

# CITY OF OCEANSIDE



## ENGINEERS DESIGN AND PROCESSING MANUAL

### APPENDIX

### GENERAL NOTES

## **GRADING PLAN DESIGN NOTES**

1. All grading and drainage improvements shall be completed in accordance with the City's current Grading Ordinance, the Standard Specifications for Public Works Construction with supplements (A.P.W.A. Specifications) and the "San Diego Area Regional Standard Drawings", as amended by the City Supplements, and the earthwork specifications attached to the "Preliminary Soils Reports".
2. The developer shall be responsible for landscaping, for slope stabilization of all embankments over 3 feet in height, within 45 days of completion of preliminary grading. Permanent irrigation systems shall be installed for all embankments over 5 feet in height (and for all slopes along major streets). Landscaping specifications, and plans as required, shall be approved by the City Engineer prior to issuance of the Grading Permit. The developer shall be responsible for maintenance of slope stabilization landscaping until release of the Grading Bond or until individual lots (or living units) close escrow, whichever occurs later.
3. All grading shall be done under the observation of a qualified soils engineer.
4. Cut and fill slopes shall be trimmed to the finish grade to produce a smooth and uniform surface of cross section. The slopes of excavations or embankments shall be shaped and trimmed as directed by the engineer of work and as approved by the City Engineer. Finish slopes shall be left in a neat and orderly condition. All stones, roots or other waste material shall be properly disposed off site.
5. Compaction tests shall be supplied for trenches.
6. All existing, abandoned pipelines shall be removed and replaced with properly compacted soils unless specifically approved by the City Engineer.
7. The Contractor shall take precautionary measures to protect existing utilities.
8. Neither the owner nor the engineer of work will enforce safety measures or regulations. The contractor shall design, construct and maintain all safety devices, including shoring, and shall be solely responsible for conforming to all local, state, and federal safety and health standards, laws and regulations.
9. The contractor shall notify the engineer of work and Public Works inspector prior to performing rock-removal operations.
10. Approval of these plans by the City Engineer does not authorize any work or grading to be performed until a valid grading permit has been issued, and all affected property owner's permission has been obtained.
11. These plans are subject to a signed and approved set of improvement plans.

12. An encroachment permit from the City Engineer shall be required by the contractor for any work within the existing City right of way.
13. All rock-slope protection shall be rip rap unless otherwise approved by the City Engineer.
14. All lot pads shall be designed to drain to an acceptable location at a minimum gradient of 1%.
15. All retaining walls shall have a permit from the Building Department per the Uniform Building Code.
16. Maximum slope ratio shall be 2:1.
17. A 12-inch high by 4-foot wide berm (90% compacted) shall be constructed along the top of the slope. No runoff shall flow over the top of the slope. Downdrains shall be used per D-75.
18. For this plan to become effective, an approved haul route plan that has been approved by the City Engineer shall be included (for hauling of material on a public street).
19. Lot grading is to be in accordance with City Supplement Drawing M-12 ("Typical Lot Grading").
20. 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. each day, Monday through Friday, and no earthmoving or grading operations shall be conducted on the premises on Saturdays, Sundays or legal holidays, unless waived by the City Engineer.
21. All disturbed areas must be revegetated, substantially germinated, and established within 45 days of completion of grading and prior to requesting final inspection.
22. Import material shall be obtained from, and waste material shall be deposited at a site approved by the City Engineer. The contractor shall be responsible for any debris or damage occurring along the haul routes or adjacent streets as direct result of the operation.

**GRADING PLAN DESIGN CERTIFICATES**

1. All grading shall be done under the observation of a qualified soils engineer and engineering geologist and in accordance with the recommendations and specifications set forth in the approved soils and geological report prepared by:

\_\_\_\_\_ Dated: \_\_\_\_\_

2. These grading plans have been reviewed by the undersigned and are found to be in conformance with the recommendations and specifications outlined in the soils and geological report prepared for this development.

BY: \_\_\_\_\_ R.C.E. \_\_\_\_\_ DATE: \_\_\_\_\_

BY: \_\_\_\_\_ R.C.E. \_\_\_\_\_ DATE: \_\_\_\_\_

PLANS ARE CHECKED AND FOUND TO COMPLY WITH  
CITY OF OCEANSIDE REQUIREMENTS:

\_\_\_\_\_  
GEOTECHNICAL CONSULTANT

\_\_\_\_\_  
DATE

**AS-BUILT CERTIFICATION**

LANDSCAPE PLANS

I hereby certify that I have inspected the improvements as shown on these plans, insure that the improvements have been constructed in accordance with these plans, that the contractor's work has been completed in accordance with these plans, and that all individual plants show vigorous established growth typical of their species.

Landscape Architect of Record: \_\_\_\_\_  
Name Seal

IMPROVEMENT PLANS

I hereby certify that as the Engineer in responsible charge of work for this project, I have reviewed the engineering work as shown on these plans to determine general compliance with plans and specifications, and that the completed construction is in conformance with these plans.

Civil Engineer of Record: \_\_\_\_\_  
Name Seal

GRADING PLANS

Civil Engineer Certification

I hereby certify that as the Engineer in responsible charge of work for this project, I have supervised the engineering work as shown on these plans to determine general compliance with plans and specifications, and that the completed construction is in conformance with these plans.

I also certify that all design changes made during construction, all information as required by the City of Oceanside Grading Ordinance, and all recommendations from the soils engineering and engineering geology reports prepared for this project have been incorporated in these plans.

Civil Engineer of Record: \_\_\_\_\_  
Name Seal

Soils Engineer Certification

We hereby certify that we have provided professional testing and approval concerning the preparation of ground to receive fills, testing for required compaction, stability of all finish slopes, design of buttress fills where required, the adequacy of the natural ground for receiving fill, the stability of cut slopes with respect to geological matters and the need for subdrains and other groundwater drainage devices, and that these grading plans accurately reflect all conditions and construction recommendations prepared for this project as dated: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

Soils Engineer of Record: \_\_\_\_\_  
Name Seal

Engineering Geologist of Record: \_\_\_\_\_  
Name Seal

## EROSION CONTROL NOTES

1. The erosion control systems require certification by the engineer of record. Such certified systems shall be completed, inspected, and in place no later than October 15. All erosion control systems shall remain in place at all times for all areas in which construction is not scheduled to commence within the next seven (7) days. All erosion control systems shall remain in place until April 15.
2. The contractor, permittee or owner shall be responsible for the inspection, modification and proper maintenance of the erosion control devices as necessary. In the event of failure or refusal to properly maintain said devices, the City Engineer may cause emergency maintenance work to be done to protect adjacent private and public property, the cost (including an initial mobilization amount) of which shall be charged to the owner.
3. All erosion control measures required to retain sediment on-site and to safely discharge any accelerated runoff generated by the project shall be installed during the initial construction phase of the project.
4. The construction and maintenance of all erosion control systems shall be in substantial conformance with the approved erosion control plan.
5. Temporary erosion control devices shown on the erosion control plan which interfere with the work shall be relocated or modified as the work progresses as recommended by the engineer of work and as approved by the City Engineer.
6. All removable protection devices shown shall be in place at the end of each working day when the 5-day rain probability forecast exceeds 40-percent.
7. Erosion control systems shall be serviced and maintained to provide continuous capacity and adequacy to function as designed. after precipitation exceeding one-quarter (1/4) inch in any 12-hour period, or upon direction of the City Engineer, silt and debris shall be removed from check dams and desilting basins and the basins pumped dry and otherwise restored to the original design condition.
8. Desilting basins constructed of compacted earth shall be compacted to a relative compaction of 90 percent of maximum density. A soil engineering report including the type of field testing performed, location, and results of testing shall be submitted to the city engineer for approval upon completing the desilting basin.
9. Erosion control provisions shall include and complement drainage patterns during the current and future phases of grading throughout the rainy season.
10. The contractor, permittee, or project owner shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a hazardous condition. necessary precautions may include, but not

be limited to, appropriate perimeter fencing or a 24-hour guard preventing unauthorized persons from entering the basins.

11. Graded areas around the tract perimeter must drain away from the face of slopes at the conclusion of each working day.
12. Paved streets, sidewalks, and other improvements shall be maintained in a neat and clean condition, free of loose soil, construction debris, and trash. Street sweeping or other equally effective means shall be used on a regular basis to control erosion. Watering shall not be used to clean streets except for the removal of fine material not otherwise removed by sweeping or other mechanical means.
13. Stand-by crews shall be alerted by the contractor, permittee or owner for emergency work during rainstorms.
14. Gravel bags and necessary materials in accordance with the approved plans, shall be available onsite and stockpiled at convenient locations to facilitate rapid construction of temporary devices or to repair any damaged erosion control measures when rain is imminent. A stand-by crew shall be made available at all times during the rainy season.
15. All utility trenches shall be backfilled within 24 hours and must be backfilled before the end of the workday if a 40-percent chance of rain is predicted.
16. A gravel bag silt basin or trap shall be provided at every storm drain inlet to prevent sediment from entering the storm drain system.
17. A 12-inch high by 4-foot wide berm shall be maintained along the top of the slope of those fills on which grading is not in progress. Concentrated water shall be carried not closer than 10 feet from the top of slopes.
18. All building pads shall be sloped towards the driveway and velocity check dams provided at the base of all driveways draining into the street. Velocity check dams shall be provided across the outlets of all lots draining into the street.
19. Provide velocity check dams in all unpaved street areas at the intervals indicated below. Velocity check, dams may be constructed of gravel bags, timber, or other erosion resistant materials approved by the City Engineer, and shall extend completely across the street at right angles to the centerline. Earth dikes may not be used as velocity check dams. Check dam installation shall provide for the prevention of erosion around the ends of the dam.

GRADE OF THE STREET

LESS THAN 2%

2% TO 4%

4% TO 10%

OVER 10%

INTERVAL

AS REQUIRED

100 FEET

50 FEET

25 FEET

20. All erosion control plans must provide a 24-hour telephone number and the name(s) of the person(s) responsible for emergency work. A telephone answering machine or answering service is unacceptable.

Contact

\_\_\_\_\_

Name

\_\_\_\_\_

(Area Code) Number

## GENERAL NOTES FOR ALL IMPROVEMENT PLANS

- 1) The contractor shall notify the San Diego Gas and Electric Company, Pacific Telephone and Telegraph Company prior to starting work near company facilities and shall coordinate his work with company representatives. All telephone services within this subdivision are underground installation. For location of electric cable, gas piping and telephone cables and appurtenances, contact UNDERGROUND SERVICE ALERT: 1-800-422-4133. Also refer to City standard.
- 2) A permit shall be obtained from the City Engineering Department for work within existing City rights-of-way.
- 3) The contractor shall notify the City of Oceanside Engineering Department 48 hours prior to starting work so that inspection may be provided. (Telephone number: (760) 435-5097.
- 4) All work shall be in accordance with the most recent editions of the Standard Specifications for Public Works Construction, with supplements (A.P.W.A Specifications), the San Diego County Regional Standard Drawings and City of Oceanside Engineer's 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 in 6" of neutral sand.
- 7) Construction expansion joints in curb and gutter at returns and at driveway intersections are required per G-9 and G-10 (S.D.R.S.D.).
- 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 .1' 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 earth work 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 Manual of Traffic Controls.
- 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 S.D.R.S.D. M-10 and M-11.
- 14) All existing improvements including curb 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 sawcutting, 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. each day, 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 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 to 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 curb, gutter or sidewalk shall be removed and replaced.
- 21) A minimum replacement section to be at least equal to score mark to score mark (typically 5' x 5'). For sidewalks exceeding 5' width, replacement is to be full width squared to the next score mark.

- 1) A "W" shall be inscribed on curb directly above all water services. Services shall be shown on As-Builts Plans and shall be located by a centerline station.
- 2) No disruption to 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.
- 3) 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.
- 4) The Contractor shall notify the Underground Service Alert two working days prior to starting excavation so that existing water facilities shall be marked in the field prior to start of construction. Underground Service Alert number: (800) 422-4133.
- 5) Location and elevation of existing water facilities shall be confirmed by field measurements and excavation exploration by the contractor.
- 6) The existence and location of 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.
- 7) No revision shall be made to these plans without the approval of the City Engineer.
- 8) Nuts and bolts on all flange fittings shall be cadmium plated and shall have NON-OXIDE protective coating applied to the threads before installation.
- 9) Water service laterals are not permitted in driveway.
- 10) The City Inspector shall be notified at least two working days prior to any inspection. To arrange for inspection, call (760) 435-5081.
- 11) Pipe bedding and trench backfill shall conform to San Diego Regional Standard Drawing W-21. The pipe shall be laid on 6 inch minimum sand bed or native materials with sand equivalent of 30 or more. The backfill material for the pipe zone shall be sand or native material with an S.E. of 30 or more, free from stones, clods and other deleterious materials. All fittings shall be encased with 6" of neutral sand.
- 12) 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.

- ~~13) All water used on a construction project must be paid for and will be metered. This includes water for loading of new waterlines, flushing of lines, pressure testing, etc. Citations will be issued to parties taking water from unmetered facilities. A construction water meter permit may be contained from the Water Utilities Department.~~

## REQUIRED NOTES FOR SEWER SYSTEM DESIGN PLANS

- 1) All works shall be in accordance with the most recent Editions of the Standard Specifications for Public Works Construction, with supplements (A.P.W.A. Specifications), the San Diego County Regional Standard Drawings and City of Oceanside Engineer's Manual.
- 2) Each lot shall be served by a minimum of 4 inch sewer lateral set at a minimum grade of 2% with a minimum drop of 0.3 feet and an invert depth of 5 feet below top of curb at property line per San Diego County Regional Sewerline Standard S-13.
- 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.
- 5) City forces shall make all 4 inch sewer lateral connections to existing sewer mains at contractor's expense unless otherwise approved by the Water Utilities Director.
- 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 number: 1-800-422-4133.
- 9) Location and elevation of existing sewer facilities shall be confirmed by field measurements and excavation exploration by the contractor, prior to the beginning of new work. This will allow time to permit revision of plans, as necessary, as a result 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's Inspector shall be notified at least two working days prior to commencing work on the sewers. City Inspector number: (760) 435-5081.

- 12) All sewer house connections shall be placed prior to surfacing of streets.
- 13) All manholes are to be coated inside with Sancon 100.
- 14) All manhole covers for private sewer systems shall be manufactured with "Private Sewer" stamped on the top of the lid. Conversely, "City of Oceanside" shall be stamped on manhole covers which belong in the public system.
- 15) All sewer mains shall be televised at the contractor's expense prior to final acceptance. A color VHS videotape with verbal description and a written manuscript of the pertinent dialogue shall be submitted to the Water Utilities Director. Information required is line location, footage, lateral locations from the upstream manhole and problem areas. This tape will be reviewed prior to final acceptance of the improvements. A list of qualified vendors will be provided by the Water Utilities Department Administrative Office.
- 16) All sewer mains will pass a mandrel test and air pressure test prior to street paving, but after all other utilities have been completed and compaction testing approved.
- 17) Plastic sewer pipe shall be bedded in strict accordance with City of Oceanside Standard Drawing S-3. Bedding shall remain undisturbed by subsequent construction.
- 18) Each parcel or lot shall have a separate connection to the public sewer main.
- 19) Saddle connections cut through sewer mains shall not be accepted.
- 20) 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.
- 21) 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. Prior to releasing sewer into the City's sewer system, the contractor will perform the air pressure test as per Section 306-1-4.4 of the Standard Specification for Public Works Construction, and wayneball all lines.
- 22) Existing sewer mains will not be used for discharge of storm waters, drainage, or other similar uses per Oceanside City Code Section 2945.1 (O).
- 23) All sewer lines shall be cleansed of all foreign material, prior to connection to the City's sewer system.

- ~~24) All sewer forced mains shall be provided with release valves at the required locations. The air release valve assembly shall be easily accessible to Water Utilities Department for maintenance purposes.~~