### SEE APPENDIX F - WATER POINT OF CONNECTION PLAN CHECK PROCEDURES

### **4.14 DIGITAL PLAN SUBMITTAL**

MSWD requires the developer's engineer preparing the improvement plans to submit approved plans in AutoCAD Drawing format.

Files shall be e-transmitted or otherwise packaged to include all appropriate font files and CTB or STB required for opening the file for plotting.

## 1. Software Format

The acceptable format for digital submissions shall be one of the following:

- a) AutoCAD's Release 2020 (.DWG) or an earlier version
- b) Drawing Exchange File (.DXF) subject to district approval

# 2. Digital Data Media

All digital information shall be submitted to MSWD on one of the following:

- a) DVD
- b) Flash or Thumb Drive (will be retained by MSWD)

The following information must be labeled on all digital data:

- DATE (Date submitted)
- MAP NAME (TR, PM, PP, Etc.)
- MSWD WO#
- COMPANY (engineering Firm Name)

# 5.0 PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES

All water and sewer facility projects shall be constructed by developer and inspected by MSWD inspectors. Work performed without the knowledge or the observation of a MSWD inspector will not be accepted. An outline of the required steps to construct water and sewer facilities is set forth in Section 5.01. The steps for the pre-construction and construction procedures are illustrated in a flow chart in Section 5.03.01; and outlined in greater detail in Section 5.02.

## 5.01 CONSTRUCTION STEPS

1. MSWD Engineering Department sends developer a Fee Letter and Pre-construction Requirements Checklist. See Section 5.03.02.

- 2. All required items listed in a pre-construction requirements checklist must be received by MSWD prior to scheduling a pre-construction meeting.
- 3. Engineering Department notifies developer when all pre-construction requirements have been received.
- 4. Engineering Department schedules a pre-construction meeting with the developer.
- 5. MSWD, developer and contractor attend pre-construction meeting.
- 6. Engineering Department issues a Notice to Proceed.
- 7. Developer's contractor constructs water and/or sewer system facilities per MSWD specifications.
- 8. Developer's contractor pressure tests and disinfects water system facilities and leak tests sewer system facilities.
- 9. MSWD Inspector notifies the Engineering Department when the bacteriological and pressure tests have passed on an extension of pipeline.
- 10. Inspection deposit must be kept current throughout construction phase.
- 11. MSWD or Developer's contractor sets meter boxes.
- 12. The Engineering Department will process the application/request for meter installation only after the meter box installation has been explicitly approved. Note: Upon approval of meter box installation, following the receipt of the Bill of Sale, the Engineering Department will process the application/request for meter installation. Meter installation can take up to two weeks.
- 13. Developer's contractor connects to existing water and sewer facilities.
- <u>14.</u> MSWD notifies the City or County Fire Department and releases lots for fire protection and construction water.
- 14.15. Developer shall provide executed Bill of Sale to transfer title of the water and sewer systems and its appurtenances to the District has been received.
- 15.16. Engineering Department coordinates installation of drop-in meters with MSWD field crew.
- 46.17. MSWD installs the meter(s).
- 47.18. MSWD releases lots for temporary occupancy to the City or County.
- 48.19. MSWD Inspector prepares preliminary final construction punch list items.

- <u>19.20.</u> Developer's contractor completes all punch list items and prepares red line drawings given to MSWD for review and approval.
- 20.21. MSWD provides final inspection and acceptance and issues a Notice of Final Inspection.
- 21.22. Notice of Final Inspection is forwarded to Engineering Department.
- 22.23. MSWD issues a Notice of Completion (NOC) and/or Bill of Sale.
- 23.24. Following Board of Directors acceptance and/or the recording of the NOC or Board of Directors acceptance of the and Bill of Sale, MSWD reduces the Faithful Performance Bond by ninety percent (90%) and holds a ten percent (10%) retention for one year, if applicable.
- 24.25. MSWD closes project deposit account after the one-year warranty period established by the Bill of Sale and returns any remaining funds to the developer.

# 5.02 PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES DETAIL

- 1. The developer shall pay the following deposits, fees, and charges:
  - a) Engineering and plan check review fees.
  - b) Inspection Deposit The inspection deposit is submitted with the initial plan check deposit (see 1.05 2). Engineering Department will determine if sufficient funds remain or if an additional deposit is required.
  - c) Meter Fees Payment is required for each meter. MSWD will install the meters on behalf of the contractor.
  - d) Water Connection Charge Payment of the distribution system fee is required for all new customers connecting to an existing MSWD water pipeline.
  - e) Back flow preventer assembly charges.
  - f) Sewer connection fees.
- 2. Submit three copies of water/sewer system construction agreement.

MSWD will prepare the Water/Sewer System Construction Agreement for execution by the developer and contractor. All three copies shall be returned to MSWD and all three copies shall have original signatures for the developer and contractor. A sample agreement is set forth in Sections 5.03.03 and 5.03.04.

3. Submit Two Copies of Participation/Refund Waiver Agreement.

MSWD will prepare the Participation/Refund Waiver Agreement for execution by the developer. Both copies shall be returned to MSWD and both copies shall have original signatures. A sample agreement is set forth in Section 5.03.05.

4. Submit Labor and Materials Bond and Faithful Performance Bond.

Developer shall provide MSWD with evidence of a labor and materials bond and a faithful performance bond. Each bond shall be in the amount of the total contract price for construction of the water and sewer facilities.

5. Provide contractor's Name, Address, and License Number.

Developer shall provide MSWD with the name, address, and license number for the contractor that will construct the sewer and water system facilities.

6. Provide Certificate of Insurance Naming MSWD as Additional Insured.

Contractor shall provide MSWD with certificate of insurance and original endorsements in accordance with the insurance requirements as specified in the Water/Sewer Construction Agreement.

7. Provide copy of contractor's bid.

Developer shall provide MSWD with a copy of the contractor's bid for the water and sewer system facilities. The bid shall include line item costs of all work as specified on the approved construction drawings.

8. Provide copy of encroachment permit (if working in a public right-of-way).

If the project involves construction within a public right-of-way, developer shall provide MSWD with a copy of the encroachment permit from the public agency. Said permit shall allow the contractor to construct the facilities and shall allow MSWD to operate and maintain the facilities once completed.

9. Provide Letter from Licensed civil engineer that streets have been graded to rough grade.

Developer shall submit a letter from a licensed civil engineer stating that streets have been graded to rough grade (0.2'±). A sample letter is included as Section 5.03.06.

- 10. Provide Letter from Licensed civil engineer that Curb and Gutters have been constructed or submit a Letter Requesting a Waiver.
- 11. Developer shall submit a letter from a licensed civil engineer stating that curb and gutters have been constructed. As an alternative, developer may submit a letter

- requesting a waiver from construction of the curb and gutters prior to construction of the water pipelines. For a sample letter for an installation waiver, see Section 5.03.07.
- 12. Easements or Fee Title: Developer shall provide MSWD with an executed and notarized easement document or a grant deed, for any easements or Fee Title parcels shown on the water or sewer plans.
- 13. Soils Report: Developer shall provide MSWD staff with a copy of the soils report prepared for the site.
- 14. Recorded Map: Developer shall submit a copy of the recorded map (MSWD requires copy of recorded map prior to recording the Notice of Completion (NOC). Dedicated easements will be required if the tract Map is not recorded. MSWD will not record the easement unless it is necessary to own, operate and maintain facilities.
- 15. Tract Construction phasing Maps: Developer shall submit a tract construction phasing map (8½" X 11" format) showing lot numbers and street names.
- 16. Schedule a Pre-construction Meeting with MSWD Engineering Department.
- 17. Developer shall schedule a pre-construction meeting with MSWD Engineering Department after all required fees and line items have been received by Development Services. A one-week notice is required prior to said pre-construction meeting.
- 18. Attend Pre-construction Meeting. Pre-construction meeting shall be held at MSWD administrative office, or via video conference, and shall be attended by developer's representative, developer's contractor, MSWD Engineering Department, City and County representatives, other utility agencies, as well as by MSWD staff.
- 19. Provide copies of cut sheets. The contractor shall submit three copies of the construction cut sheets for MSWD use during construction. Water pipelines shall be staked at 50' intervals (if curb and gutters are not installed, stake at 25' intervals) and at all water services, fire hydrants, tees, crosses, elbows, valves, air valves, blow-offs, and grade breaks. Sewers shall be staked at 25' intervals and at all sewer laterals and manholes.
- 20. MSWD issues notice to proceed. When all the above items are completed to the satisfaction of MSWD, MSWD Engineering Department will issue a notice to proceed for construction of the water and sewer system facilities.
- 21. Notify MSWD regarding construction start. The contractor shall notify MSWD a minimum of 48 hours prior to construction start.
- 22. Construct water and sewer system facilities. The water and sewer system facilities shall be constructed by developer's contractor per MSWD specifications and inspected by MSWD inspectors. Inspection requirements are set forth in (Section 5.03.08).

- 23. Compaction test: The contractor shall furnish evidence that compaction of trenches has been completed to the satisfaction of the County of Riverside, the City of Desert Hot Springs or the City of Palm Springs, as appropriate.
- 24. Pressure test and disinfect water system facilities and leak test sewer system facilities. After water facilities are completed to the satisfaction of MSWD inspector including all items on inspector's construction deficiencies list, and after compaction of trenches has been completed to the satisfaction of MSWD, the County of Riverside, the City of Desert Hot Springs, or the City of Palm Springs, as appropriate, contractor shall test and disinfect the water facilities in accordance with MSWD standards. Contractor shall video inspect all welded steel water pipelines twelve-inch (12") or larger prior to testing and disinfection.
- 25. After sewer facilities are completed to the satisfaction of MSWD inspector including all items on inspector's construction deficiencies list, and after contractor furnishes evidence that compaction of trenches has been completed to the satisfaction of MSWD, the County of Riverside, the City of Desert Hot Springs or the City of Palm Springs, as appropriate, contractor shall test the sewer facilities in accordance with MSWD standards. Contractor shall video inspect all sewer pipelines.
- 26. Landscape meters: The developer will install the landscape lateral, meter box and backflow device assembly but not the meter. MSWD will install the meter after all meter fees have been paid. Important: The Developer must execute a Bill of Sale to transfer title of the water and sewer systems and its appurtenances to the District prior to the installation of any meters. Meters will be locked off until backflow assembly device has been installed, tested and certified by MSWD.
- 27. After the water system is tested and disinfected, contractor may connect water facilities to existing water facilities. Contractor shall provide MSWD with two weeks written notification requesting a system shutdown to make connections to existing MSWD facilities. After all sewer connection fees have been paid, and the sewer system is tested, contractor may connect sewer facilities to existing sewer facilities. Contractor shall perform all connections with continuous inspection by MSWD. Thereafter, MSWD will release lots for fire protection and construction water.
- 28. The Developer is responsible for installing meter boxes. The MSWD Engineering Department will issue work orders to the MSWD Operations Department to schedule the meter installation. Important: The Developer must execute a Bill of Sale to transfer title of the water and sewer systems and its appurtenances to the District prior to the installation of any meters. Once the meters are installed, the Engineering Department will authorize the release of lots for occupancy and will notify the County of Riverside, the City of Desert Hot Springs, and the City of Palm Springs as applicable. Developer will install meter boxes. MSWD Engineering Department provides work orders to MSWD Operations Department to schedule meter installation (Bill of Sale must be submitted to the District before meters will be installed). When meters have been installed, the Engineering Department will release lots for occupancy and will provide notices to the County of Riverside, the City of Desert Hot Springs, and the City of Palm Springs, as appropriate.

- 29. After construction of the water and sewer system facilities for the entire tract, MSWD inspector will prepare a preliminary final construction punch list and deliver copies to contractor.
- 30. The contractor shall complete all items listed on MSWD preliminary final construction punch list.
- 31. The contractor shall provide MSWD inspector with accurate record drawings.
- 32. When the water system and sewer system facilities have been accepted by MSWD, MSWD will issue a Notice of Final Inspection stating that the final inspection has been made and the construction is complete.
- 33. MSWD prepares a notice of completion and/or Bill of Sale for the water and sewer system facilities to the Board of Directors for acceptance.
- 34. When the developer executes the Notice of Completion and/or Bill of Sale, developer shall return the documents to MSWD. When MSWD has received the executed documents, MSWD Submits Notice of Completion for Recordation and Releases the Labor and Materials Bond.
- 35. After the Notice of Completion is recorded and following the 90-day lien period, MSWD will reduce the Faithful Performance Bond by 90%. Following Board of Directors acceptance and/or recording of the NOC and Bill of Sale, MSWD reduces the Faithful Performance Bond by ninety percent (90%) and holds a ten percent (10%) retention for one year, if applicable.
- 36. MSWD issues a letter of acceptance of water and/or sewer system for the County of Riverside or the City of Desert Hot Springs.
- 37. MSWD performs a warranty inspection at one (1) year from the NOC and/or Bill of Sale.
- 38. MSWD will close the deposit account and return any remaining deposit after one (1) year warranty period has expired.

### 5.03 PRE-CONSTRUCTION AND CONSTRUCTION FORMS INDEX

5.03.01	Flowchart – pre-construction and construction
5.03.02	Pre-construction requirement checklist
5.03.03	Water system construction agreement
5.03.04	Sewer system construction agreement
5.03.05	Agreement for on-site water/sewer participation waiver
5.03.06	Form letter - rough grade verification