DRILLING SERVICES SURVEY RESULTS 2016

Various Questions	
Q2. What was your roll the last time you worked with Drilling Services	**Total**
Geoprofessional in charge of the Geotechnical Investigation	20
Geoprofessional who conducted field logging	19
Geoprofessional Supervisor	6
Other	2
Q4. How did you submit your drilling request	**Total**
Emailed to "Drill.requests@dot.ca.gov	22 (73%)
Emailed directly to Drilling Services Staff	6 (20%)
Hard Copy	2 (7%)
Q5. How well did the formal resource estimate you received match the actual resources required to complete your project	**Total**
The actual resources were about the same as the estimate	16 (76%)
The actual resources were much greater than the estimate	5 (24%)
The actual resources were much less than the estimate	0 (0%)
Q12. The week before you began drilling, did you attend (in person or by phone) the Thursday scheduling meeting at Drill Services	**Total**
Yes	8 (15%)
No	29 (85%)

Yes, No, Don't Know Questions	No	Yes	Don't Know	Total
Q5. Did you request a formal resource estimate from Drilling Services	19 (54%)	8 (23%)	8 (23%)	35 (100%)
Q8. Did Drilling Services conduct a Site Preview of your project?	0 (0%)	29 (88%)	4 (12%)	33 (100%)
Q15. In general, did the Drill Crew arrive at the site and begin drilling operations on time?	5 (15%)	21 (64%)	7 (21%)	33 (100%)
Q17. (4 Part) - Drilling				
Did the Drill Crew(s) satisfy the objectives of your drilling plan?	3 (9%)	28 (88%)	1 (3%)	32 (100%)
Did the Drill Crew(s) satisfy the objectives of your testing & sampling plan?	1 (3%)	30 (94%)	1 (3%)	32 (100%)
Was the amount of time it took to complete your drilling plan reasonable?	8 (25%)	22 (69%)	2 (6%)	32 (100%)
Was Drill Crew overtime used effectively on your project?	4 (13%)	13 (42%)	14 (45%)	31 (100%)
Q20. (2 Part) - Drilling Equipment				
Was the Drilling Equipment assigned to your project appropiate for your drilling plan?	3 (9%)	26 (81%)	3 (9%)	32 (100%)
Did Drilling Equipment breakdowns affect your drilling schedule?	13 (41%)	17 (53%)	2 (6%)	32 (100%)

Unsatisfactory, Satisfactory, Excellent Questions	Unsatisfactory	Satisfactory	Excellent	Total
Q9. Rate the usefullness of the Site Preview conducted for your project	1 (3%)	22 (71%)	8 (25%)	31 (100%)
Q11. (3 Part) - Scheduling of Drilling Operations				
Rate the communication received regarding Scheduling	4 (12%)	22 (65%)	8 (23%)	34 (100%)
Rate the usefulness of the Drilling Schedule	3 (9%)	19 (56%)	12 (35%)	34 (100%)
Rate the usefulness of Drill Crew Work Schedules (start/end time on the job site) offered by Drilling Services	10 (30%)	18 (55%)	5 (15%)	33 (100%)
Q14. (2 Part) - Mobilization / Demobilization / Travel				
Rate the efficiency of the Drill Crew's mobilization to your project site and initiation of drilling operations	10 (32%)	18 (58%)	3 (10%)	31 (100%)
Rate the efficiency of the Drill Crew's daily travel time and set-up for drilling	7 (22%)	21 (68%)	3 (10%)	31 (100%)
Q18. (2 Part) - Drill Crew				
Rate the Drill Crew(s) proficiency at borehole backfill operations on your project	5 (16%)	22 (68%)	5 (16%)	32 (100%)
Rate the overall proficiency of the Drill Crew(s) on your project	3 (9%)	23 (72%)	6 (19%)	32 (100%)
Q21. (3 Part) - Drilling Equipment				
Rate the general quality of the Drilling Equipment used on your project	7 (22%)	23 (72%)	2 (6%)	32 (100%)
Rate the general quality of Testing & Sampling Equipment used on your project	4 (13%)	27 (84%)	1 (3%)	32 (100%)
Rate the Drill Crews' proficiency with the Drilling Equipment used on your project	3 (9%)	20 (63%)	9 (28%)	32 (100%)
Q23. Rate the overall performance of Drilling Services during your last drilling project	8 (24%)	18 (55%)	7 (21%)	33 (100%)

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Question	Comments
Q 7) Please comment on Drilling Service's Resource Estimate	1) Satisfactory 2) Seemed Accurate unless problems in field 3) Equipment break down, short work hours due to drill crew travel times, 4 person drill crews 4) For this job, I did not do a formal resource. However, in previous jobs where I estimated a formal resource estimate, the overhead cost were well over projections but the drill crew hours were ok because I had control over that aspect. 5) Have never asked or received one. I was under the impression that the Design Branch Chiefs estimated the hours for GS based on the estimating tools. 6) Very much up and down most cases 7) Never requested resource estimate yet 8) I did see it 9) Resource Estimate provided in the SPGR was based on the DS general hourly/week estimate for a crew of 3. Question 6 not applicable to my situation. 10) I did not request DS to estimate the resources for the project and did not know how many hours were used by DS 11) Borehole backfill according to the LEA is difficult to predict the actual issues and requirement. 12) I didn't use at that time. Used informal 220 hrs/week for DS. 13) Good 14) the resource estimate was for a week, 3 working days, we got it done in 2 days, partially because I told the drillers if we get done early we get to go home early. 15) The response in Question #6 is not necessarily the case. It was only to proceed with the survey. N/A would have been appropriate. I have never requested a formal resource estimate from Drilling Services. I did not know that drilling provided a formal resource estimate. I was aware there was always a magic number (220, 230, 240) floating around in the abyss. Additionally, I have always completed the resource estimate for drilling based on my own estimate of time and have never compared the estimate to the actual hours used. This is because drilling takes what it takes and we are not going to stop the project and jeopardize our ability to meet our deadlines just because drilling goes over that estimate.
Q 10) Please comment on the Site Preview conducted for your project	1) Drill coordinator visited the site to assess drill rig accessibility. 2) Because it is a different crew doing the actual work the site preview isn't fully relevant, and final drilling is up to the crew that comes on site. 3) OK 4) For this previous job, I was not involved in the Site Preview. I'd say in most cases (80-90%), the site preview is satisfactory but for some jobs with access issues, potential shoulder closures, and/or lane closures, I have had discrepancies between what the preview person thinks is do-able and not do-able. 5) Sometimes have issues with conflicting opinions about accessibility/required OH utility setback between preview and driller on the job 6) The site preview included determining the possibility of drilling through the bridge deck, as opposed to barge work; as well as general site preview for borings off highway. Preview gave very helpful information for determining how to proceed with the work. 7) Equipment accessibility 8) Good 9) Norm is very good at identifying possible conflicts. 10) Was thorough because detail was needed about drilling on land and in the river. 11) If for a simple site, with some site photos and obvious access conditions, no site preview is needed. 12) Helpful. Was an off-ramp that would be completely closed. Had CT traffic signals and loops that were cleared with CT electrical. 13) It is necessary 14) I was not present during the site preview. 15) In the past it seemed that drilling services conducted Site previews just to have something to charge to. Personally I have lots of experience with the capibilities of the drill equipment and what each drill crew feels comfortable doing. I typically take lots of good quality photographs and measurements inorder to communicate the site specific conditions to drilling services. For this particular job, the access road was a little steep so I requested a Site Preview so there would be no surprises. 16) One would expect that the drill crew assigned to perform the work would have access to the Site Preview before they arrive, and this would be beneficial in their planning although they sometimes seemed surprised once they arrive. The Site Preview is definitely helpful for advanced planning.
Q 13) Please comment on the scheduling of Drilling Operations.	1) It seems fair 2) Seemed logical 3) Crew was flexible due to high summer heat. 4) OK 5) Very good at accommodating our schedules and working with us to complete the work. Willing to work long hours and be flexible to get the job done. 6) Generally the scheduling is very helpful to the needs of the job. Occasionally there are no rigs available the weeks that we would like to drill, but we are usually able to work around the schedule. 7) Scheduling is ok. Coming from Sacramento is time consuming. They can't beat private drilling companies. But quality is much better. 8) Good 9) Good 10) Accurate and accommodating. 11) If drilling in local Sacramento area, really difficult to arrange crew without per diem. And the traveling time for whole Monday and Thursday only left 2 days of drilling each week. 12) A mystery 13) Scheduling worked well and field work was completed on time. 14) Good 15) Scheduling of drilling services was easy and straight forward, my needs were met. 16) Due to the shortage of crews, it's been difficult to schedule the work and get it done on time. Task Orders have been terribly expensive but that seems to be more of the norm than not. Yet I only want the TO as a back up plan. Additionally, Traffic Control is very expensive in a TO and getting Maintenance to commit is difficult if the project goes for more than a week and most do.

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Q 16) Please comment on the Mobilization/Demobilization/Travel of Drilling Operations	1) Seems that it takes too long. 4 hr trip and no work on the first and last day at all 2) OK 3) Appears that actual drilling may be a couple of hours or no drilling on Mondays and same goes for Thursdays due to travel times. What a waste of resources. 4) Crew had to be modified last minute, but all work was completed in the window that I had set aside. 5) 4 day week, Two days travel, two days drilling? does not seem right. 6) For the last project, the crews arrived on time and left the site at a reasonable time because we were in lane closure and the timing of mob/demob was important. However, depending on the job and drill crew you may get a lead driller that on occasion tends to want to pick up sometimes early to deal with mud and other issues. Sometimes justified and other times a geoprofessional is left scratching his head wondering why they need to do mud every night. 7) Sacramento based travel makes it difficult to be efficient when only 3 of 5 days are spent drilling. 8) Engineer that was onsite will comment in separate survey. 9) Horible 10) Meets the expectation. 11) Drilling crew coordinated the activities very well. They pre-ordered the required material. They had all the tools necessary for drilling on site. 12) Good 13) I think sound communication involving the Drill Crew, Drilling Services, and Geo-professional is very important/useful prior to, and during, mob/demob and travel operations. 14) Crews are always an hour late and leave hour early for a 10 hour operation 15) no comment, 16) No comment 17) We met at Mtce Yard at the specified time and talked with Mtce. Supervisor and lane closure personnel. All personnel arrived before scheduled meet time. Equipment was readied before start time. Talked with lane closure personnel before the lane closure. 18) Drillers are more in tune with their hotel needs. They stay as far as possible to the job site to include the travel time in their schedule. 19) It was scheduled considerably 20) Lane closure set Monday as agreed by all, crew a no show on Monday due to mixup in drill yard. 21) Travel time was not an issue for this drill crew, first day they were on site before I arrived. 22) Travel time for the drillers is unpredictable. Good communication from the crew is also lacking. I rarely seem to know when to expect them and often don't see them until the next day.
Q 19) Please comment on the Drilling conducted by the Drill Crew(s) you worked with	1) Good performance 2) All of them are good to work with, However, some drillers are a lot faster and more efficient. 3) Because of my limited experience I did not mark excellent, simply put I don't know where the "bar" is. I had no issues and the crew did great despite temperatures into the triple digits. 4) OK 5) They did a good job in getting good production and samples. 6) There are always challenges, sometimes we do better to handle them than other times. Many personalities and ability levels from one crew to the next, have to know the limitations and strengths of each crew and their equipment to establish reasonable expectations and manage time and resources effectively. As a group they are on-time, have good attitudes, and work with us to complete jobs. The GMSA and BBDS process has really hurt efficiency with the paperwork and tracking trail, would hope that can be streamlined for the field process to still comply with the law but not burden the geoprofessional and driller with so much paperwork and follow up. 7) Engineer that was onsite will comment in separate survey. 8) satisfactory 9) Good 10) Completed the drilling operations on time and with good effort. 11) The drilling was done very well. The crew was efficient and productive. 12) Overall effort was good. Personal interaction was great! 13) 1 hole for 1 month, very unsatisfactory 14) no comment 15) Some crews are efficient, but some are not. 16) I was not there to observe and I received no complaints from those involved. 17) Good crew. Did all required tasks and sampling and worked as team. 18) Rig broke down to much 20 feet drilling 2 weeks in a row 19) Good 20) This was Jose Valencias crew, we had above average communication both prior to work day and on site. I always try to offer my drill crew an incentive to be safe and efficient, this crew responded by meeting all my needs which included drilling deeper than my request and they still finished ahead of our schedule. 21) On a 4/10 schedule, it's often necessary to finish up the work on Friday or Saturday in order to be efficient and to avoid additional long distance travel. Often a 5/40 schedule would be more efficient when hours are limited in lane closures. I often see unproductive hours at the beginning and end of shifts. I no that sometimes this is unavoidable but sometimes it seems planned and deliberate. The summer months with longer days can be more productive on 4/10s if used properly. Maintenance changes their schedule back and forth depending on the time of the year.
Q 22) Please comment on the Equipment that Drilling Services used on your project	1) Well maintained 2) One rig broke down and it took a while to get it out of the job site, due to wet conditions. 3) The auto hammer was broke, although we were able to manually get spt counts the consistency was not there and I would have preferred to have the hammer be functional. 4) To much last minute questions about what piece of equipment is going do to equipment failures. 5) Drill rigs are well-maintained and the operators are experienced with the equipment. In the event of a breakdown they move quickly to send replacement rigs or repair the rig using local resources. 6) Engineer that was onsite will comment in separate survey 7) Excellent 8) Good reliable rig 9) The drilling equipment was old. But the drill crew was experienced and they did a good job with it. 10) Equipment broke down fairly frequently. 11) New drilling equipment but always breaking down. 12) Often equipment broken down, repairing/replacing efficiency is bad considering the limited window of work hours. 13) Hollow stem auger rig performed very well. Mostly completed SPT's and some modified California Sampling (2.0 inch brass-lined). Also, 1 rotary wash boring was used. Verified no groundwater at proposed wall site with tiedowns. Abandoned borings before leaving each day and opening up ramp closure. 14) We have the best equipment. 15) The Mobile B-48 was provided to the drillers because their rig was in the shop. The rig broke down within the first day of drilling and they spent most of the first two days trying to fix the rig before they were brought a replacement drill rig. We wasted 2 days of drilling time. 16) This project used standard hollow stem auger equipment, with no groundwater encountered, easy drilling no problems. 17) Recent drilling at Southside Park with one of the newer rigs was slow and painful. There seems to be limitations with some of the new rigs including bugs that must be worked out.

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Q 24) What are the positive aspects of Drilling Services?	1) Familiar with our needs and friendly with us 2) In-House drilling means better control over quality of field data 3) Good people to work with 4) Crew was professional and safe, work was completed in the window I had hoped for. 5) Know the drillers, office personnel and equipment. Equipment is in good condition generally. Have worked with drilling services for 16 years, know them well. 6) The last project, the drill crew had good drilling production and recovery from the punch core system. SPT samples were done correctly to my satisfaction. 7) Good people that I've working with for years and have established positive work relationships with. Can-do attitudes and knowledgeable about subsurface investigations and the reasons to drill, sample, etc. 8) Drilling Services has generally provided satisfactory services over the last decade and half that I have worked with them on various projects. The crews have been well trained, work hard, and adjust to difficult and varying conditions well. The schedulers have tried hard to accommodate the needs of the geoprofessional and project. 9) do not have to deal with T.O 10) Quality 11) Hard working and knowledgeable 12) Drillers can be made to produce more if motivated. Personnel are generally pleasant to work with. 13) friendly 14) Project was completed 15) Personnel good to work with and helpful at the job site. Equipment is usually well maintained which minimizes breakdowns/delays. Drilling Services has good experience/familiarity with many types of jobs and installation of Piezometers and Slope Inclinometers. Also, DS familiar with downhole testing requirements and grouting pipe for Downhole P-S Logging. Drill crews have always done what I request for my jobs. 16) We need them, and they are helping us. 17) convenient, 18) Because I know most the drillers and schedulers personally and their capabilities I know what to expect when I work with them. 19) I like our crews. Our equipment is usually very dependable. Everything is reasonably predictable and can get the job done efficiently. Contractor's are unpredictable and their equipment seems to be prone to breakdowns.
Q 25) What aspects of Drilling Services need improvement?	1) Efficiency of mobilization and demobilization 2) I think ways to reduce hours/week would be good to compete 3) Time management, between travel times and work hours, actual drilling is about 60% of the time. A three person drill crew is enough. Worked with Consultants, contractors and most of them have 2 person drill crew. 4) Make sure equipment is in working order prior to coming on site. Faster response times (it was many months in the que). 5) Drilling equipment needs to be pre-checked on Fridays so no surprises for GP on Monday, 6) We need two rigs in the south that can make closure schedules Monday through Friday (generally 9-2). this cannot be overemphasized. the crew from Valencia does not help us if they cannot make the closures at 9 am Mondays. right now we get 2 or 2.5 days of drilling per week; that does not work with our project schedule these days. If we are really expected to compete with consultants we need rigs in the south that can give us 5 days drilling per week. 7) Effort among the different drill crews varies from one crew to the next. Some guys give a good effort daily and others drill crews might not (i.e. long breaks/lunch, leave site early). Overhead from DS is high and needs to be lowered to stay competitive. 8) Streamline GMSA compliance and do away with repetitive tracking processes in multiple databases. Figure out a way to work as a State Agency and comply with water protection laws without needing a private contractor's license. 9) 1) Often the amount of hours charged by Drilling Services has been questioned by the project mangers, and can make competing with private drilling companies a challenge. 2) Sometimes getting the crews to the job site in southern California on a Monday can be slow due to safety meetings, catching flights, mobilizing the equipment from the yard, etc. 10) Mobilization and De.mob. 11) Mobilization, needs local office 12) Auger drilling below water table, boulder/gravelly formation. Need more finesse. 13) Better equipment. 14) Effective communication involving DS, Dill Crew, and Geo-professional needs improvements. Proper working equipment can enhance productivity greatly. 15) If its a 10 hour operation, let us work 10 hours. If you leave early at the job site, prepare everything including water needed. 16) Communication not good at all. Too hard to plan drilling dates. Too much uncertainty in Drilling Services. Too little knowledge of GMSA requirements in Drilling Services. 17) Travel to/from job site 18) Emergency drilling. We should have an emergency response team/group for emergency drilling. 19) Equipment breakdowns (drill rig/tenders)-drill rig or tender breaks down within the first day of drilling in a lane closure. Inefficient use of their time-need to maximize their drilling time during the 10 hour day or change schedules to five 8s.
Q 26) Please add any other comments that will help Drilling Services improve	1) Drill crews are scattered all over and time is wasted on travel. Drill crews should either be stationed close to respective districts or move crews around more efficiently to closer locations. Some times, drill crews have to travel 10 hours each way to get to job site???????? 2) I appreciate the fact that the drilling schedule did happen at the time I was told, communication is the most important thing. Although I wish the drilling would have been started sooner the fact that it was started when I was told it would was very important, much appreciated! Thanks, 3) Have drilling seniors notify Task Level 6 Manager (GP) if DS charges are over PRISM allotment. 4) Overall, I believe DS is doing a good job but there is some room for improvement as described in #25. 5) Keep on truckin', see you at the next hole 6) Local drilling crews 7) Production should be compare with private. 8) Need expert advise by continuous education/seminar. 9) The drillers did a great job. The lead driller was well organized which made the work easier. 10) Overall, DS is providing useful service. Again, proper communication, proper working equipment and a motivated Drill Crew are all necessary ingredients for effective productivity. 11) Drillers I have worked with are very good and work hard long hours. More appreciation for the drillers would improve Drilling Services. Some Drilling Services Seniors are not helpful and even hindered my project. Too much blame is put on the drillers. 12) Caltrans maintenance stations must cooperate with our drilling equipment as well as storing our soil/rock samples in their property till completion of that job. 13) Back up drill rigs/tenders should be available for use when drill rigs are turned in for a PM or break down. More training - do the drillers know how to install a piezometer using centralizers? Random field visits by their supervisor near starting and ending times. Field staff should be supported by the office staff. 14) Have an open house, where drilling services provides lunch and we can discuss our experiences, expectations and lessons learned in a less formal atmosphere. I know you guys personally and I try to keep all my drilling in house, many GPs go straight to TO in an attempt to circumvent drilling services altogether because they don't have that personal relationships and trust. Many GPs don't know what your full capabilities are, and mostly we only hear the bad stuff not the good side. 15) Improved morale. Better working conditions, better pay, better support from management. More crews with more rigs and better use of time in the field.