



Dewatering Plan per Specification Section 02140

Summary:

Per specification section 02140 titled, "Dewatering" WA Rasic is to derive and provide a system that will remove and dispose of surface water and ground water entering the excavation. Further, per specification 02140 subsection 3.01 A and B WA Rasic is ensure that we can direct the water and remove the water entering the excavations in order to obtain a satisfactory subgrade foundation. This foundation is to be maintained until all the fills, structures or pipes to be built thereon have been completed to ensure said items will not float.

Per the potholing process in the heavy ground water areas done by WA Rasic it can be concluded that there is minimal to no groundwater that has been encountered and the water that was encountered was "saturated soils" that can not be extracted using conventional dewatering methods.

Method:

W.A. Rasic will be installing both gravity sewer and force main sewer throughout the city of Los Osos. Pipe sizes range from 8" to 18" and the depth of excavation will be 10' +/- throughout most of the project.

In order to adhere to specification section 02140 during the excavation process when Rasic encounters aforementioned saturated soils while excavating and installing sewer lines we propose the following method. Excavation will begin at low elevation near proposed manhole and continue up slope to the higher elevation. If water is encountered a well will be installed at the low end of the trench. Rasic will then utilize Type F rock per Detail C-116B as stabilization and Type E rock per Detail C-116B for pipe bedding and both items wrapped in approved Filter Fabric. This system will also double as a "French Drain" system allowing us to direct and remove the water entering the excavation. All saturated soil/water accumulating will then move downstream to be pumped at our dewatering well near the proposed manhole. No additional excavation or material will be necessary to implement this system. The water will be pumped out of the well into a water truck and transferred to the Mid Town Disposal site per RFI # 4. As excavation continues additional pumps and wells will be installed upstream as necessary and previous wells will be abandoned during the backfill process.

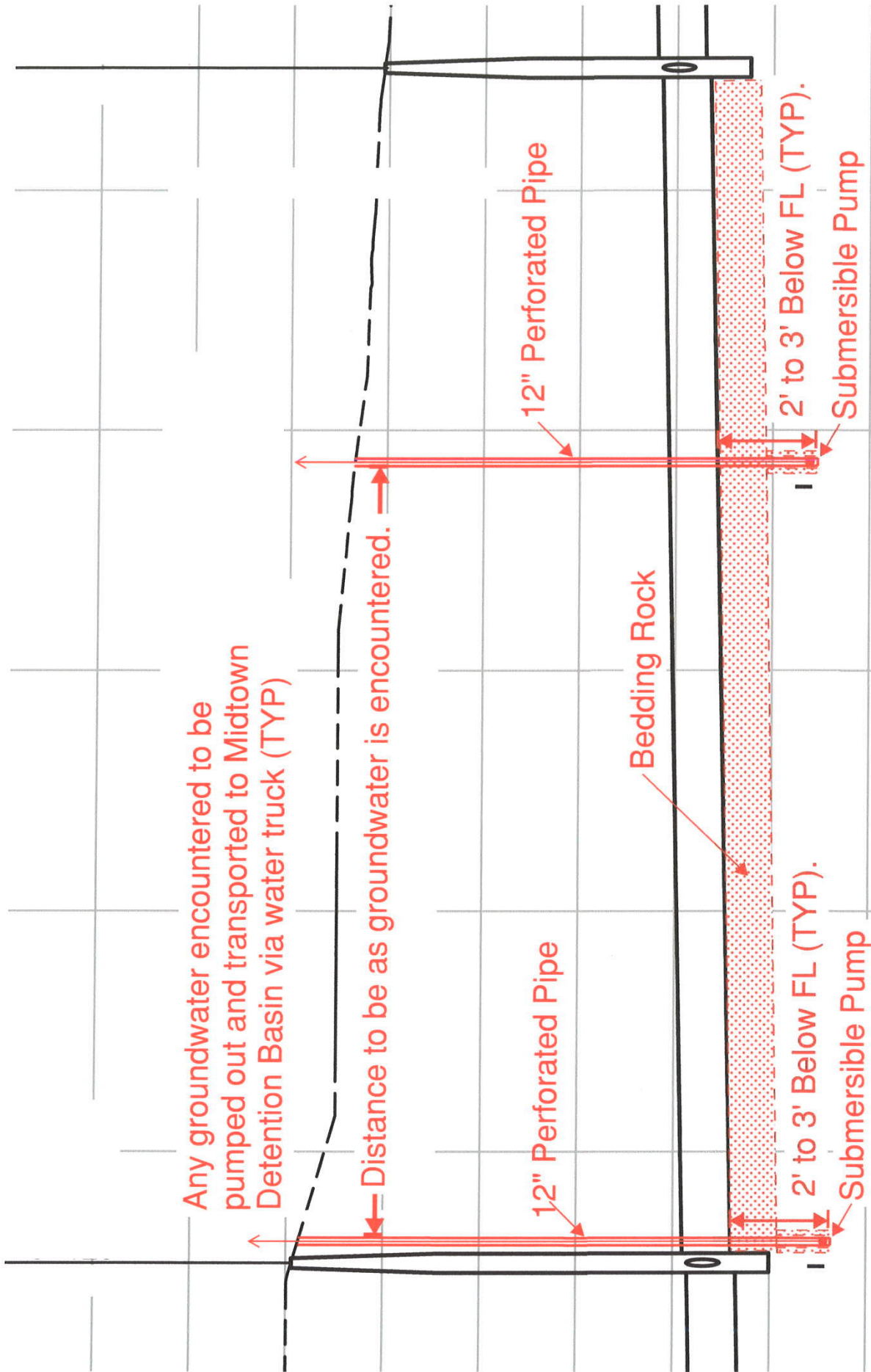
Equipment:

1. CAT 330 Excavator
2. CAT 950 Loader
3. Water Trucks
4. Generator / Power Drop
5. Submersible pumps

Material:

12" Perforated pipe
Type F Rock (coarse drain rock)
Type E Rock (For Bedding)

W.A. Rasic will demonstrate this system should groundwater exist during excavation and maintain a dry trench and an intact subgrade foundation. Allowing the water to run through the coarse drain rock will filter fine soil and create a drain path that will not disturb surrounding soil. This system will run continuously as necessary to insure the stability of the trench, and that no pipe or structure float during excavation or backfill.



Case 1: Minimal Groundwater Areas