Pure Water North City Phase 1 Construction Projects
University City Working Group Meeting #3 Summary

North City Water Reclamation Plant
Thursday, Aug. 2, 2018, 4:30 - 8 p.m.

This document is not intended to capture verbatim comments from the meeting or function as meeting minutes. It is a summary of the comments and questions posed by the Working Group members and the answers provided by City staff and consultants. The questions and answers are unattributed.

Working Group Members Present

Brenda Anderson, Resident
William "Bill" Beck, Renaissance La Jolla HOA
Barry Bernstein, University City (UC) Community Association
Ruth DeSantis, UC Community Foundation
Andie Hosch, UC Planning Group
Merle Langston, UC Community Association
Rita Lim Wilby, Resident, Chemist, Business Owner
Jerry Malamud, Resident
Pia Mantovani-Sud, Resident
Amy Murad, Resident
Bob Brown, UC Community Association
Katie Rodolico, Resident
Tama Snow, Engineer

Working Group Members Absent

Dan Harvey, Organic Chemist

Project Team Members Present

John Helminski, Public Utilities Department
Steve Lindsay, Public Works Department
Alan Shapiro, AECOM
Mai-Lan Le, Public Utilities Department
Sean McCarty, Consultant, Public Utilities Department
Lewis Michaelson, Facilitator, Katz & Associates
Tiffany Ngo, Katz & Associates

Other Attendees

Bridger Langfur, Council District 1

Public Members from Sign-in Sheet

Marty Graham
Deborah Knight, Friends of Rose Canyon

Chris Nielsen, UC Planning Group

Welcome and Introductions

Lewis Michaelson welcomed the University City Working Group (WG) and went over introductions, the agenda, follow up items, and list of construction topics. L. Michaelson outlined the discussion topics for the meeting including staging areas/parking, environmental monitoring, outreach communications and notifications, and construction monitoring.

WG members received a packet of Meeting 3 materials for their binders including the meeting agenda, a copy of the PowerPoint presentation, the construction plan view overlaid onto aerial photos of the alignment, and the Meeting 2 summary.

To view project and meeting materials, including new binder contents, visit the Pure Water San Diego website at www.purewatersd.org/Phase1.

Follow-up Items

L. Michaelson asked the WG members if there were any follow up items or questions that they would like addressed, including specific areas along the alignment that were not covered in the previous meeting.

The following are questions and comments regarding follow-up items from WG members:

Meeting Handouts

- **WG Member: In our first meeting, we were presented with a map that needed further definition. We asked for and received an enhanced version that shows the sides of the street, specific areas for depth, etc. This looks great and in most cases, this answers specific questions.**
    - Facilitator: We know you have neighbors and friends who have similar questions regarding which sides of the street the pipeline will be located, how deep the pipeline will be located, etc. so hopefully this is a tool that you can use with others outside of this room.
- **WG Member: I saw a huge graphic with an estimated number of work days at each section. The project team showed me a graphic that does show the estimated number of days at each section.**
    - Project Team: Yes, but I want to caveat that this is just an approximate. We can provide it as an 11x17" handout at the fourth meeting. It was created at around 60 percent design. It was conservative and we overestimated the amounts of time sections would take. That exhibit will give you a general idea of how much time it might take to get through certain segments. It's estimated durations for sections of pipe. That's why if you added up all the days along the entire alignment, you would have a longer time than the entire project is planned to take. When we have a contractor on board and they have a schedule, we can show you their strategy. Every two weeks, we will receive a three-week look-ahead that is ground level that will show us where they will be between certain blocks and certain days.
    - **WG Member: The graphic allays fears and concerns people have. For me, it was very helpful. The project may take two years but if you see in a certain section**

that it is two months of work, it helps you get your mind around it. The more knowledge that you have, the more people start to accept that this is going to happen. If you spring it on them at the last minute, it will not go over very well.
    - Facilitator: So you think that two months allays concerns?
    - **WG Member: Yes. I think that when people have nothing, they want to have some concept. Is it two years, is it two months, is it six months?**
    - Project Team: It's a window. As we get closer, we can get you an actual, correct and specific answer. Right now, we don't have a contractor so we don't know where they will be and when. As we move forward into construction, we can tell you where we will be in the next three weeks. That kind of clarity will be communicated once we have it.

Air Vacuum Air Release Valve Vault & Vent (AVAR) Tour
As part of the update of items from the last meeting, the Project Team mentioned that no one on the Working Group responded to the email invitation to take the tour.

- **WG Member: Most of us are booked out a week in advance and need more notice, so can we make a second AVAR tour a follow up item?**
    - Project Team: Yes.

Work Hours

- **WG Member: During the last meeting, I voiced concern regarding my property that backs up onto Genesee and the night work that will be happening there. We talked about different times that that could happen and if that would be looked into, whether it could be early morning to mid-afternoon before the southbound traffic starts getting heavy on Genesee.**
    - Project Team: We are hoping to have an answer to this question by a future meeting. Regarding hours, we have to look into average daily trips based on hourly logs in each direction whether or not we can work in those timeframes. My goal is to have an answer for you by Meeting 4 to let you know if we can or cannot work during the timeframe you specified. We can assume that the contractor will leave one lane open and then we can look at the peak times to see how far the traffic will back up and what hours we would be restricted to.
    - **WG Member: It would be great if you could require the contractor to work four 10-hour days as opposed to five 8-hour days if you found that to be feasible.**
    - Project Team: I have found that contractors would rather work four 10-hour days if the traffic window will allow it. We may need to pay some overtime premium but it is a cost that is worth it because of the increased productivity.
- **WG Member: Does it have to be an 8 or 7-hour work day or could you do the work in a 4 or 5-hour block of time?**
    - Project Team: It's part of set up and break down. You have to put up traffic control set up and remove the plates, get equipment running, etc. The first hour of work is not the most productive.
    - **WG Member: What is the timeframe that you need?**
    - Project Team: It would be an 8-hour minimum to allow for set up and break down. Ten hours would be ideal because we can get 8 hours of work plus set up and break

down. We would have to work from 8 p.m. – 6 a.m. if we were to work nights. The nice thing about ten hours is that there are four days of construction and three days off. There are tradeoffs. There's traffic control, working hours, phasing – if you squeeze one, the other one moves out.
    - **WG Member: 5 a.m. – 3 p.m. would be ten hours.**
    - Project Team: It would still require a noise permit to start work by 5 a.m.
    - **WG Member: What works on Genesee might not work on Nobel or Towne Center. We are looking at changing Towne Center between Nobel and the mall and Genesee between Governor past the high school.**
    - Facilitator: Do you believe there is resistance on the part of the project team to doing what you're asking them to do?
    - **WG Member: No.**

Schedule

- **WG Member: When will the first shovel in the ground go for the Morena Pipelines?**
    - Project Team: We are projecting April 2019.
    - **WG Member: What about the UC section?**
    - Project Team: If my memory serves me correctly, it's about 12 weeks after that so it would be June/July.
- **WG Member: I am concerned about the section of the alignment that goes from Renaissance Avenue to the mall. How long do you expect before you're gone? So that there are two lanes going?**
    - Project Team: If the street is currently two lanes in each direction, we will keep one lane open in each direction during our work hours.
    - **WG Member: If the contractor does not finish within a certain amount of time, will they be penalized?**
    - Project Team: Yes
- **WG Member: I have a question about schedule. From beginning to end, construction in our area (specifically Genesee and Nobel Drive), how long do you anticipate construction taking? I have concerns that if we start in the spring, which to me is March, we are looking at a holiday season when there is a lot of traffic around the mall and a lot of out of town family and friends. Is it possible to start construction sooner depending how long it's going to proceed?**
    - Project Team: If it ends up being night work, it shouldn't be a traffic impact, but it would mean noise during the night. Keep in mind that we already have a holiday construction moratorium from Thanksgiving to the New Year which will prevent people from having issues getting to and from the UTC mall during that period.
    - **WG Member: The moratorium covers it.**
- **WG Member: It would be helpful if we had a chart to show where you will be approximately. For example, it will show where you are in January, February, March, and so on. You mentioned you had a start date in April 2019.**
    - Project Team: We have a planned start date for April 2019 but the contractor can pick where on the pipeline route they start.
    - **WG member: So the contractor can jump around on the pipeline route?**
    - Project Team: It would not be efficient for the contractor to jump around. If it was a gravity sewer pipe, you would need to start downstream and move up. For a pressure

pipe, it can come together at different levels. The contractor will want to start one way and move in that direction. We can have a definitive answer for you at a future meeting.

- **WG Member: You said that the contractor could start wherever they want. Do you have control over when they start? It would be great where you could start during the summertime when school starts.**
    - Project Team: If we were working right in front of a school, we wouldn't do it during the school year unless it was at night. It would not happen while school is in session.
- **WG Member: Is there a contractor currently in place?**
    - Project Team: No.

Traffic

- **WG Member: How do you figure out about those hours, how the traffic flows and if it's feasible?**
    - Project Team: We have counts. When you drive over the device, it clicks to count your car. We have a traffic impact analysis that was completed as part of the EIR so the whole alignment was tracked. We have hourly counts and there are equations similar to water. You can only push so much water in a pipe before it starts backing up, so it is the same idea with traffic. They use different equations but it's the same concept. If it starts backing up, how far does it start backing up until it creates a mess and how much mess does that create? They categorize it by a Level of Service or LOS.
- **WG Member: Was a new traffic impact analysis performed for this EIR? Or did you use an existing analysis?**
    - Project Team: I am pretty sure the EIR team completed its own traffic analysis. There was an hour-by-hour request for past Governor and Genesee and Towne Center between Nobel to the mall.
- **WG Member: When they do the traffic study, how does it take into consideration that we are already sitting in traffic for an hour and a half?**
    - Project Team: The traffic study assumes that we would be doing this work at night so it would not be making the traffic any worse. We would only need to consider that when we get requests to work during the day.

Noise

- **WG Member: My property has a 30-foot hill that comes straight up from the sidewalk. Should I be concerned about the digging and vibrations that will be a few feet from the bottom of the hill? Are there engineers who look at the stability of that type of hill?**
    - Facilitator: I recall Joe Long's answer was that engineers analyzed it and concluded that the work will not impact that hill.
    - Project Team: For the hillside, there will be a slip plane there that would be more likely to be triggered by rain or water. The amount of vibration that is going to occur through this operation will not affect the hillside. I have never seen any impacts due to vibration. With that said, if the material we were digging through had been much harder and we had to bang on it much harder and repeatedly, like granite, that would be atypical in that part of the city. We know this because we already conducted a geotechnical study in order to come up with the current design. Also,

our bid specifications are very clear that no blasting is allowed. We are not expecting to meet any soil that would require such an intense movement that would create vibrations that would affect your property.

Wastewater

- **WG Member: We have the sewer line going to Point Loma. Will that be pumped back to Morena?**
    - Project Team: No, it will be intercepted at Morena.
    - **WG Member: Which one, the raw sewage?**
    - Project Team: Yes, the raw sewage.
    - **WG Member: So our raw sewage will go to Morena, will it will be cleared out?**
    - Project Team: It will be screened.
    - **WG Member: So we have sludge being pumped up here?**
    - Project Team: No, I don't want to call it sludge because sludge is a different thing. The solids are filtered out through screens at Morena. These pumps are expensive so we don't want to damage them with solids. We have a screening facility and so the solids are put into a bin, dried and hauled to the Metro-biosolids Center (MBC). MBC won't be receiving any more than it already does.
    - Facilitator: How long has MBC been there?
    - Project Team: Since 1998.
    - **WG Member: We have a problem with that facility already. Will there be odor? When the wind blows in the right direction, we smell it.**
    - Project Team: Right now, all that sewage goes to Point Loma and gets pumped to MBC. So MBC isn't getting any more, it's just getting it in a little different way. So it either goes to Point Loma and gets pumped all the way back or is diverted to this new pump station. We had to go far enough south that we could collect enough wastewater from the Central Area and East County.
- **WG Member: So the wastewater will go to Morena, then through the pipes to here at the North City Water Reclamation Plant (NCWRP), then what happens?**
    - Project Team: The water that comes to NCWRP will become purple pipe water. We will continue to service purple pipe water to our customers and then the excess purple pipe water will go across the street to a five-stage treatment process and become Pure Water. The demonstration facility is 1/30 the size of what the future Pure Water Facility will be.
- **WG Member: Currently the brine that is produced by the purple pipe goes back into the sewer system, so it can make multiple trips in theory?**
    - Project Team: Currently the plan is to not recirculate. That's why we have the brine line. The brine goes back into the sewer after the Morena Pump Station. Currently the brine is treated at Point Loma and discharged into the Pacific Ocean.

Trees

- **WG Member: Will the trees be safe from all this excavation? You were going to find out from your arborist whether or not the root systems of the mature pine trees north of Governor on Genesee are going to be safe and protected from all this excavating when it starts on the median curb.**

- Project Team: The arborist will be there when we are doing the excavation. Otherwise, I would have to start tearing up the street now to see how far the key roots extend. We think we are far enough away from the trees because the last thing we want to do is damage those trees.
- **WG Member: But if you're starting next to the median curb, you're only a few feet away.**
- Project Team: Whatever we damage we will replace in kind. We will have an arborist out there so they can evaluate while we excavate to make sure that if a root needs to be cut, it will be cut in a certain manner, or they can determine if the tree is able to be savaged.
- **WG Member: Sometimes that might not show up until after you finish the work and pave over the road and the tree gets very sad and passes away. We would want to make sure that is replaced.**
- Facilitator: I think the project team is trying to say that they will replace the tree if that happens.
- Project Team: Even if it was afterwards, but we are still doing more investigation for that type of tree to avoid the damage.
- **WG Member: Most professional arborists are able to make an assessment based on the trunk as to what kind of roots there are underneath and how far they are going to go. They don't have to dig up the area. The team should have it figured into the bid package if they will possibly be replacing huge trees with 48 or 60-inch boxes.**
- Project Team: How big are the planters they are in?
- **WG Member: Five feet by five feet.**
- Project Team: I will go out there and bring a tape measurer to make sure.

Construction Topics

L. Michaelson outlined the discussion topics for the meeting including staging areas/parking, environmental monitoring, outreach communications and notifications, and construction monitoring. Steve Lindsay and Sean McCarty explained the topics and asked for WG members' input on future outreach communications and construction monitoring.

Construction Staging Areas

S. Lindsay presented information on construction staging areas and explained the difference between laydown yards and staging areas, noting that staging areas move along with the pipeline route as the pipeline is installed.

The following are comments and questions from WG members:

- **WG Member: You're saying the pipe material is moved off to the side. What if there is no parking?**
    - Project Team: The contractor will make a parking spot for them and make adjustments for traffic. They will keep the same number of lanes going but they may take away a bike lane if needed. There will also be traffic delineators, barricades, etc. The materials will be kept close together.

    - **WG member: But these are wider than a bike lane.**
    - Project Team: We will make sure we have buffer. As part of the traffic control plan, they need to show what their staging is going to be and they need to show how much room they need.
- **WG Member: Will you impact the sidewalk?**
    - Project Team: No, the only thing that will be on the sidewalk are "no parking" sides.
- **WG Member: Will you mark parking spots and staging areas on the maps for the bid specs?**
    - Project Team: The plans will show a typical staging area, but since it moves along with the pipe they can't be placed on one map. There may be a certain block with specific features that may require more detail about that location. It will be prepared by the contractor at the time.
    - **WG Member: So you won't specify where you want the contractor to put their equipment or give them guidelines?**
    - Project Team: We can give them restrictions. For example, we can tell them not to store materials next to a fire hydrant. Or if it is causing a sight line restriction where people can't pull out of their driveways, that would be an issue.
- **WG Member: Can we make sure wherever they put it there are plenty of signs? When you cut off a bike lane suddenly, you can cause crashes and serious bike accidents.**
    - Project Team: This is something that we can put in the bid specifications. Once we get a contractor on board, I will bring them to talk to this group in the future. If what they have doesn't work for you, we can adjust.
- **WG Member: What is bedding?**
    - Project Team: The only materials that you should see on the side of the road is bedding. Bedding is a clean sand that goes under and around the pipe. It gives the pipe an even, consistent layer to lay on. You may see some crushed rock on the side. The main bedding source is sand.
    - **WG Member: So one of the lanes will be blocked off to store the bedding?**
    - Project Team: Yes, a parking lane or a bike lane that's wide enough. A lot of the lanes are wide enough that they have a red curb anyway.
    - **WG Member: What about north of Governor and Genesee where all the trees are? The lanes are going to have to be skinny and the bikes lanes go away.**
    - Project Team: If it gets too tight and too narrow, then I would make the contractor take extra time to move the equipment and materials so that we can safely get cars through there with the number of lanes that we need to handle traffic. During non-work hours, they are required to leave two lanes open in both direction on Genesee. They can't store if they can't meet that requirement.
    - **WG Member: They won't take right or left turn lanes, correct?**
    - Project Team: No. They can't put the materials anywhere it would be in line with someone's sight distance.
- **WG Member: In my case, we have a street coming out. We pushed cars out of the way with a striped area. That won't be an area where you put rocks or other materials?**
    - Project Team: That is correct. There might be some delineators but if it blocks your line of sight, it won't be there.
    - **WG Member: Will the center of that street be used?**
    - Project Team: If it is used as a maneuver for cars, we won't block it. There are certain areas where the crews will have to move the materials off site instead of storing it.

- **WG Member: There's a large area at the mall that could be used for storage.**

Storage Yards

S. Lindsay explained that storage yards are more permanent areas where larger equipment and materials can be stored when they are not in use rather than leaving them in the staging area. He stated that contractors are required to put a chain link fence and green screen around storage yards in addition to following Best Management Practices (BMPs).

The following are comments and questions from WG members:

- **WG Member: So this will be different than the one at San Clemente Canyon at the 52 freeway and Genesee? You talked about storing things there.**
  - Project Team: There will be specific tunneling materials at the one next to 52. They may fit everything there.
  - **WG Member: It's not paved.**
  - Project Team: If there is dirt, we will manage the dust control issue. The contractor may put down rocks or gravel. There may also be rumble strips to knock the dirt off tires and we will be sweeping in that area.

No Parking

S. Lindsay discussed how the City would handle taking away parking spots during construction. He explained that areas that will have parking taken away during construction will need to have a sign posted 48 hours in advance. No Parking signs will have certain dates and hours identified.

The following are comments and questions from WG members:

- **WG Member: There are spots on Nobel Drive and you can park on Towne Center Drive.**
  - Project Team: Once you get on Executive, there is no parking there.
- **WG Member: There are certain places where the curb is not painted red and people think they can park there. It's happening on Genesee right now between Eastgate Mall and Regents. I just want to make sure that gets monitored.**
  - Project Team: We can do that. We have a good relationship with SDPD because we have traffic control and sometimes there are areas where people do not pay attention. There is a number we can call and they will send out an SDPD car there. If people are parking where they should not be, we can inform the SDPD.
- **WG Member: Right now, on Genesee, you can't park because of bike lanes and the curb is not red. If you put the "no parking" signs on the sidewalk, then they would be notified they can't park there?**
  - Project Team: I am checking with Transportation to see if we can paint the curb red in those instances.
- **WG Member: Can we ensure that if there are "no parking" signs put out that they are not placed in bike lanes? That happened on Gilman. It forced bikes out of the bike lane and there were no "share the road" signs. It was very dangerous.**
  - Project Team: These "no parking" signs do not belong anywhere besides back of the curb. The signs need to have the date and hours that they are effective. I won't allow

them to post a "24 hour no parking" unless there is a reason for it because parking is valuable. The hours will be important. To tow a car, you need to have the sign posted 48 hours in advance. Some days you might not work but you don't want to pull the signs down because you might be back the next day and you just broke the 48 hours' notice. If we are going to be gone for a week, I will have them pull the "no parking" signs.

- **WG Member: If you are taking the bike lane to maintain two lanes during non-construction time, are you going to restripe?**
    - Project Team: It will be restriped or delineated through cones.

Environmental Monitoring

S. McCarty presented the environmental monitoring requirements that the City must meet during construction. He discussed the Environmental Management Plan that identifies the requirements they need to meet, how they are going to meet them, and the reporting requirements. He stated that the City's Development Services Mitigation Monitoring Coordination is the main auditing force.

The following are comments and questions from WG members:

- **WG Member: Is the construction schedule you have, that commences in 2019, did that come about due to environmental concerns that were raised? Are we not starting sooner due to nesting?**
    - Project Team: Our schedule that starts in April 2019 depends on a succession of steps including NEPA clearance and the time it takes to go through the bidding process, those were the parameters. Specific areas in the Environmental Management Plan will have provisions such as if we work during this time of year, we have to have to take precautions to ensure there are no nesting endangered birds. If there are nesting birds, then you have to take additional measure to protect the nests. Therefore, we don't have the schedule yet. The contractor has to look at what times he is going to be there, what nesting requirements are there, etc. and needs to come up with a plan to comply with all of that. That's their "means and methods" of approaching getting the job done that we keep referring to. We are there to make sure that the contractor doesn't break any rules.
    - **WG Member: So the reason you can't start prior to March or April is NEPA?**
    - Project Team: Again, it's a series of steps. We need NEPA clearance, we are doing the constructability review, we need city council's approval to go out to bid, then we need to go out to bid, the time to look at those drawings, plan check, bid and advertise, etc. It depends on how quickly we can get those things done.
- **WG Member: Will there only be one contractor that is doing the entire pipeline route?**
    - Project Team: There are four. One for the pump station because that one is unique. From the pump station to Iroquois, that is contractor A. From Clairemont and Iroquois to and Genesee and Appleton, that is contractor B. From Genesee and Appleton to the NCWRP, that is contractor C. There is some overlap between the communities but the communities acted as sort of delineators. We split them up so that the contractor could focus on specific community areas. When we set up the Working Groups, we split them up to mirror those contracts.
- **WG Member: Does the City have to approve the schedule developed by the contractor?**

    - Project Team: Yes.
    - **WG Member: Once you approve the schedule, what happens? Will the schedule be communicated to us?**
    - Project Team: Yes.
- **WG Member: Will the three stretches be concurrent?**
    - Project Team: They will be staggered a little bit. We aren't going to put them out to bid at the same time. The contractors themselves want some time because a lot of the same firms want to bid on contracts. So if you put them all out at once, that's a lot of work for contractors to bid on three contracts at once. Part of the constructability review is to look at our strategy and ask if this is the right approach.
- **WG Member: Which stretch are you starting with?**
    - Project Team: I believe the Clairemont segment is the first one. It has the most schedule slip. From Iroquois to Appleton, would be first. Then the top and the bottom run very close together. The strategy is based on the assumption that the longest duration will be the 805 tunnel. We have a specific window that we can work here because they will be doing upgrades here as well. That drives the schedule.
- **WG Member: Where will you tunnel?**
    - Project Team: Under the 805.
- **WG Member: You're not putting this all out to bid at once because you want to give a contractor who wants to bid on Part A a chance to bid on Part B or Part C? Is that correct? That's stretching out the schedule to accommodate the contractors to give them a chance to bid.**
    - Project Team: We need the contracts to end at about the same time. Clairemont has the longest length, so by starting with it, we can plan to have all the contracts to finish at the same time. You don't want to have one part finish early when you don't need it to.
    - **WG Member: Let's pretend that you grant Contract B to Smith Construction, the longest part first. I hope you wouldn't hold up the bidding process to allow them to bid on Contract A on Contract C. Then we have to wait for them to finish Contract B first.**
    - Project Team: No, we can't prevent Smith Construction from bidding but what it helps avoid is if we all went out at the same time, Smith Construction may have the lowest bid on Contracts A, B and C and that company may win but have no feasible way to complete all three. If we tell Smith Construction that they win Contract B, they may not bid on anymore contracts because they get so busy. What happens when you put contracts out to bid at the same time, contractors will bid on all of them hoping to get on at least one. When you stagger them, they will bid on the first one so what you see with contracts of this size, the contractor who wins will not put resources forward to bid on more contracts.
- **WG Member: Do you penalize contractors for not meeting timelines?**
    - Project Team: Yes, we call that liquidated damages. We have a finite number of working days we require for completion, and we would charge them the number of working days that they are over. Because of the complexity of this program, the liquidated damages have some teeth.
    - Facilitator: In the first meeting the project team also talked about how the three different contracts have different challenges.

    - Project Team: UC has tunneling. Clairemont has issues where you're up on the mesa with residents on each side, so we have a lot of water and sewer laterals.
    - Facilitator: So your point was that different contractors will have different strengths that would make them more likely to be qualified to do one segment versus the other.
    - Project Team: They will take different approaches, too.
- **WG Member: Let's say you have three different contractors. One leaves off the part of the pipeline where the other one starts. Who is responsible for the joint?**
    - Project Team We have details of how to leave and pick up a connector. Whoever is first has to leave it in shape for whoever picks it up to make the proper connection. We have what we call an "additive alternate." In each of the contracts, we have it so that the contractor can make either of those connections in each of the two locations. It is whoever makes more sense, or whoever is there last is responsible. We are going to have a price from the contractor either way if they have to leave it or pick up so they can't argue with us for a change order. Those joints are still the same as all of the other joints. It may even be a custom piece of pipe that is welded in.
- **WG Member: They are penalized if they are late, do they get a reward if they are higher?**
    - Project Team: We don't pay them by the hour, we pay them by performance. We have a unit price for everything. If they finish three months earlier, that's three months of a project manager or a superintendent, their insurance costs, etc. that they are able to avoid. In that sense they are rewarded for their efficiency.
- **WG Member: Who's responsible for this Environmental Monitoring oversight? Who is actually collecting the data?**
    - Project Team: We have an environmental compliance officer for each project as part of the core team. They will be working with the inspectors and resident engineer to advise them and double check. It's a team effort. There will be some monitors who will need to be on site constantly, such as monitors for paleontological resources who need to inspect more frequently. When we get to a certain point in the canyon, there will be a biological monitor out there.
    - **WG Member: We do have a resident environmentalist, Debbie Knight, who would like to touch base and weigh in. I want to make sure her name is added to the record.**
- **WG Member: You mentioned pressure testing. Does the pressure testing follow the simulation that we were shown?**
    - Project Team: Pressure testing is at segment intervals. We put flange with a bulkhead (concrete block) at the end of the pipe and we pump the pipe full of water to 1.5x the maximum pressure, or above the red line. You hold it there to make sure there's no leaks.
- **WG Member: What happens to that water that you use for pressure testing? That's a lot of water.**
    - Project Team: That will be for the contractor to decide. They can reuse it. They can't put it in the storm drain. They can put it in the sewer, we have given them information on what they can put in the sewer. There are certain requirements that the water has to meet, such as turbidity. If the discharge is greater than one acre-foot, there is additional testing that is required by the Regional Board. Typically, they

will need to get a municipal discharge permit for water to go into the sewer to be treated. They pay for that treatment.
    - **WG Member: Are they using reclaimed water or are they using potable water?**
    - Project Team: Potable water.
    - **WG Member: How many million gallons of water will be used? That's a lot of water.**
    - Project Team: This is a useful purpose for the water.
    - **WG Member: How many feet of the pipe are you going to test?**
    - Project Team: A couple hundred feet at a time. Every pipeline that is installed in municipalities goes through this test, it is specified by the American Water Works Association (AWWA).
    - **WG Member: Where does the water used for pressure testing come from, the hydrants?**
    - Project Team: Yes, hydrants. They have to put a meter on the hydrants so the contractor is paying for every gallon that they use, so they don't use more than they need.
    - **WG Member: Have you spoken to the fire department about taking the water from fire hydrants for the pressure tests?**
    - Project Team: We have a water model of our whole system and we identified what we can take out, where and when so there's enough to keep the firefighting requirements intact. There are storage tanks up high that keep a certain level of water that feeds the pressure into the hydrant. As water level is dropping in that hydrant, it will start pumping water from our other pipelines back into that. It's a constant system that is monitored. This is something that we would check with the water department's modeling section.
- **WG Member: I have a question about the pressure of pipe during operations. What is the accuracy of the pressure testing? You don't have sensors along the pipelines, so you don't know where the leak is. How much must spill before a leak is discussed?**
    - Project Team: We will provide the meter and pressure sensor accuracy.
    - Facilitator: There was a suggestion made at a previous meeting for the project team to consider pressure sensors along the way and I recall they agreed to look into that.
    - **WG Member: I want to encourage that because a tenth of a percent is tens of thousands of gallons per day with the volume that is coming through.**
    - Project Team: I have to look at the specs for the instrument control. If something is off, we would typically call Pure Technologies and they would send in a pipe diver or a smart ball unit that sends a sensor that listens for any kind of leaks. There is a listener on one end, so if there is a leak you will hear it and know exactly where it is.
    - **WG Member: My concern is that your sensors are not accurate enough to detect thousands of gallons.**
    - Project Team: Without the specs, I can't tell you exactly what the accuracy is. That is something that I will have to look into.
    - **WG Member: I would appreciate it.**
- **WG Member: How long is the pressure held during a pressure test that gives you a chance of detecting leaks?**
    - Project Team: The City has settled on four hours for steel pipe. That is plenty of time and there is no loss for steel pipe. They will fill the pipe first and allow it to absorb into the liner inside and then do a four-hour test.

- **WG Member: The joints are not a pre-sectioned pipe, you're butting them together.**
    - Project Team: No, actually it's a lap joint. It's over and under. You're inside and then you do the inside mortar.
    - **WG Member: The joints would be a point where if it's not done properly, it is more likely to have a leak there than in the middle of a section that is fabricated.**
    - Facilitator: Are you pressure testing the welds as well?
    - Project Team: Before we pressure test at the weld, we do a phased array. First, we have a certified pipe welder that has to meet special requirements to even be out on that job. Then they have a certified welding instructor to monitor him. Then they have a phased array which is like x-ray of the weld to make sure it's done properly, and then we pressure test. Then we have a visual test where we can have someone crawl or send in a camera to make sure it's looking good.
- **WG Member: What kind of warranties and liabilities do you require of contractors after they complete the project?**
    - Project Team: They're required to be bonded to a certain amount. There's a performance bond to make sure they complete the work properly without defect. For the materials and parts, there's typically a one-year warranty if those materials fail. There is a ten-year latent defects law which means the contractor is liable for up to 10 years for anything that goes wrong. The material is warranted for a year. If something fails after that year, it's going to be a construction problem.
- **WG Member: What is the expected lifespan of this pipe?**
    - Project Team: Steel pipe is 75 years at a minimum with no coating. We are doing coating so that is 100+. We continually look at the mortar throughout its life to see if there is degradation. We also have electrodes to prevent corrosion on the pipe.
    - **WG Member: Do you expect the mortar to last for more than 100 years?**
    - Project Team: No, the whole pipe. We continually look at the mortar to see if there is any degradation and if there is, then we will patch it. There is going to be electrodes on the pipe checking for a current through there. If the steel starts to rust, we have corrosion detectors that will know that rust is occurring.
- **WG Member: Are there continuous corrosion detectors?**
    - Project Team: It is continuous along the pipe but there's segments and we have to draw a little bit of power so we have different meters along the way. There is a low voltage current along the pipe and then you have sensors that read that at both ends and you can tell across that section if there's a variance in in voltage.
    - **WG Member: Does the budget allow for someone in an ongoing position to review this?**
    - Project Team: Yes, the City has a team of corrosion engineers. We've designed man-way access points so that we can get in and send cameras to make sure that everything inside the pipe is maintained and if we need to repair anything, we can.

Construction Outreach and Notifications

S. Lindsay discussed what the City primarily does for outreach, notifications and communications during construction. He stated that there would be a construction communication plan developed and explained how input from the WG members will be used, stating that he would share the plan with WG members once completed. In addition, he explained the role of the future community

liaison which will be required during construction and how the three-week look-ahead will be used to notify the community. The plan will be a dynamic document that can change as needed. The project team asked WG members what they thought were the best methods to reach their community.

The following are questions and suggestions from WG members organized by category:

Construction Communication Plan

- **WG Member: Do you have an outreach list?**
    - Project Team: It will be developed as part of the construction communication plan. We will identify the key players. If we miss something, you'll be able to tell us which groups we missed.
- **WG Member: Will you share this plan with us?**
    - Project Team: Yes, we need your input.
- **WG Member: Will the construction communication plan be posted online?**
    - Project Team: Yes, it will be posted online once complete.

SHIFT Program

- **WG Member: SHIFT has been a helpful resource for the trolley project. They have documented road closures for us in the past.**
    - Project Team: We are involved with SHIFT. We have a representative from the City who attends the SHIFT meetings.
    - **WG member: The City, SANDAG, UCSD and other agencies are all part of the SHIFT meetings. These groups discuss traffic issues and make sure they notify community groups. We should use SHIFT but this shouldn't be the only option.**
- **WG Member: What is SHIFT?**
    - Bridger Langfur: SHIFT is an organization that is contracted under SANDAG. They have a monthly meeting in which a majority of major projects in the area come together and share updates about their projects. They use the platform to interact and create a feedback loop so that they aren't conflicting their projects. There is a meeting segment and the website is www.keepsandiegomoving.com. SHIFT is for the Golden Triangle area only. The website lists all the major projects and contacts.

Social Media and Mobile Apps

- **WG Member: I think that if you would just keep the lines of communications open, we can tap the rest of the community. I think the more we keep the community updated such as through the UCCA newsletter and Nextdoor, we can give them a heads up as to what is going on with construction.**
- **WG Member: Twitter. Google Maps shows you real time data with traffic and construction.**
  WG Member: Our Nextdoor is good.
- **WG Member (from UCSD): You could create a mobile app. UCSD students would be happy to create that app for you. An app can show you what streets they are working on that week, what times they are working on it, what traffic issues it will create, etc.**

    - Facilitator: That's a good suggestion to take advantage of.
- **WG Member: Caltrans had a hotline number that you can call and a website that would tell you which roads were closed that day.**
    - Facilitator: You are referring to pull technology. A hotline number would be a pull technology. Push technology is when the information is pushed out to you. Things like Nextdoor and Twitter are examples of push technology. Typically, you want a combination of both.
- **WG Member: I have a question regarding communities that have driveways on Genesee. La Jolla Park West, La Jolla Park East, Regency Villas, Luigi Terrace… How are you going to communicate to that community? Will there be outreach to these specific communities? Mobile apps will not work for senior communities, such as Regency Villas. It's a locked-door community, how would you distribute information to a community like this?**
    - Project Team: It's our job to figure out a way to get residents the information they need. We would have to go through management and be persistent.

Newspapers

- **WG Member: What about the San Diego Union-Tribune?**
    - Project Team: Newspapers require a lot more lead time. We would not be able to post our schedules as we would like.

Schools

- **WG Member: Have you informed the schools?**
    - Project Team: Yes. Schools and any complexes would receive more intense outreach. We are going to be meeting with principals and try to adjust our hours around school pick up and drop off. All your suggestions will be taken down and put into the construction communication plan. Our community liaison will be available to you and you can also be helpful in translating technical terms to community members.
- **WG Member: You should hand out printed information at schools, churches and synagogues.**
    - Project Team: When it comes to schools, we always start with the principals and they will typically bring it to the PTA. We can provide printed materials.

Doorhangers

- **WG Member: What about notifications?**
    - Project Team: We will put up doorhangers three weeks to a month in advance. It will tell you that we are coming and will provide a phone number for you to call if you have questions.
    - **WG Member: Can't you print something with more information than a doorhanger if you have a three week look ahead?**
    - Project Team: If we determine that doorhangers are the most efficient way to distribute information, then we will go with doorhangers. However, there are different and more efficient ways to get detailed information out, such as email blasts or mobile apps. Other groups have asked me to post printed information at

Starbucks, churches, etc. I would like to go out and speak with as many groups as possible so they know where the information is.

Printed Newsletters

- **WG Member: I have a unique group of 56 homes (Vista La Jolla) that are locked in. They will want notification. I can personally distribute 56 newsletters. If you give me a list of construction times, I will make sure these homeowners know about it. If there is a newsletter that we can distribute, that will work.**
    - Project Team: We can provide newsletters and present at your HOA meetings if you would like.

Community Meetings

- **WG Member: You need to go to both UCCA and UCPG meetings. They are useful meetings and well attended. I would like you to come every month during construction.**
    - Project Team: We will be there.
- **WG Member: There are many community leaders on this WG so you can use us. We are mouthpieces for the community and can get the word out.**
    - Project Team: Thank you.

Construction Monitoring

S. McCarty informed WG members about the different construction packages, timeline for bids and proposals. He also discussed the possibility of a fifth and sixth WG meeting at key milestones (i.e. pre-bid and post award) leading up to construction, and when WG members could meet with a contractor once selected. S. Lindsay stated that he would meet with WG members as often as needed during construction to gain feedback.

- Facilitator: The slide says, "bid release starting end of 2018," is that when you think the fifth meeting will be?
    - Project Team: Yes, so just before we start pushing out the actual advertisement, we would come back together.
    - Facilitator: Is that November?
    - Project Team: It depends on the contract. Again, these are staggered so we would share the contract specifications for this. We just know it's towards the end of the year. That's when the plans will be made final.

Construction Site Housekeeping

S. McCarty explained that the City's requirements for the contractor to keep a clean construction site. He informed members of the creation of a Storm Water Pollution Prevention Plan (SWPPP), dust abatement measures and Best Management Practices (BMPs). S. McCarty stated that requirements include precautions taken every time there is a 50% chance of rain or more, a Rain Event Action Plan (REAP) must be created to cover that. During a rain event, the contractor needs to monitor storm water for turbidity (sediment) and pH.

The following are comments or questions from the WG members:

- **WG Member: Can we ensure that bike lanes are swept when this happens?**
    - Project Team: They will do that. The most important part to sweep is the gutter which is usually next to the bike lanes. We will have Qualified Storm Water Pollution Prevention Plan Designers and Practitioners (QSD/QSP) monitoring it. If you see that happening, please let us know.

Pure Water Website Resources

Tiffany Ngo and S. McCarty introduced the website to the WG members and showed them how to use the interactive map to navigate the pipeline route. T. Ngo showed the WG members where to find informational materials.

The following are comments or questions from the WG members:

- **WG Member: When was the satellite photo on the interactive map taken?**
    - Project Team: We pull it from ESRI, which is the premier GIS vendor. It's a static image from the last satellite that flew over and took a picture.
- **WG Member: Will this map have the latest things like on Nobel where you had to go on the other side of the street, the Westfield sewer trunk line?**
    - Project Team: Alan is working on that. The storm drain is not the Public Utilities Department, it goes through the Transportation & Storm Water Department and Development Services Department. The information just did not get conveyed yet. If we are planning a project, we don't get the as-builds of what's going in and it catches us. That's why we drive the alignment once a month to see if anything is new. For example, last month I caught that SDG&E was paving Miramar Road by Kearny Villa even though we asked them not to do that.
    - **WG Member: There's a five-year moratorium so once they pave you can't go back over that road?**
    - Project Team: We can only if we get a waiver. I need to go to the director of the Public Works Department and tell him what we did to try and get them to not do it but they did it anyways.

No Parking

S. Lindsay spoke about the need to have no parking zones to accommodate the staging areas when necessary and the parameters required by the San Diego Police Department for placing those signs. He addressed the need to plan for no-parking zones in a way that would minimize residential and business impacts.

The following are comments or questions from the WG members:

- **WG Member: I have a question where the crews will be parking. Parking is already kind of a mess. Will they be parking on the street? If they start work at 5 a.m., will they take all the street parking? Will there be a central parking area?**
    - Project Team: The crew size for this work will be around 10-15 crew members.
    - **WG Member: Does that include the monitors?**

    - Project Team: No. Typically, crews will look close by to see where they can park. If it becomes a problem and they are taking too many spaces, we will have them pick a location to park so people can get by. If it became a problem, we would adjust. They will look for spaces to park along the alignment close to the work. If we know there is tight parking, we will restrict them from taking up resident spaces.
    - **WG Member: Will they park in the center near the excavators or bags of dirt of gravel?**
    - Project Team: Not with this size of crew, I don't see that happening. There will be the superintendent's truck, the foreman, tools, some vehicles like that but not commuting vehicles.
- **WG Member: Are port-a-potties moving with the excavator along the way?**
    - Project Team: Yes. Nobody will get that parked in front of their house for too long. We try and take side streets for those. We look for strategic locations and don't leave it in any one location for too long.
    - **WG Member: The side streets? That's not going to work.**
    - Project Team: If it's in an all residential area and you're constructing along the main street, you look for a side street and the first house that doesn't face the side street because it has a side yard there, which is typically more of an acceptable location.
    - **WG Member: I just want to make sure you realize that the side streets we have are our streets. I don't see it going on Excalibur or anywhere on the two streets that we have. His *(points to another WG member)* side yard is that street.**
    - Project Team: I won't put it directly in front of somebody's home, or in front of someone's driveway or window. We will look for a way better place to put it. Tell me where you don't want them and I will take care of it.

- **WG Member: I have a question about the corrosion resistance of the mortar that's lining the pipe internally.**
    - Project Team: It is type 2-5.
    - **WG Member: How long does that concrete last under 14 atmospheres of pressure, or the max pressure?**
    - Project Team: It depends on the content of the wastewater and the velocity of the water. I think Pump Station 2 (PS2) has a concrete mortar liner that is still fine after 50 years.
    - **WG Member: Yes, but is this a high pressure?**
    - Project Team: Yes. PS2 is located on Harbor Drive just west of the airport and pumps to Point Loma under pressure. These are 84-inch lines. The PS2 force main under San Diego Bay operates at 75 PSI. The sludge line that goes from Point Loma to MBC is designed for 570 PSI and has an average operating pressure of 200 PSI.
    - **WG Member: Will the high purity oxygen injected have any chemical reaction? The sewage that goes from PS2 to Point Loma that is pumped without aeration. When you aerate, you increase conversion of hydrogen sulfides to sulfuric acid, which is far more corrosive.**
    - Project Team: Victor Occiano is a chemical engineer. He is our lead technical engineer and did a whole analysis. We can bring you his analysis.
    - **WG Member: I am concerned that the measures used to extend the life of the pipeline can diminish it.**
    - Project Team: Can we set up a call with you and Victor to discuss?

    - **WG Member: Yes. Maybe Victor can come to the next meeting and spend a few minutes answering our questions.**
    - Project Team: Yes, we can bring him in.
- **WG Member: It has occurred to me that is cheaper to just inject air instead of oxygen. I assume that the reason you are adding oxygen instead of just adding air is so you won't add nitrogen.**
    - Project Team: There is a reason we went with high purity oxygen over other chemicals, such as ferric chloride, because then you would have a lot of iron in your wastewater and you would need to take the iron out. We would have to check with Victor for a more complete answer.
    - **WG Member: Is this experimental or new science? If not, why isn't anyone talking about how long this kind of technology has been used, how standard it is, and where it has been used before? You are only referencing other examples in San Diego.**
    - Project Team: High purity oxygen injection is used in several municipalities, including the LA Sanitation District. In addition, we are doing a pilot study to determine the impacts on the microorganisms at the treatment plant.
    - **WG Member: Do they use this technology in Orange County? They have a similar program.**
    - Project Team: They do groundwater augmentation. It is a different system, it only has three barriers of treatment.
    - **WG Member: Is it the same type of pipe?**
    - Project Team: Yes.

Construction Plans Table-top Review

At the end of the meeting, L. Michaelson asked WG members who were interested in reviewing specific areas on the alignment to stay and review the design plans. The project team went over the plans with WG members who opted to stay for further discussion. Discussion happened while standing over the plans, pointing out specific details.

The following are comments and questions captured from WG members:

- **WG Member: How deep is the pipeline at Governor and Genesee? This is a critical intersection so if there is a problem with the pipe during operation, then the whole intersection gets shut down.**
    - Project Team: 7 feet to top of pipe.
- **WG Member: We would like to have the pipeline deeper and possibly sleeved as it crosses the intersection. We would like to see more protection for it here.**
    - Project Team: In the site development permit, we needed to look at alternatives. We hired AECOM to come up with alternatives and prepare a technical memorandum. Alternative 1 is what we have in the design currently. Alternative 2 is a trenchless tunnel under that intersection. Alternative 3 is to go deeper because you would add a casing. We are weighing three options with different parameters. I am hoping to have the technical memorandum for one of the future meetings.
    - Facilitator: For the option that looks at trenchless tunneling, was that for ease of construction or for strength of operation?

    - Project Team: We are weighing the four options against different parameters, including construction impacts. The impact tradeoffs will be looked at among the different alternatives.
- **WG Member: I think that the trenchless alternative would be less of an impact.**
    - Project Team: For the trenchless alternative, we would be drilling shafts and have to permanently k-rail them off and then we have to bore. It's not two or three days across the intersection, it's weeks.
- **WG Member: We are ultimately concerned about the operational safety of the pipeline regardless of construction impact. We are willing to put up with a longer construction duration if the pipe is safer. It's not that it's not safe, we want it to be safer.**
    - Project Team: From a safety perspective, whether it's at 60 or 20 feet the factor of safety is no different in our opinion. On the other hand, if it were deeper and there were to be a rupture, it's more difficult to reach the pipe.

Public Comment

At the meeting's closing, L. Michaelson invited members of the public to provide comment. There were two public comments. Public comments and subsequent questions and discussion are below:

- "It's been curious to me that people would prefer night work rather than weekends on Genesee because I know night work will be noisy. Maybe everybody has decided that's what we want but I will be hearing it at night because I heard it when they were putting that other sewer line in. I know it can be noisy but we all live through it. In terms of thought or discussion, can we do a couple of weekend days and a few less nights?" – Debbie Knight, Friends of Rose Canyon
    - Project Team: Our site development permit says no work on Sundays at Genesee. This was included under direction from City Council.
    - Bridger Langfur: Weekend work is another discussion. The reason the council put that amendment in there was to allow for emergency vehicle access when there's heavy traffic on Genesee.
    - D. Knight: If there's appetite for changing that it should be looked at again because it will be very noisy.
    - Project Team: There is some leeway to address that. I think that's worth looking into. If the reason for putting that provision in there is not more valid than an alternate, we can look into changing it.
- "I will work with Steve Lindsay to get the Pure Water group on the UCPG agenda regularly once construction starts. Secondly, I would like to work more with Andie to prepare a report on bicycle safety and traffic management. We can work on this and make it part of the record." – Chris Nielson, UC Planning Group

Closing and Next Steps

L. Michaelson closed the meeting by thanking the WG members for their time and participation.