

Kyle - Wastewater Treatment Plant Expansion			
Leonhard Euler	Bernoulli Inc	10/16/2019 10:44 PM	donde estan los planes
		10/17/2019 1:18 PM	Plans are uploaded in the Docs section of CivCast.
GILBERT D. Cabeldue	T MORALES COMPANY	10/17/2019 11:51 AM	Please reference specification section 26 32 13-page 11 of 24, 2.2 A 1. a.b. Will you accept other manufactures for the standby generator sets? Please advise?
		10/17/2019 1:20 PM	Those listed are the only manufacturers the Owner and Engineer have approved for this project; no other manufacturers will be considered.
GILBERT D. Cabeldue	T MORALES COMPANY	10/17/2019 12:21 PM	Please reference specification section 26 29 23-page 10 of 21, 2.2,1. Will other manufactures be accepted, example, SqD, Eaton Cutler Hammer or GE? Please advise?
		10/17/2019 1:20 PM	Those listed are the only manufacturers the Owner and Engineer have approved for this project; no other manufacturers will be considered.
Tom Ellis	Ferguson WW Plant Div	10/17/2019 2:05 PM	Can you confirm this is not a Buy America or Texas Water Board project requiring all domestic material. Thanks
		10/18/2019 9:33 AM	This is not a Buy America or Texas Water Board project. All domestic material is not required.
GILBERT D. Cabeldue	T MORALES COMPANY	10/18/2019 3:07 PM	Please see section 00 32 00-page 1 of 1 "Bid Equipment and Components" form. See Diesel Engine Generator(26 32 13). Option is given for Caterpillar, Cummins and Kohler. Please revise to reflect only manufacture listed in specification and response to question #2. Please advise?
		10/30/2019 8:37 AM	All three manufacturers listed in Section 00 32 00 are approved to supply generators for this project.
George Tamez	T Gray Utility & Rehab Co.	10/18/2019 3:54 PM	sht 43 note 4, calls for interior protective coating in concrete structures; which spec section applies to protective coating requirements including phys properties, approved brands, thickness etc...
		10/21/2019 11:15 AM	The applicable specification is Section 09 90 00 (Painting), Article 4.2 (Paint Schedule), where the row "Precast Concrete and Cast-in-Place Concrete" indicates F and H codes are applicable to the ceilings and walls for the referenced structures in this section and on the drawings.
Dave Williams	Ferguson Waterworks	10/21/2019 3:26 PM	Ref Spec 33 05 33 - Will you allow MJ C153 Compact Fittings for sizes 30" - 48"? And Spec 33 05 53 - Will you allow MJ C153 Compact Fittings for all size ranges?
		10/22/2019 9:10 AM	MJ C153 compact fittings are allowable for all size ranges as part of Section 33 05 33.

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Dave Williams	Ferguson Waterworks	10/21/2019 3:28 PM	Ref Spec 40 05 07. 2.1 D. 1. Please verify if there is any lining required other than Cement Lining. The pipe schedule on plan page 21 doesn't list any pipe linings.
		10/22/2019 9:19 AM	Supply DIP and fittings with asphaltic liner per Article 2.1.D.1.a of Section 40 05 07.
Dave Williams	Ferguson Waterworks	10/21/2019 3:30 PM	Ref Plan Page 21 Buried Pipe Schedule Note #2. Please verify if a Wedge Action Restraint (Megalug type) will be acceptable for the required restrained joint on all buried fittings.
		10/22/2019 9:52 AM	Wedge-action components can be used to restrain buried fittings' joints.
Jim Horton	Ferguson Enterprises	10/22/2019 5:07 AM	Drawing 23, Enlarged yard piping plan - 2, is showing the 48" SS line going from the Influent Junction Box over to the Headworks structure. We do not see this " SS " line listed in the pipe schedule on drawing 21. Please clarify the type of pipe to provide for the SS line.
Jim Horton	Ferguson Enterprises	10/22/2019 5:08 AM	Is there a valve schedule for the project? We see a valve schedule referenced in several locations in the specifications.
		10/23/2019 7:27 AM	There is not a schedule for Section 40 05 23, Process Valves and Actuators.
Jim Horton	Ferguson Enterprises	10/22/2019 5:09 AM	Is there a pipe schedule for the exposed and interior piping?
		10/23/2019 7:28 AM	There is not a schedule for Division 40 piping specification sections.
Jim Horton	Ferguson Enterprises	10/22/2019 5:17 AM	Section - C on drawing 44 is showing the inlet wall pipe at the Headworks Structure. The wall pipe is drawn with a single vertical line at the connection point. Reading in the specifications section - 40 05 14, 2.2, A, Wall and Floor Pipe, 2, it states that the end connections shall be as shown on the drawings. The single vertical line shown in the section view does not indicate the type of joint to provide. Please review and clarify the type of pipe joint to provide for the wall pipe.
Jim Horton	Ferguson Enterprises	10/22/2019 5:27 AM	Looking at the wall and floor penetration details on drawing 132, we see penetrations for existing walls and slabs with pipe, C.I. wall sleeve and a cored hole with a link seal set. There is a wall penetration with a C. I. sleeve and link seal set for what appears to be for new walls. We have not found a detail for a wall pipe for new construction walls. Please review and provide a detail for new wall pipe.
		10/23/2019 8:12 AM	Wall and floor penetration details for new construction match those shown for existing walls and floors, but without the exterior non-shrink grout.

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Jim Horton	Ferguson Enterprises	10/22/2019 5:35 AM	Specification section - 40 05 14, 2.2, Wall and Floor Pipes and Pipe Sleeves, B, Pipe Sleeves, 1, states that pipe sleeves shall be ductile iron. We note the wall penetration detail on sheet 132, Wall Penetration Compressible Rubber Link Type, is indicating the sleeve can be C. I., steel or high impact thermoplastic materials. We do not find steel or the high impact thermoplastic material indicated in the specifications. Is the Century -Line HDPE wall sleeve acceptable for the project? Please review and clarify
		10/23/2019 8:13 AM	Century-Line HDPE wall sleeves are acceptable for this project.
Jim Horton	Ferguson Enterprises	10/22/2019 5:51 AM	The pipe schedule on drawing 21 is indicating that the buried ductile iron pipe is to be either pressure class 250 or 350 based upon the size. Reading in the specifications, section - 33 05 33 - 2, 2.1, A, we see that the ductile iron pipe is indicated to be either thickness class 51, 52 or 53 based upon the size. Please review and clarify the ductile iron rating to provide for the project.
		10/23/2019 8:14 AM	Supply DIP per Pressure Class 250 or 350, as applicable for pipe diameter.
Jim Horton	Ferguson Enterprises	10/22/2019 6:00 AM	Reading in specification section 33 05 33 - 4, 2.1, C, 3, Ball and socket joint pipe is described. Is there a particular process line or lines, in this project that requires this type of pipe? We do not see this indicated in the buried pipe schedule. Please review and clarify.
		10/23/2019 8:15 AM	Ball and socket joint pipe is not required for this project.
Jim Horton	Ferguson Enterprises	10/22/2019 6:16 AM	Drawing 43 is showing section - A, and the Influent Pump. Looking at the section view, it appears that there is a flange reducer connected to the pump discharge. Reading in the Influent Pump specification section - 43 21 22, 3.5 Pump Schedule we see that it indicates a minimum pipe connection size of 12". Please review and clarify the discharge piping for the four influent pumps.
		10/23/2019 8:52 AM	Should pump discharge elbow (supplied by pump manufacturer) vary from 12" diameter, reducer will be required. Otherwise, reducer shown will be a 12" spool piece for each pump.
Jim Horton	Ferguson Enterprises	10/22/2019 6:30 AM	Reading in specification section - 40 05 03 - 3, 2.2, A, 3, b, Submerged Service, it indicates that for bolts 1 2/4 inches in diameter and larger, bolt studs with a nut on each end are recommended. Please review and clarify the diameter of the bolt.
		10/23/2019 8:59 AM	Revise diameter reference to 1-3/4" (matching the diameter of nonsubmerged service bolts referenced in 2.2.A.3.a).
Jim Horton	Ferguson Enterprises	10/22/2019 6:37 AM	We do not see the SW pipe listed in the buried yard piping schedule on drawing 21. Please review and clarify.

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		10/23/2019 9:58 AM	<p>Information for SW piping, which includes flanged above-grade at Influent Lift Station (ISL) and buried pipe to Aeration Splitter Box (ASB), and buried from ASB to two existing package plants (PP):</p> <p>Pipe ID SW</p> <p>Designation Screened Wastewater</p> <p>Diameter (in) 12, 18, 24</p> <p>Material DIP PC 250/350</p> <p>Buried Joint PO</p> <p>Buried Fitting MJ</p> <p>Restrained Joint Length ISL to ASB segment, 25 ft (horizontal and vertical)</p> <p>Operating Pressure ISL to ASB segment, 25 psi; ASB to PP segment, 10 psi</p> <p>Test Pressure ISL to ASB segment 40 psi; ASB to PP segment 25 psi</p>
Jim Horton	Ferguson Enterprises	10/22/2019 9:12 AM	<p>Specification section - 40 05 23 - 7, 2.2, D - Plug Valves, lists one valve as eccentric, non-lubricated and having an 80 percent port opening. Then there is a second listing for a full port plug valve. We do not know where each type of valve is to be provided. Please review and clarify where 80 percent port valves are to be installed and where 100 percent port valves are to be installed.</p>
		10/23/2019 9:59 AM	Provide full-port (100% opening) plug valves in all applications.
Jim Horton	Ferguson Enterprises	10/22/2019 10:44 AM	<p>Do pipe going through concrete slabs on grade require a pipe sleeve? Can expansion joint material be used to wrap around the barrel of the pipe? We do not see a detail of a slab on grade pipe penetration. We see the details on drawing 132 for existing wall and slab sleeve but we assume those are meant for suspended concrete floors. Please review and clarify.</p>
		10/23/2019 10:16 AM	Piping through SOG requires DIP wall pipe with seep ring (matching detail for existing wall/slab closure, without non-shrink grout, and detail for underslab pipe encasement).
Jim Horton	Ferguson Enterprises	10/22/2019 10:54 AM	<p>Section - E on drawing 43 at the Headworks Structure is showing two 12" flanged gate valves. We looked in the specifications but did not find a paragraph describing flanged gate valves. Please review and provide a specification description for the flanged gate valves.</p>
		10/23/2019 10:19 AM	Provide two full-port plug valves instead of the gate valves.
Jim Horton	Ferguson Enterprises	10/22/2019 12:55 PM	<p>Looking at section - B on sheet 43, we see the 6" air release valve in the SW discharge header pipe. The air release valve is drawn as being a dual body type. Reading in specification section 40 05 23 - 11, 2.2, I, the description does not mention the valve being a dual body type. We do not see any mention of the air release valve having a flushing connection. Is a flushing connection needed for this sewage service valve? Please review and clarify this air release valve at this location.</p>
		10/24/2019 7:44 AM	Provide the ARV per Section 40 05 23. with flushing connection.

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Jim Horton	Ferguson Enterprises	10/22/2019 1:30 PM	Section - A on drawing - 43 is showing the vent pipe coming off of the top of the small air release valve on the combination air release valve assembly. The section is showing a 1/4" copper drain tube. We looked at a Val-Matic combination dual body air release valve and the outlet on the top of the small valve was indicated to be 1/2" size. Since the specifications do not specify a particular air release valve we are assuming which valve to provide. Is it your intention to reduce the vent outlet down to 1/4" as shown on the section view? Please review and clarify the size of the vent drain line to provide for these combination air release valves.
		10/24/2019 7:45 AM	Provide 1/2" vent drain line.
Jim Horton	Ferguson Enterprises	10/22/2019 2:52 PM	Looking in the pipe schedule on sheet 21, we see the line for DR - Drain piping. In the restrained joint length column, there are no distances indicated. Reading note # 2 below the schedule, it states to provide restrained joint fittings on all buried pipe. Are we to provide restraints only where there is a distance indicated in the schedule? Please review and clarify which lines are to be restrained.
		10/23/2019 1:21 PM	Drain piping does not require mechanical restraint in addition to fitting blocking. Only piping with a length in feet on the schedule requires restraint joints. Provide restraint on all joints within that distance, both before and after the fitting.
Tom Ellis	Ferguson WW Plant Div	10/22/2019 3:05 PM	Follow up to question 26, are we to follow the new joint restraint requirements issued by the City of Austin issued effective Oct 1, 2019 • WW-27A, Joint Restraint Devices for Ductile Iron Pipe (Revised existing SPL) • WW-27A-01, Joint Restraint Devices for MJ Bell Connections (New SPL) • WW-308C, Joint Restraint Devices for PVC Pipe (New SPL) -
		10/23/2019 1:22 PM	Use the requirements of this project.
Jim Horton	Ferguson Enterprises	10/22/2019 3:18 PM	We see the six mud valves in the bottom of the channels in the Headworks Structure. Looking at section - D on sheet - 45, we see four of the mud valves. There are no extension stems shown in this section view. Is it up to the mud valve supplier to design the extension stem and supports for the guides? We assume that there will have to be an opening in the grating to access the top of the extension stem for the center channel with the manual bar screen. We are looking at the distance from the slide gate over to the mud valve. Projecting that distance up to the operating level, it appears that that is in the edge of the automatic bar screen and compactor support beam. Please review and clarify the configuration of the mud valve extensions.

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		10/24/2019 7:56 AM	Mud valves are to be provided with operating stems that terminate in operator nuts, with their tops flush with operating floor elevation (concrete or grating). Location will be dimensioned so stem is in center of space between screen channel gate and press pad. One additional mud valve will be added to drain the bypass channel.
Jim Horton	Ferguson Enterprises	10/22/2019 3:35 PM	Drawing - 41 is showing the channel level of the Headworks structure. We see key note # 2, which is a 6" flanged rubber duckbill check valve in the Influent Wetwell No- 1. We searched through the specifications but did not find a specification section describing a rubber duckbill check valve. Please review and provide a paragraph describing the ductbill check valve required for the project.
		10/24/2019 8:13 AM	Provide Tideflex Series 35 flanged check valve, with EPDM body, and Type 304 stainless steel Class 150 flange and mounting hardware.
Jim Horton	Ferguson Enterprises	10/22/2019 3:49 PM	Drawing 42 is showing a 4" NPW water line coming into the building and extending along the east wall of the Operating floor level at the Headworks Structure. We do not know what pipe material to provide for this pipe. There is no indication on the plan sheet and we do not have a pipe schedule to find the pipe material. Is the pipe to be flanged ductile iron or is it to be schedule 80 PVC pipe? Please review and clarify the NPW pipe in the Headworks building.
		10/24/2019 8:19 AM	Provide Schedule 80 PVC pipe for the NPW piping in the Headworks, including the 4" header, two 2" screen/compactor feeds, and smaller-diameter connections as required by the screening and compactor equipment supplied.
Jim Horton	Ferguson Enterprises	10/22/2019 3:55 PM	Drawing 42 is showing a 4" NPW water line coming into the building and extending along the east wall of the Operating floor level at the Headworks Structure. We do not see any elevation indication for this line. Looking at section - C cut through this area does not show the NPW water line. Please review and clarify the elevation of the 2" and 4" NPW water lines.
		10/24/2019 8:21 AM	Install 2" and 4" NPW lines at centerline elevation 615.5.
Jim Horton	Ferguson Enterprises	10/22/2019 4:15 PM	Drawing 42 at the Headworks Building is showing NPW, HB - hose bibbs out side along the west side of the upper exterior floor slab. There are also two NPW, hose bibbs shown inside the east wall of the Headworks Building. There is no indication as to what size hose bibbs to provide. We did not find a detail showing the installation for hose bibbs. We did find hose bibbs described in the Plumbing specification for Domestic Water Piping Specialties, section - 22 11 19 - 3, 2.6. It indicates the supply sizes can be either 1/2" or 3/4" with a 1/2" garden hose thread outlet. It also includes a vacuum breaker which would apply to a potable water service line. But this is a NPW water service line. Please review and clarify the hose bibbs to provide inside the building.
		10/24/2019 8:36 AM	Provide 3/4" hose bibs, 30 ft of 3/4" hose, and aluminum hose rack at both locations inside headworks. Vacuum breakers are not required.

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Jim Horton	Ferguson Enterprises	10/22/2019 4:18 PM	Drawing 42 at the Headworks Building is showing NPW, HB - hose bibbs out side along the west side of the upper exterior floor slab. Since these are outside of the building should these be yard hydrants rather than hose bibbs? Please review and clarify the exterior hose bibbs.
		10/24/2019 8:39 AM	Provide yard hydrants instead of hose bibbs in the two locations on the west edge of the lift station's concrete slab.
Jim Horton	Ferguson Enterprises	10/23/2019 8:14 AM	Drawing 42 is showing (8) guard posts at the Headworks Building. Key note # 17 states they are to be per standard detail. We have looked through the plans and have not been able to find a detail of the guard post installation. Please provide a detail.
		10/23/2019 1:03 PM	Sheet 133 shows guard post requirements.
Jeff Scott	Archer Western Construction	10/23/2019 8:19 AM	Can a door schedule be added for the Aeration Blower Building? These doors are mentioned in the Metal Building spec, but the Metal Building suppliers will not supply personnel or overhead doors.
		10/24/2019 8:59 AM	Provide two single and one double exterior hollow-metal person doors (per Section 08 11 13, Article 2.4), one interior hollow-metal person door (per Section 08 11 13, Article 2.3), and one rollup door (per Section 08 33 23), as dimensioned on Sheets 62 and 64.
Brandon Ballengee	PLW Waterworks, LLC	10/23/2019 8:41 AM	Is a 1- or 2-year maintenance bond required for this project? 5.4.4 of the GC's references a maintenance bond but does not indicate whether a maintenance bond is required or not and does not specify duration.*
		10/30/2019 9:16 AM	General Contractor to provide a 1-year maintenance bond.
Brandon Ballengee	PLW Waterworks, LLC	10/23/2019 8:42 AM	Please confirm surety may use their own bid bond form as none is provided in the bidding documents.*
		10/23/2019 12:54 PM	Use of a form that conforms with State Law for municipal public works projects is acceptable.
Brandon Ballengee	PLW Waterworks, LLC	10/23/2019 8:42 AM	Article 5 of the Supplemental Conditions lists the only required insurance as being Auto, WC/Employers Liability and Commercial General Liability. Is Builder's Risk/Property Insurance not required? Is Owner purchasing Builder's Risk/Property Insurance?*
		10/30/2019 9:18 AM	General Contractor to provide Builder's Risk/Property Insurance.
Brandon Ballengee	PLW Waterworks, LLC	10/23/2019 8:42 AM	Please provide actual physical address or exact coordinates of project site for insurance and bonding purposes. Our insurance carrier is unable to model coverage without this information. *
		10/23/2019 1:34 PM	Address: 941 New Bridge Drive, Kyle TX 78640
Brandon Ballengee	PLW Waterworks, LLC	10/23/2019 8:43 AM	Please confirm there is no MWBE goal on this project*
		10/23/2019 12:55 PM	No MWBE goal is required on this project.

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Brandon Ballengee	PLW Waterworks, LLC	10/23/2019 8:43 AM	When is RFI cut off date?*
		10/24/2019 9:00 AM	Date will be defined at prebid meeting.
Jim Horton	Ferguson Enterprises	10/23/2019 9:01 AM	Drawing 58 is showing the Aeration Splitter Box. We see the callout for an 12" OF - overflow pipe in the plan view. We do not see this OF pipe in any of the section views. There is no indication of the elevation for the top of the OF pipe. Is the OF pipe to be a plain end piece of pipe? Is the pipe to have a flanged flare fitting at the top? Please review and provide a section view of the pipe.
		10/24/2019 9:11 AM	Provide vertical overflow pipe with plain end located at elevation 623.0.
Jim Horton	Ferguson Enterprises	10/23/2019 9:21 AM	Drawing 58 is showing the Aeration Splitter Box. We see the hose babb up on the upper deck level. We see the callout for a buried 2" NPW water line coming up to the structure. Does the 2" NPW pipe extend up to the upper deck level? What size hose babb is needed at this location.
		10/24/2019 9:15 AM	Schedule 80 PVC 2" NPW line extends vertically along splitter box wall exterior to service 3/4" hose babb, to be supplied with 20' of hose and aluminum hose rack.
Jeff Scott	Archer Western Construction	10/23/2019 9:26 AM	Drawing 13 appears to show new security fence around the entire perimeter of the site. There also appears to be existing fence along the top (NW) of the site, and there is a call out stating "Security Fence (Ex. Fence to Remain)". Is there actually new fence at the top of the site, or are we connecting new fence to the existing at the left and right limits? If we are installing new fence, does it go right against the existing fence?
		10/24/2019 9:32 AM	The existing residential wood fence is to remain, with the new security fence installed paralleling it, and minimum spacing between the two as required to install the new fence.
Jim Horton	Ferguson Enterprises	10/23/2019 9:26 AM	Drawing 51 is showing the Aeration Basin. We see the two hose babb up on the walkway deck level. We see the callout for a buried 2" NPW water line coming up to the structure on the left side of the layout. Does the 2" NPW pipe extend to the right side or east end of the walkway at the second hose babb? What size hose babb is needed at this location?
		10/29/2019 8:45 AM	Both hose bibbs on the walkway deck are tied into the buried 2" NPW on the west end of the structure. Provide 1" PVC Schedule 80 NPW piping between the two bibbs (each 3/4" size, with 30' of 3/4" hose, on aluminum or Type 304 stainless steel hose rack). Secure 1" piping on concrete with pipe clamps.
Jeff Scott	Archer Western Construction	10/23/2019 9:33 AM	Can a detail/elevation be provided for the automatic slide gate shown on sheet 13?
		10/30/2019 9:39 AM	For both slide gates indicated on Sheet 13, a single cantilevered sliding gate detail will be issued in Addendum 1.

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Jim Horton	Ferguson Enterprises	10/23/2019 9:56 AM	Aeration Basin Influent Pipe : Drawing - 53 is showing the enlarged area of the west end of the Aeration Basin. The plan view layout is showing the 18" SW pipe connecting to the influent chamber with a flanged 90 degree bend fitting. This 90 bend fitting would have to be a flange by MJ 90 bend. Then looking at the section view of this influent chamber in section - A on drawing - 54, we see the 18" SW pipe turning up and extending to the Aeration Basin influent chamber with a MJ 90 degree bend fitting and a short piece of pipe which connects to the wall pipe. Which layout are we to use? Please review and clarify which layout is correct.
		10/29/2019 8:52 AM	Install aeration basin influent piping per Section A on Sheet 54 with MJ fittings and pipe.
Brandon Ballengee	PLW Waterworks, LLC	10/23/2019 10:02 AM	00 48 00 Notice of Award indicates that Awarded Contractor must execute the agreement and furnish required bonds and certificates of insurance within 10 calendar days of receipt. However, Article 2, Section 1 of 00 70 00 states that, "Within five (5) Working Days after written notification of award of Contract, CONTRACTOR shall deliver to OWNER signed Agreement, Bond(s), Insurance Certificate(s) and other documentation required for execution of Contract". Please clarify the expectation. *
		10/23/2019 12:57 PM	Use Section 00 48 00 referenced duration of 10 days.
Robert Larrabee	R Bruce Consulting	10/23/2019 10:17 AM	Could Val-Matic Plug Valves be approved for this project?
		10/29/2019 8:59 AM	Val-Matic plug valves are not an approved equal to manufacturers listed in Section 40 05 23.
Brandon Dalton	CC Lynch & Associates, Inc.	10/23/2019 10:45 AM	Spec section 41 33 34 - Sampler Equipment- 1.2.A Indicates that the influent sampler will be located in a Class 1 Div 2 area. Note that the specified samplers are not rated for hazardous areas. 1.2.A Indicates that the effluent sampler shall be installed in a weather enclosure suitable for outdoor installation. I don't see a spec for an enclosure. Is the Plasti-Fab Model 4B acceptable. 1.3.D Names the Isco 3710FR. This model has been discontinued and replaced by the Isco 5800. Please confirm that this model is acceptable. 2.3.A Requires two 5.5-gallon bottles. Is the intent to use a single bottle and have a second bottle as a spare or do you want the sampler to use a 2-bottle configuration with both bottles installed at the same time?
		10/29/2019 9:01 AM	Provide sampler suitable for classified area. Plasti-Fab Model 4B is acceptable, as is Isco 5800, with second bottle as a spare.
Jeff Scott	Archer Western Construction	10/23/2019 10:51 AM	Sheet 20 - Can a schedule be provided stating the types of plants and shrubs required and a quantity for each? Can a spec be provided for the grass and drivable pavers? Is any permanent irrigation required for this area?

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		10/29/2019 9:19 AM	Any plant fitting generic description (such as "drought-tolerant grass") will be suitable, with number of minimum plantings shown on Sheet 20. Distribution of plant type to be determined by landscaper. Provide GeoPave aggregate porous paver system, with 4" minimum base depth, or similar system with high-strength polyethylene grid suitable for fire truck accesss. No permanent irrigation system is required.
Jim Horton	Ferguson Enterprises	10/23/2019 11:00 AM	The RAS pipe in the Aeration Basin is shown in section - B on drawing 55, as having a flange 45 deg. bend fitting with a flange by PE - plain end. We do not know of any one that makes a cast flange by plain end 45 degree fitting. Is it your intention to have a ductile iron grooved end 45 degree bend fitting with a grooved flange adapter on the side that connects to the flanged plug valve? This would essentially provide the plain end. Would a standard flanged 45 degree bend fitting be acceptable at this location? Please review and clarify.
		10/29/2019 9:23 AM	Provide standard 45-degree flanged fitting (FLxFL) for each RAS discharge.
GILBERT D. Cabeldue	T MORALES COMPANY	10/23/2019 1:29 PM	Will you please consider a bid date extension? Can we discuss at prebid Please advise?
		10/24/2019 9:00 AM	Extension will be discussed at prebid meeting.
Jim Horton	Ferguson Enterprises	10/23/2019 3:09 PM	We are looking at the ALP piping on the Aeration Basins. We notice the pipe appears to be drawn with some flanged joints at the 90 bends and tee fittings. We see the butterfly valves in the air header that extends down the basins that appear to have flanged connections. Reading through the Carbon Steel Process Piping section - 40 05 05, Part - 2, C, Joints, it has welded, threaded or grooved types. There is no mention of flanged joints. There is no description of the type of flanges to provide in the piping. It is your intention to have grooved type couplings in the pipe joints and flange adapters at any valves? Please review and clarify the fabricated steel air piping system.
		10/29/2019 9:46 AM	Flanges at ALP bend and tee fittings are not required, and can be welded. Standard flanges are required at valves, flow meter inserts, expansion couplings, and dropleg materials transition.
Jim Horton	Ferguson Enterprises	10/23/2019 4:14 PM	The ALP air piping on the Aeration Basin is showing what appears to be wafer style butterfly valves. Reading in specification section 40 05 23, 2.2, B, Butterfly valves there are two paragraphs. B. 1 - describes an AWWA C504, cast iron body, metal seated valve. The manufacturer reference in subparagraph j, lists M H Valve Co. and a style 1450. This is a flanged body valve. The other paragraph - 2 , is for an AWWA C504, cast iron body valve with a resilient seat. Which one of these valve did you intend to be used in the ALP air piping system? Please review and clarify.
		10/29/2019 9:49 AM	Provide flanged butterfly valves for the ALP system.

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Jim Horton	Ferguson Enterprises	10/24/2019 6:59 AM	Reading through specification section - 40 05 05 Carbon Steel Process Piping, we do not find a reference for the type of bolts and nuts to be provided. Are the ASTM A 307, Grade B bolts and nuts referenced in section 40 05 03 - Process Piping Basic Requirements acceptable for the ALP system?
		10/29/2019 9:54 AM	Provide Type 316 stainless steel nuts and bolts for the ALP system.
Jim Horton	Ferguson Enterprises	10/24/2019 7:17 AM	Reading in the butterfly valve specification paragraph - 40 05 23 - 5, 2.2, B, 2, I, we see that lever operators are mentioned. There is no indication as to what size valves that lever operators can be provided. Please review and clarify what size valves can have lever operators.
		10/29/2019 9:56 AM	Provide level operators on butterfly valves 4" diameter and less.
Brandon Ballengee	PLW Waterworks, LLC	10/24/2019 3:59 PM	On Sheet 94 in the PLAN Drawing, Key Note 4, is for a SST Slide Gate. Specification Section 40 05 24 Slide, Sluice, and Weir Gates doesn't show this in the schedule. Is this Slide Gate to be in accordance with 40 05 24? Please Advise.*
		10/29/2019 10:04 AM	Provide nominal 18" by 12" plate with handle so slide gate can be manually pulled out completely from guides. Compliance with Section 40 05 24 requirements is not required.
Brandon Ballengee	PLW Waterworks, LLC	10/24/2019 4:00 PM	Sheet 91 shows 3 Aerobic Digester Blowers, M-9-1, M-9-2, M-9-3; however, Specification Section 44 52 56 Aerobic Digesters Positive Displacement Blowers indicates a number of 4, per 44 52 56.4.3.A. Please Advise.*
		10/27/2019 12:10 PM	Provide three Aerobic Digester Blowers.
Brandon Ballengee	PLW Waterworks, LLC	10/24/2019 4:00 PM	Specification Section 43 21 55 Non-Potable Water Centrifugal Pumps, as shown in Specification Section 00 32 00 Bid Equipment and Components, appears to be missing from the documents. Please provide missing Specification.*

VERTICAL MULTI-STAGE CENTRIFUGAL PUMPS

A. Provide in accordance with Section 43 21 00 "Pumps Basic Requirements".

Pumps. Vertical multi-stage booster pumps shall be constructed with Type 304 stainless steel bodies and supplied with built-in thrust bearings.

Pump Volute shall be Type 304 stainless steel with ANSI flanges.
Impeller shall be 3D Laser welded AISI Type stainless steel.
Shaft shall be Type 304 stainless steel.

Mechanical seal shall be a sleeve of Type 316L with spring clips of Type 304 stainless steel.

Piping and Valves. Pumps shall be interconnected with 4 inch (102 mm) Type 304 stainless steel suction and discharge headers, check valves (one per pump), and butterfly isolation valves (two per pump).

Isolation valves shall be Type 304 stainless steel ball valves.
Check valves shall be Type 316 stainless steel, non-slam, with EPDM seal.

Brandon Ballengee	PLW Waterworks, LLC	10/24/2019 4:00 PM	With regard to 00 40 00 Statement of Bidder's Experience, Attachments G- Current Projects and Attachment H- 5 years of worth of completed Projects: Given the volume of projects requested, can bidder use their own current and completed project listings in a different format, as long as they contain the required elements of the City's forms for Attachments G H?*
		10/27/2019 12:11 PM	Use of bidder's forms is acceptable to define Bidder's Experience.
Brandon Ballengee	PLW Waterworks, LLC	10/24/2019 4:01 PM	With regard to the twelve comparable projects required by owner. In order to demonstrate best similar, comparable projects based on the criteria provided there may be overlap with one project being the best illustration for more than one experience category. Is this acceptable? *
		10/27/2019 12:12 PM	Yes, this type of project experience overlap is acceptable.

Kyle - Wastewater Treatment Plant Expansion			
Jim Horton	Ferguson Enterprises	10/24/2019 4:02 PM	In a couple of the responses regarding NPW hose bibbs on the Headworks and the Aeration Basin Splitter Box, they have indicated that the hose racks are to be aluminum. The hose rack detail on drawing 131 is showing it to be made with some grade of stainless steel. Are some racks to be aluminum and some to be stainless steel? Please review and clarify the hose rack materials.
		10/27/2019 12:18 PM	Aluminum or Type 304 stainless steel hose racks are acceptable. Supply hose racks made of one material and install throughout the WWTP.
Jim Horton	Ferguson Enterprises	10/25/2019 6:46 AM	Drawing 53 is showing the influent area of the Aeration Basin. We see the 12" RAS line coming into the basin and extending across to the left side into basin 1B. We see that the line is showing a blind flange at the last tee fitting. Then there is a wall pipe with blind flanges for future expansion. Looking at the P ID layout on sheet - I-0304, we see that a plug valve is shown at this location and the pipe extends over to the wall pipe. Please review and clarify if the plug valve and spool piece of pipe is to be provided.
		10/29/2019 10:29 AM	Install piping as per P&ID on Sheet 146, with 12" plug valve and spool piece between tee and wall pipe at south end of basin. Do not supply two 12" blind flanges shown inside basin, but do provide blind flange indicated on wall pipe outside of basin.
Jim Horton	Ferguson Enterprises	10/25/2019 7:33 AM	Drawing 62 is showing the Blower Building and the air pipe going through the metal building walls. We see the wall penetrations but there is no reference for a detail of the pipe penetration. The wall penetration details on drawing - 132 appear to be for concrete walls. Please review and clarify the wall penetration detail for the metal building walls.
		10/29/2019 10:54 AM	For each ALP wall penetration in the Blower Building, provide a circular cutout in the metal wall panels, backed by a rectangular 1" thick minimum of high-temperature cladded insulation mounted on the inside of the wall and adjacent to the pipe exterior to seal all peripheral gaps.
Jeff Scott	Archer Western Construction	10/25/2019 8:19 AM	Looking through the LV Switchboard spec section 26 24 13 it states that GE, ASO, SQ'D, and Siemens are the approved manufacturers. If ESS Metron quotes the LV Switchboards using a circuit breaker from one of the manufacturers listed are we OK to quote and supply the LV Switchboards?
		10/30/2019 9:33 AM	Per Section 26 24 13, Article 1.3 B: Obtain enclosed switches and circuit breakers, overcurrent protective devices, components, and accessories, within same product category, from single source and single manufacturer. Accordingly, it is not acceptable to quote various overcurrent part manufacturers for the switchboard.

Kyle - Wastewater Treatment Plant Expansion			
Jim Horton	Ferguson Enterprises	10/25/2019 8:36 AM	Reading in specification section - 40 05 14 - 4, 2.3, D, Coatings, 1, it states that steel items shall be hot dipped galvanized at the factory unless otherwise noted on the drawings. Looking at the riser bracket detail on sheet - 132, it indicates in note 1, that the steel shall be hot dipped galvanized. Then looking at the blower pipe support detail, it has a callout for this post support to be shop primed and painted. Looking on sheet 131, in the maximum unsupported pipe span schedule, in note - 6, it states that miscellaneous metal fabrications shall be welded construction, 304 stainless steel, unless noted otherwise. We are not sure which finish or materials to use for the supports on the project. Please review and clarify what materials and finish to provide for the different locations or service areas.
		10/29/2019 11:18 AM	For the fabricated ALP pipe supports and cradles inside and outside the Blower Building and on the aeration basins (per Sheet 50), provide hot dipped galvanized components.
Jeff Scott	Archer Western Construction	10/25/2019 8:38 AM	Where can the spec for the automatic slide gate operators be found?
		10/29/2019 11:24 AM	Supply gate actuators per Section 40 05 23, Process Valves and Actuators, Article 2.3.
Jim Horton	Ferguson Enterprises	10/25/2019 9:43 AM	Does the hose bibb inside the Blower Building require a hose rack and hose? Ref. drawing - 62.
		10/27/2019 12:24 PM	Provide rack and hose (20' length minimum).
Robert Larrabee	R Bruce Consulting	10/25/2019 9:51 AM	Could Val-Matic Check Valves be approved for this project?
		10/29/2019 11:26 AM	Val-Matic check valves are not an approved equal to manufacturers listed in Section 40 05 23.
Jim Horton	Ferguson Enterprises	10/25/2019 10:35 AM	Looking at the 24" ML lines coming out of the Clarifier Splitter Box going to Clarifiers no -1 2, it appears that the yard fitting layout needs to be adjusted. The ML line going to Clarifier No - 2 needs to have a MJ 45 bend at the end of the pipe that is coming down from the flanged 45 bend at the wall. This fitting is needed to bring the line back to a level orientation. Is it your intention for the contractors to add whatever pipe or fittings to the project to make the piping work out? Do you need to add the fitting to the drawing? Please review and clarify .
		10/29/2019 11:33 AM	Provide four additional 45-degree bends on Sheets 68 and 69 for the vertical-to-horizontal transition of the 24" ML lines at the Clarifier Splitter Box.

Kyle - Wastewater Treatment Plant Expansion			
Jim Horton	Ferguson Enterprises	10/25/2019 10:48 AM	Drawing - 68 is showing the Clarifier Splitter Box. Looking on the left side of the structure we see the ML lines extending out for the two future clarifiers. We see the callout for the MJ plugs to be installed at the end of the pipe. The section - C on sheet - 69, cut across these pipe does not show the ends of the pipe. Is it your intention for the ends of the slanting flanged pipe connecting to the flange 45 bend fittings that are connected to the wall pipe, to have a "cap " on the end of them? Should we provide a MJ 45 degree bend fitting on the ends of the pipe and then provide MJ "plugs" in the outlet of the 45 MJ bends? Please review and clarify the piping configuration.
		10/29/2019 11:36 AM	Per answer to Question 74 above, add fitting so both 24" ML lines to be extended in the future are horizontal, and plug those lines' ends.
Jim Horton	Ferguson Enterprises	10/25/2019 11:02 AM	Drawing 119 is showing the typical pressure relief valve details for wall and floors. We have looked on the plans but have not seen these hydrostatic pressure relief valves indicated on any of the structures. Please review and clarify if these valve are required for the project.
		10/29/2019 11:50 AM	These stuctures require pressure relief valves: For each secondary clarifier, install 6 PRVs in the walls (spaced about 36'-8" on center equally around the walls). For the post-aeration basin, install 4 PRVs in the walls (2 along the north wall and 2 along the south wall, at the third points of each wall).
David Kenley	MGC	10/25/2019 12:54 PM	What are the flows in the existing 30" ss influent line? Where is the nearest existing upstream manhole?
David Kenley	MGC	10/25/2019 12:56 PM	Sheet 119, Detail 1: Are mud slabs required? Is select fill being placed then a mud mat?
		10/30/2019 9:27 AM	Per Detail 1 on Sheet 119, mudmats/sealslabs are only required if the excavation depth exceeds 6'-6".
David Kenley	MGC	10/25/2019 12:56 PM	Please confirm 4500 psi concrete is required for the structures.
		10/29/2019 11:41 AM	Provide 4500 psi concrete for all treatment process structures.

Kyle - Wastewater Treatment Plant Expansion			
Jim Horton	Ferguson Enterprises	10/25/2019 2:19 PM	Drawing 68 and 69 are showing the two 10" telescoping valves in the RAS / WAS wetwell. We see that they are drawn having electrical motor actuators. Looking on sheet I - 0306, we see the two valves but there is no indication of any feed back signals. Section - 40 05 23, 2.2, F, does not include a description for the operators. Reading in section - 2.3, Operators, B, Electrical, it describes open / close operators and modulating operators. The section describes limit switches in the motor. There is no mention of the motor operator support stand. We see section - 2.4, D, Floor Stands, which describes a 304 stainless steel, manual crank operated, non-rising type. There is no mention of having an electric motor mounted on the floor stand. Please review and clarify the telescoping valve motor operator and controls.
		10/30/2019 10:22 AM	Telescoping valves shown on Sheets 68, 69, and 148 shall be operated using open-close electric actuators (fitted with horizontal handwheel) which are mounted on vertical floor stands. Provide local controls for these two electric actuators. There are no interlocks with the actuators to the control system.
David Kenley	MGC	10/25/2019 2:49 PM	Please provide a concrete coating schedule by structure for interior and exterior coating requirements. The spec implies that all concrete structures are to be coated.
David Kenley	MGC	10/25/2019 3:08 PM	Sheet 119 has a detail for pressure relief valves but we do not see them indicated on any structures. Please indicate if and where they are required.
		10/29/2019 11:54 AM	See answer to Question 73.
Jim Horton	Ferguson Enterprises	10/25/2019 3:28 PM	Drawing 69 is showing the section B view through the RAS / WAS pump station. We see the 4" WAS pump discharge header and the callout for a " 4" cleanout". We are assuming that is meant to be a 4" quick disconnect, pump out connection. We searched the specification division - 40 and did not find a mention of a cam-lock type quick disconnect fitting. We do not know what material the quick connect coupling is to be made. Please review and clarify the material of construction for this pump out connection.
		10/30/2019 10:42 AM	Provide Type 316 stainless steel 4" cam-lock type quick disconnect fitting with dust cap for the item on Sheet 69, Section B called out as "cleanout".
Brandon Ballengee	PLW Waterworks, LLC	10/28/2019 9:01 AM	Item number 5 of 00 41 00 Bidder's Safety Experience states that, "The Bidder acknowledges the requirements for Safety Training (listed in Section 00 41 00) must be met before any work commences on the project". Please clarify which specific trainings are required, or is this in reference to the competent persons?*
		10/31/2019 9:33 AM	The bidder must acknowledge they have a safety coordinator who has completed the 30-hour OSHA construction safety training program noted in the general conditions.

Kyle - Wastewater Treatment Plant Expansion			
Jeff Scott	Archer Western Construction	10/28/2019 10:10 AM	Can sizing be added for the 24" ALP structural supports shown on sheet 55, section C?
		10/30/2019 10:51 AM	ALP supports' component size and connection requirements on Sheet 55 are the same as those indicated on Sheet 50, Section 3.
Jim Horton	Ferguson Enterprises	10/28/2019 12:10 PM	The drawing number - 83 is showing the skid mounted NPW pumps. The drawing does not indicate the sizes of the inlet pipe and the discharge pipe. We looked in the specifications but did not find a section for this booster pump skid. Please review and clarify the NPW booster pump equipment.
		10/29/2019 11:52 AM	See answer to Question 60.
Jim Horton	Ferguson Enterprises	10/28/2019 3:19 PM	Drawing - 90 is showing the four 10" telescoping decant valves in the Aerobic Digesters. There is no callout or indication as to what elevation the telescoping valves are to be installed. The section view - B on drawing 92 shows the 8" overflow pipe and not the 10" telescoping decant valve. We do not know how long to provide the 10" riser pipe. Please review and provide the installation information necessary for these valves.
		10/30/2019 11:00 AM	Provide four 10" telescoping valves in the Aerobic Digesters with a range of travel between Elevation 617.5 and Elevation 613.5.
Jim Horton	Ferguson Enterprises	10/28/2019 3:31 PM	Reading in specification section - 40 05 23 - 9, 2.2, F, Telescoping valves, paragraph 1, d, indicates that the floor pedestal shall be of type 60601-T6 aluminum and shall be designed for center or offset mounting as shown on the drawings. Reading in section - 2.4, Accessories, D, Floor Stands, it indicates that floor stands shall be type 304 stainless steel. Looking at the plan view layout on drawing - 91, it appears that the telescoping valves are mounted off of the concrete walkway and on a separate mounting bracket, bolted to the wall. The specification paragraph does not mention a mounting bracket for the floor stand. Are they to have a crank operator or a handwheel operator? Please review and clarify the configuration that is required for these telescoping valves.
		10/30/2019 11:08 AM	Provide aluminum floor stand pedestals and wall-mounted brackets that support electrical actuators with horizontal handwheel operator for each of the four 10" telescoping valves in the Aerobic Digesters.
Jim Horton	Ferguson Enterprises	10/29/2019 6:49 AM	Reading in the specifications for butterfly valves, we find section 40 05 23 - 6, 2.2, B, Butterfly valves, 3, Anti-cavitation trim. The paragraph states where indicated in the valve schedule shall include a stainless steel air distribution ring. The project does not have a valve schedule. Please review and clarify if any of the butterfly valves in the project will require this anti-cavitation trim.
		10/30/2019 11:57 AM	No butterfly valves on this project require anti-cavitation trim.

Kyle - Wastewater Treatment Plant Expansion			
Jim Horton	Ferguson Enterprises	10/29/2019 7:15 AM	The Aerobic Digester is showing the 2" NPW water lines on the upper level extending to the hose bibb stations. We see key note # 2, which indicates to mount the 2" pipe on the handrail. We did not find a detail of this mounting configuration. Is it your intention to use U-bolts to mount the 2" pipe to the hand rail posts? Do you want "unistrut" to be fastened to the hand railing and the pipe mounted on the "unistrut" with pipe clamps? Please review and clarify how the pipe is to be mounted on the hand railing.
		10/30/2019 12:26 PM	For three north-south 2" PVC NPW runs, mount pipe with galvanized strap-clamp supports (Grinnel 262 or equal) to side of concrete walkway. Provide supports on 6-ft centers. For vertical NPW pipe segments, secure to handrail with U-bolts.
Jeff Scott	Archer Western Construction	10/29/2019 8:50 AM	Can the doors at the Tertiary Treatment Facility be added to the door schedule?
		10/30/2019 12:37 PM	Provide two single exterior hollow-metal person doors (per Section 08 11 13, Article 2.4), both 3'-10" wide and 8'-0" tall.
Brandon Dalton	CC Lynch & Associates, Inc.	10/29/2019 9:25 AM	Please specify a model sampler for spec section 41 33 34. I don't believe that a hazardous area rated sampler is available from Isco, Hach , or E+H. At one time Isco, QCEC, Sonford and possibly others used a hazardous area rated refrigerator that was manufactured by a third party. That refrigerator was discontinued several years ago and to my knowledge there no commercially available refrigerated composite samplers that are rated for a hazardous area.
Jim Horton	Ferguson Enterprises	10/29/2019 9:41 AM	We have not seen a response to question no - 10, regarding the 48" SS pipe going to the Headworks Structure. This question also applies to the new 30" pipe coming into the new Influent Junction Box. Please clarify.
		10/30/2019 12:38 PM	Details will be provided when finalized.
Jim Horton	Ferguson Enterprises	10/29/2019 9:47 AM	Drawing 23 is showing the new 42" SS Bunton Creek Interceptor line to be installed by others. This line is connecting to the stub out in the Influent Junction Box. We need to know what pipe is being installed. We are assuming that this pipe is not restrained joint type. Are we to just stub out a push on joint bell end piece of pipe with a push on joint plug? Is it up to the other contractor to adapt to the pipe end that this project provides? Please clarify.
		10/30/2019 12:39 PM	Details will be provided when finalized.
Jim Horton	Ferguson Enterprises	10/29/2019 11:12 AM	Reading in specification section - 33 05 13, Manholes and Inlets, in paragraph 2.1, I, Frames and Covers, it indicates that the covers shall have "SANITARY SEWER " OR "STORM SEWER" on them. Looking at the details for the Influent Junction Box on sheet - 31, we see the top level plan. In the plan view we notice that the manhole cover has " KYLE SEWER" on it. Please review and clarify if the project manhole ring covers require a special name in the casting.
		10/30/2019 12:43 PM	Standard manhole cover designations listed in Section 33 05 13 are applicable for this project.

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Q. Cho	Altermann Electric	10/29/2019 11:45 AM	Drawing E-9001 detail ED-16 shows 2-¾" 316 SS All-Thread Rod support for 4' LED fixtures. Each ¾" SS All-thread rod is rated for 2700 lbs., could this have been a typo and ¼" was intended for 4' LED Fixtures that weigh between 12-22 lbs. Please review advise.
		10/31/2019 9:35 AM	For support of the LED fixtures, use of 1/4" stainless steel all-thread is acceptable.
Q. Cho	Altermann Electric	10/29/2019 11:48 AM	Specification 26 28 16 3.2 A - requires disconnect switches to be installed at locations shown on the Drawings and as required for device connections and code compliance. However, there is only 2 disconnects shown on the one-line diagrams (E-1100, Sheet 4 and E-5001, Sheet 3). No other disconnects are not shown on the drawings. Please review and advise if these 2 are the only disconnects to be installed for the project.
		10/31/2019 9:39 AM	As part of this design there are only two disconnects, as referenced in the question.
Vanessa Sarmiento	Green Orange Construction Professionals, LLC	10/29/2019 12:33 PM	Can you please clarify where on the plans it is shown the limits of excavation and shoring?
		10/31/2019 4:03 PM	<p>In accordance with Texas Health and Safety Code Chapter 756, Subchapter C, Section 756.023.(a).(4), the City of Kyle has provided a separate pay item for trench excavation safety protection. As required in Texas Health and Safety Code Chapter 756, Subchapter C, Section 756.023.(b), the pay item for trench protection is provided per linear foot and the pay item for special shoring is provided per square foot. These bid items are required by State Law, described in Paragraph 6.11 of the General Conditions, and provided on the Bid Form in the required unit price basis. The OWNER and ENGINEER will make no determination of the limits of any excavations which may be subject to the trench safety or shoring requirements. The general conditions in paragraph 6.11.2 requires the CONTRACTOR to determine when the various types of trench safety and shoring are required. Where trench safety and shoring is required and provided, the actual quantity shall be measured and paid at the unit price bid.</p> <p>The quantities provided on the Bid Form are estimates per Paragraph 11.6.1 of the General Conditions and are not guaranteed.</p>

Kyle - Wastewater Treatment Plant Expansion			
Jim Horton	Ferguson Enterprises	10/29/2019 3:01 PM	<p>Looking at the yard valve detail on sheet - 116, we see the valve boxes are drawn showing adjustable screw type. In the notes the first point indicates that in unpaved areas the valve boxes are to be telescoping type box and in the paved areas the boxes are to be adjustable screw type. The valve boxes shown are including a base, center section and then an adjustable screw top section. Then in the last point of the notes we notice that it states that valve box shall be 6" diameter ductile iron. We are not sure where the ductile iron pipe is to be used. We know it cannot be used with a screw type valve box. Would the pipe be used in unpaved areas where the valve would be buried at a very deep elevation? Do you have a detail that shows a valve box with a 6" ductile iron extension pipe? Please review and clarify the use of the ductile iron extension pipe.</p>
		10/30/2019 1:27 PM	In addition to ductile iron, 6" valve boxes can be cast iron or Polyiron.
Jim Horton	Ferguson Enterprises	10/29/2019 3:21 PM	<p>Reading in specification section - 33 05 33 - 3, 2.1, C, Joints, 2, Flanged, it states that flanged joints shall not be used in underground installations except where specified or shown on the plans. Looking on drawing - 58, at the Aeration Basin Splitter Box, we see the two 18" SW pipe coming out from the structure. The plan is showing two tee fittings and there is a callout at one of the tee fittings that states, " 18" BF (TYP OF 2)". Then there is a 24" x 18", reducing fitting connected to the branch of the tee. Is it your intention for these buried fittings to be flanged at this location. Please review and clarify the piping at this location.</p>
		10/30/2019 1:02 PM	Follow Section 33 05 33 regarding buried MJ joints, which are to be installed around Aeration Basin Splitter Box. Instead of the two 18" blind flanges indicated, provide two 18" restrained plugs.
David Kenley	MGC	10/29/2019 3:54 PM	Please provide sign-in sheet to the MANDATORY PRE-BID MEETING.
		10/30/2019 8:33 AM	Sheet has been posted under the Docs tab.
David Kenley	MGC	10/29/2019 3:54 PM	Would it be possible to get the CAD file for the grading and civil work?
		10/30/2019 8:34 AM	No electronic files will be issued prior to the project award.
David Kenley	MGC	10/29/2019 3:56 PM	Based on the responses we have received from subcontractors and suppliers, please consider pushing the bid date to a later date.
		10/30/2019 8:41 AM	Owner has been informed.
David Kenley	MGC	10/29/2019 3:59 PM	Will the questions being asked on Civcast be answered in a future addendum to make them part of the contract documents? or are the answers here on Civcast considered part of the contract documents?
		10/30/2019 8:43 AM	Addendum will be issued next week to make exchanges part of contract.

Kyle - Wastewater Treatment Plant Expansion			
Rod Lunkwitz	Archer Western Construction	10/29/2019 4:22 PM	General Conditions Article 13 states that the Owner will provide the Quality Control testing. Specification section 03 30 00 paragraph 3.5A states that we are to provide the concrete quality control testing. Who provided the quality control testing on this project?
		10/30/2019 9:13 AM	Concrete quality control testing shall be conducted according to Section 03 30 00.
Rod Lunkwitz	Archer Western Construction	10/30/2019 7:30 AM	Section 00 20 00 Scope of Bids Item #4 calls for \$8,000 of Office Furniture. Bid form has \$18,000 inserted into this bid item.
		10/30/2019 8:45 AM	Use Bid Form allowance of \$18,000.
James Good	RLC Controls	10/30/2019 7:38 AM	Can you please consider extending the bid date for this project an additional two weeks. This additional time will allow us to provide more competitive bid? Please advise?
		10/30/2019 8:46 AM	Owner has been informed.
Miguel Vera	HRM Env Austin	10/30/2019 8:14 AM	Combustible sensor (section 44 52 52, para. 2.4). The only reference I found discussing this sensor is section 40 75 05, para. 2.7 (the spec instead called for sect 40 91 06). We need confirmation that the blower spec is indeed referencing this sensor.
Miguel Vera	HRM Env Austin	10/30/2019 8:14 AM	Section 44 52 52. We would also like to confirm the ventilation system in the blower rooms are designed to reject at least 18 kW of heat per blower. Please also confirm it is acceptable to have a stand-alone chiller unit installed separately from the blower unit (but still inside the blower room) to provide cooling to the blower as necessary. The chiller unit will be powered from the blower unit, so no additional wiring or control is required from the plant.
		10/31/2019 9:46 AM	Blower Building ventilation system is suitable for removing 18kW of heat, and stand-alone chiller unit is acceptable.
Miguel Vera	HRM Env Austin	10/30/2019 8:23 AM	SECTION 44 12 05. 2.1.A.3 Frame design is specific for a single supplier. Other named suppliers utilize separate L-shaped guide tracks. Please confirm that this frame design is allowed.
		10/30/2019 9:11 AM	Separate L-shaped guide tracks are acceptable.
Miguel Vera	HRM Env Austin	10/30/2019 8:25 AM	SECTION 44 12 05. 2.1.A.5 Requesting that screen bars also allowed bars that are trapezoidal shaped 8 mm wide by 40 mm deep, from Type 304 stainless steel.
		10/30/2019 9:10 AM	Type 304 stainless steel trapezoidal bars 8mm by 40mm are acceptable.
Miguel Vera	HRM Env Austin	10/30/2019 8:27 AM	Section 44 12 05 2.1.A.7 Screen Dead plate. Please indicate the reasoning for having the dead plate be removable. It is not a wear item and dead plates are typically welded to the screen side frames to provide a rigid structure. Vulcan has been designing and manufacturing heavy-duty bar screens for over 40 years and we have never replaced a dead plate in a screen.

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		10/30/2019 1:09 PM	Screen dead plate can be stationary or removable.
Miguel Vera	HRM Env Austin	10/30/2019 8:30 AM	SECTION 44 12 05. 2.1.A.13 Please consider changing the material fro the take-up screw from zinc plated steel to 304 SS. We would not recommend the use of zinc plated steel in that highly corrosive environment.
		10/30/2019 1:10 PM	Provide take-up screw constructed of Type 304 stainless steel.
Miguel Vera	HRM Env Austin	10/30/2019 8:47 AM	<p>Section 44 12 05 2.1.B.2 Compactor capacity is listed at 140 ft³/hr.</p> <p>Per WEF MOP 8, a bar screen utilizing 1/4" clear bar spacing will generate between 20 and 25 cu.ft. of screenings / million gallons of flow. So, for a specified peak flow of 9 MGD the estimated maximum screenings volume will be approx. 9.38 cu.ft./hr.</p> <p>Based on the above guidelines we request a revision to this value.</p> <p>Typically for a plant of this size, we will be proposing our washing compactor (5.0 HP motor) that has a capacity of up to 99 cu.ft./hr. in continuous operating mode. Which represents a safety factor of 10 based on the MOP 8 max screenings volume.</p>
		10/30/2019 1:11 PM	Noted.
David Kenley	MGC	10/30/2019 8:59 AM	Please provide a cross section for the bioswale.
		10/30/2019 1:06 PM	Sheet 114 has bioswale sections and details.
Jake Blount	Alterman	10/30/2019 9:19 AM	This project is important to us and we need more time to produce an accurate bid. Please extend the bid due date so that we have enough time to review the forthcoming addendums, and coordinate our scope with scopes of our vendors and subcontractors. Thank you.
		10/31/2019 9:47 AM	Timeframe extended per Addendum 1.
Jeff Scott	Archer Western Construction	10/30/2019 10:21 AM	The window schedule is showing window "TA" being located at the Tertiary Building. The elevations of this building don't show windows, and there are no marks identifying windows. Are there any windows required at this structure, or is the window "TA" located elsewhere on the project?
		10/31/2019 9:57 AM	Delete TA designation on Sheet 128, as the Tertiary Building does not have windows.
Jim Horton	Ferguson Enterprises	10/30/2019 10:39 AM	Looking on drawing - 90 showing the piping layout at the Aerobic Digesters, we notice a 8" SEP pipe shown coming down and connecting to the 8" WAS header pipe. This line is to the left of the 4" WAS pipe. Looking on the yard piping drawing - 26, this pipe does not appear. Please review and clarify this 8" SEP line.
		10/31/2019 10:41 AM	On Sheet 90, delete the 8" SEP piping and tee interconnected with the 8" WAS header.

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Jim Horton	Ferguson Enterprises	10/30/2019 11:01 AM	<p>Looking on drawing - 90, we see the 8" DS line coming out from the digester structure and connecting to an 8" DS header pipe. We see two locations where the DS line extends out to the north. There are two 8" plug valves at the MJ tee fittings where the line is shown going out to the north. Then looking on the yard piping sheet - 26 of this area, we see one pipe stubbed out to the north, between Aerobic Digesters No - 3 & 4. The line does not appear to go anywhere. Please review and clarify the piping configuration for this DS piping and where it should extend.</p>
		10/31/2019 11:03 AM	<p>On Sheet 90, cap the east 8" DS line with a restrained plug. For the west 8" DS line shown on Sheet 90 and Sheet 26, extend the line to the dashed area reserved for dewatering equipment (Coded Note 5). Terminate this 8" DS line with a buried plug valve and flange 12" above grade. Sheet 26 will be reissued in Addendum 2.</p>
Jim Horton	Ferguson Enterprises	10/30/2019 12:52 PM	<p>Looking at the existing package treatment plant No - 1, we see a new 8" WAS line coming out of the existing tank where key note # 5 is located. This is approximately in the four o'clock position on the tank. We see the new WAS line curving around the outside of the tank wall. The callout for the elevation of the line is INV. 602.25. Looking at the grading plan for this area the existing grade elevation is approximately 605.50'. The pipe schedule indicates that buried WAS pipe is to be ductile iron pipe. The line is drawn similar to the 18" influent pipe that curves around the outside of the tank wall. This influent line is above grade and is indicated to be fabricated steel pipe. We were wondering if you were intending for the buried WAS line to curve around the tank with a buried fabricated steel pipe. Please review and clarify the new 8" WAS line at the package treatment plant.</p>
Jim Horton	Ferguson Enterprises	10/30/2019 1:02 PM	<p>Looking at the existing treatment plant No - 1, we see the key note # 1, that indicates to cut the existing vertical 18" ductile iron pipe, thread on a new flange, reinstall a flanged tee fitting at C/L elev. 612.75'. We are assuming that the existing flanged tee fitting is part of the existing influent piping on the tank. There does not appear to be a section view showing this vertical pipe. We do not know the elevations of the top 18" flanged 90 bend fitting going into the tank nor the top of the concrete wall. Please review and clarify the new piping by providing a section view.</p>

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Jim Horton	Ferguson Enterprises	10/30/2019 1:08 PM	<p>Looking at the existing treatment plant No -1 , we see key note # 1, which indicates to cut the existing vertical 18" ductile iron pipe and thread on a new flange. Reading over the information provided, we do not know how long the vertical influent pipe measures. We do not know the type of pipe joint at the lower end of the pipe or if it is above ground or below ground. Is it your intention to have this vertical piece of pipe disconnected and sent to a pipe fabrication shop to have the new flange threaded onto the end of the pipe? We do not believe that this can be accomplished in the field. We could cut the pipe and provide a flange adapter coupling. Please review and clarify the modifications to this existing pipe.</p>
Jim Horton	Ferguson Enterprises	10/30/2019 1:15 PM	<p>Looking at the existing package treatment plant No - 1, we see the new 18" influent pipe curving around the outside of the tank wall. This line extends from the six o'clock position around to the right to about the 1 o'clock position. This line has the key note # 3 designation in several locations.</p> <p>The note indicates to transition from ductile iron pipe to welded steel pipe. We are not sure in the pipe that turns up and into the tank, at the 1 o'clock position, is to be fabricated steel or if it is to be ductile iron pipe. The influent pipe at the 6 o'clock position is to be ductile iron. Please review and clarify this influent pipe.</p>
Brett Keckler	Archer Western	10/30/2019 1:25 PM	<p>On Sheet 41 note 7 indicates a 12" Intermediate Bracing Wall. On Sheet 33 it shows that as being a 1'6" wall. Which is correct, and could you provide a cross section?</p>
Jeff Scott	Archer Western Construction	10/30/2019 1:38 PM	Are fire extinguishers required at the Operations Building?
Jeff Scott	Archer Western Construction	10/30/2019 3:19 PM	Is there a reason why the Q/A expiration date was changed from 11/7 to 11/1? This is 2 weeks before the bid date, and doesn't give our subs/suppliers adequate time to review all of the documents for potential questions.
Jim Horton	Ferguson Enterprises	10/30/2019 3:59 PM	Looking at drawing - 24, showing the two 8" drain lines coming out of the Aeration Basins to the 16" drain line, we do not see any valves in these lines. Drawings 51 and 52 also do not show valves in the drain lines. Please review and clarify.
Jim Horton	Ferguson Enterprises	10/30/2019 4:15 PM	Looking at drawing - 24, we see the two 8" drain lines coming out of the Clarifiers to the 16" drain line. We do not see any valves in these lines. Please review and clarify.

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James Mansfield	Pump Solutions Inc.	10/30/2019 4:28 PM	<p>Please add "Motor Controls, Inc." to Section 43 21 55 and Section 00 32 00 - Bid Equipment and Components in Addendum 1 as a named mfg.</p> <p>Motor Controls, Inc. (MCI) has been thoroughly vetted by City of Kyle and recently witnessed other installations around Texas and is currently supplying two (2) very large booster packages for projects for City of Kyle.</p> <p>Please confirm the hydro-pneumatic tank size in the spec. Also, if this is a hydro-pneumatic tank requiring a site glass, air compressor, and air compressor controls or if this is a bladder tank.</p>
Miguel Vera	HRM Env Austin	10/30/2019 7:22 PM	<p>Section 46 43 21. 1.02 – Manufacture's representative shall provide a maximum of one (1) trip with a total of 3 days on site.</p> <p>Please confirm that its one trip for the two clarifiers combined. If the clarifiers are expected to start up at different times, two (2) trips would be required.</p>
Miguel Vera	HRM Env Austin	10/30/2019 7:25 PM	<p>Section 46 43 21. 2.02: ..."the turn table assembly shall be so designed that the balls and strip liners (if used) may be removed without removing the access bridge."</p> <p>It is requested to remove "without removing access bridge" from the specifications.</p> <p>Our drives have a time tested design, that have lasted 20+ years in the field, and do not need regular maintenance requiring the walkway to be raised. Other reasons we don't recommend a split gear design which allows the balls and strip liner to be removed without removing the access bridge are as follows:</p> <p>SAFETY – Main gear halves can weigh as much as 300 lbs each. These gear halves must be lifted vertically over the bearing balls and then pulled sideways towards the workers removing them. All of this is accomplished while working on scaffolding below the walkway.</p> <p>ALIGNMENT - Assuming that the gear can be successfully removed and is now on the side of the tank the workers should be able to remove the old bearing strips and install new bearing strip halves. The workers will also be able to reach inside the base and with some effort be able to remove and replace the worn strips. The difficulty lies in the replacement of the strip liner halves for the main gear. They will be installed outside the tank. Each half will be replaced and reinstalled over the bearing balls and the gear assembly bolts will be replaced. There is no way to guarantee that the strip liners which are now not visible for inspection are aligned vertically or horizontally. Wherever there is a misalignment between the two strip liners there will be a wear point for the bearing balls.</p>

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Miguel Vera	HRM Env Austin	10/30/2019 7:26 PM	Section 46 43 21. 2.08-B A 3-footwide walkway, with aluminum grating... please confirm that aluminum grating for walkway and platform is per section 05 53 00 – 2.06 – E: Pressure Locked, Aluminum I-Bar Grating. Pressure locked grating is significantly higher in price then standard (non-pressure locked) I-Bar grating
Jim Horton	Ferguson Enterprises	10/31/2019 7:41 AM	Looking on sheet - 94 at the Vactor Truck Unloading Station, we see the SST slide gate in the drain trench. The gate is drawn being installed on the inside face of the trench wall. The key note # 4, is indicating to have the hand slide gate installed in the 8" wall with embedded channels. We are wondering how the 8" drain pipe is to connect to the trench drain if the slide gate is in the wall. What type of wall pipe or sleeve should be provided that will allow for the slide gate in the wall. Please review and clarify the 8" drain line connection.
Mike Panter	MGC Contractors, Inc	10/31/2019 8:26 AM	Please clarify bid item #10 - 26,000sf of excavation shoring. How this to be paid is not defined in the section 00-20-00. For this to be a bid item we would ask for the structures and excavation limits to be shown on the drawings.
		10/31/2019 4:04 PM	In accordance with Texas Health and Safety Code Chapter 756, Subchapter C, Section 756.023.(a).(4), the City of Kyle has provided a separate pay item for trench excavation safety protection. As required in Texas Health and Safety Code Chapter 756, Subchapter C, Section 756.023.(b), the pay item for trench protection is provided per linear foot and the pay item for special shoring is provided per square foot. These bid items are required by State Law, described in Paragraph 6.11 of the General Conditions, and provided on the Bid Form in the required unit price basis. The OWNER and ENGINEER will make no determination of the limits of any excavations which may be subject to the trench safety or shoring requirements. The general conditions in paragraph 6.11.2 requires the CONTRACTOR to determine when the various types of trench safety and shoring are required. Where trench safety and shoring is required and provided, the actual quantity shall be measured and paid at the unit price bid. The quantities provided on the Bid Form are estimates per Paragraph 11.6.1 of the General Conditions and are not guaranteed.
Mike Panter	MGC Contractors, Inc	10/31/2019 8:29 AM	Reference drawing 27. Please provide additional details for the new connections and work to be done in existing lift stations 1 -2? Will the existing coatings need to be replaced or patched at new connections?
		11/01/2019 9:39 AM	Install new piping and abandon existing piping per Sheet 23, and patch and repair interior/exterior concrete and coatings as necessary to accomplish this work. See Sheets 144 and 165 for instrumentation and electrical modifications.
Beverly Grgis	RR Contracting, LLC	10/31/2019 9:30 AM	Please provide grade elevations for paving (Inner and outer road), sidewalks, granite walk at the Bioswale, etc.

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Jeff Scott	Archer Western Construction	10/31/2019 10:35 AM	Detail 1 on sheet 120 shows perimeter insulation under the floor slab. Is this required for any of the structures on this project?
Jim Horton	Ferguson Enterprises	10/31/2019 12:33 PM	Drawings - 22 and 23 are showing the 8" SS pipe extending from the manhole north of the Operations Building, east to the Influent Junction Box. Looking in the buried yard pipe schedule we do not find a listing for SS service pipe. We see in the specifications sections describing SDR 35 PVC sewer pipe and also a section for ductile iron sewer pipe. Please review and clarify which pipe material is to be provided for the SS line.
Jason Ford	Prime Controls	10/31/2019 12:56 PM	Neither the specs or drawings provide the type of fiber (single mode or multimode). Please advise.
		11/01/2019 9:16 AM	Multimode FOC is acceptable granted it meets the 1GBps throughput requirement for each segment.
Jim Horton	Ferguson Enterprises	10/31/2019 1:10 PM	Drawings 21 and 22 are showing the 3" W and 2" W lines coming from the north west corner of the site over to the new backflow preventer. We do not find the W service pipe line listed in the buried pipe schedule. The specifications division - 33 - Utilities, does not include a section for water service pipe materials. The division - 40 - Process Integration also does not have a section for water service materials. We do not know if it is to be copper pipe, HDPE pipe, schedule 40 PVC or schedule 80 PVC pipe. Please review and clarify the W water line in the yard piping.
		11/01/2019 9:22 AM	Provide Schedule 80 PVC for all potable water pipes and fittings (W) shown as yard piping on Sheets 21 and 22.
Jim Horton	Ferguson Enterprises	10/31/2019 2:47 PM	Reading in the pipe schedule on drawing - 21, we see the listing for NPW, Non-Potable Water line, and the pipe material to be PVC / C900 / DR14. Looking in the project specifications, we do not find a section describing this pipe material and fittings to be provided. The pipe schedule indicates that the pipe shall be restrained sixty feet from a fitting. Please review and clarify this pipe materials and type of restraints to be provided.
		11/01/2019 10:27 AM	Provide Schedule 80 PVC for all NPW pipes and fittings shown on yard piping sheets. Bell or screwed ends are acceptable, with fittings restrained accordingly for operating and test pressure requirements.
Vanessa Sarmiento	Green Orange Construction Professionals, LLC	10/31/2019 2:59 PM	Can you please clarify where on the plans it is shown the limits of excavation and shoring

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		10/31/2019 4:04 PM	<p>In accordance with Texas Health and Safety Code Chapter 756, Subchapter C, Section 756.023.(a).(4), the City of Kyle has provided a separate pay item for trench excavation safety protection. As required in Texas Health and Safety Code Chapter 756, Subchapter C, Section 756.023.(b), the pay item for trench protection is provided per linear foot and the pay item for special shoring is provided per square foot. These bid items are required by State Law, described in Paragraph 6.11 of the General Conditions, and provided on the Bid Form in the required unit price basis. The OWNER and ENGINEER will make no determination of the limits of any excavations which may be subject to the trench safety or shoring requirements. The general conditions in paragraph 6.11.2 requires the CONTRACTOR to determine when the various types of trench safety and shoring are required. Where trench safety and shoring is required and provided, the actual quantity shall be measured and paid at the unit price bid.</p> <p>The quantities provided on the Bid Form are estimates per Paragraph 11.6.1 of the General Conditions and are not guaranteed.</p>
Jennifer Warren	Seguin Fabricators, Misc Metals Fabricator	10/31/2019 3:20 PM	Since the bid date changed to 12/3/19, will the deadline to ask questions change as well? Addenda 1 still says the deadline is 11/1/2019.
		11/01/2019 9:25 AM	Addendum 1 states the questions deadline as 11/1/2019 correctly.
Beverly Girgis	RR Contracting, LLC	10/31/2019 3:57 PM	Please provide proposed grades along the earth berms.
		11/01/2019 9:27 AM	Sheet 113 shows required grades for earth berms.
Joey Justice	Environmental Improvements	10/31/2019 4:26 PM	Please clarify if the UV system is required to meet the 5-log poliovirus effluent requirement. Should the system be required to meet this requirement, please confirm the required NWRI dose.
Q. Cho	Altermann Electric	10/31/2019 4:37 PM	Sheet E-1038, Sheet 1 DB 11 and DB 12 shows inconsistency for the lighting circuit # to the Splitter Box. Also, shouldn't the DB containing the light circuit be routed to the ELP-HW instead of DP-HW? Please review and advise.
		11/01/2019 10:32 AM	Replace conduit name "C-DPHW-19" with "ELPHW-1601-2-C" and size "1" with "1.25" on drawing E-1038, Sheet 1 at the following ductbank locations: Section 2 position 7, Section 6 position 5, Section 7 position 2, and Section 11 position 4. Increase minimum size of conduit in ductbank section 12 position 4 to "1.25". Leave stub ups inside Headwork Building as shown on drawings. Contractor can route exterior lighting conduit "ELPHW-1601-2-C" along wall/ceiling to access the lighting contactor panel "ELP-HW" and ductbank.

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Q. Cho	Altermann Electric	10/31/2019 4:38 PM	Sheet E-1034 Sheet 1 ductbanks 7, 6, E-1030 Sheet 1 ductbanks 2, 11, and ductbank 12 on E-1106 do not show circuit # 21 for the Splitter Box receptacles from HW panel. Also, Sheet E-1106, Sheet 1 shows the receptacle circuit to be #33 instead of #21. Headworks power distribution panel only has 30 circuits. Please review and advise.
		11/01/2019 10:34 AM	See the answer to Question #143 as well as the following: The receptacle circuit number 33 shown on drawing E-1106 sheet 1 is incorrect (it should be number 21).
Miguel Vera	HRM Env Austin	10/31/2019 4:56 PM	In section 44 52 52 para. 2.6, a harmonic filter is to be supplied in accordance with section 26 35 26, which states the harmonic filter is supplied as a stand-alone unit and needs to have less than 5% in both iTHD and vTHD. The standard Spencer equipment has a built-in harmonic filter inside the blower enclosure, eliminating the need for a separate unit. The standard KEB passive harmonic can guarantee an iTHD less than 8%, and vTHD less than 3.5% at maximum load. This is normally considered sufficient to comply with IEEE519 in a blower building, which typically has a I_{sc}/I_L ratio over 20. Please confirm the built-in harmonic filter is acceptable, and 8% iTHD will be sufficient for IEEE519 compliance.
		11/01/2019 10:29 AM	The built-in harmonic filter complying with IEEE 519 is sufficient.
Joey Justice	Environmental Improvements	10/31/2019 6:10 PM	<p>See the questions below that we have for the aeration systems</p> <p>Section 44 62 60 – Aerobic Digester coarse bubble diffuser system</p> <p>1. Paragraph 2.1.C requires minimum 420 installed diffusers (105 per tank) with flow range per diffuser of 27 to 36 scfm. If diffusers are held to this range, this corresponds to 2,835 to 3,780 scfm total per tank. Paragraph 2.1.B indicates air flow rate will be between 1,650 and 2,200 scfm per tank. With 105 diffusers per tank, this would correspond to 15.7 to 21 scfm/diffuser. Drawing sheet 90 shows 84 diffusers per tank (42 per header).</p> <p>- Suggest using $1650/27 = 61.1$ or 62 diffusers per tank</p> <p>2. Paragraph 2.2.B.1 requires 6" PVC manifold.</p> <p>- Suggest deleting paragraph 2.2.B.1 since stainless is required in paragraph 2.2.B.2, and is appropriate for stainless 24" diffusers.</p> <p>Section 44 42 44 – Post Aeration System</p> <p>1. Paragraph 2.1.C, Post Aeration Design Criteria lists 225 scfm per tank and to deliver 750 lb of O2/day (AOR) per tank. With the given parameters in 2.1.B and the desired 6.0 mg/l of dissolved oxygen in 2.1.C, this corresponds to 6,022 lb of O2/day (SOR). This amount of oxygen requires significantly more than 225 SCFM and 81 diffusers per tank.</p> <p>- If SOR is 1500 per tank, required air flow is 213 scfm and # of diffusers is 107 (at 2 scfm/diffuser) with 28% efficiency. This is more representative for 9 MGD per tank with minimum BOD treatment requirement and an increase of D.O. to 6.0 mg/l. Suggest modifying specification to 1500 SOR minimum delivered per tank, and increasing minimum diffusers to 113 (to correspond with 225 scfm @ maximum 2 scfm/diffuser).</p>

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Joey Justice	Environmental Improvements	10/31/2019 6:11 PM	Please clarify if the UV system is required to meet the 5-log poliovirus effluent requirement. Should the system be required to meet this requirement, please confirm the required NWRI dose.
Miguel Vera	HRM Env Austin	10/31/2019 8:09 PM	<p>Section 44 32 30, Paragraph 1.5.B – Process Conditions for Clarifiers 1 and 2.</p> <p>The clarifiers performance is highly dependent on the characteristics of the solids being provided from the upstream process in the influent flow. The clarifier manufacturer has no control over the upstream process and parameters of the influent solids characteristics must be set.</p> <p>As it is currently written, Ovivo must take exception to Paragraphs 1.5.B.1 and 4. For Ovivo to accept Paragraph 1.5.B.1 and 1.5.B.4, the influent sludge must be considered healthy, free from filamentous bacteria or other conditions which negatively affect sludge settling. Please note, Paragraph 1.5.B.4 requires a sludge concentration of 10,000 mg/l or greater with less than 2 feet of sludge stored in the clarifier. This is less than a typical secondary sludge blanket of 2-3 feet of sludge and is considered to be excessive. Therefore, the sludge SVI must be 100 or less and must have a design mix liquor of 4,000 mg/l.</p> <p>In summary, to be acceptable to Ovivo:</p> <ul style="list-style-type: none"> -Influent sludge must be considered healthy, free from filamentous bacteria or other conditions which negatively affect sludge settling. -The sludge SVI must be 100 or less. A design mix liquor of 4,000 mg/l. <p>Additionally on Paragraph 1.5.B.4:</p> <p>There is no limit as to how low the sludge blanket can be drawn and the clarifier still expected to achieve 10,000 mg/l. To be acceptable to Ovivo and to achieve 10,000 mg/l Ovivo requires the sludge stored in the clarifier to be a minimum of 1.9' deep or greater measured at the tank wall.</p>
Miguel Vera	HRM Env Austin	11/01/2019 8:34 AM	Section 44 52 52 para 2.2.L. Discharge isolation valve is not required for routine blower operation. In cases where the blower needs to be isolated from the piping system, a manual discharge isolation valve with wheel or chain can be used. Please confirm manual isolation valve is acceptable.
Q. Cho	Altermann Electric	11/01/2019 9:46 AM	Please provide details for work to be done in the Existing Electrical Building shown on E-1030, Sheet 1.

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Jim Horton	Ferguson Enterprises	11/01/2019 9:56 AM	Drawing - 18, is showing the storm water drain pipe and the concrete catch basins. It is also showing two headwalls. We see the catch basin detail on drawing - 117. We have not been able to find a detail of the headwall. Please provide a detail of how the headwall is to be constructed.
Jim Horton	Ferguson Enterprises	11/01/2019 10:23 AM	Drawing - 18, showing the site storm water drain lines and the catch basins, is showing a catch basin with the tag - CB-2A. This is not in the storm sewer schedule. This is located in the roadway between the future clarifiers and the future aerobic digesters. There is no pipe shown connecting to this catch basin. Please review and clarify this catch basin.
Jim Horton	Ferguson Enterprises	11/01/2019 11:00 AM	Looking at drawing - 18, we see the callouts for the floodwall berm type - I on the south side of the sampling point and berm type - II, farther north, in line with the existing package treatment plants. Then north of this berm type - II we see the callout for the floodwall (concrete). There is a second floodwall (concrete) shown just north of the sampling point. Does the concrete flood wall extend the whole distance from the south side of the site, around and up to the north side of the site? Does the berm extend along with the concrete wall or just in certain locations? The plan does not clearly show where they are to be installed. Please review and clarify the flood wall berm and concrete wall.
Jim Horton	Ferguson Enterprises	11/01/2019 11:08 AM	Drawing - 113 is showing section views of the earth berms type - I and II. The sections are indicating 6" drain pipe to be placed in the berms. The callout does not indicate what type of drain pipe to provide. We looked through the earthwork specifications and the other piping sections but did not find any mention of this drain pipe. Is the pipe SDR 35, schedule 40 DWV or black flexible corrugated HPDE drain pipe by ADS? Please review and clarify the drain pipe in the earth - flood berms.

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Joey Justice	Environmental Improvements	11/01/2019 11:48 AM	Questions/comments for 44 32 30 - Secondary Clarifiers: 1. Paragraph 2.1.E allows for truss bridges and further calls for handrail provided along the walkway. With truss bridges, handrailing (and toe plate) is essentially built into the bridge design. As the platform is a separate piece from the bridge, handrailing would be provided for the platform. - Evoqua recommends pony truss design serves as handrailing. 2. Paragraph 2.1.F.4 calls for an 18'-0" diameter well. Evoqua sizes its standard influent wells using standard steel plate sizes. We have a 19'-9" diameter standard well that we would recommend for this project. - Please confirm a 19'-9" well is acceptable for this project. 3. Table 3.9 Secondary Clarifier 1 and 2 Equipment Schedule – Included in the table is are two values for running torques: (1) Minimum 100-percent design running torque of 21,900 ft.-lbs. and (2) Minimum AGMA continuous running torque of 15,000 ft.-lbs. For secondary clarifier applications operating continuously (applies to this project), AGMA calls for 1.25 service factor on drive mechanisms. Given the specified AGMA continuous running torque of 15,000 ft.-lbs., the drive's 100% (or 1.0 service factor) rating is 18,750 ft.-lbs. which is obviously less than the 21,900 ft.-lbs. called for with the minimum 100-percent design running torque. Evoqua would simply recommend aligning the AGMA continuous and 100-percent design running torque values to be the same, 21,900 ft.-lbs. - Evoqua requests AGMA continuous and 100-percent design running torque values to be the same, 21,900 ft.-lbs. 4. Paragraph 2.2.B.3.b. calls for centrifugally cast Herculoy bronze which is what we consider a high-torque gear. Given the specified torque, there doesn't appear to be a need for a high-torque worm gear while also considering the size of the drive (35-in ball race diameter). There are some decent cost savings going from high-torque worm gear to a low-torque. - Evoqua recommends a ductile iron worm gear (low-torque) vice a centrifugally cast Herculoy bronze (high torque) worm gear be accepted for this application.
Jim Horton	Ferguson Enterprises	11/01/2019 4:28 PM	Looking on drawing - 94, showing the Vactor Truck Unloading Station, we notice a YH shown at the south west corner of the structure. There is a 2" NPW pipe extending away at an angle to the south east. Key note # 1 indicates to see the yard piping for continuation of the line. Looking on sheet - 26, we see the Vactor Unloading Station but we do not see a NPW water line going to the station. Please review and clarify where the NPW water line should be routed for this YH.