

Condition 83**Trenchless Technologies**

Implementation of trenchless technologies shall be considered as a feasible option for the installation of conveyance pipelines within and adjacent to areas containing wetlands, streams, and riparian vegetation. Trenchless technologies that are feasible for all Proposed Projects include microtunneling and horizontal directional drilling (HDD) within all areas along the proposed conveyance routes, and pipe suspension at areas supporting existing bridge crossings along the proposed conveyance routes (at the Los Osos Creek crossing).

Microtunneling and HDD entrance and exit locations shall be set back as far away from wetlands, streams, and riparian vegetation as feasible and consistent with the setback requirements of the CZLUO and Estero Area Plan. Implementation of microtunneling and HDD methodologies shall incorporate a frac-out contingency plan and all relevant Best Management Practices during construction.

Maintenance activities associated with pipe suspension that may result in activity within the streambed of Los Osos Creek shall be restricted to periods when the streambed is dry and does not support any flowing water or pooling water in the proposed maintenance area.

Evidence of compliance:

The plans and project specifications (Contract Documents) for the Los Osos Wastewater Project allow the use of trenchless technologies anywhere in Los Osos during construction and also provide specific direction for certain areas of the wastewater project that need to be constructed using trenchless technologies to avoid impacts to sensitive areas.

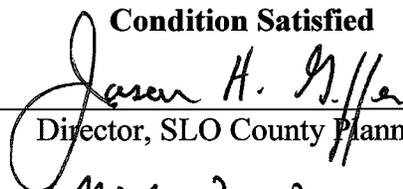
Specific portions of the gravity sewer that need to be constructed by trenchless methods on Clelland Ave., Pismo Ave., Ramona Ave., and Los Osos Valley Road and are shown on plan sheets C-PP-146, D-PP-114, D-PP-117, C-PP-363-364, and C-PP-409-410 which are attached hereto for reference. In addition to the gravity sewer line, 2,184 linear feet of recycled water line located in El Morro Ave. will be constructed using horizontal directional drilling. Plan sheets A-PP-390, A-PP-391 and A-PP-392, also attached, show this portion of recycled water line to be constructed using horizontal directional drilling.

Of the lines being directionally drilled, only one (Pismo Ave.) is in proximity to a wetland. The other trenchless lines are to avoid coastal scrub habitat or cultural resource sites. Bore pits at Pismo Ave. will be located in the improved roadway within the sewer line alignment outside the wetland area. Wetlands are located along both sides of Pismo Avenue; therefore, setbacks from wetlands are not feasible. No direct wetland impacts will occur as a result of directional drilling.

Along with the plan sheets noted above, Sections 02151 and 02158 of the project specifications are attached and outline the requirements for bore/jack and horizontal directional drilling.

The attached typical SWPPP sheet identifies erosion control materials that will be onsite throughout construction. No directional drilling is proposed in areas of standing or flowing water, eliminating the possibility of substantial frac-out impacts.

Condition Satisfied



Director, SLO County Planning

MAY 2, 2012

Date