



BOARD OF TRUSTEES
February 22, 2022
6:30 PM

Leeper Center, 3800 Wilson Avenue, Wellington, CO

Regular Meeting Agenda

Individuals wishing to make public comments must attend the meeting in person or may submit comments by sending an email to euckerkk@wellingtoncolorado.gov. The email must be received by 4:00 p.m. Tuesday February 22, 2022. The comments will be provided to the Trustees and added as an addendum to the packet. Emailed comments will not be read during the meeting.

The Zoom information below is for online viewing and listening only.

Join from a PC, Mac, iPad, iPhone or Android device:

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A. CALL TO ORDER

1. Pledge of Allegiance
2. Roll Call
3. Amendments to Agenda
4. Conflict of Interest

B. COMMUNITY PARTICIPATION

1. Public Comment

C. ACTION ITEMS

1. Wastewater Treatment Plant Construction Manager At Risk (CMAR) Contract Amendment for Guaranteed Maximum Price (GMP)

- Presentation: Dave Myer, Engineer
- 2. Ordinance No. 05-2022 - An Ordinance of the Town of Wellington, Colorado, Acting by and through the Town Wastewater Enterprise, Approving a Loan from the Colorado Water Resources and Power Development Authority to Finance Wastewater Related Improvements; Authorizing the Execution of a Loan Agreement and a Bond to Document the Loan; and Providing for Payment of the Bond from Net Revenue of the Wastewater System
Presentation: Vik Runkle, Interim Finance Director
- 3. Resolution No. 12-2022 - A Resolution of the Town of Wellington, Colorado Acting by and Through the Town Wastewater Enterprise, Declaring its Official Intent to Reimburse itself with the Proceeds of the Issuance of Municipal Bonds for Certain Capital Expenditures Undertaken or to be Undertaken by the Town; Generally Identifying the Capital Expenditures; and Providing Certain Other Matters in Connection Therewith.

• Presentation: Vik Runkle, Interim Finance Director
- 4. 2022 Fireworks Amendment

• Presentation by Hallie Sheldon, Management Analyst

D. LIQUOR LICENSE AUTHORITY

1. Special Event Permit Application - Hoppy Go Lucky 5K

• Presentation: Krystal Eucker, Town Clerk

E. REPORTS

1. Town Attorney
2. Town Administrator
3. Staff Communications
 - a. Report of Bills - January 2022
 - b. Larimer County Sheriff's Office Monthly Report - January 2022
4. Board Reports

F. ADJOURN

The Town of Wellington will make reasonable accommodations for access to Town services, programs, and activities and special communication arrangements. Individuals needing special accommodation may request assistance by contacting at Town Hall or at 970-568-3380 ext. 110 at least 24 hours in advance.

Board of Trustees Meeting

Date: February 22, 2022
Submitted By: Dave Myer, Engineer
Subject: Wastewater Treatment Plant Construction Manager At Risk (CMAR) Contract
Amendment for Guaranteed Maximum Price (GMP)

- **Presentation: Dave Myer, Engineer**

EXECUTIVE SUMMARY

The contract amendment with the CMAR Contractor (Moltz Construction) for Phase 2 Construction based on the Guaranteed Maximum Price for Wellington's Wastewater Treatment Plant expansion will be presented for approval.

BACKGROUND / DISCUSSION

The 90 percent design package (drawings and specifications) was received on schedule from Jacobs on December 3, 2021. Immediately after, Moltz began preparation of the 90 percent cost estimate as part of its pre-construction services for the Town.

Moltz submitted an initial 90 percent cost estimate of \$45,821,656 (without contingency) on schedule on January 7, 2022. Numerous value engineering (VE) items were identified within that submittal. The design team (Moltz, Jacobs, Town Staff) discussed all items in numerous workshops throughout January, investigating VE options and scope change considerations line by line. Many engineering items were reevaluated, equipment options were investigated, alternative construction products were discussed, and instrumentation packages were scrutinized, all in an effort to obtain cost savings. Town staff and Jacobs conducted interviews and in-person site visits to explore alternative equipment. This exercise concluded with Moltz's revised cost estimate of \$43,546,349 that was received on February 10, representing the Guaranteed Maximum Price (GMP) for construction. Adding a 5% Contractor's contingency and a 5% Owner's Contingency (totaling \$4,354,634) bring the total price for Phase 2 Construction to \$47,900,984.

Most of the cost increases can be attributed to three reasons: additions to the design scope and specifications from the 60 percent level; substantial increase in materials pricing and labor (rebar, metal buildings, fuel, electrical, piping, hourly labor rates, etc.); and, most impactfully, supply chain issues along with the American Iron and Steel and Davis Bacon (DB) wage obligations per State Revolving Fund (SRF) requirements. Electrical prices have risen substantially from a few months ago and steel commodity prices are very high. DB labor wages have also considerably increased.

Moltz used a competitive bidding process for the 90 percent cost estimate. In most cases, three bids were received for subcontractors and equipment, and material suppliers. The majority of the bids for each item were within ten percent of each other, indicating the drawings and specifications were well-understood and interpreted the same way. Moltz asked bidders to hold prices for 90 days, but many were not able to do that due to market and supply-chain volatility. Therefore, to minimize cost escalations, Moltz would need to execute subcontracts and purchase orders in March.

Moltz prepared a construction schedule that now shows the Substantial and Final Completion dates as August 1, 2024, and October 30, 2024, respectively. This three-month extension from previously defined completion



dates was needed to reduce laborers' overtime hours, which would have substantially increased the cost. Moltz has indicated, however, most plant facilities would be online by June 1, 2024, pending favorable progress and an early notice to proceed.

On June 25, 2021, a Board-approved contract was executed with Moltz for Phase 1, Preconstruction Services. That contract included an Agreement (EJCDC C-525) and General Conditions (EJCDC C-700). The contract for Phase 2 Construction based on the GMP is considered as an amendment to the existing contract, including the following:

- Contract Amendment (cover sheet with signature lines)
- EJCDC Change Order Form (C-941) (with additional signature lines)
- Moltz's GMP Package, which defines GMP as \$43,546,349; adding \$4,354,634 in contingency money brings the total Phase 2 cost to \$47,900,984.
- Supplemental Conditions to the General Conditions contained within the Phase 1, Preconstruction Services contract.

The 90% drawings and specifications are also considered part of this contract amendment (available on the Town's website).

Upon execution of this contract amendment, expected to occur after SRF loan approval from Colorado Water Resources and Power Development Authority on March 4, a Notice to Proceed will be issued by the Town. Then Moltz will proceed to execute subcontracts and issue purchase orders to lock in prices and begin mobilization. The next step for Jacobs includes completion of the 100% drawings and specifications which are scheduled for delivery on April 7.

STAFF RECOMMENDATION

Authorize execution of contract amendment with Moltz Construction, Inc. in the not to exceed amount of \$47,900,984.00, inclusive of the GMP (\$43,546,349) and ten percent total contingencies (\$4,354,634), for Phase 2 Construction Services on the Wastewater Treatment Plant Expansion.

ATTACHMENTS

1. Wellington WWTP GMP Phase 2 Contract Amendment
2. WWTP GMP Approval Presentation 2-22-22



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Wellington, CO 80549
PUBLIC WORKS (970) 568-0447
TOWN HALL (970) 568-3381

WELLINGTON WASTEWATER TREATMENT PLANT EXPANSION CMAR CONSTRUCTION SERVICES

Phase 2 - Construction Services

AMENDMENT ONE TO CONTRACT FOR SERVICES, GL No. 211-80-4061

Parties. The parties to this Amendment are the Town of Wellington, 3735 Cleveland Avenue, Wellington, Colorado 80549 (Town) and Moltz Construction, Inc., 975 Merchant Court, Windsor, CO, 80550 (Contractor).

Purpose of Amendment. This Amendment constitutes the first amendment to the Agreement Between Owner and Contractor for Construction Contract (Cost-Plus) between the Town and the Contractor. This Amendment is for Moltz to proceed with Phase 2 – Construction Services pursuant to the agreed upon Guaranteed Maximum Price (GMP) and further provisions of this Amendment.

The original Agreement, effective June 25, 2021, is for Preconstruction Services (Phase 1) as defined in Section 101 of the existing Agreement for the expansion of Wellington's Wastewater Treatment Plant (WWTP) for a total Contract amount of one hundred twenty-seven thousand two hundred four dollars and no cents (\$127,204.00). On the effective date of Amendment 1, the total Contract amount will be amended to forty-eight million twenty-eight thousand one hundred eighteen dollars and no cents (\$48,028,118.00).

Term of the Amendment. This Amendment shall commence upon the date the last required signature is affixed hereto (Effective Date) and shall remain in full force through the term of the Contract, as amended, unless terminated at an earlier date pursuant to the provisions of the Contract.

Amendment(s).

1. Amendment to the EJCDC C-525 Agreement Between Owner and Contractor for Construction Contract (Cost-Plus), dated June 25, 2021, between Town of Wellington, Colorado, a Colorado Statutory Town and Moltz Construction, Inc., a Colorado Corporation.
2. Amendment to the Contract to include Phase 2 construction services and establish the Guaranteed Maximum Price for the Construction Services, according to EJCDC C-525 Sections 1.02.
3. Amendment to Paragraph 4.02 Contract times for Construction service to be substantially complete by August 1, 2024, and ready for final payment in accordance with Paragraph 15.06 by October 30,

2024. Assumed a notice of award of contract no later than April 1, 2022, and a notice to proceed date not later than May 1, 2022.

4. Amendment to Paragraph 6.02 Phase 2 Guaranteed Maximum Price for Phase 2 construction services will be \$43,546,349.00. The GMP price is based on the assumptions, clarifications, and value engineering spreadsheet per Attachment 2 (GMP package) and on Jacobs Engineering Group Wellington WWTP Expansion 90 percent drawings, specifications, and Addendums Nos. 1-3 per Attachment 1. Adding Owner and Contractor contingencies of 5 percent each to the GMP bring the total Phase 2 project cost to \$47,900,984.
 - a Attachment 1: 90% Drawings and Specifications Dated December 2021.
 - b Attachment 2: GMP Package Dated February 10, 2022.
 - c Attachment 3: Supplemental Conditions.

Same Terms and Conditions. Except for items explicitly delineated in this Amendment, all terms and conditions of the original Contract, and any previous amendments, between the Town and the Contractor, remain unchanged and in full force and effect.

Entirety of Contract. The original Contract, consisting of seventy-two (72) pages and this Amendment One, consisting of one hundred fifty-one (151) pages (excluding the above referenced Attachment 1), represent the entire and integrated Contract between the parties.

Signatures. The parties to this Amendment, through their duly authorized representatives, have executed this Amendment on the dates set out below and certify that they have read, understood, and agreed to the terms and conditions of this Amendment.

TOWN OF WELLINGTON

Signature

Date

Printed Name

Title

MOLTZ CONSTRUCTION, INC.

Signature

Date

Printed Name

Title

Date of Issuance: 2-10-2022
Owner: Town of Wellington
Contractor: Moltz Construction Inc.
Engineer: Jacobs Engineering
Project: Wellington WWTP Expansion Project

Effective Date: 3-1-2022
Owner's Contract No.:
Contractor's Project No.: 2115 Wellington WWTP
Engineer's Project No.:
Contract Name: Wellington WWTP Expansion Project

The Contract is modified as follows upon execution of this Change Order:

Description: Approval of Phase 2 Construction Services for the Wellington WWTP Expansion Project

Attachments: Amendment #1 Phase 2 Construction Services Guaranteed Maximum Price Amendment
Attachment #1 90% Plans and Specs dated December 2021: Attachment #2 GMP Package Dated 2-10-2022
(Updated Schedule required for any change in Contract Time)

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES <i>[note changes in Milestones if applicable]</i>
Original Contract Price: \$ <u>\$127,204.00</u>	Original Contract Times: Substantial Completion: <u>N/A for Phase 1</u> Ready for Final Payment: <u>N/A for Phase 1</u> days or dates
[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: \$ <u>0</u>	[Increase] [Decrease] from previously approved Change Orders No. ___ to No. ___: Substantial Completion: <u>N/A</u> Ready for Final Payment: <u>N/A</u> days
Contract Price prior to this Change Order: \$ <u>\$127,204.00</u>	Contract Times prior to this Change Order: Substantial Completion: <u>N/A</u> Ready for Final Payment: <u>N/A</u> days or dates
[Increase] [Decrease] of this Change Order: \$ <u>Increase of \$47,900,984.00</u>	[Increase] [Decrease] of this Change Order: Substantial Completion: <u>8-1-2024</u> Ready for Final Payment: <u>10-30-2024</u> 823 days Sub, 913 days final days or dates
Contract Price incorporating this Change Order: \$ <u>\$48,028,118.00</u>	Contract Times with all approved Change Orders: Substantial Completion: <u>8-1-2024</u> Ready for Final Payment: <u>10-30-2024</u> days or dates

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: _____ Engineer (if required)	By: _____ Owner (Authorized Signature)	By: _____ Contractor (Authorized Signature)
Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____

Approved by Funding Agency (if applicable)

By: _____ Date: _____
Title: _____



ATTACHMENT 2

TOWN OF WELLINGTON WATER RECLAMATION FACILITY PHASE 3 IMPROVEMENTS AND EXPANSION

Final 90% DESIGN LEVEL COST ESTIMATE

Dated 2-10-2022

TABLE OF CONTENTS

Totals Summary.....	Tab 1
Estimate Assumptions, Clarifications & Exceptions.....	Tab 2
Value Engineering	Tab 3
Constructability Items.....	Tab 4
30% to 60% to 90% Estimate Comparison.....	Tab 5
Vendor and Subcontractor Quotes.....	Tab 6
Estimate	Tab 7
Schedule.....	Tab 8



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General Contractor/Construction Manager

www.moltzconstruction.com

**TOWN OF WELLINGTON WATER RECLAMATION FACILITY
 PHASE 3 IMPROVEMENTS AND EXPANSION
 90% Design Level Cost Estimate
 February 10, 2022**

Construction Costs		
01 General Requirements	\$	2,718,875
02 Existing Conditions	\$	374,537
03 Concrete	\$	8,394,514
04 Masonry	\$	396,198
05 Metals	\$	1,569,012
06 Woods, Plastics, & Composites	\$	82,886
07 Thermal & Moisture Protection	\$	287,645
08 Openings	\$	396,798
09 Finishes	\$	1,098,572
10 Specialties	\$	70,325
12 Furnishings	\$	4,062
13 Special Construction	\$	1,865,289
22 Plumbing	\$	733,600
23 HVAC	\$	1,745,245
26 Electrical	\$	7,752,920
31 Earthwork	\$	2,688,790
32 Exterior Improvements	\$	49,064
33 Utilities	\$	126,739
35 Waterway and Marine Construction	\$	253,954
40 Process Interconnections	\$	6,336,357
41 Material Processing and Handling Equipment	\$	321,526
44 Pollution and Waste Control Equipment	\$	5,332,131
Total Construction Costs*	\$	42,599,039
VE Savings (Included in Total Construction Costs)	\$	2,115,286
Subtotal	\$	40,483,753
Construction Manager Fee	6.50% \$	2,631,444
Subtotal	\$	43,115,197
Bonds & Insurance	1.00% \$	431,152
GMP Amount	\$	43,546,349
Contractor's Contingency	5.00% \$	2,177,317
Owner's Contingency	5.00% \$	2,177,317
GMP INCLUDING Contingency	\$	47,900,984

**Includes Labor Burden and Small Tools*



MOLTZ CONSTRUCTION INC.

General Contractor/Construction Manager

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TOWN OF WELLINGTON WATER RECLAMATION FACILITY PHASE 3 IMPROVEMENTS AND EXPANSION

Assumptions, Clarifications, & Exceptions

January 27, 2022 – 90% Design Level

1. Please note that the construction material markets are very volatile right now (Wood, Steel, Pipe and Commodities). Moltz did our best to get good numbers and estimate standard increases over the next year.
2. GPM is based on the attached schedule. Notice to Proceed May 2, 2022. Substantial Completion August 1, 2024. Final Completion October 30, 2024.
3. Moltz has not included any on-site third-party materials testing or special inspections
4. Moltz does not include the cost of building permits. We do have dewatering and stormwater permit costs included.
5. Moltz has included a 1-year warranty per General Conditions Section 15.08 of the Executed Agreement signed June 25, 2021. Unless otherwise stated in specific specification section.
6. Assumed Town will remove desks and loose items from existing lab.
7. Startup Chemicals and Totes by Owner.
8. General clarification regarding catchall/turnkey language: We have included what is outlined in the construction documents and have a current knowledge of industry and local practices relative to this project. Depending on the significance of any unforeseen issues which may arise could require use of contingency funds to address.
9. Water Softener included is Labconco, dispensing gun and filter kit included.
10. Specification 40 27 00 Section 3.21 states "Immediately after cleaning service piping, dry to minus 40 degrees F dew point with dry compressed instrument air or compressed commercial grade nitrogen." Moltz does not include this service. Moltz will flush and clean process pipe per standard practices.
11. Moltz Construction did not include Painting PVC Pipe. We will Label with Stickers.
12. Moltz is in the base bid with Tolin Mechanical for the HVAC scope of work. It would be an additional \$180,000 to go with Horizon Mechanical Solutions.
13. Moltz is in the base bid with Strait Mechanical for the Plumbing scope of work.
14. Moltz is in the base bid with Interstates Inc. for the Electrical and I&C scope. It would be an additional cost to go to go with Weifield Group or Eckstine. Please note that all bidders had the Hach Instruments and the required 3 year service contract. The service contract added an additional \$250,000 to the instrument quote.
15. In a pipe encasement situation, all pipes will extend 1 foot past the concrete encasement followed by a solid sleeve, in lieu of using 4027-601, wall pipe detail.
16. Concrete pavement is estimated at 8" thick with 6" base under pavement with no thickened edges.
17. Due to the amount of paving on this project concrete paving is placed using spec 033000 not 321313 to be cost effective
18. Moltz did not include sludge removal or cleaning of basins during construction.
19. All sidewalks are placed at 6" thick with 6" base underneath. No thickened edges.

21. Moltz is not including any Landscaping. Moltz did include dryland seeding and reclamation of all areas and minor irrigation to get seeding established.
22. Moltz did not include any bonding agent at fill concrete. Moltz will roughen clean and pressure wash areas to receive.
23. Moltz has assumed all spoils can be left on site. Moltz has included placing spoils in a berm and seeding all disturbed areas.
24. Moltz has included touching up entrance road and site roads with 3" of road base upon completion of the project.
25. Moltz has assumed we can utilize on site power and water at no charge. Moltz will provide backflow measures for water and any electrical equipment need during construction, but we are not carrying any usage fees or any separate power drop.
26. Moltz has included a job site trailer for an on-site resident engineer
27. Assuming structural masonry bond beams every 4 feet per detail 0422-004
28. Assuming all pumps have paint/coating from manufacturers.
29. Assuming we are not damp proofing/waterproofing under slabs except where Bentonite Waterproofing is required.
30. Assuming the only lines getting insulation and heat trace are interior ALP blower piping 8' and below in step feed process building and UV blower building, and the exterior glycerin lines above grade at the Orbal ditch and step feed aeration basins.
31. Assuming CRC coating is only required at the influent box of the influent pump station and at the FC injection point in headworks.
32. Assuming all metal building panels are PBR style panels to match existing metal building profile.
33. Assuming all pipe comes from the factory primed and ready to be painted onsite with minimal prep work required.
34. Assuming use of epoxy coating system per subcontractor recommendation on Sheet 750-A-1010 note 1
35. Assuming HDG primary and secondary structural members on all pre-engineered metal buildings and no painting or coating will be applied in the field.
36. Assuming EPDM roof will be 60mil BLACK reinforced Versico roof in lieu of white. White is not available reinforced.
37. Assuming owner pays for all 3rd party testing including NACE inspection on paintings and coatings including CRC and High build epoxy, and as stated in Spec 09 90 00 Part 3 Execution 3.04 B Chlor Test Surface contamination testing.
38. Assuming no painting of PVC piping
39. Assuming no painting or coatings on buried or encased piping
40. We have not included the Utility Transformers, meter cabinets, or wire to Xcel transformers as they will be furnished and installed by Xcel. Cost of incoming service by Others.
41. Moltz has assumed in plant lift station pumps will be reused.



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TOWN OF WELLINGTON WATER RECLAMATION FACILITY

PHASE 3 IMPROVEMENTS AND EXPANSION

Value Engineering Tracking

February 4, 2022

					Accepted By:			Notes
Description					Wellington	Jacobs	Moltz	
1	In lieu of 6" conduit with innerduct, use (3) 2" conduits for the fiber backbone, preserving the possibility to add (2) fibers in the future.	\$ (25,000.00)	\$ (25,000.00)	Accept				
2	Remove requirements for UL2085 and reduce to UL142 (This is OK) for generator	\$ (70,100.00)	\$ (70,100.00)	Accept				
3	Amount of spare conduits in duct banks is excessive, Reduce spares by 50%.	\$ (42,000.00)		Review				Provide Savings throughout Construction. Look at on case by case.
4	Delete Bentonite Waterproofing System	\$ (134,925.00)	\$ (134,925.00)	Accept				
5	Moltz provided SST Pipe Supports on Digesters, Change to HDG	\$ (86,600.00)	\$ (86,600.00)	Accept				
6	Delete Epoxy Injection requirement on water testing. Seal cracks during water testing with a urethane grout system.	\$ (83,712.00)	\$ (58,712.00)	Accept				Minimize Epoxy Injection
7	Delete grout slurry requirement for grouting bottom of walls with water stop prior to concrete placement.	\$ (44,926.00)	\$ (44,926.00)	Accept				
8	Delete Bonding agent and special roughen of taper ties. Moltz is still installing rubber taper tie plug and grouting both sides of taper ties.	\$ (33,772.00)	\$ -	Decline				Bonding Agent is needed per Structural Engineering
9	Place clarifier base slabs in one placement	\$ (9,305.00)	\$ (9,305.00)	Accept				
10	Delete requirements and paperwork requirements for full time on site QC person	\$ (122,304.00)	\$ (122,304.00)	Accept				
11	Place 6" Base at new road based roads instead of the 9"	\$ (6,592.00)	\$ (6,592.00)	Accept				
12	Place Squeegee in fill areas at the lower level of the headworks in place of foam Void	\$ (25,605.00)	\$ (10,080.00)	Accept				Per Jacobs email 1/24 - Partial Acceppt, recommendation from geotech report & engineering
13	Place shake on Dye at duct banks in place of integral red dye	\$ (22,897.00)	\$ (22,897.00)	Accept				
14	Delete road base requirement under concrete encased duct bank per the standard detail	\$ (8,308.00)	\$ -	Decline				Engineering recommends keeping after reviewing geotech report
15	Delete Xcel duct banks for primary service (Addendum #2 states for contractor to install conduit & hand holes).	\$ (51,000.00)	\$ (51,000.00)	Accept				
16	Replace half of the concrete paving area near Step feed and headworks with asphalt paving	\$ (51,000.00)	\$ (51,000.00)	Accept				Review and Layout with Mike/Town Staff
17	Delete over excavation at step feed basement	\$ (15,000.00)	\$ -	Decline				Engineering recommends keeping after reviewing geotech report
18	All sleeves 14" and smaller be plastic vs SST	\$ (34,000.00)	\$ (34,000.00)	Accept				
19	Install copper compressed air lines in lieu of SST 2" AHP	\$ (50,000.00)	\$ -	Decline				Longevity and Safety concerns
20	Delete Clarifier Launder Covers and try to use contingency, if available	\$ (114,000.00)	\$ (114,000.00)	Accept				May be added back into the Project if Contengency allows
21	Delete the sloped concrete at the bottom of the digester 5/6	\$ (20,000.00)	\$ -	Decline				Longterm reduction in maintenance labor/costs and Safety concerns
22	Delete Ball Joints at meter vault and replace with double solid sleeve	\$ (16,000.00)	\$ (16,000.00)	Accept				
23	Change 4" NPW Line in Headworks from Ductile to Sch. 80 PVC. Does this need to be 4"?	\$ (45,000.00)	\$ (45,000.00)	Accept				Jacobs will review size
Subtotal Adjustment to Costs Subject to Contractor's Fee		\$	(902,441.00)					

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TOWN OF WELLINGTON WATER RECLAMATION FACILITY**PHASE 3 IMPROVEMENTS AND EXPANSION****Value Engineering Tracking**

February 4, 2022

					Accepted By:			Notes
Description		Estimated	Final	Action	Wellington	Jacobs	Moltz	
24	Delete bell restraints on C900 gravity lines	\$ (45,000.00)	\$ (45,000.00)	Accept				
25	CML or C900 in lieu of ceramic on RS lines & remove ceramic lining from ALP lines	\$ (60,000.00)	\$ (60,000.00)	Accept				No lining needed for ALP lines, C900 acceptable for RS Lines
26	Change SST dumpster rails & guides to HDG	\$ (58,450.00)	\$ -	Decline				HDG will not hold up as long and could create possible in-operation
27	Delete plumbing drain line encasement at UV, Step Feed, and Admin	\$ (62,000.00)	\$ (62,000.00)	Accept				
28	Remove trap primers at Admin	\$ (5,000.00)	\$ (5,000.00)	Accept				
29	Modify belt press building conversion from scope to only incl. removal of equip. & disconnect of electrical	\$ (80,000.00)	\$ (80,000.00)	Accept				May be added back into the Project if Contengency allows
30	Delete existing RAS/WAS Conversion from scope	\$ (418,734.00)	\$ -	Decline				Safety concerns; reduction in maneuverability, access, and efficiency if not completed
31	Delete furnishings allowance from scope	\$ (30,000.00)	\$ (30,000.00)	Accept				May be added back into the Project if Contengency allows
32	Delete ionized water system in scope of work	\$ (9,000.00)	\$ -	Decline				Needed for Laboratory Testing per State Requirements
33	Switch from Huber to BDP Dewatering Presses; must use Suez UV	\$ (55,000.00)	\$ (55,000.00)	Accept				
34	Switch from Huber to Swing Dewatering Presses	\$ (50,000.00)		Decline				Took larger savings by going with BDP on number 33
35	Switch from Neuros Turbo Blowers to Aerzen Turbo Blowers, only if Ovivo screens, Aerzen PD blowers, Velodyne and Enviromix Compressed Gas are still being selected (currently all low)	\$ (80,000.00)	\$ -	Decline				Longevity of equipment and future cost savings from a maintenance standpoint
36	Switch from Neuros to Lonestar Turbo Blowers	\$ (65,000.00)	\$ -	Decline				Longevity of equipment and future cost savings from a maintenance standpoint
37	Switch from Blue-White Chemical Feed Systems to Watson-Marlow	\$ (14,000.00)	\$ (14,000.00)	Accept				
38	Utilize Red Valve non AIS and EDI	\$ (47,900.00)		Decline				Item 38, 39 or 40 can be deducted, not multiple, Accepted line item 39 or 40
39	Utilize Red Valve non AIS with 1 Header and EDI	\$ (91,600.00)	\$ (91,600.00)	Accept				Item 39, 40 or 41 can be deducted, not multiple
40	Utilize Aquarius	\$ (204,950.00)		Review				Item 39, 40 or 41 can be deducted, not multiple, reviewing Flexcap design from Aquarius for additonal savings
41	Switch from Flygt NPW Pump System to KSB NPW Pump System	\$ (45,000.00)	\$ (45,000.00)	Accept				Review Sulzer Curve for possible additional savings
42	Delete spare parts for Rotary Lobe Pumps	\$ (15,000.00)		Decline				Requires specialty tools and rebuild kits that are required
43	Switch from Boerger Pumps to Vogelsang Pumps	\$ (20,000.00)	\$ (20,000.00)	Accept				
44	OzzyCup - Eliminate (1) Control Panel, Utilize Radar	\$ (80,000.00)	\$ (80,000.00)	Accept				
45	OzzyCup - The original budge price included 1 trip of 3 days and the spec calls for 2 trips and 5 days. Deudct to go back to 1 trip and 3 days	\$ (9,000.00)	\$ (9,000.00)	Accept				
46	OzzyCup - The original budget proposal included a standard 1-year warranty. The spec calls for two years. Deduct to go back to 1 year.	\$ (15,000.00)	\$ -	Decline				More beneficial in long term to keep 2 year warranty
47	Ovivo Package Deduct	\$ (82,000.00)	\$ (82,000.00)	Accept				
48	Delete Screw Press Platform	\$ (49,800.00)	\$ -	Decline				Safety concerns, access
49	Delete Cross Over Stairs on Digester	\$ (4,000.00)	\$ -	Decline				Safety concerns, access

Total Adjustment to Costs Subject to Contractor's Fee \$ (1,581,041.00)



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TOWN OF WELLINGTON WATER RECLAMATION FACILITY

PHASE 3 IMPROVEMENTS AND EXPANSION

Value Engineering Tracking

February 4, 2022

					Accepted By:			Notes
Description		Estimated	Final	Action	Wellington	Jacobs	Moltz	
50	Reduce Feeder size from 550-GEN-01 to ATS.	\$ (16,042.00)	\$ (16,042.00)	Accept				Leave 100 as is, 550 can be reduced
51	Eliminate Perimeter Site Lighting excluding (2) parking lot lights & (1) at entry gate	\$ (23,321.00)	\$ (23,321.00)	Accept				
52	Remove Expansion/ Deflection fittings from duct banks into Structures and Manholes. These are already doweled in.	\$ (17,234.00)	\$ (17,234.00)	Accept				
53	Change Aluminum Checkered plate at Headworks Channels to Grating with Mat	\$ (30,000.00)		Decline				Safety Concerns, longevity of mat system
54	Delete Stained Concrete at Headworks to match Veneer	\$ (6,415.00)	\$ (6,415.00)	Accept				
55	Delete painting interior concret walls at headworks	\$ (22,485.00)	\$ (22,485.00)	Accept				
56	Delete painting interior walls at step feed basement	\$ (11,675.00)	\$ (11,675.00)	Accept				
57	Add CRC Coating to Influent Manhole	\$ 13,500.00	\$ 13,500.00	Accept				Needed per Engineering, longetvity of manhole
58	Remove motorized inlet/outlet louvers & space heater from Gensets	\$ (9,000.00)	\$ (9,000.00)	Accept				
59	Change from Insulated Metal Building Panels to un-insulated panel with roll insulation	\$ (135,000.00)	\$ (135,000.00)	Accept				
60	Use standard gland accessories in lieu of Cor-Blu	\$ (30,000.00)	\$ (30,000.00)	Accept				Need to be AWWA Approved
61	Delete (2) Years of Hach Maintenance Package, contract carried by Interstates	\$ (101,822.00)	\$ (101,822.00)	Accept				
62	Updated/Revised Hach, I&C, & Electrical Package	\$ (174,751.00)	\$ (174,751.00)	Accept				
63								
64								
65								
66								
67								
68								
69								
70								
71								

Total Adjustment to Costs Subject to Contractor's Fee \$ (2,115,286.00)



MOLTZ CONSTRUCTION INC.

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**TOWN OF WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 EXPANSION AND IMPROVEMENTS
30%, 60% to 90% Cost Comparison (before VE)**

January 27, 2022

Description	30%	60%	90%/Final	60% to 90%	Notes
01 General Requirements	\$ 2,432,372.00	\$ 2,432,260.00	\$ 2,718,875.00	\$ 286,615.00	Full Time QC Specialist Required by Specifications
02 Existing Conditions	\$ 1,771,133.00	\$ 504,652.00	\$ 374,537.00	\$ (130,115.00)	Moved Existing RAS/WAS to Div. 40
03 Concrete	\$ 6,685,205.00	\$ 7,088,878.00	\$ 8,394,514.00	\$ 1,305,636.00	Cost of rebar, Davis Bacon wages increased, See VE for Additional Increases, updated thicknesses & spec.
04 Masonry	\$ 567,873.00	\$ 358,022.00	\$ 396,198.00	\$ 38,176.00	
05 Metals	\$ 896,188.00	\$ 1,023,532.00	\$ 1,569,012.00	\$ 545,480.00	Material price increases and finalized scope
06 Woods & Plastics	\$ 8,956.00	\$ 7,356.00	\$ 82,886.00	\$ 75,530.00	Now includes Casework
07 Thermal & Moisture Protection	\$ 141,532.00	\$ 116,511.00	\$ 287,645.00	\$ 171,134.00	Bentonite Waterproofing
08 Openings	\$ 307,486.00	\$ 322,044.00	\$ 396,798.00	\$ 74,754.00	Material price increases, defined scope
09 Finishes	\$ 835,340.00	\$ 733,500.00	\$ 1,098,572.00	\$ 365,072.00	Defined scope, See VE for Additional Increases, interior metal building walls are drywall
10 Specialties	\$ 44,019.00	\$ 51,651.00	\$ 70,325.00	\$ 18,674.00	
12 Furnishings	\$ 108,579.00	\$ 70,267.00	\$ 4,062.00	\$ (66,205.00)	Moved to Div. 06
13 Special Construction	\$ 1,352,657.00	\$ 1,386,346.00	\$ 1,865,289.00	\$ 478,943.00	Material price increases
21 Fire Suppression	\$ 50,000.00	\$ 60,000.00		\$ (60,000.00)	Deleted
22 Plumbing	\$ 410,000.00	\$ 325,000.00	\$ 733,600.00	\$ 408,600.00	Defined scope, chemical area drains added, trench drains added, material price increases
23 HVAC	\$ 1,352,021.00	\$ 1,410,335.00	\$ 1,745,245.00	\$ 334,910.00	Material price increases, specifications issued on air handling units
26 Electrical	\$ 5,855,494.00	\$ 6,607,234.00	\$ 7,752,920.00	\$ 1,145,686.00	Hach Claros System Added, Extra instrumentation at aeration basins, material price increases, refeed IPS
31 Earthwork	\$ 2,440,775.00	\$ 2,343,968.00	\$ 2,688,790.00	\$ 344,822.00	Over-excavations defined, fuel price increases,
32 Exterior Improvements	\$ -	\$ -	\$ 49,064.00	\$ 49,064.00	
33 Utilities	\$ 4,819,411.00	\$ 5,264,298.00	\$ 126,739.00	\$ (5,137,559.00)	Now included in Div. 40
35 Waterway and Marine Construction	\$ 285,323.00	\$ 221,573.00	\$ 253,954.00	\$ 32,381.00	Material price increases
40 Process Interconnections	\$ -	\$ -	\$ 6,336,357.00	\$ 6,336,357.00	Was included in Div. 33 at 30% and 60%, Material price increases, supply chain increases,
41 Material Processing and Handling	\$ 98,635.00	\$ 126,970.00	\$ 321,526.00	\$ 194,556.00	Was included in Div. 14 at 30% and 60%, Material price increaes, addition of Davit Cranes
44 Pollution and Waste Control Equip.	\$ 4,382,026.00	\$ 4,368,659.00	\$ 5,332,131.00	\$ 963,472.00	Ozzy Cup price increased by \$220,00, Material price increases, See VE for Additonal Increases



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**TOWN OF WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION**

Quotes

January 27, 2022 - 90% Design Level

Provided in Separate File

Project name	Wellington WRF Ph 3 90%
Labor rate table	Labor - Raw (MCI)
Equipment rate table	Equipment - MCI
Report format	Sorted by 'Spec #/Area/System/Assembly' 'Detail' summary

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
000000	General Conditions														
001	General														
GEN	General														
01	-100 General Conditions (mci)														
	Project Manager	1006.100	117.00 wk	-	-	-	-	-	-	50.00 /ea	5,850	2,700.00 /wk	315,900	321,750	321,867
	Project Engineer	1006.100	162.00 wk	-	-	-	-	-	-	50.00 /ea	8,100	2,207.36 /wk	357,592	365,692	365,854
	General Superintendent	1022.100	130.00 wk	2,000.00 /wk	260,000	-	-	-	-	/ea		-	-	260,000	364,000
	Assistant Superintendent	1022.100	65.00 wk	1,680.00 /wk	109,200	-	-	-	-	/ea		-	-	109,200	152,880
	Field Engineer	1630.100	117.00 wk	1,680.00 /wk	196,560	-	-	-	-	-	-	-	-	196,560	275,184
	Rodman	1630.100	40.00 wk	1,120.00 /wk	44,800	-	-	-	-	/ea		-	-	44,800	62,720
	Project Coordinator	1014.100	20.00 wk	-	-	-	-	-	-	-	-	1,350.00 /wk	27,000	27,000	27,000
	Senior Project Manager	1006.100	56.00 wk	-	-	-	-	-	-	50.00 /ea	2,800	2,916.00 /wk	163,296	166,096	166,152
	Yard Man	1000.100	65.00 wk	1,200.00 /wk	78,000	-	-	-	-	-	-	-	-	78,000	109,200
	Pickup	1900.210	100.00 mnth	-	-	-	-	-	-	836.00 /mnth	83,600	514.00 /mnth	51,400	135,000	136,672
	Project Signs 4x8	1614.100	1.00 ea	31.00 /mh	248	1,500.00 /ea	1,500	-	-	-	-	-	-	1,748	1,847
	Safety	1116.100	1.00 ls	31.00 /mh		25,000.00 /ls	25,000	-	-	-	-	-	-	25,000	25,000
	Safety Plank	1116.200	500.00 lf	-	-	3.00 /lf	1,500	-	-	-	-	-	-	1,500	1,500
	Safety Rail	1116.200	2,000.00 lf	31.00 /mh		1.00 /lf	2,000	-	-	-	-	-	-	2,000	2,000
	Temporary Fences	1116.200	1.00 ls	-	-	-	-	8,500.00 /ls	8,500	-	-	-	-	8,500	8,500
	Site Security/Alarm System	1644.100	24.00 mnth	31.00 /mh	3,720	450.00 /m nt h	10,800	-	-	-	-	-	-	14,520	16,008
	Temporary Power Hookup	1162.100	1.00 ls	31.00 /mh		/ls		5,000.00 /ls	5,000	-	-	-	-	5,000	5,000
	Temporary Toilets	1162.100	144.00 mnth	-	-	210.00 /m nt h	30,240	-	-	-	-	-	-	30,240	30,240
	Cell Phone	1162.100	96.00 mnth	-	-	-	-	-	-	125.00 /mnth	12,000	-	-	12,000	12,240
	Radios	1162.100	24.00 mnth	-	-	200.00 /m nt h	4,800	-	-	-	-	-	-	4,800	4,800
	Project Management Software	1672.200	27.00 mnth	-	-	-	-	-	-	-	-	1,200.00 /mnth	32,400	32,400	32,400
	Drinking Water	1162.100	1.00 ls	-	-	4,800.00 /ls	4,800	-	-	-	-	-	-	4,800	4,800
	Permit - Building - not included	1222.100	1.00 ls	-	-	-	-	-	-	-	-	/ls			
	Documents - Contract Documents	1060.100	1.00 ls	-	-	2,500.00 /ls	2,500	-	-	-	-	-	-	2,500	2,500
	Documents - Freight and Postage	1060.100	1.00 ls	-	-	5,000.00 /ls	5,000	-	-	-	-	-	-	5,000	5,000
	Photos - Project by GC	1104.100	24.00 mnth	31.00 /mh	5,952	50.00 /m nt h	1,200	-	-	-	-	-	-	7,152	9,533
	Survey Equipment, Project	1630.100	24.00 mnth	-	-	500.00 /m nt h	12,000	-	-	1,200.00 /mnth	28,800	-	-	40,800	41,376
	40' Storage Trailer	1900.142	54.00 mnth	-	-	-	-	-	-	150.00 /mnth	8,100	50.00 /mnth	2,700	10,800	10,962
	Temp Office and Storage Construction	1900.142	1.00 ls	31.00 /mh		65,000.00 /ls	65,000	-	-	-	-	-	-	65,000	65,000
	Staging Area Rock	2305.250	100.00 cy	31.00 /mh	620	34.00 /to n	5,440	-	-	-	-	-	-	6,060	6,308
	(3rd Party) 2-Ton Truck, GVW 25,950	1900.210	48.00 hr	-	-	-	-	85.00 /hr	4,080	-	-	-	-	4,080	4,080
	(MCI) Semi Tractor	1900.210	48.00 hr	6,933.20 /mnth	1,920	-	-	-	-	5,973.00 /mnth	1,654	6,160.00 /mnth	1,706	5,280	6,081
	Mob & Demob Labor	1900.210	240.00 hr	31.00 /mh	7,440	-	-	-	-	-	-	-	-	7,440	10,416
	Final Cleaning	1714.100	240.00 hr	31.00 /mh	7,440	14.59 /hr	3,502	-	-	-	-	-	-	10,942	13,918
	Dumpster Rental/Pick up	1714.100	104.00 wk	-	-	500.00 /w k	52,000	-	-	-	-	-	-	52,000	52,000
	Scaffolding	1900.300	8.00 mnth	31.00 /mh		800.00 /m nt h	6,400	-	-	-	-	-	-	6,400	6,400
	Drug Testing	1116.100	1.00 ls	31.00 /mh		-	-	-	-	-	-	3,500.00 /ls	3,500	3,500	3,500
	Advertising	1642.100	1.00 ls	-	-	-	-	-	-	-	-	2,500.00 /ls	2,500	2,500	2,500
	Safety Officer	1116.100	15.00 wk	0.00 /wk	0	-	-	-	-	-	-	2,160.00 /wk	32,400	32,400	32,400
	Office clean	2220.205	104.00 wk	1,240.00 /wk	128,960	-	-	-	-	-	-	-	-	128,960	180,544
	Internet Service	1672.200	27.00 mnth	-	-	-	-	-	-	-	-	275.00 /mnth	7,425	7,425	7,425
	Permit - Stormwater	1222.100	1.00 ls	-	-	-	-	-	-	-	-	2,500.00 /ls	2,500	2,500	2,500
	Permit - Dewatering	1222.100	1.00 ls	-	-	-	-	-	-	-	-	3,000.00 /ls	3,000	3,000	3,000
	Inspector's Trailer	1672.100	27.00 mnth	-	-	850.00 /m nt h	22,950	-	-	-	-	-	-	22,950	22,950
	Survey & Layouts building dept layback	1630.100	1.00 ls	31.00 /mh		0.00 /ls	0	18,000.00 /ls	18,000	-	-	-	-	18,000	18,000
	Admin Blower Test	1166.100	1.00 ea	31.00 /mh		/ea		4,500.00 /ea	4,500	/ea		-	-	4,500	4,500
	Quality Control Specialist	1630.100	104.00 wk	1,680.00 /wk	174,720	-	-	-	-	-	-	-	-	174,720	244,608
	General Conditions (mci)				1,019,580		256,632	/wk	40,080		150,904		1,003,319	2,470,515	2,881,365
	GEN General				1,019,580		256,632		40,080		150,904		1,003,319	2,470,515	2,881,365
	001 General				1,019,580		256,632	/LS	40,080		150,904		1,003,319	2,470,515	2,881,365
	000000 General Conditions				1,019,580		256,632		40,080		150,904		1,003,319	2,470,515	2,881,365
020000	Existing Conditions														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
001	General														
GEN	General														
01	-100 General Existing Item Budget Allowances (not shown on drawings)														
	Existing Belt Press Building Conversion include 8 k elect	2010.110	1.00 ls	-	-	-	-	100,000.00 /ls	100,000	-	-	-	-	100,000	100,000
	Electrical Sub and intergrator RAS/WAS Pumps Station	2010.110	1.00 ls	-	-	-	-	20,000.00 /ls	20,000	-	-	-	-	20,000	20,000
	Headworks Electrical Demo	2010.110	1.00 ls	-	-	-	-	5,000.00 /ls	5,000	-	-	-	-	5,000	5,000
	Headworks Remove Equipment	2010.110	1.00 ls	-	-	-	-	15,000.00 /ls	15,000	-	-	-	-	15,000	15,000
	Miscellaneous Furnishings Budget and appliances	12500.100	1.00 ls	31.00 /mh		/ls		30,000.00 /ls	30,000	-	-	-	-	30,000	30,000
	Dionized Water Equipment Budget lab noco polish system include electrical	12500.100	1.00 ls	31.00 /mh		/ls		9,000.00 /ls	9,000	-	-	-	-	9,000	9,000
	General Existing Item Budget Allowances (not shown on drawings)							/wk	179,000					179,000	179,000
	GEN General								179,000					179,000	179,000
	001 General							/LS	179,000					179,000	179,000
	020000 Existing Conditions								179,000					179,000	179,000
024100	Demolition														
051	Site Civil														
Demo	Demo														
020-	Demo Sidewalks Around Digesters & Clarifiers for Yard Piping														
	Demo Concrete Sidewalks	2220.730	1,850.00 sf	31.00 /mh	2,294	-	-	-	-	/ch	-	-	-	2,294	3,212
	Dump Fees	2220.980	80.00 tn	-	-	58.00 /tn	4,640	-	-	-	-	-	-	4,640	4,640
	Trucking Demo Materials	2220.980	12.50 hr	31.00 /mh				-	-	115.00 /hr	1,438	-	-	1,438	1,466
	Remove and Relocate Equipment - Exterior Lighting??	2220.140	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.50 mnth	-	-	-	-	-	-	8,500.00 /mnth	4,250	3,500.00 /mnth	1,750	6,000	6,085
	John Deere 624 Loader (172 HP) (M)	1900.132	0.50 mnth	-	-	-	-	-	-	5,500.00 /mnth	2,750	3,000.00 /mnth	1,500	4,250	4,305
	Electrical Sub replace light poles	16000.001	1.00 ls	-	-	-	-	10,000.00 /ls	10,000	-	-	-	-	10,000	10,000
	Demo Sidewalks Around Digesters & Clarifiers for Yard Piping		1.00 ls		2,790		4,640	10,000.00 /ls	10,000		8,438		3,250	29,118	30,402
020-	Misc Site Demolition - 051-C-0001														
	Demo Chain Link Fencing	2220.735	40.00 lf	31.00 /mh	248	-	-	-	-	-	-	-	-	248	347
	Demo Metal Bollards	2220.735	3.00 ea	31.00 /mh	93	-	-	-	-	/ch	-	-	-	93	130
	Cut, Plug and Abandon Pipe (2 Plcs) 14"	2230.100	1.00 ls	31.00 /mh	744	-	-	-	-	-	-	-	-	744	1,042
	Cut, Plug and Abandon Pipe 36" (Placing MH)	2230.100	1.00 ls	31.00 /mh	744	-	-	-	-	-	-	-	-	744	1,042
	3500 psi Concrete	3310.100	3.00 cy	-	-	165.00 /cy	530	-	-	-	-	-	-	530	530
	PVC C-900 Caps 14	2336.330	2.00 ea	31.00 /mh	62	740.00 /ea	1,480	-	-	-	-	-	-	1,542	1,567
	John Deere 624 Loader (172 HP) (M)	1900.132	0.08 mnth	-	-	-	-	-	-	5,500.00 /mnth	440	3,000.00 /mnth	240	680	689
	Misc Site Demolition - 051-C-0001				1,891		2,010	/ls			440		240	4,581	5,346
020-	Demo Asphalt Drying Beds														
	Demo Asphalt	2220.730	48,000.00 sf	31.00 /mh	2,232	-	-	-	-	/ch	-	-	-	2,232	3,125
	John Deere 624 Loader (172 HP) (M)	1900.132	0.25 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,375	3,000.00 /mnth	750	2,125	2,153
	Hitachi 225 Excavator w/ Breaker (147 HP) (L)	1900.136	0.25 mnth	-	-	-	-	-	-	10,000.00 /mnth	2,500	2,200.00 /mnth	550	3,050	3,100
	(3rd Party) Semi Tractor (2 hour round trip)	1900.210	98.00 hr	-	-	-	-	125.00 /hr	12,250	-	-	-	-	12,250	12,250
	Demo Asphalt Drying Beds		1.00 ls		2,232			12,250.00 /ls	12,250		3,875		1,300	19,657	20,627
0203-	Demo Concrete 051-C-0001														
	Demo Concrete	2220.083	16.00 cy	31.00 /mh	248	-	-	-	-	-	-	-	-	248	347
	(3rd Party) Semi Tractor (2 hour round trip)	1900.210	4.00 hr	-	-	-	-	125.00 /hr	500	-	-	-	-	500	500
	Dump Fees	2220.980	16.00 tn	-	-	40.00 /tn	640	-	-	-	-	-	-	640	640
	Hitachi 225 Excavator w/ Breaker (147 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	10,000.00 /mnth	1,700	2,200.00 /mnth	374	2,074	2,108
	Demo Concrete 051-C-0001		16.00 CY		248		640	31.25 /CY	500		1,700		374	3,462	3,595
0206-	Demo Buried Pipe From Drying Bed to Pond														
	Demo Buried Pipe (Type Unknown) (Enter Dia)	2230.100	90.00 lf	31.00 /mh	279	-	-	-	-	-	-	-	-	279	391
	Trench Excavtion 0- 4'	2333.010	90.00 lf	31.00 /mh	223	-	-	-	-	-	-	-	-	223	312
	Trench Backfill 0- 4'	2333.020	90.00 lf	31.00 /mh	279	-	-	-	-	-	-	-	-	279	391
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.04 mnth	-	-	-	-	-	-	8,500.00 /mnth	349	3,500.00 /mnth	144	492	499
	John Deere 624 Loader (172 HP) (M)	1900.132	0.04 mnth	-	-	-	-	-	-	5,500.00 /mnth	226	3,000.00 /mnth	123	349	353
	Water Truck, 4,000 Gallon (L)	1900.210	0.04 mnth	-	-	-	-	-	-	4,500.00 /mnth	180	1,200.00 /mnth	48	228	232
	Mikasa Jumping Jack Compactor (L)	1900.138	0.04 mnth	-	-	-	-	-	-	200.00 /mnth	8	100.00 /mnth	4	12	12
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.04 mnth	-	-	-	-	-	-	2,000.00 /mnth	80	300.00 /mnth	12	92	94
	Dump Fees & Trash Haul	1162.100	1.00 ea	-	-	500.00 /ea	500	-	-	-	-	-	-	500	500
	Demo Buried Pipe From Drying Bed to Pond		90.00 lf		781		500	/lf			842		331	2,454	2,783
0206-	Demo 4" and 8" WAS														
	Demo Ductile Iron Pipe (Enter Dia)	2230.100	180.00 lf	31.00 /mh	502	-	-	-	-	-	-	-	-	502	703
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.04 mnth	-	-	-	-	-	-	8,500.00 /mnth	349	3,500.00 /mnth	144	492	499
	John Deere 624 Loader (172 HP) (M)	1900.132	0.04 mnth	-	-	-	-	-	-	5,500.00 /mnth	226	3,000.00 /mnth	123	349	353
	Dump Fees & Trash Haul	1162.100	1.00 ea	-	-	500.00 /ea	500	-	-	-	-	-	-	500	500
	Demo 4" and 8" WAS		90.00 lf		502		500	/lf			574		267	1,843	2,055
0206-	Demo 4" DIP and Cap - 051-C-0001														
	Trench Excavtion 0- 4'	2333.010	90.00 lf	31.00 /mh	446	-	-	-	-	-	-	-	-	446	625
	Trench Backfill 0- 4'	2333.020	90.00 lf	31.00 /mh	837	-	-	-	-	-	-	-	-	837	1,172
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.07 mnth	-	-	-	-	-	-	8,500.00 /mnth	595	3,500.00 /mnth	245	840	852
	John Deere 624 Loader (172 HP) (M)	1900.132	0.07 mnth	-	-	-	-	-	-	5,500.00 /mnth	385	3,000.00 /mnth	210	595	603
	Water Truck, 4,000 Gallon (L)	1900.210	0.07 mnth	-	-	-	-	-	-	4,500.00 /mnth	315	1,200.00 /mnth	84	399	405

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0206- Demo 4" DIP and Cap - 051-C-0001														
	Mikasa Jumping Jack Compactor (L)	1900.138	0.07 mnth	-	-	-	-	-	-	200.00 /mnth	14	100.00 /mnth	7	21	21
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.07 mnth	-	-	-	-	-	-	2,000.00 /mnth	140	300.00 /mnth	21	161	164
	Cut Existing	2333.010	1.00 ea	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	DI MJ Compact Cap 4	2511.310	1.00 ea	31.00 /mh	9	150.00 /ea	150	-	-	-	-	-	-	159	163
	Demo 4" DIP and Cap - 051-C-0001		90.00 lf		1,355		150	/lf			1,449		567	3,521	4,092
	Demo Demo				9,799		8,440		22,750		17,318		6,328	64,634	68,900
	051 Site Civil				9,799		8,440	/LS	22,750		17,318		6,328	64,634	68,900
	650 Existing Digester 1 to 4														
	Demo Demo														
	0203- 8" SQ Openings - 650-S-1011 & 1020														
	Demo Concrete	2220.083	1.00 cy	31.00 /mh	992	-	-	-	-	-	-	-	-	992	1,389
	Torch Set and Ocy/Acet.	1900.300	0.50 mnth	-	-	1,000.00 /mnt h	500	-	-	1,000.00 /mnth	500	-	-	1,000	1,010
	John Deere 624 Loader (172 HP) (M)	1900.132	0.50 mnth	-	-	-	-	-	-	5,500.00 /mnth	2,750	3,000.00 /mnth	1,500	4,250	4,305
	X ray testing digester 1-2	1166.100	1.00 ls	-	-	-	-	-	-	-	-	1,500.00 /ls	1,500	1,500	1,500
	Patch and coat rebar	3350.130	5.00 ea	31.00 /mh	2	50.00 /ea	250	-	-	-	-	-	-	252	253
	8" SQ Openings - 650-S-1011 & 1020		1.00 CY		994		750	/CY			3,250		3,000	7,994	8,457
	0203- Saw Cutting/Core Drilling Sub														
	Saw Cut & Core Drill Sub	2220.083	1.00 ls	31.00 /mh	6	-	-	15,650.00 /ls	15,650	/ls		-	-	15,656	15,659
	Saw Cutting/Core Drilling Sub				6			/CY	15,650					15,656	15,659
	Demo Demo				1,001		750		15,650		3,250		3,000	23,651	24,116
	Digester 1&2														
	02-2b Remove Transfer Sludge Piping & Valves														
	Demo DI Pipe 4"	2220.605	50.00 lf	31.00 /mh	775	-	-	-	-	-	-	-	-	775	1,085
	Demo Pipe Hangers 4"	2220.610	15.00 ea	31.00 /mh	233	-	-	-	-	-	-	-	-	233	326
	Demo Pipe Valves 4"	2220.840	3.00 ea	31.00 /mh	28	-	-	-	-	-	-	-	-	28	39
	Dumpster Pickups	2220.980	1.00 ea	-	-	500.00 /ea	500	-	-	-	-	-	-	500	500
	Grout/Fix Existing Concrete Anchors	3150.200	1.00 ls	31.00 /mh	31	100.00 /ls	100	-	-	-	-	-	-	131	143
	Core Drill ~8" for new Transfer Sludge Pipe	2220.085	2.00 ea	31.00 /mh	62	-	-	0.00 /ea	0	-	-	-	-	62	87
	Remove Transfer Sludge Piping & Valves		30.00 lf		1,128		600	/lf						1,728	2,180
	02-2b Remove WAS Piping to Be Lowered														
	Demo DI Pipe 4"	2220.605	6.00 lf	31.00 /mh	93	-	-	-	-	-	-	-	-	93	130
	Demo Pipe Hangers 4"	2220.610	2.00 ea	31.00 /mh	31	-	-	-	-	-	-	-	-	31	43
	Grout/Fix Existing Concrete anchors	3150.200	1.00 ls	31.00 /mh	124	100.00 /ls	100	-	-	-	-	-	-	224	274
	Core Drill ~8" for New WAS Piping	2220.085	2.00 ea	31.00 /mh	248	-	-	0.00 /ea	0	-	-	-	-	248	347
	Remove WAS Piping to Be Lowered		30.00 lf		496		100	/lf						596	794
	020- Demo Course Bubble Diffusers														
	Demo Equip. - Coarse Bubble Diffusers 75LF	2220.140	42.00 ea	31.00 /mh	5,208	-	-	-	-	-	-	-	-	5,208	7,291
	Grout/Fix Existing Concrete	3150.200	1.00 ls	31.00 /mh	31	800.00 /ls	800	-	-	-	-	-	-	831	843
	Demo Course Bubble Diffusers				5,239		800	/ls						6,039	8,135
	020- Demo Decant Mechanism & Piping														
	Demo Equipment - Decant Mechanism	2220.140	2.00 ea	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Dumpster Pickups	2220.980	1.00 ea	-	-	500.00 /ea	500	-	-	-	-	-	-	500	500
	Grout/Fix Existing Concrete -Wall Opening	3150.200	1.00 ls	31.00 /mh	124	1,000.00 /ls	1,000	-	-	-	-	-	-	1,124	1,174
	DI Blind Flange 4"	15221.405	2.00 ea	31.00 /mh	248	75.00 /ea	150	-	-	-	-	-	-	398	497
	NBG Kit 125# SS 4in	15125.012	2.00 ea	31.00 /mh	19	200.00 /ea	400	-	-	-	-	-	-	419	426
	Demo Decant Mechanism & Piping				887		2,050	/ls						2,937	3,291
	020- Demo Exisitng Platform, Railing and Stairs														
	Demo Metal Stairs/Platforms	2220.490	1.00 ea	31.00 /mh	248	-	-	-	-	-	-	-	-	248	347
	Grout Existing Connection Point/Holes	3150.200	1.00 ls	31.00 /mh	248	50.00 /ls	50	-	-	-	-	-	-	298	397
	Dumpster Pickups	2220.980	1.00 ea	-	-	500.00 /ea	500	-	-	-	-	-	-	500	500
	Grove RT760/RT700, 60 ton (240 HP) (L) All demo at digester 5/6	1900.100	0.50 mnth	7,296.00 /mnth	3,648	350.00 /mnt h	175	-	-	9,500.00 /mnth	4,750	1,500.00 /mnth	750	9,323	10,877
	Genie 32' Scissor Lift (Requires Power Source)	1900.300	1.00 mnth	-	-	-	-	-	-	1,200.00 /mnth	1,200	100.00 /mnth	100	1,300	1,324
	Demo Exisitng Platform, Railing and Stairs				4,144		725	/ls			5,950		850	11,669	13,446
	0203- 8" Core Drill - 650-D-1010														
	Core Drill 8"	2220.085	1.00 ea	31.00 /mh	31	-	-	0.00 /ea	0	-	-	-	-	31	43
	8" Core Drill - 650-D-1010				31			/CY						31	43
	Digester 1&2				11,925		4,275				5,950		850	23,000	27,889
	Digester 3&4														
	02-2b Remove Transfer Sludge Piping and Valves														
	Demo DI Pipe 4"	2220.605	70.00 lf	31.00 /mh	217	-	-	-	-	-	-	-	-	217	304
	Demo Pipe Hangers 4"	2220.610	25.00 ea	31.00 /mh	388	-	-	-	-	-	-	-	-	388	543
	Dumpster Pickups	2220.980	1.00 ea	-	-	500.00 /ea	500	-	-	-	-	-	-	500	500
	Grout/Fix Existing Concrete	3150.200	1.00 ls	31.00 /mh	124	250.00 /ls	250	-	-	-	-	-	-	374	424
	Core Drill ~8" for New Transfer Sludge Pipe	2220.085	2.00 ea	31.00 /mh	62	-	-	0.00 /ea	0	-	-	-	-	62	87

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	Remove Transfer Sludge Piping and Valves		50.00 lf		791		750	/lf						1,541	1,857
02-2b	Remove WAS Piping to Be Lowered														
	Demo DI Pipe 4"	2220.605	6.00 lf	31.00 /mh	37	-	-	-	-	-	-	-	-	37	52
	Demo Pipe Hangers 4"	2220.610	2.00 ea	31.00 /mh	31	-	-	-	-	-	-	-	-	31	43
	Grout/Fix Existing Concrete	3150.200	1.00 ls	31.00 /mh	124	250.00 /ls	250	-	-	-	-	-	-	374	424
	Core Drill ~8" for New WAS Piping	2220.085	2.00 ea	31.00 /mh	62	-	-	0.00 /ea	0	-	-	-	-	62	87
	Remove WAS Piping to Be Lowered		30.00 lf		254		250	/lf						504	606
020-	Demo Course Bubble Diffusers														
	Demo Equip. - Coarse Bubble Diffusers 540LF	2220.140	336.00 ea	31.00 /mh	4,166	-	-	-	-	-	-	-	-	4,166	5,833
	Grout/Fix Exising Concrete	3150.200	1.00 ls	31.00 /mh		1,500.00 /ls	1,500	-	-	-	-	-	-	2,740	3,236
	Demo Course Bubble Diffusers				5,406		1,500	/ls						6,906	9,069
020-	Demo Exisitng Platform, Railing and Stairs														
	Demo Metal Stairs/Platforms	2220.490	2.00 ea	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Grout Existing Connection Point/Holes	3150.200	1.00 ls	31.00 /mh	248	250.00 /ls	250	-	-	-	-	-	-	498	597
	Dumpster Pickups	2220.980	4.00 ea	-	-	500.00 /ea	2,000	-	-	-	-	-	-	2,000	2,000
	Demo Exisitng Platform, Railing and Stairs				744		2,250	/ls						2,994	3,292
0203-	2'x3' Opening - 650-S3002														
	Demo Concrete	2220.083	2.36 cy	31.00 /mh	1,173	-	-	-	-	-	-	-	-	1,173	1,642
	Saw Cut	2220.083	384.00 lf	31.00 /mh	2,381	-	-	-	-	/lf	-	-	-	2,381	3,333
	60 lb Jack Hammer	1900.138	1.00 mnth	-	-	-	-	-	-	400.00 /mnth	400	100.00 /mnth	100	500	508
	Torch Set and Ocy/Acet.	1900.300	0.50 mnth	-	-	1,000.00 /mnt h	500	-	-	1,000.00 /mnth	500	-	-	1,000	1,010
	Grove RT760/RT700, 60 ton (240 HP) (L) alll digester 1-4	1900.100	0.50 mnth	7,296.00 /mnth	3,648	350.00 /mnt h	175	-	-	9,500.00 /mnth	4,750	1,500.00 /mnth	750	9,323	10,877
	Skyjack/Genie 19' Scissor Lift (Requires Power Source)	1900.300	1.00 mnth	-	-	-	-	-	-	800.00 /mnth	800	100.00 /mnth	100	900	916
	Grind/Patch Concrete at openings	3350.130	1.00 ls	31.00 /mh	124	750.00 /ls	750	-	-	-	-	-	-	874	924
	2'x3' Opening - 650-S3002		2.36 CY		7,325		1,425	/CY			6,450		950	16,150	19,209
0203-	10" Core Drill - 640-D-1010														
	Core Drill Concrete 10"	2220.085	1.00 ea	31.00 /mh	124	-	-	0.00 /ea	0	-	-	-	-	124	174
	X ray testing digester 4	1166.100	1.00 ls	-	-	-	-	-	-	-	-	1,500.00 /ls	1,500	1,500	1,500
	10" Core Drill - 640-D-1010		0.04 CY		124			/CY					1,500	1,624	1,674
0206-	Demo 4" Decant Line and Valve														
	Demo Ductile Iron Pipe (4")	2230.100	14.00 lf	31.00 /mh	109	-	-	-	-	-	-	-	-	109	152
	Trench Excavtion 10-12'	2333.010	14.00 lf	31.00 /mh	74	-	-	-	-	-	-	-	-	74	103
	Trench Backfill 10-12'	2333.020	14.00 lf	31.00 /mh	95	-	-	-	-	-	-	-	-	95	134
	Dumpster Pickups	2220.980	1.00 ea	-	-	500.00 /ea	500	-	-	-	-	-	-	500	500
	Non Shrink Grout - Patch Opening in Slab	3150.700	1.00 cf	31.00 /mh	31	60.00 /cf	60	-	-	-	-	-	-	91	103
	Demo 4" Decant Line and Valve		14.00 lf		309		560	/lf						869	992
	Digester 3&4				14,953		6,735				6,450		2,450	30,588	36,698
	650 Existing Digester 1 to 4				27,879		11,760	/LS	15,650		15,650		6,300	77,239	88,703
750 Lab and Control Building															
Demo Demo															
020-	Misc. Demo for new Lab Casework														
	Demo Shelving	2220.730	2.00 ea	31.00 /mh	248	-	-	-	-	/ea	-	-	-	248	347
	Demo Water Purification System	2220.730	1.00 ea	31.00 /mh	124	-	-	-	-	/ea	-	-	-	124	174
	Demo Drywall where Backing is Needed	2220.730	24.00 sf	31.00 /mh	149	-	-	-	-	/ch	-	-	-	149	208
	Misc. Demo for new Lab Casework				521			/ls						521	729
	Demo Demo				521									521	729
	750 Lab and Control Building				521			/LS						521	729
850 Existing RAS/WAS															
Exis	RAS/WAS														
02-2b	Demo RAS/WAS Interior Pipe and Valves														
	Demo DI Pipe 8"	2220.605	576.00 lf	31.00 /mh	3,571	-	-	-	-	-	-	-	-	3,571	5,000
	Demo Pipe Hangers 8"	2220.610	100.00 ea	31.00 /mh	1,550	-	-	-	-	-	-	-	-	1,550	2,170
	Demo Pipe Valves 8"	2220.840	20.00 ea	31.00 /mh	1,240	-	-	-	-	-	-	-	-	1,240	1,736
	Hoisting Costs	1485.100	1.00 mnth	31.00 /mh	554	1,500.00 /mnt h	1,500	-	-	-	-	-	-	2,054	2,275
	Demo Concrete pads	2220.083	11.00 ea	31.00 /mh	8,184	-	-	-	-	-	-	-	-	8,184	11,458
	60 lb Jack Hammer	1900.138	1.00 mnth	-	-	-	-	-	-	800.00 /mnth	800	100.00 /mnth	100	900	916
	Air Compressor 185 cfm (66 HP) (L)	1900.010	1.00 mnth	-	-	-	-	-	-	750.00 /mnth	750	705.00 /mnth	705	1,455	1,470
	Dumpster Rental/Pick up	1714.100	4.00 ea	-	-	500.00 /ea	2,000	-	-	-	-	-	-	2,000	2,000
	Grind/Patch Architectural Wall	3350.130	1.00 ls	31.00 /mh	744	1,500.00 /ls	1,500	-	-	-	-	-	-	2,244	2,542
	Demo RAS/WAS Interior Pipe and Valves		576.00 lf		15,843		5,000	/lf			1,550		805	23,198	29,566
020-	Demo WAS/RAS & SCUM Pumps														
	Demo Equipment - RAS Pump	2220.140	5.00 ea	31.00 /mh	2,480	-	-	-	-	-	-	-	-	2,480	3,472
	Demo Equipment - WAS Pump	2220.140	5.00 ea	31.00 /mh	2,480	-	-	-	-	-	-	-	-	2,480	3,472

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
020-	Demo WAS/RAS & SCUM Pumps														
	Demo Equipment - SCUM Pump	2220.140	1.00 ea	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Demo WAS/RAS & SCUM Pumps				5,456			/ls						5,456	7,638
	Exis. RAS/WAS				21,299		5,000				1,550		805	28,654	37,204
	850 Existing RAS/WAS				21,299		5,000				1,550		805	28,654	37,204
	024100 Demolition				59,497		25,200		38,400		34,518		13,433	171,048	195,537
033000	Cast-In-Place Concrete														
	001 General														
	Concrete Concrete														
	014- Winter Conditions														
	Winter Conditions	1572.100	10.00 mnth	31.00 /mh	42,780	1,000.00 /mnt h	10,000	-	-	-	-	-	-	52,780	69,892
	2012 Allmand Self Cont. 1M BTU Heater(In @ 4.0 gal/hr w/ 2 burners+1 gal/hr Gen running *3 24/7) (L)	1900.400	10.00 mnth	-	-	0.00 /mnt h	0	-	-	2,250.00 /mnth	22,500	2,000.00 /mnth	20,000	42,500	42,950
	Winter Heat Propane	1572.100	10.00 mnth	-	-	1,500.00 /mnt h	15,000	-	-	-	-	-	-	15,000	15,000
	Snow Shovel Ground Level	1572.300	96.00 mnhr	31.00 /mh	2,976	-	-	-	-	-	-	-	-	2,976	4,166
	Snow Plowing	1572.300	10.00 mnth	31.00 /mh	2,480	0.00 /mnt h	0	-	-	-	-	-	-	2,480	3,472
	Ground Heater E2200 (In @ 1.1 gal/hr *3 24/7) (L)	1900.400	4.00 mnth	-	-	-	-	-	-	6,000.00 /mnth	24,000	3,800.00 /mnth	15,200	39,200	39,680
	Bobcat Skid Steer (85hp)- track (L)	1900.131	2.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	6,000	2,000.00 /mnth	4,000	10,000	10,120
	Winter Conditions		10.00 mo		48,236		25,000	/mo			52,500		39,200	164,936	185,280
019-100	Water Test Basin														
	Water Test Basins	3995.200	8.00 ea	31.00 /mh	5,952	/ea		-	-	-	-	-	-	5,952	8,333
	Test Water	3995.200	8.00 ea	31.00 /mh		/ea		-	-	/ea		-	-		
	Pumps	3995.200	8.00 ea	31.00 /mh		1,000.00 /ea	8,000	-	-	/ea		-	-	8,000	8,000
	Temporary Bulkheads	3995.200	23.00 ea	31.00 /mh	5,704	250.00 /ea	5,750	-	-	-	-	-	-	11,454	13,736
	Hose and Acc	3995.200	8.00 ea	31.00 /mh		500.00 /ea	4,000	-	-	/ea		-	-	4,000	4,000
	Urethane Injection System	3995.200	8.00 ea	31.00 /mh	39,680	2,000.00 /ea	16,000	-	-	1,000.00 /ea	8,000	-	-	63,680	79,712
	Epoxy Injection System	3995.200	8.00 ea	31.00 /mh	39,680	2,500.00 /ea	20,000	-	-	1,000.00 /ea	8,000	-	-	67,680	83,712
	Water Test Basin		8.00 ea		91,016		53,750	/ea			16,000			160,766	197,492
0380-	Concrete Equipment														
	Razorback Screed	3995.100	6.00 ea	-	-	-	-	-	-	500.00 /ea	3,000	-	-	3,000	3,060
	Troweling Machine	3995.100	12.00 mnth	-	-	-	-	-	-	300.00 /mnth	3,600	-	-	3,600	3,672
	Concrete Crane Buckets	3995.100	27.00 mnth	-	-	-	-	-	-	150.00 /mnth	4,050	-	-	4,050	4,131
	Generators High cylce	3995.100	72.00 mnth	-	-	-	-	-	-	300.00 /mnth	21,600	-	-	21,600	22,032
	Concrete Vibrators	3995.100	72.00 mnth	-	-	-	-	-	-	300.00 /mnth	21,600	-	-	21,600	22,032
	Formwork Freight	3150.200	52.00 ld	31.00 /mh	0	-	-	-	-	-	-	650.00 /load	33,800	33,800	33,800
	Grove RT760/RT700, 60 ton, wo/operator (240 HP) (L)	1900.100	8.00 mnth	-	-	350.00 /mnt h	2,800	-	-	10,400.00 /mnth	83,200	1,500.00 /mnth	12,000	98,000	99,664
	Crane Mob by Sub	1900.100	1.00 ea	31.00 /mh		-	-	2,000.00 /ea	2,000	-	-	-	-	2,000	2,000
	Manitowoc 10000 - 100 Ton (332 HP) (L)	1900.100	19.00 mnth	7,296.00 /mnth	138,624	350.00 /mnt h	6,650	-	-	12,500.00 /mnth	237,500	2,200.00 /mnth	41,800	424,574	484,774
	Crane Mob by Sub	1900.100	1.00 ea	31.00 /mh		-	-	10,000.00 /ea	10,000	-	-	-	-	10,000	10,000
	Concrete Formwork Design Fees	1500.100	1.00 ls	-	-	-	-	12,500.00 /ls	12,500	-	-	-	-	12,500	12,500
	Air Compressor 185 cfm (66 HP) (L)	1900.010	27.00 mnth	-	-	-	-	-	-	750.00 /mnth	20,250	705.00 /mnth	19,035	39,285	39,690
	Welding Machine 300 amp (33 HP) (L)	1900.012	3.00 mnth	-	-	/mnt h		-	-	350.00 /mnth	1,050	550.00 /mnth	1,650	2,700	2,721
	Concrete Foreman	1000.100	24.00 wk	1,520.00 /wk	36,480	-	-	-	-	-	-	-	-	36,480	51,072
	Pickup	1900.210	12.00 mnth	-	-	-	-	-	-	836.00 /mnth	10,032	514.00 /mnth	6,168	16,200	16,401
	Stair Tower and Stair Acess	1900.300	16.00 mo	31.00 /mh		800.00 /mo	12,800	-	-	-	-	-	-	12,800	12,800
	RT Telescopic Forklift (12,000 lb) (130 HP) (L)	1900.300	12.00 mnth	-	-	-	-	-	-	3,500.00 /mnth	42,000	1,200.00 /mnth	14,400	56,400	57,240
	Genie 32' Scissor Lift (Requires Power Source)	1900.300	22.00 mnth	-	-	-	-	-	-	1,200.00 /mnth	26,400	100.00 /mnth	2,200	28,600	29,128
	Concrete Equipment				175,104		22,250	/ls	24,500		474,282		131,053	827,189	906,716
0385-	Reinforcement														
	Rebar Supply in with install	3200.980	1.00 ls	31.00 /mh		0.00 /ls	0	-	-	-	-	-	-		
	Rebar Supply and Install	3200.980	1.00 ls	-	-	-	-	1,498,911.00 /ls	1,498,911	-	-	-	-	1,498,911	1,498,911
	Rebar Chairs	3200.980	11,800.00 ea	31.00 /mh	4	0.35 /ea	4,130	-	-	-	-	-	-	4,134	4,135
	Rebar Bricks	3200.980	6,000.00 ea	31.00 /mh	2	0.65 /ea	3,900	-	-	-	-	-	-	3,902	3,903
	Rebar Acc: wire and acc	3200.980	1.00 ls	31.00 /mh		1,500.00 /ls	1,500	-	-	-	-	-	-	1,500	1,500
	Wall Spreaders and slab sspreaders and added splices	3200.980	1.00 ls	31.00 /mh		30,000.00 /ls	30,000	-	-	-	-	-	-	30,000	30,000
	Deck and Walk Bolster	3200.980	2,600.00 lf	31.00 /mh	1	0.65 /lf	1,690	-	-	-	-	-	-	1,691	1,691

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	Reinforcement				6		41,220		1,498,911					1,540,137	1,540,140
	Concrete Concrete				314,362		142,220		1,523,411		542,782		170,253	2,693,028	2,829,629
	001 General				314,362		142,220	/LS	1,523,411		542,782		170,253	2,693,028	2,829,629
051 Site Civil															
Concrete Concrete															
0302- Sidewalks Drawing 051-C-1001 all except clarifiers															
5000 psi Concrete	3310.100	60.65 cy	-	-	167.00 /cy	10,837	-	-	-	-	-	-	-	10,837	10,837
Slab Placement Count	3310.360	8.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	-	0	0
Truck Place Slab on Grade	3310.230	60.65 cy	31.00 /mh	1,609	-	-	-	-	-	-	-	-	-	1,609	2,253
Formwork S.O.G. Edge Form < 1'	3100.120	1,162.00 sf	31.00 /mh	11,527	1.50 /sf	1,830	-	-	-	-	-	-	-	13,357	17,968
Formwork S.O.G. Const Joints < 1'	3100.120	41.00 sf	31.00 /mh	585	1.50 /sf	65	-	-	-	-	-	-	-	649	883
CJ Prep Slab	3350.170	41.00 sf	31.00 /mh	32	0.15 /sf	6	-	-	-	-	-	-	-	38	51
Finegrade Below Concrete	3150.650	3,275.00 sf	31.00 /mh	2,031	-	-	-	-	-	-	-	-	-	2,031	2,843
Finish- Hard Trowel	3350.110	3,275.00 sf	31.00 /mh	1,421	/sf	-	-	-	-	-	-	-	-	1,421	1,990
Liquid Curing Compounds	3390.170	3,275.00 sf	31.00 /mh	203	0.06 /sf	197	-	-	-	-	-	-	-	400	481
Road Base Below Concrete	2305.300	92.00 cy	31.00 /mh	1,426	22.00 /ton	4,008	-	-	-	-	-	-	-	5,434	6,004
Oil SOG Form	3100.310	622.00 sf	31.00 /mh	0	0.02 /sf	12	-	-	-	-	-	-	-	13	13
Nails and Hardware	3150.200	581.00 sf	31.00 /mh	0	0.04 /sf	23	-	-	-	-	-	-	-	23	24
Dimension Lumber	3150.200	581.00 sf	31.00 /mh	0	0.50 /sf	291	-	-	-	-	-	-	-	291	291
Saw Cut S-O-G	3350.160	1,130.00 lf	31.00 /mh	1,051	0.50 /lf	565	-	-	0.50 /lf	565	-	-	-	2,181	2,613
SOG Rebar	3210.104	6.06 tn	31.00 /mh	4,697	1,400.00 /tn	8,908	-	-	-	-	-	-	-	13,605	15,483
Expansion Joint Cork 6in wide x 3/4in thick	3150.720	400.00 lf	31.00 /mh	620	6.00 /lf	2,520	-	-	-	-	-	-	-	3,140	3,388
Caulking 10.3 oz tube 3/4d x 3/4w expansion Joint	7920.300	400.00 lf	31.00 /mh	620	15.00 /tube	2,276	-	-	-	-	-	-	-	2,896	3,144
Sidewalks Drawing 051-C-1001 all except clarifiers		60.65 cy		25,822		31,537	/cy				565			57,924	68,264
0302- Concrete Valley Pan 051-C-1001															
5000 psi Concrete	3310.100	18.09 cy	-	-	167.00 /cy	3,232	-	-	-	-	-	-	-	3,232	3,232
Truck Place Slab on Grade	3310.230	18.09 cy	31.00 /mh	390	-	-	-	-	-	-	-	-	-	390	546
Formwork S.O.G. Edge Form < 1'	3100.120	329.64 sf	31.00 /mh	3,270	1.50 /sf	519	-	-	-	-	-	-	-	3,789	5,097
Formwork S.O.G. Const Joints < 1'	3100.120	12.06 sf	31.00 /mh	172	1.50 /sf	19	-	-	-	-	-	-	-	191	260
CJ Prep Slab	3350.170	12.06 sf	31.00 /mh	9	0.15 /sf	2	-	-	-	-	-	-	-	11	15
Finegrade Below Concrete	3150.650	729.00 sf	31.00 /mh	452	-	-	-	-	-	-	-	-	-	452	633
Finish- Hard Trowel	3350.110	729.00 sf	31.00 /mh	316	/sf	-	-	-	-	-	-	-	-	316	443
Liquid Curing Compounds	3390.170	729.00 sf	31.00 /mh	45	0.06 /sf	44	-	-	-	-	-	-	-	89	107
Oil SOG Form	3100.310	341.70 sf	31.00 /mh	0	0.02 /sf	7	-	-	-	-	-	-	-	7	7
Nails and Hardware	3150.200	329.64 sf	31.00 /mh	0	0.04 /sf	13	-	-	-	-	-	-	-	13	13
Dimension Lumber	3150.200	329.64 sf	31.00 /mh	0	0.50 /sf	165	-	-	-	-	-	-	-	165	165
Saw Cut S-O-G	3350.160	240.00 lf	31.00 /mh	223	0.50 /lf	120	-	-	0.50 /lf	120	-	-	-	463	555
SOG Rebar	3210.104	2.26 tn	31.00 /mh	1,752	1,400.00 /tn	3,324	-	-	-	-	-	-	-	5,076	5,777
Concrete Valley Pan 051-C-1001		18.09 cy		6,631		7,445	/cy				120			14,195	16,850
0302- Clarifier Sidewalks 051-C-1001															
5000 psi Concrete	3310.100	34.26 cy	-	-	167.00 /cy	6,122	-	-	-	-	-	-	-	6,122	6,122
Slab Placement Count	3310.360	4.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	-	0	0
Truck Place Slab on Grade	3310.230	34.26 cy	31.00 /mh	739	-	-	-	-	-	-	-	-	-	739	1,034
Formwork S.O.G. Edge Form < 1'	3100.120	375.00 sf	31.00 /mh	3,720	1.50 /sf	591	-	-	-	-	-	-	-	4,311	5,799
Formwork S.O.G. Const Joints < 1'	3100.120	17.50 sf	31.00 /mh	250	1.50 /sf	28	-	-	-	-	-	-	-	277	377
CJ Prep Slab	3350.170	17.50 sf	31.00 /mh	14	0.15 /sf	3	-	-	-	-	-	-	-	16	22
Finegrade Below Concrete	3150.650	1,850.00 sf	31.00 /mh	1,147	-	-	-	-	-	-	-	-	-	1,147	1,606
Finish- Hard Trowel	3350.110	1,850.00 sf	31.00 /mh	803	/sf	-	-	-	-	-	-	-	-	803	1,124
Liquid Curing Compounds	3390.170	1,850.00 sf	31.00 /mh	115	0.06 /sf	111	-	-	-	-	-	-	-	226	272
Road Base Below Concrete	2305.300	51.00 cy	31.00 /mh	791	22.00 /ton	2,222	-	-	-	-	-	-	-	3,012	3,328
Oil SOG Form	3100.310	392.50 sf	31.00 /mh	0	0.02 /sf	8	-	-	-	-	-	-	-	8	8
Nails and Hardware	3150.200	375.00 sf	31.00 /mh	0	0.04 /sf	15	-	-	-	-	-	-	-	15	15
Dimension Lumber	3150.200	375.00 sf	31.00 /mh	0	0.50 /sf	188	-	-	-	-	-	-	-	188	188
Saw Cut S-O-G	3350.160	740.00 lf	31.00 /mh	688	0.50 /lf	370	-	-	0.50 /lf	370	-	-	-	1,428	1,711
SOG Rebar	3210.104	3.43 tn	31.00 /mh	2,655	1,400.00 /tn	5,036	-	-	-	-	-	-	-	7,691	8,753
Expansion Joint Asphalt 6in wide x 3/4in thick	3150.720	314.00 lf	31.00 /mh	487	6.00 /lf	1,978	-	-	-	-	-	-	-	2,465	2,660
Caulking 10.3 oz tube 3/4d x 3/4w Expansion Joint	7920.300	314.00 lf	31.00 /mh	487	15.00 /tube	1,787	-	-	-	-	-	-	-	2,273	2,468
Clarifier Sidewalks 051-C-1001		34.26 cy		11,894		18,456	/cy				370			30,720	35,485
0302- Concrete Pavement 051-C-1001															
5000 psi Concrete	3310.100	324.11 cy	-	-	167.00 /cy	57,914	-	-	-	-	-	-	-	57,914	57,914
Slab Placement Count	3310.360	7.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	-	0	0
Pump Place Slab on Grade	3310.230	324.11 cy	31.00 /mh	6,988	-	-	-	-	-	-	31.26 /cy	10,841	-	17,829	20,624
Formwork S.O.G. Edge Form < 1'	3100.120	809.36 sf	31.00 /mh	8,029	1.50 /sf	1,275	-	-	-	-	-	-	-	9,304	12,515
Formwork S.O.G. Const Joints < 1'	3100.120	129.31 sf	31.00 /mh	1,844	1.50 /sf	204	-	-	-	-	-	-	-	2,048	2,785
CJ Prep Slab	3350.170	129.31 sf	31.00 /mh	100	0.15 /sf	19	-	-	-	-	-	-	-	120	160
Finegrade Below Concrete	3150.650	13,061.00 sf	31.00 /mh	8,098	-	-	-	-	-	-	-	-	-	8,098	11,337
Finish- Hard Trowel	3350.110	13,061.00 sf	31.00 /mh	5,668	/sf	-	-	-	-	-	-	-	-	5,668	7,936
Liquid Curing Compounds	3390.170	13,061.00 sf	31.00 /mh	810	0.06 /sf	784	-	-	-	-	-	-	-	1,593	1,917

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0302- Concrete Pavement 051-C-1001														
	Blockouts in Concrete	3150.194	72.00 sf	31.00 /mh	781	2.00 /sf	144	-	-	-	-	-	-	925	1,238
	Expansion Joint	3150.720	254.60 sf	31.00 /mh	395	6.00 /sf	1,604	-	-	-	-	-	-	1,999	2,156
	Expansion Joint Sealant	3150.720	380.00 lf	31.00 /mh	589	2.00 /lf	798	-	-	-	-	-	-	1,387	1,623
	Oil SOG Form	3100.310	938.67 sf	31.00 /mh	0	0.02 /sf	19	-	-	-	-	-	-	19	19
	Nails and Hardware	3150.200	809.36 sf	31.00 /mh	0	0.04 /sf	32	-	-	-	-	-	-	33	33
	Dimension Lumber	3150.200	809.36 sf	31.00 /mh	0	0.50 /sf	405	-	-	-	-	-	-	405	405
	Saw Cut S-O-G	3350.160	2,528.00 lf	31.00 /mh	2,351	0.50 /lf	1,264	-	-	0.50 /lf	1,264	-	-	4,879	5,845
	SOG Rebar	3210.104	40.51 tn	31.00 /mh	31,398	1,400.00 /tn	59,556	-	-	-	-	-	-	90,954	103,514
	Drill and Epoxy #5	3210.101	380.00 ea	31.00 /mh	3,534	5.00 /ea	1,995	-	-	-	-	-	-	5,529	6,943
	Smooth Dowels 1-1/4"	3210.106	380.00 ea	31.00 /mh	5,890	21.00 /ea	7,980	-	-	-	-	-	-	13,870	16,226
	Hardener	3310.110	324.00 cy	-	-	10.00 /cy	3,467	-	-	-	-	-	-	3,467	3,467
	Concrete Pavement 051-C-1001		324.11 cy		76,476		137,459	/cy			1,264		10,841	226,040	256,656
	0302- 051-C-1002 Sidewalks														
	5000 psi Concrete	3310.100	87.04 cy	-	-	167.00 /cy	15,553	-	-	-	-	-	-	15,553	15,553
	Truck Place Slab on Grade	3310.230	87.04 cy	31.00 /mh	1,877	-	-	-	-	-	-	-	-	1,877	2,627
	Formwork S.O.G. Edge Form < 1'	3100.120	945.00 sf	31.00 /mh	9,374	1.50 /sf	1,488	-	-	-	-	-	-	10,863	14,613
	Formwork S.O.G. Const Joints < 1'	3100.120	50.00 sf	31.00 /mh	713	1.50 /sf	79	-	-	-	-	-	-	792	1,077
	CJ Prep Slab	3350.170	50.00 sf	31.00 /mh	39	0.15 /sf	8	-	-	-	-	-	-	46	62
	Finegrade Below Concrete	3150.650	4,700.00 sf	31.00 /mh	2,914	-	-	-	-	-	-	-	-	2,914	4,080
	Finish- Hard Trowel	3350.110	4,700.00 sf	31.00 /mh	2,040	/sf	-	-	-	-	-	-	-	2,040	2,856
	Liquid Curing Compounds	3390.170	4,700.00 sf	31.00 /mh	291	0.06 /sf	282	-	-	-	-	-	-	573	690
	Blockouts in Concrete	3150.194	50.00 sf	31.00 /mh	543	2.00 /sf	100	-	-	-	-	-	-	643	860
	Road Base Below Concrete	2305.300	131.00 cy	31.00 /mh	1,595	22.00 /to n	5,706	-	-	-	-	-	-	7,301	7,939
	Expansion Joint	3150.720	304.00 sf	31.00 /mh	188	6.00 /sf	1,915	-	-	-	-	-	-	2,104	2,179
	Expansion Joint Sealant	3150.720	608.00 lf	31.00 /mh	188	2.00 /lf	1,277	-	-	-	-	-	-	1,465	1,541
	Oil SOG Form	3100.310	995.00 sf	31.00 /mh	0	0.02 /sf	20	-	-	-	-	-	-	20	20
	Nails and Hardware	3150.200	945.00 sf	31.00 /mh	0	0.04 /sf	38	-	-	-	-	-	-	38	38
	Dimension Lumber	3150.200	945.00 sf	31.00 /mh	0	0.50 /sf	473	-	-	-	-	-	-	473	473
	Saw Cut S-O-G	3350.160	1,880.00 lf	31.00 /mh	1,748	0.50 /lf	940	-	-	0.50 /lf	940	-	-	3,628	4,347
	SOG Rebar	3210.104	8.70 tn	31.00 /mh	6,746	1,400.00 /tn	12,795	-	-	-	-	-	-	19,540	22,238
	Drill and Epoxy #5	3210.101	608.00 ea	31.00 /mh	5,654	5.00 /ea	3,192	-	-	-	-	-	-	8,846	11,108
	051-C-1002 Sidewalks		87.04 cy		33,911		43,865	/cy			940			78,716	92,299
	0302- Valley Pad 051-C-1002														
	5000 psi Concrete	3310.100	11.17 cy	-	-	167.00 /cy	1,995	-	-	-	-	-	-	1,995	1,995
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Truck Place Slab on Grade	3310.230	11.17 cy	31.00 /mh	241	-	-	-	-	-	-	-	-	241	337
	Formwork S.O.G. Edge Form < 1'	3100.120	205.02 sf	31.00 /mh	2,034	1.50 /sf	323	-	-	-	-	-	-	2,357	3,170
	Formwork S.O.G. Const Joints < 1'	3100.120	10.05 sf	31.00 /mh	143	1.50 /sf	16	-	-	-	-	-	-	159	216
	CJ Prep Slab	3350.170	10.05 sf	31.00 /mh	8	0.15 /sf	2	-	-	-	-	-	-	9	12
	Finegrade Below Concrete	3150.650	450.00 sf	31.00 /mh	279	-	-	-	-	-	-	-	-	279	391
	Finish- Hard Trowel	3350.110	450.00 sf	31.00 /mh	195	/sf	-	-	-	-	-	-	-	195	273
	Liquid Curing Compounds	3390.170	450.00 sf	31.00 /mh	28	0.06 /sf	27	-	-	-	-	-	-	55	66
	Oil SOG Form	3100.310	215.07 sf	31.00 /mh	0	0.02 /sf	4	-	-	-	-	-	-	4	4
	Nails and Hardware	3150.200	205.02 sf	31.00 /mh	0	0.04 /sf	8	-	-	-	-	-	-	8	8
	Dimension Lumber	3150.200	205.02 sf	31.00 /mh	0	0.50 /sf	103	-	-	-	-	-	-	103	103
	Saw Cut S-O-G	3350.160	150.00 lf	31.00 /mh	140	0.50 /lf	75	-	-	0.50 /lf	75	-	-	290	347
	SOG Rebar	3210.104	1.40 tn	31.00 /mh	1,082	1,400.00 /tn	2,052	-	-	-	-	-	-	3,134	3,567
	Valley Pad 051-C-1002		11.17 cy		4,149		4,605	/cy			75			8,830	10,491
	0302- Generator Pads (3ea) and transformer pads 3ea														
	5000 psi Concrete	3310.100	84.00 cy	-	-	167.00 /cy	15,010	-	-	-	-	-	-	15,010	15,010
	Slab Placement Count	3310.360	6.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	84.00 cy	31.00 /mh	2,229	-	-	-	-	-	-	31.26 /cy	2,810	5,039	5,930
	Formwork S.O.G. Edge Form > 1'	3100.120	594.00 sf	31.00 /mh	5,892	1.50 /sf	936	-	-	-	-	-	-	6,828	9,185
	Finegrade Below Concrete	3150.650	1,512.00 sf	31.00 /mh	937	-	-	-	-	-	-	-	-	937	1,312
	Finish- Hard Trowel	3350.110	1,512.00 sf	31.00 /mh	656	/sf	-	-	-	-	-	-	-	656	919
	Liquid Curing Compounds	3390.170	1,512.00 sf	31.00 /mh	94	0.06 /sf	91	-	-	-	-	-	-	184	222
	Blockouts in Concrete	3150.194	144.00 sf	31.00 /mh	1,562	2.00 /sf	288	-	-	-	-	-	-	1,850	2,475
	Chamfer 3/4"	3150.625	396.00 lf	31.00 /mh	614	0.20 /lf	83	-	-	-	-	-	-	697	942
	Road Base Below Concrete	2305.300	112.00 cy	31.00 /mh	1,736	22.00 /to n	4,879	-	-	-	-	-	-	6,615	7,309
	Oil SOG Form	3100.310	594.00 sf	31.00 /mh	0	0.02 /sf	12	-	-	-	-	-	-	12	12
	Nails and Hardware	3150.200	594.00 sf	31.00 /mh	0	0.04 /sf	24	-	-	-	-	-	-	24	24
	Dimension Lumber	3150.200	594.00 sf	31.00 /mh	0	0.50 /sf	297	-	-	-	-	-	-	297	297
	SOG Rebar	3210.104	10.50 tn	31.00 /mh	8,138	1,400.00 /tn	15,435	-	-	-	-	-	-	23,573	26,828
	Generator Pads (3ea) and transformer pads 3ea		84.00 cy		21,859		37,054	/cy					2,810	61,723	70,466
	Concrete Concrete				180,742		280,421				3,334		13,650	478,148	550,511
	Sidewalk Sidewalk														
	0302-A Replace Sidewalks Around Existing Digesters & Clarifiers														
	3500 psi Concrete	3310.100	34.26 cy	-	-	165.00 /cy	6,049	-	-	-	-	-	-	6,049	6,049
	Slab Placement Count	3310.360	6.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0302-A	Replace Sidewalks Around Existing Digesters & Clarifiers														
	Truck Place Slab on Grade	3310.230	34.26 cy	31.00 /mh	739	-	-	-	-	-	-	-	-	739	1,034
	Formwork S.O.G. Edge Form < 1'	3100.120	380.00 sf	31.00 /mh	3,770	1.50 /sf	599	-	-	-	-	-	-	4,368	5,876
	Formwork S.O.G. Const Joints < 1'	3100.120	15.00 sf	31.00 /mh	214	1.50 /sf	24	-	-	-	-	-	-	238	323
	CJ Prep Slab	3350.170	15.00 sf	31.00 /mh	12	0.15 /sf	2	-	-	-	-	-	-	14	19
	Finegrade Below Concrete	3150.650	1,850.00 sf	31.00 /mh	803	-	-	-	-	-	-	-	-	803	1,124
	Finish- Broom	3350.110	1,850.00 sf	31.00 /mh	803	0.01 /sf	11	-	-	-	-	-	-	814	1,135
	Liquid Curing Compounds	3390.170	1,850.00 sf	31.00 /mh	115	0.06 /sf	111	-	-	-	-	-	-	226	272
	Road Base Below Concrete	2305.300	34.26 cy	31.00 /mh	531	22.00 /ton	1,492	-	-	-	-	-	-	2,023	2,236
	Expansion Joint	3150.720	185.00 sf	31.00 /mh	574	6.00 /sf	1,166	-	-	-	-	-	-	1,739	1,968
	Expansion Joint Sealant	3150.720	370.00 lf	31.00 /mh	1,147	2.00 /lf	777	-	-	-	-	-	-	1,924	2,383
	Oil SOG Form	3100.310	395.00 sf	31.00 /mh	0	0.02 /sf	8	-	-	-	-	-	-	8	8
	Nails and Hardware	3150.200	380.00 sf	31.00 /mh	0	0.04 /sf	15	-	-	-	-	-	-	15	15
	Saw Cut S-O-G	3350.160	320.00 lf	31.00 /mh	298	0.50 /lf	160	-	-	0.50 /lf	160	-	-	618	740
	SOG Rebar	3210.104	2.30 tn	31.00 /mh	1,783	1,400.00 /tn	3,381	-	-	-	-	-	-	5,164	5,876
	Drill and Epoxy #5	3210.101	380.00 ea	31.00 /mh	3,534	4.00 /ea	1,596	-	-	-	-	-	-	5,130	6,544
	Replace Sidewalks Around Existing Digesters & Clarifiers		34.26 cy		14,320		15,390	/cy			160			29,870	35,601
	Sidewalk Sidewalk				14,320		15,390				160			29,870	35,601
	051 Site Civil				195,063		295,811	/LS			3,494		13,650	508,018	586,113
100	Headworks														
	Concrete Concrete														
0302-	Headworks Base Slab														
	5000 psi Concrete	3310.100	320.00 cy	-	-	165.00 /cy	56,496	-	-	-	-	-	-	56,496	56,496
	Slab Placement Count	3310.360	6.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	320.00 cy	31.00 /mh	5,307	-	-	-	-	-	-	31.26 /cy	10,703	16,011	18,134
	Formwork S.O.G. Edge Form > 1'	3100.120	942.00 sf	31.00 /mh	9,345	1.50 /sf	1,484	-	-	-	-	-	-	10,828	14,566
	Formwork S.O.G. Const Joints > 1'	3100.120	339.00 sf	31.00 /mh	4,834	1.50 /sf	534	-	-	-	-	-	-	5,368	7,302
	CJ Prep Slab	3350.170	339.00 sf	31.00 /mh	263	0.15 /sf	51	-	-	-	-	-	-	314	419
	Finegrade Below Concrete	3150.650	3,514.00 sf	31.00 /mh	2,179	-	-	-	-	-	-	-	-	2,179	3,050
	Finish- Hard Trowel	3350.110	3,514.00 sf	31.00 /mh	1,525	/sf	-	-	-	-	-	-	-	1,525	2,135
	Liquid Curing Compounds	3390.170	3,514.00 sf	31.00 /mh	218	0.06 /sf	211	-	-	-	-	-	-	429	516
	Blockouts in Concrete	3150.194	120.00 sf	31.00 /mh	1,302	2.00 /sf	240	-	-	-	-	-	-	1,542	2,063
	Waterstop 6" Flat	3510.610	353.00 lf	31.00 /mh	1,094	5.00 /lf	1,853	-	-	-	-	-	-	2,948	3,385
	Oil SOG Form	3100.310	1,425.00 sf	31.00 /mh	0	0.02 /sf	29	-	-	-	-	-	-	29	29
	Nails and Hardware	3150.200	942.00 sf	31.00 /mh	0	0.04 /sf	38	-	-	-	-	-	-	38	38
	Dimension Lumber	3150.200	942.00 sf	31.00 /mh	0	0.50 /sf	471	-	-	-	-	-	-	471	471
	Waterstop Fittings	3510.610	15.00 ea	31.00 /mh	930	55.00 /ea	866	-	-	-	-	-	-	1,796	2,168
	Headworks Base Slab		320.00 cy		26,998		62,272	/cy					10,703	99,973	110,772
0302-	Grit Chamber Deck														
	5000 psi Concrete	3310.100	11.11 cy	-	-	165.00 /cy	1,962	-	-	-	-	-	-	1,962	1,962
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	11.11 cy	31.00 /mh	369	-	-	-	-	-	-	31.26 /cy	372	740	888
	Formwork S.O.G. Edge Form > 1'	3100.120	90.00 sf	31.00 /mh	977	1.50 /sf	142	-	-	-	-	-	-	1,118	1,509
	Formwork S.O.G. Const Joints > 1'	3100.120	90.00 sf	31.00 /mh	1,283	1.50 /sf	142	-	-	-	-	-	-	1,425	1,939
	CJ Prep Slab	3350.170	90.00 sf	31.00 /mh	70	0.15 /sf	14	-	-	-	-	-	-	83	111
	Finegrade Below Concrete	3150.650	200.00 sf	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Finish- Hard Trowel	3350.110	200.00 sf	31.00 /mh	87	/sf	-	-	-	-	-	-	-	87	122
	Liquid Curing Compounds	3390.170	200.00 sf	31.00 /mh	12	0.06 /sf	12	-	-	-	-	-	-	24	29
	Blockouts in Concrete	3150.194	24.00 sf	31.00 /mh	260	2.00 /sf	48	-	-	-	-	-	-	308	413
	Waterstop 6" Flat	3510.610	120.00 lf	31.00 /mh	372	5.00 /lf	630	-	-	-	-	-	-	1,002	1,151
	Oil SOG Form	3100.310	180.00 sf	31.00 /mh	0	0.02 /sf	4	-	-	-	-	-	-	4	4
	Nails and Hardware	3150.200	90.00 sf	31.00 /mh	0	0.04 /sf	4	-	-	-	-	-	-	4	4
	Dimension Lumber	3150.200	90.00 sf	31.00 /mh	0	0.50 /sf	45	-	-	-	-	-	-	45	45
	Waterstop Fittings	3510.610	4.00 ea	31.00 /mh	248	55.00 /ea	231	-	-	-	-	-	-	479	578
	Grit Chamber Deck		11.11 cy		3,802		3,232	/cy					372	7,405	8,926
0302-	Void Form under Grit and Screenign slabs														
	Slab Void - Foam Void Under Slabs	3100.320	7,200.00 cf	31.00 /mh	4,464	5.00 /cf	39,600	-	-	-	-	-	-	44,064	45,850
	Void Form under Grit and Screenign slabs				4,464		39,600	/cy						44,064	45,850
0302-	Headworks HVAC Pad														
	5000 psi Concrete	3310.100	6.22 cy	-	-	165.00 /cy	1,099	-	-	-	-	-	-	1,099	1,099
	Crane Place Slab on Grade	3310.230	6.22 cy	31.00 /mh	206	-	-	-	-	-	-	-	-	206	289
	Formwork S.O.G. Edge Form > 1'	3100.120	66.00 sf	31.00 /mh	716	1.50 /sf	104	-	-	-	-	-	-	820	1,107
	Finegrade Below Concrete	3150.650	112.00 sf	31.00 /mh	69	-	-	-	-	-	-	-	-	69	97
	Finish- Hard Trowel	3350.110	112.00 sf	31.00 /mh	49	/sf	-	-	-	-	-	-	-	49	68
	Liquid Curing Compounds	3390.170	112.00 sf	31.00 /mh	7	0.06 /sf	7	-	-	-	-	-	-	14	16
	Blockouts in Concrete	3150.194	8.00 sf	31.00 /mh	87	2.00 /sf	16	-	-	-	-	-	-	103	138
	Chamfer 3/4"	3150.625	44.00 lf	31.00 /mh	68	0.20 /lf	9	-	-	-	-	-	-	77	105
	Road Base Below Concrete	2305.300	4.15 cy	31.00 /mh	51	22.00 /ton	181	-	-	-	-	-	-	231	251
	Oil SOG Form	3100.310	66.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0302-	Headworks HVAC Pad														
	Nails and Hardware	3150.200	66.00 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Dimension Lumber	3150.200	66.00 sf	31.00 /mh	0	0.50 /sf	33	-	-	-	-	-	-	33	33
	SOG Rebar	3210.104	0.78 tn	31.00 /mh	603	1,400.00 /tn	1,144	-	-	-	-	-	-	1,747	1,988
	Headworks HVAC Pad		6.22 cy		1,856		2,596	/cy						4,452	5,194
0302-B	Headworks and Grit Channel fill concrete														
	4500 psi Concrete Fill Grout	3310.100	19.00 cy	-	-	195.00 /cy	3,964	-	-	-	-	-	-	3,964	3,964
	Pump Place Slab on Grade	3310.230	19.00 cy	31.00 /mh	788	-	-	-	-	-	-	31.26 /cy	636	1,423	1,738
	Formwork S.O.G. Edge Form > 1'	3100.120	544.00 sf	31.00 /mh	4,216	1.50 /sf	857	-	-	-	-	-	-	5,073	6,759
	Formwork S.O.G. Edge Form < 1'	3100.120	50.00 sf	31.00 /mh	388	1.50 /sf	79	-	-	-	-	-	-	466	621
	Finish- Hard Trowel	3350.110	192.00 sf	31.00 /mh	83	/sf		-	-	-	-	-	-	83	117
	Liquid Curing Compounds	3390.170	192.00 sf	31.00 /mh	12	0.06 /sf	12	-	-	-	-	-	-	23	28
	Oil SOG Form	3100.310	594.00 sf	31.00 /mh	0	0.02 /sf	12	-	-	-	-	-	-	12	12
	Nails and Hardware	3150.200	594.00 sf	31.00 /mh	0	0.04 /sf	24	-	-	-	-	-	-	24	24
	Dimension Lumber	3150.200	594.00 sf	31.00 /mh	0	0.50 /sf	297	-	-	-	-	-	-	297	297
	CJ Prep Slab	3350.170	192.00 sf	31.00 /mh	149	0.15 /sf	29	-	-	-	-	-	-	178	237
	Fiber reinforcing for fill grout	3310.110	19.00 cy	-	-	25.00 /cy	508	-	-	-	-	-	-	508	508
	Headworks and Grit Channel fill concrete		19.00 cy		5,636		5,781	/cy					636	12,052	14,307
0303-	Headworks Lower Level Walls														
	Pump Place Walls	3310.260	436.00 cy	31.00 /mh	9,834	-	-	-	-	-	-	31.26 /cy	14,583	24,418	28,351
	5000 psi Concrete	3310.100	436.00 cy	-	-	165.00 /cy	76,976	-	-	-	-	-	-	76,976	76,976
	Wall Placement Count	3310.360	8.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Gang Form System 12-16'	3100.180	7,140.00 sf	31.00 /mh	39,841	2.50 /sf	18,743	-	-	-	-	-	-	58,584	74,520
	Gang Form System 16'->	3100.180	10,620.00 sf	31.00 /mh	59,260	2.50 /sf	27,878	-	-	-	-	-	-	87,137	110,841
	Wall Bulkhead Forms	3150.192	297.92 sf	31.00 /mh	4,248	1.50 /sf	469	-	-	-	-	-	-	4,718	6,417
	CJ Prep Walls	3350.170	976.22 sf	31.00 /mh	757	0.15 /sf	146	-	-	-	-	-	-	903	1,206
	Finish- Top of Wall	3350.110	678.30 sf	31.00 /mh	294	/sf		-	-	-	-	-	-	294	412
	Liquid Curing Walls	3390.170	18,440.00 sf	31.00 /mh	572	0.06 /sf	1,106	-	-	-	-	-	-	1,678	1,907
	Grind/Patch Walls	3350.130	17,760.00 sf	31.00 /mh	6,607	0.05 /sf	888	-	-	-	-	-	-	7,495	10,137
	Blockouts in Concrete	3150.194	314.00 sf	31.00 /mh	3,407	2.00 /sf	628	-	-	-	-	-	-	4,035	5,398
	Waterstop 6" Flat	3510.610	353.00 lf	31.00 /mh	1,094	5.00 /lf	1,853	-	-	-	-	-	-	2,948	3,385
	Chamfer 3/4"	3150.625	28.00 lf	31.00 /mh	43	0.20 /lf	6	-	-	-	-	-	-	49	67
	Rub Walls	3350.140	8,880.00 sf	31.00 /mh	11,011	0.15 /sf	1,332	-	-	-	-	-	-	12,343	16,748
	Oil Wall Forms	3100.310	17,760.00 sf	31.00 /mh	6	0.02 /sf	355	-	-	-	-	-	-	361	363
	Nails and Hardware	3150.200	17,760.00 sf	31.00 /mh	6	0.04 /sf	710	-	-	-	-	-	-	716	718
	Form Ties 16"	3150.632	4,180.00 ea	31.00 /mh	1	2.50 /ea	10,450	-	-	-	-	-	-	10,451	10,452
	Dimension Lumber	3150.200	17,760.00 sf	31.00 /mh	6	0.50 /sf	8,880	-	-	-	-	-	-	8,886	8,888
	Rebar Templates	3200.980	550.00 lf	31.00 /mh	853	0.50 /lf	275	-	-	-	-	-	-	1,128	1,469
	Rebar Formsavers # 5	3210.108	224.00 ea	31.00 /mh	2,292	27.00 /ea	6,048	-	-	-	-	-	-	8,340	9,256
	Dovetail Slots	4080.150	2,400.00 lf	31.00 /mh	7,440	3.00 /lf	7,560	-	-	-	-	-	-	15,000	17,976
	Bonding agent, and prep Tie holes	3350.130	1,500.00 ea	31.00 /mh	6,975	2.00 /ea	3,000	-	-	-	-	-	-	9,975	12,765
	Grout Slurry bottom of walls	3150.200	272.00 cf	31.00 /mh	2,108	15.00 /cf	4,080	-	-	-	-	-	-	6,188	7,031
	Waterstop Fittings	3510.610	12.00 ea	31.00 /mh	744	55.00 /ea	693	-	-	-	-	-	-	1,437	1,735
	Form Special blockouts for doors	3150.200	1.00 ls	31.00 /mh	31	3,500.00 /ls	3,500	-	-	-	-	-	-	3,531	3,543
	Headworks Lower Level Walls		401.96 cy		157,428		175,577	/cy					14,583	347,588	410,560
0303-	Concrete Channel Walls														
	Pump Place Walls	3310.260	150.54 cy	31.00 /mh	3,995	-	-	-	-	-	-	31.26 /cy	5,035	9,030	10,628
	5000 psi Concrete	3310.100	150.54 cy	-	-	165.00 /cy	26,578	-	-	-	-	-	-	26,578	26,578
	Wall Placement Count	3310.360	10.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Rented Form System 0-4'	3100.180	2,448.00 sf	31.00 /mh	15,178	1.50 /sf	3,856	-	-	-	-	-	-	19,033	25,104
	Rented Form System 4-8'	3100.180	3,424.16 sf	31.00 /mh	21,230	1.50 /sf	5,393	-	-	-	-	-	-	26,623	35,115
	Wall Bulkhead Forms	3150.192	161.31 sf	31.00 /mh	2,300	1.50 /sf	254	-	-	-	-	-	-	2,554	3,474
	CJ Prep Walls	3350.170	924.18 sf	31.00 /mh	716	0.15 /sf	139	-	-	-	-	-	-	855	1,141
	Finish- Top of Wall	3350.110	762.87 sf	31.00 /mh	331	/sf		-	-	-	-	-	-	331	464
	Liquid Curing Walls	3390.170	6,635.03 sf	31.00 /mh	206	0.06 /sf	398	-	-	-	-	-	-	604	686
	Grind/Patch Walls	3350.130	5,872.16 sf	31.00 /mh	2,184	0.05 /sf	294	-	-	-	-	-	-	2,478	3,352
	Blockouts in Concrete	3150.194	360.00 sf	31.00 /mh	3,906	2.00 /sf	720	-	-	-	-	-	-	4,626	6,188
	Waterstop 6" Flat	3510.610	662.32 lf	31.00 /mh	2,053	5.00 /lf	3,477	-	-	-	-	-	-	5,530	6,352
	Rub Walls	3350.140	2,936.08 sf	31.00 /mh	3,641	0.15 /sf	440	-	-	-	-	-	-	4,081	5,537
	Oil Wall Forms	3100.310	5,872.16 sf	31.00 /mh	2	0.02 /sf	117	-	-	-	-	-	-	119	120
	Nails and Hardware	3150.200	5,872.16 sf	31.00 /mh	2	0.04 /sf	235	-	-	-	-	-	-	237	237
	Form Ties 16"	3150.632	1,113.40 ea	31.00 /mh	0	2.50 /ea	2,784	-	-	-	-	-	-	2,784	2,784
	Form Ties 18"	3150.632	240.00 ea	31.00 /mh	0	2.55 /ea	612	-	-	-	-	-	-	612	612
	Form Ties 20"	3150.632	114.64 ea	31.00 /mh	0	2.80 /ea	321	-	-	-	-	-	-	321	321
	Dimension Lumber	3150.200	5,872.16 sf	31.00 /mh	2	0.50 /sf	2,936	-	-	-	-	-	-	2,938	2,939
	Rebar Templates	3200.980	547.00 lf	31.00 /mh	848	0.50 /lf	274	-	-	-	-	-	-	1,121	1,460
	Form Ties Specialty radius in corner	3150.632	6.00 ea	31.00 /mh	4,464	500.00 /ea	3,000	-	-	-	-	-	-	7,464	9,250
	Grout Slurry bottom of walls	3150.200	180.00 cf	31.00 /mh	1,395	15.00 /cf	2,700	-	-	-	-	-	-	4,095	4,653
	Waterstop Fittings	3510.610	18.00 ea	31.00 /mh	1,116	55.00 /ea	1,040	-	-	-	-	-	-	2,156	2,602
	Concrete Channel Walls		150.54 cy		63,569		55,566	/cy					5,035	124,170	149,598
0304-	Channel Bottom Elevated deck														
	5000 psi Concrete	3310.100	91.00 cy	-	-	165.00 /cy	16,066	-	-	-	-	-	-	16,066	16,066

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0304- Channel Bottom Elevated deck														
	Slab Placement Count	3310.360	3.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Suspended Slab	3310.240	91.00 cy	31.00 /mh	2,415	-	-	-	-	-	-	31.26 /cy	3,044	5,459	6,424
	Shore Suspended Slab 0-15'	3100.124	1,633.00 sf	31.00 /mh	20,249	4.25 /sf	7,287	-	-	-	-	-	-	27,536	35,636
	Slab Edge Form > 1'	3100.124	360.00 sf	31.00 /mh	6,696	2.00 /sf	720	-	-	-	-	-	-	7,416	10,094
	Suspended Slab Const Joint	3100.124	21.00 sf	31.00 /mh	228	1.50 /sf	32	-	-	-	-	-	-	259	350
	CJ Prep Elevated Slab CJ	3350.170	21.00 sf	31.00 /mh	16	0.20 /sf	4	-	-	-	-	-	-	20	27
	Finish- Hard Trowel	3350.110	1,633.00 sf	31.00 /mh	709	/sf		-	-	-	-	-	-	709	992
	Liquid Curing Compounds	3390.170	1,633.00 sf	31.00 /mh	101	0.06 /sf	98	-	-	-	-	-	-	199	240
	Grind and Patch Deck Bottom	3350.130	1,633.00 sf	31.00 /mh	607	0.05 /sf	82	-	-	-	-	-	-	689	932
	Blockouts in Concrete	3150.194	192.00 sf	31.00 /mh	2,083	2.00 /sf	384	-	-	-	-	-	-	2,467	3,300
	Waterstop 6" Flat	3510.610	594.00 lf	31.00 /mh	1,841	5.00 /lf	3,119	-	-	-	-	-	-	4,960	5,696
	Oil Suspended Slab Frm	3100.310	1,633.00 sf	31.00 /mh	1	0.02 /sf	33	-	-	-	-	-	-	33	33
	Nails and Hardware	3150.200	1,633.00 sf	31.00 /mh	1	0.04 /sf	65	-	-	-	-	-	-	66	66
	Rub Slab Bottom	3350.140	1,633.00 sf	31.00 /mh	1,519	0.12 /sf	196	-	-	-	-	-	-	1,715	2,322
	Inverted Keyway	3150.620	440.00 lf	31.00 /mh	1,364	2.00 /lf	924	-	-	-	-	-	-	2,288	2,834
	Beam Side Forms	3100.140	80.00 sf	31.00 /mh	992	1.50 /sf	126	-	-	-	-	-	-	1,118	1,515
	Beam Bottom Forms	3100.140	40.00 sf	31.00 /mh	496	4.25 /sf	179	-	-	-	-	-	-	675	873
	Channel Bottom Elevated deck		80.72 cy		39,318		29,314	/cy					3,044	71,675	87,402
	0304- Headworks Eleveated deck at 56.33														
	5000 psi Concrete	3310.100	128.50 cy	-	-	165.00 /cy	22,687	-	-	-	-	-	-	22,687	22,687
	Slab Placement Count	3310.360	11.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Suspended Slab	3310.240	128.50 cy	31.00 /mh	3,197	-	-	-	-	-	-	31.26 /cy	4,298	7,495	8,774
	Shore Suspended Slab 0-15'	3100.124	250.00 sf	31.00 /mh	3,100	4.25 /sf	1,116	-	-	-	-	-	-	4,216	5,456
	Shore Suspended Slab 15-up	3100.124	1,466.00 sf	31.00 /mh	18,178	4.25 /sf	6,542	-	-	-	-	-	-	24,720	31,992
	Slab Edge Form > 1'	3100.124	870.00 sf	31.00 /mh	16,182	2.00 /sf	1,740	-	-	-	-	-	-	17,922	24,395
	Suspended Slab Const Joint	3100.124	100.50 sf	31.00 /mh	1,433	1.50 /sf	151	-	-	-	-	-	-	1,584	2,157
	CJ Prep Elevated Slab CJ	3350.170	100.50 sf	31.00 /mh	78	0.20 /sf	20	-	-	-	-	-	-	98	129
	Finish- Hard Trowel	3350.110	2,313.00 sf	31.00 /mh	1,004	/sf		-	-	-	-	-	-	1,004	1,405
	Liquid Curing Compounds	3390.170	2,313.00 sf	31.00 /mh	143	0.06 /sf	139	-	-	-	-	-	-	282	340
	Grind and Patch Deck Bottom	3350.130	2,313.00 sf	31.00 /mh	860	0.05 /sf	116	-	-	-	-	-	-	976	1,320
	Blockouts in Concrete	3150.194	80.00 sf	31.00 /mh	868	2.00 /sf	160	-	-	-	-	-	-	1,028	1,375
	Oil Suspended Slab Frm	3100.310	2,313.00 sf	31.00 /mh	1	0.02 /sf	46	-	-	-	-	-	-	47	47
	Nails and Hardware	3150.200	2,313.00 sf	31.00 /mh	1	0.04 /sf	93	-	-	-	-	-	-	93	94
	Rub Slab Bottom	3350.140	1,466.00 sf	31.00 /mh	1,363	0.12 /sf	176	-	-	-	-	-	-	1,539	2,085
	Beam Side Forms	3100.140	16.00 sf	31.00 /mh	198	1.50 /sf	25	-	-	-	-	-	-	224	303
	Headworks Eleveated deck at 56.33		128.50 cy		46,607		33,010	/cy					4,298	83,915	102,558
	0307- Grit Room Columns														
	5000 psi Concrete	3310.100	5.33 cy	-	-	165.00 /cy	941	-	-	-	-	-	-	941	941
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Piers & Columns	3310.270	5.33 cy	31.00 /mh	354	-	-	-	-	-	-	31.26 /cy	178	532	674
	Formwork Rectangle Columns 16 -20'	3100.110	288.00 sf	31.00 /mh	1,786	1.50 /sf	454	-	-	-	-	-	-	2,239	2,953
	Liquid Curing Compounds	3390.170	288.00 sf	31.00 /mh	18	0.06 /sf	17	-	-	-	-	-	-	35	42
	Grind/Patch Columns	3350.130	288.00 sf	31.00 /mh	133	0.05 /sf	14	-	-	-	-	-	-	147	201
	Chamfer 3/4"	3150.625	144.00 lf	31.00 /mh	223	0.20 /lf	30	-	-	-	-	-	-	253	343
	Oil Column Forms	3100.310	288.00 sf	31.00 /mh	0	0.02 /sf	6	-	-	-	-	-	-	6	6
	Dimension Lumber	3150.200	288.00 sf	31.00 /mh	0	0.50 /sf	144	-	-	-	-	-	-	144	144
	Nails and Hardware	3150.200	288.00 sf	31.00 /mh	0	0.04 /sf	12	-	-	-	-	-	-	12	12
	Grit Room Columns		5.33 cy		2,514		1,618	/cy					178	4,310	5,316
	0309- Grit Chamber Radius Walls														
	Pump Place Walls	3310.260	10.47 cy	31.00 /mh	347	-	-	-	-	-	-	31.26 /cy	350	698	837
	5000 psi Concrete	3310.100	10.47 cy	-	-	165.00 /cy	1,849	-	-	-	-	-	-	1,849	1,849
	Wall Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Job Built with Plyform 4-8'	3100.180	376.99 sf	31.00 /mh	3,506	1.50 /sf	594	-	-	-	-	-	-	4,100	5,502
	Job Built with Plyform 8-12'	3100.180	188.50 sf	31.00 /mh	1,461	1.50 /sf	297	-	-	-	-	-	-	1,758	2,342
	CJ Prep Walls	3350.170	40.84 sf	31.00 /mh	32	0.15 /sf	6	-	-	-	-	-	-	38	50
	Finish- Top of Wall	3350.110	40.84 sf	31.00 /mh	18	/sf		-	-	-	-	-	-	18	25
	Liquid Curing Walls	3390.170	606.33 sf	31.00 /mh	19	0.06 /sf	36	-	-	-	-	-	-	55	63
	Grind/Patch Walls	3350.130	565.49 sf	31.00 /mh	210	0.05 /sf	28	-	-	-	-	-	-	239	323
	Waterstop 6" Flat	3510.610	58.00 lf	31.00 /mh	180	5.00 /lf	305	-	-	-	-	-	-	484	556
	Rub Walls	3350.140	204.00 sf	31.00 /mh	253	0.15 /sf	31	-	-	-	-	-	-	284	385
	Oil Wall Forms	3100.310	565.49 sf	31.00 /mh	0	0.02 /sf	11	-	-	-	-	-	-	11	12
	Nails and Hardware	3150.200	565.49 sf	31.00 /mh	0	0.04 /sf	23	-	-	-	-	-	-	23	23
	Form Ties 12"	3150.632	141.37 ea	31.00 /mh	0	2.35 /ea	332	-	-	-	-	-	-	332	332
	Dimension Lumber	3150.200	565.49 sf	31.00 /mh	0	0.50 /sf	283	-	-	-	-	-	-	283	283
	Grout Slurry bottom of walls	3150.200	19.00 cf	31.00 /mh	147	15.00 /cf	285	-	-	-	-	-	-	432	491
	Form Special	3150.200	1.00 ls	31.00 /mh	992	5,000.00 /ls	5,000	-	-	-	-	-	-	5,992	6,389
	Grit Chamber Radius Walls		10.47 cy		7,165		9,079	/cy					350	16,595	19,461
	0310- Headworks Electrical and Equipment Pads														
	Equipment Pad Form 6"	3100.164	175.00 sf	31.00 /mh	1,790	1.50 /sf	276	-	-	-	-	-	-	2,066	2,782
	Oil Equipment Pad Form	3100.310	175.00 sf	31.00 /mh	0	0.02 /sf	4	-	-	-	-	-	-	4	4
	5000 psi Concrete	3310.100	8.22 cy	-	-	165.00 /cy	1,452	-	-	-	-	-	-	1,452	1,452

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0310-	Headworks Electrical and Equipment Pads														
	Other Placement Count	3310.360	18.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Buggy Place Equipment Pads	3310.300	8.22 cy	31.00 /mh	546	-	-	-	-	-	-	-	-	546	764
	Liquid Curing Compounds	3390.170	444.00 sf	31.00 /mh	28	0.06 /sf	27	-	-	-	-	-	-	54	65
	Finish- Hard Trowel	3350.110	444.00 sf	31.00 /mh	193	/sf		-	-	-	-	-	-	193	270
	Chamfer	3150.625	350.00 lf	31.00 /mh	162	0.20 /lf	74	-	-	-	-	-	-	235	300
	Misc. Pad Rebar	3210.104	1.03 tn	31.00 /mh	796	1,400.00 /tn	1,509	-	-	-	-	-	-	2,305	2,623
	Nails and Hardware	3150.200	175.00 sf	31.00 /mh	0	0.04 /sf	7	-	-	-	-	-	-	7	7
	Drill and Epoxy #4	3210.101	366.00 ea	31.00 /mh	2,269	4.00 /ea	1,537	-	-	-	-	-	-	3,806	4,714
	Headworks Electrical and Equipment Pads		8.22 cy		5,783		4,885	/cy						10,668	12,981
	Concrete Concrete				365,139		422,529						39,200	826,869	972,924
	100 Headworks				365,139		422,529	/LS					39,200	826,869	972,924
150	Influent Pump Station														
	Concrete Concrete														
0302-	Influent Pump Station Slab on Grade														
	5000 psi Concrete	3310.100	39.59 cy	-	-	165.00 /cy	6,989	-	-	-	-	-	-	6,989	6,989
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	39.59 cy	31.00 /mh	1,050	-	-	-	-	-	-	31.26 /cy	1,324	2,374	2,795
	Formwork S.O.G. Edge Form > 1'	3100.120	258.68 sf	31.00 /mh	2,566	1.50 /sf	407	-	-	-	-	-	-	2,974	4,000
	Finegrade Below Concrete	3150.650	534.41 sf	31.00 /mh	331	-	-	-	-	-	-	-	-	331	464
	Finish- Hard Trowel	3350.110	534.41 sf	31.00 /mh	232	/sf		-	-	-	-	-	-	232	325
	Liquid Curing Compounds	3390.170	534.41 sf	31.00 /mh	33	0.06 /sf	32	-	-	-	-	-	-	65	78
	Waterstop 6" Flat	3510.610	120.00 lf	31.00 /mh	372	5.00 /lf	630	-	-	-	-	-	-	1,002	1,151
	Crushed Rock Below Concrete	2305.300	9.90 cy	31.00 /mh	153	32.00 /ton	592	-	-	-	-	-	-	746	807
	Oil SOG Form	3100.310	258.68 sf	31.00 /mh	0	0.02 /sf	5	-	-	-	-	-	-	5	5
	Nails and Hardware	3150.200	258.68 sf	31.00 /mh	0	0.04 /sf	10	-	-	-	-	-	-	10	10
	Dimension Lumber	3150.200	258.68 sf	31.00 /mh	0	0.50 /sf	129	-	-	-	-	-	-	129	129
	Waterstop Fittings	3510.610	6.00 ea	31.00 /mh	372	55.00 /ea	347	-	-	-	-	-	-	719	867
	Influent Pump Station Slab on Grade		39.59 cy		5,111		9,142	/cy					1,324	15,576	17,621
0302-	Concrete Loading Slab at Influent Pump Station														
	5000 psi Concrete	3310.100	14.78 cy	-	-	165.00 /cy	2,609	-	-	-	-	-	-	2,609	2,609
	Pump Place Slab on Grade	3310.230	14.78 cy	31.00 /mh	588	-	-	-	-	-	-	31.26 /cy	494	1,082	1,318
	Formwork S.O.G. Edge Form > 1'	3100.120	106.40 sf	31.00 /mh	1,154	1.50 /sf	168	-	-	-	-	-	-	1,322	1,784
	Finegrade Below Concrete	3150.650	300.00 sf	31.00 /mh	186	-	-	-	-	-	-	-	-	186	260
	Finish- Hard Trowel	3350.110	300.00 sf	31.00 /mh	130	/sf		-	-	-	-	-	-	130	182
	Liquid Curing Compounds	3390.170	300.00 sf	31.00 /mh	19	0.06 /sf	18	-	-	-	-	-	-	37	44
	Blockouts in Concrete	3150.194	12.00 sf	31.00 /mh	130	2.00 /sf	24	-	-	-	-	-	-	154	206
	Chamfer 3/4"	3150.625	80.00 lf	31.00 /mh	124	0.20 /lf	17	-	-	-	-	-	-	141	190
	Road Base Below Concrete	2305.300	11.11 cy	31.00 /mh	172	22.00 /ton	484	-	-	-	-	-	-	656	725
	Oil SOG Form	3100.310	106.40 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	106.40 sf	31.00 /mh	0	0.04 /sf	4	-	-	-	-	-	-	4	4
	Dimension Lumber	3150.200	106.40 sf	31.00 /mh	0	0.50 /sf	53	-	-	-	-	-	-	53	53
	Concrete Loading Slab at Influent Pump Station		14.78 cy		2,504		3,379	/cy					494	6,377	7,379
0302-B	Fill concrete In bottom of Influent Pump Station														
	5000 psi Concrete	3310.100	16.30 cy	-	-	165.00 /cy	2,877	-	-	-	-	-	-	2,877	2,877
	Other Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	16.30 cy	31.00 /mh	1,081	-	-	-	-	-	-	31.26 /cy	545	1,626	2,059
	Formwork S.O.G. Edge Form < 1'	3100.120	84.00 sf	31.00 /mh	1,042	1.50 /sf	132	-	-	-	-	-	-	1,174	1,591
	Finish- Hard Trowel	3350.110	440.00 sf	31.00 /mh	191	/sf		-	-	-	-	-	-	191	267
	Liquid Curing Compounds	3390.170	440.00 sf	31.00 /mh	27	0.06 /sf	26	-	-	-	-	-	-	54	65
	Blockouts in Concrete	3150.194	24.00 sf	31.00 /mh	260	2.00 /sf	48	-	-	-	-	-	-	308	413
	Oil SOG Form	3100.310	84.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	84.00 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Dimension Lumber	3150.200	84.00 sf	31.00 /mh	0	0.50 /sf	42	-	-	-	-	-	-	42	42
	CJ Prep Slab	3350.170	440.00 sf	31.00 /mh	341	0.15 /sf	66	-	-	-	-	-	-	407	543
	Fiber Reinforcement grout topping	3310.110	16.00 cy	-	-	25.00 /cy	428	-	-	-	-	-	-	428	428
	Fill concrete In bottom of Influent Pump Station		16.30 cy		2,942		3,625	/cy					545	7,112	8,289
0303-	Influent Pump Station Walls														
	Pump Place Walls	3310.260	160.04 cy	31.00 /mh	3,185	-	-	-	-	-	-	31.26 /cy	5,353	8,538	9,812
	5000 psi Concrete	3310.100	160.04 cy	-	-	165.00 /cy	28,256	-	-	-	-	-	-	28,256	28,256
	Wall Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Gang Form System 16'->	3100.180	6,498.00 sf	31.00 /mh	30,216	2.50 /sf	17,057	-	-	-	-	-	-	47,273	59,359
	Wall Bulkhead Forms	3150.192	113.72 sf	31.00 /mh	1,622	1.50 /sf	179	-	-	-	-	-	-	1,801	2,449
	CJ Prep Walls	3350.170	265.34 sf	31.00 /mh	206	0.15 /sf	40	-	-	-	-	-	-	245	328
	Finish- Top of Wall	3350.110	151.62 sf	31.00 /mh	66	/sf		-	-	-	-	-	-	66	92
	Liquid Curing Walls	3390.170	6,649.62 sf	31.00 /mh	206	0.06 /sf	399	-	-	-	-	-	-	605	688
	Grind/Patch Walls	3350.130	6,498.00 sf	31.00 /mh	2,417	0.05 /sf	325	-	-	-	-	-	-	2,742	3,709
	Blockouts in Concrete	3150.194	80.00 sf	31.00 /mh	868	2.00 /sf	160	-	-	-	-	-	-	1,028	1,375
	Waterstop 6" Flat	3510.610	205.50 lf	31.00 /mh	637	5.00 /lf	1,079	-	-	-	-	-	-	1,716	1,971

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0303- Influent Pump Station Walls														
	Rub Walls	3350.140	3,249.00 sf	31.00 /mh	4,029	0.15 /sf	487	-	-	-	-	-	-	4,516	6,128
	Oil Wall Forms	3100.310	6,498.00 sf	31.00 /mh	2	0.02 /sf	130	-	-	-	-	-	-	132	133
	Nails and Hardware	3150.200	6,498.00 sf	31.00 /mh	2	0.04 /sf	260	-	-	-	-	-	-	262	263
	Form Ties 16"	3150.632	1,624.50 ea	31.00 /mh	1	2.50 /ea	4,061	-	-	-	-	-	-	4,062	4,062
	Dimension Lumber	3150.200	6,498.00 sf	31.00 /mh	2	0.50 /sf	3,249	-	-	-	-	-	-	3,251	3,252
	Rebar Templates	3200.980	114.00 lf	31.00 /mh	177	0.50 /lf	57	-	-	-	-	-	-	234	304
	Form Liners - HDPE	3150.190	440.00 sf	31.00 /mh	3,410	100.00 /sf	46,200	-	-	-	-	-	-	49,610	50,974
	Grout Slurry bottom of walls	3150.200	57.00 cf	31.00 /mh	442	15.00 /cf	855	-	-	-	-	-	-	1,297	1,473
	Bonding agent and cj prep tie holes	3350.130	550.00 ea	31.00 /mh	2,558	2.00 /ea	1,100	-	-	-	-	-	-	3,658	4,680
	Waterstop Fittings	3510.610	6.00 ea	31.00 /mh	372	55.00 /ea	347	-	-	-	-	-	-	719	867
	Influent Pump Station Walls		160.04 cy		50,416		104,240	/cy					5,353	160,009	180,175
	0304- Influent Pump Station Top Deck														
	5000 psi Concrete	3310.100	16.30 cy	-	-	165.00 /cy	2,877	-	-	-	-	-	-	2,877	2,877
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Suspended Slab	3310.240	16.30 cy	31.00 /mh	676	-	-	-	-	-	-	31.26 /cy	545	1,221	1,491
	Shore Suspended Slab 15-up	3100.124	440.00 sf	31.00 /mh	6,820	4.25 /sf	1,964	-	-	-	-	-	-	8,784	11,512
	Slab Edge Form < 1'	3100.124	84.00 sf	31.00 /mh	1,953	2.00 /sf	176	-	-	-	-	-	-	2,129	2,911
	Finish- Hard Trowel	3350.110	440.00 sf	31.00 /mh	191	/sf		-	-	-	-	-	-	191	267
	Liquid Curing Compounds	3390.170	440.00 sf	31.00 /mh	27	0.06 /sf	26	-	-	-	-	-	-	54	65
	Grind and Patch Deck Bottom	3350.130	440.00 sf	31.00 /mh	164	0.05 /sf	22	-	-	-	-	-	-	186	251
	Blockouts in Concrete	3150.194	76.00 sf	31.00 /mh	825	2.00 /sf	152	-	-	-	-	-	-	977	1,306
	Chamfer 3/4"	3150.625	84.00 lf	31.00 /mh	130	0.20 /lf	18	-	-	-	-	-	-	148	200
	Oil Suspended Slab Frm	3100.310	440.00 sf	31.00 /mh	0	0.02 /sf	9	-	-	-	-	-	-	9	9
	Nails and Hardware	3150.200	440.00 sf	31.00 /mh	0	0.04 /sf	18	-	-	-	-	-	-	18	18
	Rub Slab Bottom	3350.140	440.00 sf	31.00 /mh	409	0.12 /sf	53	-	-	-	-	-	-	462	626
	Influent Pump Station Top Deck		16.30 cy		11,195		5,314	/cy					545	17,054	21,532
	0306- Influent Pump Station Monorail Columns 2ea														
	5000 psi Concrete	3310.100	3.00 cy	-	-	165.00 /cy	530	-	-	-	-	-	-	530	530
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Piers & Columns	3310.270	3.00 cy	31.00 /mh	299	-	-	-	-	-	-	31.26 /cy	100	399	518
	Formwork Sonotube 20"	3100.112	18.00 lf	31.00 /mh	558	15.00 /lf	284	-	-	-	-	-	-	842	1,065
	Liquid Curing Compounds	3390.170	62.83 sf	31.00 /mh	4	0.06 /sf	4	-	-	-	-	-	-	8	9
	Grind/Patch Columns	3350.130	20.94 sf	31.00 /mh	10	0.05 /sf	1	-	-	-	-	-	-	11	15
	Rub Columns	3350.140	20.94 sf	31.00 /mh	19	0.12 /sf	3	-	-	-	-	-	-	22	30
	Dimension Lumber	3150.200	62.83 sf	31.00 /mh	0	0.50 /sf	31	-	-	-	-	-	-	31	31
	Bobcat Skid Steer (85hp)- track (L) with Post hole attachment	1900.131	0.50 mnth	-	-	-	-	-	-	4,000.00 /mnth	2,000	2,000.00 /mnth	1,000	3,000	3,040
	Influent Pump Station Monorail Columns 2ea		1.00 cy		890		852	/cy			2,000		1,100	4,842	5,238
	Concrete Concrete				73,057		126,552				2,000		9,362	210,971	240,234
	150 Influent Pump Station				73,057		126,552	/LS			2,000		9,362	210,971	240,234
	200 Aeration Basin														
	Concrete Concrete														
	0302- Aeration Basin Base Slab														
	5000 psi Concrete	3310.100	821.33 cy	-	-	165.00 /cy	145,006	-	-	-	-	-	-	145,006	145,006
	Slab Placement Count	3310.360	8.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	821.33 cy	31.00 /mh	13,622	-	-	-	-	-	-	31.26 /cy	27,472	41,094	46,543
	Formwork S.O.G. Edge Form > 1'	3100.120	884.00 sf	31.00 /mh	8,769	1.50 /sf	1,392	-	-	-	-	-	-	10,162	13,669
	Formwork S.O.G. Const Joints > 1'	3100.120	750.00 sf	31.00 /mh	10,695	1.50 /sf	1,181	-	-	-	-	-	-	11,876	16,154
	CJ Prep Slab	3350.170	750.00 sf	31.00 /mh	581	0.15 /sf	113	-	-	-	-	-	-	694	926
	Finegrade Below Concrete	3150.650	11,088.00 sf	31.00 /mh	6,875	-	-	-	-	-	-	-	-	6,875	9,624
	Finish- Hard Trowel	3350.110	11,088.00 sf	31.00 /mh	4,812	/sf		-	-	-	-	-	-	4,812	6,737
	Liquid Curing Compounds	3390.170	11,088.00 sf	31.00 /mh	687	0.06 /sf	665	-	-	-	-	-	-	1,353	1,628
	Blockouts in Concrete	3150.194	105.00 sf	31.00 /mh	1,139	2.00 /sf	210	-	-	-	-	-	-	1,349	1,805
	Waterstop 9" Flat	3510.610	375.00 lf	31.00 /mh	1,163	7.00 /lf	2,756	-	-	-	-	-	-	3,919	4,384
	Oil SOG Form	3100.310	1,634.00 sf	31.00 /mh	1	0.02 /sf	33	-	-	-	-	-	-	33	33
	Nails and Hardware	3150.200	884.00 sf	31.00 /mh	0	0.04 /sf	35	-	-	-	-	-	-	36	36
	Dimension Lumber	3150.200	884.00 sf	31.00 /mh	0	0.50 /sf	442	-	-	-	-	-	-	442	442
	Expansion Joint Neoprene Sheets 3/4in thick	3150.720	160.00 sf	31.00 /mh	1,240	6.00 /sf	1,008	-	-	-	-	-	-	2,248	2,744
	Expansion Joint Cap	3150.720	70.00 lf	31.00 /mh	22	0.35 /lf	26	-	-	-	-	-	-	47	56
	Expansion Joint Sealant	3150.720	70.00 lf	31.00 /mh	22	2.00 /lf	147	-	-	-	-	-	-	169	177
	Smooth Dowels 1" X 3' coated with cap	3210.106	70.00 ea	31.00 /mh	1,085	14.00 /ea	980	-	-	-	-	-	-	2,065	2,499
	Waterstop 6" Flat	3510.610	160.00 lf	31.00 /mh	496	5.00 /lf	840	-	-	-	-	-	-	1,336	1,534
	Waterstop 6" Protector Cap	3510.610	166.00 lf	31.00 /mh	515	20.00 /lf	3,486	-	-	-	-	-	-	4,001	4,206
	Epoxy Anchor 3/8 x 5in SS 316	5001.054	332.00 ea	31.00 /mh	515	8.00 /ea	2,656	-	-	-	-	-	-	3,171	3,376
	Caulking 10.3 oz tube 1/4d x 1/4w	7920.300	332.00 lf	31.00 /mh	309	15.00 /tu be	213	-	-	-	-	-	-	522	645
	Rebar Formsavers # 9	3210.108	304.00 ea	31.00 /mh	4,712	51.00 /ea	15,504	-	-	-	-	-	-	20,216	22,101
	Rebar Formsavers #9 Bolt Caps	3210.108	304.00 ea	31.00 /mh	4,712	51.00 /ea	15,504	-	-	-	-	-	-	20,216	22,101
	Waterstop Fittings	3510.610	4.00 ea	31.00 /mh	248	55.00 /ea	231	-	-	-	-	-	-	479	578
	Aeration Basin Base Slab		821.33 cy		62,219		192,429	/cy					27,472	282,120	307,007
	0302- Aeration Stairway Bottom of Stair Pad														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0302-	Aeration Stairway Bottom of Stair Pad														
	5000 psi Concrete	3310.100	4.00 cy	-	-	165.00 /cy	706	-	-	-	-	-	-	706	706
	Pump Place Slab on Grade	3310.230	4.00 cy	31.00 /mh	133	-	-	-	-	-	-	31.26 /cy	134	266	320
	Formwork S.O.G. Edge Form > 1'	3100.120	72.00 sf	31.00 /mh	714	1.50 /sf	113	-	-	-	-	-	-	828	1,113
	Finegrade Below Concrete	3150.650	72.00 sf	31.00 /mh	45	-	-	-	-	-	-	-	-	45	62
	Finish- Hard Trowel	3350.110	72.00 sf	31.00 /mh	31	/sf		-	-	-	-	-	-	31	44
	Liquid Curing Compounds	3390.170	72.00 sf	31.00 /mh	4	0.06 /sf	4	-	-	-	-	-	-	9	11
	Oil SOG Form	3100.310	72.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Nails and Hardware	3150.200	72.00 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Dimension Lumber	3150.200	72.00 sf	31.00 /mh	0	0.50 /sf	36	-	-	-	-	-	-	36	36
	Aeration Stairway Bottom of Stair Pad		4.00 cy		927		864	/cy					134	1,925	2,296
0303-	Aeration Basin Exterior Walls and Future Wall Stubs														
	Pump Place Walls	3310.260	656.09 cy	31.00 /mh	15,234	-	-	-	-	-	-	31.26 /cy	21,945	37,179	43,272
	5000 psi Concrete	3310.100	656.09 cy	-	-	165.00 /cy	115,832	-	-	-	-	-	-	115,832	115,832
	Wall Placement Count	3310.360	10.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Gang Form System 16'->	3100.180	19,360.00 sf	31.00 /mh	78,021	2.50 /sf	50,820	-	-	-	-	-	-	128,841	160,049
	Wall Bulkhead Forms	3150.192	648.00 sf	31.00 /mh	9,240	1.50 /sf	1,021	-	-	-	-	-	-	10,261	13,957
	CJ Prep Walls	3350.170	1,288.32 sf	31.00 /mh	998	0.15 /sf	193	-	-	-	-	-	-	1,192	1,591
	Finish- Top of Wall	3350.110	805.20 sf	31.00 /mh	349	/sf		-	-	-	-	-	-	349	489
	Liquid Curing Walls	3390.170	20,165.20 sf	31.00 /mh	625	0.06 /sf	1,210	-	-	-	-	-	-	1,835	2,085
	Grind/Patch Walls	3350.130	19,360.00 sf	31.00 /mh	7,202	0.05 /sf	968	-	-	-	-	-	-	8,170	11,051
	Waterstop 6" Flat	3510.610	814.00 lf	31.00 /mh	2,523	5.00 /lf	4,274	-	-	-	-	-	-	6,797	7,806
	Chamfer 3/4"	3150.625	968.00 lf	31.00 /mh	1,500	0.20 /lf	203	-	-	-	-	-	-	1,704	2,304
	Rub Walls	3350.140	9,680.00 sf	31.00 /mh	12,003	0.15 /sf	1,452	-	-	-	-	-	-	13,455	18,256
	Oil Wall Forms	3100.310	19,360.00 sf	31.00 /mh	6	0.02 /sf	387	-	-	-	-	-	-	393	396
	Nails and Hardware	3150.200	19,360.00 sf	31.00 /mh	6	0.04 /sf	774	-	-	-	-	-	-	780	783
	Form Ties 22"	3150.632	4,840.00 ea	31.00 /mh	2	2.80 /ea	13,552	-	-	-	-	-	-	13,554	13,554
	Dimension Lumber	3150.200	19,360.00 sf	31.00 /mh	6	0.50 /sf	9,680	-	-	-	-	-	-	9,686	9,688
	Rebar Templates	3200.980	440.00 lf	31.00 /mh	682	0.50 /lf	220	-	-	-	-	-	-	902	1,175
	Expansion Joint Cork Sheets	3150.720	88.00 sf	31.00 /mh	273	6.00 /sf	554	-	-	-	-	-	-	827	936
	Expansion Joint Cap	3150.720	88.00 lf	31.00 /mh	273	0.35 /lf	32	-	-	-	-	-	-	305	414
	Expansion Joint Sealant	3150.720	88.00 lf	31.00 /mh	273	2.00 /lf	185	-	-	-	-	-	-	458	567
	Smooth Dowels 1" X 3' coated	3210.106	88.00 ea	31.00 /mh	1,364	14.00 /ea	1,232	-	-	-	-	-	-	2,596	3,142
	Rebar Formsavers # 8	3210.108	96.00 ea	31.00 /mh	1,488	47.00 /ea	4,512	-	-	-	-	-	-	6,000	6,595
	Rebar Formsavers # 6	3210.108	144.00 ea	31.00 /mh	2,232	30.00 /ea	4,320	-	-	-	-	-	-	6,552	7,445
	Waterstop 6" Cap for future	3510.610	120.00 lf	31.00 /mh	372	20.00 /lf	2,520	-	-	-	-	-	-	2,892	3,041
	Caulking 10.3 oz tube 1/4d x 1/4w	7920.300	240.00 lf	31.00 /mh	223	15.00 /tu be	154	-	-	-	-	-	-	377	467
	PS Epoxy Anchor 3/8 x 5in SS	15060.112	240.00 ea	31.00 /mh	372	14.00 /ea	3,360	-	-	-	-	-	-	3,732	3,881
	Rebar Formsavers # 8 caps for future	3210.108	96.00 ea	31.00 /mh	1,488	47.00 /ea	4,512	-	-	-	-	-	-	6,000	6,595
	Rebar Formsavers #6 caps for future	3210.108	144.00 ea	31.00 /mh	2,232	30.00 /ea	4,320	-	-	-	-	-	-	6,552	7,445
	Bondng agent and CJ prep tie holes	3350.130	1,615.00 ea	31.00 /mh	7,510	2.00 /ea	3,230	-	-	-	-	-	-	10,740	13,744
	Grout Slurry bottom of walls	3150.200	290.00 cf	31.00 /mh	2,248	15.00 /cf	4,350	-	-	-	-	-	-	6,598	7,497
	Waterstop Fittings	3510.610	22.00 ea	31.00 /mh	1,364	55.00 /ea	1,271	-	-	-	-	-	-	2,635	3,180
	Aeration Basin Exterior Walls and Future Wall Stubs		656.09 cy		150,109		235,139	/cy					21,945	407,193	467,237
0303-	Aeration Basin Interior Walls														
	Pump Place Walls	3310.260	543.40 cy	31.00 /mh	12,617	-	-	-	-	-	-	31.26 /cy	18,176	30,793	35,840
	5000 psi Concrete	3310.100	543.40 cy	-	-	165.00 /cy	95,937	-	-	-	-	-	-	95,937	95,937
	Gang Form System 16'->	3100.180	25,080.00 sf	31.00 /mh	101,072	2.50 /sf	65,835	-	-	-	-	-	-	166,907	207,336
	Wall Bulkhead Forms	3150.192	437.58 sf	31.00 /mh	6,240	1.50 /sf	689	-	-	-	-	-	-	6,929	9,425
	CJ Prep Walls	3350.170	1,104.48 sf	31.00 /mh	856	0.15 /sf	166	-	-	-	-	-	-	1,022	1,364
	Finish- Top of Wall	3350.110	666.90 sf	31.00 /mh	289	/sf		-	-	-	-	-	-	289	405
	Liquid Curing Walls	3390.170	25,746.90 sf	31.00 /mh	798	0.06 /sf	1,545	-	-	-	-	-	-	2,343	2,662
	Grind/Patch Walls	3350.130	25,080.00 sf	31.00 /mh	9,330	0.05 /sf	1,254	-	-	-	-	-	-	10,584	14,316
	Blockouts in Concrete	3150.194	206.00 sf	31.00 /mh	2,235	2.00 /sf	412	-	-	-	-	-	-	2,647	3,541
	Waterstop 6" Flat	3510.610	954.00 lf	31.00 /mh	2,957	5.00 /lf	5,009	-	-	-	-	-	-	7,966	9,149
	Chamfer 3/4"	3150.625	1,140.00 lf	31.00 /mh	1,767	0.20 /lf	239	-	-	-	-	-	-	2,006	2,713
	Rub Walls	3350.140	11,400.00 sf	31.00 /mh	14,136	0.15 /sf	1,710	-	-	-	-	-	-	15,846	21,500
	Oil Wall Forms	3100.310	25,080.00 sf	31.00 /mh	8	0.02 /sf	502	-	-	-	-	-	-	509	512
	Nails and Hardware	3150.200	25,080.00 sf	31.00 /mh	8	0.04 /sf	1,003	-	-	-	-	-	-	1,011	1,014
	Form Ties 14"	3150.632	6,270.00 ea	31.00 /mh	2	2.40 /ea	15,048	-	-	-	-	-	-	15,050	15,051
	Dimension Lumber	3150.200	25,080.00 sf	31.00 /mh	8	0.50 /sf	12,540	-	-	-	-	-	-	12,548	12,551
	Rebar Templates	3200.980	570.00 lf	31.00 /mh	884	0.50 /lf	285	-	-	-	-	-	-	1,169	1,522
	Expansion Joint 3/4" Neoprene	3150.720	60.00 sf	31.00 /mh	186	6.00 /sf	378	-	-	-	-	-	-	564	638
	Expansion Joint Cap	3150.720	88.00 lf	31.00 /mh	273	0.35 /lf	32	-	-	-	-	-	-	305	414
	Expansion Joint Sealant	3150.720	88.00 lf	31.00 /mh	273	2.00 /lf	185	-	-	-	-	-	-	458	567
	Smooth Dowels 1" X 3' coated	3210.106	88.00 ea	31.00 /mh	1,364	14.00 /ea	1,232	-	-	-	-	-	-	2,596	3,142
	Waterstop 9" Flat	3510.610	88.00 lf	31.00 /mh	246	7.00 /lf	647	-	-	-	-	-	-	892	991
	Rebar Formsavers # 5	3210.108	80.00 ea	31.00 /mh	818	27.00 /ea	2,160	-	-	-	-	-	-	2,978	3,306
	Bonding agent and cj prep tie holes	3350.130	2,083.00 ea	31.00 /mh	9,686	2.00 /ea	4,166	-	-	-	-	-	-	13,852	17,726
	Grout Slurry bottom of walls	3150.200	220.00 cf	31.00 /mh	1,705	15.00 /cf	3,300	-	-	-	-	-	-	5,005	5,687
	Waterstop Fittings	3510.610	24.00 ea	31.00 /mh	1,488	55.00 /ea	1,386	-	-	-	-	-	-	2,874	3,469

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	Aeration Basin Interior Walls		543.40 cy		169,246		215,660	/cy					18,176	403,081	470,779
0303-	Aeration Effluent Box Walls														
	Pump Place Walls	3310.260	6.67 cy	31.00 /mh	332	-	-	-	-	-	-	31.26 /cy	223	555	687
	5000 psi Concrete	3310.100	6.67 cy	-	-	165.00 /cy	1,177	-	-	-	-	-	-	1,177	1,177
	Rented Form System 4-8'	3100.180	360.00 sf	31.00 /mh	2,232	1.50 /sf	567	-	-	-	-	-	-	2,799	3,692
	Wall Bulkhead Forms	3150.192	12.00 sf	31.00 /mh	171	1.50 /sf	19	-	-	-	-	-	-	190	258
	CJ Prep Walls	3350.170	42.00 sf	31.00 /mh	33	0.15 /sf	6	-	-	-	-	-	-	39	52
	Finish- Top of Wall	3350.110	30.00 sf	31.00 /mh	13	/sf		-	-	-	-	-	-	13	18
	Liquid Curing Walls	3390.170	390.00 sf	31.00 /mh	12	0.06 /sf	23	-	-	-	-	-	-	35	40
	Grind/Patch Walls	3350.130	360.00 sf	31.00 /mh	134	0.05 /sf	18	-	-	-	-	-	-	152	205
	Blockouts in Concrete	3150.194	64.00 sf	31.00 /mh	694	2.00 /sf	128	-	-	-	-	-	-	822	1,100
	Waterstop 6" Flat	3510.610	45.00 lf	31.00 /mh	140	5.00 /lf	236	-	-	-	-	-	-	376	432
	Keyway 4"	3150.620	12.00 lf	31.00 /mh	19	1.00 /lf	13	-	-	-	-	-	-	31	39
	Rub Walls	3350.140	180.00 sf	31.00 /mh	223	0.15 /sf	27	-	-	-	-	-	-	250	339
	Oil Wall Forms	3100.310	360.00 sf	31.00 /mh	0	0.02 /sf	7	-	-	-	-	-	-	7	7
	Nails and Hardware	3150.200	360.00 sf	31.00 /mh	0	0.04 /sf	14	-	-	-	-	-	-	15	15
	Form Ties 12"	3150.632	90.00 ea	31.00 /mh	0	2.35 /ea	212	-	-	-	-	-	-	212	212
	Dimension Lumber	3150.200	360.00 sf	31.00 /mh	0	0.50 /sf	180	-	-	-	-	-	-	180	180
	Rebar Templates	3200.980	30.00 lf	31.00 /mh	47	0.50 /lf	15	-	-	-	-	-	-	62	80
	Aeration Effluent Box Walls		6.67 cy		4,049		2,643	/cy					223	6,915	8,534
0304-	Effluent Box Elevated Deck Effluent Box														
	5000 psi Concrete	3310.100	5.11 cy	-	-	165.00 /cy	902	-	-	-	-	-	-	902	902
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Crane Place Suspended Slab	3310.240	5.11 cy	31.00 /mh	254	-	-	-	-	-	-	-	-	254	356
	Shore Suspended Slab 15-up	3100.124	138.00 sf	31.00 /mh	1,711	4.25 /sf	616	-	-	-	-	-	-	2,327	3,012
	Slab Edge Form < 1'	3100.124	29.00 sf	31.00 /mh	450	2.00 /sf	61	-	-	-	-	-	-	510	690
	Finish- Hard Trowel	3350.110	138.00 sf	31.00 /mh	60	/sf		-	-	-	-	-	-	60	84
	Liquid Curing Compounds	3390.170	138.00 sf	31.00 /mh	9	0.06 /sf	8	-	-	-	-	-	-	17	20
	Grind and Patch Deck Bottom	3350.130	138.00 sf	31.00 /mh	51	0.05 /sf	7	-	-	-	-	-	-	58	79
	Waterstop Adeka or Swellstop	3510.610	60.00 lf	31.00 /mh	167	8.50 /lf	536	-	-	-	-	-	-	703	770
	Keyway 4"	3150.620	30.00 lf	31.00 /mh	233	1.00 /lf	32	-	-	-	-	-	-	264	357
	Oil Suspended Slab Frm	3100.310	138.00 sf	31.00 /mh	0	0.02 /sf	3	-	-	-	-	-	-	3	3
	Nails and Hardware	3150.200	138.00 sf	31.00 /mh	0	0.04 /sf	6	-	-	-	-	-	-	6	6
	Effluent Box Elevated Deck Effluent Box		5.11 cy		2,935		2,170	/cy						5,104	6,278
0304-	Aeration Elevated Walkways														
	5000 psi Concrete	3310.100	69.48 cy	-	-	165.00 /cy	12,267	-	-	-	-	-	-	12,267	12,267
	Pump Place Suspended Slab	3310.240	69.48 cy	31.00 /mh	2,305	-	-	-	-	-	-	31.26 /cy	2,324	4,629	5,551
	Shore Suspended Slab 15-up	3100.124	2,800.00 sf	31.00 /mh	34,720	4.25 /sf	12,495	-	-	-	-	-	-	47,215	61,103
	Slab Edge Form < 1'	3100.124	469.00 sf	31.00 /mh	7,270	2.00 /sf	985	-	-	-	-	-	-	8,254	11,162
	Suspended Slab Const Joint	3100.124	16.08 sf	31.00 /mh	174	1.50 /sf	24	-	-	-	-	-	-	199	268
	CJ Prep Elevated Slab CJ	3350.170	16.08 sf	31.00 /mh	12	0.20 /sf	3	-	-	-	-	-	-	16	21
	Finish- Hard Trowel	3350.110	2,800.00 sf	31.00 /mh	1,215	/sf		-	-	-	-	-	-	1,215	1,701
	Liquid Curing Compounds	3390.170	2,800.00 sf	31.00 /mh	174	0.06 /sf	168	-	-	-	-	-	-	342	411
	Grind and Patch Deck Bottom	3350.130	2,800.00 sf	31.00 /mh	1,042	0.05 /sf	140	-	-	-	-	-	-	1,182	1,598
	Blockouts in Concrete	3150.194	16.00 sf	31.00 /mh	174	2.00 /sf	32	-	-	-	-	-	-	206	275
	Chamfer 3/4"	3150.625	1,050.00 lf	31.00 /mh	1,628	0.20 /lf	221	-	-	-	-	-	-	1,848	2,499
	Oil Suspended Slab Frm	3100.310	2,800.00 sf	31.00 /mh	1	0.02 /sf	56	-	-	-	-	-	-	57	57
	Nails and Hardware	3150.200	2,800.00 sf	31.00 /mh	1	0.04 /sf	112	-	-	-	-	-	-	113	113
	Expansion Joint 3/4" neoprene	3150.720	8.00 sf	31.00 /mh	25	6.00 /sf	50	-	-	-	-	-	-	75	85
	Smooth Dowels 1" coated	3210.106	8.00 ea	31.00 /mh	124	14.00 /ea	112	-	-	-	-	-	-	236	286
	Aeration Elevated Walkways		69.48 cy		48,863		26,665	/cy					2,324	77,852	97,398
	Concrete Concrete				438,348		675,569						70,274	1,184,190	1,359,529
	200 Aeration Basin				438,348		675,569	/LS					70,274	1,184,190	1,359,529
250	Secondary Clarifier Splitter Box														
	Concrete Concrete														
0302-	Clarifier Splitter Structure Base Slab														
	5000 psi Concrete	3310.100	15.44 cy	-	-	165.00 /cy	2,726	-	-	-	-	-	-	2,726	2,726
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	15.44 cy	31.00 /mh	512	-	-	-	-	-	-	31.26 /cy	516	1,028	1,233
	Formwork S.O.G. Edge Form > 1'	3100.120	100.02 sf	31.00 /mh	1,240	1.50 /sf	158	-	-	-	-	-	-	1,398	1,894
	Finegrade Below Concrete	3150.650	277.89 sf	31.00 /mh	172	-	-	-	-	-	-	-	-	172	241
	Finish- Hard Trowel	3350.110	277.89 sf	31.00 /mh	121	/sf		-	-	-	-	-	-	121	169
	Waterstop 6" Flat	3510.610	128.00 lf	31.00 /mh	397	5.00 /lf	672	-	-	-	-	-	-	1,069	1,228
	Oil SOG Form	3100.310	100.02 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	100.02 sf	31.00 /mh	0	0.04 /sf	4	-	-	-	-	-	-	4	4
	Dimension Lumber	3150.200	100.02 sf	31.00 /mh	0	0.50 /sf	50	-	-	-	-	-	-	50	50
	Waterstop Fittings	3510.610	4.00 ea	31.00 /mh	248	55.00 /ea	231	-	-	-	-	-	-	479	578
	Clarifier Splitter Structure Base Slab		15.44 cy		2,690		3,842	/cy					516	7,049	8,125
0303-	Clarifier Splitter Box Walls														
	Pump Place Walls	3310.260	49.41 cy	31.00 /mh	1,311	-	-	-	-	-	-	31.26 /cy	1,653	2,964	3,488
	5000 psi Concrete	3310.100	49.41 cy	-	-	165.00 /cy	8,723	-	-	-	-	-	-	8,723	8,723

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0303- Clarifier Splitter Box Walls														
	Wall Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Rented Form System 8-12'	3100.180	2,668.00 sf	31.00 /mh	14,887	1.50 /sf	4,202	-	-	-	-	-	-	19,090	25,045
	CJ Prep Walls	3350.170	116.00 sf	31.00 /mh	90	0.15 /sf	17	-	-	-	-	-	-	107	143
	Finish- Top of Wall	3350.110	116.00 sf	31.00 /mh	50	/sf		-	-	-	-	-	-	50	70
	Liquid Curing Walls	3390.170	2,784.00 sf	31.00 /mh	86	0.06 /sf	167	-	-	-	-	-	-	253	288
	Grind/Patch Walls	3350.130	2,668.00 sf	31.00 /mh	993	0.05 /sf	133	-	-	-	-	-	-	1,126	1,523
	Blockouts in Concrete	3150.194	64.00 sf	31.00 /mh	694	2.00 /sf	128	-	-	-	-	-	-	822	1,100
	Chamfer 3/4"	3150.625	80.00 lf	31.00 /mh	124	0.20 /lf	17	-	-	-	-	-	-	141	190
	Rub Walls	3350.140	696.00 sf	31.00 /mh	863	0.15 /sf	104	-	-	-	-	-	-	967	1,313
	Oil Wall Forms	3100.310	2,668.00 sf	31.00 /mh	1	0.02 /sf	53	-	-	-	-	-	-	54	55
	Nails and Hardware	3150.200	2,668.00 sf	31.00 /mh	1	0.04 /sf	107	-	-	-	-	-	-	108	108
	Form Ties 12"	3150.632	667.00 ea	31.00 /mh	0	2.35 /ea	1,567	-	-	-	-	-	-	1,568	1,568
	Dimension Lumber	3150.200	2,668.00 sf	31.00 /mh	1	0.50 /sf	1,334	-	-	-	-	-	-	1,335	1,335
	Rebar Templates	3200.980	116.00 lf	31.00 /mh	180	0.50 /lf	58	-	-	-	-	-	-	238	310
	Waterstop Fitting	3510.610	8.00 ea	31.00 /mh	496	55.00 /ea	462	-	-	-	-	-	-	958	1,156
	Grout Slurry in bottom of walls	3150.200	50.00 cf	31.00 /mh	388	15.00 /cf	750	-	-	-	-	-	-	1,138	1,292
	Clarifier Splitter Box Walls		49.41 cy		20,165		17,823	/cy					1,653	39,641	47,707
	Concrete Concrete				22,855		21,666						2,169	46,690	55,832
	250 Secondary Clarifier Splitter Box				22,855		21,666	/LS					2,169	46,690	55,832
	300 Secondary Clarifiers 5 and 6														
	Concrete Concrete														
	0302- Effluent Box Bottom Slab Clarifer 5 and 6														
	5000 psi Concrete	3310.100	4.74 cy	-	-	165.00 /cy	837	-	-	-	-	-	-	837	837
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	4.74 cy	31.00 /mh	236	-	-	-	-	-	-	31.26 /cy	159	394	489
	Formwork S.O.G. Edge Form < 1'	3100.120	64.00 sf	31.00 /mh	694	1.50 /sf	101	-	-	-	-	-	-	795	1,073
	Finegrade Below Concrete	3150.650	128.00 sf	31.00 /mh	79	-	-	-	-	-	-	-	-	79	111
	Finish- Hard Trowel	3350.110	128.00 sf	31.00 /mh	56	/sf		-	-	-	-	-	-	56	78
	Liquid Curing Compounds	3390.170	128.00 sf	31.00 /mh	8	0.06 /sf	8	-	-	-	-	-	-	16	19
	Waterstop 6" Flat	3510.610	24.00 lf	31.00 /mh	74	5.00 /lf	126	-	-	-	-	-	-	200	230
	Oil SOG Form	3100.310	64.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Nails and Hardware	3150.200	64.00 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Dimension Lumber	3150.200	64.00 sf	31.00 /mh	0	0.50 /sf	32	-	-	-	-	-	-	32	32
	Waterstop Fitting	3510.610	4.00 ea	31.00 /mh	248	55.00 /ea	231	-	-	-	-	-	-	479	578
	Effluent Box Bottom Slab Clarifer 5 and 6		4.74 cy		1,396		1,338	/cy					159	2,893	3,451
	0302-B Clarifier 5 and 6 grout topping at trough outside														
	5000 psi Concrete	3310.100	6.67 cy	-	-	165.00 /cy	1,177	-	-	-	-	-	-	1,177	1,177
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	6.67 cy	31.00 /mh	885	-	-	-	-	-	-	31.26 /cy	223	1,108	1,461
	Finish- Hard Trowel	3350.110	300.00 sf	31.00 /mh	130	/sf		-	-	-	-	-	-	130	182
	Liquid Curing Compounds	3390.170	300.00 sf	31.00 /mh	19	0.06 /sf	18	-	-	-	-	-	-	37	44
	Oil SOG Form	3100.310	362.40 sf	31.00 /mh	0	0.02 /sf	7	-	-	-	-	-	-	7	7
	Nails and Hardware	3150.200	362.40 sf	31.00 /mh	0	0.04 /sf	15	-	-	-	-	-	-	15	15
	Dimension Lumber	3150.200	362.40 sf	31.00 /mh	0	0.50 /sf	181	-	-	-	-	-	-	181	181
	CJ Prep Slab	3350.170	300.00 sf	31.00 /mh	233	0.15 /sf	45	-	-	-	-	-	-	278	371
	Fibber Reinforcing grout topping	3310.110	7.00 cy	-	-	25.00 /cy	187	-	-	-	-	-	-	187	187
	Clarifier 5 and 6 grout topping at trough outside		6.67 cy		1,266		1,630	/cy					223	3,120	3,626
	0302-B Grout Fill at Scum Manhole														
	5000 psi Concrete	3310.100	3.00 cy	-	-	165.00 /cy	530	-	-	-	-	-	-	530	530
	Other Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	3.00 cy	31.00 /mh	149	-	-	-	-	-	-	31.26 /cy	100	250	309
	Formwork S.O.G. Edge Form > 1'	3100.120	48.00 sf	31.00 /mh	372	1.50 /sf	76	-	-	-	-	-	-	448	596
	Finish- Hard Trowel	3350.110	36.00 sf	31.00 /mh	16	/sf		-	-	-	-	-	-	16	22
	Liquid Curing Compounds	3390.170	36.00 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	4	5
	Oil SOG Form	3100.310	48.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Nails and Hardware	3150.200	48.00 sf	31.00 /mh	0	0.04 /sf	2	-	-	-	-	-	-	2	2
	Dimension Lumber	3150.200	48.00 sf	31.00 /mh	0	0.50 /sf	24	-	-	-	-	-	-	24	24
	CJ Prep Slab	3350.170	36.00 sf	31.00 /mh	28	0.15 /sf	5	-	-	-	-	-	-	33	44
	Fiber Reinforcing for grout fill	3310.110	3.00 cy	-	-	25.00 /cy	80	-	-	-	-	-	-	80	80
	Grout Fill at Scum Manhole		3.00 cy		567		720	/cy					100	1,387	1,614
	0303- Clarifier 5 and 6 Effluent Box Walls														
	Pump Place Walls	3310.260	16.23 cy	31.00 /mh	1,077	-	-	-	-	-	-	31.26 /cy	543	1,619	2,050
	5000 psi Concrete	3310.100	16.23 cy	-	-	165.00 /cy	2,865	-	-	-	-	-	-	2,865	2,865
	Wall Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Rented Form System 12-16'	3100.180	876.24 sf	31.00 /mh	7,334	1.50 /sf	1,380	-	-	-	-	-	-	8,714	11,648
	CJ Prep Walls	3350.170	36.00 sf	31.00 /mh	28	0.15 /sf	5	-	-	-	-	-	-	33	44
	Finish- Top of Wall	3350.110	36.00 sf	31.00 /mh	16	/sf		-	-	-	-	-	-	16	22
	Liquid Curing Walls	3390.170	912.24 sf	31.00 /mh	28	0.06 /sf	55	-	-	-	-	-	-	83	94
	Grind/Patch Walls	3350.130	876.24 sf	31.00 /mh	326	0.05 /sf	44	-	-	-	-	-	-	370	500
	Waterstop Adeka or Swellstop	3510.610	48.00 lf	31.00 /mh	149	8.50 /lf	428	-	-	-	-	-	-	577	637

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0303-	Clarifier 5 and 6 Effluent Box Walls														
	Chamfer 3/4"	3150.625	80.00 lf	31.00 /mh	124	0.20 /lf	17	-	-	-	-	-	-	141	190
	Rub Walls	3350.140	360.00 sf	31.00 /mh	446	0.15 /sf	54	-	-	-	-	-	-	500	679
	Oil Wall Forms	3100.310	876.24 sf	31.00 /mh	0	0.02 /sf	18	-	-	-	-	-	-	18	18
	Nails and Hardware	3150.200	876.24 sf	31.00 /mh	0	0.04 /sf	35	-	-	-	-	-	-	35	35
	Form Ties 12"	3150.632	219.06 ea	31.00 /mh	0	2.35 /ea	515	-	-	-	-	-	-	515	515
	Dimension Lumber	3150.200	876.24 sf	31.00 /mh	0	0.50 /sf	438	-	-	-	-	-	-	438	438
	Rebar Templates	3200.980	36.00 lf	31.00 /mh	56	0.50 /lf	18	-	-	-	-	-	-	74	96
	Grout Slurry bottom of walls	3150.200	17.00 cf	31.00 /mh	132	15.00 /cf	255	-	-	-	-	-	-	387	439
	Clarifier 5 and 6 Effluent Box Walls		16.23 cy		9,716		6,127	/cy					543	16,385	20,272
0304-	Clarifier 5 and 6 Trough Concrete Susp Slab														
	5000 psi Concrete	3310.100	44.44 cy	-	-	165.00 /cy	7,847	-	-	-	-	-	-	7,847	7,847
	Slab Placement Count	3310.360	8.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Suspended Slab	3310.240	44.44 cy	31.00 /mh	2,211	-	-	-	-	-	-	31.26 /cy	1,487	3,698	4,582
	Shore Suspended Slab 15-up	3100.124	1,200.00 sf	31.00 /mh	14,880	4.25 /sf	5,355	-	-	-	-	-	-	20,235	26,187
	Slab Edge Form < 1'	3100.124	300.00 sf	31.00 /mh	4,650	2.00 /sf	630	-	-	-	-	-	-	5,280	7,140
	Suspended Slab Const Joint	3100.124	24.00 sf	31.00 /mh	260	1.50 /sf	36	-	-	-	-	-	-	296	401
	CJ Prep Elevated Slab CJ	3350.170	24.00 sf	31.00 /mh	19	0.20 /sf	5	-	-	-	-	-	-	23	31
	Finish- Hard Trowel	3350.110	1,200.00 sf	31.00 /mh	521	/sf		-	-	-	-	-	-	521	729
	Liquid Curing Compounds	3390.170	1,200.00 sf	31.00 /mh	74	0.06 /sf	72	-	-	-	-	-	-	146	176
	Grind and Patch Deck Bottom	3350.130	1,200.00 sf	31.00 /mh	446	0.05 /sf	60	-	-	-	-	-	-	506	685
	Waterstop 6" Flat	3510.610	324.00 lf	31.00 /mh	1,004	5.00 /lf	1,701	-	-	-	-	-	-	2,705	3,107
	Chamfer 3/4"	3150.625	300.00 lf	31.00 /mh	465	0.20 /lf	63	-	-	-	-	-	-	528	714
	Oil Suspended Slab Frm	3100.310	1,200.00 sf	31.00 /mh	0	0.02 /sf	24	-	-	-	-	-	-	24	25
	Nails and Hardware	3150.200	1,200.00 sf	31.00 /mh	0	0.04 /sf	48	-	-	-	-	-	-	48	49
	Clarifier 5 and 6 Trough Concrete Susp Slab		44.44 cy		24,532		15,840	/cy					1,487	41,859	51,672
0308-	Clarifier 5 and 6 Center Column Concrete														
	5000 psi Concrete	3310.100	26.00 cy	-	-	165.00 /cy	4,590	-	-	-	-	-	-	4,590	4,590
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	26.00 cy	31.00 /mh	1,294	-	-	-	-	-	-	31.26 /cy	870	2,163	2,681
	Formwork S.O.G. Edge Form > 1' Circular Slab	3100.120	301.59 sf	31.00 /mh	4,675	1.50 /sf	475	-	-	-	-	-	-	5,150	7,020
	Finegrade Below Concrete	3150.650	100.53 sf	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	Finish- Hard Trowel	3350.110	100.53 sf	31.00 /mh	44	/sf		-	-	-	-	-	-	44	61
	Liquid Curing Compounds	3390.170	100.53 sf	31.00 /mh	6	0.06 /sf	6	-	-	-	-	-	-	12	15
	Blockouts in Concrete	3150.194	64.00 sf	31.00 /mh	694	2.00 /sf	128	-	-	-	-	-	-	822	1,100
	Waterstop 6" Flat	3510.610	64.00 lf	31.00 /mh	198	5.00 /lf	336	-	-	-	-	-	-	534	614
	Oil SOG Form	3100.310	301.59 sf	31.00 /mh	0	0.02 /sf	6	-	-	-	-	-	-	6	6
	Nails and Hardware	3150.200	301.59 sf	31.00 /mh	0	0.04 /sf	12	-	-	-	-	-	-	12	12
	Dimension Lumber	3150.200	301.59 sf	31.00 /mh	0	0.50 /sf	151	-	-	-	-	-	-	151	151
	Flow Fill around center column	3310.105	100.00 cy	31.00 /mh	3,100	120.00 /cy	12,600	-	-	-	-	-	-	15,700	16,940
	Clarifier 5 and 6 Center Column Concrete		26.00 cy		10,074		18,304	/cy					870	29,247	33,277
0308-	Clarifier 5 and 6 Base Slab Concrete														
	5000 psi Concrete	3310.100	339.29 cy	-	-	165.00 /cy	59,902	-	-	-	-	-	-	59,902	59,902
	Slab Placement Count	3310.360	8.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	339.29 cy	31.00 /mh	8,441	-	-	-	-	-	-	31.26 /cy	11,349	19,789	23,166
	Formwork S.O.G. Edge Form > 1' Circular Slab	3100.120	678.58 sf	31.00 /mh	7,363	1.50 /sf	1,069	-	-	-	-	-	-	8,431	11,376
	Formwork S.O.G. Const Joints > 1'	3100.120	432.00 sf	31.00 /mh	6,160	1.50 /sf	680	-	-	-	-	-	-	6,841	9,305
	CJ Prep Slab	3350.170	432.00 sf	31.00 /mh	335	0.15 /sf	65	-	-	-	-	-	-	400	534
	Finegrade Below Concrete	3150.650	4,580.44 sf	31.00 /mh	2,840	-	-	-	-	-	-	-	-	2,840	3,976
	Finish- Hard Trowel	3350.110	4,580.44 sf	31.00 /mh	1,988	/sf		-	-	-	-	-	-	1,988	2,783
	Liquid Curing Compounds	3390.170	4,580.44 sf	31.00 /mh	284	0.06 /sf	275	-	-	-	-	-	-	559	672
	Blockouts in Concrete	3150.194	64.00 sf	31.00 /mh	694	2.00 /sf	128	-	-	-	-	-	-	822	1,100
	Waterstop 6" Flat	3510.610	516.00 lf	31.00 /mh	1,600	5.00 /lf	2,709	-	-	-	-	-	-	4,309	4,948
	Oil SOG Form	3100.310	678.58 sf	31.00 /mh	0	0.02 /sf	14	-	-	-	-	-	-	14	14
	Nails and Hardware	3150.200	678.58 sf	31.00 /mh	0	0.04 /sf	27	-	-	-	-	-	-	27	27
	Dimension Lumber	3150.200	678.58 sf	31.00 /mh	0	0.50 /sf	339	-	-	-	-	-	-	340	340
	Waterstop Fittings	3510.610	8.00 ea	31.00 /mh	496	55.00 /ea	462	-	-	-	-	-	-	958	1,156
	Clarifier 5 and 6 Base Slab Concrete		339.29 cy		30,201		65,670	/cy					11,349	107,219	119,300
0308-	Clarifier Grout Topping														
	5500 psi Concrete	3310.100	36.93 cy	-	-	195.00 /cy	7,706	-	-	-	-	-	-	7,706	7,706
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	36.93 cy	31.00 /mh	1,837	-	-	-	-	-	-	31.26 /cy	1,235	3,073	3,808
	CJ Prep Slab	3350.170	3,323.81 sf	31.00 /mh	5,152	0.25 /sf	831	-	-	-	-	-	-	5,983	8,044
	Finish- Hard Trowel	3350.110	3,323.81 sf	31.00 /mh	1,443	/sf		-	-	-	-	-	-	1,443	2,020
	Water Cure	3390.170	3,323.81 sf	31.00 /mh	206	0.06 /sf	199	-	-	-	-	-	-	406	488
	Blockouts in Concrete	3150.194	32.00 sf	31.00 /mh	347	2.00 /sf	64	-	-	-	-	-	-	411	550
	Fiber in topping	3310.110	37.00 cy	-	-	25.00 /cy	990	-	-	-	-	-	-	990	990
	Clarifier Grout Topping		36.93 cy		8,985		9,790	/cy					1,235	20,010	23,604
0309-	Clarifier 5 and 6 Wall concrete														
	Pump Place Walls	3310.260	290.94 cy	31.00 /mh	7,720	-	-	-	-	-	-	31.26 /cy	9,731	17,451	20,540
	5000 psi Concrete	3310.100	290.94 cy	-	-	165.00 /cy	51,365	-	-	-	-	-	-	51,365	51,365
	Wall Placement Count	3310.360	8.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0309- Clarifier 5 and 6 Wall concrete														
	Radius Gang Forms 16- >	3100.182	11,812.39 sf	31.00 /mh	47,604	4.25 /sf	52,713	-	-	-	-	-	-	100,317	119,358
	Wall Bulkhead Forms	3150.192	212.80 sf	31.00 /mh	3,035	1.50 /sf	335	-	-	-	-	-	-	3,370	4,584
	CJ Prep Walls	3350.170	605.56 sf	31.00 /mh	469	0.15 /sf	91	-	-	-	-	-	-	560	748
	Finish- Top of Wall	3350.110	392.76 sf	31.00 /mh	170	/sf		-	-	-	-	-	-	170	239
	Liquid Curing Walls	3390.170	12,205.15 sf	31.00 /mh	378	0.06 /sf	732	-	-	-	-	-	-	1,111	1,262
	Grind/Patch Walls	3350.130	11,812.39 sf	31.00 /mh	4,394	0.05 /sf	591	-	-	-	-	-	-	4,985	6,743
	Blockouts in Concrete	3150.194	64.00 sf	31.00 /mh	694	2.00 /sf	128	-	-	-	-	-	-	822	1,100
	Waterstop 6" Flat	3510.610	160.00 lf	31.00 /mh	496	5.00 /lf	840	-	-	-	-	-	-	1,336	1,534
	Chamfer 3/4"	3150.625	1,200.00 lf	31.00 /mh	1,860	0.20 /lf	252	-	-	-	-	-	-	2,112	2,856
	Oil Wall Forms	3100.310	11,812.39 sf	31.00 /mh	4	0.02 /sf	236	-	-	-	-	-	-	240	241
	Nails and Hardware	3150.200	11,812.39 sf	31.00 /mh	4	0.04 /sf	473	-	-	-	-	-	-	476	478
	Form Ties 16"	3150.632	2,953.10 ea	31.00 /mh	1	2.50 /ea	7,383	-	-	-	-	-	-	7,384	7,384
	Dimension Lumber	3150.200	11,812.39 sf	31.00 /mh	4	0.50 /sf	5,906	-	-	-	-	-	-	5,910	5,911
	Rebar Formsavers # 6	3210.108	744.00 ea	31.00 /mh	11,532	30.00 /ea	22,320	-	-	-	-	-	-	33,852	38,465
	Waterstop Adeka or Swellstop	3510.610	400.00 lf	31.00 /mh	1,240	8.50 /lf	3,570	-	-	-	-	-	-	4,810	5,306
	Keyway 12"	3150.620	400.00 lf	31.00 /mh	3,100	4.00 /lf	1,680	-	-	-	-	-	-	4,780	6,020
	Bonding agent and CJ prep tie holes	3350.130	983.00 ea	31.00 /mh	4,571	2.00 /ea	1,966	-	-	-	-	-	-	6,537	8,365
	Grout Slurry bottom of walls	3150.200	140.00 cf	31.00 /mh	1,085	15.00 /cf	2,100	-	-	-	-	-	-	3,185	3,619
	Waterstop Fittings	3510.610	8.00 ea	31.00 /mh	496	55.00 /ea	462	-	-	-	-	-	-	958	1,156
	Clarifier 5 and 6 Wall concrete		290.94 cy		88,857		153,142	/cy					9,731	251,730	287,273
	0309- Clarifer 5 and 6 weir wall														
	Pump Place Walls	3310.260	17.00 cy	31.00 /mh	1,691	-	-	-	-	-	-	31.26 /cy	569	2,260	2,936
	5000 psi Concrete	3310.100	17.00 cy	-	-	165.00 /cy	3,001	-	-	-	-	-	-	3,001	3,001
	Wall Placement Count	3310.360	8.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Rented Form System 0-4'	3100.180	1,105.84 sf	31.00 /mh	10,284	1.50 /sf	1,742	-	-	-	-	-	-	12,026	16,140
	Wall Bulkhead Forms	3150.192	13.28 sf	31.00 /mh	189	1.50 /sf	21	-	-	-	-	-	-	210	286
	CJ Prep Walls	3350.170	242.74 sf	31.00 /mh	188	0.15 /sf	36	-	-	-	-	-	-	225	300
	Finish- Top of Wall	3350.110	229.46 sf	31.00 /mh	100	/sf		-	-	-	-	-	-	100	139
	Liquid Curing Walls	3390.170	1,335.30 sf	31.00 /mh	41	0.06 /sf	80	-	-	-	-	-	-	122	138
	Grind/Patch Walls	3350.130	1,105.84 sf	31.00 /mh	411	0.05 /sf	55	-	-	-	-	-	-	467	631
	Waterstop 6" Flat	3510.610	16.00 lf	31.00 /mh	50	5.00 /lf	84	-	-	-	-	-	-	134	153
	Chamfer 4"	3150.625	300.00 lf	31.00 /mh	2,325	0.20 /lf	63	-	-	-	-	-	-	2,388	3,318
	Rub Walls	3350.140	1,200.00 sf	31.00 /mh	1,488	0.15 /sf	180	-	-	-	-	-	-	1,668	2,263
	Oil Wall Forms	3100.310	1,105.84 sf	31.00 /mh	0	0.02 /sf	22	-	-	-	-	-	-	22	23
	Nails and Hardware	3150.200	1,105.84 sf	31.00 /mh	0	0.04 /sf	44	-	-	-	-	-	-	45	45
	Form Ties 10"	3150.632	276.46 ea	31.00 /mh	0	2.25 /ea	622	-	-	-	-	-	-	622	622
	Dimension Lumber	3150.200	1,105.84 sf	31.00 /mh	0	0.50 /sf	553	-	-	-	-	-	-	553	553
	Grout Slurry Bottom of Walls	3150.200	82.00 cf	31.00 /mh	636	15.00 /cf	1,230	-	-	-	-	-	-	1,866	2,120
	Clarifer 5 and 6 weir wall		17.00 cy		17,405		7,734	/cy					569	25,707	32,669
	Concrete Concrete				192,999		280,295						26,265	499,559	576,758
	300 Secondary Clarifiers 5 and 6				192,999		280,295	/LS					26,265	499,559	576,758
	350 Step Feed Process Building														
	Concrete Concrete														
	0302- Step Feed Sump Slab and Trench drain support slab														
	5000 psi Concrete	3310.100	4.90 cy	-	-	165.00 /cy	864	-	-	-	-	-	-	864	864
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	4.90 cy	31.00 /mh	325	-	-	-	-	-	-	31.26 /cy	164	489	619
	Formwork S.O.G. Edge Form < 1'	3100.120	78.96 sf	31.00 /mh	783	1.50 /sf	124	-	-	-	-	-	-	908	1,221
	Finegrade Below Concrete	3150.650	185.00 sf	31.00 /mh	115	-	-	-	-	-	-	-	-	115	161
	Finish- Hard Trowel	3350.110	185.00 sf	31.00 /mh	80	/sf		-	-	-	-	-	-	80	112
	Waterstop 6" Flat	3510.610	20.00 lf	31.00 /mh	62	5.00 /lf	105	-	-	-	-	-	-	167	192
	Oil SOG Form	3100.310	78.96 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	78.96 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Dimension Lumber	3150.200	78.96 sf	31.00 /mh	0	0.50 /sf	39	-	-	-	-	-	-	40	40
	Step Feed Sump Slab and Trench drain support slab		4.90 cy		1,365		1,138	/cy					164	2,667	3,213
	0302- Step Feed Base Slab for basement														
	5000 psi Concrete	3310.100	149.49 cy	-	-	165.00 /cy	26,392	-	-	-	-	-	-	26,392	26,392
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	149.49 cy	31.00 /mh	3,471	-	-	-	-	-	-	31.26 /cy	5,000	8,471	9,860
	Formwork S.O.G. Edge Form > 1'	3100.120	399.28 sf	31.00 /mh	3,961	1.50 /sf	629	-	-	-	-	-	-	4,590	6,174
	Formwork S.O.G. Const Joints > 1'	3100.120	65.10 sf	31.00 /mh	928	1.50 /sf	103	-	-	-	-	-	-	1,031	1,402
	CJ Prep Slab	3350.170	65.10 sf	31.00 /mh	50	0.15 /sf	10	-	-	-	-	-	-	60	80
	Finegrade Below Concrete	3150.650	1,860.00 sf	31.00 /mh	1,153	-	-	-	-	-	-	-	-	1,153	1,614
	Finish- Hard Trowel	3350.110	1,860.00 sf	31.00 /mh	807	/sf		-	-	-	-	-	-	807	1,130
	Liquid Curing Compounds	3390.170	1,860.00 sf	31.00 /mh	115	0.06 /sf	112	-	-	-	-	-	-	227	273
	Blockouts in Concrete	3150.194	136.00 sf	31.00 /mh	1,476	2.00 /sf	272	-	-	-	-	-	-	1,748	2,338
	Waterstop 6" Flat	3510.610	244.00 lf	31.00 /mh	756	5.00 /lf	1,281	-	-	-	-	-	-	2,037	2,340
	Oil SOG Form	3100.310	464.38 sf	31.00 /mh	0	0.02 /sf	9	-	-	-	-	-	-	9	9
	Nails and Hardware	3150.200	399.28 sf	31.00 /mh	0	0.04 /sf	16	-	-	-	-	-	-	16	16
	Dimension Lumber	3150.200	399.28 sf	31.00 /mh	0	0.50 /sf	200	-	-	-	-	-	-	200	200
	Waterstop fittings	3510.610	8.00 ea	31.00 /mh	496	55.00 /ea	462	-	-	-	-	-	-	958	1,156

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0302- Step Feed Base Slab for basement														
	Pipe Tie Downs (Trench Drain)	3150.200	10.00 ea	31.00 /mh	620	150.00 /ea	1,500	-	-	-	-	-	-	2,120	2,368
	Step Feed Base Slab for basement		149.49 cy		13,835		30,985	/cy					5,000	49,820	55,354
	0302- Step Feed Building Foundation Pad														
	5000 psi Concrete	3310.100	24.44 cy	-	-	165.00 /cy	4,316	-	-	-	-	-	-	4,316	4,316
	Slab Placement Count	3310.360	11.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	24.44 cy	31.00 /mh	811	-	-	-	-	-	-	31.26 /cy	818	1,628	1,953
	Formwork S.O.G. Edge Form > 1'	3100.120	484.00 sf	31.00 /mh	4,801	1.50 /sf	762	-	-	-	-	-	-	5,564	7,484
	Finegrade Below Concrete	3150.650	330.00 sf	31.00 /mh	205	-	-	-	-	-	-	-	-	205	286
	Finish- Hard Trowel	3350.110	330.00 sf	31.00 /mh	143	/sf	-	-	-	-	-	-	-	143	201
	Oil SOG Form	3100.310	484.00 sf	31.00 /mh	0	0.02 /sf	10	-	-	-	-	-	-	10	10
	Nails and Hardware	3150.200	484.00 sf	31.00 /mh	0	0.04 /sf	19	-	-	-	-	-	-	20	20
	Dimension Lumber	3150.200	484.00 sf	31.00 /mh	0	0.50 /sf	242	-	-	-	-	-	-	242	242
	Step Feed Building Foundation Pad		24.44 cy		5,960		5,349	/cy					818	12,127	14,511
	0302- Trench drain and dumpster steel support slabs														
	5000 psi Concrete	3310.100	28.00 cy	-	-	165.00 /cy	4,943	-	-	-	-	-	-	4,943	4,943
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Crane Place Slab on Grade	3310.230	28.00 cy	31.00 /mh	604	-	-	-	-	-	-	-	-	604	845
	Formwork S.O.G. Edge Form < 1'	3100.120	314.90 sf	31.00 /mh	1,464	1.50 /sf	496	-	-	-	-	-	-	1,960	2,546
	Finegrade Below Concrete	3150.650	1,100.00 sf	31.00 /mh	682	-	-	-	-	-	-	-	-	682	955
	Finish- Hard Trowel	3350.110	1,100.00 sf	31.00 /mh	477	/sf	-	-	-	-	-	-	-	477	668
	Liquid Curing Compounds	3390.170	600.00 sf	31.00 /mh	37	0.06 /sf	36	-	-	-	-	-	-	73	88
	Oil SOG Form	3100.310	314.90 sf	31.00 /mh	0	0.02 /sf	6	-	-	-	-	-	-	6	6
	Nails and Hardware	3150.200	314.90 sf	31.00 /mh	0	0.04 /sf	13	-	-	-	-	-	-	13	13
	Dimension Lumber	3150.200	314.90 sf	31.00 /mh	0	0.50 /sf	157	-	-	-	-	-	-	158	158
	Pipe Tie Downs (Medium)	3150.200	57.00 ea	31.00 /mh	1,767	150.00 /ea	8,550	-	-	-	-	-	-	10,317	11,024
	Trench drain and dumpster steel support slabs		28.00 cy		5,032		14,202	/cy						19,234	21,246
	0302- Step Feed Dumpster bay, Screw Press and Electrical Rooms Base Slab														
	5000 psi Concrete	3310.100	156.00 cy	-	-	165.00 /cy	27,542	-	-	-	-	-	-	27,542	27,542
	Slab Placement Count	3310.360	4.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	156.00 cy	31.00 /mh	4,140	-	-	-	-	-	-	31.26 /cy	5,218	9,358	11,013
	Formwork S.O.G. Edge Form < 1'	3100.120	232.00 sf	31.00 /mh	2,301	1.50 /sf	365	-	-	-	-	-	-	2,667	3,587
	Formwork S.O.G. Const Joints < 1'	3100.120	122.00 sf	31.00 /mh	1,740	1.50 /sf	192	-	-	-	-	-	-	1,932	2,628
	CJ Prep Slab	3350.170	102.00 sf	31.00 /mh	79	0.15 /sf	15	-	-	-	-	-	-	94	126
	Finegrade Below Concrete	3150.650	3,120.00 sf	31.00 /mh	1,934	-	-	-	-	-	-	-	-	1,934	2,708
	Finish- Hard Trowel	3350.110	3,120.00 sf	31.00 /mh	1,354	/sf	-	-	-	-	-	-	-	1,354	1,896
	Liquid Curing Compounds	3390.170	3,120.00 sf	31.00 /mh	193	0.06 /sf	187	-	-	-	-	-	-	381	458
	Blockouts in Concrete	3150.194	424.00 sf	31.00 /mh	4,600	2.00 /sf	848	-	-	-	-	-	-	5,448	7,289
	10 Mil. Vapor Barrier	3150.630	3,120.00 sf	31.00 /mh	193	0.15 /sf	515	-	-	-	-	-	-	708	786
	Oil SOG Form	3100.310	326.00 sf	31.00 /mh	0	0.02 /sf	7	-	-	-	-	-	-	7	7
	Nails and Hardware	3150.200	224.00 sf	31.00 /mh	0	0.04 /sf	9	-	-	-	-	-	-	9	9
	Dimension Lumber	3150.200	224.00 sf	31.00 /mh	0	0.50 /sf	112	-	-	-	-	-	-	112	112
	Straighten and Tie down Trench Drains	3150.200	100.00 lf	31.00 /mh	775	5.00 /sf	500	-	-	-	-	-	-	1,275	1,585
	Expansion Joint Sheets 3/4in thick	3150.720	64.00 sf	31.00 /mh	496	6.00 /sf	403	-	-	-	-	-	-	899	1,098
	Step Feed Dumpster bay, Screw Press and Electrical Rooms Base Slab		156.00 cy		17,807		30,695	/cy					5,218	53,720	60,843
	0302- Step Feed Curb at botom PEMB dumpster, elect and press rooms														
	5000 psi Concrete	3310.100	9.24 cy	-	-	165.00 /cy	1,632	-	-	-	-	-	-	1,632	1,632
	Slab Placement Count	3310.360	6.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Buggy Place Slab on Grade	3310.230	9.24 cy	31.00 /mh	1,839	-	-	-	-	-	-	-	-	1,839	2,575
	Formwork S.O.G. Edge Form < 1'	3100.120	376.98 sf	31.00 /mh	3,740	1.50 /sf	594	-	-	-	-	-	-	4,333	5,829
	Formwork S.O.G. Const Joints < 1'	3100.120	8.04 sf	31.00 /mh	115	1.50 /sf	13	-	-	-	-	-	-	127	173
	CJ Prep Slab	3350.170	8.04 sf	31.00 /mh	6	0.15 /sf	1	-	-	-	-	-	-	7	10
	Finegrade Below Concrete	3150.650	372.40 sf	31.00 /mh	231	-	-	-	-	-	-	-	-	231	323
	Finish- Hard Trowel	3350.110	372.40 sf	31.00 /mh	162	/sf	-	-	-	-	-	-	-	162	226
	Liquid Curing Compounds	3390.170	372.40 sf	31.00 /mh	23	0.06 /sf	22	-	-	-	-	-	-	45	55
	Chamfer 3/4"	3150.625	560.00 lf	31.00 /mh	868	0.20 /lf	118	-	-	-	-	-	-	986	1,333
	Oil SOG Form	3100.310	385.02 sf	31.00 /mh	0	0.02 /sf	8	-	-	-	-	-	-	8	8
	Nails and Hardware	3150.200	376.98 sf	31.00 /mh	0	0.04 /sf	15	-	-	-	-	-	-	15	15
	Dimension Lumber	3150.200	376.98 sf	31.00 /mh	0	0.50 /sf	188	-	-	-	-	-	-	189	189
	Drill and Epoxy #5	3210.101	560.00 ea	31.00 /mh	5,208	5.00 /ea	2,940	-	-	-	-	-	-	8,148	10,231
	Step Feed Curb at botom PEMB dumpster, elect and press rooms		9.24 cy		12,192		5,530	/cy						17,722	22,599
	0302- Step Feed Chem Room Sump Slabs														
	5000 psi Concrete	3310.100	5.33 cy	-	-	165.00 /cy	941	-	-	-	-	-	-	941	941
	Pump Place Slab on Grade	3310.230	5.33 cy	31.00 /mh	265	-	-	-	-	-	-	31.26 /cy	178	444	550
	Formwork S.O.G. Edge Form < 1'	3100.120	96.00 sf	31.00 /mh	952	1.50 /sf	151	-	-	-	-	-	-	1,104	1,484
	Finegrade Below Concrete	3150.650	144.00 sf	31.00 /mh	89	-	-	-	-	-	-	-	-	89	125
	Finish- Hard Trowel	3350.110	144.00 sf	31.00 /mh	63	/sf	-	-	-	-	-	-	-	63	88
	Liquid Curing Compounds	3390.170	144.00 sf	31.00 /mh	9	0.06 /sf	9	-	-	-	-	-	-	18	21
	Waterstop 6" Flat	3510.610	64.00 lf	31.00 /mh	198	5.00 /lf	336	-	-	-	-	-	-	534	614
	Oil SOG Form	3100.310	96.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	96.00 sf	31.00 /mh	0	0.04 /sf	4	-	-	-	-	-	-	4	4
	Dimension Lumber	3150.200	96.00 sf	31.00 /mh	0	0.50 /sf	48	-	-	-	-	-	-	48	48

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	Step Feed Chem Room Sump Slabs		5.33 cy		1,577		1,491	/cy					178	3,246	3,877
0302-	Step Feed Chem Building Rooms Base Slab														
	5000 psi Concrete	3310.100	63.00 cy	-	-	165.00 /cy	11,123	-	-	-	-	-	-	11,123	11,123
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	63.00 cy	31.00 /mh	2,612	-	-	-	-	-	-	31.26 /cy	2,107	4,719	5,764
	Formwork S.O.G. Edge Form > 1'	3100.120	195.00 sf	31.00 /mh	1,934	1.50 /sf	307	-	-	-	-	-	-	2,242	3,015
	Formwork S.O.G. Const Joints > 1'	3100.120	27.50 sf	31.00 /mh	392	1.50 /sf	43	-	-	-	-	-	-	435	592
	CJ Prep Slab	3350.170	27.50 sf	31.00 /mh	21	0.15 /sf	4	-	-	-	-	-	-	25	34
	Finegrade Below Concrete	3150.650	1,232.00 sf	31.00 /mh	764	-	-	-	-	-	-	-	-	764	1,069
	Finish- Hard Trowel	3350.110	1,232.00 sf	31.00 /mh	535	/sf		-	-	-	-	-	-	535	749
	Liquid Curing Compounds	3390.170	1,232.00 sf	31.00 /mh	76	0.06 /sf	74	-	-	-	-	-	-	150	181
	Blockouts in Concrete	3150.194	48.00 sf	31.00 /mh	521	2.00 /sf	96	-	-	-	-	-	-	617	825
	10 Mil. Vapor Barrier	3150.630	1,232.00 sf	31.00 /mh	76	0.15 /sf	203	-	-	-	-	-	-	280	310
	Oil SOG Form	3100.310	222.50 sf	31.00 /mh	0	0.02 /sf	4	-	-	-	-	-	-	5	5
	Nails and Hardware	3150.200	195.00 sf	31.00 /mh	0	0.04 /sf	8	-	-	-	-	-	-	8	8
	Dimension Lumber	3150.200	195.00 sf	31.00 /mh	0	0.50 /sf	98	-	-	-	-	-	-	98	98
	Step Feed Chem Building Rooms Base Slab		63.00 cy		6,932		11,960	/cy					2,107	21,000	23,773
0302-	Metal Building Curb at Chem areas and Pump Room Deck Step Feed														
	5000 psi Concrete	3310.100	10.56 cy	-	-	165.00 /cy	1,865	-	-	-	-	-	-	1,865	1,865
	Slab Placement Count	3310.360	6.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Buggy Place Slab on Grade	3310.230	10.56 cy	31.00 /mh	1,401	-	-	-	-	-	-	-	-	1,401	1,962
	Formwork S.O.G. Edge Form < 1'	3100.120	430.58 sf	31.00 /mh	4,271	1.50 /sf	678	-	-	-	-	-	-	4,950	6,658
	Formwork S.O.G. Const Joints < 1'	3100.120	14.74 sf	31.00 /mh	210	1.50 /sf	23	-	-	-	-	-	-	233	317
	CJ Prep Slab	3350.170	14.74 sf	31.00 /mh	11	0.15 /sf	2	-	-	-	-	-	-	14	18
	Finegrade Below Concrete	3150.650	425.60 sf	31.00 /mh	264	-	-	-	-	-	-	-	-	264	369
	Finish- Hard Trowel	3350.110	425.60 sf	31.00 /mh	185	/sf		-	-	-	-	-	-	185	259
	Liquid Curing Compounds	3390.170	425.60 sf	31.00 /mh	26	0.06 /sf	26	-	-	-	-	-	-	52	62
	Chamfer 3/4"	3150.625	640.00 lf	31.00 /mh	992	0.20 /lf	134	-	-	-	-	-	-	1,126	1,523
	Oil SOG Form	3100.310	445.32 sf	31.00 /mh	0	0.02 /sf	9	-	-	-	-	-	-	9	9
	Nails and Hardware	3150.200	430.58 sf	31.00 /mh	0	0.04 /sf	17	-	-	-	-	-	-	17	17
	Dimension Lumber	3150.200	430.58 sf	31.00 /mh	0	0.50 /sf	215	-	-	-	-	-	-	215	215
	Drill and Epoxy #5	3210.101	640.00 ea	31.00 /mh	5,952	5.00 /ea	3,360	-	-	-	-	-	-	9,312	11,693
	Metal Building Curb at Chem areas and Pump Room Deck Step Feed		10.56 cy		13,314		6,330	/cy						19,643	24,968
0302-	Step Feed Building HVAC Pads														
	5000 psi Concrete	3310.100	6.67 cy	-	-	165.00 /cy	1,177	-	-	-	-	-	-	1,177	1,177
	Crane Place Slab on Grade	3310.230	6.67 cy	31.00 /mh	332	-	-	-	-	-	-	-	-	332	464
	Formwork S.O.G. Edge Form > 1'	3100.120	96.00 sf	31.00 /mh	952	1.50 /sf	151	-	-	-	-	-	-	1,104	1,484
	Finegrade Below Concrete	3150.650	120.00 sf	31.00 /mh	74	-	-	-	-	-	-	-	-	74	104
	Finish- Hard Trowel	3350.110	120.00 sf	31.00 /mh	52	/sf		-	-	-	-	-	-	52	73
	Liquid Curing Compounds	3390.170	120.00 sf	31.00 /mh	7	0.06 /sf	7	-	-	-	-	-	-	15	18
	Blockouts in Concrete	3150.194	16.00 sf	31.00 /mh	174	2.00 /sf	32	-	-	-	-	-	-	206	275
	Chamfer 3/4"	3150.625	64.00 lf	31.00 /mh	99	0.20 /lf	13	-	-	-	-	-	-	113	152
	Road Base Below Concrete	2305.300	4.44 cy	31.00 /mh	54	22.00 /ton	194	-	-	-	-	-	-	248	269
	Oil SOG Form	3100.310	96.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	96.00 sf	31.00 /mh	0	0.04 /sf	4	-	-	-	-	-	-	4	4
	Dimension Lumber	3150.200	96.00 sf	31.00 /mh	0	0.50 /sf	48	-	-	-	-	-	-	48	48
	SOG Rebar	3210.104	0.83 tn	31.00 /mh	646	1,400.00 /tn	1,225	-	-	-	-	-	-	1,871	2,129
	Step Feed Building HVAC Pads		6.67 cy		2,391		2,853	/cy						5,244	6,200
0303-	Step Feed Basement Sump Walls														
	Crane Place Walls	3310.260	1.48 cy	31.00 /mh	98	-	-	-	-	-	-	-	-	98	138
	5000 psi Concrete	3310.100	1.48 cy	-	-	165.00 /cy	262	-	-	-	-	-	-	262	262
	Job Built with Plyform 0-4'	3100.180	80.00 sf	31.00 /mh	744	1.50 /sf	126	-	-	-	-	-	-	870	1,168
	CJ Prep Walls	3350.170	20.00 sf	31.00 /mh	186	0.15 /sf	3	-	-	-	-	-	-	189	263
	Finish- Top of Wall	3350.110	20.00 sf	31.00 /mh	9	/sf		-	-	-	-	-	-	9	12
	Liquid Curing Walls	3390.170	100.00 sf	31.00 /mh	3	0.06 /sf	6	-	-	-	-	-	-	9	10
	Grind/Patch Walls	3350.130	80.00 sf	31.00 /mh	30	0.05 /sf	4	-	-	-	-	-	-	34	46
	Waterstop 6" Flat	3510.610	20.00 lf	31.00 /mh	56	5.00 /lf	105	-	-	-	-	-	-	161	183
	Rub Walls	3350.140	40.00 sf	31.00 /mh	50	0.15 /sf	6	-	-	-	-	-	-	56	75
	Oil Wall Forms	3100.310	80.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	80.00 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Form Ties 12"	3150.632	20.00 ea	31.00 /mh	0	2.35 /ea	47	-	-	-	-	-	-	47	47
	Dimension Lumber	3150.200	80.00 sf	31.00 /mh	0	0.50 /sf	40	-	-	-	-	-	-	40	40
	Rebar Templates	3200.980	20.00 lf	31.00 /mh	31	0.50 /lf	10	-	-	-	-	-	-	41	53
	Step Feed Basement Sump Walls		1.48 cy		1,206		613	/cy						1,820	2,302
0303-	Step Feed Basin Basement Walls														
	Pump Place Walls	3310.260	179.90 cy	31.00 /mh	4,177	-	-	-	-	-	-	31.26 /cy	6,017	10,194	11,865
	5000 psi Concrete	3310.100	179.90 cy	-	-	165.00 /cy	31,761	-	-	-	-	-	-	31,761	31,761
	Wall Placement Count	3310.360	4.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Gang Form System 12-16'	3100.180	6,206.00 sf	31.00 /mh	28,858	2.50 /sf	16,291	-	-	-	-	-	-	45,149	56,692
	Wall Pilaster Forms	3150.192	289.71 sf	31.00 /mh	3,143	1.50 /sf	456	-	-	-	-	-	-	3,600	4,857
	Wall Bulkhead Forms	3150.192	87.00 sf	31.00 /mh	1,241	1.50 /sf	137	-	-	-	-	-	-	1,378	1,874

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0303- Step Feed Basin Basement Walls														
	CJ Prep Walls	3350.170	408.00 sf	31.00 /mh	316	0.15 /sf	61	-	-	-	-	-	-	377	504
	Finish- Top of Wall	3350.110	321.00 sf	31.00 /mh	139	/sf		-	-	-	-	-	-	139	195
	Liquid Curing Walls	3390.170	6,816.71 sf	31.00 /mh	211	0.06 /sf	409	-	-	-	-	-	-	620	705
	Grind/Patch Walls	3350.130	6,495.71 sf	31.00 /mh	2,416	0.05 /sf	325	-	-	-	-	-	-	2,741	3,708
	Blockouts in Concrete	3150.194	248.00 sf	31.00 /mh	2,691	2.00 /sf	496	-	-	-	-	-	-	3,187	4,263
	Waterstop 6" Flat	3510.610	58.00 lf	31.00 /mh	180	5.00 /lf	305	-	-	-	-	-	-	484	556
	Rub Walls	3350.140	3,103.00 sf	31.00 /mh	3,848	0.15 /sf	465	-	-	-	-	-	-	4,313	5,852
	Oil Wall Forms	3100.310	6,495.71 sf	31.00 /mh	2	0.02 /sf	130	-	-	-	-	-	-	132	133
	Nails and Hardware	3150.200	6,495.71 sf	31.00 /mh	2	0.04 /sf	260	-	-	-	-	-	-	262	263
	Form Ties 18"	3150.632	1,551.50 ea	31.00 /mh	0	2.55 /ea	3,956	-	-	-	-	-	-	3,957	3,957
	Form Ties Specialty	3150.632	43.50 ea	31.00 /mh	270	5.00 /ea	218	-	-	-	-	-	-	487	595
	Dimension Lumber	3150.200	6,495.71 sf	31.00 /mh	2	0.50 /sf	3,248	-	-	-	-	-	-	3,250	3,251
	Rebar Templates	3200.980	214.00 lf	31.00 /mh	332	0.50 /lf	107	-	-	-	-	-	-	439	571
	Bonding agent and patch tie hole	3350.130	516.00 ea	31.00 /mh	2,399	2.00 /ea	1,032	-	-	-	-	-	-	3,431	4,391
	Grout Slurry Bottom of Walls	3150.200	106.00 cf	31.00 /mh	822	15.00 /cf	1,590	-	-	-	-	-	-	2,412	2,740
	Rebar Formsavers # 6	3210.108	22.00 ea	31.00 /mh	341	30.00 /ea	660	-	-	-	-	-	-	1,001	1,137
	Step Feed Basin Basement Walls		179.90 cy		51,390		61,906	/cy					6,017	119,314	139,870
	0303- Step Feed Building Concrete Stem Walls														
	Pump Place Walls	3310.260	61.51 cy	31.00 /mh	1,734	-	-	-	-	-	-	31.26 /cy	2,057	3,792	4,485
	5000 psi Concrete	3310.100	61.51 cy	-	-	165.00 /cy	10,860	-	-	-	-	-	-	10,860	10,860
	Wall Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Rented Form System 0-4'	3100.180	1,648.40 sf	31.00 /mh	12,775	1.50 /sf	2,596	-	-	-	-	-	-	15,371	20,481
	Wall Pilaster Forms	3150.192	325.34 sf	31.00 /mh	3,530	1.50 /sf	512	-	-	-	-	-	-	4,042	5,454
	Wall Bulkhead Forms	3150.192	42.35 sf	31.00 /mh	604	1.50 /sf	67	-	-	-	-	-	-	671	912
	CJ Prep Walls	3350.170	476.55 sf	31.00 /mh	369	0.15 /sf	71	-	-	-	-	-	-	441	589
	Finish- Top of Wall	3350.110	434.20 sf	31.00 /mh	188	/sf		-	-	-	-	-	-	188	264
	Liquid Curing Walls	3390.170	2,407.94 sf	31.00 /mh	75	0.06 /sf	144	-	-	-	-	-	-	219	249
	Grind/Patch Walls	3350.130	1,973.74 sf	31.00 /mh	734	0.05 /sf	99	-	-	-	-	-	-	833	1,127
	Blockouts in Concrete	3150.194	64.00 sf	31.00 /mh	694	2.00 /sf	128	-	-	-	-	-	-	822	1,100
	Rub Walls	3350.140	80.00 sf	31.00 /mh	99	0.15 /sf	12	-	-	-	-	-	-	111	151
	Oil Wall Forms	3100.310	1,973.74 sf	31.00 /mh	1	0.02 /sf	39	-	-	-	-	-	-	40	40
	Nails and Hardware	3150.200	1,973.74 sf	31.00 /mh	1	0.04 /sf	79	-	-	-	-	-	-	80	80
	Form Ties 20"	3150.632	412.10 ea	31.00 /mh	0	2.80 /ea	1,154	-	-	-	-	-	-	1,154	1,154
	Form Ties Specialty	3150.632	34.87 ea	31.00 /mh	216	5.00 /ea	174	-	-	-	-	-	-	391	477
	Dimension Lumber	3150.200	1,973.74 sf	31.00 /mh	1	0.50 /sf	987	-	-	-	-	-	-	987	988
	Rebar Templates	3200.980	260.00 lf	31.00 /mh	403	0.50 /lf	130	-	-	-	-	-	-	533	694
	Step Feed Building Concrete Stem Walls		61.51 cy		21,425		17,053	/cy					2,057	40,535	49,105
	0304- Step Feed Basement Upper level Deck														
	5000 psi Concrete	3310.100	88.00 cy	-	-	165.00 /cy	15,536	-	-	-	-	-	-	15,536	15,536
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Suspended Slab	3310.240	88.00 cy	31.00 /mh	2,481	-	-	-	-	-	-	31.26 /cy	2,943	5,425	6,417
	Shore Suspended Slab 0-15'	3100.124	1,469.14 sf	31.00 /mh	15,940	4.25 /sf	6,556	-	-	-	-	-	-	22,496	28,872
	Slab Edge Form > 1'	3100.124	324.00 sf	31.00 /mh	5,022	2.00 /sf	648	-	-	-	-	-	-	5,670	7,679
	Suspended Slab Const Joint	3100.124	39.00 sf	31.00 /mh	423	1.50 /sf	59	-	-	-	-	-	-	482	651
	CJ Prep Elevated Slab CJ	3350.170	39.00 sf	31.00 /mh	30	0.20 /sf	8	-	-	-	-	-	-	38	50
	Finish- Hard Trowel	3350.110	1,469.14 sf	31.00 /mh	638	/sf		-	-	-	-	-	-	638	893
	Liquid Curing Compounds	3390.170	1,469.14 sf	31.00 /mh	91	0.06 /sf	88	-	-	-	-	-	-	179	216
	Grind and Patch Deck Bottom	3350.130	1,469.14 sf	31.00 /mh	547	0.05 /sf	73	-	-	-	-	-	-	620	839
	Blockouts in Concrete	3150.194	24.00 sf	31.00 /mh	260	2.00 /sf	48	-	-	-	-	-	-	308	413
	Chamfer 3/4"	3150.625	100.00 lf	31.00 /mh	155	0.20 /lf	21	-	-	-	-	-	-	176	238
	Oil Suspended Slab Frm	3100.310	1,469.14 sf	31.00 /mh	0	0.02 /sf	29	-	-	-	-	-	-	30	30
	Nails and Hardware	3150.200	1,469.14 sf	31.00 /mh	0	0.04 /sf	59	-	-	-	-	-	-	59	59
	Rub Slab Bottom	3350.140	1,469.14 sf	31.00 /mh	1,366	0.12 /sf	176	-	-	-	-	-	-	1,543	2,089
	Beam Side Forms	3100.140	200.00 sf	31.00 /mh	2,480	1.50 /sf	315	-	-	-	-	-	-	2,795	3,787
	Beam Bottom Forms	3100.140	200.00 sf	31.00 /mh	2,170	4.25 /sf	893	-	-	-	-	-	-	3,063	3,931
	Rebar Formsavers # 6	3210.108	170.00 ea	31.00 /mh	2,635	30.00 /ea	5,100	-	-	-	-	-	-	7,735	8,789
	Step Feed Basement Upper level Deck		88.00 cy		34,240		29,609	/cy					2,943	66,792	80,488
	0310- Step Feed Basement Pump Pads														
	Equipment Pad Form 6"	3100.164	48.00 sf	31.00 /mh	491	1.50 /sf	76	-	-	-	-	-	-	567	763
	Oil Equipment Pad Form	3100.310	48.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	5000 psi Concrete	3310.100	1.67 cy	-	-	165.00 /cy	294	-	-	-	-	-	-	294	294
	Other Placement Count	3310.360	6.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Buggy Place Equipment Pads	3310.300	1.67 cy	31.00 /mh	221	-	-	-	-	-	-	-	-	221	310
	Liquid Curing Compounds	3390.170	90.00 sf	31.00 /mh	6	0.06 /sf	5	-	-	-	-	-	-	11	13
	Finish- Hard Trowel	3350.110	90.00 sf	31.00 /mh	39	/sf		-	-	-	-	-	-	39	55
	Chamfer	3150.625	120.00 lf	31.00 /mh	55	0.20 /lf	25	-	-	-	-	-	-	81	103
	Misc. Pad Rebar	3210.104	0.21 tn	31.00 /mh	161	1,400.00 /tn	305	-	-	-	-	-	-	466	531
	Nails and Hardware	3150.200	48.00 sf	31.00 /mh	0	0.04 /sf	2	-	-	-	-	-	-	2	2
	Drill and Epoxy #4	3210.101	120.00 ea	31.00 /mh	744	4.00 /ea	504	-	-	-	-	-	-	1,248	1,546
	Step Feed Basement Pump Pads		1.67 cy		1,718		1,213	/cy						2,930	3,617
	0310- Screw Press Pads Step Feed 8 ea														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
03	10- Screw Press Pads Step Feed 8 ea														
	Equipment Pad Form > 8"	3100.164	160.00 sf	31.00 /mh	1,637	1.50 /sf	252	-	-	-	-	-	-	1,889	2,544
	Oil Equipment Pad Form	3100.310	160.00 sf	31.00 /mh	0	0.02 /sf	3	-	-	-	-	-	-	3	3
	5000 psi Concrete	3310.100	3.56 cy	-	-	165.00 /cy	628	-	-	-	-	-	-	628	628
	Other Placement Count	3310.360	8.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Buggy Place Equipment Pads	3310.300	3.56 cy	31.00 /mh	472	-	-	-	-	-	-	-	-	472	661
	Liquid Curing Compounds	3390.170	48.00 sf	31.00 /mh	3	0.06 /sf	3	-	-	-	-	-	-	6	7
	Finish- Hard Trowel	3350.110	48.00 sf	31.00 /mh	21	/sf		-	-	-	-	-	-	21	29
	Chamfer	3150.625	96.00 lf	31.00 /mh	149	0.20 /lf	20	-	-	-	-	-	-	169	228
	Misc. Pad Rebar	3210.104	0.44 tn	31.00 /mh	344	1,400.00 /tn	652	-	-	-	-	-	-	997	1,134
	Nails and Hardware	3150.200	160.00 sf	31.00 /mh	0	0.04 /sf	6	-	-	-	-	-	-	6	6
	Drill and Epoxy #4	3210.101	96.00 ea	31.00 /mh	595	4.00 /ea	403	-	-	-	-	-	-	998	1,236
	Screw Press Pads Step Feed 8 ea		3.56 cy		3,221		1,968	/cy						5,189	6,477
03	10- Step Feed Electrical Room Equipment Pads														
	Equipment Pad Form 6"	3100.164	113.00 sf	31.00 /mh	1,156	1.50 /sf	178	-	-	-	-	-	-	1,334	1,796
	Oil Equipment Pad Form	3100.310	113.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	5000 psi Concrete	3310.100	5.19 cy	-	-	165.00 /cy	916	-	-	-	-	-	-	916	916
	Other Placement Count	3310.360	9.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Buggy Place Equipment Pads	3310.300	5.19 cy	31.00 /mh	688	-	-	-	-	-	-	-	-	688	963
	Liquid Curing Compounds	3390.170	280.00 sf	31.00 /mh	17	0.06 /sf	17	-	-	-	-	-	-	34	41
	Finish- Hard Trowel	3350.110	280.00 sf	31.00 /mh	122	/sf		-	-	-	-	-	-	122	170
	Chamfer	3150.625	212.00 lf	31.00 /mh	98	0.20 /lf	45	-	-	-	-	-	-	142	182
	Misc. Pad Rebar	3210.104	0.65 tn	31.00 /mh	502	1,400.00 /tn	952	-	-	-	-	-	-	1,454	1,655
	Nails and Hardware	3150.200	113.00 sf	31.00 /mh	0	0.04 /sf	5	-	-	-	-	-	-	5	5
	Drill and Epoxy #4	3210.101	246.00 ea	31.00 /mh	1,525	4.00 /ea	1,033	-	-	-	-	-	-	2,558	3,168
	Step Feed Electrical Room Equipment Pads		5.19 cy		4,108		3,147	/cy						7,255	8,899
03	10- Step Feed Building Chem Room and Blower Room Equip Pads														
	Equipment Pad Form > 8"	3100.164	188.00 sf	31.00 /mh	1,923	1.50 /sf	296	-	-	-	-	-	-	2,219	2,989
	Oil Equipment Pad Form	3100.310	188.00 sf	31.00 /mh		0.02 /sf	4	-	-	-	-	-	-	4	4
	5000 psi Concrete	3310.100	7.11 cy	-	-	165.00 /cy	1,255	-	-	-	-	-	-	1,255	1,255
	Buggy Place Equipment Pads	3310.300	7.11 cy	31.00 /mh	944	-	-	-	-	-	-	-	-	944	1,321
	Liquid Curing Compounds	3390.170	192.00 sf	31.00 /mh	12	0.06 /sf	12	-	-	-	-	-	-	23	28
	Finish- Hard Trowel	3350.110	192.00 sf	31.00 /mh	83	/sf		-	-	-	-	-	-	83	117
	Chamfer	3150.625	232.00 lf	31.00 /mh	107	0.20 /lf	49	-	-	-	-	-	-	156	199
	Misc. Pad Rebar	3210.104	0.89 tn	31.00 /mh	689	1,400.00 /tn	1,306	-	-	-	-	-	-	1,995	2,271
	Nails and Hardware	3150.200	188.00 sf	31.00 /mh	0	0.04 /sf	8	-	-	-	-	-	-	8	8
	Drill and Epoxy #4	3210.101	232.00 ea	31.00 /mh	1,438	4.00 /ea	974	-	-	-	-	-	-	2,413	2,988
	Step Feed Building Chem Room and Blower Room Equip Pads		7.11 cy		5,197		3,904	/cy						9,100	11,179
03	10- Step Feed Building Door Stoops at Chem Area														
	Equipment Pad Form 8"	3100.164	52.26 sf	31.00 /mh	535	1.50 /sf	82	-	-	-	-	-	-	617	831
	Oil Equipment Pad Form	3100.310	52.26 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	5000 psi Concrete	3310.100	4.00 cy	-	-	165.00 /cy	706	-	-	-	-	-	-	706	706
	Other Placement Count	3310.360	3.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Buggy Place Equipment Pads	3310.300	4.00 cy	31.00 /mh	531	-	-	-	-	-	-	-	-	531	743
	Liquid Curing Compounds	3390.170	108.00 sf	31.00 /mh	7	0.06 /sf	6	-	-	-	-	-	-	13	16
	Finish- Hard Trowel	3350.110	108.00 sf	31.00 /mh	47	/sf		-	-	-	-	-	-	47	66
	Chamfer	3150.625	120.00 lf	31.00 /mh	55	0.20 /lf	25	-	-	-	-	-	-	81	103
	Misc. Pad Rebar	3210.104	0.34 tn	31.00 /mh	260	1,400.00 /tn	493	-	-	-	-	-	-	752	856
	Nails and Hardware	3150.200	52.26 sf	31.00 /mh	0	0.04 /sf	2	-	-	-	-	-	-	2	2
	Drill and Epoxy #4	3210.101	120.00 ea	31.00 /mh	744	4.00 /ea	504	-	-	-	-	-	-	1,248	1,546
	Step Feed Building Door Stoops at Chem Area		4.00 cy		2,178		1,820	/cy						3,998	4,869
	Concrete Concrete				205,086		231,767						24,503	461,356	543,390
	350 Step Feed Process Building				205,086		231,767	/LS					24,503	461,356	543,390
400	Orbal Anaerobic Reactor														
	Concrete Concrete														
03	02- Orbal Reactor Stair Bottom Slab														
	5000 psi Concrete	3310.100	1.67 cy	-	-	165.00 /cy	294	-	-	-	-	-	-	294	294
	Truck Place Slab on Grade	3310.230	1.67 cy	31.00 /mh	221	-	-	-	-	-	-	-	-	221	310
	Formwork S.O.G. Edge Form > 1'	3100.120	33.00 sf	31.00 /mh	327	1.50 /sf	52	-	-	-	-	-	-	379	510
	Finegrade Below Concrete	3150.650	30.00 sf	31.00 /mh	19	-	-	-	-	-	-	-	-	19	26
	Finish- Hard Trowel	3350.110	30.00 sf	31.00 /mh	13	/sf		-	-	-	-	-	-	13	18
	Liquid Curing Compounds	3390.170	30.00 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	4	4
	Oil SOG Form	3100.310	33.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Nails and Hardware	3150.200	33.00 sf	31.00 /mh	0	0.04 /sf	1	-	-	-	-	-	-	1	1
	Dimension Lumber	3150.200	33.00 sf	31.00 /mh	0	0.50 /sf	17	-	-	-	-	-	-	17	17
	SOG Rebar	3210.104	0.21 tn	31.00 /mh	161	1,400.00 /tn	305	-	-	-	-	-	-	466	531
	Orbal Reactor Stair Bottom Slab		1.67 cy		743		672	/cy						1,415	1,712
03	03- Orbal Selector Effluent Box Walls														
	Crane Place Walls	3310.260	2.08 cy	31.00 /mh	414	-	-	-	-	-	-	-	-	414	580
	5000 psi Concrete	3310.100	2.08 cy	-	-	165.00 /cy	367	-	-	-	-	-	-	367	367
	Wall Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0303-	Orbal Selector Effluent Box Walls														
	Job Built with Plyform 0-4'	3100.180	96.00 sf	31.00 /mh	1,339	1.50 /sf	151	-	-	-	-	-	-	1,490	2,026
	CJ Prep Walls	3350.170	18.72 sf	31.00 /mh	15	0.15 /sf	3	-	-	-	-	-	-	17	23
	Finish- Top of Wall	3350.110	18.72 sf	31.00 /mh	8	/sf		-	-	-	-	-	-	8	11
	Liquid Curing Walls	3390.170	114.72 sf	31.00 /mh	4	0.06 /sf	7	-	-	-	-	-	-	10	12
	Grind/Patch Walls	3350.130	96.00 sf	31.00 /mh	36	0.05 /sf	5	-	-	-	-	-	-	41	55
	Waterstop Adeka or Swellstop	3510.610	26.00 lf	31.00 /mh	73	8.50 /lf	232	-	-	-	-	-	-	305	334
	Chamfer 3/4"	3150.625	26.00 lf	31.00 /mh	40	0.20 /lf	5	-	-	-	-	-	-	46	62
	Rub Walls	3350.140	96.00 sf	31.00 /mh	119	0.15 /sf	14	-	-	-	-	-	-	133	181
	Oil Wall Forms	3100.310	96.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	96.00 sf	31.00 /mh	0	0.04 /sf	4	-	-	-	-	-	-	4	4
	Form Ties 14"	3150.632	24.00 ea	31.00 /mh	0	2.40 /ea	58	-	-	-	-	-	-	58	58
	Dimension Lumber	3150.200	96.00 sf	31.00 /mh	0	0.50 /sf	48	-	-	-	-	-	-	48	48
	Rebar Templates	3200.980	16.00 lf	31.00 /mh	25	0.50 /lf	8	-	-	-	-	-	-	33	43
	Orbal Selector Effluent Box Walls		2.08 cy		2,072		904	/cy						2,976	3,805
0304-	Orbal Reactor Effluent Box Susp Slab														
	5000 psi Concrete	3310.100	3.03 cy	-	-	165.00 /cy	535	-	-	-	-	-	-	535	535
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Crane Place Suspended Slab	3310.240	3.03 cy	31.00 /mh	302	-	-	-	-	-	-	-	-	302	423
	Shore Suspended Slab 0-15'	3100.124	120.00 sf	31.00 /mh	1,674	4.25 /sf	536	-	-	-	-	-	-	2,210	2,879
	Slab Edge Form > 1'	3100.124	23.40 sf	31.00 /mh	435	2.00 /sf	47	-	-	-	-	-	-	482	656
	Finish- Hard Trowel	3350.110	70.00 sf	31.00 /mh	30	/sf		-	-	-	-	-	-	30	43
	Liquid Curing Compounds	3390.170	70.00 sf	31.00 /mh	4	0.06 /sf	4	-	-	-	-	-	-	9	10
	Grind and Patch Deck Bottom	3350.130	70.00 sf	31.00 /mh	26	0.05 /sf	4	-	-	-	-	-	-	30	40
	Blockouts in Concrete	3150.194	16.00 sf	31.00 /mh	174	2.00 /sf	32	-	-	-	-	-	-	206	275
	Waterstop Adeka or Swellstop	3510.610	20.00 lf	31.00 /mh	62	8.50 /lf	179	-	-	-	-	-	-	241	265
	Chamfer 3/4"	3150.625	20.00 lf	31.00 /mh	31	0.20 /lf	4	-	-	-	-	-	-	35	48
	Oil Suspended Slab Frm	3100.310	70.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Nails and Hardware	3150.200	70.00 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Orbal Reactor Effluent Box Susp Slab		3.03 cy		2,738		1,344	/cy						4,083	5,178
0304-	Orbal Reactor Stair Top deck														
	5000 psi Concrete	3310.100	3.00 cy	-	-	165.00 /cy	530	-	-	-	-	-	-	530	530
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Crane Place Suspended Slab	3310.240	3.00 cy	31.00 /mh	398	-	-	-	-	-	-	-	-	398	557
	Shore Suspended Slab 15-up	3100.124	90.00 sf	31.00 /mh	1,674	4.25 /sf	402	-	-	-	-	-	-	2,076	2,745
	Slab Edge Form < 1'	3100.124	21.58 sf	31.00 /mh	301	2.00 /sf	45	-	-	-	-	-	-	346	467
	Finish- Hard Trowel	3350.110	90.00 sf	31.00 /mh	39	/sf		-	-	-	-	-	-	39	55
	Liquid Curing Compounds	3390.170	90.00 sf	31.00 /mh	6	0.06 /sf	5	-	-	-	-	-	-	11	13
	Grind and Patch Deck Bottom	3350.130	90.00 sf	31.00 /mh	33	0.05 /sf	5	-	-	-	-	-	-	38	51
	Chamfer 3/4"	3150.625	46.00 lf	31.00 /mh	71	0.20 /lf	10	-	-	-	-	-	-	81	109
	Oil Suspended Slab Frm	3100.310	90.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	90.00 sf	31.00 /mh	0	0.04 /sf	4	-	-	-	-	-	-	4	4
	Rub Slab Bottom	3350.140	90.00 sf	31.00 /mh	84	0.12 /sf	11	-	-	-	-	-	-	95	128
	Orbal Reactor Stair Top deck		3.00 cy		2,606		1,012	/cy						3,619	4,661
0308-	Orbal Reactor Basin Base Slab														
	5000 psi Concrete	3310.100	66.09 cy	-	-	165.00 /cy	11,668	-	-	-	-	-	-	11,668	11,668
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	66.09 cy	31.00 /mh	1,535	-	-	-	-	-	-	31.26 /cy	2,211	3,745	4,359
	Formwork S.O.G. Edge Form > 1' Circular Slab	3100.120	178.44 sf	31.00 /mh	1,770	1.50 /sf	281	-	-	-	-	-	-	2,051	2,759
	Finegrade Below Concrete	3150.650	1,256.64 sf	31.00 /mh	779	-	-	-	-	-	-	-	-	779	1,091
	Finish- Hard Trowel	3350.110	1,256.64 sf	31.00 /mh	545	/sf		-	-	-	-	-	-	545	764
	Liquid Curing Compounds	3390.170	1,256.64 sf	31.00 /mh	78	0.06 /sf	75	-	-	-	-	-	-	153	184
	Waterstop 6" Flat	3510.610	125.00 lf	31.00 /mh	388	5.00 /lf	656	-	-	-	-	-	-	1,044	1,199
	Oil SOG Form	3100.310	178.44 sf	31.00 /mh	0	0.02 /sf	4	-	-	-	-	-	-	4	4
	Nails and Hardware	3150.200	178.44 sf	31.00 /mh	0	0.04 /sf	7	-	-	-	-	-	-	7	7
	Dimension Lumber	3150.200	178.44 sf	31.00 /mh	0	0.50 /sf	89	-	-	-	-	-	-	89	89
	Waterstop Fitting	3510.610	4.00 ea	31.00 /mh	248	55.00 /ea	231	-	-	-	-	-	-	479	578
	Orbal Reactor Basin Base Slab		66.09 cy		5,343		13,012	/cy					2,211	20,565	22,702
0309-	Orbal Reactor Basin Walls														
	Pump Place Walls	3310.260	98.02 cy	31.00 /mh	3,739	-	-	-	-	-	-	31.26 /cy	3,279	7,017	8,513
	5000 psi Concrete	3310.100	98.02 cy	-	-	165.00 /cy	17,305	-	-	-	-	-	-	17,305	17,305
	Wall Placement Count	3310.360	3.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Radius Gang Forms 16- >	3100.182	4,523.89 sf	31.00 /mh	21,036	4.25 /sf	20,188	-	-	-	-	-	-	41,224	49,638
	Wall Bulkhead Forms	3150.192	70.20 sf	31.00 /mh	1,001	1.50 /sf	111	-	-	-	-	-	-	1,112	1,512
	CJ Prep Walls	3350.170	202.52 sf	31.00 /mh	157	0.15 /sf	30	-	-	-	-	-	-	187	250
	Finish- Top of Wall	3350.110	132.32 sf	31.00 /mh	57	/sf		-	-	-	-	-	-	57	80
	Liquid Curing Walls	3390.170	4,656.22 sf	31.00 /mh	144	0.06 /sf	279	-	-	-	-	-	-	424	481
	Grind/Patch Walls	3350.130	4,523.89 sf	31.00 /mh	1,683	0.05 /sf	226	-	-	-	-	-	-	1,909	2,582
	Blockouts in Concrete	3150.194	24.00 sf	31.00 /mh	260	2.00 /sf	48	-	-	-	-	-	-	308	413
	Waterstop 6" Flat	3510.610	60.00 lf	31.00 /mh	186	5.00 /lf	315	-	-	-	-	-	-	501	575
	Chamfer 3/4"	3150.625	240.00 lf	31.00 /mh	372	0.20 /lf	50	-	-	-	-	-	-	422	571
	Rub Walls	3350.140	2,260.00 sf	31.00 /mh	2,802	0.15 /sf	339	-	-	-	-	-	-	3,141	4,262

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0309- Orbal Reactor Basin Walls														
	Oil Wall Forms	3100.310	4,523.89 sf	31.00 /mh	1	0.02 /sf	90	-	-	-	-	-	-	92	92
	Nails and Hardware	3150.200	4,523.89 sf	31.00 /mh	1	0.04 /sf	181	-	-	-	-	-	-	182	183
	Form Ties 14"	3150.632	1,130.97 ea	31.00 /mh	0	2.40 /ea	2,714	-	-	-	-	-	-	2,715	2,715
	Dimension Lumber	3150.200	4,523.89 sf	31.00 /mh	1	0.50 /sf	2,262	-	-	-	-	-	-	2,263	2,264
	Grout Slurry Bottom of Walls	3150.200	47.00 cf	31.00 /mh	364	15.00 /cf	705	-	-	-	-	-	-	1,069	1,215
	Bonding Agent and C/J prep tie holes	3350.130	383.00 ea	31.00 /mh	1,781	2.00 /ea	766	-	-	-	-	-	-	2,547	3,259
	Rebar Formsavers # 5	3210.108	76.00 ea	31.00 /mh	777	27.00 /ea	2,052	-	-	-	-	-	-	2,829	3,140
	Keyway 12"	3150.620	34.00 lf	31.00 /mh	53	4.00 /lf	143	-	-	-	-	-	-	196	217
	Orbal Reactor Basin Walls		98.02 cy		34,418		47,805	/cy					3,279	85,502	99,270
	Concrete Concrete				47,921		64,750						5,489	118,160	137,329
	400 Orbal Anaerobic Reactor				47,921		64,750	/LS					5,489	118,160	137,329
	550 UV and Digester Blower Building														
	Concrete Concrete														
	0302- UV Building Influent Box Base Slab at 25.96														
	5000 psi Concrete	3310.100	17.33 cy	-	-	165.00 /cy	3,060	-	-	-	-	-	-	3,060	3,060
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	17.33 cy	31.00 /mh	632	-	-	-	-	-	-	31.26 /cy	580	1,212	1,465
	Formwork S.O.G. Edge Form > 1'	3100.120	124.00 sf	31.00 /mh	1,230	1.50 /sf	195	-	-	-	-	-	-	1,425	1,917
	Finegrade Below Concrete	3150.650	234.00 sf	31.00 /mh	145	-	-	-	-	-	-	-	-	145	203
	Finish- Hard Trowel	3350.110	234.00 sf	31.00 /mh	102	/sf		-	-	-	-	-	-	102	142
	Liquid Curing Compounds	3390.170	234.00 sf	31.00 /mh	15	0.06 /sf	14	-	-	-	-	-	-	29	34
	Waterstop 6" Flat	3510.610	62.00 lf	31.00 /mh	192	5.00 /lf	326	-	-	-	-	-	-	518	595
	Oil SOG Form	3100.310	124.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	3	3
	Nails and Hardware	3150.200	124.00 sf	31.00 /mh	0	0.04 /sf	5	-	-	-	-	-	-	5	5
	Dimension Lumber	3150.200	124.00 sf	31.00 /mh	0	0.50 /sf	62	-	-	-	-	-	-	62	62
	UV Building Influent Box Base Slab at 25.96		17.33 cy		2,316		3,664	/cy					580	6,560	7,486
	0302- UV Channel Base Slab														
	5000 psi Concrete	3310.100	74.07 cy	-	-	165.00 /cy	13,078	-	-	-	-	-	-	13,078	13,078
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	74.07 cy	31.00 /mh	2,457	-	-	-	-	-	-	31.26 /cy	2,478	4,935	5,917
	Formwork S.O.G. Edge Form > 1'	3100.120	360.00 sf	31.00 /mh	3,571	1.50 /sf	567	-	-	-	-	-	-	4,138	5,567
	Formwork S.O.G. Const Joints > 1'	3100.120	40.00 sf	31.00 /mh	570	1.50 /sf	63	-	-	-	-	-	-	633	862
	CJ Prep Slab	3350.170	40.00 sf	31.00 /mh	31	0.15 /sf	6	-	-	-	-	-	-	37	49
	Finegrade Below Concrete	3150.650	1,000.00 sf	31.00 /mh	620	-	-	-	-	-	-	-	-	620	868
	Finish- Hard Trowel	3350.110	1,000.00 sf	31.00 /mh	434	/sf		-	-	-	-	-	-	434	608
	Liquid Curing Compounds	3390.170	1,000.00 sf	31.00 /mh	62	0.06 /sf	60	-	-	-	-	-	-	122	147
	Waterstop 6" Flat	3510.610	232.00 lf	31.00 /mh	719	5.00 /lf	1,218	-	-	-	-	-	-	1,937	2,225
	Keyway 4"	3150.620	12.00 lf	31.00 /mh	19	1.00 /lf	13	-	-	-	-	-	-	31	39
	Oil SOG Form	3100.310	400.00 sf	31.00 /mh	0	0.02 /sf	8	-	-	-	-	-	-	8	8
	Nails and Hardware	3150.200	360.00 sf	31.00 /mh	0	0.04 /sf	14	-	-	-	-	-	-	15	15
	Dimension Lumber	3150.200	360.00 sf	31.00 /mh	0	0.50 /sf	180	-	-	-	-	-	-	180	180
	UV Channel Base Slab		74.07 cy		8,484		15,207	/cy					2,478	26,168	29,562
	0302- UV Building Effluent Box Base Slab at 30.61														
	5000 psi Concrete	3310.100	4.89 cy	-	-	165.00 /cy	863	-	-	-	-	-	-	863	863
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	4.89 cy	31.00 /mh	243	-	-	-	-	-	-	31.26 /cy	164	407	504
	Formwork S.O.G. Edge Form > 1'	3100.120	57.00 sf	31.00 /mh	565	1.50 /sf	90	-	-	-	-	-	-	655	881
	Finegrade Below Concrete	3150.650	88.00 sf	31.00 /mh	55	-	-	-	-	-	-	-	-	55	76
	Finish- Hard Trowel	3350.110	88.00 sf	31.00 /mh	38	/sf		-	-	-	-	-	-	38	53
	Liquid Curing Compounds	3390.170	88.00 sf	31.00 /mh	5	0.06 /sf	5	-	-	-	-	-	-	11	13
	Waterstop 6" Flat	3510.610	38.00 lf	31.00 /mh	118	5.00 /lf	200	-	-	-	-	-	-	317	364
	Oil SOG Form	3100.310	57.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Nails and Hardware	3150.200	57.00 sf	31.00 /mh	0	0.04 /sf	2	-	-	-	-	-	-	2	2
	Dimension Lumber	3150.200	57.00 sf	31.00 /mh	0	0.50 /sf	29	-	-	-	-	-	-	29	29
	UV Building Effluent Box Base Slab at 30.61		4.89 cy		1,025		1,190	/cy					164	2,378	2,788
	0302- UV Basin Non Pot Base Slab elev 28.61														
	5000 psi Concrete	3310.100	7.00 cy	-	-	165.00 /cy	1,236	-	-	-	-	-	-	1,236	1,236
	Pump Place Slab on Grade	3310.230	7.00 cy	31.00 /mh	348	-	-	-	-	-	-	31.26 /cy	234	582	722
	Formwork S.O.G. Edge Form > 1'	3100.120	69.00 sf	31.00 /mh	684	1.50 /sf	109	-	-	-	-	-	-	793	1,067
	Finegrade Below Concrete	3150.650	126.00 sf	31.00 /mh	78	-	-	-	-	-	-	-	-	78	109
	Finish- Hard Trowel	3350.110	126.00 sf	31.00 /mh	55	/sf		-	-	-	-	-	-	55	77
	Liquid Curing Compounds	3390.170	126.00 sf	31.00 /mh	8	0.06 /sf	8	-	-	-	-	-	-	15	18
	Waterstop 6" Flat	3510.610	46.00 lf	31.00 /mh	143	5.00 /lf	242	-	-	-	-	-	-	384	441
	Oil SOG Form	3100.310	69.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Nails and Hardware	3150.200	69.00 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Dimension Lumber	3150.200	69.00 sf	31.00 /mh	0	0.50 /sf	35	-	-	-	-	-	-	35	35
	UV Basin Non Pot Base Slab elev 28.61		7.00 cy		1,316		1,632	/cy					234	3,182	3,709
	0302- UV Builldng Stem Wall Footing Pads														
	5000 psi Concrete	3310.100	18.56 cy	-	-	165.00 /cy	3,276	-	-	-	-	-	-	3,276	3,276
	Slab Placement Count	3310.360	12.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0302- UV Building Stem Wall Footing Pads														
	Pump Place Slab on Grade	3310.230	18.56 cy	31.00 /mh	492	-	-	-	-	-	-	31.26 /cy	621	1,113	1,310
	Formwork S.O.G. Edge Form > 1'	3100.120	400.80 sf	31.00 /mh	3,976	1.50 /sf	631	-	-	-	-	-	-	4,607	6,198
	Finegrade Below Concrete	3150.650	300.00 sf	31.00 /mh	186	-	-	-	-	-	-	-	-	186	260
	Finish- Hard Trowel	3350.110	300.00 sf	31.00 /mh	130	/sf		-	-	-	-	-	-	130	182
	Liquid Curing Compounds	3390.170	300.00 sf	31.00 /mh	19	0.06 /sf	18	-	-	-	-	-	-	37	44
	Oil SOG Form	3100.310	400.80 sf	31.00 /mh	0	0.02 /sf	8	-	-	-	-	-	-	8	8
	Nails and Hardware	3150.200	400.80 sf	31.00 /mh	0	0.04 /sf	16	-	-	-	-	-	-	16	16
	Dimension Lumber	3150.200	400.80 sf	31.00 /mh	0	0.50 /sf	200	-	-	-	-	-	-	201	201
	UV Building Stem Wall Footing Pads		18.56 cy		4,804		4,150	/cy					621	9,574	11,495
	0302- UV Building Main Level Slab														
	5000 psi Concrete	3310.100	138.67 cy	-	-	165.00 /cy	24,482	-	-	-	-	-	-	24,482	24,482
	Slab Placement Count	3310.360	3.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	138.67 cy	31.00 /mh	4,600	-	-	-	-	-	-	31.26 /cy	4,638	9,238	11,078
	Formwork S.O.G. Edge Form < 1'	3100.120	495.00 sf	31.00 /mh	4,910	1.50 /sf	780	-	-	-	-	-	-	5,690	7,654
	Formwork S.O.G. Const Joints < 1'	3100.120	108.00 sf	31.00 /mh	1,540	1.50 /sf	170	-	-	-	-	-	-	1,710	2,326
	CJ Prep Slab	3350.170	108.00 sf	31.00 /mh	84	0.15 /sf	16	-	-	-	-	-	-	100	133
	Finegrade Below Concrete	3150.650	3,744.00 sf	31.00 /mh	2,321	-	-	-	-	-	-	-	-	2,321	3,250
	Finish- Hard Trowel	3350.110	3,744.00 sf	31.00 /mh	1,625	/sf		-	-	-	-	-	-	1,625	2,275
	Liquid Curing Compounds	3390.170	3,744.00 sf	31.00 /mh	232	0.06 /sf	225	-	-	-	-	-	-	457	550
	Blockouts in Concrete	3150.194	64.00 sf	31.00 /mh	694	2.00 /sf	128	-	-	-	-	-	-	822	1,100
	10 Mil. Vapor Barrier	3150.630	3,744.00 sf	31.00 /mh	232	0.15 /sf	618	-	-	-	-	-	-	850	943
	Oil SOG Form	3100.310	388.00 sf	31.00 /mh	0	0.02 /sf	8	-	-	-	-	-	-	8	8
	Nails and Hardware	3150.200	280.00 sf	31.00 /mh	0	0.04 /sf	11	-	-	-	-	-	-	11	11
	Dimension Lumber	3150.200	280.00 sf	31.00 /mh	0	0.50 /sf	140	-	-	-	-	-	-	140	140
	Shore Suspended Slab 0-15'	3100.124	80.00 sf	31.00 /mh	868	4.25 /sf	357	-	-	-	-	-	-	1,225	1,572
	UV Building Main Level Slab		138.67 cy		17,107		26,934	/cy					4,638	48,679	55,522
	0302- UV Building HVAC Slabs														
	5000 psi Concrete	3310.100	8.78 cy	-	-	165.00 /cy	1,550	-	-	-	-	-	-	1,550	1,550
	Slab Placement Count	3310.360	3.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Buggy Place Slab on Grade	3310.230	8.78 cy	31.00 /mh	349	-	-	-	-	-	-	-	-	349	489
	Formwork S.O.G. Edge Form > 1'	3100.120	120.00 sf	31.00 /mh	1,190	1.50 /sf	189	-	-	-	-	-	-	1,379	1,856
	Finegrade Below Concrete	3150.650	158.00 sf	31.00 /mh	98	-	-	-	-	-	-	-	-	98	137
	Finish- Hard Trowel	3350.110	158.00 sf	31.00 /mh	69	/sf		-	-	-	-	-	-	69	96
	Liquid Curing Compounds	3390.170	158.00 sf	31.00 /mh	10	0.06 /sf	9	-	-	-	-	-	-	19	23
	Chamfer 3/4"	3150.625	80.00 lf	31.00 /mh	124	0.20 /lf	17	-	-	-	-	-	-	141	190
	Oil SOG Form	3100.310	120.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	120.00 sf	31.00 /mh	0	0.04 /sf	5	-	-	-	-	-	-	5	5
	Dimension Lumber	3150.200	120.00 sf	31.00 /mh	0	0.50 /sf	60	-	-	-	-	-	-	60	60
	SOG Rebar	3210.104	1.10 tn	31.00 /mh	850	1,400.00 /tn	1,613	-	-	-	-	-	-	2,463	2,803
	UV Building HVAC Slabs		8.78 cy		2,690		3,445	/cy						6,135	7,212
	0302-B UV Channel Topping concrete flume fill and fill under eff flume														
	5000 psi Concrete	3310.100	20.44 cy	-	-	165.00 /cy	3,609	-	-	-	-	-	-	3,609	3,609
	Other Placement Count	3310.360	5.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Truck Place Slab on Grade	3310.230	20.44 cy	31.00 /mh	678	-	-	-	-	-	-	-	-	678	949
	Formwork S.O.G. Edge Form > 1'	3100.120	372.00 sf	31.00 /mh	3,690	1.50 /sf	586	-	-	-	-	-	-	4,276	5,752
	Finish- Hard Trowel	3350.110	196.00 sf	31.00 /mh	85	/sf		-	-	-	-	-	-	85	119
	Liquid Curing Compounds	3390.170	196.00 sf	31.00 /mh	12	0.06 /sf	12	-	-	-	-	-	-	24	29
	Blockouts in Concrete	3150.194	24.00 sf	31.00 /mh	260	2.00 /sf	48	-	-	-	-	-	-	308	413
	Waterstop Adeka or Swellstop	3510.610	50.00 lf	31.00 /mh	140	8.50 /lf	446	-	-	-	-	-	-	586	642
	Oil SOG Form	3100.310	372.00 sf	31.00 /mh	0	0.02 /sf	7	-	-	-	-	-	-	8	8
	Nails and Hardware	3150.200	372.00 sf	31.00 /mh	0	0.04 /sf	15	-	-	-	-	-	-	15	15
	Dimension Lumber	3150.200	372.00 sf	31.00 /mh	0	0.50 /sf	186	-	-	-	-	-	-	186	186
	CJ Prep Slab	3350.170	196.00 sf	31.00 /mh	152	0.15 /sf	29	-	-	-	-	-	-	181	242
	Form Special effluent flume	3150.200	1.00 ls	31.00 /mh	1,488	500.00 /ls	500	-	-	-	-	-	-	1,988	2,583
	UV Channel Topping concrete flume fill and fill under eff flume		20.44 cy		6,506		5,439	/cy						11,945	14,547
	0303- UV Building Influent Box Walls elev 25.96 to 29.61														
	Pump Place Walls	3310.260	11.11 cy	31.00 /mh	737	-	-	-	-	-	-	31.26 /cy	372	1,109	1,404
	5000 psi Concrete	3310.100	11.11 cy	-	-	165.00 /cy	1,962	-	-	-	-	-	-	1,962	1,962
	Wall Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Rented Form System 0-4'	3100.180	400.00 sf	31.00 /mh	3,968	1.50 /sf	630	-	-	-	-	-	-	4,598	6,185
	CJ Prep Walls	3350.170	75.00 sf	31.00 /mh	58	0.15 /sf	11	-	-	-	-	-	-	69	93
	Finish- Top of Wall	3350.110	75.00 sf	31.00 /mh	33	/sf		-	-	-	-	-	-	33	46
	Liquid Curing Walls	3390.170	475.00 sf	31.00 /mh	15	0.06 /sf	29	-	-	-	-	-	-	43	49
	Grind/Patch Walls	3350.130	400.00 sf	31.00 /mh	149	0.05 /sf	20	-	-	-	-	-	-	169	228
	Waterstop 6" Flat	3510.610	50.00 lf	31.00 /mh	155	5.00 /lf	263	-	-	-	-	-	-	418	480
	Oil Wall Forms	3100.310	400.00 sf	31.00 /mh	0	0.02 /sf	8	-	-	-	-	-	-	8	8
	Nails and Hardware	3150.200	400.00 sf	31.00 /mh	0	0.04 /sf	16	-	-	-	-	-	-	16	16
	Form Ties 18"	3150.632	100.00 ea	31.00 /mh	0	2.55 /ea	255	-	-	-	-	-	-	255	255
	Dimension Lumber	3150.200	400.00 sf	31.00 /mh	0	0.50 /sf	200	-	-	-	-	-	-	200	200
	Rebar Templates	3200.980	50.00 lf	31.00 /mh	78	0.50 /lf	25	-	-	-	-	-	-	103	134

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	UV Building Influent Box Walls elev 25.96 to 29.61		11.11 cy		5,192		3,418	/cy					372	8,982	11,059
0303-	UV Building Non pot bottom walls														
	Crane Place Walls	3310.260	2.22 cy	31.00 /mh	147	-	-	-	-	-	-	-	-	147	206
	5000 psi Concrete	3310.100	2.22 cy	-	-	165.00 /cy	392	-	-	-	-	-	-	392	392
	Job Built with Plyform 0-4'	3100.180	80.00 sf	31.00 /mh	620	1.50 /sf	126	-	-	-	-	-	-	746	994
	CJ Prep Walls	3350.170	60.00 sf	31.00 /mh	47	0.15 /sf	9	-	-	-	-	-	-	56	74
	Finish- Top of Wall	3350.110	60.00 sf	31.00 /mh	26	/sf		-	-	-	-	-	-	26	36
	Liquid Curing Walls	3390.170	140.00 sf	31.00 /mh	4	0.06 /sf	8	-	-	-	-	-	-	13	14
	Grind/Patch Walls	3350.130	80.00 sf	31.00 /mh	30	0.05 /sf	4	-	-	-	-	-	-	34	46
	Waterstop 6" Flat	3510.610	40.00 lf	31.00 /mh	124	5.00 /lf	210	-	-	-	-	-	-	334	384
	Oil Wall Forms	3100.310	80.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	80.00 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Form Ties 18"	3150.632	20.00 ea	31.00 /mh	0	2.55 /ea	51	-	-	-	-	-	-	51	51
	Dimension Lumber	3150.200	80.00 sf	31.00 /mh	0	0.50 /sf	40	-	-	-	-	-	-	40	40
	Rebar Templates	3200.980	40.00 lf	31.00 /mh	62	0.50 /lf	20	-	-	-	-	-	-	82	107
	UV Building Non pot bottom walls		2.22 cy		1,060		866	/cy						1,926	2,350
0303-	UV Building UV Channel Walls														
	Pump Place Walls	3310.260	106.30 cy	31.00 /mh	2,821	-	-	-	-	-	-	31.26 /cy	3,555	6,376	7,504
	5000 psi Concrete	3310.100	106.30 cy	-	-	165.00 /cy	18,767	-	-	-	-	-	-	18,767	18,767
	Wall Placement Count	3310.360	6.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Job Built with Plyform 4-8'	3100.180	4,480.00 sf	31.00 /mh	27,776	1.50 /sf	7,056	-	-	-	-	-	-	34,832	45,942
	Wall Bulkhead Forms	3150.192	70.00 sf	31.00 /mh	998	1.50 /sf	110	-	-	-	-	-	-	1,108	1,508
	CJ Prep Walls	3350.170	480.00 sf	31.00 /mh	372	0.15 /sf	72	-	-	-	-	-	-	444	593
	Finish- Top of Wall	3350.110	410.00 sf	31.00 /mh	178	/sf		-	-	-	-	-	-	178	249
	Liquid Curing Walls	3390.170	4,890.00 sf	31.00 /mh	152	0.06 /sf	293	-	-	-	-	-	-	445	506
	Grind/Patch Walls	3350.130	4,480.00 sf	31.00 /mh	1,667	0.05 /sf	224	-	-	-	-	-	-	1,891	2,557
	Blockouts in Concrete	3150.194	152.00 sf	31.00 /mh	1,649	2.00 /sf	304	-	-	-	-	-	-	1,953	2,613
	Waterstop 6" Flat	3510.610	376.00 lf	31.00 /mh	1,166	5.00 /lf	1,974	-	-	-	-	-	-	3,140	3,606
	Rub Walls	3350.140	1,600.00 sf	31.00 /mh	1,984	0.15 /sf	240	-	-	-	-	-	-	2,224	3,018
	Oil Wall Forms	3100.310	4,480.00 sf	31.00 /mh	1	0.02 /sf	90	-	-	-	-	-	-	91	92
	Nails and Hardware	3150.200	4,480.00 sf	31.00 /mh	1	0.04 /sf	179	-	-	-	-	-	-	181	181
	Form Ties 12"	3150.632	490.00 ea	31.00 /mh	0	2.35 /ea	1,152	-	-	-	-	-	-	1,152	1,152
	Form Ties 18"	3150.632	630.00 ea	31.00 /mh	0	2.55 /ea	1,607	-	-	-	-	-	-	1,607	1,607
	Dimension Lumber	3150.200	4,480.00 sf	31.00 /mh	1	0.50 /sf	2,240	-	-	-	-	-	-	2,241	2,242
	Rebar Templates	3200.980	320.00 lf	31.00 /mh	496	0.50 /lf	160	-	-	-	-	-	-	656	854
	Waterstop Fittings	3510.610	24.00 ea	31.00 /mh	1,488	55.00 /ea	1,386	-	-	-	-	-	-	2,874	3,469
	Grout Slurry Bottom of Walls	3150.200	150.00 cf	31.00 /mh	1,163	15.00 /cf	2,250	-	-	-	-	-	-	3,413	3,877
	UV Building UV Channel Walls		106.30 cy		41,913		38,103	/cy					3,555	83,571	100,336
0303-	UV Building Stem Walls														
	Pump Place Walls	3310.260	42.89 cy	31.00 /mh	1,423	-	-	-	-	-	-	31.26 /cy	1,435	2,857	3,426
	5000 psi Concrete	3310.100	42.89 cy	-	-	165.00 /cy	7,572	-	-	-	-	-	-	7,572	7,572
	Wall Placement Count	3310.360	8.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Job Built with Plyform 0-4'	3100.180	1,668.00 sf	31.00 /mh	12,927	1.50 /sf	2,627	-	-	-	-	-	-	15,554	20,725
	Wall Pilaster Forms	3150.192	324.00 sf	31.00 /mh	2,511	1.50 /sf	510	-	-	-	-	-	-	3,021	4,026
	Wall Bulkhead Forms	3150.192	12.00 sf	31.00 /mh	171	1.50 /sf	19	-	-	-	-	-	-	190	258
	CJ Prep Walls	3350.170	290.00 sf	31.00 /mh	225	0.15 /sf	44	-	-	-	-	-	-	268	358
	Finish- Top of Wall	3350.110	278.00 sf	31.00 /mh	121	/sf		-	-	-	-	-	-	121	169
	Liquid Curing Walls	3390.170	2,270.00 sf	31.00 /mh	70	0.06 /sf	136	-	-	-	-	-	-	207	235
	Grind/Patch Walls	3350.130	1,992.00 sf	31.00 /mh	741	0.05 /sf	100	-	-	-	-	-	-	841	1,137
	Oil Wall Forms	3100.310	1,992.00 sf	31.00 /mh	1	0.02 /sf	40	-	-	-	-	-	-	40	41
	Nails and Hardware	3150.200	1,992.00 sf	31.00 /mh	1	0.04 /sf	80	-	-	-	-	-	-	80	81
	Form Ties 12"	3150.632	417.00 ea	31.00 /mh	0	2.35 /ea	980	-	-	-	-	-	-	980	980
	Form Ties Specialty	3150.632	36.00 ea	31.00 /mh	223	5.00 /ea	180	-	-	-	-	-	-	403	492
	Dimension Lumber	3150.200	1,992.00 sf	31.00 /mh	1	0.50 /sf	996	-	-	-	-	-	-	997	997
	Rebar Templates	3200.980	278.00 lf	31.00 /mh	431	0.50 /lf	139	-	-	-	-	-	-	570	742
	UV Building Stem Walls		42.89 cy		18,845		13,422	/cy					1,435	33,701	41,239
0303-	UV Building Curb for PEMB														
	Pump Place Walls	3310.260	15.72 cy	31.00 /mh	2,085	-	-	-	-	-	-	31.26 /cy	526	2,611	3,445
	5000 psi Concrete	3310.100	15.72 cy	-	-	165.00 /cy	2,775	-	-	-	-	-	-	2,775	2,775
	Wall Placement Count	3310.360	4.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Job Built with Plyform 0-4'	3100.180	529.30 sf	31.00 /mh	4,102	1.50 /sf	834	-	-	-	-	-	-	4,936	6,577
	Wall Pilaster Forms	3150.192	72.36 sf	31.00 /mh	561	1.50 /sf	114	-	-	-	-	-	-	675	899
	Wall Bulkhead Forms	3150.192	10.69 sf	31.00 /mh	152	1.50 /sf	17	-	-	-	-	-	-	169	230
	CJ Prep Walls	3350.170	536.04 sf	31.00 /mh	415	0.15 /sf	80	-	-	-	-	-	-	496	662
	Finish- Top of Wall	3350.110	525.35 sf	31.00 /mh	228	/sf		-	-	-	-	-	-	228	319
	Liquid Curing Walls	3390.170	1,127.01 sf	31.00 /mh	35	0.06 /sf	68	-	-	-	-	-	-	103	117
	Grind/Patch Walls	3350.130	601.66 sf	31.00 /mh	224	0.05 /sf	30	-	-	-	-	-	-	254	343
	Chamfer 3/4"	3150.625	990.00 lf	31.00 /mh	1,535	0.20 /lf	208	-	-	-	-	-	-	1,742	2,356
	Rub Walls	3350.140	990.00 sf	31.00 /mh	1,228	0.15 /sf	149	-	-	-	-	-	-	1,376	1,867
	Oil Wall Forms	3100.310	601.66 sf	31.00 /mh	0	0.02 /sf	12	-	-	-	-	-	-	12	12
	Nails and Hardware	3150.200	601.66 sf	31.00 /mh	0	0.04 /sf	24	-	-	-	-	-	-	24	24
	Form Ties 16"	3150.632	132.33 ea	31.00 /mh	0	2.50 /ea	331	-	-	-	-	-	-	331	331

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0303- UV Building Curb for PEMB														
	Form Ties Specialty	3150.632	8.04 ea	31.00 /mh	50	5.00 /ea	40	-	-	-	-	-	-	90	110
	Dimension Lumber	3150.200	601.66 sf	31.00 /mh	0	0.50 /sf	301	-	-	-	-	-	-	301	301
	Rebar Templates	3200.980	395.00 lf	31.00 /mh	612	0.50 /lf	198	-	-	-	-	-	-	810	1,055
	Drill and Epoxy #5	3210.101	990.00 ea	31.00 /mh	9,207	5.00 /ea	5,198	-	-	-	-	-	-	14,405	18,087
	UV Building Curb for PEMB		15.72 cy		20,435		10,377	/cy					526	31,337	39,511
	0310- UV Building Blower Room Equip Pads														
	Equipment Pad Form 8"	3100.164	54.94 sf	31.00 /mh	562	1.50 /sf	87	-	-	-	-	-	-	649	873
	Oil Equipment Pad Form	3100.310	54.94 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	5000 psi Concrete	3310.100	5.91 cy	-	-	165.00 /cy	1,043	-	-	-	-	-	-	1,043	1,043
	Other Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Buggy Place Equipment Pads	3310.300	5.91 cy	31.00 /mh	588	-	-	-	-	-	-	-	-	588	823
	Liquid Curing Compounds	3390.170	238.00 sf	31.00 /mh	15	0.06 /sf	14	-	-	-	-	-	-	29	35
	Finish- Hard Trowel	3350.110	238.00 sf	31.00 /mh	103	/sf		-	-	-	-	-	-	103	145
	Chamfer	3150.625	84.00 lf	31.00 /mh	39	0.20 /lf	18	-	-	-	-	-	-	56	72
	Misc. Pad Rebar	3210.104	0.74 tn	31.00 /mh	572	1,400.00 /tn	1,085	-	-	-	-	-	-	1,657	1,886
	Nails and Hardware	3150.200	54.94 sf	31.00 /mh	0	0.04 /sf	2	-	-	-	-	-	-	2	2
	Drill and Epoxy #4	3210.101	84.00 ea	31.00 /mh	521	4.00 /ea	353	-	-	-	-	-	-	874	1,082
	UV Building Blower Room Equip Pads		5.91 cy		2,399		2,602	/cy						5,002	5,961
	0310- UV Building Electric Room Equipment Pads														
	Equipment Pad Form 6"	3100.164	100.00 sf	31.00 /mh	1,023	1.50 /sf	158	-	-	-	-	-	-	1,181	1,590
	Oil Equipment Pad Form	3100.310	100.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	5000 psi Concrete	3310.100	4.96 cy	-	-	165.00 /cy	876	-	-	-	-	-	-	876	876
	Buggy Place Equipment Pads	3310.300	4.96 cy	31.00 /mh	658	-	-	-	-	-	-	-	-	658	922
	Liquid Curing Compounds	3390.170	268.00 sf	31.00 /mh	17	0.06 /sf	16	-	-	-	-	-	-	33	39
	Finish- Hard Trowel	3350.110	268.00 sf	31.00 /mh	116	/sf		-	-	-	-	-	-	116	163
	Chamfer	3150.625	156.00 lf	31.00 /mh	72	0.20 /lf	33	-	-	-	-	-	-	105	134
	Misc. Pad Rebar	3210.104	0.62 tn	31.00 /mh	481	1,400.00 /tn	911	-	-	-	-	-	-	1,392	1,584
	Nails and Hardware	3150.200	100.00 sf	31.00 /mh	0	0.04 /sf	4	-	-	-	-	-	-	4	4
	Drill and Epoxy #4	3210.101	208.00 ea	31.00 /mh	1,290	4.00 /ea	874	-	-	-	-	-	-	2,163	2,679
	UV Building Electric Room Equipment Pads		4.96 cy		3,657		2,873	/cy						6,530	7,993
	0310- UV Building Misc Equipment pads not blower or elect														
	Equipment Pad Form 6"	3100.164	50.00 sf	31.00 /mh	512	1.50 /sf	79	-	-	-	-	-	-	590	795
	Oil Equipment Pad Form	3100.310	50.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	5000 psi Concrete	3310.100	2.32 cy	-	-	165.00 /cy	409	-	-	-	-	-	-	409	409
	Other Placement Count	3310.360	5.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Buggy Place Equipment Pads	3310.300	2.32 cy	31.00 /mh	307	-	-	-	-	-	-	-	-	307	430
	Liquid Curing Compounds	3390.170	125.00 sf	31.00 /mh	8	0.06 /sf	8	-	-	-	-	-	-	15	18
	Finish- Hard Trowel	3350.110	125.00 sf	31.00 /mh	54	/sf		-	-	-	-	-	-	54	76
	Chamfer	3150.625	110.00 lf	31.00 /mh	51	0.20 /lf	23	-	-	-	-	-	-	74	94
	Misc. Pad Rebar	3210.104	0.29 tn	31.00 /mh	224	1,400.00 /tn	424	-	-	-	-	-	-	648	738
	Nails and Hardware	3150.200	50.00 sf	31.00 /mh	0	0.04 /sf	2	-	-	-	-	-	-	2	2
	Drill and Epoxy #4	3210.101	110.00 ea	31.00 /mh	682	4.00 /ea	462	-	-	-	-	-	-	1,144	1,417
	UV Building Misc Equipment pads not blower or elect		2.32 cy		1,837		1,407	/cy						3,245	3,980
	Concrete Concrete				139,585		134,729						14,601	288,915	344,749
	550 UV and Digester Blower Building				139,585		134,729	/LS					14,601	288,915	344,749
	600 Aerobic Digester 5 and 6														
	Concrete Concrete														
	0302- Digester 5 and 6 Base Slab														
	5000 psi Concrete	3310.100	151.56 cy	-	-	165.00 /cy	26,758	-	-	-	-	-	-	26,758	26,758
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	151.56 cy	31.00 /mh	3,268	-	-	-	-	-	-	31.26 /cy	5,070	8,337	9,644
	Formwork S.O.G. Edge Form > 1'	3100.120	338.12 sf	31.00 /mh	3,354	1.50 /sf	533	-	-	-	-	-	-	3,887	5,228
	Formwork S.O.G. Const Joints > 1'	3100.120	58.46 sf	31.00 /mh	834	1.50 /sf	92	-	-	-	-	-	-	926	1,259
	CJ Prep Slab	3350.170	58.46 sf	31.00 /mh	45	0.15 /sf	9	-	-	-	-	-	-	54	72
	Finegrade Below Concrete	3150.650	2,590.00 sf	31.00 /mh	1,606	-	-	-	-	-	-	-	-	1,606	2,248
	Finish- Hard Trowel	3350.110	2,590.00 sf	31.00 /mh	1,124	/sf		-	-	-	-	-	-	1,124	1,574
	Liquid Curing Compounds	3390.170	2,590.00 sf	31.00 /mh	161	0.06 /sf	155	-	-	-	-	-	-	316	380
	Blockouts in Concrete	3150.194	64.00 sf	31.00 /mh	694	2.00 /sf	128	-	-	-	-	-	-	822	1,100
	Waterstop 6" Flat	3510.610	282.00 lf	31.00 /mh	874	5.00 /lf	1,481	-	-	-	-	-	-	2,355	2,704
	Oil SOG Form	3100.310	396.58 sf	31.00 /mh	0	0.02 /sf	8	-	-	-	-	-	-	8	8
	Nails and Hardware	3150.200	338.12 sf	31.00 /mh	0	0.04 /sf	14	-	-	-	-	-	-	14	14
	Dimension Lumber	3150.200	338.12 sf	31.00 /mh	0	0.50 /sf	169	-	-	-	-	-	-	169	169
	Waterstop Fittings	3510.610	10.00 ea	31.00 /mh	28	55.00 /ea	578	-	-	-	-	-	-	605	617
	Digester 5 and 6 Base Slab		151.56 cy		11,988		29,924	/cy					5,070	46,981	51,777
	0302- Digester 5 and 6 sump base slab														
	5000 psi Concrete	3310.100	11.24 cy	-	-	165.00 /cy	1,984	-	-	-	-	-	-	1,984	1,984
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	11.24 cy	31.00 /mh	373	-	-	-	-	-	-	31.26 /cy	376	749	898
	Formwork S.O.G. Edge Form > 1'	3100.120	88.48 sf	31.00 /mh	878	1.50 /sf	139	-	-	-	-	-	-	1,017	1,368
	Finegrade Below Concrete	3150.650	192.00 sf	31.00 /mh	119	-	-	-	-	-	-	-	-	119	167

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0302-	Digester 5 and 6 sump base slab														
	Finish- Hard Trowel	3350.110	192.00 sf	31.00 /mh	83	/sf		-	-	-	-	-	-	83	117
	Liquid Curing Compounds	3390.170	192.00 sf	31.00 /mh	12	0.06 /sf	12	-	-	-	-	-	-	23	28
	Waterstop 6" Flat	3510.610	56.00 lf	31.00 /mh	156	5.00 /lf	294	-	-	-	-	-	-	450	513
	Oil SOG Form	3100.310	88.48 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	88.48 sf	31.00 /mh	0	0.04 /sf	4	-	-	-	-	-	-	4	4
	Dimension Lumber	3150.200	88.48 sf	31.00 /mh	0	0.50 /sf	44	-	-	-	-	-	-	44	44
	Digester 5 and 6 sump base slab		11.24 cy		1,621		2,478	/cy					376	4,475	5,124
0302-	Digester 5 and 6 stair pads 2 ea														
	5000 psi Concrete	3310.100	2.67 cy	-	-	165.00 /cy	471	-	-	-	-	-	-	471	471
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Crane Place Slab on Grade	3310.230	2.67 cy	31.00 /mh	177	-	-	-	-	-	-	-	-	177	248
	Formwork S.O.G. Edge Form > 1'	3100.120	60.00 sf	31.00 /mh	595	1.50 /sf	95	-	-	-	-	-	-	690	928
	Finegrade Below Concrete	3150.650	48.00 sf	31.00 /mh	30	-	-	-	-	-	-	-	-	30	42
	Finish- Hard Trowel	3350.110	48.00 sf	31.00 /mh	21	/sf		-	-	-	-	-	-	21	29
	Liquid Curing Compounds	3390.170	48.00 sf	31.00 /mh	3	0.06 /sf	3	-	-	-	-	-	-	6	7
	Oil SOG Form	3100.310	60.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Nails and Hardware	3150.200	60.00 sf	31.00 /mh	0	0.04 /sf	2	-	-	-	-	-	-	2	2
	Dimension Lumber	3150.200	60.00 sf	31.00 /mh	0	0.50 /sf	30	-	-	-	-	-	-	30	30
	Digester 5 and 6 stair pads 2 ea		2.67 cy		826		602	/cy						1,428	1,758
0302-	Digester 5 and 6 meter vault Base slab for precast														
	5000 psi Concrete	3310.100	2.00 cy	-	-	165.00 /cy	353	-	-	-	-	-	-	353	353
	Crane Place Slab on Grade	3310.230	2.00 cy	31.00 /mh	100	-	-	-	-	-	-	-	-	100	139
	Formwork S.O.G. Edge Form < 1'	3100.120	24.00 sf	31.00 /mh	238	1.50 /sf	38	-	-	-	-	-	-	276	371
	Finegrade Below Concrete	3150.650	36.00 sf	31.00 /mh	22	-	-	-	-	-	-	-	-	22	31
	Finish- Hard Trowel	3350.110	36.00 sf	31.00 /mh	16	/sf		-	-	-	-	-	-	16	22
	Liquid Curing Compounds	3390.170	36.00 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	4	5
	Keyway 4"	3150.620	20.00 lf	31.00 /mh	155	1.00 /lf	21	-	-	-	-	-	-	176	238
	Oil SOG Form	3100.310	24.00 sf	31.00 /mh	0	0.02 /sf	0	-	-	-	-	-	-	0	0
	Nails and Hardware	3150.200	24.00 sf	31.00 /mh	0	0.04 /sf	1	-	-	-	-	-	-	1	1
	Dimension Lumber	3150.200	24.00 sf	31.00 /mh	0	0.50 /sf	12	-	-	-	-	-	-	12	12
	Digester 5 and 6 meter vault Base slab for precast		2.00 cy		533		428	/cy						960	1,173
0302-B	Digester 5 and 6 sloped topping concrete														
	5500 psi Concrete	3310.100	45.33 cy	-	-	195.00 /cy	9,459	-	-	-	-	-	-	9,459	9,459
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Crane Place Slab on Grade	3310.230	45.33 cy	31.00 /mh	3,007	-	-	-	-	-	-	-	-	3,007	4,210
	Formwork S.O.G. Edge Form < 1'	3100.120	32.00 sf	31.00 /mh	248	1.50 /sf	50	-	-	-	-	-	-	298	398
	Finish- Hard Trowel	3350.110	2,448.00 sf	31.00 /mh	1,062	/sf		-	-	-	-	-	-	1,062	1,487
	Liquid Curing Compounds	3390.170	2,448.00 sf	31.00 /mh	152	0.06 /sf	147	-	-	-	-	-	-	299	359
	Blockouts in Concrete	3150.194	16.00 sf	31.00 /mh	174	2.00 /sf	32	-	-	-	-	-	-	206	275
	Oil SOG Form	3100.310	104.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Nails and Hardware	3150.200	104.00 sf	31.00 /mh	0	0.04 /sf	4	-	-	-	-	-	-	4	4
	Dimension Lumber	3150.200	104.00 sf	31.00 /mh	0	0.50 /sf	52	-	-	-	-	-	-	52	52
	CJ Prep Slab	3350.170	2,448.00 sf	31.00 /mh	1,897	0.15 /sf	367	-	-	-	-	-	-	2,264	3,023
	Grout topping fibers	3310.110	46.00 cy	-	-	25.00 /cy	1,231	-	-	-	-	-	-	1,231	1,231
	Digester 5 and 6 sloped topping concrete		45.33 cy		6,540		11,344	/cy						17,884	20,501
0303-	Digester 5 and 6 Walls														
	Pump Place Walls	3310.260	240.39 cy	31.00 /mh	7,974	-	-	-	-	-	-	31.26 /cy	8,040	16,014	19,203
	5000 psi Concrete	3310.100	240.39 cy	-	-	165.00 /cy	42,440	-	-	-	-	-	-	42,440	42,440
	Wall Placement Count	3310.360	6.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Gang Form System 16'->	3100.180	9,760.00 sf	31.00 /mh	45,384	2.50 /sf	25,620	-	-	-	-	-	-	71,004	89,158
	Wall Bulkhead Forms	3150.192	212.80 sf	31.00 /mh	3,035	1.50 /sf	335	-	-	-	-	-	-	3,370	4,584
	CJ Prep Walls	3350.170	537.32 sf	31.00 /mh	416	0.15 /sf	81	-	-	-	-	-	-	497	664
	Finish- Top of Wall	3350.110	324.52 sf	31.00 /mh	141	/sf		-	-	-	-	-	-	141	197
	Liquid Curing Walls	3390.170	10,084.52 sf	31.00 /mh	313	0.06 /sf	605	-	-	-	-	-	-	918	1,043
	Grind/Patch Walls	3350.130	9,760.00 sf	31.00 /mh	3,631	0.05 /sf	488	-	-	-	-	-	-	4,119	5,571
	Blockouts in Concrete	3150.194	96.00 sf	31.00 /mh	1,042	2.00 /sf	192	-	-	-	-	-	-	1,234	1,650
	Waterstop 6" Flat	3510.610	404.00 lf	31.00 /mh	1,252	5.00 /lf	2,121	-	-	-	-	-	-	3,373	3,874
	Rub Walls	3350.140	3,416.00 sf	31.00 /mh	4,236	0.15 /sf	512	-	-	-	-	-	-	4,748	6,443
	Oil Wall Forms	3100.310	9,760.00 sf	31.00 /mh	3	0.02 /sf	195	-	-	-	-	-	-	198	199
	Nails and Hardware	3150.200	9,760.00 sf	31.00 /mh	3	0.04 /sf	390	-	-	-	-	-	-	393	395
	Form Ties 16"	3150.632	2,440.00 ea	31.00 /mh	1	2.50 /ea	6,100	-	-	-	-	-	-	6,101	6,101
	Dimension Lumber	3150.200	9,760.00 sf	31.00 /mh	3	0.50 /sf	4,880	-	-	-	-	-	-	4,883	4,884
	Rebar Templates	3200.980	244.00 lf	31.00 /mh	378	0.50 /lf	122	-	-	-	-	-	-	500	651
	Waterstop Fittings	3510.610	12.00 ea	31.00 /mh	744	55.00 /ea	693	-	-	-	-	-	-	1,437	1,735
	Bonding agent and CJ prep Tie holes	3350.130	813.00 ea	31.00 /mh	3,780	2.00 /ea	1,626	-	-	-	-	-	-	5,406	6,919
	Grout Slurry Bottom of Walls	3150.200	108.00 cf	31.00 /mh	837	15.00 /cf	1,620	-	-	-	-	-	-	2,457	2,792
	Digester 5 and 6 Walls		240.39 cy		73,172		88,021	/cy					8,040	169,233	198,502
0304-	Digester 5 and 6 Elevated Deck														
	5000 psi Concrete	3310.100	90.67 cy	-	-	165.00 /cy	16,007	-	-	-	-	-	-	16,007	16,007
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Crane Place Suspended Slab	3310.240	90.67 cy	31.00 /mh	3,007	-	-	-	-	-	-	-	-	3,007	4,210

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0304- Digester 5 and 6 Elevated Deck														
	Shore Suspended Slab 15-up	3100.124	2,448.00 sf	31.00 /mh	26,561	4.25 /sf	10,924	-	-	-	-	-	-	37,485	48,109
	Slab Edge Form < 1'	3100.124	270.00 sf	31.00 /mh	3,767	2.00 /sf	567	-	-	-	-	-	-	4,334	5,840
	Suspended Slab Const Joint	3100.124	36.00 sf	31.00 /mh	391	1.50 /sf	54	-	-	-	-	-	-	445	601
	CJ Prep Elevated Slab CJ	3350.170	36.00 sf	31.00 /mh	28	0.20 /sf	7	-	-	-	-	-	-	35	46
	Finish- Hard Trowel	3350.110	2,448.00 sf	31.00 /mh	1,062	/sf		-	-	-	-	-	-	1,062	1,487
	Liquid Curing Compounds	3390.170	2,448.00 sf	31.00 /mh	152	0.06 /sf	147	-	-	-	-	-	-	299	359
	Grind and Patch Deck Bottom	3350.130	2,448.00 sf	31.00 /mh	911	0.05 /sf	122	-	-	-	-	-	-	1,033	1,397
	Blockouts in Concrete	3150.194	96.00 sf	31.00 /mh	1,042	2.00 /sf	192	-	-	-	-	-	-	1,234	1,650
	Chamfer 3/4"	3150.625	320.00 lf	31.00 /mh	496	0.20 /lf	67	-	-	-	-	-	-	563	762
	Oil Suspended Slab Frm	3100.310	2,448.00 sf	31.00 /mh	1	0.02 /sf	49	-	-	-	-	-	-	50	50
	Nails and Hardware	3150.200	2,448.00 sf	31.00 /mh	1	0.04 /sf	98	-	-	-	-	-	-	99	99
	Rub Slab Bottom	3350.140	2,448.00 sf	31.00 /mh	2,277	0.12 /sf	294	-	-	-	-	-	-	2,570	3,481
	Digester 5 and 6 Elevated Deck		90.67 cy		39,694		28,529	/cy						68,223	84,100
	0305- Digester 5 and 6 Elevated Deck Beams														
	5000 psi Concrete	3310.100	48.00 cy	-	-	165.00 /cy	8,474	-	-	-	-	-	-	8,474	8,474
	Other Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Crane Place Beams	3310.280	48.00 cy	31.00 /mh	1,592	-	-	-	-	-	-	-	-	1,592	2,229
	Beam Side Forms	3100.140	864.00 sf	31.00 /mh	10,714	1.50 /sf	1,361	-	-	-	-	-	-	12,074	16,360
	Beam Bottom Forms	3100.140	1,152.00 sf	31.00 /mh	12,499	4.25 /sf	5,141	-	-	-	-	-	-	17,640	22,640
	Grind/Patch Beams	3350.130	1,296.00 sf	31.00 /mh	599	0.05 /sf	65	-	-	-	-	-	-	663	903
	Chamfer 3/4"	3150.625	288.00 lf	31.00 /mh	446	0.20 /lf	60	-	-	-	-	-	-	507	685
	Rub Beams	3350.140	1,296.00 sf	31.00 /mh	1,205	0.12 /sf	156	-	-	-	-	-	-	1,361	1,843
	Oil Beam Forms	3100.310	1,296.00 sf	31.00 /mh	0	0.02 /sf	26	-	-	-	-	-	-	26	26
	Nails and Hardware	3150.200	1,296.00 sf	31.00 /mh	0	0.04 /sf	52	-	-	-	-	-	-	52	52
	Digester 5 and 6 Elevated Deck Beams		48.00 cy		27,056		15,335	/cy						42,391	53,213
	0306- Pipe Support columns Digester 5 and 6 4 ea														
	5000 psi Concrete	3310.100	2.00 cy	-	-	165.00 /cy	353	-	-	-	-	-	-	353	353
	Other Placement Count	3310.360	4.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Crane Place Piers & Columns	3310.270	2.00 cy	31.00 /mh	133	-	-	-	-	-	-	-	-	133	186
	Formwork Sonotube 16"	3100.112	20.00 lf	31.00 /mh	310	6.00 /lf	126	-	-	-	-	-	-	436	560
	Liquid Curing Compounds	3390.170	83.78 sf	31.00 /mh	5	0.06 /sf	5	-	-	-	-	-	-	10	12
	Grind/Patch Columns	3350.130	16.76 sf	31.00 /mh	8	0.05 /sf	1	-	-	-	-	-	-	9	12
	Rub Columns	3350.140	16.76 sf	31.00 /mh	16	0.12 /sf	2	-	-	-	-	-	-	18	24
	Dimension Lumber	3150.200	83.78 sf	31.00 /mh	0	0.50 /sf	42	-	-	-	-	-	-	42	42
	Bobcat Skid Steer with post hole attach	1900.131	0.25 mnth	-	-	-	-	-	-	4,000.00 /mnth	1,000	2,000.00 /mnth	500	1,500	1,520
	Pipe Support columns Digester 5 and 6 4 ea		2.00 cy		471		529	/cy			1,000		500	2,500	2,709
	Concrete Concrete				161,901		177,188				1,000		13,986	354,076	418,856
	600 Aerobic Digester 5 and 6				161,901		177,188	/LS			1,000		13,986	354,076	418,856
	650 Existing Digester 1 to 4														
	Concrete Concrete														
	0302- Digester 3 and 4 manhole base slab														
	5000 psi Concrete	3310.100	2.37 cy	-	-	165.00 /cy	418	-	-	-	-	-	-	418	418
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Crane Place Slab on Grade	3310.230	2.37 cy	31.00 /mh	157	-	-	-	-	-	-	-	-	157	220
	Formwork S.O.G. Edge Form < 1'	3100.120	32.00 sf	31.00 /mh	317	1.50 /sf	50	-	-	-	-	-	-	368	495
	Finegrade Below Concrete	3150.650	64.00 sf	31.00 /mh	40	-	-	-	-	-	-	-	-	40	56
	Finish- Hard Trowel	3350.110	64.00 sf	31.00 /mh	28	/sf		-	-	-	-	-	-	28	39
	Liquid Curing Compounds	3390.170	64.00 sf	31.00 /mh	4	0.06 /sf	4	-	-	-	-	-	-	8	9
	Keyway 4"	3150.620	32.00 lf	31.00 /mh	50	1.00 /lf	34	-	-	-	-	-	-	83	103
	Road Base Below Concrete	2305.300	2.37 cy	31.00 /mh	37	22.00 /to n	103	-	-	-	-	-	-	140	155
	Oil SOG Form	3100.310	32.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Nails and Hardware	3150.200	32.00 sf	31.00 /mh	0	0.04 /sf	1	-	-	-	-	-	-	1	1
	Dimension Lumber	3150.200	32.00 sf	31.00 /mh	0	0.50 /sf	16	-	-	-	-	-	-	16	16
	SOG Rebar	3210.104	0.30 tn	31.00 /mh	229	1,400.00 /tn	435	-	-	-	-	-	-	665	757
	Digester 3 and 4 manhole base slab		2.37 cy		862		1,063	/cy						1,925	2,269
	0304- Digester 1 and 2 Elevated Deck														
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	5000 psi Concrete	3310.100	44.52 cy	-	-	165.00 /cy	7,860	-	-	-	-	-	-	7,860	7,860
	Pump Place Suspended Slab	3310.240	44.52 cy	31.00 /mh	1,477	-	-	-	-	-	-	31.26 /cy	1,489	2,966	3,556
	Shore Suspended Slab 15-up	3100.124	1,202.01 sf	31.00 /mh	13,042	4.25 /sf	5,364	-	-	-	-	-	-	18,406	23,622
	Slab Edge Form < 1'	3100.124	140.00 sf	31.00 /mh	2,170	2.00 /sf	294	-	-	-	-	-	-	2,464	3,332
	Finish- Hard Trowel	3350.110	1,202.01 sf	31.00 /mh	522	/sf		-	-	-	-	-	-	522	730
	Liquid Curing Compounds	3390.170	1,202.01 sf	31.00 /mh	75	0.06 /sf	72	-	-	-	-	-	-	147	176
	Grind and Patch Deck Bottom	3350.130	1,202.01 sf	31.00 /mh	447	0.05 /sf	60	-	-	-	-	-	-	507	686
	Blockouts in Concrete	3150.194	96.00 sf	31.00 /mh	1,042	2.00 /sf	192	-	-	-	-	-	-	1,234	1,650
	Waterstop Adeka or Swellstop	3510.610	175.00 lf	31.00 /mh	543	8.50 /lf	1,562	-	-	-	-	-	-	2,104	2,321
	Chamfer 3/4"	3150.625	140.00 lf	31.00 /mh	217	0.20 /lf	29	-	-	-	-	-	-	246	333
	Oil Suspended Slab Frm	3100.310	1,202.01 sf	31.00 /mh	0	0.02 /sf	24	-	-	-	-	-	-	24	25
	Nails and Hardware	3150.200	1,202.01 sf	31.00 /mh	0	0.04 /sf	48	-	-	-	-	-	-	48	49

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0304- Digester 1 and 2 Elevated Deck														
	Drill and Epoxy #5	3210.101	175.00 ea	31.00 /mh	1,628	5.00 /ea	919	-	-	-	-	-	-	2,546	3,197
	CJ Prep Walls (Roughen top of Walls at Deck connect)	3350.170	186.00 sf	31.00 /mh	1,153	0.15 /sf	28	-	-	-	-	-	-	1,181	1,642
	Digester 1 and 2 Elevated Deck		44.52 cy		22,314		16,452	/cy					1,489	40,255	49,181
	0304- Digester 3 and 4 Elevated Deck Concrete														
	Slab Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	5000 psi Concrete	3310.100	93.33 cy	-	-	165.00 /cy	16,478	-	-	-	-	-	-	16,478	16,478
	Pump Place Suspended Slab	3310.240	93.33 cy	31.00 /mh	3,096	-	-	-	-	-	-	31.26 /cy	3,122	6,218	7,456
	Shore Suspended Slab 15-up	3100.124	2,520.00 sf	31.00 /mh	27,342	4.25 /sf	11,246	-	-	-	-	-	-	38,588	49,524
	Slab Edge Form < 1'	3100.124	266.00 sf	31.00 /mh	4,123	2.00 /sf	559	-	-	-	-	-	-	4,682	6,331
	Suspended Slab Const Joint	3100.124	36.00 sf	31.00 /mh	391	1.50 /sf	54	-	-	-	-	-	-	445	601
	CJ Prep Elevated Slab CJ	3350.170	36.00 sf	31.00 /mh	28	0.20 /sf	7	-	-	-	-	-	-	35	46
	Finish- Hard Trowel	3350.110	2,520.00 sf	31.00 /mh	1,094	/sf		-	-	-	-	-	-	1,094	1,531
	Liquid Curing Compounds	3390.170	2,520.00 sf	31.00 /mh	156	0.06 /sf	151	-	-	-	-	-	-	307	370
	Grind and Patch Deck Bottom	3350.130	2,520.00 sf	31.00 /mh	937	0.05 /sf	126	-	-	-	-	-	-	1,063	1,438
	Blockouts in Concrete	3150.194	96.00 sf	31.00 /mh	1,042	2.00 /sf	192	-	-	-	-	-	-	1,234	1,650
	Waterstop Adeka or Swellstop	3510.610	248.00 lf	31.00 /mh	769	8.50 /lf	2,213	-	-	-	-	-	-	2,982	3,290
	Chamfer 3/4"	3150.625	212.00 lf	31.00 /mh	329	0.20 /lf	45	-	-	-	-	-	-	373	505
	Oil Suspended Slab Frm	3100.310	2,520.00 sf	31.00 /mh	1	0.02 /sf	50	-	-	-	-	-	-	51	51
	Nails and Hardware	3150.200	2,520.00 sf	31.00 /mh	1	0.04 /sf	101	-	-	-	-	-	-	102	102
	Drill and Epoxy #5	3210.101	248.00 ea	31.00 /mh	2,306	5.00 /ea	1,302	-	-	-	-	-	-	3,608	4,531
	CJ Prep Walls (Top of Wall at deck wall connect)	3350.170	291.00 sf	31.00 /mh	1,804	0.15 /sf	44	-	-	-	-	-	-	1,848	2,570
	Digester 3 and 4 Elevated Deck Concrete		93.33 cy		43,418		32,567	/cy					3,122	79,107	96,474
	0305- Digester 3 and 4 Elevated Deck Beams														
	5000 psi Concrete	3310.100	48.00 cy	-	-	165.00 /cy	8,474	-	-	-	-	-	-	8,474	8,474
	Other Placement Count	3310.360	12.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Beams	3310.280	48.00 cy	31.00 /mh	1,751	-	-	-	-	-	-	31.26 /cy	1,606	3,357	4,057
	Beam Side Forms	3100.140	864.00 sf	31.00 /mh	10,714	1.50 /sf	1,361	-	-	-	-	-	-	12,074	16,360
	Beam Bottom Forms	3100.140	1,152.00 sf	31.00 /mh	12,499	4.25 /sf	5,141	-	-	-	-	-	-	17,640	22,640
	Grind/Patch Beams	3350.130	1,296.00 sf	31.00 /mh	599	0.05 /sf	65	-	-	-	-	-	-	663	903
	Chamfer 3/4"	3150.625	288.00 lf	31.00 /mh	446	0.20 /lf	60	-	-	-	-	-	-	507	685
	Oil Beam Forms	3100.310	1,296.00 sf	31.00 /mh	0	0.02 /sf	26	-	-	-	-	-	-	26	26
	Nails and Hardware	3150.200	1,296.00 sf	31.00 /mh	0	0.04 /sf	52	-	-	-	-	-	-	52	52
	Digester 3 and 4 Elevated Deck Beams		48.00 cy		26,010		15,179	/cy					1,606	42,795	53,199
	Concrete Concrete				92,604		65,261						6,216	164,082	201,123
	650 Existing Digester 1 to 4				92,604		65,261	/LS					6,216	164,082	201,123
	700 Administration Building														
	Concrete Concrete														
	0302- Admin Building Foundation Pads														
	5000 psi Concrete	3310.100	18.52 cy	-	-	165.00 /cy	3,269	-	-	-	-	-	-	3,269	3,269
	Slab Placement Count	3310.360	10.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	18.52 cy	31.00 /mh	491	-	-	-	-	-	-	31.26 /cy	619	1,111	1,307
	Formwork S.O.G. Edge Form > 1'	3100.120	400.00 sf	31.00 /mh	3,968	1.50 /sf	630	-	-	-	-	-	-	4,598	6,185
	Finegrade Below Concrete	3150.650	250.00 sf	31.00 /mh	155	-	-	-	-	-	-	-	-	155	217
	Finish- Hard Trowel	3350.110	250.00 sf	31.00 /mh	109	/sf		-	-	-	-	-	-	109	152
	Liquid Curing Compounds	3390.170	250.00 sf	31.00 /mh	16	0.06 /sf	15	-	-	-	-	-	-	31	37
	Oil SOG Form	3100.310	400.00 sf	31.00 /mh	0	0.02 /sf	8	-	-	-	-	-	-	8	8
	Nails and Hardware	3150.200	400.00 sf	31.00 /mh	0	0.04 /sf	16	-	-	-	-	-	-	16	16
	Dimension Lumber	3150.200	400.00 sf	31.00 /mh	0	0.50 /sf	200	-	-	-	-	-	-	200	200
	Admin Building Foundation Pads		18.52 cy		4,739		4,139	/cy					619	9,497	11,392
	0302- Admin Building Base Slab														
	5000 psi Concrete	3310.100	124.44 cy	-	-	165.00 /cy	21,971	-	-	-	-	-	-	21,971	21,971
	Slab Placement Count	3310.360	4.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	124.44 cy	31.00 /mh	3,302	-	-	-	-	-	-	31.26 /cy	4,162	7,465	8,786
	Formwork S.O.G. Edge Form < 1'	3100.120	236.00 sf	31.00 /mh	1,829	1.50 /sf	372	-	-	-	-	-	-	2,201	2,932
	Formwork S.O.G. Const Joints < 1'	3100.120	118.00 sf	31.00 /mh	1,683	1.50 /sf	186	-	-	-	-	-	-	1,869	2,542
	CJ Prep Slab	3350.170	118.00 sf	31.00 /mh	91	0.15 /sf	18	-	-	-	-	-	-	109	146
	Finegrade Below Concrete	3150.650	3,360.00 sf	31.00 /mh	2,083	-	-	-	-	-	-	-	-	2,083	2,916
	Finish- Hard Trowel	3350.110	3,360.00 sf	31.00 /mh	1,458	/sf		-	-	-	-	-	-	1,458	2,042
	Liquid Curing Compounds	3390.170	3,360.00 sf	31.00 /mh	208	0.06 /sf	202	-	-	-	-	-	-	410	493
	Blockouts in Concrete	3150.194	64.00 sf	31.00 /mh	694	2.00 /sf	128	-	-	-	-	-	-	822	1,100
	10 Mil. Vapor Barrier	3150.630	3,360.00 sf	31.00 /mh	208	0.15 /sf	554	-	-	-	-	-	-	763	846
	Oil SOG Form	3100.310	354.00 sf	31.00 /mh	0	0.02 /sf	7	-	-	-	-	-	-	7	7
	Nails and Hardware	3150.200	236.00 sf	31.00 /mh	0	0.04 /sf	9	-	-	-	-	-	-	10	10
	Dimension Lumber	3150.200	236.00 sf	31.00 /mh	0	0.50 /sf	118	-	-	-	-	-	-	118	118
	Admin Building Base Slab		124.44 cy		11,558		23,564	/cy					4,162	39,285	43,908
	0302- Admin Building Curb at PEMB														
	5000 psi Concrete	3310.100	5.86 cy	-	-	165.00 /cy	1,034	-	-	-	-	-	-	1,034	1,034
	Slab Placement Count	3310.360	4.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Pump Place Slab on Grade	3310.230	5.86 cy	31.00 /mh	777	-	-	-	-	-	-	31.26 /cy	196	973	1,284
	Formwork S.O.G. Edge Form < 1'	3100.120	317.58 sf	31.00 /mh	2,461	1.50 /sf	500	-	-	-	-	-	-	2,961	3,946

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0302- Admin Building Curb at PEMB														
	Formwork S.O.G. Const Joints < 1'	3100.120	5.36 sf	31.00 /mh	76	1.50 /sf	8	-	-	-	-	-	-	85	115
	CJ Prep Slab	3350.170	5.36 sf	31.00 /mh	4	0.15 /sf	1	-	-	-	-	-	-	5	7
	Finegrade Below Concrete	3150.650	236.00 sf	31.00 /mh	146	-	-	-	-	-	-	-	-	146	205
	Finish- Hard Trowel	3350.110	236.00 sf	31.00 /mh	102	/sf		-	-	-	-	-	-	102	143
	Liquid Curing Compounds	3390.170	236.00 sf	31.00 /mh	15	0.06 /sf	14	-	-	-	-	-	-	29	35
	Chamfer 3/4"	3150.625	472.00 lf	31.00 /mh	732	0.20 /lf	99	-	-	-	-	-	-	831	1,123
	Oil SOG Form	3100.310	322.94 sf	31.00 /mh	0	0.02 /sf	6	-	-	-	-	-	-	7	7
	Nails and Hardware	3150.200	317.58 sf	31.00 /mh	0	0.04 /sf	13	-	-	-	-	-	-	13	13
	Dimension Lumber	3150.200	317.58 sf	31.00 /mh	0	0.50 /sf	159	-	-	-	-	-	-	159	159
	Drill and Epoxy #5	3210.101	472.00 ea	31.00 /mh	4,390	5.00 /ea	2,478	-	-	-	-	-	-	6,868	8,623
	Admin Building Curb at PEMB		5.86 cy		8,704		4,313	/cy					196	13,212	16,694
	0302- Admin Building HVAC Pad														
	5000 psi Concrete	3310.100	4.17 cy	-	-	165.00 /cy	736	-	-	-	-	-	-	736	736
	Crane Place Slab on Grade	3310.230	4.17 cy	31.00 /mh	138	-	-	-	-	-	-	-	-	138	193
	Formwork S.O.G. Edge Form > 1'	3100.120	72.00 sf	31.00 /mh	714	1.50 /sf	113	-	-	-	-	-	-	828	1,113
	Finegrade Below Concrete	3150.650	75.00 sf	31.00 /mh	47	-	-	-	-	-	-	-	-	47	65
	Finish- Hard Trowel	3350.110	75.00 sf	31.00 /mh	33	/sf		-	-	-	-	-	-	33	46
	Liquid Curing Compounds	3390.170	75.00 sf	31.00 /mh	5	0.06 /sf	5	-	-	-	-	-	-	9	11
	Chamfer 3/4"	3150.625	48.00 lf	31.00 /mh	74	0.20 /lf	10	-	-	-	-	-	-	84	114
	Road Base Below Concrete	2305.300	2.78 cy	31.00 /mh	43	22.00 /ton	121	-	-	-	-	-	-	164	181
	Oil SOG Form	3100.310	72.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Nails and Hardware	3150.200	72.00 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Dimension Lumber	3150.200	72.00 sf	31.00 /mh	0	0.50 /sf	36	-	-	-	-	-	-	36	36
	SOG Rebar	3210.104	0.52 tn	31.00 /mh	404	1,400.00 /tn	766	-	-	-	-	-	-	1,170	1,331
	Admin Building HVAC Pad		4.17 cy		1,457		1,791	/cy						3,248	3,831
	0303- Admin Building Concrete Stem Walls														
	Pump Place Walls	3310.260	36.22 cy	31.00 /mh	1,202	-	-	-	-	-	-	31.26 /cy	1,212	2,413	2,894
	5000 psi Concrete	3310.100	36.22 cy	-	-	165.00 /cy	6,395	-	-	-	-	-	-	6,395	6,395
	Wall Placement Count	3310.360	4.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Job Built with Plyform 0-4'	3100.180	1,416.00 sf	31.00 /mh	10,974	1.50 /sf	2,230	-	-	-	-	-	-	13,204	17,594
	Wall Pilaster Forms	3150.192	270.00 sf	31.00 /mh	2,930	1.50 /sf	425	-	-	-	-	-	-	3,355	4,527
	Wall Bulkhead Forms	3150.192	12.00 sf	31.00 /mh	171	1.50 /sf	19	-	-	-	-	-	-	190	258
	CJ Prep Walls	3350.170	248.00 sf	31.00 /mh	192	0.15 /sf	37	-	-	-	-	-	-	229	306
	Finish- Top of Wall	3350.110	236.00 sf	31.00 /mh	102	/sf		-	-	-	-	-	-	102	143
	Liquid Curing Walls	3390.170	1,922.00 sf	31.00 /mh	60	0.06 /sf	115	-	-	-	-	-	-	175	199
	Grind/Patch Walls	3350.130	1,686.00 sf	31.00 /mh	627	0.05 /sf	84	-	-	-	-	-	-	711	962
	Oil Wall Forms	3100.310	1,686.00 sf	31.00 /mh	1	0.02 /sf	34	-	-	-	-	-	-	34	34
	Nails and Hardware	3150.200	1,686.00 sf	31.00 /mh	1	0.04 /sf	67	-	-	-	-	-	-	68	68
	Form Ties 12"	3150.632	354.00 ea	31.00 /mh	0	2.35 /ea	832	-	-	-	-	-	-	832	832
	Form Ties Specialty	3150.632	30.00 ea	31.00 /mh	186	5.00 /ea	150	-	-	-	-	-	-	336	410
	Dimension Lumber	3150.200	1,686.00 sf	31.00 /mh	1	0.50 /sf	843	-	-	-	-	-	-	844	844
	Rebar Templates	3200.980	236.00 lf	31.00 /mh	366	0.50 /lf	118	-	-	-	-	-	-	484	630
	Admin Building Concrete Stem Walls		36.22 cy		16,811		11,350	/cy					1,212	29,373	36,097
	0310- Equipment pads at Admin														
	Equipment Pad Form 6"	3100.164	54.00 sf	31.00 /mh	552	1.50 /sf	85	-	-	-	-	-	-	637	858
	Oil Equipment Pad Form	3100.310	54.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	4500 psi Concrete	3310.100	1.87 cy	-	-	165.00 /cy	330	-	-	-	-	-	-	330	330
	Other Placement Count	3310.360	5.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Buggy Place Equipment Pads	3310.300	1.87 cy	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	Liquid Curing Compounds	3390.170	101.00 sf	31.00 /mh	6	0.06 /sf	6	-	-	-	-	-	-	12	15
	Finish- Hard Trowel	3350.110	101.00 sf	31.00 /mh	44	/sf		-	-	-	-	-	-	44	61
	Chamfer	3150.625	108.00 lf	31.00 /mh	50	0.20 /lf	23	-	-	-	-	-	-	73	93
	Misc. Pad Rebar	3210.104	0.23 tn	31.00 /mh	218	1,400.00 /tn	344	-	-	-	-	-	-	562	649
	Nails and Hardware	3150.200	54.00 sf	31.00 /mh	0	0.04 /sf	2	-	-	-	-	-	-	2	2
	Drill and Epoxy #4	3210.101	108.00 ea	31.00 /mh	670	4.00 /ea	454	-	-	-	-	-	-	1,123	1,391
	Equipment pads at Admin		1.87 cy		1,602		1,245	/cy						2,847	3,488
	Concrete Concrete				44,871		46,402						6,189	97,462	115,410
	700 Administration Building				44,871		46,402	/LS					6,189	97,462	115,410
	750 Lab and Control Building														
	Concrete Concrete														
	0302- Fill and Place Concrete cap at UV Channels														
	5000 psi Concrete	3310.100	4.59 cy	-	-	165.00 /cy	811	-	-	-	-	-	-	811	811
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Buggy Place Slab on Grade	3310.230	4.59 cy	31.00 /mh	152	-	-	-	-	-	-	-	-	152	213
	Formwork S.O.G. Edge Form < 1'	3100.120	70.00 sf	31.00 /mh	543	1.50 /sf	110	-	-	-	-	-	-	653	870
	Finegrade Below Concrete	3150.650	124.00 sf	31.00 /mh	77	-	-	-	-	-	-	-	-	77	108
	Finish- Hard Trowel	3350.110	124.00 sf	31.00 /mh	54	/sf		-	-	-	-	-	-	54	75
	Liquid Curing Compounds	3390.170	124.00 sf	31.00 /mh	8	0.06 /sf	7	-	-	-	-	-	-	15	18
	Oil SOG Form	3100.310	70.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0302-	Fill and Place Concrete cap at UV Channels														
	Nails and Hardware	3150.200	70.00 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Dimension Lumber	3150.200	70.00 sf	31.00 /mh	0	0.50 /sf	35	-	-	-	-	-	-	35	35
	SOG Rebar	3210.104	0.57 tn	31.00 /mh	445	1,400.00 /tn	844	-	-	-	-	-	-	1,289	1,467
	Drill and Epoxy #5	3210.101	140.00 ea	31.00 /mh	1,302	5.00 /ea	735	-	-	-	-	-	-	2,037	2,558
	Place Concrete Flow Fill under concrete cap	3310.230	30.00 cy	31.00 /mh	1,990	115.00 /cy	3,692	-	-	-	-	-	-	5,682	6,478
	Fill and Place Concrete cap at UV Channels		4.59 cy		4,570		6,239	/cy						10,809	12,637
	Concrete Concrete				4,570		6,239							10,809	12,637
	750 Lab and Control Building				4,570		6,239	/LS						10,809	12,637
	033000 Cast-In-Place Concrete				2,298,361		2,690,979		1,523,411		549,276		402,157	7,464,184	8,394,514
042200	Concrete Unit Masonry														
	100 Headworks														
	Masonry Masonry														
	014- Winter Conditions Masonry														
	Winter Conditions	1572.100	2.00 mnth	31.00 /mh	5,704	2,000.00 /mnt h	4,000	-	-	-	-	-	-	9,704	11,986
	Winter Heat Fuel	1572.100	2.00 mnth	-	-	2,000.00 /mnt h	4,000	-	-	-	-	-	-	4,000	4,000
	Winter Conditions Masonry				5,704		8,000	/mo						13,704	15,986
	0401- Masonry Headworks														
	Sub - Masonry Subcontr	4000.980	1.00 ls	-	-	-	-	338,000.00 /ls	338,000	-	-	-	-	338,000	338,000
	Masonry Rebar Dray	4080.210	320.00 mnhr	31.00 /mh	9,920	-	-	-	-	-	-	-	-	9,920	13,888
	Rebar Masonry	3200.980	1.00 ls	31.00 /mh		24,000.00 /ls	24,000	-	-	-	-	-	-	24,000	24,000
	Temp Shore Window	4000.210	7.00 ea	31.00 /mh	1,302	100.00 /ea	700	-	-	-	-	-	-	2,002	2,523
	Temp Shore Single door	4000.210	1.00 ea	31.00 /mh	186	100.00 /ea	100	-	-	-	-	-	-	286	360
	Temp Shore Double Doors	4000.210	1.00 ea	31.00 /mh	372	200.00 /ea	200	-	-	-	-	-	-	572	721
	Temp Shore Louvers	4000.210	2.00 ea	31.00 /mh	372	100.00 /ea	200	-	-	-	-	-	-	572	721
	Sub - Masonry Bond	4000.980	1.00 ls	-	-	-	-			-	-	-	-		
	Masonry Headworks				12,152		25,200	/ea	338,000					375,352	380,213
	Masonry Masonry				17,856		33,200		338,000					389,056	396,198
	100 Headworks				17,856		33,200	/LS	338,000					389,056	396,198
	042200 Concrete Unit Masonry				17,856		33,200		338,000					389,056	396,198
055000	Metal Fabrication														
	001 General														
	GEN General														
	05 50- Misc Metals Assembly														
	Purchase Misc. Metals	5001.130	1.00 LS	31.00 /mh	31	994,260.00 /LS	994,260	-	-	-	-	-	-	994,291	994,303
	Grove RT760/RT700, 60 ton (240 HP) (L)	1900.100	2.00 mnth	7,296.00 /mnth	14,592	350.00 /mnt h	700	-	-	9,500.00 /mnth	19,000	1,500.00 /mnth	3,000	37,292	43,509
	Genie 32' Scissor Lift (Requires Power Source)	1900.300	9.00 mnth	-	-	-	-	-	-	1,200.00 /mnth	10,800	100.00 /mnth	900	11,700	11,916
	Boom Lift (L)	1900.300	1.50 mnth	-	-	-	-	-	-	2,800.00 /mnth	4,200	1,250.00 /mnth	1,875	6,075	6,159
	Welding Machine 300 amp (33 HP) (L)	1900.012	3.00 mnth	-	-	/mnt h		-	-	350.00 /mnth	1,050	550.00 /mnth	1,650	2,700	2,721
	RT Telescopic Forklift (12,000 lb) (130 HP) (L)	1900.300	3.00 mnth	-	-	-	-	-	-	3,500.00 /mnth	10,500	1,200.00 /mnth	3,600	14,100	14,310
	Misc Metals Assembly		1.00 ea		14,623		994,960	/ea			45,550		11,025	1,066,158	1,072,918
	GEN General				14,623		994,960				45,550		11,025	1,066,158	1,072,918
	001 General				14,623		994,960	/LS			45,550		11,025	1,066,158	1,072,918
	051 Site Civil														
	Bollards														
	05 55- Bollards														
	Bollards - 6" x 7"	5001.125	42.00 ea	31.00 /mh	31,248	0.00 /ea	0	-	-	-	-	-	-	31,248	43,747
	Place Concrete	3310.270	21.00 cy	31.00 /mh	383	-	-	-	-	-	-	-	-	383	536
	Purchase 4000 psi Concrete	3310.100	21.00 cy	-	-	165.00 /cy	3,708	-	-	-	-	-	-	3,708	3,708
	Bobcat Skid Steer (85hp)- track (L) with auger	1900.131	1.00 mnth	-	-	-	-	-	-	4,000.00 /mnth	4,000	2,000.00 /mnth	2,000	6,000	6,080
	Formwork Sonotube 18"	3100.112	84.00 lf	31.00 /mh	1,302	13.00 /lf	1,147	-	-	-	-	-	-	2,449	2,969
	Bollards		40.00 EA		32,933		4,854	/EA			4,000		2,000	43,787	57,041
	Bollards				32,933		4,854				4,000		2,000	43,787	57,041
	Misc. Metals														
	05 50- Sidewalk Drain														
	Sidewalk Drain	5001.130	8.00 ea	31.00 /mh	3,968	500.00 /ea	4,000	-	-	-	-	-	-	7,968	9,555
	Sidewalk Drain		1.00 ea		3,968		4,000	/ea						7,968	9,555

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	Misc. Metals				3,968		4,000							7,968	9,555
	051 Site Civil				36,901		8,854	/LS			4,000		2,000	51,755	66,596
100 Headworks															
	Misc. Metals														
	05 02- Install W10x15 Beams - HDWK Stair Roofing														
	Erect Steel W 10 Beams (7'-4" Long)	5120.010	4.00 ea	31.00 /mh	992	-	-	-	-	-	-	-	-	992	1,389
	Embed Plate	5124.005	8.00 ea	31.00 /mh	992	0.00 /lbs	0	-	-	-	-	-	-	992	1,389
	Epoxy Anchor 5/8 x 6in HDG	5001.051	24.00 ea	31.00 /mh	37	6.00 /ea	144	-	-	-	-	-	-	181	196
	Non Shrink Grout	3601.100	6.00 cf	31.00 /mh	2,232	60.00 /cf	360	-	-	-	-	-	-	2,592	3,485
	Field Welding - Carbon Steel	5000.985	8.00 hrs	31.00 /mh	248	/hrs		142.36 /hrs	1,139	/hrs		-	-	1,387	1,486
	Install W10x15 Beams - HDWK Stair Roofing		2.00 ls		4,501		504	569.43 /ls	1,139					6,144	7,945
	05 12- Veneer Support Angle														
	Angle 8 x 8 x 3/4	5123.800	404.00 lf	31.00 /mh	10,645	0.01 /lbs	3	-	-	-	-	-	-	10,648	14,907
	Concrete Anchor - 3/4" Dia x 9"	3150.700	340.00 ea	31.00 /mh	5,270	6.00 /ea	2,040	-	-	-	-	-	-	7,310	9,418
	Veneer Support Angle		2.00 ea		15,915		2,043	/ea						17,958	24,325
	05 12- Veneer - Lintel Angles														
	Set Angle Lintels - Louvers	4090.130	2.00 ea	31.00 /mh	496	0.01 /ea	0	-	-	-	-	-	-	496	694
	Set Angle Lintels - Single Doors	4090.130	4.00 ea	31.00 /mh	992	0.01 /ea	0	-	-	-	-	-	-	992	1,389
	Set Angle Lintels - Double Doors	4090.130	3.00 ea	31.00 /mh	1,116	0.01 /ea	0	-	-	-	-	-	-	1,116	1,562
	Set Angle Lintels - Overhead Doors	4090.130	3.00 ea	31.00 /mh	1,488	0.01 /ea	0	-	-	-	-	-	-	1,488	2,083
	Set Angle Lintels - Windows ~9' Long	4090.130	7.00 ea	31.00 /mh	2,604	0.01 /ea	0	-	-	-	-	-	-	2,604	3,646
	Epoxy Anchor 3/4 x 8-1/2in EG	5001.050	96.00 ea	31.00 /mh	149	6.00 /ea	576	-	-	-	-	-	-	725	784
	Veneer - Lintel Angles		2.00 ea		6,845		576	/ea						7,421	10,159
	05 21- Install 30K12 Roof Joists														
	Joist K-Series 30 K12 (9 EA)	5050.101	9.00 ea	31.00 /mh	2,511	0.01 /lbs	2	-	-	-	-	-	-	2,513	3,517
	Epoxy Anchor 3/4 x 10in HDG	5001.051	42.00 ea	31.00 /mh	326	6.00 /ea	252	-	-	-	-	-	-	578	708
	20 GA Galv. Closure Plates	5124.005	36.00 ea	31.00 /mh	4,464	0.01 /lbs	3	-	-	-	-	-	-	4,467	6,252
	Non Shrink Grout	3601.100	18.00 cf	31.00 /mh	6,696	60.00 /cf	1,080	-	-	-	-	-	-	7,776	10,454
	Epoxy Anchor 1/4 x 3-1/4in HDG - For Closure Plates	5001.051	144.00 ea	31.00 /mh	446	6.00 /ea	864	-	-	-	-	-	-	1,310	1,489
	Precast Tees - embed plates	3410.120	18.00 ea	31.00 /mh	2,232	/ea				-	-	-	-	2,232	3,125
	Field Welding - Carbon Steel	5000.985	16.00 hrs	31.00 /mh	496	/hrs		142.35 /hrs	2,278	/hrs		-	-	2,774	2,972
	Angle 1 x 1 x 1/8	5123.801	180.00 lf	-	-	0.00 /lbs	0	-	-	-	-	-	-	0	0
	Angle 1 clip	5123.801	6.00 ea	-	-	0.00 /lbs	0	-	-	-	-	-	-	0	0
	Angle at hatch	5123.804	1.00 ea	-	-	0.00 /lbs	0	-	-	-	-	-	-	0	0
	Bar Joinst bridging	5001.130	1.00 ls	31.00 /mh	2,604	/ls		-	-	-	-	-	-	2,604	3,646
	Field Welding - Carbon Steel	5000.985	16.00 hrs	31.00 /mh	496	/hrs		142.35 /hrs	2,278	/hrs		-	-	2,774	2,972
	Install 30K12 Roof Joists		1.00 ls		20,271		2,200	4,555.34 /ls	4,555					27,027	35,135
	05 32- Railings Aluminum														
	Alum Handrail	5001.115	98.00 lf	31.00 /mh	3,646	0.01 /lf	1	-	-	-	-	-	-	3,647	5,105
	Epoxy Anchor 1/2 x 6in SS 316	5001.054	88.00 ea	31.00 /mh	273	5.00 /ea	440	-	-	-	-	-	-	713	822
	Fall Protection	1116.100	1.00 ls	-	-	-	-	-	-	/ls		-	-		
	Neoprene	7100.100	13.00 lf	31.00 /mh	101	5.00 /lf	70	-	-	-	-	-	-	170	211
	Toe Board	5124.030	48.00 lf	31.00 /mh	0	0.01 /lf	0	-	-	-	-	-	-	0	0
	Railings Aluminum		90.00 lf		4,019		511	/lf						4,530	6,138
	05 45- AL Checkered Plate - 3/8" Thick														
	Checkered Plate 3/8"	5001.122	587.00 sf	31.00 /mh	10,008	0.01 /sf	6	-	-	-	-	-	-	10,014	14,018
	SS Grating Angle - Embed	5001.145	551.00 lf	31.00 /mh	4,270	0.01 /lf	6	-	-	-	-	-	-	4,276	5,984
	1/4" SS Flat Head Screws w/ (2) Nuts	6090.500	551.00 ea	31.00 /mh	0	2.00 /ea	1,102	-	-	-	-	-	-	1,102	1,102
	1/8" Thick x 1 1/2" Neoprene Gasket	7100.100	551.00 lf	31.00 /mh	854	5.00 /lf	2,948	-	-	-	-	-	-	3,802	4,144
	AL Checkered Plate - 3/8" Thick		587.00 sf		15,133		4,061	/sf						19,194	25,247
	05 50- Hose Racks														
	Hose Racks	5001.130	7.00 ea	31.00 /mh	434	/ea		-	-	-	-	-	-	434	608
	Hose Racks		1.00 ea		434			/ea						434	608
	05 50- Ladder														
	Ladder - 10'	5001.140	1.00 ea	31.00 /mh	744	0.01 /ea	0	-	-	-	-	-	-	744	1,042
	Anchors for Ladder	5001.140	8.00 ea	31.00 /mh	31	5.00 /ea	40	-	-	-	-	-	-	71	83
	Grout for Ladder	5001.140	1.00 ea	31.00 /mh	62	20.00 /ea	20	-	-	-	-	-	-	82	107
	Ladder		1.00 ea		837		60	/ea						897	1,232
	05 50- Stairs														
	Aluminum Stairs - 2 Platform - 20' Tall	5001.100	33.00 rs	31.00 /mh	6,138	0.01 /rs	0	-	-	-	-	-	-	6,138	8,594

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
05	50- Stairs														
	Epoxy Anchor 5/8 x 7in EG	5001.050	4.00 ea	31.00 /mh	12	6.00 /ea	24	-	-	-	-	-	-	36	41
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh	248	60.00 /cf	60	-	-	-	-	-	-	308	407
	11 GA AL Plate - Riser	5124.005	35.00 ea	31.00 /mh	0	0.01 /lb s	3	-	-	-	-	-	-	3	3
	Erect AL 8x7.02 I Beams	5120.008	2.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	Anchors for Grating Angle	5001.120	14.00 ea	31.00 /mh	54	5.00 /ea	70	-	-	-	-	-	-	124	146
	Grating Angle - Bolt on	5001.120	15.00 lf	31.00 /mh		0.01 /lf	0	-	-	-	-	-	-	0	0
	Erect AL I 12 Beams	5120.012	2.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	Anchor Bolts 3/4" SST 7.5	6090.500	56.00 ea	31.00 /mh	174	6.00 /ea	336	-	-	-	-	-	-	510	579
	SST Self Tapping Tek Screw 1" Long	7460.100	245.00 ea	31.00 /mh	0	0.50 /ea	131	-	-	-	-	-	-	131	131
	Neoprene	7100.100	4.00 lf	31.00 /mh		5.00 /lf	21	-	-	-	-	-	-	21	21
	Alum Handrail	5001.115	40.00 lf	31.00 /mh	1,860	0.00 /lf	0	-	-	-	-	-	-	1,860	2,604
	Anchors for Handrail	5001.115	34.00 ea	31.00 /mh	132	5.00 /ea	170	-	-	-	-	-	-	302	354
	Stairs		1.00 ea		8,618		816	/ea						9,434	12,881
05	50- Install Deck Angle and Decking														
	Steel Roof Deck 20 ga. 1-1/2"	5050.210	2,747.00 sf	31.00 /mh	6,813	0.00 /sf	0	-	-	-	-	-	-	6,813	9,538
	Fastners for Side Laps	7460.200	546.00 ea	31.00 /mh	0	0.50 /ea	292	-	-	-	-	-	-	292	292
	#12 Screws for 36/5 Pattern	7460.100	945.00 ea	31.00 /mh	0	1.00 /ea	1,011	-	-	-	-	-	-	1,011	1,012
	Angle 3 x 3 x 1/4	5123.803	219.00 lf	31.00 /mh	6,789	0.00 /lb s	0	-	-	-	-	-	-	6,789	9,505
	Anchor Bolt 5/8	5001.064	110.00 ea	31.00 /mh	1,705	6.00 /ea	660	-	-	-	-	-	-	2,365	3,047
	Install Deck Angle and Decking		1.00 ea		15,307		1,963	/ea						17,270	23,393
05	50- 1/4" Plates for Future Gate Locations - Splitter Box														
	Steel Plate 1/4" (QTY 3)	5124.005	3.00 ea	31.00 /mh	1,488	0.01 /lb s	0	-	-	-	-	-	-	1,488	2,084
	Anchor Bolts 1/2" 316 SST 5" Long	6090.500	36.00 ea	31.00 /mh	112	5.00 /ea	180	-	-	-	-	-	-	292	336
	Neoprene	7100.100	48.00 lf	31.00 /mh	37	5.00 /lf	257	-	-	-	-	-	-	294	309
	1/4" Plates for Future Gate Locations - Splitter Box		1.00 ea		1,637		437	/ea						2,074	2,729
05	50- Overhead Door "Jamb"														
	Roll-Up Door Frames - 28 LF EA	5590.100	6.00 ea	31.00 /mh	2,232	0.01 /ea	0	-	-	-	-	-	-	2,232	3,125
	Door jamb hardware	5001.130	6.00 ea	31.00 /mh	186	150.00 /ea	900	-	-	-	-	-	-	1,086	1,160
	Overhead Door "Jamb"		6.00 ea		2,418		900	/ea						3,318	4,285
05	60- 4'-8" x 7' AL Floor Door														
	Access Hatch (Incl. Shipping for All) 4.67 X 7 ft	5001.110	1.00 ea	31.00 /mh	1,240	0.01 /ea	0	-	-	-	-	-	-	1,240	1,736
	Set Angle	3150.710	23.33 LF	31.00 /mh	72	0.00 /L F	0	-	-	-	-	-	-	72	101
	4'-8" x 7' AL Floor Door		1.00 ea		1,312		0	/ea						1,312	1,837
05	60- Roof Hatch 3'x2'-6"														
	Cut In Opening	2220.083	1.00 ls	31.00 /mh	6	-	-	-	-	/ch		-	-	6	9
	Access Hatch Bilco J4 36x30	5001.110	1.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	Roof Hatch 3'x2'-6"		1.00 ea		254		0	/ea						254	356
	Misc. Metals				97,502		14,072		5,694					117,268	156,268
	100 Headworks				97,502		14,072	/LS	5,694					117,268	156,268
150 Influent Pump Station															
	Misc. Metals														
05	50- Eye Bolts for Securing Ladders														
	Eye Bolt 3/4x3 SS 316	5001.064	4.00 ea	31.00 /mh	496	50.00 /ea	200	-	-	-	-	-	-	696	894
	Eye Bolts for Securing Ladders		1.00 ea		496		200	/ea						696	894
05	60- 6' x 4' Hatch														
	Access Hatch Bilco JD4 6" X 4'	5001.110	2.00 ea	31.00 /mh	1,488	0.01 /ea	0	-	-	-	-	-	-	1,488	2,083
	Set Angle	3150.710	40.00 LF	31.00 /mh	124	0.01 /L F	0	-	-	-	-	-	-	124	174
	6' x 4' Hatch		2.00 ea		1,612		0	/ea						1,612	2,257
05	60- 3' x 3' Hatch														
	Access Hatch Bilco J4 36x36	5001.110	3.00 ea	31.00 /mh	1,116	0.01 /ea	0	-	-	-	-	-	-	1,116	1,562
	Set Angle	3150.710	36.00 LF	31.00 /mh	112	0.01 /L F	0	-	-	-	-	-	-	112	157
	3' x 3' Hatch		3.00 ea		1,228		0	/ea						1,228	1,719
05	60- 6' x 8' Hatch														
	Access Hatch Bilco JD4AL 6' X 8'	5001.110	2.00 ea	31.00 /mh	248	8,000.00 /ea	16,000	-	-	-	-	-	-	16,248	16,347
	Set Angle	3150.710	56.00 LF	31.00 /mh	434	0.01 /L F	1	-	-	-	-	-	-	435	608
	6' x 8' Hatch		2.00 ea		682		16,001	/ea						16,683	16,955
	Misc. Metals				4,018		16,201							20,219	21,826
	150 Influent Pump Station				4,018		16,201	/LS						20,219	21,826
200 Aeration Basin															
	Misc. Metals														
05	32- Railings Aluminum														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
05	32- Railings Aluminum														
	Alum Handrail	5001.115	716.00 lf	31.00 /mh	19,976	0.01 /lf	7	-	-	-	-	-	-	19,984	27,974
	Epoxy Anchor 1/2 x 6in SS 316	5001.054	716.00 ea	31.00 /mh	1,110	5.00 /ea	3,580	-	-	-	-	-	-	4,690	5,134
	Fall Protection	1116.100	1.00 ls	-	-	-	-	-	-	/ls		-	-		
	Neoprene	7100.100	90.00 lf	31.00 /mh	70	5.00 /lf	482	-	-	-	-	-	-	551	579
	Toe Board	5124.030	716.00 lf	31.00 /mh	0	0.01 /lf	7	-	-	-	-	-	-	7	7
	Railings Aluminum		90.00 lf		21,156		4,076	/lf						25,232	33,694
05	43- Floor Grating - Aluminum														
	Alum Floor Grating 1.50"	5001.120	72.00 sf	31.00 /mh	558	0.01 /sf	1	-	-	-	-	-	-	559	782
	Alum Grating Angle - Embed 1.5x1.5x1/4	5001.145	44.00 lf	31.00 /mh	341	0.01 /lf	0	-	-	-	-	-	-	341	478
	Floor Grating - Aluminum		144.00 sf		899		1	/sf						900	1,260
05	50- Stairs - East														
	Aluminum Stairs - 2 Platform - 20' Tall	5001.100	20.00 rs	31.00 /mh	1,550	0.01 /rs	0	-	-	-	-	-	-	1,550	2,170
	Epoxy Anchor 5/8 x 7in EG	5001.050	4.00 ea	31.00 /mh	12	6.00 /ea	24	-	-	-	-	-	-	36	41
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh		60.00 /cf	60	-	-	-	-	-	-	60	60
	8 GA AL Plate - Half Riser	5124.005	20.00 ea	31.00 /mh	0	0.01 /lb s	2	-	-	-	-	-	-	2	2
	Erect AL 8x6.35 I Beams	5120.008	1.00 ea	31.00 /mh		0.00 /ea	0	-	-	-	-	-	-		
	Grating Angle - Embed	5001.120	4.00 lf	31.00 /mh	31	0.01 /lf	0	-	-	-	-	-	-	31	43
	Erect AL PL 3/8x3x3	5120.012	2.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	Anchor Bolts 3/4" SST for PL	6090.500	5.00 ea	31.00 /mh	16	6.00 /ea	30	-	-	-	-	-	-	46	52
	Anchor Bolt 3/4x6.5 SS - Conn. to Concrete	5001.063	4.00 ea	31.00 /mh	12	6.00 /ea	24	-	-	-	-	-	-	36	41
	Anchor Bolt 3/4 SS - Stringer to Beam	5001.063	4.00 ea	31.00 /mh	12	0.01 /ea	0	-	-	-	-	-	-	12	17
	Neoprene	7100.100	3.00 lf	31.00 /mh	9	5.00 /lf	16	-	-	-	-	-	-	25	29
	SST Self Tapping Tek Screw 1" Long for Half Riser	7460.100	140.00 ea	31.00 /mh	0	0.50 /ea	75	-	-	-	-	-	-	75	75
	Aluminum 3 Line Rail	5001.115	47.00 lf	31.00 /mh	2,186	0.01 /lf	0	-	-	-	-	-	-	2,186	3,060
	Anchors for Handrail	5001.115	24.00 ea	31.00 /mh	93	5.00 /ea	120	-	-	-	-	-	-	213	250
	Stairs - East		1.00 ea		3,922		351	/ea						4,273	5,841
05	50- Stairs - North														
	Aluminum Stairs - 2 Platform - 20' Tall	5001.100	20.00 rs	31.00 /mh	1,550	0.01 /rs	0	-	-	-	-	-	-	1,550	2,170
	Epoxy Anchor 5/8 x 7in EG	5001.050	4.00 ea	31.00 /mh	12	6.00 /ea	24	-	-	-	-	-	-	36	41
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh		60.00 /cf	60	-	-	-	-	-	-	60	60
	8 GA AL Plate - Haf Riser	5124.005	20.00 ea	31.00 /mh	0	0.01 /lb s	2	-	-	-	-	-	-	2	2
	Erect AL 8x6.35 I Beams	5120.008	1.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	Grating Angle - Embed	5001.120	4.00 lf	31.00 /mh	31	0.01 /lf	0	-	-	-	-	-	-	31	43
	Erect AL PL 3/8x3x3	5120.012	2.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	Anchor Bolts 3/4" SST for PL	6090.500	5.00 ea	31.00 /mh	16	6.00 /ea	30	-	-	-	-	-	-	46	52
	Anchor Bolt 3/4x6.5 SS - Conn. to Concrete	5001.063	4.00 ea	31.00 /mh	12	6.00 /ea	24	-	-	-	-	-	-	36	41
	Anchor Bolt 3/4 SS - Stringer to Beam	5001.063	4.00 ea	31.00 /mh	12	0.01 /ea	0	-	-	-	-	-	-	12	17
	Neoprene	7100.100	3.00 lf	31.00 /mh	9	5.00 /lf	16	-	-	-	-	-	-	25	29
	SST Self Tapping Tex Screw 1" Long for Half Riser	7460.100	140.00 ea	31.00 /mh	0	0.50 /ea	75	-	-	-	-	-	-	75	75
	Aluminum 3 Line Rail	5001.115	47.00 lf	31.00 /mh	2,186	0.01 /lf	0	-	-	-	-	-	-	2,186	3,060
	Anchors for Handrail	5001.115	24.00 ea	31.00 /mh	93	5.00 /ea	120	-	-	-	-	-	-	213	250
	Stairs - North		1.00 ea		3,922		351	/ea						4,273	5,841
	Misc. Metals				29,898		4,779							34,678	46,637
	200 Aeration Basin				29,898		4,779	/LS						34,678	46,637
250	Secondary Clarifier Splitter Box														
	Misc. Metals														
05	32- Railings Aluminum														
	Alum Handrail	5001.115	88.00 lf	31.00 /mh	2,455	0.01 /lf	1	-	-	-	-	-	-	2,456	3,438
	Epoxy Anchor 1/2 x 6in SS 316	5001.054	88.00 ea	31.00 /mh	273	5.00 /ea	440	-	-	-	-	-	-	713	822
	Fall Protection	1116.100	1.00 ls	-	-	-	-	-	-	/ls		-	-		
	Neoprene	7100.100	33.00 lf	31.00 /mh	102	5.00 /lf	177	-	-	-	-	-	-	279	320
	Toe Board	5124.030	88.00 lf	31.00 /mh	0	0.01 /lb s	108	-	-	-	-	-	-	108	108
	Railings Aluminum		90.00 lf		2,830		725	/lf						3,556	4,688
05	43- Floor Grating - Aluminum														
	Alum Floor Grating 1.50"	5001.120	68.00 sf	31.00 /mh	632	0.01 /sf	1	-	-	-	-	-	-	633	886
	Alum Grating Angle - Embed 1.5x1.5x1/4	5001.145	54.00 lf	31.00 /mh	419	0.01 /lf	1	-	-	-	-	-	-	419	586
	Angle 3 x 3 x 1/4	5123.803	10.00 lf	31.00 /mh		0.01 /lb s	1	-	-	-	-	-	-	1	1
	Anchor Bolts 5/8" SST - 6.5" Long for Angle	6090.500	8.00 ea	31.00 /mh	25	6.00 /ea	48	-	-	-	-	-	-	73	83
	Floor Grating - Aluminum		68.00 sf		1,076		50	/sf						1,125	1,556
05	45- AL Checkered Plate - 3/8"														
	Checkered Plate 3/8"	5001.122	68.00 sf	31.00 /mh	632	0.01 /sf	1	-	-	-	-	-	-	633	886
	SS Grating Angle - Embed	5001.145	54.00 lf	31.00 /mh	419	0.01 /lf	1	-	-	-	-	-	-	419	586
	Tubing LF #1	15219.100	54.00 lf	31.00 /mh	134	2.00 /lf	119	-	-	-	-	-	-	253	306
	Angle 3 x 3 x 1/4	5123.803	10.00 lf	31.00 /mh	78	0.01 /lb s	1	-	-	-	-	-	-	78	109
	Anchor Bolts 5/8" SST - 6.5" Long For Angle	6090.500	8.00 ea	31.00 /mh	25	6.00 /ea	48	-	-	-	-	-	-	73	83

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	AL Checkered Plate - 3/8"		68.00 sf		1,287		169	/sf						1,456	1,971
05	50- 1/2" Plates for Future Gate Locations														
	Steel Plate 1/2" (QTY 2)	5124.005	10.00 sf	31.00 /mh	992	0.01 /lb s	1	-	-	-	-	-	-	993	1,390
	Anchor Bolts 1/2" 316 SST	6090.500	42.00 ea	31.00 /mh	130	5.00 /ea	210	-	-	-	-	-	-	340	392
	Neoprene Sheets - 1/8"	7100.100	3.00 sf	31.00 /mh	9	5.00 /sf	16	-	-	-	-	-	-	25	29
	1/2" Plates for Future Gate Locations		1.00 ea		1,132		227	/ea						1,359	1,811
05	50- Stairs														
	Aluminum Stairs - 2 Platform - 7.5' Tall	5001.100	17.00 rs	31.00 /mh	1,581	0.01 /rs	0	-	-	-	-	-	-	1,581	2,214
	Epoxy Anchor 5/8 x 7in	5001.050	4.00 ea	31.00 /mh	12	6.00 /ea	24	-	-	-	-	-	-	36	41
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh		60.00 /cf	60	-	-	-	-	-	-	60	60
	8 GA AL Plate -Half Riser	5124.005	12.00 ea	31.00 /mh		0.01 /lb s	1	-	-	-	-	-	-	1	1
	Anchor Bolt 3/4 SS - Stringer to Bridge Beam	5001.063	4.00 ea	31.00 /mh	6	0.01 /ea	0	-	-	-	-	-	-	6	9
	Self Tapping Tex Screw 1" long for Half Riser	7460.100	119.00 ea	31.00 /mh	0	0.50 /ea	64	-	-	-	-	-	-	64	64
	Aluminum 3 Line Rail	5001.115	42.00 lf	31.00 /mh	1,953	0.01 /lf	0	-	-	-	-	-	-	1,953	2,735
	Anchors for Handrail	5001.115	36.00 ea	31.00 /mh	140	5.00 /ea	180	-	-	-	-	-	-	320	375
	Stairs		1.00 ea		3,692		329	/ea						4,021	5,498
	Misc. Metals				10,017		1,500							11,517	15,523
	250 Secondary Clarifier Splitter Box				10,017		1,500	/LS						11,517	15,523
300	Secondary Clarifiers 5 and 6														
	Misc. Metals														
05	43- Floor Grating - Aluminum														
	Alum Floor Grating 1.50"	5001.120	33.00 sf	31.00 /mh	512	0.01 /sf	0	-	-	-	-	-	-	512	716
	Alum Grating Angle - Embed 1.5x1.5x1/4	5001.145	33.00 lf	31.00 /mh	256	0.01 /lf	0	-	-	-	-	-	-	256	358
	Floor Grating - Aluminum		144.00 sf		767		1	/sf						768	1,075
05	50- Stairs - Clarifier 5														
	Aluminum Stairs - 2 Platform - 7.5' Tall	5001.100	12.00 rs	31.00 /mh	1,488	0.01 /rs	0	-	-	-	-	-	-	1,488	2,083
	Epoxy Anchor 5/8 x 7in	5001.050	4.00 ea	31.00 /mh	6	6.00 /ea	24	-	-	-	-	-	-	30	33
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh	124	60.00 /cf	60	-	-	-	-	-	-	184	234
	8 GA AL Plate -Half Riser	5124.005	12.00 ea	31.00 /mh		0.01 /lb s	1	-	-	-	-	-	-	1	1
	Self Tapping Tex Screw 1" long for Half Riser	7460.100	84.00 ea	31.00 /mh	0	0.50 /ea	45	-	-	-	-	-	-	45	45
	Aluminum 3 Line Rail	5001.115	27.00 lf	31.00 /mh	1,256	0.01 /lf	0	-	-	-	-	-	-	1,256	1,758
	Anchors for Handrail	5001.115	20.00 ea	31.00 /mh	78	5.00 /ea	100	-	-	-	-	-	-	178	209
	Anchor Bolt 3/4 SS - Stringer to Bridge Beam	5001.063	4.00 ea	31.00 /mh	12	6.00 /ea	24	-	-	-	-	-	-	36	41
	Stairs - Clarifier 5		1.00 ea		2,964		254	/ea						3,218	4,403
05	50- Stairs - Clarifier 6														
	Aluminum Stairs - 2 Platform - 7.5' Tall	5001.100	12.00 rs	31.00 /mh	1,488	0.01 /rs	0	-	-	-	-	-	-	1,488	2,083
	Epoxy Anchor 5/8 x 7in EG	5001.050	4.00 ea	31.00 /mh	6	6.00 /ea	24	-	-	-	-	-	-	30	33
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh	124	60.00 /cf	60	-	-	-	-	-	-	184	234
	8 GA AL Plate -Half Riser	5124.005	12.00 ea	31.00 /mh		0.01 /lb s	1	-	-	-	-	-	-	1	1
	Anchor Bolt 3/4 SS - Stringer to Bridge Beam	5001.063	4.00 ea	31.00 /mh	6	0.01 /ea	0	-	-	-	-	-	-	6	9
	Self Tapping Tex Screw 1" long for Half Riser	7460.100	84.00 ea	31.00 /mh	0	0.50 /ea	45	-	-	-	-	-	-	45	45
	Aluminum 3 Line Rail	5001.115	27.00 lf	31.00 /mh	1,256	0.01 /lf	0	-	-	-	-	-	-	1,256	1,758
	Anchors for Handrail	5001.115	20.00 ea	31.00 /mh	78	5.00 /ea	100	-	-	-	-	-	-	178	209
	Stairs - Clarifier 6		1.00 ea		2,957		230	/ea						3,188	4,371
	Misc. Metals				6,688		485							7,174	9,849
	300 Secondary Clarifiers 5 and 6				6,688		485	/LS						7,174	9,849
350	Step Feed Process Building														
	Misc. Metals														
05	32- Railings Aluminum														
	Alum Handrail	5001.115	54.00 lf	31.00 /mh	1,507	0.01 /lf	1	-	-	-	-	-	-	1,507	2,110
	Epoxy Anchor 1/2 x 6in SS 316	5001.054	54.00 ea	31.00 /mh	167	5.00 /ea	270	-	-	-	-	-	-	437	504
	Toe Board	5124.030	54.00 lf	31.00 /mh	0	0.01 /lb s	66	-	-	-	-	-	-	66	66
	Railings Aluminum		90.00 lf		1,674		337	/lf						2,011	2,680
05	43- Floor Grating - Aluminum														
	Alum Floor Grating 1.25"	5001.120	9.00 sf	31.00 /mh	140	0.01 /sf	0	-	-	-	-	-	-	140	195
	Alum Grating Angle - Embed 1.5x1.5x1/4	5001.145	12.00 lf	31.00 /mh	93	0.01 /lf	0	-	-	-	-	-	-	93	130
	Floor Grating - Aluminum		144.00 sf		233		0	/sf						233	326
05	50- Hose Racks														
	Hose Racks	5001.130	9.00 ea	31.00 /mh	837	/ea		-	-	-	-	-	-	837	1,172
	Hose Racks		1.00 ea		837			/ea						837	1,172
05	50- Stairs														
	Aluminum Stairs - 2 Platform - 20' Tall	5001.100	26.00 rs	31.00 /mh	2,418	0.01 /rs	0	-	-	-	-	-	-	2,418	3,385
	Epoxy Anchor 5/8 x 7in - Floor	5001.050	4.00 ea	31.00 /mh	12	6.00 /ea	24	-	-	-	-	-	-	36	41
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh		60.00 /cf	60	-	-	-	-	-	-	60	60

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
05	50- Stairs														
	11 GA AL Plate - Riser	5124.005	26.00 ea	31.00 /mh	0	0.01 /lb s	2	-	-	-	-	-	-	2	2
	Erect AL 8x7.02 I Beams	5120.008	1.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	Anchors for Grating Angle	5001.120	5.00 ea	31.00 /mh	19	5.00 /ea	25	-	-	-	-	-	-	44	52
	Grating Angle - Bolt on	5001.120	7.00 lf	31.00 /mh	54	0.01 /lf	0	-	-	-	-	-	-	54	76
	Erect AL I 12 Beams	5120.012	1.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	Anchor Bolts 3/4" SST 7.5 - Into Concrete	6090.500	28.00 ea	31.00 /mh	87	6.00 /ea	168	-	-	-	-	-	-	255	290
	SST Self Tapping Tek Screw 1" Long	7460.100	182.00 ea	31.00 /mh	0	0.50 /ea	97	-	-	-	-	-	-	97	97
	Neoprene Sheets	7100.100	3.00 lf	31.00 /mh	9	5.00 /lf	16	-	-	-	-	-	-	25	29
	Aluminum 3 Line Rail	5001.115	32.00 lf	31.00 /mh	1,488	0.01 /lf	0	-	-	-	-	-	-	1,488	2,084
	Anchors for Handrail	5001.115	22.00 ea	31.00 /mh	85	5.00 /ea	110	-	-	-	-	-	-	195	229
	Stairs		1.00 ea		4,173		503	/ea						4,677	6,346
05	50- Stairs - to Screw Press Platform														
	Aluminum Stairs - 2 Platform - 9'-2"	5001.100	10.00 rs	31.00 /mh	1,550	0.01 /rs	0	-	-	-	-	-	-	1,550	2,170
	Epoxy Anchor 5/8 x 7in	5001.050	4.00 ea	31.00 /mh	12	6.00 /ea	24	-	-	-	-	-	-	36	41
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh	124	60.00 /cf	60	-	-	-	-	-	-	184	234
	8 GA AL Plate -Half Riser	5124.005	10.00 ea	31.00 /mh		0.01 /lb s	1	-	-	-	-	-	-	1	1
	Anchor Bolt 3/4 SS - Stringer to Platform Beam	5001.063	4.00 ea	31.00 /mh	12	0.01 /ea	0	-	-	-	-	-	-	12	17
	Self Tapping Tex Screw 1" long for Half Riser	7460.100	70.00 ea	31.00 /mh	0	0.50 /ea	37	-	-	-	-	-	-	37	37
	Aluminum 3 Line Rail	5001.115	21.00 lf	31.00 /mh	977	0.01 /lf	0	-	-	-	-	-	-	977	1,367
	Anchors for Handrail	5001.115	17.00 ea	31.00 /mh	66	5.00 /ea	85	-	-	-	-	-	-	151	177
	Stairs - to Screw Press Platform		1.00 ea		2,741		208	/ea						2,949	4,045
05	50- Ladder														
	Ladder - 2'	5001.140	3.00 ea	31.00 /mh	744	0.00 /ea	0	-	-	-	-	-	-	744	1,042
	Anchors for Ladder	5001.140	8.00 ea	31.00 /mh	31	5.00 /ea	40	-	-	-	-	-	-	71	83
	Ladder		1.00 ea		775		40	/ea						815	1,125
05	50- Screw Press Platform														
	Erect AL L3x3 - Column	5120.004	24.00 ea	31.00 /mh	2,604	-	-	-	-	-	-	-	-	2,604	3,646
	Epoxy Anchor 5/8 x 7in SS 316 for Columns	5001.054	48.00 ea	31.00 /mh	149	6.00 /ea	288	-	-	-	-	-	-	437	496
	Erect C8 Beams	5120.004	22.00 ea	31.00 /mh	2,387	-	-	-	-	-	-	-	-	2,387	3,342
	Beam Connection Bolts	15060.476	104.00 ea	-	-	0.01 /ea	1	-	-	-	-	-	-	1	1
	Alum Floor Grating 1.25"	5001.120	140.00 sf	31.00 /mh	434	0.01 /sf	1	-	-	-	-	-	-	435	609
	Screw Press Platform		1.00 ea		5,574		290	/ea						5,864	8,094
05	50- Dumpster Rails														
	PL 1/2"x 62' Long x 1'-10" Wide - Rear Wheel	5001.130	2.00 ea	31.00 /mh	6,324	0.01 /ea	0	-	-	-	-	-	-	6,324	8,854
	Non Shrink Grout	3601.100	102.00 cf	31.00 /mh	4,743	60.00 /cf	6,120	-	-	-	-	-	-	10,863	12,760
	Epoxy Anchor 5/8 x 8-1/2in SS 316	5001.054	124.00 ea	31.00 /mh	384	6.00 /ea	744	-	-	-	-	-	-	1,128	1,282
	PL 1/2"x1'x 56'-3" - Front Wheel	5124.005	2.00 ea	31.00 /mh	6,324	0.01 /lb s	0	-	-	-	-	-	-	6,324	8,854
	Non Shrink Grout	3601.100	17.00 cf	31.00 /mh	791	60.00 /cf	1,020	-	-	-	-	-	-	1,811	2,127
	Epoxy Anchor 5/8 x 8-1/2in SS 316	5001.054	112.00 ea	31.00 /mh	347	6.00 /ea	672	-	-	-	-	-	-	1,019	1,158
	Field Welding - Stainless	5000.985	24.00 hrs	31.00 /mh	744	/hr s		115.00 /hrs	2,760	/hrs		-	-	3,504	3,802
	Dumpster Rails		1.00 ea		19,657		8,556	2,760.01 /ea	2,760					30,974	38,836
05	60- 6' x 4' Hatch														
	Access Hatch Bilco JD2 6' X 4'	5001.110	1.00 ea	31.00 /mh	992	0.01 /ea	0	-	-	-	-	-	-	992	1,389
	Set Angle	3150.710	20.00 LF	31.00 /mh	62	0.00 /L F	0	-	-	-	-	-	-	62	87
	6' x 4' Hatch		2.00 ea		1,054		0	/ea						1,054	1,476
	Misc. Metals				36,718		9,934		2,760					49,413	64,100
	350 Step Feed Process Building				36,718		9,934	/LS	2,760					49,413	64,100
400	Orbal Anaerobic Reactor														
	Misc. Metals														
05	32- Railings Aluminum														
	Alum Handrail	5001.115	39.00 lf	31.00 /mh	1,088	0.01 /lf	0	-	-	-	-	-	-	1,088	1,524
	Epoxy Anchor 1/2 x 6in SS 316	5001.054	39.00 ea	31.00 /mh	121	5.00 /ea	195	-	-	-	-	-	-	316	364
	Toe Board	5124.030	39.00 lf	31.00 /mh	0	0.01 /lb s	48	-	-	-	-	-	-	48	48
	Railings Aluminum		90.00 lf		1,209		243	/lf						1,452	1,936
05	50- Stairs To Grating														
	Aluminum Stairs - 2 Platform - 7.5' Tall	5001.100	12.00 rs	31.00 /mh	1,488	0.01 /rs	0	-	-	-	-	-	-	1,488	2,083
	Epoxy Anchor 5/8 x 7in EG	5001.050	4.00 ea	31.00 /mh	6	6.00 /ea	24	-	-	-	-	-	-	30	33
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh	124	60.00 /cf	60	-	-	-	-	-	-	184	234
	8 GA AL Plate -Half Riser	5124.005	12.00 ea	31.00 /mh		0.01 /lb s	1	-	-	-	-	-	-	1	1
	Anchor Bolt 3/4 SS - Stringer to Bridge Beam	5001.063	4.00 ea	31.00 /mh	6	6.00 /ea	24	-	-	-	-	-	-	30	33
	Self Tapping Tex Screw 1" long for Half Riser	7460.100	84.00 ea	31.00 /mh	0	0.50 /ea	45	-	-	-	-	-	-	45	45
	Aluminum 3 Line Rail	5001.115	31.00 lf	31.00 /mh	1,442	0.01 /lf	0	-	-	-	-	-	-	1,442	2,018

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
05	50- Stairs To Grating														
	Anchors for Handrail	5001.115	20.00 ea	31.00 /mh	78	5.00 /ea	100	-	-	-	-	-	-	178	209
	Stairs To Grating		1.00 ea		3,143		254	/ea						3,398	4,655
	Misc. Metals				4,352		497							4,850	6,591
	400 Orbal Anaerobic Reactor				4,352		497	/LS						4,850	6,591
	550 UV and Digester Blower Building														
	Misc. Metals														
05	43- AL Grating - 2"														
	Alum Floor Grating 2"	5001.120	433.00 sf	31.00 /mh	2,416	0.01 /sf	4	-	-	-	-	-	-	2,420	3,387
	Grating Angle - Bolt on 3x3x1/4	5001.120	300.00 lf	31.00 /mh	3,255	0.01 /lf	3	-	-	-	-	-	-	3,258	4,560
	Anchor Bolt 5/8x6 SS 316	5001.064	189.00 ea	31.00 /mh	293	6.00 /ea	1,134	-	-	-	-	-	-	1,427	1,544
	Erect Steel Channel 6"	5122.406	8.00 ea	31.00 /mh	1,488	-	-	-	-	/ea	-	-	-	1,488	2,083
	AL 16x4.03 Beams - 6'10" Long	5120.016	4.00 ea	31.00 /mh	1,240	-	-	-	-	-	-	-	-	1,240	1,736
	Anchor Bolts 3/4" SST - For Beams	6090.500	32.00 ea	31.00 /mh	99	6.00 /ea	192	-	-	-	-	-	-	291	331
	AL Grating - 2"		433.00 sf		8,791		1,333	/sf						10,125	13,641
05	50- Hose Racks														
	Hose Racks	5001.130	1.00 ea	31.00 /mh	93	/ea		-	-	-	-	-	-	93	130
	Hose Racks		1.00 ea		93			/ea						93	130
05	50- 1/2" Plates for Future														
	Steel Plate 1/4" (QTY 1)	5124.005	1.00 ea	31.00 /mh	248	0.01 /lb s	0	-	-	-	-	-	-	248	347
	Anchor Bolts 1/2" 316 SST 5" Long	6090.500	8.00 ea	31.00 /mh	25	5.00 /ea	40	-	-	-	-	-	-	65	75
	Neoprene	7100.100	3.00 lf	31.00 /mh	9	5.00 /lf	16	-	-	-	-	-	-	25	29
	1/2" Plates for Future		1.00 ea		282		56	/ea						338	451
	Misc. Metals				9,166		1,389							10,556	14,222
	550 UV and Digester Blower Building				9,166		1,389	/LS						10,556	14,222
	600 Aerobic Digester 5 and 6														
	Misc. Metals														
05	32- Railings Aluminum														
	Alum Handrail	5001.115	230.00 lf	31.00 /mh	6,417	0.01 /lf	2	-	-	-	-	-	-	6,419	8,986
	Epoxy Anchor 1/2 x 6in SS 316	5001.054	230.00 ea	31.00 /mh	357	5.00 /ea	1,150	-	-	-	-	-	-	1,507	1,649
	Fall Protection	1116.100	1.00 ls	-	-	-	-	-	-	/ls	-	-	-		
	Neoprene	7100.100	60.00 lf	31.00 /mh	186	5.00 /lf	321	-	-	-	-	-	-	507	581
	Skyjack/Genie 19' Scissor Lift (Requires Power Source)	1900.300	1.00 mnth	-	-	-	-	-	-	800.00 /mnth	800	100.00 /mnth	100	900	916
	Toe Board	5124.030	230.00 lf	31.00 /mh		0.01 /lb s	282	-	-	-	-	-	-	282	282
	Railings Aluminum		230.00 lf		6,960		1,755	/lf			800		100	9,615	12,414
05	45- AL Checkered Plate - 3/8" Thick														
	Checkered Plate 3/8"	5001.122	30.00 sf	31.00 /mh	1,163	0.01 /sf	0	-	-	-	-	-	-	1,163	1,628
	SS Grating Angle - Embed	5001.145	32.00 lf	31.00 /mh	347	0.01 /lf	0	-	-	-	-	-	-	348	486
	1/4" SS Flat Head Screws w/ (2) Nuts	6090.500	8.00 ea	31.00 /mh		2.00 /ea	16	-	-	-	-	-	-	16	16
	AL Checkered Plate - 3/8" Thick		30.00 sf		1,510		17	/sf						1,526	2,130
05	50- Stairs - North														
	Aluminum Stairs - 2 Platform -8'-3" Tall	5001.100	9.00 rs	31.00 /mh	1,535	0.01 /rs	0	-	-	-	-	-	-	1,535	2,148
	Epoxy Anchor 5/8 x 7in EG	5001.050	4.00 ea	31.00 /mh	6	6.00 /ea	24	-	-	-	-	-	-	30	33
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh	124	60.00 /cf	60	-	-	-	-	-	-	184	234
	8 GA AL Plate - Half Riser	5124.005	9.00 ea	31.00 /mh		0.01 /lb s	1	-	-	-	-	-	-	1	1
	Erect AL 8x6.35 I Beams	5120.008	1.00 ea	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Grating Angle - Embed	5001.120	4.00 lf	31.00 /mh	43	0.01 /lf	0	-	-	-	-	-	-	43	61
	Erect AL PL 3/8x3x3	5120.012	2.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	Anchor Bolts 3/4" SST for PL	6090.500	5.00 ea	31.00 /mh	16	6.00 /ea	30	-	-	-	-	-	-	46	52
	Anchor Bolt 3/4x6.5 SS - Conn. to Concrete	5001.063	4.00 ea	31.00 /mh	6	6.00 /ea	24	-	-	-	-	-	-	30	33
	Anchor Bolt 3/4 SS - Stringer to Beam	5001.063	4.00 ea	31.00 /mh	6	6.00 /ea	24	-	-	-	-	-	-	30	33
	Neoprene	7100.100	3.00 lf	31.00 /mh	9	5.00 /lf	16	-	-	-	-	-	-	25	29
	SST Self Tapping Tek Screw 1" Long for Half Riser	7460.100	63.00 ea	31.00 /mh	0	0.50 /ea	34	-	-	-	-	-	-	34	34
	Aluminum 3 Line Rail	5001.115	27.00 lf	31.00 /mh	1,256	0.01 /lf	0	-	-	-	-	-	-	1,256	1,758
	Anchors for Handrail	5001.115	26.00 ea	31.00 /mh	101	5.00 /ea	130	-	-	-	-	-	-	231	271
	Stairs - North		1.00 ea		3,598		343	/ea						3,940	5,379
05	50- Stairs - East														
	Aluminum Stairs - 2 Platform - 20' Tall	5001.100	10.00 rs	31.00 /mh	1,705	0.01 /rs	0	-	-	-	-	-	-	1,705	2,387
	Epoxy Anchor 5/8 x 7in EG	5001.050	4.00 ea	31.00 /mh	6	6.00 /ea	24	-	-	-	-	-	-	30	33
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh		60.00 /cf	60	-	-	-	-	-	-	60	60
	8 GA AL Plate - Half Riser	5124.005	10.00 ea	31.00 /mh		0.01 /lb s	1	-	-	-	-	-	-	1	1
	Erect AL 8x6.35 I Beams	5120.008	1.00 ea	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Grating Angle - Embed	5001.120	4.00 lf	31.00 /mh	31	0.01 /lf	0	-	-	-	-	-	-	31	43
	Erect AL PL 3/8x3x3	5120.012	2.00 ea	31.00 /mh	217	-	-	-	-	-	-	-	-	217	304
	Anchor Bolts 3/4" SST for PL	6090.500	5.00 ea	31.00 /mh	31	6.00 /ea	30	-	-	-	-	-	-	61	73
	Anchor Bolt 3/4x6.5 SS - Conn. to Concrete	5001.063	4.00 ea	31.00 /mh	25	6.00 /ea	24	-	-	-	-	-	-	49	59

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
05	50- Stairs - East														
	Anchor Bolt 3/4 SS - Stringer to Beam	5001.063	4.00 ea	31.00 /mh	25	6.00 /ea	24	-	-	-	-	-	-	49	59
	Neoprene	7100.100	3.00 lf	31.00 /mh	9	5.00 /lf	16	-	-	-	-	-	-	25	29
	SST Self Tapping Tek Screw 1" Long for Half Riser	7460.100	70.00 ea	31.00 /mh	0	0.50 /ea	37	-	-	-	-	-	-	37	37
	Aluminum 3 Line Rail	5001.115	29.00 lf	31.00 /mh	1,349	0.01 /lf	0	-	-	-	-	-	-	1,349	1,888
	Anchors for Handrail	5001.115	26.00 ea	31.00 /mh	101	5.00 /ea	130	-	-	-	-	-	-	231	271
	Stairs - East		1.00 ea		3,994		347	/ea						4,341	5,939
05	50- Special Pipe Supports														
	Install Large Pipe Supports	5001.130	11.00 ea	31.00 /mh	6,820	/ea		-	-	-	-	-	-	6,820	9,548
	Set Anchor Bolts and supply	3150.700	88.00 ea	31.00 /mh	2,728	25.00 /ea	2,200	-	-	-	-	-	-	4,928	6,019
	Special Pipe Supports		1.00 ea		9,548		2,200	/ea						11,748	15,567
05	60- 6' x 4' Hatch														
	Install Access Hatch	5001.110	2.00 ea	31.00 /mh	1,984	0.01 /ea	0	-	-	-	-	-	-	1,984	2,778
	Set Angle	3150.710	40.00 LF	31.00 /mh	124	0.01 /L F	0	-	-	-	-	-	-	124	174
	6' x 4' Hatch		2.00 ea		2,108		0	/ea						2,108	2,952
	Misc. Metals				27,717		4,662				800		100	33,279	44,382
	600 Aerobic Digester 5 and 6				27,717		4,662	/LS			800		100	33,279	44,382
650	Existing Digester 1 to 4														
	Digester 1&2														
05	32- Railings Aluminum														
	Alum Handrail	5001.115	135.00 lf	31.00 /mh	3,767	0.01 /lf	1	-	-	-	-	-	-	3,768	5,274
	Epoxy Anchor 1/2 x 6in SS 316	5001.054	135.00 ea	31.00 /mh	419	5.00 /ea	675	-	-	-	-	-	-	1,094	1,261
	Fall Protection	1116.100	1.00 ls	-	-	-	-	-	-	/ls		-	-		
	Neoprene	7100.100	17.00 lf	31.00 /mh	53	5.00 /lf	91	-	-	-	-	-	-	144	165
	Skyjack/Genie 19' Scissor Lift (Requires Power Source)	1900.300	1.00 mnth	-	-	-	-	-	-	800.00 /mnth	800	100.00 /mnth	100	900	916
	Toe Board	5124.030	135.00 lf	31.00 /mh	0	0.01 /lb s	165	-	-	-	-	-	-	165	165
	Railings Aluminum		90.00 lf		4,238		933	/lf			800		100	6,070	7,782
05	50- Stairs - South														
	Aluminum Stairs - 2 Platform - 7'-4" Tall	5001.100	9.00 rs	31.00 /mh	1,535	0.01 /rs	0	-	-	-	-	-	-	1,535	2,148
	Epoxy Anchor 5/8 x 7in EG	5001.050	4.00 ea	31.00 /mh	12	6.00 /ea	24	-	-	-	-	-	-	36	41
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh	124	60.00 /cf	60	-	-	-	-	-	-	184	234
	8 GA AL Plate - Half Riser	5124.005	9.00 ea	31.00 /mh		0.01 /lb s	1	-	-	-	-	-	-	1	1
	Erect AL 8x6.35 I Beams	5120.008	1.00 ea	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Grating Angle - Embed	5001.120	4.00 lf	31.00 /mh	43	0.01 /lf	0	-	-	-	-	-	-	43	61
	Erect AL PL 3/8x3x3	5120.012	2.00 ea	31.00 /mh	217	-	-	-	-	-	-	-	-	217	304
	Anchor Bolts 3/4" SST for PL	6090.500	5.00 ea	31.00 /mh	31	6.00 /ea	30	-	-	-	-	-	-	61	73
	Anchor Bolt 3/4x6.5 SS - Conn. to Concrete	5001.063	4.00 ea	31.00 /mh	25	6.00 /ea	24	-	-	-	-	-	-	49	59
	Anchor Bolt 3/4 SS - Stringer to Beam	5001.063	4.00 ea	31.00 /mh	25	6.00 /ea	24	-	-	-	-	-	-	49	59
	Neoprene	7100.100	3.00 lf	31.00 /mh	9	5.00 /lf	16	-	-	-	-	-	-	25	29
	SST Self Tapping Tek Screw 1" Long for Half Riser	7460.100	63.00 ea	31.00 /mh	0	0.50 /ea	34	-	-	-	-	-	-	34	34
	Aluminum 3 Line Rail	5001.115	28.00 lf	31.00 /mh	1,302	0.01 /lf	0	-	-	-	-	-	-	1,302	1,823
	Anchors for Handrail	5001.115	26.00 ea	31.00 /mh	101	5.00 /ea	130	-	-	-	-	-	-	231	271
	Stairs - South		1.00 ea		3,920		343	/ea						4,263	5,831
	Digester 1&2				8,158		1,276				800		100	10,333	13,612
	Digester 3&4														
05	32- Railings Aluminum														
	Alum Handrail	5001.115	226.00 lf	31.00 /mh	6,305	0.01 /lf	2	-	-	-	-	-	-	6,308	8,830
	Epoxy Anchor 1/2 x 6in SS 316	5001.054	226.00 ea	31.00 /mh	701	5.00 /ea	1,130	-	-	-	-	-	-	1,831	2,111
	Fall Protection	1116.100	1.00 ls	-	-	-	-	-	-	/ls		-	-		
	Neoprene Sheets	7100.100	29.00 sf	31.00 /mh	90	5.00 /sf	155	-	-	-	-	-	-	245	281
	Railings Aluminum		90.00 lf		7,096		1,287	/lf						8,383	11,222
05	45- AL Checkered Plate - 3/8" Thick														
	Checkered Plate 3/8"	5001.122	30.00 sf	31.00 /mh	1,116	0.01 /sf	0	-	-	-	-	-	-	1,116	1,563
	SS Grating Angle - Embed	5001.145	32.00 lf	31.00 /mh	347	0.01 /lf	0	-	-	-	-	-	-	348	486
	1/4" SS Flat Head Screws w/ (2) Nuts	6090.500	8.00 ea	31.00 /mh		2.00 /ea	16	-	-	-	-	-	-	16	16
	AL Checkered Plate - 3/8" Thick		587.00 sf		1,463		17	/sf						1,480	2,065
05	50- Hose Racks														
	Hose Racks	5001.130	2.00 ea	31.00 /mh	186	/ea		-	-	-	-	-	-	186	260
	Hose Racks		1.00 ea		186			/ea						186	260
05	50- Stairs - South														
	Aluminum Stairs - 2 Platform - 6'-5" Tall	5001.100	8.00 rs	31.00 /mh	1,364	0.01 /rs	0	-	-	-	-	-	-	1,364	1,910
	Epoxy Anchor 5/8 x 7in EG	5001.050	4.00 ea	31.00 /mh	12	6.00 /ea	24	-	-	-	-	-	-	36	41
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh	124	60.00 /cf	60	-	-	-	-	-	-	184	234
	8 GA AL Plate - Half Riser	5124.005	8.00 ea	31.00 /mh		0.01 /lb s	1	-	-	-	-	-	-	1	1
	Erect AL 8x6.35 I Beams	5120.008	1.00 ea	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Grating Angle - Embed	5001.120	4.00 lf	31.00 /mh	43	0.01 /lf	0	-	-	-	-	-	-	43	61

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
05	50- Stairs - South														
	Erect AL PL 3/8x3x3	5120.012	2.00 ea	31.00 /mh	217	-	-	-	-	-	-	-	-	217	304
	Anchor Bolts 3/4" SST for PL	6090.500	5.00 ea	31.00 /mh	31	6.00 /ea	30	-	-	-	-	-	-	61	73
	Anchor Bolt 3/4x6.5 SS - Conn. to Concrete	5001.063	4.00 ea	31.00 /mh	25	6.00 /ea	24	-	-	-	-	-	-	49	59
	Anchor Bolt 3/4 SS - Stringer to Beam	5001.063	4.00 ea	31.00 /mh	25	6.00 /ea	24	-	-	-	-	-	-	49	59
	Neoprene	7100.100	3.00 lf	31.00 /mh	9	5.00 /lf	16	-	-	-	-	-	-	25	29
	SST Self Tapping Tek Screw 1" Long for Half Riser	7460.100	56.00 ea	31.00 /mh	0	0.50 /ea	30	-	-	-	-	-	-	30	30
	Aluminum 3 Line Rail	5001.115	26.00 lf	31.00 /mh	1,209	0.01 /lf	0	-	-	-	-	-	-	1,209	1,693
	Anchors for Handrail	5001.115	26.00 ea	31.00 /mh	101	5.00 /ea	130	-	-	-	-	-	-	231	271
	Stairs - South		1.00 ea		3,656		339	/ea						3,995	5,458
05	50- Stairs - North														
	Aluminum Stairs - 2 Platform -12'-10"	5001.100	14.00 rs	31.00 /mh	2,387	0.01 /rs	0	-	-	-	-	-	-	2,387	3,342
	Epoxy Anchor 5/8 x 7in EG	5001.050	4.00 ea	31.00 /mh	12	6.00 /ea	24	-	-	-	-	-	-	36	41
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh	124	60.00 /cf	60	-	-	-	-	-	-	184	234
	8 GA AL Plate - Half Riser	5124.005	14.00 ea	31.00 /mh		0.01 /lb s	1	-	-	-	-	-	-	1	1
	Erect AL 8x6.35 I Beams	5120.008	1.00 ea	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Grating Angle - Embed	5001.120	4.00 lf	31.00 /mh	43	0.01 /lf	0	-	-	-	-	-	-	43	61
	Erect AL PL 3/8x3x3	5120.012	2.00 ea	31.00 /mh	217	-	-	-	-	-	-	-	-	217	304
	Anchor Bolts 3/4" SST for PL	6090.500	5.00 ea	31.00 /mh	31	6.00 /ea	30	-	-	-	-	-	-	61	73
	Anchor Bolt 3/4x6.5 SS - Conn. to Concrete	5001.063	4.00 ea	31.00 /mh	25	5.00 /ea	20	-	-	-	-	-	-	45	55
	Anchor Bolt 3/4 SS - Stringer to Beam	5001.063	4.00 ea	31.00 /mh	25	5.00 /ea	20	-	-	-	-	-	-	45	55
	Neoprene	7100.100	3.00 lf	31.00 /mh	9	5.00 /lf	16	-	-	-	-	-	-	25	29
	SST Self Tapping Tek Screw 1" Long for Half Riser	7460.100	98.00 ea	31.00 /mh	0	0.50 /ea	52	-	-	-	-	-	-	52	52
	Aluminum 3 Line Rail	5001.115	42.00 lf	31.00 /mh	1,953	0.01 /lf	0	-	-	-	-	-	-	1,953	2,735
	Anchors for Handrail	5001.115	36.00 ea	31.00 /mh	140	5.00 /ea	180	-	-	-	-	-	-	320	375
	Stairs - North		1.00 ea		5,462		404	/ea						5,866	8,051
05	50- Crossover Platform														
	Aluminum Stairs - Crossover Platform 3'-6" Platform	5001.100	6.00 rs	31.00 /mh	1,116	0.01 /rs	0	-	-	-	-	-	-	1,116	1,562
	Epoxy Anchor 5/8 x 7in EG	5001.050	16.00 ea	31.00 /mh	99	6.00 /ea	96	-	-	-	-	-	-	195	235
	Non Shrink Grout	3601.100	1.00 cf	31.00 /mh	248	60.00 /cf	60	-	-	-	-	-	-	308	407
	Neoprene	7100.100	3.00 lf	31.00 /mh	9	5.00 /lf	16	-	-	-	-	-	-	25	29
	Crossover Platform		1.00 ea		1,473		172	/ea						1,645	2,234
05	60- 6' x 4' Hatch														
	Install Access Hatch	5001.110	2.00 ea	31.00 /mh	1,984	0.01 /ea	0	-	-	-	-	-	-	1,984	2,778
	Set Angle	3150.710	40.00 LF	31.00 /mh	124	0.01 /L F	0	-	-	-	-	-	-	124	174
	6' x 4' Hatch		2.00 ea		2,108		0	/ea						2,108	2,952
	Digester 3&4				21,444		2,220							23,664	32,242
Misc.	Metals														
05	50- Special Pipe Supports														
	Install Large Pipe Supports	5001.130	3.00 ea	31.00 /mh	1,860	/ea		-	-	-	-	-	-	1,860	2,604
	Set Anchor Bolts and supply	3150.700	24.00 ea	31.00 /mh	744	25.00 /ea	600	-	-	-	-	-	-	1,344	1,642
	Special Pipe Supports		1.00 ea		2,604		600	/ea						3,204	4,246
	Misc. Metals				2,604		600							3,204	4,246
	650 Existing Digester 1 to 4				32,206		4,095	/LS			800		100	37,201	50,100
	055000 Metal Fabrication				309,807		1,061,430		8,454		51,150		13,225	1,444,066	1,569,012
061000	Rough Carpentry														
100	Headworks														
Wood															
0600	2- Plywood "cap" at Top of Masonry Walls														
	Blocking Plywood 3/4" CDX 1.5' Wide	6160.500	724.00 sf	31.00 /mh	3,367	2.00 /sf	1,549	-	-	-	-	-	-	4,916	6,263
	Bolt Connectors 1/2"	6090.700	121.00 ea	31.00 /mh	750	8.00 /ea	968	-	-	-	-	-	-	1,718	2,018
	Plywood "cap" at Top of Masonry Walls		225.00 lf		4,117		2,517	/lf						6,634	8,281
0600	2- Blocking for Roof Hatch														
	PT Blocking	6116.140	52.00 lf	31.00 /mh	322	2.00 /lf	111	-	-	-	-	-	-	434	563
	Screws	6090.700	26.00 ea	31.00 /mh	0	0.25 /ea	7	-	-	-	-	-	-	7	7
	Blocking for Roof Hatch		13.00 lf		322		118	/lf						440	569
	Wood				4,439		2,635							7,074	8,850
	100 Headworks				4,439		2,635	/LS						7,074	8,850
700	Administration Building														
Wood															
0600	3- Blocking														
	Blocking	6116.160	760.00 lf	31.00 /mh	4,241	2.00 /lf	1,626	-	-	-	-	-	-	5,867	7,564
	Screws	6090.700	760.00 ea	31.00 /mh	0	0.25 /ea	190	-	-	-	-	-	-	190	190
	Blocking		50.00 lf		4,241		1,816	/lf						6,057	7,754
	Wood				4,241		1,816							6,057	7,754

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	700 Administration Building				4,241		1,816	/LS						6,057	7,754
	750 Lab and Control Building														
	Wood														
	0600 3- Blocking														
	Blocking	6116.160	50.00 lf	31.00 /mh	465	2.00 /lf	107	-	-	-	-	-	-	572	758
	Screws	6090.700	50.00 ea	31.00 /mh	0	0.25 /ea	13	-	-	-	-	-	-	13	13
	Blocking		50.00 lf		465		120	/lf						585	771
	Wood				465		120							585	771
	750 Lab and Control Building				465		120	/LS						585	771
	061000 Rough Carpentry				9,145		4,571							13,716	17,374
064100	Architectural Wood Casework														
	700 Administration Building														
	GEN General														
	12-01 Casework (New Admin Bldg)														
	Sub - Casework	12310.100	1.00 ls	-	-	-	-	56,123.00 /ls	56,123	-	-	-	-	56,123	56,123
	Base Cabinets Wood	12350.100	22.00 lf	31.00 /mh	512	0.00 /lf	0	-	-	-	-	-	-	512	716
	Wall Cabinets Wood	12350.100	22.00 lf	31.00 /mh	512	0.00 /lf	0	-	-	-	-	-	-	512	716
	Countertops Laminated Plastic	12350.100	33.00 lf	31.00 /mh	1,535	0.00 /lf	0	-	-	-	-	-	-	1,535	2,148
	Casework (New Admin Bldg)		1.00 LS		2,558			56,123.00 /LS	56,123					58,681	59,704
	GEN General				2,558				56,123					58,681	59,704
	Wood														
	0606 8- Window Sill														
	Window Sill 1'-6"	6114.600	2.00 ea	31.00 /mh	248	50.00 /ea	107	-	-	-	-	-	-	355	454
	Window Sill 4'-0"	6114.700	7.00 ea	31.00 /mh	868	100.00 /ea	749	-	-	-	-	-	-	1,617	1,964
	Window Sill 12'-0	7260.100	1.00 ea	31.00 /mh	372	400.00 /ea	428	-	-	-	-	-	-	800	949
	Window Sill				1,488		1,284	/lf						2,772	3,367
	Wood				1,488		1,284							2,772	3,367
	700 Administration Building				4,046		1,284	/LS	56,123					61,453	63,071
	750 Lab and Control Building														
	Casework														
	12-01 Casework (Existing Lab)														
	Sub - Casework	12310.100	1.00 ls	-	-	-	-	0.01 /ls	0	-	-	-	-	0	0
	Base Cabinets Enamel Steel	12350.100	21.00 lf	31.00 /mh	488	0.00 /lf	0	-	-	-	-	-	-	488	684
	Wall Cabinets Enamel Steel	12350.100	6.00 lf	31.00 /mh	279	0.00 /lf	0	-	-	-	-	-	-	279	391
	Countertops Laminated Plastic	12350.100	21.00 lf	31.00 /mh	977	0.00 /lf	0	-	-	-	-	-	-	977	1,367
	Casework (Existing Lab)		1.00 LS		1,744			0.01 /LS	0					1,744	2,441
	Casework				1,744				0					1,744	2,441
	750 Lab and Control Building				1,744			/LS	0					1,744	2,441
	064100 Architectural Wood Casework				5,789		1,284		56,123					63,196	65,512
071113	Bituminous Dampproofing														
	100 Headworks														
	Waterproofing														
	07 3- Damproofing (mci)														
	Brush on Rubber	7110.100	765.00 sf	31.00 /mh	711	0.50 /sf	409	-	-	-	-	-	-	1,121	1,405
	Damproofing (mci)		996.00 sf		711		409	/sf						1,121	1,405
	Waterproofing				711		409							1,121	1,405
	100 Headworks				711		409	/LS						1,121	1,405
	350 Step Feed Process Building														
	Waterproofing														
	07 3- Damproofing (mci)														
	Brush on Rubber	7110.100	996.00 sf	31.00 /mh	926	0.50 /sf	533	-	-	-	-	-	-	1,459	1,830
	Damproofing (mci)		996.00 sf		926		533	/sf						1,459	1,830
	Waterproofing				926		533							1,459	1,830
	350 Step Feed Process Building				926		533	/LS						1,459	1,830
	550 UV and Digester Blower Building														
	Waterproofing														
	07 3- Damproofing (mci)														
	Brush on Rubber	7110.100	840.00 sf	31.00 /mh	781	0.50 /sf	449	-	-	-	-	-	-	1,231	1,543
	Damproofing (mci)		996.00 sf		781		449	/sf						1,231	1,543
	Waterproofing				781		449							1,231	1,543
	550 UV and Digester Blower Building				781		449	/LS						1,231	1,543
	700 Administration Building														
	Waterproofing														
	07 3- Damproofing (mci)														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
07	3- Damproofing (mci)														
	Brush on Rubber	7110.100	705.00 sf	31.00 /mh	656	0.50 /sf	377	-	-	-	-	-	-	1,033	1,295
	Damproofing (mci)		996.00 sf		656		377	/sf						1,033	1,295
	Waterproofing				656		377							1,033	1,295
	700 Administration Building				656		377	/LS						1,033	1,295
	071113 Bituminous Dampproofing				3,075		1,769							4,843	6,073
071700	Bentonite Waterproofing														
	350 Step Feed Process Building														
	Waterproofing														
07	2- Bentonite Waterproofing - Slab														
	Bentonite Panels Slab - 2,254 SF	7100.100	1.00 ls	31.00 /mh		0.01 /ls	0	-	-	-	-	-	-	0	0
	Staples Seams every 12"	3150.200	1.00 ea	31.00 /mh		0.00 /ea	0	-	-	-	-	-	-		
	Seam Tape - 21 Seams	7260.100	616.00 lf	31.00 /mh	0	0.00 /lf	0	-	-	-	-	-	-	0	0
	Weather Protect Bentonite Waterproofing (all Step Feed)	1572.100	1.00 mnth	31.00 /mh	6,200	2,500.00 /mnt h	2,500	-	-	-	-	-	-	8,700	11,180
	Influent Pump Station slab 1 ls 440 sf cover board for slab	7110.100	1.00 ls	31.00 /mh		3,500.00 /ls	3,745	-	-	-	-	-	-	3,745	3,745
	Bentonite sub	7100.100	1.00 ls	-	-	-	-	120,000.00 /ls	120,000	-	-	-	-	120,000	120,000
	Bentonite Waterproofing - Slab		2,212.00 sf		6,200		6,245	54.25 /sf	120,000					132,445	134,925
07	2- Bentonite Waterproofing - Walls														
	Bentonite Panels Walls - 2,615 SF	7100.100	1.00 ls	31.00 /mh		0.01 /ls	0	-	-	-	-	-	-	0	0
	Drainage Board - 2,615	7110.100	1.00 ls	31.00 /mh		0.01 /ls	0	-	-	-	-	-	-	0	0
	Nail every 24", Staple every 6"	3150.200	1.00 ea	31.00 /mh		/ea		-	-	-	-	-	-		
	Influent Pump Station Walls 1 ls 2352 SF	7110.100	1.00 ls	31.00 /mh		0.01 /ls	0	-	-	-	-	-	-	0	0
	Bentonite Waterproofing - Walls		2,212.00 sf				0	/sf						0	0
	Waterproofing				6,200		6,245		120,000					132,445	134,925
	350 Step Feed Process Building				6,200		6,245	/LS	120,000					132,445	134,925
	071700 Bentonite Waterproofing				6,200		6,245		120,000					132,445	134,925
072100	Thermal Insulation														
	100 Headworks														
	Rigid Insulation														
07	6- Insulation - Rigid (mci)														
	Rigid Insulation 2.0 " @ Wall	7210.400	765.00 sf	31.00 /mh	711	2.00 /sf	1,637	-	-	-	-	-	-	2,349	2,633
	Rigid Wall Insulation Adhesive	7210.400	765.00 sf	31.00 /mh	0	0.15 /sf	115	-	-	-	-	-	-	115	115
	Insulation - Rigid (mci)		800.00 sf		712		1,752	/sf						2,464	2,748
	Rigid Insulation				712		1,752							2,464	2,748
	100 Headworks				712		1,752	/LS						2,464	2,748
	350 Step Feed Process Building														
	Rigid Insulation														
07	6- Insulation - Rigid (mci)														
	Rigid Insulation 2.0 " @ Wall	7210.400	996.00 sf	31.00 /mh	926	2.00 /sf	2,131	-	-	-	-	-	-	3,058	3,428
	Rigid Wall Insulation Adhesive	7210.400	996.00 sf	31.00 /mh	0	0.15 /sf	149	-	-	-	-	-	-	150	150
	Insulation - Rigid (mci)		800.00 sf		927		2,281	/sf						3,207	3,578
	Rigid Insulation				927		2,281							3,207	3,578
	350 Step Feed Process Building				927		2,281	/LS						3,207	3,578
	550 UV and Digester Blower Building														
	Rigid Insulation														
07	6- Insulation - Rigid (mci)														
	Rigid Insulation 2.0 " @ Wall	7210.400	840.00 sf	31.00 /mh	781	2.00 /sf	1,798	-	-	-	-	-	-	2,579	2,891
	Rigid Wall Insulation Adhesive	7210.400	840.00 sf	31.00 /mh	0	0.15 /sf	126	-	-	-	-	-	-	126	126
	Insulation - Rigid (mci)		800.00 sf		781		1,924	/sf						2,705	3,018
	Rigid Insulation				781		1,924							2,705	3,018
	550 UV and Digester Blower Building				781		1,924	/LS						2,705	3,018
	700 Administration Building														
	Rigid Insulation														
07	6- Insulation - Rigid (mci)														
	Rigid Insulation 2.0 " @ Wall	7210.400	705.00 sf	31.00 /mh	656	2.00 /sf	1,509	-	-	-	-	-	-	2,164	2,427
	Rigid Wall Insulation Adhesive	7210.400	705.00 sf	31.00 /mh	0	0.15 /sf	106	-	-	-	-	-	-	106	106
	Insulation - Rigid (mci)		800.00 sf		656		1,614	/sf						2,270	2,533
	Rigid Insulation				656		1,614							2,270	2,533
	700 Administration Building				656		1,614	/LS						2,270	2,533
	072100 Thermal Insulation				3,076		7,571							10,646	11,877
072616	Belowgrade Vapor Retarders														
	700 Administration Building														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	Waterproofing														
	07 2- Vapor Barrier														
	Vapor Barrier - 3,587 SF	7100.100	1.00 ls	31.00 /mh	496	995.00 /ls	1,065	-	-	-	-	-	-	1,561	1,759
	Perimeter Tape	3150.200	460.00 lf	31.00 /mh	143	0.61 /lf	281	-	-	-	-	-	-	423	480
	Seam Tape - 5 Seams	7260.100	358.00 lf	31.00 /mh	111	0.42 /lf	161	-	-	-	-	-	-	272	316
	Vapor Barrier		2,212.00 sf		750		1,506	/sf						2,256	2,556
	Waterproofing				750		1,506							2,256	2,556
	700 Administration Building				750		1,506	/LS						2,256	2,556
	072616 Belowgrade Vapor Retarders				750		1,506							2,256	2,556
	075323 EPDM Roofing														
	051 Site Civil														
	General														
	0710- Splash Blocks that should have been with roofing														
	Precast Item # 3 SPLASH BLOCKS PRECAST VARIETY	2327.005	8.00 ea	31.00 /mh	496	50.00 /ls	400	-	-	-	-	-	-	896	1,094
	Splash Blocks that should have been with roofing				496		400	/sf						896	1,094
	General				496		400							896	1,094
	051 Site Civil				496		400	/LS						896	1,094
	100 Headworks														
	EPDM Roofing EPDM Roofing														
	0730- Headworks EPDM Roofing														
	Sub - Membrane Roofing (2875 sf)	7530.100	1.00 ls	-	-	-	-	93,758.00 /ls	93,758	-	-	-	-	93,758	93,758
	Sub - Roofing Bond	4000.980	1.00 ls	-	-	-	-			-	-	-	-		
	Headworks EPDM Roofing							/sf	93,758					93,758	93,758
	EPDM Roofing EPDM Roofing								93,758					93,758	93,758
	100 Headworks							/LS	93,758					93,758	93,758
	075323 EPDM Roofing				496		400		93,758					94,654	94,852
	078400 Firestopping														
	100 Headworks														
	Caulking														
	0760- Fire Caulking														
	Caulking 10.3 oz tube 1/8d x 1/4w	7920.300	175.00 lf	31.00 /mh	543	2.00 /lf	385	-	-	-	-	-	-	928	1,144
	Fire Insul	7920.300	1.00 ls	31.00 /mh		250.00 /ls	275	-	-	-	-	-	-	275	275
	Fire Caulking		100.00 lf		543		660	/lf						1,203	1,419
	Caulking				543		660							1,203	1,419
	Firestopping														
	0751- Firestopping - Joists & Beams														
	Firestopping - Void Area	7210.400	26.00 ea	31.00 /mh	1,612	150.00 /ea	4,173	-	-	-	-	-	-	5,785	6,430
	Firestopping - Joists & Beams		0.25 sf		1,612		4,173	/sf						5,785	6,430
	Firestopping				1,612		4,173							5,785	6,430
	100 Headworks				2,155		4,833	/LS						6,988	7,849
	350 Step Feed Process Building														
	Caulking														
	0760- Fire Caulking														
	Caulking 10.3 oz tube 1/8d x 1/4w	7920.300	752.00 lf	31.00 /mh	4,662	2.00 /lf	1,654	-	-	-	-	-	-	6,317	8,182
	Misc Materials	7920.300	1.00 ls	31.00 /mh		750.00 /ls	825	-	-	-	-	-	-	825	825
	Fire Caulking		100.00 lf		4,662		2,479	/lf						7,142	9,007
	Caulking				4,662		2,479							7,142	9,007
	350 Step Feed Process Building				4,662		2,479	/LS						7,142	9,007
	078400 Firestopping				6,817		7,312							14,129	16,856
	079200 Joint Sealants														
	100 Headworks														
	Caulking														
	0760- Caulking - Doors														
	Caulking 10.3 oz tube 1/4d x 1/4w	7920.300	550.00 lf	31.00 /mh	1,705	15.00 /tu be	353	-	-	-	-	-	-	2,058	2,740
	Caulking - Doors		10.00 lf		1,705		353	/lf						2,058	2,740
	0760- Caulking - Masonry														
	Caulking 10.3 oz tube 1/4d x 1/4w	7920.300	936.00 lf	31.00 /mh	5,803	15.00 /tu be	601	-	-	-	-	-	-	6,404	8,725
	Caulking - Masonry		10.00 lf		5,803		601	/lf						6,404	8,725
	Caulking				7,508		954							8,462	11,466
	100 Headworks				7,508		954	/LS						8,462	11,466
	350 Step Feed Process Building														
	Caulking														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0760-	Caulking - Doors														
	Caulking 10.3 oz tube 1/4d x 1/4w	7920.300	787.00 lf	31.00 /mh	2,440	15.00 /tube	505	-	-	-	-	-	-	2,945	3,921
	Caulking - Doors		10.00 lf		2,440		505	/lf						2,945	3,921
	Caulking				2,440		505							2,945	3,921
	350 Step Feed Process Building				2,440		505	/LS						2,945	3,921
550 UV	and Digester Blower Building														
	Caulking														
0760-	Caulking - Doors														
	Caulking 10.3 oz tube 1/4d x 1/4w	7920.300	321.00 lf	31.00 /mh	995	15.00 /tube	206	-	-	-	-	-	-	1,201	1,599
	Caulking - Doors		10.00 lf		995		206	/lf						1,201	1,599
	Caulking				995		206							1,201	1,599
	550 UV and Digester Blower Building				995		206	/LS						1,201	1,599
700 Ad	ministration Building														
	Caulking														
0760-	Caulking - Doors														
	Caulking 10.3 oz tube 1/4d x 1/4w	7920.300	645.00 lf	31.00 /mh	2,000	15.00 /tube	414	-	-	-	-	-	-	2,414	3,213
	Caulking - Doors		10.00 lf		2,000		414	/lf						2,414	3,213
0760-	Caulking - Misc														
	Caulking 10.3 oz tube 1/4d x 1/4w	7920.300	50.00 lf	31.00 /mh	155	15.00 /tube	32	-	-	-	-	-	-	187	249
	Caulking - Misc		10.00 lf		155		32	/lf						187	249
	Caulking				2,155		446							2,601	3,463
	700 Administration Building				2,155		446	/LS						2,601	3,463
750 Lab	and Control Building														
	Caulking														
0760-	Caulking - Misc														
	Caulking 10.3 oz tube 1/4d x 1/4w	7920.300	30.00 lf	31.00 /mh	28	15.00 /tube	19	-	-	-	-	-	-	47	58
	Caulking - Misc		10.00 lf		28		19	/lf						47	58
	Caulking				28		19							47	58
	750 Lab and Control Building				28		19	/LS						47	58
	079200 Joint Sealants				13,125		2,131							15,256	20,506
081101	Steel Door Assemblies														
	001 General														
	GEN General														
0800-1	Hollow Metal Doors Basic														
	Purchase Doors & Frames	8115.100	1.00 ls	-	-	123,000.00 /ls	123,000	-	-	-	-	-	-	123,000	123,000
	Hollow Metal Doors Basic						123,000	/ea						123,000	123,000
	GEN General						123,000							123,000	123,000
	001 General						123,000	/LS						123,000	123,000
100 Head	works														
	OPENINGS														
0800-1	Hollow Metal Doors														
	Install HM Single Frames & Doors	8110.100	8.00 ea	31.00 /mh	7,936	0.00 /ea	0	-	-	-	-	-	-	7,936	11,110
	Install HM Double Frames and Doors	8110.100	2.00 ea	31.00 /mh	2,976	0.00 /ea	0	-	-	-	-	-	-	2,976	4,166
	Install HM Door Leafs	8110.105	12.00 ea	31.00 /mh		0.00 /ea	0	-	-	-	-	-	-		
	Install Hardware by Leaf	8115.100	12.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	Hollow Metal Doors		12.00 ea		10,912			/ea						10,912	15,277
	OPENINGS				10,912									10,912	15,277
	100 Headworks				10,912			/LS						10,912	15,277
350 Step	Feed Process Building														
	OPENINGS														
0800-1	Hollow Metal Doors														
	Install HM Single Frames & Doors	8110.100	9.00 ea	31.00 /mh	8,928	0.00 /ea	0	-	-	-	-	-	-	8,928	12,499
	Install HM Double Frames and Doors	8110.100	4.00 ea	31.00 /mh	5,952	0.00 /ea	0	-	-	-	-	-	-	5,952	8,333
	Install HM Door Leafs	8110.105	17.00 ea	31.00 /mh		0.00 /ea	0	-	-	-	-	-	-		
	Install Hardware by Leaf	8115.100	17.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	Hollow Metal Doors		12.00 ea		14,880			/ea						14,880	20,832
	OPENINGS				14,880									14,880	20,832
	350 Step Feed Process Building				14,880			/LS						14,880	20,832
550 UV	and Digester Blower Building														
	OPENINGS														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0800	00-1 Hollow Metal Doors														
	Install HM Single Frames & Doors	8110.100	3.00 ea	31.00 /mh	2,976	0.00 /ea	0	-	-	-	-	-	-	2,976	4,166
	Install HM Double Frames and Doors	8110.100	4.00 ea	31.00 /mh	5,952	0.00 /ea	0	-	-	-	-	-	-	5,952	8,333
	Install HM Door Leafs	8110.105	11.00 ea	31.00 /mh		0.00 /ea	0	-	-	-	-	-	-		
	Install Hardware by Leaf	8115.100	11.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	Hollow Metal Doors		12.00 ea		8,928			/ea						8,928	12,499
	OPENINGS				8,928									8,928	12,499
	550 UV and Digester Blower Building				8,928			/LS						8,928	12,499
700	Administration Building														
	OPENINGS														
0800	00-1 Hollow Metal Doors														
	Install HM Single Frames & Doors	8110.100	15.00 ea	31.00 /mh	14,880	0.00 /ea	0	-	-	-	-	-	-	14,880	20,832
	Install Accordian Door	8110.100	1.00 ea	31.00 /mh	992	0.00 /ea	0	-	-	-	-	-	-	992	1,389
	Install HM Borrow Light Frame	8110.100	3.00 ea	31.00 /mh		0.00 /ea	0	-	-	-	-	-	-		
	Install HM Door Leafs	8110.105	18.00 ea	31.00 /mh		0.00 /ea	0	-	-	-	-	-	-		
	Install Hardware by Leaf	8115.100	18.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	Hollow Metal Doors		12.00 ea		15,872			/ea						15,872	22,221
	OPENINGS				15,872									15,872	22,221
	700 Administration Building				15,872			/LS						15,872	22,221
	081101 Steel Door Assemblies				50,592		123,000							173,592	193,829
083000	Specialty Doors														
	001 General														
	GEN General														
0830	0- Overhead Doors														
	Coiling Doors - Subcontractor	8360.200	1.00 LS	-	-	-	-	103,000.00 /LS	103,000	-	-	-	-	103,000	103,000
	Overhead Doors							/LS	103,000					103,000	103,000
	GEN General								103,000					103,000	103,000
	001 General							/LS	103,000					103,000	103,000
	083000 Specialty Doors								103,000					103,000	103,000
085113	Aluminum Windows														
	001 General														
	OPENINGS														
0823	0- Windows - Aluminum														
	Glazing - Subcontractor	8510.300	1.00 LS	31.00 /mh		0.00 /L S	0	99,969.00 /LS	99,969	-	-	-	-	99,969	99,969
	Windows - Aluminum							/ls	99,969					99,969	99,969
	OPENINGS								99,969					99,969	99,969
	001 General							/LS	99,969					99,969	99,969
	085113 Aluminum Windows								99,969					99,969	99,969
092900	Gypsum Board														
	350 Step Feed Process Building														
	Drywall Drywall														
0919	0- Drywall Sub														
	Sub - Drywall Process Bld	9250.980	1.00 ls	-	-	-	-	235,000.00 /ls	235,000	-	-	-	-	235,000	235,000
	Drywall Sub		250.00 sf					940.00 /sf	235,000					235,000	235,000
	Drywall Drywall								235,000					235,000	235,000
	350 Step Feed Process Building							/LS	235,000					235,000	235,000
550	UV and Digester Blower Building														
	Drywall Drywall														
0919	0- Drywall Sub														
	Sub - Sealant and bottom covering	9250.980	1.00 ls	-	-	-	-	8,500.00 /ls	8,500	-	-	-	-	8,500	8,500
	Drywall Sub		250.00 sf					34.00 /sf	8,500					8,500	8,500
	Drywall Drywall								8,500					8,500	8,500
	550 UV and Digester Blower Building							/LS	8,500					8,500	8,500
700	Administration Building														
	Drywall Drywall														
0919	0- Drywall Sub														
	Sub - Insulation	9250.980	1.00 ls	-	-	-	-	25,000.00 /ls	25,000	-	-	-	-	25,000	25,000
	Drywall Sub		250.00 sf					100.00 /sf	25,000					25,000	25,000
	Drywall Drywall								25,000					25,000	25,000
	700 Administration Building							/LS	25,000					25,000	25,000
	092900 Gypsum Board								268,500					268,500	268,500
093000	Tiling														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	700 Administration Building														
	Tile Tile														
	092 1- Tile														
	Sub - Tile Flooring	9680.050	1.00 ls	-	-	-	-	72,000.00 /ls	72,000	-	-	-	-	72,000	72,000
	Sub - Tile patch at existing	9680.210	1.00 ls	-	-	-	-	3,000.00 /ls	3,000	-	-	-	-	3,000	3,000
	Tile							/ls	75,000					75,000	75,000
	Tile Tile								75,000					75,000	75,000
	700 Administration Building							/LS	75,000					75,000	75,000
	093000 Tiling								75,000					75,000	75,000
095123	Acoustical Tile Ceilings														
	700 Administration Building														
	Acoustical Tile Acoustical														
	093 1- Acoustical Ceiling														
	Sub - Ceiling	9500.980	1.00 ls	-	-	-	-	14,000.00 /ls	14,000	-	-	-	-	14,000	14,000
	Acoustical Ceiling							/sf	14,000					14,000	14,000
	Acoustical Tile Acoustical								14,000					14,000	14,000
	700 Administration Building							/LS	14,000					14,000	14,000
	095123 Acoustical Tile Ceilings								14,000					14,000	14,000
097701	Fiberglass-Reinforced Plastic (FRP) Panel Walls														
	350 Step Feed Process Building														
	FRP FRP														
	091 1- FRP Panel Walls														
	FRP Panel	5001.155	96.00 sf	31.00 /mh	1,488	10.00 /sf	960	-	-	-	-	-	-	2,448	3,043
	FRP Panel Walls				1,488		960	/lf						2,448	3,043
	FRP FRP				1,488		960							2,448	3,043
	350 Step Feed Process Building				1,488		960	/LS						2,448	3,043
	700 Administration Building														
	FRP FRP														
	091 1- FRP Panel Walls														
	FRP Panel	5001.155	64.00 sf	31.00 /mh	992	10.00 /sf	640	-	-	-	-	-	-	1,632	2,029
	FRP Panel Walls				992		640	/lf						1,632	2,029
	FRP FRP				992		640							1,632	2,029
	700 Administration Building				992		640	/LS						1,632	2,029
	097701 Fiberglass-Reinforced Plastic (FRP) Panel Walls				2,480		1,600							4,080	5,072
099000	Painting and Coating														
	001 General														
	Painting Painting														
	099-2 Painting and Coatings														
	Sub - Special Coatings (national)	9960.100	1.00 ls	-	-	-	-	736,000.00 /ls	736,000	-	-	-	-	736,000	736,000
	Sub - Coatings Bond	4000.980	1.00 ls	-	-	-	-			-	-	-	-		
	Painting and Coatings							/sf	736,000					736,000	736,000
	Painting Painting								736,000					736,000	736,000
	001 General							/LS	736,000					736,000	736,000
	099000 Painting and Coating								736,000					736,000	736,000
101400	Signage														
	001 General														
	Signs Signs														
	10-101 Signs														
	Supply Sign Package and pipe label	10430.100	1.00 ls	-	-	18,000.00 /ls	18,000	-	-	-	-	-	-	18,000	18,000
	Misc. Materials To Install Signs	10430.100	1.00 ls	31.00 /mh		2,500.00 /ls	2,500	-	-	-	-	-	-	2,500	2,500
	Div 10 install signs	2220.040	1.00 ls	31.00 /mh	7,440	-	-	-	-	-	-	-	-	7,440	10,416
	Signs				7,440		20,500	/LS						27,940	30,916
	Signs Signs				7,440		20,500							27,940	30,916
	001 General				7,440		20,500	/LS						27,940	30,916
	101400 Signage				7,440		20,500							27,940	30,916
102800	Toilet and Bath Accessories														
	700 Administration Building														
	Toilet & Bath Toilet & Bath														
	10-102 Bathroom Accessories														
	Sub - Bath Accessories Supply only	10810.100	1.00 ls	-	-	-	-	3,524.00 /ls	3,524	-	-	-	-	3,524	3,524
	Curtain Rods	10810.200	2.00 ea	31.00 /mh	124	0.00 /ea	0	-	-	-	-	-	-	124	174
	Soap Dispensers	10810.200	2.00 ea	31.00 /mh	124	0.00 /ea	0	-	-	-	-	-	-	124	174
	Bath Tissue Dispenser Single	10810.200	2.00 ea	31.00 /mh	124	0.00 /ea	0	-	-	-	-	-	-	124	174

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
10-	102 Bathroom Accessories														
	TP Dispenser Double	10810.200	2.00 ea	31.00 /mh	124	0.00 /ea	0	-	-	-	-	-	-	124	174
	Paper Towel Dispenser Recessed	10810.200	2.00 ea	31.00 /mh	124	0.00 /ea	0	-	-	-	-	-	-	124	174
	Sanitary Napkin Dispenser	10810.200	1.00 ea	31.00 /mh	62	0.00 /ea	0	-	-	-	-	-	-	62	87
	Bath Mirror Large	10810.200	2.00 ea	31.00 /mh	372	0.00 /ea	0	-	-	-	-	-	-	372	521
	Coat Hooks	10810.200	2.00 ea	31.00 /mh	124	0.00 /ea	0	-	-	-	-	-	-	124	174
	Mop Hooks	10810.200	1.00 ea	31.00 /mh	62	0.00 /ea	0	-	-	-	-	-	-	62	87
	Towel Hooks	10810.200	2.00 ea	31.00 /mh	124	0.00 /ea	0	-	-	-	-	-	-	124	174
	Grab Bars - Handicap Toilet	10810.600	4.00 ea	31.00 /mh	248	250.00 /ea	1,000	-	-	-	-	-	-	1,248	1,347
	Grab Bars - Handicap Shower	10810.600	2.00 ea	31.00 /mh	124	250.00 /ea	500	-	-	-	-	-	-	624	674
	Handicap Shower Bench	10500.100	2.00 ea	31.00 /mh	248	250.00 /ea	500	-	-	-	-	-	-	748	847
	Shower Curtain	10185.100	2.00 ea	31.00 /mh	124	65.00 /ea	130	-	-	-	-	-	-	254	304
	Locker Room Benches 48"	10500.100	2.00 ea	31.00 /mh	248	250.00 /ea	500	-	-	-	-	-	-	748	847
	Soap Dish	10810.200	2.00 ea	31.00 /mh	124	0.00 /ea	0	-	-	-	-	-	-	124	174
	Paper Towel Dispenser Surface	10810.200	1.00 ea	31.00 /mh	62	0.00 /ea	0	-	-	-	-	-	-	62	87
	Bathroom Accessories				2,542		2,630	/LS	3,524					8,696	9,713
	Toilet & Bath Toilet & Bath				2,542		2,630		3,524					8,696	9,713
	700 Administration Building				2,542		2,630	/LS	3,524					8,696	9,713
	102800 Toilet and Bath Accessories				2,542		2,630		3,524					8,696	9,713
104400	Fire Protection Specialties and Safety Equipment														
100	Headworks														
	Fire Extinguisher Fire Extinguisher														
10-	101 Fire Extinguisher														
	Fire Extinguisher Dry 10 lbs	10520.200	4.00 ea	31.00 /mh	248	175.00 /ea	700	-	-	-	-	-	-	948	1,047
	Fire Extinguisher CO2 15 lbs	10520.200	2.00 ea	31.00 /mh	124	200.00 /ea	400	-	-	-	-	-	-	524	574
	Fire Extinguisher				372		1,100	/LS						1,472	1,621
	Fire Extinguisher Fire Extinguisher				372		1,100							1,472	1,621
	100 Headworks				372		1,100	/LS						1,472	1,621
350	Step Feed Process Building														
	Fire Extinguisher Fire Extinguisher														
10-	101 Fire Extinguisher														
	Fire Extinguisher Dry 10 lbs	10520.200	7.00 ea	31.00 /mh	434	175.00 /ea	1,225	-	-	-	-	-	-	1,659	1,833
	Fire Extinguisher CO2 15 lbs	10520.200	1.00 ea	31.00 /mh	62	200.00 /ea	200	-	-	-	-	-	-	262	287
	Fire Extinguisher				496		1,425	/LS						1,921	2,119
	Fire Extinguisher Fire Extinguisher				496		1,425							1,921	2,119
	350 Step Feed Process Building				496		1,425	/LS						1,921	2,119
550	UV and Digester Blower Building														
	Fire Extinguisher Fire Extinguisher														
10-	101 Fire Extinguisher														
	Fire Extinguisher Dry 10 lbs	10520.200	4.00 ea	31.00 /mh	248	175.00 /ea	700	-	-	-	-	-	-	948	1,047
	Fire Extinguisher CO2 15 lbs	10520.200	2.00 ea	31.00 /mh	124	200.00 /ea	400	-	-	-	-	-	-	524	574
	Fire Extinguisher				372		1,100	/LS						1,472	1,621
	Fire Extinguisher Fire Extinguisher				372		1,100							1,472	1,621
	550 UV and Digester Blower Building				372		1,100	/LS						1,472	1,621
700	Administration Building														
	Fire Extinguisher Fire Extinguisher														
10-	101 Fire Extinguisher														
	Fire Extinguisher Dry 10 lbs	10520.200	2.00 ea	31.00 /mh	124	175.00 /ea	350	-	-	-	-	-	-	474	524
	Fire Extin. Cabinet Wall Mount	10520.100	2.00 ea	31.00 /mh	124	400.00 /ea	800	-	-	-	-	-	-	924	974
	Fire Extinguisher				248		1,150	/LS						1,398	1,497
	Fire Extinguisher Fire Extinguisher				248		1,150							1,398	1,497
	700 Administration Building				248		1,150	/LS						1,398	1,497
	104400 Fire Protection Specialties and Safety Equipment				1,488		4,775							6,263	6,858
105100	Lockers														
700	Administration Building														
	Lockers Lockers														
10-	101 Lockers														
	Lockers 18x24x72	10500.100	12.00 ea	31.00 /mh	2,976	600.00 /ea	7,200	-	-	-	-	-	-	10,176	11,366
	Lockers 36x24x72	10500.100	10.00 ea	31.00 /mh	2,480	800.00 /ea	8,000	-	-	-	-	-	-	10,480	11,472
	Sub - Lockers	10810.100	1.00 ls	-	-	-	-			-	-	-	-		
	Lockers				5,456		15,200	/LS						20,656	22,838
	Lockers Lockers				5,456		15,200							20,656	22,838
	700 Administration Building				5,456		15,200	/LS						20,656	22,838
	105100 Lockers				5,456		15,200							20,656	22,838
122100	Window Blinds														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	700 Administration Building														
	Window Blinds Window Blinds														
	12-01 Blinds														
	Sub - Blinds & Shades	12490.100	1.00 ls	-	-	-	-	2,500.00 /ls	2,500	-	-	-	-	2,500	2,500
	Vertical Blinds Aluminum Strip 4x4	12490.100	7.00 ea	31.00 /mh	868	0.00 /ea	0	-	-	-	-	-	-	868	1,215
	Vertical Blinds Aluminum Strip 12x4	12490.100	1.00 ea	31.00 /mh	248	0.00 /ea	0	-	-	-	-	-	-	248	347
	Blinds				1,116			/LS	2,500					3,616	4,062
	Window Blinds Window Blinds				1,116				2,500					3,616	4,062
	700 Administration Building				1,116			/LS	2,500					3,616	4,062
	122100 Window Blinds				1,116				2,500					3,616	4,062
133419	Metal Building System														
	001 General														
	PEMB Metal Building PEMB														
	13-02 Pre-Engineered Metal Building (PEMB)														
	Metal Building Subcontractor	13122.100	1.00 ls	-	-	-	-	1,761,000.00 /ls	1,761,000	-	-	-	-	1,761,000	1,761,000
	Metal Building Subcontractor bond	13122.100	1.00 ls	-	-	-	-			-	-	-	-		
	Pre-Engineered Metal Building (PEMB)							/LS	1,761,000					1,761,000	1,761,000
	PEMB Metal Building PEMB								1,761,000					1,761,000	1,761,000
	001 General							/LS	1,761,000					1,761,000	1,761,000
	350 Step Feed Process Building														
	PEMB Metal Building PEMB														
	13-02 Step Feed PEMB														
	Purchase anchors Metal Building 3/4" anchor bolt	13122.100	72.00 ea	31.00 /mh	0	40.00 /ea	2,880	-	-	-	-	/ea		2,880	2,880
	Metal Building Anchor Plate Assembly (4 anchor per)	13122.100	18.00 ea	31.00 /mh	4,464	0.00 /ea	0	-	-	-	-	-	-	4,464	6,250
	Grout Bearing Plates	3150.700	18.00 ea	31.00 /mh	2,232	-	-	-	-	-	-	-	-	2,232	3,125
	Manitowoc 10000 - 100 Ton (332 HP) (L)	1900.100	1.00 mnth	7,296.00 /mnth	7,296	350.00 /m nt h	350	-	-	12,500.00 /mnth	12,500	2,200.00 /mnth	2,200	22,346	25,514
	Non Shrink Grout	3150.700	6.00 cf	31.00 /mh	186	60.00 /cf	360	-	-	-	-	-	-	546	620
	Step Feed PEMB				14,178		3,590	/LS			12,500		2,200	32,468	38,389
	PEMB Metal Building PEMB				14,178		3,590				12,500		2,200	32,468	38,389
	350 Step Feed Process Building				14,178		3,590	/LS			12,500		2,200	32,468	38,389
	550 UV and Digester Blower Building														
	PEMB Metal Building PEMB														
	13-02 PEMB UV and Blower														
	Metal Building Anchor Purchase 3/4"	13122.100	56.00 ea	31.00 /mh	0	40.00 /ea	2,240	-	-	-	-	/ea		2,240	2,240
	Metal Building Anchor Assembly set	13122.100	14.00 ea	31.00 /mh	3,472	0.00 /ea	0	-	-	-	-	-	-	3,472	4,861
	Grout Bearing Plates	3150.700	14.00 ea	31.00 /mh	1,736	-	-	-	-	-	-	-	-	1,736	2,430
	Manitowoc 10000 - 100 Ton (332 HP) (L)	1900.100	1.00 mnth	7,296.00 /mnth	7,296	350.00 /m nt h	350	-	-	12,500.00 /mnth	12,500	2,200.00 /mnth	2,200	22,346	25,514
	Non Shrink Grout	3150.700	5.00 cf	31.00 /mh	155	60.00 /cf	300	-	-	-	-	-	-	455	517
	PEMB UV and Blower				12,659		2,890	/LS			12,500		2,200	30,249	35,563
	PEMB Metal Building PEMB				12,659		2,890				12,500		2,200	30,249	35,563
	550 UV and Digester Blower Building				12,659		2,890	/LS			12,500		2,200	30,249	35,563
	700 Administration Building														
	PEMB Metal Building PEMB														
	13-02 Admin PEMB														
	Metal Building Anchors 3/4"	13122.100	48.00 ea	31.00 /mh	0	40.00 /ea	1,920	-	-	-	-	/ea		1,920	1,920
	Metal Building Anchor Bolt Assembly set	13122.100	12.00 ea	31.00 /mh	2,976	0.00 /ea	0	-	-	-	-	-	-	2,976	4,166
	Grout Bearing Plates	3150.700	12.00 ea	31.00 /mh	1,488	-	-	-	-	-	-	-	-	1,488	2,083
	Grove RT760/RT700, 60 ton (240 HP) (L)	1900.100	1.00 mnth	7,296.00 /mnth	7,296	350.00 /m nt h	350	-	-	9,500.00 /mnth	9,500	1,500.00 /mnth	1,500	18,646	21,754
	Non Shrink Grout	3150.700	4.00 cf	31.00 /mh	124	60.00 /cf	240	-	-	-	-	-	-	364	414
	Admin PEMB				11,884		2,510	/LS			9,500		1,500	25,394	30,338
	PEMB Metal Building PEMB				11,884		2,510				9,500		1,500	25,394	30,338
	700 Administration Building				11,884		2,510	/LS			9,500		1,500	25,394	30,338
	133419 Metal Building System				38,721		8,990		1,761,000		34,500		5,900	1,849,111	1,865,289
220000	Plumbing														
	001 General														
	Plumbing														
	15 - 2 Plumbing - Sub														
	Plumbing Subcontractor w/ Bond	15403.100	1.00 ls	-	-	-	-	633,000.00 /ls	633,000	-	-	-	-	633,000	633,000
	Plumbing - Sub							/LS	633,000					633,000	633,000

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	Plumbing								633,000					633,000	633,000
	001 General							/LS	633,000					633,000	633,000
	100 Headworks														
	Plumbing														
	154-4609- 100- HW Floor Drains Trench and Encase														
	Trench Excavtion 0- 4'	2333.010	200.00 lf	31.00 /mh	1,550	-	-	-	-	-	-	-	-	1,550	2,170
	Formwork Encasement	3100.108	800.00 sf	31.00 /mh	3,720	1.50 /sf	1,260	-	-	-	-	-	-	4,980	6,468
	Place Encasement Concrete	3310.195	35.00 cy	31.00 /mh	1,161	166.00 /cy	6,217	-	-	-	-	-	-	7,378	7,842
	Encasement Rebar	3210.104	3.50 tn	31.00 /mh	3,255	1,400.00 /tn	5,145	-	-	-	-	-	-	8,400	9,702
	Bobcat E85 Mini-Excavator (60 HP) (L)	1900.136	1.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	3,000	1,200.00 /mnth	1,200	4,200	4,260
	Bobcat Skid Steer (85hp)- track (L)	1900.131	1.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	3,000	2,000.00 /mnth	2,000	5,000	5,060
	100- HW Floor Drains Trench and Encase		1.00 ea		9,686		12,622	/ea			6,000		3,200	31,508	35,502
	Plumbing				9,686		12,622				6,000		3,200	31,508	35,502
	100 Headworks				9,686		12,622	/LS			6,000		3,200	31,508	35,502
	550 UV and Digester Blower Building														
	Plumbing														
	154-4609- 550 - UV Digester Drain Encasement														
	Trench Excavtion 0- 4'	2333.010	130.00 lf	31.00 /mh	1,008	-	-	-	-	-	-	-	-	1,008	1,411
	Formwork Encasement	3100.108	520.00 sf	31.00 /mh	2,418	1.50 /sf	819	-	-	-	-	-	-	3,237	4,204
	Pipe Encasement Rebar	3200.980	2.40 tn	31.00 /mh	2,232	1,400.00 /tn	3,360	-	-	-	-	-	-	5,592	6,485
	Place Encasement Concrete	3310.195	24.00 cy	31.00 /mh	796	166.00 /cy	4,263	-	-	-	-	-	-	5,059	5,377
	Bobcat E85 Mini-Excavator (60 HP) (L)	1900.136	1.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	3,000	1,200.00 /mnth	1,200	4,200	4,260
	Bobcat Skid Steer (85hp)- track (L)	1900.131	1.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	3,000	2,000.00 /mnth	2,000	5,000	5,060
	550 - UV Digester Drain Encasement		1.00 ea		6,454		8,442	/ea			6,000		3,200	24,095	26,797
	Plumbing				6,454		8,442				6,000		3,200	24,095	26,797
	550 UV and Digester Blower Building				6,454		8,442	/LS			6,000		3,200	24,095	26,797
	700 Administration Building														
	Plumbing														
	154-4609- 700 - Admin Drain Pipe Encasement														
	Place Encasement Concrete	3310.195	38.00 cy	31.00 /mh	1,260	166.00 /cy	6,750	-	-	-	-	-	-	8,010	8,514
	Encasement Rebar	3210.104	3.80 tn	31.00 /mh	3,534	1,400.00 /tn	5,586	-	-	-	-	-	-	9,120	10,534
	Trench Excavtion 4- 6'	2333.010	230.00 lf	31.00 /mh	1,783	-	-	-	-	-	-	-	-	1,783	2,496
	Formwork Encasement	3100.108	920.00 sf	31.00 /mh	4,278	1.50 /sf	1,449	-	-	-	-	-	-	5,727	7,438
	Bobcat E85 Mini-Excavator (60 HP) (L)	1900.136	1.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	3,000	1,200.00 /mnth	1,200	4,200	4,260
	Bobcat Skid Steer (85hp)- track (L)	1900.131	1.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	3,000	2,000.00 /mnth	2,000	5,000	5,060
	700 - Admin Drain Pipe Encasement				10,855		13,785	/ea			6,000		3,200	33,840	38,302
	Plumbing				10,855		13,785				6,000		3,200	33,840	38,302
	700 Administration Building				10,855		13,785	/LS			6,000		3,200	33,840	38,302
	220000 Plumbing				26,994		34,848		633,000		18,000		9,600	722,443	733,600
	230000 HVAC														
	001 General														
	HVAC														
	15 - 1 HVAC - Sub														
	HVAC Subcontractor w/ Bond	15402.010	1.00 ls	-	-	-	-	1,739,000.00 /ls	1,739,000	-	-	-	-	1,739,000	1,739,000
	Unload HAVC	1630.100	2.00 wk	1,200.00 /wk	2,400	-	-	-	-	/ea	-	-	-	2,400	3,360
	Grove RT760/RT700, 60 ton, wo/operator (240 HP) (L)	1900.100	0.25 mnth	-	-	350.00 /mnt h	88	-	-	9,500.00 /mnth	2,375	1,500.00 /mnth	375	2,838	2,885
	HVAC - Sub				2,400		88	/LS	1,739,000		2,375		375	1,744,238	1,745,245
	HVAC				2,400		88		1,739,000		2,375		375	1,744,238	1,745,245
	001 General				2,400		88	/LS	1,739,000		2,375		375	1,744,238	1,745,245
	230000 HVAC				2,400		88		1,739,000		2,375		375	1,744,238	1,745,245
	260000 Electrical														
	001 General														
	Electrical														
	16 -1 Electrical - Sub														
	Electrical Sub w/ Bond	16000.001	1.00 ls	-	-	-	-	7,250,403.00 /ls	7,250,403	-	-	-	-	7,250,403	7,250,403
	Temprary Construction power	16000.001	1.00 ls	-	-	-	-	25,000.00 /ls	25,000	-	-	-	-	25,000	25,000
	Electrical minor changes (1% of electrical number)	16000.001	1.00 ls	-	-	/ls		72,500.00 /ls	72,500	-	-	-	-	72,500	72,500
	Bobcat Skid Steer (85hp)- track (L) with Auger	1900.131	1.00 mnth	-	-	-	-	-	-	4,000.00 /mnth	4,000	2,000.00 /mnth	2,000	6,000	6,080
	John Deere 624 Loader (172 HP) (M)	1900.132	1.00 mnth	-	-	-	-	-	-	5,500.00 /mnth	5,500	3,000.00 /mnth	3,000	8,500	8,610
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.50 mnth	-	-	-	-	-	-	8,500.00 /mnth	4,250	3,500.00 /mnth	1,750	6,000	6,085
	Bobcat E85 Mini-Excavator (60 HP) (L)	1900.136	6.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	18,000	1,200.00 /mnth	7,200	25,200	25,560
	Unload and assist electrical gear	1000.100	4.00 wk	1,200.00 /wk	4,800	-	-	-	-	-	-	-	-	4,800	6,720
	Electrical Sub allowance wire to place Blowoff at Aeration	16000.001	1.00 ls	-	-	-	-	8,000.00 /ls	8,000	-	-	-	-	8,000	8,000
	Electrical - Sub				4,800			/LS	7,355,903		31,750		13,950	7,406,403	7,408,958

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	Electrical				4,800				7,355,903		31,750		13,950	7,406,403	7,408,958
	001 General				4,800			/LS	7,355,903		31,750		13,950	7,406,403	7,408,958
	260000 Electrical				4,800				7,355,903		31,750		13,950	7,406,403	7,408,958
260533															
	053 Site Electrical														
	Ductbank														
	16-01 Site Electrical Direct Bury HH-10A(South) to Site Light														
	Duct Bank Excavation/Backfill	16000.002	100.00 lf	31.00 /mh	775	-	-	-	-	/lf	-	-	-	775	1,085
	Duct Bank Bedding	2305.500	27.00 tn	-	-	24.00 /ton	648	-	-	-	-	-	-	648	648
	Electrical Handholes	16000.002	1.00 ea	31.00 /mh	248	0.00 /ea	0	-	-	-	-	-	-	248	347
	Electrical Light Pole Base	16000.002	2.00 ea	31.00 /mh	1,984	800.00 /ea	1,600	-	-	-	-	-	-	3,584	4,378
	Formwork Sonotube 24"	3100.112	16.00 lf	31.00 /mh	99	9.00 /lf	151	-	-	-	-	-	-	250	290
	Site Electrical Direct Bury HH-10A(South) to Site Light		100.00 lf		3,106		2,399	/lf						5,505	6,748
	16-01 Site Electrical Direct Bury HH-10A(North) to Site Lights														
	Duct Bank Excavation/Backfill	16000.002	45.00 lf	31.00 /mh	349	-	-	-	-	/lf	-	-	-	349	488
	Duct Bank Bedding	2305.500	12.00 tn	-	-	24.00 /ton	288	-	-	-	-	-	-	288	288
	Electrical Handholes	16000.002	1.00 ea	31.00 /mh	248	0.00 /ea	0	-	-	-	-	-	-	248	347
	Electrical Light Pole Base	16000.002	1.00 ea	31.00 /mh	992	800.00 /ea	800	-	-	-	-	-	-	1,792	2,189
	Formwork Sonotube 24"	3100.112	8.00 lf	31.00 /mh	50	9.00 /lf	76	-	-	-	-	-	-	125	145
	Site Electrical Direct Bury HH-10A(North) to Site Lights		45.00 lf		1,638		1,164	/lf						2,802	3,457
	16-01 Site Electrical Direct Bury Admin to Site Light														
	Duct Bank Excavation/Backfill	16000.002	70.00 lf	31.00 /mh	543	-	-	-	-	/lf	-	-	-	543	760
	Duct Bank Bedding	2305.500	19.00 tn	-	-	24.00 /ton	456	-	-	-	-	-	-	456	456
	Electrical Handholes	16000.002	1.00 ea	31.00 /mh	248	0.00 /ea	0	-	-	-	-	-	-	248	347
	Electrical Light Pole Base	16000.002	1.00 ea	31.00 /mh	992	800.00 /ea	800	-	-	-	-	-	-	1,792	2,189
	Formwork Sonotube 24"	3100.112	8.00 lf	31.00 /mh	50	9.00 /lf	76	-	-	-	-	-	-	125	145
	Site Electrical Direct Bury Admin to Site Light		70.00 lf		1,832		1,332	/lf						3,164	3,897
	16-01 Site Electrical Direct Bury HH-8A to Site Light														
	Duct Bank Excavation/Backfill	16000.002	25.00 lf	31.00 /mh	194	-	-	-	-	/lf	-	-	-	194	271
	Duct Bank Bedding	2305.500	7.00 tn	-	-	24.00 /ton	168	-	-	-	-	-	-	168	168
	Electrical Handholes	16000.002	1.00 ea	31.00 /mh	248	0.00 /ea	0	-	-	-	-	-	-	248	347
	Electrical Light Pole Base	16000.002	1.00 ea	31.00 /mh	992	800.00 /ea	800	-	-	-	-	-	-	1,792	2,189
	Formwork Sonotube 24"	3100.112	8.00 lf	31.00 /mh	50	9.00 /lf	76	-	-	-	-	-	-	125	145
	Site Electrical Direct Bury HH-8A to Site Light		25.00 lf		1,483		1,044	/lf						2,527	3,120
	16-01 Site Electrical Direct Bury HH-4A to Site Lights														
	Duct Bank Excavation/Backfill	16000.002	75.00 lf	31.00 /mh	581	-	-	-	-	0.00 /lf	0	-	-	581	814
	Duct Bank Bedding	2305.500	17.00 tn	-	-	24.00 /ton	408	-	-	-	-	-	-	408	408
	Electrical Light Pole Base	16000.002	1.00 ea	31.00 /mh	992	800.00 /ea	800	-	-	-	-	-	-	1,792	2,189
	Formwork Sonotube 24"	3100.112	5.00 lf	31.00 /mh	31	9.00 /lf	47	-	-	-	-	-	-	78	91
	Site Electrical Direct Bury HH-4A to Site Lights		75.00 lf		1,604		1,255	/lf						2,860	3,501
	16-01 Site Electrical HH-6A to Site Lights														
	Duct Bank Excavation/Backfill	16000.002	565.00 lf	31.00 /mh	4,379	-	-	-	-	0.00 /lf	0	-	-	4,379	6,130
	Duct Bank Bedding	2305.500	150.00 tn	-	-	24.00 /ton	3,600	-	-	-	-	-	-	3,600	3,600
	Electrical Light Pole Base	16000.002	3.00 ea	31.00 /mh	2,976	800.00 /ea	2,400	-	-	-	-	-	-	5,376	6,566
	Formwork Sonotube 24"	3100.112	15.00 lf	31.00 /mh	93	9.00 /lf	142	-	-	-	-	-	-	235	272
	Site Electrical HH-6A to Site Lights		565.00 lf		7,448		6,142	/lf						13,590	16,569
	16-01 Site Electrical Concrete Encased Ex Digesters 1-4 to Digester RM 550														
	Duct Bank Excavation/Backfill	16000.002	525.00 lf	31.00 /mh	4,069	-	-	-	-	0.00 /lf	0	-	-	4,069	5,696
	Duct Bank Formwork	16000.002	2,120.00 sf	31.00 /mh	6,572	1.50 /sf	3,180	-	-	-	-	-	-	9,752	12,381
	Duct Bank Concrete	3310.100	117.78 cy	31.00 /mh	2,921	166.00 /cy	20,920	-	-	-	-	-	-	23,841	25,009
	Color Dye	3310.110	117.78 cy	-	-	65.00 /cy	8,191	-	-	-	-	-	-	8,191	8,191
	Duct Bank Rebar	3210.230	8.70 tn	31.00 /mh	8,091	1,400.00 /ton	12,180	-	-	-	-	-	-	20,271	23,507
	Electrical Handholes	16000.002	8.00 ea	31.00 /mh	1,984	0.00 /ea	0	-	-	-	-	-	-	1,984	2,778
	Utility Bedding Gravel-Crushed	2305.200	70.00 tn	-	-	23.00 /ton	2,576	-	-	-	-	-	-	2,576	2,576
	One Sided Wall Forms Duct Bank Corbels	3100.184	4.00 ea	31.00 /mh	992	400.00 /ea	1,680	-	-	-	-	-	-	2,672	3,069
	Drill and Epoxy #5	3210.101	10.00 ea	31.00 /mh	93	5.00 /ea	53	-	-	-	-	-	-	146	183
	Site Electrical Concrete Encased Ex Digesters 1-4 to Digester RM 550		525.00 lf		24,722		48,780	/lf						73,501	83,390
	16-01 Site Electrical Concrete Encased Dig.Rm 550 to SFP Bldg 350														
	Duct Bank Excavation/Backfill	16000.002	615.00 lf	31.00 /mh	4,766	-	-	-	-	0.00 /lf	0	-	-	4,766	6,673
	Duct Bank Formwork	16000.002	2,480.00 sf	31.00 /mh	7,688	1.50 /sf	3,720	-	-	-	-	-	-	11,408	14,483
	Duct Bank Concrete	3310.100	92.00 cy	31.00 /mh	2,282	166.00 /cy	16,341	-	-	-	-	-	-	18,623	19,535
	Color Dye	3310.110	92.00 cy	-	-	65.00 /cy	6,399	-	-	-	-	-	-	6,399	6,399

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	16-01 Site Electrical Concrete Encased Dig.Rm 550 to SFP Bldg 350														
	Duct Bank Rebar	3210.230	6.90 tn	31.00 /mh	6,417	1,400.00 /ton	9,660	-	-	-	-	-	-	16,077	18,644
	Electrical Handholes	16000.002	7.00 ea	31.00 /mh	1,736	0.00 /ea	0	-	-	-	-	-	-	1,736	2,430
	One Sided Wall Forms Duct Bank Corbels	3100.184	2.00 ea	31.00 /mh	496	400.00 /ea	840	-	-	-	-	-	-	1,336	1,534
	Utility Bedding Gravel-Crushed	2305.200	82.00 tn	-	-	23.00 /ton	3,018	-	-	-	-	-	-	3,018	3,018
	Drill and Epoxy #5	3210.101	10.00 ea	31.00 /mh	93	5.00 /ea	53	-	-	-	-	-	-	146	183
	Site Electrical Concrete Encased Dig.Rm 550 to SFP Bldg 350		615.00 lf		23,478		40,030	/lf						63,508	72,899
	16-01 Site Electrical Concrete Encased HH-3 to Admin Bldg 700, HH 5A to clar														
	Duct Bank Excavation/Backfill	16000.002	370.00 lf	31.00 /mh	2,868	-	-	-	-	0.00 /lf	0	-	-	2,868	4,015
	Duct Bank Formwork	16000.002	1,720.00 sf	31.00 /mh	5,332	1.50 /sf	2,580	-	-	-	-	-	-	7,912	10,045
	Duct Bank Concrete	3310.100	66.00 cy	31.00 /mh	1,637	166.00 /cy	11,723	-	-	-	-	-	-	13,360	14,014
	Color Dye	3310.110	66.00 cy	-	-	65.00 /cy	4,590	-	-	-	-	-	-	4,590	4,590
	Duct Bank Rebar	3210.230	5.50 tn	31.00 /mh	5,115	1,400.00 /ton	7,700	-	-	-	-	-	-	12,815	14,861
	Duct Bank Bedding	2305.500	65.00 tn	-	-	24.00 /ton	1,560	-	-	-	-	-	-	1,560	1,560
	Electrical Handholes	16000.002	4.00 ea	31.00 /mh	992	/ea		-	-	-	-	-	-	992	1,389
	One Sided Wall Forms Duct Bank Corbels	3100.184	3.00 ea	31.00 /mh	744	400.00 /ea	1,260	-	-	-	-	-	-	2,004	2,302
	Drill and Epoxy #5	3210.101	10.00 ea	31.00 /mh	93	5.00 /ea	53	-	-	-	-	-	-	146	183
	Site Electrical Concrete Encased HH-3 to Admin Bldg 700, HH 5A to clar		430.00 lf		16,780		29,466	/lf						46,246	52,958
	16-01 Site Electrical Concrete Encased 550-XFMR to HH-7A and DB Aeration BO														
	Duct Bank Excavation/Backfill	16000.002	55.00 lf	31.00 /mh	426	-	-	-	-	0.00 /lf	0	-	-	426	597
	Duct Bank Formwork	16000.002	220.00 sf	31.00 /mh	682	1.50 /sf	330	-	-	-	-	-	-	1,012	1,285
	Duct Bank Concrete	3310.100	10.00 cy	31.00 /mh	248	166.00 /cy	1,776	-	-	-	-	-	-	2,024	2,123
	Color Dye	3310.110	10.00 cy	-	-	65.00 /cy	696	-	-	-	-	-	-	696	696
	Duct Bank Rebar	3210.230	0.75 tn	31.00 /mh	698	1,400.00 /ton	1,050	-	-	-	-	-	-	1,748	2,027
	Duct Bank Bedding	2305.500	6.00 tn	-	-	24.00 /ton	144	-	-	-	-	-	-	144	144
	Electrical Handholes	16000.002	1.00 ea	31.00 /mh	248	/ea		-	-	-	-	-	-	248	347
	Site Electrical Concrete Encased 550-XFMR to HH-7A and DB Aeration BO		15.00 lf		2,302		3,996	/lf						6,297	7,218
	16-01 Site Electrical Concrete Encased 100-XFMR to HH-1A and HH 8A to Digest														
	Duct Bank Excavation/Backfill	16000.002	110.00 lf	31.00 /mh	853	-	-	-	-	0.00 /lf	0	-	-	853	1,194
	Duct Bank Formwork	16000.002	440.00 sf	31.00 /mh	1,364	1.50 /sf	660	-	-	-	-	-	-	2,024	2,570
	Duct Bank Concrete	3310.100	25.00 cy	31.00 /mh	620	166.00 /cy	4,441	-	-	-	-	-	-	5,061	5,309
	Color Dye	3310.110	25.00 cy	-	-	65.00 /cy	1,739	-	-	-	-	-	-	1,739	1,739
	Duct Bank Rebar	3210.230	1.88 tn	31.00 /mh	1,748	1,400.00 /ton	2,632	-	-	-	-	-	-	4,380	5,080
	Duct Bank Bedding	2305.500	15.00 tn	0.00	0	24.00 /ton	360	-	-	-	-	-	-	360	360
	Slab Void - 6"	3100.320	40.00 sf	31.00 /mh	124	10.00 /sf	440	-	-	-	-	-	-	564	614
	Site Electrical Concrete Encased 100-XFMR to HH-1A and HH 8A to Digest		110.00 lf		4,709		10,271	/lf						14,980	16,864
	16-01 Site Electrical Concrete Encased 350 XFMER to 350-Gen to SFP														
	Duct Bank Excavation/Backfill	16000.002	50.00 lf	31.00 /mh	388	-	-	-	-	0.00 /lf	0	-	-	388	543
	Duct Bank Formwork	16000.002	200.00 sf	31.00 /mh	620	1.50 /sf	300	-	-	-	-	-	-	920	1,168
	Duct Bank Concrete	3310.100	12.00 cy	31.00 /mh	298	166.00 /cy	2,131	-	-	-	-	-	-	2,429	2,548
	Color Dye	3310.110	12.00 cy	-	-	65.00 /cy	835	-	-	-	-	-	-	835	835
	Duct Bank Rebar	3210.230	0.90 tn	31.00 /mh	837	1,400.00 /ton	1,260	-	-	-	-	-	-	2,097	2,432
	Duct Bank Bedding	2305.500	11.00 tn	-	-	24.00 /ton	264	-	-	-	-	-	-	264	264
	Electrical Handholes	16000.002	1.00 ea	31.00 /mh	248	/ea		-	-	-	-	-	-	248	347
	One Sided Wall Forms Duct Bank Corbels	3100.184	1.00 ea	31.00 /mh	248	400.00 /ea	420	-	-	-	-	-	-	668	767
	Site Electrical Concrete Encased 350 XFMER to 350-Gen to SFP		50.00 lf		2,638		5,210	/lf						7,848	8,903
	16-01 Site Electrical Concrete Encased 550-GEN to Blower Bldg & Adend #3 DB														
	Duct Bank Excavation/Backfill	16000.002	80.00 lf	31.00 /mh	620	-	-	-	-	0.00 /lf	0	-	-	620	868
	Duct Bank Formwork	16000.002	400.00 sf	31.00 /mh	1,240	1.50 /sf	600	-	-	-	-	-	-	1,840	2,336
	Duct Bank Concrete	3310.100	17.00 cy	31.00 /mh	422	166.00 /cy	3,020	-	-	-	-	-	-	3,441	3,610
	Color Dye	3310.110	17.00 cy	-	-	65.00 /cy	1,182	-	-	-	-	-	-	1,182	1,182
	Duct Bank Rebar	3210.230	1.28 tn	31.00 /mh	1,186	1,400.00 /ton	1,785	-	-	-	-	-	-	2,971	3,445
	Duct Bank Bedding	2305.500	21.00 tn	-	-	24.00 /ton	504	-	-	-	-	-	-	504	504
	One Sided Wall Forms Duct Bank Corbels	3100.184	1.00 ea	31.00 /mh	248	400.00 /ea	420	-	-	-	-	-	-	668	767
	Site Electrical Concrete Encased 550-GEN to Blower Bldg & Adend #3 DB		80.00 lf		3,715		7,511	/lf						11,226	12,712
	16-01 Site Electrical Direct Bury 700 Admin to Ex Admin														
	Duct Bank Excavation/Backfill	16000.002	390.00 lf	31.00 /mh	3,023	-	-	-	-	0.00 /lf	0	-	-	3,023	4,232
	Duct Bank Bedding	2305.500	144.00 tn	-	-	24.00 /ton	3,456	-	-	-	-	-	-	3,456	3,456
	Electrical Handholes	16000.002	2.00 ea	31.00 /mh	496	0.00 /ea	0	-	-	-	-	-	-	496	694

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	Site Electrical Direct Bury 700 Admin to Ex Admin		390.00 lf		3,519		3,456	/lf						6,975	8,382
16-01	Site Electrical Direct Bury HH-7B to Ex RAS/WAS														
	Duct Bank Excavation/Backfill	16000.002	115.00 lf	31.00 /mh	891	-	-	-	-	0.00 /lf	0	-	-	891	1,248
	Duct Bank Bedding	2305.500	31.00 tn	-	-	24.00 /ton	744	-	-	-	-	-	-	744	744
	Site Electrical Direct Bury HH-7B to Ex RAS/WAS		115.00 lf		891		744	/lf						1,635	1,992
16-01	Site Electrical Direct Bury Building Grounding														
	Duct Bank Excavation/Backfill	16000.002	1,500.00 lf	31.00 /mh	9,300	-	-	-	-	0.00 /lf	0	-	-	9,300	13,020
	Site Electrical Direct Bury Building Grounding		1,500.00 lf		9,300			/lf						9,300	13,020
16-01	Duct Banks Under Buildings Headworks UV step Feed and admin														
	Duct Bank Excavation/Backfill	16000.002	220.00 lf	31.00 /mh	1,364	-	-	-	-	0.00 /lf	0	-	-	1,364	1,910
	Duct Bank Formwork	16000.002	880.00 sf	31.00 /mh	1,500	1.50 /sf	1,320	-	-	-	-	-	-	2,820	3,421
	Duct Bank Concrete	3310.100	49.00 cy	31.00 /mh	638	166.00 /cy	8,703	-	-	-	-	-	-	9,341	9,597
	Duct Bank Rebar	3210.230	3.70 tn	31.00 /mh	3,441	1,400.00 /ton	5,180	-	-	-	-	-	-	8,621	9,997
	Color Dye	3310.110	49.00 cy	-	-	65.00 /cy	3,408	-	-	-	-	-	-	3,408	3,408
	Duct Banks Under Buildings Headworks UV step Feed and admin		180.00 lf		6,943		18,611	/lf						25,555	28,332
	Ductbank				116,109		181,409							297,518	343,962
	053 Site Electrical				116,109		181,409	/LS						297,518	343,962
	260533				116,109		181,409							297,518	343,962
312316	Excavation														
001	General														
	Dirtwork Dirtwork														
01	-100 Dirtwork General														
	Operator Foreman	1000.100	8.00 wk	1,500.00 /wk	12,000	-	-	-	-	-	-	-	-	12,000	16,800
	Pickup	1900.210	4.00 mnth	-	-	-	-	-	-	836.00 /mnth	3,344	514.00 /mnth	2,056	5,400	5,467
	(3rd Party) Semi Tractor	1900.210	96.00 hr	-	-	-	-	125.00 /hr	12,000	-	-	-	-	12,000	12,000
	Dirtwork General				12,000			/wk	12,000		3,344		2,056	29,400	34,267
014-	Dirtwork Winter Conditions														
	Winter Conditions	1572.100	8.00 mnth	31.00 /mh	5,704	1,500.00 /mnt h	12,000	-	-	-	-	-	-	17,704	19,986
	Ground Heater E2200 (ln @ 1.1 gal/hr *3 24/7) (L)	1900.400	8.00 mnth	-	-	-	-	-	-	6,000.00 /mnth	48,000	3,800.00 /mnth	30,400	78,400	79,360
	Dirtwork Winter Conditions				5,704		12,000	/mo			48,000		30,400	96,104	99,346
0213-	Site Erosion Control														
	Inlet Protection Waddel	2370.150	200.00 lf	31.00 /mh	620	2.00 /lf	440	-	-	-	-	-	-	1,060	1,308
	Silt Fence	2370.150	3,000.00 lf	31.00 /mh	9,300	1.00 /lf	3,300	-	-	-	-	-	-	12,600	16,320
	Stone @ Entrance	2305.350	39.70 cy	31.00 /mh	738	43.00 /ton	2,817	-	-	-	-	-	-	3,555	3,851
	Concrete Washout (Inst'l, Maintain, Remove)	2305.350	1.00 ea	31.00 /mh	1,736	1,000.00 /ea	1,000	-	-	-	-	-	-	2,736	3,430
	(3rd Party) Dump Truck, 10 wheel haul off concrete spoils	1900.210	60.00 hr	-	-	-	-	110.00 /hr	6,600	-	-	-	-	6,600	6,600
	Erosion Control (BMP) Maintenance and dust control	2370.050	768.00 mnhr	31.00 /mh	23,808	-	-	-	-	-	-	-	-	23,808	33,331
	Erosion Control Mats	2322.040	1,200.00 sy	31.00 /mh	2,046	-	-	5.00 /sy	6,000	-	-	-	-	8,046	8,864
	Clean Rock parking and staging area	2305.050	50.00 cy	-	-	34.00 /ton	2,754	-	-	-	-	-	-	2,754	2,754
	Hydroseeding (including mob)	2322.060	13.00 ac	-	-	-	-	2,500.00 /ac	32,500	-	-	-	-	32,500	32,500
	Backflow Preventer Flg 3" for water truck	15403.130	1.00 ea	31.00 /mh		4,500.00 /ea	4,500	-	-	-	-	-	-	4,500	4,500
	Sub - Fencing replace existing fence and add 1ea double gate	2820.980	1.00 ls	-	-	-	-	18,000.00 /ls	18,000	-	-	-	-	18,000	18,000
	John Deere 624 Loader (172 HP) (M)	1900.132	0.25 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,375	3,000.00 /mnth	750	2,125	2,153
	Water Maintenance for Landscaping	2322.060	1.00 ls	31.00 /mh	3,720	20,000.00 /ls	20,000	-	-	-	-	-	-	23,720	25,208
	Bobcat Skid Steer with trencher, broom or plow	1900.131	8.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	24,000	2,000.00 /mnth	16,000	40,000	40,480
	Site Erosion Control		1.00 ls		41,968		34,811	63,100.00 /ls	63,100		25,375		16,750	182,004	199,299
0238-1	Site Dewatering Clarifiers, IPS, Digesters Aetation and Orbal														
	Trench Excavtion 0- 4'	2333.010	1,300.00 lf	31.00 /mh	4,836	-	-	-	-	-	-	-	-	4,836	6,770
	Trench Backfill 0- 4'	2333.020	1,300.00 lf	31.00 /mh	6,448	-	-	-	-	-	-	-	-	6,448	9,027
	Utility Bedding Stone 3/4"	2305.200	577.78 cy	-	-	34.00 /ton	31,431	-	-	-	-	-	-	31,431	31,431
	Spoils to Waste	2333.060	577.78 cy	31.00 /mh	1,791	-	-	-	-	-	-	-	-	1,791	2,508
	Trench Wrap	2333.040	2,020.00 sy	31.00 /mh	2,505	1.50 /sy	3,333	-	-	-	-	-	-	5,838	6,840
	HDPE Coiled Pipe Perfed 4	2631.201	1,300.00 lf	31.00 /mh	3,224	6.00 /lf	8,190	-	-	-	-	-	-	11,414	12,704
	HDPE Coil Tee 4	2631.214	8.00 ea	31.00 /mh	496	15.00 /ea	120	-	-	-	-	-	-	616	814
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	1.00 mnth	-	-	-	-	-	-	8,500.00 /mnth	8,500	3,500.00 /mnth	3,500	12,000	12,170
	John Deere 624 Loader (172 HP) (M)	1900.132	1.00 mnth	-	-	-	-	-	-	5,500.00 /mnth	5,500	3,000.00 /mnth	3,000	8,500	8,610
	Water Truck, 4,000 Gallon (L)	1900.210	1.00 mnth	-	-	-	-	-	-	4,500.00 /mnth	4,500	1,200.00 /mnth	1,200	5,700	5,790
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	1.00 mnth	-	-	-	-	-	-	2,000.00 /mnth	2,000	300.00 /mnth	300	2,300	2,340
	3" Pump & Hoses	2240.120	400.00 day	31.00 /mh		100.00 /day	40,000	-	-	/day		-	-	40,000	40,000
	Clean Rock for wells and sumps	2305.050	100.00 cy	-	-	34.00 /ton	5,508	-	-	-	-	-	-	5,508	5,508
	Dewatering Set Up	2240.050	1.00 ls	31.00 /mh	3,720	-	-	-	-	-	-	-	-	3,720	5,208

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0238-1 Site Dewatering Clarifiers, IPS, Digesters Aetation and Orbal														
	Dewatering Maintenance	2240.050	70.00 wk	31.00 /mh	8,680	-	-	-	-	-	-	-	-	8,680	12,152
	Dewatering Permit	2240.050	1.00 ls	-	-	-	-	-	-	-	-	3,500.00 /ls	3,500	3,500	3,500
	Dewatering Discharge Testing	2240.050	70.00 ea	31.00 /mh	4,340	-	-	-	-	-	-	60.00 /ea	4,200	8,540	10,276
	Dewatering Power hook up	2240.050	1.00 ls	31.00 /mh		/ls		25,000.00 /ls	25,000	-	-	-	-	25,000	25,000
	HD PE Pipe 8 DR 17	2631.301	1,100.00 lf	31.00 /mh	4,092	0.00 /lf	0	-	-	-	-	-	-	4,092	5,729
	HD PE 90 bend 8 DR 17	2631.314	1.00 ea	31.00 /mh	28	0.00 /ea	0	-	-	-	-	-	-	28	39
	HD PE 45 bend 8 DR 17	2631.314	3.00 ea	31.00 /mh	74	0.00 /ea	0	-	-	-	-	-	-	74	104
	HD PE Tee 8 DR 17	2631.320	4.00 ea	31.00 /mh	112	0.00 /ea	0	-	-	-	-	-	-	112	156
	Valve Butterfly Lugged 125# 3in	15110.026	19.00 ea	31.00 /mh	295	250.00 /ea	4,750	-	-	-	-	-	-	5,045	5,162
	Dewatering Subcontractor	2240.050	1.00 ls	-	-	-	-	181,650.00 /ls	181,650	-	-	-	-	181,650	181,650
	Valve Check Flange 125# 3in	15110.040	19.00 ea	31.00 /mh	295	350.00 /ea	6,650	-	-	-	-	-	-	6,945	7,062
	PVC Sch-80 Pipe 3 Bell End	2336.110	1,000.00 lf	31.00 /mh	4,960	8.00 /lf	8,000	-	-	-	-	-	-	12,960	14,944
	Excavate Sump 5' Deep	2240.200	8.00 ea	31.00 /mh	2,976	250.00 /ea	2,000	-	-	-	-	-	-	4,976	6,166
	Generators 100 kw, Kohler (140 HP) (L)	1900.020	16.00 mnth	-	-	-	-	-	-	1,520.00 /mnth	24,320	500.00 /mnth	8,000	32,320	32,806
	Site Dewatering Clarifiers, IPS, Digesters Aetation and Orbal		1.00 ls		48,871		109,982	206,650.00 /ls	206,650		44,820		23,700	434,023	454,468
	Dirtwork Dirtwork				108,543		156,793		281,750		121,539		72,906	741,531	787,380
	001 General				108,543		156,793	/LS	281,750		121,539		72,906	741,531	787,380
	051 Site Civil														
	Dirtwork Dirtwork														
	0212- Clear and grub site														
	Clear and Grub Site -Light	2314.100	2.76 ac	31.00 /mh	1,196	-	-	-	-	/ac	-	-	-	1,196	1,674
	Strip Topsoil to Stockpile	2314.200	1,500.00 cy	31.00 /mh	2,325	-	-	-	-	-	-	-	-	2,325	3,255
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,445	3,500.00 /mnth	595	2,040	2,069
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.17 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,020	3,500.00 /mnth	595	1,615	1,635
	John Deere 644 Loader (232 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,020	3,700.00 /mnth	629	1,649	1,669
	John Deere 624 Loader (172 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	5,500.00 /mnth	935	3,000.00 /mnth	510	1,445	1,464
	Water Truck, 4,000 Gallon (L)	1900.210	0.17 mnth	-	-	-	-	-	-	4,500.00 /mnth	765	1,200.00 /mnth	204	969	984
	Clear and grub site		2.76 ac		3,521			/ac			5,185		2,533	11,239	12,751
	0234- Excavation Sand Filter and Det Pond														
	Excavation - Mass	2317.105	1,482.00 cy	31.00 /mh	3,675	-	-	-	-	-	-	-	-	3,675	5,145
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.21 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,785	3,500.00 /mnth	735	2,520	2,556
	John Deere 644 Loader (232 HP) (M)	1900.132	0.21 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,260	3,700.00 /mnth	777	2,037	2,062
	John Deere 624 Loader (172 HP) (M)	1900.132	0.21 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,155	3,000.00 /mnth	630	1,785	1,808
	Water Truck, 4,000 Gallon (L)	1900.210	0.21 mnth	-	-	-	-	-	-	4,500.00 /mnth	945	1,200.00 /mnth	252	1,197	1,216
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.21 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,260	3,500.00 /mnth	735	1,995	2,020
	Precompact Subgrade Below Foundations	2300.600	600.00 sy	31.00 /mh	229	-	-	-	-	-	-	-	-	229	320
	Machine Grade Below Structure	2301.100	600.00 sy	31.00 /mh	465	-	-	-	-	-	-	-	-	465	651
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.11 mnth	-	-	-	-	-	-	8,500.00 /mnth	969	3,500.00 /mnth	399	1,368	1,387
	Water Truck, 4,000 Gallon (L)	1900.210	0.11 mnth	-	-	-	-	-	-	4,500.00 /mnth	513	1,200.00 /mnth	137	650	660
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.11 mnth	-	-	-	-	-	-	2,000.00 /mnth	228	300.00 /mnth	34	262	267
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.11 mnth	-	-	-	-	-	-	3,360.00 /mnth	383	1,650.00 /mnth	188	571	579
	Excavation Sand Filter and Det Pond		1,482.00 cy		4,369			/cy			8,498		3,887	16,754	18,672
	0234- Site Excavation														
	Excavation - Mass	2317.105	664.00 cy	31.00 /mh	2,058	-	-	-	-	-	-	-	-	2,058	2,882
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.09 mnth	-	-	-	-	-	-	8,500.00 /mnth	799	3,500.00 /mnth	329	1,128	1,144
	John Deere 644 Loader (232 HP) (M)	1900.132	0.09 mnth	-	-	-	-	-	-	6,000.00 /mnth	564	3,700.00 /mnth	348	912	923
	Water Truck, 4,000 Gallon (L)	1900.210	0.09 mnth	-	-	-	-	-	-	4,500.00 /mnth	423	1,200.00 /mnth	113	536	544
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.09 mnth	-	-	-	-	-	-	6,000.00 /mnth	564	3,500.00 /mnth	329	893	904
	Site Excavation		664.00 cy		2,058			/cy			2,350		1,119	5,527	6,397
	Dirtwork Dirtwork				9,948						16,033		7,539	33,520	37,820
	051 Site Civil				9,948			/LS			16,033		7,539	33,520	37,820
	100 Headworks														
	Dirtwork Dirtwork														
	0234- Headworks Excavation														
	Excavation - Mass	2317.105	2,155.00 cy	31.00 /mh	3,340	-	-	-	-	-	-	-	-	3,340	4,676
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,445	3,500.00 /mnth	595	2,040	2,069
	John Deere 644 Loader (232 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,020	3,700.00 /mnth	629	1,649	1,669
	John Deere 624 Loader (172 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	5,500.00 /mnth	935	3,000.00 /mnth	510	1,445	1,464
	Water Truck, 4,000 Gallon (L)	1900.210	0.17 mnth	-	-	-	-	-	-	4,500.00 /mnth	765	1,200.00 /mnth	204	969	984
	Precompact Subgrade Below Foundations	2300.600	544.00 sy	31.00 /mh	207	-	-	-	-	-	-	-	-	207	290
	Machine Grade Below Structure	2301.100	544.00 sy	31.00 /mh	422	-	-	-	-	-	-	-	-	422	590
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.05 mnth	-	-	-	-	-	-	8,500.00 /mnth	442	3,500.00 /mnth	182	624	633
	Water Truck, 4,000 Gallon (L)	1900.210	0.05 mnth	-	-	-	-	-	-	4,500.00 /mnth	234	1,200.00 /mnth	62	296	301
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.05 mnth	-	-	-	-	-	-	2,000.00 /mnth	104	300.00 /mnth	16	120	122
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.05 mnth	-	-	-	-	-	-	3,360.00 /mnth	175	1,650.00 /mnth	86	261	264
	Headworks Excavation		2,155.00 cy		3,969			/cy			5,120		2,284	11,373	13,063
	Dirtwork Dirtwork				3,969						5,120		2,284	11,373	13,063
	100 Headworks				3,969			/LS			5,120		2,284	11,373	13,063
	150 Influent Pump Station														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	Dirtwork Dirtwork														
	0234- Excavation Influent Pump Station														
	Excavation - Mass	2317.105	10,440.00 cy	31.00 /mh	17,800	-	-	-	-	-	-	-	-	17,800	24,920
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.80 mnth	-	-	-	-	-	-	8,500.00 /mnth	6,800	3,500.00 /mnth	2,800	9,600	9,736
	John Deere 644 Loader (232 HP) (M)	1900.132	0.80 mnth	-	-	-	-	-	-	6,000.00 /mnth	4,800	3,700.00 /mnth	2,960	7,760	7,856
	Water Truck, 4,000 Gallon (L)	1900.210	0.80 mnth	-	-	-	-	-	-	4,500.00 /mnth	3,600	1,200.00 /mnth	960	4,560	4,632
	Haul Truck - 35 Ton (393 HP) (L)	1900.210	0.80 mnth	-	-	-	-	-	-	11,200.00 /mnth	8,960	4,500.00 /mnth	3,600	12,560	12,739
	Precompact Subgrade Below Foundations	2300.600	100.00 sy	31.00 /mh	38	-	-	-	-	-	-	-	-	38	53
	Machine Grade Below Structure	2301.100	100.00 sy	31.00 /mh	78	-	-	-	-	-	-	-	-	78	109
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.03 mnth	-	-	-	-	-	-	8,500.00 /mnth	238	3,500.00 /mnth	98	336	341
	Water Truck, 4,000 Gallon (L)	1900.210	0.03 mnth	-	-	-	-	-	-	4,500.00 /mnth	126	1,200.00 /mnth	34	160	162
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.03 mnth	-	-	-	-	-	-	2,000.00 /mnth	56	300.00 /mnth	8	64	66
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.03 mnth	-	-	-	-	-	-	3,360.00 /mnth	94	1,650.00 /mnth	46	140	142
	Engineered/Stamped Design for Excavation	2317.105	1.00 ls	31.00 /mh	-	-	-	7,500.00 /ls	7,500	-	-	-	-	7,500	7,500
	Reroute gas line at Pump Station Excavation	15402.010	1.00 ls	-	-	-	-	7,500.00 /ls	7,500	-	-	-	-	7,500	7,500
	Reroute electrical lines at Influent Pump Station Excavation	15402.010	1.00 ls	-	-	-	-	10,000.00 /ls	10,000	-	-	-	-	10,000	10,000
	Reroute PW Line	15402.010	1.00 ls	-	-	-	-	10,000.00 /ls	10,000	-	-	-	-	10,000	10,000
	Excavation Influent Pump Station		10,440.00 cy		17,916			3.35 /cy	35,000		24,674		10,506	88,096	95,756
	Dirtwork Dirtwork				17,916				35,000		24,674		10,506	88,096	95,756
	150 Influent Pump Station				17,916			/LS	35,000		24,674		10,506	88,096	95,756
	200 Aeration Basin														
	Dirtwork Dirtwork														
	0234- Excavate Aeration Basin														
	Excavation - Mass	2317.105	9,511.00 cy	31.00 /mh	13,268	-	-	-	-	-	-	-	-	13,268	18,575
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.65 mnth	-	-	-	-	-	-	8,500.00 /mnth	5,525	3,500.00 /mnth	2,275	7,800	7,911
	Haul Truck - 35 Ton (393 HP) (L)	1900.210	0.65 mnth	-	-	-	-	-	-	11,200.00 /mnth	7,280	4,500.00 /mnth	2,925	10,205	10,351
	John Deere 644 Loader (232 HP) (M)	1900.132	0.65 mnth	-	-	-	-	-	-	6,000.00 /mnth	3,900	3,700.00 /mnth	2,405	6,305	6,383
	Water Truck, 4,000 Gallon (L)	1900.210	0.65 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,925	1,200.00 /mnth	780	3,705	3,764
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.65 mnth	-	-	-	-	-	-	6,000.00 /mnth	3,900	3,500.00 /mnth	2,275	6,175	6,253
	Precompact Subgrade Below Foundations	2300.600	1,555.00 sy	31.00 /mh	593	-	-	-	-	-	-	-	-	593	830
	Machine Grade Below Structure	2301.100	1,555.00 sy	31.00 /mh	1,205	-	-	-	-	-	-	-	-	1,205	1,687
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.11 mnth	-	-	-	-	-	-	8,500.00 /mnth	935	3,500.00 /mnth	385	1,320	1,339
	Water Truck, 4,000 Gallon (L)	1900.210	0.11 mnth	-	-	-	-	-	-	4,500.00 /mnth	495	1,200.00 /mnth	132	627	637
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.11 mnth	-	-	-	-	-	-	2,000.00 /mnth	220	300.00 /mnth	33	253	257
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.11 mnth	-	-	-	-	-	-	3,360.00 /mnth	370	1,650.00 /mnth	182	551	558
	Excavate Aeration Basin		9,511.00 cy		15,066			/cy			25,550		11,392	52,007	58,544
	Dirtwork Dirtwork				15,066						25,550		11,392	52,007	58,544
	200 Aeration Basin				15,066			/LS			25,550		11,392	52,007	58,544
	300 Secondary Clarifiers 5 and 6														
	Dirtwork Dirtwork														
	0234- Excavation Clarifiers 5 and 6														
	Excavation - Mass	2317.105	6,421.00 cy	31.00 /mh	13,934	-	-	-	-	-	-	-	-	13,934	19,507
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.65 mnth	-	-	-	-	-	-	8,500.00 /mnth	5,525	3,500.00 /mnth	2,275	7,800	7,911
	Haul Truck - 35 Ton (393 HP) (L)	1900.210	0.65 mnth	-	-	-	-	-	-	11,200.00 /mnth	7,280	4,500.00 /mnth	2,925	10,205	10,351
	John Deere 644 Loader (232 HP) (M)	1900.132	0.65 mnth	-	-	-	-	-	-	6,000.00 /mnth	3,900	3,700.00 /mnth	2,405	6,305	6,383
	Water Truck, 4,000 Gallon (L)	1900.210	0.65 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,925	1,200.00 /mnth	780	3,705	3,764
	Precompact Subgrade Below Foundations	2300.600	833.00 sy	31.00 /mh	318	-	-	-	-	-	-	-	-	318	445
	Machine Grade Below Structure	2301.100	833.00 sy	31.00 /mh	646	-	-	-	-	-	-	-	-	646	904
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.08 mnth	-	-	-	-	-	-	8,500.00 /mnth	672	3,500.00 /mnth	277	948	961
	Water Truck, 4,000 Gallon (L)	1900.210	0.08 mnth	-	-	-	-	-	-	4,500.00 /mnth	356	1,200.00 /mnth	95	450	457
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.08 mnth	-	-	-	-	-	-	2,000.00 /mnth	158	300.00 /mnth	24	182	185
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.08 mnth	-	-	-	-	-	-	3,360.00 /mnth	265	1,650.00 /mnth	130	396	401
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.65 mnth	-	-	-	-	-	-	6,000.00 /mnth	3,900	3,500.00 /mnth	2,275	6,175	6,253
	Excavation Clarifiers 5 and 6		6,421.00 cy		14,897			/cy			24,980		11,185	51,063	57,521
	Dirtwork Dirtwork				14,897						24,980		11,185	51,063	57,521
	300 Secondary Clarifiers 5 and 6				14,897			/LS			24,980		11,185	51,063	57,521
	350 Step Feed Process Building														
	Dirtwork Dirtwork														
	0234- Excavation Step Feed Building														
	Excavation - Mass	2317.105	6,638.00 cy	31.00 /mh	13,376	-	-	-	-	-	-	-	-	13,376	18,726
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.65 mnth	-	-	-	-	-	-	8,500.00 /mnth	5,525	3,500.00 /mnth	2,275	7,800	7,911
	Haul Truck - 35 Ton (393 HP) (L)	1900.210	0.65 mnth	-	-	-	-	-	-	11,200.00 /mnth	7,280	4,500.00 /mnth	2,925	10,205	10,351
	John Deere 644 Loader (232 HP) (M)	1900.132	0.65 mnth	-	-	-	-	-	-	6,000.00 /mnth	3,900	3,700.00 /mnth	2,405	6,305	6,383
	Water Truck, 4,000 Gallon (L)	1900.210	0.65 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,925	1,200.00 /mnth	780	3,705	3,764
	Precompact Subgrade Below Foundations	2300.600	866.00 sy	31.00 /mh	330	-	-	-	-	-	-	-	-	330	462
	Machine Grade Below Structure	2301.100	866.00 sy	31.00 /mh	671	-	-	-	-	-	-	-	-	671	940
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.08 mnth	-	-	-	-	-	-	8,500.00 /mnth	697	3,500.00 /mnth	287	984	998
	Water Truck, 4,000 Gallon (L)	1900.210	0.08 mnth	-	-	-	-	-	-	4,500.00 /mnth	369	1,200.00 /mnth	98	467	475
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.08 mnth	-	-	-	-	-	-	2,000.00 /mnth	164	300.00 /mnth	25	189	192
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.08 mnth	-	-	-	-	-	-	3,360.00 /mnth	276	1,650.00 /mnth	135	411	416

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0234- Excavation Step Feed Building														
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.08 mnth	-	-	-	-	-	-	6,000.00 /mnth	480	3,500.00 /mnth	280	760	770
	Excavation Step Feed Building		6,638.00 cy		14,377			/cy			21,616		9,210	45,203	51,386
	Dirtwork Dirtwork				14,377						21,616		9,210	45,203	51,386
	350 Step Feed Process Building				14,377			/LS			21,616		9,210	45,203	51,386
	400 Orbal Anaerobic Reactor														
	Dirtwork Dirtwork														
	0234- Excavation Orbal Basin														
	Excavation - Mass	2317.105	1,962.00 cy	31.00 /mh	3,649	-	-	-	-	-	-	-	-	3,649	5,109
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.19 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,581	3,500.00 /mnth	651	2,232	2,264
	John Deere 644 Loader (232 HP) (M)	1900.132	0.19 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,116	3,700.00 /mnth	688	1,804	1,827
	John Deere 624 Loader (172 HP) (M)	1900.132	0.19 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,023	3,000.00 /mnth	558	1,581	1,601
	Water Truck, 4,000 Gallon (L)	1900.210	0.19 mnth	-	-	-	-	-	-	4,500.00 /mnth	837	1,200.00 /mnth	223	1,060	1,077
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.19 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,116	3,500.00 /mnth	651	1,767	1,789
	Precompact Subgrade Below Foundations	2300.600	177.00 sy	31.00 /mh	67	-	-	-	-	-	-	-	-	67	94
	Machine Grade Below Structure	2301.100	177.00 sy	31.00 /mh	137	-	-	-	-	-	-	-	-	137	192
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.03 mnth	-	-	-	-	-	-	8,500.00 /mnth	289	3,500.00 /mnth	119	408	414
	Water Truck, 4,000 Gallon (L)	1900.210	0.03 mnth	-	-	-	-	-	-	4,500.00 /mnth	153	1,200.00 /mnth	41	194	197
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.03 mnth	-	-	-	-	-	-	2,000.00 /mnth	68	300.00 /mnth	10	78	80
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.03 mnth	-	-	-	-	-	-	3,360.00 /mnth	114	1,650.00 /mnth	56	170	173
	Excavation Orbal Basin		1,962.00 cy		3,854			/cy			6,297		2,998	13,149	14,816
	Dirtwork Dirtwork				3,854						6,297		2,998	13,149	14,816
	400 Orbal Anaerobic Reactor				3,854			/LS			6,297		2,998	13,149	14,816
	550 UV and Digester Blower Building														
	Dirtwork Dirtwork														
	0234- Excavation UV and Digester Blower Building														
	Excavation - Mass	2317.105	1,969.00 cy	31.00 /mh	4,883	-	-	-	-	-	-	-	-	4,883	6,836
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.26 mnth	-	-	-	-	-	-	8,500.00 /mnth	2,210	3,500.00 /mnth	910	3,120	3,164
	John Deere 644 Loader (232 HP) (M)	1900.132	0.26 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,560	3,700.00 /mnth	962	2,522	2,553
	John Deere 624 Loader (172 HP) (M)	1900.132	0.26 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,430	3,000.00 /mnth	780	2,210	2,239
	Water Truck, 4,000 Gallon (L)	1900.210	0.26 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,170	1,200.00 /mnth	312	1,482	1,505
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.26 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,560	3,500.00 /mnth	910	2,470	2,501
	Precompact Subgrade Below Foundations	2300.600	766.00 sy	31.00 /mh	292	-	-	-	-	-	-	-	-	292	409
	Machine Grade Below Structure	2301.100	766.00 sy	31.00 /mh	594	-	-	-	-	-	-	-	-	594	831
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.09 mnth	-	-	-	-	-	-	8,500.00 /mnth	740	3,500.00 /mnth	305	1,044	1,059
	Water Truck, 4,000 Gallon (L)	1900.210	0.09 mnth	-	-	-	-	-	-	4,500.00 /mnth	392	1,200.00 /mnth	104	496	504
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.09 mnth	-	-	-	-	-	-	2,000.00 /mnth	174	300.00 /mnth	26	200	204
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.09 mnth	-	-	-	-	-	-	3,360.00 /mnth	292	1,650.00 /mnth	144	436	442
	Relocate Electrical Duct Banks at excavation	15402.010	1.00 ls	-	-	-	-	50,000.00 /ls	50,000	-	-	-	-	50,000	50,000
	Excavation UV and Digester Blower Building		1,969.00 cy		5,769			25.39 /cy	50,000		9,527		4,453	69,749	72,247
	Dirtwork Dirtwork				5,769				50,000		9,527		4,453	69,749	72,247
	550 UV and Digester Blower Building				5,769			/LS	50,000		9,527		4,453	69,749	72,247
	600 Aerobic Digester 5 and 6														
	Dirtwork Dirtwork														
	0234- Excavation Digester 5 and 6														
	Excavation - Mass	2317.105	4,219.00 cy	31.00 /mh	10,463	-	-	-	-	-	-	-	-	10,463	14,648
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.48 mnth	-	-	-	-	-	-	8,500.00 /mnth	4,080	3,500.00 /mnth	1,680	5,760	5,842
	John Deere 644 Loader (232 HP) (M)	1900.132	0.48 mnth	-	-	-	-	-	-	6,000.00 /mnth	2,880	3,700.00 /mnth	1,776	4,656	4,714
	Haul Truck - 35 Ton (393 HP) (L)	1900.210	0.48 mnth	-	-	-	-	-	-	11,200.00 /mnth	5,376	4,500.00 /mnth	2,160	7,536	7,644
	Water Truck, 4,000 Gallon (L)	1900.210	0.48 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,160	1,200.00 /mnth	576	2,736	2,779
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.48 mnth	-	-	-	-	-	-	6,000.00 /mnth	2,880	3,500.00 /mnth	1,680	4,560	4,618
	Precompact Subgrade Below Foundations	2300.600	444.00 sy	31.00 /mh	169	-	-	-	-	-	-	-	-	169	237
	Machine Grade Below Structure	2301.100	444.00 sy	31.00 /mh	344	-	-	-	-	-	-	-	-	344	482
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.05 mnth	-	-	-	-	-	-	8,500.00 /mnth	425	3,500.00 /mnth	175	600	609
	Water Truck, 4,000 Gallon (L)	1900.210	0.05 mnth	-	-	-	-	-	-	4,500.00 /mnth	225	1,200.00 /mnth	60	285	290
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.05 mnth	-	-	-	-	-	-	2,000.00 /mnth	100	300.00 /mnth	15	115	117
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.05 mnth	-	-	-	-	-	-	3,360.00 /mnth	168	1,650.00 /mnth	83	251	254
	Relocate 8" WAS. and 4" water 3 ea at digester excavation (360 lf)	15402.010	1.00 ls	-	-	-	-	36,000.00 /ls	36,000	-	-	-	-	36,000	36,000
	Relocate 10" ALP at digeter excavation (120 lf)	15402.010	1.00 ls	-	-	-	-	18,000.00 /ls	18,000	-	-	-	-	18,000	18,000
	Relocate electrical around Digester 5 and 6	15402.010	1.00 ls	-	-	-	-	5,000.00 /ls	5,000	-	-	-	-	5,000	5,000
	Excavation Digester 5 and 6		4,219.00 cy		10,977			13.98 /cy	59,000		18,294		8,205	96,475	101,232
	Dirtwork Dirtwork				10,977				59,000		18,294		8,205	96,475	101,232
	600 Aerobic Digester 5 and 6				10,977			/LS	59,000		18,294		8,205	96,475	101,232
	700 Administration Building														
	Dirtwork Dirtwork														
	0234- Excavation Admin														
	Excavation - Mass	2317.105	350.00 cy	31.00 /mh	868	-	-	-	-	-	-	-	-	868	1,215
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.08 mnth	-	-	-	-	-	-	8,500.00 /mnth	680	3,500.00 /mnth	280	960	974
	John Deere 644 Loader (232 HP) (M)	1900.132	0.08 mnth	-	-	-	-	-	-	6,000.00 /mnth	480	3,700.00 /mnth	296	776	786

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0234-	Excavation Admin														
	Water Truck, 4,000 Gallon (L)	1900.210	0.08 mnth	-	-	-	-	-	-	4,500.00 /mnth	360	1,200.00 /mnth	96	456	463
	Precompact Subgrade Below Foundations	2300.600	600.00 sy	31.00 /mh	229	-	-	-	-	-	-	-	-	229	320
	Machine Grade Below Structure	2301.100	600.00 sy	31.00 /mh	465	-	-	-	-	-	-	-	-	465	651
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.07 mnth	-	-	-	-	-	-	8,500.00 /mnth	578	3,500.00 /mnth	238	816	828
	Water Truck, 4,000 Gallon (L)	1900.210	0.07 mnth	-	-	-	-	-	-	4,500.00 /mnth	306	1,200.00 /mnth	82	388	394
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.07 mnth	-	-	-	-	-	-	2,000.00 /mnth	136	300.00 /mnth	20	156	159
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.07 mnth	-	-	-	-	-	-	3,360.00 /mnth	228	1,650.00 /mnth	112	341	345
	Excavation Admin		350.00 cy		1,562			/cy			2,768		1,124	5,454	6,135
	Dirtwork Dirtwork				1,562						2,768		1,124	5,454	6,135
	700 Administration Building				1,562			/LS			2,768		1,124	5,454	6,135
	312316 Excavation				206,877		156,793		425,750		276,398		141,801	1,207,620	1,295,898
312323	Fill and Backfill														
051	Site Civil														
	Dirtwork Dirtwork														
0230-	Grade Site														
	Rough Grade site	2300.600	50,000.00 sy	31.00 /mh	54,250	-	-	-	-	-	-	-	-	54,250	75,950
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	1.52 mnth	-	-	-	-	-	-	8,500.00 /mnth	12,920	3,500.00 /mnth	5,320	18,240	18,498
	John Deere 644 Loader (232 HP) (M)	1900.132	1.52 mnth	-	-	-	-	-	-	6,000.00 /mnth	9,120	3,700.00 /mnth	5,624	14,744	14,926
	Water Truck, 4,000 Gallon (L)	1900.210	1.52 mnth	-	-	-	-	-	-	4,500.00 /mnth	6,840	1,200.00 /mnth	1,824	8,664	8,801
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	1.52 mnth	-	-	-	-	-	-	2,000.00 /mnth	3,040	300.00 /mnth	456	3,496	3,557
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	1.52 mnth	-	-	-	-	-	-	3,360.00 /mnth	5,107	1,650.00 /mnth	2,508	7,615	7,717
	John Deere 750 Dozer (168 HP) (L)	1900.120	1.52 mnth	-	-	-	-	-	-	6,000.00 /mnth	9,120	3,500.00 /mnth	5,320	14,440	14,622
	Bobcat Skid Steer (85hp)- track (L)	1900.131	3.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	9,000	2,000.00 /mnth	6,000	15,000	15,180
	Grade Site		50,000.00 sy		54,250			/sy			55,147		27,052	136,449	159,252
0234-	Export Soils to Waste on site berm outside fence														
	Excavation - Mass	2317.105	21,458.00 cy	31.00 /mh	21,952	-	-	-	-	-	-	-	-	21,952	30,732
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	1.20 mnth	-	-	-	-	-	-	8,500.00 /mnth	10,200	3,500.00 /mnth	4,200	14,400	14,604
	John Deere 644 Loader (232 HP) (M)	1900.132	1.20 mnth	-	-	-	-	-	-	6,000.00 /mnth	7,200	3,700.00 /mnth	4,440	11,640	11,784
	John Deere 750 Dozer (168 HP) (L)	1900.120	1.20 mnth	-	-	-	-	-	-	6,000.00 /mnth	7,200	3,500.00 /mnth	4,200	11,400	11,544
	Water Truck, 4,000 Gallon (L)	1900.210	1.20 mnth	-	-	-	-	-	-	4,500.00 /mnth	5,400	1,200.00 /mnth	1,440	6,840	6,948
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	1.20 mnth	-	-	-	-	-	-	3,360.00 /mnth	4,032	1,650.00 /mnth	1,980	6,012	6,093
	(3rd Party) Dump Truck, 10 wheel (12 min loads)	1900.210	1,144.00 hr	-	-	-	-	110.00 /hr	125,840	-	-	-	-	125,840	125,840
	Seeding Mechanical Methods (Excess Spoils outside fence)	2322.060	2.00 ac	31.00 /mh	-	-	-	2,500.00 /ac	5,000	-	-	-	-	5,000	5,000
	Export Soils to Waste on site berm outside fence		21,458.00 cy		21,952			6.10 /cy	130,840		34,032		16,260	203,084	212,545
0235-	Site Backfill														
	Backfill - Mass	2319.302	2,417.00 cy	31.00 /mh	11,239	-	-	-	-	-	-	-	-	11,239	15,735
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.39 mnth	-	-	-	-	-	-	8,500.00 /mnth	3,315	3,500.00 /mnth	1,365	4,680	4,746
	John Deere 644 Loader (232 HP) (M)	1900.132	0.39 mnth	-	-	-	-	-	-	6,000.00 /mnth	2,340	3,700.00 /mnth	1,443	3,783	3,830
	Water Truck, 4,000 Gallon (L)	1900.210	0.39 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,755	1,200.00 /mnth	468	2,223	2,258
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.39 mnth	-	-	-	-	-	-	6,000.00 /mnth	2,340	3,500.00 /mnth	1,365	3,705	3,752
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.39 mnth	-	-	-	-	-	-	3,360.00 /mnth	1,310	1,650.00 /mnth	644	1,954	1,980
	Site Backfill		2,417.00 cy		11,239			/cy			11,060		5,285	27,584	32,301
0235-	Backfill Filter material under Sand Det Pond														
	Backfill - Mass	2319.302	80.00 cy	31.00 /mh	744	-	-	-	-	-	-	-	-	744	1,042
	Import Fill - Sand class C	2305.100	80.00 cy	-	-	21.00 /ton	2,520	-	-	-	-	-	-	2,520	2,520
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.11 mnth	-	-	-	-	-	-	8,500.00 /mnth	969	3,500.00 /mnth	399	1,368	1,387
	John Deere 644 Loader (232 HP) (M)	1900.132	0.11 mnth	-	-	-	-	-	-	6,000.00 /mnth	684	3,700.00 /mnth	422	1,106	1,119
	Water Truck, 4,000 Gallon (L)	1900.210	0.11 mnth	-	-	-	-	-	-	4,500.00 /mnth	513	1,200.00 /mnth	137	650	660
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.11 mnth	-	-	-	-	-	-	6,000.00 /mnth	684	3,500.00 /mnth	399	1,083	1,097
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.11 mnth	-	-	-	-	-	-	2,000.00 /mnth	228	300.00 /mnth	34	262	267
	Backfill Filter material under Sand Det Pond		600.00 cy		744		2,520	/cy			3,078		1,391	7,733	8,092
0235-	Touch up Existing Road Base Roads														
	Backfill - Mass	2319.302	1,050.00 cy	31.00 /mh	9,765	-	-	-	-	-	-	-	-	9,765	13,671
	Import Fill - Gravel Process	2305.100	1,050.00 cy	-	-	21.00 /ton	38,588	-	-	-	-	-	-	38,588	38,588
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.25 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,500	3,500.00 /mnth	875	2,375	2,405
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.25 mnth	-	-	-	-	-	-	3,360.00 /mnth	840	1,650.00 /mnth	413	1,253	1,269
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.25 mnth	-	-	-	-	-	-	2,000.00 /mnth	500	300.00 /mnth	75	575	585
	Bobcat Skid Steer (85hp)- track (L)	1900.131	0.50 mnth	-	-	-	-	-	-	3,000.00 /mnth	1,500	2,000.00 /mnth	1,000	2,500	2,530
	Sub Blade road to site during construction	2740.840	12.00 mo	-	-	-	-	2,000.00 /mo	24,000	-	-	-	-	24,000	24,000
	Touch up Existing Road Base Roads		1,050.00 cy		9,765		38,588	22.86 /cy	24,000		4,340		2,363	79,055	83,048
0235-	Rip rap at valley pans and outlets														
	Backfill - Mass	2319.302	30.00 cy	31.00 /mh	930	-	-	-	-	-	-	-	-	930	1,302
	Import Fill - Gravel Process	2305.100	30.00 cy	-	-	21.00 /ton	1,103	-	-	-	-	-	-	1,103	1,103
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.03 mnth	-	-	-	-	-	-	8,500.00 /mnth	289	3,500.00 /mnth	119	408	414
	John Deere 644 Loader (232 HP) (M)	1900.132	0.03 mnth	-	-	-	-	-	-	6,000.00 /mnth	204	3,700.00 /mnth	126	330	334

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0235- Rip rap at valley pans and outlets														
	Import Rip Rap - Type L (D50 = 9")	2305.450	30.00 cy	-	-	55.00 /ton	2,723	-	-	-	-	-	-	2,723	2,723
	Rip rap at valley pans and outlets		30.00 cy		930		3,825	/cy			493		245	5,493	5,875
	0250- Base under, Concrete Paving, Sidewalks, Base roads and Asphalt														
	Sub-Grade/Compact Roads	2300.600	5,400.00 sy	31.00 /mh	1,674	-	-	-	-	-	-	-	-	1,674	2,344
	Fine Grade/Compact Roads	2301.100	5,400.00 sy	31.00 /mh	3,348	-	-	-	-	-	-	-	-	3,348	4,687
	Base - Roads	2339.510	1,300.00 cy	31.00 /mh	4,030	-	-	-	-	-	-	-	-	4,030	5,642
	Import Process Gravel	2305.250	1,300.00 cy	-	-	22.00 /ton	52,910	-	-	-	-	-	-	52,910	52,910
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.50 mnth	-	-	-	-	-	-	6,000.00 /mnth	3,000	3,500.00 /mnth	1,750	4,750	4,810
	John Deere 644 Loader (232 HP) (M)	1900.132	0.50 mnth	-	-	-	-	-	-	6,000.00 /mnth	3,000	3,700.00 /mnth	1,850	4,850	4,910
	Water Truck, 4,000 Gallon (L)	1900.210	0.50 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,250	1,200.00 /mnth	600	2,850	2,895
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.50 mnth	-	-	-	-	-	-	3,360.00 /mnth	1,680	1,650.00 /mnth	825	2,505	2,539
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.50 mnth	-	-	-	-	-	-	2,000.00 /mnth	1,000	300.00 /mnth	150	1,150	1,170
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.50 mnth	-	-	-	-	-	-	8,500.00 /mnth	4,250	3,500.00 /mnth	1,750	6,000	6,085
	Bobcat Skid Steer (85hp)- track (L)	1900.131	0.50 mnth	-	-	-	-	-	-	3,000.00 /mnth	1,500	2,000.00 /mnth	1,000	2,500	2,530
	Base under, Concrete Paving, Sidewalks, Base roads and Asphalt		1,300.00 cy		9,052		52,910	/cy			16,680		7,925	86,567	90,521
	Dirtwork Dirtwork				107,932		97,843		154,840		124,831		60,520	545,964	591,634
	051 Site Civil				107,932		97,843	/LS	154,840		124,831		60,520	545,964	591,634
	100 Headworks														
	Dirtwork Dirtwork														
	0235- Backfill Headworks														
	Backfill - Mass	2319.302	1,886.00 cy	31.00 /mh	7,016	-	-	-	-	-	-	-	-	7,016	9,822
	Import Fill - Gravel Process	2305.100	1,457.00 cy	-	-	21.00 /ton	53,545	-	-	-	-	-	-	53,545	53,545
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.36 mnth	-	-	-	-	-	-	8,500.00 /mnth	3,035	3,500.00 /mnth	1,250	4,284	4,345
	John Deere 644 Loader (232 HP) (M)	1900.132	0.36 mnth	-	-	-	-	-	-	6,000.00 /mnth	2,142	3,700.00 /mnth	1,321	3,463	3,506
	Water Truck, 4,000 Gallon (L)	1900.210	0.36 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,607	1,200.00 /mnth	428	2,035	2,067
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.36 mnth	-	-	-	-	-	-	2,000.00 /mnth	714	300.00 /mnth	107	821	835
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.36 mnth	-	-	-	-	-	-	3,360.00 /mnth	1,200	1,650.00 /mnth	589	1,789	1,813
	Bobcat Skid Steer (85hp)- track (L)	1900.131	1.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	3,000	2,000.00 /mnth	2,000	5,000	5,060
	Backfill Headworks		1,886.00 cy		7,016		53,545	/cy			11,697		5,695	77,952	80,992
	Dirtwork Dirtwork				7,016		53,545				11,697		5,695	77,952	80,992
	100 Headworks				7,016		53,545	/LS			11,697		5,695	77,952	80,992
	150 Influent Pump Station														
	Dirtwork Dirtwork														
	0235- Backfill Influent Pump Station														
	Backfill - Mass	2319.302	7,425.00 cy	31.00 /mh	28,312	-	-	-	-	-	-	-	-	28,312	39,636
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.84 mnth	-	-	-	-	-	-	8,500.00 /mnth	7,174	3,500.00 /mnth	2,954	10,128	10,271
	John Deere 644 Loader (232 HP) (M)	1900.132	0.84 mnth	-	-	-	-	-	-	6,000.00 /mnth	5,064	3,700.00 /mnth	3,123	8,187	8,288
	Haul Truck - 35 Ton (393 HP) (L)	1900.210	0.84 mnth	-	-	-	-	-	-	11,200.00 /mnth	9,453	4,500.00 /mnth	3,798	13,251	13,440
	Water Truck, 4,000 Gallon (L)	1900.210	0.84 mnth	-	-	-	-	-	-	4,500.00 /mnth	3,798	1,200.00 /mnth	1,013	4,811	4,887
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.84 mnth	-	-	-	-	-	-	2,000.00 /mnth	1,688	300.00 /mnth	253	1,941	1,975
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.84 mnth	-	-	-	-	-	-	6,000.00 /mnth	5,064	3,500.00 /mnth	2,954	8,018	8,119
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.84 mnth	-	-	-	-	-	-	3,360.00 /mnth	2,836	1,650.00 /mnth	1,393	4,228	4,285
	Backfill Influent Pump Station		7,425.00 cy		28,312			/cy			35,077		15,487	78,876	90,902
	0235- Influent Pump Station Under Slab Rock														
	Backfill - Mass	2319.302	60.00 cy	31.00 /mh	1,023	-	-	-	-	-	-	-	-	1,023	1,432
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.05 mnth	-	-	-	-	-	-	8,500.00 /mnth	383	3,500.00 /mnth	158	540	548
	John Deere 644 Loader (232 HP) (M)	1900.132	0.05 mnth	-	-	-	-	-	-	6,000.00 /mnth	270	3,700.00 /mnth	167	437	442
	Bobcat Skid Steer (85hp)- track (L)	1900.131	0.05 mnth	-	-	-	-	-	-	3,000.00 /mnth	135	2,000.00 /mnth	90	225	228
	Clean Rock 2" -4" Ballast	2305.050	20.00 cy	-	-	36.00 /ton	1,166	-	-	-	-	-	-	1,166	1,166
	Clean Rock 3/4"	2305.050	40.00 cy	-	-	32.00 /ton	2,074	-	-	-	-	-	-	2,074	2,074
	Influent Pump Station Under Slab Rock		60.00 cy		1,023		3,240	/cy			788		414	5,465	5,889
	Dirtwork Dirtwork				29,335		3,240				35,864		15,901	84,340	96,791
	150 Influent Pump Station				29,335		3,240	/LS			35,864		15,901	84,340	96,791
	200 Aeration Basin														
	Dirtwork Dirtwork														
	0235- Backfill Aeration Basin														
	Backfill - Mass	2319.302	4,050.00 cy	31.00 /mh	15,066	-	-	-	-	-	-	-	-	15,066	21,092
	Import Fill - Gravel Process	2305.100	1,300.00 cy	-	-	21.00 /ton	47,775	-	-	-	-	-	-	47,775	47,775
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.46 mnth	-	-	-	-	-	-	8,500.00 /mnth	3,910	3,500.00 /mnth	1,610	5,520	5,598
	John Deere 644 Loader (232 HP) (M)	1900.132	0.46 mnth	-	-	-	-	-	-	6,000.00 /mnth	2,760	3,700.00 /mnth	1,702	4,462	4,517
	John Deere 624 Loader (172 HP) (M)	1900.132	0.46 mnth	-	-	-	-	-	-	5,500.00 /mnth	2,530	3,000.00 /mnth	1,380	3,910	3,961
	Water Truck, 4,000 Gallon (L)	1900.210	0.46 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,070	1,200.00 /mnth	552	2,622	2,663
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.46 mnth	-	-	-	-	-	-	6,000.00 /mnth	2,760	3,500.00 /mnth	1,610	4,370	4,425

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0235- Backfill Aeration Basin														
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.46 mnth	-	-	-	-	-	-	2,000.00 /mnth	920	300.00 /mnth	138	1,058	1,076
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.46 mnth	-	-	-	-	-	-	3,360.00 /mnth	1,546	1,650.00 /mnth	759	2,305	2,336
	Backfill Aeration Basin		4,050.00 cy		15,066		47,775	/cy			16,496		7,751	87,088	93,444
	0235- Aeration Basin Underslab Rock														
	Backfill - Mass	2319.302	725.00 cy	31.00 /mh	4,046	-	-	-	-	-	-	-	-	4,046	5,664
	Import Fill Stone 3/4"	2305.100	483.00 cy	-	-	34.00 /to n	26,275	-	-	-	-	-	-	26,275	26,275
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.18 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,530	3,500.00 /mnth	630	2,160	2,191
	John Deere 644 Loader (232 HP) (M)	1900.132	0.18 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,080	3,700.00 /mnth	666	1,746	1,768
	Bobcat Skid Steer (85hp)- track (L)	1900.131	0.50 mnth	-	-	-	-	-	-	3,000.00 /mnth	1,500	2,000.00 /mnth	1,000	2,500	2,530
	Clean Rock 2" - 4" Balast	2305.050	242.00 cy	-	-	36.00 /to n	14,113	-	-	-	-	-	-	14,113	14,113
	Aeration Basin Underslab Rock		725.00 cy		4,046		40,389	/cy			4,110		2,296	50,840	52,541
	Dirtwork Dirtwork				19,112		88,164				20,606		10,047	137,928	145,984
	200 Aeration Basin				19,112		88,164	/LS			20,606		10,047	137,928	145,984
	250 Secondary Clarifier Splitter Box														
	Dirtwork Dirtwork														
	0235- Seconday Splitte Box exterior Backfill														
	Backfill - Mass	2319.302	150.00 cy	31.00 /mh	744	-	-	-	-	-	-	-	-	744	1,042
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.04 mnth	-	-	-	-	-	-	8,500.00 /mnth	366	3,500.00 /mnth	151	516	523
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.04 mnth	-	-	-	-	-	-	8,500.00 /mnth	366	3,500.00 /mnth	151	516	523
	Bobcat Skid Steer (85hp)- track (L)	1900.131	0.04 mnth	-	-	-	-	-	-	3,000.00 /mnth	129	2,000.00 /mnth	86	215	218
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.04 mnth	-	-	-	-	-	-	2,000.00 /mnth	86	300.00 /mnth	13	99	101
	Seconday Splitte Box exterior Backfill		150.00 cy		744			/cy			946		400	2,090	2,406
	Dirtwork Dirtwork				744						946		400	2,090	2,406
	250 Secondary Clarifier Splitter Box				744			/LS			946		400	2,090	2,406
	300 Secondary Clarifiers 5 and 6														
	Dirtwork Dirtwork														
	0235- Backfill Secondary Clarifiers 5 and 6														
	Backfill - Mass	2319.302	3,510.00 cy	31.00 /mh	16,322	-	-	-	-	-	-	-	-	16,322	22,850
	Import Fill - Gravel Process	2305.100	350.00 cy	-	-	21.00 /to n	12,863	-	-	-	-	-	-	12,863	12,863
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.48 mnth	-	-	-	-	-	-	8,500.00 /mnth	4,080	3,500.00 /mnth	1,680	5,760	5,842
	John Deere 644 Loader (232 HP) (M)	1900.132	0.48 mnth	-	-	-	-	-	-	6,000.00 /mnth	2,880	3,700.00 /mnth	1,776	4,656	4,714
	John Deere 624 Loader (172 HP) (M)	1900.132	0.48 mnth	-	-	-	-	-	-	5,500.00 /mnth	2,640	3,000.00 /mnth	1,440	4,080	4,133
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.48 mnth	-	-	-	-	-	-	6,000.00 /mnth	2,880	3,500.00 /mnth	1,680	4,560	4,618
	Water Truck, 4,000 Gallon (L)	1900.210	0.48 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,160	1,200.00 /mnth	576	2,736	2,779
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.48 mnth	-	-	-	-	-	-	2,000.00 /mnth	960	300.00 /mnth	144	1,104	1,123
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.48 mnth	-	-	-	-	-	-	3,360.00 /mnth	1,613	1,650.00 /mnth	792	2,405	2,437
	Backfill Secondary Clarifiers 5 and 6		3,510.00 cy		16,322		12,863	/cy			17,213		8,088	54,485	61,358
	0235- Clarifier 5 and 6 Under Slab Rock														
	Backfill - Mass	2319.302	230.00 cy	31.00 /mh	4,278	-	-	-	-	-	-	-	-	4,278	5,989
	Import Fill Stone 3/4"	2305.100	230.00 cy	-	-	34.00 /to n	12,512	-	-	-	-	-	-	12,512	12,512
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,445	3,500.00 /mnth	595	2,040	2,069
	John Deere 644 Loader (232 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,020	3,700.00 /mnth	629	1,649	1,669
	Bobcat Skid Steer (85hp)- track (L)	1900.131	0.50 mnth	-	-	-	-	-	-	3,000.00 /mnth	1,500	2,000.00 /mnth	1,000	2,500	2,530
	Clean Rock 2" - 4" Ballast	2305.050	115.00 cy	-	-	36.00 /to n	6,707	-	-	-	-	-	-	6,707	6,707
	Clarifier 5 and 6 Under Slab Rock		230.00 cy		4,278		19,219	/cy			3,965		2,224	29,686	31,476
	Dirtwork Dirtwork				20,600		32,081				21,178		10,312	84,171	92,834
	300 Secondary Clarifiers 5 and 6				20,600		32,081	/LS			21,178		10,312	84,171	92,834
	350 Step Feed Process Building														
	Dirtwork Dirtwork														
	0235- Backfill Step Feed Building														
	Backfill - Mass	2319.302	4,300.00 cy	31.00 /mh	19,995	-	-	-	-	-	-	-	-	19,995	27,993
	Import Fill - Gravel Process	2305.100	3,715.00 cy	-	-	21.00 /to n	136,526	-	-	-	-	-	-	136,526	136,526
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.62 mnth	-	-	-	-	-	-	8,500.00 /mnth	5,270	3,500.00 /mnth	2,170	7,440	7,545
	John Deere 644 Loader (232 HP) (M)	1900.132	0.62 mnth	-	-	-	-	-	-	6,000.00 /mnth	3,720	3,700.00 /mnth	2,294	6,014	6,088
	Water Truck, 4,000 Gallon (L)	1900.210	0.62 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,790	1,200.00 /mnth	744	3,534	3,590
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.62 mnth	-	-	-	-	-	-	3,360.00 /mnth	2,083	1,650.00 /mnth	1,023	3,106	3,148
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.62 mnth	-	-	-	-	-	-	2,000.00 /mnth	1,240	300.00 /mnth	186	1,426	1,451
	Bobcat Skid Steer (85hp)- track (L)	1900.131	1.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	3,000	2,000.00 /mnth	2,000	5,000	5,060
	Backfill Step Feed Building		4,300.00 cy		19,995		136,526	/cy			18,103		8,417	183,041	191,402
	0235- Step Feed Basement Under Slab Rock														
	Backfill - Mass	2319.302	120.00 cy	31.00 /mh	1,488	-	-	-	-	-	-	-	-	1,488	2,083
	Import Fill Stone 3/4"	2305.100	120.00 cy	-	-	34.00 /to n	6,528	-	-	-	-	-	-	6,528	6,528

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0235- Step Feed Basement Under Slab Rock														
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.05 mnth	-	-	-	-	-	-	8,500.00 /mnth	383	3,500.00 /mnth	158	540	548
	John Deere 644 Loader (232 HP) (M)	1900.132	0.05 mnth	-	-	-	-	-	-	6,000.00 /mnth	270	3,700.00 /mnth	167	437	442
	Bobcat Skid Steer (85hp)- track (L)	1900.131	0.05 mnth	-	-	-	-	-	-	3,000.00 /mnth	135	2,000.00 /mnth	90	225	228
	Clean Rock 2" - 4" Ballast	2305.050	80.00 cy	-	-	36.00 /to n	4,666	-	-	-	-	-	-	4,666	4,666
	Step Feed Basement Under Slab Rock		120.00 cy		1,488		11,194	/cy			788		414	13,883	14,494
	Dirtwork Dirtwork				21,483		147,720				18,891		8,831	196,925	205,896
	350 Step Feed Process Building				21,483		147,720	/LS			18,891		8,831	196,925	205,896
	400 Orbal Anaerobic Reactor														
	Dirtwork Dirtwork														
	0235- Backfill Orbal Selector														
	Backfill - Mass	2319.302	880.00 cy	31.00 /mh	4,910	-	-	-	-	-	-	-	-	4,910	6,875
	Import Fill Stone 3/4"	2305.100	80.00 cy	-	-	34.00 /to n	4,352	-	-	-	-	-	-	4,352	4,352
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.22 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,870	3,500.00 /mnth	770	2,640	2,677
	John Deere 644 Loader (232 HP) (M)	1900.132	0.22 mnth	-	-	-	-	-	-	6,000.00 /mnth	1,320	3,700.00 /mnth	814	2,134	2,160
	Water Truck, 4,000 Gallon (L)	1900.210	0.22 mnth	-	-	-	-	-	-	4,500.00 /mnth	990	1,200.00 /mnth	264	1,254	1,274
	Bobcat Skid Steer (85hp)- track (L)	1900.131	0.22 mnth	-	-	-	-	-	-	3,000.00 /mnth	660	2,000.00 /mnth	440	1,100	1,113
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.22 mnth	-	-	-	-	-	-	3,360.00 /mnth	739	1,650.00 /mnth	363	1,102	1,117
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.22 mnth	-	-	-	-	-	-	2,000.00 /mnth	440	300.00 /mnth	66	506	515
	Clean Rock 2" - 4" ballast	2305.050	50.00 cy	-	-	36.00 /to n	2,916	-	-	-	-	-	-	2,916	2,916
	Backfill Orbal Selector		880.00 cy		4,910		7,268	/cy			6,019		2,717	20,915	22,999
	Dirtwork Dirtwork				4,910		7,268				6,019		2,717	20,915	22,999
	400 Orbal Anaerobic Reactor				4,910		7,268	/LS			6,019		2,717	20,915	22,999
	550 UV and Digester Blower Building														
	Dirtwork Dirtwork														
	0235- Backfill UV and Digester Blower Building														
	Backfill - Mass	2319.302	1,600.00 cy	31.00 /mh	9,920	-	-	-	-	-	-	-	-	9,920	13,888
	Import Fill - Gravel Process	2305.100	1,250.00 cy	-	-	21.00 /to n	45,938	-	-	-	-	-	-	45,938	45,938
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.43 mnth	-	-	-	-	-	-	8,500.00 /mnth	3,655	3,500.00 /mnth	1,505	5,160	5,233
	John Deere 644 Loader (232 HP) (M)	1900.132	0.43 mnth	-	-	-	-	-	-	6,000.00 /mnth	2,580	3,700.00 /mnth	1,591	4,171	4,223
	Water Truck, 4,000 Gallon (L)	1900.210	0.43 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,935	1,200.00 /mnth	516	2,451	2,490
	Bobcat Skid Steer (85hp)- track (L)	1900.131	1.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	3,000	2,000.00 /mnth	2,000	5,000	5,060
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.43 mnth	-	-	-	-	-	-	3,360.00 /mnth	1,445	1,650.00 /mnth	710	2,154	2,183
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.43 mnth	-	-	-	-	-	-	2,000.00 /mnth	860	300.00 /mnth	129	989	1,006
	Backfill UV and Digester Blower Building		1,600.00 cy		9,920		45,938	/cy			13,475		6,451	75,783	80,020
	Dirtwork Dirtwork				9,920		45,938				13,475		6,451	75,783	80,020
	550 UV and Digester Blower Building				9,920		45,938	/LS			13,475		6,451	75,783	80,020
	600 Aerobic Digester 5 and 6														
	Dirtwork Dirtwork														
	0235- Digester 5 and 6 Backfill														
	Backfill - Mass	2319.302	1,950.00 cy	31.00 /mh	9,672	-	-	-	-	-	-	-	-	9,672	13,541
	Import Fill - Gravel Process	2305.100	50.00 cy	-	-	21.00 /to n	1,838	-	-	-	-	-	-	1,838	1,838
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.37 mnth	-	-	-	-	-	-	8,500.00 /mnth	3,137	3,500.00 /mnth	1,292	4,428	4,491
	John Deere 644 Loader (232 HP) (M)	1900.132	0.37 mnth	-	-	-	-	-	-	6,000.00 /mnth	2,214	3,700.00 /mnth	1,365	3,579	3,624
	Water Truck, 4,000 Gallon (L)	1900.210	0.37 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,661	1,200.00 /mnth	443	2,103	2,137
	John Deere 750 Dozer (168 HP) (L)	1900.120	0.37 mnth	-	-	-	-	-	-	6,000.00 /mnth	2,214	3,500.00 /mnth	1,292	3,506	3,550
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.37 mnth	-	-	-	-	-	-	2,000.00 /mnth	738	300.00 /mnth	111	849	863
	Sakai SV540 Compactor Single Drum 84" (160 HP) (L)	1900.138	0.37 mnth	-	-	-	-	-	-	3,360.00 /mnth	1,240	1,650.00 /mnth	609	1,849	1,873
	Digester 5 and 6 Backfill		1,950.00 cy		9,672		1,838	/cy			11,203		5,111	27,823	31,916
	0235- Digester 5 and 6 Under slab rock														
	Backfill - Mass	2319.302	133.00 cy	31.00 /mh	2,062	-	-	-	-	-	-	-	-	2,062	2,886
	Import Fill Stone 3/4"	2305.100	133.00 cy	-	-	34.00 /to n	7,235	-	-	-	-	-	-	7,235	7,235
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.08 mnth	-	-	-	-	-	-	8,500.00 /mnth	680	3,500.00 /mnth	280	960	974
	John Deere 644 Loader (232 HP) (M)	1900.132	0.08 mnth	-	-	-	-	-	-	6,000.00 /mnth	480	3,700.00 /mnth	296	776	786
	Bobcat Skid Steer (85hp)- track (L)	1900.131	0.08 mnth	-	-	-	-	-	-	3,000.00 /mnth	240	2,000.00 /mnth	160	400	405
	Clean Rock 2" - 4" Ballast	2305.050	80.00 cy	-	-	36.00 /to n	4,666	-	-	-	-	-	-	4,666	4,666
	Digester 5 and 6 Under slab rock		133.00 cy		2,062		11,901	/cy			1,400		736	16,098	16,951
	Dirtwork Dirtwork				11,734		13,738				12,603		5,847	43,921	48,867
	600 Aerobic Digester 5 and 6				11,734		13,738	/LS			12,603		5,847	43,921	48,867
	700 Administration Building														
	Dirtwork Dirtwork														
	0235- Admin Building Backfill														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0235-	Admin Building Backfill														
	Backfill - Mass	2319.302	400.00 cy	31.00 /mh	2,976	-	-	-	-	-	-	-	-	2,976	4,166
	Import Fill - Gravel Process	2305.100	300.00 cy	-	-	21.00 /ton	11,025	-	-	-	-	-	-	11,025	11,025
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.14 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,190	3,500.00 /mnth	490	1,680	1,704
	John Deere 644 Loader (232 HP) (M)	1900.132	0.14 mnth	-	-	-	-	-	-	6,000.00 /mnth	840	3,700.00 /mnth	518	1,358	1,375
	Water Truck, 4,000 Gallon (L)	1900.210	0.14 mnth	-	-	-	-	-	-	4,500.00 /mnth	630	1,200.00 /mnth	168	798	811
	Bobcat Skid Steer (85hp)- track (L)	1900.131	1.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	3,000	2,000.00 /mnth	2,000	5,000	5,060
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.14 mnth	-	-	-	-	-	-	2,000.00 /mnth	280	300.00 /mnth	42	322	328
	Admin Building Backfill		400.00 cy		2,976		11,025	/cy			5,940		3,218	23,159	24,468
	Dirtwork Dirtwork				2,976		11,025				5,940		3,218	23,159	24,468
	700 Administration Building				2,976		11,025	/LS			5,940		3,218	23,159	24,468
312323	Fill and Backfill				235,760		500,561		154,840		272,048		129,938	1,293,147	1,392,892
321216	Asphalt Paving														
051	Site Civil														
	Asphalt Asphalt														
0254-	Admin Parking														
	Bituminous Base Course 6"	2740.120	645.00 sy	-	-	-	-	0.00 /sy	0	-	-	-	-	0	0
	Bituminous Binder Course 2"	2740.120	645.00 sy	-	-	-	-	0.00 /sy	0	-	-	-	-	0	0
	Proof Roll/Regrade Asphalt Subgrade	2740.840	645.00 sy	-	-	-	-	0.00 /sy	0	-	-	-	-	0	0
	Bituminous Top Course 2"	2740.120	645.00 sy	-	-	-	-	0.00 /sy	0	-	-	-	-	0	0
	Asphalt Subcont. Mobilization	2740.840	1.00 ls	-	-	-	-	0.00 /ls	0	-	-	-	-	0	0
	Asphalt Tack Coat	2740.840	645.00 sy	-	-	-	-	0.00 /sy	0	-	-	-	-	0	0
	Asphalt Subcont. Bond	2740.840	1.00 ls	-	-	-	-			-	-	-	-		
	Asphalt Subcont.	2740.840	1.00 ls	-	-	-	-	46,664.00 /ls	46,664	-	-	-	-	46,664	46,664
	Asphalt Contingency	2740.840	1.00 ls	-	-	-	-			-	-	-	-		
	Precast Item # 1 Parking Blocks	2327.005	12.00 ea	31.00 /mh		/ls		-	-	-	-	-	-		
	Steel Pins f/ Parking Blocks	2327.005	24.00 ea	31.00 /mh	0	100.00 /ls	2,400	-	-	-	-	-	-	2,400	2,400
	Striping Subcontractor	2740.840	1.00 ls	-	-	-	-			-	-	-	-		
	Admin Parking		1,290.00 sy		0		2,400	36.17 /sy	46,664					49,064	49,064
0254-	Step Feed Area														
	Bituminous Base Course 6"	2740.120	1,363.00 sy	-	-	-	-	0.00 /sy	0	-	-	-	-	0	0
	Bituminous Binder Course 2"	2740.120	1,363.00 sy	-	-	-	-	0.00 /sy	0	-	-	-	-	0	0
	Bituminous Top Course 2"	2740.120	1,363.00 sy	-	-	-	-	0.00 /sy	0	-	-	-	-	0	0
	Proof Roll/Regrade Asphalt Subgrade	2740.840	1,363.00 sy	-	-	-	-	0.00 /sy	0	-	-	-	-	0	0
	Asphalt Tack Coat	2740.840	1,363.00 sy	-	-	-	-	0.00 /sy	0	-	-	-	-	0	0
	Asphalt Subcont. Mobilization	2740.840	1.00 ls	-	-	-	-	0.00 /ls	0	-	-	-	-	0	0
	Asphalt Subcont. Bond	2740.840	1.00 ls	-	-	-	-			-	-	-	-		
	Asphalt Subcont.	2740.840	1.00 ls	-	-	-	-			-	-	-	-		
	Asphalt Contingency	2740.840	1.00 ls	-	-	-	-			-	-	-	-		
	Asphalt Asphalt				0		2,400		46,664					49,064	49,064
	051 Site Civil				0		2,400	/LS	46,664					49,064	49,064
321216	Asphalt Paving				0		2,400		46,664					49,064	49,064
330513	Manholes														
052	Yard Piping														
	Manhole Manhole														
026-1-	4' MH For Decant at Digesters 3&4														
	Supply Precast Package	2327.005	1.00 ls	-	-	84,000.00 /ls	84,000	-	-	-	-	-	-	84,000	84,000
	Set and test	2327.020	1.00 ea	31.00 /mh	1,116	-	-	250.00 /ea	250	/ea		-	-	1,366	1,812
	Manhole 4' Riser	2327.010	10.00 vf	31.00 /mh		0.01 /vf	0	-	-	-	-	-	-	0	0
	Manhole 4' Riser Coating	2327.010	10.00 vf	31.00 /mh		0.01 /vf	0	-	-	-	-	-	-	0	0
	Manhole 4' Brick Extensions	2327.010	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Frame & Cover - Watertight	2327.120	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Manhole Boots 6"	2327.090	2.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Manhole Special - Grout Riser to CIP Base	2327.010	1.00 ea	31.00 /mh		200.00 /ea	200	-	-	-	-	-	-	200	200
	MH Marker Post	2519.100	1.00 ea	31.00 /mh		250.00 /ea	250	-	-	-	-	-	-	250	250
	4' MH For Decant at Digesters 3&4		10.00 vf		1,116		84,450	25.00 /vf	250					85,816	86,263
026-1-	4' MH For Decant at Digester 5&6														
	Supply Precast Package	2327.005	1.00 ls	-	-	/ls		-	-	-	-	-	-		
	Set and test	2327.020	1.00 ea	31.00 /mh	1,116	-	-	250.00 /ea	250	/ea		-	-	1,366	1,812
	Cast-In-Place Manhole 4' Base & Invert	2327.010	1.00 ea	31.00 /mh		625.00 /ea	625	-	-	-	-	-	-	625	625
	Manhole 4' Riser	2327.010	10.00 vf	31.00 /mh		0.01 /vf	0	-	-	-	-	-	-	0	0
	Manhole 4' Riser Coating	2327.010	10.00 vf	31.00 /mh		0.01 /vf	0	-	-	-	-	-	-	0	0
	Manhole 4' Brick Extensions	2327.010	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Frame & Cover - Watertight	2327.120	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Manhole Boots 6"	2327.090	2.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Manhole Special - Grout Riser to CIP Base	2327.010	1.00 ea	31.00 /mh		200.00 /ea	200	-	-	-	-	-	-	200	200
	MH Marker Post	2519.100	1.00 ea	31.00 /mh		250.00 /ea	250	-	-	-	-	-	-	250	250

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	4' MH For Decant at Digester 5&6		10.00 vf		1,116		1,075	25.00 /vf	250					2,441	2,888
	026-1- 5' MH For IPS Influent														
	Supply Precast Package	2327.005	1.00 ls	-	-	/ls		-	-	-	-	-	-		
	Set and test	2327.020	1.00 ea	31.00 /mh	1,488	-	-	250.00 /ea	250	/ea		-	-	1,738	2,333
	Cast-In-Place Manhole 6' Base & Invert	2327.030	1.00 ea	31.00 /mh		180.00 /ea	180	-	-	-	-	-	-	180	180
	Manhole 6' Riser	2327.030	17.00 vf	31.00 /mh		0.01 /vf	0	-	-	-	-	-	-	0	0
	Manhole 6' Riser Coating	2327.030	17.00 vf	31.00 /mh		0.01 /vf	0	-	-	-	-	-	-	0	0
	Manhole 6' Brick Extensions	2327.030	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Frame & Cover - Watertight	2327.120	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Manhole Special - Grout Riser to CIP Base	2327.010	1.00 ea	31.00 /mh		200.00 /ea	200	-	-	-	-	-	-	200	200
	MH Marker Post	2519.100	1.00 ea	31.00 /mh		250.00 /ea	250	-	-	-	-	-	-	250	250
	Import Road Base Class 6	2305.100	2.00 cy	-	-	22.00 /to n	79	-	-	-	-	-	-	79	79
	5' MH For IPS Influent		17.00 vf		1,488		710	14.71 /vf	250					2,448	3,043
	026-1- 4' MH For IPS Effluent (Bypass Pumping Connection)														
	Supply Precast Package	2327.005	1.00 ls	-	-	/ls		-	-	-	-	-	-		
	Set and test	2327.020	1.00 ea	31.00 /mh	868	-	-	250.00 /ea	250	/ea		-	-	1,118	1,465
	Manhole 4' Riser	2327.010	4.00 vf	31.00 /mh		0.01 /vf	0	-	-	-	-	-	-	0	0
	Manhole 4' Riser Coating	2327.010	4.00 vf	31.00 /mh		0.01 /vf	0	-	-	-	-	-	-	0	0
	Manhole 4' Brick Extensions	2327.010	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Frame & Cover - Watertight	2327.120	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Utility Bedding Stone 3/4"	2305.200	3.00 cy	-	-	34.00 /to n	163	-	-	-	-	-	-	163	163
	MH Marker Post	2519.100	1.00 ea	31.00 /mh		250.00 /ea	250	-	-	-	-	-	-	250	250
	4' MH For IPS Effluent (Bypass Pumping Connection)		6.00 vf		868		413	41.67 /vf	250					1,531	1,879
	026-1- Precast Utility Vault For IPS Effluent														
	Supply Precast Package	2327.005	2.00 ls	-	-	/ls		-	-	-	-	-	-		
	Frame & Grate - Double Locking	2327.120	2.00 ea	31.00 /mh	5,952	0.01 /ea	0	-	-	-	-	-	-	5,952	8,333
	Precast Vault - 8' x 6'	2327.070	2.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Road Base Below Concrete	2305.300	8.00 cy	31.00 /mh		22.00 /to n	348	-	-	-	-	-	-	348	348
	Core Drilled Hole - 14 x 8"	15122.100	8.00 ea	31.00 /mh		525.00 /ea	4,200	300.00 /ea	2,400	-	-	-	-	6,600	6,600
	Grove RT760/RT700, 60 ton, wo/operator (240 HP) (L)	1900.100	0.25 mnth	-	-	350.00 /m nt h	88	-	-	9,500.00 /mnth	2,375	1,500.00 /mnth	375	2,838	2,885
	Import Road Base Class 6	2305.100	10.00 cy	-	-	22.00 /to n	396	-	-	-	-	-	-	396	396
	Precast Utility Vault For IPS Effluent		16.00 vf		5,952		5,032	150.00 /vf	2,400		2,375		375	16,134	18,562
	026-1- Scum Box														
	Supply Precast Package	2327.005	1.00 ls	-	-	/ls		-	-	-	-	-	-		
	Set and test	2327.020	1.00 ea	31.00 /mh	1,116	-	-	250.00 /ea	250	/ea		-	-	1,366	1,812
	Manhole 6' Base	2327.030	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Manhole 6' Riser	2327.030	12.00 vf	31.00 /mh		0.01 /vf	0	-	-	-	-	-	-	0	0
	Manhole 6' Riser Coating	2327.030	12.00 vf	31.00 /mh		0.01 /vf	0	-	-	-	-	-	-	0	0
	Manhole 6' Brick Extensions	2327.030	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Manhole 6' Formed Invert (Delete If By Supplier)	2327.030	1.00 ea	31.00 /mh		180.00 /ea	180	-	-	-	-	-	-	180	180
	Frame & Cover - Watertight	2327.120	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Manhole Boots 2"	2327.090	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Manhole Boots 4"	2327.090	3.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Road Base Below Concrete	2305.300	2.25 cy	31.00 /mh		22.00 /to n	98	-	-	-	-	-	-	98	98
	Scum Box		12.00 vf		1,116		278	20.83 /vf	250					1,644	2,091
	026-1- 1.5" NPW CONTROL VALVE MH														
	Supply Precast Package	2327.005	1.00 ls	-	-	/ls		-	-	-	-	-	-		
	Cast-In-Place Manhole 4' Base & Invert	2327.010	1.00 ea	31.00 /mh	744	625.00 /ea	625	-	-	-	-	-	-	1,369	1,667
	Manhole 4' Riser	2327.010	4.00 vf	31.00 /mh		0.01 /vf	0	-	-	-	-	-	-	0	0
	Manhole 4' Brick Extensions	2327.010	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Frame & Cover - Watertight	2327.120	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	Manhole 4' Flat Cover	2327.010	1.00 ea	31.00 /mh		0.01 /ea	0	-	-	- /ch	-	-	-	0	0
	Import Road Base Class 6	2305.100	2.00 cy	-	-	22.00 /to n	79	-	-	-	-	-	-	79	79
	1.5" NPW CONTROL VALVE MH		4.00 vf		744		704	/vf						1,448	1,746
	0308- CIP Base for IPS Influent Line														
	4500 psi Concrete	3310.100	4.00 cy	-	-	165.00 /cy	706	-	-	-	-	-	-	706	706
	Slab Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Crane Place Slab on Grade	3310.230	4.00 cy	31.00 /mh	398	-	-	-	-	-	-	-	-	398	557
	Formwork S.O.G. Edge Form > 1' Circular Slab	3100.120	65.97 sf	31.00 /mh	654	1.50 /sf	104	-	-	-	-	-	-	758	1,020
	Finegrade Below Concrete	3150.650	28.27 sf	31.00 /mh	12	-	-	-	-	-	-	-	-	12	17
	Finish- Hard Trowel	3350.110	28.27 sf	31.00 /mh	12	/sf		-	-	-	-	-	-	12	17
	Cure With Burlap	3390.170	28.27 sf	31.00 /mh	2	0.05 /sf	1	-	-	-	-	-	-	3	4
	Keyway 4"	3150.620	16.00 lf	31.00 /mh	124	1.00 /lf	17	-	-	-	-	-	-	141	190

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0308-	CIP Base for IPS Influent Line														
	Road Base Below Concrete	2305.300	1.05 cy	31.00 /mh	16	22.00 /ton	46	-	-	-	-	-	-	62	68
	Oil SOG Form	3100.310	65.97 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Nails and Hardware	3150.200	65.97 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Dimension Lumber	3150.200	65.97 sf	31.00 /mh	0	0.50 /sf	33	-	-	-	-	-	-	33	33
	SOG Rebar	3210.104	0.25 tn	31.00 /mh	233	1,400.00 /tn	368	-	-	-	-	-	-	601	694
	Non Shrink Grout	3150.700	6.00 cf	31.00 /mh	372	60.00 /cf	360	-	-	-	-	-	-	732	881
	CIP Base for IPS Influent Line		3.67 cy		1,824		1,639	/cy						3,463	4,192
	Manhole Manhole				14,224		94,302		3,650		2,375		375	114,926	120,663
	052 Yard Piping				14,224		94,302	/LS	3,650		2,375		375	114,926	120,663
	330513 Manholes				14,224		94,302		3,650		2,375		375	114,926	120,663
334101	Storm Drain Sanitary Sewer and Drainage Piping														
	052 Yard Piping														
	RCP RCP														
	02632- 12" RCP at Entrance														
	Trench Excavtion 4- 6'	2333.010	72.00 lf	31.00 /mh	335	-	-	-	-	-	-	-	-	335	469
	Trench Backfill 4- 6'	2333.020	72.00 lf	31.00 /mh	446	-	-	-	-	-	-	-	-	446	625
	Utility Bedding Peastone	2305.200	24.00 cy	-	-	24.00 /ton	922	-	-	-	-	-	-	922	922
	Spoils to Waste	2333.060	24.00 cy	31.00 /mh	74	-	-	-	-	-	-	-	-	74	104
	RCP Class III O-Ring Joint 12	2632.103	72.00 lf	31.00 /mh	893	0.01 /lf	1	-	-	-	-	-	-	894	1,251
	RCP O-Ring Joint 12" Flare End	2632.152	2.00 ea	31.00 /mh	186	0.01 /ea	0	-	-	-	-	-	-	186	260
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.07 mnth	-	-	-	-	-	-	8,500.00 /mnth	595	3,500.00 /mnth	245	840	852
	John Deere 624 Loader (172 HP) (M)	1900.132	0.07 mnth	-	-	-	-	-	-	5,500.00 /mnth	385	3,000.00 /mnth	210	595	603
	Water Truck, 4,000 Gallon (L)	1900.210	0.07 mnth	-	-	-	-	-	-	4,500.00 /mnth	315	1,200.00 /mnth	84	399	405
	Mikasa Jumping Jack Compactor (L)	1900.138	0.07 mnth	-	-	-	-	-	-	200.00 /mnth	14	100.00 /mnth	7	21	21
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.07 mnth	-	-	-	-	-	-	2,000.00 /mnth	140	300.00 /mnth	21	161	164
	Dump Fees & Trash Haul	1162.100	1.00 ea	-	-	400.00 /ea	400	-	-	-	-	-	-	400	400
	12" RCP at Entrance		72.00 lf		1,934		1,322	/lf			1,449		567	5,273	6,076
	RCP RCP				1,934		1,322				1,449		567	5,273	6,076
	052 Yard Piping				1,934		1,322	/LS			1,449		567	5,273	6,076
	334101 Storm Drain Sanitary Sewer and Drainage Piping				1,934		1,322				1,449		567	5,273	6,076
352016	Fabricated Slide Gates and Stop Logs														
	100 Headworks														
	GEN General														
	11-15 Fabricated Slide Gates														
	Supply Slide Gate Package (Hydro Gate)	11500.050	1.00 ls	-	-	187,414.00 /ls	187,414	-	-	-	-	-	-	187,414	187,414
	Slide Gate 24" x 18"	11500.050	1.00 ea	31.00 /mh	1,240	/ea		-	-	-	-	-	-	1,240	1,736
	Slide Gate 24" x 48"	11500.050	1.00 ea	31.00 /mh	1,240	/ea		-	-	-	-	-	-	1,240	1,736
	Slide Gate 30" x 42" Elect Actuator	11500.050	3.00 ea	31.00 /mh	5,952	/ea		-	-	-	-	-	-	5,952	8,333
	Slide Gate 30" x 48"	11500.050	2.00 ea	31.00 /mh	2,480	/ea		-	-	-	-	-	-	2,480	3,472
	Slide Gate 36" x 48"	11500.050	5.00 ea	31.00 /mh	6,200	/ea		-	-	-	-	-	-	6,200	8,680
	Leak Test Slide Gates	11500.050	12.00 ea	31.00 /mh	2,976	250.00 /ea	3,000	-	-	-	-	-	-	5,976	7,166
	Grout Equipment	11000.005	24.00 cf	31.00 /mh		60.00 /cf	1,440	-	-	-	-	-	-	1,440	1,440
	Anchors for Gates	11500.050	144.00 ea	31.00 /mh	893	15.00 /ea	2,160	-	-	-	-	-	-	3,053	3,410
	Fabricated Slide Gates		17.00 ea		20,981		194,014	/ea						214,995	223,387
	GEN General				20,981		194,014							214,995	223,387
	100 Headworks				20,981		194,014	/LS						214,995	223,387
	150 Influent Pump Station														
	GEN General														
	11-15 Fabricated Slide Gate														
	Supply Slide Gate Package	11500.050	1.00 ls	-	-	/ls		-	-	-	-	-	-		
	Slide Gate 36" x 36"	11500.050	3.00 ea	31.00 /mh	5,952	/ea		-	-	-	-	-	-	5,952	8,333
	Leak Test Slide Gates	11500.050	3.00 ea	31.00 /mh	744	250.00 /ea	750	-	-	-	-	-	-	1,494	1,792
	Grout Equipment	11000.005	3.00 cf	31.00 /mh		60.00 /cf	180	-	-	-	-	-	-	180	180
	Anchors for Gates	11500.050	30.00 ea	31.00 /mh	186	15.00 /ea	450	-	-	-	-	-	-	636	710
	Fabricated Slide Gate		3.00 ea		6,882		1,380	/ea						8,262	11,015
	GEN General				6,882		1,380							8,262	11,015
	150 Influent Pump Station				6,882		1,380	/LS						8,262	11,015
	250 Secondary Clarifier Splitter Box														
	GEN General														
	11-15 Slide Gate														
	Supply Slide Gate Package	11500.050	1.00 ls	-	-	/ls		-	-	-	-	-	-		
	Slide Gate 24" x 30"	11500.050	2.00 ea	31.00 /mh	3,720	/ea		-	-	-	-	-	-	3,720	5,208
	Leak Test Slide Gates	11500.050	2.00 ea	31.00 /mh	496	250.00 /ea	500	-	-	-	-	-	-	996	1,194
	Grout Equipment	11000.005	2.00 cf	31.00 /mh		60.00 /cf	120	-	-	-	-	-	-	120	120
	Anchors for Gates	11500.050	20.00 ea	31.00 /mh	124	15.00 /ea	300	-	-	-	-	-	-	424	474

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	Slide Gate		2.00 ea		4,340		920	/ea						5,260	6,996
	GEN General				4,340		920							5,260	6,996
	250 Secondary Clarifier Splitter Box				4,340		920	/LS						5,260	6,996
550 UV	and Digester Blower Building														
GEN	General														
	11-15 Fabricated Slide Gates														
	Supply Slide Gate Package	11500.050	1.00 ls	-	-	/ls		-	-	-	-	-	-		
	Slide Gate 24" x 48"	11500.050	3.00 ea	31.00 /mh	4,464	/ea		-	-	-	-	-	-	4,464	6,250
	Leak Test Slide Gates	11500.050	3.00 ea	31.00 /mh	744	300.00 /ea	900	-	-	-	-	-	-	1,644	1,942
	Grout Equipment	11000.005	3.00 cf	31.00 /mh		60.00 /cf	180	-	-	-	-	-	-	180	180
	Anchors for Gates	11500.050	24.00 ea	31.00 /mh	149	15.00 /ea	360	-	-	-	-	-	-	509	568
	Fabricated Slide Gates		3.00 ea		5,357		1,440	/ea						6,797	8,940
	GEN General				5,357		1,440							6,797	8,940
	550 UV and Digester Blower Building				5,357		1,440	/LS						6,797	8,940
600 Aerobic	Digester 5 and 6														
GEN	General														
	11-15 Fabricated Slide Gate														
	Supply Slide Gate Package	11500.050	1.00 ls	-	-	/ls		-	-	-	-	-	-		
	Slide Gate 24" x 24"	11500.050	1.00 ea	31.00 /mh	1,984	/ea		-	-	-	-	-	-	1,984	2,778
	Leak Test Slide Gates	11500.050	1.00 ea	31.00 /mh	248	250.00 /ea	250	-	-	-	-	-	-	498	597
	Grout Equipment	11000.005	0.08 cf	31.00 /mh		60.00 /cf	5	-	-	-	-	-	-	5	5
	Anchors for Gates	11500.050	10.00 ea	31.00 /mh	62	15.00 /ea	150	-	-	-	-	-	-	212	237
	Fabricated Slide Gate		1.00 ea		2,294		405	/ea						2,699	3,617
	GEN General				2,294		405							2,699	3,617
	600 Aerobic Digester 5 and 6				2,294		405	/LS						2,699	3,617
	352016 Fabricated Slide Gates and Stop Logs				39,854		198,159							238,013	253,954
402700	Process Pipe - General														
001	General														
General															
07	5- Insulation - Interior Blower and chem heat trace														
	Sub heat trace and insulation sub	7210.110	1.00 ls	-	-	-	-	25,000.00 /ls	25,000	-	-	-	-	25,000	25,000
	Heat Trace	16000.001	2.00 ea	31.00 /mh		3,500.00 /ea	7,000			-	-	-	-	7,000	7,000
	Insulation - Interior Blower and chem heat trace						7,000	/sf	25,000					32,000	32,000
	General						7,000		25,000					32,000	32,000
GEN	General														
01	-100 Pipe General Conditions														
	Mechanical Foreman	1000.100	24.00 wk	1,500.00 /wk	36,000	-	-	-	-	-	-	-	-	36,000	50,400
	Pickup	1900.210	6.00 mnth	-	-	-	-	-	-	836.00 /mnth	5,016	514.00 /mnth	3,084	8,100	8,200
	Pipe Shop Drawings	1060.100	1.00 ls	-	-	10,000.00 /ls	10,000	-	-	-	-	-	-	10,000	10,000
	Skyjack/Genie 19' Scissor Lift (Requires Power Source)	1900.300	8.00 mnth	-	-	-	-	-	-	800.00 /mnth	6,400	100.00 /mnth	800	7,200	7,328
	Grove RT760/RT700, 60 ton (240 HP) (L)	1900.100	2.00 mnth	7,296.00 /mnth	14,592	350.00 /m nt h	700	-	-	9,500.00 /mnth	19,000	1,500.00 /mnth	3,000	37,292	43,509
	Off Load Misc Deliveries	1640.100	1.00 ls	31.00 /mh	2,480	-	-	-	-	/hr		-	-	2,480	3,472
	Hoisting Costs	1485.100	1.00 mnth	31.00 /mh		3,500.00 /m nt h	3,500	-	-	-	-	-	-	3,500	3,500
	RT Telescopic Forklift (12,000 lb) (130 HP) (L)	1900.300	8.00 mnth	-	-	-	-	-	-	3,500.00 /mnth	28,000	1,200.00 /mnth	9,600	37,600	38,160
	Bobcat E85 Mini-Excavator (60 HP) (L)	1900.136	12.00 mnth	-	-	-	-	-	-	3,000.00 /mnth	36,000	1,200.00 /mnth	14,400	50,400	51,120
	Supply Pipe support Package	15233.505	1.00 ls	-	-	310,000.00 /ls	310,000	-	-	-	-	-	-	310,000	310,000
	Pipe General Conditions				53,072		324,200	/wk			94,416		30,884	502,572	525,689
	GEN General				53,072		324,200				94,416		30,884	502,572	525,689
	001 General				53,072		331,200	/LS	25,000		94,416		30,884	534,572	557,689
052 Yard Piping															
304SS 304SS															
02645- 2" AHP															
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 4- 6'	2333.010	300.00 lf	31.00 /mh	1,395	-	-	-	-	-	-	-	-	1,395	1,953
	Trench Backfill 4- 6'	2333.020	300.00 lf	31.00 /mh	1,860	-	-	-	-	-	-	-	-	1,860	2,604
	Utility Bedding Squeegee	2305.200	45.00 cy	-	-	24.00 /to n	1,782	-	-	-	-	-	-	1,782	1,782
	Spoils to Waste	2333.060	45.00 cy	31.00 /mh	140	-	-	-	-	-	-	-	-	140	195
	Stainless Steel Pipe 2" S40 316SS Seamless	15212.005	460.00 lf	31.00 /mh	2,852	35.00 /lf	16,100	-	-	-	-	-	-	18,952	20,093
	Stainless Steel 90 Elbow 2"	15212.040	12.00 ea	31.00 /mh	74	610.00 /ea	7,320	-	-	-	-	-	-	7,394	7,424
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.34 mnth	-	-	-	-	-	-	8,500.00 /mnth	2,890	3,500.00 /mnth	1,190	4,080	4,138
	John Deere 624 Loader (172 HP) (M)	1900.132	0.34 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,870	3,000.00 /mnth	1,020	2,890	2,927
	Water Truck, 4,000 Gallon (L)	1900.210	0.34 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,530	1,200.00 /mnth	408	1,938	1,969
	Mikasa Jumping Jack Compactor (L)	1900.138	0.34 mnth	-	-	-	-	-	-	200.00 /mnth	68	100.00 /mnth	34	102	103

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02645-	2" AHP														
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.34 mnth	-	-	-	-	-	-	2,000.00 /mnth	680	300.00 /mnth	102	782	796
	Warning Tape Detectable	2333.080	300.00 lf	31.00 /mh	93	0.07 /lf	21	-	-	-	-	-	-	114	151
	Stainless Steel Companion Flange 2	15212.084	3.00 ea	31.00 /mh	19	450.00 /ea	1,350	-	-	-	-	-	-	1,369	1,376
	Stainless Steel Coupling 2"	15212.025	20.00 ea	31.00 /mh	124	200.00 /ea	4,000	-	-	-	-	-	-	4,124	4,174
	PS Strut SS 1-5/8 x 1-5/8	15060.476	20.00 lf	31.00 /mh	186	15.00 /lf	300	-	-	-	-	-	-	486	560
	Field Welding - Stainless	5000.985	16.00 hrs	31.00 /mh	496	/hr s		110.00 /hrs	1,760	/hrs		-	-	2,256	2,454
	Pot Hole Existing	2333.010	3.00 ea	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Cross Existing	2333.010	3.00 ea	31.00 /mh	186	100.00 /ea	300	-	-	-	-	-	-	486	560
	2" AHP		300.00 lf		8,293		31,273	5.87 /lf	1,760		7,138		2,754	51,218	54,677
	304SS 304SS				8,293		31,273		1,760		7,138		2,754	51,218	54,677
CEL	DI Ceramic Epoxy Lined DI														
02643-	10" ALP From Existing to Digester 5&6														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 4- 6'	2333.010	90.00 lf	31.00 /mh	419	-	-	-	-	-	-	-	-	419	586
	Trench Backfill 4- 6'	2333.020	90.00 lf	31.00 /mh	558	-	-	-	-	-	-	-	-	558	781
	Utility Bedding Peastone	2305.200	27.35 cy	-	-	24.00 /to n	1,050	-	-	-	-	-	-	1,050	1,050
	Spoils to Waste	2333.060	27.35 cy	31.00 /mh	85	-	-	-	-	-	-	-	-	85	119
	DI Pipe RJ - Class 350 6 (Ceramic Lined)	2511.401	26.00 lf	31.00 /mh	81	43.00 /lf	1,230	-	-	-	-	-	-	1,310	1,343
	DI Pipe RJ - Class 350 10 Ceramic Lined)	2511.401	64.00 lf	31.00 /mh	238	70.00 /lf	4,928	-	-	-	-	-	-	5,166	5,261
	DI RJ Compact 90 6 (Ceramic Lined)	2511.514	2.00 ea	31.00 /mh	124	685.00 /ea	1,370	-	-	-	-	-	-	1,494	1,544
	DI RJ Compact 45 10 (Ceramic Lined)	2511.514	1.00 ea	31.00 /mh	62	1,135.00 /ea	1,135	-	-	-	-	-	-	1,197	1,222
	DI RJ Compact Solid Sleeve Long 10 (Ceramic Lined)	2511.522	2.00 ea	31.00 /mh	186	1,140.00 /ea	2,280	-	-	-	-	-	-	2,466	2,540
	Polybag 12" and Smaller	2333.090	90.00 lf	31.00 /mh	28	0.75 /lf	74	-	-	-	-	-	-	102	113
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,445	3,500.00 /mnth	595	2,040	2,069
	John Deere 624 Loader (172 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	5,500.00 /mnth	935	3,000.00 /mnth	510	1,445	1,464
	Water Truck, 4,000 Gallon (L)	1900.210	0.17 mnth	-	-	-	-	-	-	4,500.00 /mnth	765	1,200.00 /mnth	204	969	984
	Mikasa Jumping Jack Compactor (L)	1900.138	0.17 mnth	-	-	-	-	-	-	200.00 /mnth	34	100.00 /mnth	17	51	52
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.17 mnth	-	-	-	-	-	-	2,000.00 /mnth	340	300.00 /mnth	51	391	398
	Pot Hole Existing	2333.010	2.00 ea	31.00 /mh	248	-	-	-	-	-	-	-	-	248	347
	Cut Existing	2333.010	2.00 ea	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Tie to Existing	2333.010	2.00 ea	31.00 /mh	992	50.00 /ea	100	-	-	-	-	-	-	1,092	1,489
	Warning Tape Detectable	2333.080	90.00 lf	31.00 /mh	28	0.07 /lf	6	-	-	-	-	-	-	34	45
	Tracer Wire	2333.080	110.00 lf	31.00 /mh	34	0.25 /lf	30	-	-	-	-	-	-	64	78
	Tracer Wire Test Box	2333.080	4.00 ea	31.00 /mh	124	95.00 /ea	380	-	-	-	-	-	-	504	554
	3500 psi Thrust Block Concrete	3310.105	1.50 cy	31.00 /mh	186	165.00 /cy	260	-	-	-	-	-	-	446	520
	DI Pipe 6in. dia FxPE - 7ft. 6in.	15221.030	2.00 ea	31.00 /mh	124	800.00 /ea	1,600	-	-	-	-	-	-	1,724	1,774
	10" ALP From Existing to Digester 5&6		90.00 lf		3,888		14,494	/lf			3,569		1,377	23,327	24,954
02643-1-	18" ALP From Process Bldg. To Aeration Basin														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 8-10'	2333.010	164.00 lf	31.00 /mh	1,017	-	-	-	-	-	-	-	-	1,017	1,424
	Trench Backfill 8-10'	2333.020	164.00 lf	31.00 /mh	1,525	-	-	-	-	-	-	-	-	1,525	2,135
	Utility Bedding Stone 3/4"	2305.200	74.41 cy	-	-	34.00 /to n	4,048	-	-	-	-	-	-	4,048	4,048
	Spoils to Waste	2333.060	74.41 cy	31.00 /mh	231	-	-	-	-	-	-	-	-	231	323
	DI Pipe RJ - Class 250 18 (Ceramic Lined)	2511.401	164.00 lf	31.00 /mh	915	152.00 /lf	27,421	-	-	-	-	-	-	28,336	28,702
	DI RJ Compact 90 18 (Ceramic Lined)	2511.514	1.00 ea	31.00 /mh	186	4,160.00 /ea	4,160	-	-	-	-	-	-	4,346	4,420
	DI RJ Compact 45 18 (Ceramic Lined)	2511.514	2.00 ea	31.00 /mh	372	3,460.00 /ea	6,920	-	-	-	-	-	-	7,292	7,441
	DI RJ Compact Tee 18x16 (Ceramic Lined)	2511.524	1.00 ea	31.00 /mh	248	5,931.00 /ea	5,931	-	-	-	-	-	-	6,179	6,278
	DI RJ Compact Cap 18 (Ceramic Lined)	2511.510	1.00 ea	31.00 /mh	124	3,300.00 /ea	3,300	-	-	-	-	-	-	3,424	3,474
	Polybag 18" and smaller	2333.090	164.00 lf	31.00 /mh	51	1.40 /lf	253	-	-	-	-	-	-	303	324
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.26 mnth	-	-	-	-	-	-	8,500.00 /mnth	2,210	3,500.00 /mnth	910	3,120	3,164
	John Deere 624 Loader (172 HP) (M)	1900.132	0.26 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,430	3,000.00 /mnth	780	2,210	2,239
	Water Truck, 4,000 Gallon (L)	1900.210	0.26 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,170	1,200.00 /mnth	312	1,482	1,505
	Mikasa Jumping Jack Compactor (L)	1900.138	0.26 mnth	-	-	-	-	-	-	200.00 /mnth	52	100.00 /mnth	26	78	79
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.26 mnth	-	-	-	-	-	-	2,000.00 /mnth	520	300.00 /mnth	78	598	608
	Warning Tape Detectable	2333.080	164.00 lf	31.00 /mh	51	0.07 /lf	11	-	-	-	-	-	-	62	83
	Tracer Wire	2333.080	164.00 lf	31.00 /mh	51	0.25 /lf	45	-	-	-	-	-	-	96	116
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	3500 psi Thrust Block Concrete	3310.105	5.00 cy	31.00 /mh	620	165.00 /cy	866	-	-	-	-	-	-	1,486	1,734
	DI Pipe 16in. dia FxPE - 7ft. 0in. (Ceramic Lined)	15221.030	1.00 ea	31.00 /mh	124	5,100.00 /ea	5,100	-	-	-	-	-	-	5,224	5,274
	DI Pipe 18in. dia FxPE - 10ft. 0in.(Ceramic Lined)	15221.030	1.00 ea	31.00 /mh	124	5,100.00 /ea	5,100	-	-	-	-	-	-	5,224	5,274
	18" ALP From Process Bldg. To Aeration Basin		164.00 lf		6,134		63,395	/lf			5,432		2,106	77,067	79,630
02643-1-	36" RS From MH to IPS														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 18-20	2333.010	72.00 lf	31.00 /mh	893	-	-	-	-	-	-	-	-	893	1,250
	Trench Backfill 18-20	2333.020	72.00 lf	31.00 /mh	1,339	-	-	-	-	-	-	-	-	1,339	1,875
	Trench Box 20' Deep	2333.030	72.00 lf	31.00 /mh	0	-	-	-	-	32.00 /lf	2,304	-	-	2,304	2,350
	Utility Bedding Stone 3/4"	2305.200	66.67 cy	-	-	34.00 /to n	3,627	-	-	-	-	-	-	3,627	3,627

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02643-1-	36" RS From MH to IPS														
	Spoils to Waste	2333.060	66.67 cy	31.00 /mh	207	-	-	-	-	-	-	-	-	207	289
	DI Pipe RJ - Class 350 36 (Ceramic Lined)	2511.401	80.00 lf	31.00 /mh	694	545.00 /lf	47,960	-	-	-	-	-	-	48,654	48,932
	DI RJ Compact 45 36 (Ceramic Lined)	2511.514	3.00 ea	31.00 /mh	1,674	17,800.00 /ea	53,400	-	-	-	-	-	-	55,074	55,744
	DI RJ Compact Solid Sleeve Long 36 (Ceramic Lined)	2511.522	1.00 ea	31.00 /mh	558	14,600.00 /ea	14,600	-	-	-	-	-	-	15,158	15,381
	Polybag 36" and smaller	2333.090	72.00 lf	31.00 /mh	22	2.30 /lf	182	-	-	-	-	-	-	204	213
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.60 mnth	-	-	-	-	-	-	8,500.00 /mnth	5,100	3,500.00 /mnth	2,100	7,200	7,302
	John Deere 624 Loader (172 HP) (M)	1900.132	0.60 mnth	-	-	-	-	-	-	5,500.00 /mnth	3,300	3,000.00 /mnth	1,800	5,100	5,166
	Water Truck, 4,000 Gallon (L)	1900.210	0.60 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,700	1,200.00 /mnth	720	3,420	3,474
	Mikasa Jumping Jack Compactor (L)	1900.138	0.60 mnth	-	-	-	-	-	-	200.00 /mnth	120	100.00 /mnth	60	180	182
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.60 mnth	-	-	-	-	-	-	2,000.00 /mnth	1,200	300.00 /mnth	180	1,380	1,404
	Pot Hole Existing	2333.010	3.00 ea	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Cut Existing	2333.010	1.00 ea	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	Tie to Existing	2333.010	1.00 ea	31.00 /mh	992	50.00 /ea	50	-	-	-	-	-	-	1,042	1,439
	Plug Existing	2333.010	1.00 ea	31.00 /mh	992	250.00 /ea	250	-	-	-	-	-	-	1,242	1,639
	Warning Tape Detectable	2333.080	60.00 lf	31.00 /mh	19	0.07 /lf	4	-	-	-	-	-	-	23	30
	Tracer Wire	2333.080	100.00 lf	31.00 /mh	31	0.25 /lf	28	-	-	-	-	-	-	59	71
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	3500 psi Thrust Block Concrete	3310.105	4.50 cy	31.00 /mh	837	165.00 /cy	780	-	-	-	-	-	-	1,617	1,951
	DI Wall Pipe MJ x PE w/ Collar & Tapped Holes 36in x 2ft 0in long	15221.388	1.00 ea	31.00 /mh	310	16,200.00 /ea	16,200	-	-	-	-	-	-	16,510	16,634
	Trench Stabilization Rock	2305.050	25.00 cy	-	-	36.00 /ton	1,458	-	-	-	-	-	-	1,458	1,458
	Dewatering	2240.050	1.00 ls	31.00 /mh	992	-	-	-	-	-	-	-	-	992	1,389
	Bypass Pumping???	2240.150	1.00 ls	31.00 /mh	1,984	/ls		8,000.00 /ls	8,000	/ls		-	-	9,984	10,778
	Grove RT760/RT700, 60 ton (240 HP) (L)	1900.100	0.25 mnth	7,296.00 /mnth	1,824	350.00 /month	88	-	-	9,500.00 /mnth	2,375	1,500.00 /mnth	375	4,662	5,439
	36" RS From MH to IPS		72.00 lf		14,298		138,866	111.11 /lf	8,000		17,149		5,235	183,548	189,610
02643-1-	20" RS From IPS To Headworks														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 6- 8'	2333.010	80.00 lf	31.00 /mh	620	-	-	-	-	-	-	-	-	620	868
	Trench Backfill 6- 8'	2333.020	80.00 lf	31.00 /mh	744	-	-	-	-	-	-	-	-	744	1,042
	Utility Bedding Stone 3/4"	2305.200	45.39 cy	-	-	34.00 /ton	2,469	-	-	-	-	-	-	2,469	2,469
	Spoils to Waste	2333.060	45.39 cy	31.00 /mh	141	-	-	-	-	-	-	-	-	141	197
	DI Pipe RJ - Class 350 10 (Ceramic Lined)	2511.401	30.00 lf	31.00 /mh	112	70.00 /lf	2,310	-	-	-	-	-	-	2,422	2,466
	DI Pipe RJ - Class 250 16 (Ceramic Lined)	2511.401	10.00 lf	31.00 /mh	50	124.00 /lf	1,364	-	-	-	-	-	-	1,414	1,433
	DI Pipe RJ - Class 250 20 (Ceramic Lined)	2511.401	40.00 lf	31.00 /mh	273	165.00 /lf	7,260	-	-	-	-	-	-	7,533	7,642
	DI RJ Compact 90 10 (Ceramic Lined)	2511.514	1.00 ea	31.00 /mh	124	1,345.00 /ea	1,345	-	-	-	-	-	-	1,469	1,519
	DI RJ Compact 90 20 (Ceramic Lined)	2511.514	2.00 ea	31.00 /mh	496	6,300.00 /ea	12,600	-	-	-	-	-	-	13,096	13,294
	DI RJ Compact Tee 10 (Ceramic Lined)	2511.524	1.00 ea	31.00 /mh	124	2,680.00 /ea	2,680	-	-	-	-	-	-	2,804	2,854
	DI RJ Compact Tee 20 (Ceramic Lined)	2511.524	1.00 ea	31.00 /mh	248	10,100.00 /ea	10,100	-	-	-	-	-	-	10,348	10,447
	DI RJ Compact Tee 16x10 (Ceramic Lined)	2511.524	2.00 ea	31.00 /mh	744	4,150.00 /ea	8,300	-	-	-	-	-	-	9,044	9,342
	DI RJ Compact Red 16x10 (Ceramic Lined)	2511.520	1.00 ea	31.00 /mh	372	3,260.00 /ea	3,260	-	-	-	-	-	-	3,632	3,781
	DI RJ Compact Red 20x16 (Ceramic Lined)	2511.520	1.00 ea	31.00 /mh	372	3,470.00 /ea	3,470	-	-	-	-	-	-	3,842	3,991
	DI RJ Compact Solid Sleeve Long 20 (Ceramic Lined)	2511.522	2.00 ea	31.00 /mh	496	3,890.00 /ea	7,780	-	-	-	-	-	-	8,276	8,474
	DI RJ Compact Solid Sleeve Short 10 (Ceramic Lined)	2511.523	4.00 ea	31.00 /mh	496	1,320.00 /ea	5,280	-	-	-	-	-	-	5,776	5,974
	Polybag 24" and smaller	2333.090	80.00 lf	31.00 /mh	25	1.40 /lf	123	-	-	-	-	-	-	148	158
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.30 mnth	-	-	-	-	-	-	8,500.00 /mnth	2,550	3,500.00 /mnth	1,050	3,600	3,651
	John Deere 624 Loader (172 HP) (M)	1900.132	0.30 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,650	3,000.00 /mnth	900	2,550	2,583
	Water Truck, 4,000 Gallon (L)	1900.210	0.30 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,350	1,200.00 /mnth	360	1,710	1,737
	Mikasa Jumping Jack Compactor (L)	1900.138	0.30 mnth	-	-	-	-	-	-	200.00 /mnth	60	100.00 /mnth	30	90	91
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.30 mnth	-	-	-	-	-	-	2,000.00 /mnth	600	300.00 /mnth	90	690	702
	Warning Tape Detectable	2333.080	80.00 lf	31.00 /mh	25	0.07 /lf	6	-	-	-	-	-	-	30	40
	Tracer Wire	2333.080	100.00 lf	31.00 /mh	31	0.25 /lf	28	-	-	-	-	-	-	59	71
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	3500 psi Thrust Block Concrete	3310.105	4.00 cy	31.00 /mh	496	165.00 /cy	693	-	-	-	-	-	-	1,189	1,387
	DI Pipe 20in. dia FxPE - 4ft. 0in. (Cermamic Lined)	15221.030	1.00 ea	31.00 /mh	124	3,200.00 /ea	3,200	-	-	-	-	-	-	3,324	3,374
	DI Flanged Con Red 20x06" (Ceramic Lined)	15221.445	1.00 ea	31.00 /mh	186	6,500.00 /ea	6,500	-	-	-	-	-	-	6,686	6,760
	Valve Plug Flange 125# 6in w/ handwheel	15110.650	1.00 ea	31.00 /mh	124	1,280.00 /ea	1,280	-	-	-	-	-	-	1,404	1,454
	Camlock Cap SS 6"	15220.600	1.00 ea	31.00 /mh	62	320.00 /ea	320	-	-	-	-	-	-	382	407
	Camlock Adapter SS Female x Flange 6"	15220.600	1.00 ea	31.00 /mh	62	500.00 /ea	500	-	-	-	-	-	-	562	587
	NBG Kit 125# SS 20in [316SS & 1/8" EPDM]	15125.012	1.00 ea	31.00 /mh	31	1,200.00 /ea	1,200	-	-	-	-	-	-	1,231	1,243
	NBG Kit 125# Insulating 6in	15125.016	1.00 ea	31.00 /mh	31	60.00 /ea	60	-	-	-	-	-	-	91	103
	NBG Kit 125# SS 6in [316SS & 1/8" EPDM]	15125.012	2.00 ea	31.00 /mh	62	350.00 /ea	700	-	-	-	-	-	-	762	787
	20" RS From IPS To Headworks		110.00 lf		7,165		83,068	/lf			6,260		2,430	98,923	101,914
02643-1-	6" RAW SEWAGE HEADWORKS														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 6- 8'	2333.010	140.00 lf	31.00 /mh	868	-	-	-	-	-	-	-	-	868	1,215
	Trench Backfill 6- 8'	2333.020	140.00 lf	31.00 /mh	1,302	-	-	-	-	-	-	-	-	1,302	1,823
	Utility Bedding Peastone	2305.200	38.89 cy	-	-	24.00 /ton	1,493	-	-	-	-	-	-	1,493	1,493
	Spoils to Waste	2333.060	38.89 cy	31.00 /mh	121	-	-	-	-	-	-	-	-	121	169

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02	643-1- 6" RAW SEWAGE HEADWORKS														
	DI Pipe RJ - Class 50 6 (Ceramic Lined)	2511.401	140.00 lf	31.00 /mh	434	43.00 /lf	6,622	-	-	-	-	-	-	7,056	7,230
	DI RJ Compact 90 6 (Ceramic Lined)	2511.514	1.00 ea	31.00 /mh	62	685.00 /ea	685	-	-	-	-	-	-	747	772
	DI RJ Compact 45 6 (Ceramic Lined)	2511.514	1.00 ea	31.00 /mh	62	660.00 /ea	660	-	-	-	-	-	-	722	747
	DI RJ Compact Tee 6 (Ceramic Lined)	2511.524	1.00 ea	31.00 /mh	93	1,300.00 /ea	1,300	-	-	-	-	-	-	1,393	1,430
	DI RJ Compact Wye 6 (Ceramic Lined)	2511.528	1.00 ea	31.00 /mh	93	1,540.00 /ea	1,540	-	-	-	-	-	-	1,633	1,670
	DI RJ Compact Solid Sleeve Short 6 (Ceramic Lined)	2511.523	1.00 ea	31.00 /mh	93	780.00 /ea	780	-	-	-	-	-	-	873	910
	Polybag 12" and Smaller	2333.090	160.00 lf	31.00 /mh	50	0.75 /lf	132	-	-	-	-	-	-	182	201
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.22 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,870	3,500.00 /mnth	770	2,640	2,677
	John Deere 624 Loader (172 HP) (M)	1900.132	0.22 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,210	3,000.00 /mnth	660	1,870	1,894
	Water Truck, 4,000 Gallon (L)	1900.210	0.22 mnth	-	-	-	-	-	-	4,500.00 /mnth	990	1,200.00 /mnth	264	1,254	1,274
	Mikasa Jumping Jack Compactor (L)	1900.138	0.22 mnth	-	-	-	-	-	-	200.00 /mnth	44	100.00 /mnth	22	66	67
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.22 mnth	-	-	-	-	-	-	2,000.00 /mnth	440	300.00 /mnth	66	506	515
	Pot Hole Existing	2333.010	3.00 ea	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Cross Existing	2333.010	3.00 ea	31.00 /mh	186	100.00 /ea	300	-	-	-	-	-	-	486	560
	3500 psi Thrust Block Concrete	3310.105	2.00 cy	31.00 /mh	248	165.00 /cy	347	-	-	-	-	-	-	595	694
	Conc Pad for Valve Box	2519.100	1.00 ea	31.00 /mh	124	50.00 /ea	50	-	-	-	-	-	-	174	224
	DI Pipe 6in. dia FxPE - 10ft. 0in.	15221.030	1.00 ea	31.00 /mh	124	900.00 /ea	900	-	-	-	-	-	-	1,024	1,074
	DI Blind Flange 6"	15221.405	1.00 ea	31.00 /mh	62	130.00 /ea	130	-	-	-	-	-	-	192	217
	NBG Kit 125# SS 6in [316SS & 1/8" EPDM]	15125.012	1.00 ea	31.00 /mh	31	350.00 /ea	350	-	-	-	-	-	-	381	393
	DI RJ Compact Cap 6	2511.510	2.00 ea	31.00 /mh	124	200.00 /ea	400	-	-	-	-	-	-	524	574
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	1.00 ea	31.00 /mh	124	125.00 /ea	125	-	-	-	-	-	-	249	299
	6" RAW SEWAGE HEADWORKS		140.00 lf		4,820		15,864	/lf			4,604		1,782	27,070	29,090
	CELDI Ceramic Epoxy Lined DI				36,306		315,686		8,000		37,014		12,930	409,935	425,198
	CML Ductile Iron														
02	643-1- 4" SSM SCUM CLARIFIERS														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 6- 8'	2333.010	80.00 lf	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Trench Backfill 6- 8'	2333.020	80.00 lf	31.00 /mh	744	-	-	-	-	-	-	-	-	744	1,042
	Utility Bedding Peastone	2305.200	22.22 cy	-	-	24.00 /ton	853	-	-	-	-	-	-	853	853
	Spoils to Waste	2333.060	22.22 cy	31.00 /mh	69	-	-	-	-	-	-	-	-	69	96
	DI Pipe RJ - Class 50 4 [all pipe/ftg is CML per spec, Ceramic as Noted]	2511.401	80.00 lf	31.00 /mh	248	35.00 /lf	3,080	-	-	-	-	-	-	3,328	3,427
	DI RJ Compact 45 4	2511.514	6.00 ea	31.00 /mh	372	280.00 /ea	1,680	-	-	-	-	-	-	2,052	2,201
	DI RJ Compact Wye 4	2511.528	2.00 ea	31.00 /mh	124	506.00 /ea	1,012	-	-	-	-	-	-	1,136	1,186
	DI RJ Compact Solid Sleeve Short 4	2511.523	6.00 ea	31.00 /mh	372	290.00 /ea	1,740	-	-	-	-	-	-	2,112	2,261
	Polybag 12" and Smaller	2333.090	100.00 lf	31.00 /mh	31	0.75 /lf	83	-	-	-	-	-	-	114	126
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,445	3,500.00 /mnth	595	2,040	2,069
	John Deere 624 Loader (172 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	5,500.00 /mnth	935	3,000.00 /mnth	510	1,445	1,464
	Water Truck, 4,000 Gallon (L)	1900.210	0.17 mnth	-	-	-	-	-	-	4,500.00 /mnth	765	1,200.00 /mnth	204	969	984
	Mikasa Jumping Jack Compactor (L)	1900.138	0.17 mnth	-	-	-	-	-	-	200.00 /mnth	34	100.00 /mnth	17	51	52
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.17 mnth	-	-	-	-	-	-	2,000.00 /mnth	340	300.00 /mnth	51	391	398
	Warning Tape Detectable	2333.080	80.00 lf	31.00 /mh	25	0.07 /lf	6	-	-	-	-	-	-	30	40
	3500 psi Thrust Block Concrete	3310.105	2.00 cy	31.00 /mh	248	165.00 /cy	347	-	-	-	-	-	-	595	694
	Conc Pad for Valve Box	2519.100	2.00 ea	31.00 /mh	248	50.00 /ea	100	-	-	-	-	-	-	348	447
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	2.00 ea	31.00 /mh	248	750.00 /ea	1,500	-	-	-	-	-	-	1,748	1,847
	DI Blind Flange 4"	15221.405	2.00 ea	31.00 /mh	124	75.00 /ea	150	-	-	-	-	-	-	274	324
	NBG Kit 125# SS 4in [316SS & 1/8" EPDM]	15125.012	2.00 ea	31.00 /mh	62	300.00 /ea	600	-	-	-	-	-	-	662	687
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	2.00 ea	31.00 /mh	248	125.00 /ea	250	-	-	-	-	-	-	498	597
	4" SSM SCUM CLARIFIERS		80.00 lf		4,155		11,500	/lf			3,619		1,377	20,651	22,385
	CML Ductile Iron				4,155		11,500				3,619		1,377	20,651	22,385
	GAS HDPE														
02	616- NATURAL GAS TRENCH														
	Trench Excavtion 0- 4'	2333.010	440.00 lf	31.00 /mh	2,046	-	-	-	-	-	-	-	-	2,046	2,864
	Trench Backfill 0- 4'	2333.020	440.00 lf	31.00 /mh	2,728	-	-	-	-	-	-	-	-	2,728	3,819
	Utility Bedding Peastone	2305.200	32.59 cy	-	-	24.00 /ton	1,252	-	-	-	-	-	-	1,252	1,252
	Spoils to Waste	2333.060	32.59 cy	31.00 /mh	101	-	-	-	-	-	-	-	-	101	141
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.20 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,700	3,500.00 /mnth	700	2,400	2,434
	John Deere 624 Loader (172 HP) (M)	1900.132	0.20 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,100	3,000.00 /mnth	600	1,700	1,722
	Water Truck, 4,000 Gallon (L)	1900.210	0.10 mnth	-	-	-	-	-	-	4,500.00 /mnth	450	1,200.00 /mnth	120	570	579
	Mikasa Jumping Jack Compactor (L)	1900.138	0.10 mnth	-	-	-	-	-	-	200.00 /mnth	20	100.00 /mnth	10	30	30
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.10 mnth	-	-	-	-	-	-	2,000.00 /mnth	200	300.00 /mnth	30	230	234
	Pot Hole Existing	2333.010	8.00 ea	31.00 /mh	1,984	-	-	-	-	-	-	-	-	1,984	2,778
	Gas Pipe Sub (exterior)	15402.010	1.00 ls	-	-	-	-	14,000.00 /ls	14,000	-	-	-	-	14,000	14,000
	Valve Box Assembly 6' Bury	2519.130	12.00 ea	31.00 /mh	1,116	350.00 /ea	4,200	-	-	-	-	-	-	5,316	5,762
	Conc Pad for Valve Box	2519.100	12.00 ea	31.00 /mh	744	50.00 /ea	600	-	-	-	-	-	-	1,344	1,642
	NATURAL GAS TRENCH		440.00 lf		8,719		6,052	31.82 /lf	14,000		3,470		1,460	33,701	37,258
	GAS HDPE				8,719		6,052		14,000		3,470		1,460	33,701	37,258
	HDPE HDPE														
	02616- 3" GLYCERINE GLY														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	02616- 3" GLYCERINE GLY														
	Testing Pressure & Leak - Piping	1166.100	6.00 ea	31.00 /mh	1,488	50.00 /ea	300	-	-	50.00 /ea	300	-	-	2,088	2,689
	Trench Excavtion 0- 4'	2333.010	480.00 lf	31.00 /mh	1,786	-	-	-	-	-	-	-	-	1,786	2,500
	Trench Backfill 0- 4'	2333.020	480.00 lf	31.00 /mh	2,678	-	-	-	-	-	-	-	-	2,678	3,750
	Utility Bedding Peastone	2305.200	88.89 cy	-	-	24.00 /ton	3,413	-	-	-	-	-	-	3,413	3,413
	Spoils to Waste	2333.060	88.89 cy	31.00 /mh	276	-	-	-	-	-	-	-	-	276	386
	HD PE Pipe 3 DR 13.5 PE 4710	2631.301	480.00 lf	31.00 /mh	744	4.00 /lf	2,016	-	-	-	-	-	-	2,760	3,058
	HD PE 90 bend 3 DR 17 Long Sweep	2631.314	6.00 ea	31.00 /mh	372	75.00 /ea	450	-	-	-	-	-	-	822	971
	HD PE 45 bend 12 DR 17 Long Sweep	2631.314	6.00 ea	31.00 /mh	372	75.00 /ea	450	-	-	-	-	-	-	822	971
	HD PE Pipe Cap 12 DR 17	2631.350	6.00 ea	31.00 /mh	372	15.00 /ea	90	-	-	-	-	-	-	462	611
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.52 mnth	-	-	-	-	-	-	8,500.00 /mnth	4,420	3,500.00 /mnth	1,820	6,240	6,328
	John Deere 624 Loader (172 HP) (M)	1900.132	0.52 mnth	-	-	-	-	-	-	5,500.00 /mnth	2,860	3,000.00 /mnth	1,560	4,420	4,477
	Water Truck, 4,000 Gallon (L)	1900.210	0.52 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,340	1,200.00 /mnth	624	2,964	3,011
	Mikasa Jumping Jack Compactor (L)	1900.138	0.52 mnth	-	-	-	-	-	-	200.00 /mnth	104	100.00 /mnth	52	156	158
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.52 mnth	-	-	-	-	-	-	2,000.00 /mnth	1,040	300.00 /mnth	156	1,196	1,217
	Pot Hole Existing	2333.010	5.00 ea	31.00 /mh	620	-	-	-	-	-	-	-	-	620	868
	Cross Existing	2333.010	5.00 ea	31.00 /mh	310	100.00 /ea	500	-	-	-	-	-	-	810	934
	Cut Existing	2333.010	1.00 ea	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	Tie to Existing	2333.010	1.00 ea	31.00 /mh	62	50.00 /ea	50	-	-	-	-	-	-	112	137
	Warning Tape Detectable	2333.080	480.00 lf	31.00 /mh	149	0.07 /lf	34	-	-	-	-	-	-	182	242
	Tracer Wire	2333.080	500.00 lf	31.00 /mh	155	0.25 /lf	138	-	-	-	-	-	-	293	355
	Tracer Wire Test Box	2333.080	3.00 ea	31.00 /mh	372	95.00 /ea	285	-	-	-	-	-	-	657	806
	HD PE Tee 3 DR 17	2631.320	1.00 ea	31.00 /mh	93	15.00 /ea	15	-	-	-	-	-	-	108	145
	PVC Reinf Tubing 3/4" ID x 1" OD	15219.100	500.00 lf	31.00 /mh	1,550	2.00 /lf	1,150	-	-	-	-	-	-	2,700	3,320
	3" GLYCERINE GLY		480.00 lf		11,460		8,890	/lf			11,064		4,212	35,627	40,432
	02616- 3" FERRIC CHLORIDE FC														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 4- 6'	2333.010	220.00 lf	31.00 /mh	682	-	-	-	-	-	-	-	-	682	955
	Trench Backfill 4- 6'	2333.020	220.00 lf	31.00 /mh	1,023	-	-	-	-	-	-	-	-	1,023	1,432
	Utility Bedding Peastone	2305.200	40.74 cy	-	-	24.00 /ton	1,564	-	-	-	-	-	-	1,564	1,564
	Spoils to Waste	2333.060	40.74 cy	31.00 /mh	126	-	-	-	-	-	-	-	-	126	177
	HD PE Pipe 3 DR 13.5 PE 4710	2631.301	220.00 lf	31.00 /mh	341	4.00 /lf	924	-	-	-	-	-	-	1,265	1,401
	HD PE 90 bend 3 DR 17	2631.314	4.00 ea	31.00 /mh	248	75.00 /ea	300	-	-	-	-	-	-	548	647
	HD PE 45 bend 12 DR 17	2631.314	4.00 ea	31.00 /mh	248	75.00 /ea	300	-	-	-	-	-	-	548	647
	HD PE Pipe Cap 12 DR 17	2631.350	4.00 ea	31.00 /mh	248	15.00 /ea	60	-	-	-	-	-	-	308	407
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.21 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,785	3,500.00 /mnth	735	2,520	2,556
	John Deere 624 Loader (172 HP) (M)	1900.132	0.21 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,155	3,000.00 /mnth	630	1,785	1,808
	Water Truck, 4,000 Gallon (L)	1900.210	0.21 mnth	-	-	-	-	-	-	4,500.00 /mnth	945	1,200.00 /mnth	252	1,197	1,216
	Mikasa Jumping Jack Compactor (L)	1900.138	0.21 mnth	-	-	-	-	-	-	200.00 /mnth	42	100.00 /mnth	21	63	64
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.21 mnth	-	-	-	-	-	-	2,000.00 /mnth	420	300.00 /mnth	63	483	491
	Warning Tape Detectable	2333.080	220.00 lf	31.00 /mh	68	0.07 /lf	15	-	-	-	-	-	-	84	111
	Tracer Wire	2333.080	240.00 lf	31.00 /mh	74	0.25 /lf	66	-	-	-	-	-	-	140	170
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	PVC Reinf Tubing 3/4" ID x 1" OD	15219.100	240.00 lf	31.00 /mh	744	2.00 /lf	552	-	-	-	-	-	-	1,296	1,594
	Manhole 4'	2327.010	1.00 ea	31.00 /mh	496	0.01 /ea	0	-	-	-	-	-	-	496	694
	3" FERRIC CHLORIDE FC		220.00 lf		5,043		4,072	/lf			4,447		1,701	15,263	17,369
	HDPE HDPE				16,503		12,962				15,511		5,913	50,890	57,801
	PVC C900														
	02605- 16" ML From Splitter to Clarifier 6														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 14-16'	2333.010	198.00 lf	31.00 /mh	1,228	-	-	-	-	-	-	-	-	1,228	1,719
	Trench Backfill 14-16'	2333.020	198.00 lf	31.00 /mh	1,841	-	-	-	-	-	-	-	-	1,841	2,578
	Trench Box 16' Deep	2333.030	60.00 lf	31.00 /mh	-	-	-	-	-	32.00 /lf	1,920	-	-	1,920	1,958
	Utility Bedding Stone 3/4"	2305.200	89.83 cy	-	-	34.00 /ton	4,887	-	-	-	-	-	-	4,887	4,887
	Spoils to Waste	2333.060	89.83 cy	31.00 /mh	278	-	-	-	-	-	-	-	-	278	390
	PVC C-900 Pipe 16	2336.310	170.00 lf	31.00 /mh	843	66.00 /lf	12,342	-	-	-	-	-	-	13,185	13,522
	DI RJ Compact 90 16	2511.514	4.00 ea	31.00 /mh	496	2,080.00 /ea	8,320	-	-	-	-	-	-	8,816	9,014
	DI RJ Compact 45 16	2511.514	3.00 ea	31.00 /mh	372	1,800.00 /ea	5,400	-	-	-	-	-	-	5,772	5,921
	DI RJ Compact 11-¼ 16	2511.514	2.00 ea	31.00 /mh	248	1,760.00 /ea	3,520	-	-	-	-	-	-	3,768	3,867
	DI RJ Compact Cap 16	2511.510	2.00 ea	31.00 /mh	186	920.00 /ea	1,840	-	-	-	-	-	-	2,026	2,100
	DI RJ Compact Solid Sleeve Short 16	2511.523	4.00 ea	31.00 /mh	744	1,700.00 /ea	6,800	-	-	-	-	-	-	7,544	7,842
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.43 mnth	-	-	-	-	-	-	8,500.00 /mnth	3,655	3,500.00 /mnth	1,505	5,160	5,233
	John Deere 624 Loader (172 HP) (M)	1900.132	0.43 mnth	-	-	-	-	-	-	5,500.00 /mnth	2,365	3,000.00 /mnth	1,290	3,655	3,702
	Water Truck, 4,000 Gallon (L)	1900.210	0.43 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,935	1,200.00 /mnth	516	2,451	2,490
	Mikasa Jumping Jack Compactor (L)	1900.138	0.43 mnth	-	-	-	-	-	-	200.00 /mnth	86	100.00 /mnth	43	129	131
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.43 mnth	-	-	-	-	-	-	2,000.00 /mnth	860	300.00 /mnth	129	989	1,006
	Warning Tape Detectable	2333.080	200.00 lf	31.00 /mh	62	0.07 /lf	14	-	-	-	-	-	-	76	101
	Tracer Wire	2333.080	200.00 lf	31.00 /mh	62	0.25 /lf	55	-	-	-	-	-	-	117	142
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	62	95.00 /ea	190	-	-	-	-	-	-	252	277
	3500 psi Thrust Block Concrete	3310.105	7.00 cy	31.00 /mh	868	165.00 /cy	1,213	-	-	-	-	-	-	2,081	2,428

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	02605- 16" ML From Splitter to Clarifier 6														
	DI Pipe RJ - Class 250 16	2511.401	40.00 lf	31.00 /mh	198	90.00 /lf	3,960	-	-	-	-	-	-	4,158	4,238
	DI Floor Pipe FLG x PE w/ Collar 16in x 4ft 0in long	15221.236	1.00 ea	31.00 /mh	124	2,400.00 /ea	2,400	-	-	-	-	-	-	2,524	2,574
	DI Floor Pipe FLG x PE w/ Collar 16in x 6ft 0in long	15221.236	1.00 ea	31.00 /mh	124	2,800.00 /ea	2,800	-	-	-	-	-	-	2,924	2,974
	Polybag 18" and smaller	2333.090	30.00 lf	31.00 /mh	9	1.40 /lf	46	-	-	-	-	-	-	56	59
	Poly Tape	2333.090	1.00 roll	31.00 /mh		5.00 /ro ll	6	-	-	-	-	-	-	6	6
	Dewatering	2240.050	1.00 ls	31.00 /mh	744	-	-	-	-	-	-	-	-	744	1,042
	Trench Stabilization Rock	2305.050	20.00 cy	-	-	36.00 /ton	1,166	-	-	-	-	-	-	1,166	1,166
	16 Bell Restrainer F/C900	2336.380	8.00 ea	31.00 /mh	496	433.00 /ea	3,464	-	-	-	-	-	-	3,960	4,158
	16" ML From Splitter to Clarifier 6		198.00 lf		9,482		58,523	/lf			10,921		3,483	82,409	86,421
	02605- 14" ABI From Headworks to Anoxic														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 6- 8'	2333.010	100.00 lf	31.00 /mh	465	-	-	-	-	-	-	-	-	465	651
	Trench Backfill 6- 8'	2333.020	100.00 lf	31.00 /mh	775	-	-	-	-	-	-	-	-	775	1,085
	Utility Bedding Stone 3/4"	2305.200	37.22 cy	-	-	34.00 /ton	2,025	-	-	-	-	-	-	2,025	2,025
	Spoils to Waste	2333.060	37.22 cy	31.00 /mh	115	-	-	-	-	-	-	-	-	115	162
	PVC C-900 Pipe 14	2336.310	80.00 lf	31.00 /mh	372	51.00 /lf	4,488	-	-	-	-	-	-	4,860	5,009
	DI RJ Compact 90 14	2511.514	2.00 ea	31.00 /mh	186	1,660.00 /ea	3,320	-	-	-	-	-	-	3,506	3,580
	DI RJ Compact 45 14	2511.514	1.00 ea	31.00 /mh	93	1,440.00 /ea	1,440	-	-	-	-	-	-	1,533	1,570
	DI RJ Compact Cap 14	2511.510	2.00 ea	31.00 /mh	186	710.00 /ea	1,420	-	-	-	-	-	-	1,606	1,680
	DI RJ Compact Solid Sleeve Short 14	2511.523	4.00 ea	31.00 /mh	372	1,480.00 /ea	5,920	-	-	-	-	-	-	6,292	6,441
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,445	3,500.00 /mnth	595	2,040	2,069
	John Deere 624 Loader (172 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	5,500.00 /mnth	935	3,000.00 /mnth	510	1,445	1,464
	Water Truck, 4,000 Gallon (L)	1900.210	0.17 mnth	-	-	-	-	-	-	4,500.00 /mnth	765	1,200.00 /mnth	204	969	984
	Mikasa Jumping Jack Compactor (L)	1900.138	0.17 mnth	-	-	-	-	-	-	200.00 /mnth	34	100.00 /mnth	17	51	52
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.17 mnth	-	-	-	-	-	-	2,000.00 /mnth	340	300.00 /mnth	51	391	398
	Warning Tape Detectable	2333.080	80.00 lf	31.00 /mh	25	0.07 /lf	6	-	-	-	-	-	-	30	40
	Tracer Wire	2333.080	100.00 lf	31.00 /mh	31	0.25 /lf	28	-	-	-	-	-	-	59	71
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	3500 psi Thrust Block Concrete	3310.105	2.50 cy	31.00 /mh	310	165.00 /cy	433	-	-	-	-	-	-	743	867
	Polybag 18" and smaller	2333.090	10.00 lf	31.00 /mh	3	1.40 /lf	15	-	-	-	-	-	-	19	20
	DI Pipe RJ - Class 250 14	2511.401	23.00 lf	31.00 /mh	107	80.00 /lf	2,024	-	-	-	-	-	-	2,131	2,174
	DI Floor Pipe PE x PE w/ Collar 14in x 6ft 0in long	15221.248	1.00 ea	31.00 /mh	93	1,400.00 /ea	1,400	-	-	-	-	-	-	1,493	1,530
	14 Bell Restrainer F/C900	2336.380	3.00 ea	31.00 /mh	186	385.00 /ea	1,155	-	-	-	-	-	-	1,341	1,415
	14" ABI From Headworks to Anoxic		100.00 lf		4,063		23,963	/lf			3,619		1,377	33,023	34,720
	02605- 14" ABI From Headworks to Aerobic														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 8-10'	2333.010	76.00 lf	31.00 /mh	471	-	-	-	-	-	-	-	-	471	660
	Trench Backfill 8-10'	2333.020	76.00 lf	31.00 /mh	589	-	-	-	-	-	-	-	-	589	825
	Utility Bedding Stone 3/4"	2305.200	28.29 cy	-	-	34.00 /ton	1,539	-	-	-	-	-	-	1,539	1,539
	Spoils to Waste	2333.060	28.29 cy	31.00 /mh	88	-	-	-	-	-	-	-	-	88	123
	PVC C-900 Pipe 14	2336.310	66.00 lf	31.00 /mh	307	51.00 /lf	3,703	-	-	-	-	-	-	4,010	4,132
	DI RJ Compact 90 14	2511.514	3.00 ea	31.00 /mh	279	1,660.00 /ea	4,980	-	-	-	-	-	-	5,259	5,371
	DI RJ Compact 45 14	2511.514	1.00 ea	31.00 /mh	93	1,440.00 /ea	1,440	-	-	-	-	-	-	1,533	1,570
	DI RJ Compact Solid Sleeve Short 14	2511.523	4.00 ea	31.00 /mh	372	1,480.00 /ea	5,920	-	-	-	-	-	-	6,292	6,441
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,445	3,500.00 /mnth	595	2,040	2,069
	John Deere 624 Loader (172 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	5,500.00 /mnth	935	3,000.00 /mnth	510	1,445	1,464
	Water Truck, 4,000 Gallon (L)	1900.210	0.17 mnth	-	-	-	-	-	-	4,500.00 /mnth	765	1,200.00 /mnth	204	969	984
	Mikasa Jumping Jack Compactor (L)	1900.138	0.17 mnth	-	-	-	-	-	-	200.00 /mnth	34	100.00 /mnth	17	51	52
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.17 mnth	-	-	-	-	-	-	2,000.00 /mnth	340	300.00 /mnth	51	391	398
	Warning Tape Detectable	2333.080	76.00 lf	31.00 /mh	24	0.07 /lf	5	-	-	-	-	-	-	29	38
	Tracer Wire	2333.080	90.00 lf	31.00 /mh	28	0.25 /lf	25	-	-	-	-	-	-	53	64
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	3500 psi Thrust Block Concrete	3310.105	3.00 cy	31.00 /mh	372	165.00 /cy	520	-	-	-	-	-	-	892	1,041
	Polybag 18" and smaller	2333.090	20.00 lf	31.00 /mh	6	1.40 /lf	31	-	-	-	-	-	-	37	39
	Poly Tape	2333.090	1.00 roll	31.00 /mh		5.00 /ro ll	6	-	-	-	-	-	-	6	6
	DI Pipe RJ - Class 250 14	2511.401	13.00 lf	31.00 /mh	60	80.00 /lf	1,144	-	-	-	-	-	-	1,204	1,229
	DI Floor Pipe PE x PE w/ Collar 14in x 6ft 0in long	15221.248	1.00 ea	31.00 /mh	93	1,400.00 /ea	1,400	-	-	-	-	-	-	1,493	1,530
	Sleeve w/Ring 316SS 18" x 1'-10"	15121.250	1.00 ea	31.00 /mh	124	2,300.00 /ea	2,300	-	-	-	-	-	-	2,424	2,474
	Link Seal Size LS-360-S-316ss	15123.100	48.00 ea	31.00 /mh	223	15.00 /ea	720	-	-	-	-	-	-	943	1,032
	14 Bell Restrainer F/C900	2336.380	2.00 ea	31.00 /mh	124	385.00 /ea	770	-	-	-	-	-	-	894	944
	14" ABI From Headworks to Aerobic		76.00 lf		3,997		24,791	/lf			3,619		1,377	33,785	35,456
	02605- 10" RAS From Process Bld. to Anaerobic														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 8-10'	2333.010	140.00 lf	31.00 /mh	868	-	-	-	-	-	-	-	-	868	1,215
	Trench Backfill 8-10'	2333.020	140.00 lf	31.00 /mh	1,085	-	-	-	-	-	-	-	-	1,085	1,519
	Utility Bedding Peastone	2305.200	44.02 cy	-	-	24.00 /ton	1,690	-	-	-	-	-	-	1,690	1,690

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02605-	10" RAS From Process Bld. to Anaerobic														
	Spoils to Waste	2333.060	44.02 cy	31.00 /mh	136	-	-	-	-	-	-	-	-	136	191
	PVC C-900 Pipe 10	2336.310	140.00 lf	31.00 /mh	521	33.00 /lf	5,082	-	-	-	-	-	-	5,603	5,811
	DI RJ Compact 90 10	2511.514	3.00 ea	31.00 /mh	279	820.00 /ea	2,460	-	-	-	-	-	-	2,739	2,851
	DI RJ Compact 45 4	2511.514	1.00 ea	31.00 /mh	62	280.00 /ea	280	-	-	-	-	-	-	342	367
	DI RJ Compact Wye 10x4	2511.528	1.00 ea	31.00 /mh	93	1,070.00 /ea	1,070	-	-	-	-	-	-	1,163	1,200
	DI RJ Compact Solid Sleeve Short 10	2511.523	4.00 ea	31.00 /mh	372	780.00 /ea	3,120	-	-	-	-	-	-	3,492	3,641
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.21 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,785	3,500.00 /mnth	735	2,520	2,556
	John Deere 624 Loader (172 HP) (M)	1900.132	0.21 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,155	3,000.00 /mnth	630	1,785	1,808
	Water Truck, 4,000 Gallon (L)	1900.210	0.21 mnth	-	-	-	-	-	-	4,500.00 /mnth	945	1,200.00 /mnth	252	1,197	1,216
	Mikasa Jumping Jack Compactor (L)	1900.138	0.21 mnth	-	-	-	-	-	-	200.00 /mnth	42	100.00 /mnth	21	63	64
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.21 mnth	-	-	-	-	-	-	2,000.00 /mnth	420	300.00 /mnth	63	483	491
	Warning Tape Detectable	2333.080	140.00 lf	31.00 /mh	43	0.07 /lf	10	-	-	-	-	-	-	53	71
	Tracer Wire	2333.080	160.00 lf	31.00 /mh	50	0.25 /lf	44	-	-	-	-	-	-	94	113
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	62	95.00 /ea	190	-	-	-	-	-	-	252	277
	3500 psi Thrust Block Concrete	3310.105	3.00 cy	31.00 /mh	372	165.00 /cy	520	-	-	-	-	-	-	892	1,041
	10 Bell Restrainer F/C900	2336.380	6.00 ea	31.00 /mh	93	225.00 /ea	1,350	-	-	-	-	-	-	1,443	1,480
	Polybag 12" and Smaller	2333.090	40.00 lf	31.00 /mh	12	0.75 /lf	33	-	-	-	-	-	-	45	50
	Poly Tape	2333.090	2.00 roll	31.00 /mh		5.00 /ro ll	11	-	-	-	-	-	-	11	11
	DI Pipe 4in. dia FxPE - 8ft. 0in.	15221.030	1.00 ea	31.00 /mh	93	750.00 /ea	750	-	-	-	-	-	-	843	880
	DI Blind Flange 4"	15221.405	1.00 ea	31.00 /mh	31	75.00 /ea	75	-	-	-	-	-	-	106	118
	NBG Kit 125# SS 4in [316SS & 1/8" EPDM]	15125.012	1.00 ea	31.00 /mh	31	300.00 /ea	300	-	-	-	-	-	-	331	343
	DI Pipe 10in. dia PEXPE - 5ft. 0in.	15221.070	1.00 ea	31.00 /mh	62	600.00 /ea	600	-	-	-	-	-	-	662	687
	Sleeve w/Ring 316SS 14" x 1'-10"	15121.250	1.00 ea	31.00 /mh	62	1,700.00 /ea	1,700	-	-	-	-	-	-	1,762	1,787
	Link Seal Size LS-400-S	15123.100	20.00 ea	31.00 /mh	93	16.00 /ea	320	-	-	-	-	-	-	413	450
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	1.00 ea	31.00 /mh	124	125.00 /ea	125	-	-	-	-	-	-	249	299
	Conc Pad for Cleanout	2519.100	1.00 ea	31.00 /mh	124	50.00 /ea	50	-	-	-	-	-	-	174	224
	10 Bell Restrainer F/C900	2336.380	6.00 ea	31.00 /mh	186	225.00 /ea	1,350	-	-	-	-	-	-	1,536	1,610
	10" RAS From Process Bld. to Anaerobic		140.00 lf		5,103		21,180	/lf			4,397		1,701	32,381	34,510
02605-	8" RAS From Clarifier 5 to Process Bld.														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 14-16'	2333.010	72.00 lf	31.00 /mh	513	-	-	-	-	-	-	-	-	513	719
	Trench Backfill 14-16'	2333.020	72.00 lf	31.00 /mh	714	-	-	-	-	-	-	-	-	714	1,000
	Utility Bedding Peastone	2305.200	21.36 cy	-	-	24.00 /to n	820	-	-	-	-	-	-	820	820
	Spoils to Waste	2333.060	21.36 cy	31.00 /mh	66	-	-	-	-	-	-	-	-	66	93
	PVC C-900 Pipe 8	2336.310	40.00 lf	31.00 /mh	136	22.00 /lf	968	-	-	-	-	-	-	1,104	1,159
	DI RJ Compact 90 8	2511.514	1.00 ea	31.00 /mh	62	510.00 /ea	510	-	-	-	-	-	-	572	597
	DI RJ Compact 45 4	2511.514	1.00 ea	31.00 /mh	62	280.00 /ea	280	-	-	-	-	-	-	342	367
	DI RJ Compact 45 8	2511.514	2.00 ea	31.00 /mh	124	470.00 /ea	940	-	-	-	-	-	-	1,064	1,114
	DI RJ Compact Wye 8x4	2511.528	1.00 ea	31.00 /mh	93	780.00 /ea	780	-	-	-	-	-	-	873	910
	DI RJ Compact Cap 8	2511.510	2.00 ea	31.00 /mh	62	245.00 /ea	490	-	-	-	-	-	-	552	577
	DI RJ Compact Solid Sleeve Short 8	2511.523	4.00 ea	31.00 /mh	248	520.00 /ea	2,080	-	-	-	-	-	-	2,328	2,427
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,445	3,500.00 /mnth	595	2,040	2,069
	John Deere 624 Loader (172 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	5,500.00 /mnth	935	3,000.00 /mnth	510	1,445	1,464
	Water Truck, 4,000 Gallon (L)	1900.210	0.17 mnth	-	-	-	-	-	-	4,500.00 /mnth	765	1,200.00 /mnth	204	969	984
	Mikasa Jumping Jack Compactor (L)	1900.138	0.17 mnth	-	-	-	-	-	-	200.00 /mnth	34	100.00 /mnth	17	51	52
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.17 mnth	-	-	-	-	-	-	2,000.00 /mnth	340	300.00 /mnth	51	391	398
	Warning Tape Detectable	2333.080	72.00 lf	31.00 /mh	22	0.07 /lf	5	-	-	-	-	-	-	27	36
	Tracer Wire	2333.080	70.00 lf	31.00 /mh	22	0.25 /lf	19	-	-	-	-	-	-	41	50
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	3500 psi Thrust Block Concrete	3310.105	3.00 cy	31.00 /mh	372	165.00 /cy	520	-	-	-	-	-	-	892	1,041
	DI Pipe 4in. dia FxPE - 12ft. 0in.	15221.030	1.00 ea	31.00 /mh	62	900.00 /ea	900	-	-	-	-	-	-	962	987
	DI Blind Flange 4"	15221.405	1.00 ea	31.00 /mh	31	75.00 /ea	75	-	-	-	-	-	-	106	118
	NBG Kit 125# SS 4in [316SS & 1/8" EPDM]	15125.012	1.00 ea	31.00 /mh	31	300.00 /ea	300	-	-	-	-	-	-	331	343
	DI Pipe RJ - Class 350 8	2511.401	32.00 lf	31.00 /mh	109	37.00 /lf	1,302	-	-	-	-	-	-	1,412	1,455
	DI Floor Pipe PE x PE w/ Collar 8in x 4ft 0in long	15221.248	1.00 ea	31.00 /mh	62	550.00 /ea	550	-	-	-	-	-	-	612	637
	Polybag 12" and Smaller	2333.090	20.00 lf	31.00 /mh	6	0.75 /lf	17	-	-	-	-	-	-	23	25
	Poly Tape	2333.090	1.00 roll	31.00 /mh		5.00 /ro ll	6	-	-	-	-	-	-	6	6
	8 Bell Restrainer F/C900	2336.380	2.00 ea	31.00 /mh	62	138.00 /ea	276	-	-	-	-	-	-	338	363
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	1.00 ea	31.00 /mh	124	125.00 /ea	125	-	-	-	-	-	-	249	299
	Conc Pad for Cleanout	2519.100	1.00 ea	31.00 /mh	124	50.00 /ea	50	-	-	-	-	-	-	174	224
	Dewatering	2240.050	1.00 ls	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Trench Stabilization Rock	2305.050	15.00 cy	-	-	36.00 /to n	875	-	-	-	-	-	-	875	875
	8" RAS From Clarifier 5 to Process Bld.		72.00 lf		4,225		12,177	/lf			3,619		1,377	21,398	23,160
02605-	8" RAS From Clarifier 6 to Process Bld.														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 14-16'	2333.010	76.00 lf	31.00 /mh	542	-	-	-	-	-	-	-	-	542	759
	Trench Backfill 14-16'	2333.020	76.00 lf	31.00 /mh	754	-	-	-	-	-	-	-	-	754	1,056
	Trench Box 16' Deep	2333.030	76.00 lf	31.00 /mh	0	-	-	-	-	32.00 /lf	2,432	-	-	2,432	2,481

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	02605- 8" RAS From Clarifier 6 to Process Bld.														
	Utility Bedding Peastone	2305.200	18.32 cy	-	-	24.00 /ton	704	-	-	-	-	-	-	704	704
	Spoils to Waste	2333.060	18.32 cy	31.00 /mh	57	-	-	-	-	-	-	-	-	57	80
	PVC C-900 Pipe 8	2336.310	44.00 lf	31.00 /mh	150	22.00 /lf	1,065	-	-	-	-	-	-	1,215	1,275
	DI RJ Compact 90 8	2511.514	1.00 ea	31.00 /mh	62	510.00 /ea	510	-	-	-	-	-	-	572	597
	DI RJ Compact 45 4	2511.514	1.00 ea	31.00 /mh	31	280.00 /ea	280	-	-	-	-	-	-	311	323
	DI RJ Compact 45 8	2511.514	2.00 ea	31.00 /mh	124	470.00 /ea	940	-	-	-	-	-	-	1,064	1,114
	DI RJ Compact Wye 8x4	2511.528	1.00 ea	31.00 /mh	93	780.00 /ea	780	-	-	-	-	-	-	873	910
	DI RJ Compact Solid Sleeve Short 8	2511.523	4.00 ea	31.00 /mh	248	520.00 /ea	2,080	-	-	-	-	-	-	2,328	2,427
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,445	3,500.00 /mnth	595	2,040	2,069
	John Deere 624 Loader (172 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	5,500.00 /mnth	935	3,000.00 /mnth	510	1,445	1,464
	Water Truck, 4,000 Gallon (L)	1900.210	0.17 mnth	-	-	-	-	-	-	4,500.00 /mnth	765	1,200.00 /mnth	204	969	984
	Mikasa Jumping Jack Compactor (L)	1900.138	0.17 mnth	-	-	-	-	-	-	200.00 /mnth	34	100.00 /mnth	17	51	52
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.17 mnth	-	-	-	-	-	-	2,000.00 /mnth	340	300.00 /mnth	51	391	398
	Warning Tape Detectable	2333.080	52.00 lf	31.00 /mh	16	0.07 /lf	4	-	-	-	-	-	-	20	26
	Tracer Wire	2333.080	80.00 lf	31.00 /mh	25	0.25 /lf	22	-	-	-	-	-	-	47	57
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	3500 psi Thrust Block Concrete	3310.105	3.00 cy	31.00 /mh	372	165.00 /cy	520	-	-	-	-	-	-	892	1,041
	DI Pipe 4in. dia FxPE - 12ft. 0in.	15221.030	1.00 ea	31.00 /mh	62	900.00 /ea	900	-	-	-	-	-	-	962	987
	DI Blind Flange 4"	15221.405	1.00 ea	31.00 /mh	31	75.00 /ea	75	-	-	-	-	-	-	106	118
	NBG Kit 125# SS 4in [316SS & 1/8" EPDM]	15125.012	1.00 ea	31.00 /mh	31	300.00 /ea	300	-	-	-	-	-	-	331	343
	DI Pipe RJ - Class 350 8	2511.401	32.00 lf	31.00 /mh	109	37.00 /lf	1,302	-	-	-	-	-	-	1,412	1,455
	DI Floor Pipe PE x PE w/ Collar 8in x 4ft 0in long	15221.248	1.00 ea	31.00 /mh	62	550.00 /ea	550	-	-	-	-	-	-	612	637
	Polybag 12" and Smaller	2333.090	20.00 lf	31.00 /mh	6	0.75 /lf	17	-	-	-	-	-	-	23	25
	Poly Tape	2333.090	1.00 roll	31.00 /mh		5.00 /roll	6	-	-	-	-	-	-	6	6
	8 Bell Restrainer F/C900	2336.380	2.00 ea	31.00 /mh	62	138.00 /ea	276	-	-	-	-	-	-	338	363
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	1.00 ea	31.00 /mh	124	125.00 /ea	125	-	-	-	-	-	-	249	299
	Conc Pad for Cleanout	2519.100	1.00 ea	31.00 /mh	124	50.00 /ea	50	-	-	-	-	-	-	174	224
	Dewatering	2240.050	1.00 ls	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Trench Stabilization Rock	2305.050	15.00 cy	-	-	36.00 /ton	875	-	-	-	-	-	-	875	875
	8" RAS From Clarifier 6 to Process Bld.		76.00 lf		4,201		11,669	/lf			6,051		1,377	23,298	25,099
	02605- 24" SE From Clarifiers to UV														
	Trench Excavtion 8-10'	2333.010	414.00 lf	31.00 /mh	2,567	-	-	-	-	-	-	-	-	2,567	3,594
	Trench Backfill 8-10'	2333.020	414.00 lf	31.00 /mh	3,209	-	-	-	-	-	-	-	-	3,209	4,492
	Trench Box 10' Deep	2333.030	240.00 lf	31.00 /mh		-	-	-	-	32.00 /lf	7,680	-	-	7,680	7,834
	Utility Bedding Stone 3/4"	2305.200	224.59 cy	-	-	34.00 /ton	12,218	-	-	-	-	-	-	12,218	12,218
	Spoils to Waste	2333.060	224.59 cy	31.00 /mh	696	-	-	-	-	-	-	-	-	696	975
	PVC C-900 Pipe 14	2336.310	80.00 lf	31.00 /mh	372	51.00 /lf	4,488	-	-	-	-	-	-	4,860	5,009
	PVC C-900 Pipe 24	2336.310	334.00 lf	31.00 /mh	2,589	147.00 /lf	54,008	-	-	-	-	-	-	56,596	57,632
	DI RJ Compact 90 14	2511.514	1.00 ea	31.00 /mh	93	1,660.00 /ea	1,660	-	-	-	-	-	-	1,753	1,790
	DI RJ Compact 45 24	2511.514	2.00 ea	31.00 /mh	372	3,600.00 /ea	7,200	-	-	-	-	-	-	7,572	7,721
	DI RJ Compact Tee 24x14	2511.524	1.00 ea	31.00 /mh	155	5,180.00 /ea	5,180	-	-	-	-	-	-	5,335	5,397
	DI RJ Compact Red 24x14	2511.520	1.00 ea	31.00 /mh	155	2,825.00 /ea	2,825	-	-	-	-	-	-	2,980	3,042
	DI RJ Compact Solid Sleeve Long 24	2511.522	2.00 ea	31.00 /mh	372	3,350.00 /ea	6,700	-	-	-	-	-	-	7,072	7,221
	DI RJ Compact Solid Sleeve Short 14	2511.523	2.00 ea	31.00 /mh	372	1,480.00 /ea	2,960	-	-	-	-	-	-	3,332	3,481
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.69 mnth	-	-	-	-	-	-	8,500.00 /mnth	5,865	3,500.00 /mnth	2,415	8,280	8,397
	John Deere 624 Loader (172 HP) (M)	1900.132	0.69 mnth	-	-	-	-	-	-	5,500.00 /mnth	3,795	3,000.00 /mnth	2,070	5,865	5,941
	Water Truck, 4,000 Gallon (L)	1900.210	0.69 mnth	-	-	-	-	-	-	4,500.00 /mnth	3,105	1,200.00 /mnth	828	3,933	3,995
	Mikasa Jumping Jack Compactor (L)	1900.138	0.69 mnth	-	-	-	-	-	-	200.00 /mnth	138	100.00 /mnth	69	207	210
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.69 mnth	-	-	-	-	-	-	2,000.00 /mnth	1,380	300.00 /mnth	207	1,587	1,615
	Pot Hole Existing	2333.010	7.00 ea	31.00 /mh	868	-	-	-	-	-	-	-	-	868	1,215
	Cross Existing	2333.010	7.00 ea	31.00 /mh	868	100.00 /ea	700	-	-	-	-	-	-	1,568	1,915
	Support Existing	2333.010	7.00 ea	31.00 /mh	651	250.00 /ea	1,750	-	-	-	-	-	-	2,401	2,661
	Warning Tape Detectable	2333.080	414.00 lf	31.00 /mh	128	0.07 /lf	29	-	-	-	-	-	-	157	209
	Tracer Wire	2333.080	434.00 lf	31.00 /mh	135	0.25 /lf	119	-	-	-	-	-	-	254	308
	Tracer Wire Test Box	2333.080	3.00 ea	31.00 /mh	372	95.00 /ea	285	-	-	-	-	-	-	657	806
	3500 psi Thrust Block Concrete	3310.105	4.00 cy	31.00 /mh	496	165.00 /cy	693	-	-	-	-	-	-	1,189	1,387
	DI Wall Pipe MJ x PE w/ Collar & Tapped Holes 14in x 1ft 0in long	15221.388	2.00 ea	31.00 /mh	248	2,300.00 /ea	4,600	-	-	-	-	-	-	4,848	4,947
	DI Wall Pipe MJ x PE w/ Collar & Tapped Holes 24in x 1ft 6in long	15221.388	1.00 ea	31.00 /mh	186	5,500.00 /ea	5,500	-	-	-	-	-	-	5,686	5,760
	DI Pipe RJ - Class 250 24	2511.401	50.00 lf	31.00 /mh	388	168.00 /lf	9,240	-	-	-	-	-	-	9,628	9,783
	Polybag 24" and smaller	2333.090	30.00 lf	31.00 /mh	9	1.40 /lf	46	-	-	-	-	-	-	56	59
	Poly Tape	2333.090	1.00 roll	31.00 /mh		5.00 /roll	6	-	-	-	-	-	-	6	6
	14 Bell Restrainer F/C900	2336.380	3.00 ea	31.00 /mh	186	385.00 /ea	1,155	-	-	-	-	-	-	1,341	1,415
	24 Bell Restrainer F/C900	2336.380	16.00 ea	31.00 /mh	992	850.00 /ea	13,600	-	-	-	-	-	-	14,592	14,989
	24" SE From Clarifiers to UV		414.00 lf		16,478		134,962	/lf			21,963		5,589	178,991	186,022
	02605- 18" SE From Existing Clarifiers to UV														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 8-10'	2333.010	172.00 lf	31.00 /mh	853	-	-	-	-	-	-	-	-	853	1,194

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	02605- 18" SE From Existing Clarifiers to UV														
	Trench Backfill 8-10'	2333.020	172.00 lf	31.00 /mh	1,120	-	-	-	-	-	-	-	-	1,120	1,568
	Trench Box 10' Deep	2333.030	172.00 lf	31.00 /mh		-	-	-	-	32.00 /lf	5,504	-	-	5,504	5,614
	Utility Bedding Stone 3/4"	2305.200	78.04 cy	-	-	34.00 /ton	4,245	-	-	-	-	-	-	4,245	4,245
	Spoils to Waste	2333.060	78.04 cy	31.00 /mh	242	-	-	-	-	-	-	-	-	242	339
	PVC C-900 Pipe 18	2336.310	172.00 lf	31.00 /mh	960	83.00 /lf	15,704	-	-	-	-	-	-	16,663	17,047
	DI RJ Compact 90 18	2511.514	1.00 ea	31.00 /mh	124	2,600.00 /ea	2,600	-	-	-	-	-	-	2,724	2,774
	DI RJ Compact 45 18	2511.514	2.00 ea	31.00 /mh	248	2,180.00 /ea	4,360	-	-	-	-	-	-	4,608	4,707
	DI RJ Compact Cap 18	2511.510	2.00 ea	31.00 /mh	248	1,155.00 /ea	2,310	-	-	-	-	-	-	2,558	2,657
	DI RJ Compact Solid Sleeve Long 18	2511.522	2.00 ea	31.00 /mh	372	2,050.00 /ea	4,100	-	-	-	-	-	-	4,472	4,621
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.47 mnth	-	-	-	-	-	-	8,500.00 /mnth	3,995	3,500.00 /mnth	1,645	5,640	5,720
	John Deere 624 Loader (172 HP) (M)	1900.132	0.47 mnth	-	-	-	-	-	-	5,500.00 /mnth	2,585	3,000.00 /mnth	1,410	3,995	4,047
	Water Truck, 4,000 Gallon (L)	1900.210	0.47 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,115	1,200.00 /mnth	564	2,679	2,721
	Mikasa Jumping Jack Compactor (L)	1900.138	0.47 mnth	-	-	-	-	-	-	200.00 /mnth	94	100.00 /mnth	47	141	143
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.47 mnth	-	-	-	-	-	-	2,000.00 /mnth	940	300.00 /mnth	141	1,081	1,100
	Pot Hole Existing	2333.010	8.00 ea	31.00 /mh	992	-	-	-	-	-	-	-	-	992	1,389
	Cross Existing	2333.010	7.00 ea	31.00 /mh	868	100.00 /ea	700	-	-	-	-	-	-	1,568	1,915
	Cut Existing	2333.010	1.00 ea	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	Tie to Existing	2333.010	1.00 ea	31.00 /mh	62	50.00 /ea	50	-	-	-	-	-	-	112	137
	Support Existing	2333.010	7.00 ea	31.00 /mh	217	250.00 /ea	1,750	-	-	-	-	-	-	1,967	2,054
	Warning Tape Detectable	2333.080	172.00 lf	31.00 /mh	53	0.07 /lf	12	-	-	-	-	-	-	65	87
	Tracer Wire	2333.080	190.00 lf	31.00 /mh	59	0.25 /lf	52	-	-	-	-	-	-	111	135
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	3500 psi Thrust Block Concrete	3310.105	3.00 cy	31.00 /mh	372	165.00 /cy	520	-	-	-	-	-	-	892	1,041
	Polybag 18" and smaller	2333.090	20.00 lf	31.00 /mh	6	1.40 /lf	31	-	-	-	-	-	-	37	39
	Poly Tape	2333.090	1.00 roll	31.00 /mh		5.00 /roll	6	-	-	-	-	-	-	6	6
	DI Pipe RJ - Class 250 18	2511.401	50.00 lf	31.00 /mh	279	111.00 /lf	6,105	-	-	-	-	-	-	6,384	6,496
	DI Wall Pipe MJ x PE w/ Collar & Tapped Holes 18in x 1ft 6in long	15221.388	1.00 ea	31.00 /mh	155	3,500.00 /ea	3,500	-	-	-	-	-	-	3,655	3,717
	DI Pipe 18in. dia FxPE - 2ft. 10in.	15221.030	1.00 ea	31.00 /mh	93	2,200.00 /ea	2,200	-	-	-	-	-	-	2,293	2,330
	NBG Kit 125# SS 18in [316SS & 1/8" EPDM]	15125.012	1.00 ea	31.00 /mh	31	1,200.00 /ea	1,200	-	-	-	-	-	-	1,231	1,243
	Bypass Pumping???	2240.150	1.00 ls	31.00 /mh	992	/ls		8,000.00 /ls	8,000	/ls		-	-	8,992	9,389
	Remove and Replace Landscape Rock	2322.040	20.00 cy	31.00 /mh	1,240	50.00 /cy	1,000	-	-	-	-	-	-	2,240	2,736
	18 Bell Restrainer F/C900	2336.380	8.00 ea	31.00 /mh	496	470.00 /ea	3,760	-	-	-	-	-	-	4,256	4,454
	18" SE From Existing Clarifiers to UV		172.00 lf		10,888		54,494	46.51 /lf	8,000		15,333		3,807	92,522	97,184
	02605- 24" FE From UV to Existing MH														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 6- 8'	2333.010	360.00 lf	31.00 /mh	1,674	-	-	-	-	-	-	-	-	1,674	2,344
	Trench Backfill 6- 8'	2333.020	360.00 lf	31.00 /mh	2,232	-	-	-	-	-	-	-	-	2,232	3,125
	Utility Bedding Stone 3/4"	2305.200	213.33 cy	-	-	34.00 /ton	11,605	-	-	-	-	-	-	11,605	11,605
	Spoils to Waste	2333.060	213.33 cy	31.00 /mh	661	-	-	-	-	-	-	-	-	661	926
	PVC C-900 Pipe 24	2336.310	360.00 lf	31.00 /mh	1,674	147.00 /lf	58,212	-	-	-	-	-	-	59,886	60,556
	DI RJ Compact 90 24	2511.514	1.00 ea	31.00 /mh	186	5,470.00 /ea	5,470	-	-	-	-	-	-	5,656	5,730
	DI RJ Compact 45 24	2511.514	5.00 ea	31.00 /mh	930	3,600.00 /ea	18,000	-	-	-	-	-	-	18,930	19,302
	DI RJ Compact 22-½ 24	2511.514	1.00 ea	31.00 /mh	186	3,520.00 /ea	3,520	-	-	-	-	-	-	3,706	3,780
	DI RJ Compact Cap 24	2511.510	2.00 ea	31.00 /mh	279	1,930.00 /ea	3,860	-	-	-	-	-	-	4,139	4,251
	DI RJ Compact Solid Sleeve Long 24	2511.522	2.00 ea	31.00 /mh	372	3,350.00 /ea	6,700	-	-	-	-	-	-	7,072	7,221
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.65 mnth	-	-	-	-	-	-	8,500.00 /mnth	5,525	3,500.00 /mnth	2,275	7,800	7,911
	John Deere 624 Loader (172 HP) (M)	1900.132	0.65 mnth	-	-	-	-	-	-	5,500.00 /mnth	3,575	3,000.00 /mnth	1,950	5,525	5,597
	Water Truck, 4,000 Gallon (L)	1900.210	0.65 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,925	1,200.00 /mnth	780	3,705	3,764
	Mikasa Jumping Jack Compactor (L)	1900.138	0.65 mnth	-	-	-	-	-	-	200.00 /mnth	130	100.00 /mnth	65	195	198
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.65 mnth	-	-	-	-	-	-	2,000.00 /mnth	1,300	300.00 /mnth	195	1,495	1,521
	Pot Hole Existing	2333.010	8.00 ea	31.00 /mh	992	-	-	-	-	-	-	-	-	992	1,389
	Cross Existing	2333.010	7.00 ea	31.00 /mh	868	100.00 /ea	700	-	-	-	-	-	-	1,568	1,915
	Tie to Existing	2333.010	1.00 ea	31.00 /mh	124	50.00 /ea	50	-	-	-	-	-	-	174	224
	Support Existing	2333.010	7.00 ea	31.00 /mh	651	250.00 /ea	1,750	-	-	-	-	-	-	2,401	2,661
	Tracer Wire	2333.080	380.00 lf	31.00 /mh	118	0.25 /lf	105	-	-	-	-	-	-	222	269
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	3500 psi Thrust Block Concrete	3310.105	6.00 cy	31.00 /mh	744	165.00 /cy	1,040	-	-	-	-	-	-	1,784	2,081
	Polybag 24" and smaller	2333.090	30.00 lf	31.00 /mh	9	1.40 /lf	46	-	-	-	-	-	-	56	59
	Poly Tape	2333.090	1.00 roll	31.00 /mh		5.00 /roll	6	-	-	-	-	-	-	6	6
	Bypass Pumping???	2240.150	1.00 ls	31.00 /mh	992	/ls		10,000.00 /ls	10,000	/ls		-	-	10,992	11,389
	Remodel Invert	2327.510	1.00 ea	31.00 /mh	124	360.00 /ea	360	-	-	/ch		-	-	484	534
	Tie in Exist Manhole	2327.100	1.00 ea	31.00 /mh	62	0.00 /ea	0	-	-	-	-	-	-	62	87
	Manhole Boots 24"	2327.090	1.00 ea	31.00 /mh	31	125.00 /ea	125	-	-	-	-	-	-	156	168
	Grout Pipe in Manhole 24"	2327.090	1.00 ea	31.00 /mh	124	125.00 /ea	125	-	-	-	-	-	-	249	299
	24 Bell Restrainer F/C900	2336.380	17.00 ea	31.00 /mh	527	850.00 /ea	14,450	-	-	-	-	-	-	14,977	15,188
	24" FE From UV to Existing MH		360.00 lf		14,056		126,363	27.78 /lf	10,000		13,505		5,265	169,189	175,082
	02605-1 14" ABI From Headworks to Orbal Reactor														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02605-1	14" ABI From Headworks to Orbal Reactor														
	Trench Excavtion 6- 8'	2333.010	320.00 lf	31.00 /mh	1,488	-	-	-	-	-	-	-	-	1,488	2,083
	Trench Backfill 6- 8'	2333.020	320.00 lf	31.00 /mh	1,984	-	-	-	-	-	-	-	-	1,984	2,778
	Utility Bedding Stone 3/4"	2305.200	106.67 cy	-	-	34.00 /ton	5,803	-	-	-	-	-	-	5,803	5,803
	Spoils to Waste	2333.060	106.67 cy	31.00 /mh	331	-	-	-	-	-	-	-	-	331	463
	PVC C-900 Pipe 14	2336.310	320.00 lf	31.00 /mh	1,488	51.00 /lf	17,952	-	-	-	-	-	-	19,440	20,035
	DI RJ Compact 90 14	2511.514	4.00 ea	31.00 /mh	248	1,660.00 /ea	6,640	-	-	-	-	-	-	6,888	6,987
	DI RJ Compact 45 14	2511.514	3.00 ea	31.00 /mh	186	1,440.00 /ea	4,320	-	-	-	-	-	-	4,506	4,580
	DI RJ Compact Tee 14	2511.524	2.00 ea	31.00 /mh	186	2,370.00 /ea	4,740	-	-	-	-	-	-	4,926	5,000
	DI RJ Compact Wye 14	2511.528	1.00 ea	31.00 /mh	93	3,900.00 /ea	3,900	-	-	-	-	-	-	3,993	4,030
	DI RJ Compact Solid Sleeve Short 14	2511.523	7.00 ea	31.00 /mh	651	1,480.00 /ea	10,360	-	-	-	-	-	-	11,011	11,271
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.48 mnth	-	-	-	-	-	-	8,500.00 /mnth	4,080	3,500.00 /mnth	1,680	5,760	5,842
	John Deere 624 Loader (172 HP) (M)	1900.132	0.48 mnth	-	-	-	-	-	-	5,500.00 /mnth	2,640	3,000.00 /mnth	1,440	4,080	4,133
	Water Truck, 4,000 Gallon (L)	1900.210	0.48 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,160	1,200.00 /mnth	576	2,736	2,779
	Mikasa Jumping Jack Compactor (L)	1900.138	0.48 mnth	-	-	-	-	-	-	200.00 /mnth	96	100.00 /mnth	48	144	146
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.48 mnth	-	-	-	-	-	-	2,000.00 /mnth	960	300.00 /mnth	144	1,104	1,123
	Pot Hole Existing	2333.010	2.00 ea	31.00 /mh	248	-	-	-	-	-	-	-	-	248	347
	Cross Existing	2333.010	1.00 ea	31.00 /mh	124	100.00 /ea	100	-	-	-	-	-	-	224	274
	Cut Existing	2333.010	1.00 ea	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	Tie to Existing	2333.010	1.00 ea	31.00 /mh	62	50.00 /ea	50	-	-	-	-	-	-	112	137
	Support Existing	2333.010	1.00 ea	31.00 /mh	31	250.00 /ea	250	-	-	-	-	-	-	281	293
	Warning Tape Detectable	2333.080	320.00 lf	31.00 /mh	99	0.07 /lf	22	-	-	-	-	-	-	122	161
	Tracer Wire	2333.080	360.00 lf	31.00 /mh	112	0.25 /lf	99	-	-	-	-	-	-	211	255
	Tracer Wire Test Box	2333.080	6.00 ea	31.00 /mh	744	95.00 /ea	570	-	-	-	-	-	-	1,314	1,612
	3500 psi Thrust Block Concrete	3310.105	4.50 cy	31.00 /mh	558	165.00 /cy	780	-	-	-	-	-	-	1,338	1,561
	Valve - Plug MJ 14"	2519.160	2.00 ea	31.00 /mh	248	5,450.00 /ea	10,900	-	-	-	-	-	-	11,148	11,247
	Valve Box Assembly 6' Bury	2519.130	2.00 ea	31.00 /mh	186	330.00 /ea	660	-	-	-	-	-	-	846	920
	Valve Box 2' Extension	2519.130	2.00 ea	31.00 /mh	31	90.00 /ea	180	-	-	-	-	-	-	211	223
	Conc Block for Valve	2519.100	2.00 ea	31.00 /mh	31	50.00 /ea	100	-	-	-	-	-	-	131	143
	Conc Pad for Valve Box	2519.100	2.00 ea	31.00 /mh	248	50.00 /ea	100	-	-	-	-	-	-	348	447
	Valve Stem Extension	2519.100	2.00 ea	31.00 /mh	62	130.00 /ea	260	-	-	-	-	-	-	322	347
	Valve Position Indicator	2519.100	2.00 ea	31.00 /mh	62	0.01 /ea	0	-	-	-	-	-	-	62	87
	Valve - Marker Post [carsonite]	2519.100	2.00 ea	31.00 /mh	62	40.00 /ea	80	-	-	-	-	-	-	142	167
	Polybag 18" and smaller	2333.090	40.00 lf	31.00 /mh	12	1.40 /lf	62	-	-	-	-	-	-	74	79
	Poly Tape	2333.090	2.00 roll	31.00 /mh		5.00 /roll	11	-	-	-	-	-	-	11	11
	Sleeve w/Ring 316SS 18" x 14"	15121.250	1.00 ea	31.00 /mh	124	1,700.00 /ea	1,700	-	-	-	-	-	-	1,824	1,874
	Link Seal Size LS-360-S	15123.100	48.00 ea	31.00 /mh	223	15.00 /ea	720	-	-	-	-	-	-	943	1,032
	Bypass Pumping???	2240.150	1.00 ls	31.00 /mh	992	/ls		8,000.00 /ls	8,000	/ls		-	-	8,992	9,389
	DI Pipe RJ - Class 250 14	2511.401	13.00 lf	31.00 /mh	81	80.00 /lf	1,144	-	-	-	-	-	-	1,225	1,257
	14 Bell Restrainer F/C900	2336.380	15.00 ea	31.00 /mh	465	385.00 /ea	5,775	-	-	-	-	-	-	6,240	6,426
	14" ABI From Headworks to Orbal Reactor		320.00 lf		12,018		77,377	25.00 /lf	8,000		10,036		3,888	111,319	116,327
02605-1	12" RAS From Existing to Orbal														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 6- 8'	2333.010	314.00 lf	31.00 /mh	1,460	-	-	-	-	-	-	-	-	1,460	2,044
	Trench Backfill 6- 8'	2333.020	314.00 lf	31.00 /mh	1,947	-	-	-	-	-	-	-	-	1,947	2,726
	Utility Bedding Stone 3/4"	2305.200	104.67 cy	-	-	34.00 /ton	5,694	-	-	-	-	-	-	5,694	5,694
	Spoils to Waste	2333.060	104.67 cy	31.00 /mh	324	-	-	-	-	-	-	-	-	324	454
	PVC C-900 Pipe 12	2336.310	314.00 lf	31.00 /mh	1,168	47.00 /lf	16,234	-	-	-	-	-	-	17,402	17,869
	DI RJ Compact 90 12	2511.514	1.00 ea	31.00 /mh	62	1,000.00 /ea	1,000	-	-	-	-	-	-	1,062	1,087
	DI RJ Compact 45 12	2511.514	4.00 ea	31.00 /mh	248	890.00 /ea	3,560	-	-	-	-	-	-	3,808	3,907
	DI RJ Compact Wye 12	2511.528	1.00 ea	31.00 /mh	62	1,830.00 /ea	1,830	-	-	-	-	-	-	1,892	1,917
	DI RJ Compact Solid Sleeve Short 12	2511.523	4.00 ea	31.00 /mh	372	840.00 /ea	3,360	-	-	-	-	-	-	3,732	3,881
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.34 mnth	-	-	-	-	-	-	8,500.00 /mnth	2,890	3,500.00 /mnth	1,190	4,080	4,138
	John Deere 624 Loader (172 HP) (M)	1900.132	0.34 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,870	3,000.00 /mnth	1,020	2,890	2,927
	Water Truck, 4,000 Gallon (L)	1900.210	0.34 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,530	1,200.00 /mnth	408	1,938	1,969
	Mikasa Jumping Jack Compactor (L)	1900.138	0.34 mnth	-	-	-	-	-	-	200.00 /mnth	68	100.00 /mnth	34	102	103
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.34 mnth	-	-	-	-	-	-	2,000.00 /mnth	680	300.00 /mnth	102	782	796
	Pot Hole Existing	2333.010	3.00 ea	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Cross Existing	2333.010	2.00 ea	31.00 /mh	124	100.00 /ea	200	-	-	-	-	-	-	324	374
	Cut Existing	2333.010	2.00 ea	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Tie to Existing	2333.010	1.00 ea	31.00 /mh	62	50.00 /ea	50	-	-	-	-	-	-	112	137
	Support Existing	2333.010	2.00 ea	31.00 /mh	186	250.00 /ea	500	-	-	-	-	-	-	686	760
	Warning Tape Detectable	2333.080	164.00 lf	31.00 /mh	51	0.07 /lf	11	-	-	-	-	-	-	62	83
	Tracer Wire	2333.080	180.00 lf	31.00 /mh	56	0.25 /lf	50	-	-	-	-	-	-	105	128
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	62	95.00 /ea	190	-	-	-	-	-	-	252	277
	3500 psi Thrust Block Concrete	3310.105	4.50 cy	31.00 /mh	558	165.00 /cy	780	-	-	-	-	-	-	1,338	1,561
	Valve - Plug MJ 12"	2519.160	1.00 ea	31.00 /mh	62	4,070.00 /ea	4,070	-	-	-	-	-	-	4,132	4,157
	Valve Box Assembly 6' Bury	2519.130	1.00 ea	31.00 /mh	93	330.00 /ea	330	-	-	-	-	-	-	423	460
	Valve Box 2' Extension	2519.130	1.00 ea	31.00 /mh	16	90.00 /ea	90	-	-	-	-	-	-	106	112
	Conc Block for Valve	2519.100	1.00 ea	31.00 /mh	16	50.00 /ea	50	-	-	-	-	-	-	66	72

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02605-1	12" RAS From Existing to Orbal														
	Conc Pad for Valve Box	2519.100	1.00 ea	31.00 /mh	124	50.00 /ea	50	-	-	-	-	-	-	174	224
	Valve Stem Extension	2519.100	1.00 ea	31.00 /mh	31	130.00 /ea	130	-	-	-	-	-	-	161	173
	Valve Position Indicator	2519.100	1.00 ea	31.00 /mh	31	0.01 /ea	0	-	-	-	-	-	-	31	43
	Valve - Marker Post [carsonite]	2519.100	1.00 ea	31.00 /mh	31	40.00 /ea	40	-	-	-	-	-	-	71	83
	Sleeve w/Ring 316SS 16" x 14"	15121.250	1.00 ea	31.00 /mh	62	1,500.00 /ea	1,500	-	-	-	-	-	-	1,562	1,587
	Link Seal Size LS-360-S-316	15123.100	42.00 ea	31.00 /mh	195	15.00 /ea	630	-	-	-	-	-	-	825	903
	Polybag 18" and smaller	2333.090	30.00 lf	31.00 /mh	9	1.40 /lf	46	-	-	-	-	-	-	56	59
	Poly Tape	2333.090	2.00 roll	31.00 /mh		5.00 /ro ll	11	-	-	-	-	-	-	11	11
	Bypass Pumping???	2240.150	1.00 ls	31.00 /mh	992	/ls		8,000.00 /ls	8,000	/ls		-	-	8,992	9,389
	12 Bell Restrainer F/C900	2336.380	15.00 ea	31.00 /mh	465	200.00 /ea	3,000	-	-	-	-	-	-	3,465	3,651
	12" RAS From Existing to Orbal		314.00 lf		9,861		43,506	25.48 /lf	8,000		7,138		2,754	71,258	75,345
02605-1	24" ML From Aeration Basin to Splitter Box														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 10-12'	2333.010	120.00 lf	31.00 /mh	632	-	-	-	-	-	-	-	-	632	885
	Trench Backfill 10-12'	2333.020	120.00 lf	31.00 /mh	818	-	-	-	-	-	-	-	-	818	1,146
	Utility Bedding Stone 3/4"	2305.200	71.11 cy	-	-	34.00 /to n	3,868	-	-	-	-	-	-	3,868	3,868
	Spoils to Waste	2333.060	71.11 cy	31.00 /mh	220	-	-	-	-	-	-	-	-	220	309
	PVC C-900 Pipe 24	2336.310	120.00 lf	31.00 /mh	930	147.00 /lf	19,404	-	-	-	-	-	-	20,334	20,706
	DI RJ Compact 90 24	2511.514	2.00 ea	31.00 /mh	372	5,470.00 /ea	10,940	-	-	-	-	-	-	11,312	11,461
	DI RJ Compact Tee 24	2511.524	1.00 ea	31.00 /mh	186	6,800.00 /ea	6,800	-	-	-	-	-	-	6,986	7,060
	DI RJ Compact Solid Sleeve Long 24	2511.522	2.00 ea	31.00 /mh	372	3,350.00 /ea	6,700	-	-	-	-	-	-	7,072	7,221
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.21 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,785	3,500.00 /mnth	735	2,520	2,556
	John Deere 624 Loader (172 HP) (M)	1900.132	0.21 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,155	3,000.00 /mnth	630	1,785	1,808
	Water Truck, 4,000 Gallon (L)	1900.210	0.21 mnth	-	-	-	-	-	-	4,500.00 /mnth	945	1,200.00 /mnth	252	1,197	1,216
	Mikasa Jumping Jack Compactor (L)	1900.138	0.21 mnth	-	-	-	-	-	-	200.00 /mnth	42	100.00 /mnth	21	63	64
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.21 mnth	-	-	-	-	-	-	2,000.00 /mnth	420	300.00 /mnth	63	483	491
	Tracer Wire	2333.080	140.00 lf	31.00 /mh	43	0.25 /lf	39	-	-	-	-	-	-	82	99
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	62	95.00 /ea	190	-	-	-	-	-	-	252	277
	3500 psi Thrust Block Concrete	3310.105	3.00 cy	31.00 /mh	372	165.00 /cy	520	-	-	-	-	-	-	892	1,041
	DI Pipe RJ - Class 250 24	2511.401	20.00 lf	31.00 /mh	155	168.00 /lf	3,696	-	-	-	-	-	-	3,851	3,913
	DI Floor Pipe PE x PE w/ Collar 24in x 7'-0"	15221.248	1.00 ea	31.00 /mh	217	2,800.00 /ea	2,800	-	-	-	-	-	-	3,017	3,104
	DI RJ Compact Cap 24	2511.510	1.00 ea	31.00 /mh	140	1,930.00 /ea	1,930	-	-	-	-	-	-	2,070	2,125
	DI RJ Compact Red 36x24	2511.520	1.00 ea	31.00 /mh	248	10,420.00 /ea	10,420	-	-	-	-	-	-	10,668	10,767
	DI Pipe 36in. dia FxPE - 12ft. 0in.	15221.030	1.00 ea	31.00 /mh	248	14,200.00 /ea	14,200	-	-	-	-	-	-	14,448	14,547
	Polybag 24" and smaller	2333.090	40.00 lf	31.00 /mh	12	1.40 /lf	62	-	-	-	-	-	-	74	79
	Poly Tape	2333.090	2.00 roll	31.00 /mh		5.00 /ro ll	11	-	-	-	-	-	-	11	11
	24 Bell Restrainer F/C900	2336.380	5.00 ea	31.00 /mh	310	850.00 /ea	4,250	-	-	-	-	-	-	4,560	4,684
	24" ML From Aeration Basin to Splitter Box		120.00 lf		5,587		85,879	/lf			4,397		1,701	97,564	99,886
02605-1	16" ML From SplitterTo Clarifier 5														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	500.00 /ea	1,000	-	-	1,596	1,814
	Trench Excavtion 14-16'	2333.010	204.00 lf	31.00 /mh	1,455	-	-	-	-	-	-	-	-	1,455	2,036
	Trench Backfill 14-16'	2333.020	204.00 lf	31.00 /mh	2,024	-	-	-	-	-	-	-	-	2,024	2,833
	Trench Box 16' Deep	2333.030	60.00 lf	31.00 /mh		-	-	-	-	32.00 /lf	1,920	-	-	1,920	1,958
	Utility Bedding Stone 3/4"	2305.200	81.67 cy	-	-	34.00 /to n	4,443	-	-	-	-	-	-	4,443	4,443
	Spoils to Waste	2333.060	81.67 cy	31.00 /mh	253	-	-	-	-	-	-	-	-	253	354
	PVC C-900 Pipe 16	2336.310	180.00 lf	31.00 /mh	893	66.00 /lf	13,068	-	-	-	-	-	-	13,961	14,318
	DI RJ Compact 90 16	2511.514	3.00 ea	31.00 /mh	372	2,080.00 /ea	6,240	-	-	-	-	-	-	6,612	6,761
	DI RJ Compact 45 16	2511.514	5.00 ea	31.00 /mh	620	1,800.00 /ea	9,000	-	-	-	-	-	-	9,620	9,868
	DI RJ Compact 11-¼ 16	2511.514	2.00 ea	31.00 /mh	248	1,760.00 /ea	3,520	-	-	-	-	-	-	3,768	3,867
	DI RJ Compact Solid Sleeve Long 16	2511.522	4.00 ea	31.00 /mh	620	1,700.00 /ea	6,800	-	-	-	-	-	-	7,420	7,668
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.43 mnth	-	-	-	-	-	-	8,500.00 /mnth	3,655	3,500.00 /mnth	1,505	5,160	5,233
	John Deere 624 Loader (172 HP) (M)	1900.132	0.43 mnth	-	-	-	-	-	-	5,500.00 /mnth	2,365	3,000.00 /mnth	1,290	3,655	3,702
	Water Truck, 4,000 Gallon (L)	1900.210	0.43 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,935	1,200.00 /mnth	516	2,451	2,490
	Mikasa Jumping Jack Compactor (L)	1900.138	0.43 mnth	-	-	-	-	-	-	200.00 /mnth	86	100.00 /mnth	43	129	131
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.43 mnth	-	-	-	-	-	-	2,000.00 /mnth	860	300.00 /mnth	129	989	1,006
	Warning Tape Detectable	2333.080	180.00 lf	31.00 /mh	56	0.07 /lf	13	-	-	-	-	-	-	68	91
	Tracer Wire	2333.080	220.00 lf	31.00 /mh	68	0.25 /lf	61	-	-	-	-	-	-	129	156
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	3500 psi Thrust Block Concrete	3310.105	9.00 cy	31.00 /mh	1,116	165.00 /cy	1,559	-	-	-	-	-	-	2,675	3,122
	DI Pipe RJ - Class 250 16	2511.401	40.00 lf	31.00 /mh	198	90.00 /lf	3,960	-	-	-	-	-	-	4,158	4,238
	DI Floor Pipe PE x PE w/ Collar 16in x 4ft 0in long	15221.248	1.00 ea	31.00 /mh	124	1,200.00 /ea	1,200	-	-	-	-	-	-	1,324	1,374
	DI Floor Pipe PE x PE w/ Collar 16in x 6ft 0in long	15221.248	1.00 ea	31.00 /mh	124	1,600.00 /ea	1,600	-	-	-	-	-	-	1,724	1,774
	Polybag 18" and smaller	2333.090	30.00 lf	31.00 /mh	9	1.40 /lf	46	-	-	-	-	-	-	56	59
	Poly Tape	2333.090	1.00 roll	31.00 /mh		5.00 /ro ll	6	-	-	-	-	-	-	6	6
	Dewatering	2240.050	1.00 ls	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Trench Stabilization Rock	2305.050	20.00 cy	-	-	36.00 /to n	1,166	-	-	-	-	-	-	1,166	1,166

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	02605-1 16" ML From SplitterTo Clarifier 5														
	16 Bell Restrainer F/C900	2336.380	8.00 ea	31.00 /mh	372	433.00 /ea	3,464	-	-	-	-	-	-	3,836	3,985
	Grove RT760/RT700, 60 ton (240 HP) (L)	1900.100	0.12 mnth	7,296.00 /mnth	876	350.00 /mnt h	42	-	-	9,500.00 /mnth	1,140	1,500.00 /mnth	180	2,238	2,611
	16" ML From SplitterTo Clarifier 5		180.00 lf		10,543		56,477	/lf			12,961		3,663	83,645	88,121
	02605-2 4" DS From Digesters to Process Bld.														
	Testing Pressure & Leak - Piping	1166.100	3.00 ea	31.00 /mh	744	50.00 /ea	150	-	-	50.00 /ea	150	-	-	1,044	1,345
	Trench Excavtion 6- 8'	2333.010	550.00 lf	31.00 /mh	2,558	-	-	-	-	-	-	-	-	2,558	3,581
	Trench Excavtion 14-16'	2333.010	200.00 lf	31.00 /mh	1,860	-	-	-	-	-	-	-	-	1,860	2,604
	Trench Backfill 6- 8'	2333.020	550.00 lf	31.00 /mh	3,410	-	-	-	-	-	-	-	-	3,410	4,774
	Trench Backfill 14-16'	2333.020	200.00 lf	31.00 /mh	2,480	-	-	-	-	-	-	-	-	2,480	3,472
	Trench Box 16' Deep	2333.030	200.00 lf	31.00 /mh	-	-	-	-	-	32.00 /lf	6,400	-	-	6,400	6,528
	Utility Bedding Peastone	2305.200	208.33 cy	-	-	24.00 /ton	8,000	-	-	-	-	-	-	8,000	8,000
	Spoils to Waste	2333.060	208.33 cy	31.00 /mh	646	-	-	-	-	-	-	-	-	646	904
	PVC C-900 Pipe 4	2336.310	750.00 lf	31.00 /mh	2,093	7.00 /lf	5,775	-	-	-	-	-	-	7,868	8,704
	DI RJ Compact 90 4	2511.514	4.00 ea	31.00 /mh	124	300.00 /ea	1,200	-	-	-	-	-	-	1,324	1,374
	DI RJ Compact 45 4	2511.514	12.00 ea	31.00 /mh	372	280.00 /ea	3,360	-	-	-	-	-	-	3,732	3,881
	DI RJ Compact Tee 4	2511.524	3.00 ea	31.00 /mh	186	430.00 /ea	1,290	-	-	-	-	-	-	1,476	1,550
	DI RJ Compact Wye 4	2511.528	7.00 ea	31.00 /mh	434	506.00 /ea	3,542	-	-	-	-	-	-	3,976	4,150
	DI RJ Compact Solid Sleeve Short 4	2511.523	6.00 ea	31.00 /mh	186	290.00 /ea	1,740	-	-	-	-	-	-	1,926	2,000
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	1.08 mnth	-	-	-	-	-	-	8,500.00 /mnth	9,180	3,500.00 /mnth	3,780	12,960	13,144
	John Deere 624 Loader (172 HP) (M)	1900.132	1.08 mnth	-	-	-	-	-	-	5,500.00 /mnth	5,940	3,000.00 /mnth	3,240	9,180	9,299
	Water Truck, 4,000 Gallon (L)	1900.210	1.08 mnth	-	-	-	-	-	-	4,500.00 /mnth	4,860	1,200.00 /mnth	1,296	6,156	6,253
	Mikasa Jumping Jack Compactor (L)	1900.138	1.08 mnth	-	-	-	-	-	-	200.00 /mnth	216	100.00 /mnth	108	324	328
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	1.08 mnth	-	-	-	-	-	-	2,000.00 /mnth	2,160	300.00 /mnth	324	2,484	2,527
	Tracer Wire	2333.080	750.00 lf	31.00 /mh	233	0.25 /lf	206	-	-	-	-	-	-	439	532
	Warning Tape Detectable	2333.080	750.00 lf	31.00 /mh	233	0.07 /lf	53	-	-	-	-	-	-	285	378
	3500 psi Thrust Block Concrete	3310.105	5.00 cy	31.00 /mh	620	165.00 /cy	866	-	-	-	-	-	-	1,486	1,734
	Polybag 12" and Smaller	2333.090	150.00 lf	31.00 /mh	47	0.75 /lf	124	-	-	-	-	-	-	170	189
	Pot Hole Existing	2333.010	7.00 ea	31.00 /mh	868	-	-	-	-	-	-	-	-	868	1,215
	Cross Existing	2333.010	5.00 ea	31.00 /mh	310	100.00 /ea	500	-	-	-	-	-	-	810	934
	Cut Existing	2333.010	1.00 ea	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	Tie to Existing	2333.010	1.00 ea	31.00 /mh	62	50.00 /ea	50	-	-	-	-	-	-	112	137
	Support Existing	2333.010	5.00 ea	31.00 /mh	465	250.00 /ea	1,250	-	-	-	-	-	-	1,715	1,901
	Warning Tape Detectable	2333.080	750.00 lf	31.00 /mh	233	0.07 /lf	53	-	-	-	-	-	-	285	378
	Tracer Wire	2333.080	820.00 lf	31.00 /mh	254	0.25 /lf	226	-	-	-	-	-	-	480	581
	Tracer Wire Test Box	2333.080	7.00 ea	31.00 /mh	868	95.00 /ea	665	-	-	-	-	-	-	1,533	1,880
	Valve - Plug MJ 4" (2 for tie in purpose)	2519.160	4.00 ea	31.00 /mh	496	1,320.00 /ea	5,280	-	-	-	-	-	-	5,776	5,974
	Valve Box Assembly 6' Bury	2519.130	2.00 ea	31.00 /mh	186	330.00 /ea	660	-	-	-	-	-	-	846	920
	Valve Box 2' Extension	2519.130	10.00 ea	31.00 /mh	155	90.00 /ea	900	-	-	-	-	-	-	1,055	1,117
	Conc Block for Valve	2519.100	2.00 ea	31.00 /mh	31	50.00 /ea	100	-	-	-	-	-	-	131	143
	Conc Pad for Valve Box	2519.100	2.00 ea	31.00 /mh	248	50.00 /ea	100	-	-	-	-	-	-	348	447
	Valve Stem Extension	2519.100	2.00 ea	31.00 /mh	62	130.00 /ea	260	-	-	-	-	-	-	322	347
	Valve Position Indicator	2519.100	2.00 ea	31.00 /mh	62	0.01 /ea	0	-	-	-	-	-	-	62	87
	Valve - Marker Post [carsonite]	2519.100	2.00 ea	31.00 /mh	62	40.00 /ea	80	-	-	-	-	-	-	142	167
	4 Bell Restrainer F/C900	2336.380	36.00 ea	31.00 /mh	1,116	70.00 /ea	2,520	-	-	-	-	-	-	3,636	4,082
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	9.00 ea	31.00 /mh	837	750.00 /ea	6,750	-	-	-	-	-	-	7,587	7,922
	DI Blind Flange 4"	15221.405	7.00 ea	31.00 /mh	217	75.00 /ea	525	-	-	-	-	-	-	742	829
	NBG Kit 125# SS 4in [316SS & 1/8" EPDM]	15125.012	7.00 ea	31.00 /mh	217	300.00 /ea	2,100	-	-	-	-	-	-	2,317	2,404
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	7.00 ea	31.00 /mh	868	125.00 /ea	875	-	-	-	-	-	-	1,743	2,090
	Concrete Pad for Cleanout Cover	2519.100	7.00 ea	31.00 /mh	434	50.00 /ea	350	-	-	-	-	-	-	784	958
	Sleeve SS 8" x 28"	15121.200	2.00 ea	31.00 /mh	186	1,000.00 /ea	2,000	-	-	-	-	-	-	2,186	2,260
	Link Seal Size LS-410-S	15123.100	42.00 ea	31.00 /mh	195	16.00 /ea	672	-	-	-	-	-	-	867	945
	Core Drilled Hole - 8 -*	15122.100	1.00 ea	31.00 /mh	31	200.00 /ea	200	250.00 /ea	250	-	-	-	-	481	493
	4" DS From Digesters to Process Bld.		750.00 lf		24,748		52,421	0.33 /lf	250		28,906		8,748	115,073	125,551
	02605-2 8" WAS from Digesters 600														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 6- 8'	2333.010	140.00 lf	31.00 /mh	781	-	-	-	-	-	-	-	-	781	1,094
	Trench Backfill 6- 8'	2333.020	140.00 lf	31.00 /mh	998	-	-	-	-	-	-	-	-	998	1,397
	Utility Bedding Peastone	2305.200	38.89 cy	-	-	24.00 /ton	1,493	-	-	-	-	-	-	1,493	1,493
	Spoils to Waste	2333.060	38.89 cy	31.00 /mh	121	-	-	-	-	-	-	-	-	121	169
	PVC C-900 Pipe 4	2336.310	20.00 lf	31.00 /mh	56	7.00 /lf	154	-	-	-	-	-	-	210	232
	PVC C-900 Pipe 8	2336.310	120.00 lf	31.00 /mh	409	22.00 /lf	2,904	-	-	-	-	-	-	3,313	3,477
	DI RJ Compact 45 4	2511.514	1.00 ea	31.00 /mh	62	280.00 /ea	280	-	-	-	-	-	-	342	367
	DI RJ Compact 45 6	2511.514	2.00 ea	31.00 /mh	124	400.00 /ea	800	-	-	-	-	-	-	924	974
	DI RJ Compact 45 8	2511.514	1.00 ea	31.00 /mh	62	470.00 /ea	470	-	-	-	-	-	-	532	557
	DI RJ Compact Tee 4	2511.524	1.00 ea	31.00 /mh	62	430.00 /ea	430	-	-	-	-	-	-	492	517
	DI RJ Compact Tee 8	2511.524	1.00 ea	31.00 /mh	93	760.00 /ea	760	-	-	-	-	-	-	853	890
	DI RJ Compact Tee 8x4	2511.524	2.00 ea	31.00 /mh	186	630.00 /ea	1,260	-	-	-	-	-	-	1,446	1,520
	DI RJ Compact Wye 8x6	2511.528	2.00 ea	31.00 /mh	186	910.00 /ea	1,820	-	-	-	-	-	-	2,006	2,080

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02	605-2 8" WAS from Digesters 600														
	DI RJ Compact Wye 8	2511.528	1.00 ea	31.00 /mh	93	1,020.00 /ea	1,020	-	-	-	-	-	-	1,113	1,150
	DI RJ Compact Red 8x4	2511.520	1.00 ea	31.00 /mh	62	380.00 /ea	380	-	-	-	-	-	-	442	467
	DI RJ Compact Solid Sleeve Short 4	2511.523	3.00 ea	31.00 /mh	186	290.00 /ea	870	-	-	-	-	-	-	1,056	1,130
	DI RJ Compact Solid Sleeve Short 8	2511.523	2.00 ea	31.00 /mh	124	520.00 /ea	1,040	-	-	-	-	-	-	1,164	1,214
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.26 mnth	-	-	-	-	-	-	8,500.00 /mnth	2,210	3,500.00 /mnth	910	3,120	3,164
	John Deere 624 Loader (172 HP) (M)	1900.132	0.26 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,430	3,000.00 /mnth	780	2,210	2,239
	Water Truck, 4,000 Gallon (L)	1900.210	0.26 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,170	1,200.00 /mnth	312	1,482	1,505
	Mikasa Jumping Jack Compactor (L)	1900.138	0.26 mnth	-	-	-	-	-	-	200.00 /mnth	52	100.00 /mnth	26	78	79
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.26 mnth	-	-	-	-	-	-	2,000.00 /mnth	520	300.00 /mnth	78	598	608
	Tracer Wire	2333.080	160.00 lf	31.00 /mh	50	0.25 /lf	44	-	-	-	-	-	-	94	113
	Warning Tape Detectable	2333.080	140.00 lf	31.00 /mh	43	0.07 /lf	10	-	-	-	-	-	-	53	71
	3500 psi Thrust Block Concrete	3310.105	2.00 cy	31.00 /mh	248	165.00 /cy	347	-	-	-	-	-	-	595	694
	Polybag 12" and Smaller	2333.090	50.00 lf	31.00 /mh	16	0.75 /lf	41	-	-	-	-	-	-	57	63
	Pot Hole Existing	2333.010	3.00 ea	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Cut Existing	2333.010	3.00 ea	31.00 /mh	186	-	-	-	-	-	-	-	-	186	260
	Tie to Existing	2333.010	3.00 ea	31.00 /mh	186	50.00 /ea	150	-	-	-	-	-	-	336	410
	Tracer Wire Test Box	2333.080	3.00 ea	31.00 /mh	372	95.00 /ea	285	-	-	-	-	-	-	657	806
	Conc Pad for Valve Box	2519.100	2.00 ea	31.00 /mh	248	50.00 /ea	100	-	-	-	-	-	-	348	447
	DI Pipe 6in. dia FxPE - 10ft. 0in.	15221.030	2.00 ea	31.00 /mh	186	900.00 /ea	1,800	-	-	-	-	-	-	1,986	2,060
	NBG Kit 125# SS 6in [316SS & 1/8" EPDM]	15125.012	2.00 ea	31.00 /mh	62	350.00 /ea	700	-	-	-	-	-	-	762	787
	DI Blind Flange 6"	15221.405	2.00 ea	31.00 /mh	62	130.00 /ea	260	-	-	-	-	-	-	322	347
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	2.00 ea	31.00 /mh	248	125.00 /ea	250	-	-	-	-	-	-	498	597
	8 Bell Restrainer F/C900	2336.380	5.00 ea	31.00 /mh	155	138.00 /ea	690	-	-	-	-	-	-	845	907
	Valve - Plug MJ 8"	2519.160	1.00 ea	31.00 /mh	124	3,250.00 /ea	3,250	-	-	-	-	-	-	3,374	3,424
	8" WAS from Digesters 600		140.00 lf		6,410		21,658	/lf			5,432		2,106	35,606	38,279
02	605-2 4" Screw Press Pressate SPP														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 6- 8'	2333.010	265.00 lf	31.00 /mh	1,479	-	-	-	-	-	-	-	-	1,479	2,070
	Trench Backfill 6- 8'	2333.020	265.00 lf	31.00 /mh	1,889	-	-	-	-	-	-	-	-	1,889	2,645
	Utility Bedding Peastone	2305.200	73.61 cy	-	-	24.00 /to n	2,827	-	-	-	-	-	-	2,827	2,827
	Spoils to Waste	2333.060	73.61 cy	31.00 /mh	228	-	-	-	-	-	-	-	-	228	319
	PVC C-900 Pipe 4	2336.310	265.00 lf	31.00 /mh	739	7.00 /lf	2,041	-	-	-	-	-	-	2,780	3,076
	DI RJ Compact 90 4	2511.514	1.00 ea	31.00 /mh	62	300.00 /ea	300	-	-	-	-	-	-	362	387
	DI RJ Compact 45 4	2511.514	6.00 ea	31.00 /mh	372	280.00 /ea	1,680	-	-	-	-	-	-	2,052	2,201
	DI RJ Compact Wye 4	2511.528	2.00 ea	31.00 /mh	124	506.00 /ea	1,012	-	-	-	-	-	-	1,136	1,186
	DI RJ Compact Solid Sleeve Short 4	2511.523	2.00 ea	31.00 /mh	124	290.00 /ea	580	-	-	-	-	-	-	704	754
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.26 mnth	-	-	-	-	-	-	8,500.00 /mnth	2,210	3,500.00 /mnth	910	3,120	3,164
	John Deere 624 Loader (172 HP) (M)	1900.132	0.26 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,430	3,000.00 /mnth	780	2,210	2,239
	Water Truck, 4,000 Gallon (L)	1900.210	0.26 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,170	1,200.00 /mnth	312	1,482	1,505
	Mikasa Jumping Jack Compactor (L)	1900.138	0.26 mnth	-	-	-	-	-	-	200.00 /mnth	52	100.00 /mnth	26	78	79
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.26 mnth	-	-	-	-	-	-	2,000.00 /mnth	520	300.00 /mnth	78	598	608
	Tracer Wire	2333.080	300.00 lf	31.00 /mh	93	0.25 /lf	83	-	-	-	-	-	-	176	213
	Warning Tape Detectable	2333.080	265.00 lf	31.00 /mh	82	0.07 /lf	19	-	-	-	-	-	-	101	134
	Polybag 12" and Smaller	2333.090	100.00 lf	31.00 /mh	31	0.75 /lf	83	-	-	-	-	-	-	114	126
	Pot Hole Existing	2333.010	3.00 ea	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	62	95.00 /ea	190	-	-	-	-	-	-	252	277
	4 Bell Restrainer F/C900	2336.380	12.00 ea	31.00 /mh	93	70.00 /ea	840	-	-	-	-	-	-	933	970
	NBG Kit 125# SS 4in [316SS & 1/8" EPDM]	15125.012	1.00 ea	31.00 /mh	31	300.00 /ea	300	-	-	-	-	-	-	331	343
	DI Blind Flange 4"	15221.405	1.00 ea	31.00 /mh	31	75.00 /ea	75	-	-	-	-	-	-	106	118
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	2.00 ea	31.00 /mh	186	750.00 /ea	1,500	-	-	-	-	-	-	1,686	1,760
	Conc Pad for Valve Box	2519.100	1.00 ea	31.00 /mh	124	50.00 /ea	50	-	-	-	-	-	-	174	224
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	1.00 ea	31.00 /mh	124	125.00 /ea	125	-	-	-	-	-	-	249	299
	PVC Sch 80 PIPE 2" PE	15211.203	20.00 lf	31.00 /mh	130	4.00 /lf	80	-	-	-	-	-	-	210	262
	Core Drilled Hole - 8 -*	15122.100	1.00 ea	31.00 /mh	31	200.00 /ea	200	150.00 /ea	150	-	-	-	-	381	393
	4" Screw Press Pressate SPP		265.00 lf		6,656		12,033	0.57 /lf	150		5,432		2,106	26,377	29,148
02	605-2 6" UV DRAIN DR														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 8-10'	2333.010	400.00 lf	31.00 /mh	2,480	-	-	-	-	-	-	-	-	2,480	3,472
	Trench Backfill 8-10'	2333.020	400.00 lf	31.00 /mh	3,100	-	-	-	-	-	-	-	-	3,100	4,340
	Utility Bedding Peastone	2305.200	111.11 cy	-	-	24.00 /to n	4,267	-	-	-	-	-	-	4,267	4,267
	Spoils to Waste	2333.060	111.11 cy	31.00 /mh	344	-	-	-	-	-	-	-	-	344	482
	PVC C-900 Pipe 6	2336.310	400.00 lf	31.00 /mh	1,240	13.00 /lf	5,720	-	-	-	-	-	-	6,960	7,456
	DI RJ Compact 90 6	2511.514	1.00 ea	31.00 /mh	62	425.00 /ea	425	-	-	-	-	-	-	487	512
	DI RJ Compact 45 6	2511.514	4.00 ea	31.00 /mh	248	400.00 /ea	1,600	-	-	-	-	-	-	1,848	1,947
	DI RJ Compact Tee 6	2511.524	1.00 ea	31.00 /mh	62	630.00 /ea	630	-	-	-	-	-	-	692	717
	DI RJ Compact Wye 6	2511.528	4.00 ea	31.00 /mh	248	710.00 /ea	2,840	-	-	-	-	-	-	3,088	3,187
	DI RJ Compact Solid Sleeve Short 6	2511.523	1.00 ea	31.00 /mh	62	440.00 /ea	440	-	-	-	-	-	-	502	527
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.34 mnth	-	-	-	-	-	-	8,500.00 /mnth	2,890	3,500.00 /mnth	1,190	4,080	4,138
	John Deere 624 Loader (172 HP) (M)	1900.132	0.34 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,870	3,000.00 /mnth	1,020	2,890	2,927
	Water Truck, 4,000 Gallon (L)	1900.210	0.34 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,530	1,200.00 /mnth	408	1,938	1,969

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02605-2	6" UV DRAIN DR														
	Mikasa Jumping Jack Compactor (L)	1900.138	0.34 mnth	-	-	-	-	-	-	200.00 /mnth	68	100.00 /mnth	34	102	103
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.34 mnth	-	-	-	-	-	-	2,000.00 /mnth	680	300.00 /mnth	102	782	796
	Tracer Wire	2333.080	420.00 lf	31.00 /mh	130	0.25 /lf	116	-	-	-	-	-	-	246	298
	Warning Tape Detectable	2333.080	400.00 lf	31.00 /mh	124	0.07 /lf	28	-	-	-	-	-	-	152	202
	Polybag 12" and Smaller	2333.090	120.00 lf	31.00 /mh	37	0.75 /lf	99	-	-	-	-	-	-	136	151
	Pot Hole Existing	2333.010	2.00 ea	31.00 /mh	248	-	-	-	-	-	-	-	-	248	347
	Cross Existing	2333.010	1.00 ea	31.00 /mh	62	100.00 /ea	100	-	-	-	-	-	-	162	187
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	DI Pipe 6in. dia FxPE - 10ft. 0in.	15221.030	4.00 ea	31.00 /mh	124	900.00 /ea	3,600	-	-	-	-	-	-	3,724	3,774
	DI Blind Flange 6"	15221.405	4.00 ea	31.00 /mh	124	130.00 /ea	520	-	-	-	-	-	-	644	694
	6 Bell Restrainer F/C900	2336.380	19.00 ea	31.00 /mh	589	90.00 /ea	1,710	-	-	-	-	-	-	2,299	2,535
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	4.00 ea	31.00 /mh	496	125.00 /ea	500	-	-	-	-	-	-	996	1,194
	Conc Pad for Valve Box	2519.100	4.00 ea	31.00 /mh	496	50.00 /ea	200	-	-	-	-	-	-	696	894
	Core Drilled Hole - 10 -*	15122.100	1.00 ea	31.00 /mh	31	200.00 /ea	200	150.00 /ea	150	-	-	-	-	381	393
	Link Seal Size LS-475-S	15123.100	10.00 ea	31.00 /mh	47	16.00 /ea	160	-	-	-	-	-	-	207	225
	Trench Box 10' Deep	2333.030	400.00 lf	31.00 /mh	-	-	-	-	-	32.00 /lf	12,800	-	-	12,800	13,056
	6" UV DRAIN DR		400.00 lf		10,850		23,394	0.38 /lf	150		19,888		2,754	57,037	61,774
02605-2	4" POTABLE WATER W1														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 6- 8'	2333.010	115.00 lf	31.00 /mh	642	-	-	-	-	-	-	-	-	642	898
	Trench Backfill 6- 8'	2333.020	115.00 lf	31.00 /mh	820	-	-	-	-	-	-	-	-	820	1,148
	Utility Bedding Peastone	2305.200	31.94 cy	-	-	24.00 /ton	1,227	-	-	-	-	-	-	1,227	1,227
	Spoils to Waste	2333.060	31.94 cy	31.00 /mh	99	-	-	-	-	-	-	-	-	99	139
	PVC C-900 Pipe 4	2336.310	115.00 lf	31.00 /mh	321	7.00 /lf	886	-	-	-	-	-	-	1,206	1,335
	DI RJ Compact 90 4	2511.514	1.00 ea	31.00 /mh	62	300.00 /ea	300	-	-	-	-	-	-	362	387
	DI RJ Compact 45 4	2511.514	1.00 ea	31.00 /mh	62	280.00 /ea	280	-	-	-	-	-	-	342	367
	DI RJ Compact Tee 4	2511.524	1.00 ea	31.00 /mh	62	430.00 /ea	430	-	-	-	-	-	-	492	517
	DI RJ Compact Solid Sleeve Short 4	2511.523	2.00 ea	31.00 /mh	124	290.00 /ea	580	-	-	-	-	-	-	704	754
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,445	3,500.00 /mnth	595	2,040	2,069
	John Deere 624 Loader (172 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	5,500.00 /mnth	935	3,000.00 /mnth	510	1,445	1,464
	Water Truck, 4,000 Gallon (L)	1900.210	0.17 mnth	-	-	-	-	-	-	4,500.00 /mnth	765	1,200.00 /mnth	204	969	984
	Mikasa Jumping Jack Compactor (L)	1900.138	0.17 mnth	-	-	-	-	-	-	200.00 /mnth	34	100.00 /mnth	17	51	52
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.17 mnth	-	-	-	-	-	-	2,000.00 /mnth	340	300.00 /mnth	51	391	398
	Tracer Wire	2333.080	140.00 lf	31.00 /mh	43	0.25 /lf	39	-	-	-	-	-	-	82	99
	Warning Tape Detectable	2333.080	115.00 lf	31.00 /mh	36	0.07 /lf	8	-	-	-	-	-	-	44	58
	3500 psi Thrust Block Concrete	3310.105	1.00 cy	31.00 /mh	124	165.00 /cy	173	-	-	-	-	-	-	297	347
	Polybag 12" and Smaller	2333.090	25.00 lf	31.00 /mh	8	0.75 /lf	21	-	-	-	-	-	-	28	31
	Pot Hole Existing	2333.010	1.00 ea	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Cut Existing	2333.010	1.00 ea	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	Tie to Existing	2333.010	1.00 ea	31.00 /mh	62	50.00 /ea	50	-	-	-	-	-	-	112	137
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	62	95.00 /ea	190	-	-	-	-	-	-	252	277
	Disinfection/Chlorination of PW (Enter Line Size)	1166.100	1.00 ea	31.00 /mh	248	150.00 /ea	150	-	-	-	-	-	-	398	497
	Valve - Plug MJ 4"	2519.160	1.00 ea	31.00 /mh	62	1,320.00 /ea	1,320	-	-	-	-	-	-	1,382	1,407
	Valve Box Assembly 6' Bury	2519.130	1.00 ea	31.00 /mh	93	330.00 /ea	330	-	-	-	-	-	-	423	460
	Valve Box 2' Extension	2519.130	1.00 ea	31.00 /mh	16	90.00 /ea	90	-	-	-	-	-	-	106	112
	Conc Block for Valve	2519.100	1.00 ea	31.00 /mh	16	50.00 /ea	50	-	-	-	-	-	-	66	72
	Conc Pad for Valve Box	2519.100	1.00 ea	31.00 /mh	124	50.00 /ea	50	-	-	-	-	-	-	174	224
	Valve Stem Extension	2519.100	1.00 ea	31.00 /mh	31	130.00 /ea	130	-	-	-	-	-	-	161	173
	4 Bell Restrainer F/C900	2336.380	5.00 ea	31.00 /mh	155	70.00 /ea	350	-	-	-	-	-	-	505	567
	4" POTABLE WATER W1		115.00 lf		3,704		6,703	/lf			3,569		1,377	15,353	16,906
02605-2	4" NON POTABLE WATER W3														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 4- 6'	2333.010	1,410.00 lf	31.00 /mh	6,557	-	-	-	-	-	-	-	-	6,557	9,179
	Trench Backfill 4- 6'	2333.020	1,410.00 lf	31.00 /mh	10,053	-	-	-	-	-	-	-	-	10,053	14,075
	Utility Bedding Peastone	2305.200	380.56 cy	-	-	24.00 /ton	14,613	-	-	-	-	-	-	14,613	14,613
	Spoils to Waste	2333.060	380.56 cy	31.00 /mh	1,180	-	-	-	-	-	-	-	-	1,180	1,652
	PVC C-900 Pipe 4 DR25	2336.310	1,330.00 lf	31.00 /mh	3,711	7.00 /lf	10,241	-	-	-	-	-	-	13,952	15,436
	DI RJ Compact 90 4	2511.514	10.00 ea	31.00 /mh	620	300.00 /ea	3,000	-	-	-	-	-	-	3,620	3,868
	DI RJ Compact 45 4	2511.514	12.00 ea	31.00 /mh	744	280.00 /ea	3,360	-	-	-	-	-	-	4,104	4,402
	DI RJ Compact Tee 4	2511.524	16.00 ea	31.00 /mh	992	430.00 /ea	6,880	-	-	-	-	-	-	7,872	8,269
	DI RJ Compact Cross 4	2511.512	1.00 ea	31.00 /mh	62	615.00 /ea	615	-	-	-	-	-	-	677	702
	DI RJ Compact Solid Sleeve Short 4	2511.523	5.00 ea	31.00 /mh	310	290.00 /ea	1,450	-	-	-	-	-	-	1,760	1,884
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	1.56 mnth	-	-	-	-	-	-	8,500.00 /mnth	13,260	3,500.00 /mnth	5,460	18,720	18,985
	John Deere 624 Loader (172 HP) (M)	1900.132	1.56 mnth	-	-	-	-	-	-	5,500.00 /mnth	8,580	3,000.00 /mnth	4,680	13,260	13,432
	Water Truck, 4,000 Gallon (L)	1900.210	1.56 mnth	-	-	-	-	-	-	4,500.00 /mnth	7,020	1,200.00 /mnth	1,872	8,892	9,032
	Mikasa Jumping Jack Compactor (L)	1900.138	1.56 mnth	-	-	-	-	-	-	200.00 /mnth	312	100.00 /mnth	156	468	474
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	1.56 mnth	-	-	-	-	-	-	2,000.00 /mnth	3,120	300.00 /mnth	468	3,588	3,650
	Tracer Wire	2333.080	1,400.00 lf	31.00 /mh	434	0.25 /lf	385	-	-	-	-	-	-	819	993
	Warning Tape Detectable	2333.080	1,370.00 lf	31.00 /mh	425	0.07 /lf	96	-	-	-	-	-	-	521	690
	Polybag 12" and Smaller	2333.090	300.00 lf	31.00 /mh	93	0.75 /lf	248	-	-	-	-	-	-	341	378

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02605-2	4" NON POTABLE WATER W3														
	Pot Hole Existing	2333.010	6.00 ea	31.00 /mh	744	-	-	-	-	-	-	-	-	744	1,042
	Cross Existing	2333.010	4.00 ea	31.00 /mh	248	100.00 /ea	400	-	-	-	-	-	-	648	747
	Cut Existing	2333.010	1.00 ea	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	Tie to Existing	2333.010	1.00 ea	31.00 /mh	62	50.00 /ea	50	-	-	-	-	-	-	112	137
	Tracer Wire Test Box	2333.080	5.00 ea	31.00 /mh	620	95.00 /ea	475	-	-	-	-	-	-	1,095	1,343
	Valve - Gate 4"	2519.110	10.00 ea	31.00 /mh	620	960.00 /ea	9,600	-	-	-	-	-	-	10,220	10,468
	Valve Box Assembly 6' Bury	2519.130	10.00 ea	31.00 /mh	930	330.00 /ea	3,300	-	-	-	-	-	-	4,230	4,602
	Conc Block for Valve	2519.100	10.00 ea	31.00 /mh	155	50.00 /ea	500	-	-	-	-	-	-	655	717
	Conc Pad for Valve Box	2519.100	10.00 ea	31.00 /mh	1,240	50.00 /ea	500	-	-	-	-	-	-	1,740	2,236
	Valve Stem Extension	2519.100	10.00 ea	31.00 /mh	310	130.00 /ea	1,300	-	-	-	-	-	-	1,610	1,734
	Valve - Marker Post [carsonite]	2519.100	10.00 ea	31.00 /mh	310	40.00 /ea	400	-	-	-	-	-	-	710	834
	PVC Sch-80 Pipe 1-1/2 Bell End	2336.110	80.00 lf	31.00 /mh	397	3.50 /lf	280	-	-	-	-	-	-	677	836
	PVC Sch 80 Tee 1-1/2 SOC	2336.160	3.00 ea	31.00 /mh	17	13.00 /ea	39	-	-	-	-	-	-	56	62
	DI RJ Compact Cap 4	2511.510	1.00 ea	31.00 /mh	31	148.00 /ea	148	-	-	-	-	-	-	179	191
	4 Bell Restrainer F/C900	2336.380	66.00 ea	31.00 /mh	2,046	70.00 /ea	4,620	-	-	-	-	-	-	6,666	7,484
	DI RJ Compact Cap 4	2511.510	9.00 ea	31.00 /mh	279	148.00 /ea	1,332	-	-	-	-	-	-	1,611	1,723
	Yard Hydrant	2510.200	8.00 ea	31.00 /mh	1,488	1,100.00 /ea	8,800	-	-	-	-	-	-	10,288	10,883
	PVC Sch 80 Primer	15211.201	1.00 qt	31.00 /mh		35.00 /qt	39	-	-	-	-	-	-	39	39
	PVC Sch 80 Cement	15211.201	1.00 qt	31.00 /mh		45.00 /qt	50	-	-	-	-	-	-	50	50
	PVC Sch 80 TEE 1.5" S	15211.211	5.00 ea	31.00 /mh	33	10.20 /ea	51	-	-	-	-	-	-	84	97
	Copper Pipe Type K 3/4	2517.101	50.00 lf	31.00 /mh	233	8.00 /lf	440	-	-	-	-	-	-	673	766
	Wrot Adapter FtgxM 3/4	15231.060	16.00 ea	31.00 /mh	496	25.00 /ea	400	-	-	-	-	-	-	896	1,094
	Valve Special 1-1/2in - Solenoid	15110.003	1.00 ea	31.00 /mh	124	900.00 /ea	900	-	-	-	-	-	-	1,024	1,074
	PVC Sch 80 3/8"xMPT Spray nozzle	15211.202	3.00 ea	31.00 /mh	186	15.00 /ea	45	-	-	-	-	-	-	231	305
	PVC Sch 80 BUSH 1X3/8" SPGXT	15211.231	3.00 ea	31.00 /mh	20	8.00 /ea	24	-	-	-	-	-	-	44	51
	PVC Sch 80 BUSH 1.5X1" SPGXS	15211.230	3.00 ea	31.00 /mh	20	8.00 /ea	24	-	-	-	-	-	-	44	51
	1.5" Yard Hydrant	2510.200	1.00 ea	31.00 /mh	186	1,100.00 /ea	1,100	-	-	-	-	-	-	1,286	1,360
	4" NON POTABLE WATER W3		1,370.00 lf		36,531		75,804	/lf			32,392		12,636	157,362	172,622
02605-2	4" WAS from EXISTING DIGESTER														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 6- 8'	2333.010	400.00 lf	31.00 /mh	1,860	-	-	-	-	-	-	-	-	1,860	2,604
	Trench Backfill 6- 8'	2333.020	400.00 lf	31.00 /mh	2,480	-	-	-	-	-	-	-	-	2,480	3,472
	Utility Bedding Peastone	2305.200	111.11 cy	-	-	24.00 /ton	4,267	-	-	-	-	-	-	4,267	4,267
	Spoils to Waste	2333.060	111.11 cy	31.00 /mh	344	-	-	-	-	-	-	-	-	344	482
	PVC C-900 Pipe 4 DR25	2336.310	400.00 lf	31.00 /mh	1,116	7.00 /lf	3,080	-	-	-	-	-	-	4,196	4,642
	DI RJ Compact 90 4	2511.514	2.00 ea	31.00 /mh	62	300.00 /ea	600	-	-	-	-	-	-	662	687
	DI RJ Compact 45 4	2511.514	5.00 ea	31.00 /mh	155	280.00 /ea	1,400	-	-	-	-	-	-	1,555	1,617
	DI RJ Compact Wye 4	2511.528	3.00 ea	31.00 /mh	186	506.00 /ea	1,518	-	-	-	-	-	-	1,704	1,778
	DI RJ Compact Solid Sleeve Short 4	2511.523	8.00 ea	31.00 /mh	248	290.00 /ea	2,320	-	-	-	-	-	-	2,568	2,667
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.52 mnth	-	-	-	-	-	-	8,500.00 /mnth	4,420	3,500.00 /mnth	1,820	6,240	6,328
	John Deere 624 Loader (172 HP) (M)	1900.132	0.52 mnth	-	-	-	-	-	-	5,500.00 /mnth	2,860	3,000.00 /mnth	1,560	4,420	4,477
	Water Truck, 4,000 Gallon (L)	1900.210	0.52 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,340	1,200.00 /mnth	624	2,964	3,011
	Mikasa Jumping Jack Compactor (L)	1900.138	0.52 mnth	-	-	-	-	-	-	200.00 /mnth	104	100.00 /mnth	52	156	158
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.52 mnth	-	-	-	-	-	-	2,000.00 /mnth	1,040	300.00 /mnth	156	1,196	1,217
	Tracer Wire	2333.080	420.00 lf	31.00 /mh	130	0.25 /lf	116	-	-	-	-	-	-	246	298
	Warning Tape Detectable	2333.080	400.00 lf	31.00 /mh	124	0.07 /lf	28	-	-	-	-	-	-	152	202
	Polybag 12" and Smaller	2333.090	100.00 lf	31.00 /mh	31	0.75 /lf	83	-	-	-	-	-	-	114	126
	Pot Hole Existing	2333.010	8.00 ea	31.00 /mh	992	-	-	-	-	-	-	-	-	992	1,389
	Cross Existing	2333.010	2.00 ea	31.00 /mh	124	100.00 /ea	200	-	-	-	-	-	-	324	374
	Cut Existing	2333.010	6.00 ea	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Tie to Existing	2333.010	6.00 ea	31.00 /mh	372	50.00 /ea	300	-	-	-	-	-	-	672	821
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	248	95.00 /ea	190	-	-	-	-	-	-	438	537
	Valve - Plug MJ 4"	2519.160	2.00 ea	31.00 /mh	124	1,320.00 /ea	2,640	-	-	-	-	-	-	2,764	2,814
	Valve Box Assembly 6' Bury	2519.130	2.00 ea	31.00 /mh	186	330.00 /ea	660	-	-	-	-	-	-	846	920
	Valve Box 2' Extension	2519.130	2.00 ea	31.00 /mh	31	90.00 /ea	180	-	-	-	-	-	-	211	223
	Conc Block for Valve	2519.100	2.00 ea	31.00 /mh	62	50.00 /ea	100	-	-	-	-	-	-	162	187
	Conc Pad for Valve Box	2519.100	2.00 ea	31.00 /mh	248	50.00 /ea	100	-	-	-	-	-	-	348	447
	Valve Stem Extension	2519.100	2.00 ea	31.00 /mh	62	130.00 /ea	260	-	-	-	-	-	-	322	347
	Valve - Marker Post [carsonite]	2519.100	2.00 ea	31.00 /mh	62	40.00 /ea	80	-	-	-	-	-	-	142	167
	4 Bell Restrainer F/C900	2336.380	19.00 ea	31.00 /mh	589	70.00 /ea	1,330	-	-	-	-	-	-	1,919	2,155
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	2.00 ea	31.00 /mh	186	750.00 /ea	1,500	-	-	-	-	-	-	1,686	1,760
	DI Blind Flange 4"	15221.405	2.00 ea	31.00 /mh	62	75.00 /ea	150	-	-	-	-	-	-	212	237
	NBG Kit 125# SS 4in [316SS & 1/8" EPDM]	15125.012	2.00 ea	31.00 /mh	62	300.00 /ea	600	-	-	-	-	-	-	662	687
	DI RJ Compact Cap 4	2511.510	1.00 ea	31.00 /mh	31	148.00 /ea	148	-	-	-	-	-	-	179	191
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	2.00 ea	31.00 /mh	248	125.00 /ea	250	-	-	-	-	-	-	498	597
	Conc Pad for Valve Box	2519.100	2.00 ea	31.00 /mh	248	50.00 /ea	100	-	-	-	-	-	-	348	447
	3500 psi Thrust Block Concrete	3310.105	2.00 cy	31.00 /mh	248	165.00 /cy	347	-	-	-	-	-	-	595	694
	4" WAS from EXISTING DIGESTER		400.00 lf		11,542		22,595	/lf			10,814		4,212	49,163	53,996
02605-2	4" ADMIN DRAIN D														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 6- 8'	2333.010	140.00 lf	31.00 /mh	651	-	-	-	-	-	-	-	-	651	911

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02605-2 4" ADMIN DRAIN D															
	Trench Backfill 6- 8'	2333.020	140.00 lf	31.00 /mh	868	-	-	-	-	-	-	-	-	868	1,215
	Utility Bedding Peastone	2305.200	38.89 cy	-	-	24.00 /ton	1,493	-	-	-	-	-	-	1,493	1,493
	Spoils to Waste	2333.060	38.89 cy	31.00 /mh	121	-	-	-	-	-	-	-	-	121	169
	PVC C-900 Pipe 4	2336.310	140.00 lf	31.00 /mh	391	7.00 /lf	1,078	-	-	-	-	-	-	1,469	1,625
	DI RJ Compact 90 4	2511.514	1.00 ea	31.00 /mh	31	300.00 /ea	300	-	-	-	-	-	-	331	343
	DI RJ Compact 45 4	2511.514	1.00 ea	31.00 /mh	31	280.00 /ea	280	-	-	-	-	-	-	311	323
	DI RJ Compact Wye 4	2511.528	4.00 ea	31.00 /mh	248	506.00 /ea	2,024	-	-	-	-	-	-	2,272	2,371
	DI RJ Compact Solid Sleeve Short 4	2511.523	1.00 ea	31.00 /mh	31	290.00 /ea	290	-	-	-	-	-	-	321	333
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,445	3,500.00 /mnth	595	2,040	2,069
	John Deere 624 Loader (172 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	5,500.00 /mnth	935	3,000.00 /mnth	510	1,445	1,464
	Water Truck, 4,000 Gallon (L)	1900.210	0.17 mnth	-	-	-	-	-	-	4,500.00 /mnth	765	1,200.00 /mnth	204	969	984
	Mikasa Jumping Jack Compactor (L)	1900.138	0.17 mnth	-	-	-	-	-	-	200.00 /mnth	34	100.00 /mnth	17	51	52
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.17 mnth	-	-	-	-	-	-	2,000.00 /mnth	340	300.00 /mnth	51	391	398
	Tracer Wire	2333.080	160.00 lf	31.00 /mh	50	0.25 /lf	44	-	-	-	-	-	-	94	113
	Warning Tape Detectable	2333.080	140.00 lf	31.00 /mh	43	0.07 /lf	10	-	-	-	-	-	-	53	71
	Polybag 12" and Smaller	2333.090	20.00 lf	31.00 /mh	6	0.75 /lf	17	-	-	-	-	-	-	23	25
	Pot Hole Existing	2333.010	2.00 ea	31.00 /mh	248	-	-	-	-	-	-	-	-	248	347
	Cross Existing	2333.010	1.00 ea	31.00 /mh	62	100.00 /ea	100	-	-	-	-	-	-	162	187
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	62	95.00 /ea	190	-	-	-	-	-	-	252	277
	Conc Pad for Valve Box	2519.100	3.00 ea	31.00 /mh	372	50.00 /ea	150	-	-	-	-	-	-	522	671
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	3.00 ea	31.00 /mh	279	750.00 /ea	2,250	-	-	-	-	-	-	2,529	2,641
	DI Blind Flange 4"	15221.405	3.00 ea	31.00 /mh	93	75.00 /ea	225	-	-	-	-	-	-	318	355
	NBG Kit 125# SS 4in [316SS & 1/8" EPDM]	15125.012	3.00 ea	31.00 /mh	93	300.00 /ea	900	-	-	-	-	-	-	993	1,030
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	3.00 ea	31.00 /mh	372	125.00 /ea	375	-	-	-	-	-	-	747	896
	4 Bell Restrainer F/C900	2336.380	6.00 ea	31.00 /mh	186	70.00 /ea	420	-	-	-	-	-	-	606	680
	Link Seal Size LS-300-S	15123.100	10.00 ea	31.00 /mh	47	6.00 /ea	60	-	-	-	-	-	-	107	125
	Core Drilled Hole - 6 -*	15122.100	1.00 ea	31.00 /mh	31	200.00 /ea	200	150.00 /ea	150	-	-	-	-	381	393
	4" ADMIN DRAIN D		140.00 lf		4,563		10,456	1.07 /lf	150		3,569		1,377	20,115	22,011
02605-2 4" HEADWORKS DRAIN D															
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 6- 8'	2333.010	140.00 lf	31.00 /mh	651	-	-	-	-	-	-	-	-	651	911
	Trench Backfill 6- 8'	2333.020	140.00 lf	31.00 /mh	868	-	-	-	-	-	-	-	-	868	1,215
	Utility Bedding Peastone	2305.200	38.89 cy	-	-	24.00 /ton	1,493	-	-	-	-	-	-	1,493	1,493
	Spoils to Waste	2333.060	38.89 cy	31.00 /mh	121	-	-	-	-	-	-	-	-	121	169
	PVC C-900 Pipe 4	2336.310	140.00 lf	31.00 /mh	434	7.00 /lf	1,078	-	-	-	-	-	-	1,512	1,686
	DI RJ Compact 90 4	2511.514	1.00 ea	31.00 /mh	31	300.00 /ea	300	-	-	-	-	-	-	331	343
	DI RJ Compact 45 4	2511.514	2.00 ea	31.00 /mh	62	280.00 /ea	560	-	-	-	-	-	-	622	647
	DI RJ Compact Wye 4	2511.528	2.00 ea	31.00 /mh	124	506.00 /ea	1,012	-	-	-	-	-	-	1,136	1,186
	DI RJ Compact Solid Sleeve Short 4	2511.523	1.00 ea	31.00 /mh	31	290.00 /ea	290	-	-	-	-	-	-	321	333
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.17 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,445	3,500.00 /mnth	595	2,040	2,069
	John Deere 624 Loader (172 HP) (M)	1900.132	0.17 mnth	-	-	-	-	-	-	5,500.00 /mnth	935	3,000.00 /mnth	510	1,445	1,464
	Water Truck, 4,000 Gallon (L)	1900.210	0.17 mnth	-	-	-	-	-	-	4,500.00 /mnth	765	1,200.00 /mnth	204	969	984
	Mikasa Jumping Jack Compactor (L)	1900.138	0.17 mnth	-	-	-	-	-	-	200.00 /mnth	34	100.00 /mnth	17	51	52
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.17 mnth	-	-	-	-	-	-	2,000.00 /mnth	340	300.00 /mnth	51	391	398
	Tracer Wire	2333.080	160.00 lf	31.00 /mh	50	0.25 /lf	44	-	-	-	-	-	-	94	113
	Warning Tape Detectable	2333.080	140.00 lf	31.00 /mh	43	0.07 /lf	10	-	-	-	-	-	-	53	71
	Polybag 12" and Smaller	2333.090	50.00 lf	31.00 /mh	16	0.75 /lf	41	-	-	-	-	-	-	57	63
	Pot Hole Existing	2333.010	3.00 ea	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Cross Existing	2333.010	3.00 ea	31.00 /mh	372	100.00 /ea	300	-	-	-	-	-	-	672	821
	Tracer Wire Test Box	2333.080	2.00 ea	31.00 /mh	62	95.00 /ea	190	-	-	-	-	-	-	252	277
	Conc Block for Valve	2519.100	2.00 ea	31.00 /mh	62	50.00 /ea	100	-	-	-	-	-	-	162	187
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	2.00 ea	31.00 /mh	186	750.00 /ea	1,500	-	-	-	-	-	-	1,686	1,760
	DI Blind Flange 4"	15221.405	2.00 ea	31.00 /mh	62	75.00 /ea	150	-	-	-	-	-	-	212	237
	NBG Kit 125# SS 4in [316SS & 1/8" EPDM]	15125.012	2.00 ea	31.00 /mh	62	300.00 /ea	600	-	-	-	-	-	-	662	687
	DI RJ Compact Red 6x4	2511.520	1.00 ea	31.00 /mh	31	330.00 /ea	330	-	-	-	-	-	-	361	373
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	2.00 ea	31.00 /mh	248	125.00 /ea	250	-	-	-	-	-	-	498	597
	4 Bell Restrainer F/C900	2336.380	6.00 ea	31.00 /mh	186	70.00 /ea	420	-	-	-	-	-	-	606	680
	4" HEADWORKS DRAIN D		140.00 lf		4,321		8,718	/lf			3,569		1,377	17,985	19,785
02605-2 6" - 4" DIGESTER DECANT DEC															
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 8-10'	2333.010	170.00 lf	31.00 /mh	1,054	-	-	-	-	-	-	-	-	1,054	1,476
	Trench Backfill 8-10'	2333.020	170.00 lf	31.00 /mh	1,318	-	-	-	-	-	-	-	-	1,318	1,845
	Utility Bedding Peastone	2305.200	44.44 cy	-	-	24.00 /ton	1,707	-	-	-	-	-	-	1,707	1,707
	Spoils to Waste	2333.060	44.44 cy	31.00 /mh	138	-	-	-	-	-	-	-	-	138	193
	PVC C-900 Pipe 6	2336.310	140.00 lf	31.00 /mh	434	13.00 /lf	2,002	-	-	-	-	-	-	2,436	2,610
	DI RJ Compact 90 6	2511.514	2.00 ea	31.00 /mh	62	425.00 /ea	850	-	-	-	-	-	-	912	937
	DI RJ Compact 45 6	2511.514	6.00 ea	31.00 /mh	186	400.00 /ea	2,400	-	-	-	-	-	-	2,586	2,660
	DI RJ Compact Wye 6	2511.528	1.00 ea	31.00 /mh	62	710.00 /ea	710	-	-	-	-	-	-	772	797
	DI RJ Compact Red 6x4	2511.520	2.00 ea	31.00 /mh	62	330.00 /ea	660	-	-	-	-	-	-	722	747

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02605-2	6" - 4" DIGESTER DECANT DEC														
	DI RJ Compact Solid Sleeve Short 6	2511.523	3.00 ea	31.00 /mh	93	440.00 /ea	1,320	-	-	-	-	-	-	1,413	1,450
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.34 mnth	-	-	-	-	-	-	8,500.00 /mnth	2,890	3,500.00 /mnth	1,190	4,080	4,138
	John Deere 624 Loader (172 HP) (M)	1900.132	0.34 mnth	-	-	-	-	-	-	5,500.00 /mnth	1,870	3,000.00 /mnth	1,020	2,890	2,927
	Water Truck, 4,000 Gallon (L)	1900.210	0.34 mnth	-	-	-	-	-	-	4,500.00 /mnth	1,530	1,200.00 /mnth	408	1,938	1,969
	Mikasa Jumping Jack Compactor (L)	1900.138	0.34 mnth	-	-	-	-	-	-	200.00 /mnth	68	100.00 /mnth	34	102	103
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.34 mnth	-	-	-	-	-	-	2,000.00 /mnth	680	300.00 /mnth	102	782	796
	Tracer Wire	2333.080	180.00 lf	31.00 /mh	56	0.25 /lf	50	-	-	-	-	-	-	105	128
	Warning Tape Detectable	2333.080	160.00 lf	31.00 /mh	50	0.07 /lf	11	-	-	-	-	-	-	61	81
	3500 psi Thrust Block Concrete	3310.105	2.00 cy	31.00 /mh	248	165.00 /cy	347	-	-	-	-	-	-	595	694
	Polybag 12" and Smaller	2333.090	60.00 lf	31.00 /mh	19	0.75 /lf	50	-	-	-	-	-	-	68	76
	Pot Hole Existing	2333.010	1.00 ea	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Cut Existing	2333.010	1.00 ea	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	Tie to Existing	2333.010	1.00 ea	31.00 /mh	62	50.00 /ea	50	-	-	-	-	-	-	112	137
	Tracer Wire Test Box	2333.080	3.00 ea	31.00 /mh	93	95.00 /ea	285	-	-	-	-	-	-	378	415
	Conc Pad for Valve Box	2519.100	1.00 ea	31.00 /mh	124	50.00 /ea	50	-	-	-	-	-	-	174	224
	DI RJ Compact Wye 6x4	2511.528	3.00 ea	31.00 /mh	186	620.00 /ea	1,860	-	-	-	-	-	-	2,046	2,120
	6 Bell Restrainer F/C900	2336.380	3.00 ea	31.00 /mh	93	90.00 /ea	270	-	-	-	-	-	-	363	400
	DI Pipe 6in. dia FxPE - 5ft. 0in.	15221.030	4.00 ea	31.00 /mh	248	600.00 /ea	2,400	-	-	-	-	-	-	2,648	2,747
	NBG Kit 125# SS 6in [316SS & 1/8" EPDM]	15125.012	4.00 ea	31.00 /mh	124	350.00 /ea	1,400	-	-	-	-	-	-	1,524	1,574
	PVC C-900 Pipe 4	2336.310	30.00 lf	31.00 /mh	930	7.00 /lf	231	-	-	-	-	-	-	1,161	1,533
	DI RJ Compact Wye 4	2511.528	1.00 ea	31.00 /mh	62	506.00 /ea	506	-	-	-	-	-	-	568	593
	DI RJ Compact 45 4	2511.514	2.00 ea	31.00 /mh	62	280.00 /ea	560	-	-	-	-	-	-	622	647
	DI RJ Compact Solid Sleeve Long 4	2511.522	1.00 ea	31.00 /mh	31	290.00 /ea	290	-	-	-	-	-	-	321	333
	DI RJ Compact Cap 4	2511.510	1.00 ea	31.00 /mh	31	148.00 /ea	148	-	-	-	-	-	-	179	191
	4 Bell Restrainer F/C900	2336.380	6.00 ea	31.00 /mh	186	70.00 /ea	420	-	-	-	-	-	-	606	680
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	1.00 ea	31.00 /mh	93	750.00 /ea	750	-	-	-	-	-	-	843	880
	DI Blind Flange 4"	15221.405	1.00 ea	31.00 /mh	31	75.00 /ea	75	-	-	-	-	-	-	106	118
	NBG Kit 125# SS 4in [316SS & 1/8" EPDM]	15125.012	1.00 ea	31.00 /mh	31	300.00 /ea	300	-	-	-	-	-	-	331	343
	Cleanout Frame and Cover Cast Iron w/ 12" Clear ID	2327.120	1.00 ea	31.00 /mh	124	125.00 /ea	125	-	-	-	-	-	-	249	299
	Valve Plug Flange 125# 6in Electric Actuated	15110.650	2.00 ea	31.00 /mh	372	7,280.00 /ea	14,560	-	-	-	-	-	-	14,932	15,081
	Instrument - Analyzer - Suspended Solids -	17100.000	2.00 ea	31.00 /mh	248	500.00 /ea	1,000	-	-	-	-	-	-	1,248	1,347
	6" - 4" DIGESTER DECANT DEC		160.00 lf		7,593		35,485	/lf			7,138		2,754	52,971	56,151
0330 4-	Encase Pipe Crossings at Water Line														
	Formwork Pipe Encasement	3100.108	68.00 sf	31.00 /mh	527	1.50 /sf	107	-	-	-	-	-	-	634	845
	Place Pipe Encasement	3310.195	6.00 cy	31.00 /mh	199	166.00 /cy	1,066	-	-	-	-	-	-	1,265	1,344
	Nails and Hardware	3150.200	68.00 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Form Ties Specialty	3150.632	10.00 ea	31.00 /mh	62	5.00 /ea	50	-	-	-	-	-	-	112	137
	Pipe Tie Downs (Small)	3150.200	5.00 ea	31.00 /mh	620	75.00 /ea	375	-	-	-	-	-	-	995	1,243
	Dimension Lumber	3150.200	68.00 sf	31.00 /mh	0	0.50 /sf	34	-	-	-	-	-	-	34	34
	Oil SOG Form	3100.310	68.00 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Finish- Rough	3350.110	30.00 sf	31.00 /mh	8	0.01 /sf	0	-	-	-	-	-	-	9	12
	Liquid Curing Compounds	3390.170	30.00 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	4	4
	Encase Pipe Crossings at Water Line		2.17 CY		1,418		1,638	/CY						3,056	3,624
	PVC C900				228,838		1,002,266		34,700		238,268		76,806	1,580,879	1,677,180
PVC30 SCH80															
02610-	2"-1.5" POTABLE WATER W1														
	Testing Pressure & Leak - Piping	1166.100	3.00 ea	31.00 /mh	744	50.00 /ea	150	-	-	50.00 /ea	150	-	-	1,044	1,345
	Trench Excavtion 6- 8'	2333.010	520.00 lf	31.00 /mh	2,418	-	-	-	-	-	-	-	-	2,418	3,385
	Trench Backfill 6- 8'	2333.020	520.00 lf	31.00 /mh	3,224	-	-	-	-	-	-	-	-	3,224	4,514
	Utility Bedding Peastone	2305.200	96.30 cy	-	-	24.00 /ton	3,698	-	-	-	-	-	-	3,698	3,698
	Spoils to Waste	2333.060	96.30 cy	31.00 /mh	299	-	-	-	-	-	-	-	-	299	418
	PVC Sch 80 Pipe 2 Bell End	2336.110	290.00 lf	31.00 /mh	899	4.00 /lf	1,276	-	-	-	-	-	-	2,175	2,535
	PVC Sch 80 90 ell 2 SOC	2336.120	3.00 ea	31.00 /mh	15	6.00 /ea	18	-	-	-	-	-	-	33	39
	PVC Sch 80 45 bend 2 SOC	2336.120	3.00 ea	31.00 /mh	15	12.00 /ea	36	-	-	-	-	-	-	51	57
	PVC Sch 80 Tee 3/8 SOC	2336.160	1.00 ea	31.00 /mh	8	4.00 /ea	4	-	-	-	-	-	-	12	15
	PVC Sch 80 Wye 2 x 2 SOC	2336.170	1.00 ea	31.00 /mh	5	29.00 /ea	29	-	-	-	-	-	-	34	36
	PVC Sch 80 Coupling Reducer 2 x 1-1/2 SOC x SOC	2336.190	1.00 ea	31.00 /mh	5	10.00 /ea	10	-	-	-	-	-	-	15	17
	PVC Sch 80 Coupling 2" SOC	2336.180	10.00 ea	31.00 /mh	50	6.00 /ea	60	-	-	-	-	-	-	110	129
	PVC Sch 80 Caps 2 SOC	2336.130	3.00 ea	31.00 /mh	15	10.00 /ea	30	-	-	-	-	-	-	45	51
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.56 mnth	-	-	-	-	-	-	8,500.00 /mnth	4,760	3,500.00 /mnth	1,960	6,720	6,815
	John Deere 624 Loader (172 HP) (M)	1900.132	0.56 mnth	-	-	-	-	-	-	5,500.00 /mnth	3,080	3,000.00 /mnth	1,680	4,760	4,822
	Water Truck, 4,000 Gallon (L)	1900.210	0.56 mnth	-	-	-	-	-	-	4,500.00 /mnth	2,520	1,200.00 /mnth	672	3,192	3,242
	Mikasa Jumping Jack Compactor (L)	1900.138	0.56 mnth	-	-	-	-	-	-	200.00 /mnth	112	100.00 /mnth	56	168	170
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.56 mnth	-	-	-	-	-	-	2,000.00 /mnth	1,120	300.00 /mnth	168	1,288	1,310
	Pot Hole Existing	2333.010	3.00 ea	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Cross Existing	2333.010	3.00 ea	31.00 /mh	186	100.00 /ea	300	-	-	-	-	-	-	486	560
	Tie to Existing	2333.010	1.00 ea	31.00 /mh	62	50.00 /ea	50	-	-	-	-	-	-	112	137
	Warning Tape Detectable	2333.080	520.00 lf	31.00 /mh	161	0.07 /lf	36	-	-	-	-	-	-	198	262
	Tracer Wire	2333.080	520.00 lf	31.00 /mh	161	0.25 /lf	143	-	-	-	-	-	-	304	369
	Tracer Wire Test Box	2333.080	3.00 ea	31.00 /mh	93	95.00 /ea	285	-	-	-	-	-	-	378	415

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	02610- 2"-1.5" POTABLE WATER W1														
	Disinfection/Chlorination of PW (Enter Line Size)	1166.100	3.00 ea	31.00 /mh	744	50.00 /ea	150	-	-	-	-	-	-	894	1,192
	Valve - Gate 2"	2519.110	5.00 ea	31.00 /mh	310	500.00 /ea	2,500	-	-	-	-	-	-	2,810	2,934
	Valve Box Assembly 6' Bury	2519.130	5.00 ea	31.00 /mh	465	330.00 /ea	1,650	-	-	-	-	-	-	2,115	2,301
	Valve Box 2' Extension	2519.130	5.00 ea	31.00 /mh	78	90.00 /ea	450	-	-	-	-	-	-	528	559
	Conc Block for Valve	2519.100	5.00 ea	31.00 /mh	78	50.00 /ea	250	-	-	-	-	-	-	328	358
	Conc Pad for Valve Box	2519.100	5.00 ea	31.00 /mh	620	50.00 /ea	250	-	-	-	-	-	-	870	1,118
	Valve Stem Extension	2519.100	5.00 ea	31.00 /mh	155	130.00 /ea	650	-	-	-	-	-	-	805	867
	Valve - Marker Post [carsonite]	2519.100	5.00 ea	31.00 /mh	155	40.00 /ea	200	-	-	-	-	-	-	355	417
	PVC Sch-80 Pipe 1-1/2 Bell End	2336.110	230.00 lf	31.00 /mh	1,141	3.50 /lf	805	-	-	-	-	-	-	1,946	2,402
	PVC Sch-80 45 Bend 1-1/2 SOC	2336.120	2.00 ea	31.00 /mh	10	10.00 /ea	20	-	-	-	-	-	-	30	34
	PVC Sch 80 90 ell 1-1/2 SOC	2336.120	2.00 ea	31.00 /mh	10	5.00 /ea	10	-	-	-	-	-	-	20	24
	PVC Sch 80 Coupling 1-1/2" SOC	2336.180	5.00 ea	31.00 /mh	25	6.00 /ea	30	-	-	-	-	-	-	55	65
	PVC Sch 80 Cement	15211.201	5.00 qt	31.00 /mh		45.00 /qt	248	-	-	-	-	-	-	248	248
	PVC Sch 80 Primer	15211.201	5.00 qt	31.00 /mh		35.00 /qt	193	-	-	-	-	-	-	193	193
	PVC Sch 80 MALE ADPT 2" SXMT	15211.217	10.00 ea	31.00 /mh	65	9.90 /ea	99	-	-	-	-	-	-	164	190
	Water Tap Saddle 6 x 2"	2519.424	1.00 ea	31.00 /mh	62	80.00 /ea	80	-	-	-	-	-	-	142	167
	2"-1.5" POTABLE WATER W1		520.00 lf		12,647		13,709	/lf			11,742		4,536	42,635	47,928
	02610- 6" ROOF DRAIN HEADWORKS														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 0- 4'	2333.010	40.00 lf	31.00 /mh	99	-	-	-	-	-	-	-	-	99	139
	Trench Backfill 0- 4'	2333.020	40.00 lf	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Utility Bedding Peastone	2305.200	11.11 cy	-	-	24.00 /to n	427	-	-	-	-	-	-	427	427
	Spoils to Waste	2333.060	11.11 cy	31.00 /mh	34	-	-	-	-	-	-	-	-	34	48
	PVC Sch 80 Pipe 6 Bell End	2336.110	40.00 lf	31.00 /mh	198	28.00 /lf	1,232	-	-	-	-	-	-	1,430	1,510
	PVC Sch 80 90 ell 6 SOC	2336.120	1.00 ea	31.00 /mh	6	55.00 /ea	55	-	-	-	-	-	-	61	63
	PVC Sch 80 Coupling 6" SOC	2336.180	1.00 ea	31.00 /mh	6	43.00 /ea	43	-	-	-	-	-	-	49	51
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.04 mnth	-	-	-	-	-	-	8,500.00 /mnth	340	3,500.00 /mnth	140	480	487
	John Deere 624 Loader (172 HP) (M)	1900.132	0.04 mnth	-	-	-	-	-	-	5,500.00 /mnth	220	3,000.00 /mnth	120	340	344
	Water Truck, 4,000 Gallon (L)	1900.210	0.04 mnth	-	-	-	-	-	-	4,500.00 /mnth	180	1,200.00 /mnth	48	228	232
	Mikasa Jumping Jack Compactor (L)	1900.138	0.04 mnth	-	-	-	-	-	-	200.00 /mnth	8	100.00 /mnth	4	12	12
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.04 mnth	-	-	-	-	-	-	2,000.00 /mnth	80	300.00 /mnth	12	92	94
	Import Rip Rap - Type L (D50 = 9")	2305.450	1.00 cy	-	-	55.00 /to n	91	-	-	-	-	-	-	91	91
	PVC Sch 80 Cement	15211.201	1.00 qt	31.00 /mh		45.00 /qt	50	-	-	-	-	-	-	50	50
	PVC Sch 80 Primer	15211.201	1.00 qt	31.00 /mh		35.00 /qt	39	-	-	-	-	-	-	39	39
	PVC Sch 80 Coupling Reducer 6 x 4 SOC x SOC	2336.190	1.00 ea	31.00 /mh	6	93.00 /ea	93	-	-	-	-	-	-	99	101
	6" ROOF DRAIN HEADWORKS		40.00 lf		721		2,078	/lf			878		324	4,001	4,307
	02610- 6" UV ROOF DRAIN														
	Trench Excavtion 0- 4'	2333.010	35.00 lf	31.00 /mh	130	-	-	-	-	-	-	-	-	130	182
	Trench Backfill 0- 4'	2333.020	35.00 lf	31.00 /mh	163	-	-	-	-	-	-	-	-	163	228
	Utility Bedding Peastone	2305.200	8.10 cy	-	-	24.00 /to n	311	-	-	-	-	-	-	311	311
	Spoils to Waste	2333.060	8.10 cy	31.00 /mh	25	-	-	-	-	-	-	-	-	25	35
	PVC Sch 80 Pipe 6 Bell End	2336.110	35.00 lf	31.00 /mh	174	28.00 /lf	1,078	-	-	-	-	-	-	1,252	1,321
	PVC Sch 80 90 ell 6 SOC	2336.120	4.00 ea	31.00 /mh	22	55.00 /ea	220	-	-	-	-	-	-	242	251
	PVC Sch 80 Coupling Reducer 6 x 4 SOC x SOC	2336.190	4.00 ea	31.00 /mh	22	93.00 /ea	372	-	-	-	-	-	-	394	403
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.04 mnth	-	-	-	-	-	-	8,500.00 /mnth	340	3,500.00 /mnth	140	480	487
	John Deere 624 Loader (172 HP) (M)	1900.132	0.04 mnth	-	-	-	-	-	-	5,500.00 /mnth	220	3,000.00 /mnth	120	340	344
	Water Truck, 4,000 Gallon (L)	1900.210	0.04 mnth	-	-	-	-	-	-	4,500.00 /mnth	180	1,200.00 /mnth	48	228	232
	Mikasa Jumping Jack Compactor (L)	1900.138	0.04 mnth	-	-	-	-	-	-	200.00 /mnth	8	100.00 /mnth	4	12	12
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.04 mnth	-	-	-	-	-	-	2,000.00 /mnth	80	300.00 /mnth	12	92	94
	PVC Sch 80 Cement	15211.201	1.00 qt	31.00 /mh		45.00 /qt	50	-	-	-	-	-	-	50	50
	PVC Sch 80 Primer	15211.201	1.00 qt	31.00 /mh		35.00 /qt	39	-	-	-	-	-	-	39	39
	Import Rip Rap - Type L (D50 = 9")	2305.450	4.00 cy	-	-	55.00 /to n	363	-	-	-	-	-	-	363	363
	Rip Rap Hand Place Loose	2305.450	16.00 sf	31.00 /mh	248	-	-	-	-	-	-	-	-	248	347
	6" UV ROOF DRAIN		35.00 lf		784		2,432	/lf			828		324	4,368	4,699
	PVC80 SCH80				14,152		18,220				13,448		5,184	51,004	56,934
	052 Yard Piping				316,966		1,397,959	/LS	58,460		318,468		106,424	2,198,277	2,331,432
	100 Headworks														
	CML Ductile Iron														
	0330 4- Encase 14" ABI to Anoxic														
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	147.76 sf	31.00 /mh	1,145	1.50 /sf	233	-	-	-	-	-	-	1,378	1,836
	Place Pipe Encasement	3310.195	8.00 cy	31.00 /mh	265	166.00 /cy	1,421	-	-	-	-	-	-	1,686	1,792
	Nails and Hardware	3150.200	147.76 sf	31.00 /mh	0	0.04 /sf	6	-	-	-	-	-	-	6	6
	Form Ties Specialty	3150.632	15.00 ea	31.00 /mh	93	5.00 /ea	75	-	-	-	-	-	-	168	205
	Pipe Tie Downs (Medium)	3150.200	6.00 ea	31.00 /mh	930	150.00 /ea	900	-	-	-	-	-	-	1,830	2,202
	Dimension Lumber	3150.200	147.76 sf	31.00 /mh	0	0.50 /sf	74	-	-	-	-	-	-	74	74
	Oil SOG Form	3100.310	147.76 sf	31.00 /mh	0	0.02 /sf	3	-	-	-	-	-	-	3	3

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0330 4- Encase 14" ABI to Anoxic														
	Finish- Rough	3350.110	66.75 sf	31.00 /mh	19	0.01 /sf	0	-	-	-	-	-	-	19	26
	Liquid Curing Compounds	3390.170	66.75 sf	31.00 /mh	4	0.06 /sf	4	-	-	-	-	-	-	8	10
	Encasement Rebar	3210.104	0.30 tn	31.00 /mh	279	1,400.00 /tn	441	-	-	-	-	-	-	720	832
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	45	8.50 /lf	143	-	-	-	-	-	-	187	205
	Encase 14" ABI to Anoxic		8.00 CY		2,780		3,300	/CY						6,080	7,192
	0330 4- Encase 14" ABI to Anaerobic														
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	78.34 sf	31.00 /mh	607	1.50 /sf	123	-	-	-	-	-	-	731	973
	Place Pipe Encasement	3310.195	4.00 cy	31.00 /mh	133	166.00 /cy	710	-	-	-	-	-	-	843	896
	Nails and Hardware	3150.200	78.34 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Form Ties Specialty	3150.632	8.00 ea	31.00 /mh	50	5.00 /ea	40	-	-	-	-	-	-	90	109
	Pipe Tie Downs (Medium)	3150.200	3.00 ea	31.00 /mh	465	150.00 /ea	450	-	-	-	-	-	-	915	1,101
	Dimension Lumber	3150.200	78.34 sf	31.00 /mh	0	0.50 /sf	39	-	-	-	-	-	-	39	39
	Oil SOG Form	3100.310	78.34 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Finish- Rough	3350.110	32.04 sf	31.00 /mh	9	0.01 /sf	0	-	-	-	-	-	-	9	13
	Liquid Curing Compounds	3390.170	32.04 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	4	5
	Encasement Rebar	3210.104	0.28 tn	31.00 /mh	260	1,400.00 /tn	412	-	-	-	-	-	-	672	776
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	45	8.50 /lf	143	-	-	-	-	-	-	187	205
	Encase 14" ABI to Anaerobic		4.00 CY		1,570		1,924	/CY						3,495	4,123
	0330 4- Encase 14" ABI to Orbal														
	Excavation - Mass	2317.105	42.00 cy	31.00 /mh	65	-	-	-	-	-	-	-	-	65	91
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	78.34 sf	31.00 /mh	607	1.50 /sf	123	-	-	-	-	-	-	731	973
	Place Pipe Encasement	3310.195	3.50 cy	31.00 /mh	116	166.00 /cy	622	-	-	-	-	-	-	738	784
	Nails and Hardware	3150.200	78.34 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Form Ties Specialty	3150.632	10.00 ea	31.00 /mh	62	5.00 /ea	50	-	-	-	-	-	-	112	137
	Pipe Tie Downs (Medium)	3150.200	3.00 ea	31.00 /mh	465	150.00 /ea	450	-	-	-	-	-	-	915	1,101
	Dimension Lumber	3150.200	78.34 sf	31.00 /mh	0	0.50 /sf	39	-	-	-	-	-	-	39	39
	Oil SOG Form	3100.310	78.34 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Finish- Rough	3350.110	32.04 sf	31.00 /mh	9	0.01 /sf	0	-	-	-	-	-	-	9	13
	Liquid Curing Compounds	3390.170	32.04 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	4	5
	Encasement Rebar	3210.104	0.13 tn	31.00 /mh	121	1,400.00 /tn	192	-	-	-	-	-	-	313	361
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	45	8.50 /lf	143	-	-	-	-	-	-	187	205
	Encase 14" ABI to Orbal		3.50 CY		1,492		1,626	/CY						3,118	3,714
	0330 4- Encase 14" ABI to Phase 5 Future														
	Excavation - Mass	2317.105	42.00 cy	31.00 /mh	65	-	-	-	-	-	-	-	-	65	91
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	78.34 sf	31.00 /mh	607	1.50 /sf	123	-	-	-	-	-	-	731	973
	Place Pipe Encasement	3310.195	4.00 cy	31.00 /mh	133	166.00 /cy	710	-	-	-	-	-	-	843	896
	Nails and Hardware	3150.200	78.34 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Form Ties Specialty	3150.632	8.00 ea	31.00 /mh	50	5.00 /ea	40	-	-	-	-	-	-	90	109
	Pipe Tie Downs (Medium)	3150.200	3.00 ea	31.00 /mh	465	150.00 /ea	450	-	-	-	-	-	-	915	1,101
	Dimension Lumber	3150.200	78.34 sf	31.00 /mh	0	0.50 /sf	39	-	-	-	-	-	-	39	39
	Oil SOG Form	3100.310	78.34 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Finish- Rough	3350.110	32.04 sf	31.00 /mh	9	0.01 /sf	0	-	-	-	-	-	-	9	13
	Liquid Curing Compounds	3390.170	32.04 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	4	5
	Encasement Rebar	3210.104	0.13 tn	31.00 /mh	121	1,400.00 /tn	192	-	-	-	-	-	-	313	361
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	45	8.50 /lf	143	-	-	-	-	-	-	187	205
	DI Pipe RJ - Class 250 14	2511.401	13.00 lf	31.00 /mh	403	80.00 /lf	1,144	-	-	-	-	-	-	1,547	1,708
	DI RJ Compact 90 14	2511.514	1.00 ea	31.00 /mh	62	1,660.00 /ea	1,660	-	-	-	-	-	-	1,722	1,747
	DI RJ Compact Cap 14	2511.510	2.00 ea	31.00 /mh	124	710.00 /ea	1,420	-	-	-	-	-	-	1,544	1,594
	Encase 14" ABI to Phase 5 Future		4.00 CY		2,085		5,928	/CY						8,013	8,848
	0330 4- Encase 14" ABI to Phase 4 Future														
	Excavation - Mass	2317.105	42.00 cy	31.00 /mh	65	-	-	-	-	-	-	-	-	65	91
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	78.34 sf	31.00 /mh	607	1.50 /sf	123	-	-	-	-	-	-	731	973
	Place Pipe Encasement	3310.195	4.00 cy	31.00 /mh	133	166.00 /cy	710	-	-	-	-	-	-	843	896
	Nails and Hardware	3150.200	78.34 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Form Ties Specialty	3150.632	8.00 ea	31.00 /mh	50	5.00 /ea	40	-	-	-	-	-	-	90	109
	Pipe Tie Downs (Medium)	3150.200	4.00 ea	31.00 /mh	620	150.00 /ea	600	-	-	-	-	-	-	1,220	1,468
	Dimension Lumber	3150.200	78.34 sf	31.00 /mh	0	0.50 /sf	39	-	-	-	-	-	-	39	39
	Oil SOG Form	3100.310	78.34 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Finish- Rough	3350.110	32.04 sf	31.00 /mh	9	0.01 /sf	0	-	-	-	-	-	-	9	13
	Liquid Curing Compounds	3390.170	32.04 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	4	5
	Encasement Rebar	3210.104	0.13 tn	31.00 /mh	121	1,400.00 /tn	192	-	-	-	-	-	-	313	361
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	50	8.50 /lf	143	-	-	-	-	-	-	192	212
	DI Pipe RJ - Class 250 14	2511.401	13.00 lf	31.00 /mh	403	80.00 /lf	1,144	-	-	-	-	-	-	1,547	1,708
	DI RJ Compact 90 14	2511.514	1.00 ea	31.00 /mh	62	1,660.00 /ea	1,660	-	-	-	-	-	-	1,722	1,747
	DI RJ Compact Cap 14	2511.510	1.00 ea	31.00 /mh	62	710.00 /ea	710	-	-	-	-	-	-	772	797
	Encase 14" ABI to Phase 4 Future		4.00 CY		2,183		5,368	/CY						7,551	8,425
	0330 4- Encase 14" ABI to Phase 4 Future (Diagonal Line)														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0330 4- Encase 14" ABI to Phase 4 Future (Diagonal Line)														
	Excavation - Mass	2317.105	76.00 cy	31.00 /mh	118	-	-	-	-	-	-	-	-	118	165
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	126.40 sf	31.00 /mh	980	1.50 /sf	199	-	-	-	-	-	-	1,179	1,570
	Place Pipe Encasement	3310.195	6.00 cy	31.00 /mh	199	166.00 /cy	1,066	-	-	-	-	-	-	1,265	1,344
	Nails and Hardware	3150.200	126.40 sf	31.00 /mh	0	0.04 /sf	5	-	-	-	-	-	-	5	5
	Form Ties Specialty	3150.632	13.00 ea	31.00 /mh	81	5.00 /ea	65	-	-	-	-	-	-	146	178
	Pipe Tie Downs (Medium)	3150.200	5.00 ea	31.00 /mh	775	150.00 /ea	750	-	-	-	-	-	-	1,525	1,835
	Dimension Lumber	3150.200	126.40 sf	31.00 /mh	0	0.50 /sf	63	-	-	-	-	-	-	63	63
	Oil SOG Form	3100.310	126.40 sf	31.00 /mh	0	0.02 /sf	3	-	-	-	-	-	-	3	3
	Finish- Rough	3350.110	56.07 sf	31.00 /mh	16	0.01 /sf	0	-	-	-	-	-	-	16	22
	Liquid Curing Compounds	3390.170	56.07 sf	31.00 /mh	3	0.06 /sf	3	-	-	-	-	-	-	7	8
	Pipe Encasement Rebar	3200.980	0.23 tn	31.00 /mh	215	1,400.00 /tn	323	-	-	-	-	-	-	538	624
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	50	8.50 /lf	143	-	-	-	-	-	-	192	212
	DI Pipe RJ - Class 250 14	2511.401	20.00 lf	31.00 /mh	372	80.00 /lf	1,760	-	-	-	-	-	-	2,132	2,281
	DI RJ Compact 90 14	2511.514	1.00 ea	31.00 /mh	62	1,660.00 /ea	1,660	-	-	-	-	-	-	1,722	1,747
	DI RJ Compact Cap 14	2511.510	1.00 ea	31.00 /mh	62	710.00 /ea	710	-	-	-	-	-	-	772	797
	Encase 14" ABI to Phase 4 Future (Diagonal Line)		6.00 CY		2,932		6,751	/CY						9,682	10,855
	CML Ductile Iron				13,042		24,897							37,939	43,156
GEN	General														
	02643-1- 20" RS Influent Underslab														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 6- 8'	2333.010	40.00 lf	31.00 /mh	186	-	-	-	-	-	-	-	-	186	260
	Trench Backfill 6- 8'	2333.020	40.00 lf	31.00 /mh	248	-	-	-	-	-	-	-	-	248	347
	Spoils to Waste	2333.060	37.04 cy	31.00 /mh	115	-	-	-	-	-	-	-	-	115	161
	DI Pipe RJ - Class 250 20 Epoxy Lined	2511.401	50.00 lf	31.00 /mh	341	165.00 /lf	9,075	-	-	-	-	-	-	9,416	9,552
	DI RJ Compact 90 20 Epoxy Lined	2511.514	1.00 ea	31.00 /mh	124	6,300.00 /ea	6,300	-	-	-	-	-	-	6,424	6,474
	Polybag 24" and smaller	2333.090	40.00 lf	31.00 /mh	12	1.40 /lf	62	-	-	-	-	-	-	74	79
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.02 mnth	-	-	-	-	-	-	8,500.00 /mnth	153	3,500.00 /mnth	63	216	219
	John Deere 624 Loader (172 HP) (M)	1900.132	0.02 mnth	-	-	-	-	-	-	5,500.00 /mnth	99	3,000.00 /mnth	54	153	155
	Water Truck, 4,000 Gallon (L)	1900.210	0.01 mnth	-	-	-	-	-	-	4,500.00 /mnth	41	1,200.00 /mnth	11	51	52
	Mikasa Jumping Jack Compactor (L)	1900.138	0.01 mnth	-	-	-	-	-	-	200.00 /mnth	2	100.00 /mnth	1	3	3
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.01 mnth	-	-	-	-	-	-	2,000.00 /mnth	18	300.00 /mnth	3	21	21
	DI Floor Pipe FLG x MJ w/ Collar 20in x 3ft 0in long	15221.232	1.00 ea	31.00 /mh	186	6,300.00 /ea	6,300	-	-	-	-	-	-	6,486	6,560
	20" RS Influent Underslab		40.00 lf		1,460		21,787	/lf			362		131	23,741	24,332
	02643-1- 6" RS Underslab														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 6- 8'	2333.010	10.00 lf	31.00 /mh	47	-	-	-	-	-	-	-	-	47	65
	Trench Backfill 6- 8'	2333.020	10.00 lf	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	Utility Bedding Peastone	2305.200	5.93 cy	-	-	24.00 /ton	228	-	-	-	-	-	-	228	228
	Spoils to Waste	2333.060	5.93 cy	31.00 /mh	18	-	-	-	-	-	-	-	-	18	26
	DI Pipe RJ - Class 350 6 Epoxy Lined	2511.401	15.00 lf	31.00 /mh	47	43.00 /lf	710	-	-	-	-	-	-	756	775
	DI RJ Compact 90 6 Epoxy Lined	2511.514	1.00 ea	31.00 /mh	62	685.00 /ea	685	-	-	-	-	-	-	747	772
	Polybag 12" and Smaller	2333.090	10.00 lf	31.00 /mh	3	0.75 /lf	8	-	-	-	-	-	-	11	13
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.01 mnth	-	-	-	-	-	-	8,500.00 /mnth	43	3,500.00 /mnth	18	60	61
	John Deere 624 Loader (172 HP) (M)	1900.132	0.01 mnth	-	-	-	-	-	-	5,500.00 /mnth	28	3,000.00 /mnth	15	43	43
	Water Truck, 4,000 Gallon (L)	1900.210	0.00 mnth	-	-	-	-	-	-	4,500.00 /mnth	9	1,200.00 /mnth	2	11	12
	Mikasa Jumping Jack Compactor (L)	1900.138	0.00 mnth	-	-	-	-	-	-	200.00 /mnth	0	100.00 /mnth	0	1	1
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.00 mnth	-	-	-	-	-	-	2,000.00 /mnth	4	300.00 /mnth	1	5	5
	DI Floor Pipe FLG x MJ w/ Collar 6in x 3ft 0in long	15221.232	1.00 ea	31.00 /mh	93	1,400.00 /ea	1,400	-	-	-	-	-	-	1,493	1,530
	6" RS Underslab		10.00 lf		579		3,080	/lf			133		36	3,829	4,063
	0330 4- 20" RS, Influent Underslab Encasement														
	Formwork Pipe Encasement	3100.108	192.00 sf	31.00 /mh	1,488	1.50 /sf	302	-	-	-	-	-	-	1,790	2,386
	Place Pipe Encasement	3310.195	16.00 cy	31.00 /mh	425	166.00 /cy	2,842	-	-	-	-	-	-	3,267	3,436
	Nails and Hardware	3150.200	192.00 sf	31.00 /mh	0	0.04 /sf	8	-	-	-	-	-	-	8	8
	Form Ties Specialty	3150.632	12.00 ea	31.00 /mh	74	5.00 /ea	60	-	-	-	-	-	-	134	164
	Pipe Tie Downs (Small)	3150.200	6.00 ea	31.00 /mh	930	75.00 /ea	450	-	-	-	-	-	-	1,380	1,752
	Dimension Lumber	3150.200	192.00 sf	31.00 /mh	0	0.50 /sf	96	-	-	-	-	-	-	96	96
	Oil SOG Form	3100.310	192.00 sf	31.00 /mh	0	0.02 /sf	4	-	-	-	-	-	-	4	4
	Finish- Rough	3350.110	80.00 sf	31.00 /mh	22	0.01 /sf	0	-	-	-	-	-	-	23	32
	Liquid Curing Compounds	3390.170	80.00 sf	31.00 /mh	5	0.06 /sf	5	-	-	-	-	-	-	10	12
	4500 psi Concrete	3310.100	11.85 cy	-	-	165.00 /cy	2,093	-	-	-	-	-	-	2,093	2,093
	Encasement Rebar	3210.104	1.48 tn	31.00 /mh	1,377	1,400.00 /tn	2,177	-	-	-	-	-	-	3,554	4,105
	Slab Void - 6"	3100.320	41.00 sf	31.00 /mh	13	10.00 /sf	451	-	-	-	-	-	-	464	469
	20" RS, Influent Underslab Encasement		16.00 CY		4,334		8,488	/CY						12,822	14,556
	0330 4- 6" RS Underslab Encasement														
	Other Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	112.00 sf	31.00 /mh	868	1.50 /sf	176	-	-	-	-	-	-	1,044	1,392
	Place Pipe Encasement	3310.195	9.00 cy	31.00 /mh	299	166.00 /cy	1,599	-	-	-	-	-	-	1,897	2,017
	Nails and Hardware	3150.200	112.00 sf	31.00 /mh	0	0.04 /sf	4	-	-	-	-	-	-	5	5
	Form Ties Specialty	3150.632	7.00 ea	31.00 /mh	43	5.00 /ea	35	-	-	-	-	-	-	78	96

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0330	4- 6" RS Underslab Encasement														
	Pipe Tie Downs (Small)	3150.200	4.00 ea	31.00 /mh	496	75.00 /ea	300	-	-	-	-	-	-	796	994
	Dimension Lumber	3150.200	112.00 sf	31.00 /mh	0	0.50 /sf	56	-	-	-	-	-	-	56	56
	Oil SOG Form	3100.310	112.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Finish- Rough	3350.110	40.00 sf	31.00 /mh	11	0.01 /sf	0	-	-	-	-	-	-	11	16
	Liquid Curing Compounds	3390.170	40.00 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	5	6
	Encasement Rebar	3210.104	0.74 tn	31.00 /mh	689	1,400.00 /tn	1,089	-	-	-	-	-	-	1,778	2,054
	4500 psi Concrete	3310.100	5.93 cy	-	-	165.00 /cy	1,046	-	-	-	-	-	-	1,046	1,046
	Slab Void - 6"	3100.320	30.00 sf	31.00 /mh	93	10.00 /sf	330	-	-	-	-	-	-	423	460
	6" RS Underslab Encasement		9.00 CY		2,502		4,641	/CY						7,143	8,143
150-01	1c 12042002 16"/20" RS to Influent Channel														
	DI Pipe 16in. dia FxF - 4ft. 0in. Epoxy Lined	15221.010	2.00 ea	31.00 /mh	248	3,700.00 /ea	7,400	-	-	-	-	-	-	7,648	7,747
	DI Pipe 16in. dia FxPE - 10ft. 0in. Epoxy Lined	15221.030	1.00 ea	31.00 /mh	124	6,500.00 /ea	6,500	-	-	-	-	-	-	6,624	6,674
	DI Pipe 20in. dia FxPE - 6ft. 1in. Epoxy Lined	15221.030	2.00 ea	31.00 /mh	248	4,000.00 /ea	8,000	-	-	-	-	-	-	8,248	8,347
	DI Flanged Con Red 20x16" Epoxy Lined	15221.445	2.00 ea	31.00 /mh	248	6,100.00 /ea	12,200	-	-	-	-	-	-	12,448	12,547
	NBG Kit 125# SS 16in	15125.012	5.00 ea	31.00 /mh	155	900.00 /ea	4,500	-	-	-	-	-	-	4,655	4,717
	NBG Kit 125# SS 20in	15125.012	2.00 ea	31.00 /mh	124	1,200.00 /ea	2,400	-	-	-	-	-	-	2,524	2,574
	DI Wall Pipe FLG x PE w/ Collar & Tapped Holes 20in x 3ft 0in long	15221.380	1.00 ea	31.00 /mh	186	3,300.00 /ea	3,300	-	-	-	-	-	-	3,486	3,560
	Instrument - Flow - Magnetic Flow Meter - 16in	17200.000	1.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	Restrained Dismantling Joint 16" SS Bolts	15112.085	1.00 ea	31.00 /mh	186	5,200.00 /ea	5,200	-	-	-	-	-	-	5,386	5,460
	DI MEGAFLANGE w/ SS Bolts for DIP 16"	15112.230	1.00 ea	31.00 /mh	140	2,500.00 /ea	2,500	-	-	-	-	-	-	2,640	2,695
	DI MEGAFLANGE w/ SS Bolts for DIP 20"	15112.230	1.00 ea	31.00 /mh	186	2,500.00 /ea	2,500	-	-	-	-	-	-	2,686	2,760
	PVC Sch 80 PIPE 16" PE	15211.203	10.00 lf	31.00 /mh	124	200.00 /lf	2,000	-	-	-	-	-	-	2,124	2,174
	PVC Sch 80 Flange Van Stone 16" Soc	15211.223	2.00 ea	31.00 /mh	124	2,000.00 /ea	4,000	-	-	-	-	-	-	4,124	4,174
	16"/20" RS to Influent Channel				2,341		60,500							62,841	63,777
150-01	1c 12042002 6" RS to Influent Channel														
	DI Pipe 6in. dia FxF - 5ft. 0in. Epoxy Lined	15221.010	1.00 ea	31.00 /mh	93	1,050.00 /ea	1,050	-	-	-	-	-	-	1,143	1,180
	DI Pipe 6in. dia FxF - 10ft. 0in. Epoxy Lined	15221.010	2.00 ea	31.00 /mh	248	1,600.00 /ea	3,200	-	-	-	-	-	-	3,448	3,547
	DI Pipe 6in. dia FxF - 12ft. 0in. Epoxy Lined	15221.010	1.00 ea	31.00 /mh	155	1,800.00 /ea	1,800	-	-	-	-	-	-	1,955	2,017
	DI Pipe 6in. dia FxF - 14ft. 0in. Epoxy Lined	15221.010	1.00 ea	31.00 /mh	186	2,000.00 /ea	2,000	-	-	-	-	-	-	2,186	2,260
	DI Pipe 6in. dia FxF - 18ft. 0in. Epoxy Lined	15221.010	1.00 ea	31.00 /mh	248	2,500.00 /ea	2,500	-	-	-	-	-	-	2,748	2,847
	DI Pipe 6in. dia FxPE - 5ft. 0in. Epoxy Lined	15221.030	3.00 ea	31.00 /mh	279	800.00 /ea	2,400	-	-	-	-	-	-	2,679	2,791
	DI Pipe 6in. dia FxPE - 10ft. 0in. Epoxy Lined	15221.030	1.00 ea	31.00 /mh	124	1,400.00 /ea	1,400	-	-	-	-	-	-	1,524	1,574
	DI Pipe 6in. dia FxPE - 18ft. 0in. Epoxy Lined	15221.030	1.00 ea	31.00 /mh	124	2,300.00 /ea	2,300	-	-	-	-	-	-	2,424	2,474
	DI Flanged 90 ell 6" Epoxy Lined	15221.430	6.00 ea	31.00 /mh	372	650.00 /ea	3,900	-	-	-	-	-	-	4,272	4,421
	DI Flanged Tee 6" Epoxy Lined	15221.455	1.00 ea	31.00 /mh	62	850.00 /ea	850	-	-	-	-	-	-	912	937
	Link Seal Size LS-475-S	15123.100	40.00 ea	31.00 /mh	186	16.00 /ea	640	-	-	-	-	-	-	826	900
	Sleeve Plastic CS-10-	15121.600	2.00 ea	31.00 /mh	62	170.00 /ea	340	-	-	-	-	-	-	402	427
	PS Clevis Hanger HDG 6in	15060.098	7.00 ea	31.00 /mh	217	17.00 /ea	119	-	-	-	-	-	-	336	423
	PS Pipe Stand for 6in DIP 5ft 0in floor to CL HDG	15060.406	1.00 ea	31.00 /mh	62	0.01 /ea	0	-	-	-	-	-	-	62	87
	PS Special Support for 6in DIP - Galv	15060.475	2.00 ea	31.00 /mh	124	0.01 /ea	0	-	-	-	-	-	-	124	174
	NBG Kit 125# SS 6in	15125.012	20.00 ea	31.00 /mh	310	250.00 /ea	5,000	-	-	-	-	-	-	5,310	5,434
	DI MEGAFLANGE w/ SS Bolts for DIP 6"	15112.230	6.00 ea	31.00 /mh	419	300.00 /ea	1,800	-	-	-	-	-	-	2,219	2,386
	PS Expansion Anchor 5/8 x 7in SS	15060.127	16.00 ea	31.00 /mh	50	14.00 /ea	224	-	-	-	-	-	-	274	293
	PS Pipe Stand grout	15060.404	1.00 ea	31.00 /mh	16	8.00 /ea	8	-	-	-	-	-	-	24	30
	DI Blind Flange 6" w/ 2" tap	15221.405	1.00 ea	31.00 /mh	31	170.00 /ea	170	-	-	-	-	-	-	201	213
	Grout Sleeve 12in	15124.300	4.00 ea	31.00 /mh	248	20.00 /ea	80	-	-	-	-	-	-	328	427
	PS Epoxy Anchor 3/8 x 5in SS	15060.112	16.00 ea	31.00 /mh	25	14.00 /ea	224	-	-	-	-	-	-	249	259
	PS Strut SS 1-5/8 x 1-5/8	15060.476	40.00 lf	31.00 /mh	372	15.00 /lf	600	-	-	-	-	-	-	972	1,121
	Valve Air Release 2in	15110.005	1.00 ea	31.00 /mh	93	4,600.00 /ea	4,600	-	-	-	-	-	-	4,693	4,730
	Valve Ball Threaded SS 2in	15110.014	1.00 ea	31.00 /mh	93	465.00 /ea	465	-	-	-	-	-	-	558	595
	Stainless Steel Nipple 2" X 3"	15212.010	2.00 ea	31.00 /mh	20	15.00 /ea	30	-	-	-	-	-	-	50	59
	PVC Sch 80 PIPE 1/2" PE	15211.203	20.00 lf	31.00 /mh	130	1.00 /lf	20	-	-	-	-	-	-	150	202
	PVC Sch 80 MALE ADPT 1/2" SXMT	15211.217	1.00 ea	31.00 /mh	7	2.20 /ea	2	-	-	-	-	-	-	9	11
	PVC Sch 80 90 EL 1/2" S	15211.207	2.00 ea	31.00 /mh	13	1.00 /ea	2	-	-	-	-	-	-	15	20
	PVC Sch 80 45 EL 1/2" SOCxSOC	15211.208	4.00 ea	31.00 /mh	26	1.90 /ea	8	-	-	-	-	-	-	34	44
	PS 2 Piece Clamp SS 1/2 in	15060.518	6.00 ea	31.00 /mh	56	4.00 /ea	24	-	-	-	-	-	-	80	102
	Valve Plug Flange 125# 6in	15110.650	1.00 ea	31.00 /mh	93	1,280.00 /ea	1,280	-	-	-	-	-	-	1,373	1,410
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	6" RS to Influent Channel				4,790		37,086				50			41,926	43,843
150-01	1c 12042002 4" Grit Suction														
	DI Pipe 4in. dia FxV - 10ft. 0in. Glass Lined	15221.040	4.00 ea	31.00 /mh	248	1,400.00 /ea	5,600	-	-	-	-	-	-	5,848	5,947
	DI Pipe 4in. dia VxPE - 18ft. 0in. Glass Lined	15221.090	1.00 ea	31.00 /mh	124	2,100.00 /ea	2,100	-	-	-	-	-	-	2,224	2,274
	DI VIC Lateral 45 Wye 4" Glass Lined	15221.675	3.00 ea	31.00 /mh	186	1,800.00 /ea	5,400	-	-	-	-	-	-	5,586	5,660
	DI Flanged Con Red 4x3" Glass Lined	15221.445	2.00 ea	31.00 /mh	62	450.00 /ea	900	-	-	-	-	-	-	962	987
	Link Seal Size LS-475-S	15123.100	48.00 ea	31.00 /mh	223	16.00 /ea	768	-	-	-	-	-	-	991	1,080
	Sleeve Plastic CS-8-	15121.600	3.00 ea	31.00 /mh	186	150.00 /ea	450	-	-	-	-	-	-	636	710
	Valve Plug Flange 125# 4in (V405) w/ Elec Actuator	15110.650	2.00 ea	31.00 /mh	186	6,700.00 /ea	13,400	-	-	-	-	-	-	13,586	13,660
	PS Pipe Stand for 4in DIP 3ft 0in floor to CL HDG	15060.406	4.00 ea	31.00 /mh	496	0.01 /ea	0	-	-	-	-	-	-	496	694
	NBG Kit 125# SS 3in	15125.012	4.00 ea	31.00 /mh	62	205.00 /ea	820	-	-	-	-	-	-	882	907
	NBG Kit 125# SS 4in	15125.012	21.00 ea	31.00 /mh	326	200.00 /ea	4,200	-	-	-	-	-	-	4,526	4,656
	DI MEGAFLANGE w/ SS Bolts for DIP 4"	15112.230	6.00 ea	31.00 /mh	279	200.00 /ea	1,200	-	-	-	-	-	-	1,479	1,591

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
150-01 1c 12042002 4" Grit Suction															
	DI VIC Cap 4" w/ 1-1/2" tap	15221.605	2.00 ea	31.00 /mh	31	250.00 /ea	500	-	-	-	-	-	-	531	543
	PS Pipe Stand grout	15060.404	3.00 ea	31.00 /mh	93	8.00 /ea	24	-	-	-	-	-	-	117	154
	Expansion Joint Flanged Rubber 4"	15112.050	2.00 ea	31.00 /mh	248	2,700.00 /ea	5,400	-	-	-	-	-	-	5,648	5,747
	Valve Ball Threaded SS 1-½in	15110.014	2.00 ea	31.00 /mh	71	366.00 /ea	732	-	-	-	-	-	-	803	832
	Stainless Steel Nipple 1.5" x 3	15212.010	2.00 ea	31.00 /mh	16	8.00 /ea	16	-	-	-	-	-	-	32	38
	Grout Sleeve 8in	15124.300	3.00 ea	31.00 /mh	186	15.00 /ea	45	-	-	-	-	-	-	231	305
	PS Expansion Anchor 5/8 x 7in SS	15060.127	16.00 ea	31.00 /mh	25	14.00 /ea	224	-	-	-	-	-	-	249	259
	DI VIC Coupling 4"	15221.680	10.00 ea	31.00 /mh	155	120.00 /ea	1,200	-	-	-	-	-	-	1,355	1,417
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	4" Grit Suction				3,450		43,029				50			46,529	47,910
150-01 1c 12042002 4" Grit Discharge															
	DI Pipe 4in. dia FxF - 2ft. 0in. Glass Lined	15221.010	2.00 ea	31.00 /mh	124	575.00 /ea	1,150	-	-	-	-	-	-	1,274	1,324
	DI Pipe 4in. dia FxF - 4ft. 0in. Glass Lined	15221.010	2.00 ea	31.00 /mh	124	800.00 /ea	1,600	-	-	-	-	-	-	1,724	1,774
	DI Pipe 4in. dia FxF - 5ft. 0in. Glass Lined	15221.010	1.00 ea	31.00 /mh	93	910.00 /ea	910	-	-	-	-	-	-	1,003	1,040
	DI Pipe 4in. dia FxF - 6ft. 0in. Glass Lined	15221.010	2.00 ea	31.00 /mh	186	1,020.00 /ea	2,040	-	-	-	-	-	-	2,226	2,300
	DI Pipe 4in. dia FxF - 18ft. 0in. Glass Lined	15221.010	1.00 ea	31.00 /mh	186	2,400.00 /ea	2,400	-	-	-	-	-	-	2,586	2,660
	DI Pipe 4in. dia FxPE - 10ft. 0in. Glass Lined	15221.030	3.00 ea	31.00 /mh	372	1,300.00 /ea	3,900	-	-	-	-	-	-	4,272	4,421
	DI Pipe 4in. dia FxPE - 18ft. 0in. Glass Lined	15221.030	2.00 ea	31.00 /mh	372	2,200.00 /ea	4,400	-	-	-	-	-	-	4,772	4,921
	DI Flanged 90 ell 4" Glass Lined	15221.430	2.00 ea	31.00 /mh	124	600.00 /ea	1,200	-	-	-	-	-	-	1,324	1,374
	DI Flanged 45 ell 4" Glass Lined	15221.425	2.00 ea	31.00 /mh	124	600.00 /ea	1,200	-	-	-	-	-	-	1,324	1,374
	DI Flanged Tee 4" Glass Lined	15221.455	2.00 ea	31.00 /mh	124	800.00 /ea	1,600	-	-	-	-	-	-	1,724	1,774
	DI Flanged Wye 4"	15221.460	2.00 ea	31.00 /mh	186	500.00 /ea	1,000	-	-	-	-	-	-	1,186	1,260
	DI Flanged Con Red 4x3" Glass Lined	15221.445	2.00 ea	31.00 /mh	124	450.00 /ea	900	-	-	-	-	-	-	1,024	1,074
	Link Seal Size LS-475-S	15123.100	64.00 ea	31.00 /mh	298	16.00 /ea	1,024	-	-	-	-	-	-	1,322	1,441
	Sleeve Plastic CS-8-	15121.600	4.00 ea	31.00 /mh	248	150.00 /ea	600	-	-	-	-	-	-	848	947
	Valve Check Flange 125# 4in	15110.040	2.00 ea	31.00 /mh	124	1,580.00 /ea	3,160	-	-	-	-	-	-	3,284	3,334
	Valve Plug Flange 125# 4in	15110.650	3.00 ea	31.00 /mh	186	1,200.00 /ea	3,600	-	-	-	-	-	-	3,786	3,860
	PS Clevis Hanger SS 4in	15060.096	8.00 ea	31.00 /mh	248	47.00 /ea	376	-	-	-	-	-	-	624	723
	NBG Kit 125# SS 3in	15125.012	6.00 ea	31.00 /mh	93	205.00 /ea	1,230	-	-	-	-	-	-	1,323	1,360
	NBG Kit 125# SS 4in	15125.012	36.00 ea	31.00 /mh	558	200.00 /ea	7,200	-	-	-	-	-	-	7,758	7,981
	DI MEGAFLANGE w/ SS Bolts for DIP 3"	15112.230	6.00 ea	31.00 /mh	279	125.00 /ea	750	-	-	-	-	-	-	1,029	1,141
	DI Blind Flange 4" w/ 1-1/2" tap	15221.405	3.00 ea	31.00 /mh	93	120.00 /ea	360	-	-	-	-	-	-	453	490
	Expansion Joint Flanged Rubber 4"	15112.050	2.00 ea	31.00 /mh	266	2,700.00 /ea	5,400	-	-	-	-	-	-	5,666	5,772
	PS Threaded Rod 3/4in SS	15060.502	40.00 lf	31.00 /mh	124	8.00 /lf	320	-	-	-	-	-	-	444	494
	PS Strut Embed SS 1-5/8 x 1-5/8	15060.477	40.00 lf	31.00 /mh	372	15.00 /lf	600	-	-	-	-	-	-	972	1,121
	Instrument - Pressure - Gauge	17400.000	2.00 ea	31.00 /mh	186	1,200.00 /ea	2,400	-	-	-	-	-	-	2,586	2,660
	Instrument - Pressure - Transmitter	17400.000	2.00 ea	31.00 /mh	124	0.01 /ea	0	-	-	-	-	-	-	124	174
	Stainless Steel Nipple 1.5" x 3"	15212.010	6.00 ea	31.00 /mh	47	8.00 /ea	48	-	-	-	-	-	-	95	113
	Valve Ball Threaded SS 1-½in	15110.014	2.00 ea	31.00 /mh	71	366.00 /ea	732	-	-	-	-	-	-	803	832
	Grout Sleeve 8in	15124.300	4.00 ea	31.00 /mh	248	15.00 /ea	60	-	-	-	-	-	-	308	407
	LS for Vic	15060.476	1.00 ls	-	-	3,000.00 /ls	3,000	-	-	-	-	-	-	3,000	3,000
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	4" Grit Discharge				5,951		53,210				50			59,211	61,593
150-01 1c 12042002 6" PRD, Grit Classifier															
	DI Pipe 6in. dia FxF - 3ft. 0in.	15221.010	3.00 ea	31.00 /mh	186	650.00 /ea	1,950	-	-	-	-	-	-	2,136	2,210
	DI Pipe 4in. dia FxF - 4ft. 0in.	15221.010	1.00 ea	31.00 /mh	93	560.00 /ea	560	-	-	-	-	-	-	653	690
	DI Pipe 6in. dia FxF - 18ft. 0in.	15221.010	1.00 ea	31.00 /mh	186	1,600.00 /ea	1,600	-	-	-	-	-	-	1,786	1,860
	DI Pipe 6in. dia FxPE - 10ft. 0in.	15221.030	2.00 ea	31.00 /mh	248	900.00 /ea	1,800	-	-	-	-	-	-	2,048	2,147
	DI Pipe 6in. dia FxPE - 18ft. 0in.	15221.030	1.00 ea	31.00 /mh	186	1,400.00 /ea	1,400	-	-	-	-	-	-	1,586	1,660
	DI Flanged 90 ell 6"	15221.430	4.00 ea	31.00 /mh	248	300.00 /ea	1,200	-	-	-	-	-	-	1,448	1,547
	DI Flanged 90 ell 4"	15221.430	1.00 ea	31.00 /mh	31	200.00 /ea	200	-	-	-	-	-	-	231	243
	DI Flanged 45 ell 6"	15221.425	1.00 ea	31.00 /mh	62	300.00 /ea	300	-	-	-	-	-	-	362	387
	DI Flanged Tee 6"	15221.455	3.00 ea	31.00 /mh	186	450.00 /ea	1,350	-	-	-	-	-	-	1,536	1,610
	DI Flanged Wye 6"	15221.460	1.00 ea	31.00 /mh	62	750.00 /ea	750	-	-	-	-	-	-	812	837
	DI Flanged Con Red 6x4"	15221.445	1.00 ea	31.00 /mh	62	300.00 /ea	300	-	-	-	-	-	-	362	387
	PS Clevis Hanger SS 6in	15060.096	2.00 ea	31.00 /mh	62	65.00 /ea	130	-	-	-	-	-	-	192	217
	PS Pipe Stand for 6in DIP 2ft 0in floor to CL SS	15060.408	3.00 ea	31.00 /mh	186	0.01 /ea	0	-	-	-	-	-	-	186	260
	NBG Kit 125# SS 6in	15125.012	20.00 ea	31.00 /mh	310	250.00 /ea	5,000	-	-	-	-	-	-	5,310	5,434
	DI MEGAFLANGE w/ SS Bolts for DIP 6"	15112.230	3.00 ea	31.00 /mh	209	300.00 /ea	900	-	-	-	-	-	-	1,109	1,193
	NBG Kit 125# SS 4in	15125.012	3.00 ea	31.00 /mh	47	200.00 /ea	600	-	-	-	-	-	-	647	665
	PS Pipe Stand grout	15060.404	2.00 ea	31.00 /mh	62	8.00 /ea	16	-	-	-	-	-	-	78	103
	PS Expansion Anchor 5/8 x 7in SS	15060.127	19.00 ea	31.00 /mh	59	14.00 /ea	266	-	-	-	-	-	-	325	348
	MI Companion Flange Galv 6	15213.284	1.00 ea	31.00 /mh	6	50.00 /ea	50	-	-	-	-	-	-	56	59
	Bird Screens @ Vent	10210.100	1.00 ea	31.00 /mh	93	25.00 /ea	25	-	-	-	-	-	-	118	155
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	6" PRD, Grit Classifier				2,832		18,447				50			21,329	22,463
150-01 1c 12042002 4" NPW															
	DI Pipe 4in. dia FxF - 2ft. 0in.	15221.010	4.00 ea	31.00 /mh	248	455.00 /ea	1,820	-	-	-	-	-	-	2,068	2,167
	DI Pipe 4in. dia FxF - 3ft. 0in.	15221.010	3.00 ea	31.00 /mh	279	510.00 /ea	1,530	-	-	-	-	-	-	1,809	1,921
	DI Pipe 4in. dia FxF - 4ft. 0in.	15221.010	2.00 ea	31.00 /mh	186	560.00 /ea	1,120	-	-	-	-	-	-	1,306	1,380
	DI Pipe 4in. dia FxF - 6ft. 0in.	15221.010	4.00 ea	31.00 /mh	372	850.00 /ea	3,400	-	-	-	-	-	-	3,772	3,921

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
150-01	1c 12042002 4" NPW														
	DI Pipe 4in. dia Fx F - 8ft. 0in.	15221.010	3.00 ea	31.00 /mh	372	780.00 /ea	2,340	-	-	-	-	-	-	2,712	2,861
	DI Pipe 4in. dia Fx F - 10ft. 0in.	15221.010	4.00 ea	31.00 /mh	496	900.00 /ea	3,600	-	-	-	-	-	-	4,096	4,294
	DI Pipe 4in. dia Fx F - 18ft. 0in.	15221.010	3.00 ea	31.00 /mh	558	1,300.00 /ea	3,900	-	-	-	-	-	-	4,458	4,681
	DI Pipe 4in. dia Fx PE - 5ft. 0in.	15221.030	3.00 ea	31.00 /mh	186	450.00 /ea	1,350	-	-	-	-	-	-	1,536	1,610
	DI Pipe 4in. dia Fx PE - 6ft. 0in.	15221.030	3.00 ea	31.00 /mh	279	600.00 /ea	1,800	-	-	-	-	-	-	2,079	2,191
	DI Pipe 4in. dia Fx PE - 7ft. 0in.	15221.030	1.00 ea	31.00 /mh	93	700.00 /ea	700	-	-	-	-	-	-	793	830
	DI Pipe 4in. dia Fx PE - 18ft. 0in.	15221.030	6.00 ea	31.00 /mh	1,116	1,200.00 /ea	7,200	-	-	-	-	-	-	8,316	8,762
	DI Flanged 90 ell 4"	15221.430	16.00 ea	31.00 /mh	992	200.00 /ea	3,200	-	-	-	-	-	-	4,192	4,589
	DI Flanged Tee 4"	15221.455	13.00 ea	31.00 /mh	806	300.00 /ea	3,900	-	-	-	-	-	-	4,706	5,028
	Valve Butterfly Lugged 125# 4in	15110.026	6.00 ea	31.00 /mh	93	1,150.00 /ea	6,900	-	-	-	-	-	-	6,993	7,030
	PS Clevis Hanger SS 4in	15060.096	8.00 ea	31.00 /mh	248	47.00 /ea	376	-	-	-	-	-	-	624	723
	PS Knee Brace for 4in DIP 18in horizontal length SS	15060.280	18.00 ea	31.00 /mh	1,674	0.01 /ea	0	-	-	-	-	-	-	1,674	2,344
	NBG Kit 125# SS 4in	15125.012	116.00 ea	31.00 /mh	1,798	200.00 /ea	23,200	-	-	-	-	-	-	24,998	25,717
	DI MEGAFLANGE w/ SS Bolts for DIP 4"	15112.230	12.00 ea	31.00 /mh	558	200.00 /ea	2,400	-	-	-	-	-	-	2,958	3,181
	DI Blind Flange 4" w/ 2" tap	15221.405	15.00 ea	31.00 /mh	465	120.00 /ea	1,800	-	-	-	-	-	-	2,265	2,451
	PS Epoxy Anchor 3/4 x 8-1/2in SS	15060.112	70.00 ea	31.00 /mh	2,170	24.00 /ea	1,680	-	-	-	-	-	-	1,897	1,984
	Valve PRV Flange SS 150# 4" NPW	15110.735	1.00 ea	31.00 /mh	186	10,000.00 /ea	10,000	-	-	-	-	-	-	10,186	10,260
	Core Drilled Hole - 8 -*	15122.100	4.00 ea	31.00 /mh	248	200.00 /ea	800	150.00 /ea	600	-	-	-	-	1,648	1,747
	Link Seal Size LS-475-S	15123.100	32.00 ea	31.00 /mh	149	16.00 /ea	512	-	-	-	-	-	-	661	720
	Grout Sleeve 8in	15124.300	4.00 ea	31.00 /mh	248	15.00 /ea	60	-	-	-	-	-	-	308	407
	4" NPW				11,867		83,588		600					96,055	100,802
150-01	1c 12042002 1/4" Air to Grit Classifier														
	Stainless Steel Pipe 1/4"	15212.005	40.00 lf	31.00 /mh	248	6.00 /lf	240	-	-	-	-	-	-	488	587
	Stainless Steel Nipple 1/4" x 2"	15212.010	4.00 ea	31.00 /mh	31	5.00 /ea	20	-	-	-	-	-	-	51	63
	Stainless Steel 90 Elbow 1/4"	15212.040	8.00 ea	31.00 /mh	50	25.00 /ea	200	-	-	-	-	-	-	250	269
	Stainless Steel 45 Elbow 1/4"	15212.035	6.00 ea	31.00 /mh	37	21.00 /ea	126	-	-	-	-	-	-	163	178
	Stainless Steel Coupling 1/4"	15212.025	4.00 ea	31.00 /mh	25	20.00 /ea	80	-	-	-	-	-	-	105	115
	Valve Ball Threaded SS 1/4in	15110.014	6.00 ea	31.00 /mh	190	84.00 /ea	504	-	-	-	-	-	-	694	770
	Stainless Steel Tee 1/4"	15212.055	3.00 ea	31.00 /mh	19	25.00 /ea	75	-	-	-	-	-	-	94	101
	PS Strut SS 1-5/8 x 1-5/8	15060.476	20.00 lf	31.00 /mh	186	15.00 /lf	300	-	-	-	-	-	-	486	560
	PS 2 Piece Clamp SS 1/4 in	15060.518	15.00 ea	31.00 /mh	140	4.00 /ea	60	-	-	-	-	-	-	200	255
	PS Expansion Anchor 3/8 x 5in SS	15060.127	10.00 ea	31.00 /mh	16	5.00 /ea	50	-	-	-	-	-	-	66	72
	1/4" Air to Grit Classifier				940		1,655							2,595	2,971
150-55	80 8" Grit Classifier SCR														
	PVC Sch 80 PIPE 8" PE	15211.203	20.00 lf	31.00 /mh	310	30.00 /lf	600	-	-	-	-	-	-	910	1,034
	PVC Sch 80 45 EL 8" SOCxSOC	15211.208	2.00 ea	31.00 /mh	62	80.00 /ea	160	-	-	-	-	-	-	222	247
	PVC Sch 80 Straight CPLG 8" S	15211.204	1.00 ea	31.00 /mh	31	35.00 /ea	35	-	-	-	-	-	-	66	78
	PVC Sch 80 Flange Van Stone 8" Soc	15211.223	6.00 ea	31.00 /mh	186	140.00 /ea	840	-	-	-	-	-	-	1,026	1,100
	PVC Sch 80 Cement	15211.201	1.00 qt	31.00 /mh		45.00 /qt	50	-	-	-	-	-	-	50	50
	PVC Sch 80 Primer	15211.201	1.00 qt	31.00 /mh		35.00 /qt	39	-	-	-	-	-	-	39	39
	NBG Kit 125# SS 8in	15125.012	4.00 ea	31.00 /mh	124	250.00 /ea	1,000	-	-	-	-	-	-	1,124	1,174
	Elephant Trunk to Dumpster	14559.160	1.00 ea	31.00 /mh	248	1,500.00 /ea	1,500	-	-	-	-	-	-	1,748	1,847
	PS Special Support for 10in Sch 80 PVC - Stainless	15060.475	2.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	Sleeve SS 12" x 1	15121.200	1.00 ea	31.00 /mh	124	1,600.00 /ea	1,600	-	-	-	-	-	-	1,724	1,774
	8" Grit Classifier SCR		20.00 lf		1,333		5,823	/lf						7,156	7,689
150-55	80 10" Influent SCR to Dumpster														
	PVC Sch 80 PIPE 10" PE	15211.203	40.00 lf	31.00 /mh	1,240	50.00 /lf	2,000	-	-	-	-	-	-	3,240	3,736
	PVC Sch 80 45 EL 10" SOCxSOC	15211.208	4.00 ea	31.00 /mh	248	520.00 /ea	2,080	-	-	-	-	-	-	2,328	2,427
	PVC Sch 80 Straight CPLG 10" S	15211.204	2.00 ea	31.00 /mh	124	250.00 /ea	500	-	-	-	-	-	-	624	674
	PVC Sch 80 Flange Van Stone 10" Soc	15211.223	10.00 ea	31.00 /mh	620	180.00 /ea	1,800	-	-	-	-	-	-	2,420	2,668
	PVC Sch 80 Cement	15211.201	3.00 qt	31.00 /mh		45.00 /qt	149	-	-	-	-	-	-	149	149
	PVC Sch 80 Primer	15211.201	3.00 qt	31.00 /mh		35.00 /qt	116	-	-	-	-	-	-	116	116
	NBG Kit 125# SS 10in	15125.012	6.00 ea	31.00 /mh	186	500.00 /ea	3,000	-	-	-	-	-	-	3,186	3,260
	Elephant Trunk	14559.160	2.00 ea	31.00 /mh	744	1,500.00 /ea	3,000	-	-	-	-	-	-	3,744	4,042
	PS Special Support for 10in Sch 80 PVC - SSt	15060.475	4.00 ea	31.00 /mh	496	0.01 /ea	0	-	-	-	-	-	-	496	694
	10" Influent SCR to Dumpster		40.00 lf		3,658		12,644	/lf						16,302	17,765
150-55	80 3" PRD from Screens to Channel														
	PVC Sch 80 PIPE 3" PE	15211.203	60.00 lf	31.00 /mh	558	8.00 /lf	480	-	-	-	-	-	-	1,038	1,261
	PVC Sch 80 90 EL 3" S	15211.207	10.00 ea	31.00 /mh	93	9.50 /ea	95	-	-	-	-	-	-	188	225
	PVC Sch 80 Straight CPLG 3" S	15211.204	4.00 ea	31.00 /mh	37	10.00 /ea	40	-	-	-	-	-	-	77	92
	PVC Sch 80 Flange Van Stone 3" Soc	15211.223	3.00 ea	31.00 /mh	28	40.00 /ea	120	-	-	-	-	-	-	148	159
	PVC Sch 80 Cement	15211.201	1.00 qt	31.00 /mh		45.00 /qt	50	-	-	-	-	-	-	50	50
	PVC Sch 80 Primer	15211.201	1.00 qt	31.00 /mh		35.00 /qt	39	-	-	-	-	-	-	39	39
	NBG Kit 125# SS 3in	15125.012	3.00 ea	31.00 /mh	47	205.00 /ea	615	-	-	-	-	-	-	662	680
	Pipe Tie Downs (Small)	3150.200	10.00 ea	31.00 /mh	930	75.00 /ea	750	-	-	-	-	-	-	1,680	2,052
	3" PRD from Screens to Channel		60.00 lf		1,693		2,188	/lf						3,881	4,558
150-55	80 1" Sample Line to Auto Sampler														
	PVC Sch 80 PIPE 1" PE	15211.203	20.00 lf	31.00 /mh	130	2.00 /lf	40	-	-	-	-	-	-	170	222
	PVC Sch 80 90 EL 1" S	15211.207	8.00 ea	31.00 /mh	52	2.10 /ea	17	-	-	-	-	-	-	69	90
	PVC Sch 80 45 EL 1" SOCxSOC	15211.208	6.00 ea	31.00 /mh	39	4.40 /ea	26	-	-	-	-	-	-	65	81
	PVC Sch 80 Straight CPLG 1" S	15211.204	1.00 ea	31.00 /mh	7	2.00 /ea	2	-	-	-	-	-	-	9	11

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	150-55 80 1" Sample Line to Auto Sampler														
	PVC Sch 80 MALE ADPT 1" SXMT	15211.217	3.00 ea	31.00 /mh	20	4.10 /ea	12	-	-	-	-	-	-	32	40
	PVC Sch 80 Cement	15211.201	1.00 qt	31.00 /mh		45.00 /qt	50	-	-	-	-	-	-	50	50
	PVC Sch 80 Primer	15211.201	1.00 qt	31.00 /mh		35.00 /qt	39	-	-	-	-	-	-	39	39
	PVC Valve Ball True Union Viton 1" S & T	15211.310	3.00 ea	31.00 /mh	93	45.00 /ea	135	-	-	-	-	-	-	228	265
	PS Strut SS 1-5/8 x 1-5/8	15060.476	10.00 lf	31.00 /mh	93	15.00 /lf	150	-	-	-	-	-	-	243	280
	PS 2 Piece Clamp SS 1in	15060.518	10.00 ea	31.00 /mh	93	5.00 /ea	50	-	-	-	-	-	-	143	180
	PS Expansion Anchor 3/8 x 5in SS	15060.127	10.00 ea	31.00 /mh	31	5.00 /ea	50	-	-	-	-	-	-	81	93
	1" Sample Line to Auto Sampler		20.00 lf		557		571	/lf						1,128	1,351
	150-55 80 NPW PVC														
	PVC Sch 80 PIPE 1.5" PE	15211.203	200.00 lf	31.00 /mh	1,302	3.00 /lf	600	-	-	-	-	-	-	1,902	2,423
	PVC Sch 80 PIPE 2" PE	15211.203	180.00 lf	31.00 /mh	1,172	4.00 /lf	720	-	-	-	-	-	-	1,892	2,361
	PVC Sch 80 90 EL 1.5" S	15211.207	40.00 ea	31.00 /mh	260	3.00 /ea	120	-	-	-	-	-	-	380	485
	PVC Sch 80 45 EL 1.5" SOCxSOC	15211.208	30.00 ea	31.00 /mh	195	6.60 /ea	198	-	-	-	-	-	-	393	471
	PVC Sch 80 90 EL 2" S	15211.207	30.00 ea	31.00 /mh	195	3.60 /ea	108	-	-	-	-	-	-	303	381
	PVC Sch 80 45 EL 2" SOCxSOC	15211.208	28.00 ea	31.00 /mh	182	7.00 /ea	196	-	-	-	-	-	-	378	451
	PVC Sch 80 Straight CPLG 1.5" S	15211.204	20.00 ea	31.00 /mh	130	3.00 /ea	60	-	-	-	-	-	-	190	242
	PVC Sch 80 TEE 1.5" S	15211.211	16.00 ea	31.00 /mh	104	10.20 /ea	163	-	-	-	-	-	-	267	309
	PVC Sch 80 TEE 2" S	15211.211	18.00 ea	31.00 /mh	117	12.80 /ea	230	-	-	-	-	-	-	348	394
	PVC Sch 80 MALE ADPT 1.5" SXMT	15211.217	22.00 ea	31.00 /mh	143	6.80 /ea	150	-	-	-	-	-	-	293	350
	PVC Sch 80 Straight CPLG 2" S	15211.204	14.00 ea	31.00 /mh	91	4.00 /ea	56	-	-	-	-	-	-	147	184
	PVC Sch 80 Cement	15211.201	15.00 qt	31.00 /mh		45.00 /qt	743	-	-	-	-	-	-	743	743
	PVC Sch 80 Primer	15211.201	15.00 qt	31.00 /mh		35.00 /qt	578	-	-	-	-	-	-	578	578
	PVC Sch 80 MALE ADPT 2" SXMT	15211.217	32.00 ea	31.00 /mh	208	9.90 /ea	317	-	-	-	-	-	-	525	608
	PVC Sch 80 Flange Van Stone 2" Soc	15211.223	8.00 ea	31.00 /mh	52	20.00 /ea	160	-	-	-	-	-	-	212	233
	PVC Valve Ball True Union EPDM 1.5" S & T	15211.320	2.00 ea	31.00 /mh	13	70.00 /ea	140	-	-	-	-	-	-	153	158
	PS Strut SS 1-5/8 x 1-5/8	15060.476	185.00 lf	31.00 /mh	1,721	15.00 /lf	2,775	-	-	-	-	-	-	4,496	5,184
	PS 2 Piece Clamp SS 1-½in	15060.518	80.00 ea	31.00 /mh	744	7.00 /ea	560	-	-	-	-	-	-	1,304	1,602
	PS Expansion Anchor 3/8 x 5in SS	15060.127	156.00 ea	31.00 /mh	484	5.00 /ea	780	-	-	-	-	-	-	1,264	1,457
	NBG Kit 125# SS 1-½in	15125.012	2.00 ea	31.00 /mh	31	80.00 /ea	160	-	-	-	-	-	-	191	203
	NBG Kit 125# SS 2in	15125.012	10.00 ea	31.00 /mh	155	100.00 /ea	1,000	-	-	-	-	-	-	1,155	1,217
	PVC Valve Ball True Union Viton 1.5" S & T	15211.310	28.00 ea	31.00 /mh	434	70.00 /ea	1,960	-	-	-	-	-	-	2,394	2,568
	PVC Valve Ball True Union Viton 2" S & T	15211.310	20.00 ea	31.00 /mh	310	90.00 /ea	1,800	-	-	-	-	-	-	2,110	2,234
	PS 2 Piece Clamp SS 2in	15060.518	60.00 ea	31.00 /mh	558	7.00 /ea	420	-	-	-	-	-	-	978	1,201
	PS Clevis Hanger SS 1-½in	15060.096	11.00 ea	31.00 /mh	102	18.00 /ea	198	-	-	-	-	-	-	300	341
	PS Clevis Hanger SS 2in	15060.096	16.00 ea	31.00 /mh	149	19.00 /ea	304	-	-	-	-	-	-	453	512
	PS Threaded Rod 3/8in SS	15060.502	200.00 lf	31.00 /mh	620	2.00 /lf	400	-	-	-	-	-	-	1,020	1,268
	PS Hex Nut SS 3/8	15060.354	81.00 ea	31.00 /mh	126	0.50 /ea	41	-	-	-	-	-	-	166	216
	PS Washer Flat 3/8 SS	15060.576	81.00 ea	31.00 /mh	63	3.00 /ea	243	-	-	-	-	-	-	306	331
	PS Beam/C Clamp W/lk Nut 3/8	15060.082	16.00 ea	31.00 /mh	50	15.00 /ea	240	-	-	-	-	-	-	290	309
	PS Concrete Insert Blk Steel 3/8" Rod	15060.092	11.00 ea	31.00 /mh	300	25.00 /ea	275	-	-	-	-	-	-	575	695
	PVC Sch 80 TEE 1.5" S	15211.211	15.00 ea	31.00 /mh	98	10.20 /ea	153	-	-	-	-	-	-	251	290
	Valve Special 1-1/2in - Solenoid Valve	15110.003	10.00 ea	31.00 /mh	310	900.00 /ea	9,000	-	-	-	-	-	-	9,310	9,434
	Hose Bib Brass No Press 1-½"	15110.455	8.00 ea	31.00 /mh	74	250.00 /ea	2,000	-	-	-	-	-	-	2,074	2,104
	Valve PRV Threaded Bronze 150# 1.5"	15110.715	3.00 ea	31.00 /mh	279	3,050.00 /ea	9,150	-	-	-	-	-	-	9,429	9,541
	Valve PRV Threaded Bronze 150# 2"	15110.715	2.00 ea	31.00 /mh	186	4,500.00 /ea	9,000	-	-	-	-	-	-	9,186	9,260
	Valve Special 2in - Solenoid Valve	15110.003	9.00 ea	31.00 /mh	558	1,400.00 /ea	12,600	-	-	-	-	-	-	13,158	13,381
	NPW PVC		380.00 lf		11,517		57,597	/lf						69,113	73,720
	150-600 3/4" FC														
	HD PE Pipe 3/4" DR 17	2631.301	30.00 lf	31.00 /mh	233	2.00 /lf	63	-	-	-	-	-	-	296	389
	HD PE 90 bend 3/4 DR 17	2631.314	6.00 ea	31.00 /mh	186	15.00 /ea	90	-	-	-	-	-	-	276	350
	HD PE 45 bend 3/4 DR 17	2631.314	4.00 ea	31.00 /mh	124	5.00 /ea	20	-	-	-	-	-	-	144	194
	HD PE Electrofusion Coupling 3/4" DR 17	2631.356	3.00 ea	31.00 /mh	93	9.00 /ea	27	-	-	-	-	-	-	120	157
	PVC Sch 80 PIPE 3" PE	15211.203	30.00 lf	31.00 /mh	195	8.00 /lf	240	-	-	-	-	-	-	435	513
	CPVC Valve Ball True Union Viton 3/4" S & T	15211.510	6.00 ea	31.00 /mh	39	70.00 /ea	420	-	-	-	-	-	-	459	475
	CPVC Valve Ball Check True Union Viton 3/4" S & T	15211.530	2.00 ea	31.00 /mh	13	70.00 /ea	140	-	-	-	-	-	-	153	158
	Valve PRV Flange SS 150# 3/4"	15110.735	1.00 ea	31.00 /mh	124	950.00 /ea	950	-	-	-	-	-	-	1,074	1,124
	PS 2 Piece Clamp SS 3in	15060.518	10.00 ea	31.00 /mh	93	7.00 /ea	70	-	-	-	-	-	-	163	200
	PS Strut SS 1-5/8 x 1-5/8	15060.476	10.00 lf	31.00 /mh	93	15.00 /lf	150	-	-	-	-	-	-	243	280
	3/4" FC		30.00 lf		1,193		2,170	/lf						3,363	3,840
	GEN General				60,998		416,503		600		696		167	478,963	503,376
	HDPE HDPE														
	0330 4- 3" FERRIC CHLORIDE PIPE ENCASEMENT														
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	139.18 sf	31.00 /mh	1,079	1.50 /sf	219	-	-	-	-	-	-	1,298	1,729
	Place Pipe Encasement	3310.195	6.00 cy	31.00 /mh	199	166.00 /cy	1,066	-	-	-	-	-	-	1,265	1,344
	Nails and Hardware	3150.200	139.18 sf	31.00 /mh	0	0.04 /sf	6	-	-	-	-	-	-	6	6
	Form Ties Specialty	3150.632	22.00 ea	31.00 /mh	136	5.00 /ea	110	-	-	-	-	-	-	246	301
	Pipe Tie Downs (Small)	3150.200	11.00 ea	31.00 /mh	1,364	75.00 /ea	825	-	-	-	-	-	-	2,189	2,735
	Dimension Lumber	3150.200	139.18 sf	31.00 /mh	0	0.50 /sf	70	-	-	-	-	-	-	70	70
	Oil SOG Form	3100.310	139.18 sf	31.00 /mh	0	0.02 /sf	3	-	-	-	-	-	-	3	3
	Finish- Rough	3350.110	66.80 sf	31.00 /mh	19	0.01 /sf	0	-	-	-	-	-	-	19	27

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0330	4- 3" FERRIC CHLORIDE PIPE ENCASEMENT														
	Liquid Curing Compounds	3390.170	66.80 sf	31.00 /mh	4	0.06 /sf	4	-	-	-	-	-	-	8	10
	Pipe Encasement Rebar	3200.980	0.18 tn	31.00 /mh	167	1,400.00 /tn	252	-	-	-	-	-	-	419	486
	3" FERRIC CHLORIDE PIPE ENCASEMENT		6.00 CY		2,968		2,554	/CY						5,523	6,710
	HDPE HDPE				2,968		2,554							5,523	6,710
	100 Headworks				77,008		443,954	/LS	600		696		167	522,425	553,242
150	Influent Pump Station														
GEN	General														
150-01	1c 12042002 10" RS, INF Pump Dishcharge														
	DI Pipe 10in. dia FxF - 18ft. 0in. Epoxy Lined	15221.010	4.00 ea	31.00 /mh	992	4,200.00 /ea	16,800	-	-	-	-	-	-	17,792	18,189
	DI Pipe 10in. dia FxPE - 3ft. 0in. Epoxy Lined	15221.030	4.00 ea	31.00 /mh	496	1,000.00 /ea	4,000	-	-	-	-	-	-	4,496	4,694
	DI Pipe 10in. dia FxPE - 10ft. 0in. Epoxy Lined	15221.030	4.00 ea	31.00 /mh	744	2,300.00 /ea	9,200	-	-	-	-	-	-	9,944	10,242
	DI Pipe 10in. dia FxPE - 10ft. 1in. w/ 2" tap Epoxy Lined	15221.030	4.00 ea	31.00 /mh	744	2,400.00 /ea	9,600	-	-	-	-	-	-	10,344	10,642
	DI Pipe 10in. dia PExPE - 10ft. 0in. Epoxy Lined	15221.070	8.00 ea	31.00 /mh	1,488	2,700.00 /ea	21,600	-	-	-	-	-	-	23,088	23,683
	DI Flanged 90 eII 10" Epoxy Lined	15221.430	4.00 ea	31.00 /mh	372	1,800.00 /ea	7,200	-	-	-	-	-	-	7,572	7,721
	DI Flanged Con Red 10x6" Epoxy Lined	15221.445	4.00 ea	31.00 /mh	372	1,200.00 /ea	4,800	-	-	-	-	-	-	5,172	5,321
	Link Seal Size LS-340-S	15123.100	384.00 ea	31.00 /mh	1,786	15.00 /ea	5,760	-	-	-	-	-	-	7,546	8,260
	Sleeve Steel WS-14-37-S-	15121.800	8.00 ea	31.00 /mh	992	1,450.00 /ea	11,600	-	-	-	-	-	-	12,592	12,989
	Valve Check Flange 125# 10in Rubber Flapper (V634)	15110.040	4.00 ea	31.00 /mh	496	5,800.00 /ea	23,200	-	-	-	-	-	-	23,696	23,894
	Valve Plug Flange 125# 10in (V405)	15110.650	4.00 ea	31.00 /mh	496	2,790.00 /ea	11,160	-	-	-	-	-	-	11,656	11,854
	PS Pipe Stand for 10in DIP 3ft 0in floor to CL HDG	15060.406	4.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	PS Special Support for 10in DIP - Stainless	15060.475	8.00 ea	31.00 /mh	992	0.01 /ea	0	-	-	-	-	-	-	992	1,389
	NBG Kit 125# SS 6in	15125.012	6.00 ea	31.00 /mh	93	250.00 /ea	1,500	-	-	-	-	-	-	1,593	1,630
	NBG Kit 125# SS 10in	15125.012	24.00 ea	31.00 /mh	372	500.00 /ea	12,000	-	-	-	-	-	-	12,372	12,521
	DI MEGAFLANGE w/ SS Bolts for DIP 10"	15112.230	8.00 ea	31.00 /mh	744	700.00 /ea	5,600	-	-	-	-	-	-	6,344	6,642
	PS Expansion Anchor 3/4 x 8-1/2in SS	15060.127	48.00 ea	31.00 /mh	149	25.00 /ea	1,200	-	-	-	-	-	-	1,349	1,408
	PS Pipe Stand grout	15060.404	12.00 ea	31.00 /mh	372	8.00 /ea	96	-	-	-	-	-	-	468	617
	DI Wall Pipe FLG x MJ w/ Collar & Tapped Holes 10in x 1ft 6in long	15221.376	4.00 ea	31.00 /mh	496	2,200.00 /ea	8,800	-	-	-	-	-	-	9,296	9,494
	Restrained Dismantling Joint 10" SS Bolts	15112.085	4.00 ea	31.00 /mh	496	3,000.00 /ea	12,000	-	-	-	-	-	-	12,496	12,694
	10" Double Ball Flex Joint (EBBA Flex-Tend)	15112.010	4.00 ea	31.00 /mh	744	7,500.00 /ea	30,000	-	-	-	-	-	-	30,744	31,042
	DI MEGALUG for DIP 10"	2511.610	12.00 ea	31.00 /mh	186	66.00 /ea	792	-	-	-	-	-	-	978	1,052
	Valve Ball Threaded SS 2in	15110.014	4.00 ea	31.00 /mh	175	465.00 /ea	1,860	-	-	-	-	-	-	2,035	2,105
	Grout Sleeve 18in	15124.300	8.00 ea	31.00 /mh	496	35.00 /ea	280	-	-	-	-	-	-	776	974
	Stainless Steel Nipple 2" X 3"	15212.010	8.00 ea	31.00 /mh	82	15.00 /ea	120	-	-	-	-	-	-	202	235
	Instrument - Pressure - Transmitter	17400.000	4.00 ea	31.00 /mh	124	0.01 /ea	0	-	-	-	-	-	-	124	174
	Instrument - Pressure - Gauge	17400.000	4.00 ea	31.00 /mh	124	1,200.00 /ea	4,800	-	-	-	-	-	-	4,924	4,974
	Testing Pressure & Leak - Piping	1166.100	4.00 ea	31.00 /mh	992	50.00 /ea	200	-	-	50.00 /ea	200	-	-	1,392	1,793
	10" RS, INF Pump Dishcharge				15,862		204,168				200			220,230	226,579
150-01	1c 12042002 Instrumentation Roof Penetrations														
	NBG Kit 125# SS 8in	15125.012	7.00 ea	31.00 /mh	109	250.00 /ea	1,750	-	-	-	-	-	-	1,859	1,902
	DI Blind Flange 8" w/ 2" tap	15221.405	7.00 ea	31.00 /mh	651	240.00 /ea	1,680	-	-	-	-	-	-	2,331	2,591
	DI Wall Pipe FLG x PE w/ Collar & Tapped Holes 8in x 2ft 0in long	15221.380	7.00 ea	31.00 /mh	651	900.00 /ea	6,300	-	-	-	-	-	-	6,951	7,211
	Instrumentation Roof Penetrations				1,411		9,730							11,141	11,705
	GEN General				17,273		213,898				200			231,371	238,284
	150 Influent Pump Station				17,273		213,898	/LS			200			231,371	238,284
200	Aeration Basin														
GEN	General														
150-01	1c 12042002 30" ML														
	DI Pipe 30in. dia FxF - 8ft. 0in.	15221.010	1.00 ea	31.00 /mh	248	13,000.00 /ea	13,000	-	-	-	-	-	-	13,248	13,347
	DI Pipe 30in. dia FxPE - 10ft. 0in.	15221.030	1.00 ea	31.00 /mh	372	9,000.00 /ea	9,000	-	-	-	-	-	-	9,372	9,521
	DI Flanged Tee 30"	15221.455	1.00 ea	31.00 /mh	372	25,000.00 /ea	25,000	-	-	-	-	-	-	25,372	25,521
	Link Seal Size LS-400-S	15123.100	58.00 ea	31.00 /mh	270	16.00 /ea	928	-	-	-	-	-	-	1,198	1,306
	Sleeve Steel WS-36-37-S-	15121.800	1.00 ea	31.00 /mh	186	5,300.00 /ea	5,300	-	-	-	-	-	-	5,486	5,560
	NBG Kit 125# SS 30in	15125.012	5.00 ea	31.00 /mh	620	2,100.00 /ea	10,500	-	-	-	-	-	-	11,120	11,368
	DI MEGAFLANGE w/ SS Bolts for DIP 30"	15112.230	1.00 ea	31.00 /mh	186	3,700.00 /ea	3,700	-	-	-	-	-	-	3,886	3,960
	DI Blind Flange 30"	15221.405	1.00 ea	31.00 /mh	155	5,800.00 /ea	5,800	-	-	-	-	-	-	5,955	6,017
	Grout Sleeve 36in	15124.300	1.00 ea	31.00 /mh	124	100.00 /ea	100	-	-	-	-	-	-	224	274
	30" ML				2,533		73,328							75,861	76,874
150-01	1c 12042002 ALP 304 SST														
	Link Seal Size LS-340-S	15123.100	104.00 ea	31.00 /mh	484	15.00 /ea	1,560	-	-	-	-	-	-	2,044	2,237
	Link Seal Size LS-400-S	15123.100	24.00 ea	31.00 /mh	112	16.00 /ea	384	-	-	-	-	-	-	496	540
	Link Seal Size LS-410-S	15123.100	60.00 ea	31.00 /mh	279	16.00 /ea	960	-	-	-	-	-	-	1,239	1,351
	Link Seal Size LS-475-S	15123.100	40.00 ea	31.00 /mh	186	16.00 /ea	640	-	-	-	-	-	-	826	900
	Sleeve Steel WS-8-18-S-	15121.800	2.00 ea	31.00 /mh	124	800.00 /ea	1,600	-	-	-	-	-	-	1,724	1,774
	Sleeve Steel WS-10-36-S-	15121.800	3.00 ea	31.00 /mh	372	1,000.00 /ea	3,000	-	-	-	-	-	-	3,372	3,521
	Sleeve Steel WS-12-37-S-	15121.800	1.00 ea	31.00 /mh	124	1,200.00 /ea	1,200	-	-	-	-	-	-	1,324	1,374
	Sleeve Steel WS-14-37-S-	15121.800	4.00 ea	31.00 /mh	496	1,450.00 /ea	5,800	-	-	-	-	-	-	6,296	6,494
	Sleeve Steel WS-16-37-S-	15121.800	1.00 ea	31.00 /mh	155	1,600.00 /ea	1,600	-	-	-	-	-	-	1,755	1,817
	Valve Plug Flange 125# 6in	15110.650	1.00 ea	31.00 /mh	62	1,280.00 /ea	1,280	-	-	-	-	-	-	1,342	1,367
	Valve Butterfly Lugged 125# 6in	15110.026	9.00 ea	31.00 /mh	558	1,250.00 /ea	11,250	-	-	-	-	-	-	11,808	12,031
	NBG Kit 125# SS 4in	15125.012	52.00 ea	31.00 /mh	806	200.00 /ea	10,400	-	-	-	-	-	-	11,206	11,528

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	150-01 1c 12042002 ALP 304 SST														
	PS Knee Brace for 4in DIP 24in horizontal length SS	15060.280	16.00 ea	31.00 /mh	1,984	0.01 /ea	0	-	-	-	-	-	-	1,984	2,778
	NBG Kit 125# SS 6in	15125.012	26.00 ea	31.00 /mh	806	250.00 /ea	6,500	-	-	-	-	-	-	7,306	7,628
	PS Knee Brace for 6in DIP 24in horizontal length SS	15060.280	11.00 ea	31.00 /mh	1,364	0.01 /ea	0	-	-	-	-	-	-	1,364	1,910
	NBG Kit 125# SS 10in	15125.012	24.00 ea	31.00 /mh	744	500.00 /ea	12,000	-	-	-	-	-	-	12,744	13,042
	PS Knee Brace for 8in DIP 24in horizontal length SS	15060.280	2.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	NBG Kit 125# SS 12in	15125.012	9.00 ea	31.00 /mh	419	500.00 /ea	4,500	-	-	-	-	-	-	4,919	5,086
	PS Knee Brace for 10in DIP 24in horizontal length SS	15060.280	34.00 ea	31.00 /mh	4,216	0.01 /ea	0	-	-	-	-	-	-	4,216	5,903
	NBG Kit 125# SS 16in	15125.012	3.00 ea	31.00 /mh	186	900.00 /ea	2,700	-	-	-	-	-	-	2,886	2,960
	PS Knee Brace for 12in DIP 24in horizontal length SS	15060.280	6.00 ea	31.00 /mh	744	0.01 /ea	0	-	-	-	-	-	-	744	1,042
	Fab Stainless Steel Pipe - 10" - *	15233.505	32.00 ea	31.00 /mh	3,968	/ea		-	-	-	-	-	-	3,968	5,555
	Fab Stainless Steel Pipe - 12" - *	15233.505	13.00 ea	31.00 /mh	2,418	/ea		-	-	-	-	-	-	2,418	3,385
	Fab Stainless Steel Pipe - 4" - *	15233.505	35.00 ea	31.00 /mh	3,255	/ea		-	-	-	-	-	-	3,255	4,557
	Fab Stainless Steel Pipe - 6" - *	15233.505	31.00 ea	31.00 /mh	2,883	/ea		-	-	-	-	-	-	2,883	4,036
	Fab Stainless Steel Pipe - 16"-.*	15233.505	3.00 ea	31.00 /mh	558	/ea		-	-	-	-	-	-	558	781
	Valve Butterfly Lugged 125# 12in	15110.026	1.00 ea	31.00 /mh	124	2,240.00 /ea	2,240	-	-	-	-	-	-	2,364	2,414
	FCV Valve Butterfly 125# 12in Elec Actuated	15110.034	1.00 ea	31.00 /mh	93	7,500.00 /ea	7,500	-	-	-	-	-	-	7,593	7,630
	NBG Kit 125# SS 8in	15125.012	4.00 ea	31.00 /mh	124	250.00 /ea	1,000	-	-	-	-	-	-	1,124	1,174
	Instrument - Flow - Magnetic Flow Meter - 12in	17200.000	1.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	Instrument - Flow - Magnetic Flow Meter - 4in	17200.000	1.00 ea	31.00 /mh	124	0.01 /ea	0	-	-	-	-	-	-	124	174
	Instrument - Flow - Magnetic Flow Meter - 6in	17200.000	1.00 ea	31.00 /mh	124	0.01 /ea	0	-	-	-	-	-	-	124	174
	Instrument - Flow - Magnetic Flow Meter - 10in	17200.000	1.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	FCV Valve Butterfly 125# 4in Elec Actuated	15110.034	4.00 ea	31.00 /mh	248	6,300.00 /ea	25,200	-	-	-	-	-	-	25,448	25,547
	PS Epoxy Anchor 3/4 x 8-1/2in SS	15060.112	256.00 ea	31.00 /mh	794	24.00 /ea	6,144	-	-	-	-	-	-	6,938	7,255
	FCV Valve Butterfly 125# 6in Elec Actuated	15110.034	1.00 ea	31.00 /mh	93	6,600.00 /ea	6,600	-	-	-	-	-	-	6,693	6,730
	FCV Valve Butterfly 125# 10in Elec Actuated	15110.034	1.00 ea	31.00 /mh	124	7,000.00 /ea	7,000	-	-	-	-	-	-	7,124	7,174
	Expansion Joint Flanged SS 4"	15112.070	4.00 ea	31.00 /mh	496	2,700.00 /ea	10,800	-	-	-	-	-	-	11,296	11,494
	Expansion Joint Flanged SS 6"	15112.070	3.00 ea	31.00 /mh	372	3,200.00 /ea	9,600	-	-	-	-	-	-	9,972	10,121
	Expansion Joint Flanged SS 10"	15112.070	3.00 ea	31.00 /mh	372	4,100.00 /ea	12,300	-	-	-	-	-	-	12,672	12,821
	Restrained Dismantling Joint 4" SS Bolts	15112.085	6.00 ea	31.00 /mh	372	1,000.00 /ea	6,000	-	-	-	-	-	-	6,372	6,521
	Restrained Dismantling Joint 6" SS Bolts	15112.085	4.00 ea	31.00 /mh	372	1,100.00 /ea	4,400	-	-	-	-	-	-	4,772	4,921
	Restrained Dismantling Joint 10" SS Bolts	15112.085	4.00 ea	31.00 /mh	496	3,000.00 /ea	12,000	-	-	-	-	-	-	12,496	12,694
	Restrained Dismantling Joint 12" SS Bolts	15112.085	2.00 ea	31.00 /mh	372	3,400.00 /ea	6,800	-	-	-	-	-	-	7,172	7,321
	Fab Stainless Steel Pipe - 8" - *	15233.505	4.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Valve Butterfly Lugged 125# 4in	15110.026	8.00 ea	31.00 /mh	248	1,150.00 /ea	9,200	-	-	-	-	-	-	9,448	9,547
	Valve Butterfly Lugged 125# 6in	15110.026	2.00 ea	31.00 /mh	62	1,250.00 /ea	2,500	-	-	-	-	-	-	2,562	2,587
	Valve Butterfly Lugged 125# 8in	15110.026	1.00 ea	31.00 /mh	31	1,450.00 /ea	1,450	-	-	-	-	-	-	1,481	1,493
	Valve Butterfly Lugged 125# 10in	15110.026	3.00 ea	31.00 /mh	186	1,700.00 /ea	5,100	-	-	-	-	-	-	5,286	5,360
	Valve Butterfly Lugged 125# 12in	15110.026	1.00 ea	31.00 /mh	62	2,240.00 /ea	2,240	-	-	-	-	-	-	2,302	2,327
	Grout Sleeve 8in	15124.300	2.00 ea	31.00 /mh	124	15.00 /ea	30	-	-	-	-	-	-	154	204
	Grout Sleeve 12in	15124.300	4.00 ea	31.00 /mh	372	20.00 /ea	80	-	-	-	-	-	-	452	601
	Grout Sleeve 18in	15124.300	4.00 ea	31.00 /mh	496	35.00 /ea	140	-	-	-	-	-	-	636	834
	Grout Sleeve 24in	15124.300	1.00 ea	31.00 /mh	186	75.00 /ea	75	-	-	-	-	-	-	261	335
	ALP 304 SST				35,008		203,774							238,782	252,785
	150-01 1c 12042002 2" AHP														
	Stainless Steel Pipe 2"	15212.005	680.00 lf	31.00 /mh	8,854	35.00 /lf	23,800	-	-	-	-	-	-	32,654	36,195
	Stainless Steel 90 Elbow 2"	15212.040	46.00 ea	31.00 /mh	713	610.00 /ea	28,060	-	-	-	-	-	-	28,773	29,058
	Stainless Steel 45 Elbow 2"	15212.035	16.00 ea	31.00 /mh	248	610.00 /ea	9,760	-	-	-	-	-	-	10,008	10,107
	Stainless Steel Coupling 2"	15212.025	34.00 ea	31.00 /mh	527	200.00 /ea	6,800	-	-	-	-	-	-	7,327	7,538
	PS 2 Piece Clamp SS 2in	15060.518	100.00 ea	31.00 /mh	930	7.00 /ea	700	-	-	-	-	-	-	1,630	2,002
	PS Strut Spring Nut SS 3/8"	15060.484	100.00 ea	31.00 /mh	518	9.00 /ea	945	-	-	-	-	-	-	1,463	1,670
	PS Strut SS 1-5/8 x 1-5/8	15060.476	160.00 lf	31.00 /mh	1,488	15.00 /lf	2,400	-	-	-	-	-	-	3,888	4,483
	PS Expansion Anchor 3/8 x 5in SS	15060.127	200.00 ea	31.00 /mh	930	5.00 /ea	1,000	-	-	-	-	-	-	1,930	2,302
	Valve Ball Threaded SS 2in	15110.014	7.00 ea	31.00 /mh	434	465.00 /ea	3,255	-	-	-	-	-	-	3,689	3,863
	2" AHP				14,641		76,720							91,361	97,218
	150-55 80 10" MLR														
	PVC Sch 80 PIPE 10" PE	15211.203	200.00 lf	31.00 /mh	3,100	50.00 /lf	10,000	-	-	-	-	-	-	13,100	14,340
	PVC Sch 80 90 EL 10" S	15211.207	4.00 ea	31.00 /mh	248	800.00 /ea	3,200	-	-	-	-	-	-	3,448	3,547
	PVC Sch 80 Flange Van Stone 10" Soc	15211.223	24.00 ea	31.00 /mh	1,488	180.00 /ea	4,320	-	-	-	-	-	-	5,808	6,403
	PVC Sch 80 Cement	15211.201	8.00 qt	31.00 /mh		45.00 /qt	396	-	-	-	-	-	-	396	396
	PVC Sch 80 Primer	15211.201	8.00 qt	31.00 /mh		35.00 /qt	308	-	-	-	-	-	-	308	308
	PVC Sch 80 Flange Van Stone 10" Soc	15211.223	10.00 ea	31.00 /mh	620	180.00 /ea	1,800	-	-	-	-	-	-	2,420	2,668
	NBG Kit 125# SS 10in	15125.012	17.00 ea	31.00 /mh	527	500.00 /ea	8,500	-	-	-	-	-	-	9,027	9,238
	Valve Check Flange 125# 10in	15110.040	2.00 ea	31.00 /mh	124	5,260.00 /ea	10,520	-	-	-	-	-	-	10,644	10,694
	PS Pipe Stand for 10in PVC 2ft 6in floor to CL SS	15060.408	15.00 ea	31.00 /mh	1,860	0.01 /ea	0	-	-	-	-	-	-	1,860	2,604
	PS Epoxy Anchor 3/4 x 8-1/2in SS	15060.112	60.00 ea	31.00 /mh	186	24.00 /ea	1,440	-	-	-	-	-	-	1,626	1,700
	PS Pipe Stand grout	15060.404	15.00 ea	31.00 /mh	465	8.00 /ea	120	-	-	-	-	-	-	585	771
	Grout Sleeve 18in	15124.300	5.00 ea	31.00 /mh	465	35.00 /ea	175	-	-	-	-	-	-	640	826
	Sleeve Steel WS-14-37-S-	15121.800	5.00 ea	31.00 /mh	465	1,450.00 /ea	7,250	-	-	-	-	-	-	7,715	7,901
	Link Seal Size LS-475-S	15123.100	100.00 ea	31.00 /mh	465	16.00 /ea	1,600	-	-	-	-	-	-	2,065	2,251
	10" MLR		200.00 lf		10,013		49,629	/lf						59,642	63,647
	150-55 80 1" GLY														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
150-55 80 1" GLY															
	PVC Sch 80 PIPE 1" PE	15211.203	30.00 lf	31.00 /mh	195	2.00 /lf	60	-	-	-	-	-	-	255	333
	PVC Sch 80 90 EL 1" S	15211.207	4.00 ea	31.00 /mh	26	2.10 /ea	8	-	-	-	-	-	-	34	45
	PVC Sch 80 45 EL 1" SOCxSOC	15211.208	6.00 ea	31.00 /mh	39	4.40 /ea	26	-	-	-	-	-	-	65	81
	PVC Sch 80 TEE 1" S	15211.211	1.00 ea	31.00 /mh	7	3.70 /ea	4	-	-	-	-	-	-	10	13
	PVC Sch 80 Straight CPLG 1" S	15211.204	2.00 ea	31.00 /mh	13	2.00 /ea	4	-	-	-	-	-	-	17	22
	PVC Sch 80 MALE ADPT 1" SXMT	15211.217	4.00 ea	31.00 /mh	26	4.10 /ea	16	-	-	-	-	-	-	42	53
	PVC Sch 80 Cement	15211.201	1.00 qt	31.00 /mh		45.00 /qt	50	-	-	-	-	-	-	50	50
	PVC Sch 80 Primer	15211.201	1.00 qt	31.00 /mh		35.00 /qt	39	-	-	-	-	-	-	39	39
	PVC Valve Ball True Union Viton 1" S & T	15211.310	4.00 ea	31.00 /mh	26	45.00 /ea	180	-	-	-	-	-	-	206	216
	PS Strut SS 1-5/8 x 1-5/8	15060.476	15.00 lf	31.00 /mh	140	15.00 /lf	225	-	-	-	-	-	-	365	420
	PS 2 Piece Clamp SS 1in	15060.518	10.00 ea	31.00 /mh	93	5.00 /ea	50	-	-	-	-	-	-	143	180
	PS Expansion Anchor 3/8 x 5in SS	15060.127	12.00 ea	31.00 /mh	37	5.00 /ea	60	-	-	-	-	-	-	97	112
	Valve PRV Threaded Bronze 150# 1"	15110.715	1.00 ea	31.00 /mh	62	2,550.00 /ea	2,550	-	-	-	-	-	-	2,612	2,637
	PVC Valve Ball Check True Union Viton 1" S & T	15211.330	1.00 ea	31.00 /mh	31	70.00 /ea	70	-	-	-	-	-	-	101	113
	1" GLY		30.00 lf		695		3,342	/lf						4,037	4,314
	GEN General				62,890		406,793							469,683	494,839
	200 Aeration Basin				62,890		406,793	/LS						469,683	494,839
250 Secondary Clarifier Splitter Box															
CML Ductile Iron															
0330 4- Encase 24" ML Below Splitter															
	Excavation - Mass	2317.105	50.00 cy	31.00 /mh	78	-	-	-	-	-	-	-	-	78	109
	Other Placement Count	3310.360	3.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	216.00 sf	31.00 /mh	1,674	1.50 /sf	340	-	-	-	-	-	-	2,014	2,684
	Place Pipe Encasement	3310.195	10.95 cy	31.00 /mh	363	166.00 /cy	1,946	-	-	-	-	-	-	2,309	2,454
	Nails and Hardware	3150.200	216.00 sf	31.00 /mh	0	0.04 /sf	9	-	-	-	-	-	-	9	9
	Form Ties Specialty	3150.632	14.00 ea	31.00 /mh	87	5.00 /ea	70	-	-	-	-	-	-	157	192
	Pipe Tie Downs (Medium)	3150.200	5.00 ea	31.00 /mh	775	150.00 /ea	750	-	-	-	-	-	-	1,525	1,835
	Dimension Lumber	3150.200	216.00 sf	31.00 /mh	0	0.50 /sf	108	-	-	-	-	-	-	108	108
	Oil SOG Form	3100.310	216.00 sf	31.00 /mh	0	0.02 /sf	4	-	-	-	-	-	-	4	4
	Finish- Rough	3350.110	92.00 sf	31.00 /mh	26	0.01 /sf	1	-	-	-	-	-	-	26	36
	Liquid Curing Compounds	3390.170	92.00 sf	31.00 /mh	6	0.06 /sf	6	-	-	-	-	-	-	11	14
	Waterstop Adeka or Swellstop	3510.610	20.00 lf	31.00 /mh	62	8.50 /lf	179	-	-	-	-	-	-	241	265
	Encase 24" ML Below Splitter		10.95 CY		3,070		3,411	/CY						6,481	7,710
0330 4- Encase 16" ML Below Splitter (Clarifier 5)															
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	81.13 sf	31.00 /mh	629	1.50 /sf	128	-	-	-	-	-	-	756	1,008
	Place Pipe Encasement	3310.195	4.00 cy	31.00 /mh	133	166.00 /cy	710	-	-	-	-	-	-	843	896
	Nails and Hardware	3150.200	81.13 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Form Ties Specialty	3150.632	8.00 ea	31.00 /mh	50	5.00 /ea	40	-	-	-	-	-	-	90	109
	Pipe Tie Downs (Medium)	3150.200	3.00 ea	31.00 /mh	465	150.00 /ea	450	-	-	-	-	-	-	915	1,101
	Dimension Lumber	3150.200	81.13 sf	31.00 /mh	0	0.50 /sf	41	-	-	-	-	-	-	41	41
	Oil SOG Form	3100.310	81.13 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Finish- Rough	3350.110	33.00 sf	31.00 /mh	9	0.01 /sf	0	-	-	-	-	-	-	9	13
	Liquid Curing Compounds	3390.170	33.00 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	4	5
	Pipe Encasement Rebar	3200.980	0.13 tn	31.00 /mh	121	1,400.00 /tn	182	-	-	-	-	-	-	303	351
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	50	8.50 /lf	143	-	-	-	-	-	-	192	212
	Encase 16" ML Below Splitter (Clarifier 5)		4.00 CY		1,458		1,701	/CY						3,159	3,742
0330 4- Encase 16" ML Below Splitter (Clarifier 6)															
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	81.13 sf	31.00 /mh	629	1.50 /sf	128	-	-	-	-	-	-	757	1,008
	Place Pipe Encasement	3310.195	4.00 cy	31.00 /mh	133	166.00 /cy	710	-	-	-	-	-	-	843	896
	Nails and Hardware	3150.200	81.13 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Form Ties Specialty	3150.632	8.00 ea	31.00 /mh	50	5.00 /ea	40	-	-	-	-	-	-	90	109
	Pipe Tie Downs (Medium)	3150.200	3.00 ea	31.00 /mh	465	150.00 /ea	450	-	-	-	-	-	-	915	1,101
	Dimension Lumber	3150.200	81.13 sf	31.00 /mh	0	0.50 /sf	41	-	-	-	-	-	-	41	41
	Oil SOG Form	3100.310	81.13 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Finish- Rough	3350.110	33.00 sf	31.00 /mh	9	0.01 /sf	0	-	-	-	-	-	-	9	13
	Liquid Curing Compounds	3390.170	33.00 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	4	5
	Encasement Rebar	3210.104	0.13 tn	31.00 /mh	121	1,400.00 /tn	192	-	-	-	-	-	-	313	361
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	50	8.50 /lf	143	-	-	-	-	-	-	192	212
	Encase 16" ML Below Splitter (Clarifier 6)		4.00 CY		1,458		1,711	/CY						3,168	3,752
0330 4- 16" ML to Future Clarifier 7															
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	81.13 sf	31.00 /mh	629	1.50 /sf	128	-	-	-	-	-	-	756	1,008
	Place Pipe Encasement	3310.195	6.00 cy	31.00 /mh	199	166.00 /cy	1,066	-	-	-	-	-	-	1,265	1,344
	Nails and Hardware	3150.200	81.13 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Form Ties Specialty	3150.632	8.00 ea	31.00 /mh	50	5.00 /ea	40	-	-	-	-	-	-	90	109
	Pipe Tie Downs (Medium)	3150.200	3.00 ea	31.00 /mh	465	150.00 /ea	450	-	-	-	-	-	-	915	1,101
	Dimension Lumber	3150.200	81.13 sf	31.00 /mh	0	0.50 /sf	41	-	-	-	-	-	-	41	41
	Oil SOG Form	3100.310	81.13 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0330 4- 16" ML to Future Clarifier 7															
	Finish- Rough	3350.110	33.00 sf	31.00 /mh	9	0.01 /sf	0	-	-	-	-	-	-	9	13
	Liquid Curing Compounds	3390.170	33.00 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	4	5
	Encasement Rebar	3210.104	0.13 tn	31.00 /mh	121	1,400.00 /tn	192	-	-	-	-	-	-	313	361
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	50	8.50 /lf	143	-	-	-	-	-	-	192	212
	DI Pipe RJ - Class 250 16	2511.401	9.00 lf	31.00 /mh	279	90.00 /lf	891	-	-	-	-	-	-	1,170	1,282
	DI RJ Compact 90 16	2511.514	1.00 ea	31.00 /mh	93	2,080.00 /ea	2,080	-	-	-	-	-	-	2,173	2,210
	DI RJ Compact Cap 16	2511.510	2.00 ea	31.00 /mh	186	920.00 /ea	1,840	-	-	-	-	-	-	2,026	2,100
	DI Floor Pipe PE x PE w/ Collar 16in x 4ft 0in long	15221.248	1.00 ea	31.00 /mh	124	1,200.00 /ea	1,200	-	-	-	-	-	-	1,324	1,374
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.15 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,275	3,500.00 /mnth	525	1,800	1,826
16" ML to Future Clarifier 7			6.00 CY		2,454		8,127	/CY			1,325		525	12,431	13,439
0330 4- 16" ML to Future Clarifier 8															
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	81.13 sf	31.00 /mh	629	1.50 /sf	128	-	-	-	-	-	-	756	1,008
	Place Pipe Encasement	3310.195	4.00 cy	31.00 /mh	133	166.00 /cy	710	-	-	-	-	-	-	843	896
	Nails and Hardware	3150.200	81.13 sf	31.00 /mh	0	0.04 /sf	3	-	-	-	-	-	-	3	3
	Form Ties Specialty	3150.632	8.00 ea	31.00 /mh	50	5.00 /ea	40	-	-	-	-	-	-	90	109
	Pipe Tie Downs (Medium)	3150.200	3.00 ea	31.00 /mh	465	150.00 /ea	450	-	-	-	-	-	-	915	1,101
	Dimension Lumber	3150.200	81.13 sf	31.00 /mh	0	0.50 /sf	41	-	-	-	-	-	-	41	41
	Oil SOG Form	3100.310	81.13 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Finish- Rough	3350.110	33.00 sf	31.00 /mh	9	0.01 /sf	0	-	-	-	-	-	-	9	13
	Liquid Curing Compounds	3390.170	33.00 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	4	5
	Encasement Rebar	3210.104	0.13 tn	31.00 /mh	121	1,400.00 /tn	192	-	-	-	-	-	-	313	361
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	50	8.50 /lf	143	-	-	-	-	-	-	192	212
	DI Pipe RJ - Class 250 16	2511.401	9.00 lf	31.00 /mh	279	90.00 /lf	891	-	-	-	-	-	-	1,170	1,282
	DI RJ Compact 90 16	2511.514	1.00 ea	31.00 /mh	93	2,080.00 /ea	2,080	-	-	-	-	-	-	2,173	2,210
	DI RJ Compact Cap 16	2511.510	2.00 ea	31.00 /mh	186	920.00 /ea	1,840	-	-	-	-	-	-	2,026	2,100
	DI Floor Pipe PE x PE w/ Collar 16in x 4ft 0in long	15221.248	1.00 ea	31.00 /mh	124	1,200.00 /ea	1,200	-	-	-	-	-	-	1,324	1,374
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.15 mnth	-	-	-	-	-	-	8,500.00 /mnth	1,275	3,500.00 /mnth	525	1,800	1,826
16" ML to Future Clarifier 8			4.00 CY		2,388		7,771	/CY			1,325		525	12,009	12,991
CML Ductile Iron					10,828		22,721				2,650		1,050	37,249	41,633
250 Secondary Clarifier Splitter Box					10,828		22,721	/LS			2,650		1,050	37,249	41,633
300 Secondary Clarifiers 5 and 6															
CML Ductile Iron															
0330 4- Encase 16" ML Below Clarifier 5															
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	182.90 sf	31.00 /mh	1,417	1.50 /sf	288	-	-	-	-	-	-	1,706	2,272
	Place Pipe Encasement	3310.195	9.00 cy	31.00 /mh	299	166.00 /cy	1,599	-	-	-	-	-	-	1,897	2,017
	Nails and Hardware	3150.200	182.90 sf	31.00 /mh	0	0.04 /sf	7	-	-	-	-	-	-	7	7
	Form Ties Specialty	3150.632	18.00 ea	31.00 /mh	112	5.00 /ea	90	-	-	-	-	-	-	202	246
	Pipe Tie Downs (Medium)	3150.200	10.00 ea	31.00 /mh	1,550	150.00 /ea	1,500	-	-	-	-	-	-	3,050	3,670
	Dimension Lumber	3150.200	182.90 sf	31.00 /mh	0	0.50 /sf	91	-	-	-	-	-	-	92	92
	Oil SOG Form	3100.310	182.90 sf	31.00 /mh	0	0.02 /sf	4	-	-	-	-	-	-	4	4
	Finish- Rough	3350.110	84.32 sf	31.00 /mh	24	0.01 /sf	1	-	-	-	-	-	-	24	33
	Liquid Curing Compounds	3390.170	84.32 sf	31.00 /mh	5	0.06 /sf	5	-	-	-	-	-	-	10	12
	Encasement Rebar	3210.104	0.36 tn	31.00 /mh	335	1,400.00 /tn	529	-	-	-	-	-	-	864	998
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	50	8.50 /lf	143	-	-	-	-	-	-	192	212
Encase 16" ML Below Clarifier 5			9.00 CY		3,791		4,257	/CY						8,048	9,564
0330 4- Encase 16" ML Below Clarifier 6															
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	182.90 sf	31.00 /mh	1,417	1.50 /sf	288	-	-	-	-	-	-	1,706	2,272
	Place Pipe Encasement	3310.195	8.00 cy	31.00 /mh	265	166.00 /cy	1,421	-	-	-	-	-	-	1,686	1,792
	Nails and Hardware	3150.200	182.90 sf	31.00 /mh	0	0.04 /sf	7	-	-	-	-	-	-	7	7
	Form Ties Specialty	3150.632	18.00 ea	31.00 /mh	112	5.00 /ea	90	-	-	-	-	-	-	202	246
	Pipe Tie Downs (Medium)	3150.200	10.00 ea	31.00 /mh	1,550	150.00 /ea	1,500	-	-	-	-	-	-	3,050	3,670
	Dimension Lumber	3150.200	182.90 sf	31.00 /mh	0	0.50 /sf	91	-	-	-	-	-	-	92	92
	Oil SOG Form	3100.310	182.90 sf	31.00 /mh	0	0.02 /sf	4	-	-	-	-	-	-	4	4
	Finish- Rough	3350.110	84.32 sf	31.00 /mh	24	0.01 /sf	1	-	-	-	-	-	-	24	33
	Liquid Curing Compounds	3390.170	84.32 sf	31.00 /mh	5	0.06 /sf	5	-	-	-	-	-	-	10	12
	Encasement Rebar	3210.104	0.36 tn	31.00 /mh	335	1,400.00 /tn	529	-	-	-	-	-	-	864	998
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	50	8.50 /lf	143	-	-	-	-	-	-	192	212
Encase 16" ML Below Clarifier 6			8.00 CY		3,758		4,079	/CY						7,837	9,340
0330 4- Encase 8" RAS Below Clarifier 5															
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	148.30 sf	31.00 /mh	1,149	1.50 /sf	234	-	-	-	-	-	-	1,383	1,843
	Place Pipe Encasement	3310.195	8.00 cy	31.00 /mh	265	166.00 /cy	1,421	-	-	-	-	-	-	1,686	1,792
	Nails and Hardware	3150.200	148.30 sf	31.00 /mh	0	0.04 /sf	6	-	-	-	-	-	-	6	6
	Form Ties Specialty	3150.632	18.00 ea	31.00 /mh	112	5.00 /ea	90	-	-	-	-	-	-	202	246
	Pipe Tie Downs (Small)	3150.200	9.00 ea	31.00 /mh	1,116	75.00 /ea	675	-	-	-	-	-	-	1,791	2,237

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	0330 4- Encase 8" RAS Below Clarifier 5														
	Dimension Lumber	3150.200	148.30 sf	31.00 /mh	0	0.50 /sf	74	-	-	-	-	-	-	74	74
	Oil SOG Form	3100.310	148.30 sf	31.00 /mh	0	0.02 /sf	3	-	-	-	-	-	-	3	3
	Finish- Rough	3350.110	69.44 sf	31.00 /mh	19	0.01 /sf	0	-	-	-	-	-	-	20	28
	Liquid Curing Compounds	3390.170	69.44 sf	31.00 /mh	4	0.06 /sf	4	-	-	-	-	-	-	8	10
	Encasement Rebar	3210.104	0.35 tn	31.00 /mh	326	1,400.00 /tn	515	-	-	-	-	-	-	841	971
	Waterstop Adeka or Swellstop	3510.610	12.00 lf	31.00 /mh	37	8.50 /lf	107	-	-	-	-	-	-	144	159
	Encase 8" RAS Below Clarifier 5		8.00 CY		3,029		3,129	/CY						6,158	7,370
	0330 4- Encase 8" RAS Below Clarifier 6														
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	148.30 sf	31.00 /mh	1,149	1.50 /sf	234	-	-	-	-	-	-	1,383	1,843
	Place Pipe Encasement	3310.195	8.00 cy	31.00 /mh	265	166.00 /cy	1,421	-	-	-	-	-	-	1,686	1,792
	Nails and Hardware	3150.200	148.30 sf	31.00 /mh	0	0.04 /sf	6	-	-	-	-	-	-	6	6
	Form Ties Specialty	3150.632	18.00 ea	31.00 /mh	112	5.00 /ea	90	-	-	-	-	-	-	202	246
	Pipe Tie Downs (Small)	3150.200	9.00 ea	31.00 /mh	1,116	75.00 /ea	675	-	-	-	-	-	-	1,791	2,237
	Dimension Lumber	3150.200	148.30 sf	31.00 /mh	0	0.50 /sf	74	-	-	-	-	-	-	74	74
	Oil SOG Form	3100.310	148.30 sf	31.00 /mh	0	0.02 /sf	3	-	-	-	-	-	-	3	3
	Finish- Rough	3350.110	69.44 sf	31.00 /mh	19	0.01 /sf	0	-	-	-	-	-	-	20	28
	Liquid Curing Compounds	3390.170	69.44 sf	31.00 /mh	4	0.06 /sf	4	-	-	-	-	-	-	8	10
	Encasement Rebar	3210.104	0.35 tn	31.00 /mh	326	1,400.00 /tn	515	-	-	-	-	-	-	841	971
	Waterstop Adeka or Swellstop	3510.610	12.00 lf	31.00 /mh	33	8.50 /lf	107	-	-	-	-	-	-	141	154
	Encase 8" RAS Below Clarifier 6		8.00 CY		3,025		3,129	/CY						6,155	7,365
	CML Ductile Iron				13,603		14,595							28,197	33,638
	GEN General														
	150-01 1c 12042002 4" Scum in Clarifiers														
	DI Pipe 4in. dia FxF - 4ft. 0in.	15221.010	4.00 ea	31.00 /mh	372	560.00 /ea	2,240	-	-	-	-	-	-	2,612	2,761
	DI Pipe 4in. dia FxPE - 3ft. 0in.	15221.030	2.00 ea	31.00 /mh	186	350.00 /ea	700	-	-	-	-	-	-	886	960
	DI Pipe 4in. dia FxPE - 6ft. 0in.	15221.030	2.00 ea	31.00 /mh	248	600.00 /ea	1,200	-	-	-	-	-	-	1,448	1,547
	DI Flanged 90 ell 4"	15221.430	4.00 ea	31.00 /mh	124	200.00 /ea	800	-	-	-	-	-	-	924	974
	DI Flanged 45 ell 4"	15221.425	4.00 ea	31.00 /mh	124	200.00 /ea	800	-	-	-	-	-	-	924	974
	Link Seal Size LS-475-S	15123.100	32.00 ea	31.00 /mh	149	16.00 /ea	512	-	-	-	-	-	-	661	720
	Sleeve Plastic CS-8-	15121.600	2.00 ea	31.00 /mh	62	150.00 /ea	300	-	-	-	-	-	-	362	387
	PS Special Support	15060.475	2.00 ea	31.00 /mh	186	0.01 /ea	0	-	-	-	-	-	-	186	260
	NBG Kit 125# SS 4in	15125.012	20.00 ea	31.00 /mh	186	200.00 /ea	4,000	-	-	-	-	-	-	4,186	4,260
	DI MEGAFLANGE w/ SS Bolts for DIP 4"	15112.230	4.00 ea	31.00 /mh	186	200.00 /ea	800	-	-	-	-	-	-	986	1,060
	Grout Sleeve 8in	15124.300	2.00 ea	31.00 /mh	124	15.00 /ea	30	-	-	-	-	-	-	154	204
	PS Expansion Anchor 5/8 x 7in SS	15060.127	8.00 ea	31.00 /mh	25	14.00 /ea	112	-	-	-	-	-	-	137	147
	4" Scum in Clarifiers				1,972		11,494							13,466	14,254
	150-55 80 1-1/2" Spray Bar														
	PVC Sch 80 PIPE 1.5" PE	15211.203	60.00 lf	31.00 /mh	391	3.00 /lf	180	-	-	-	-	-	-	571	727
	PVC Sch 80 90 EL 1.5" S	15211.207	4.00 ea	31.00 /mh	26	3.00 /ea	12	-	-	-	-	-	-	38	48
	PVC Sch 80 45 EL 1.5" SOCxSOC	15211.208	8.00 ea	31.00 /mh	52	6.60 /ea	53	-	-	-	-	-	-	105	126
	PVC Sch 80 TEE 1.5" S	15211.211	10.00 ea	31.00 /mh	65	10.20 /ea	102	-	-	-	-	-	-	167	193
	PVC Sch 80 Straight CPLG 1.5" S	15211.204	4.00 ea	31.00 /mh	26	3.00 /ea	12	-	-	-	-	-	-	38	48
	PVC Sch 80 MALE ADPT 1.5" SXMT	15211.217	10.00 ea	31.00 /mh	65	6.80 /ea	68	-	-	-	-	-	-	133	159
	PVC Sch 80 Cement	15211.201	4.00 qt	31.00 /mh		45.00 /qt	198	-	-	-	-	-	-	198	198
	PVC Sch 80 Primer	15211.201	4.00 qt	31.00 /mh		35.00 /qt	154	-	-	-	-	-	-	154	154
	PVC Sch 80 EPDM UNION 1.5" S	15211.219	10.00 ea	31.00 /mh	65	12.00 /ea	120	-	-	-	-	-	-	185	211
	PVC Valve Ball True Union Viton 1.5" S & T	15211.310	6.00 ea	31.00 /mh	39	70.00 /ea	420	-	-	-	-	-	-	459	475
	PS Strut SS 1-5/8 x 1-5/8	15060.476	30.00 lf	31.00 /mh	279	15.00 /lf	450	-	-	-	-	-	-	729	841
	PS 2 Piece Clamp SS 1-½in	15060.518	14.00 ea	31.00 /mh	130	7.00 /ea	98	-	-	-	-	-	-	228	280
	PS Expansion Anchor 3/8 x 5in SS	15060.127	28.00 ea	31.00 /mh	87	5.00 /ea	140	-	-	-	-	-	-	227	262
	1-1/2" Spray Nozzle	15112.010	10.00 ea	31.00 /mh	310	15.00 /ea	150	-	-	-	-	-	-	460	584
	1-1/2" Spray Bar		60.00 lf		1,535		2,157	/lf						3,692	4,306
	GEN General				3,507		13,651							17,158	18,560
	300 Secondary Clarifiers 5 and 6				17,109		28,246	/LS						45,355	52,198
	350 Step Feed Process Building														
	GEN General														
	02643-1- 8" RAS from Clarifiers 5 & 6 Underslab														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 4- 6'	2333.010	60.00 lf	31.00 /mh	335	-	-	-	-	-	-	-	-	335	469
	Trench Backfill 4- 6'	2333.020	60.00 lf	31.00 /mh	465	-	-	-	-	-	-	-	-	465	651
	Spoils to Waste	2333.060	35.56 cy	31.00 /mh	110	-	-	-	-	-	-	-	-	110	154
	DI Pipe RJ - Class 350 8	2511.401	60.00 lf	31.00 /mh	279	37.00 /lf	2,442	-	-	-	-	-	-	2,721	2,833
	DI RJ Compact Solid Sleeve Short 8	2511.523	2.00 ea	31.00 /mh	124	520.00 /ea	1,040	-	-	-	-	-	-	1,164	1,214
	Polybag 12" and Smaller	2333.090	60.00 lf	31.00 /mh	19	0.75 /lf	50	-	-	-	-	-	-	68	76
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.05 mnth	-	-	-	-	-	-	8,500.00 /mnth	425	3,500.00 /mnth	175	600	609
	John Deere 624 Loader (172 HP) (M)	1900.132	0.05 mnth	-	-	-	-	-	-	5,500.00 /mnth	275	3,000.00 /mnth	150	425	431
	Water Truck, 4,000 Gallon (L)	1900.210	0.05 mnth	-	-	-	-	-	-	4,500.00 /mnth	225	1,200.00 /mnth	60	285	290
	Mikasa Jumping Jack Compactor (L)	1900.138	0.05 mnth	-	-	-	-	-	-	200.00 /mnth	10	100.00 /mnth	5	15	15
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.05 mnth	-	-	-	-	-	-	2,000.00 /mnth	100	300.00 /mnth	15	115	117

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	8" RAS from Clarifiers 5 & 6 Underslab		60.00 If		1,828		3,632	/lf			1,135		405	6,999	7,753
02643-1-	4" Scum Underslab														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 4- 6'	2333.010	30.00 lf	31.00 /mh	167	-	-	-	-	-	-	-	-	167	234
	Trench Backfill 4- 6'	2333.020	30.00 lf	31.00 /mh	233	-	-	-	-	-	-	-	-	233	325
	Spoils to Waste	2333.060	16.67 cy	31.00 /mh	52	-	-	-	-	-	-	-	-	52	72
	DI Pipe RJ - Class 350 4 Glass Line	2511.401	30.00 lf	31.00 /mh	93	76.00 /lf	2,508	-	-	-	-	-	-	2,601	2,638
	DI RJ Compact Solid Sleeve Short 4 Glass Lined	2511.523	1.00 ea	31.00 /mh	62	780.00 /ea	780	-	-	-	-	-	-	842	867
	Polybag 12" and Smaller	2333.090	30.00 lf	31.00 /mh	9	0.75 /lf	25	-	-	-	-	-	-	34	38
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.01 mnth	-	-	-	-	-	-	8,500.00 /mnth	119	3,500.00 /mnth	49	168	170
	John Deere 624 Loader (172 HP) (M)	1900.132	0.01 mnth	-	-	-	-	-	-	5,500.00 /mnth	77	3,000.00 /mnth	42	119	121
	Water Truck, 4,000 Gallon (L)	1900.210	0.01 mnth	-	-	-	-	-	-	4,500.00 /mnth	32	1,200.00 /mnth	8	40	41
	Mikasa Jumping Jack Compactor (L)	1900.138	0.01 mnth	-	-	-	-	-	-	200.00 /mnth	1	100.00 /mnth	1	2	2
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.01 mnth	-	-	-	-	-	-	2,000.00 /mnth	14	300.00 /mnth	2	16	16
	4" Scum Underslab		30.00 lf		864		3,363	/lf			293		102	4,622	4,973
02643-1-	10" RAS Discharge Underslab														
	Trench Excavtion 4- 6'	2333.010	30.00 lf	31.00 /mh	167	-	-	-	-	-	-	-	-	167	234
	Trench Backfill 4- 6'	2333.020	30.00 lf	31.00 /mh	233	-	-	-	-	-	-	-	-	233	325
	Spoils to Waste	2333.060	16.67 cy	31.00 /mh	52	-	-	-	-	-	-	-	-	52	72
	DI Pipe RJ - Class 350 10	2511.401	30.00 lf	31.00 /mh	112	45.00 /lf	1,485	-	-	-	-	-	-	1,597	1,641
	DI RJ Compact Solid Sleeve Short 10	2511.523	1.00 ea	31.00 /mh	93	780.00 /ea	780	-	-	-	-	-	-	873	910
	Polybag 12" and Smaller	2333.090	30.00 lf	31.00 /mh	9	0.75 /lf	25	-	-	-	-	-	-	34	38
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.01 mnth	-	-	-	-	-	-	8,500.00 /mnth	119	3,500.00 /mnth	49	168	170
	John Deere 624 Loader (172 HP) (M)	1900.132	0.01 mnth	-	-	-	-	-	-	5,500.00 /mnth	77	3,000.00 /mnth	42	119	121
	Water Truck, 4,000 Gallon (L)	1900.210	0.01 mnth	-	-	-	-	-	-	4,500.00 /mnth	32	1,200.00 /mnth	8	40	41
	Mikasa Jumping Jack Compactor (L)	1900.138	0.01 mnth	-	-	-	-	-	-	200.00 /mnth	1	100.00 /mnth	1	2	2
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.01 mnth	-	-	-	-	-	-	2,000.00 /mnth	14	300.00 /mnth	2	16	16
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	10" RAS Discharge Underslab		30.00 lf		913		2,340	/lf			293		102	3,648	4,020
02643-1-	4" WAS Discharge Underslab														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 4- 6'	2333.010	30.00 lf	31.00 /mh	140	-	-	-	-	-	-	-	-	140	195
	Trench Backfill 4- 6'	2333.020	30.00 lf	31.00 /mh	233	-	-	-	-	-	-	-	-	233	325
	Spoils to Waste	2333.060	16.67 cy	31.00 /mh	52	-	-	-	-	-	-	-	-	52	72
	DI Pipe RJ - Class 350 4	2511.401	30.00 lf	31.00 /mh	93	35.00 /lf	1,155	-	-	-	-	-	-	1,248	1,285
	DI RJ Compact Solid Sleeve Short 4	2511.523	1.00 ea	31.00 /mh	31	290.00 /ea	290	-	-	-	-	-	-	321	333
	Polybag 12" and Smaller	2333.090	30.00 lf	31.00 /mh	9	0.75 /lf	25	-	-	-	-	-	-	34	38
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.01 mnth	-	-	-	-	-	-	8,500.00 /mnth	119	3,500.00 /mnth	49	168	170
	John Deere 624 Loader (172 HP) (M)	1900.132	0.01 mnth	-	-	-	-	-	-	5,500.00 /mnth	77	3,000.00 /mnth	42	119	121
	Water Truck, 4,000 Gallon (L)	1900.210	0.01 mnth	-	-	-	-	-	-	4,500.00 /mnth	32	1,200.00 /mnth	8	40	41
	Mikasa Jumping Jack Compactor (L)	1900.138	0.01 mnth	-	-	-	-	-	-	200.00 /mnth	1	100.00 /mnth	1	2	2
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.01 mnth	-	-	-	-	-	-	2,000.00 /mnth	14	300.00 /mnth	2	16	16
	4" WAS Discharge Underslab		30.00 lf		805		1,520	/lf			293		102	2,720	3,048
02643-1-	4" DS Underslab														
	Testing Pressure & Leak - Piping	1166.100	2.00 ea	31.00 /mh	496	50.00 /ea	100	-	-	50.00 /ea	100	-	-	696	896
	Trench Excavtion 4- 6'	2333.010	100.00 lf	31.00 /mh	465	-	-	-	-	-	-	-	-	465	651
	Trench Backfill 4- 6'	2333.020	100.00 lf	31.00 /mh	775	-	-	-	-	-	-	-	-	775	1,085
	Spoils to Waste	2333.060	55.56 cy	31.00 /mh	172	-	-	-	-	-	-	-	-	172	241
	DI Pipe RJ - Class 350 4	2511.401	100.00 lf	31.00 /mh	310	35.00 /lf	3,850	-	-	-	-	-	-	4,160	4,284
	DI RJ Compact 90 4	2511.514	10.00 ea	31.00 /mh	620	300.00 /ea	3,000	-	-	-	-	-	-	3,620	3,868
	DI RJ Compact Solid Sleeve Short 4	2511.523	1.00 ea	31.00 /mh	62	290.00 /ea	290	-	-	-	-	-	-	352	377
	Polybag 12" and Smaller	2333.090	100.00 lf	31.00 /mh	31	0.75 /lf	83	-	-	-	-	-	-	114	126
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.05 mnth	-	-	-	-	-	-	8,500.00 /mnth	383	3,500.00 /mnth	158	540	548
	John Deere 624 Loader (172 HP) (M)	1900.132	0.05 mnth	-	-	-	-	-	-	5,500.00 /mnth	248	3,000.00 /mnth	135	383	387
	Water Truck, 4,000 Gallon (L)	1900.210	0.02 mnth	-	-	-	-	-	-	4,500.00 /mnth	104	1,200.00 /mnth	28	131	133
	Mikasa Jumping Jack Compactor (L)	1900.138	0.02 mnth	-	-	-	-	-	-	200.00 /mnth	5	100.00 /mnth	2	7	7
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.02 mnth	-	-	-	-	-	-	2,000.00 /mnth	46	300.00 /mnth	7	53	54
	DI Floor Pipe FLG x MJ w/ Collar 4in x 3ft 0in long	15221.232	5.00 ea	31.00 /mh	465	1,100.00 /ea	5,500	-	-	-	-	-	-	5,965	6,151
	4" DS Underslab		100.00 lf		3,396		12,823	/lf			884		329	17,432	18,808
02643-1-	4" SPP Underslab														
	Trench Excavtion 4- 6'	2333.010	50.00 lf	31.00 /mh	279	-	-	-	-	-	-	-	-	279	391
	Trench Backfill 4- 6'	2333.020	50.00 lf	31.00 /mh	388	-	-	-	-	-	-	-	-	388	543
	Spoils to Waste	2333.060	29.63 cy	31.00 /mh	92	-	-	-	-	-	-	-	-	92	129
	DI Pipe RJ - Class 350 4	2511.401	50.00 lf	31.00 /mh	233	35.00 /lf	1,925	-	-	-	-	-	-	2,158	2,251
	DI RJ Compact 45 4	2511.514	3.00 ea	31.00 /mh	186	280.00 /ea	840	-	-	-	-	-	-	1,026	1,100
	DI RJ Compact Wye 4	2511.528	1.00 ea	31.00 /mh	93	506.00 /ea	506	-	-	-	-	-	-	599	636
	DI RJ Compact Solid Sleeve Short 4	2511.523	1.00 ea	31.00 /mh	124	290.00 /ea	290	-	-	-	-	-	-	414	464
	Polybag 12" and Smaller	2333.090	50.00 lf	31.00 /mh	16	0.75 /lf	41	-	-	-	-	-	-	57	63
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.02 mnth	-	-	-	-	-	-	8,500.00 /mnth	196	3,500.00 /mnth	81	276	280
	John Deere 624 Loader (172 HP) (M)	1900.132	0.02 mnth	-	-	-	-	-	-	5,500.00 /mnth	127	3,000.00 /mnth	69	196	198
	Water Truck, 4,000 Gallon (L)	1900.210	0.01 mnth	-	-	-	-	-	-	4,500.00 /mnth	50	1,200.00 /mnth	13	63	64
	Mikasa Jumping Jack Compactor (L)	1900.138	0.01 mnth	-	-	-	-	-	-	200.00 /mnth	2	100.00 /mnth	1	3	3

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02643-1-	4" SPP Underslab														
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.01 mnth	-	-	-	-	-	-	2,000.00 /mnth	22	300.00 /mnth	3	25	26
	DI Floor Pipe FLG x MJ w/ Collar 4in x 3ft 0in long	15221.232	2.00 ea	31.00 /mh	310	1,100.00 /ea	2,200	-	-	-	-	-	-	2,510	2,634
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	4" SPP Underslab		50.00 lf		1,967		5,852	/lf			446		167	8,432	9,228
0330 4-	8" RAS from Clarifiers 5 & 6 Underslab Encasement														
	Formwork Pipe Encasement	3100.108	420.00 sf	31.00 /mh	3,255	1.50 /sf	662	-	-	-	-	-	-	3,917	5,219
	Place Pipe Encasement	3310.195	37.00 cy	31.00 /mh	1,227	166.00 /cy	6,572	-	-	-	-	-	-	7,799	8,290
	Nails and Hardware	3150.200	420.00 sf	31.00 /mh	0	0.04 /sf	17	-	-	-	-	-	-	17	17
	Form Ties Specialty	3150.632	34.00 ea	31.00 /mh	211	5.00 /ea	170	-	-	-	-	-	-	381	465
	Pipe Tie Downs (Small)	3150.200	18.00 ea	31.00 /mh	2,232	75.00 /ea	1,350	-	-	-	-	-	-	3,582	4,475
	Dimension Lumber	3150.200	420.00 sf	31.00 /mh	0	0.50 /sf	210	-	-	-	-	-	-	210	210
	Oil SOG Form	3100.310	420.00 sf	31.00 /mh	0	0.02 /sf	8	-	-	-	-	-	-	9	9
	Finish- Rough	3350.110	300.00 sf	31.00 /mh	84	0.01 /sf	2	-	-	-	-	-	-	86	119
	Liquid Curing Compounds	3390.170	300.00 sf	31.00 /mh	19	0.06 /sf	18	-	-	-	-	-	-	37	44
	Encasement Rebar	3210.104	2.77 tn	31.00 /mh	2,147	1,400.00 /tn	4,073	-	-	-	-	-	-	6,219	7,078
	8" RAS from Clarifiers 5 & 6 Underslab Encasement		37.00 CY		9,175		13,081	/CY						22,256	25,925
0330 4-	4" Scum Underslab Encasement														
	Other Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	210.00 sf	31.00 /mh	1,628	1.50 /sf	331	-	-	-	-	-	-	1,958	2,609
	Place Pipe Encasement	3310.195	15.00 cy	31.00 /mh	498	166.00 /cy	2,664	-	-	-	-	-	-	3,162	3,361
	Nails and Hardware	3150.200	210.00 sf	31.00 /mh	0	0.04 /sf	8	-	-	-	-	-	-	8	8
	Form Ties Specialty	3150.632	17.00 ea	31.00 /mh	105	5.00 /ea	85	-	-	-	-	-	-	190	233
	Pipe Tie Downs (Small)	3150.200	9.00 ea	31.00 /mh	1,116	75.00 /ea	675	-	-	-	-	-	-	1,791	2,237
	Dimension Lumber	3150.200	210.00 sf	31.00 /mh	0	0.50 /sf	105	-	-	-	-	-	-	105	105
	Oil SOG Form	3100.310	210.00 sf	31.00 /mh	0	0.02 /sf	4	-	-	-	-	-	-	4	4
	Finish- Rough	3350.110	150.00 sf	31.00 /mh	42	0.01 /sf	1	-	-	-	-	-	-	43	59
	Liquid Curing Compounds	3390.170	150.00 sf	31.00 /mh	9	0.06 /sf	9	-	-	-	-	-	-	18	22
	Encasement Rebar	3210.104	1.25 tn	31.00 /mh	969	1,400.00 /tn	1,838	-	-	-	-	-	-	2,807	3,194
	4" Scum Underslab Encasement		15.00 CY		4,367		5,721	/CY						10,087	11,834
0330 4-	10" RAS Discharge Underslab Encasement														
	Other Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	210.00 sf	31.00 /mh	1,628	1.50 /sf	331	-	-	-	-	-	-	1,958	2,609
	Place Pipe Encasement	3310.195	19.00 cy	31.00 /mh	630	166.00 /cy	3,375	-	-	-	-	-	-	4,005	4,257
	Nails and Hardware	3150.200	210.00 sf	31.00 /mh	0	0.04 /sf	8	-	-	-	-	-	-	8	8
	Form Ties Specialty	3150.632	17.00 ea	31.00 /mh	105	5.00 /ea	85	-	-	-	-	-	-	190	233
	Pipe Tie Downs (Small)	3150.200	9.00 ea	31.00 /mh	1,116	75.00 /ea	675	-	-	-	-	-	-	1,791	2,237
	Dimension Lumber	3150.200	210.00 sf	31.00 /mh	0	0.50 /sf	105	-	-	-	-	-	-	105	105
	Oil SOG Form	3100.310	210.00 sf	31.00 /mh	0	0.02 /sf	4	-	-	-	-	-	-	4	4
	Finish- Rough	3350.110	150.00 sf	31.00 /mh	42	0.01 /sf	1	-	-	-	-	-	-	43	59
	Liquid Curing Compounds	3390.170	150.00 sf	31.00 /mh	9	0.06 /sf	9	-	-	-	-	-	-	18	22
	Encasement Rebar	3210.104	1.42 tn	31.00 /mh	1,101	1,400.00 /tn	2,087	-	-	-	-	-	-	3,188	3,628
	10" RAS Discharge Underslab Encasement		19.00 CY		4,631		6,680	/CY						11,311	13,164
0330 4-	4" WAS Discharge Underslab Encasement														
	Other Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	210.00 sf	31.00 /mh	1,628	1.50 /sf	331	-	-	-	-	-	-	1,958	2,609
	Place Pipe Encasement	3310.195	16.57 cy	31.00 /mh	550	166.00 /cy	2,943	-	-	-	-	-	-	3,493	3,713
	Nails and Hardware	3150.200	210.00 sf	31.00 /mh	0	0.04 /sf	8	-	-	-	-	-	-	8	8
	Form Ties Specialty	3150.632	17.00 ea	31.00 /mh	105	5.00 /ea	85	-	-	-	-	-	-	190	233
	Pipe Tie Downs (Small)	3150.200	9.00 ea	31.00 /mh	1,116	75.00 /ea	675	-	-	-	-	-	-	1,791	2,237
	Dimension Lumber	3150.200	210.00 sf	31.00 /mh	0	0.50 /sf	105	-	-	-	-	-	-	105	105
	Oil SOG Form	3100.310	210.00 sf	31.00 /mh	0	0.02 /sf	4	-	-	-	-	-	-	4	4
	Finish- Rough	3350.110	150.00 sf	31.00 /mh	42	0.01 /sf	1	-	-	-	-	-	-	43	59
	Liquid Curing Compounds	3390.170	150.00 sf	31.00 /mh	9	0.06 /sf	9	-	-	-	-	-	-	18	22
	Encasement Rebar	3210.104	1.20 tn	31.00 /mh	930	1,400.00 /tn	1,764	-	-	-	-	-	-	2,694	3,066
	4" WAS Discharge Underslab Encasement		16.57 CY		4,380		5,925	/CY						10,305	12,057
0330 4-	4" DS Underslab Encasement														
	Other Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	832.00 sf	31.00 /mh	6,448	1.50 /sf	1,310	-	-	-	-	-	-	7,758	10,338
	Place Pipe Encasement	3310.195	23.00 cy	31.00 /mh	763	166.00 /cy	4,085	-	-	-	-	-	-	4,848	5,153
	Nails and Hardware	3150.200	832.00 sf	31.00 /mh	0	0.04 /sf	33	-	-	-	-	-	-	34	34
	Form Ties Specialty	3150.632	52.00 ea	31.00 /mh	322	5.00 /ea	260	-	-	-	-	-	-	582	711
	Pipe Tie Downs (Small)	3150.200	26.00 ea	31.00 /mh	3,224	75.00 /ea	1,950	-	-	-	-	-	-	5,174	6,464
	Dimension Lumber	3150.200	832.00 sf	31.00 /mh	0	0.50 /sf	416	-	-	-	-	-	-	416	416
	Oil SOG Form	3100.310	832.00 sf	31.00 /mh	0	0.02 /sf	17	-	-	-	-	-	-	17	17
	Finish- Rough	3350.110	400.00 sf	31.00 /mh	112	0.01 /sf	2	-	-	-	-	-	-	114	159
	Liquid Curing Compounds	3390.170	400.00 sf	31.00 /mh	25	0.06 /sf	24	-	-	-	-	-	-	49	59
	Encasement Rebar	3210.104	1.72 tn	31.00 /mh	1,333	1,400.00 /tn	2,528	-	-	-	-	-	-	3,861	4,395
	4" DS Underslab Encasement		58.94 CY		12,227		10,626	/CY						22,854	27,745
0330 4-	4" SPP Underslab Encasement														
	Other Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
0330	4- 4" SPP Underslab Encasement														
	Formwork Pipe Encasement	3100.108	432.00 sf	31.00 /mh	3,348	1.50 /sf	680	-	-	-	-	-	-	4,028	5,368
	Place Pipe Encasement	3310.195	13.00 cy	31.00 /mh	431	166.00 /cy	2,309	-	-	-	-	-	-	2,740	2,913
	Nails and Hardware	3150.200	432.00 sf	31.00 /mh	0	0.04 /sf	17	-	-	-	-	-	-	17	17
	Form Ties Specialty	3150.632	27.00 ea	31.00 /mh	167	5.00 /ea	135	-	-	-	-	-	-	302	369
	Pipe Tie Downs (Small)	3150.200	14.00 ea	31.00 /mh	1,736	75.00 /ea	1,050	-	-	-	-	-	-	2,786	3,480
	Dimension Lumber	3150.200	432.00 sf	31.00 /mh	0	0.50 /sf	216	-	-	-	-	-	-	216	216
	Oil SOG Form	3100.310	432.00 sf	31.00 /mh	0	0.02 /sf	9	-	-	-	-	-	-	9	9
	Finish- Rough	3350.110	200.00 sf	31.00 /mh	56	0.01 /sf	1	-	-	-	-	-	-	57	79
	Liquid Curing Compounds	3390.170	200.00 sf	31.00 /mh	12	0.06 /sf	12	-	-	-	-	-	-	24	29
	Encasement Rebar	3210.104	0.97 tn	31.00 /mh	752	1,400.00 /tn	1,427	-	-	-	-	-	-	2,178	2,479
	4" SPP Underslab Encasement		29.47 CY		6,503		5,856	/CY						12,359	14,960
150-01	1c 12042002 8" RAS Pump Suction														
	DI Pipe 8in. dia FxF - 3ft. 0in.	15221.010	1.00 ea	31.00 /mh	47	1,000.00 /ea	1,000	-	-	-	-	-	-	1,047	1,065
	DI Pipe 4in. dia FxF - 2ft. 1in. w/ 1" tap	15221.010	2.00 ea	31.00 /mh	62	675.00 /ea	1,350	-	-	-	-	-	-	1,412	1,437
	DI Pipe 8in. dia FxF - 4ft. 0in.	15221.010	2.00 ea	31.00 /mh	93	1,100.00 /ea	2,200	-	-	-	-	-	-	2,293	2,330
	DI Pipe 8in. dia FxF - 9ft. 0in.	15221.010	3.00 ea	31.00 /mh	140	1,500.00 /ea	4,500	-	-	-	-	-	-	4,640	4,695
	DI Pipe 8in. dia FxPE - 3ft. 0in.	15221.030	2.00 ea	31.00 /mh	93	650.00 /ea	1,300	-	-	-	-	-	-	1,393	1,430
	DI Pipe 8in. dia FxPE - 6ft. 0in.	15221.030	3.00 ea	31.00 /mh	140	900.00 /ea	2,700	-	-	-	-	-	-	2,840	2,895
	DI Pipe 8in. dia FxPE - 7ft. 0in.	15221.030	2.00 ea	31.00 /mh	93	1,000.00 /ea	2,000	-	-	-	-	-	-	2,093	2,130
	DI Flanged Tee 8"	15221.455	7.00 ea	31.00 /mh	434	1,100.00 /ea	7,700	-	-	-	-	-	-	8,134	8,308
	DI Flanged Tee 4"	15221.455	1.00 ea	31.00 /mh	47	300.00 /ea	300	-	-	-	-	-	-	347	365
	DI Flanged Con Red 6x4"	15221.445	3.00 ea	31.00 /mh	93	300.00 /ea	900	-	-	-	-	-	-	993	1,030
	DI Flanged Con Red 8x4"	15221.445	2.00 ea	31.00 /mh	93	300.00 /ea	600	-	-	-	-	-	-	693	730
	DI Flanged Con Red 8x6"	15221.445	3.00 ea	31.00 /mh	140	350.00 /ea	1,050	-	-	-	-	-	-	1,190	1,245
	Link Seal Size LS-400-S	15123.100	36.00 ea	31.00 /mh	167	16.00 /ea	576	-	-	-	-	-	-	743	810
	Sleeve Plastic CS-12-	15121.600	2.00 ea	31.00 /mh	62	190.00 /ea	380	-	-	-	-	-	-	442	467
	Valve Plug Flange 125# 4in	15110.650	3.00 ea	31.00 /mh	93	1,200.00 /ea	3,600	-	-	-	-	-	-	3,693	3,730
	Valve Plug Flange 125# 6in	15110.650	3.00 ea	31.00 /mh	93	1,280.00 /ea	3,840	-	-	-	-	-	-	3,933	3,970
	Valve Plug Flange 125# 8in	15110.650	2.00 ea	31.00 /mh	124	1,690.00 /ea	3,380	-	-	-	-	-	-	3,504	3,554
	PS Pipe Stand for 8in DIP 3ft 0in floor to CL HDG	15060.406	6.00 ea	31.00 /mh	372	0.01 /ea	0	-	-	-	-	-	-	372	521
	NBG Kit 125# Steel 4in [EPDM gaskets, heavy hex, Steel = EG, SS = 316SS]	15125.010	18.00 ea	31.00 /mh	167	25.00 /ea	450	-	-	-	-	-	-	617	684
	NBG Kit 125# Steel 6in	15125.010	6.00 ea	31.00 /mh	56	40.00 /ea	240	-	-	-	-	-	-	296	318
	NBG Kit 125# Steel 8in	15125.010	28.00 ea	31.00 /mh	260	50.00 /ea	1,400	-	-	-	-	-	-	1,660	1,765
	DI MEGAFLANGE w/ Galv Bolts for DIP 8"	15112.220	5.00 ea	31.00 /mh	465	215.00 /ea	1,075	-	-	-	-	-	-	1,540	1,726
	DI Blind Flange 8"	15221.405	2.00 ea	31.00 /mh	93	200.00 /ea	400	-	-	-	-	-	-	493	530
	PS Expansion Anchor 3/4 x 7in SS	15060.127	32.00 ea	31.00 /mh	50	17.00 /ea	544	-	-	-	-	-	-	594	613
	PS Pipe Stand grout	15060.404	6.00 ea	31.00 /mh	93	8.00 /ea	48	-	-	-	-	-	-	141	178
	Grout Sleeve 12in	15124.300	5.00 ea	31.00 /mh	310	20.00 /ea	100	-	-	-	-	-	-	410	534
	DI MEGALUG for DIP 8"	2511.610	5.00 ea	31.00 /mh	78	45.00 /ea	225	-	-	-	-	-	-	303	334
	FCA for DIP 8"	15112.090	1.00 ea	31.00 /mh	124	1,500.00 /ea	1,500	-	-	-	-	-	-	1,624	1,674
	Restrained Dismantling Joint 8" EG Bolts	15112.085	1.00 ea	31.00 /mh	124	1,400.00 /ea	1,400	-	-	-	-	-	-	1,524	1,574
	Instrument - Pressure - Gauge	17400.000	3.00 ea	31.00 /mh	93	1,200.00 /ea	3,600	-	-	-	-	-	-	3,693	3,730
	Instrument - Pressure - Transmitter	17400.000	3.00 ea	31.00 /mh	93	0.01 /ea	0	-	-	-	-	-	-	93	130
	Stainless Steel Nipple 1" x 3"	15212.010	4.00 ea	31.00 /mh	31	8.00 /ea	32	-	-	-	-	-	-	63	75
	Valve Ball Threaded SS 1in	15110.014	2.00 ea	31.00 /mh	54	179.00 /ea	358	-	-	-	-	-	-	412	434
	Water Tap Saddle 8 x 2"	2519.424	1.00 ea	31.00 /mh	19	106.00 /ea	106	-	-	-	-	-	-	125	132
	Valve Air Release 2in	15110.005	1.00 ea	31.00 /mh	44	4,600.00 /ea	4,600	-	-	-	-	-	-	4,644	4,661
	Stainless Steel Nipple 2" X 3"	15212.010	2.00 ea	31.00 /mh	20	15.00 /ea	30	-	-	-	-	-	-	50	59
	Valve Ball Threaded SS 2in	15110.014	2.00 ea	31.00 /mh	87	465.00 /ea	930	-	-	-	-	-	-	1,017	1,052
	8" RAS Pump Suction				4,645		54,414							59,059	60,917
150-01	1c 12042002 4" Scum Suction														
	DI Pipe 4in. dia FxF - 2ft. 1in. w/ 1" tap Glass Lined	15221.010	1.00 ea	31.00 /mh	62	830.00 /ea	830	-	-	-	-	-	-	892	917
	DI Pipe 4in. dia FxF - 4ft. 0in. Glass Lined	15221.010	1.00 ea	31.00 /mh	62	800.00 /ea	800	-	-	-	-	-	-	862	887
	DI Pipe 4in. dia FxF - 10ft. 0in. Glass Lined	15221.010	1.00 ea	31.00 /mh	93	1,500.00 /ea	1,500	-	-	-	-	-	-	1,593	1,630
	DI Pipe 4in. dia FxPE - 3ft. 0in. Glass Lined	15221.030	1.00 ea	31.00 /mh	62	510.00 /ea	510	-	-	-	-	-	-	572	597
	DI Pipe 4in. dia FxPE - 6ft. 0in. Glass Lined	15221.030	1.00 ea	31.00 /mh	93	1,200.00 /ea	1,200	-	-	-	-	-	-	1,293	1,330
	DI Flanged 90 ell 4" Glass Lined	15221.430	1.00 ea	31.00 /mh	62	600.00 /ea	600	-	-	-	-	-	-	662	687
	DI Flanged Tee 4" Glass Lined	15221.455	3.00 ea	31.00 /mh	186	800.00 /ea	2,400	-	-	-	-	-	-	2,586	2,660
	Sleeve Plastic CS-8-	15121.600	1.00 ea	31.00 /mh	62	150.00 /ea	150	-	-	-	-	-	-	212	237
	Valve Plug Flange 125# 4in	15110.650	3.00 ea	31.00 /mh	186	1,200.00 /ea	3,600	-	-	-	-	-	-	3,786	3,860
	PS Pipe Stand for 4in DIP 3ft 0in floor to CL HDG	15060.406	2.00 ea	31.00 /mh	186	0.01 /ea	0	-	-	-	-	-	-	186	260
	PS Knee Brace for 4in DIP 18in horizontal length HDG	15060.278	2.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	NBG Kit 125# Steel 4in	15125.010	15.00 ea	31.00 /mh	233	25.00 /ea	375	-	-	-	-	-	-	608	701
	DI MEGAFLANGE w/ Galv Bolts for DIP 4"	15112.220	3.00 ea	31.00 /mh	140	92.00 /ea	276	-	-	-	-	-	-	416	471
	DI Blind Flange 4"	15221.405	2.00 ea	31.00 /mh	62	75.00 /ea	150	-	-	-	-	-	-	212	237
	PS Epoxy Anchor 5/8 x 7in SS	15060.112	16.00 ea	31.00 /mh	50	16.00 /ea	256	-	-	-	-	-	-	306	325
	PS Pipe Stand grout	15060.404	2.00 ea	31.00 /mh	62	8.00 /ea	16	-	-	-	-	-	-	78	103
	DI MEGALUG for DIP 4"	2511.610	1.00 ea	31.00 /mh	31	25.00 /ea	25	-	-	-	-	-	-	56	68
	Grout Sleeve 8in	15124.300	1.00 ea	31.00 /mh	62	15.00 /ea	15	-	-	-	-	-	-	77	102
	Stainless Steel Nipple 1" x 3"	15212.010	2.00 ea	31.00 /mh	16	8.00 /ea	16	-	-	-	-	-	-	32	38
	Valve Ball Threaded SS 1in	15110.014	1.00 ea	31.00 /mh	27	179.00 /ea	179	-	-	-	-	-	-	206	217
	Instrument - Pressure - Gauge	17400.000	1.00 ea	31.00 /mh	93	1,200.00 /ea	1,200	-	-	-	-	-	-	1,293	1,330

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
150-01 1c 12042002 4" Scum Suction															
	Instrument - Pressure - Transmitter	17400.000	1.00 ea	31.00 /mh	62	0.01 /ea	0	-	-	-	-	-	-	62	87
	4" Scum Suction				2,138		14,098							16,236	17,091
150-01 1c 12042002 8"/10" RAS Discharge															
	DI Pipe 6in. dia FxF - 3ft. 1in. w/ 1" tap	15221.010	3.00 ea	31.00 /mh	186	900.00 /ea	2,700	-	-	-	-	-	-	2,886	2,960
	DI Pipe 6in. dia FxF - 6ft. 0in.	15221.010	4.00 ea	31.00 /mh	372	850.00 /ea	3,400	-	-	-	-	-	-	3,772	3,921
	DI Pipe 8in. dia FxF - 4ft. 0in.	15221.010	3.00 ea	31.00 /mh	186	1,100.00 /ea	3,300	-	-	-	-	-	-	3,486	3,560
	DI Pipe 8in. dia FxF - 18ft. 0in.	15221.010	2.00 ea	31.00 /mh	310	2,300.00 /ea	4,600	-	-	-	-	-	-	4,910	5,034
	DI Pipe 10in. dia FxPE - 8ft. 0in.	15221.030	2.00 ea	31.00 /mh	248	1,400.00 /ea	2,800	-	-	-	-	-	-	3,048	3,147
	DI Flanged 90 ell 6"	15221.430	3.00 ea	31.00 /mh	186	300.00 /ea	900	-	-	-	-	-	-	1,086	1,160
	DI Flanged 90 ell 8"	15221.430	3.00 ea	31.00 /mh	186	550.00 /ea	1,650	-	-	-	-	-	-	1,836	1,910
	DI Flanged Tee 8"	15221.455	2.00 ea	31.00 /mh	124	1,100.00 /ea	2,200	-	-	-	-	-	-	2,324	2,374
	DI Flanged Tee 10"	15221.455	1.00 ea	31.00 /mh	62	1,600.00 /ea	1,600	-	-	-	-	-	-	1,662	1,687
	DI Flanged Tee 10x8"	15221.455	1.00 ea	31.00 /mh	62	1,400.00 /ea	1,400	-	-	-	-	-	-	1,462	1,487
	DI Flanged Con Red 8x6"	15221.445	3.00 ea	31.00 /mh	186	350.00 /ea	1,050	-	-	-	-	-	-	1,236	1,310
	DI Flanged Con Red 10x8"	15221.445	1.00 ea	31.00 /mh	62	700.00 /ea	700	-	-	-	-	-	-	762	787
	Link Seal Size LS-340-S	15123.100	48.00 ea	31.00 /mh	223	15.00 /ea	720	-	-	-	-	-	-	943	1,032
	Sleeve Steel WS-14-37-S-	15121.800	1.00 ea	31.00 /mh	62	1,450.00 /ea	1,450	-	-	-	-	-	-	1,512	1,537
	Valve Check Flange 125# 8in	15110.040	3.00 ea	31.00 /mh	279	3,200.00 /ea	9,600	-	-	-	-	-	-	9,879	9,991
	Valve Plug Flange 125# 8in	15110.650	3.00 ea	31.00 /mh	279	1,690.00 /ea	5,070	-	-	-	-	-	-	5,349	5,461
	PS Clevis Hanger HDG 8in	15060.098	6.00 ea	31.00 /mh	186	25.00 /ea	150	-	-	-	-	-	-	336	410
	PS Clevis Hanger HDG 10in	15060.098	2.00 ea	31.00 /mh	62	46.00 /ea	92	-	-	-	-	-	-	154	179
	NBG Kit 125# Steel 6in	15125.010	18.00 ea	31.00 /mh	279	40.00 /ea	720	-	-	-	-	-	-	999	1,111
	NBG Kit 125# Steel 8in	15125.010	29.00 ea	31.00 /mh	450	50.00 /ea	1,450	-	-	-	-	-	-	1,900	2,079
	NBG Kit 125# Steel 10in	15125.010	7.00 ea	31.00 /mh	217	90.00 /ea	630	-	-	-	-	-	-	847	934
	DI MEGAFLANGE w/ Galv Bolts for DIP 8"	15112.220	3.00 ea	31.00 /mh	279	215.00 /ea	645	-	-	-	-	-	-	924	1,036
	DI MEGAFLANGE w/ Galv Bolts for DIP 10"	15112.220	1.00 ea	31.00 /mh	93	300.00 /ea	300	-	-	-	-	-	-	393	430
	DI Blind Flange 8"	15221.405	2.00 ea	31.00 /mh	93	200.00 /ea	400	-	-	-	-	-	-	493	530
	Instrument - Flow - Magnetic Flow Meter - 6in	17200.000	3.00 ea	31.00 /mh	372	0.01 /ea	0	-	-	-	-	-	-	372	521
	Water Tap Saddle 10 x 3/4"	2519.424	2.00 ea	31.00 /mh	62	106.00 /ea	212	-	-	-	-	-	-	274	299
	Water Tap Saddle 6 x 1"	2519.424	3.00 ea	31.00 /mh	93	80.00 /ea	240	-	-	-	-	-	-	333	370
	DI MEGALUG for DIP 10"	2511.610	1.00 ea	31.00 /mh	31	66.00 /ea	66	-	-	-	-	-	-	97	109
	Stainless Steel Nipple 1" x 3"	15212.010	12.00 ea	31.00 /mh	93	8.00 /ea	96	-	-	-	-	-	-	189	226
	Valve Ball Threaded SS 1in	15110.014	8.00 ea	31.00 /mh	216	179.00 /ea	1,432	-	-	-	-	-	-	1,648	1,734
	Stainless Steel 90 Elbow 1"	15212.040	3.00 ea	31.00 /mh	19	200.00 /ea	600	-	-	-	-	-	-	619	626
	Stainless Steel Nipple 1/2" X 2"	15212.010	4.00 ea	31.00 /mh	31	5.00 /ea	20	-	-	-	-	-	-	51	63
	Valve Ball Threaded SS 1/2in	15110.014	2.00 ea	31.00 /mh	33	80.00 /ea	160	-	-	-	-	-	-	193	207
	Grout Sleeve 18in	15124.300	1.00 ea	31.00 /mh	62	35.00 /ea	35	-	-	-	-	-	-	97	122
	PS Ceiling Plate For 3/4" Rod HDG	15060.093	10.00 ea	31.00 /mh	273	60.00 /ea	600	-	-	-	-	-	-	873	982
	PS Epoxy Anchor 3/4 x 7in SS	15060.112	32.00 ea	31.00 /mh	99	21.00 /ea	672	-	-	-	-	-	-	771	811
	PS Threaded Rod 3/4in EG	15060.502	40.00 lf	31.00 /mh	124	8.00 /lf	320	-	-	-	-	-	-	444	494
	Instrument - Pressure - Gauge	17400.000	3.00 ea	31.00 /mh	279	1,200.00 /ea	3,600	-	-	-	-	-	-	3,879	3,991
	Instrument - Pressure - Switch High	17400.000	3.00 ea	31.00 /mh	186	0.01 /ea	0	-	-	-	-	-	-	186	260
	Water Tap Saddle 8 x 2"	2519.424	1.00 ea	31.00 /mh	31	106.00 /ea	106	-	-	-	-	-	-	137	149
	Valve Air Release 2in	15110.005	1.00 ea	31.00 /mh	44	4,600.00 /ea	4,600	-	-	-	-	-	-	4,644	4,661
	Stainless Steel Nipple 2" X 3"	15212.010	2.00 ea	31.00 /mh	20	15.00 /ea	30	-	-	-	-	-	-	50	59
	Valve Ball Threaded SS 2in	15110.014	1.00 ea	31.00 /mh	44	465.00 /ea	465	-	-	-	-	-	-	509	526
	8"/10" RAS Discharge				6,783		60,781							67,564	70,278
150-01 1c 12042002 4" WAS Discharge															
	DI Pipe 4in. dia FxF - 3ft. 0in.	15221.010	3.00 ea	31.00 /mh	186	510.00 /ea	1,530	-	-	-	-	-	-	1,716	1,790
	DI Pipe 4in. dia FxF - 4ft. 0in.	15221.010	6.00 ea	31.00 /mh	372	560.00 /ea	3,360	-	-	-	-	-	-	3,732	3,881
	DI Pipe 4in. dia FxF - 6ft. 0in.	15221.010	1.00 ea	31.00 /mh	62	850.00 /ea	850	-	-	-	-	-	-	912	937
	DI Pipe 4in. dia FxF - 8ft. 0in.	15221.010	2.00 ea	31.00 /mh	186	780.00 /ea	1,560	-	-	-	-	-	-	1,746	1,820
	DI Pipe 4in. dia FxPE - 6ft. 0in.	15221.030	4.00 ea	31.00 /mh	248	600.00 /ea	2,400	-	-	-	-	-	-	2,648	2,747
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	1.00 ea	31.00 /mh	124	750.00 /ea	750	-	-	-	-	-	-	874	924
	DI Pipe 4in. dia FxPE - 18ft. 0in.	15221.030	1.00 ea	31.00 /mh	155	1,200.00 /ea	1,200	-	-	-	-	-	-	1,355	1,417
	DI Flanged 90 ell 4"	15221.430	6.00 ea	31.00 /mh	186	200.00 /ea	1,200	-	-	-	-	-	-	1,386	1,460
	DI Flanged 45 ell 4"	15221.425	3.00 ea	31.00 /mh	93	200.00 /ea	600	-	-	-	-	-	-	693	730
	DI Flanged Tee 4"	15221.455	4.00 ea	31.00 /mh	248	300.00 /ea	1,200	-	-	-	-	-	-	1,448	1,547
	Link Seal Size LS-475-S	15123.100	16.00 ea	31.00 /mh	74	16.00 /ea	256	-	-	-	-	-	-	330	360
	Sleeve Plastic CS-8-	15121.600	1.00 ea	31.00 /mh	62	150.00 /ea	150	-	-	-	-	-	-	212	237
	Valve Check Flange 125# 4in	15110.040	3.00 ea	31.00 /mh	186	1,580.00 /ea	4,740	-	-	-	-	-	-	4,926	5,000
	Valve Plug Flange 125# 4in	15110.650	4.00 ea	31.00 /mh	248	1,200.00 /ea	4,800	-	-	-	-	-	-	5,048	5,147
	PS Clevis Hanger HDG 4in	15060.098	3.00 ea	31.00 /mh	47	10.00 /ea	30	-	-	-	-	-	-	77	95
	PS Knee Brace for 4in DIP 24in horizontal length HDG	15060.278	5.00 ea	31.00 /mh	465	0.01 /ea	0	-	-	-	-	-	-	465	651
	NBG Kit 125# Steel 4in	15125.010	37.00 ea	31.00 /mh	344	25.00 /ea	925	-	-	-	-	-	-	1,269	1,407
	DI MEGAFLANGE w/ Galv Bolts for DIP 4"	15112.220	8.00 ea	31.00 /mh	372	92.00 /ea	736	-	-	-	-	-	-	1,108	1,257
	DI Blind Flange 4"	15221.405	2.00 ea	31.00 /mh	62	75.00 /ea	150	-	-	-	-	-	-	212	237
	PS Epoxy Anchor 3/4 x 7in SS	15060.112	26.00 ea	31.00 /mh	81	21.00 /ea	546	-	-	-	-	-	-	627	659
	Grout Sleeve 8in	15124.300	4.00 ea	31.00 /mh	248	15.00 /ea	60	-	-	-	-	-	-	308	407
	Instrument - Flow - Magnetic Flow Meter - 4in	17200.000	1.00 ea	31.00 /mh	90	0.01 /ea	0	-	-	-	-	-	-	90	126
	Water Tap Saddle 4 X 1"	2519.424	7.00 ea	31.00 /mh	217	70.00 /ea	490	-	-	-	-	-	-	707	794
	Stainless Steel Nipple 1" x 3"	15212.010	14.00 ea	31.00 /mh	109	8.00 /ea	112	-	-	-	-	-	-	221	264

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	150-01 1c 12042002 4" WAS Discharge														
	Stainless Steel 90 Elbow 1"	15212.040	3.00 ea	31.00 /mh	19	200.00 /ea	600	-	-	-	-	-	-	619	626
	Valve Ball Threaded SS 1in	15110.014	8.00 ea	31.00 /mh	216	179.00 /ea	1,432	-	-	-	-	-	-	1,648	1,734
	Instrument - Analyzer - TSS	17100.000	4.00 ea	31.00 /mh	248	500.00 /ea	2,000	-	-	-	-	-	-	2,248	2,347
	Instrument - Pressure - Switch Differential	17400.000	3.00 ea	31.00 /mh	279	0.01 /ea	0	-	-	-	-	-	-	279	391
	Instrument - Pressure - Transmitter	17400.000	3.00 ea	31.00 /mh	186	0.01 /ea	0	-	-	-	-	-	-	186	260
	DI MEGALUG for DIP 4"	2511.610	1.00 ea	31.00 /mh	5	25.00 /ea	25	-	-	-	-	-	-	30	32
	4" WAS Discharge				5,416		31,702							37,118	39,285
	150-01 1c 12042002 4" DS to Presses														
	DI Pipe 4in. dia FxF - 2ft. 0in. [Lining is all CML or as noted]	15221.010	2.00 ea	31.00 /mh	124	455.00 /ea	910	-	-	-	-	-	-	1,034	1,084
	DI Pipe 4in. dia FxF - 2ft. 6in.	15221.010	2.00 ea	31.00 /mh	124	480.00 /ea	960	-	-	-	-	-	-	1,084	1,134
	DI Pipe 4in. dia FxF - 3ft. 0in.	15221.010	5.00 ea	31.00 /mh	310	510.00 /ea	2,550	-	-	-	-	-	-	2,860	2,984
	DI Pipe 4in. dia FxF - 5ft. 0in.	15221.010	2.00 ea	31.00 /mh	124	610.00 /ea	1,220	-	-	-	-	-	-	1,344	1,394
	DI Pipe 4in. dia FxPE - 4ft. 0in.	15221.030	2.00 ea	31.00 /mh	124	380.00 /ea	760	-	-	-	-	-	-	884	934
	DI Flanged 90 ell 4"	15221.430	3.00 ea	31.00 /mh	93	200.00 /ea	600	-	-	-	-	-	-	693	730
	DI Flanged 90 ell 6"	15221.430	2.00 ea	31.00 /mh	62	300.00 /ea	600	-	-	-	-	-	-	662	687
	DI Flanged Tee 4"	15221.455	3.00 ea	31.00 /mh	140	300.00 /ea	900	-	-	-	-	-	-	1,040	1,095
	DI Flanged Con Red 6x4"	15221.445	2.00 ea	31.00 /mh	124	300.00 /ea	600	-	-	-	-	-	-	724	774
	Valve Plug Flange 125# 4in	15110.650	4.00 ea	31.00 /mh	248	1,200.00 /ea	4,800	-	-	-	-	-	-	5,048	5,147
	PS Pipe Stand for 4in DIP 3ft 0in floor to CL HDG	15060.406	2.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	PS Pipe Stand for 4in DIP 5ft 0in floor to CL HDG	15060.406	2.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	NBG Kit 125# Steel 4in	15125.010	35.00 ea	31.00 /mh	543	25.00 /ea	875	-	-	-	-	-	-	1,418	1,635
	NBG Kit 125# Steel 6in	15125.010	8.00 ea	31.00 /mh	124	40.00 /ea	320	-	-	-	-	-	-	444	494
	DI MEGAFLANGE w/ Galv Bolts for DIP 4"	15112.220	5.00 ea	31.00 /mh	233	92.00 /ea	460	-	-	-	-	-	-	693	786
	DI Blind Flange 4"	15221.405	2.00 ea	31.00 /mh	62	75.00 /ea	150	-	-	-	-	-	-	212	237
	PS Expansion Anchor 5/8 x 7in SS	15060.127	16.00 ea	31.00 /mh	50	14.00 /ea	224	-	-	-	-	-	-	274	293
	PS Pipe Stand grout	15060.404	4.00 ea	31.00 /mh	62	8.00 /ea	32	-	-	-	-	-	-	94	119
	Water Tap Saddle 4 X 1"	2519.424	5.00 ea	31.00 /mh	78	70.00 /ea	350	-	-	-	-	-	-	428	459
	Instrument - Flow - Magnetic Flow Meter - 4in	17200.000	2.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	Valve Special 4in - "FCV"	15110.003	2.00 ea	31.00 /mh	124	10,000.00 /ea	20,000	-	-	-	-	-	-	20,124	20,174
	In-line Polymer Mixer (Motorized)	11900.084	2.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	NBG Kit 125# Insulating 6in	15125.016	2.00 ea	31.00 /mh	62	60.00 /ea	120	-	-	-	-	-	-	182	207
	Stainless Steel Nipple 1" x 3"	15212.010	10.00 ea	31.00 /mh	78	8.00 /ea	80	-	-	-	-	-	-	158	189
	Stainless Steel 90 Elbow 1"	15212.040	6.00 ea	31.00 /mh	37	200.00 /ea	1,200	-	-	-	-	-	-	1,237	1,252
	Valve Ball Threaded SS 1in	15110.014	7.00 ea	31.00 /mh	189	179.00 /ea	1,253	-	-	-	-	-	-	1,442	1,517
	Instrument - Pressure - Transmitter	17400.000	2.00 ea	31.00 /mh	124	0.01 /ea	0	-	-	-	-	-	-	124	174
	Instrument - Pressure - Gauge	17400.000	2.00 ea	31.00 /mh	124	1,200.00 /ea	2,400	-	-	-	-	-	-	2,524	2,574
	4" DS to Presses				4,600		41,364							45,964	47,804
	150-01 1c 12042002 12" ALP Blower Discharge														
	PS Clevis Hanger SS 4in	15060.096	2.00 ea	31.00 /mh	62	47.00 /ea	94	-	-	-	-	-	-	156	181
	PS Clevis Hanger SS 12in	15060.096	8.00 ea	31.00 /mh	496	214.00 /ea	1,712	-	-	-	-	-	-	2,208	2,406
	NBG Kit 125# SS 4in	15125.012	5.00 ea	31.00 /mh	78	200.00 /ea	1,000	-	-	-	-	-	-	1,078	1,108
	NBG Kit 125# SS 12in	15125.012	16.00 ea	31.00 /mh	496	500.00 /ea	8,000	-	-	-	-	-	-	8,496	8,694
	NBG Kit 125# SS 20in	15125.012	1.00 ea	31.00 /mh	93	1,200.00 /ea	1,200	-	-	-	-	-	-	1,293	1,330
	Fab Stainless Steel Pipe - 12" - *	15233.505	17.00 ea	31.00 /mh	1,581	/ea		-	-	-	-	-	-	1,581	2,213
	Fab Stainless Steel Pipe - 20" - *	15233.505	1.00 ea	31.00 /mh	186	/ea		-	-	-	-	-	-	186	260
	Fab Stainless Steel Pipe - 4" - *	15233.505	4.00 ea	31.00 /mh	248	/ea		-	-	-	-	-	-	248	347
	Double Disc Valve Check Swing Flange 12"	15110.058	3.00 ea	31.00 /mh	372	4,900.00 /ea	14,700	-	-	-	-	-	-	15,072	15,221
	Valve Butterfly Lugged 125# 12in	15110.026	3.00 ea	31.00 /mh	93	2,240.00 /ea	6,720	-	-	-	-	-	-	6,813	6,850
	FCV Valve Butterfly Lugged 125# 4in w/ Elec Actuator	15110.026	1.00 ea	31.00 /mh	93	6,300.00 /ea	6,300	-	-	-	-	-	-	6,393	6,430
	Expansion Joint Flanged SS 12"	15112.070	5.00 ea	31.00 /mh	930	4,900.00 /ea	24,500	-	-	-	-	-	-	25,430	25,802
	NBG Kit 125# Insulating 20in	15125.016	1.00 ea	31.00 /mh	93	300.00 /ea	300	-	-	-	-	-	-	393	430
	PS Ceiling Plate For 3/4" Rod SS	15060.093	5.00 ea	31.00 /mh	136	60.00 /ea	300	-	-	-	-	-	-	436	491
	PS Misc Hardware for Clevis Hanger Assemblies	15060.290	1.00 ea	31.00 /mh	8	5.00 /ea	5	-	-	-	-	-	-	13	16
	PS Strut SS 1-5/8 x 1-5/8	15060.476	20.00 lf	31.00 /mh	186	15.00 /lf	300	-	-	-	-	-	-	486	560
	PS Threaded Rod 3/4in SS	15060.502	20.00 lf	31.00 /mh	62	8.00 /lf	160	-	-	-	-	-	-	222	247
	Backer Rod and Caulk Sleeve 18in	15124.100	7.00 ea	31.00 /mh	868	100.00 /ea	700	-	-	-	-	-	-	1,568	1,915
	Expansion Material Around Pipe	15124.100	7.00 ea	31.00 /mh	109	40.00 /ea	280	-	-	-	-	-	-	389	432
	Blower Silencer 4"	11100.050	1.00 ea	31.00 /mh		/ea		-	-	-	-	-	-		
	Stainless Steel Nipple 1" x 3"	15212.010	4.00 ea	31.00 /mh	31	8.00 /ea	32	-	-	-	-	-	-	63	75
	Valve Ball Threaded SS 1in	15110.014	2.00 ea	31.00 /mh	54	179.00 /ea	358	-	-	-	-	-	-	412	434
	Instrument - Pressure - Transmitter	17400.000	2.00 ea	31.00 /mh	124	0.01 /ea	0	-	-	-	-	-	-	124	174
	Core Drilled Hole - 8 -*	15122.100	1.00 ea	31.00 /mh	31	200.00 /ea	200	150.00 /ea	150	-	-	-	-	381	393
	Link Seal Size LS-475-S	15123.100	16.00 ea	31.00 /mh	74	16.00 /ea	256	-	-	-	-	-	-	330	360
	12" ALP Blower Discharge				6,503		67,117		150					73,771	76,372
	150-55 80 4" SPP														
	PVC Sch 80 PIPE 4" PE	15211.203	30.00 lf	31.00 /mh	298	11.00 /lf	330	-	-	-	-	-	-	628	747
	PVC Sch 80 90 EL 4" S	15211.207	4.00 ea	31.00 /mh	40	14.30 /ea	57	-	-	-	-	-	-	97	113
	PVC Sch 80 Straight CPLG 4" S	15211.204	2.00 ea	31.00 /mh	20	12.00 /ea	24	-	-	-	-	-	-	44	52
	PVC Sch 80 Flange Van Stone 4" Soc	15211.223	4.00 ea	31.00 /mh	40	50.00 /ea	200	-	-	-	-	-	-	240	256
	PVC Sch 80 Cement	15211.201	2.00 qt	31.00 /mh		45.00 /qt	99	-	-	-	-	-	-	99	99
	PVC Sch 80 Primer	15211.201	2.00 qt	31.00 /mh		35.00 /qt	77	-	-	-	-	-	-	77	77

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
150-55 80 4" SPP															
	NBG Kit 125# SS 4in	15125.012	4.00 ea	31.00 /mh	62	200.00 /ea	800	-	-	-	-	-	-	862	887
	PS 2 Piece Clamp EG 4in	15060.514	14.00 ea	31.00 /mh	130	14.00 /ea	196	-	-	-	-	-	-	326	378
	PVC Sch 80 PIPE 6" PE	15211.203	10.00 lf	31.00 /mh	99	20.00 /lf	200	-	-	-	-	-	-	299	339
	PVC Sch 80 90 EL 6" S	15211.207	2.00 ea	31.00 /mh	20	40.80 /ea	82	-	-	-	-	-	-	101	109
	PVC Sch 80 Flange Van Stone 6" Soc	15211.223	2.00 ea	31.00 /mh	20	80.00 /ea	160	-	-	-	-	-	-	180	188
	PVC Sch 80 Concentric Reducer Coupling 6X4 S	15211.205	2.00 ea	31.00 /mh	20	60.00 /ea	120	-	-	-	-	-	-	140	148
	NBG Kit 125# SS 6in	15125.012	2.00 ea	31.00 /mh	31	250.00 /ea	500	-	-	-	-	-	-	531	543
	Stainless Steel Nipple 1" x 3"	15212.010	4.00 ea	31.00 /mh	31	8.00 /ea	32	-	-	-	-	-	-	63	75
	Stainless Steel 90 Elbow 1"	15212.040	2.00 ea	31.00 /mh	12	200.00 /ea	400	-	-	-	-	-	-	412	417
	Valve Ball Threaded SS 1in	15110.014	2.00 ea	31.00 /mh	62	179.00 /ea	358	-	-	-	-	-	-	420	445
4" SPP			30.00 lf		884		3,635	/lf						4,519	4,873
150-55 80 Chemical Piping (SHC, Poly, Gly, FC)															
	PVC Sch 80 PIPE 2" PE	15211.203	220.00 lf	31.00 /mh	2,046	4.00 /lf	880	-	-	-	-	-	-	2,926	3,744
	PVC Sch 80 PIPE 1/2" PE	15211.203	20.00 lf	31.00 /mh	186	1.00 /lf	20	-	-	-	-	-	-	206	280
	PVC Sch 80 PIPE 3" PE	15211.203	80.00 lf	31.00 /mh	744	8.00 /lf	640	-	-	-	-	-	-	1,384	1,682
	PVC Sch 80 90 EL 2" S	15211.207	40.00 ea	31.00 /mh	372	3.60 /ea	144	-	-	-	-	-	-	516	665
	PVC Sch 80 90 EL 3" S	15211.207	20.00 ea	31.00 /mh	186	9.50 /ea	190	-	-	-	-	-	-	376	450
	PVC Sch 80 90 EL 1/2" S	15211.207	6.00 ea	31.00 /mh	56	1.00 /ea	6	-	-	-	-	-	-	62	84
	PVC Sch 80 45 EL 2" SOCxSOC	15211.208	20.00 ea	31.00 /mh	186	7.00 /ea	140	-	-	-	-	-	-	326	400
	PVC Sch 80 45 EL 3" SOCxSOC	15211.208	10.00 ea	31.00 /mh	93	20.00 /ea	200	-	-	-	-	-	-	293	330
	PVC Sch 80 45 EL 1/2" SOCxSOC	15211.208	6.00 ea	31.00 /mh	56	1.90 /ea	11	-	-	-	-	-	-	67	90
	PVC Sch 80 TEE 2" S	15211.211	12.00 ea	31.00 /mh	112	12.80 /ea	154	-	-	-	-	-	-	265	310
	PVC Sch 80 TEE 3" S	15211.211	6.00 ea	31.00 /mh	56	17.40 /ea	104	-	-	-	-	-	-	160	183
	PVC Sch 80 TEE 1/2" S	15211.211	4.00 ea	31.00 /mh	37	2.90 /ea	12	-	-	-	-	-	-	49	64
	PVC Sch 80 Straight CPLG 2" S	15211.204	10.00 ea	31.00 /mh	93	4.00 /ea	40	-	-	-	-	-	-	133	170
	PVC Sch 80 Straight CPLG 3" S	15211.204	5.00 ea	31.00 /mh	47	10.00 /ea	50	-	-	-	-	-	-	97	115
	PVC Sch 80 MALE ADPT 2" SXMT	15211.217	16.00 ea	31.00 /mh	149	9.90 /ea	158	-	-	-	-	-	-	307	367
	PVC Sch 80 MALE ADPT 3" SXMT	15211.217	8.00 ea	31.00 /mh	74	12.40 /ea	99	-	-	-	-	-	-	174	203
	PVC Sch 80 Straight CPLG 1/2" S	15211.204	1.00 ea	31.00 /mh	9	2.00 /ea	2	-	-	-	-	-	-	11	15
	PVC Sch 80 MALE ADPT 1/2" SXMT	15211.217	6.00 ea	31.00 /mh	56	2.20 /ea	13	-	-	-	-	-	-	69	91
	PVC Sch 80 Cement	15211.201	4.00 qt	31.00 /mh		45.00 /qt	198	-	-	-	-	-	-	198	198
	PVC Sch 80 Primer	15211.201	4.00 qt	31.00 /mh		35.00 /qt	154	-	-	-	-	-	-	154	154
	PVC Sch 80 FEM ADPT 1/2" SXT	15211.218	2.00 ea	31.00 /mh	19	1.70 /ea	3	-	-	-	-	-	-	22	29
	PVC Valve Ball True Union Viton 2" S & T	15211.310	46.00 ea	31.00 /mh	2,852	90.00 /ea	4,140	-	-	-	-	-	-	6,992	8,133
	PVC Valve Ball True Union Viton 3" S	15211.310	10.00 ea	31.00 /mh	620	220.00 /ea	2,200	-	-	-	-	-	-	2,820	3,068
	PS Strut SS 1-5/8 x 1-5/8	15060.476	120.00 lf	31.00 /mh	1,116	15.00 /lf	1,800	-	-	-	-	-	-	2,916	3,362
	PS 2 Piece Clamp SS 2in	15060.518	72.00 ea	31.00 /mh	670	7.00 /ea	504	-	-	-	-	-	-	1,174	1,441
	PS 2 Piece Clamp SS 3in	15060.518	28.00 ea	31.00 /mh	260	7.00 /ea	196	-	-	-	-	-	-	456	561
	PS Expansion Anchor 3/8 x 5in SS	15060.127	185.00 ea	31.00 /mh	574	5.00 /ea	925	-	-	-	-	-	-	1,499	1,728
	PS Clevis Hanger SS 2in	15060.096	16.00 ea	31.00 /mh	149	19.00 /ea	304	-	-	-	-	-	-	453	512
	PS Clevis Hanger SS 3in	15060.096	7.00 ea	31.00 /mh	65	29.00 /ea	203	-	-	-	-	-	-	268	294
	PS 2 Piece Clamp SS 1/2 in	15060.518	10.00 ea	31.00 /mh	93	4.00 /ea	40	-	-	-	-	-	-	133	170
	PS Threaded Rod 3/8in SS	15060.502	80.00 lf	31.00 /mh	248	2.00 /lf	160	-	-	-	-	-	-	408	507
	PS Threaded Rod 1/2in SS	15060.502	35.00 lf	31.00 /mh	109	3.00 /lf	105	-	-	-	-	-	-	214	257
	PS Hex Nut SS 3/8	15060.354	48.00 ea	31.00 /mh	74	0.50 /ea	24	-	-	-	-	-	-	98	128
	PS Hex Nut SS 1/2	15060.354	21.00 ea	31.00 /mh	49	0.50 /ea	11	-	-	-	-	-	-	59	79
	PS Clevis Hanger EG 1/2in	15060.094	3.00 ea	31.00 /mh	28	2.00 /ea	6	-	-	-	-	-	-	34	45
	PS Washer Flat 3/8 SS	15060.576	48.00 ea	31.00 /mh	37	3.00 /ea	144	-	-	-	-	-	-	181	196
	PS Washer Flat 1/2 SS	15060.576	21.00 ea	31.00 /mh	163	4.00 /ea	84	-	-	-	-	-	-	247	312
	PS Beam/C Clamp W/lk Nut 1/2	15060.082	7.00 ea	31.00 /mh	22	30.00 /ea	210	-	-	-	-	-	-	232	240
	PS Threaded Rod 3/8in EG	15060.502	15.00 lf	31.00 /mh	47	2.00 /lf	30	-	-	-	-	-	-	77	95
	PS Beam/C Clamp W/lk Nut 3/8	15060.082	19.00 ea	31.00 /mh	59	15.00 /ea	285	-	-	-	-	-	-	344	367
	PS Hex Nut EG 3/8	15060.354	9.00 ea	31.00 /mh	14	0.50 /ea	5	-	-	-	-	-	-	18	24
	PVC Reinf Tubing 1/2" ID x 3/4" OD	15219.100	100.00 lf	31.00 /mh	155	2.00 /lf	230	-	-	-	-	-	-	385	447
	Tubing Clamp SS Worm Drive 1/2"	15219.110	10.00 ea	31.00 /mh	25	3.00 /ea	30	-	-	-	-	-	-	55	65
	HDPE Fittings	15211.484	1.00 ls	31.00 /mh	7	5.00 /ls	5	-	-	-	-	-	-	12	14
	PS Washer Flat 3/8 EG	15060.576	9.00 ea	31.00 /mh	70	3.00 /ea	27	-	-	-	-	-	-	97	125
	PVC Valve Ball True Union Viton 1/2" S & T	15211.310	8.00 ea	31.00 /mh	124	35.00 /ea	280	-	-	-	-	-	-	404	454
	PVC Valve Ball Check True Union Viton 1/2" S & T	15211.330	2.00 ea	31.00 /mh	31	50.00 /ea	100	-	-	-	-	-	-	131	143
	PVC Valve Ball True Union Viton 1/2" S & T	15211.310	2.00 ea	31.00 /mh	31	35.00 /ea	70	-	-	-	-	-	-	101	113
	Valve PRV Flange Bronze 150# 1/2"	15110.715	2.00 ea	31.00 /mh	62	950.00 /ea	1,900	-	-	-	-	-	-	1,962	1,987
	Core Drilled Hole - 5 -*	15122.100	10.00 ea	31.00 /mh	310	200.00 /ea	2,000	150.00 /ea	1,500	-	-	-	-	3,810	3,934
	Grout Sleeve 6in	15124.300	10.00 ea	31.00 /mh	620	10.00 /ea	100	-	-	-	-	-	-	720	968
	Camlock Adapter SS Male x MPT 2"	15220.600	6.00 ea	31.00 /mh	186	100.00 /ea	600	-	-	-	-	-	-	786	860
Chemical Piping (SHC, Poly, Gly, FC)			260.00 lf		13,443		19,936	5.77 /lf	1,500					34,879	40,256
150-55 80 NPW															
	PVC Sch 80 PIPE 1/2" PE	15211.203	100.00 lf	31.00 /mh	651	1.00 /lf	100	-	-	-	-	-	-	751	1,011
	PVC Sch 80 PIPE 1" PE	15211.203	300.00 lf	31.00 /mh	1,953	2.00 /lf	600	-	-	-	-	-	-	2,553	3,334
	PVC Sch 80 PIPE 3" PE	15211.203	150.00 lf	31.00 /mh	1,488	8.00 /lf	1,200	-	-	-	-	-	-	2,688	3,283
	PVC Sch 80 PIPE 1.5" PE	15211.203	100.00 lf	31.00 /mh	651	3.00 /lf	300	-	-	-	-	-	-	951	1,211
	PVC Sch 80 90 EL 1/2" S	15211.207	16.00 ea	31.00 /mh	104	1.00 /ea	16	-	-	-	-	-	-	120	162
	PVC Sch 80 90 EL 1" S	15211.207	30.00 ea	31.00 /mh	195	2.10 /ea	63	-	-	-	-	-	-	258	336

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
150-55	80 NPW														
	PVC Sch 80 90 EL 3" S	15211.207	10.00 ea	31.00 /mh	99	9.50 /ea	95	-	-	-	-	-	-	194	234
	PVC Sch 80 90 EL 1.5" S	15211.207	10.00 ea	31.00 /mh	65	3.00 /ea	30	-	-	-	-	-	-	95	121
	PVC Sch 80 45 EL 1/2" SOCxSOC	15211.208	8.00 ea	31.00 /mh	52	1.90 /ea	15	-	-	-	-	-	-	67	88
	PVC Sch 80 45 EL 1" SOCxSOC	15211.208	36.00 ea	31.00 /mh	234	4.40 /ea	158	-	-	-	-	-	-	393	487
	PVC Sch 80 45 EL 3" SOCxSOC	15211.208	12.00 ea	31.00 /mh	119	20.00 /ea	240	-	-	-	-	-	-	359	407
	PVC Sch 80 45 EL 1.5" SOCxSOC	15211.208	16.00 ea	31.00 /mh	104	6.60 /ea	106	-	-	-	-	-	-	210	251
	PVC Sch 80 TEE 1/2" S	15211.211	6.00 ea	31.00 /mh	39	2.90 /ea	17	-	-	-	-	-	-	56	72
	PVC Sch 80 TEE 1" S	15211.211	10.00 ea	31.00 /mh	65	3.70 /ea	37	-	-	-	-	-	-	102	128
	PVC Sch 80 TEE 3" S	15211.211	6.00 ea	31.00 /mh	60	17.40 /ea	104	-	-	-	-	-	-	164	188
	PVC Sch 80 TEE 1.5" S	15211.211	6.00 ea	31.00 /mh	39	10.20 /ea	61	-	-	-	-	-	-	100	116
	PVC Sch 80 Straight CPLG 1/2" S	15211.204	6.00 ea	31.00 /mh	39	2.00 /ea	12	-	-	-	-	-	-	51	67
	PVC Sch 80 Straight CPLG 1" S	15211.204	20.00 ea	31.00 /mh	130	2.00 /ea	40	-	-	-	-	-	-	170	222
	PVC Sch 80 Straight CPLG 3" S	15211.204	10.00 ea	31.00 /mh	99	10.00 /ea	100	-	-	-	-	-	-	199	239
	PVC Sch 80 MALE ADPT 1/2" SXMT	15211.217	5.00 ea	31.00 /mh	33	2.20 /ea	11	-	-	-	-	-	-	44	57
	PVC Sch 80 MALE ADPT 1" SXMT	15211.217	12.00 ea	31.00 /mh	78	4.10 /ea	49	-	-	-	-	-	-	127	159
	PVC Sch 80 MALE ADPT 3" SXMT	15211.217	5.00 ea	31.00 /mh	50	12.40 /ea	62	-	-	-	-	-	-	112	131
	PVC Sch 80 Straight CPLG 1.5" S	15211.204	6.00 ea	31.00 /mh	39	3.00 /ea	18	-	-	-	-	-	-	57	73
	PVC Sch 80 FEM ADPT 1/2" SXT	15211.218	2.00 ea	31.00 /mh	13	1.70 /ea	3	-	-	-	-	-	-	16	22
	PVC Sch 80 FEM ADPT 1" SXT	15211.218	6.00 ea	31.00 /mh	39	3.80 /ea	23	-	-	-	-	-	-	62	77
	PVC Sch 80 MALE ADPT 1.5" SXMT	15211.217	12.00 ea	31.00 /mh	78	6.80 /ea	82	-	-	-	-	-	-	160	191
	PVC Sch 80 Flange Van Stone 1" Soc	15211.223	6.00 ea	31.00 /mh	39	15.00 /ea	90	-	-	-	-	-	-	129	145
	PVC Sch 80 Flange Van Stone 3" Soc	15211.223	6.00 ea	31.00 /mh	60	40.00 /ea	240	-	-	-	-	-	-	300	323
	PVC Sch 80 Cement	15211.201	7.00 qt	31.00 /mh		45.00 /qt	347	-	-	-	-	-	-	347	347
	PVC Sch 80 Primer	15211.201	7.00 qt	31.00 /mh		35.00 /qt	270	-	-	-	-	-	-	270	270
	NBG Kit 125# SS 1in	15125.012	6.00 ea	31.00 /mh	93	77.00 /ea	462	-	-	-	-	-	-	555	592
	NBG Kit 125# SS 3in	15125.012	2.00 ea	31.00 /mh	31	205.00 /ea	410	-	-	-	-	-	-	441	453
	PVC Valve Ball True Union Viton 1/2" S & T	15211.310	12.00 ea	31.00 /mh	78	35.00 /ea	420	-	-	-	-	-	-	498	529
	PVC Valve Ball True Union Viton 1" S & T	15211.310	32.00 ea	31.00 /mh	208	45.00 /ea	1,440	-	-	-	-	-	-	1,648	1,732
	PVC Valve Ball True Union Viton 3" S	15211.310	4.00 ea	31.00 /mh	26	220.00 /ea	880	-	-	-	-	-	-	906	916
	PS Strut SS 1-5/8 x 1-5/8	15060.476	600.00 lf	31.00 /mh	5,580	15.00 /lf	9,000	-	-	-	-	-	-	14,580	16,812
	PS Strut Post Base SS	15060.478	4.00 ea	31.00 /mh	37	80.00 /ea	320	-	-	-	-	-	-	357	372
	PS 2 Piece Clamp SS 1/2 in	15060.518	20.00 ea	31.00 /mh	186	4.00 /ea	80	-	-	-	-	-	-	266	340
	PS 2 Piece Clamp SS 1in	15060.518	40.00 ea	31.00 /mh	372	5.00 /ea	200	-	-	-	-	-	-	572	721
	PS 2 Piece Clamp SS 3in	15060.518	20.00 ea	31.00 /mh	186	7.00 /ea	140	-	-	-	-	-	-	326	400
	PS Expansion Anchor 3/8 x 5in SS	15060.127	100.00 ea	31.00 /mh	155	5.00 /ea	500	-	-	-	-	-	-	655	717
	PS Clevis Hanger SS 1/2in	15060.096	15.00 ea	31.00 /mh	140	10.00 /ea	150	-	-	-	-	-	-	290	345
	PS 2 Piece Clamp EG 1-½in	15060.514	20.00 ea	31.00 /mh	186	7.00 /ea	140	-	-	-	-	-	-	326	400
	PS Clevis Hanger SS 1in	15060.096	43.00 ea	31.00 /mh	400	12.00 /ea	516	-	-	-	-	-	-	916	1,076
	PS Clevis Hanger SS 3in	15060.096	13.00 ea	31.00 /mh	121	29.00 /ea	377	-	-	-	-	-	-	498	546
	PS Threaded Rod 3/8in SS	15060.502	290.00 lf	31.00 /mh	899	2.00 /lf	580	-	-	-	-	-	-	1,479	1,839
	PS Threaded Rod 1/2in SS	15060.502	65.00 lf	31.00 /mh	202	3.00 /lf	195	-	-	-	-	-	-	397	477
	PS Hex Nut SS 3/8	15060.354	174.00 ea	31.00 /mh	270	0.50 /ea	87	-	-	-	-	-	-	357	465
	PS Clevis Hanger EG 1-½in	15060.094	12.00 ea	31.00 /mh	112	18.00 /ea	216	-	-	-	-	-	-	328	372
	PS Hex Nut SS 1/2	15060.354	39.00 ea	31.00 /mh	91	0.50 /ea	20	-	-	-	-	-	-	110	146
	PS Washer Flat 3/8 SS	15060.576	174.00 ea	31.00 /mh	135	3.00 /ea	522	-	-	-	-	-	-	657	711
	PS Washer Flat 1/2 SS	15060.576	39.00 ea	31.00 /mh	302	4.00 /ea	156	-	-	-	-	-	-	458	579
	PS Threaded Rod 3/8in EG	15060.502	60.00 lf	31.00 /mh	186	2.00 /lf	120	-	-	-	-	-	-	306	380
	PS Beam/C Clamp W/lk Nut 1/2	15060.082	13.00 ea	31.00 /mh	40	30.00 /ea	390	-	-	-	-	-	-	430	446
	PS Beam/C Clamp W/lk Nut 3/8	15060.082	70.00 ea	31.00 /mh	217	15.00 /ea	1,050	-	-	-	-	-	-	1,267	1,354
	PS Hex Nut EG 3/8	15060.354	36.00 ea	31.00 /mh	56	0.50 /ea	18	-	-	-	-	-	-	74	96
	Valve Special 1in - Solenoid Valve	15110.003	8.00 ea	31.00 /mh	248	600.00 /ea	4,800	-	-	-	-	-	-	5,048	5,147
	PVC Valve Ball Check True Union Viton 1" S & T	15211.330	4.00 ea	31.00 /mh	26	70.00 /ea	280	-	-	-	-	-	-	306	316
	PS Washer Flat 3/8 EG	15060.576	36.00 ea	31.00 /mh	279	3.00 /ea	108	-	-	-	-	-	-	387	499
	Hose Bib Brass No Press 1-½"	15110.455	12.00 ea	31.00 /mh	744	250.00 /ea	3,000	-	-	-	-	-	-	3,744	4,042
	Strainer Flange Wye 125# 2"	15112.430	2.00 ea	31.00 /mh	102	500.00 /ea	1,000	-	-	-	-	-	-	1,102	1,142
	NPW		650.00 lf		18,322		32,066	/lf						50,388	57,717
150-553	1" AHP to Presses														
	Stainless Steel Pipe 1"	15212.005	60.00 lf	31.00 /mh	465	20.00 /lf	1,200	-	-	-	-	-	-	1,665	1,851
	Stainless Steel 45 Elbow 1"	15212.035	8.00 ea	31.00 /mh	62	200.00 /ea	1,600	-	-	-	-	-	-	1,662	1,687
	Stainless Steel 90 Elbow 1"	15212.040	10.00 ea	31.00 /mh	78	200.00 /ea	2,000	-	-	-	-	-	-	2,078	2,108
	Stainless Steel Union 1"	15212.060	5.00 ea	31.00 /mh	39	400.00 /ea	2,000	-	-	-	-	-	-	2,039	2,054
	Stainless Steel Nipple 1" x 3"	15212.010	8.00 ea	31.00 /mh	62	8.00 /ea	64	-	-	-	-	-	-	126	151
	Stainless Steel Tee 1"	15212.055	6.00 ea	31.00 /mh	47	350.00 /ea	2,100	-	-	-	-	-	-	2,147	2,165
	Valve Ball Threaded SS 1in	15110.014	10.00 ea	31.00 /mh	270	179.00 /ea	1,790	-	-	-	-	-	-	2,060	2,168
	Valve Special 1in - Solenoid Valve	15110.003	4.00 ea	31.00 /mh	124	600.00 /ea	2,400	-	-	-	-	-	-	2,524	2,574
	PS 2 Piece Clamp SS 1in	15060.518	20.00 ea	31.00 /mh	186	5.00 /ea	100	-	-	-	-	-	-	286	360
	PS Strut SS 1-5/8 x 1-5/8	15060.476	30.00 lf	31.00 /mh	279	15.00 /lf	450	-	-	-	-	-	-	729	841
	PS Strut Spring Nut SS 3/8"	15060.484	20.00 ea	31.00 /mh	104	9.00 /ea	189	-	-	-	-	-	-	293	334
	PS Expansion Anchor 3/8 x 3-1/2in SS	15060.127	20.00 ea	31.00 /mh	62	4.00 /ea	80	-	-	-	-	-	-	142	167
	Instrument - Pressure - Switch Low	17400.000	2.00 ea	31.00 /mh	124	0.01 /ea	0	-	-	-	-	-	-	124	174
	Instrument - Pressure - Gauge	17400.000	2.00 ea	31.00 /mh	124	1,200.00 /ea	2,400	-	-	-	-	-	-	2,524	2,574

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	1" AHP to Presses				2,024		16,373							18,397	19,207
150-553	2" AHP														
	Stainless Steel Pipe 2"	15212.005	80.00 lf	31.00 /mh	992	35.00 /lf	2,800	-	-	-	-	-	-	3,792	4,189
	Stainless Steel Nipple 2" X 3"	15212.010	4.00 ea	31.00 /mh	41	15.00 /ea	60	-	-	-	-	-	-	101	117
	Stainless Steel 45 Elbow 2"	15212.035	10.00 ea	31.00 /mh	310	610.00 /ea	6,100	-	-	-	-	-	-	6,410	6,534
	Stainless Steel 90 Elbow 2"	15212.040	14.00 ea	31.00 /mh	434	610.00 /ea	8,540	-	-	-	-	-	-	8,974	9,148
	Stainless Steel Companion Flange 2	15212.084	2.00 ea	31.00 /mh	12	450.00 /ea	900	-	-	-	-	-	-	912	917
	Stainless Steel Tee 2"	15212.055	4.00 ea	31.00 /mh	25	800.00 /ea	3,200	-	-	-	-	-	-	3,225	3,235
	Stainless Steel Union 2"	15212.060	6.00 ea	31.00 /mh	37	1,100.00 /ea	6,600	-	-	-	-	-	-	6,637	6,652
	Valve Ball Threaded SS 2in	15110.014	8.00 ea	31.00 /mh	496	465.00 /ea	3,720	-	-	-	-	-	-	4,216	4,414
	PS Expansion Anchor 3/8 x 5in SS	15060.127	42.00 ea	31.00 /mh	130	5.00 /ea	210	-	-	-	-	-	-	340	392
	PS Strut SS 1-5/8 x 1-5/8	15060.476	30.00 lf	31.00 /mh	279	15.00 /lf	450	-	-	-	-	-	-	729	841
	PS Strut Misc Bolts and Hardware	15060.476	1.00 ls	-	-	/ls		-	-	-	-	-	-		
	PS 2 Piece Clamp SS 2in	15060.518	30.00 ea	31.00 /mh	279	7.00 /ea	210	-	-	-	-	-	-	489	601
	2" AHP				3,036		32,790							35,826	37,040
	GEN General				118,850		451,695		1,650		3,344		1,208	576,747	624,353
HDPE	HDPE														
0330	4- 3" GLY PIPE ENCASEMENT														
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	60.12 sf	31.00 /mh	466	1.50 /sf	95	-	-	-	-	-	-	561	747
	Place Pipe Encasement	3310.195	4.00 cy	31.00 /mh	133	166.00 /cy	710	-	-	-	-	-	-	843	896
	Nails and Hardware	3150.200	60.12 sf	31.00 /mh	0	0.04 /sf	2	-	-	-	-	-	-	2	2
	Form Ties Specialty	3150.632	10.00 ea	31.00 /mh	62	5.00 /ea	50	-	-	-	-	-	-	112	137
	Pipe Tie Downs (Small)	3150.200	5.00 ea	31.00 /mh	620	75.00 /ea	375	-	-	-	-	-	-	995	1,243
	Dimension Lumber	3150.200	60.12 sf	31.00 /mh	0	0.50 /sf	30	-	-	-	-	-	-	30	30
	Oil SOG Form	3100.310	60.12 sf	31.00 /mh	0	0.02 /sf	1	-	-	-	-	-	-	1	1
	Finish- Rough	3350.110	45.00 sf	31.00 /mh	13	0.01 /sf	0	-	-	-	-	-	-	13	18
	Liquid Curing Compounds	3390.170	45.00 sf	31.00 /mh	3	0.06 /sf	3	-	-	-	-	-	-	5	7
	Pipe Encasement Rebar	3200.980	0.10 tn	31.00 /mh	93	1,400.00 /tn	140	-	-	-	-	-	-	233	270
	3" GLY PIPE ENCASEMENT		4.00 CY		1,389		1,407	/CY						2,796	3,351
	HDPE HDPE				1,389		1,407							2,796	3,351
	350 Step Feed Process Building				120,239		453,102	/LS	1,650		3,344		1,208	579,542	627,705
400	Orbal Anaerobic Reactor														
	General														
	150-01 1c 12042002 14" ABI in Orbal														
	DI Pipe 14in. dia FxPE - 6ft. 0in.	15221.030	1.00 ea	31.00 /mh	124	3,500.00 /ea	3,500	-	-	-	-	-	-	3,624	3,674
	DI Pipe 14in. dia FxPE - 8ft. 0in.	15221.030	1.00 ea	31.00 /mh	124	3,500.00 /ea	3,500	-	-	-	-	-	-	3,624	3,674
	DI Flanged 90 ell 14"	15221.430	1.00 ea	31.00 /mh	78	2,500.00 /ea	2,500	-	-	-	-	-	-	2,578	2,609
	NBG Kit 125# SS 14in	15125.012	3.00 ea	31.00 /mh	93	500.00 /ea	1,500	-	-	-	-	-	-	1,593	1,630
	Sleeve w/Ring Steel WS-18- 16"	15121.850	2.00 ea	31.00 /mh	372	1,800.00 /ea	3,600	-	-	-	-	-	-	3,972	4,121
	Link Seal Size LS-360-C	15123.050	96.00 ea	31.00 /mh	446	16.00 /ea	1,536	-	-	-	-	-	-	1,982	2,161
	14" ABI in Orbal				1,237		16,136							17,373	17,868
	General				1,237		16,136							17,373	17,868
GEN	General														
	150-01 1c 12042002 10" MLR in Exist. Orbal														
	DI Pipe 10in. dia FxF - 18ft. 0in.	15221.010	3.00 ea	31.00 /mh	744	2,200.00 /ea	6,600	-	-	-	-	-	-	7,344	7,642
	DI Pipe 10in. dia FxPE - 18ft. 0in.	15221.030	2.00 ea	31.00 /mh	496	3,500.00 /ea	7,000	-	-	-	-	-	-	7,496	7,694
	DI Flanged 90 ell 6"	15221.430	5.00 ea	31.00 /mh	310	300.00 /ea	1,500	-	-	-	-	-	-	1,810	1,934
	Valve Check Flange 125# 6in	15110.040	1.00 ea	31.00 /mh	93	1,870.00 /ea	1,870	-	-	-	-	-	-	1,963	2,000
	Valve Plug Flange 125# 6in	15110.650	1.00 ea	31.00 /mh	93	1,280.00 /ea	1,280	-	-	-	-	-	-	1,373	1,410
	PS Special Support for 6in DIP - SST	15060.475	5.00 ea	31.00 /mh	930	0.01 /ea	0	-	-	-	-	-	-	930	1,302
	NBG Kit 125# SS 6in	15125.012	16.00 ea	31.00 /mh	248	250.00 /ea	4,000	-	-	-	-	-	-	4,248	4,347
	PS Expansion Anchor 3/4 x 7in SS	15060.127	36.00 ea	31.00 /mh	112	17.00 /ea	612	-	-	-	-	-	-	724	768
	DI MEGAFLANGE w/ SS Bolts for DIP 10"	15112.230	2.00 ea	31.00 /mh	186	700.00 /ea	1,400	-	-	-	-	-	-	1,586	1,660
	10" MLR in Exist. Orbal				3,212		24,262							27,474	28,758
150-553	2" AHP														
	Supply Steel Pipe Package	15233.405	1.00 ls	-	-	360,000.00 /ls	360,000	-	-	-	-	-	-	360,000	360,000
	Stainless Steel Pipe 2"	15212.005	30.00 lf	31.00 /mh	372	35.00 /lf	1,050	-	-	-	-	-	-	1,422	1,571
	Stainless Steel Nipple 2" X 3"	15212.010	2.00 ea	31.00 /mh	20	15.00 /ea	30	-	-	-	-	-	-	50	59
	Stainless Steel 45 Elbow 2"	15212.035	4.00 ea	31.00 /mh	25	610.00 /ea	2,440	-	-	-	-	-	-	2,465	2,475
	Stainless Steel 90 Elbow 2"	15212.040	4.00 ea	31.00 /mh	25	610.00 /ea	2,440	-	-	-	-	-	-	2,465	2,475
	Stainless Steel Tee 2"	15212.055	1.00 ea	31.00 /mh	6	800.00 /ea	800	-	-	-	-	-	-	806	809
	Stainless Steel Union 2"	15212.060	2.00 ea	31.00 /mh	12	1,100.00 /ea	2,200	-	-	-	-	-	-	2,212	2,217
	Valve Ball Threaded SS 2in	15110.014	4.00 ea	31.00 /mh	175	465.00 /ea	1,860	-	-	-	-	-	-	2,035	2,105
	PS Expansion Anchor 3/8 x 5in SS	15060.127	12.00 ea	31.00 /mh	19	5.00 /ea	60	-	-	-	-	-	-	79	86
	PS Strut SS 1-5/8 x 1-5/8	15060.476	20.00 lf	31.00 /mh	186	15.00 /lf	300	-	-	-	-	-	-	486	560
	PS 2 Piece Clamp SS 2in	15060.518	6.00 ea	31.00 /mh	56	7.00 /ea	42	-	-	-	-	-	-	98	120
	2" AHP				896		371,222							372,118	372,476
	GEN General				4,108		395,484							399,592	401,235

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	400 Orbal Anaerobic Reactor				5,344		411,620	/LS						416,964	419,102
550 UV	and Digester Blower Building														
CML	Ductile Iron														
	0330 4- Encase 24" SE Below UV														
	Excavation - Mass	2317.105	686.00 cy	31.00 /mh	1,063	-	-	-	-	-	-	-	-	1,063	1,489
	Backfill - Mass	2319.302	655.00 cy	31.00 /mh	1,015	-	-	-	-	-	-	-	-	1,015	1,421
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	389.36 sf	31.00 /mh	3,018	1.50 /sf	613	-	-	-	-	-	-	3,631	4,838
	Place Pipe Encasement	3310.195	26.00 cy	31.00 /mh	862	166.00 /cy	4,618	-	-	-	-	-	-	5,481	5,826
	Nails and Hardware	3150.200	389.36 sf	31.00 /mh	0	0.04 /sf	16	-	-	-	-	-	-	16	16
	Form Ties Specialty	3150.632	26.00 ea	31.00 /mh	161	5.00 /ea	130	-	-	-	-	-	-	291	356
	Pipe Tie Downs (Medium)	3150.200	9.00 ea	31.00 /mh	1,395	150.00 /ea	1,350	-	-	-	-	-	-	2,745	3,303
	Dimension Lumber	3150.200	389.36 sf	31.00 /mh	0	0.50 /sf	195	-	-	-	-	-	-	195	195
	Oil SOG Form	3100.310	389.36 sf	31.00 /mh	0	0.02 /sf	8	-	-	-	-	-	-	8	8
	Finish- Rough	3350.110	180.01 sf	31.00 /mh	50	0.01 /sf	1	-	-	-	-	-	-	51	71
	Liquid Curing Compounds	3390.170	180.01 sf	31.00 /mh	11	0.06 /sf	11	-	-	-	-	-	-	22	26
	Encasement Rebar	3210.104	1.98 tn	31.00 /mh	1,841	1,400.00 /tn	2,911	-	-	-	-	-	-	4,752	5,489
	Waterstop Adeka or Swellstop	3510.610	106.00 lf	31.00 /mh	329	8.50 /lf	946	-	-	-	-	-	-	1,275	1,406
	Encase 24" SE Below UV		26.00 CY		9,746		10,798	/CY						20,544	24,443
	0330 4- Encase 18" SE Below UV														
	Excavation - Mass	2317.105	100.00 cy	31.00 /mh	155	-	-	-	-	-	-	-	-	155	217
	Backfill - Mass	2319.302	81.00 cy	31.00 /mh	126	-	-	-	-	-	-	-	-	126	176
	Other Placement Count	3310.360	2.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	295.76 sf	31.00 /mh	2,292	1.50 /sf	466	-	-	-	-	-	-	2,758	3,675
	Place Pipe Encasement	3310.195	16.00 cy	31.00 /mh	531	166.00 /cy	2,842	-	-	-	-	-	-	3,373	3,585
	Nails and Hardware	3150.200	295.76 sf	31.00 /mh	0	0.04 /sf	12	-	-	-	-	-	-	12	12
	Form Ties Specialty	3150.632	26.00 ea	31.00 /mh	161	5.00 /ea	130	-	-	-	-	-	-	291	356
	Pipe Tie Downs (Medium)	3150.200	9.00 ea	31.00 /mh	1,395	150.00 /ea	1,350	-	-	-	-	-	-	2,745	3,303
	Dimension Lumber	3150.200	295.76 sf	31.00 /mh	0	0.50 /sf	148	-	-	-	-	-	-	148	148
	Oil SOG Form	3100.310	295.76 sf	31.00 /mh	0	0.02 /sf	6	-	-	-	-	-	-	6	6
	Finish- Rough	3350.110	139.12 sf	31.00 /mh	39	0.01 /sf	1	-	-	-	-	-	-	40	55
	Liquid Curing Compounds	3390.170	139.12 sf	31.00 /mh	9	0.06 /sf	8	-	-	-	-	-	-	17	20
	Encasement Rebar	3210.104	0.52 tn	31.00 /mh	484	1,400.00 /tn	764	-	-	-	-	-	-	1,248	1,441
	Waterstop Adeka or Swellstop	3510.610	16.00 lf	31.00 /mh	45	8.50 /lf	143	-	-	-	-	-	-	187	205
	Encase 18" SE Below UV		16.00 CY		5,236		5,870	/CY						11,105	13,200
	CML Ductile Iron				14,982		16,668							31,650	37,643
GEN	General														
	02643-1- 4" DS Underslab														
	Testing Pressure & Leak - Piping	1166.100	3.00 ea	31.00 /mh	744	50.00 /ea	150	-	-	50.00 /ea	150	-	-	1,044	1,345
	Trench Excavtion 4- 6'	2333.010	40.00 lf	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Trench Backfill 4- 6'	2333.020	40.00 lf	31.00 /mh	186	-	-	-	-	-	-	-	-	186	260
	Spoils to Waste	2333.060	23.70 cy	31.00 /mh	73	-	-	-	-	-	-	-	-	73	103
	DI Pipe RJ - Class 350 4	2511.401	40.00 lf	31.00 /mh	124	35.00 /lf	1,540	-	-	-	-	-	-	1,664	1,714
	DI RJ Compact 90 4	2511.514	3.00 ea	31.00 /mh	93	300.00 /ea	900	-	-	-	-	-	-	993	1,030
	DI RJ Compact Solid Sleeve Short 4	2511.523	3.00 ea	31.00 /mh	93	290.00 /ea	870	-	-	-	-	-	-	963	1,000
	Polybag 12" and Smaller	2333.090	40.00 lf	31.00 /mh	12	0.75 /lf	33	-	-	-	-	-	-	45	50
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.04 mnth	-	-	-	-	-	-	8,500.00 /mnth	340	3,500.00 /mnth	140	480	487
	John Deere 624 Loader (172 HP) (M)	1900.132	0.04 mnth	-	-	-	-	-	-	5,500.00 /mnth	220	3,000.00 /mnth	120	340	344
	Water Truck, 4,000 Gallon (L)	1900.210	0.04 mnth	-	-	-	-	-	-	4,500.00 /mnth	180	1,200.00 /mnth	48	228	232
	Mikasa Jumping Jack Compactor (L)	1900.138	0.04 mnth	-	-	-	-	-	-	200.00 /mnth	8	100.00 /mnth	4	12	12
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.04 mnth	-	-	-	-	-	-	2,000.00 /mnth	80	300.00 /mnth	12	92	94
	DI Floor Pipe FLG x MJ w/ Collar 4in x 3ft 0in long	15221.232	3.00 ea	31.00 /mh	186	1,100.00 /ea	3,300	-	-	-	-	-	-	3,486	3,560
	4" DS Underslab		40.00 lf		1,636		6,793	/lf			978		324	9,731	10,405
	02643-1- 4" NPW Underslab														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448
	Trench Excavtion 4- 6'	2333.010	10.00 lf	31.00 /mh	62	-	-	-	-	-	-	-	-	62	87
	Trench Backfill 4- 6'	2333.020	10.00 lf	31.00 /mh	93	-	-	-	-	-	-	-	-	93	130
	Spoils to Waste	2333.060	5.93 cy	31.00 /mh	18	-	-	-	-	-	-	-	-	18	26
	DI Pipe RJ - Class 350 4	2511.401	10.00 lf	31.00 /mh	31	35.00 /lf	385	-	-	-	-	-	-	416	428
	DI RJ Compact 90 4	2511.514	1.00 ea	31.00 /mh	31	300.00 /ea	300	-	-	-	-	-	-	331	343
	DI RJ Compact Solid Sleeve Short 4	2511.523	1.00 ea	31.00 /mh	31	290.00 /ea	290	-	-	-	-	-	-	321	333
	Polybag 12" and Smaller	2333.090	10.00 lf	31.00 /mh	3	0.75 /lf	8	-	-	-	-	-	-	11	13
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.03 mnth	-	-	-	-	-	-	8,500.00 /mnth	255	3,500.00 /mnth	105	360	365
	John Deere 624 Loader (172 HP) (M)	1900.132	0.03 mnth	-	-	-	-	-	-	5,500.00 /mnth	165	3,000.00 /mnth	90	255	258
	Water Truck, 4,000 Gallon (L)	1900.210	0.03 mnth	-	-	-	-	-	-	4,500.00 /mnth	135	1,200.00 /mnth	36	171	174
	Mikasa Jumping Jack Compactor (L)	1900.138	0.03 mnth	-	-	-	-	-	-	200.00 /mnth	6	100.00 /mnth	3	9	9
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.03 mnth	-	-	-	-	-	-	2,000.00 /mnth	60	300.00 /mnth	9	69	70
	DI Floor Pipe FLG x MJ w/ Collar 4in x 3ft 0in long	15221.232	1.00 ea	31.00 /mh	124	1,100.00 /ea	1,100	-	-	-	-	-	-	1,224	1,274
	4" NPW Underslab		10.00 lf		641		2,133	/lf			671		243	3,689	3,959
	02643-1- 4" Drain Line Underslab														
	Testing Pressure & Leak - Piping	1166.100	1.00 ea	31.00 /mh	248	50.00 /ea	50	-	-	50.00 /ea	50	-	-	348	448

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
02643-1-	4" Drain Line Underslab														
	Trench Excavtion 4- 6'	2333.010	30.00 lf	31.00 /mh	140	-	-	-	-	-	-	-	-	140	195
	Trench Backfill 4- 6'	2333.020	30.00 lf	31.00 /mh	186	-	-	-	-	-	-	-	-	186	260
	Spoils to Waste	2333.060	16.67 cy	31.00 /mh	52	-	-	-	-	-	-	-	-	52	72
	DI Pipe RJ - Class 350 4	2511.401	30.00 lf	31.00 /mh	93	35.00 /lf	1,155	-	-	-	-	-	-	1,248	1,285
	DI RJ Compact 90 4	2511.514	3.00 ea	31.00 /mh	93	300.00 /ea	900	-	-	-	-	-	-	993	1,030
	DI RJ Compact 45 4	2511.514	4.00 ea	31.00 /mh	124	280.00 /ea	1,120	-	-	-	-	-	-	1,244	1,294
	DI RJ Compact Wye 4	2511.528	2.00 ea	31.00 /mh	62	506.00 /ea	1,012	-	-	-	-	-	-	1,074	1,099
	DI RJ Compact Solid Sleeve Long 4	2511.522	1.00 ea	31.00 /mh	31	290.00 /ea	290	-	-	-	-	-	-	321	333
	Polybag 12" and Smaller	2333.090	30.00 lf	31.00 /mh	9	0.75 /lf	25	-	-	-	-	-	-	34	38
	Komatsu PC300 Excavator (232 HP) (L)	1900.136	0.04 mnth	-	-	-	-	-	-	8,500.00 /mnth	340	3,500.00 /mnth	140	480	487
	John Deere 624 Loader (172 HP) (M)	1900.132	0.04 mnth	-	-	-	-	-	-	5,500.00 /mnth	220	3,000.00 /mnth	120	340	344
	Water Truck, 4,000 Gallon (L)	1900.210	0.04 mnth	-	-	-	-	-	-	4,500.00 /mnth	180	1,200.00 /mnth	48	228	232
	Mikasa Jumping Jack Compactor (L)	1900.138	0.04 mnth	-	-	-	-	-	-	200.00 /mnth	8	100.00 /mnth	4	12	12
	Wacker/Rammer Pad Foot Trench Roller (L)	1900.138	0.04 mnth	-	-	-	-	-	-	2,000.00 /mnth	80	300.00 /mnth	12	92	94
	DI Floor Pipe FLG x MJ w/ Collar 4in x 3ft 0in long	15221.232	3.00 ea	31.00 /mh	186	1,100.00 /ea	3,300	-	-	-	-	-	-	3,486	3,560
	Valve Mud 4" 316ss	15110.555	3.00 ea	31.00 /mh	744	2,700.00 /ea	8,100	-	-	-	-	-	-	8,844	9,142
	Valve Stem Extension	2519.100	3.00 ea	31.00 /mh	93	130.00 /ea	390	-	-	-	-	-	-	483	520
	NBG Kit 125# SS 4in	15125.012	3.00 ea	31.00 /mh	28	200.00 /ea	600	-	-	-	-	-	-	628	639
	DI RJ Compact Red 6x4	2511.520	1.00 ea	31.00 /mh	19	330.00 /ea	330	-	-	-	-	-	-	349	356
	DI Pipe RJ - Class 350 6	2511.401	10.00 lf	31.00 /mh	31	27.00 /lf	297	-	-	-	-	-	-	328	340
	4" Drain Line Underslab		30.00 lf		2,138		17,569	/lf			878		324	20,909	21,781
0330 4-	4" DS Underslab Encasement														
	Other Placement Count	3310.360	3.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	240.00 sf	31.00 /mh	1,860	1.50 /sf	378	-	-	-	-	-	-	2,238	2,982
	Place Pipe Encasement	3310.195	11.00 cy	31.00 /mh	365	166.00 /cy	1,954	-	-	-	-	-	-	2,319	2,465
	Nails and Hardware	3150.200	342.00 sf	31.00 /mh	0	0.04 /sf	14	-	-	-	-	-	-	14	14
	Form Ties Specialty	3150.632	30.00 ea	31.00 /mh	186	5.00 /ea	150	-	-	-	-	-	-	336	410
	Pipe Tie Downs (Small)	3150.200	10.00 ea	31.00 /mh	1,240	75.00 /ea	750	-	-	-	-	-	-	1,990	2,486
	Dimension Lumber	3150.200	342.00 sf	31.00 /mh	0	0.50 /sf	171	-	-	-	-	-	-	171	171
	Oil SOG Form	3100.310	342.00 sf	31.00 /mh	0	0.02 /sf	7	-	-	-	-	-	-	7	7
	Finish- Rough	3350.110	180.00 sf	31.00 /mh	50	0.01 /sf	1	-	-	-	-	-	-	51	71
	Liquid Curing Compounds	3390.170	180.00 sf	31.00 /mh	11	0.06 /sf	11	-	-	-	-	-	-	22	26
	Encasement Rebar	3210.104	0.83 tn	31.00 /mh	639	1,400.00 /tn	1,212	-	-	-	-	-	-	1,852	2,108
	4" DS Underslab Encasement		11.00 CY		4,352		4,648	/CY						9,000	10,740
0330 4-	4" NPW Underslab Encasement														
	Other Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	112.00 sf	31.00 /mh	868	1.50 /sf	176	-	-	-	-	-	-	1,044	1,392
	Place Pipe Encasement	3310.195	3.00 cy	31.00 /mh	100	166.00 /cy	533	-	-	-	-	-	-	632	672
	Nails and Hardware	3150.200	112.00 sf	31.00 /mh	0	0.04 /sf	4	-	-	-	-	-	-	5	5
	Form Ties Specialty	3150.632	7.00 ea	31.00 /mh	43	5.00 /ea	35	-	-	-	-	-	-	78	96
	Pipe Tie Downs (Small)	3150.200	2.00 ea	31.00 /mh	248	75.00 /ea	150	-	-	-	-	-	-	398	497
	Dimension Lumber	3150.200	112.00 sf	31.00 /mh	0	0.50 /sf	56	-	-	-	-	-	-	56	56
	Oil SOG Form	3100.310	112.00 sf	31.00 /mh	0	0.02 /sf	2	-	-	-	-	-	-	2	2
	Finish- Rough	3350.110	40.00 sf	31.00 /mh	11	0.01 /sf	0	-	-	-	-	-	-	11	16
	Liquid Curing Compounds	3390.170	40.00 sf	31.00 /mh	2	0.06 /sf	2	-	-	-	-	-	-	5	6
	Encasement Rebar	3210.104	0.35 tn	31.00 /mh	271	1,400.00 /tn	515	-	-	-	-	-	-	786	895
	4" NPW Underslab Encasement		5.89 CY		1,544		1,475	/CY						3,019	3,636
0330 4-	4" Drain Underslab Encasement														
	Other Placement Count	3310.360	1.00 ea	-	-	0.01 /ea	0	-	-	-	-	-	-	0	0
	Formwork Pipe Encasement	3100.108	180.00 sf	31.00 /mh	1,395	1.50 /sf	284	-	-	-	-	-	-	1,679	2,237
	Place Pipe Encasement	3310.195	8.00 cy	31.00 /mh	265	166.00 /cy	1,421	-	-	-	-	-	-	1,686	1,792
	Nails and Hardware	3150.200	280.00 sf	31.00 /mh	0	0.04 /sf	11	-	-	-	-	-	-	11	11
	Form Ties Specialty	3150.632	17.00 ea	31.00 /mh	105	5.00 /ea	85	-	-	-	-	-	-	190	233
	Pipe Tie Downs (Small)	3150.200	9.00 ea	31.00 /mh	1,116	75.00 /ea	675	-	-	-	-	-	-	1,791	2,237
	Dimension Lumber	3150.200	280.00 sf	31.00 /mh	0	0.50 /sf	140	-	-	-	-	-	-	140	140
	Oil SOG Form	3100.310	280.00 sf	31.00 /mh	0	0.02 /sf	6	-	-	-	-	-	-	6	6
	Finish- Rough	3350.110	150.00 sf	31.00 /mh	42	0.01 /sf	1	-	-	-	-	-	-	43	59
	Liquid Curing Compounds	3390.170	150.00 sf	31.00 /mh	9	0.06 /sf	9	-	-	-	-	-	-	18	22
	Encasement Rebar	3210.104	0.60 tn	31.00 /mh	465	1,400.00 /tn	882	-	-	-	-	-	-	1,347	1,533
	4" Drain Underslab Encasement		22.13 CY		3,398		3,513	/CY						6,911	8,271
150-01 1c 12042002	4" DS Suction														
	DI Pipe 4in. dia FxF - 3ft. 0in.	15221.010	3.00 ea	31.00 /mh	186	510.00 /ea	1,530	-	-	-	-	-	-	1,716	1,790
	DI Pipe 4in. dia FxPE - 3ft. 0in.	15221.030	3.00 ea	31.00 /mh	186	350.00 /ea	1,050	-	-	-	-	-	-	1,236	1,310
	DI Flanged 90 ell 4"	15221.430	4.00 ea	31.00 /mh	124	200.00 /ea	800	-	-	-	-	-	-	924	974
	Valve Plug Flange 125# 4in	15110.650	2.00 ea	31.00 /mh	124	1,200.00 /ea	2,400	-	-	-	-	-	-	2,524	2,574
	PS Pipe Stand for 4in DIP 4ft 0in floor to CL HDG	15060.406	2.00 ea	31.00 /mh	186	0.01 /ea	0	-	-	-	-	-	-	186	260
	NBG Kit 125# Steel 4in	15125.010	16.00 ea	31.00 /mh	248	25.00 /ea	400	-	-	-	-	-	-	648	747
	DI MEGAFLANGE w/ Galv Bolts for DIP 4"	15112.220	4.00 ea	31.00 /mh	186	92.00 /ea	368	-	-	-	-	-	-	554	628
	DI Blind Flange 4"	15221.405	1.00 ea	31.00 /mh	31	75.00 /ea	75	-	-	-	-	-	-	106	118
	PS Expansion Anchor 5/8 x 7in SS	15060.127	8.00 ea	31.00 /mh	25	14.00 /ea	112	-	-	-	-	-	-	137	147
	PS Pipe Stand grout	15060.404	2.00 ea	31.00 /mh	62	8.00 /ea	16	-	-	-	-	-	-	78	103

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	150-01 1c 12042002 4" DS Suction														
	DI Flanged Cross 4"	15221.410	1.00 ea	31.00 /mh	62	530.00 /ea	530	-	-	-	-	-	-	592	617
	Water Tap Saddle 4 X 1"	2519.424	4.00 ea	31.00 /mh	124	70.00 /ea	280	-	-	-	-	-	-	404	454
	NBG Kit 125# Insulating 4in [insu kits are insulating components only]	15125.016	4.00 ea	31.00 /mh	124	40.00 /ea	160	-	-	-	-	-	-	284	334
	Stainless Steel Nipple 1" x 3"	15212.010	8.00 ea	31.00 /mh	62	8.00 /ea	64	-	-	-	-	-	-	126	151
	Valve Ball Threaded SS 1in	15110.014	4.00 ea	31.00 /mh	108	179.00 /ea	716	-	-	-	-	-	-	824	867
	Instrument - Pressure - Switch High Low	17400.000	2.00 ea	31.00 /mh	124	0.01 /ea	0	-	-	-	-	-	-	124	174
	Instrument - Pressure - Gauge	17400.000	2.00 ea	31.00 /mh	124	1,200.00 /ea	2,400	-	-	-	-	-	-	2,524	2,574
	Stainless Steel 90 Elbow 1"	15212.040	2.00 ea	31.00 /mh	12	200.00 /ea	400	-	-	-	-	-	-	412	417
	4" DS Suction				2,098		11,301							13,399	14,238
	150-01 1c 12042002 4" DS Discharge														
	DI Pipe 4in. dia FxF - 3ft. 0in.	15221.010	3.00 ea	31.00 /mh	186	510.00 /ea	1,530	-	-	-	-	-	-	1,716	1,790
	DI Pipe 4in. dia FxF - 4ft. 0in.	15221.010	2.00 ea	31.00 /mh	124	560.00 /ea	1,120	-	-	-	-	-	-	1,244	1,294
	DI Pipe 4in. dia FxPE - 5ft. 0in.	15221.030	3.00 ea	31.00 /mh	279	450.00 /ea	1,350	-	-	-	-	-	-	1,629	1,741
	DI Flanged 90 ell 4"	15221.430	4.00 ea	31.00 /mh	124	200.00 /ea	800	-	-	-	-	-	-	924	974
	DI Flanged Tee 4"	15221.455	2.00 ea	31.00 /mh	124	300.00 /ea	600	-	-	-	-	-	-	724	774
	Valve Check Flange 125# 4in Ball Check	15110.040	2.00 ea	31.00 /mh	124	1,470.00 /ea	2,940	-	-	-	-	-	-	3,064	3,114
	Valve Plug Flange 125# 4in	15110.650	2.00 ea	31.00 /mh	124	1,200.00 /ea	2,400	-	-	-	-	-	-	2,524	2,574
	PS Pipe Stand for 4in DIP 6ft 0in floor to CL HDG	15060.406	2.00 ea	31.00 /mh	186	0.01 /ea	0	-	-	-	-	-	-	186	260
	NBG Kit 125# Steel 4in	15125.010	18.00 ea	31.00 /mh	279	25.00 /ea	450	-	-	-	-	-	-	729	841
	DI MEGAFLANGE w/ Galv Bolts for DIP 4"	15112.220	3.00 ea	31.00 /mh	140	92.00 /ea	276	-	-	-	-	-	-	416	471
	DI Blind Flange 4" w/ 1-1/2" Tap	15221.405	2.00 ea	31.00 /mh	62	120.00 /ea	240	-	-	-	-	-	-	302	327
	PS Epoxy Anchor 5/8 x 8-1/2in SS	15060.112	8.00 ea	31.00 /mh	25	18.00 /ea	144	-	-	-	-	-	-	169	179
	PS Pipe Stand grout	15060.404	2.00 ea	31.00 /mh	62	8.00 /ea	16	-	-	-	-	-	-	78	103
	Water Tap Saddle 4 X 1"	2519.424	4.00 ea	31.00 /mh	124	70.00 /ea	280	-	-	-	-	-	-	404	454
	Stainless Steel Nipple 1" x 3"	15212.010	8.00 ea	31.00 /mh	62	8.00 /ea	64	-	-	-	-	-	-	126	151
	Stainless Steel Nipple 1.5" X 3"	15212.010	2.00 ea	31.00 /mh	20	15.00 /ea	30	-	-	-	-	-	-	50	59
	Stainless Steel 90 Elbow 1"	15212.040	2.00 ea	31.00 /mh	12	200.00 /ea	400	-	-	-	-	-	-	412	417
	Valve Ball Threaded SS 1in	15110.014	4.00 ea	31.00 /mh	108	179.00 /ea	716	-	-	-	-	-	-	824	867
	Valve Ball Threaded SS 1-½in	15110.014	2.00 ea	31.00 /mh	71	366.00 /ea	732	-	-	-	-	-	-	803	832
	Instrument - Pressure - Transmitter	17400.000	6.00 ea	31.00 /mh	372	0.01 /ea	0	-	-	-	-	-	-	372	521
	Instrument - Pressure - Gauge	17400.000	6.00 ea	31.00 /mh	372	1,200.00 /ea	7,200	-	-	-	-	-	-	7,572	7,721
	NBG Kit 125# Insulating 4in	15125.016	2.00 ea	31.00 /mh	62	40.00 /ea	80	-	-	-	-	-	-	142	167
	4" DS Discharge				3,042		21,368							24,410	25,627
	150-01 1c 12042002 4" NPW														
	DI Pipe 4in. dia FxF - 2ft. 0in.	15221.010	6.00 ea	31.00 /mh	186	455.00 /ea	2,730	-	-	-	-	-	-	2,916	2,990
	DI Pipe 4in. dia FxF - 3ft. 0in.	15221.010	2.00 ea	31.00 /mh	124	510.00 /ea	1,020	-	-	-	-	-	-	1,144	1,194
	DI Pipe 4in. dia FxF - 4ft. 0in.	15221.010	2.00 ea	31.00 /mh	124	560.00 /ea	1,120	-	-	-	-	-	-	1,244	1,294
	DI Pipe 4in. dia FxF - 5ft. 0in.	15221.010	1.00 ea	31.00 /mh	93	610.00 /ea	610	-	-	-	-	-	-	703	740
	DI Pipe 4in. dia FxF - 10ft. 0in.	15221.010	3.00 ea	31.00 /mh	372	900.00 /ea	2,700	-	-	-	-	-	-	3,072	3,221
	DI Pipe 4in. dia FxPE - 4ft. 0in.	15221.030	3.00 ea	31.00 /mh	186	380.00 /ea	1,140	-	-	-	-	-	-	1,326	1,400
	DI Flanged 90 ell 4"	15221.430	8.00 ea	31.00 /mh	372	200.00 /ea	1,600	-	-	-	-	-	-	1,972	2,121
	DI Flanged Tee 4"	15221.455	5.00 ea	31.00 /mh	233	300.00 /ea	1,500	-	-	-	-	-	-	1,733	1,826
	Valve Check Flange 125# 4in	15110.040	3.00 ea	31.00 /mh	186	1,580.00 /ea	4,740	-	-	-	-	-	-	4,926	5,000
	Valve Plug Flange 125# 4in	15110.650	7.00 ea	31.00 /mh	434	1,200.00 /ea	8,400	-	-	-	-	-	-	8,834	9,008
	PS Pipe Stand for 4in DIP 4ft 0in floor to CL HDG	15060.406	4.00 ea	31.00 /mh	372	0.01 /ea	0	-	-	-	-	-	-	372	521
	NBG Kit 125# Steel 4in	15125.010	48.00 ea	31.00 /mh	744	25.00 /ea	1,200	-	-	-	-	-	-	1,944	2,242
	NBG Kit 125# SS 4in	15125.012	9.00 ea	31.00 /mh	140	200.00 /ea	1,800	-	-	-	-	-	-	1,940	1,995
	DI MEGAFLANGE w/ Galv Bolts for DIP 4"	15112.220	5.00 ea	31.00 /mh	233	92.00 /ea	460	-	-	-	-	-	-	693	786
	DI Blind Flange 4"	15221.405	1.00 ea	31.00 /mh	31	75.00 /ea	75	-	-	-	-	-	-	106	118
	PS Pipe Stand grout	15060.404	4.00 ea	31.00 /mh	62	8.00 /ea	32	-	-	-	-	-	-	94	119
	Water Tap Saddle 4 X 1"	2519.424	5.00 ea	31.00 /mh	78	70.00 /ea	350	-	-	-	-	-	-	428	458
	Instrument - Flow - Magnetic Flow Meter - 4in	17200.000	1.00 ea	31.00 /mh	90	0.01 /ea	0	-	-	-	-	-	-	90	126
	Stainless Steel Nipple 1" x 3"	15212.010	10.00 ea	31.00 /mh	78	8.00 /ea	80	-	-	-	-	-	-	158	188
	Stainless Steel Tee 1"	15212.055	5.00 ea	31.00 /mh	31	350.00 /ea	1,750	-	-	-	-	-	-	1,781	1,793
	Valve Ball Threaded SS 1in	15110.014	5.00 ea	31.00 /mh	135	179.00 /ea	895	-	-	-	-	-	-	1,030	1,084
	4" NPW				4,301		32,202							36,503	38,224
	150-01 1c 12042002 8"/10" ALP Blower Discharge to Digesters														
	PS Clevis Hanger SS 8in	15060.096	7.00 ea	31.00 /mh	217	113.00 /ea	791	-	-	-	-	-	-	1,008	1,095
	PS Clevis Hanger SS 10in	15060.096	7.00 ea	31.00 /mh	217	180.00 /ea	1,260	-	-	-	-	-	-	1,477	1,564
	PS Pipe Stand for 8in DIP 2ft 6in floor to CL SS	15060.408	3.00 ea	31.00 /mh	279	0.01 /ea	0	-	-	-	-	-	-	279	391
	PS Pipe Stand for 10in DIP 2ft 6in floor to CL SS	15060.408	2.00 ea	31.00 /mh	186	0.01 /ea	0	-	-	-	-	-	-	186	260
	NBG Kit 125# SS 8in	15125.012	28.00 ea	31.00 /mh	868	250.00 /ea	7,000	-	-	-	-	-	-	7,868	8,215
	NBG Kit 125# SS 10in	15125.012	22.00 ea	31.00 /mh	1,364	500.00 /ea	11,000	-	-	-	-	-	-	12,364	12,910
	PS Pipe Stand grout	15060.404	5.00 ea	31.00 /mh	155	8.00 /ea	40	-	-	-	-	-	-	195	257
	Fab Stainless Steel Pipe - 8" - *	15233.505	20.00 ea	31.00 /mh	2,480	/ea		-	-	-	-	-	-	2,480	3,472
	Fab Stainless Steel Pipe - 10" - *	15233.505	14.00 ea	31.00 /mh	1,736	/ea		-	-	-	-	-	-	1,736	2,430
	Expansion Joint Flanged SS 8"	15112.070	3.00 ea	31.00 /mh	372	3,700.00 /ea	11,100	-	-	-	-	-	-	11,472	11,621
	Expansion Joint Flanged SS 10"	15112.070	3.00 ea	31.00 /mh	372	4,100.00 /ea	12,300	-	-	-	-	-	-	12,672	12,821
	Valve Check Swing Flange 10" Double Disc	15110.058	2.00 ea	31.00 /mh	248	2,800.00 /ea	5,600	-	-	-	-	-	-	5,848	5,947
	Valve Check Swing Flange 8" Double Disc	15110.058	3.00 ea	31.00 /mh	279	1,490.00 /ea	4,470	-	-	-	-	-	-	4,749	4,861
	Valve Butterfly Lugged 125# 8in	15110.026	3.00 ea	31.00 /mh	186	1,450.00 /ea	4,350	-	-	-	-	-	-	4,536	4,610

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	150-01 1c 12042002 8"/10" ALP Blower Discharge to Digesters														
	Valve Butterfly Lugged 125# 10in	15110.026	2.00 ea	31.00 /mh	124	1,700.00 /ea	3,400	-	-	-	-	-	-	3,524	3,574
	NBG Kit 125# Insulating 8in	15125.016	3.00 ea	31.00 /mh	93	100.00 /ea	300	-	-	-	-	-	-	393	430
	NBG Kit 125# Insulating 10in	15125.016	2.00 ea	31.00 /mh	62	120.00 /ea	240	-	-	-	-	-	-	302	327
	Backer Rod and Caulk Sleeve 12in	15124.100	3.00 ea	31.00 /mh	186	50.00 /ea	150	-	-	-	-	-	-	336	410
	Backer Rod and Caulk Sleeve 18in	15124.100	2.00 ea	31.00 /mh	124	100.00 /ea	200	-	-	-	-	-	-	324	374
	PS Ceiling Plate For 5/8" Rod SS	15060.093	12.00 ea	31.00 /mh	327	60.00 /ea	720	-	-	-	-	-	-	1,047	1,178
	PS Strut SS 1-5/8 x 1-5/8	15060.476	20.00 lf	31.00 /mh	186	15.00 /lf	300	-	-	-	-	-	-	486	560
	PS Threaded Rod 5/8in SS	15060.502	70.00 lf	31.00 /mh	217	6.00 /lf	420	-	-	-	-	-	-	637	724
	PS Expansion Anchor 5/8 x 8-1/2in SS	15060.127	20.00 ea	31.00 /mh	62	17.00 /ea	340	-	-	-	-	-	-	402	427
	PS Misc Hardware for Clevis Hanger Assemblies	15060.290	1.00 ls	31.00 /mh	8	0.01 /ls	0	-	-	-	-	-	-	8	11
	Restrained Dismantling Joint 8" SS Bolts	15112.085	1.00 ea	31.00 /mh	124	1,400.00 /ea	1,400	-	-	-	-	-	-	1,524	1,574
	Restrained Dismantling Joint 10" SS Bolts	15112.085	1.00 ea	31.00 /mh	124	3,000.00 /ea	3,000	-	-	-	-	-	-	3,124	3,174
	8"/10" ALP Blower Discharge to Digesters				10,596		68,381							78,977	83,216
	150-55 80 1" Sample Line														
	PVC Sch 80 PIPE 1" PE	15211.203	20.00 lf	31.00 /mh	130	2.00 /lf	40	-	-	-	-	-	-	170	222
	PVC Sch 80 90 EL 1" S	15211.207	4.00 ea	31.00 /mh	26	2.10 /ea	8	-	-	-	-	-	-	34	45
	PVC Sch 80 45 EL 1" SOCxSOC	15211.208	4.00 ea	31.00 /mh	26	4.40 /ea	18	-	-	-	-	-	-	44	54
	PVC Sch 80 TEE 1" S	15211.211	1.00 ea	31.00 /mh	7	3.70 /ea	4	-	-	-	-	-	-	10	13
	PVC Sch 80 Straight CPLG 1" S	15211.204	1.00 ea	31.00 /mh	7	2.00 /ea	2	-	-	-	-	-	-	9	11
	PVC Sch 80 MALE ADPT 1" SXMT	15211.217	4.00 ea	31.00 /mh	26	4.10 /ea	16	-	-	-	-	-	-	42	53
	PVC Valve Ball True Union Viton 1" S & T	15211.310	2.00 ea	31.00 /mh	13	45.00 /ea	90	-	-	-	-	-	-	103	108
	PS Strut SS 1-5/8 x 1-5/8	15060.476	10.00 lf	31.00 /mh	93	15.00 /lf	150	-	-	-	-	-	-	243	280
	PS 2 Piece Clamp SS 1in	15060.518	10.00 ea	31.00 /mh	93	5.00 /ea	50	-	-	-	-	-	-	143	180
	PS Expansion Anchor 3/8 x 5in SS	15060.127	10.00 ea	31.00 /mh	16	5.00 /ea	50	-	-	-	-	-	-	66	72
	PS Clevis Hanger EG 1in	15060.094	3.00 ea	31.00 /mh	28	12.00 /ea	36	-	-	-	-	-	-	64	75
	PS Threaded Rod 3/8in EG	15060.502	15.00 lf	31.00 /mh	47	2.00 /lf	30	-	-	-	-	-	-	77	95
	PS Hex Nut EG 3/8	15060.354	9.00 ea	31.00 /mh	14	0.50 /ea	5	-	-	-	-	-	-	18	24
	PS Washer Flat 3/8 EG	15060.576	9.00 ea	31.00 /mh	70	3.00 /ea	27	-	-	-	-	-	-	97	125
	PS Beam/C Clamp W/lk Nut 3/8	15060.082	3.00 ea	31.00 /mh	9	15.00 /ea	45	-	-	-	-	-	-	54	58
	1" Sample Line		20.00 lf		603		571	/lf						1,174	1,415
	GEN General				34,350		169,953				2,527		891	207,722	221,513
	550 UV and Digester Blower Building				49,332		186,621	/LS			2,527		891	239,372	259,155
	600 Aerobic Digester 5 and 6														
	GEN General														
	150-01 1c 12042002 4" DS in Digesters 5 & 6														
	DI Pipe 4in. dia FxF - 2ft. 0in.	15221.010	4.00 ea	31.00 /mh	248	455.00 /ea	1,820	-	-	-	-	-	-	2,068	2,167
	DI Pipe 4in. dia FxF - 3ft. 0in.	15221.010	2.00 ea	31.00 /mh	124	510.00 /ea	1,020	-	-	-	-	-	-	1,144	1,194
	DI Pipe 4in. dia FxF - 4ft. 0in.	15221.010	2.00 ea	31.00 /mh	186	560.00 /ea	1,120	-	-	-	-	-	-	1,306	1,380
	DI Pipe 4in. dia FxF - 5ft. 0in.	15221.010	2.00 ea	31.00 /mh	248	610.00 /ea	1,220	-	-	-	-	-	-	1,468	1,567
	DI Pipe 4in. dia FxF - 6ft. 0in.	15221.010	2.00 ea	31.00 /mh	248	850.00 /ea	1,700	-	-	-	-	-	-	1,948	2,047
	DI Pipe 4in. dia FxF - 10ft. 0in.	15221.010	2.00 ea	31.00 /mh	310	900.00 /ea	1,800	-	-	-	-	-	-	2,110	2,234
	DI Pipe 4in. dia FxF - 18ft. 0in.	15221.010	2.00 ea	31.00 /mh	372	1,300.00 /ea	2,600	-	-	-	-	-	-	2,972	3,121
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	2.00 ea	31.00 /mh	310	750.00 /ea	1,500	-	-	-	-	-	-	1,810	1,934
	DI Pipe 4in. dia FxPE - 18ft. 0in.	15221.030	4.00 ea	31.00 /mh	744	1,200.00 /ea	4,800	-	-	-	-	-	-	5,544	5,842
	DI Flanged 90 ell 4"	15221.430	5.00 ea	31.00 /mh	155	200.00 /ea	1,000	-	-	-	-	-	-	1,155	1,217
	DI Flanged 45 ell 4"	15221.425	10.00 ea	31.00 /mh	310	200.00 /ea	2,000	-	-	-	-	-	-	2,310	2,434
	DI Flanged Tee 4"	15221.455	3.00 ea	31.00 /mh	186	300.00 /ea	900	-	-	-	-	-	-	1,086	1,160
	DI Flanged Wye 4"	15221.460	6.00 ea	31.00 /mh	372	500.00 /ea	3,000	-	-	-	-	-	-	3,372	3,521
	Link Seal Size LS-475-S	15123.100	28.00 ea	31.00 /mh	130	16.00 /ea	448	-	-	-	-	-	-	578	630
	Sleeve Steel WS-8-18-S- [all sleeves are 16" long, 304SS]	15121.800	2.00 ea	31.00 /mh	248	800.00 /ea	1,600	-	-	-	-	-	-	1,848	1,947
	Valve Check Flange 125# 4in	15110.040	2.00 ea	31.00 /mh	124	1,580.00 /ea	3,160	-	-	-	-	-	-	3,284	3,334
	Valve Plug Flange 125# 4in w/ pedestal operator 3ft CL to Base, geared HW	15110.650	6.00 ea	31.00 /mh	1,488	2,290.00 /ea	13,740	-	-	-	-	-	-	15,228	15,823
	PS Knee Brace for 4in DIP 24in horizontal length SS	15060.280	10.00 ea	31.00 /mh	1,240	0.01 /ea	0	-	-	-	-	-	-	1,240	1,736
	NBG Kit 125# SS 4in	15125.012	54.00 ea	31.00 /mh	837	200.00 /ea	10,800	-	-	-	-	-	-	11,637	11,972
	DI MEGAFLANGE w/ SS Bolts for DIP 4"	15112.230	12.00 ea	31.00 /mh	558	200.00 /ea	2,400	-	-	-	-	-	-	2,958	3,181
	DI Blind Flange 4"	15221.405	5.00 ea	31.00 /mh	155	75.00 /ea	375	-	-	-	-	-	-	530	592
	PS Expansion Anchor 3/4 x 8-1/2in SS	15060.127	40.00 ea	31.00 /mh	124	25.00 /ea	1,000	-	-	-	-	-	-	1,124	1,174
	Grout Sleeve 8in	15124.300	2.00 ea	31.00 /mh	124	15.00 /ea	30	-	-	-	-	-	-	154	204
	Valve Stem Extension	2519.100	6.00 ea	31.00 /mh	744	130.00 /ea	780	-	-	-	-	-	-	1,524	1,822
	Valve Box Lid	2519.130	6.00 ea	31.00 /mh	372	20.00 /ea	120	-	-	-	-	-	-	492	641
	4" DS in Digesters 5 & 6				9,957		58,933							68,890	72,873
	150-01 1c 12042002 4" WAS in Digesters 5 & 6														
	DI Pipe 4in. dia FxF - 5ft. 0in.	15221.010	4.00 ea	31.00 /mh	372	610.00 /ea	2,440	-	-	-	-	-	-	2,812	2,961
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	2.00 ea	31.00 /mh	248	750.00 /ea	1,500	-	-	-	-	-	-	1,748	1,847
	DI Flanged 90 ell 4"	15221.430	4.00 ea	31.00 /mh	124	200.00 /ea	800	-	-	-	-	-	-	924	974
	Link Seal Size LS-475-S	15123.100	28.00 ea	31.00 /mh	130	16.00 /ea	448	-	-	-	-	-	-	578	630
	Sleeve Steel WS-8-18-S-	15121.800	2.00 ea	31.00 /mh	248	800.00 /ea	1,600	-	-	-	-	-	-	1,848	1,947
	Valve Plug Flange 125# 4in (V405) w/ Elec Actuator	15110.650	2.00 ea	31.00 /mh	496	6,700.00 /ea	13,400	-	-	-	-	-	-	13,896	14,094
	PS Special Support for 4in DIP - SST - Fancy Wall Support	15060.475	4.00 ea	31.00 /mh	992	0.01 /ea	0	-	-	-	-	-	-	992	1,389
	NBG Kit 125# SS 4in	15125.012	16.00 ea	31.00 /mh	248	200.00 /ea	3,200	-	-	-	-	-	-	3,448	3,547
	DI MEGAFLANGE w/ SS Bolts for DIP 4"	15112.230	4.00 ea	31.00 /mh	186	200.00 /ea	800	-	-	-	-	-	-	986	1,060

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	150-01 1c 12042002 4" WAS in Digesters 5 & 6														
	PS Epoxy Anchor 5/8 x 10in SS	15060.112	8.00 ea	31.00 /mh	12	22.00 /ea	176	-	-	-	-	-	-	188	193
	Valve Stem Extension	2519.100	2.00 ea	31.00 /mh	186	130.00 /ea	260	-	-	-	-	-	-	446	520
	Valve Box Top Tyler 26T	2519.130	2.00 ea	31.00 /mh	124	70.00 /ea	140	-	-	-	-	-	-	264	314
	Grout Sleeve 8in	15124.300	2.00 ea	31.00 /mh	124	15.00 /ea	30	-	-	-	-	-	-	154	204
	4" WAS in Digesters 5 & 6				3,491		24,794							28,285	29,681
	150-01 1c 12042002 4"/6" DEC in Digesters 5 & 6														
	DI Pipe 4in. dia FxF - 4ft. 0in.	15221.010	1.00 ea	31.00 /mh	62	560.00 /ea	560	-	-	-	-	-	-	622	647
	DI Pipe 4in. dia FxF - 7ft. 0in.	15221.010	2.00 ea	31.00 /mh	186	720.00 /ea	1,440	-	-	-	-	-	-	1,626	1,700
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	1.00 ea	31.00 /mh	124	750.00 /ea	750	-	-	-	-	-	-	874	924
	DI Pipe 6in. dia FxPE - 10ft. 0in.	15221.030	1.00 ea	31.00 /mh	124	900.00 /ea	900	-	-	-	-	-	-	1,024	1,074
	DI Flanged 90 ell 4"	15221.430	2.00 ea	31.00 /mh	62	200.00 /ea	400	-	-	-	-	-	-	462	487
	Link Seal Size LS-410-S	15123.100	20.00 ea	31.00 /mh	93	16.00 /ea	320	-	-	-	-	-	-	413	450
	Link Seal Size LS-475-S	15123.100	14.00 ea	31.00 /mh	65	16.00 /ea	224	-	-	-	-	-	-	289	315
	Sleeve Steel WS-8-18-S-	15121.800	1.00 ea	31.00 /mh	124	800.00 /ea	800	-	-	-	-	-	-	924	974
	Sleeve Steel WS-10-36-S-	15121.800	1.00 ea	31.00 /mh	124	1,000.00 /ea	1,000	-	-	-	-	-	-	1,124	1,174
	PS Special Support for 4in DIP -SS Fancy Wall Support	15060.475	2.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	NBG Kit 125# SS 4in	15125.012	7.00 ea	31.00 /mh	109	200.00 /ea	1,400	-	-	-	-	-	-	1,509	1,552
	NBG Kit 125# SS 6in	15125.012	2.00 ea	31.00 /mh	62	250.00 /ea	500	-	-	-	-	-	-	562	587
	PS Epoxy Anchor 5/8 x 10in SS	15060.112	8.00 ea	31.00 /mh	25	22.00 /ea	176	-	-	-	-	-	-	201	211
	Valve Telescoping 4" w/ Elec Actuator on Pedistal, 10ft Flg to Base, 4ft travel	15110.750	1.00 ea	31.00 /mh	744	8,900.00 /ea	8,900	-	-	-	-	-	-	9,644	9,942
	Grout Sleeve 8in	15124.300	1.00 ea	31.00 /mh	62	15.00 /ea	15	-	-	-	-	-	-	77	102
	Grout Sleeve 12in	15124.300	1.00 ea	31.00 /mh	62	20.00 /ea	20	-	-	-	-	-	-	82	107
	NBG Kit 125# Insulating 6in	15125.016	1.00 ea	31.00 /mh	31	60.00 /ea	60	-	-	-	-	-	-	91	103
	NBG Kit 125# Insulating 4in	15125.016	1.00 ea	31.00 /mh	31	40.00 /ea	40	-	-	-	-	-	-	71	83
	Valve Stem Extension	2519.100	1.00 ea	31.00 /mh	31	130.00 /ea	130	-	-	-	-	-	-	161	173
	Valve Box Lid	2519.130	1.00 ea	31.00 /mh	31	20.00 /ea	20	-	-	-	-	-	-	51	63
	4"/6" DEC in Digesters 5 & 6				2,399		17,655							20,054	21,014
	150-01 1c 12042002 8"/10" ALP from New Blower Building														
	Link Seal Size LS-400-S	15123.100	48.00 ea	31.00 /mh	223	16.00 /ea	768	-	-	-	-	-	-	991	1,080
	Sleeve Steel WS-12-37-S-	15121.800	2.00 ea	31.00 /mh	248	1,200.00 /ea	2,400	-	-	-	-	-	-	2,648	2,747
	PS Knee Brace for 10in DIP 24in horizontal length SS	15060.280	4.00 ea	31.00 /mh	496	0.01 /ea	0	-	-	-	-	-	-	496	694
	PS Special Support for 8in DIP -SST Misc Metals	15060.475	11.00 ea	31.00 /mh		0.01 /ea	0	-	-	-	-	-	-	0	0
	NBG Kit 125# SS 8in	15125.012	32.00 ea	31.00 /mh	992	250.00 /ea	8,000	-	-	-	-	-	-	8,992	9,389
	NBG Kit 125# SS 10in	15125.012	22.00 ea	31.00 /mh	682	500.00 /ea	11,000	-	-	-	-	-	-	11,682	11,955
	Fab Stainless Steel Pipe - 8" - *	15233.505	29.00 ea	31.00 /mh	3,596	/ea		-	-	-	-	-	-	3,596	5,034
	Fab Stainless Steel Pipe - 10" - *	15233.505	16.00 ea	31.00 /mh	1,984	/ea		-	-	-	-	-	-	1,984	2,778
	Valve Butterfly Lugged 125# 8in	15110.026	1.00 ea	31.00 /mh	93	1,450.00 /ea	1,450	-	-	-	-	-	-	1,543	1,580
	Valve Butterfly Lugged 125# 10in	15110.026	1.00 ea	31.00 /mh	93	1,700.00 /ea	1,700	-	-	-	-	-	-	1,793	1,830
	Expansion Joint Flanged SS 8"	15112.070	4.00 ea	31.00 /mh	496	3,700.00 /ea	14,800	-	-	-	-	-	-	15,296	15,494
	Expansion Joint Flanged SS 10"	15112.070	3.00 ea	31.00 /mh	372	4,100.00 /ea	12,300	-	-	-	-	-	-	12,672	12,821
	PS Epoxy Anchor 3/4 x 8-1/2in SS	15060.112	28.00 ea	31.00 /mh	87	24.00 /ea	672	-	-	-	-	-	-	759	794
	Grout Sleeve 12in	15124.300	2.00 ea	31.00 /mh	124	20.00 /ea	40	-	-	-	-	-	-	164	214
	8"/10" ALP from New Blower Building				9,486		53,130							62,616	66,411
	150-01 1c 12042002 6" ALP from Existing Blowers														
	Link Seal Size LS-410-S	15123.100	48.00 ea	31.00 /mh	223	16.00 /ea	768	-	-	-	-	-	-	991	1,080
	Sleeve Steel WS-10-36-S-	15121.800	2.00 ea	31.00 /mh	248	1,000.00 /ea	2,000	-	-	-	-	-	-	2,248	2,347
	PS Knee Brace for 6in DIP 24in horizontal length SS	15060.280	4.00 ea	31.00 /mh	496	0.01 /ea	0	-	-	-	-	-	-	496	694
	NBG Kit 125# SS 6in	15125.012	18.00 ea	31.00 /mh	279	250.00 /ea	4,500	-	-	-	-	-	-	4,779	4,891
	Fab Stainless Steel Pipe - 6" - *	15233.505	10.00 ea	31.00 /mh	930	/ea		-	-	-	-	-	-	930	1,302
	Valve Butterfly Lugged 125# 6in	15110.026	2.00 ea	31.00 /mh	124	1,250.00 /ea	2,500	-	-	-	-	-	-	2,624	2,674
	FCV Valve Butterfly 125# 6in Elec Actuator	15110.034	2.00 ea	31.00 /mh	248	6,600.00 /ea	13,200	-	-	-	-	-	-	13,448	13,547
	PS Expansion Anchor 5/8 x 7in SS	15060.127	16.00 ea	31.00 /mh	50	14.00 /ea	224	-	-	-	-	-	-	274	293
	Grout Sleeve 12in	15124.300	2.00 ea	31.00 /mh	124	20.00 /ea	40	-	-	-	-	-	-	164	214
	6" ALP from Existing Blowers				2,722		23,232							25,954	27,043
	GEN General				28,055		177,744							205,799	217,021
	600 Aerobic Digester 5 and 6				28,055		177,744	/LS						205,799	217,021
	650 Existing Digester 1 to 4														
	GEN General														
	150-01 1c 12042002 4" DS in Digesters 1 - 4														
	DI Pipe 4in. dia FxF - 2ft. 0in.	15221.010	8.00 ea	31.00 /mh	496	455.00 /ea	3,640	-	-	-	-	-	-	4,136	4,334
	DI Pipe 4in. dia FxF - 3ft. 0in.	15221.010	4.00 ea	31.00 /mh	248	510.00 /ea	2,040	-	-	-	-	-	-	2,288	2,387
	DI Pipe 4in. dia FxF - 4ft. 0in.	15221.010	4.00 ea	31.00 /mh	248	560.00 /ea	2,240	-	-	-	-	-	-	2,488	2,587
	DI Pipe 4in. dia FxF - 5ft. 0in.	15221.010	5.00 ea	31.00 /mh	465	610.00 /ea	3,050	-	-	-	-	-	-	3,515	3,701
	DI Pipe 4in. dia FxF - 6ft. 0in.	15221.010	2.00 ea	31.00 /mh	248	850.00 /ea	1,700	-	-	-	-	-	-	1,948	2,047
	DI Pipe 4in. dia FxF - 10ft. 0in.	15221.010	2.00 ea	31.00 /mh	248	900.00 /ea	1,800	-	-	-	-	-	-	2,048	2,147
	DI Pipe 4in. dia FxF - 18ft. 0in.	15221.010	4.00 ea	31.00 /mh	744	1,300.00 /ea	5,200	-	-	-	-	-	-	5,944	6,242
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	5.00 ea	31.00 /mh	620	750.00 /ea	3,750	-	-	-	-	-	-	4,370	4,618
	DI Pipe 4in. dia FxPE - 18ft. 0in.	15221.030	6.00 ea	31.00 /mh	1,116	1,200.00 /ea	7,200	-	-	-	-	-	-	8,316	8,762
	DI Flanged 90 ell 4"	15221.430	11.00 ea	31.00 /mh	341	200.00 /ea	2,200	-	-	-	-	-	-	2,541	2,677
	DI Flanged 45 ell 4"	15221.425	20.00 ea	31.00 /mh	620	200.00 /ea	4,000	-	-	-	-	-	-	4,620	4,868

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	150-01 1c 12042002 4" DS in Digesters 1 - 4														
	DI Flanged Tee 4"	15221.455	6.00 ea	31.00 /mh	372	300.00 /ea	1,800	-	-	-	-	-	-	2,172	2,321
	DI Flanged Wye 4"	15221.460	12.00 ea	31.00 /mh	744	500.00 /ea	6,000	-	-	-	-	-	-	6,744	7,042
	Link Seal Size LS-475-S	15123.100	86.00 ea	31.00 /mh	400	16.00 /ea	1,376	-	-	-	-	-	-	1,776	1,936
	Core Drilled Hole - 8 -*	15122.100	5.00 ea	31.00 /mh	155	200.00 /ea	1,000	150.00 /ea	750	-	-	-	-	1,905	1,967
	Valve Check Flange 125# 4in	15110.040	4.00 ea	31.00 /mh	248	1,580.00 /ea	6,320	-	-	-	-	-	-	6,568	6,667
	Valve Plug Flange 125# 4in w/ pedestal operator 3ft CL to Base, geared HW	15110.650	13.00 ea	31.00 /mh	3,224	2,290.00 /ea	29,770	-	-	-	-	-	-	32,994	34,284
	PS Pipe Stand for 4in DIP 4ft 0in floor to CL SS	15060.408	1.00 ea	31.00 /mh	93	0.01 /ea	0	-	-	-	-	-	-	93	130
	PS Knee Brace for 4in DIP 24in horizontal length SS	15060.280	20.00 ea	31.00 /mh	2,480	0.01 /ea	0	-	-	-	-	-	-	2,480	3,472
	NBG Kit 125# SS 4in	15125.012	112.00 ea	31.00 /mh	1,736	200.00 /ea	22,400	-	-	-	-	-	-	24,136	24,830
	DI MEGAFLANGE w/ SS Bolts for DIP 4"	15112.230	24.00 ea	31.00 /mh	1,116	200.00 /ea	4,800	-	-	-	-	-	-	5,916	6,362
	DI Blind Flange 4"	15221.405	10.00 ea	31.00 /mh	310	75.00 /ea	750	-	-	-	-	-	-	1,060	1,184
	PS Expansion Anchor 3/4 x 8-1/2in SS	15060.127	84.00 ea	31.00 /mh	260	25.00 /ea	2,100	-	-	-	-	-	-	2,360	2,465
	PS Pipe Stand grout	15060.404	1.00 ea	31.00 /mh	31	8.00 /ea	8	-	-	-	-	-	-	39	51
	Grout Sleeve 8in	15124.300	7.00 ea	31.00 /mh	434	15.00 /ea	105	-	-	-	-	-	-	539	713
	Valve Stem Extension	2519.100	12.00 ea	31.00 /mh	372	130.00 /ea	1,560	-	-	-	-	-	-	1,932	2,081
	Valve Box Lid	2519.130	12.00 ea	31.00 /mh	93	20.00 /ea	240	-	-	-	-	-	-	333	370
	Core Drilled Hole - 8 -*	15122.100	1.00 ea	31.00 /mh	31	200.00 /ea	200	150.00 /ea	150	-	-	-	-	381	393
	Valve Telescoping 4" w/ Elec Actuator on Pedistal, 10ft Flg to Base, 4ft travel	15110.750	1.00 ea	31.00 /mh	744	8,900.00 /ea	8,900	-	-	-	-	-	-	9,644	9,942
	4" DS in Digesters 1 - 4				18,237		124,149		900					143,287	150,581
	150-01 1c 12042002 8"/10" ALP from New Blowers														
	Link Seal Size LS-400-S	15123.100	96.00 ea	31.00 /mh	446	16.00 /ea	1,536	-	-	-	-	-	-	1,982	2,161
	Sleeve Steel WS-12-37-S-	15121.800	4.00 ea	31.00 /mh	496	1,200.00 /ea	4,800	-	-	-	-	-	-	5,296	5,494
	PS Clevis Hanger SS 8in	15060.096	6.00 ea	31.00 /mh	186	113.00 /ea	678	-	-	-	-	-	-	864	938
	PS Special Support for 8in DIP - SST	15060.475	8.00 ea	31.00 /mh	992	0.01 /ea	0	-	-	-	-	-	-	992	1,389
	NBG Kit 125# SS 6in	15125.012	8.00 ea	31.00 /mh	124	250.00 /ea	2,000	-	-	-	-	-	-	2,124	2,174
	NBG Kit 125# SS 8in	15125.012	36.00 ea	31.00 /mh	1,116	250.00 /ea	9,000	-	-	-	-	-	-	10,116	10,562
	NBG Kit 125# SS 10in	15125.012	8.00 ea	31.00 /mh	248	500.00 /ea	4,000	-	-	-	-	-	-	4,248	4,347
	Fab Stainless Steel Pipe - 8" - *	15233.505	27.00 ea	31.00 /mh	3,348	/ea		-	-	-	-	-	-	3,348	4,687
	Fab Stainless Steel Pipe - 10" - *	15233.505	4.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Expansion Joint Flanged SS 8"	15112.070	4.00 ea	31.00 /mh	496	3,700.00 /ea	14,800	-	-	-	-	-	-	15,296	15,494
	Expansion Joint Flanged SS 10"	15112.070	1.00 ea	31.00 /mh	124	4,100.00 /ea	4,100	-	-	-	-	-	-	4,224	4,274
	Valve Butterfly Lugged 125# 8in	15110.026	3.00 ea	31.00 /mh	279	1,450.00 /ea	4,350	-	-	-	-	-	-	4,629	4,741
	Valve Butterfly Lugged 125# 10in	15110.026	1.00 ea	31.00 /mh	93	1,700.00 /ea	1,700	-	-	-	-	-	-	1,793	1,830
	Valve Butterfly Lugged 125# 6in	15110.026	1.00 ea	31.00 /mh	62	1,250.00 /ea	1,250	-	-	-	-	-	-	1,312	1,337
	Fab Stainless Steel Pipe - 6" - *	15233.505	4.00 ea	31.00 /mh	248	/ea		-	-	-	-	-	-	248	347
	PS Ceiling Plate For 3/4" Rod SS	15060.093	5.00 ea	31.00 /mh	136	60.00 /ea	300	-	-	-	-	-	-	436	491
	PS Expansion Anchor 3/4 x 7in SS	15060.127	36.00 ea	31.00 /mh	112	17.00 /ea	612	-	-	-	-	-	-	724	768
	Grout Sleeve 12in	15124.300	4.00 ea	31.00 /mh	248	20.00 /ea	80	-	-	-	-	-	-	328	427
	8"/10" ALP from New Blowers				9,250		49,206							58,456	62,157
	150-01 1c 12042002 6" ALP from Existing Blowers														
	PS Pipe Stand for 6in DIP 2ft 0in floor to CL SS	15060.408	4.00 ea	31.00 /mh	496	0.01 /ea	0	-	-	-	-	-	-	496	694
	NBG Kit 125# SS 6in	15125.012	28.00 ea	31.00 /mh	434	250.00 /ea	7,000	-	-	-	-	-	-	7,434	7,608
	PS Expansion Anchor 5/8 x 7in SS	15060.127	8.00 ea	31.00 /mh	25	14.00 /ea	112	-	-	-	-	-	-	137	147
	PS Pipe Stand grout	15060.404	4.00 ea	31.00 /mh	124	8.00 /ea	32	-	-	-	-	-	-	156	206
	Fab Stainless Steel Pipe - 6" - *	15233.505	20.00 ea	31.00 /mh	1,240	/ea		-	-	-	-	-	-	1,240	1,736
	Valve Butterfly Lugged 125# 6in	15110.026	4.00 ea	31.00 /mh	248	1,250.00 /ea	5,000	-	-	-	-	-	-	5,248	5,347
	6" ALP from Existing Blowers				2,567		12,144							14,711	15,738
	150-01 1c 12042002 4" Existing WAS														
	DI Pipe 4in. dia FxPE - 6ft. 0in.	15221.030	12.00 ea	31.00 /mh	1,116	600.00 /ea	7,200	-	-	-	-	-	-	8,316	8,762
	Valve Plug Flange 125# 4in	15110.650	5.00 ea	31.00 /mh	465	1,200.00 /ea	6,000	-	-	-	-	-	-	6,465	6,651
	Valve Plug Flange 125# 4in w/ Elec Actuator	15110.650	1.00 ea	31.00 /mh	124	6,700.00 /ea	6,700	-	-	-	-	-	-	6,824	6,874
	PS Clevis Hanger SS 4in	15060.096	6.00 ea	31.00 /mh	186	47.00 /ea	282	-	-	-	-	-	-	468	542
	NBG Kit 125# SS 4in	15125.012	12.00 ea	31.00 /mh	186	200.00 /ea	2,400	-	-	-	-	-	-	2,586	2,660
	DI MEGAFLANGE w/ SS Bolts for DIP 4"	15112.230	6.00 ea	31.00 /mh	279	200.00 /ea	1,200	-	-	-	-	-	-	1,479	1,591
	PS Ceiling Plate For 5/8" Rod SS	15060.093	6.00 ea	31.00 /mh	164	60.00 /ea	360	-	-	-	-	-	-	524	589
	PS Expansion Anchor 5/8 x 7in SS	15060.127	46.00 ea	31.00 /mh	143	14.00 /ea	644	-	-	-	-	-	-	787	844
	PS Threaded Rod 5/8in SS	15060.502	40.00 lf	31.00 /mh	124	6.00 /lf	240	-	-	-	-	-	-	364	414
	4" Existing WAS				2,786		25,026							27,812	28,927
	GEN General				32,841		210,525		900					244,266	257,402
	650 Existing Digester 1 to 4				32,841		210,525	/LS	900					244,266	257,402
	850 Existing RAS/WAS														
	GEN General														
	150-01 1c 12042002 4" WAS/SCUM Suction														
	DI Pipe 4in. dia FxF - 4ft. 0in.	15221.010	2.00 ea	31.00 /mh	186	560.00 /ea	1,120	-	-	-	-	-	-	1,306	1,380
	DI Pipe 4in. dia FxF - 2ft. 0in.	15221.010	2.00 ea	31.00 /mh	124	455.00 /ea	910	-	-	-	-	-	-	1,034	1,084
	DI Pipe 4in. dia FxF - 7ft. 0in.	15221.010	1.00 ea	31.00 /mh	155	720.00 /ea	720	-	-	-	-	-	-	875	937
	DI Pipe 4in. dia FxF - 3ft. 0in.	15221.010	3.00 ea	31.00 /mh	279	510.00 /ea	1,530	-	-	-	-	-	-	1,809	1,921
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	1.00 ea	31.00 /mh	155	750.00 /ea	750	-	-	-	-	-	-	905	967
	DI Flanged 90 ell 4"	15221.430	5.00 ea	31.00 /mh	155	200.00 /ea	1,000	-	-	-	-	-	-	1,155	1,217
	DI Flanged Tee 4"	15221.455	2.00 ea	31.00 /mh	93	300.00 /ea	600	-	-	-	-	-	-	693	730

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	150-01 1c 12042002 4" WAS/SCUM Suction														
	Valve Plug Flange 125# 4in	15110.650	4.00 ea	31.00 /mh	248	1,200.00 /ea	4,800	-	-	-	-	-	-	5,048	5,147
	PS Pipe Stand for 4in DIP 3ft 0in floor to CL HDG	15060.406	4.00 ea	31.00 /mh	496	850.00 /ea	3,400	-	-	-	-	-	-	3,896	4,094
	PS Pipe Stand for 4in DIP 5ft 0in floor to CL HDG	15060.406	1.00 ea	31.00 /mh	124	850.00 /ea	850	-	-	-	-	-	-	974	1,024
	NBG Kit 125# Steel 4in	15125.010	26.00 ea	31.00 /mh	403	25.00 /ea	650	-	-	-	-	-	-	1,053	1,214
	DI MEGAFLANGE w/ Galv Bolts for DIP 4"	15112.220	4.00 ea	31.00 /mh	186	92.00 /ea	368	-	-	-	-	-	-	554	628
	PS Expansion Anchor 5/8 x 7in SS	15060.127	20.00 ea	31.00 /mh	62	14.00 /ea	280	-	-	-	-	-	-	342	367
	PS Pipe Stand grout	15060.404	5.00 ea	31.00 /mh	155	8.00 /ea	40	-	-	-	-	-	-	195	257
	NBG Kit 125# Insulating 4in	15125.016	3.00 ea	31.00 /mh	93	40.00 /ea	120	-	-	-	-	-	-	213	250
	Grout Sleeve 8in	15124.300	1.00 ea	31.00 /mh	62	15.00 /ea	15	-	-	-	-	-	-	77	102
	Link Seal Size LS-475-S	15123.100	16.00 ea	31.00 /mh	74	16.00 /ea	256	-	-	-	-	-	-	330	360
	DI MEGALUG for DIP 4"	2511.610	1.00 ea	31.00 /mh	16	25.00 /ea	25	-	-	-	-	-	-	41	47
	4" WAS/SCUM Suction				3,066		17,434							20,500	21,726
	150-01 1c 12042002 10" RAS Suction														
	DI Pipe 10in. dia FxF - 2ft. 0in.	15221.010	6.00 ea	31.00 /mh	372	1,500.00 /ea	9,000	-	-	-	-	-	-	9,372	9,521
	DI Pipe 10in. dia FxF - 3ft. 0in.	15221.010	2.00 ea	31.00 /mh	124	1,500.00 /ea	3,000	-	-	-	-	-	-	3,124	3,174
	DI Pipe 10in. dia FxF - 4ft. 0in.	15221.010	2.00 ea	31.00 /mh	186	1,500.00 /ea	3,000	-	-	-	-	-	-	3,186	3,260
	DI Pipe 10in. dia FxF - 5ft. 0in.	15221.010	1.00 ea	31.00 /mh	93	1,650.00 /ea	1,650	-	-	-	-	-	-	1,743	1,780
	DI Pipe 10in. dia FxF - 6ft. 0in.	15221.010	3.00 ea	31.00 /mh	372	1,700.00 /ea	5,100	-	-	-	-	-	-	5,472	5,621
	DI Pipe 10in. dia FxF - 8ft. 0in.	15221.010	2.00 ea	31.00 /mh	248	1,700.00 /ea	3,400	-	-	-	-	-	-	3,648	3,747
	DI Pipe 10in. dia FxF - 15ft. 0in.	15221.010	1.00 ea	31.00 /mh	186	2,200.00 /ea	2,200	-	-	-	-	-	-	2,386	2,460
	DI Pipe 10in. dia FxPE - 10ft. 0in.	15221.030	4.00 ea	31.00 /mh	620	1,550.00 /ea	6,200	-	-	-	-	-	-	6,820	7,068
	DI Flanged 90 ell 10"	15221.430	6.00 ea	31.00 /mh	372	1,400.00 /ea	8,400	-	-	-	-	-	-	8,772	8,921
	DI Flanged Tee 10"	15221.455	8.00 ea	31.00 /mh	744	1,600.00 /ea	12,800	-	-	-	-	-	-	13,544	13,842
	DI Flanged Con Red 10x4"	15221.445	8.00 ea	31.00 /mh	496	850.00 /ea	6,800	-	-	-	-	-	-	7,296	7,494
	Valve Plug Flange 125# 10in	15110.650	14.00 ea	31.00 /mh	1,302	2,790.00 /ea	39,060	-	-	-	-	-	-	40,362	40,883
	PS Pipe Stand for 10in DIP 4ft 0in floor to CL HDG	15060.406	12.00 ea	31.00 /mh	1,488	850.00 /ea	10,200	-	-	-	-	-	-	11,688	12,283
	NBG Kit 125# Steel 4in	15125.010	8.00 ea	31.00 /mh	124	25.00 /ea	200	-	-	-	-	-	-	324	374
	NBG Kit 125# Steel 10in	15125.010	62.00 ea	31.00 /mh	1,922	90.00 /ea	5,580	-	-	-	-	-	-	7,502	8,271
	DI MEGAFLANGE w/ Galv Bolts for DIP 10"	15112.220	6.00 ea	31.00 /mh	558	300.00 /ea	1,800	-	-	-	-	-	-	2,358	2,581
	PS Expansion Anchor 5/8 x 7in SS	15060.127	48.00 ea	31.00 /mh	149	14.00 /ea	672	-	-	-	-	-	-	821	880
	PS Pipe Stand grout	15060.404	12.00 ea	31.00 /mh	372	8.00 /ea	96	-	-	-	-	-	-	468	617
	NBG Kit 125# Insulating 10in	15125.016	6.00 ea	31.00 /mh	186	120.00 /ea	720	-	-	-	-	-	-	906	980
	Instrument - Flow - Magnetic Flow Meter - 10in	17200.000	4.00 ea	31.00 /mh	496	0.01 /ea	0	-	-	-	-	-	-	496	694
	Link Seal Size LS-340-S	15123.100	204.00 ea	31.00 /mh	949	15.00 /ea	3,060	-	-	-	-	-	-	4,009	4,388
	Grout Sleeve 18in	15124.300	16.00 ea	31.00 /mh	1,488	35.00 /ea	560	-	-	-	-	-	-	2,048	2,643
	DI MEGALUG for DIP 10"	2511.610	4.00 ea	31.00 /mh	62	66.00 /ea	264	-	-	-	-	-	-	326	351
	10" RAS Suction				12,908		123,762							136,670	141,834
	150-01 1c 12042002 4"/8" SCUM/WAS Discharge														
	DI Pipe 4in. dia FxF - 3ft. 0in.	15221.010	7.00 ea	31.00 /mh	434	510.00 /ea	3,570	-	-	-	-	-	-	4,004	4,178
	DI Pipe 4in. dia FxF - 4ft. 0in.	15221.010	1.00 ea	31.00 /mh	93	560.00 /ea	560	-	-	-	-	-	-	653	690
	DI Pipe 4in. dia FxF - 5ft. 6in.	15221.010	1.00 ea	31.00 /mh	124	650.00 /ea	650	-	-	-	-	-	-	774	824
	DI Pipe 4in. dia FxF - 10ft. 0in.	15221.010	2.00 ea	31.00 /mh	310	900.00 /ea	1,800	-	-	-	-	-	-	2,110	2,234
	DI Pipe 8in. dia FxF - 18ft. 0in.	15221.010	1.00 ea	31.00 /mh	186	2,300.00 /ea	2,300	-	-	-	-	-	-	2,486	2,560
	DI Pipe 4in. dia FxPE - 10ft. 0in.	15221.030	2.00 ea	31.00 /mh	310	750.00 /ea	1,500	-	-	-	-	-	-	1,810	1,934
	DI Pipe 8in. dia FxPE - 18ft. 0in.	15221.030	1.00 ea	31.00 /mh	186	2,500.00 /ea	2,500	-	-	-	-	-	-	2,686	2,760
	DI Flanged 90 ell 4"	15221.430	7.00 ea	31.00 /mh	217	200.00 /ea	1,400	-	-	-	-	-	-	1,617	1,704
	DI Flanged Tee 4"	15221.455	2.00 ea	31.00 /mh	124	300.00 /ea	600	-	-	-	-	-	-	724	774
	DI Flanged Con Red 8x4"	15221.445	1.00 ea	31.00 /mh	62	300.00 /ea	300	-	-	-	-	-	-	362	387
	Valve Check Flange 125# 4in	15110.040	3.00 ea	31.00 /mh	186	1,580.00 /ea	4,740	-	-	-	-	-	-	4,926	5,000
	Valve Plug Flange 125# 4in	15110.650	3.00 ea	31.00 /mh	186	1,200.00 /ea	3,600	-	-	-	-	-	-	3,786	3,860
	PS Clevis Hanger HDG 4in	15060.098	8.00 ea	31.00 /mh	248	10.00 /ea	80	-	-	-	-	-	-	328	427
	PS Clevis Hanger HDG 8in	15060.098	4.00 ea	31.00 /mh	124	25.00 /ea	100	-	-	-	-	-	-	224	274
	NBG Kit 125# Steel 4in	15125.010	36.00 ea	31.00 /mh	558	25.00 /ea	900	-	-	-	-	-	-	1,458	1,681
	DI MEGAFLANGE w/ Galv Bolts for DIP 4"	15112.220	4.00 ea	31.00 /mh	186	92.00 /ea	368	-	-	-	-	-	-	554	628
	PS Expansion Anchor 5/8 x 7in SS	15060.127	48.00 ea	31.00 /mh	149	14.00 /ea	672	-	-	-	-	-	-	821	880
	NBG Kit 125# Steel 8in	15125.010	4.00 ea	31.00 /mh	62	50.00 /ea	200	-	-	-	-	-	-	262	287
	Instrument - Flow - Magnetic Flow Meter - 4in	17200.000	2.00 ea	31.00 /mh	248	0.01 /ea	0	-	-	-	-	-	-	248	347
	DI MEGAFLANGE w/ Galv Bolts for DIP 8"	15112.220	2.00 ea	31.00 /mh	186	215.00 /ea	430	-	-	-	-	-	-	616	690
	Instrument - Pressure - Transmitter	17400.000	16.00 ea	31.00 /mh	992	0.01 /ea	0	-	-	-	-	-	-	992	1,389
	PS Ceiling Plate For 5/8" Rod EG	15060.093	12.00 ea	31.00 /mh	327	30.00 /ea	360	-	-	-	-	-	-	687	818
	Link Seal Size LS-400-S	15123.100	18.00 ea	31.00 /mh	84	16.00 /ea	288	-	-	-	-	-	-	372	405
	Grout Sleeve 12in	15124.300	1.00 ea	31.00 /mh	62	20.00 /ea	20	-	-	-	-	-	-	82	107
	DI MEGALUG for DIP 8"	2511.610	1.00 ea	31.00 /mh	16	45.00 /ea	45	-	-	-	-	-	-	61	67
	4"/8" SCUM/WAS Discharge				5,659		26,983							32,643	34,906
	150-01 1c 12042002 10" RAS Discharge														
	DI Pipe 4in. dia FxF - 3ft. 0in.	15221.010	6.00 ea	31.00 /mh	372	510.00 /ea	3,060	-	-	-	-	-	-	3,432	3,581
	DI Pipe 4in. dia FxF - 6ft. 0in.	15221.010	3.00 ea	31.00 /mh	372	850.00 /ea	2,550	-	-	-	-	-	-	2,922	3,071
	DI Pipe 10in. dia FxF - 4ft. 0in.	15221.010	4.00 ea	31.00 /mh	372	1,650.00 /ea	6,600	-	-	-	-	-	-	6,972	7,121
	DI Pipe 10in. dia FxF - 8ft. 0in.	15221.010	2.00 ea	31.00 /mh	248	1,700.00 /ea	3,400	-	-	-	-	-	-	3,648	3,747
	DI Pipe 10in. dia FxF - 10ft. 0in.	15221.010	1.00 ea	31.00 /mh	124	1,800.00 /ea	1,800	-	-	-	-	-	-	1,924	1,974
	DI Pipe 10in. dia FxF - 18ft. 0in.	15221.010	2.00 ea	31.00 /mh	372	2,200.00 /ea	4,400	-	-	-	-	-	-	4,772	4,921

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
150-01 1c 12042002 10" RAS Discharge															
	DI Pipe 10in. dia FxPE - 10ft. 0in.	15221.030	1.00 ea	31.00 /mh	124	1,550.00 /ea	1,550	-	-	-	-	-	-	1,674	1,724
	DI Pipe 10in. dia FxPE - 18ft. 0in.	15221.030	1.00 ea	31.00 /mh	186	3,500.00 /ea	3,500	-	-	-	-	-	-	3,686	3,760
	DI Flanged 90 ell 4"	15221.430	9.00 ea	31.00 /mh	279	200.00 /ea	1,800	-	-	-	-	-	-	2,079	2,191
	DI Flanged 90 ell 10"	15221.430	1.00 ea	31.00 /mh	62	1,400.00 /ea	1,400	-	-	-	-	-	-	1,462	1,487
	DI Flanged Tee 10"	15221.455	1.00 ea	31.00 /mh	93	1,600.00 /ea	1,600	-	-	-	-	-	-	1,693	1,730
	DI Flanged Tee 10x4"	15221.455	6.00 ea	31.00 /mh	372	1,400.00 /ea	8,400	-	-	-	-	-	-	8,772	8,921
	Valve Check Flange 125# 4in	15110.040	6.00 ea	31.00 /mh	372	1,580.00 /ea	9,480	-	-	-	-	-	-	9,852	10,001
	Valve Plug Flange 125# 4in	15110.650	6.00 ea	31.00 /mh	372	1,200.00 /ea	7,200	-	-	-	-	-	-	7,572	7,721
	Valve Plug Flange 125# 10in	15110.650	2.00 ea	31.00 /mh	248	2,790.00 /ea	5,580	-	-	-	-	-	-	5,828	5,927
	PS Clevis Hanger HDG 4in	15060.098	3.00 ea	31.00 /mh	93	10.00 /ea	30	-	-	-	-	-	-	123	160
	PS Clevis Hanger HDG 10in	15060.098	10.00 ea	31.00 /mh	310	46.00 /ea	460	-	-	-	-	-	-	770	894
	NBG Kit 125# Steel 4in	15125.010	48.00 ea	31.00 /mh	744	25.00 /ea	1,200	-	-	-	-	-	-	1,944	2,242
	NBG Kit 125# Steel 10in	15125.010	28.00 ea	31.00 /mh	868	90.00 /ea	2,520	-	-	-	-	-	-	3,388	3,735
	DI MEGAFLANGE w/ Galv Bolts for DIP 4"	15112.220	2.00 ea	31.00 /mh	93	92.00 /ea	184	-	-	-	-	-	-	277	314
	DI MEGAFLANGE w/ Galv Bolts for DIP 10"	15112.220	4.00 ea	31.00 /mh	372	300.00 /ea	1,200	-	-	-	-	-	-	1,572	1,721
	DI Blind Flange 10"	15221.405	2.00 ea	31.00 /mh	93	350.00 /ea	700	-	-	-	-	-	-	793	830
	PS Expansion Anchor 5/8 x 8-1/2in SS	15060.127	52.00 ea	31.00 /mh	161	17.00 /ea	884	-	-	-	-	-	-	1,045	1,110
	Link Seal Size LS-340-S	15123.100	48.00 ea	31.00 /mh	223	15.00 /ea	720	-	-	-	-	-	-	943	1,032
	PS Ceiling Plate For 5/8" Rod EG	15060.093	13.00 ea	31.00 /mh	355	30.00 /ea	390	-	-	-	-	-	-	745	887
	DI MEGALUG for DIP 10"	2511.610	1.00 ea	31.00 /mh	16	66.00 /ea	66	-	-	-	-	-	-	82	88
	NBG Kit 125# Insulating 4in	15125.016	8.00 ea	31.00 /mh	248	40.00 /ea	320	-	-	-	-	-	-	568	667
	10" RAS Discharge				7,544		70,994							78,538	81,555
	GEN General				29,177		239,173							268,350	280,021
	850 Existing RAS/WAS				29,177		239,173							268,350	280,021
	402700 Process Pipe - General				820,135		4,523,555		86,610		422,300		140,624	5,993,225	6,329,724
409000 Instrumentation and Control for Process Systems															
150 Influent Pump Station															
Instruments															
16-01 IPS Float Switch Penetrations 150-LSHH															
	DI Wall Pipe FLG x PE w/ Collar 8in x 1ft 6in long	15221.336	3.00 ea	31.00 /mh	186	900.00 /ea	2,700	-	-	-	-	-	-	2,886	2,960
	DI Blind Flange 8"	15221.405	3.00 ea	31.00 /mh	186	200.00 /ea	600	-	-	-	-	-	-	786	860
	NBG Kit 125# HDG 8in	15125.014	3.00 ea	31.00 /mh	28	40.00 /ea	120	-	-	-	-	-	-	148	159
	IPS Float Switch Penetrations 150-LSHH				400		3,420	/lf						3,820	3,980
	Instruments				400		3,420							3,820	3,980
	150 Influent Pump Station				400		3,420	/LS						3,820	3,980
350 Step Feed Process Building															
Instruments															
16-01 Instuments Level Floats															
	DI Wall Pipe FLG x PE w/ Collar 8in x 1ft 6in long	15221.336	2.00 ea	31.00 /mh	124	900.00 /ea	1,800	-	-	-	-	-	-	1,924	1,974
	DI Blind Flange 8"	15221.405	2.00 ea	31.00 /mh	124	200.00 /ea	400	-	-	-	-	-	-	524	574
	NBG Kit 125# HDG 8in	15125.014	2.00 ea	31.00 /mh	19	40.00 /ea	80	-	-	-	-	-	-	99	106
	Instuments Level Floats				267		2,280	/lf						2,547	2,653
	Instruments				267		2,280							2,547	2,653
	350 Step Feed Process Building				267		2,280	/LS						2,547	2,653
	409000 Instrumentation and Control for Process Systems				667		5,700							6,367	6,633
412213 Overhead Cranes															
001 General															
Hoists															
14 -100 Conveying Systems - Sub															
	Sub - Hoists & Cranes	14600.100	1.00 ls	-	-	-	-	269,000.00 /ls	269,000	-	-	-	-	269,000	269,000
	Sub - material escalation	14600.100	1.00 ls	-	-	-	-	26,900.00 /ls	26,900	-	-	-	-	26,900	26,900
	Conveying Systems - Sub		1.00 LS					295,900.00 /LS	295,900					295,900	295,900
	Hoists								295,900					295,900	295,900
	001 General							/LS	295,900					295,900	295,900
350 Step Feed Process Building															
Hoists															
14 -100 Screw Press Bridge Crane															
	Bridge Crane - 2 TON - Electric	14600.100	1.00 ea	31.00 /mh	1,240	-	-			-	-	-	-	1,240	1,736
	Cast in Place anchors 4 ea	5001.050	4.00 ea	31.00 /mh	992	100.00 /ea	400	-	-	-	-	-	-	1,392	1,789
	Screw Press Bridge Crane		1.00 LS		2,232		400	/LS						2,632	3,525
	Hoists				2,232		400							2,632	3,525
	350 Step Feed Process Building				2,232		400	/LS						2,632	3,525
550 UV and Digester Blower Building															
Hoists															
14 -100 UV Workstation Crane															
	Bridge Crane - 2 Ton - Manual	14600.100	1.00 ea	31.00 /mh		-	-			-	-	-	-		

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
14	-100 UV Workstation Crane														
	Set Anchor Bolts 4 Set	3150.700	4.00 ea	31.00 /mh	992	100.00 /ea	400	-	-	-	-	-	-	1,392	1,789
	UV Workstation Crane		1.00 LS		992		400	/LS						1,392	1,789
	Hoists				992		400							1,392	1,789
	550 UV and Digester Blower Building				992		400	/LS						1,392	1,789
	412213 Overhead Cranes				3,224		800		295,900					299,924	301,214
412223	Monorail Hoists														
	150 Influent Pump Station														
	Hoists														
14	-100 Influent Pump Station Bridge Crane														
	Bridge Crane - 1 TON - Manual	14600.100	1.00 ea	31.00 /mh	1,240	-	-			-	-	-	-	1,240	1,736
	Set Anchor Bolts 4 Set	3150.700	8.00 ea	31.00 /mh	1,984	100.00 /ea	800	-	-	-	-	-	-	2,784	3,578
	Influent Pump Station Bridge Crane		1.00 LS		3,224		800	/LS						4,024	5,314
	Hoists				3,224		800							4,024	5,314
	150 Influent Pump Station				3,224		800	/LS						4,024	5,314
	200 Aeration Basin														
	General														
14-01	Davit Cranes at Aeration														
	Sub - Hoists & Cranes	14600.100	1.00 ls	-	-	-	-			-	-	-	-		
	Bases	14600.100	2.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	3/4" epoxy anchors	5001.052	8.00 ea	31.00 /mh	248	20.00 /ea	160	-	-	-	-	-	-	408	507
	Davit Cranes at Aeration		2.00 EA		744		160	/EA						904	1,202
	General				744		160							904	1,202
	200 Aeration Basin				744		160	/LS						904	1,202
	350 Step Feed Process Building														
	Hoists														
14	-100 Step Feed Lower Level Pump Room														
	Monorail Hoist - 1 Ton - Manual	14600.100	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Epoxy Anchor 7/8 x 18" A307 - Plate to Concrete	5001.051	4.00 ea	31.00 /mh	992	100.00 /ea	400	-	-	-	-	-	-	1,392	1,789
	Epoxy Anchor 3/4 x 4-1/4in A325 Plate to Beam	5001.051	4.00 ea	31.00 /mh	992	100.00 /ea	400	-	-	-	-	-	-	1,392	1,789
	Steel Plate 3/8"x3.25"x3.5" Washers	5124.005	4.00 ea	31.00 /mh		0.01 /lb	1	-	-	-	-	-	-	1	1
						s									
	Steel Plate 1/4"x6.5"x14"	5124.005	2.00 ea	31.00 /mh		0.01 /lb	0	-	-	-	-	-	-	0	0
						s									
	Spacer Pack 3/4"x3.5"x5"	5124.005	8.00 ea	31.00 /mh		0.01 /lb	2	-	-	-	-	-	-	2	2
						s									
	Field Welding - Carbon Steel	5000.985	8.00 hrs	31.00 /mh	248	/hr		142.30 /hrs	1,138	/hrs		-	-	1,386	1,486
						s									
	Steel Plate 1"x6"x15" - Main Plate	5124.010	2.00 ea	31.00 /mh		0.01 /lb	1	-	-	-	-	-	-	1	1
						s									
	Steel Plate 3/4"x12"x6""? - Side Anchor Plate	5124.005	2.00 ea	31.00 /mh		0.01 /lb	1	-	-	-	-	-	-	1	1
						s									
	Anchor Bolt 3/4x6 SS 316	5001.064	4.00 ea	31.00 /mh		5.00 /ea	20	-	-	-	-	-	-	20	20
	Anchor Bolt 3/4x? A325N Bolts	5001.064	6.00 ea	31.00 /mh		5.00 /ea	30	-	-	-	-	-	-	30	30
	Monorail Beam - W - 10x30, 47' Long	5001.150	1.00 ea	31.00 /mh		0.00 /ea	0	-	-	-	-	-	-		
	Step Feed Lower Level Pump Room		1.00 LS		2,728		855	1,138.42 /LS	1,138					4,721	5,812
14	-100 Step Feed Polymer Room														
	Monorail - 2 Ton - Manual	14600.100	1.00 ea	31.00 /mh	744	0.00 /ea	0	-	-	-	-	-	-	744	1,042
	Set Anchor Bolts 4 Set	3150.700	4.00 ea	31.00 /mh	992	100.00 /ea	400	-	-	-	-	-	-	1,392	1,789
	Step Feed Polymer Room		1.00 LS		1,736		400	/LS						2,136	2,830
14	-100 Step Feed Bower Room														
	Davit Crane - 1/2 Ton	14600.100	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Davit Base	14600.100	1.00 ea	31.00 /mh	124	/ea		-	-	-	-	-	-	124	174
	Anchors for Davit Bases	5001.150	4.00 ea	31.00 /mh	31	20.00 /ea	80	-	-	-	-	-	-	111	123
	Step Feed Bower Room		1.00 LS		651		80	/LS						731	991
	Hoists				5,115		1,335		1,138					7,588	9,634
	350 Step Feed Process Building				5,115		1,335	/LS	1,138					7,588	9,634
	550 UV and Digester Blower Building														
	Hoists														
14	-100 1 Ton Davit Crane														
	Davit Crane - 1/2 Ton	14600.100	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Davit Base	14600.100	1.00 ea	31.00 /mh	124	/ea		-	-	-	-	-	-	124	174
	Anchors for Davit Bases	5001.150	4.00 ea	31.00 /mh	31	20.00 /ea	80	-	-	-	-	-	-	111	123
	1 Ton Davit Crane		1.00 LS		651		80	/LS						731	991
	Hoists				651		80							731	991
	550 UV and Digester Blower Building				651		80	/LS						731	991
	600 Aerobic Digester 5 and 6														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
Hoists															
14	-100 1/2 Ton Davit Crane														
	Davit Crane - 1/2 Ton	14600.100	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Davit Base	14600.100	2.00 ea	31.00 /mh	248	/ea		-	-	-	-	-	-	248	347
	Anchors for Davit Bases	5001.150	8.00 ea	31.00 /mh	62	20.00 /ea	160	-	-	-	-	-	-	222	247
	1/2 Ton Davit Crane		1.00 LS		806		160	/LS						966	1,288
	Hoists				806		160							966	1,288
	600 Aerobic Digester 5 and 6				806		160	/LS						966	1,288
	650 Existing Digester 1 to 4														
Hoists															
14	-100 1/2 Ton Davit Crane														
	Davit Crane - 1/2 Ton	14600.100	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Davit Base	14600.100	4.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Anchors for Davit Bases	5001.150	16.00 ea	31.00 /mh	124	20.00 /ea	320	-	-	-	-	-	-	444	494
	1/2 Ton Davit Crane		1.00 LS		1,116		320	/LS						1,436	1,882
	Hoists				1,116		320							1,436	1,882
	650 Existing Digester 1 to 4				1,116		320	/LS						1,436	1,882
	412223 Monorail Hoists				11,656		2,855		1,138					15,649	20,312
444219	Blowers														
001	General														
General															
01	-100 Div 44 Misc Equipment and general														
	Mechanical Foreman	1000.100	8.00 wk	1,500.00 /wk	12,000	-	-	-	-	-	-	-	-	12,000	16,800
	Pickup	1900.210	3.00 mnth	-	-	-	-	-	-	836.00 /mnth	2,508	514.00 /mnth	1,542	4,050	4,100
	Grove RT760/RT700, 60 ton (240 HP) (L)	1900.100	4.00 mnth	7,296.00 /mnth	29,184	350.00 /m nt h	1,400	-	-	9,500.00 /mnth	38,000	1,500.00 /mnth	6,000	74,584	87,018
	Scissor Lifts	11900.028	2.00 mo	31.00 /mh	744	2,800.00 /m o	5,600	-	-	-	-	-	-	6,344	6,642
	Forklift small propane	2322.510	2.00 mnth	-	-	-	-	-	-	2,500.00 /mnth	5,000	-	-	5,000	5,100
	Equipment Connex (spare Parts Equip Storage)	1900.142	27.00 mnth	-	-	-	-	-	-	150.00 /mnth	4,050	0.00 /mnth	0	4,050	4,131
	RT Telescopic Forklift (12,000 lb) (130 HP) (L)	1900.300	6.00 mnth	-	-	-	-	-	-	3,500.00 /mnth	21,000	1,200.00 /mnth	7,200	28,200	28,620
	Div 44 Misc Equipment and general				41,928		7,000	/wk			70,558		14,742	134,228	152,410
	General				41,928		7,000				70,558		14,742	134,228	152,410
	001 General				41,928		7,000	/LS			70,558		14,742	134,228	152,410
	350 Step Feed Process Building														
GEN	General														
11	-09 Step Feed Blowers														
	Supply Blower Package (In with Nurose)	11100.045	1.00 ea	-	-	355,185.00 /hp	355,185	-	-	-	-	-	-	355,185	355,185
	Control Panel	11100.020	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Blower Misc -	11100.020	1.00 ea	31.00 /mh	31	/ea		-	-	-	-	-	-	31	43
	Blower Inlet Filter	11100.010	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Blwr Init Disch Silncr	11100.050	1.00 ea	31.00 /mh	744	/ea		-	-	-	-	-	-	744	1,042
	Anchors for Equipment	11000.005	36.00 ea	31.00 /mh	279	50.00 /ea	1,800	-	-	-	-	-	-	2,079	2,191
	Misc Materials	11000.005	3.00 ea	31.00 /mh	93	850.00 /ea	2,550	-	-	-	-	-	-	2,643	2,680
	Start up and Training	11000.005	1.00 ls	31.00 /mh	744	-	-	-	-	-	-	-	-	744	1,042
	Turbo Blower 100 hp	11100.045	1.00 ea	31.00 /mh	1,488	/hp		-	-	-	-	-	-	1,488	2,083
	Turbo Blower 150hp	11100.045	2.00 ea	31.00 /mh	2,976	/hp		-	-	-	-	-	-	2,976	4,166
	Step Feed Blowers				7,347		359,535	/LS						366,882	369,821
	GEN General				7,347		359,535							366,882	369,821
	350 Step Feed Process Building				7,347		359,535	/LS						366,882	369,821
550	UV and Digester Blower Building														
GEN	General														
11	-09 Digester Blowers														
	Supply Blower Package (Aerzen)	11100.045	1.00 ea	-	-	207,753.00 /hp	207,753	-	-	-	-	-	-	207,753	207,753
	Control Panel	11100.020	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Blower Inlet Filter 12"	11100.010	1.00 ea	31.00 /mh	744	4,825.00 /ea	4,825	-	-	-	-	-	-	5,569	5,867
	Blwr Init Disch Silncr 12"	11100.050	1.00 ea	31.00 /mh	372	/ea		-	-	-	-	-	-	372	521
	Anchors for Equipment	11000.005	30.00 ea	31.00 /mh	233	50.00 /ea	1,500	-	-	-	-	-	-	1,733	1,825
	Misc Materials	11000.005	5.00 ea	31.00 /mh	155	250.00 /ea	1,250	-	-	-	-	-	-	1,405	1,467
	Start up and Training	11000.005	1.00 ls	31.00 /mh	1,240	-	-	-	-	-	-	-	-	1,240	1,736
	Pos. Displacement Blower 75 hp	11100.030	3.00 ea	31.00 /mh	2,976	/hp		-	-	-	-	-	-	2,976	4,166
	Pos. Displacement Blower 100 hp	11100.030	2.00 ea	31.00 /mh	1,984	/hp		-	-	-	-	-	-	1,984	2,778
	Digester Blowers				8,200		215,328	/LS						223,528	226,807
	GEN General				8,200		215,328							223,528	226,807
	550 UV and Digester Blower Building				8,200		215,328	/LS						223,528	226,807

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	444219 Blowers				57,475		581,863				70,558		14,742	724,638	749,038
	444224 Secondary Clarifier Mechanism														
	300 Secondary Clarifiers 5 and 6														
	GEN General														
	11-21 Clarifier Equipment 2 ea 5 and 6														
	Clarifier Package Supply (Galv)	11000.100	1.00 ls	-	-	291,714.00 /ea	291,714	-	-	-	-	-	-	291,714	291,714
	Clarifier Welding	11000.100	1.00 ls	31.00 /mh	496	/ls				-	-	-	-	496	694
	Center Column Anchors	11000.100	20.00 ea	31.00 /mh	930	/ea		-	-	-	-	-	-	930	1,302
	Clarifier Control Panel	11000.100	2.00 ea	31.00 /mh	992	/ea		-	-	-	-	-	-	992	1,389
	Clarifier Install	11000.100	2.00 ea	31.00 /mh	29,760	-	-			-	-	-	-	29,760	41,664
	Misc Materials and caulking	11000.005	1.00 ea	31.00 /mh	31	1,500.00 /ea	1,500	-	-	-	-	-	-	1,531	1,543
	Grout Equipment	11000.005	16.00 cf	31.00 /mh	1,984	60.00 /cf	960	-	-	-	-	-	-	2,944	3,738
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Supply Weir and Baffle Package	11000.460	1.00 ls	-	-	33,350.00 /ls	33,350	-	-	-	-	-	-	33,350	33,350
	Install Weirs	11000.460	282.00 lf	31.00 /mh	7,431	-	-	-	-	-	-	-	-	7,431	10,403
	Install Baffles	11000.460	282.00 lf	31.00 /mh	7,431	-	-	-	-	-	-	-	-	7,431	10,403
	Final Level and Adjust Weirs	11000.460	2.00 ea	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Clarifier Torque Test	11000.100	2.00 EA	31.00 /mh	1,488	500.00 /E A	1,000			-	-	-	-	2,488	3,083
	Field Welding - Carbon Steel	5000.985	16.00 hrs	31.00 /mh	496	/hr s		110.00 /hrs	1,760	/hrs		-	-	2,256	2,454
	Painting Sub touch up clarifiers 2 ea	9910.100	1.00 ls	-	-	-	-	16,000.00 /ls	16,000	-	-	-	-	16,000	16,000
	Clarifier Equipment 2 ea 5 and 6				52,030		328,524	/ls	17,760					398,314	419,127
	GEN General				52,030		328,524		17,760					398,314	419,127
	300 Secondary Clarifiers 5 and 6				52,030		328,524	/LS	17,760					398,314	419,127
	444224 Secondary Clarifier Mechanism				52,030		328,524		17,760					398,314	419,127
	444225 Secondary Clarifier Launder Cover														
	300 Secondary Clarifiers 5 and 6														
	GEN General														
	11-21 Clarifier Launder Covers for 1-6														
	Clarifier Misc Materials	11000.100	6.00 ea	31.00 /mh	1,488	500.00 /ea	3,000			-	-	-	-	4,488	5,083
	Clarifier Launder Covers	11000.100	6.00 ea	31.00 /mh	59,520	19,166.67 /ea	115,000			-	-	-	-	174,520	198,328
	Clarifier Launder Covers for 1-6				61,008		118,000	/ls						179,008	203,411
	GEN General				61,008		118,000							179,008	203,411
	300 Secondary Clarifiers 5 and 6				61,008		118,000	/LS						179,008	203,411
	444225 Secondary Clarifier Launder Cover				61,008		118,000							179,008	203,411
	444228 Weir and Baffle Plates														
	550 UV and Digester Blower Building														
	GEN General														
	11-500 Finger Weirs														
	Anchors for Equipment	11000.005	1.00 ls	31.00 /mh	8	250.00 /ls	250	-	-	-	-	-	-	258	261
	Install Weirs	11000.460	1.00 ls	31.00 /mh	11	-	-	-	-	-	-	-	-	11	15
	Final Level and Adjust Weirs	11000.460	1.00 ea	31.00 /mh	2,232	-	-	-	-	-	-	-	-	2,232	3,125
	Supply Finger Weir Package In UV Package	11000.460	1.00 ls	-	-	/ls		-	-	-	-	-	-		
	Non Shrink Grout	3150.700	6.00 cf	31.00 /mh	186	60.00 /cf	360	-	-	-	-	-	-	546	620
	Finger Weirs				2,437		610	/ls						3,047	4,021
	GEN General				2,437		610							3,047	4,021
	550 UV and Digester Blower Building				2,437		610	/LS						3,047	4,021
	444228 Weir and Baffle Plates				2,437		610							3,047	4,021
	444230 Floating Decanters														
	600 Aerobic Digester 5 and 6														
	GEN General														
	11-500 Floating Decanter														
	Anchors for Equipment	11000.005	24.00 ea	31.00 /mh	186	25.00 /ea	600	-	-	-	-	-	-	786	860
	Grout Equipment	11000.005	2.00 cf	31.00 /mh	186	60.00 /cf	120	-	-	-	-	-	-	306	380
	Start up and Training	11000.005	1.00 ls	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Decanter Supply	11000.440	1.00 ls	-	-	42,703.00 /ls	42,703	-	-	-	-	-	-	42,703	42,703
	Decanter Install	11000.440	1.00 ea	31.00 /mh	992	/ls		-	-	-	-	-	-	992	1,389
	Floating Decanter				1,488		43,423	/ls						44,911	45,506
	GEN General				1,488		43,423							44,911	45,506
	600 Aerobic Digester 5 and 6				1,488		43,423	/LS						44,911	45,506
	650 Existing Digester 1 to 4														
	GEN General														
	11-500 Floating Decanter														
	Anchors for Equipment	11000.005	24.00 ea	31.00 /mh	186	25.00 /ea	600	-	-	-	-	-	-	786	860
	Grout Equipment	11000.005	2.00 cf	31.00 /mh	186	60.00 /cf	120	-	-	-	-	-	-	306	380

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
11	-500 Floating Decanter														
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	/ea		-	-	-	-	-	-	31	43
	Start up and Training	11000.005	1.00 ls	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Decanter Supply in with 1-4 decanter	11000.440	1.00 ls	-	-	/ls		-	-	-	-	-	-		
	Decanter Install	11000.440	1.00 ea	31.00 /mh	992	/ls		-	-	-	-	-	-	992	1,389
	Floating Decanter				1,519		720	/ls						2,239	2,847
	GEN General				1,519		720							2,239	2,847
	650 Existing Digester 1 to 4				1,519		720	/LS						2,239	2,847
	444230 Floating Decanters				3,007		44,143							47,150	48,353
444235	Single Entry Drum Screen and Screenings Washer Compactor														
	100 Headworks														
	GEN General														
11	-500 Drum Screen and Washer Compactor														
	Anchors for Equipment	11000.005	64.00 ea	31.00 /mh	496	25.00 /ea	1,600	-	-	-	-	-	-	2,096	2,294
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	500.00 /ea	500	-	-	-	-	-	-	531	543
	Spare Parts	11000.005	1.00 ls	31.00 /mh		/ls		-	-	-	-	-	-		
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Screenings Compactor	11000.320	2.00 ea	31.00 /mh	6,200	/ea		-	-	-	-	-	-	6,200	8,680
	Rotary Screen	11000.320	2.00 ea	31.00 /mh	18,600	/ea		-	-	-	-	-	-	18,600	26,040
	Compactor Discharge Pipe and Supports	11000.320	2.00 ea	31.00 /mh	1,488	1,500.00 /ea	3,000	-	-	-	-	-	-	4,488	5,083
	Instrument - Level - Ultrasonic Sensor - (upstream, dstream)	17300.000	5.00 ea	31.00 /mh	310	500.00 /ea	2,500	-	-	-	-	-	-	2,810	2,934
	Instrument - Level - Float Switch (upstream)	17300.000	3.00 ea	31.00 /mh	186	500.00 /ea	1,500	-	-	-	-	-	-	1,686	1,760
	Rotary Screen and Washer Compactor Supply	11000.320	1.00 ls	31.00 /mh		632,000.00 /ls	632,000	-	-	-	-	-	-	632,000	632,000
	Chutes Stainless	14560.100	2.00 ea	31.00 /mh		-	-			-	-	-	-		
	Drum Screen and Washer Compactor		1.00 ls		27,807		641,100	/ls						668,907	680,030
	GEN General				27,807		641,100							668,907	680,030
	100 Headworks				27,807		641,100	/LS						668,907	680,030
	444235 Single Entry Drum Screen and Screenings Washer Compactor				27,807		641,100							668,907	680,030
444240	Vortex Grit Chamber Equipment														
	100 Headworks														
	GEN General														
11	-500 Grit Vortex Equipment														
	Anchors for Equipment	11000.005	10.00 ea	31.00 /mh	78	25.00 /ea	250	-	-	-	-	-	-	328	359
	Grout Equipment	11000.005	2.00 cf	31.00 /mh	186	60.00 /cf	120	-	-	-	-	-	-	306	380
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	500.00 /ea	500	-	-	-	-	-	-	531	543
	Spare Parts	11000.005	1.00 ls	31.00 /mh		/ls		-	-	-	-	-	-		
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Vortex Grit Equipment includes Classifier	11600.020	1.00 ea	31.00 /mh	3,968	240,776.00 /ea	240,776	-	-	-	-	-	-	244,744	246,331
	Grit Vortex Equipment				4,759		241,646	/ls						246,405	248,308
	GEN General				4,759		241,646							246,405	248,308
	100 Headworks				4,759		241,646	/LS						246,405	248,308
	444240 Vortex Grit Chamber Equipment				4,759		241,646							246,405	248,308
444241	Separator and Grit Washer/Classifier														
	100 Headworks														
	GEN General														
11	-500 Grit Classifier														
	Anchors for Equipment	11000.005	16.00 ea	31.00 /mh	124	25.00 /ea	400	-	-	-	-	-	-	524	574
	Grout Equipment	11000.005	2.00 cf	31.00 /mh	186	60.00 /cf	120	-	-	-	-	-	-	306	380
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	500.00 /ea	500	-	-	-	-	-	-	531	543
	Control Panel	11000.005	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Misc Rotometers etc	11000.005	1.00 ls	31.00 /mh	124	1,500.00 /ls	1,500	-	-	-	-	-	-	1,624	1,674
	Chutes Stainless	14560.100	1.00 ea	31.00 /mh	744	-	-			-	-	-	-	744	1,042
	Cyclone Grit Separator	11600.020	1.00 ea	31.00 /mh	1,984	/ea		-	-	-	-	-	-	1,984	2,778
	Package Air Compressor 100 cfm	11300.030	1.00 ea	31.00 /mh	992	/ea		-	-	-	-	-	-	992	1,389
	Grit Classifier				4,681		2,520	/ls						7,201	9,073
	GEN General				4,681		2,520							7,201	9,073
	100 Headworks				4,681		2,520	/LS						7,201	9,073
	444241 Separator and Grit Washer/Classifier				4,681		2,520							7,201	9,073
444248	Automatic Composite Sampler														
	100 Headworks														
	GEN General														
11	-500 Auto Composite Sampler														
	Anchors for Equipment	11000.005	8.00 ea	31.00 /mh	62	25.00 /ea	200	-	-	-	-	-	-	262	287
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	250.00 /ea	250	-	-	-	-	-	-	281	293

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
11	-500 Auto Composite Sampler														
	Start up and Training	11000.005	1.00 ls	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Auto Composite Sampler	11000.335	1.00 ea	31.00 /mh	496	8,386.00 /ea	8,386	-	-	-	-	-	-	8,882	9,080
	Auto Composite Sampler				713		8,836	/ls						9,549	9,834
	GEN General				713		8,836							9,549	9,834
	100 Headworks				713		8,836	/LS						9,549	9,834
550 UV	and Digester Blower Building														
GEN	General														
11	-500 Auto Composite Sampler														
	Anchors for Equipment	11000.005	4.00 ea	31.00 /mh	31	25.00 /ea	100	-	-	-	-	-	-	131	143
	Grout Equipment	11000.005	1.00 cf	31.00 /mh	93	60.00 /cf	60	-	-	-	-	-	-	153	190
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	250.00 /ea	250	-	-	-	-	-	-	281	293
	Start up and Training	11000.005	1.00 ls	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Controls	11000.005	1.00 ea	31.00 /mh	31	/ea		-	-	-	-	-	-	31	43
	Auto Composite Sampler Relocated	11000.335	1.00 ea	31.00 /mh	496	0.00 /ea	0	-	-	-	-	-	-	496	694
	Auto Composite Sampler				806		410	/ls						1,216	1,538
	GEN General				806		410							1,216	1,538
	550 UV and Digester Blower Building				806		410	/LS						1,216	1,538
	444248 Automatic Composite Sampler				1,519		9,246							10,765	11,373
444256	Pumps														
100	Headworks														
GEN	General														
11	-01 Grit Pumps														
	Supply Pump Package Wemco	11700.020	1.00 ls	-	-	60,929.00 /ls	60,929	-	-	-	-	-	-	60,929	60,929
	Anchors for Equipment	11000.005	8.00 ea	31.00 /mh	62	25.00 /ea	200	-	-	-	-	-	-	262	287
	Grout Equipment	11000.005	2.00 cf	31.00 /mh	248	60.00 /cf	120	-	-	-	-	-	-	368	467
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	250.00 /ea	250	-	-	-	-	-	-	281	293
	Pressure Gauge Assembly	11000.005	2.00 ea	31.00 /mh	248	1,200.00 /ea	2,400	-	-	-	-	-	-	2,648	2,747
	Start up and Training	11000.005	1.00 ls	31.00 /mh	248	-	-	-	-	-	-	-	-	248	347
	Horz Non Clog Centr Pump - 15 HP	11700.020	2.00 ea	31.00 /mh	1,488	/ea		-	-	-	-	-	-	1,488	2,083
	Grit Pumps				2,325		63,899							66,224	67,154
	GEN General				2,325		63,899							66,224	67,154
	100 Headworks				2,325		63,899	/LS						66,224	67,154
150	Influent Pump Station														
GEN	General														
11	-02 Influent Submersible Pumps														
	Supply Submersible Pumps flyght	11700.110	1.00 ls	-	-	99,340.00 /ls	99,340	-	-	-	-	-	-	99,340	99,340
	Submersible Pump - 20 HP	11700.110	4.00 ea	31.00 /mh	3,968	/ls		-	-	-	-	-	-	3,968	5,555
	Control Panel	11700.110	1.00 ls	31.00 /mh	248	/ls		-	-	-	-	-	-	248	347
	Level Controls	11700.110	4.00 ls	31.00 /mh	124	150.00 /ls	600	-	-	-	-	-	-	724	774
	Mounting Brackets	11700.110	8.00 ea	31.00 /mh	124	/ea		-	-	-	-	-	-	124	174
	Lifting Chain	11700.110	120.00 lf	31.00 /mh	372	/lf		-	-	-	-	-	-	372	521
	Misc Materials	11000.005	1.00 ls	31.00 /mh	31	250.00 /ls	250	-	-	-	-	-	-	281	293
	Anchors for Equipment	11000.005	40.00 ea	31.00 /mh	310	25.00 /ea	1,000	-	-	-	-	-	-	1,310	1,434
	Grout Equipment	11000.005	3.00 cf	31.00 /mh	372	60.00 /cf	180	-	-	-	-	-	-	552	701
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Influent Submersible Pumps		4.00 ls		6,045		101,370	/ls						107,415	109,833
	GEN General				6,045		101,370							107,415	109,833
	150 Influent Pump Station				6,045		101,370	/LS						107,415	109,833
200	Aeration Basin														
GEN	General														
11	-02 MLR Pumps														
	Supply Submersible Pumps (flyght)	11700.110	1.00 ls	-	-	48,853.00 /ls	48,853	-	-	-	-	-	-	48,853	48,853
	Submersible Pump - 7.5 HP	11700.110	2.00 ea	31.00 /mh	1,488	/ea		-	-	-	-	-	-	1,488	2,083
	Control Panel	11700.110	1.00 ls	31.00 /mh	248	/ls		-	-	-	-	-	-	248	347
	Mounting Brackets	11700.110	4.00 ea	31.00 /mh	62	/ea		-	-	-	-	-	-	62	87
	Lifting Chain	11700.110	50.00 lf	31.00 /mh	155	/lf		-	-	-	-	-	-	155	217
	Misc Materials	11000.005	2.00 ea	31.00 /mh	62	250.00 /ea	500	-	-	-	-	-	-	562	587
	Anchors for Equipment	11000.005	24.00 ea	31.00 /mh	186	25.00 /ea	600	-	-	-	-	-	-	786	860
	Grout Equipment	11000.005	1.50 cf	31.00 /mh	186	60.00 /cf	90	-	-	-	-	-	-	276	350
	Start up and Training	11000.005	4.00 ls	31.00 /mh	1,984	-	-	-	-	-	-	-	-	1,984	2,778
	MLR Pumps		2.00 ls		4,371		50,043	/ls						54,414	56,162
	GEN General				4,371		50,043							54,414	56,162
	200 Aeration Basin				4,371		50,043	/LS						54,414	56,162
350	Step Feed Process Building														
GEN	General														
11	-01 RAS Pumps														

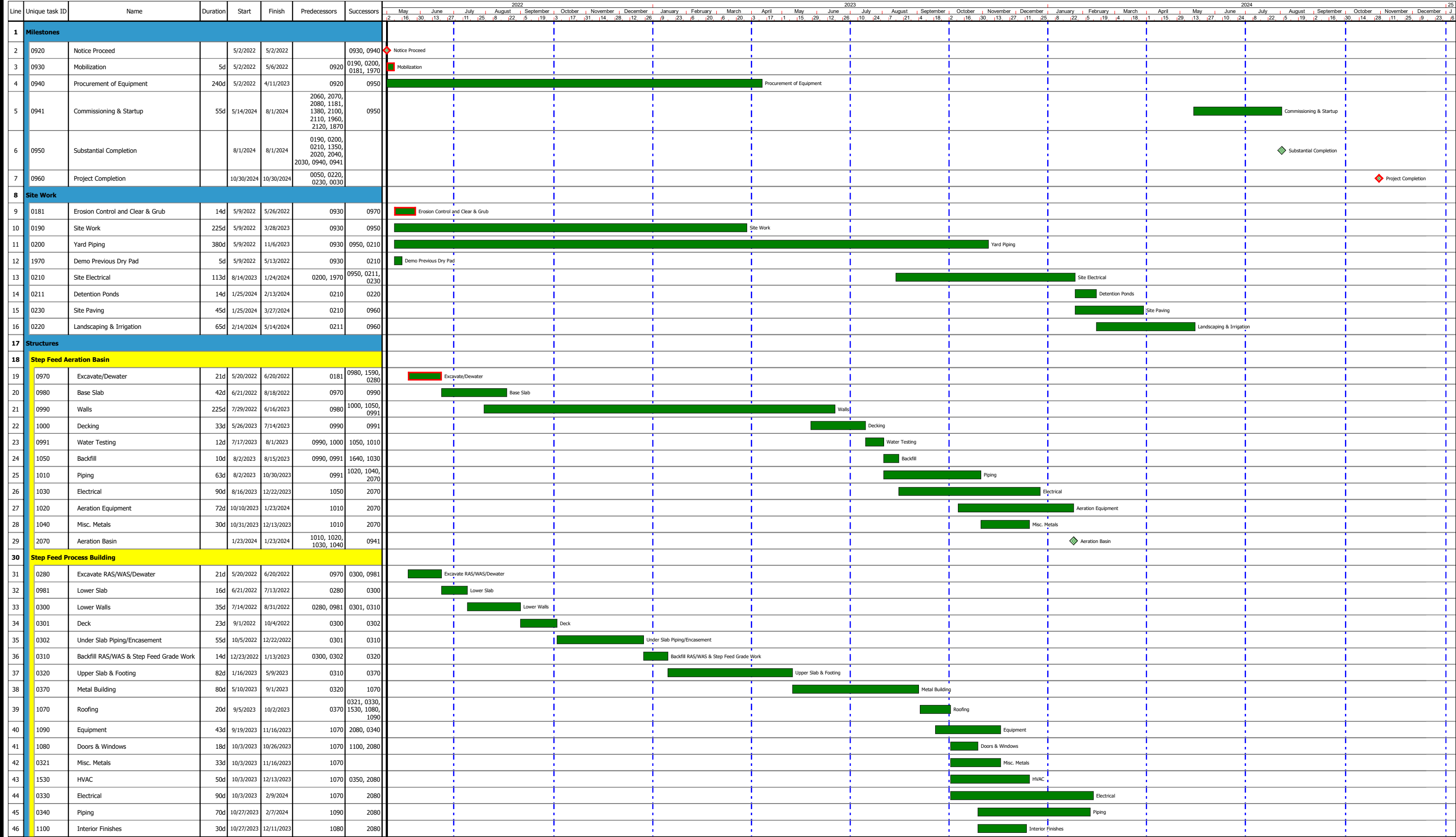
	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
11	-01 RAS Pumps														
	Supply RAS Pump Package (Hayward Gordon)	11700.020	1.00 ls	-	-	85,093.00 /ls	85,093	-	-	-	-	-	-	85,093	85,093
	Anchors for Equipment	11000.005	12.00 ea	31.00 /mh	93	25.00 /ea	300	-	-	-	-	-	-	393	430
	Grout Equipment	11000.005	4.50 cf	31.00 /mh	558	60.00 /cf	270	-	-	-	-	-	-	828	1,051
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	250.00 /ea	250	-	-	-	-	-	-	281	293
	Pressure Gauge Assembly	11000.005	3.00 ea	31.00 /mh	372	1,200.00 /ea	3,600	-	-	-	-	-	-	3,972	4,121
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Screw Flow Centr Pump - 15 HP	11700.020	3.00 ea	31.00 /mh	2,976	/ea		-	-	-	-	-	-	2,976	4,166
	RAS Pumps				4,526		89,513							94,039	95,849
11	-01 WAS & SCUM Pumps														
	Supply Pump Package (Borger)	11700.020	1.00 ls	-	-	73,203.00 /ls	73,203	-	-	-	-	-	-	73,203	73,203
	Anchors for Equipment	11000.005	12.00 ea	31.00 /mh	93	25.00 /ea	300	-	-	-	-	-	-	393	430
	Grout Equipment	11000.005	3.00 cf	31.00 /mh	372	60.00 /cf	180	-	-	-	-	-	-	552	701
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	/ea		-	-	-	-	-	-	31	43
	Pressure Gauge Assembly	11000.005	3.00 ea	31.00 /mh	372	1,200.00 /ea	3,600	-	-	-	-	-	-	3,972	4,121
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Lobe Pumps - 3 HP -	11700.050	3.00 ea	31.00 /mh	2,232	/ea		-	-	-	-	-	-	2,232	3,125
	WAS & SCUM Pumps				3,596		77,283							80,879	82,317
11	-02 Sump Pumps														
	Supply Submersible Pumps (flyght)	11700.110	1.00 ls	-	-	14,776.00 /ls	14,776	-	-	-	-	-	-	14,776	14,776
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	250.00 /ea	250	-	-	-	-	-	-	281	293
	Anchors for Equipment	11000.005	8.00 ea	31.00 /mh	62	25.00 /ea	200	-	-	-	-	-	-	262	287
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Sump Pumps .5 hp	11700.090	2.00 ea	31.00 /mh	1,488	/ea		-	-	-	-	-	-	1,488	2,083
	Sump Pumps				2,077		15,226	/ls						17,303	18,134
11	-03 Sodium Hypo Feed Pump Skid														
	Start up and Training	11000.005	1.00 mnhr	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	750.00 /ea	750	-	-	-	-	-	-	781	793
	Anchors for Equipment	11000.005	8.00 ea	31.00 /mh	62	25.00 /ea	200	-	-	-	-	-	-	262	287
	Grout Equipment	11000.005	2.00 cf	31.00 /mh	186	60.00 /cf	120	-	-	-	-	-	-	306	380
	Startup Chemicals -	11000.005	1.00 ea	31.00 /mh	31	/ea		-	-	-	-	-	-	31	43
	Control Panel	11000.005	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Controls	11000.005	1.00 ea	31.00 /mh	31	/ea		-	-	-	-	-	-	31	43
	Tote Containment	11000.005	1.00 ea	31.00 /mh	124	/ea		-	-	-	-	-	-	124	174
	Sodium Hypochlorite Chem Feed System Skid	11200.020	1.00 ea	31.00 /mh	744	46,550.00 /ea	46,550	-	-	-	-	-	-	47,294	47,592
	Sodium Hypo Feed Pump Skid				1,829		47,620	/LS						49,449	50,181
11	-03 Feric Chloride Pump Skid														
	FC Feed Skid	11200.020	1.00 ea	31.00 /mh	744	/ea		-	-	-	-	-	-	744	1,042
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	750.00 /ea	750	-	-	-	-	-	-	781	793
	Anchors for Equipment	11000.005	8.00 ea	31.00 /mh	62	25.00 /ea	200	-	-	-	-	-	-	262	287
	Grout Equipment	11000.005	2.00 cf	31.00 /mh	248	60.00 /cf	120	-	-	-	-	-	-	368	467
	Control Panel	11000.005	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Controls	11000.005	1.00 ea	31.00 /mh	31	/ea		-	-	-	-	-	-	31	43
	Tote Containment	11000.005	1.00 ea	31.00 /mh	124	/ea		-	-	-	-	-	-	124	174
	Feric Chloride Pump Skid				1,736		1,070	/LS						2,806	3,500
11	-03 Glycerin Feed Skid														
	Gly Feed Skid	11200.020	1.00 ea	31.00 /mh	744	/ea		-	-	-	-	-	-	744	1,042
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	750.00 /ea	750	-	-	-	-	-	-	781	793
	Anchors for Equipment	11000.005	8.00 ea	31.00 /mh	62	25.00 /ea	200	-	-	-	-	-	-	262	287
	Grout Equipment	11000.005	2.00 cf	31.00 /mh	186	60.00 /cf	120	-	-	-	-	-	-	306	380
	Control Panel	11000.005	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Controls	11000.005	1.00 ea	31.00 /mh	31	/ea		-	-	-	-	-	-	31	43
	Tote Containment	11000.005	1.00 ea	31.00 /mh	124	/ea		-	-	-	-	-	-	124	174
	Glycerin Feed Skid				1,674		1,070	/LS						2,744	3,414
	GEN General				15,438		231,782							247,220	253,395
	350 Step Feed Process Building				15,438		231,782	/LS						247,220	253,395
400	Orbal Anaerobic Reactor														
GEN	General														
11	-02 Replacement of Existing MLR														
	Supply Submersible Pumps relocated	11700.110	1.00 ls	-	-	0.01 /ls	0	-	-	-	-	-	-	0	0
	Submersible Pump - 7.5 HP	11700.110	1.00 ea	31.00 /mh	992	/ea		-	-	-	-	-	-	992	1,389
	Mounting Brackets	11700.110	2.00 ea	31.00 /mh	31	/ea		-	-	-	-	-	-	31	43
	Lifting Chain	11700.110	15.00 lf	31.00 /mh	47	/lf		-	-	-	-	-	-	47	65
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	750.00 /ea	750	-	-	-	-	-	-	781	793
	Anchors for Equipment	11000.005	10.00 ea	31.00 /mh	78	25.00 /ea	250	-	-	-	-	-	-	328	359
	Grout Equipment	11000.005	0.08 cf	31.00 /mh	8	60.00 /cf	5	-	-	-	-	-	-	13	16
	Start up and Training	11000.005	1.00 mnhr	31.00 /mh	248	-	-	-	-	-	-	-	-	248	347
	Replacement of Existing MLR		1.00 ls		1,434		1,005	/ls						2,439	3,012
	GEN General				1,434		1,005							2,439	3,012

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
	400 Orbal Anaerobic Reactor				1,434		1,005	/LS						2,439	3,012
550 UV	and Digester Blower Building														
GEN	General														
11-01	Screw Press Feed Pumps														
	Supply Pump Package in with WAS scum	11700.020	1.00 ls	-	-	0.00 /ls	0	-	-	-	-	-	-	0	0
	Control Panel	11000.005	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Anchors for Equipment	11000.005	8.00 ea	31.00 /mh	62	25.00 /ea	200	-	-	-	-	-	-	262	287
	Grout Equipment	11000.005	2.00 cf	31.00 /mh	186	60.00 /cf	120	-	-	-	-	-	-	306	380
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	750.00 /ea	750	-	-	-	-	-	-	781	793
	Pressure Gauge Assembly	11000.005	2.00 ea	31.00 /mh	248	1,200.00 /ea	2,400	-	-	-	-	-	-	2,648	2,747
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Lobe Pumps - 7.5 HP -	11700.050	2.00 ea	31.00 /mh	1,488	/ea		-	-	-	-	-	-	1,488	2,083
	Screw Press Feed Pumps				3,007		3,470							6,477	7,680
11-02	NPW Pumps														
	Supply Submersible Pumps (Flyght)	11700.110	1.00 ls	-	-	108,935.00 /ls	108,935	-	-	-	-	-	-	108,935	108,935
	Submersible Pump - 25 HP	11700.110	3.00 ea	31.00 /mh	2,232	/ea		-	-	-	-	-	-	2,232	3,125
	Control Panel	11700.110	1.00 ls	31.00 /mh	496	/ls		-	-	-	-	-	-	496	694
	Misc Materials	11000.005	3.00 ea	31.00 /mh	93	1,000.00 /ea	3,000	-	-	-	-	-	-	3,093	3,130
	Anchors for Equipment	11000.005	36.00 ea	31.00 /mh	279	25.00 /ea	900	-	-	-	-	-	-	1,179	1,291
	Grout Equipment	11000.005	2.00 cf	31.00 /mh	186	60.00 /cf	120	-	-	-	-	-	-	306	380
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Large Filter Included	15112.010	1.00 ea	31.00 /mh	992	0.00 /ea	0	-	-	-	-	-	-	992	1,389
	NPW Pumps		3.00 ls		4,774		112,955	/ls						117,729	119,639
	GEN General				7,781		116,425							124,206	127,318
	550 UV and Digester Blower Building				7,781		116,425	/LS						124,206	127,318
600 Aerobic	Digester 5 and 6														
GEN	General														
11-02	Transfer Pumps														
	Supply Submersible Pumps (Sulzer)	11700.110	2.00 ls	-	-	22,855.00 /ls	45,710	-	-	-	-	-	-	45,710	45,710
	Submersible Pump - 7.5 HP	11700.110	2.00 ea	31.00 /mh	1,488	/ea		-	-	-	-	-	-	1,488	2,083
	Control Panel	11700.110	2.00 ls	31.00 /mh	992	/ls		-	-	-	-	-	-	992	1,389
	Level Controls	11700.110	2.00 ls	31.00 /mh	62	/ls		-	-	-	-	-	-	62	87
	Mounting Brackets	11700.110	4.00 ea	31.00 /mh	62	/ea		-	-	-	-	-	-	62	87
	Lifting Chain	11700.110	50.00 lf	31.00 /mh	155	/lf		-	-	-	-	-	-	155	217
	Misc Materials	11000.005	2.00 ea	31.00 /mh	62	500.00 /ea	1,000	-	-	-	-	-	-	1,062	1,087
	Anchors for Equipment	11000.005	20.00 ea	31.00 /mh	155	25.00 /ea	500	-	-	-	-	-	-	655	717
	Grout Equipment	11000.005	1.00 cf	31.00 /mh	93	60.00 /cf	60	-	-	-	-	-	-	153	190
	Start up and Training	11000.005	2.00 mnhr	31.00 /mh	992	-	-	-	-	-	-	-	-	992	1,389
	Transfer Pumps		2.00 ls		4,061		47,270	/ls						51,331	52,955
	GEN General				4,061		47,270							51,331	52,955
	600 Aerobic Digester 5 and 6				4,061		47,270	/LS						51,331	52,955
850 Existing	RAS/WAS														
GEN	General														
11-01	WAS/SCUM Pumps														
	Supply Pump Package (Boerger)	11700.020	1.00 ls	-	-	34,931.00 /ls	34,931	-	-	-	-	-	-	34,931	34,931
	Anchors for Equipment	11000.005	12.00 ea	31.00 /mh	93	25.00 /ea	300	-	-	-	-	-	-	393	430
	Grout Equipment	11000.005	2.00 cf	31.00 /mh	186	60.00 /cf	120	-	-	-	-	-	-	306	380
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	500.00 /ea	500	-	-	-	-	-	-	531	543
	Pressure Gauge Assembly	11000.005	3.00 ea	31.00 /mh	372	1,200.00 /ea	3,600	-	-	-	-	-	-	3,972	4,121
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	WAS Lobe Pumps - 3 HP -	11700.050	3.00 ea	31.00 /mh	2,232	/ea		-	-	-	-	-	-	2,232	3,125
	WAS/SCUM Pumps				3,410		39,451							42,861	44,225
11-02	RAS Pumps														
	Supply Submersible Pumps (Sulzer)	11700.110	1.00 ls	-	-	27,988.00 /ls	27,988	-	-	-	-	-	-	27,988	27,988
	Submersible Pump - 3 HP - Dry pit	11700.110	4.00 ea	31.00 /mh	3,968	/ea		-	-	-	-	-	-	3,968	5,555
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	500.00 /ea	500	-	-	-	-	-	-	531	543
	Anchors for Equipment	11000.005	24.00 ea	31.00 /mh	186	25.00 /ea	600	-	-	-	-	-	-	786	860
	Grout Equipment	11000.005	1.33 cf	31.00 /mh	124	60.00 /cf	80	-	-	-	-	-	-	204	254
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Remove and Relocate Equipment - 2 Existing RAS pumps	2220.140	1.00 ls	31.00 /mh	992	-	-	-	-	-	-	-	-	992	1,389
	RAS Pumps		4.00 ls		5,797		29,168	/ls						34,965	37,284
	GEN General				9,207		68,619							77,826	81,509
	850 Existing RAS/WAS				9,207		68,619							77,826	81,509
	444256 Pumps				50,662		680,413							731,075	751,339
444463	Polymer Feed System														
350 Step	Feed Process Building														
GEN	General														
11-03	Polymer Feed System														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
11-03	Polymer Feed System														
	Polymer Feed Skids Velodyne	11200.020	2.00 ea	31.00 /mh	1,488	58,697.00 /ea	117,394	-	-	-	-	-	-	118,882	119,477
	In-line Polymer Mixer?	11200.020	2.00 ea	31.00 /mh	62	/ea		-	-	-	-	-	-	62	87
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	750.00 /ea	750	-	-	-	-	-	-	781	793
	Anchors for Equipment	11000.005	16.00 ea	31.00 /mh	124	25.00 /ea	400	-	-	-	-	-	-	524	574
	Grout Equipment	11000.005	4.00 cf	31.00 /mh	372	60.00 /cf	240	-	-	-	-	-	-	612	761
	Control Panel	11000.005	1.00 ea	31.00 /mh	248	/ea		-	-	-	-	-	-	248	347
	Controls	11000.005	1.00 ea	31.00 /mh	31	/ea		-	-	-	-	-	-	31	43
	Tote Containment	11000.005	3.00 ea	31.00 /mh	372	2,000.00 /ea	6,000	-	-	-	-	-	-	6,372	6,521
	Polymer Feed System				3,224		124,784	/LS						128,008	129,298
	GEN General				3,224		124,784							128,008	129,298
	350 Step Feed Process Building				3,224		124,784	/LS						128,008	129,298
	444463 Polymer Feed System				3,224		124,784							128,008	129,298
444473	UV Disinfection System														
550 UV	and Digester Blower Building														
GEN	General														
11-22	UV Disinfection Equipment														
	UV Disinfection Equipment Supply	11000.410	1.00 ls	-	-	323,775.00 /ls	323,775	-	-	-	-	-	-	323,775	323,775
	UV Disinfection Install UV Banks	11000.410	4.00 ea	31.00 /mh	2,976	-	-	-	-	-	-	-	-	2,976	4,166
	UV Disinfection Install System Control Center	11000.410	1.00 ea	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	UV Disinfection Install PDC	11000.410	1.00 ea	31.00 /mh	744	-	-	-	-	-	-	-	-	744	1,042
	UV Disinfection Install Chem Cleaning Basin	11000.410	1.00 ea	31.00 /mh	744	-	-	-	-	-	-	-	-	744	1,042
	UV Disinfection Blower?	11000.410	1.00 ea	31.00 /mh	744	/ls		-	-	-	-	-	-	744	1,042
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	1,500.00 /ea	1,500	-	-	-	-	-	-	1,531	1,543
	Anchors for Equipment	11000.005	36.00 ea	31.00 /mh	279	25.00 /ea	900	-	-	-	-	-	-	1,179	1,291
	Grout Equipment	11000.005	20.00 cf	31.00 /mh	1,240	60.00 /cf	1,200	-	-	-	-	-	-	2,440	2,936
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Parshall Flumes 12"	11000.295	1.00 ea	31.00 /mh	2,232	10,037.00 /ea	10,037	-	-	-	-	-	-	12,269	13,162
	UV Disinfection Equipment				9,982		337,412	/LS						347,394	351,387
	GEN General				9,982		337,412							347,394	351,387
	550 UV and Digester Blower Building				9,982		337,412	/LS						347,394	351,387
	444473 UV Disinfection System				9,982		337,412							347,394	351,387
444516	Diffusers & Mixing System														
200	Aeration Basin														
GEN	General														
11-23	Compressed Gas Mixing System														
	Aeration Equipment Supply compressed gas mixing (Enviromix)	11000.010	1.00 ea	31.00 /mh		185,000.00 /ls	185,000	-	-	-	-	-	-	185,000	185,000
	Diffused Air Drop Pipe	11000.010	6.00 ea	31.00 /mh	2,976	-	-	-	-	-	-	-	-	2,976	4,166
	Diffused Air Drop Pipe Support	11000.010	20.00 ea	31.00 /mh	620	-	-	-	-	-	-	-	-	620	868
	Diffused Air Header	11000.010	6.00 ea	31.00 /mh	1,488	-	-	-	-	-	-	-	-	1,488	2,083
	Diffused Air Lateral Supports	11000.010	40.00 ea	31.00 /mh	1,240	-	-	-	-	-	-	-	-	1,240	1,736
	Nozzles	11000.010	32.00 ea	31.00 /mh	992	-	-	-	-	-	-	-	-	992	1,389
	Anchors for Equipment	11000.005	1.00 ls	31.00 /mh	8	250.00 /ls	250	-	-	-	-	-	-	258	261
	Misc Materials	11000.005	1.00 ls	31.00 /mh	31	1,500.00 /ls	1,500	-	-	-	-	-	-	1,531	1,543
	Bubble Test	11000.005	1.00 ea	31.00 /mh	744	250.00 /ea	250	-	-	-	-	-	-	994	1,292
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Control Panel	11000.005	1.00 ea	31.00 /mh	744	/ea		-	-	-	-	-	-	744	1,042
	Controls	11000.005	1.00 ea	31.00 /mh	31	/ea		-	-	-	-	-	-	31	43
	Compressed Gas Mixing System				9,370		187,000	/LS						196,370	200,118
11-23	Fine Bubble Air Diffuser System														
	Aeration Equipment Supply (EDI)	11000.010	1.00 ea	31.00 /mh	31	75,750.00 /ls	75,750	-	-	-	-	-	-	75,781	75,793
	Diffused Air Drop Pipe	11000.010	9.00 ea	31.00 /mh	4,464	-	-	-	-	-	-	-	-	4,464	6,250
	Diffused Air Drop Pipe Support	11000.010	18.00 ea	31.00 /mh	1,116	-	-	-	-	-	-	-	-	1,116	1,562
	Diffused Air Header	11000.010	9.00 ea	31.00 /mh	4,464	-	-	-	-	-	-	-	-	4,464	6,250
	Diffused Air Header Support	11000.010	34.00 ea	31.00 /mh	2,108	-	-	-	-	-	-	-	-	2,108	2,951
	Diffused Air Laterals	11000.010	86.00 ea	31.00 /mh	31,992	-	-	-	-	-	-	-	-	31,992	44,789
	Diffused Air Lateral Supports	11000.010	774.00 ea	31.00 /mh	23,994	-	-	-	-	-	-	-	-	23,994	33,592
	Diffused Air Diffusers	11000.010	1,548.00 ea	31.00 /mh	7,198	-	-	-	-	-	-	-	-	7,198	10,077
	Anchors for Equipment	11000.005	1.00 ls	31.00 /mh	8	25.00 /ls	25	-	-	-	-	-	-	33	36
	Misc Materials	11000.005	1.00 ls	31.00 /mh	31	1,500.00 /ls	1,500	-	-	-	-	-	-	1,531	1,543
	Bubble Test	11000.005	1.00 ls	31.00 /mh	744	250.00 /ls	250	-	-	-	-	-	-	994	1,292
	Anchors, Epoxy Cover Board	11000.250	1.00 LS	31.00 /mh		2,000.00 /L S	2,000	-	-	-	-	-	-	2,000	2,000
	Fine Bubble Air Diffuser System				76,150		79,525	/LS						155,675	186,135
	GEN General				85,520		266,525							352,045	386,253
	200 Aeration Basin				85,520		266,525	/LS						352,045	386,253
350 Step	Feed Process Building														

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
GEN	General														
11-23	Compressed Gas Compressors and Expansion Tank														
	Anchors for Equipment included in Gas Mix System	11000.005	16.00 ea	31.00 /mh	124	25.00 /ea	400	-	-	-	-	-	-	524	574
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	500.00 /ea	500	-	-	-	-	-	-	531	543
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Package Air Compressor	11300.030	2.00 ea	31.00 /mh	1,984	/ea		-	-	-	-	-	-	1,984	2,778
	Recieveing Tank	11900.048	1.00 ea	31.00 /mh	744	/ea		-	-	-	-	-	-	744	1,042
	Compressed Gas Compressors and Expansion Tank				3,379		900	/LS						4,279	5,631
GEN	General				3,379		900							4,279	5,631
350	Step Feed Process Building				3,379		900	/LS						4,279	5,631
400	Orbal Anaerobic Reactor														
GEN	General														
11-23	Compressed Gas Aeration System														
	Aeration Equipment Supply included in Comp Gas Mix	11000.010	1.00 ea	31.00 /mh	31	/ls		-	-	-	-	-	-	31	43
	Diffused Air Drop Pipe	11000.010	1.00 ea	31.00 /mh	248	-	-	-	-	-	-	-	-	248	347
	Diffused Air Drop Pipe Support	11000.010	2.00 ea	31.00 /mh	124	-	-	-	-	-	-	-	-	124	174
	Diffused Air Laterals	11000.010	4.00 ea	31.00 /mh	744	-	-	-	-	-	-	-	-	744	1,042
	Diffused Air Lateral Supports	11000.010	12.00 ea	31.00 /mh	372	-	-	-	-	-	-	-	-	372	521
	Nozzles	11000.010	10.00 ea	31.00 /mh	155	-	-	-	-	-	-	-	-	155	217
	Anchors for Equipment	11000.005	60.00 ea	31.00 /mh	465	5.00 /ea	300	-	-	-	-	-	-	765	951
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	250.00 /ea	250	-	-	-	-	-	-	281	293
	Bubble Test	11000.005	1.00 ls	31.00 /mh	496	250.00 /ls	250	-	-	-	-	-	-	746	944
	Start up and Training	11000.005	1.00 ls	31.00 /mh	31	-	-	-	-	-	-	-	-	31	43
	Compressed Gas Aeration System				2,697		800	/LS						3,497	4,576
GEN	General				2,697		800							3,497	4,576
400	Orbal Anaerobic Reactor				2,697		800	/LS						3,497	4,576
600	Aerobic Digester 5 and 6														
GEN	General														
11-23	Course Bubble Aeration System														
	Aeration Equipment Supply	11000.010	1.00 ea	31.00 /mh	31	394,100.00 /ls	394,100	-	-	-	-	-	-	394,131	394,143
	Diffused Air Drop Pipe	11000.010	4.00 ea	31.00 /mh	1,984	-	-	-	-	-	-	-	-	1,984	2,778
	Diffused Air Drop Pipe Support	11000.010	8.00 ea	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Diffused Air Header	11000.010	4.00 ea	31.00 /mh	1,488	-	-	-	-	-	-	-	-	1,488	2,083
	Diffused Air Header Support	11000.010	16.00 ea	31.00 /mh	992	-	-	-	-	-	-	-	-	992	1,389
	Diffused Air Laterals	11000.010	8.00 ea	31.00 /mh	1,984	-	-	-	-	-	-	-	-	1,984	2,778
	Diffused Air Lateral Supports	11000.010	32.00 ea	31.00 /mh	1,984	-	-	-	-	-	-	-	-	1,984	2,778
	Diffused Air Diffusers	11000.010	112.00 ea	31.00 /mh	694	-	-	-	-	-	-	-	-	694	972
	Anchors for Equipment	11000.005	112.00 ea	31.00 /mh	868	5.00 /ea	560	-	-	-	-	-	-	1,428	1,775
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	1,500.00 /ea	1,500	-	-	-	-	-	-	1,531	1,543
	Bubble Test	11000.005	1.00 ls	31.00 /mh	496	250.00 /ls	250	-	-	-	-	-	-	746	944
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Course Bubble Aeration System				11,544		396,410	/LS						407,954	412,572
GEN	General				11,544		396,410							407,954	412,572
600	Aerobic Digester 5 and 6				11,544		396,410	/LS						407,954	412,572
650	Existing Digester 1 to 4														
GEN	General														
11-23	Course Bubble Aeration System														
	Aeration Equipment Supply in with Digester 5 and 6	11000.010	1.00 ea	31.00 /mh	31	/ls		-	-	-	-	-	-	31	43
	Diffused Air Drop Pipe	11000.010	8.00 ea	31.00 /mh	3,968	-	-	-	-	-	-	-	-	3,968	5,555
	Diffused Air Drop Pipe Support	11000.010	16.00 ea	31.00 /mh	992	-	-	-	-	-	-	-	-	992	1,389
	Diffused Air Header	11000.010	8.00 ea	31.00 /mh	2,976	-	-	-	-	-	-	-	-	2,976	4,166
	Diffused Air Header Support	11000.010	32.00 ea	31.00 /mh	1,984	-	-	-	-	-	-	-	-	1,984	2,778
	Diffused Air Laterals	11000.010	12.00 ea	31.00 /mh	2,976	-	-	-	-	-	-	-	-	2,976	4,166
	Diffused Air Lateral Supports	11000.010	72.00 ea	31.00 /mh	4,464	-	-	-	-	-	-	-	-	4,464	6,250
	Diffused Air Diffusers	11000.010	144.00 ea	31.00 /mh	893	-	-	-	-	-	-	-	-	893	1,250
	Anchors for Equipment	11000.005	350.00 ea	31.00 /mh	2,713	5.00 /ea	1,750	-	-	-	-	-	-	4,463	5,547
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	1,500.00 /ea	1,500	-	-	-	-	-	-	1,531	1,543
	Bubble	11000.005	1.00 ls	31.00 /mh	496	250.00 /ls	250	-	-	-	-	-	-	746	944
	Start up and Training	11000.005	1.00 ls	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Course Bubble Aeration System				22,019		3,500	/LS						25,519	34,327
GEN	General				22,019		3,500							25,519	34,327
650	Existing Digester 1 to 4				22,019		3,500	/LS						25,519	34,327
444516	Diffusers & Mixing System				125,159		668,135							793,294	843,358
444613	Screw Conveyor System														
350	Step Feed Process Building														
GEN	General														
11-500	Screw Conveyor System														
	Anchors for Equipment	11000.005	36.00 ea	31.00 /mh	279	25.00 /ea	900	-	-	-	-	-	-	1,179	1,291

	Spreadsheet Level	Phase	Takeoff Quantity	Labor Price	Labor Amount	Material Price	Material Amount	Sub Cost/Unit	Sub Amount	Equip Price	Equip Amount	Other Price	Other Amount	Total Amount	Grand Total
11	-500 Screw Conveyor System														
	Grout Equipment	11000.005	4.00 cf	31.00 /mh	372	60.00 /cf	240	-	-	-	-	-	-	612	761
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	2,500.00 /ea	2,500	-	-	-	-	-	-	2,531	2,543
	Start up and Training	11000.005	1.00 ea	31.00 /mh	496	-	-	-	-	-	-	-	-	496	694
	Control Panel	11000.005	1.00 ea	31.00 /mh	496	/ea		-	-	-	-	-	-	496	694
	Controls	11000.005	1.00 ea	31.00 /mh	124	/ea		-	-	-	-	-	-	124	174
	Support Structure	11000.005	1.00 ea	31.00 /mh	2,976	/ea		-	-	-	-	-	-	2,976	4,166
	Conveyor Horizontal	14550.100	1.00 ea	31.00 /mh	2,232	-	-	-	-	-	-	-	-	2,232	3,125
	Chutes Stainless	14560.100	2.00 ea	31.00 /mh		-	-	0.00 /ea	0	-	-	-	-		
	Vertical Conveyors	14559.160	2.00 ea	31.00 /mh	1,984	/ea		-	-	-	-	-	-	1,984	2,778
	Supply Screw Conveyors (Spirac)	11000.230	1.00 ls	31.00 /mh		136,210.00 /ls	136,210	-	-	-	-	-	-	136,210	136,210
	Screw Conveyor System				8,990		139,850	/ls						148,840	152,436
	GEN General				8,990		139,850							148,840	152,436
	350 Step Feed Process Building				8,990		139,850	/LS						148,840	152,436
	444613 Screw Conveyor System				8,990		139,850							148,840	152,436
444622	Dewatering Screw Press														
	350 Step Feed Process Building														
	GEN General														
11	-500 Dewatering Presses														
	Anchors for Equipment	11000.005	16.00 ea	31.00 /mh	124	100.00 /ea	1,600	-	-	-	-	-	-	1,724	1,774
	Grout Equipment	11000.005	4.00 cf	31.00 /mh	372	60.00 /cf	240	-	-	-	-	-	-	612	761
	Misc Materials	11000.005	1.00 ea	31.00 /mh	31	2,500.00 /ea	2,500	-	-	-	-	-	-	2,531	2,543
	Start up and Training	11000.005	1.00 ls	31.00 /mh	992	-	-	-	-	-	-	-	-	992	1,389
	Control Panel	11000.005	2.00 ea	31.00 /mh	992	/ea		-	-	-	-	-	-	992	1,389
	Controls	11000.005	1.00 ea	31.00 /mh	31	/ea		-	-	-	-	-	-	31	43
	Injection Ring	11000.005	2.00 ea	31.00 /mh	248	/ea		-	-	-	-	-	-	248	347
	Supply Dewatering Presses (huber)	11000.390	1.00 ls	-	-	715,000.00 /ls	715,000	-	-	-	-	-	-	715,000	715,000
	Air Compressor (if needed)	11000.390	1.00 ls	31.00 /mh	496	/ls		-	-	-	-	-	-	496	694
	Dewatering Presses	11000.390	2.00 ea	31.00 /mh	4,464	-	-	-	-	-	-	-	-	4,464	6,250
	Chutes Stainless	14560.100	2.00 ea	31.00 /mh		-	-	-	-	-	-	-	-		
	NPW Booster Pumps	11700.050	2.00 ea	31.00 /mh	992	/ea		-	-	-	-	-	-	992	1,389
	Dewatering Presses				8,742		719,340	/ls						728,082	731,579
	GEN General				8,742		719,340							728,082	731,579
	350 Step Feed Process Building				8,742		719,340	/LS						728,082	731,579
	444622 Dewatering Screw Press				8,742		719,340							728,082	731,579



 MOLTZ CONSTRUCTION INC.	Wellington WWTP Expansion Project	Job #: 00001	Rev. date: 1/6/2022 1:23:32 PM	Bar Chart View
		Data Date: 5/2/2022	Page 2 of 4	Filter: None

 MOLTZ CONSTRUCTION INC.	Wellington WWTP Expansion Project	Job #: 00001	Rev. date: 1/6/2022 1:23:32 PM	Bar Chart View
		Data Date: 5/2/2022	Page 3 of 4	Filter: None

 MOLTZ CONSTRUCTION INC.	Wellington WWTP Expansion Project	Job #: 00001	Rev. date: 1/6/2022 1:23:32 PM	Bar Chart View
		Data Date: 5/2/2022	Page 4 of 4	Filter: None

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract as indicated below. All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof. The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix “SC” added thereto.

SC-1.01. Renumber Paragraph 1.01.A.21 to 1.01.A.21.a. and add the following new paragraphs:

1.01.A.21.b. *Geotechnical Baseline Report (GBR)*—The interpretive report prepared by or for Owner regarding subsurface conditions at the Site and containing specific baseline geotechnical conditions that may be anticipated or relied upon for bidding and contract administration purposes, subject to the controlling provisions of the Contract, including the GBR’s own terms. The GBR is a Contract Document.

1.01.A.21.c. *Geotechnical Data Report (GDR)*—The factual report that collects and presents data regarding actual subsurface conditions at or adjacent to the Site, including Technical Data and other geotechnical data, prepared by or for Owner in support of the Geotechnical Baseline Report. The GDR’s content may include logs of borings, trenches, and other site investigations, recorded measurements of subsurface water levels, the results of field and laboratory testing, and descriptions of the investigative and testing programs. The GDR does not include an interpretation of the data. If opinions, or interpretive or speculative non-factual comments or statements appear in a document that is labeled a GDR, such opinions, comments, or statements are not operative parts of the GDR and do not have contractual standing. Subject to that exception, the GDR is a Contract Document.

SC-1.01. Renumber Paragraph 1.01.A.38 to 1.01.A.38.a, and add the following new paragraphs:

1.01.A.38.b. *Specialist*—The term Specialist refers to a person, partnership, firm, or corporation of established reputation (or if newly organized, whose personnel have previously established a reputation in the same field), which is regularly engaged in, and which maintains a regular force of workers skilled in either (as applicable) manufacturing or fabricating items required by the Contract Documents, or otherwise performing Work required by the Contract

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

Documents. Where the Specifications require the installation by a Specialist, that term shall also be deemed to mean either the manufacturer of the item, a person, partnership, firm, or corporation licensed by the manufacturer, or a person, partnership, firm, or corporation who will perform the Work under the manufacturer's direct supervision.

SC-1.01. Add the following language at the end of Paragraph 1.01.A.40:

Substantial Completion is further defined as (i) that degree of completion of the Project's operating facilities or systems sufficient to provide Owner the full time, uninterrupted, and continuous beneficial operation of the Work; and (ii) required functional, performance and acceptance, or startup testing has been successfully demonstrated for components, devices, equipment, and instrumentation and control to the satisfaction of Engineer in accordance with the requirements of the Specifications.

SC-2.01 Delete Paragraph 2.01.B and Paragraph 2.01.C in their entirety and insert the following in their place:

2.01.B. Evidence of Contractor's Insurance: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner copies of the policies of insurance (including all endorsements, and identification of applicable self-insured retentions and deductibles) required to be provided by Contractor in Article 6. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

2.01.C. Evidence of Owner's Insurance: After receipt from Contractor of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor copies of the policies of insurance to be provided by Owner under Article 6 (if any). Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

SC-2.02. Amend first sentence in Paragraph 2.02.A to read as follows:

Owner will furnish to Contractor one hard copy of the Contract Documents (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF).

SC-3.01. Add the following new paragraph immediately after Paragraph 3.01.E:

3.01.F. Sections of Division 01, General Requirements, govern the execution of the Work of all sections of the Specifications.

SC-4.01. Delete the third sentence of Paragraph 4.01.A in its entirety.

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

SC-5.02. Add the following language to the end of Paragraph 5.02.A.1:

Contractor shall not enter upon nor use property not under Owner control until appropriate easements have been executed and a copy is on file at the Site.

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.B:

5.03.C. The following reports of explorations and tests of subsurface conditions at or adjacent to the Site are known to Owner:

5.03.C.1. Report dated September 3, 2021, prepared by CTL Thompson, 400 North Link Lane, Fort Collins, CO 80524 entitled "Geotechnical Design Memorandum, Wellington Wastewater Treatment Plant, 6190 N.E. Frontage Road, Wellington, Colorado," consisting of 68 pages. Technical Data contained in such report upon whose accuracy Contractor may rely are those indicated in the definition of Technical Data in the General Conditions.

5.03.C.2. Report dated July 31, 2001, prepared by Earth Engineering Consultants, Inc., 2301 Research Boulevard, Suite 104, Fort Collins, CO, entitled "Subsurface Exploration Report, Wellington Wastewater Treatment Plant, Wellington, Colorado," consisting of 25 pages. Technical Data contained in such report upon whose accuracy Contractor may rely are those indicated in the definition of Technical Data in the General Conditions.

5.03.D. The following drawings of physical conditions relating to existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities) are known to Owner:

5.03.D.1. Drawings dated July 2002 prepared by The Engineering Company, 2310 East Prospect Road, Fort Collins, CO, entitled "Town of Wellington, Colorado, Wastewater Treatment Plant Phase I," consisting of 91 sheets.

5.03.D.2. Drawings dated July 2016 prepared by Stantec, 2950 East Harmony Road, Fort Collins, CO, entitled "Town of Wellington Wastewater Treatment Plant Expansion" consisting of 78 sheets.

5.03.D.1.a. All the information in such drawings constitutes Technical Data on whose accuracy Contractor may rely.

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

SC-5.06. Delete Paragraph 5.04 in its entirety and insert the following in its place:

SC-5.04 Differing Subsurface or Physical Conditions:

5.04.A. Notice: If Contractor believes that any subsurface condition that is uncovered or revealed at the Site:

5.04.A.1. Differs materially from conditions shown or indicated in the GBR; or

5.04.A.2. Differs materially from conditions shown or indicated in the GDR, to the extent the GBR is inapplicable; or

5.04.A.3. Differs materially from conditions shown or indicated in Contract Documents other than the GBR or GDR, to the extent the GBR and GDR are inapplicable; or

5.04.A.4. To the extent the GBR and GDR are inapplicable, is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or

5.04.A.5. To the extent the GBR and GDR are inapplicable, is of such a nature as to require a change in the Drawings or Specifications; or

5.04.A.6. To the extent the GBR and GDR are inapplicable, is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents; then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

5.04.B. Engineer's Review: After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph SC-5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

regarding the Contractor's resumption or continuation of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.

5.04.C. Owner's Statement to Contractor Regarding Site Condition: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption or continuation of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.

5.04.D. Possible Price and Times Adjustments:

5.04.D.1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

5.04.D.1.a. such condition must fall within any one or more of the categories described in Paragraph SC-5.04.A;

5.04.D.1.b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03 of the General Conditions; and,

5.04.D.1.c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

5.04.D.2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:

5.04.D.2.a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

5.04.D.2.b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or

5.04.D.2.c. Contractor failed to give the written notice as required by Paragraph SC/GBR 5.04.A.

5.04.D.3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.

5.04.D.4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

SC-5.06. Add the following language following Paragraph 5.06.A.2:

3. The following reports or drawings regarding Hazardous Environmental Conditions at the Site are known to Owner:

5.06.A.3.a. Report dated May 18, 2021, prepared by WSP USA, 4600 West 60th Avenue, Arvada, CO, entitled "Hazardous Material Assessment, Wastewater Treatment Plant, 6190 N.E. Frontage Road, Wellington, Colorado," consisting of 54 pages.

SC-6.01. Add the following language after Paragraph 6.01.A:

SC-6.03. Add the following new paragraph immediately following Paragraph 6.03.A.4:

6.03.A.5. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

6.03.A.5.a. Workers' Compensation and related coverages under Paragraph 6.03.A.1 and Paragraph 6.03.A.3 of the General Conditions:

6.03.A.5.a.1. State: Statutory.

6.03.A.5.a.2. Applicable Federal (e.g., Longshoreman's): Statutory.

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

6.03.A.5.a.5. Employer's Liability:

Bodily Injury, Each Accident: Per State Statute.

Bodily Injury by Disease, Each Employee: Per State Statute.

Bodily Injury/Disease Aggregate: Per State Statute.

Foreign Voluntary Worker Compensation: Per State Statute.

SC-6.03. Add the following new paragraph immediately following Paragraph 6.03.C.8:

6.03.C.9. Contractor's General Liability under Paragraph 6.03.B. and Paragraph 6.03.C of the General Conditions which shall eliminate the exclusion with respect to property under the care, custody and control of Contractor:

6.03.C.9.a. General Aggregate	\$2,000,000
6.03.C.9.b. Products - Completed Operations Aggregate	\$2,000,000
6.03.C.9.c. Personal and Advertising Injury (per person/Organization)	\$1,000,000
6.03.C.9.d. Each Occurrence (Bodily Injury and Property Damage)	\$1,000,000
6.03.C.9.e. Property Damage liability insurance will provide Explosion, Collapse, and Underground coverages where applicable.	

SC-6.03. Add the following new paragraph immediately following Paragraph 6.03.D:

6.03.D.1. Contractor's Automobile Liability

6.03.D.1.a. Combined Single Limit of	\$1,000,000
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SC-6.03. Add the following new paragraph immediately following Paragraph 6.03.E:

6.03.E.1. Excess or Umbrella Liability:

a) General Aggregate	\$2,000,000
b) Each Occurrence	\$2,000,000

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

SC-6.03. Add the following new paragraph immediately following Paragraph 6.03.F:

6.03.F.1. Pollution Liability:

- | | |
|----------------------|-------------|
| a) Each Occurrence | \$1,000,000 |
| b) General Aggregate | \$1,000,000 |

☐ If box is checked, Contractor is not required to provide Contractor's Pollution Liability insurance under this Contract.

SC-6.03. Add the following language after Paragraph 6.03.G:

6.03.G.1. Include the following parties or entities as additional insured:

6.03.G.1.a. Town of Wellington, 3735 Cleveland Avenue, Wellington, CO 80549.

6.03.G.1.b. Jacobs Engineering Group, Inc., local office 2725 Rocky Mountain Avenue, Suite 330, Loveland, CO 80538.

6.03.G.1.c. Materials and Special Inspection TBD.

SC-6.03. Add the following new paragraph immediately following Paragraph 6.03.H:

6.03.H.1 Contractor's Professional Liability: If Contractor and or subcontractor shall be performing licensed professional services, Contractor and or subcontractor shall maintain for the period covered by this Agreement professional liability insurance for licensed professionals performing work pursuant to this Agreement in an amount not less than ONE MILLION DOLLARS (\$1,000,000) covering the licensed professionals' errors and omissions.

SC-6.05. Add the following to the list of items in Paragraph 6.05.A, as numbered items:

6.05.A.17. include for the benefit of Owner loss of profits and soft cost coverage including, without limitation, fixed expenses and debt service for a minimum of 12 months with a maximum deductible of 30 days, plus attorney's fees and engineering or other consultants' fees, if not otherwise covered;

6.05.A.19. Include by express endorsement coverage of damage to Contractor's equipment.

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

SC-7.06. Add the following language at the end of Paragraph 7.06.A:

Contractor shall perform a minimum of 65 percent of the onsite labor with its own employees.

SC-7.08. Add the following new paragraph immediately after Paragraph 7.08.A:

7.08.B. Owner will pay for the following construction permits and licenses:

7.08.B.1. Town of Wellington Building Department Building Permit.

SC-7.09. Delete Paragraph 7.09.A in its entirety and insert the following in its place:

7.09.A. In accordance with Colorado Revised Statutes, 39-26-114, public works contracts that are to be used in a governmental capacity are exempt from payment of Colorado State sales tax. Upon application by Contractor, Subcontractor, or Supplier, the Colorado Department of Revenue will issue a certificate or certificates of exemption from payment of Colorado State sales tax as provided by Colorado Revised Statutes.

SC-7.10. Add the following new paragraph(s) immediately after Paragraph 7.10.C:

7.10.D. While not intended to be inclusive of all Laws or Regulations for which Contractor may be responsible under Paragraph 7.10, the following Laws or Regulations are included as mandated by statute or for the convenience of Contractor:

7.10.D.1. Pursuant to Colorado Revised Statute 8-17-101, 80 percent of skilled and common labor employed on the Project shall be Colorado residents.

SC-8.04. Add the following new paragraph immediately after Paragraph 8.03:

SC-8.04. *Claims Between Contractors*

8.04.A. Should Contractor cause damage to the work or property of any other contractor at the Site, or should any claim arising out of Contractor's performance of the Work at the Site be made by any other contractor against Contractor, Owner, or Engineer, Contractor shall (without involving Owner, or Engineer) either i) remedy the damage; ii) agree to compensate the other contractor for remedy of the damages; or iii) remedy the damages and attempt to settle with such other contractor by agreement, or to otherwise resolve the dispute by arbitration or at law.

8.04.B. Contractor shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer and the officers, directors, members, partners, employees, agents, and other consultants and subcontractors of

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

each and any of them from and against all Claims, costs, losses and damages (including, but not limited to, fees and charges of engineers, architects, attorneys, and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any other contractor against Owner, Engineer, their officers, directors, members, partners, employees, agents, and other consultants and subcontractors, to the extent said Claim is based on or arises out of Contractor's performance of the Work. Should another contractor cause damage to the Work or property of Contractor or should the performance of work by any other contractor at the Site give rise to any other Claim, Contractor shall not institute any action, legal or equitable, against Owner or Engineer, or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any arbiter which seeks to impose liability on or to recover damages from Owner or Engineer, on account of any such damage or Claim.

8.04.C. If Contractor is delayed at any time in performing or furnishing the Work by any act or neglect of another contractor, and Owner and Contractor are unable to agree as to the extent of any adjustment in Contract Times attributable thereto, Contractor may make a Claim for an extension of times in accordance with Article 11. An extension of the Contract Times shall be Contractor's exclusive remedy with respect to Owner and Engineer, for any delay, disruption, interference, or hindrance caused by any other contractor. This paragraph does not prevent recovery from Owner or Engineer for activities that are their respective responsibilities.

SC-9.11. Add the following new paragraph immediately after Paragraph 9.11.A:

9.11.B. On request of Contractor, prior to the execution of any Change Order involving a significant increase in the Contract Price, Owner will furnish to Contractor reasonable evidence that adequate financial arrangements have been made by Owner to enable Owner to fulfill the increased financial obligations to be undertaken by Owner as a result of such Change Order.

SC-10.03. Add the following new paragraphs immediately after Paragraph 10.03.A:

10.03.B. Resident Project Representative (RPR) will be furnished by Engineer. The responsibilities, authority, and limitations of the RPR are limited to those of Engineer in accordance with Paragraph 10.08 and as set forth elsewhere in the Contract Documents and are further limited and described below.

10.03.C. Responsibilities and Authority:

10.03.C.1. Schedules: Review and monitor Progress Schedule, Schedule of Submittals, and Schedule of Values prepared by Contractor and consult with Engineer concerning acceptability.

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

10.03.C.2. Conferences and Meetings: Conduct or attend meetings with Contractor, such as preconstruction conferences, progress meetings, Work conferences and other Project related meetings.

10.03.C.3. Liaison: (i) Serve as Engineer's liaison with Contractor, working principally through Contractor's authorized representative, and assist in understanding the intent of the Contract Documents; (ii) assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's onsite operations; (iii) assist in obtaining from Owner additional details or information when required for proper execution of the Work.

10.03.C.4. Interpretation of Contract Documents: Inform Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.

10.03.C.5. Submittals: Receive submittals that are furnished at the Site by Contractor and notify Engineer of availability for examination. Advise Engineer and Contractor of the commencement of any Work or arrival of materials and equipment at Site, when recognized, requiring a Shop Drawing or Sample if the submittal has not been approved by Engineer.

10.03.C.6. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and provide recommendations to Engineer; transmit to Contractor, in writing decisions as issued by Engineer.

10.03.C.7. Review of Work and Rejection of Defective Work: (i) Conduct onsite observations of the Work in progress to assist Engineer in determining if the Work is, in general, proceeding in accordance with the Contract Documents; (ii) inform Engineer and Contractor whenever RPR believes that any Work is defective; (iii) advise Engineer whenever RPR believes that any Work will not produce a completed Project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged or does not meet the requirements of any inspection test, or approval required to be made; and advise Engineer of that part of the Work in progress that RPR believes should be corrected or rejected or uncovered for observation, or requires special testing, inspection, or approval.

10.03.C.8. Inspections, Tests, and System Startups: (i) Verify tests, equipment and systems startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that Contractor maintains adequate records thereof; (ii) observe, record, and report to Engineer appropriate details

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

relative to the test procedures and system startups; and (iii) accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections, and report to Engineer.

10.03.C.9. Records: (i) Maintain records for use in preparing Project documentation; (ii) keep a diary or log book recording pertinent Site conditions, activities, decisions and events; (iii) record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of Contractors, Subcontractors, and major Suppliers of materials and equipment.

10.03.C.10. Reports: (i) Furnish Engineer periodic reports of progress of the Work and of Contractor's compliance with the Progress Schedule and Schedule of Submittals; (ii) immediately notify Engineer of the occurrence of Site accidents, emergencies, acts of God endangering the Work, damage to property by fire or other causes, or the discovery of any Hazardous Environmental Condition; and (iii) assist Engineer in drafting proposed Change Orders, Work Change Directives, and Field Orders; obtain backup material from Contractor as appropriate.

10.03.C.11. Payment Requests: Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the Schedule of Values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

10.03.C.12. Certificates, Operation and Maintenance Manuals: During the course of the Work, verify materials and equipment certificates and operation and maintenance manuals and other data required by Specifications to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents been delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

10.03.C.13. Completion: (i) Participate in a Substantial Completion inspection; assist in determination of Substantial Completion and the preparation of lists of items to be completed or corrected; (ii) Participate in a final inspection in the company of Engineer, Owner, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied; and (iii) observe whether items on final list have been completed or corrected and make recommendations to Engineer concerning acceptance.

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

10.03.D. Limitations of Authority: Resident Project Representative will not:

10.03.D.1. have authority to authorize a deviation from Contract Documents or substitution of materials or equipment, unless authorized by Engineer; or

10.03.D.2. exceed the limitations of Engineer's authority as set forth in Contract Documents; or

10.03.D.3. undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or Contractor's authorized representative; or

10.03.D.4. advise on, issue directions relative to, or assume control over an aspect of the means, methods, techniques, sequences, or procedures of Contractor's work unless such advice or directions are specifically required by the Contract Documents; or

10.03.D.5. advise on, issue directions regarding, or assume control over safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor; or

10.03.D.6. participate in specialized field or laboratory tests or inspections conducted offsite by others, except as specifically authorized by Engineer; or

10.03.D.7. accept Shop Drawings or Samples from anyone other than Contractor; or

10.03.D.8. authorize Owner to occupy the Project in whole or in part.

SC-10.08. Add the following new paragraph immediately after Paragraph 10.08.E:

10.08.F. Contractors, Subcontractors, Suppliers, and others on the Project, or their sureties, shall maintain no direct action against Engineer, its officers, employees, affiliated corporations, and subcontractors, for any Claim arising out of, in connection with, or resulting from the engineering services performed. Only the Owner will be the beneficiary of any undertaking by Engineer.

SC-11.01. Add the following new paragraph immediately after Paragraph 11.01.A:

11.01.A.1. In accordance with Colorado Revised Statute 24-91-103.6, no change order will be issued which causes the aggregate amount payable under the Contract to exceed amount appropriated for the original Contract without written notice to Contractor that appropriations have been made to cover the costs of the additional work.

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

SC-11.04. Add the following new paragraph immediately after Paragraph 11.04.C:

11.04.D. In the event Contractor submits request for additional compensation because of a change or differing Site conditions, or because of delays, acceleration, or loss of productivity, Owner reserves right, upon written request, to audit and inspect Contractor's books and records relating to the Project. Upon written request for an audit, Contractor shall make its books and records available within 14 days of request. Owner shall specifically designate identity of auditor. As part of audit, Contractor shall make available its books and records relating to the Project, including but not limited to Bidding Documents, cost reports, payroll records, material invoices, subcontracts, purchase orders, daily timesheets, and daily diaries. Audit shall be limited to those cost items which are sought by Contractor in a change order or claim submission to Owner.

SC-13.01.C.1. Delete 13.01.C.1. and replaced with:

Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, purchasing and contracting agents, expeditors, and timekeepers employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. Payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.

SC-13.01.C.4. Delete 13.01.C.4. and replaced with:

Costs due to:

- a. Negligence of Contractor, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to making good any damage to property.
- b. Correction of defective Work, disposal of materials or equipment wrongly supplied, which would cause the cost of Work to be greater than the Guaranteed Maximum Price (GMP), inclusive of Contractor Contingency Allowance.

SC-13.02.C. Delete 13.02.C and replaced with:

Contingency Allowances: Owner and Contractor agree to a sum to be agreed upon as the Owner Contingency Allowance which is for the sole use of the Owner to cover unanticipated costs. Owner and Contractor agree to a sum to be agreed upon as the Contractor Contingency Allowance which is for the sole use of the of the Contractor

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

to cover costs not anticipated by the Contractor. Owner and Contractor agree to a sum to be agreed upon as the Warranty Contingency Allowance which is for the sole use of the of the Owner to cover costs not anticipated by the Contractor for warranty claims brought by the Owner to Contractor under Section 15.08, and notwithstanding Section 13.02.B, this Warranty Contingency Allowance shall remain open until the Warranty Period of Section 15.08 has closed.

SC-14.02. Add the following language at the end of Paragraph 14.02.D:

Tests required by Contract Documents to be performed by Contractor that require test certificates be submitted to Owner or Engineer for acceptance shall be made by an independent testing laboratory or agency licensed or certified in accordance with Laws and Regulations and applicable state and local statutes. In the event state license or certification is not required, testing laboratories or agencies shall meet the following applicable requirements:

14.02.D.6. Basic requirements of ASTM E329, "Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection" as applicable.

14.02.D.7. Calibrate testing equipment at reasonable intervals by devices of accuracy, traceable to the National Institute of Standards and Technology or accepted values of natural physical constants.

SC-17.02. Add the following new paragraph immediately after Paragraph 17.01:

SC-17.02 Attorneys' Fees: For any matter subject to final resolution under this Article, the prevailing party shall be entitled to an award of its attorneys' fees incurred in the final resolution proceedings, in an equitable amount to be determined in the discretion of the court, arbitrator, arbitration panel, or other arbiter of the matter subject to final resolution, taking into account the parties' initial demand or defense positions in comparison with the final result.

SC-18.07. Delete Paragraph 18.07.A in its entirety and insert the following in its place.

A. The laws of the State of Colorado apply to this Agreement. Reference to two pertinent Colorado statutes are as follows:

1. Colorado Revised Statutes (CRS 8-17-101) requires that Colorado labor be employed to perform the work to the extent of not less than 80 percent (80%) of each type or class of labor in the several classifications of skilled and common labor employed on the project. Colorado labor means any person who is a bona fide resident of the State of Colorado at the time or employment, without discrimination as to race, color, creed, age, religion, or sex.

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

2. If a claim is filed, Owner is required by law (CRS 38-26-107) to withhold from all payments to Contractor sufficient funds to ensure the payment of all claims for labor, materials, team hire, substance, provisions, provender, or other supplies used or consumed by Contractor or his subcontractors in or about the performance of the work. Such funds must be withheld until said claims have been paid or such claims as filed have been withdrawn, such payment or withdrawn to be evidenced by filing with Owner a receipt in full or an order for withdrawal in writing and signed by the person filing such a claim or his duly authorized agents or assigns. Such funds shall not be withheld longer than ninety (90) days following the date fixed for final settlement, as published in a public newspaper in accordance with the law, unless an action is commenced within that time to enforce such unpaid claim and a notice of lis pendens is filed with the Owner. At the expiration of such ninety (90) day period, Owner shall pay to Contractor such moneys and funds as are not the subject of suit and lis pendens notices, and shall retain only sufficient funds to ensure the payment of judgements which may result from the suit.

SC-18.09. Add the following Paragraph in its entirety.

SC-18.09. Contractor shall be required to use forms included in these Contract Documents and where not so included forms that are acceptable to Owner and Engineer.

SC-18.10. Add the following Paragraph in its entirety.

SC-18.10. Equal Opportunity Clause: The Contractor agrees to abide by the provisions under Title VI and VII of the Civil Rights Act of 1964 (42USC 2000e) which prohibits discrimination against any employee or applicant for employment or any applicant or recipient of services, on a basis of race, religion, color, or national origin. This includes abiding to Executive Order 11246 which prohibits discrimination on the basis of sex, and 45 CFR which prohibits discrimination on the basis of age, Section 504 of the Rehabilitation Act of 1973, or the Americans with Disabilities Act of 1990 which prohibits discrimination on the basis of a disability.

SC-18.11. Add the following Paragraph in its entirety.

SC-18.11. Appropriations Clause: This Contract is subject to annual appropriations by the Board of Trustees of the Town of Wellington and may be terminated by the Town of Wellington due to non-appropriation of funds. Town of Wellington staff responsible for the management of this contract will use best efforts to obtain appropriation in the amounts required under the

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

Contract, including the submission of budget requests each year that are sufficient to cover the Town's payment obligations for the next fiscal year.

SC-18.12. Add the following Paragraph in its entirety.

SC-18.12. Prohibition Against Employing Illegal Aliens: Pursuant to Section 8-17.5-101, C.R.S., et. seq., Contractor represents and agrees that:

- (i) As of the date of this Contract:
 - (a) Contractor does not knowingly employ or contract with an illegal alien; and
 - (b) Contractor has participated or attempted to participate in the basic pilot employment verification program created in Public Law 208, 104th Congress, as amended, and expanded in Public Law 156, 108th Congress, as amended, administered by the United States Department of Homeland Security (the "Basic Pilot Program") in order to confirm the employment eligibility of all newly hired employees.
- (ii) Contractor shall not knowingly employ or contract with an illegal alien to perform work under this Contract or knowingly enter into a contract with a subcontractor that knowingly employs or contracts with an illegal alien to perform work under this Contract.
- (iii) Contractor shall continue to apply to participate in the Basic Pilot Program and shall in writing verify same every three (3) calendar months thereafter, until Contractor is accepted or the public contract for services has been completed, whichever is earlier. The requirements of this section shall not be required or effective if the Basic Pilot Program is discontinued.
- (iv) Contractor is prohibited from using Basic Pilot Program procedures to undertake pre-employment screening of job applicants while this Contract is being performed.
- (v) If Contractor obtains actual knowledge that a subcontractor performing work under this Contract knowingly employs or contracts with an illegal alien, Contractor shall:
 - (a) Notify such subcontractor and the Town within three days that Contractor has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and

WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION

(b) Terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to this section the subcontractor does not cease employing or contracting with the illegal alien; except that Contractor shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.

(vi) Contractor shall comply with any reasonable request by the Colorado Department of Labor and Employment (the "Department") made in the course of an investigation that the Department undertakes or is undertaking pursuant to the authority established in Subsection 8-17.5-102 (5), C.R.S.

(vii) If Contractor violates a provision of this Contract pertaining to the duties imposed by Subsection 8-17.5-102, C.R.S. the Town may terminate this Contract. If this Contract is so terminated, Contractor shall be liable for actual and consequential damages to the Town arising out of Contractor's violation of Subsection 8-17.5-102, C.R.S.

(viii) The Town will notify the Office of the Secretary of State if Contractor violates this provision of this Contract and the Town terminates the Contract for such breach.

END OF SECTION

Wastewater Treatment Plant Expansion

CMAR Contract Amendment Phase 2 Construction Services & Guaranteed Maximum Price (GMP)

Board of Trustees Meeting
February 22, 2022





Timeline

- 90 percent design package received on schedule from Jacobs on December 3, 2021.
- Initial 90 percent cost estimate of \$45,821,656 (without contingencies) received from Moltz Construction (CMAR Contractor) on January 7, 2022.
 - Over 60 VE options were identified by Moltz.
- Value Engineering (VE) efforts took place in January with Town staff, Jacobs, and Moltz to explore options to reduce cost.
 - Approximately \$2M in VE savings were realized.



**Guaranteed
Maximum
Price**

\$43,546,349

Total Amount with 10% Contingency

\$47,900,984



General Contractor/Construction Manager

CORPORATE OFFICE:
8807 County Road 175
P.O. Box 729
SALIDA, CO 81201
PHONE: (719) 539-7319
FAX: (719) 539-7695

BRANCH OFFICE:
975 Merchant Court
WINDSOR, CO 80550
PHONE: (970) 330-3248
FAX: (970) 330-5623

www.moltzconstruction.com

**TOWN OF WELLINGTON WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS AND EXPANSION
90% Design Level Cost Estimate
February 10, 2022**

Construction Costs		
01	General Requirements	\$ 2,718,875
02	Existing Conditions	\$ 374,537
03	Concrete	\$ 8,394,514
04	Masonry	\$ 396,198
05	Metals	\$ 1,569,012
06	Woods, Plastics, & Composites	\$ 82,886
07	Thermal & Moisture Protection	\$ 287,645
08	Openings	\$ 396,798
09	Finishes	\$ 1,098,572
10	Specialties	\$ 70,325
12	Furnishings	\$ 4,062
13	Special Construction	\$ 1,865,289
22	Plumbing	\$ 733,600
23	HVAC	\$ 1,745,245
26	Electrical	\$ 7,752,920
31	Earthwork	\$ 2,688,790
32	Exterior Improvements	\$ 49,064
33	Utilities	\$ 126,739
35	Waterway and Marine Construction	\$ 253,954
40	Process Interconnections	\$ 6,336,357
41	Material Processing and Handling Equipment	\$ 321,526
44	Pollution and Waste Control Equipment	\$ 5,332,131
Total Construction Costs*		\$ 42,599,039
VE Savings (Included in Total Construction Costs)		\$ 2,115,286
Subtotal		\$ 40,483,753
Construction Manager Fee		6.50% \$ 2,631,444
Subtotal		\$ 43,115,197
Bonds & Insurance		1.00% \$ 431,152
GMP Amount		\$ 43,546,349
Contractor's Contingency		5.00% \$ 2,177,317
Owner's Contingency		10.00% \$ 4,790,984
GMP INCLUDING Contingency		\$ 47,900,984



Reasons for Cost Increase

- Additions to design scope & specs from the 60% level.
- Substantial increase in materials pricing (rebar, metal buildings, fuel, piping, electrical equipment, etc.).
- Supply chain issues and SRF requirements:
 - American Iron & Steel
 - Davis Bacon Wages

Moltz estimated AIS and DB each added about \$1.6M to the project cost.



Davis Bacon Wages Info

- In 2021, there were 6 updates to DB wage determination Construction Type “Heavy” and already 2 updates posted for 2022.
- Generally, wage determination incorporated into a bid solicitation and related contract award establishes the minimum wage rates and fringe benefits which must be paid for the entire term of the contract.
- If a contract has not been awarded within 90 days after bid opening, modifications prior to award to a general wage determination in the contract shall be effective with respect to that contract unless the agency requests and obtains an extension of the 90-day period from the Wage and Hour Division.

Timing is of essence!

Wages are locked in at the bid and not award (with two updates already since bids were received). Wages are only good for 90 days from bid (last bullet).



GMP Bid Process

Moltz used a competitive bidding process for the GMP

- In most cases, 3 bids were received from Subcontractors equipment, and materials suppliers, most within 10 percent of each other.
 - Indicates drawings & specs interpreted consistently.
- Most bids held for 90 days, but some not able to due to market and supply chain volatility.

To minimize cost escalations, Moltz needs to execute subcontracts and POs in March.



Construction Schedule

Three-month extension to avoid significant overtime hours.

- Substantial Completion: August 1, 2024
- Final Completion: October 30, 2024

Most plant facilities will be online June 1, 2024, pending favorable progress and early Notice to Proceed.



Contract Execution

Contract signing will occur after SRF loan approval on March 4.

- Notice to Proceed issued shortly after.
- Moltz will then proceed to contract with Subcontractors and issue purchase orders to lock in prices.
- Mobilization to begin in April or May.



Phase 2 Construction Contract with GMP

Inclusive of the Following:

- Contract Amendment (cover sheet)
- EJCDC Change Order Form (C-941)
- Moltz's GMP Package
 - GMP = \$43,546,349
 - 10 Percent Total Contingencies = \$4,354,634
 - Total = \$47,900,984
- Supplemental Conditions to the General Conditions

Wastewater Treatment Plant Expansion

**CMAR Contract Amendment
Phase 2 Construction Services &
Guaranteed Maximum Price (GMP)**

Staff Recommendation:

Authorize execution of contract amendment with Moltz Construction in the not to exceed amount of \$47,900,984.00, inclusive of the GMP (\$43,546,349) and ten percent total contingencies (\$4,354,634), for Phase 2 Construction Services.





Board of Trustees Meeting

Date: February 22, 2022

Submitted By:

Subject: Ordinance No. 05-2022 - An Ordinance of the Town of Wellington, Colorado, Acting by and through the Town Wastewater Enterprise, Approving a Loan from the Colorado Water Resources and Power Development Authority to Finance Wastewater Related Improvements; Authorizing the Execution of a Loan Agreement and a Bond to Document the Loan; and Providing for Payment of the Bond from Net Revenue of the Wastewater System

Presentation: Vik Runkle, Interim Finance Director

EXECUTIVE SUMMARY

Attached is the most recent version of the Loan Agreement between the Colorado Water Resources and Power Development Authority and the Town of Wellington, Colorado Acting By and Through the Town Wastewater Enterprise and an Ordinance adopting the Loan Agreement.

As we have been discussing for several weeks, the Town is going to pay for the Wastewater Treatment Plant expansion with the use of both operating monies and bond proceeds. The bond proceeds will come through a Colorado statewide issuance through the Colorado Water Resources and Power Development Authority. The State of Colorado issues debt for both State and municipality debt to meet various statewide capital needs. This is an efficient way for smaller entities to issue debt as the overhead issuance costs add costs to the indebtedness.

Also, the Town of Wellington receives the benefit that is associated with AAA rated debt. The State has a AAA rating; few Colorado cities have a AAA rating. It would be difficult for the Town of Wellington to be a AAA rated municipality. Thus, any debt the Town issued independently would have a higher interest rate.

Triple A ratings ensure the interest rate is the lowest possible on the sale date. Interest rates do not increase after that debt. Of course, the State can refinance outstanding debt. If they do, any interest rate savings is passed on to the entities associated with that debt. In review of history, the State did refinance a 2002 issue where the Town was a partner, and this refinancing resulted in smaller annual payments for the duration of the loan.

The State's program has an additional advantage. Whatever the interest rate on the sale date, the participants, such as the Town of Wellington, pay only 80 percent of the interest rate. Thus, if the interest rate the State pays is 3.2 percent, the Town's assigned interest rate will be 2.56 percent.

Another advantage of being in a "consortium" with the State is they have staff to handle all the details of debt issuance. Issuing debt requires considerable staff time and attention to major details. Towns do not issue debt often enough to have the expertise to know all the steps and demands, particularly as the IRS and other federal agencies change the parameters often. Having an organization, such as the State that issues debt often, managing all the details ensures compliance with all the rules.

The disadvantage to this process is the Town must adopt the Loan Agreement and Ordinance prior to the actual sale of the debt. The actual interest rate is currently unknown. The ordinance states the upper interest rate



limit is at 3.5 percent. First, again, remember the Town will, at worst, pay 80% of that or 2.8 percent. When working in a program like this, the Town needs to negotiate our upper limit while simultaneously being extremely clear we have our upper limit. The State wants the comfort of having the Town adopt a high number, and the Town cannot accept an interest rate that is simply not affordable.

Eighty percent of 3.5 percent equates to 2.8 percent as the Town's interest rate. This is again, a planning number. It is difficult to believe the State would have to pay 3.5 percent on this issuance. Second, we are also working with the State to qualify for another loan program that will provide \$3 million *at a lower interest rate*. This program, while not a grant program, provides money for a portion of the project that meets targeted environmental goals. The Board of Trustees will have to also adopt an Ordinance accepting this loan, when we fully complete the analysis. Further, this will be known before the final acceptance of any monies from the first loan. If the Town qualifies for this loan, it will *lower* the amount of this borrowing, and lower the total interest rate the Town will have to pay on the total financing of this project.

As mentioned in previous meetings, staff has always used a total planning number with the State of \$50 million. The amount the Town will borrow will be finalized in late April or early May when the State publishes the Preliminary Official Statement that will clearly articulate all the projects and their costs. The planning interest rate is higher than previously discussed. This, again, is the State's planning number – and they will only charge the Town 80 percent of that amount. Finally, the State has informally notified staff the Town will qualify for the additional program – and this will lower our total cost of financing. To reiterate, you will have to approve that loan amount once all the details are defined. It will lower the amount of this borrowing. Town staff will be working on this loan next week.

The State needs to know by March 4 the upper limit of the borrowing. This is because there is significant work that needs to be completed as it writes all the required documents. The final borrowing number will be defined in late April. At that time, we will have concluded the other loan program and will be able to know all the sources and uses for this very important and substantial project.

BACKGROUND / DISCUSSION

STAFF RECOMMENDATION

Recommended motion: Move to approve Resolution 05-2022, an Ordinance of the Town of Wellington, Colorado, Acting by and through the Town Wastewater Enterprise, Approving a Loan from the Colorado Water Resources and Power Development Authority to Finance Wastewater Related Improvements; Authorizing the Execution of a Loan Agreement and a Bond to Document the Loan; and Providing for Payment of the Bond from Net Revenue of the Wastewater System

ATTACHMENTS

1. Ordinance 05-2022 - Loan Authorization
2. Loan Agreement Powerpoint Presentation

TOWN OF WELLINGTON

ORDINANCE NO. 05-2022

AN ORDINANCE OF THE TOWN OF WELLINGTON, COLORADO, ACTING BY AND THROUGH THE TOWN WASTEWATER ENTERPRISE, APPROVING A LOAN FROM THE COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY TO FINANCE WASTEWATER RELATED IMPROVEMENTS; AUTHORIZING THE EXECUTION OF A LOAN AGREEMENT AND A BOND TO DOCUMENT THE LOAN; AND PROVIDING FOR PAYMENT OF THE BOND FROM NET REVENUE OF THE WASTEWATER SYSTEM.

WHEREAS, the Town of Wellington, Colorado, is a municipal corporation duly organized and operating as a statutory town under the Constitution and laws of the State of Colorado (unless otherwise indicated, capitalized terms used in this preamble shall have the meanings set forth in Section 1 of this Ordinance); and

WHEREAS, the Town is acting hereunder by and through the Town Wastewater Enterprise, which has been duly and regularly established pursuant to Enabling Laws and by a duly adopted ordinance of the Town, which enterprise has been and continues to be operated as a “water activity enterprise” within the meaning of Section 37-45.1-102(4), C.R.S., and constitutes a government owned business which is authorized to issue its own revenue bonds and which shall not receive 10% or more of annual revenue in grants from all Colorado state and local governments combined; and

WHEREAS, to finance the estimated costs of wastewater system capital improvements generally consisting of the expansion and improvement of the wastewater treatment facilities of the Town, the Board has determined to enter into a Loan Agreement with the Colorado Water Resources and Power Development Authority, a body corporate and political subdivision of the State, pursuant to which CWRPDA is to make a loan to the Town a principal amount not to exceed \$50,000,000; and

WHEREAS, the Town’s repayment obligation under the Loan Agreement will be evidenced by a governmental agency bond to be issued by the Town to the CWRPDA, which Bond shall constitute a special revenue obligation of the Town which is to be paid from the income and revenues derived from the operation and use of the wastewater system (but not the water system) comprising the Town Wastewater Enterprise less reasonable and necessary current expenses of the Town of operating, maintaining and repairing the wastewater system (but not the water system) comprising the Town Wastewater Enterprise and, after consideration, the Board of Trustees has determined that the execution of the Loan Agreement and the issuance of the Bond to the CWRPDA is to the best advantage of the Town; and

WHEREAS, voter approval in advance is not required under Article X, Section 20 of the Colorado Constitution for the execution of the Loan Agreement or the issuance of the Bond; and

WHEREAS, as of the date of adoption of this Ordinance, the Town has outstanding multi-year obligations which are payable from and secured by the Net Revenue, and which generally consist of a Loan Agreement dated May 1, 2002, in the original principal amount of \$4,826,280.60, which obligation is evidenced by a governmental agency bond and payable to CWRPDA, and the Wastewater Revenue Bonds, Series 2014, issued on September 15, 2014, in the original principal amount of \$2,500,000; and

WHEREAS, the form of the Loan Agreement and the Bond have been presented to the Town and made available to the Board; therefore,

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF WELLINGTON, COLORADO, AS FOLLOWS:

Section 1. Definitions. The following terms shall have the following meanings as used in this Ordinance:

“*Board*” means the Board of Trustees of the Town, acting as the governing body of the Enterprise.

“*Bond*” means the governmental agency bond to be issued by the Town to the CWRPDA pursuant to the Loan Agreement, the form of which is set forth in Exhibit D to the Loan Agreement.

“*Capital Improvements*” means the acquisition of land, easements, facilities and equipment, other than ordinary repairs and replacements, and the construction or reconstruction of improvements, betterments and extensions for use by, or in connection with, the System.

“*C.R.S.*” means the Colorado Revised Statutes, as amended and supplemented as of the date hereof.

“*CWRPDA*” means the Colorado Water Resources and Power Development Authority, a body corporate and political subdivision of the State.

“*Enabling Law*” means Part 2, Article 57 of Title 11, Colorado Revised Statutes, as amended; Part 4, Article 35 of Title 31, Colorado Revised Statutes, as amended; Part 1, Article 45.1 of Title 37, Colorado Revised Statutes, as amended. and all other laws of the State establishing the power of the Town to complete the financing contemplated by this Ordinance.

“*Enterprise*” means the government owned business of the Town, as established pursuant to a duly adopted ordinance of the Town, which is authorized to issue its own revenue bonds and which receives under 10% of annual revenue in grants from all Colorado state and local governments combined.

“*Financing Documents*” means the Loan Agreement and the Bond.

“*Future Parity Obligations*” means one or more series of additional bonds, notes, interim securities or other obligations issued by the Town having a lien on the Net Revenue which is on a parity with the lien of the Bond.

“Gross Revenue” means all income and revenues directly or indirectly derived by the Town from the operation and use of the System, or any part thereof, including without limitation, any rates, fees (including without limitation plant investment fees and availability fees), and charges for the services furnished by, or the use of, the System, and all income attributable to any past or future dispositions of property or rights, or related contracts, settlements or judgments held or obtained in connection with the System or its operations, and including investment income accruing from such moneys; provided however, that there shall be excluded from Gross Revenue any moneys borrowed and used for providing Capital Improvements; any money and securities, and investment income therefrom, in any refunding fund, escrow account or similar account pledged to the payment of any bonds or other obligations; and any moneys received as grants or appropriations from the United States, the State of Colorado or other sources, the use of which is limited or restricted by the grantor or donor to the provision of Capital Improvements or for other purposes resulting in the general unavailability thereof, except to the extent any such moneys shall be received as payments for the use of the System, services rendered thereby, the availability of any such service, or the disposal of any commodities therefrom.

“Loan Agreement” means that certain Loan Agreement between the Town and the CWRPDA pursuant to which the CWRPDA is to make a loan from its Water Pollution Control Revolving Fund to the Town.

“Net Revenue” means the Gross Revenue after deducting Operation and Maintenance Expenses.

“Operation and Maintenance Expenses” means all reasonable and necessary current expenses of the Town, paid or accrued, for operating, maintaining and repairing the System, including without limitation legal and overhead expenses of the Town directly related to the administration of the System, insurance premiums, audits, professional services, salaries and administrative expenses, labor and the cost of materials and supplies for current operation; provided however, that there shall be excluded from Operation and Maintenance Expenses any allowance for depreciation, payments in lieu of taxes or franchise fees, expenses incurred in connection with Capital Improvements, and payments due in connection with any bonds or other obligations issued to provide Capital Improvements.

“Outstanding Obligations” means, as of the execution date of the Loan Agreement, the Loan Agreement dated May 1, 2002, in the original principal amount of \$4,826,280.60, which obligation is evidenced by a governmental agency bond and payable to CWRPDA, and the Wastewater Revenue Bonds, Series 2014, issued on September 15, 2014, in the original principal amount of \$2,500,000, which obligations are payable from and secured by the Net Revenue.

“Prime Rate” means the prevailing commercial interest rate announced by the Wall Street Journal from time to time, or, if the Wall Street Journal ceases announcing a prime rate, the prevailing commercial interest rate announced by Citibank, N.A. as its prime lending rate.

“Project” means the expansion and improvement of the wastewater treatment facilities of the Town, and other System Capital Improvements as set forth in the Loan Agreement and as the Project may be later modified by determination of the Board.

“Project Costs” means the Town’s costs properly attributable to the Project, or any parts thereof, and permitted by the provisions of the Enabling Law.

“Pro Rata Portion” means when used with respect to a required credit to the accounts or subaccounts established for the payment of the principal of and interest on the Bond, any Future Parity Obligations and the Outstanding Obligation, the dollar amount derived by dividing the amount of principal or interest to come due on the next principal or interest payment date by the number of monthly credits required to be made prior to such payment date.

“Wastewater Fund” means the Wastewater Fund, within with the financial operations of the System are currently accounted for, or such other fund as may be determined by Town to account for the financial operations of the System.

“State” means the State of Colorado.

“System” means the wastewater system of the Town, as more particularly described in the Loan Agreement.

“Town” means the Town of Wellington, Colorado, acting by and through the Town Wastewater Enterprise.

Section 2. Approval of Loan Agreement and Authorization of Bond. Pursuant to and in accordance with the State Constitution and the Enabling Law, the Bond shall be issued by the Town acting by and through the Town Wastewater Enterprise. The form of the Loan Agreement setting forth the terms, conditions and details of the Bond and the procedures relating thereto, is incorporated herein by reference and is hereby approved; all Town officials and employees are hereby directed to take such actions as are necessary and appropriate to fulfill the obligations of the Town under the Financing Documents. The Town shall enter into the Loan Agreement and deliver the Bond in substantially the form presented to the Town at or prior to this meeting of the Board with only such changes as are not inconsistent herewith; provided that such documents may be completed, corrected, or revised as deemed necessary by the parties thereto in order to carry out the purposes of this Ordinance. The accomplishment of the Project and the payment of Project Costs are hereby authorized, approved, and ordered. It is hereby determined that the date of final maturity of the Bond does not exceed the estimated life of the Project.

Section 3. Bond Details. The Bond shall be in substantially the form set forth in Exhibit D to the Loan Agreement with such changes thereto, not inconsistent herewith, as may be necessary or desirable and approved by the officials of the Town executing the same (whose manual or facsimile signatures thereon shall constitute conclusive evidence of such approval). The Bond shall be in an aggregate principal amount not to exceed \$50,000,000, shall bear interest at a rate not to exceed three and one-half percent (3.50%) per annum, and shall be payable semi-annually and mature not more than thirty-two years from the date of its issuance, all as more particularly set forth in the Loan Agreement. The Bond may provide for a late charge (penalty interest rate) in an amount equal to the greater of twelve percent (12%) per annum or the Prime Rate plus one half of one percent per annum on late payments; provided however, such late charge rate shall not exceed the maximum rate permitted by law. For a period not to exceed one year from the effective date of this Ordinance, the Board hereby delegates to the Town Administrator,

or in her absence, the Town Finance Director, the right to determine, within the parameters established above, the final principal of, and loan term for, the Bond.

Section 4. Pledge for Payment of the Bond.

(a) ***Pledge of Net Revenue.*** Net Revenue is hereby pledged to the payment of the Bond and the amounts due under the Loan Agreement. The Bonds shall constitute a first lien upon the Net Revenue, but not necessarily an exclusive first lien. Pursuant to and in accordance with Section 11-57-208, C.R.S., Net Revenue, as received by or otherwise credited to the Town, shall immediately be subject to the lien of the pledge stated above without any physical delivery, filing, or further act. The lien of each such pledge, and the obligation to perform the contractual provisions made in this Ordinance and the Financing Documents, shall have priority over any or all other obligations and liabilities of the Town except as may be otherwise provided in this Ordinance or in the Financing Documents. The lien of the above pledge shall be valid, binding, and enforceable as against all persons having claims of any kind in tort, contract, or otherwise against the Town irrespective of whether such persons have notice of such liens.

(b) ***Establishment of Accounts.*** There shall be established and maintained by the Town such accounts or subaccounts within the Wastewater Fund necessary or convenient to carry out the terms and provisions of this Ordinance and the Loan Agreement.

(c) ***Flow of Funds.*** The Town shall credit to the Wastewater Fund all Gross Revenue immediately upon receipt. The Town shall pay from the Wastewater Fund all Operation and Maintenance Expenses as they become due and payable. After such payment or the allocation of Gross Revenue to such payment, the Town shall apply the Net Revenue in the following order of priority:

FIRST, to the credit of or deposit in the accounts or subaccounts established for the payment of interest on the Bond, the Outstanding Obligation and any Future Parity Obligations, the Pro Rata Portion equal to the interest coming due on the next succeeding interest payment date for the respective obligations;

SECOND, to the credit of or deposit in the accounts or subaccounts established for the payment of principal of the Bond, the Outstanding Obligation and any Future Parity Obligations, the Pro Rata Portion equal to the principal coming due on the next succeeding principal payment date for the respective obligations;

THIRD, to the credit of any reserve accounts established for the payment of the Bond, the Outstanding Obligation and any Future Parity Obligations, the amounts required in the ordinances or related documents authorizing and controlling the establishment of such reserve accounts; and

FOURTH, to the credit of or deposit in the accounts or subaccounts established for the payment of principal of and interest on other obligations the payment of which is subordinate to the payment of the Bond, the Pro Rata Portion equal to the principal of or interest on such obligations coming due on the next succeeding payment date for the respective obligations; and

FIFTH, to the credit of any other fund or account as may be designated by the Town, to be used for any lawful purpose, any moneys remaining in the Wastewater Fund after the payments and accumulations set forth in FIRST through FOURTH hereof.

(d) ***The Bond Does Not Constitute a Debt.*** The CWRPDA may not look to any general or other fund of the Town for the payment of the principal of or interest on the Bond, except the funds and accounts pledged thereto pursuant to authority of this Ordinance, and the Bond shall not constitute a debt or an indebtedness of the Town within the meaning of any constitutional or statutory provision or limitation; nor shall they be considered or held to be a general obligation of the Town.

Section 5. Various Findings, Determinations, Declarations and Covenants. The Board, having been fully informed of and having considered all the pertinent facts and circumstances, hereby affirms the covenants set forth in Section 2.02 of the Loan Agreement and further finds, determines, declares and covenants that:

(a) ***Additional Obligations.*** No bonds, notes, interim securities or other obligations shall be issued payable from the Net Revenue and having a lien thereon which is superior to, on a parity with, or subordinate to the lien of the Bond unless the requirements set forth in EXHIBIT F of the Loan Agreement, under the caption titled “Additional Bonds”, have been met.

(b) ***Maintenance of Rates and Coverage.*** The Town hereby covenants that it will establish, maintain, enforce and collect rates, fees and charges for services furnished by or the use of the System as required in provision set forth in EXHIBIT F of the Loan Agreement under the caption titled “Rate Covenant”. In the event that the Gross Revenue at any time is not sufficient to make the payments required by said provision, the Town covenants to promptly increase such rates, fees and charges to an extent which will ensure compliance with said covenant.

(c) ***Enterprise Status.*** The Board hereby determines that the Enterprise is an “enterprise” within the meaning of Article X, Section 20 of the Colorado Constitution. The Town has and will continue to maintain the System as part of its “enterprise” within the meaning Article X, Section 20 of the Colorado Constitution, and the meaning of Title 37, Article 45.1, C.R.S.; provided, however, after the current calendar year the Town may disqualify the “enterprise” in any year in which said disqualification does not materially, adversely affect the enforceability of the covenants made in the Financing Documents. In the event that the “enterprise” is disqualified and the enforceability of the covenants made by the Town in the Financing Documents are materially, adversely affected, the Town covenants to (i) immediately take all actions necessary to qualify System as an enterprise within the meaning of Article X, Section 20 of the Colorado Constitution and (ii) permit the enforcement of the covenants made in the Financing Documents.

(d) ***Obligations Currently Secured by Net Revenue.*** Other than the Outstanding Obligation, the Town has no outstanding debt, bonds, loans or other multiple fiscal year obligation which is secured by Net Revenue.

(e) ***Findings of the Board.*** The Board having been fully informed of and having considered all the pertinent facts and circumstances, hereby finds, determines, declares and covenants with the CWRPDA that:

(i) the Enterprise has been duly established and is operating during the current calendar year as an “enterprise” within the meaning of Article X, Section 20 of the Colorado Constitution;

(ii) the Board elects to apply all of the provisions of Title 11, Article 57, Part 2, C.R.S. to the execution of the Loan Agreement and to the issuance of the Bond;

(iii) the execution of the Loan Agreement and the issuance and delivery of the Bond, and all procedures undertaken incident thereto, are in full compliance and conformity with all applicable requirements, provisions and limitations prescribed by the Constitution and the Enabling Law, and all conditions and limitations of the Enabling Law and other applicable law relating to the execution of the Loan Agreement and the issuance and delivery of the Bond have been satisfied; and

(iv) it is in the best interests of the Town and its residents that the Bond be authorized, issued and delivered at the time, in the manner and for the purposes provided in this Ordinance.

Section 6. Approval of Miscellaneous Documents. The Mayor (or in the Mayor’s absence the Mayor Pro Tem) is hereby authorized and directed to execute the Loan Agreement and all documents and certificates necessary or desirable to effectuate the issuance of the Bond and the financing contemplated by this Ordinance. Additionally, authorized officers and representatives as identified in Exhibit B to the Loan Agreement shall be the Town Administrator and the Town Finance Director.

Section 7. Amendment of Ordinance. This Ordinance may be amended only with the prior written consent of the CWRPDA.

Section 8. Limitation of Actions. The Board elects to apply all of the provisions of Title 11, Article 57, Part 2, C.R.S. to the execution of the Loan Agreement and to the issuance of the Bond. Pursuant Section 11-57-212, Colorado Revised Statutes, no action or proceeding concerning the issuance of the Bonds shall be maintained against the Town unless commenced within 30 days after the date of passage of this Ordinance.

Section 9. Ratification of Prior Actions. All actions heretofore taken (not inconsistent with the provisions of this Ordinance) by the Board or by the officers and employees of the Town directed toward the issuance of the Bond for the purposes herein set forth are hereby ratified, approved and confirmed.

Section 10. Headings. The headings to the various sections and paragraphs to this Ordinance have been inserted solely for the convenience of the reader, are not a part of this Ordinance, and shall not be used in any manner to interpret this Ordinance.

Section 11. Ordinance Irrepealable. After any Bond has been issued, this Ordinance shall constitute a contract between the CWRPDA and the Town, and shall be and remain irrepealable until the Bond and the interest accruing thereon shall have been fully paid, satisfied, and discharged, as herein provided.

Section 12. Severability. It is hereby expressly declared that all provisions hereof and their application are intended to be and are severable. In order to implement such intent, if any provision hereof or the application thereof is determined by a court or administrative body to be invalid or unenforceable, in whole or in part, such determination shall not affect, impair or invalidate any other provision hereof or the application of the provision in question to any other situation; and if any provision hereof or the application thereof is determined by a court or administrative body to be valid or enforceable only if its application is limited, its application shall be limited as required to most fully implement its purpose.

Section 13. Repealer. All orders, bylaws, resolutions and ordinances of the Town, or parts thereof, inconsistent or in conflict with this Ordinance are hereby repealed to the extent only of such inconsistency or conflict.

Section 14. Effective Date. This Ordinance shall be in full force and effect 30 days from the date of passage and publication.

PASSED AND ADOPTED by the Board of Trustees of the Town of Wellington, Colorado and ordered published this 22nd day of February, 2022 and ordered to become effective 30 days from the date of publication.

TOWN OF WELLINGTON, COLORADO

By _____
Troy Hamman, Mayor

ATTEST:

By _____
Krystal Eucker, Town Clerk

COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY LOAN AGREEMENT ORDINANCE

February 22, 2022





State Loan Program Process - Why does this need approved now?

- State offers a program that permits municipalities to join them in one large statewide financing.
- The State has a review team that needs to know the maximum financing that must be borrowed.
- This team meets on March 4.
- This Ordinance tells the State the Town of Wellington's limits on the borrowing partnership.
- State will use this information to begin the debt issuance process.
- We have until late April to inform the State of the final numbers.



Why use the State Program

- Large borrowing saves smaller organizations significant direct issuance costs.
- Most organizations of Wellington's size do not issue debt often enough to keep informed of all the federal changes.
- State has a AAA bond rating – the highest possible. This translates into lower interest rates for all members of the issuance.
- State will charge the Town only 80% of the interest rate.



Initial specifics of the Ordinance

- At this time, the maximum to be borrowed is \$50 million
 - We will lower this amount prior to the final number in April; however, this is the amount we have used throughout discussions as a “worst case” number; it is simply a planning number for the State
 - We are also working with State on an additional program that will offset some of the final borrowing amount from this program
 - The Board will have to approve that program also
 - March 22 – a total final number will be approved by Board and the State will be told of the final number We expect it to be closer \$45 million from this program
 -



More Initial specifics of the Ordinance

- At this time, the maximum interest rate the Board will approve is 3.5%
 - Again, a planning number. The State is very conservative; thus, wants to adopt this upper limit
 - Town will only be responsible for 80 percent of that total -- or 2.8%
 - The other program has a lower interest rate program (1.8%) The blended rate will come closer to our “worst case” scenario of 2.5% interest rate, if this planning number should occur
 - We will carefully watch the market, and will keep the Board apprised of concerns
 - We will continue to work with the State on their direction if the financial environment becomes unacceptably turbulent



CONCLUSION

- The State needs to begin developing their debt issuance program.
- To do this, they need the Town's initial estimate of borrowing, and they want the upper limit.
- We have until late April to refine this number lower than the initial estimate.
- The same principles apply to establishing an interest rate. By adopting the 3.5% rate, there is an upper limit to the Town's ability to pay.
- Thus, if the market becomes extremely unstable, the Town can choose to not participate. This, of course, would mean the Wastewater Treatment Plant could not proceed.
- The Board will also soon consider adopting another small program to help offset the project costs. This will lower the total project financing costs.



RECOMMENDATION

- Adopt the ordinance so staff can continue working with the State on the total project financing
- Staff will continue to keep the Board informed of final numbers, particularly with the next small environmental loan

QUESTIONS



QUESTIONS

- The Town's Bond Counsel, Mario Trimble, from Kutak Rock is available also for any questions
- This negotiation was a collaborative effort – and could not have been accomplished with Mr. Trimble, Dan Sapienza, Ian Loffert (state representative), Meagan Smith, Dave Myer, and Bob Gowing

Board of Trustees Meeting

Date: February 22, 2022

Submitted By:

Subject: Resolution No. 12-2022 - A Resolution of the Town of Wellington, Colorado Acting by and Through the Town Wastewater Enterprise, Declaring its Official Intent to Reimburse itself with the Proceeds of the Issuance of Municipal Bonds for Certain Capital Expenditures Undertaken or to be Undertaken by the Town; Generally Identifying the Capital Expenditures; and Providing Certain Other Matters in Connection Therewith.

- **Presentation: Vik Runkle, Interim Finance Director**

EXECUTIVE SUMMARY

When issuing debt for a major capital project, a standard practice is for the Board of Trustees to adopt a Reimbursement Resolution prior to any debt issuance. This is to allow, but not necessarily require, the municipality to use bond proceeds to reimburse the operating Funds for any project expenditures prior to receiving the bond proceeds.

Admittedly, the Wastewater Treatment Plant project has a very constrained budget, and there may not be any monies available to reimburse the Town for planning and design work that have been paid to date. Nonetheless, given the Town cannot use any remaining debt monies for anything except the project, and the Town is obligated for the debt we are incurring, it seems reasonable to ensure all debt monies be dedicated to the project. Thus, if we have any debt resources available at the end of the project, the Town should ensure as much of the project is paid from the debt as possible. The Reimbursement Resolution permits us to ensure we can charge as many of the costs to the debt proceeds as possible.

One of the questions the State asked the Town staff members a few weeks ago was for a copy of our Reimbursement Resolution. It is considered a very common practice to have this type of Resolution. This question began the development of the attached Resolution.

Because this Resolution had not been adopted before February 22, we can only capture project expenditures in arrears for the past 60 days. Normally, this would be problematic. However, because the project is so constricted, we don't expect to have significant funds to dedicate to the work we are already paying from the current budget. Should we even consider issuing debt in the future, a Reimbursement Resolution should be considered immediately. It simply permits as much flexibility to the Town as possible. A municipality is not required to reimburse itself. However, without the Resolution, the Town cannot reimburse itself.

BACKGROUND / DISCUSSION

STAFF RECOMMENDATION

Recommended motion: Move to approve Resolution 12-2022, A Resolution of the Town of Wellington, Colorado Acting by and Through the Town Wastewater Enterprise, Declaring its Official Intent to Reimburse itself with the Proceeds of the Issuance of Municipal Bonds for Certain Capital Expenditures Undertaken or to be Undertaken by the Town; Generally Identifying the Capital Expenditures; and Providing Certain Other Matters in Connection Therewith.

ATTACHMENTS

1. Resolution 12-2022 - Reimbursement Resolution

TOWN OF WELLINGTON

RESOLUTION NO. 12-2022

A RESOLUTION OF THE TOWN OF WELLINGTON, COLORADO, ACTING BY AND THROUGH THE TOWN WASTEWATER ENTERPRISE, DECLARING ITS OFFICIAL INTENT TO REIMBURSE ITSELF WITH THE PROCEEDS OF THE ISSUANCE OF MUNICIPAL BONDS FOR CERTAIN CAPITAL EXPENDITURES UNDERTAKEN OR TO BE UNDERTAKEN BY THE TOWN; GENERALLY IDENTIFYING THE CAPITAL EXPENDITURES; AND PROVIDING CERTAIN OTHER MATTERS IN CONNECTION THEREWITH.

WHEREAS, the Town of Wellington (the “Town”), in the State of Colorado (the “State”), is a municipal corporation duly organized and operating as a statutory town under the Constitution and laws of the State of Colorado; and

WHEREAS, the Town is acting hereunder by and through the Town Wastewater Enterprise, which has been duly and regularly established pursuant to Enabling Laws and by a duly adopted ordinance of the Town, which enterprise has been and continues to be operated as a “water activity enterprise” within the meaning of Section 37-45.1-102(4), C.R.S., and constitutes a government owned business which is authorized to issue its own revenue bonds and which shall not receive 10% or more of annual revenue in grants from all Colorado state and local governments combined; and

WHEREAS, the Town Board of Trustees (the “Board”) is the governing body of the Wastewater Enterprise and exercises the Town's legal authority relating thereto; and

WHEREAS, the Board has determined that it is in the best interest of the Town to make certain capital expenditures generally consisting of, but not necessarily limited to, the expansion and improvement of the current wastewater treatment facilities and related sanitary sewer system improvements (collectively, the “Improvement Project”); and

WHEREAS, the Board has been in contact with and made application to the State of Colorado Water Pollution Control Revolving Fund (“WPCRF”) and the Colorado Water Resources and Power Development Authority in regard to the availability of a loan to fund the Improvement Project; and

WHEREAS, the Board currently intends and reasonably expects to participate in a tax-exempt financing, including an amount which is currently estimated not to exceed \$50 million (the “Financed Amount”), to reimburse the Town for the portion of such capital expenditures incurred or to be incurred subsequent to a period commencing 60 days prior to the date hereof, and ending prior to the later of 18 months of the date of such capital expenditures or the placing in service of the Improvement Project (but in no event more than 3 years after the date of the original expenditure of such moneys); and

WHEREAS, the Board hereby desires to declare its official intent, pursuant to 26 C.F.R. § 1.150-2, to reimburse the Town for such capital expenditures with the proceeds of the Town’s municipal bond financing.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF WELLINGTON, COLORADO, AS FOLLOWS:

Section 1. *Declaration of Official Intent.* The Town shall, presently intends, and reasonably expects to finance all or a portion of the Improvement Project with legally available funds.

Section 2. *Dates of Capital Expenditures.* All of the capital expenditures covered by this Resolution were or will be made on and after the date which is 60 days prior to the effective date of this Resolution.

Section 3. *Issuance of Bonds.* The Town presently intends and reasonably expects to participate in a municipal bond financing within 18 months of the date of the expenditure of moneys on the Improvement Project or the date upon which the Improvement Project is placed in service, whichever is later (but in no event more than 3 years after the date of the original expenditure of such moneys), and to allocate from said financing an amount not to exceed the Financed Amount to reimburse the Town for its expenditures in connection with the Improvement Project.

Section 4. *Confirmation of Prior Acts.* All prior acts and doings of the officials, agents and employees of the Town which are in conformity with the purpose and intent of this Resolution, and in furtherance of the Improvement Project, shall be and the same hereby are in all respects ratified, approved and confirmed.

Section 5. *Effective Date of Resolution.* This Resolution shall take effect immediately upon its passage.

Upon motion duly made, seconded and carried, the foregoing Resolution was adopted this 22nd day of February, 2022.

Town of Wellington

By: _____
Troy Hamman, Mayor

Attest:

By: _____
Krystal Eucker, Town Clerk



Board of Trustees Meeting

Date: February 22, 2022
Submitted By: Hallie Sheldon, Management Analyst
Subject: 2022 Fireworks Amendment

- **Presentation by Hallie Sheldon, Management Analyst**

EXECUTIVE SUMMARY

This is a contract amendment to be awarded to Bee Lake Productions, LLC for the annual Wellington 4th of July fireworks celebration in the total amount of \$41,083.

BACKGROUND / DISCUSSION

In 2019, the Town of Wellington signed an agreement with Bee Lake Productions, LLC to provide fireworks for the annual 4th of July celebration. Since this 2019 agreement, amendments have been provided to renew the contract each year. The attachment to this item includes the 2022 amendment provided by Town Attorney, Dan Sapienza.

Mr. Bryan Ehrlich, owner of Bee Lake Productions, LLC has requested a change in the insurance requirement outlined in the original contract. The original contract required a minimum coverage of \$7,000,000 as a total combined coverage from the Contractor (\$5,000,000) and the Fireworks Manufacturer (\$2,000,000). For the 2022 contract year only, Mr. Ehrlich has requested coverage from the Contractor to be \$3,000,000 general aggregate/\$2,000,000 per incident and the Fireworks Importer/Wholesaler to be \$2,000,000 general aggregate/\$1,000,000 per incident to a total coverage of \$5,000,000.

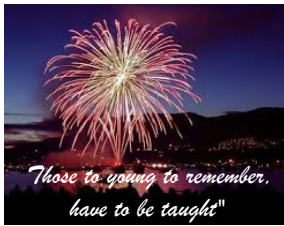
Bee Lake Productions, LLC has requested a total amount of \$41,083 for the 2022 Fireworks display. This is under the amount budgeted by the Town for 2022 (\$41,500).

STAFF RECOMMENDATION

For the discussion of the Board of Trustees

ATTACHMENTS

1. 2022 July 4 Itemized Proposal revised 02022021 FINAL
2. AMENDMENT TO PROFESSIONAL SERVICES CONTRACT 2022 FINAL
3. Firework Contract (002)



2022 July 4th Video Presentation and Pyro-musical Display

Bee Lake Productions
 2151 Bee Lake Road, Wellington, CO 80549
 970-568-7175 behrlich09@gmail.com

CUSTOMER

Town of Wellington, CO

ESTIMATE NO

2022

DATE

2/14/2022

ADDRESS

3735 Cleveland Avenue

CITY/STATE/ZIP

Wellington, CO 80549

PAYMENT TERMS

**80% at Contract approval
 20% after completion of
 Contract.**

DUE DATE

4/10/2022

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1	July 4th Video Presentation-Pyro-musical Fireworks Display	\$41,083.00	\$0.00
	Consisting of the following:		\$0.00
1	Fireworks Product (itemized list attached)	incl	\$15,500.00
1	Rental of Pyrotechnic Equipment (itemized list attached)	incl	\$5,546.00
1	\$1,000,000/\$5,000,000 + \$2,000 000 General Liability Insurance (Policy provided upon completion of contract - Named insured certificate to follow)	incl	\$6,000.00
1	Video Production - Approx., 20 Minute video	incl	\$1,200.00
1	Pyro Musical Scripting	incl	\$1,500.00
1	Video Screen/Projection, Sound and Audio Rental	incl	\$5,737.00
1	Flood Lighting Rental (3 Light Trailers)	incl	\$500.00
1	FM Transmission of audio	incl	\$500.00
1	Labor for Pyrotechnic show (includes prep, set up staging, loading firing, inspection and clean up)	incl	\$3,300.00
1	Storage Magazine rental	incl	\$1,300.00
1	Wellington Professional Firefighters (two trucks + 4 staff)	incl	\$0.00
SUBTOTAL			\$41,083.00

THIS PROPOSAL INCLUDES THE CONDITIONS NOTED:	TAX RATE	0.00%
Bee Lake Productions offers a full "turn-key" Proposal. Proposal is for 100% Acceptance of all line items.	SALES TAX	\$0.00
Bee Lake Productions will Purchase Town of Wellington Cobra Firing system consisting of 1 18R2 Controller and 24 18M Field Modules. Credit to be applied to Year 1 Contract Balance. Years 2-5 will remain as same	OTHER	
Bee Lake Productions will provide Certificate of Insurance with named insureds by May 1, 2021	TOTAL	\$41,083.00

SALES TAX NOT INCLUDED Town of Wellington must provide Tax exempt certificate if claiming Tax Exempt for Fireworks Product and Rental charges. (TBD @6.7%)

Contact Years 2-5 will be subject to price adjustment based to any, but not limited to, the following contract items. Fireworks Product, Freight charges, Liability Insurance, Labor, Sound and Audio Rental, Safety Lighting, Storage rental costs.

Contract Pricing will remain FIRM through the contract for cost contributors for Video Production, Pyro-musical Scripting and Pyrotechnic equipment.

Sign Below to Accept Quote:

Authorized Rep

Date



July 4th Video Presentation and Pyro-musical Display - Fireworks Detail

Bee Lake 2151 Bee Lake Road, Wellington, CO 80549
Productions
970-568-7175 behrlich09@gmail.com

CUSTOMER

Town of Wellington, CO

ESTIMATE NO

2022

DATE

2/14/2022

ADDRESS

3735 Cleveland Avenue

CITY/STATE/ZIP

Wellington, CO 80549

*Enter the name address
proposal in this cell*

PAYMENT TERMS

80% at contract approval
20% after completion

DUE DATE

4/10//2022

Shell Count by Size

3" - 233

4" - 140

5" - 102

6" - 107

8" - 12

QUANTITY	DESCRIPTION	SHELL SIZE	BREAKS
1	Vulcan Falling Leaves Display Shells - 72	3"	72
1	Flower King Aidsay Assortment -72	3"	72
1	Vulcan premium assorted shells- A	4"	36
1	Wizard Assortment B Display Shells - 36	4"	36
1	Freedom RWB Display Shells - 36	4"	36
1	Vulcan 5"" Cut Glass 7 arms multicolor	5"	18
1	Freedom 5"" USA Pattern assortment	5"	18
1	Vulcan premium assorted shells- A	5"	18
1	5"" Wizard Delux Asst. A	5"	18
1	Wizard assorted shells - C	5"	6
1	Freedom Selected Assortment Shells	6"	9
1	Dominator Assortmnet A Display Shells	6"	9
2	T-Sky Long Durational Showcase- Extended Time effects	6"	14
1	Flower King asst 9 effects - 9 shells	6"	9
1	6"" Extra fancy Asst Shell with rising breaking flowers	6"	9
1	Vulcan premium assorted shells- GHOST	6"	6
2	Dominator Assortmnet D Display Shells	6"	18
1	Titanium Salute (ball)	3"	41
3	chained ball salute w/ tail - chained is sets of 10 - 10	3"	27
1	white strobe comet	3"	6
3	red star comet	3"	12
1	blue star comet	3"	3
4	red chrysanthemum w/ red tail	4"	8
4	silver chrysanthemum w/ silver tail	4"	8
4	blue chrysanthemum w/ blue tail	4"	8
4	Green Bowtie w Red ring	4"	4

4	Blue Bowtie w Golden ring	4"	4
2	gold orido nishiki w/ big blue pistil	5"	2
2	gold orido nishiki w/ red strobe pistil	5"	2
1	brocade flower crown bowtie w/ red ring	5"	1
1	god of wealth horsetail w/ red falling leaves	5"	2
4	special white strobe	5"	4
1	red dark red	5"	1
1	cycus bloom to color tips	5"	2
2	cylinder shell - silver dragon w/ red and blue strobe core	5"	2
1	stacked color bands	5"	2
1	lemon glittering waterfall	5"	1
1	orange strobe waterfall	5"	1
1	blue peony w/ red coconut w/ brocade pistil w/ brocade tail	5"	1
3	Smile face w time rain ring	5"	3
2	midnight snow to red with blue pistil	6"	1
2	midnight snow double ring w/ blue pistil	6"	1
2	pixie dust willow	6"	1
2	red chrysanthemum w/ red tail	6"	2
2	silver chrysanthemum w/ silver tail	6"	2
2	blue chrysanthemum w/ blue tail	6"	2
2	nishiki kamuro niagara falls	6"	2
1	gold orido nishiki w/ big blue pistil	6"	1
1	gold orido nishiki w/ red strobe pistil	6"	1
2	god of wealth brocade w/ green strobe pistil	6"	1
1	blue ring w/ yellow star	6"	1
3	ring - three ring (red / green / blue)	6"	2
2	8 point chrys. stained glass w/ red ring	6"	2
2	multi-row flower w/ brocade flower crown pistil	6"	2
2	red heart	6"	2
1	lemon glittering waterfall	6"	1
2	blue peony w/ red coconut w/ brocade pistil w/ brocade tail	6"	2

1	smile face to strobe crossette ring	6"	1
2	red three swordsmen (red palm tree wave)	6"	2
2	half red half blue w/ brocade ring and flower wave	6"	2
1	Green Bowtie w Red ring	6"	1
1	Blue Bowtie w Golden ring	6"	1
1	Ghost Shell - red to green to crackle	8"	1
1	red to blue to silver crackling w/ golden strobe to silver crackling pistil w/ tail	8"	1
1	silver crackle w/ thousands of salutes	8"	1
1	Golden strobe to blue w/ golden strobe to red pistil	8"	1
1	color peony changing to color strobe w/ crossette pistil	8"	1
1	Ghost Shell - red to green to crackle	8"	1
1	large gold willow to variegated	8"	1
1	gold orido nishiki with red strobe pistil	8"	1
1	blue sunflower with tail	8"	1
1	red, dark, lemon, dark, delayed crackle w/ green to purple pistil	8"	1
1	crackling willow ring with smile face	8"	1
1	color crossette	8"	1
2	5x5 fan red white and blue flash break chrysanthemums w/ r,w,b tails Z" freedom reigns	3"	100
2	5x10 fan red white and blue flash break chrysanthemums w/ r,w,b tails (50sh peanut = 100 breaks)	2.5"	200
1	2" gold whirl to blue & purple peony crackling now w/ gold, blue & purple tails (50sh peanut = 100 breaks)	2"	100
1	blue tail brocade crown, brocade crown blue mine	1"	100
1	fan shaped - red / green w/ time rain tail	1"	300
1	fan shaped - special red + sky-blue and white strobe, special red w/ white strobe mines	1"	150
1	fan shaped - brocade crown to green flashing mine to red green blue peony time rain	1"	140
1	fan shaped - big gold coconut blue mine	1"	120
1	TBD Fan Cake - Red White Glittering Willow to Blue mine	1"	130
1	"Z" shaped - color glittering tail blue mine	1"	200
2	"Z" shaped - red white blue comet to report	1"	400
1	"Z" shaped - colorful falling leaves	1"	150
1	"Z" shaped - big silver tourbillion	1"	100
750	e-match / "Igniter" / "squib" 3 Meter Leads - from Wizard International LTD		
1	e-match to quick match connector Safer, quicker and more secure. 50pc per case		

	TOTAL DISPLAY SHELL BREAKS		594
	TOTAL MULTI-SHOT CAKE BREAKS		2190
	TOTAL BREAKS		2784

Sign Below to Accept Quote:

Authorized Rep

Date



July 4th Video Presentation and Pyro-musical Display - Equipment Detail

Bee Lake Productions	2151 Bee Lake Road, Wellington, CO 80549
970-568-7175	behrlich09@gmail.com

CUSTOMER

Town of Wellington, CO

ESTIMATE NO

2022

DATE

2/14/2022

ADDRESS

3735 Cleveland Avenue

CITY/STATE/ZIP

Wellington, CO 80549

PAYMENT TERMS

80% at contract approval
20% after completion

DUE DATE

4/10/2022

Shell Count by Size

3" - 233

4" - 140

5" - 102

6" - 107

8" - 12

[illegible]

Sign Below to Accept Quote:

**AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT
(FIREWORKS DISPLAY)**

THIS AMENDMENT to the contract for fireworks services dated 12th day of March, 2019 (the "Contract") relating to the 2022 event year is made this ____ day of February, 2022, between THE TOWN OF WELLINGTON, COLORADO, a Colorado statutory municipality ("Town"), and BEE LAKE PRODUCTIONS, LLC, a Colorado Limited Liability Company ("Contractor").

THE PARTIES AMEND THE CONTRACT as to the 2022 event year as follows:

1) Costs.

Paragraph 11 of exhibit A to the Contract provides, "this Agreement is for one year, ...Contractor has until January 31st or such other mutually agreed upon date to provide pricing revisions, if any, with documented support of any changes to pricing. The Town can renew the Agreement by notice after approval of proposal. Written notice of renewal shall be provided to the Contractor and mailed no later than February 28th of each renewal period. To assist the Town with Budgeting of future fireworks displays, Contractor agrees to provide the Town with a 5-year budget forecast for anticipated costs for future years."

The Town acknowledges that Contractor provided acceptable pricing revisions for 2022 and the Town has renewed the Contract for 2022. The parties acknowledge that pricing revisions and renewal notice deadlines for 2022 are waived or have been met.

The Town and Contractor agree that contract costs for the 2022 event year will be \$41,083.00. The Contractor acknowledges receipt from the Town of \$32,866.40, representing 80% for the cost of the 2022 event year, the remaining balance of \$8,216.60 for the 2022 event year (the final payment), representing the remaining 20% of the proposal balance will be due from the Town no later than July 25, 2022, on satisfactory completion of Contractor's obligations. Contractor shall provide Town with an accounting of all materials used, left over and mis-fired before the final payment is due.

2) Dates

Contractor, shall provide the Town:

1. By May 1, 2022, proof of insurance coverage and policy by May 1, 2022. Town shall provide initial approval of insurance coverage by May 15, 2022.
2. By May 20, 2022, for approval, the name of the pyrotechnician responsible for shooting the show, a menu of fireworks, the intended presentation, video, and method of presentation of the video for the 2022 event.

3. By June 3, 2022, the pyrotechnician shall initiate contact with the Town to discuss and to obtain approvals. Town shall have a reasonable time to review and approve Contractor submissions.

3) Site

The Contract at Exhibit A, paragraph 3 provides that the show will be shot from the Thimmig property, located on 6th Street directly east of the Wellington Middle School (the “site”) and that selection of any alternate site must be made 180 days before the event. The parties agree that an alternate shoot site or alternate site for AV presentation, other than the Thimmig and middle school property may be proposed prior to April 1, 2022, and that Contractor will evaluate the site to determine suitability. Contractor may, with cause, reject an alternate site proposed by Town.

4) Insurance

The Contract at Section 10 of the Statement of Work, “Insurance” requires a minimum coverage of \$7,000,000 as a total combined coverage from the Contractor (\$5,000,000) and the Fireworks Manufacturer (\$2,000,000). Contractor shall provide a certificate of insurance to the Town a minimum of 30 days before the event listing the Town as an additional insured on the policy.

For the 2022 contract year only, the Town will accept a coverage from the Contractor in the amount of \$3,000,000 general aggregate and \$2,000,000 per incident, and from the Fireworks Importer/Wholesaler in the amount of \$2,000,000 general aggregate and \$1,000,000 per incident.

5) Notice

Notice to the Town required hereunder shall be to Patti Garcia, Town Administrator, at garciapa@wellingtoncolorado.gov, with a copy to Hallie Sheldon, Management Analyst, at hpseldon@wellingtoncolorado.gov.

Amended and entered on this ____ day of _____, 2022.

TOWN OF WELLINGTON, COLORADO

By: _____

Patti Garcia, Town Administrator

ATTEST:

Town Clerk

(Seal)

BEE LAKE PRODUCTIONS, LLC

By: _____

Bryan Ehrlich, OWNER

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT made and entered into on this 12 day of March, 2019, between THE TOWN OF WELLINGTON, COLORADO, a Colorado statutory municipality ("Town"), and BEE LAKE PRODUCTIONS, LLC ("Contractor").

WITNESSETH:

In consideration of the mutual covenants and obligations herein expressed, it is agreed by and between the parties hereto as follows:

1. Scope of Services. The Contractor agrees to provide pyrotechnical and presentation services in accordance with the Scope of Work.

2. Contract Period. This Agreement shall commence on the date first appearing above, and shall continue in full force and effect until all services contemplated in Exhibit A are completed, unless sooner terminated as herein provided.

3. Termination. If the performance by either party under this Agreement is delayed in whole or in part by unforeseen causes beyond its reasonable control and without its fault or negligence, then the party so prevented shall be granted an extension of time to accommodate such unforeseen cause. For example, if weather or other environmental conditions on July 4, of 2019 prevent Contractor from completing the performance, the Town shall grant an extension of time for such performance to take place when weather permits. If, despite such extension of time, Contractor is prevented from performance, or the Town concludes that the performance cannot take place, then this Agreement shall be deemed terminated. If this Agreement is breached by Contractor or is terminated for delay, all amounts paid by the Town shall be refunded, Bryan Ehrlich has signed this Agreement guaranteeing repayment to the Town in the event of Termination.

4. Notice In the event a suitable and acceptable shoot site is not provided, or a change to the approved shoot site is needed for any reason or extreme environmental conditions exist causing the cancellation of the event, less than 180 days prior to the event, Town will be responsible for any costs incurred to the Contractor as to the purchase of firework product or

supplies. Should the Town choose to terminate the Agreement, the parties shall arrange for product and supplies purchased by the Town to be turned over to the Town or stored by Contractor at the expense of the Town.

. All notices provided under this Agreement shall be effective when mailed by first-class United States mail, postage prepaid and addressed as follows:

Town:

Town of Wellington

Attn: Ed Cannon

3735 Cleveland Ave

P.O. Box 127

Wellington, CO 80549

Contractor:

Bee Lake Production, LLC

Attn: Bryan Ehrlich

2151 Bee Lake Road

Wellington, CO 80549

5. Contract Sum. The Town shall pay the Contractor a total of \$32,096.91 for the services contemplated under this Contract for the Year 2019. The Contractor acknowledges tender of the Town's \$25,676.80 for 2019, or 80% of subsequent contract year proposals as provided by the Contractor, an advance deposit with the execution of this Agreement and by March 15th for each subsequent year of the contract. It is understood that the remaining balance of \$6420.11 for 2019 or 20% of the proposal balance for subsequent years will be paid by the Town no later than July 25, 2019, and by July 25th for subsequent years on satisfactory completion of Contractor's obligations.

Contractor agrees to provide complete proposal details including any and all price adjustments with documented justification of any changes in the proposal for each year following the 1st year of the contract. Contractor shall provide a 5-year budget forecast, based on available statistics and historical reference as related to providing all provisions of this contract.

6. Town Representative. The Town designates the Town Administrator/Clerk or in the absence of the Town Administrator/Clerk, the Assistant Town Administrator, as the Town's

representative to make decisions with reference to the services provided under this Agreement, and any extensions thereof.

7. Independent Contractor. The services to be performed by Contractor are those of an independent Contractor and not of an employee of the Town of Wellington. The Town shall not be responsible for withholding any portion of Contractor 's compensation hereunder for the payment of FICA

CONTRACTOR ACKNOWLEDGES THAT CONTRACTOR IS NOT ACTING AS AN EMPLOYEE BUT AS AN INDEPENDENT CONTRACTOR ("CONTRACTOR"), AND REPRESENTS THE TOWN THAT CONTRACTOR IS ENGAGED IN AN INDEPENDENT TRADE, OCCUPATION, PROFESSION, OR BUSINESS RELATED TO SERVICE PERFORMED FOR OWNER, INCLUDING AT OWNER'S PROPERTIES, AND CONTRACTOR FURTHER ACKNOWLEDGES THAT CONTRACTOR IS NOT ENTITLED TO WORKERS' COMPENSATION, UNEMPLOYMENT, WAGE WITHHOLDING OR OTHER BENEFITS, AND THAT CONTRACTOR IS OBLIGATED TO PAY FEDERAL AND STATE INCOME TAX ON ANY MONEYS EARNED PURSUANT TO THE CONTRACT RELATIONSHIP, To the extent Contractor utilizes the service of any employee or other party to perform work hereunder Contractor shall insure that all employment obligations are met including provision of workmen's compensation, unemployment and withholding as legally required.

8. Personal Services. It is understood that the Town enters into the Agreement based on the special abilities of the Contractor and Bryan Ehrlich and that this Agreement shall be considered as an agreement for personal services. Accordingly, the Contractor shall neither assign any responsibilities nor delegate any duties arising under the Agreement without the prior written consent of the Town.

9. Acceptance Not Waiver. The Town's approval or acceptance of, or payment for any of the services shall not be construed to operate as a waiver of any rights or benefits provided to the Town under this Agreement or cause of action arising out of performance of this Agreement.

10. Warranty. Contractor warrants that all services performed hereunder shall be performed with the highest degree of competence and care in accordance with accepted standards for work of a similar nature.

11. Default. Each and every term and condition hereof shall be deemed to be a material element of this Agreement. If either party should fail or refuse to perform according to the terms of this Agreement, such party may be declared in default thereof.

12. Remedies. In the event a party has been declared in default, the party declaring default may elect to (a) terminate the Agreement and seek damages; (b) treat the Agreement as continuing and require specific performance; or (c) avail itself of any other remedy at law or equity. Except as set forth in Section 14 below, in the event of litigation between the parties under this Agreement, each party shall bear its own attorney fees and costs.

13. Binding Effect. This Agreement, together with the exhibits hereto, constitutes the entire agreement between the parties and shall be binding upon said parties, their officers, employees, agents and assigns and shall inure to the benefit of the respective survivors, heirs, personal representatives, successors and assigns of said parties. Promises, undertakings or representations not set forth in this Agreement shall not be binding on the parties.

14. Indemnity/Insurance.

a. The Contractor agrees to indemnify and hold harmless the Town, its officers, agents and employees against and from any and all actions, suits, claims, demands or liability of any character whatsoever brought or asserted for injuries to or death of any person or persons, or damages to property arising out of, result from or occurring in connection with the performance of any service hereunder. Such duty of indemnification shall extend to all costs incurred by the Town in defense of such claims.

b. The Contractor acknowledges that pyrotechnics are by their nature capable of injury to persons and damage to property. The Contractor shall take all reasonable precautions in performing the work hereunder to prevent injury to persons or damage to property.

c. Without limiting any of the Contractor's obligations hereunder, the Contractor shall provide and maintain insurance coverage naming the Town as an additional insured as required in the attached scope of work commencing services hereunder, a certificate of insurance from an insurer acceptable to the Town shall be provided before work is undertaken by Contractor prior to May 31, 2019.

15. Law/Severability. The laws of the State of Colorado shall govern the construction interpretation, execution and enforcement of this Agreement. In the event any provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision of this Agreement.

17. Prohibition Against Employing Illegal Aliens. This paragraph shall apply to all Contractors whose performance of work under this Agreement does not involve the delivery of a specific end product other than reports that are merely incidental to the performance of said work. Pursuant to Section 8-17.5-101, C.R.S., et. seq., Contractor represents and agrees that:

a. As of the date of this Agreement:

1. Contractor does not knowingly employ or contract with an illegal alien; and
2. Contractor has participated or attempted to participate in the basic pilot employment verification program created in Public Law 208, 104th Congress, as amended, and expanded in Public Law 156, 108th Congress, as amended, administered by the United States Department of Homeland Security (the "Basic Pilot Program") in order to confirm the employment eligibility of all newly hired employees.

b. Contractor shall not knowingly employ or contract with an illegal alien to perform work under this Agreement or knowingly enter into a contract with a subcontractor that knowingly employs or contracts with an illegal alien to perform work under this Agreement.

c. Contractor shall continue to apply to participate in the Basic Pilot Program and shall in writing verify same every three (3) calendar months thereafter, until Contractor is accepted or the public contract for services has been completed, whichever is earlier. The requirements of this section shall not be required or effective if the Basic Pilot Program is discontinued.

d. Contractor is prohibited from using Basic Pilot Program procedures to undertake pre-employment screening of job applicants while this Agreement is being performed.

e. If Contractor obtains actual knowledge that a subcontractor performing work under this Agreement knowingly employs or contracts with an illegal alien, Contractor shall:

1. Notify such subcontractor and the Town within three days that Contractor has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and
2. Terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to this section the subcontractor does not cease employing or contracting with the illegal alien; except that Contractor shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.

f. Contractor shall comply with any reasonable request by the Colorado Department of Labor and Employment (the "Department") made in the course of an investigation that the Department undertakes or is undertaking pursuant to the authority established in Subsection 8-17.5-102 (5), C.R.S.

g. If Contractor violates a provision of this Agreement pertaining to the duties imposed by Subsection 8-17.5-102, C.R.S. the Town may terminate this Agreement. If this Agreement is so terminated, Contractor shall be liable for actual and consequential damages to the Town arising out of Contractor's violation of Subsection 8-17.5-102, C.R.S.

h. The Town will notify the Office of the Secretary of State if Contractor violates this provision of this Agreement and the Town terminates the Agreement for such breach.

TOWN OF WELLINGTON, COLORADO

By: _____

Ed Cannon
Town Administrator/Clerk

ATTEST:

Cynthia Sullivan, CMC

Deputy Town Clerk

March 11th & 12th, 2019

APPROVED AS TO FORM:

By: [Signature]
Town Attorney

(Seal)



BEE LAKE PRODUCTIONS, LLC

By: _____

Bryan Ehrlich

3/8/2019

Bryan Ehrlich
Bryan Ehrlich

Exhibit A
SCOPE OF WORK

1. Weather/Environmental Conditions and Duration of Show:

The Contractor shall provide a Scripted Pyro-musical choreographed for the display. The Contractor will also provide a 20-25 minute historical video presentation for viewing by spectators prior to the display. Video and Audio services will be the responsibility of the Contractor and be engineered to support the viewing and listening of the spectator area. The fireworks display and video display of the same magnitude or a heightened magnitude as in the year prior to this contract, shall commence on July 4th, 2019 at approximately 9:15 p.m. and continue, uninterrupted for Approximately 45 minutes, subject the weather and environmental conditions suitable to permit a display. As required by insurance policy, an alternate shoot date will be established between the Town and the Contractor in the event It is mutually understood and agreed, that should inclement weather or environmental conditions (i.e. severe drought conditions) prevent the display on the appointed day, the Town and the Contractor shall immediately postpone the shoot to the prearranged postponement date. It is agreed and understood by the Town and the Contractor that the Contractor will confirm set up with the Town on the day of the event and, thereafter, if the fireworks have been taken out and set up before the inclement weather prevails, then such exhibitions of fireworks must be carried out in the best possible manner without any deductions from the compensation due the Contractor.

Contractor, within 45 days of July 4th shall provide the Town for approval with a menu of fireworks and the intended presentation as well as the video and method of presentation of the video to be provided in conjunction with the event. The Town may object to the presented materials and Contractor will accommodate reasonable requested changes to the proposed presentation.

2. Contractor's Personnel:

- a) The Contractor shall furnish trained personnel authorized to serve as their agents in presenting the fireworks displays, The Contractor shall furnish a crew of adequate size, trained in the presentation of fireworks displays to perform all duties necessary for the set-up, presentation, and clean-up of the fireworks display. The Contractor shall appoint a crew foreman, who shall be duly authorized to serve as their agent and make any decision necessary during the set-up, presentation, and clean-up of the fireworks display. The crew shall arrive at least twelve (12) hours prior to the event. Crew members shall not be employees of the Town. Contractor crew members will be insured under Contractor's required insurance and Contractor shall be obligated for all compensation, employment benefits, statutory withholding, including workers compensation as may be required by applicable law.
- b) The Town Administrator/Clerk, shall be contacted at least forty-five (45) days prior to the event with the name of the pyrotechnician responsible for shooting the show. It shall be the responsibility of the pyrotechnician to contact the Town Administrator/Clerk at least thirty (30) days prior to the event to discuss any issues that need to be finalized and to obtain approvals from the Town on the day of or immediately prior to the day of the event to proceed.

3. Shooting Site:

The show will be shot from the Thimmig property, located on 6th Street directly east of the Wellington Middle School (the "site"). If the shoot site is deemed unavailable for any reason by either party or AHJ, a new shoot site must be proposed by the Town at least 180 days prior to the event. In the event a suitable and acceptable shoot site is not provided, or a change to the approved shoot site is needed for any reason, causing the cancellation of the event, less than 180 days prior to the event, Town will be responsible for any costs incurred to the Contractor as to the purchase of firework product or supplies and the parties shall arrange for product and supplies purchased by the Town to be turned over to the Town or stored by Contractor.

4. Town Provisions:

The Town will not be obligated to provide labor, material, or equipment to secure the site. Shoot site will be secured by Contractor, with Town's approval and cooperation, as required by approval of the AHJ and the Contractor. Contractor will follow all applicable laws, regulations and policies, including as set forth by Bureau of Alcohol Tobacco, Firearms and Explosives (BATFE) and Colorado Division of Fire Safety (CDFS) as it relates to safety precautions concerning shoot site, display area, fall out area, security boundaries and monitoring of site at all times while 1.3g Class B or 1.4g Professional Class C firework products are on site. Contractor will provide all means to secure the shoot site under these requirements as a part of contract.

5. Police Protection and Permits:

The Contractor is responsible for providing Contractors' security at the shooting site at all times including after equipment has been located to the site. The Contractor must obtain all necessary licensing and permits, including but not necessarily limited to a Public Display of Fireworks Permit and must adhere to the 2012 International Fire Code as adopted with amendments or current issue and NFPA 1123 current edition.

6. Safety Representative:

The Wellington Fire Protection District (the "Fire District") shall act as the Authority Having Jurisdiction (AHJ) to provide safety inspections and oversight. The AHJ will have authority to determine whether the show may be shot and the AHJ may stop the show, including if an AHJ representative determines that the safety of citizens and or the shooters is jeopardized.

7. Safety:

Contractor will strictly comply with all safety requirements and best practices as established by the American Pyrotechnics Guild for the safe and effective performance for shooting a firework display as described here. The show must be a completely electronically-shot show. The Contractor provided shooter shall remain outside the display area perimeter and within the fallout area of the shoot site. Contractor shall also provide a minimum of 4 spotters to monitor the fireworks display area, shooting performance and shell detonation as prescribed by the fireworks manufacturer. Spotters shall position to adequately monitor the show from outside the display site area, and within the fallout area of the shoot site. Only one shell per mortar tube will be allowed. No reloading of tubes will be allowed. In the event of inclement weather, and when determined by the AHJ or the Contractor, mortar tube adjustment for wind direction will be made prior to the start of the show. No one other than the Contractor or Contractor's pyrotechnician crew members will be allowed to handle the shells. Shooters shall wear fire resistant FR rated clothing, or 100% cotton clothing as approved by the NFPA and CDFS. No nylon clothing will be allowed.

8. Set Up:

The display needs to be completely set up, tested, and inspected at least one (1) hours prior to the scheduled commencement time. If the Shoot Site is available, mortar tubes can be set, backfilled, and ready for inspection twenty-four (24) hours prior to the scheduled commencement time.

9. Clean-up:

The Contractor will be responsible for cleanup and policing of the shooting site including the removal of all unexploded fireworks, removal of frames, mortars and other debris left as a result of the shooting of the fireworks display including as provided per National Fire Protection Association Code 1123.

10. Insurance:

- a) The Contractor will provide, from insurance companies acceptable to the Town, the insurance coverage designated hereinafter and pay all costs. Before commencing work under this bid, the Contractor shall furnish the Town with certificates of insurance, in a form acceptable to the Town, showing the type, amount, class of operations covered, effective dates and date of expiration of policies, and containing substantially the following statement. The Town shall approve insurance coverage (the "Insurance Requirement") in writing by March 15, 2019.

At a minimum Contractor agrees to provide public liability and property damage insurance coverage, including spectator coverage in the amount of \$7,000,000 as a total combined coverage from the Contractor (\$5,000,000) and the Fireworks Manufacturer (\$2,000,000). Contractor shall provide a certificate of insurance to the Town a minimum of 30 days before the event listing the Town and an additional insured on the policy. Additionally, Contractor will not terminate or modify such insurance policy without written notice of such change, two weeks prior to the change. In the event of a claim by the Town, Contractor agrees to pay any deductible under the policy, which deductible shall not be greater than \$5,000.

- b) The insurance evidenced by this insurance certificate will provide that "the insurance may not be cancelled or materially altered, except after ten (10) days written notice to the Town of Wellington, Colorado."
- c) In case of the breach of any provision of the Insurance Requirements, the Town, at its option, may take out and maintain, at the expense of the Contractor, such insurance as the Town may deem proper and may deduct the cost of such insurance from any monies which may be due or become due the Contractor under this Agreement. The Town, its officers, agents and employees shall be named as an additional insured on the Contractor 's general liability insurance policies for any claims arising out of work performed under this Agreement.
- d) The following minimum Insurance coverage will be provided by Contractor:
 - a) Employer's Liability. The Contractor shall maintain during the life of this Agreement for all of the Contractor 's employees engaged in work performed under this agreement:
 - i. To the extent required by applicable law, Workers' Compensation insurance with statutory limits as required by Colorado law.
 - ii. Employer's Liability insurance with limits of \$1,000,000 per accident, \$1,000,000 disease aggregate, and \$1,000,000 disease each employee.
 - iii. Commercial, General, and Vehicle Liability. The Contractor shall maintain during the life of this Agreement such commercial general liability and automobile liability insurance as will provide coverage for damage claims of

personal injury, including accidental death, as well as for claims for property damage, which may arise directly or indirectly from the performance of work under this Agreement. Coverage for property damage shall be on a "broad form" basis. The amount of insurance for each coverage, Commercial General and Vehicle, shall not be less than \$1,000,000 combined single limits for bodily injury and property damage.

- iv. In the event any work is performed by a subcontractor, the Contractor shall be responsible for any liability directly or indirectly arising out of the work performed under this Agreement by a subcontractor, which liability is not covered by the subcontractor's insurance. All subcontractors shall be approved by the Town and provide proof of workman's compensation to the Town

11. Contract Period:

This Agreement is for one year, unless sooner terminated or extended as herein provided at the option of the Town. Contractor has until January 31st to provide pricing revisions, if any, with documented support of any changes to pricing. The Town can renew the contract by notice after approval of proposal. Written notice of renewal shall be provided to the Contractor and mailed no later than February 28th of each renewal period.

To assist the Town with budgeting of future fireworks displays, Contractor agrees to provide the Town with a 5-year budget forecast for anticipated costs for future years.

12. Misfires:

Contractor agrees that after post-show inspection, any misfire product will be returned to the supplier to be destroyed under the provisions of NFPA 1123. Any product deemed unfired, and in good condition will be reported to the Town and can be stored for use in a later show. Should the Town elect to terminate the contract before the opportunity to use unfired products. Contractor will refund the wholesale cost of the product to the Town.

COBRA FIRING SYSTEM

13. The Town is willing to transfer the ownership of the COBRA FIRING SYSTEM to Contractor for an agreed transfer price to offset from the price of 2019 Proposal for services provided under this contract.

13. Attachments:

Attachment A: Video Presentation and Pyro-musical Display Firework Details

Attachment B: Equipment Detail - *Included*

Attachment C: Firework Detail - *Included*

Attachment D: Insurance



Board of Trustees Meeting

Date: February 22, 2022
Submitted By: Krystal Eucker, Town Clerk
Subject: Special Event Permit Application - Hoppy Go Lucky 5K

- **Presentation:** Krystal Eucker, Town Clerk

EXECUTIVE SUMMARY

Wellington Main Streets Program (WMSP) has submitted an Application for a Special Event Permit to serve fermented malt beverages on March 12, 2022 during the Hoppy Go Lucky 5K. WMSP has submitted all documentation for the permit including the application, premise map and permission for use of the premise, non-profit status with the Colorado Secretary of State and the special event questionnaire.

The Hoppy Go Lucky 5K event will take place on March 12, 2022 from 7:30 a.m. - 1:30 p.m. and it is anticipated that 200 individuals will attend the event. Soul Squared Brewing will be donating and serving alcohol and Leave it to Cleaver Food Truck will be onsite. Security will be at entrances for ID checks and those over 21 will be provided a wristband.

BACKGROUND / DISCUSSION

Pursuant to C.R.S 44-5-106, public notice of the proposed permit application and of the procedure to protest the permit was posted on February 11, 2022 at the premise location. To date, there have been no protests to the Application for a Special Events Permit.

The Local Liquor Licensing Authority shall report approved or disapproved Special Events Permits to the Colorado Liquor Enforcement Division within 10 days.

STAFF RECOMMENDATION

Recommended motion: Move to approve the Special Event Permit Application for the Wellington Main Streets Program for the Hoppy Go Lucky 5K.

ATTACHMENTS

1. WMSP - Hoppy Go Lucky 5K

Application for a Special Events Permit

Departmental Use Only

In order to qualify for a Special Events Permit, You **Must Be Nonprofit**
and One of the Following (See back for details.)

- | | | |
|------------------------------------|---|--|
| ☐ Social | ☐ Athletic | ☐ Philanthropic Institution |
| ☐ Fraternal | ☐ Chartered Branch, Lodge Or Chapter | ☐ Political Candidate |
| ☐ Patriotic | ☒ Of A National Organization Or Society | ☐ Municipality Owning Arts Facilities |
| ☐ Political | ☐ Religious Institution | |

LIAB	Type of Special Event Applicant is Applying for:	DO NOT WRITE IN THIS SPACE
2110 ☐ Malt, Vinous And Spirituous Liquor	\$25.00 Per Day	Liquor Permit Number
2170 ☒ Fermented Malt Beverage	\$10.00 Per Day	

1. Name of Applicant Organization or Political Candidate Wellington CO Main Streets Program	State Sales Tax Number (Required) 20141362413
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2. Mailing Address of Organization or Political Candidate (include street, city/town and ZIP) PO Box 1021 Wellington, CO 80549	3. Address of Place to Have Special Event (include street, city/town and ZIP) 3749 Harrison Ave Wellington, CO 80549
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Name	Date of Birth	Home Address (Street, City, State, ZIP)	Phone Number
4. Pres./Sec'y of Org. or Political Candidate Anita Hardy			
5. Event Manager Kallie Cooper			
6. Has Applicant Organization or Political Candidate been Issued a Special Event Permit this Calendar Year? ☒ NO ☐ YES HOW MANY DAYS? _____	7. Is premises now licensed under state liquor or beer code? ☒ NO ☐ YES TO WHOM? _____		

8. Does the Applicant Have Possession or Written Permission for the Use of The Premises to be Licensed? ☒ Yes ☐ No				
List Below the Exact Date(s) for Which Application is Being Made for Permit				
Date 03/12/22	Date	Date	Date	Date
Hours From 7:30 a .m.	Hours From .m.	Hours From .m.	Hours From .m.	Hours From .m.
To 1:30 p .m.	To .m.	To .m.	To .m.	To .m.

Oath of Applicant		
I declare under penalty of perjury in the second degree that I have read the foregoing application and all attachments thereto, and that all information therein is true, correct, and complete to the best of my knowledge.		
Signature <i>Kallie Cooper</i>	Title Executive Director	Date 01/11/22

Report and Approval of Local Licensing Authority (City or County)		
The foregoing application has been examined and the premises, business conducted and character of the applicant is satisfactory, and we do report that such permit, if granted, will comply with the provisions of Title 44, Article 5, C.R.S., as amended. THEREFORE, THIS APPLICATION IS APPROVED.		
Local Licensing Authority (City or County)	☐ City ☐ County	Telephone Number of City/County Clerk
Signature	Title	Date

DO NOT WRITE IN THIS SPACE - FOR DEPARTMENT OF REVENUE USE ONLY			
Liability Information			
License Account Number	Liability Date	State	Total
		-750 (999)	\$.

(Instructions on Reverse Side)

Application Information and Checklist

The following supporting documents must be attached to this application for a permit to be issued:

- ☒ Appropriate fee.
- ☒ Diagram of the area to be licensed (not larger than 8 1/2" X 11" reflecting bars, walls, partitions, ingress, egress and dimensions.
Note: If the event is to be held outside, please submit evidence of intended control, i.e., fencing, ropes, barriers, etc.
- ☒ Copy of deed, lease, or written permission of owner for use of the premises.
- ☒ Certificate of good corporate standing (NONPROFIT) issued by Secretary of State within last two years; **or**
- ☐ If not incorporated, a NONPROFIT charter; **or**
- ☐ If a political Candidate, attach copies of reports and statements that were filed with the Secretary of State.

- ☒ **Application must first be submitted to the local licensing authority (city or county) at least thirty (30) days prior to the event.**
- ☒ **The premises to be licensed must be posted at least ten (10) days before a hearing can be held. (44-5-106 C.R.S.)**
- ☒ **An approved application must be received by the liquor enforcement division at least ten (10) days prior to the event.**
- ☒ **Check payable to the Colorado Department Of Revenue**

(44-5-102 C.R.S.)

A Special Event Permit issued under this article may be issued to an organization, whether or not presently licensed under Articles 4 and 3 of this title, which has been incorporated under the laws of this state for the purpose of a social, fraternal, patriotic, political or athletic nature, and not for pecuniary gain or which is a regularly chartered branch, lodge or chapter of a national organization or society organized for such purposes and being non profit in nature, or which is a regularly established religious or philanthropic institution, and to any political candidate who has filed the necessary reports and statements with the Secretary of State pursuant to Article 45 of Title 1, C.R.S. A Special Event permit may be issued to any municipality owning arts facilities at which productions or performances of an artistic or cultural nature are presented for use at such facilities.

If an event is cancelled, the application fees and the day(s) are forfeited.



EMERGENCY PLAN

Hoppy Go Lucky 5K

SPONSORING COMPANY: Wellington CO Main Streets Program

EVENT LOCATION: Centennial Park
3815 Harrison Ave; Wellington, CO

EVENT DATE/TIME: Saturday, March 12th
9:00 am – 1:00 pm (Set Up @ 7:30 am; Tear Down @ 1:30 pm)

CONTACT INFO:

On Site Event Contact Mary Gray | (970) 692-9380
Emergency Contact Kallie Cooper | (970) 568-4985 or (641) 512-5136
Weather Monitoring Contact Mary Gray | (970) 692-9380

EVENT SECURITY

- A. Security Services - Overland Sertomas
 - a. Will provide Entrance and Exit security to ensure no alcohol leaves delineated area
 - b. TIPS certified to check IDs and issue wristbands to attendees 21+
- B. Area Control
 - a. Fencing has been secured through the Town of Wellington Parks and Recreation Department
 - b. Entrance and Exit openings determined by the Wellington Fire Protection District based on 800' of fencing in a 422' x 158' area

EMERGENCY PROCEDURES:

- A. NEARBY EMERGENCY SHELTERS:
 - a. Wellington Fire Protect District (8130 3rd St)
 - b. Wellington Hotel (3725 Cleveland Ave)
 - c. Owl Canyon Coffee (3745 Cleveland Ave)
 - d. Nearby vehicles
 - e. Centennial Park Shelter
- B. COMMUNICATION:
 - a. Cell phone and radio on site
- C. ON SITE EVENT CONTACT RESPONSIBLE FOR:
 - a. Monitoring a weather source (National Weather Service) two or more hours before the event and deciding whether or not to proceed with the event based on that information.
 - b. Checking the tent structures for any changes since installation – stakes pulling out of the ground, loose poles, ropes or straps etc.
 - c. Ensuring tents are spaced properly
 - d. Ensuring 10' spacing between generators / food trucks
 - e. Making sure volunteers are aware of the location of fire extinguishers and first aid supplies
 - f. Exits are properly marked
- D. DURING THE EVENT: Monitor the weather and evacuate attendees and vendors in the event of any the following conditions:
 - a. If a Severe Weather Alert is posted by the National Weather Service.
 - b. If lightning strikes within 1 mile (count of less than 5 seconds between lighting and thunder).
 - c. Damaging winds causing large trees to sway or leaves to be ripped off trees
 - d. Fire or explosion

- e. Heavy rain causing standing water
 - f. Hail or sleet
 - g. Snow or ice accumulation
 - h. Any of the tent anchoring devices fail or the tent begins to move
- E. IN THE EVENT OF EVACUATION:
- a. Use the onsite cell phones or radio to call 911
 - b. Use radios to disperse volunteers to notify attendees that there is weather or other emergency and that it is unsafe to stay in the park. Attendees will be directed to designated emergency shelters by way of the marked exits
 - c. Volunteers will assist guests in tearing down equipment as long as it is safe to do so

Krystal Eucker

From: Kallie Cooper <kallie@wellingtonmainstreet.org>
Sent: Thursday, January 27, 2022 9:29 AM
To: Krystal Eucker; Mahalia Henschel
Cc: mary@soulsquaredbrewing.com
Subject: FW: Rental of Park for Hoppy Go Lucky 5K - Saturday, March 12th from 9 am - 1 pm

Here is our written permission to utilize Centennial Park for the Hoppy Go Lucy 5K.

From: Dean Campos <camposde@wellingtoncolorado.gov>
Sent: Thursday, January 27, 2022 9:23 AM
To: Kallie cooper <kallie@wellingtonmainstreet.org>
Subject: RE: Rental of Park for Hoppy Go Lucky 5K - Saturday, March 12th from 9 am - 1 pm

Hello Kallie,

That sounds great!

I give permission for Mainstreet to use Centennial Park for the Hoppy Go Lucky 5K March 12th, 2022 from 9 am – 1 pm. We will drop off the fence at 8am on March 10th, 2022. If you could coordinate with volunteers to be ready to help during that time that would be great.

Thanks!



Dean Campos
Parks and Recreation Manager
Phone: (970) 568-7410
Email: camposde@wellingtoncolorado.gov
Web: www.wellingtoncolorado.gov
3735 Cleveland Ave, Wellington, CO
80549



From: Kallie cooper <kallie@wellingtonmainstreet.org>
Sent: Tuesday, January 25, 2022 11:35 AM
To: Dean Campos <camposde@wellingtoncolorado.gov>
Subject: Re: Rental of Park for Hoppy Go Lucky 5K - Saturday, March 12th from 9 am - 1 pm

Yes, this event is for a non-profit (Main Street) and all the proceeds will be going towards our organization.

Yes, if the fence can be delivered, our volunteers can set it up.

Good morning Dean,

I need to get written approval from the Parks and Recreation Department to reserve the use of Centennial Park (3815 Harrison Ave) for the Hoppy Go Lucky 5K on Saturday, March 12th from 9 am – 1 pm.

We will also be utilizing Town of Wellington chain link fencing to delineate the area for alcohol consumption. Thank you for your response.

<image006.jpg>

Kallie Cooper

Executive Director, Wellington CO Main Streets Program
(970) 568-4985 | kallie@wellingtonmainstreet.org
www.wellingtonmainstreet.org

<image007.png> <image008.png> [Sign up for our Newsletter!](#)

OFFICE OF THE SECRETARY OF STATE
OF THE STATE OF COLORADO

CERTIFICATE OF FACT OF GOOD STANDING

I, Jena Griswold, as the Secretary of State of the State of Colorado, hereby certify that, according to the records of this office,

Wellington, CO Main Streets Program

is a

Nonprofit Corporation

formed or registered on 06/12/2014 under the law of Colorado, has complied with all applicable requirements of this office, and is in good standing with this office. This entity has been assigned entity identification number 20141362413 .

This certificate reflects facts established or disclosed by documents delivered to this office on paper through 02/04/2022 that have been posted, and by documents delivered to this office electronically through 02/07/2022 @ 09:26:20 .

I have affixed hereto the Great Seal of the State of Colorado and duly generated, executed, and issued this official certificate at Denver, Colorado on 02/07/2022 @ 09:26:20 in accordance with applicable law. This certificate is assigned Confirmation Number 13774403 .



Jena Griswold

Secretary of State of the State of Colorado

*****End of Certificate*****

Notice: A certificate issued electronically from the Colorado Secretary of State's Web site is fully and immediately valid and effective. However, as an option, the issuance and validity of a certificate obtained electronically may be established by visiting the Validate a Certificate page of the Secretary of State's Web site, <http://www.sos.state.co.us/biz/CertificateSearchCriteria.do> entering the certificate's confirmation number displayed on the certificate, and following the instructions displayed. Confirming the issuance of a certificate is merely optional and is not necessary to the valid and effective issuance of a certificate. For more information, visit our Web site, <http://www.sos.state.co.us/> click "Businesses, trademarks, trade names" and select "Frequently Asked Questions."

Check Issue Date	Payee	Description	Amount
1/7/2022	WEX BANK	FUEL FOR TOWN VEHICLES	\$3,978.71
1/14/2022	FIRST NATIONAL BANK OMAHA	PCARD PURCHASES12/31/21-01/14-21	\$17,159.23
1/15/2022	4RIVERS EQUIPMENT	WINDOWPANE	\$1,852.40
1/15/2022	AFFORDABLE SEALING & STRIPING INC.	CRACK FILLING 2021	\$42,580.00
1/15/2022	ALL COPY PRODUCTS, INC.	COPIER MAINTNANCE	\$934.46
1/15/2022	AMAZON	OFFICE SUPPLIES FOR MULTIPLE BUILDINGS	\$967.17
1/15/2022	BECHTOLT ENGINEERING INC	TRAFFIC LIGHTS	\$4,900.00
1/15/2022	CD ENGINEERING, INC	WELLINGTON MAIN STREET LIGHTING PROJECT	\$6,175.00
1/15/2022	CINTAS	FIRST AID RESTOCK	\$38.87
1/15/2022	COLORADO ANALYTICAL LAB	CHEMICALS	\$429.00
1/15/2022	COLORADOAN	PUBLICATION	\$22.94
1/15/2022	DANA KEPNER	LABOR	\$2,438.00
1/15/2022	DEPARTMENT OF THE TREASURY	84-6014059,MARCH 31,2020, 941	\$1,260.83
1/15/2022	DPC INDUSTRIES, INC	CHEMICALS	\$120.00
1/15/2022	DS CONSTRUCTORS, LLC	3749 HARRISON AVE EXPANSION	\$163,167.80
1/15/2022	EVOQUA WATER TECHNOLOGIES LLC	DRINKING WATER TESTING	\$1,300.00
1/15/2022	GREELEY LOCK& KEY	DOOR CONTROLLER	\$9,358.31
1/15/2022	HENSEL PHELPS CONSTRUCTION CO	WTP EXPANSION PHASE 1-OZONE EQUIP	\$310,239.60
1/15/2022	JACOBS ENGINEERING C/O BANK OF AMERICA	WWTP EXPANSION ENGINEERING DISIGN AND CONSTRUCTION SERVICES	\$310,846.75
1/15/2022	L.C. SALES TAX ADMINISTRATOR	VENDOR FEE	\$27,659.83
1/15/2022	LARIMER COUNTY SHERIFF	FOURTH QUARTER 2021 LAW ENFORCEMENT SERVICES	\$347,104.25
1/15/2022	LEWAN & ASSOCIATES, INC.	INTERNET SET UP FOR NEW TOWN HALL	\$5,298.92
1/15/2022	LOGAN SIMPSON DESIGN INC	PRFESSIONAL SERVICES 103021-112621	\$7,377.10
1/15/2022	MARCH & OLIVE, LLC	LEGAL SERVICES	\$4,450.00
1/15/2022	MCDONALD FARMS ENTERPRISES, INC.	PICKED UP AND DROPPED OFF BOX	\$2,454.00
1/15/2022	MIDCO DIVING & MARINE SERVICES, INC.	LABOR	\$6,772.00
1/15/2022	MOBILE MINI INC	MOBILE OFFICE RENTAL	\$1,354.30
1/15/2022	MOLTZ CONSTRUCTION, INC	WWTP EXPANSION CMAR PHASE	\$2,830.00
1/15/2022	MOSES, WITTEMYER, HARRISON & WOODRUFF	PROFESSIONAL SERVICES	\$951.00
1/15/2022	MUNICODE	ELECTRONIC UPDATE PAGES	\$770.00
1/15/2022	POLAR GAS INC	PROPANEW WTP UTILITY	\$1,154.00
1/15/2022	POUDRE SCHOOL DISTRICT	GYM RENTAL	\$2,616.75
1/15/2022	PROTECT YOUTH SPORTS, DEPT 2110	BACKGROUND CHECKS	\$24.60
1/15/2022	RH WATER & WASTEWATER, INC	MONTHLY WTP MONITORING	\$700.00
1/15/2022	ROBERT HALF	SARAH SIMONS TEM. EMPLOYMENT	\$313.92
1/15/2022	ROCKY MOUNTAIN BOTTLED WATER, LLC	WATER	\$34.99
1/15/2022	SAFEBUILT COLORADO, LLC	DECEMBER 2021 PERMIT ACTIVITY	\$52,405.11
1/15/2022	SEACREST GROUP	CHRONIC BIOMONITORING	\$2,130.00
1/15/2022	SMART DOCUMENT MANAGEMENT, LLC	DOCUMENT SHREDDING	\$23.40

1/15/2022	TIMBERLINE ELECTRIC & CONTROL CORP.	LABOR	\$2,630.49
1/15/2022	UNCC	RTL TRANSMISSIONS	\$125.40
1/15/2022	WELD CNTY DEPT PUBLIC HEALTH ENVIRONMENT	WATER TESTING	\$205.00
1/15/2022	WELLINGTON FIRE PROTECTION DIS	VENDOR FEE	\$4,218.00
1/15/2022	XCEL ENERGY	TEMP UNIT 3749 HARRISON	\$298.14
1/21/2022	ABSOLUTE GRAPHICS, INC	PROMOTIONAL SUPPLIES	\$1,170.00
1/21/2022	ALL AMERICAN BACKFLOW	BACKFLOW TESTING	\$1,857.78
1/21/2022	ALLIANT INSURANCE SERVICES, INC-NPB MAIN	PUBLIC OFFICIAL SCHEDULE BOND	\$400.00
1/21/2022	BOKF, NATIONAL ASSOCIATION	SEMI ANNUAL PAYING AGENT FEE	\$31,692.50
1/21/2022	BUFFALO CREEK SUBDIVISION AT WELLINGTON	JAN HOA/UTILITIES	\$190.99
1/21/2022	CINTAS	FIRTST AID RESTOCK	\$81.89
1/21/2022	CIRSA	COVERAGE 01/01/22-01/01/23	\$42,182.98
1/21/2022	COLORADO ANALYTICAL LAB	CHEMICALS	\$1,241.00
1/21/2022	COLORADO LIBRARY CONSORTIUM	MAINTENANCE 2022	\$60.00
1/21/2022	DPC INDUSTRIES, INC	CHEMICALS	\$2,184.00
1/21/2022	GLM DESIGN GROUP, LLC	PREPARING GRANT FOR CLEVELAND AVE	\$3,750.00
1/21/2022	HARCROS CHECMICALS INC	CHEMICALS	\$1,914.00
1/21/2022	ICON ENGINEERING, INC	2021 STORMWATER MASTER PLAN	\$4,513.25
1/21/2022	JACOBS ENGINEERING C/O BANK OF AMERICA	LABOR	\$5,216.50
1/21/2022	LOGAN SIMPSON DESIGN INC	PROFESSIONAL SERVICES 10/30/21-12/31/21	\$10,724.56
1/21/2022	MARCH & OLIVE, LLC	2021 WATER	\$8,603.51
1/21/2022	MVR-2 HOLDINGS, LLC	CIP PROJET TRACT F	\$230,000.00
1/21/2022	NORTH FORTY NEWS	SEP/OCT 2021	\$436.00
1/21/2022	NORTH FRONT RANGE WATER QUALITY PLANNING	2022 MEMBERSHIP DUES	\$1,000.00
1/21/2022	NORTHERN COLORADO SPORTS OFFICIALS	SCHEDULING/ADMINISTRATION-JAN2022	\$625.00
1/21/2022	O.J. WATSON COMPANY, INC.	FLOOD LAMP	\$102.80
1/21/2022	OMNISITE	ANNUAL SERVICE	\$768.00
1/21/2022	POLAR GAS INC	PROPANE WTP UTILITIES	\$1,452.95
1/21/2022	ROBERT HALF	SARAH SIMONS, TEM EMPLOYMENT	\$1,579.61
1/21/2022	SEACREST GROUP	CHRONIC BIOMONITORING	\$2,400.00
1/21/2022	STANDARD INSURANCE COMPANY	SHORT TERM DISABILITY	\$1,545.05
1/21/2022	STRATEGIC GOVERNMENT RESOURCES, INC	INT-FINANCE DIRECTOR EMPLOYMENT	\$3,927.00
1/21/2022	UNITED MAILING	PRINTING AND MAILING OF UTILITY BILLS	\$1,733.25
1/21/2022	US BANK, N.A. ATTN TFM REF 14878100	TOWN LOAN	\$161,000.67
1/21/2022	WELLINGTON GRILL	MAIN STREET OPEN FOR BUISNESS	\$22,896.46
1/25/2022	NORTH POUDRE IRRIGATION	2021 WATER SHARES	\$1,152,859.20
1/25/2022	Utility Management	ANTHONY/ALYSSA BERTETTO	\$139.50
1/25/2022	Utility Management	ARTHUR D WILKERSON ESTATE	\$50.70
1/25/2022	Utility Management	ASHLEY GARZA	\$100.00
1/25/2022	Utility Management	BRADLEY REUER	\$205.06

1/25/2022 Utility Management	BRIAN/SUSAN PANTLE	\$137.41
1/25/2022 Utility Management	CODY DAVIS	\$313.47
1/25/2022 Utility Management	DAWN MINNARD	\$32.32
1/25/2022 Utility Management	DUSTIN/RENEE FULLER	\$76.35
1/25/2022 Utility Management	GATEWAY HOMES OF COLORADO LLC	\$142.28
1/25/2022 Utility Management	GREG/PAULETTE MARTIN	\$211.60
1/25/2022 Utility Management	HARTFORD CONSTRUCTION LLC	\$97.96
1/25/2022 Utility Management	HARTFORD CONSTRUCTION LLC	\$124.61
1/25/2022 Utility Management	HARTFORD CONSTRUCTION LLC	\$454.73
1/25/2022 Utility Management	HARTFORD CONSTRUCTION LLC	\$141.75
1/25/2022 Utility Management	HARTFORD CONSTRUCTION LLC	\$134.39
1/25/2022 Utility Management	HARTFORD CONSTRUCTION LLC	\$134.39
1/25/2022 Utility Management	HARTFORD CONSTRUCTION LLC	\$36.16
1/25/2022 Utility Management	HARTFORD CONSTRUCTION LLC	\$173.39
1/25/2022 Utility Management	HARTFORD CONSTRUCTION LLC	\$134.27
1/25/2022 Utility Management	HARTFORD CONSTRUCTION LLC	\$142.48
1/25/2022 Utility Management	JARED/LILY WYN	\$51.36
1/25/2022 Utility Management	JUSTIN/STEPHANIE WALTMAN	\$215.53
1/25/2022 Utility Management	LUKE/TARYN PRICE	\$290.61
1/25/2022 Utility Management	MELISSA/JUSTIN KAMM	\$53.41
1/25/2022 Utility Management	MICHAEL PRESLEY	\$107.08
1/25/2022 Utility Management	MICHELLE OWENS	\$206.40
1/25/2022 Utility Management	MORINE FAMILY REVOCABLE TRUST	\$45.00
1/25/2022 Utility Management	RICHARD SEAWORTH	\$42.22
1/25/2022 Utility Management	SAGE HOMES LLC	\$104.47
1/25/2022 Utility Management	SAGE HOMES LLC	\$142.86
1/25/2022 Utility Management	SAGE HOMES LLC	\$247.47
1/25/2022 Utility Management	SCOTT/GRETCHEN GRUENBERGER	\$189.00
1/25/2022 Utility Management	SINGEWALD, TIM	\$286.66
1/25/2022 Utility Management	TYLER SEXTON/ELIZABETH KINNEY	\$39.78
1/31/2022 ALLSTATE	JAN PREMIUM	\$536.52
1/31/2022 BLACK HILLS ENERGY	TOWN UTILITY BILLS	\$4,577.07
1/31/2022 CENTURYLINK	PHONE SERVICE	\$1,567.52
1/31/2022 GALLEGOS SANITATION	TOILET SERVICE	\$1,612.05
1/31/2022 Jive Communications Inc	TOWN PHONE BILL	\$854.65
1/31/2022 PINNACOL ASSURANCE	2022 RENEWAL	\$5,926.00
1/31/2022 PITNEY BOWES INC.	POSTAGE METER REFILL	\$52.34
1/31/2022 POUDRE VALLEY REA	UTILITIES	\$4,922.97
1/31/2022 RISE BROADBAND	INTERNET	\$223.86
1/31/2022 TDS	INTERNET	\$477.75

1/31/2022 VERIZON WIRELESS	TOWN CELL PHONES	\$2,715.36
1/31/2022 XCEL ENERGY	UTILITIES	\$27,219.18
1/31/2022 US BANK, N.A. ATTN TFM REF 14878100	TOWN LOAN	\$732,161.62
1/31/2022 XCEL ENERGY	MAIN STREET/DOLA/DOWNTOWN LIGHTING	\$14,958.30
1/31/2022 COLORADO STATE TREASURER	2021 SUTA PAYMENT FOR FOURTH QUARTER 2021	\$2,827.38
1/31/2022 TOWN OF WELLINGTON	WATER GRANT	\$600.00



LARIMER COUNTY SHERIFF'S OFFICE

Justin E. Smith, Sheriff

One Agency

One Mission

Public Safety

February 16, 2021

Town of Wellington
Attn: Patti Garcia, Town Administrator
PO Box 127
Wellington, Colorado 80549

Dear Ms. Garcia:

The Law Enforcement Services Agreement for the Town of Wellington obligates the Larimer County Sheriff's Office to provide monthly reporting.

In meeting the contract, for the month of **January 2022**, the Larimer County Sheriff's Office maintained six deputies, one corporal, and one sergeant providing full-time law enforcement for the Town. In addition, one half-time investigator, one full-time desk deputy, and one full-time School Resource Officer assisted the town with law enforcement activities.

During the month of **January 2022**, non-assigned deputies spent a total of **100.49** hours in Wellington responding to calls, patrolling, and making contacts in the town.

During the month of **January 2022** there were **32.0** hours worked by Northern Colorado Drug Task Force.

Investigations – ongoing and active cases include:

- Sex Crime - 4
- Robbery – 1
- Fraud – 1
- Child Abuse – 1
- Vehicle Theft – 1
- Suspicious Circumstances – 1

Administration
2501 Midpoint Dr.
Fort Collins, CO 80525
970 498-5100

County Jail
2405 Midpoint Dr.
Fort Collins, CO 80525
970 498-5200

Emergency Services
1303 N. Shields
Fort Collins, CO 80524
970 498-5300

Of Note:

Last month, we noted that the Average Response Times for Low Priority Calls for Service in December was higher than usual and attributed it to some unusual calls for service that extended the average response time; however, we noted the response time was very similar for the month of January. In researching this issue, it appears that the way deputies are dispatched to calls and how they are entered as being on scene is skewing the data. For example, if a deputy is dispatched to a call and they handle the call via telephone, the CAD (Computer Aided Dispatch) system never shows them as being "on scene" and simply "en route." As a result, the response time is significantly increased as it never shows them "on scene," despite the fact that the deputy was actually handling the call, albeit by telephone. We are working on this issue to ensure the most accurate recording of our response times.

Deputies responded to a reported carjacking on Jackson Court where a male suspect and his female accomplice stole a woman's car at gunpoint. The vehicle was pursued by deputies but discontinued the pursuit for safety reasons as the stolen vehicle drove into the city limits of Fort Collins. After thousands of hours of investigative work, surveillance, and multi-agency cooperation, the stolen vehicle was recovered and both suspects were taken into custody.

Deputies engaged in a vehicle pursuit of a male suspect after he was behaving suspiciously at the Family Dollar. Pursuit Intervention Techniques (PIT) were successfully utilized to stop the suspect and an officer involved shooting occurred immediately thereafter. The suspect was treated for his injuries and later booked into the jail.

Pursuant to the Law Enforcement Agreement between the Town of Wellington and Larimer County, applicable documenting monthly forms are attached.

Thank you,

A handwritten signature in black ink, appearing to read "Joe Shellhammer".

Captain Joe Shellhammer
(970) 498-5103
Attachments



LARIMER COUNTY SHERRIFF'S OFFICE

Wellington Calls for Service and Patrol Time
(For Non-Wellington Officers)

Dispatch Dates Between 1/1/2022 and 1/31/2022

Excluded from this report -

Squads: Civilian, Parks, and Investigations

Units: 9ME, 9S27;9Z89;9E13;9E43;9E75;9E39;9E66;9E65;9E49;9E7;9X106*

Call Times by Month

	Call/Contact Time (Minutes/Hours)	Patrol Time (Minutes/Hours)	Totals
2022-01	4,368.97 72.82	1,660.28 27.67	6,029.25 100.49
Totals	4,368.97 72.82	1,660.28 27.67	6,029.25 100.49

Wellington Monthly Report

January 2022

Larimer County Sheriff's Office

Christine Harpel
Executive Assistant

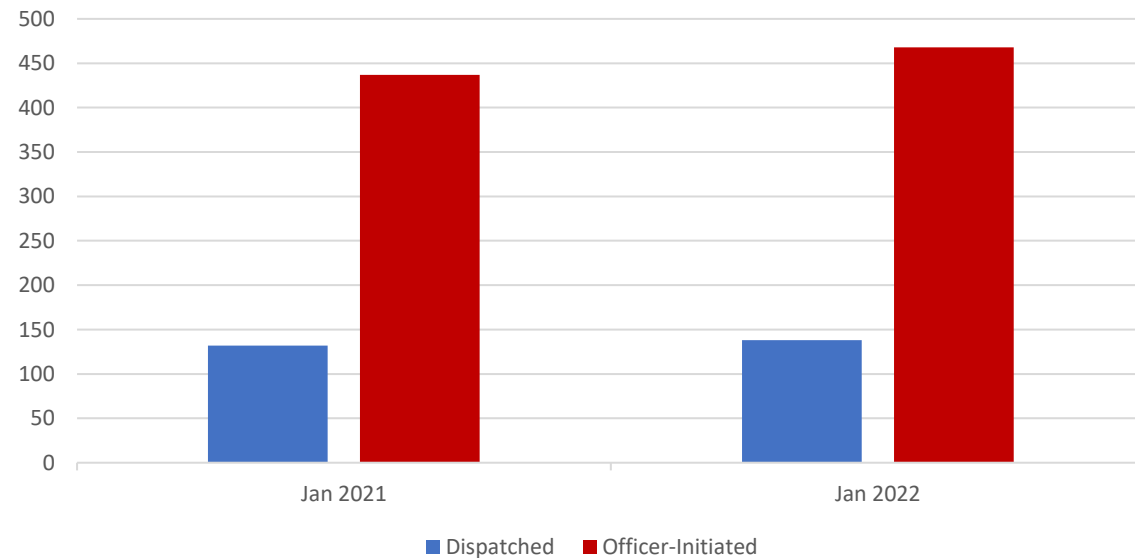
2/7/2022

January 2022 Totals

Dispatched / Officer-Initiated Activity

Dispatched Calls	138
Officer Initiated	468
Jan 2022 Total	606

Dispatched vs Officer-Initiated Activity



- Dispatched calls were Up 6 or 5% from January 2021
- Officer-Initiated Activity was Up 31 or 7% from January 2021

	Jan 2021	Jan 2022
Dispatched Calls	132	138
	23%	23%
Officer Initiated	437	468
	77%	77%
Total	569	606

- 23% were Dispatched Calls
- 77% was Officer-Initiated Activity

January 2022 Calls for Service

Calls for Service Comparison

Call Types A-M

Call Type	2019	2020	2021	Avg 19-21	2022	% Change 3-Yr Avg to 2022
9-1-1 Hangup	1	3	1	1.67	2	20%
Alarm Calls	10	5	13	9.33	7	-25%
Animal Calls	6	6	2	4.67	7	50%
Assault	1	1	0	0.67	2	200%
Assist Other Agency (Fire/Med)	17	8	9	11.33	9	-21%
Bar Checks	6	1	1	2.67	0	-100%
Burglary	0	1	1	0.67	0	-100%
Child abuse	0	1	1	0.67	1	50%
Citizen Assist	8	20	22	16.67	18	8%
Civil	14	10	11	11.67	14	20%
Criminal Mischief	0	2	4	2.00	3	50%
Disturbance	4	9	2	5.00	10	100%
Drug case	0	2	2	1.33	0	-100%
DUI Arrest	0	5	3	2.67	1	-63%
Extra Checks & Business Check	156	238	240	211.33	217	3%
Family Problems	4	9	4	5.67	11	94%
Fireworks complaint	0	2	1	1.00	1	0%
Follow up	34	30	37	33.67	42	25%
Found property	4	3	1	2.67	2	-25%
Fraud	4	6	17	9.00	7	-22%
Harassment	11	11	4	8.67	4	-54%
Juvenile Problem	6	1	5	4.00	0	-100%
Littering	0	1	0	0.33	0	-100%
Mental Health Call	1	0	1	0.67	3	350%
Missing Person (Child/Adult)	6	3	4	4.33	5	15%
Motor Vehicle Accident	1	4	3	2.67	8	200%

Call Types N-Z

Call Type	2019	2020	2021	Avg 19-21	2022	% Change 3-Yr Avg to 2022
Neighbor Problems	0	0	2	0.67	1	50%
Noise\Party Complaint	1	3	2	2.00	3	50%
Parks Incident	1	0	0	0.33	0	-100%
Pedestrian Contact/Subject St	13	4	8	8.33	9	8%
Private Tow	6	5	1	4.00	4	0%
REDDI Report	1	2	1	1.33	3	125%
Restraining Order Violation	2	3	3	2.67	4	50%
Safe 2 Tell	0	2	0	0.67	2	200%
School Check	13	5	8	8.67	21	142%
Sex Offense	3	2	0	1.67	1	-40%
Sex Offender Check	11	14	13	12.67	15	18%
Suicide Attempt	2	1	1	1.33	0	-100%
Suicide Threat	1	2	2	1.67	4	140%
Suspicious Circumstances	28	19	19	22.00	15	-32%
Theft	5	5	4	4.67	6	29%
Traffic Problem	18	7	9	11.33	10	-12%
Traffic Stop	150	138	83	123.67	102	-18%
Trespass	1	0	0	0.33	0	-100%
Vehicle Theft	1	4	0	1.67	0	-100%
Vehicle Trespass	0	1	3	1.33	2	50%
VIN Check	5	8	4	5.67	14	147%
Warrant Attempt/Arrest	15	7	4	8.67	7	-19%
Weapon Related (menacing)	0	1	0	0.33	0	-100%
Welfare Check	13	5	13	10.33	5	-52%
Unspecified	0	0	0	0.00	3	NC
TOTALS	584	620	569	591.00	605	2%

NC = Not Calculable. Cannot divide by 0.

Calls for Service UP 36 or 6% from January 2021

January 2022 calls UP 2% from January 2019-2021 Average

January 2022 Call Categories

Crime Type Averages / Trends

Property Crimes					
Call Type	2019	2020	2021	Avg 19-21	2022
Burglary	0	1	1	0.67	0
Theft	5	5	4	4.67	6
Vehicle Theft	1	4	0	1.67	0
Vehicle Trespass	0	1	3	1.33	2
Property Crimes Totals	6	11	8	8.33	8

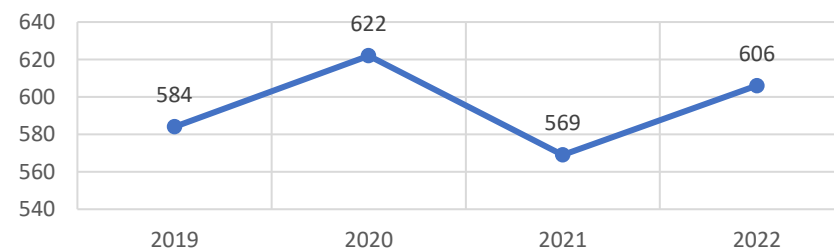
Persons Crimes					
Call Type	2019	2020	2021	Avg 19-21	2022
Assault	1	1	0	0.67	2
Missing Person (Child/Adult)	6	3	4	4.33	5
Robbery	0	1	0	0.33	1
Sex Offense	3	2	0	1.67	1
Weapon Related (menacing,	0	1	0	0.33	0
Persons Crimes Totals	10	8	4	7.33	9

Disorder/Other Crimes					
Call Type	2019	2020	2021	Avg 19-21	2022
Alcohol Calls	0	0	0	0.00	0
Animal Calls	6	6	2	4.67	7
Criminal Mischief	0	2	4	2.00	3
Disturbance	4	9	2	5.00	10
Drug case	0	2	2	1.33	0
Family Problems	4	9	4	5.67	11
Harassment	11	11	4	8.67	4
Juvenile Problem	6	1	5	4.00	0
Noise\Party Complaint	1	3	2	2.00	3
Suspicious Circumstances	28	19	19	22.00	15
Trespass	1	0	0	0.33	0
Disorder Crimes Totals	61	62	44	55.67	53

Red numbers indicate a DECREASE in crime from January 2021

Yellow backgrounds indicate an INCREASE in crime from January 2019-2021 Average

December 2019-2022 Totals



January 2022 Traffic

Traffic Citations	1/21	1/22
Traffic Citations Issued	9	9
Traffic Warnings	65	73

➤ Citations Issued No Change

➤ Warnings Up 8

Call Type	1/21	1/22
Traffic Stop	83	102
Motor Vehicle Accident	3	8
DUI Arrest	3	1
Traffic Problem	9	10
REDDI Report	1	3

➤ Traffic Stops Up 19 or 23%

➤ MV Accidents Up 5

➤ DUI Arrests Down 2

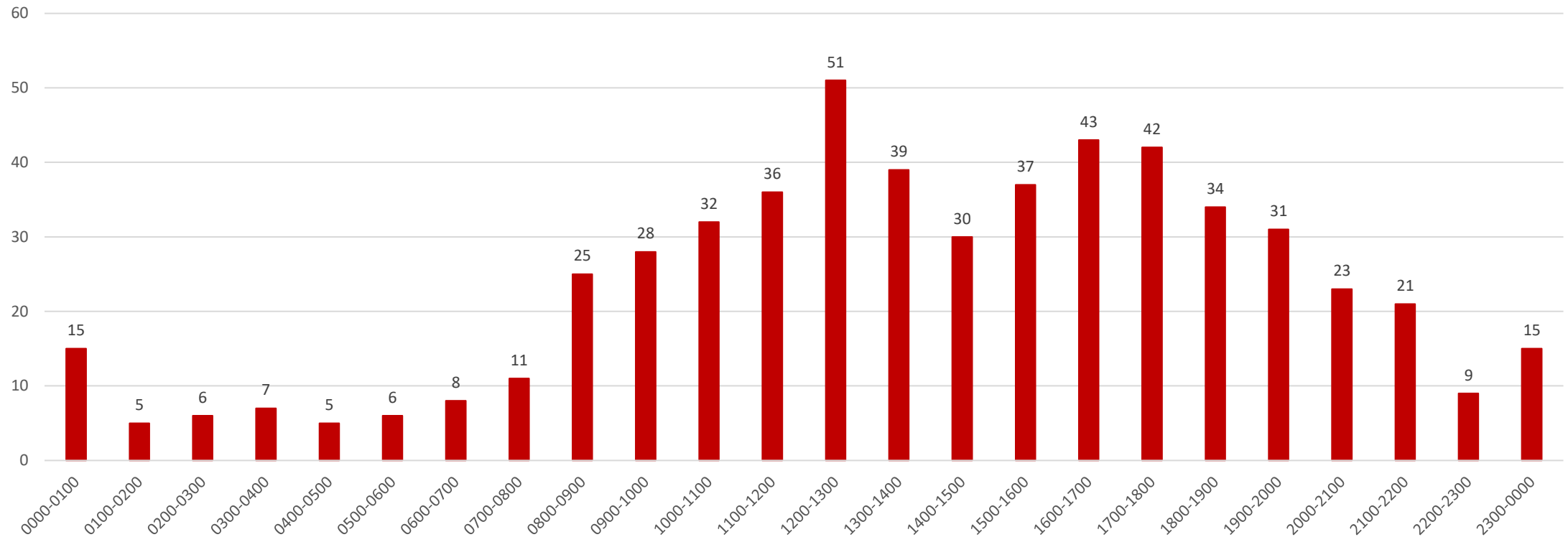
➤ Traffic Problems Up 1

➤ REDDI Reports Up 2

January 2022

Call Totals by Hour

Busiest Hours
1200-1300 (51)
1600-1700 (43)

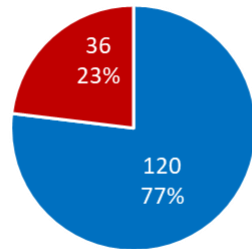


←→ 32 Calls between 0200-0700

January 2022

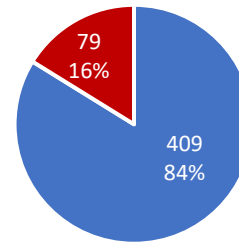
Wellington/Non-Wellington Units

Dispatched



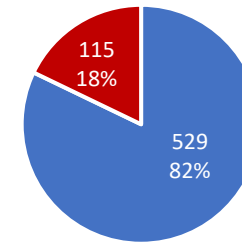
■ Wellington ■ Non-Wellington

Officer-Initiated



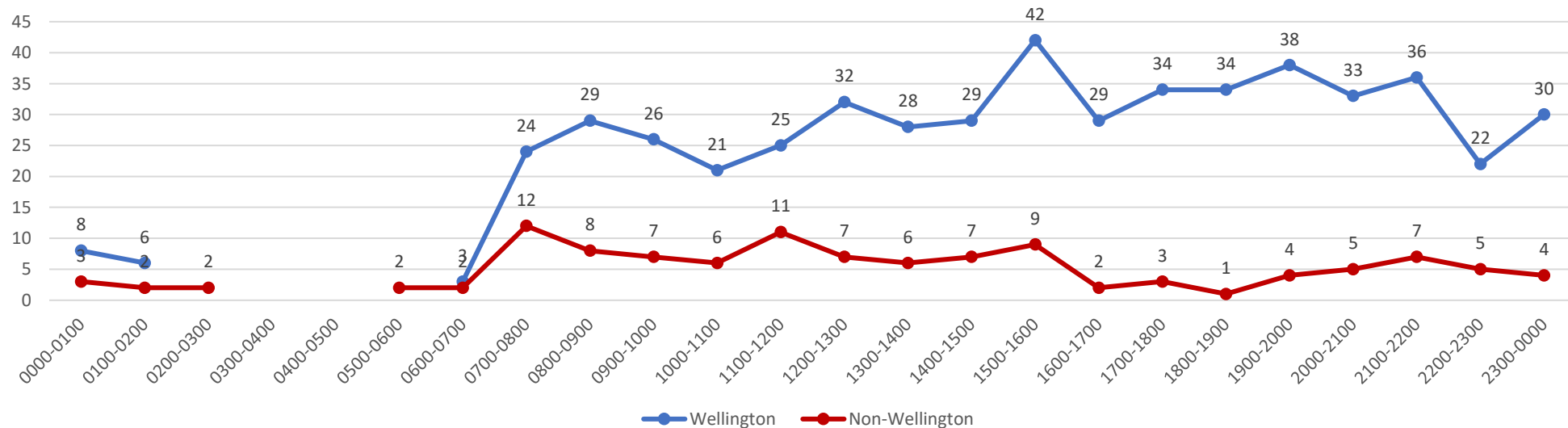
■ Wellington ■ Non-Wellington

Total Calls



■ Wellington ■ Non-Wellington

Wellington/Non-Wellington Calls by Hour



January 2022

Response Times / Time on Calls
Dispatched Calls Only
[All Times in Minutes](#)

Average Response Time (All Units)		
High		20.6
Medium		10.68
Low		40.47
Avg. Response Time		23.92

Average Time on Calls (All Wellington Calls)			
High			4.18
Medium			45.9
Low			45.60
Avg. Time			31.89