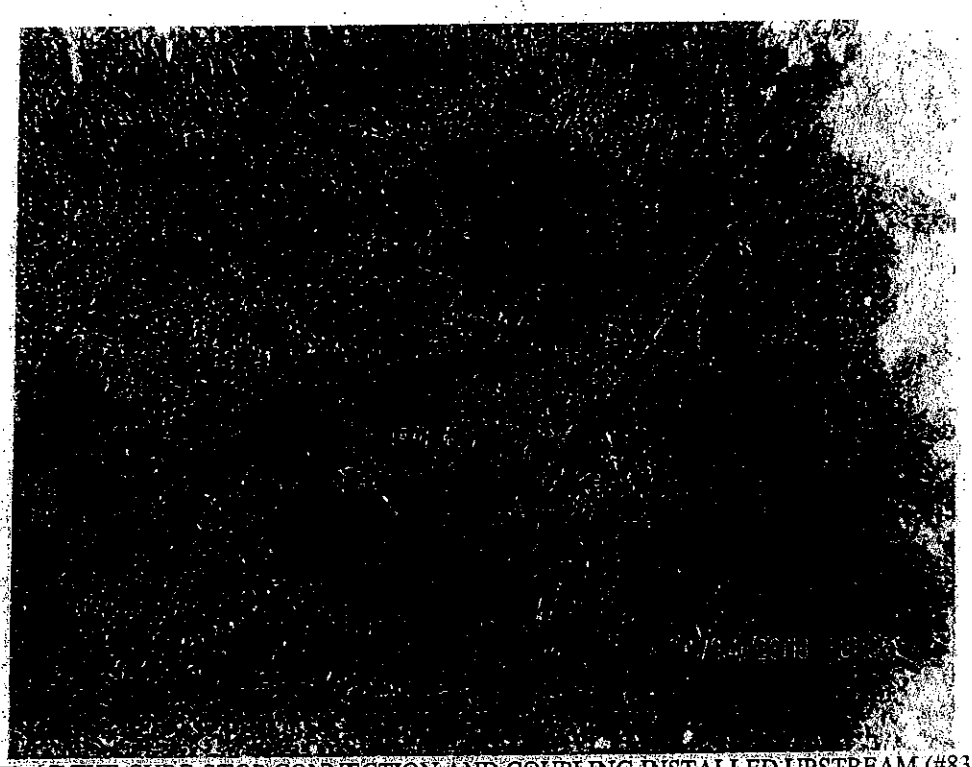
NO REPAIR NECESSARY AT GRINDER PUMP LOCATION (#8175 DUANESBURG RD.)

REPAIRED CURB STOP CONNECTION AND COUPLING (#8175 DUANESBURG RD.)

REPAIRED TAP CONNECTION AND COUPLING (#8313 DUANESBURG RD.)



NO REPAIR NECESSARY AT THE GRINDER PUMP CONNECTION (#8313 DUANESBURG RD.)



REPAIR AT THE CURB STOP CONNECTION AND COUPLING INSTALLED UPSTREAM (#8313 DUANESBURG RD.)

NO REPAIR NECESSARY AT THE CURB STOP LOCATION (#8374 DUANESBURG RD.)

2020 I+I Report SD#2

159 South of Spring Rd.

MH-1 Corner 159 and Spring Rd.
MH-2 Corner House (old Bait Store)
MH-3 7980 Mariaville Rd.
MH-4 Verizon
MH-5 7850 Mariaville Rd.
7723 Mariaville Rd.-Res Grinder Pump
MH-6 7784 Mariaville Rd.
MH-7 7694 Mariaville Rd.
7675 Mariaville Rd.-Res Grinder Pump
7615 Mariaville Rd.-Res Grinder Pump
MH-8 7618 Mariaville Rd.
MH-9 7585 Mariaville Rd.
7491 Mariaville Rd.-Res Grinder Pump

Spring Rd.

MH-10 138 Spring Rd.
155 Spring Rd.-Res Grinder Pump
165 Spring Rd.-Res Grinder Pump
183 Spring Rd.-Res Grinder Pump
MH-11 197 Spring Rd.
MH-12 261 Spring Rd.
285 Spring Rd.-Res Grinder Pump
297 Spring Rd.-Res Grinder Pump
307 Spring Rd.-Res Grinder Pump
319 Spring Rd.-Res Grinder Pump
MH-13 319 Spring Rd.
365 Spring Rd.-Res Grinder Pump
399 Spring Rd.-Res Grinder Pump
MH-14 420 Spring Rd.
MH-15 End 430 Spring Rd.

Lake Ave.

MH-16 Corner 159 and Lake Ave.
MH-17 184 Lake Ave.
MH-18 228 Lake Ave.
MH-19 End 270 Lake Ave.

S. Shore

MH-23 Corner 159 and S. Shore
MH-24 144 S. Shore
MH-25 161 S. Shore
MH-26 W of inlet
270 S Shore Rd.-Res Grinder Pump

274 S Shore Rd.-Res Grinder Pump
278 S Shore Rd.-Res Grinder Pump
MH-27 Corner of Private Rd.
294 S Shore Rd.-Res Grinder Pump
320 S Shore Rd.-Res Grinder Pump
340 S Shore Rd.-Res Grinder Pump
352 S Shore Rd.-Res Grinder Pump
MH-28 492 S. Shore
510 S Shore Rd.-Res Grinder Pump
536 S Shore Rd.-Res Grinder Pump
541 S Shore Rd.-Res Grinder Pump
548 S Shore Rd.-Res Grinder Pump
556 S Shore Rd.-Res Grinder Pump
578 S Shore Rd.-Res Grinder Pump
594 S Shore Rd.-Res Grinder Pump
612 S Shore Rd.-Res Grinder Pump
628 S Shore Rd.-Res Grinder Pump
668 S Shore Rd.-Res Grinder Pump
688 S Shore Rd.-Res Grinder Pump
712 S Shore Rd.-Res Grinder Pump
722 S Shore Rd.-Res Grinder Pump
768 S Shore Rd.-Res Grinder Pump
786 S Shore Rd.-Res Grinder Pump
794 S Shore Rd.-Res Grinder Pump
816 S Shore Rd.-Res Grinder Pump
878 S Shore Rd.-Res Grinder Pump
898 S Shore Rd.-Res Grinder Pump

Shore

MH-38 near pump station
MH-39 337 Shore Rd.
MH-40 297 Shore Rd.
237 Shore Rd.-Res Grinder Pump
213 Shore Rd.-Res Grinder Pump
MH-41 213 Shore Rd.
197 Shore Rd.-Res Grinder Pump
177 Shore Rd.-Res Grinder Pump
MH-42 177 Shore Rd.
MH-43 158 Shore Rd.
123 Shore Rd.-Res Grinder Pump

159 West of Pump Station toward Store

MH-44 front of pump station
MH-50 Corner of Hilltop and 159
8123 Mariaville Rd.-Res Grinder Pump

8126 Mariaville Rd.-Res Grinder Pump
8287 Mariaville Rd.-Res Grinder Pump
MH-45 8350 Mariaville Rd.
MH-46 8408 Mariaville Rd.
MH-47 8466 & 8452 Mariaville Rd.
8508 Mariaville Rd.-Res Grinder Pump
MH-48 8508 Mariaville Rd.
MH-49 8522 Mariaville Rd.

Weast Rd.

MH-51 Corner Weast and 159
MH-52 2598 Weast Rd.
MH-53 2534 Weast Rd.
MH-54 2496 Weast Rd.
MH-55 Corner Weast & Hillside Rd.
2426 Weast Rd.-Res Grinder Pump
2418 Weast Rd.-Res Grinder Pump
2408 Weast Rd.-Res Grinder Pump
2400 Weast Rd.-Res Grinder Pump
2388 Weast Rd.-Res Grinder Pump
2378 Weast Rd.-Res Grinder Pump
2364 Weast Rd.-Res Grinder Pump
2344 Weast Rd.-Res Grinder Pump
2326 Weast Rd.-Res Grinder Pump
2253 Weast Rd.-Res Grinder Pump
2242 Weast Rd.-Res Grinder Pump
2223 Weast Rd.-Res Grinder pump
2218 Weast Rd.-Res Grinder Pump
2213 Weast Rd.-Res Grinder Pump
2203 Weast Rd.-Res Grinder Pump (Princetown)
2187 Weast Rd.-Res Grinder Pump (Princetown)
2172 Weast Rd.-Res Grinder Pump (Princetown)
2158 Weast Rd.-Res Grinder Pump (Princetown)
2146 Weast Rd.-Res Grinder Pump (Princetown)
2137 Weast Rd.-Res Grinder Pump (Princetown)
2134 Weast Rd.-Res Grinder Pump (Princetown)
2016 Weast Rd.-Res Grinder Pump (Princetown)
1954 Weast Rd.-Res Grinder Pump (Princetown)

Hilltop

MH-58 Pump station going up Hill 1st. MH
MH-59 Corner Hillside & Hilltop
MH-60 first bend in road
MH-61 next going up hill
MH-62 turn to easement

MH-63 behind 322
MH-64 behind 478 (inline with rear corner of house)
MH-65 behind 528
MH-66 behind 542
MH-124 front of 542
MH-125 602 Jefts (building removed)
MH-126 684 Hilltop

Hillside

MH-68 168 Hillside
MH-72 189 Hillside
MH-71 228 Hillside
250 Hillside Rd.-Res Grinder Pump
MH-70 263 & 293 Hillside
MH-69 Corner by 327 Hillside
341 Hillside Rd.-Res Grinder Pump
MH-74 ½ down hill

Lake Shore & Weast

MH-75 Corner
MH-79 2041 Weast
MH-80 2009 Weast

Lake Shore Dr.

MH-82A behind 2097 Weast
MH-82 2077 Lake Shore
MH-81 Lake Shore & Island
MH-83 East of Pump Station
MH-84 2081 Island (west of Pump station)
MH-85 End of Island Dr.

Mariaville Rd. (159)

MH-92 8648 Mariaville Rd.
MH-91 8648 & 8660 Mariaville Rd.
MH-90 8722 Mariaville Rd.
MH-89 8770 & 8754 Mariaville Rd.
MH-88 8822 Mariaville Rd.(Wheaton)
MH-87 Back of 8822 Mariaville
MH-86A Back of 8866 Mariaville Rd. (Black)
MH-86 Mariaville Rd. North toward 160
MH-46 8408 Mariaville Rd.
MH-93 8548 & 8564 Mariaville Rd.

Batter St.

MH-94 Front of Store

MH-95 Past Dam
MH-96
MH-97 front of B & B
MH-98 216 & 242 Batter St.
MH-99 232 Batter St. (Private Rd.)
MH-100 304 Batter St.
MH-101 Cemetery
MH-102
MH-103 404 Batter St.
MH-104 453 Batter St.
457 Batter St.-Res Grinder Pump
551 Batter St.-Res Grinder Pump

Private Rd. (Segrue)

MH-106 Side of 232 Batter St.
MH-107 Top of Hill

159 to 160

MH-115 Near Store
MH-114 8915 Mariaville Rd.
MH-113 Corner Mill Rd. & 159
MH-112 9037 Mariaville Rd.
MH-111 9037 & 160 (Mariaville Scotch Church Rd.)
MH-110 9105 Mariaville Rd.
MH-109 front of Gilbert
MH-108 Pump Station

Mill Rd.

No MH
131 Mill Rd.-Res Grinder Pump
169 Mill Rd.-Res Grinder Pump
194 Mill Rd.-Res Grinder Pump
211 Mill Rd.-Res Grinder Pump

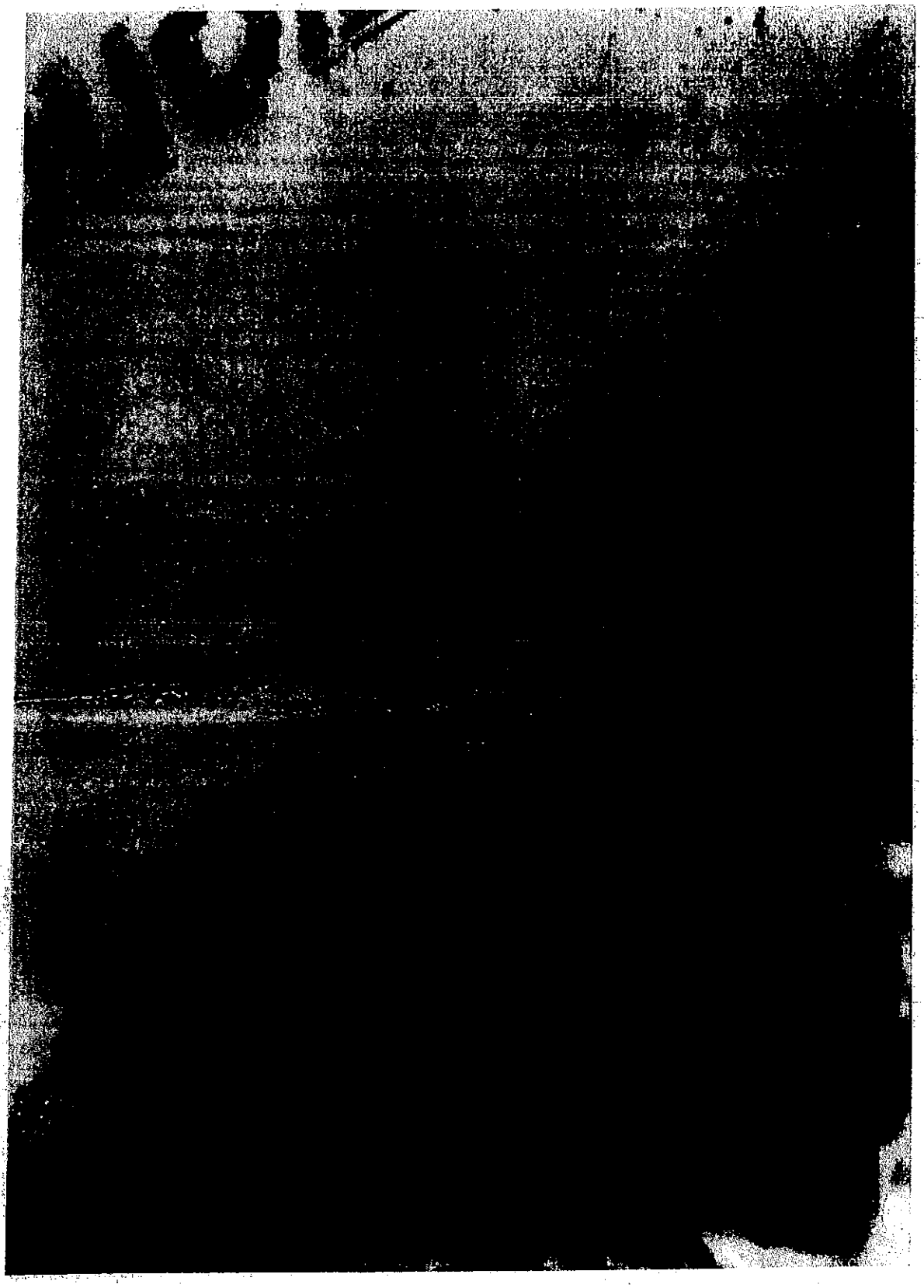
159 West of 160

MH 117 Across from School
MH 118 Across from School
MH 119 9279 Mariaville Rd.
MH 120 9293 Mariaville Rd.
MH 120A 9339 Mariaville Rd.
MH 121 9389 Mariaville Rd.
MH 122 9417 Mariaville Rd.
MH 123 9452 Mariaville Rd.
9497 Mariaville Rd.-Res Grinder Pump

Evergreen Pl.

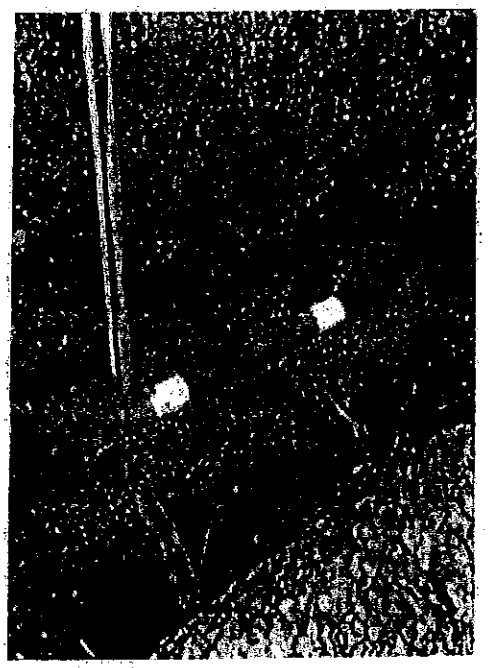
MH 1-A Corner of Mariaville Rd.
MH 2-A 171 Evergreen
MH 3-A 195 Evergreen
MH 4-A 266 Evergreen
MH 5-A 294 Evergreen
MH 6-A Cul-de-sac

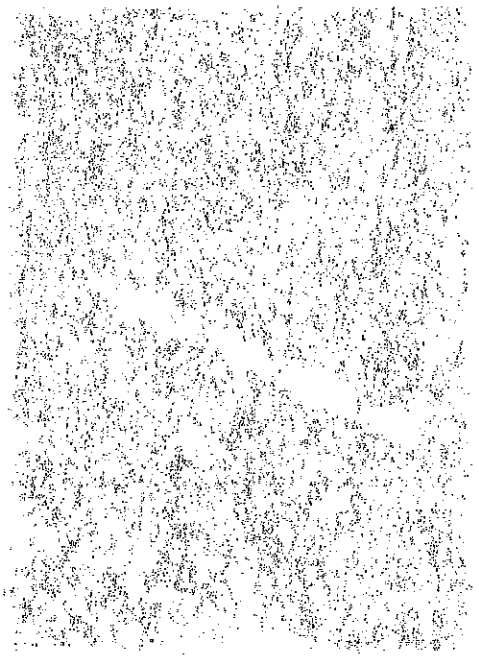
District #2
Shore Rd



Shoore Rd

Repairs made to broken hub





2019 I+I Report SD#1

Cole Rd.

MH-1 Across from Main Pump Station-
MH-2 Across Stream – Ok
MH-4 1145 Cole Rd.- Ok
MH-5 1069 Cole Rd. – Ok
MH-6 1039 Cole Rd. - Black top and grit needs to be cleaned out-Moderate
MH-7 997 Cole Rd. - Ok
MH-8 949 Cole Rd. – 2nd riser ring leak – Minor
MH-9 885 Cole Rd. – Ok
MH-10 843 Cole Rd. - Ok
MH-11 805 Cole Rd.- 2nd riser ring leak-Minor
MH-12 771 Cole Rd.- Ok
MH-13 731 Cole Rd.- Ok
MH-14 690 Cole Rd.- Ok
MH-15 669/699 Cole Rd.- Ok
MH-16 639 Cole Rd.- Top riser ring leak-Minor
MH-17 559 Cole Rd.- Ok
MH-18 521 Cole Rd.- Ok
MH-19 484 Cole Rd.- Ok
MH-20 386 Cole Rd.- Ok
MH-21 360 Cole Rd.- Ok
MH-22 324 Cole Rd.- Ok
MH-23 288 Cole Rd.- Ok
MH-24 257 Cole Rd.- Ok
MH-25 235 Cole Rd.- Ok
MH-26 170 Cole Rd.- Ok
MH-27 Ambulance Garage- Ok

Pump Station to R.R. Tracks

MH-28- Ok
MH-29 Ok
MH-30 Harvest Homes access Rd.- Ok
MH-31- Ok
MH-32- Ok
MH-33- Ok
MH-34 front SE corner of Harvest Homes- Ok
MH-35 front SW corner of Harvest Homes- Ok
MH-36 - Ok
MH-37 Delanson Industrial Park- Ok
MH-38-
MH-39 Corner Rose and RR Ave.- Ok
MH-40 Rose St.-Ok
MH-39A Delanson Equipment & Supply- Ok
MH-41 Post Office- Ok
MH-42 vacant lot next to Post Office- Ok

MH-43 Across St. to Village Park S side of RR tracks-Ok
MH-44 Village Park Flag Area-Ok
MH-45 1915 Main St.-Ok
MH-69 N side of RR tracks-Ok
MH-67 Along tracks to Elm St. Easement-Ok
MH-69A End of Elm St. Easement-Ok
MH-68 Across from FD-Ok
MH-46 1937 Main St.-Ok
MH-47 Corners of E & W Shore Rd. & Main St. -Ok
MH-48 2046 Main St.-Ok
MH-49 2066 Main St.-Ok

West Shore Rd.

MH-50 Across from Barton's Garage (1982 Main St.)-Ok
MH-54 180 W Shore-Ok
MH-53 230 W Shore-Ok
MH-52 Pump Station-Ok

East Shore Rd.

MH-57 119 E Shore Rd.-Ok
MH-59 129 E Shore Rd.-Ok
MH-60 169 E Shore Rd.-Ok
MH-61 187 E Shore Rd.-Ok
MH-62 302/304 E Shore Rd.-Ok
MH-63-Ok
MH-64 377 E Shore Rd.-Ok
MH-65 403 E Shore Rd.-Ok
MH-66 460 E Shore & Easement to Rt. 7-Ok
MH-117 E Shore Rd.-Ok
MH-118 552 E Shore Rd.-Ok
MH-119 604 E Shore Rd. -Ok
MH-120 636 E Shore & Acorn Easement-Ok
MH-121 9450 Corner E Shore & Rt. 7 -Ok

Elm St.

MH-70 204 Elm St.-needs pumping clog-5/2/19 Ok
MH-71 162 Elm St.-Ok
MH-72 Corner Elm & 1000 Acre Rd.-Ok
MH-73 129 1000 Acre Rd. (Snyder)-Ok
MH-74 Behind 1748 Main St. W side 395 Easement - 42° 44' 47"/ 74w 11' 14"-Ok
MH-75 Behind 1716 Main St. W side 395 Easement – Ok

1000 Acre Rd.

MH-76 Corner 1000 Acre & Newton St.-Ok
MH-77 200 1000 Acre Rd. (Salisburg)-Ok
MH-78 208 1000 Acre Rd.-Ok
MH-79 246 1000 Acre Rd.-Ok
MH-80 299 1000 Acre Rd.-Ok

Newton St.

MH-81 Corner Newton & Charles St.
MH-82 End House

Charles St.

MH-83 109 Charles St.
MH-83A 168 Charles St.
MH-84 189 Charles St.

Main St. Easement behind Fire House

MH-85 Creek to RR Ave.-Ok
MH-86 Fire House- Ok – 42° 41' 44" N 74°11'18"W-Ok
MH-87 Behind 1737 Main St.- 42° 44'47" N 74° 11' 18" W-Ok
MH-88 Behind 1701 Main St. - 42° 44' 47" N 74° 11' 14" W-Ok
MH-89 Creek to 395- 42°44'44"N 74°11'14" W-Ok
MH-90 E side of 395-42°44'47"n74°11'14"W-Ok
MH-91 W side of 395-Ok
MH-92 toward school-Ok
MH-93 - Ok
MH-94- Ok
MH-95 School-(Annex & Rainbow removed)-Ok
MH-96 School Dr. & 395-Ok
MH-100 Behind 136 School Dr. (Gignac)-Ok
MH-101 School Dr. & 395 (toward Stewart)Ok
MH-104 Stewart & 395-Ok
MH-108 1291 Main St.-Ok
MH-109 Cole & 395-Ok
MH-110 Behind Dr. Cooley's Garage-Ok
MH-111 1218 Main St.-Ok
MH-112 Cooley & 395-Ok
MH-115 -Ok
MH-116 1084 Main St.-Ok

School Dr.

MH-97 DCS driveway-Ok
MH-98 Alexander & School Dr.-Ok
MH-103 225 School Dr.-Ok
MH-102 227 School Dr.-Ok

Stewart Dr.

MH-105 129 Stewart-Ok
MH-106 157 Stewart-Ok
MH-107 203 Stewart-3rd ring leak-Minor

Cooley Heights

MH-113 Duanesburg Medical Services
MH-111 Corner Cooley & Stewart

East Shore to Acorn Easement

MH-122 Side of 625 E Shore (Wintle)-clog-Moderate
MH-123 back turn-Ok
MH-124 End of Acorn-Ok
MH-125 Acorn to Rt.7 Easement-Ok
MH-126 Behind 9342 Rt.7-Ok
MH-127 Behind 9320 Rt.7-Ok
MH-128 Behind 9278 Rt.7-Ok
MH-129 Front of 9278 Rt.7-Ok
MH-130 Cross Rt.7 to Elem. School-Ok
MH-131 9212 Rt.7-Ok
MH-132 9154 Rt.7-Ok

East Shore to Rt.7 Easement

MH-133 behind 460 E. Shore Rd.-42°44'10"N74°10'47"W-Ok
MH-134-42°44'20"N74°10'47"W-Ok
MH-135-Ok
MH-136 (fence)-42°44'20"N74°10'47"W-Ok
MH-137 corner base of field-42°44'20"N74°10'47"W-Ok
MH-138 3 way branch parallel with Rt.7 and heads toward Rt. 7-42°4420N-Ok
MH-139 after stream-Ok
MH-140 behind 9928 Rt.7-Ok
MH-141 After stream corner lot of Gibbys-Ok
MH-142 Behind Gibbys-Ok
MH-143 Behind Quaker Inn-Ok
MH-144 Behind Fire Department-OK
MH-148 from MH-138 going toward Rt.7
MH-148A Rear W corner of 9726 Rt.7
MH-149 Rear E corner of 9726 Rt.7

Schoharie Tpk east of Quakerstreet

MH-152 Corner Darby Hill & Schoharie Tpk.-Ok
MH-153 Maple Ave & Schoharie Tpk.-Ok
MH-192 6156 Schoharie Tpk.-Ok
MH-154 6128 Schoharie Tpk.-Ok
MH-154A 6054 Schoharie Tpk.-clog-pumped out-Ok 5/2/19
MH-155 6020 Schoharie Tpk.-Ok

Maple Ave & Darby Hill Rd.

MH-157 Darby Hill & Maple Ave.-Ok
MH-158 255 Maple Ave-Ok
MH-160 231 Maple Ave.-Ok
MH-159 159 Maple Ave.-Ok

Darby Hill & Quaker Lane Easement

MH-156 Darby Hill & Scranton's (180 Darby Hill)-Ok
MH-161 Rear of 180 Darby Hill Rd.-Ok

MH-162 Quaker Lane & Easement

Darby Hill Rd.

MH-152 Darby Hill & Intersection (Light)-Ok

Quaker Lane

MH-191 121 Quaker Lane-Ok
MH-163 219 Quaker Lane-Ok
MH-164 Rear 10371 Rt.7Ok
MH-165 359 Quaker Lane- across 271-Ok
MH-165A Quaker Lane to Rt.7 Easement-Ok
MH-166 383 Quaker Lane-Leak-minor near 327
MH-167 435 Quaker Lane-Ok
MH-168 467 Quaker Lane-Ok
MH-169 549 Quaker Lane-Ok
MH-170 Corner Bull St. & Quaker Lane-Leaking around ring-Minor
MH-171 587 Quaker Lane-Ok
MH-172 648 Quaker Lane-slight leak-Minor
MH-173 706 Quaker Lane-Ok
MH-174 748 Quaker Lane-Ok

Duanesburg Rd. (west)

MH-177 10417 Duanesburg Rd.-Ok
MH-178 Easement to Pump Station-Ok
MH-189 Pump Station-debris in bottom
MH-179 10523 Duanesburg Rd. W corner-Ok
MH-180 Quaker St. Library-Ok
MH-181 Corner Bull St. & Duanesburg Rd.-Ok

Rt.7 Pump Station to Quakerstreet Easement

MH-188 Pump Station to rear (corner)-Ok
MH-187 Rear of 10410 Rt.7-42°44'0"N 74°11'24"-Ok
MH-186 Rear of 10364 Rt.7-Ok
MH-186A Rear of 10352 Rt.7-wood pile ontop of MH-5/12/17 42°44'0"N 74°11'26"-Ok
MH-185 Rear of Church (E corner)-Ok
MH-184 Rear of 10284 Rt.7-Ok
MH-183 Front of 10284 Rt.7-clean out
MH-182 Front of 10246 Rt.7-Ok

Elementary School to bus garage

MH-A near access rd-clog needs pumping-Moderate-cleaned out 5/2/19
MH-B-behind bus garage (E corner) -Ok

Town of Duanesburg Town Board

RESOLUTION NO. 58 - 2020

March 12, 2020

WHEREAS, the Town of Duanesburg Town Board has established Duanesburg Sewer Districts Nos. 1 and 3; and

WHEREAS, the Delanson Wastewater Treatment Plant (the "Delanson WWTP") serves Duanesburg Sewer Districts Nos. 1 and 3; and

WHEREAS, the Town Board retained Delaware Engineering, D.P.C., ("Delaware") for professional services in connection with Long Term Improvements Project at the Delanson WWTP (the "Project"); and

WHEREAS, Delaware has submitted an invoice for Town Board review in the amount of $9,165.00 for professional services provided during December 2019 through February 2020 ("Professional Services Invoice No. 2").

NOW, THEREFORE, BE IT RESOLVED, the Town Board authorizes the Town Supervisor to submit the documentation to the NYS EFC to obtain the funds to pay Professional Services Invoice No. 2 and upon receipt of such funds authorizes payment to Delaware in the amount of $9,165.00

By (unanimous/majority) vote of the Town Board of the Town of Duanesburg at its regular meeting of March 12, 2020.

Roger Tidball, Supervisor

Town Clerk/Deputy Town Clerk

Date March 12, 2020

Date

Present: Councilmembers Potter, Senecal & Wenzel, Supervisor Tidball
Absent:

Town Board Members:

Roger Tidball	Yea	Nay	Abstain	
John Ganther	Yea	Nay	Abstain	Absent
Rick Potter	Yea	Nay	Abstain	
William Wenzel	Yea	Nay	Abstain	
Jeff Senecal	Yea	Nay	Abstain	

DELAWARE ENGINEERING, D.P.C.

55 South Main Street
Oneonta, NY 13820

Tel: 607.432.8073
Fax: 607.432.0432

February 11, 2020

Town of Duanesburg
Attn.: Roger Tidball, Town Supervisor
Town Hall
5853 Western Turnpike
Duanesburg, NY 12056

Re: Delanson WWTP (SD#1 & SD#3)
Long Term Improvements Project
Professional Services Invoice #2

Dear Roger:

Attached for Town review, processing and payment is our invoice totaling $9,165.00 for services related to the above referenced project.

Services provided during December 2019 and January 2020 included:

- Assist Town and NYSEFC in closing on short term financing
- Prepared draft EFC drawdown for Town submission to NYSEFC for incurred costs to date
- Retain subcontractors
- Prepare draft plans for needed improvements

Services anticipated to be provided during February 2020 included:

- Obtain quotes and specifications from suppliers for potential equipment to be installed at the Delanson WWTP, and review with Town staff
- Schedule onsite geotechnical borings
- Prepare draft plans for needed improvements

Please contact me at 607-432-8073 if you have any questions.

Respectfully,

DELAWARE ENGINEERING, D.P.C.

William J. Brown, P.E. for
Dave Ohman, P.E.

Attachment
CC: Cheryl DeCarr, Delaware Engineering, D.P.C. (w/enclosures)
02-2020 Duanesburg (T) Delanson WWTP Long Term Improvements CL 2

Delaware Engineering, D.P.C.
28 Madison Ave. Ext.
Albany, NY 12203
(518) 452-1290

Town of Duanesburg
Town Hall
5853 Western Turnpike
Duanesburg, NY 12056

Invoice number 19-1712-2
Date 02/07/2020

Project 19-1712 Town of Duanesburg - Delanson WWTP Long Term Improvements

For Services Rendered Through February 02, 2020

1 Design

	Units	Rate	Billed Amount
Brian P. Clancy	5.25	100.00	525.00
Michael Primmer	12.00	155.00	1,860.00
William J. Brown	42.00	140.00	5,880.00
	6.00	150.00	900.00
subtotal	65.25		9,165.00
Phase subtotal			9,165.00
		Invoice total	**9,165.00**

Approved by:

William J. Brown

Please remit payment to:
Delaware Engineering, D.P.C.
28 Madison Ave. Ext.
Albany, NY 12203

DELAWARE ENGINEERING, D.P.C.

55 South Main Street, Oneonta, New York 13820 Phone 607-432-8073/FAX 607-432-0432

Town of Duanesburg
Town Hall
5853 Western Turnpike
Duanesburg, NY 12056

PROJECT ID **19-1712**

PROJECT: Delanson WWTP Long Term Improvements
INVOICE/REQUISITION No.: 2

	CURRENT COST	PREVIOUS COST	COST TO DATE	BUDGET
1. Task 1 - Design				
Labor	$ 9,165.00	$ 4,430.00	$ 13,595.00	
Reimbursable Expenses	$ -	$ 571.88	$ 571.88	
Subcontractors	$ -	$ -	$ -	
SUBTOTAL-TASK 1	**$ 9,165.00**	**$ 5,001.88**	**$ 14,166.88**	**$ 100,000.00**
2. Task 2 - Bid/Award				
Labor	$ -	$ -	$ -	
Reimbursable Expenses	$ -	$ -	$ -	
SUBTOTAL-TASK 2	**$ -**	**$ -**	**$ -**	**$ 7,500.00**
3. Task 3 - Construction Management/Admin				
Labor	$ -	$ -	$ -	
Reimbursable Expenses	$ -	$ -	$ -	
SUBTOTAL-TASK 3	**$ -**	**$ -**	**$ -**	**$ 50,000.00**
4. Task 4 - Construction Inspection				
Labor	$ -	$ -	$ -	
Reimbursable Expenses	$ -	$ -	$ -	
Subcontractors	$ -	$ -	$ -	
SUBTOTAL-TASK 4	**$ -**	**$ -**	**$ -**	**$ 74,000.00**
5. Task 5 - As Built Drawing Preparation				
Labor	$ -	$ -	$ -	
Reimbursable Expenses	$ -	$ -	$ -	
SUBTOTAL-TASK 5	**$ -**	**$ -**	**$ -**	**$ 3,500.00**

DELAWARE ENGINEERING, D.P.C.

55 South Main Street, Oneonta, New York 13820 Phone 607-432-8073/FAX 607-432-0482

	CURRENT COST	PREVIOUS COST	COST TO DATE	BUDGET
6. Task 6 - NYSEFC Contract Coordination				
Labor	$ -	$ 2,746.25	$ 2,746.25	
Reimbursable Expenses	$ -	$ -	$ -	
Subcontractors	$ -	$ -	$ -	
SUBTOTAL-TASK 6	**$ -**	**$ 2,746.25**	**$ 2,746.25**	**$ 15,000.00**
7. Task 7 - Preliminary Engineering				
Labor	$ -	$ 70,894.70	$ 70,894.70	$ -
Reimbursable Expenses	$ -	$ -	$ -	
SUBTOTAL-TASK 7	**$ -**	**$ 70,894.70**	**$ 70,894.70**	**$ 70,894.70**
TOTAL	**$ 9,165.00**	**$ 78,642.83**	**$ 87,807.83**	**$ 320,894.70**

AMOUNT DUE FOR CURRENT SERVICES **$ 9,165.00**

AMOUNT PAST DUE **$ 7,748.13** **Invoice #1, 12/12/2019**

TOTAL NOW DUE **$ 16,913.13**

BUDGET BALANCE **$233,086.87**

THIS STATEMENT REFLECTS PAYMENTS RECEIVED ON OR BEFORE BILLING DATE

PROPOSED PROCESS SCHEMATIC
SCALE: NTS

SHEET: FIG 5	PROPOSED PROCESS SCHEMATIC	TOWN OF DUANESBURG WASTEWATER TREATMENT PLANT SCHENECTADY COUNTY, NY	REVISIONS NO. DATE DESCRIPTION	DELAWARE ENGINEERING, D.P.C. CIVIL AND ENVIRONMENTAL ENGINEERING 95 SOUTH MAIN STREET, ONEONTA, NY 13820 · 607.432.8073 28 MADISON AVENUE EXTENSION, ALBANY, NY 12203 · 518.452.1290 8 TOWNSEND STREET, WALTON, NY 13856 · 607.865.6235 314 MAIN STREET, LIBERTY, NY 12754 · 845.747.3952 16 EAST MARKET STREET, RED HOOK, NY 12571 · 518.452.1290	DATE: 11/18 DRAWN BY: MHP SCALE: NTS REVIEWED BY: WDJ PROJECT NO.: FILE:

Minority & Women Owned Business Enterprise (M/WBE)

Revised Utilization Plan (Revised 02/2015)

FOR EFC USE ONLY

Prime Contractor/Service Provider: Delaware Engineering DPC			Year: 2019 ☐ 1st Quarter (Oct. 1 – Dec. 31) ☐ 2nd Quarter (Jan. 1 – Mar. 31) ☒ 3rd Quarter (Apr. 1 – Jun. 30) ☐ 4th Quarter (July 1 – Sept. 30)
Municipality: Town of Duanesburg	County: Schenectady	Contract ID: [illegible]	
SRF Project No.: C4-5469-06-00	GICP/PPG No.:	Registration No.:	

☒ The Quarterly Report is Hereby Accepted as a Revised Utilization Plan EFC Representative: Carly Glassbrenner Cheryle Webber, P.E. Date: 8/20/2019	☐ The Quarterly Report is Deficient. Please Submit: Cheryle Webber, P.E. Date:			MWBE ID: 10264
Total Contract Amount: $320,849.70	Goal (%)	Goal Amount ($)	Former UP Amount	Revised UP Amount
MWBE Eligible Contract Amount (Goals are applied to this amount and include all change orders, amendments & waivers): $250,000.00	MBE: %	$	$0.00	$0.00
	WBE: %	$	$57,646.50	$57,646.50
Total	23.00 %	$57,500.00	$57,646.50	$57,646.50

Comments: The total contract amount increased from $250,000 to $320,894.70 due to amendment [illegible]

Minority & Women Owned Business Enterprise (M/WBE)
Utilization Plan & Waiver Request Review (Revised 02/2015)

FOR EFC USE ONLY					
Prime Contractor/Service Provider: Delaware Engineering DPC					**Municipality:** Town of Duanesburg
SRF Project No.: C4-5469-06-00	**GICP/EPC No.:**	**MWBE ID:** 10264	**Contract ID:** ENG		**Registration No.:**
Total Contract Amount: $250,000.00		**EFC Goal (%)**	**EFC Goal Amt ($)**	**Proposed UP Amt**	☐ Specialty Equipment Exclusion:
MWBE Eligible Contract Amount: (Goals are applied to this amount and includes all change orders, amendments & waivers)	$250,000.00	**MBE:** %	$	$0.00	
		WBE: %	$	$57,646.50	
	MWBE Total:	23.00%	$57,500.00	$57,646.50	**Total Exclusion Granted: $**

☐ **Waiver Granted for:** ☐ WBE ☐ MBE

Good Faith Effort Documentation Submitted:

☐ Documentation was provided to demonstrate why M/WBE firms were not selected ☐ Submitted Waiver Form

☐ Advertisements published in general circulation, trade & M/WBE publications ☐ Adequate documentation of solicitations to certified M/WBE firms

☐ Work was structured to allow for subcontracting opportunities ☐ Empire State Development search documentation

☐ Other: Specialty Equipment Written Justification

☒ This Utilization Plan is Hereby Accepted	☐ This Utilization Plan is Conditionally Accepted	☐ This Utilization Plan is Deficient
EFC Representative: Carly Glassbrenner	Conditions of Acceptance:	Please Submit:
Cheryle Webber, P.E. Date: 4/18/19	Cheryle Webber, P.E. Date:	Cheryle Webber, P.E. Date:
Further Comments:		

NYS Environmental Facilities Corporation
Minority- & Women- Owned Business Enterprise (MWBE) Utilization Plan

Instructions for Contractors & Service Providers:

Contractors and Service Providers must complete Sections 2 and 3. **Submit the completed, signed (electronic signature box checked and dated) form in Microsoft Word format to the Recipient's designated Minority Business Officer (MBO) no later than the date of contract execution.** Incomplete forms will be found deficient. If more than 10 subcontractors are used, additional pages for Section 3 can be found on EFC's website.

If the prime contract is being performed by the parties to a Joint Venture, Teaming Agreement, or Mentor-Protégé Agreement that includes a certified MWBE, please contact EFC for assistance.

MWBE firms must be certified by the NYS Empire State Development Corporation (ESD) in order to be counted towards satisfaction of MWBE participation goals. The utilization of certified MWBEs for non-commercially useful functions may not be counted towards utilization of certified MWBEs in the Utilization Plan. Please note whether a firm is serving as a broker or supplier on the contract. A broker is denoted by NAICS code 425120 and is designated as a broker in ESD's MWBE Directory. A supplier is denoted by a NAICS code beginning with 423 or 424, or a NIGP code that does not begin with the number 9, and is designated as a supplier in ESD's MWBE Directory. If a firm is serving as a broker, please additionally provide the percentage of the broker's commission on the contract.

See the Bid Packet at www.efc.ny.gov or consult your designated MBO for further guidance.

Instructions for Minority Business Officers (MBO):

The MBO must complete Section 1. The MBO may designate an Authorized Representative to complete and submit quarterly payment reports on its behalf, and, if so designated, the MBO's Authorized Representative must also complete Section 1. The Authorized Representative may only submit quarterly payment reports on behalf of the MBO and may not submit any other required forms or reports for the MBO. The MBO must complete Section 1 even if designating an Authorized Representative. **Submit the completed, signed (electronic signature box checked and dated) form in Microsoft Word format via e-mail to your EFC MWBE Representative.**

The subject heading of the e-mail to the EFC MWBE Representative should follow the format "UP, Project Number, Contractor." EFC will review the Utilization Plan and notify the MBO via e-mail of its acceptance or denial.

Within 10 days of EFC's acceptance of a Utilization Plan, EFC will post the approved Utilization Plan on the EFC website.

NYS Environmental Facilities Corporation
Minority- & Women- Owned Business Enterprise (MWBE) Utilization Plan

SECTION 1: MUNICIPAL INFORMATION			
Recipient/Municipality: Town of Duanesburg		**County:** Schenectady County	
Project No.: 5469-06-00	**GIGP/EPG No.:** N/A	**Contract ID:**	**Registration No. (NYC only):**
Minority Business Officer: Roger Tidball		**Email: rtidball@duanesburg.net**	**Phone #:** (518) 895-8920
Address of MBO: 5853 Western Turnpike, Duanesburg, New York 12056			
Electronic Signature of MBO: Roger Tidball ☒ I certify that the information submitted herein is true, accurate and complete to the best of my knowledge and belief.			**Date:4/4/2019**
Complete if applicable:			
Authorized Representative: Kelly Ryan		**Title:** Office Coordinator	
Authorized Rep. Company: Delaware Engineering, D.P.C.		**Email:** kryan@delawareengineering.com	**Phone #:** 518-452-1290
Electronic Signature of Authorized Rep.: Kelly Ryan ☒ I certify that the information submitted herein is true, accurate and complete to the best of my knowledge and belief.			**Date:** 3/19/2019

SECTION 2: PRIME CONTRACTOR/SERVICE PROVIDER INFORMATION				
Firm Name: Delaware Engineering, D.P.C.			**Contract Type:** ☐ Construction ☒ Other Services	
Prime Firm is Certified as: ☐ MBE ☐ WBE ☒ N/A ☐ Other: Please repeat information in the Utilization Plan below (Section 3). If dual certified, you must select either MBE or WBE.				
Address: 28 Madison Avenue Extension, Albany, NY 12203		**Phone #:** 518-452-1290	**Fed. Employer ID #:** 16-1370126	
Description of Work: Engineering Consulting Services				
Award Date: 2/2019	**Start Date:** 2/2019	**Completion Date: 12/2021**	**MWBE GOAL Total**	**PROPOSED MWBE Participation**
Total Contract Amount: $ 250,000 **MWBE Eligible Contract Amount: $ TOTAL CONTRACT** (MWBE Goals are applied to this amount and includes all change orders, amendments, & waivers)			**MBE:** 11.5% $ 28,750.00 **WBE:** 11.5% $ 28,750.00 **Total: 23%** $ 57,500.00	**MBE:** 0% $ 0.00 **WBE: 23.06%** $ 57,646.50 **Total: 23.06%** $ 57,646.50

NYS Environmental Facilities Corporation
Minority- & Women- Owned Business Enterprise (MWBE) Utilization Plan

SECTION 3: MWBE SUBCONTRACTOR INFORMATION				
This Submittal is: ☒ The First/Original Utilization Plan ☐ Revised Utilization Plan #:				
NYS Certified M/WBE Subcontractor Info		Contract Amount: MBE ($)	Contract Amount: WBE ($)	For EFC Use:
Name: Ryan Biggs Clark Davis Engineering & Surveying, DPC	Fed. Employer ID#: 14-1599413		$25,000.00	
Address: 257 Ushers Road, Clifton Park, NY 12065	Phone #: (518) 406-5506			
Scope of Work: Structural Engineering	Email: jdavis@ryanbiggs.com			
Select Only One: ☐ MBE ☒ WBE ☐ Other:	Start Date: TBD			
Select Only One: ☐ Broker __% ☐ Supplier ☒ N/A	Completion Date: TBD			
Full Contract Amount: $ 25,000.00				
Name: Whitman Engineering	Fed. Employer ID#: 56-2634387		$11,000.00	
Address: 2600 South Road, #44-260, Poughkeepsie, NY 12601	Phone #: (845) 471-6036			
Scope of Work: Electrical Engineering	Email: kate@wemep.com			
Select Only One: ☐ MBE ☒ WBE ☐ Other:	Start Date: TBD			
Select Only One: ☐ Broker __% ☐ Supplier ☒ N/A	Completion Date: TBD			
Full Contract Amount: $11,000.00				
Name: Deroo Consulting	Fed. Employer ID#: 21-0668339		$10,000.00	
Address: 13 McKinley Dr., Delmar, NY 12054	Phone #: (616) 886-5678			
Scope of Work: Fiscal Services	Email: derooconsulting@gmail.com			
Select Only One: ☐ MBE ☒ WBE ☐ Other:	Start Date: TBD			
Select Only One: ☐ Broker __% ☐ Supplier ☒ N/A	Completion Date: TBD			
Full Contract Amount: $10,000.00				
Name: CME Associates, Inc.	Fed. Employer ID#: 16-1206029		$9,146.50	
Address: 403 East Taft Road, North Syracuse, NY 13212	Phone #: (315) 668-0242			
Scope of Work: Soil Borings	Email: ecasatelli@cmeassociates.com			
Select Only One: ☐ MBE ☒ WBE ☐ Other:	Start Date: TBD			
Select Only One: ☐ Broker __% ☐ Supplier ☒ N/A	Completion Date: TBD			
Full Contract Amount: $9,146.50				

NYS Environmental Facilities Corporation
Minority- & Women- Owned Business Enterprise (MWBE) Utilization Plan

SECTION 3: M/WBE SUBCONTRACTOR INFORMATION continued				
Name: Synergetic Solutions, LLC	**Fed. Employer ID#:** 80-0945921		$2,500.00	
Address: 190 Lake Shore Dr, Maryland, NY 12116	**Phone #:** (607) 286-7364			
Scope of Work: As-Built Drawings	**Email:** synergeticsolutions13@gmail.com			
Select Only One: ☐ MBE ☒ WBE ☐ Other:	**Start Date:** TBD			
Select Only One: ☐ Broker __% ☐ Supplier ☒ N/A	**Completion Date:** TBD			
Full Contract Amount: $ 2,500.00				
Name:	**Fed. Employer ID#:**			
Address:	**Phone #:**			
Scope of Work:	**Email:**			
Select Only One: ☐ MBE ☐ WBE ☐ Other:	**Start Date:**			
Select Only One: ☐ Broker __% ☐ Supplier ☐ N/A	**Completion Date:**			
Full Contract Amount: $				
Name:	**Fed. Employer ID#:**			
Address:	**Phone #:**			
Scope of Work:	**Email:**			
Select Only One: ☐ MBE ☐ WBE ☐ Other:	**Start Date:**			
Select Only One: ☐ Broker __% ☐ Supplier ☐ N/A	**Completion Date:**			
Full Contract Amount: $				
Name:	**Fed. Employer ID#:**			
Address:	**Phone #:**			
Scope of Work:	**Email:**			
Select Only One: ☐ MBE ☐ WBE ☐ Other:	**Start Date:**			
Select Only One: ☐ Broker __% ☐ Supplier ☐ N/A	**Completion Date:**			
Full Contract Amount: $				

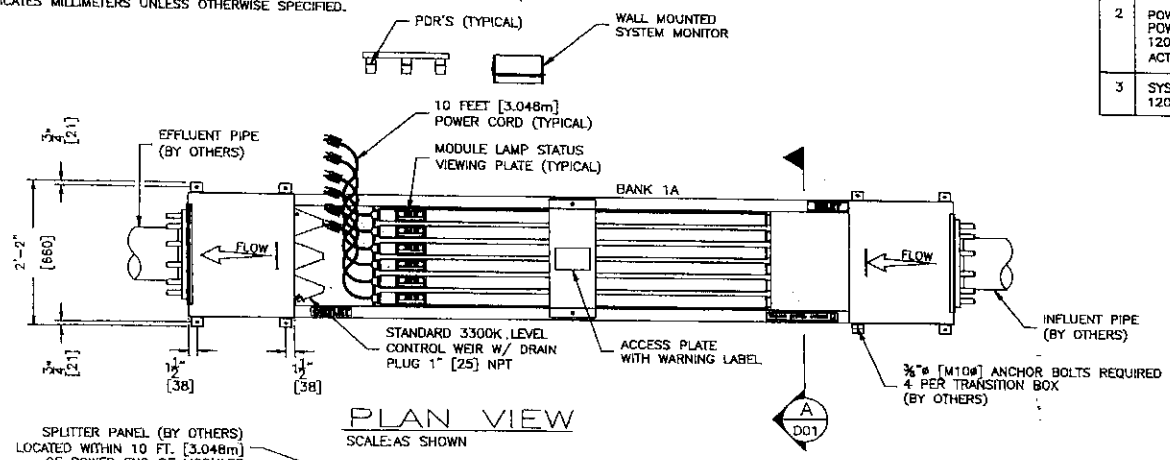
SIGNATURE	
Electronic Signature of Contractor: ☒ I certify that the information submitted herein is true, accurate and complete to the best of my knowledge and that all MWBE subcontractors will perform a commercially useful function. **Name** (Please Type)**: Kelly Ryan**	**Date:** 3/19/2019

NOTES:

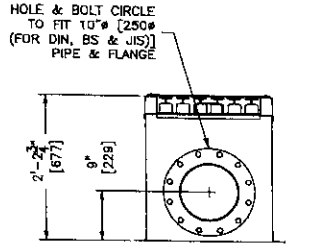
: DO NOT SLOPE CHANNEL FLOOR.
: CHANNEL WIDTH & DEPTH MUST BE KEPT WITHIN A TOLERANCE OF + OR − ¼" [6].
: ANCHOR BOLTS ARE NOT SUPPLIED BY TROJAN TECHNOLOGIES.
: BOLTS, WASHERS & NUTS FOR CONNECTION OF CHANNEL TO TRANSITION BOXES ARE PROVIDED BY TROJAN TECHNOLOGIES.
: SYSTEM CONDUIT, WIRING, DISTRIBUTION PANELS & INTERCONNECTIONS BY OTHERS.
: ELECTRICAL REQUIREMENTS SHOWN ARE TO SUPPLY TROJAN UV EQUIPMENT ONLY. ELECTRICAL INRUSH FACTOR TO BE ADDED AS PER LOCAL CODE.
: ANY EXTRA OUTLETS NOT BEING USED BY TROJAN EQUIPMENT HAVE NOT BEEN INCLUDED IN THE INTERCONNECT AMPERAGE.
: CONTRACTOR TO REVIEW ALL TROJAN TECHNOLOGIES INSTALLATION INSTRUCTIONS PRIOR TO EQUIPMENT INSTALLATION.
: ACCESS IS REQUIRED FOR MODULE REMOVAL – NOTE THE CHANNEL WIDTH AND ENSURE ADEQUATE ACCESS IS PROVIDED TO ALL MODULES.
: DO NOT ENCASE THE STEEL CHANNEL IN CONCRETE.
: [ ] INDICATES MILLIMETERS UNLESS OTHERWISE SPECIFIED.

TROJAN UV3000™ PTP
EQUIPMENT INTERCONNECTIONS

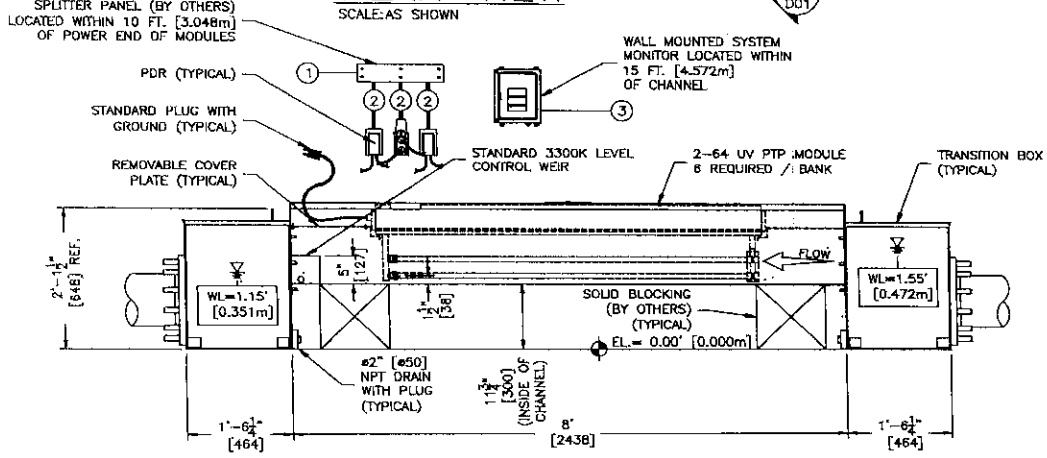
No.	DESCRIPTION	FROM	TO
1	SPLITTER PANEL POWER SUPPLY 120V, 1 PHASE, 2 WIRE, ACTUAL DRAW 9.6 AMPS / SPLITTER PANEL	DISTRIBUTION PANEL (DP) (NOT SHOWN) (BY OTHERS)	SPLITTER PANEL (BY OTHERS)
2	POWER DISTRIBUTION RECEPTACLE (PDR) POWER SUPPLY 120V, 1 PHASE, 2 WIRE, ACTUAL DRAW 3.2 AMPS / PDR	SPLITTER PANEL (BY OTHERS)	PDR
3	SYSTEM MONITOR POWER SUPPLY 120V, 1 PHASE, 2 WIRE, 5 AMPS	DP (NOT SHOWN) (BY OTHERS)	SYSTEM MONITOR



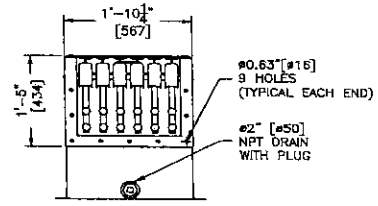
PLAN VIEW
SCALE:AS SHOWN



END VIEW (TYPICAL)
SCALE:AS SHOWN



FRONT VIEW
SCALE:AS SHOWN



A D01 SECTION
SCALE:AS SHOWN
NOTE: PDR AND SYSTEM MONITOR NOT SHOWN FOR CLARITY

MULTIPLE CHANNELS IN PARALLEL (OPTION):

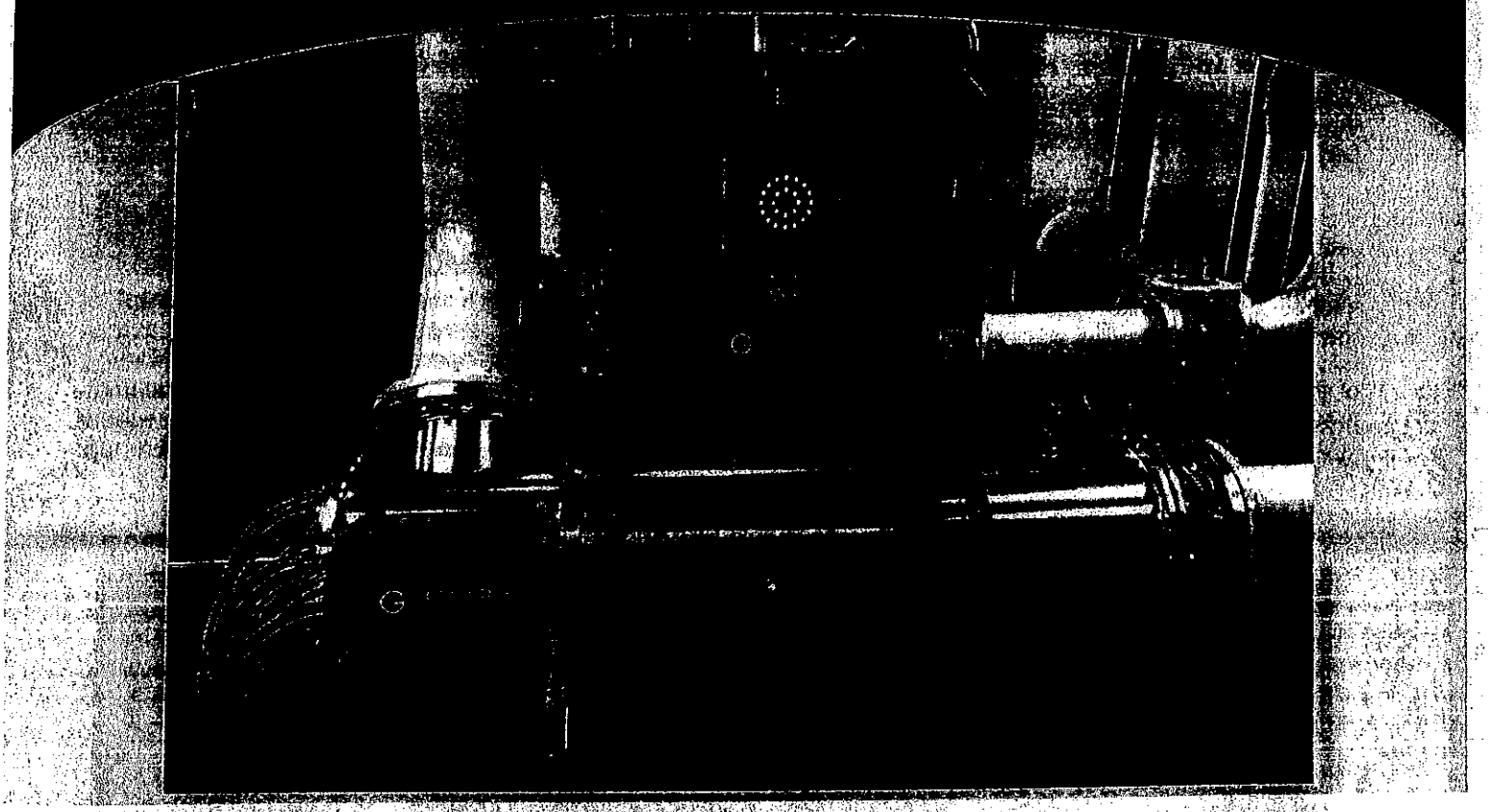
: ADDITIONAL UNITS CAN BE INSTALLED PARALLEL TO THE UNIT SHOWN.
: ACCESS BETWEEN EVERY 2 PARALLEL CHANNELS IS REQUIRED FOR MODULE REMOVAL – NOTE THE CHANNEL WIDTH AND ENSURE ADEQUATE ACCESS IS PROVIDED BETWEEN TRANSITION BOXES AND CHANNELS.
: ACCESS BETWEEN A MAXIMUM OF 2 CHANNELS IS NOT REQUIRED FOR MODULE REMOVAL. TRANSITION BOXES CAN BE INSTALLED ADJACENT TO EACH OTHER.

TROJAN UV

DESCRIPTION: LAYOUT, UV3000PTP–UV3300K 1 CHANNEL 1 BANK 2 LAMPS WEIR		STANDARD DRAWING NO.	3M0514
DRAWN BY : LZ/JMM/SPM	DATE : 12JN21	REFERENCE NO.	N/A
CHECKED BY : SAH	DATE : 12JN22		
APPROVED BY : CAP	DATE : 12JN22	DWG NO. D01	REV. D
SCALE (8½x11) NOT TO SCALE	LOG NUMBER : N/A		

ULTRAVIOLET DISINFECTION

"IL-BT" SERIES



IL-BT SERIES

OVERVIEW

Ultraviolet "UV" disinfection is an accepted method for reducing microorganisms in water and wastewater.

The "**IL-BT**" series uses a "Bullet" or "L" style chamber (pressure vessel) to treat a wide range of flow rates. For higher flows, multiple vessels are used.

Water enters the chamber via the conical inlet and once inside, it is exposed to UV light. The UV lamps produce the majority of their light in the 254-nm wavelength. At this wavelength, UV light destroys bacteria, protozoa, viruses, molds, algae and other microbes. This includes fecal coliform and such waterborne diseases as: E-coli, crypto, giardia, hepatitis and cholera.

Systems integrate energy efficient low pressure high output or high intensity (amalgam) UV lamps. These lamps last over 12,000 hours and produce 90%+ of their light in the 254 nm range.

FEATURES

- Electropolished 316L stainless steel vessels
- Low pressure UV lamps (HO or Amalgam)
- 150 psi (10 Bar) pressure rating
- Flexible flange size and type
- UV lamp monitoring
- Remote stainless steel electrical enclosures
- Lamp status and running time indicators

OPTIONS

- Automatic or manual quartz cleaning
- Programmable Logic Controls (PLC)
- UV transmission monitoring
- Chemical cleaning system
- Remote On/Off
- Explosion proof electronics

MADE IN THE USA

GLASCO UV

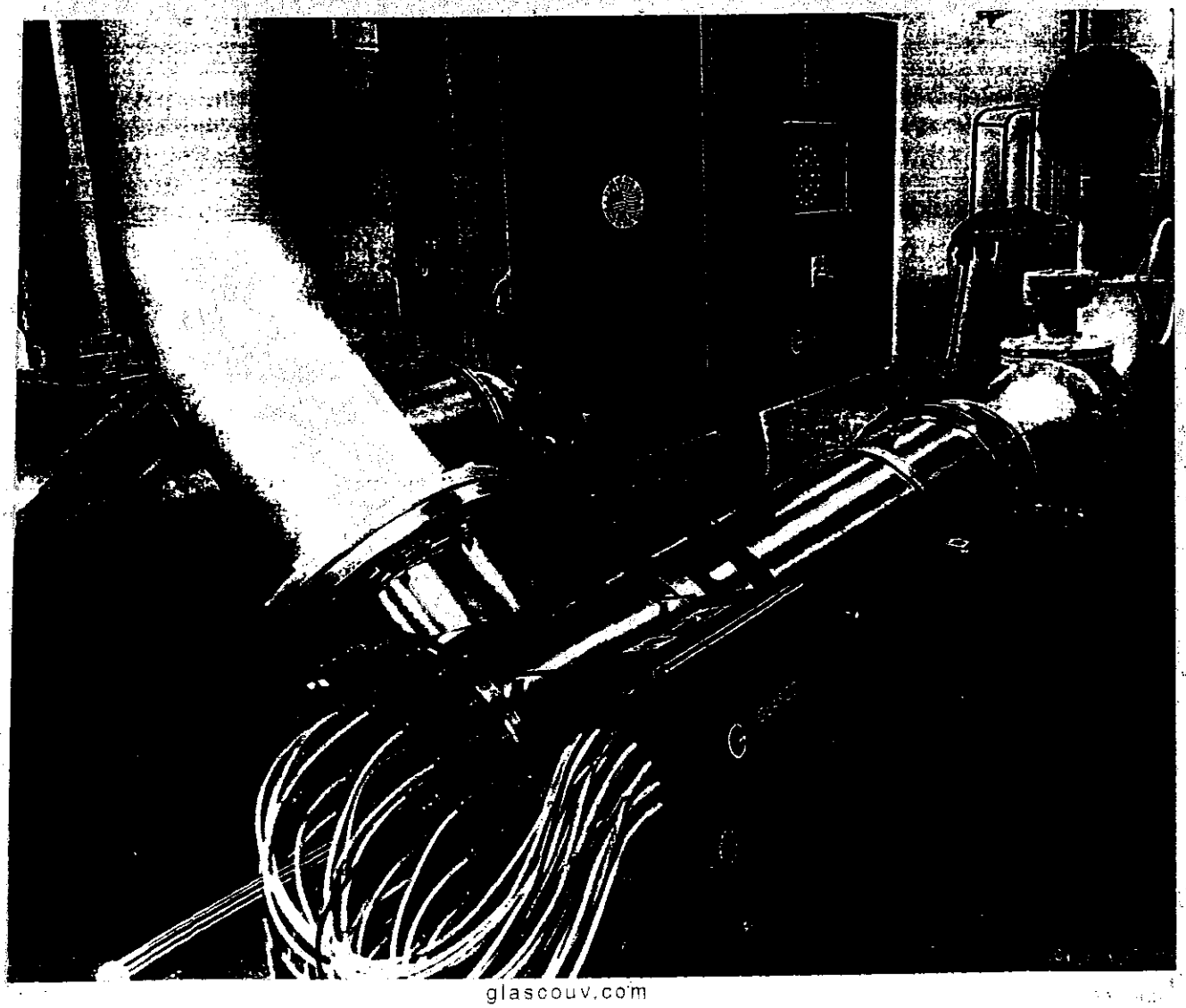
OPERATIONAL OVERVIEW

The "Bullet" or "L" Style vessel allows the facility to connect to the conical inlet. Design allows for flexible horizontal or vertical installation. The Bullet design provides low headloss and enhanced hydraulics.

As with all UV systems, the main operational and maintenance responsibilities have to do with keeping the system clean and the lamps operating at optimum performance.

Lamps need to be replaced every 12,000 hours. Due to the harsh nature of some liquids, the quartz sleeves (the glass-like tubes that protect the lamps) need to be cleaned. The amount of cleaning is related to the pre-treatment processes and the make-up of the water or wastewater Fouled quartz sleeves prevent the UV light from penetrating and will reduce system efficiency.

The "**IL-BT**" system may incorporate a manual or automatic quartz cleaning systems. The manual system allows operators to swab the sleeves on a periodic basis. The automatic - pneumatically driven system - pushes a wiper mechanism over the sleeves to remove build up.



IL-BT SERIES

CONFIGURATION - "L"

Piping to and from the vessel can cause issues due to spatial constraints and existing piping. Glasco UV offers flexibility when designing the UV system by allowing for custom flange sizes and locations.

The "IL BT" Series uses an "L" or "Bullet" style design.

There are other piping orientations available:

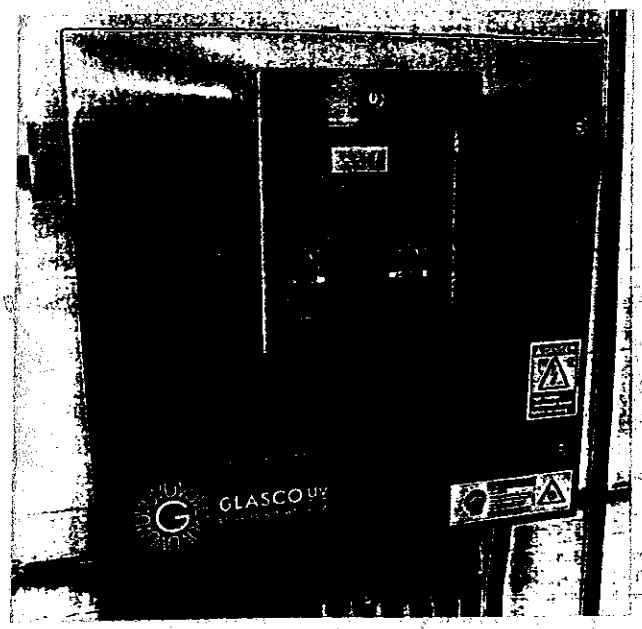
- "U" design where inlet and outlet are on same side
- "Opposing" where inlet and outlet are on opposite

Chambers are generally manufactured using raised faced 150 # flanges. They are also available in DN style and various other end user requested configurations.

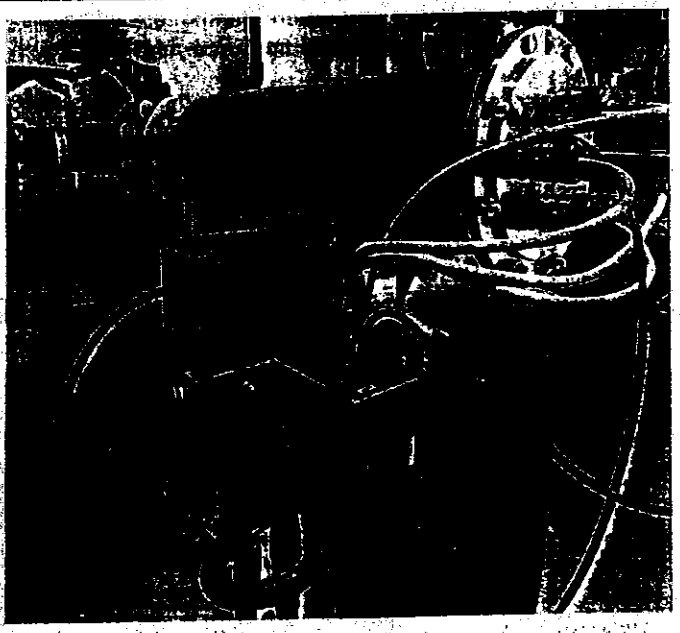
SYSTEM DESIGN

The following is a list of information required to size a UV disinfection system.

- Peak instant flow rate
- No flow situations
- Biological goal (dosage or permit)
- UV transmission %
- Total Suspended Solids (TSS)
- Total Dissolved Solids (TDS)
- Iron and Manganese levels
- Installation location (indoor or outdoor)
- Understanding of plant treatment process
- Staffing level for system maintenance



Ballast Control Center (BCC)



Junction Box

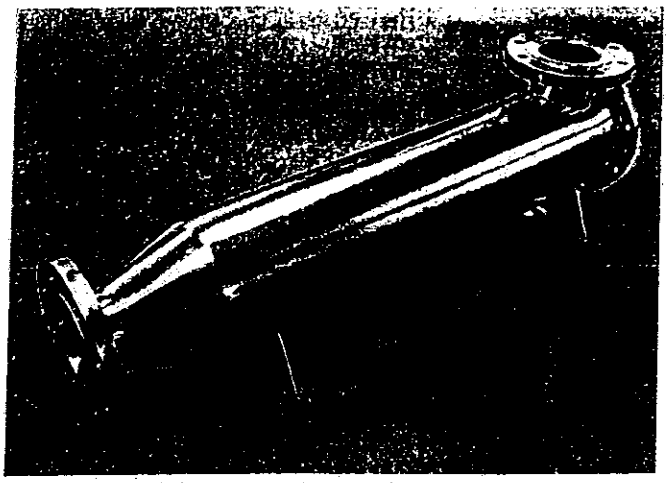
IL-BT SERIES

SYSTEM OVERVIEW

The UV lamps are installed into protective quartz sleeves. These quartz sleeves are fitted into the head of the unit and are sealed tight by compression fittings, orings and washers. The head is removable and will also hold the cleaning mechanism as well as the optional heat monitoring thermistor.

Chambers have 150 # raised face flanges and are fitted with a monitoring and drain port.

A remote Ballast Control Center (BCC) houses the ballasts, electronics, power control, monitoring devices and displays. Protected power is brought to the BCC by plant electrician. The BCC has a corresponding - pre-wired junction box. This junction box is mounted on or near the chamber. It holds the lamp connector harnesses, the UV sensor wiring and the optional high heat or automatic cleaning features.



"L" STYLE REACTOR DESIGN

As flow rates increase, the IL-BT systems grows in size to meet the project's demands. The Inlet and Outlet flanges will increase in size to meet the plant's piping.

Vessels become larger and more lamps are added. Systems can start with a single lamp and can grow to sixty (60) per vessel.

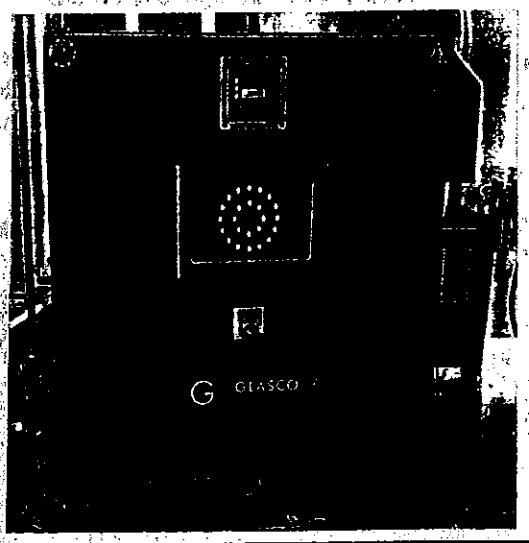
System integrate low pressure high output and amalgam technologies. Lamps range in length from 30" to 60" and from 80 to 1,200 watts per lamp.

FEATURES

American manufactured 316L stainless steel pressure vessels are at the heart of the product line. Vessels are electropolished and passivated to ensure longevity and high quality.

Chambers have 150 # raised face flanges and drain and monitoring ports. Sampling ports are built into the outlet riser pipe.

The remote BCC is a modified NEMA 4x modified stainless steel enclosure. The BCC may have a window kit or may be provided with a PLC and corresponding door mounted operator user interface (OUI).



IL-BT SERIES

Unit Name	GPM Clean	GPM Waste	INLET / OUTLET	WATTS	UNIT DIM LxWxH	ELECTRICAL DIMENSIONS
IL-BT-300-4	100	35	2"	340	44"x13"x14"	20"x16"x8
IL-BT-500-4	175	60	3-4"	600	44"x13"x14"	20"x16"x8
IL-BT-500-6	275	90	3-4"	900	44"x13"x14"	20"x16"x8
IL-BT-6000-4	425	150	4"	1400	80"x13"x15"	24"x20"x8"
IL-BT-6000-6	850	300	4-6"	2100	80"x18"x20"	24"x20"x8"
IL-BT-6000-8	1300	450	6"	2800	80"x18"x20"	24"x20"x8"
IL-BT-6000-12	1700	600	8"	4200	90"x18"x20"	24"x20"x8"
IL-BT-6000-16	2600	900	12"	5600	90"x24"x24"	24"x20"x8"
IL-BT-6000-24	5000	1750	16"	8400	100"x40"x30"	36"x30"x10"
IL-BT-9000-4	1200	450	6"	2600	80"x18"x20"	24"x24"x12
IL-BT-9000-6	1600	575	8"	3900	80"x18"x20"	24"x24"x12"
IL-BT-9000-8	2500	850	12"	5200	80"x20"x24"	36"x30"x12"
IL-BT-9000-10	3500	1200	16"	6500	80"x20"x24"	36"x30"x12"
IL-BT-9000-12	4500	1575	16"	7800	80"x20"x24"	36"x30"x12"

Sizing is generic for 90% UVT clean water and a dosage of 30 mJ. Wastewater sizing is generic and for 65% UVT and a dosage of 30 mJ. Consult sales for your application.

GLASCO UV

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Town Board
Duanesburg
5853 Western Turnpike
Duanesburg, NY 12056

March 12, 2020

Town Board:

Please include my statement with tonight's official meeting minutes.
I don't expect a reply today, but would like answers to my questions in writing.

March 11, 2020 FOIL Demolition Permit for 13590 Duanesburg Road signed by Dale Warner March 5, 2020. Demolition permit does not include a plot plan or measurements. Does the Town have a copy of the Qualcor Asbestos and Lead Report as indicated on the demolition permit and requested at the September 19, 2019 Planning Board meeting.

February 13, 2020 I asked the Town Board if Eden Renewables submitted an updated planting plan and maintenance agreement as discussed at the Planning Board meeting September 19, 2019? I have not received an answer from the Board.

February 27, 2020
I asked the Board to review December 4, 2019 Building Permit for Eden Renewables and to limit the amount of clear cutting to 0.24 acre as noted on their August 5, 2019 FEAF Part E1.b..
Has this been done? How much additional clear cutting will the town allow on this project?

I would like the Town Board and Town attorney to know that I believe their actions, as well as lack of action, concerning Eden Renewables, Harry Lopes, Giovanni Maruca and Richard Murray for Oak Hill Solar 1 and Solar 2 have compromised my personal safety and that of my property.

Lynne Bruning