

WASTEWATER RECLAMATION

1. ALL DESIGN STANDARDS, MATERIALS AND WORKMANSHIP FOR PUBLIC SANITARY SEWERS SHALL BE IN ACCORDANCE WITH THE PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT (PCRWRD) ENGINEERING DESIGN STANDARDS 2016 (EDS 2016) AND THE STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION 2016 (SSDC 2016). SAID DOCUMENTS ARE AVAILABLE THROUGH THE PCRWRD WEBSITE (www.pima.gov/wastewaterreclamation).
2. *[IDENTIFY AND DESCRIBE BENCHMARK ELEVATION IN NAVD 88 DATUM (VERTICAL CONTROL)]*
3. *[IDENTIFY AND DESCRIBE BASIS AND RECORD OF BEARING (HORIZONTAL CONTROL)]*
4. ANY CONSTRUCTION ACTIVITY HAVING THE POTENTIAL TO DAMAGE EXISTING PUBLIC SANITARY SEWERS OR ANY ACTIVITY THAT REQUIRES MATERIALS OR EQUIPMENT TO ENTER EXISTING PUBLIC SANITARY SEWERS SHALL REQUIRE A PIMA COUNTY RWRD SEWER CONSTRUCTION PERMIT PRIOR TO COMMENCING THAT ACTIVITY.
5. SEWER CONSTRUCTION SHALL NOT COMMENCE UNTIL: (A) THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) OR ITS DELEGATED AUTHORITY HAS ISSUED A CONSTRUCTION AUTHORIZATION FOR THIS PROJECT; (B) THE CONTRACTOR HAS OBTAINED A PCRWRD PUBLIC SEWER CONSTRUCTION PERMIT (CONTACT THE PCRWRD PERMITS SECTION AT (520) 724-6649 FOR PERMIT APPLICATION REQUIREMENTS); (C) THE CONTRACTOR'S FLOW MANAGEMENT PLAN HAS BEEN SUBMITTED THIRTY (30) CALENDAR DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING AND APPROVED BY PCRWRD FIELD ENGINEERING; AND (D) A PRE-CONSTRUCTION MEETING WITH THE ASSIGNED PIMA COUNTY PROJECT FIELD INSPECTOR IS SCHEDULED AT LEAST THREE (3) FULL BUSINESS DAYS PRIOR TO COMMENCING WITH SEWER CONSTRUCTION.
6. THE CONTRACTOR SHALL SUBMIT A FLOW MANAGEMENT PLAN (FMP) TO PCRWRD FIELD ENGINEERING FOR APPROVAL BEFORE PROCEEDING WITH ANY WORK THAT MAY AFFECT LIVE SEWERS. THE FMP SHALL IDENTIFY AND INCLUDE ALL FLOW MANAGEMENT COSTS IN THE CONSTRUCTION BID. THE FMP SHALL BE SUBMITTED THIRTY (30) CALENDAR DAYS PRIOR TO THE SEWER PRE-CONSTRUCTION MEETING. FIELD ENGINEERING WILL REVIEW THE FMP WITHIN TEN (10) BUSINESS DAYS TO ACCOMMODATE REVIEW AND REVISION CYCLES. REFER TO PCRWRD SSDC 2016, SECTION 2 FOR FMP REQUIREMENTS. PLEASE CONTACT PCRWRD FIELD ENGINEERING AT (520) 724-2651 FOR ANY QUESTIONS REGARDING FLOW MANAGEMENT.
7. THE CONTRACTOR SHALL FURNISH, OPERATE AND MAINTAIN ALL EQUIPMENT AND LABOR NECESSARY TO PROVIDE CONTINUOUS 24 HOURS PER DAY SANITARY SEWER SERVICE TO ALL PARTIES TRIBUTARY TO A LIVE SEWER TO WHICH A CONNECTION IS TO BE MADE. THE PCRWRD CONVEYANCE DIVISION SHALL BE NOTIFIED AT (520) 724-3400 A MINIMUM OF TWO (2) BUSINESS DAYS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES THAT IMPACTS THE FLOW WITHIN A LIVE SANITARY SEWER SYSTEM OR INVOLVES CONNECTING TO A LIVE SANITARY SEWER. SEE PCRWRD SSDC 2016, SECTION 2 FOR MORE INFORMATION.
8. THE INSPECTION OF THE CONTRACTOR'S WORK BY AN AGENCY AND/OR PCRWRD STAFF SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR COMPLIANCE WITH THE REQUIREMENTS OF THE APPROVED CONTRACT DOCUMENTS. IF THE DESIGN ENGINEER OR PCRWRD STAFF FAIL TO POINT OUT A DEFECT, DEFICIENCY OR ERROR IN THE WORK FROM LACK OF DISCOVERY OR ANY OTHER REASON, IT SHALL IN NO WAY PREVENT LATER REJECTION OR RELIEVE THE CONTRACTOR OF PERFORMING CORRECTIONS TO THE UNSATISFACTORY WORK WHEN DISCOVERED. THE CONTRACTOR SHALL NOT FILE A CLAIM FOR LOSSES SUFFERED DUE TO ANY NECESSARY REMOVALS OR REPAIRS RESULTING FROM THE UNSATISFACTORY WORK.
9. SEWER PLANS THAT BEAR THE PIMA COUNTY DEVELOPMENT SERVICES DEPARTMENT (DSD) APPROVAL STAMP OR THE PIMA COUNTY RWRD ACCEPTANCE SIGNATURE SHALL ONLY BE USED FOR THE CONSTRUCTION OF PUBLIC SANITARY SEWER FACILITIES. APPROVED PLANS REQUIRING DESIGN REVISIONS SHALL BE RESUBMITTED TO PIMA COUNTY DSD OR RWRD (AS APPROPRIATE) FOR REVIEW AND RE-APPROVAL PRIOR TO START OF THE REVISED SEWER WORK.
10. ANY SEWER CONSTRUCTION WORK THAT IS NOT INCLUDED IN THE APPROVED SEWER PLANS WILL NOT BE ACCEPTED BY PCRWRD. SEE PCRWRD SSDC 2016, SECTION 1.4.5 REGARDING THE APPROVAL OF FIELD CHANGES.
11. IMMEDIATELY REPORT ANY OF THE FOLLOWING TO THE PCRWRD OPERATIONS CONTROL CENTER (OCC) AT (520) 724-3400: ANY RELEASE OF SEWAGE, ANY DAMAGE TO THE PUBLIC SANITARY SEWER SYSTEM, OR THE DROPPING OF DEBRIS INTO A PUBLIC SANITARY SEWER MANHOLE. A PCRWRD REPRESENTATIVE WILL BE DISPATCHED TO THE SITE. THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION TO CONTAIN A SANITARY SEWAGE OVERFLOW (SSO). THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS TO REPAIR THE SYSTEM, MITIGATE THE RELEASE OF SEWAGE, DISINFECT THE RELEASE AREAS, AND ANY REGULATORY PENALTIES LEVIED ON PCRWRD FOR SEWAGE ENTERING A NATURAL DRAINAGE WAY OR STORM WATER DRAINAGE SYSTEM. THE CONTRACTOR SHALL REPAIR ALL DAMAGE AS DIRECTED AND APPROVED BY THE PCRWRD FIELD REPRESENTATIVE.
12. THE CONTRACTOR SHALL CONTACT "ARIZONA 811" (DIAL 811 OR 1-800-782-5348) A MINIMUM OF TWO (2) BUSINESS DAYS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL KEEP ALL UNDERGROUND FACILITY LOCATION REQUESTS UP-TO-DATE AND COMPLY WITH ARIZONA REVISED STATUTES (A.R.S.), TITLE 40, CHAPTER 1, ARTICLE 6.3, SECTION 40-360.22. CONCERNS REGARDING THE ACCURACY BETWEEN THE UNDERGROUND FACILITY MARKINGS AND THE PROJECT PLANS SHALL BE IMMEDIATELY REPORTED TO THE DESIGN ENGINEER.
13. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL SANITARY SEWER MANHOLES AT ALL TIMES.
14. THE CONTRACTOR SHALL FIELD-VERIFY EXISTING SEWER LINE ELEVATIONS AND ALIGNMENTS PRIOR TO CONSTRUCTION. VERIFICATION MAY REQUIRE POT-HOLING.
15. ANY HOUSE CONNECTION SEWER (HCS) OR BUSINESS CONNECTION SEWER (BCS) LINES ENCOUNTERED DURING CONSTRUCTION SHALL BE PROTECTED, REPAIRED, OR REROUTED, AS THE SITUATION DICTATES, PER PCRWRD SSDC 2016 DETAIL NO. RWRD 400 AND AT NO EXPENSE TO THE PROPERTY OWNER OR PCRWRD. HCS AND BCS LINES ARE NOT OWNED OR MAINTAINED BY PCRWRD. PRIVATE CONNECTION SEWERS CONSTRUCTED PRIOR TO JANUARY 2006 ARE NOT REQUIRED TO BE LOCATED AND MARKED.
16. SURVEY LAYOUT AND SURVEY CONTROL SHALL BE PERFORMED BY, OR UNDER, THE DIRECT SUPERVISION OF AN ARIZONA RLS.
17. SURVEY CUT SHEETS SHALL BE PREPARED IN ACCORDANCE WITH PCRWRD SSDC 2016, SECTION 3.2.3(A)(i). CERTIFIED CUT SHEETS SHALL BE SUBMITTED TO THE PCRWRD FIELD ENGINEER PRIOR TO COMMENCEMENT OF SEWER CONSTRUCTION. CUT SHEETS ARE FOR PCRWRD REFERENCE ONLY AND SHALL NOT DELAY SEWER CONSTRUCTION DUE TO REVIEW OF THE DELIVERABLE. ANY ERRORS OR OMISSIONS RESULTING IN IMPROPER SEWER CONSTRUCTION SHALL NOT BE THE RESPONSIBILITY OF PCRWRD. REFER TO PCRWRD SSDC 2016, SECTION 3.2.3(A)(ii) FOR CONSTRUCTION SURVEY STAKING REQUIREMENTS.
18. THE DEVELOPER OR CONTRACTOR SHALL RETAIN AN ARIZONA-REGISTERED LAND SURVEYOR (RLS) FOR PREPARATION OF THE SEWER AS-BUILT PLANS. SEWER AS-BUILT PLANS SHALL CONFORM TO SSDC 2016, SECTION 1.4.7 AND ARE REQUIRED FOR FINAL ACCEPTANCE OF SEWER CONSTRUCTION BY PCRWRD. THE DEVELOPER OR CONTRACTOR SHALL SUBMIT TWO FULL-SIZE COPIES, AND AN ELECTRONIC VERSION, OF THE AS-BUILT SEWER PLANS TO THE PCRWRD FIELD ENGINEER.
19. NEW PUBLIC SANITARY SEWER FACILITIES MUST BE TESTED, INSPECTED AND AUTHORIZED FOR DISCHARGE BY PCRWRD AND ADEQ, OR IT'S DELEGATE, PRIOR TO DISCHARGING INTO THE EXISTING PUBLIC SANITARY SEWER SYSTEM.

20. THE CONTRACTOR SHALL COMPLY WITH APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS AT ALL TIMES.
21. PRIOR TO THE INSTALLATION OF SANITARY SEWERS, ALL ROUGH GRADING, INCLUDING FILL, SHALL BE COMPLETED TO A MINIMUM OF 4 FEET OVER THE TOP OF THE SEWER PIPE. BEDDING, SHADING, AND TRENCH BACKFILL COMPACTION SHALL BE PERFORMED IN ACCORDANCE WITH PCRWRD SSDC 2016, DETAIL NO. RWRD 104, OR AS SHOWN ON THE PLANS. SHOULD GROUND WATER OR UNANTICIPATED SOIL CONDITIONS BE ENCOUNTERED, THE BEDDING SHALL BE MODIFIED BY THE DESIGN ENGINEER AND APPROVED BY THE PCRWRD FIELD ENGINEER. WHEN THE NEW SEWER IS LOCATED WITHIN A PUBLIC SEWER EASEMENT, COMPACTION OF BACKFILL SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS OR AS OTHERWISE DIRECTED BY PCRWRD. WHEN THE NEW SEWER IS LOCATED WITHIN RIGHT-OF-WAY, COMPACTION OF BACKFILL SHALL BE IN ACCORDANCE WITH THE RIGHT-OF-WAY AGENCY HAVING JURISDICTION.
22. SANITARY SEWER CONSTRUCTION SHALL START AT THE LOWEST DOWNSTREAM POINT AND PROCEED UPSTREAM, REGARDLESS OF THE STATIONING SHOWN ON THE PLANS. IF CONSTRUCTION CANNOT BE PERFORMED IN THIS MANNER, THE CONTRACTOR SHALL PROVIDE AN OUT-OF-SEQUENCE LETTER FOR APPROVAL BY THE PCRWRD FIELD ENGINEER PRIOR TO THE START OF SEWER CONSTRUCTION.
23. THE HORIZONTAL AND VERTICAL SEPARATION BETWEEN PUBLIC WATER MAINS AND PUBLIC SEWER LINES SHALL COMPLY WITH ARIZONA ADMINISTRATIVE CODE (A.A.C.) R18-5-502 AND PCRWRD SSDC 2016, DETAIL NO. RWRD 108.
24. PLANTING WITHIN PUBLIC SEWER EASEMENTS SHALL ONLY BE ALLOWED WITH SPECIAL APPROVAL. TREES WITH BRANCHES OR ROOTS HAVING THE POTENTIAL TO EXTEND INTO PUBLIC SEWER EASEMENTS SHALL BE AVOIDED. IN SPECIAL CASES, WHERE THE PUBLIC SEWERS MUST BE LOCATED OUTSIDE PAVED OR STABILIZED AREAS, LANDSCAPING AND PLANTING SHALL ADHERE TO GUIDELINES IN PCRWRD EDS 2016, SECTION 7.7 AND PCRWRD SSDC 2016, DETAIL NO. RWRD 111.
25. ALL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEASURES SHALL BE INSTALLED TO PREVENT ALL STORM WATER, CONSTRUCTION WATER, FUELS, CHEMICALS, LIQUIDS, OR OTHER CONTAMINANTS, FROM BEING DIRECTED INTO OR ONTO ANY SANITARY SEWER FACILITIES. PROTECTION OF SANITARY SEWER FACILITIES SHALL BE A PART OF THE APPROVED CONSTRUCTION SWPPP AND BEST MANAGEMENT PRACTICES. PROTECTION DEVICES SHALL BE INSTALLED AND MAINTAINED AROUND ALL POTENTIALLY AFFECTED SANITARY SEWER FACILITIES WITHIN THE PROJECT LIMITS. ADDITIONAL MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE USE OF RAIN STOPPERS AND MANHOLE COVERS AS DEEMED NECESSARY BY PCRWRD.
26. ALL PROJECT ACTIVITIES MUST BE KEPT WITHIN THE PROJECT AREAS. CONCERNING HUMAN BURIAL REMAINS, ARCHAEOLOGICAL CLEARANCE RECOMMENDATIONS DO NOT EXEMPT THE DEVELOPMENT FROM COMPLYING WITH STATE BURIAL PROTECTION LAWS. IN THE EVENT THAT HUMAN REMAINS, INCLUDING HUMAN SKELETAL REMAINS, CREMATIONS, CEREMONIAL OBJECTS OR FUNERARY OBJECTS, ARE FOUND DURING EXCAVATION OR CONSTRUCTION, GROUND DISTURBING ACTIVITIES MUST CEASE IN THE IMMEDIATE VICINITY OF THE DISCOVERY. ARIZONA STATE LAWS ARS 41-844 AND 41-865 REQUIRE THAT THE ARIZONA STATE MUSEUM BE NOTIFIED OF THE DISCOVERY AT (520) 621-4795 SO THAT CULTURAL GROUPS WHO CLAIM CULTURAL OR RELIGIOUS AFFINITY TO THE REMAINS CAN MAKE APPROPRIATE ARRANGEMENTS FOR THE REPATRIATION AND REBURIAL OF THE REMAINS. THE HUMAN REMAINS WILL BE REMOVED FROM THE SITE BY A PROFESSIONAL ARCHAEOLOGIST PENDING CONSULTATION AND REVIEW BY THE ARIZONA STATE MUSEUM AND THE CONCERNED CULTURAL GROUPS.

Project Specific Notes

27. SPECIAL CARE SHALL BE TAKEN TO ENSURE DESIGN SLOPES ARE MAINTAINED. SEWERS CONSTRUCTED AT INSUFFICIENT SLOPES WILL NOT BE ACCEPTED BY PCRWRD FIELD ENGINEERING AND/OR ADEQ. CORRECTIVE ACTION, INCLUDING RE-CONSTRUCTION OF THE SEWER(S), WILL BE AT THE SOLE EXPENSE OF THE PROJECT OWNER/CONTRACTOR.
28. THE CONTRACTOR SHALL ADJUST OR RECONSTRUCT ALL SANITARY SEWER MANHOLES TO FINISHED GRADE. ALL FRAMES AND COVER ADJUSTMENTS SHALL BE IN ACCORDANCE WITH PCRWRD SSDC 2016, DETAIL NOS. RWRD 211, 212, 304 OR 305 (AS APPLICABLE). THE CONTRACTOR SHALL PROTECT THE BENCH AND FLOW CHANNELS WITH A COVER PER PCRWRD SSDC 2016, DETAIL NO. RWRD 306. PRIOR TO COMMENCING ANY WORK TO THE MANHOLE AND REMOVE THE COVER AFTER ALL WORK IS COMPLETED. THE CONTRACTOR SHALL ENSURE THAT FRAMES AND COVERS ARE CLEAN AND FREE FROM ANY AND ALL ATTACHED MATERIALS (ASPHALT, CONCRETE, ETC.) AND THAT ALL VENT HOLES ARE OPEN AND CLEAR OF OBSTRUCTIONS, AS APPROVED BY THE PCRWRD FIELD ENGINEER. EXISTING FRAMES AND/OR COVERS THAT ARE DAMAGED OR CANNOT BE COMPLETELY CLEANED SHALL BE REPLACED WITH A NEW FRAME AND COVER IN ACCORDANCE WITH PCRWRD SSDC 2016, DETAIL NO. RWRD 213 – 218. COSTS ASSOCIATED WITH EXISTING FRAMES AND COVERS THAT ARE LOST OR DAMAGED DUE TO THE CONTRACTOR'S OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.