CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT

WATER, SEWER, AND RECLAIMED WATER DESIGN & CONSTRUCTION MANUAL

GENERAL AND REQUIRED NOTES

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GENERAL NOTES FOR ALL IMPROVEMENT PLANS

1. The Contractor shall notify the San Diego Gas and Electric Company and the Pacific Telephone and Telegraphy Company prior to staring work near company facilities and shall coordinate their work with company representatives. All telephone services within this subdivision are underground installation. For location of electric cables, gas piping and telephone cables and appurtenances, contact UNDERGROUND SERVICE ALERT: 1-800-227-2600. Also, refer to City standards.

2. A permit shall be obtained from the City Engineering Department for work within existing City right-of-ways.

3. The Contractor shall notify the City of Oceanside Engineering Inspection Department 48 hours prior to starting work so that inspection may be provided. (Telephone number: 760-435-5081).

4. All work shall be in accordance with the most recent editions of the Standard Specifications for Public Works Construction, with supplements (APWA Specifications); the San Diego County Regional Standard Drawings (SDRSD); City of Oceanside Water, Sewer, and Reclaimed Design & Construction Manual; and City of Oceanside Engineers Design and Processing Manual (Oceanside Engineers Manual).

5. Pavement sections shown are to be verified by “R” Value Tests (Test Method No. California 301) and pavement design report, to be submitted by Soils Engineer after underground utilities construction is complete, for City Engineer’s approval.

6. All metals placed in the ground shall be encased 6 inches of neutral sand.

7. Construction expansion joints in curb and gutter at returns and at driveway intersections are required per SDRSD G-9 and G-10.

8. All underground utilities laterals shall be installed before construction of curbs, cross gutters, or surfacing of the streets and shall be marked for easy location. The Engineer of Work shall certify all improvements to within 0.1 feet of the design.

9. It shall be the responsibility of the Contractor to obtain an excavation permit from the division of industrial safety and adhere to all provisions of the state construction safety orders.

10. Soils reports on all trenches shall be submitted to the Engineer of Work and the City Engineer by the Soils Engineer of Record, which certifies that trench backfill, was compacted as directed by the Soils Engineer in accordance with earthwork specifications and City of Oceanside Specifications and Grading Ordinance.

11. Blue Fire Hydrant Markers shall be placed on the pavement per City of Oceanside Standard Drawing M-13.

12. Traffic control shall be in accordance with the current State of California Department of Transportation Traffic Control Manual and supplements (Caltrans Traffic Control Manual); and; traffic control warning signs, lights, and devices shall conform to the 2010

California Manual on Uniform Traffic Control Devices (California MUTCD 2010, including Revs. 1 and 2 of the FHWA's MUTCD 2003), Department of Transportation, Division of Traffic Operations.

13. Centerline monuments shall be installed at the EC and BC of all curves, at the centerline intersection of all streets where manholes allow, at the radius point of concentric cul-de-sacs, and at the angle point of offset cul-de-sacs, per SDRSD M-10 and M-11.

14. All existing improvements including curbs and gutters, sidewalks, asphalt concrete or P.C.C. paving, which are being joined or matched in connection with this project, shall be joined or matched in a manner satisfactory to the City Engineer, including necessary saw-cutting, removal, replacement, and capping.

15. All operations conducted on the premises, including the warming-up, repair, arrival, departure, or running of trucks, earthmoving equipment, construction equipment, and any other associated equipment shall be limited to the period between 7:00 A.M. and 6:00 P.M. Monday through Friday; and, no earthmoving or grading operations shall be conducted on the premises on Saturdays or Sundays or legal holidays, unless waived by the City Engineer.

16. Striping shall be done by the contractor at the developer's expense, unless otherwise directed.

17. Traffic stripes and pavement markings shall not be applied over existing stripes that are to be removed. Existing stripes shall be first removed by sandblasting before any new application.

18. Reflective pavement markers shall be installed by Contractor on permanent striping. All street signs shown on these plans shall be the responsibility of the developer. Sign specifications and installation shall be in accordance with City of Oceanside Standard Drawing T-3 and the State of California, Department of Transportation Specification for regulatory, warning and guide signs.

19. Patching of sidewalk is not permitted.

20. Damaged, gouged, broken, or graffiti-marked sections of curbs, gutters or sidewalks shall be removed and replaced.

21. A minimum replacement section to be at least equal to score mark (typically 5 feet x 5 feet). For sidewalks exceeding 5 feet width, replacement is to be full width squared to the next score mark.

22. All valve cans and risers on the City's operational system will be raised to grade, including compaction around the riser and paving around valve can, within 48 hours after pavement has been placed. This includes valve cans and risers on the existing system and on all new systems that are tied into the City's existing system.

23. All sewer manholes on the City's operational system will be raised to grade within 48 hours after pavement has been placed. This includes manholes on the existing system and on all new systems that are tied into the City's existing system.

REQUIRED NOTES FOR WATER SYSTEM DESIGN PLANS

1. All work shall be in accordance with the most recent editions of the City of Oceanside Water Utilities Department Water, Sewer, and Reclaimed Water Design & Construction Manual (Oceanside Water Utilities Manual); City of Oceanside Engineers Design and Processing Manual (Oceanside Engineers Manual); San Diego Area Regional Standard Drawings (SDRSD); and, Standard Specifications for Public Works Construction (SSPWC or Greenbook) and Supplemental Amendments.

2. A "W" shall be inscribed on curb directly above all water services. Services shall be shown on As-Built Plans and shall be located by a waterline stationing.

3. Pressure test, disinfect, sample test(s), and flush the water system in accordance with the guideline titled, "Construction Guidelines and Requirements", included as Section F of the City of Oceanside's Water, Sewer, and Reclaimed Water Design & Construction Manual's.

4. No disruption to the existing water distribution mains will be allowed on Mondays or Fridays. All shutdowns for system tie-ins will be scheduled between Tuesday, Wednesday and Thursday, and will be confined to normal working hours. Refer to the guideline titled, "Administrative Procedures for Water Line Shutdowns" in the Construction Guidelines and Requirements Appendix of the City of Oceanside's Water, Sewer, and Reclaimed Water Design & Construction Manual.

5. No connections for the purpose of obtaining water supply during construction shall be made to any fire hydrant or blow-off structure without first obtaining a construction water permit from the City of Oceanside Water Utilities Department. A Reduced Pressure Principle Assembly (RP Assembly) shall protect the meter.

6. All water used on a construction project shall be metered. The cost of the water will be charged to the Contractor/Developer. This includes water for loading of new waterlines, flushing of lines, pressure testing, etc. Citations will be issued to parties taking water from non-metered facilities.

7. The Contractor shall notify the Underground Service Alert two (2) working days prior to starting excavation so that existing water facilities shall be marked in the field prior to the start of construction. (UNDERGROUND SERVICE ALERT: 1-800-227-2600).

8. Location and elevation of existing water facilities shall be confirmed by field measurements and excavation exploration (potholing) by the Contractor, after USA mark-out has been completed and the Water Utilities Department has been given a two (2) working-day notice.

9. The existence and location of existing water facilities as shown on the plans were obtained from available City records. To the best of our knowledge, the existing water facilities are as shown on the plans. The City of Oceanside shall not be held responsible for any error in the location and elevation of the existing water facilities.

10. No revision shall be made to these plans without the approval of the Water Utilities Director.

11. Nuts and bolts on all flange fittings shall be cadmium plated and coated Per Section 2.12.C of the City of Oceanside's Water, Sewer, and Reclaimed Water Design & Construction Manual, except for buried service, which shall be Type 316 stainless steel. All plated nut and bolt threads shall be coated with non-oxide grease prior to installation. Apply anti-seize to all Stainless Steel nut and bolt threads. Buried service valves, fittings, and appurtenances will be coated and wrapped per Section 2.12 of the Oceanside Water, Sewer, Reclaimed Water, Design and Construction Manual.

12. Water services are not permitted in driveways and meter boxes are not permitted in concrete.

13. The City Inspector shall be notified at least two (2) working days prior to any inspection. To arrange for inspection, call the Water Utilities Department at 760-435-5800.

14. Pipe bedding and trench backfill shall conform to San Diego Regional Standard Drawing W-21, except that compaction shall be 95%. The pipe shall be laid on 6-inch minimum sand bed with sand equivalent of SE-30 or more. The backfill material for the pipe zone shall be sand or native material with a S.E. of 30 or more, free from stones, clods and other deleterious materials.

15. All fittings and services shall be encased with a minimum of six (6) inches of neutral sand, and Per Sections 2.12.C and G of the City of Oceanside's Water, Sewer, and Reclaimed Water Design & Construction Manual.

16. Pipe deflections for short radius curves and angle points shall normally be accomplished by means of standard fittings, the locations of which shall be detailed on the plans.

17. POLYETHYLENE ENCASEMENT: All underground installed valves, ductile iron pipe, and fittings shall be encased in 2 layers of 8-mil polyethylene encasement and installation shall be in accordance with ANSI/AWWA C105/A21.5.

18. PIPE INSTALLATION: The inside and outside of the pipe shall be clean and free from foreign material of any kind before being installed.

19. 3-inch minimum width color coded detector tape marked "WATER" in 1-½ inch black letters shall be placed on the compacted and graded sand bedding one foot above and centered over the water main prior to backfilling the trench.

20. Water quality tests shall include bacteriological (BT) and General Physical (GP) testing. All testing will comply with the provisions of Section F) Water System Testing Requirements in the Construction Guidelines and Requirements Appendix of the City of Oceanside's Water, Sewer, and Reclaimed Water Design & Construction Manual. All testing will be successfully completed before connection (tie-in) submittal and approval.

21. All water discharge from flushing, testing, and dewatering shall comply with all requirements of the California Regional Water Quality Control Board-San Diego Region (SDRWQCB) regulations.

22. Detailed plans for fire service lines must be submitted to the Fire Department for approval, prior to commencement of construction.

END OF REQUIRED NOTES FOR WATER SYSTEM DESIGN PLANS

REQUIRED NOTES FOR SEWER SYSTEMS DESIGN PLANS

1. All work shall be in accordance with the most recent editions of the City of Oceanside Water Utilities Department Water, Sewer, and Reclaimed Water Design & Construction Manual (Oceanside Water Utilities Manual); City of Oceanside Design and Processing Manual (Oceanside Engineers Manual); San Diego Area Regional Standard Drawings (SDRSD); and, Standard Specifications for Public Works Construction (SSPWC or Greenbook) and Supplemental Amendments.

2. Each lot shall be served by a minimum of 4 inch sewer lateral set at a minimum slope of 2% with a minimum drop of 0.3 feet and a minimum of five feet of cover at property line per Oceanside Standard Drawing S-3.

3. The Contractor must secure approval from the City Inspector prior to backfill over any sewer line.

4. No revisions shall be made to these plans without the approval of the City Engineer and the Water Utilities Director.

5. Contractor shall make all 4 inch sewer lateral connections to existing sewer mains, unless otherwise approved by the Water Utilities Director and inspected by the Water Utilities Department.

6. The Contractor may make 4-inch sewer lateral connections to existing sewer mains that are located in easements where no paving is involved. This may be done with the approval of the Water Utilities Director and will be inspected by the Water Utilities Department.

7. No disruption to existing sewer services will be allowed during connections to existing mains without the specific approval of the City of Oceanside Water Utilities Department.

8. The Contractor shall notify the Underground Service Alert 48 hours prior to starting excavation so that existing sewer facilities may be marked in the field. (UNDERGROUND SERVICE ALERT: 1-800-227-2600).

9. Potholing location and elevation of existing sewer facilities shall be confirmed by field measurements and excavation exploration by the Contractor, in the presence of a City Inspector after a two (2) working day notice prior to the beginning of new work. This will allow time to permit revision of plans, as necessary, because of conflicts with other facilities.

10. The existence and location of sewer facilities shown on these plans were obtained from available City records. To the best of our knowledge, the existing sewer facilities are as shown on the plans. The City of Oceanside shall not be held responsible for any error in the location and elevation of the existing sewer facilities.

11. The City Inspector shall be notified at least two (2) working days prior to commencing work on the sewers. To arrange for inspection call the Water Utilities Department at (760) 435-5800.

12. All sewer house connections shall be placed prior to surfacing of streets.

13. All manholes are to be coated inside with Sancon 100 or Zebron.

14. All manhole covers for private sewer systems shall be manufactured with “Private Sewer” stamped on top of the manhole cover.

15. All manhole covers for public sewer systems shall be manufactured with “City of Oceanside” stamped on top of the manhole covers.

16. All sewer mains shall be inspected by closed circuit VHS television at the Contractor’s expense prior to final acceptance. The videotaping will take place after completion of trench backfill and finish grading but prior to the placement of pavement or permanent trench resurfacing to determine the existence and extent of any obstructions, structural deficiencies, sags, or foreign material. Both a verbal description and a written manuscript of the videotape will be submitted to the Water Utilities Director for review and approval prior to final acceptance. Videotaping will meet the requirements of TELEVISING SEWER MAINS in the Appendix of the City of Oceanside’s Water, Sewer, and Reclaimed Design & Construction Manual titled, “CONSTRUCTION GUIDELINES AND REQUIREMENTS.”

17. All sewer mains will pass a 95% mandrel test and air pressure test prior to street paving, but after all other utilities have been completed and testing certified compaction approved.

18. Plastic sewer pipe shall be bedded in strict accordance with City of Oceanside Standard Drawing S-2. Bedding shall remain undisturbed by subsequent construction.

19. Each parcel or lot shall have a separate connection to the public sewer main.

20. Saddle connections that cut through sewer mains shall not be accepted without approval of the Water Utilities Inspector.

21. PVC pipe shall be stored on a flat surface so the barrel is evenly supported. Do not stack pipe higher than 4 feet. Gaskets shall be stored in a cool, dark place out of contact with oil or grease.

22. New sewer mains will not be connected to the City’s sewer system until the requirements for occupancy are met. Flows will be retained within the newly constructed system by means of plugging the new system with a mixture of Plaster of Paris and Portland Cement (known as Dynamiting) in a place that will not impair the function of the City’s sewer system.

23. All sewer lines shall meet all testing, cleaning, and videotaping requirements, prior to connection to the City’s sewer system. No tie-in connections will be done until the city has accepted the new line.

24. Prior to releasing sewer into the City’s sewer system, the contractor will: A) Perform an air pressure test per Section 306-1-4.4 of the Standard Specification for Public Works Construction; B) Wayneball all lines; and, C) Have an approved videotape of the line from the City of Oceanside Water Utilities Department.

25. An infiltration test shall be performed on all sewer lines laid in groundwater, per Section 306.1-4.3 of the Standard Specification for Public Works Construction.

26. Existing sewer mains will not be used for discharge of storm waters, drainage, or other similar uses per City of Oceanside Code, Section 2945.1(0).

27. All sewer force mains shall be provided with release valves at the required locations. The air release valve assembly shall be easily accessible to the Water Utilities Department for maintenance purposes.

28. During any activity or work around, or in, an existing sewer line, the contractor at their expense, will protect the system by installing “traps” in the outlet side of the closest manhole. The “traps” and their location shall be submitted to the Water Utilities Director for approval. The “traps” will remain in place until all requirements (testing, cleaning, videotaping, etc.), have been completed and approved.

29. Upon activation of a sewer line, the Contractor—at their expense—will protect the line from foreign material by installing plywood over the manhole base until all grading, paving, and manhole raising is complete and accepted by the City.

30. POLYETHYLENE ENCASEMENT: All underground installed valves, ductile iron pipe, and fittings shall be encased in 2 layers of 8-mil polyethylene at the time of installation. Polyethylene encasement and installation shall be in accordance with ANSI/AWWA C105/A21.5.

31. PIPE INSTALLATION: The inside and outside of the pipe shall be clean and free from foreign material of any kind before being installed.

32. 3 inch minimum width color coded detector tape marked “SEWER” in 1-½ inch black letters shall be placed on the compacted and graded bedding material one foot above and centered over the sewer main prior to backfilling the trench.

33. All water discharge from cleaning, videotape, and other activities shall comply with all requirements of the California Regional Water Quality Control Board—San Diego Region (SDRWQCB) regulations.

END OF REQUIRED NOTES FOR SEWER SYSTEM DESIGN PLANS

REQUIRED NOTES FOR RECLAIMED WATER SYSTEM DESIGN PLANS

1. All work shall be in accordance with the most recent editions of the City of Oceanside Water, Sewer, and Reclaimed Water Design & Construction Manual (Oceanside Water Utilities Manual); City of Oceanside Design and Processing Manual (Oceanside Engineers Manual); San Diego Area Regional Standard Drawings (SDRSD); and, Standard Specifications for Public Works Construction (SSPWC or Greenbook) and Supplemental Amendments.

2. Construct all reclaimed water facilities in accordance with the City of Oceanside's Water, Sewer, and Reclaimed Water Design & Construction Manual and "Rules and Regulations for Reclaimed Water Service".

3. No revision shall be made to these plans without the approval of the Water Utilities Department, and the San Diego County Department of Environmental Health.

4. All public and private potable water mains including fire mains and any water wells and public watercourses within the reclaimed water project shall be shown on the plans.

5. The Contractor shall notify the Underground Service Alert two (2) working days prior to starting excavation so that existing facilities shall be marked in the field prior to the start of construction. (UNDERGROUND SERVICE ALERT: 1-800-227-2600).

6. Location and elevation of the existing underground utilities/facilities shall be confirmed by field measurements and excavation exploration (potholing) by the Contractor after USA mark-out has been completed and the Water Utilities Department has been given a two (2) working day notice.

7. The existence and location of the existing reclaimed water facilities as shown on the plans were obtained from available City records. To the best of our knowledge, the existing reclaimed water facilities are as shown on the plans. The City of Oceanside shall not be held responsible for any error in the location and elevation of the existing reclaimed water facilities.

8. No disruption to the existing reclaimed water distribution mains will be allowed on Mondays or Fridays. All shutdowns for system tie-ins will be scheduled on a Tuesday, Wednesday or Thursday, and will be confined to normal working hours. Refer to "Administrative Procedures for Water Line Shutdowns", in the Construction Guidelines and Requirements section of the City of Oceanside's Water, Sewer, and Reclaimed Water Design & Construction Manual.

9. No connections for the purpose of obtaining water supply during construction shall be made to any fire hydrant or blow-off structure without first obtaining a construction water permit from the City of Oceanside Water Utilities Department. A Reduced Pressure Principle Assembly (RP Assembly) shall protect the meter.

10. All water, or reclaimed water, used on a construction project shall be metered. The cost of the water, or reclaimed water, will be charged to the Contractor/Developer. This

includes water for loading of new waterlines, flushing of lines, pressure testing, etc. Citations will be issued to parties taking water from non-metered facilities.

11. A minimum of 12 inches of vertical separation between utilities must be maintained at all times.

12. Constant pressure reclaimed water lines shall cross at least twelve inches below potable water lines and maintain at least twelve inches crossing separation between other utilities.

13. A ten-foot horizontal separation between potable water and reclaimed water mains must be maintained at all times. The potable line must be installed above the reclaimed line.

14. When a potable water line and reclaimed line cross, the reclaimed line shall be installed within a protective steel casing sleeve (Per Oceanside Standard Drawing RW-21). The sleeve shall extend 10 feet from each side, from the centerline of the potable line, for a total sleeve length of 20 feet.

15. PIPE INSTALLATION: The inside and outside of the pipe shall be clean and free from foreign material of any kind before being installed.

16. Nuts and bolts on all flange fittings shall be cadmium plated and coated Per Section 4.5, except for buried service, which shall be stainless steel. All plated nut and bolt threads will be coated with non-oxide grease and all stainless steel nut and bolt threads coated with anti-seize prior to installation. Buried lines, services, valves, and appurtenances will be coated and wrapped per Section 4.5 of the City of Oceanside's Water, Sewer, and Reclaimed Water Design & Construction Manual.

17. Pipe deflections for short radius curves and angle points shall normally be accomplished by means of standard fittings, the locations of which shall be detailed on the plans.

18. POLYETHYLENE ENCASEMENT: All underground installed valves, ductile iron pipe, and fittings shall be encased in 2 layers of 8-mil purple polyethylene encasement and installation shall be in accordance with ANSI/AWWA C105/A21.5.

19. Install reclaimed water identification tape and/or tags on all reclaimed water piping, including services lines, appurtenances, and connections in accordance with the City of Oceanside's Water, Sewer, and Reclaimed Water Design & Construction Manual and the Oceanside Reclaimed Water (RW) Standard Drawings.

20. All reclaimed water sprinkler control valves shall be tagged with identification tags. Tags shall be weatherproof plastic 3" x 4", purple in color, with words "Warning Reclaimed Water – Do Not Drink" imprinted on one side, and "Aviso – Agua Impura – No Tomar" on the other side. Imprinting shall be permanent and black in color.

    One tag shall be attached to each valve as follows:

    Attach to valve stem directly or with plastic tie wrap; or
    Attach to solenoid wire directly or with plastic tie wrap.

21. The design and locations proposed for reclaimed water "Do Not Drink" signs shall be called out on the plans.

22. Pipe bedding and trench backfill shall conform to San Diego Regional Standard Drawing W-21, except that compaction shall be 95%. The pipe shall be laid on 6-inch minimum sand bed with sand equivalent of SE-30 or more. The backfill material for the pipe zone shall be sand or native material with a S.E. of 30 or more, free from stones, clods and other deleterious materials. All pipe and fittings shall be encased with 6 inches of neutral sand, and Per Section 4.5 of the Oceanside Engineers Manual.

23. Reclaimed water services are not permitted in driveways and meter boxes are not permitted in concrete.

24. A "RW" shall be inscribed on curb directly above all reclaimed water services. Services shall be shown on As-Built Plans and shall be located by a reclaimed waterline stationing.

25. Pressure test, disinfect, sample test(s), and flush the reclaimed water system in accordance with the City of Oceanside's Water, Sewer, and Reclaimed Water Design Manaual's Construction Guidelines and Requirements, Section F.

26. The City Inspector shall be notified at least two (2) working days prior to any inspection. To arrange for inspection, call the Water Utilities Department at 760-435-5800.

27. All water discharge from flushing, testing, and dewatering shall comply with all requirements of the California Regional Water Quality Control Board-San Diego Region (SDRWQCB) regulations.

28. Where reclaimed water is being used, all potable water service connections must have a Reduced Pressure Principle Assembly (RP Assembly) immediately downstream from the meter (See Oceanside Standard Drawings W-11 and W-12).

29. Where potable water is used to supplement the reclaimed system, the potable system must have an Air gap Separation (AG) from the reclaimed system.

30. An on-site user/supervisor shall be designated in writing. This individual shall be familiar with plumbing systems within the property, with the basic concepts of backflow/cross-connection protection, the reclaimed purveyor's rules and regulations, and the specific requirements of a reclaimed water system. Copies of the designation, with contact telephone numbers, shall be provided to City of Oceanside Water Utilities Department and San Diego County Department of Environmental Health. The format of the designation will be similar to that shown below:

IN CASE OF EMERGENCY
CONTACT: _____ AT _____
AFTER HOURS CONTACT: _____ AT _____

31. The Developer/Contractor shall conduct a cross-connection test and coverage test as directed by the City of Oceanside Water Utilities Department and the San Diego County Department of Environmental Health prior to any use of reclaimed water.

32. Either the City of Oceanside Water Utilities Department and/or San Diego County Department of Environmental Health will do an annual cross-connection inspection. Copies of inspection results will be forwarded to the non-inspecting party.

33. Either the San Diego County Department of Environmental Health or the State Department of Health Services shall monitor the required cross-connection control shutdown test.

34. On-site cross-connections between reclaimed waterlines and potable water lines are strictly prohibited.

35. Hose bibs are strictly prohibited.

36. Quick coupling valves used in reclaimed water systems shall conform to the following:

    A. Quick-coupling valves shall be 1-inch nominal size Nelson #7654, with brass construction and a normal working pressure of 150 P.S.I. or Rainbird #44NP. Install quick couplers no closer than 200 feet on center and no closer than 100 feet to any hardscape or structure.

    B. In order to prevent unauthorized use, the valve shall be operated only with a special coupler key with an acme thread for opening and closing the valve.

    C. The cover shall be permanently attached to the quick-coupling valve and shall be purple rubber or vinyl.

    D. Locking covers are required.

37. No ponding, run-off, or over-spray of reclaimed water is permitted. All sprinkler heads must be adjusted to prevent over-spraying onto sidewalks, streets, and private lots.

38. All non-designated use areas shall be protected from contact with reclaimed water, whether by windblown spray or by direct application, through irrigation or other approved use. Lack of protection, whether by design, construction practice, or system operation is strictly prohibited.

39. All public facilities such as comfort stations, drinking fountains, designated outdoor eating areas, etc. shall be protected from spray by reclaimed water.

40. A physical separation shall be provided between adjacent areas irrigated with reclaimed water and potable water. Distance, concrete mow strips, or other approved methods shall provide separation.

41. Irrigation heads shall be relocated or adjusted to minimize or eliminate over-spraying on sidewalks, streets, and non-designated use areas.

42. Call out on the plans if there are, or are not, drinking fountains and/or designated outdoor eating areas on this site.

43. Hours for irrigation with reclaimed water are from 10:00 p.m. to 6:00 a.m. The hours for irrigation with disinfected tertiary reclaimed water may be modified by the local authority. Irrigation during public use periods with disinfected tertiary reclaimed water shall be

under the supervision of the designated user supervisor. If reclaimed water will be used during 6 a.m. to 10 p.m. then the site supervisor must be on-site at all times during the reclaimed water use and must be certified through the San Diego County Water Authority (SDCWA) class titled, “Recycled Water Certification Workshop”.

44. All mainline pipes shall be colored purple and have warning tape per the Oceanside Water, Sewer, and Reclaimed Water Design & Construction Manual Section 4.2.8.

45. On reclaimed water systems, all appurtenances (sprinkler heads, valve boxes, etc.) shall be color-coded purple per AWWA guidelines and Section 116815 of the California Health and Safety Code.

46. Best management practices (BMP’s) shall be used to eliminate or control to the best extent possible ponding, runoff, overspray, and misting.

47. There shall be no direct (pipe-to-pipe) drainage of reclaimed water into the storm drains.

48. Absolutely minimize, by best management practices, reclaimed water runoff to storm drains.

49. Design of brow ditches and catch basins shall absolutely minimize reclaimed water runoff into storm drains.

50. All signage within the reclaimed site shall comply with the signage plan approved by the San Diego County Health Department (Per Section 4.2.12 & 4.2.13 of this manual).

51. Educate all maintenance personnel on a continuous basis of the presence of reclaimed water. Personnel must be informed that reclaimed water is meant for irrigation purposes only, and is not approved for drinking purposes, hand washing, cleaning of tools, etc. Given the high turnover rate of employees in the landscape industry it is important this information be disseminated on an almost daily basis.

END OF REQUIRED NOTES FOR RECLAIMED WATER SYSTEM DESIGN PLANS