# **GRADING NOTES**

- 1. All work shall conform to the "*Standard Plans and Specifications for Public Works Construction*" (*Greenbook*), latest edition, including supplements, to the City of Colton Standard Plans & Specifications, and to the City of Colton Public Works Department, Engineering Division "Standard Construction Drawings"
- 2. These plans have been checked based on the assumption that all information shown or implied on these plans is true, and have been checked by the City only in conformance with City Standards, compliance with development conditions and for general conceptual approval of the drainage and parkway improvements shown hereon. No detailed mathematical check or field survey was made by the City for the accuracy of the existing utilities shown or not shown. No checks were made on the existing design infrastructures and structures shown on these plans; these plans were checked on the assumption that all building layouts, setbacks and site plans were initially approved by the appropriate entities.
- 3. No work shall be done without approval from the City Engineer.
- 4. Contractor shall implement all City, County, State and Federal job site safety requirements as they relate to dust control, equipment movement, noise, hours of work and construction hazardous materials and shall minimize any inconvenience to the public.
- 5. The Contractor shall not conduct any operations or perform any work pertaining to the Project between the hours of 5:00 P.M. and 7:00 A.M. on any day nor on Saturday, Sunday or any holiday at any time without prior approval, in writing, of the City Engineer
- 6. The property owner shall be responsible for the cost of cleaning and hauling any hazardous and detrimental material, discovered during and after the work, from the site.
- 7. Contractor shall remove and replace all broken, cracked or raised sidewalk, drive approach, or curb and gutter within property frontage. For corner lots, both street frontages shall be included.
- 8. These notes shall take precedence over the information appearing on the Plans.
- 9. No grading shall commence prior to the approval and signature of this Grading Plan by the City Engineer and issuance of a Grading Permit from the Public Works Department, Engineering Division.
- 10. All work proposed in the public right of way requires a separate Permit [Street Cut Permit, Street Improvement Permit, Encroachment Permit, etc.] issued by the Public Works Department, Engineering Division.
- 11. All offsite improvements shall be completed to the satisfaction of the City Engineer.
- 12. All grading shall be done in accordance with the excavation and grading code of the City of Colton (Chapter 70 of the Uniform Building Code) and any special requirements of the Grading Permit.
- 13. The undersigned Civil Engineer hereby states that these plans were prepared by him or under his supervision, and that the plans conform to all pertinent provisions of Chapter 70, Excavation and Grading, of the Uniform Building code, 2003 edition as amended.
- 14. A Soils report shall be prepared and "wet-signed" by a Registered Civil Engineer or a Registered Geotechnical/Soils Engineer, and shall be submitted with the Grading Plan to the City Engineer for Plan Check.

- 15. Upon approval of the Soils Report, all grading shall be in conformance with the recommendations of the preliminary soils investigation as prepared by \_\_\_\_\_\_, and dated \_\_\_\_\_\_. The Soils Engineer shall so certify or indicate deviations in his final report.
- 16. All grading operations shall be supervised and monitored by the Geotechnical Engineer who prepared the Soils Report for the Project, and he shall monitor all aspects of the grading operations, including soil stability and job site construction safety and submit periodic reports to the City Engineer. A final soils report and compaction report prepared by the registered Geotechnical Engineer of Record shall be submitted prior to pouring of the foundations. This report shall indicate that all grading operations were performed in compliance with the approved soils report prepared.
- 17. The grading Contractor shall be familiar with the above noted report and he shall stabilize questionable slopes that could produce landslides, debris flows and surficial failure. The above-noted investigative report delineates these areas.
- 18. The raw earthwork quantities for this project are as follows:
  - a. Excavation = \_\_\_\_\_ cubic yards
  - b. Embankment = \_\_\_\_\_ cubic yards.
- 19. The above-noted earthwork quantities do not include allowances for shrinkage and subsidence. Actual field determination for these values shall be used to adjust quantities.

20. The contours shown on this plan was prepared by [RCE] \_\_\_\_\_\_\_ on \_\_\_\_\_\_

- 21. Provisions shall be made for contributory drainage at all times.
- 22. Approved protective measures and drainage provisions shall be provided to protect adjoining properties from deposition of material or flows originating from this property both during and after all phases of construction. Existing natural drainage, existing flow lines, existing sheet flow runoff, existing drainage in pipes, swales and conduits onto this property from adjacent land shall not be blocked, redirected, concentrated or accelerated.
- 23. All building pads, cut and fill slopes, and areas of proposed street improvements shall be compacted to a relative compaction of ninety percent (90%). Compaction tests may be required, at the request of the City Engineer or his appointed designee, and the cost for same shall be borne exclusively by the property owner/contractor/developer and shall not result in any expense for the City.
- 24. Cut slopes (excavation) shall be a maximum of 2/1 (horizontal/vertical).
- 25. Fill slopes (embankment) shall be a maximum of 2/1 (horizontal/vertical), and shall be cleaned of all vegetation and debris, scarified and inspected by the City Engineer or his appointed designee prior to placing of fill.
- 26. Lot(s) shall slope or drain to an adjacent public street at a minimum rate of one percent (1%), unless otherwise approved, in writing, by the City Engineer. The property owner is warned that if the entire lot slopes at 1%, then surface waters may not clear the lot in a timely manner.
- 27. All ground or paved area adjacent to any structure shall slope a minimum of two percent (2%) away from the structure(s). All follow lines with five feet (5') of structure(s) shall be at an elevation of four inches (4") below the finished floor elevation of the structure(s).Dust shall be controlled by watering to the satisfaction of the City Engineer.

- 28. Water shall be prevented from flowing over the tops of slopes at all times. Drainage from the construction site or from the finished grading site shall not be allowed to flow on to any adjacent property nor shall it be allowed to sheet flow across any existing or proposed sidewalk or driveway and then on to the street.
- 29. In the event the City has approved the use of sump pumps to provide surface drainage for this project, the operations and maintenance of such pumps shall be solely the responsibility of the property owner(s). The City of Colton shall bear no liability for any damages from flooding or other causes due to inoperable or improperly operating sump pumps.
- 30. All drainage systems, drain pipes, catch basins, curb drains, culverts, gutters, swales, open channels and underground storm drain pipes serving the development (or property) which are located on private property and/or public right of way adjacent to the subject property shall be maintained by the property or business owners.
- 31. The Registered Civil Engineer signing these plans is responsible for assuring the accuracy and acceptability of the work hereon. In the event any discrepancies arising during construction, he shall be responsible for determining an acceptable solution and revising the Plans for approval by the City.
- 32. A construction water meter is available from the Water/Wastewater Department, located at 160 S. 10<sup>th</sup> Street, Colton, CA 92324, and has a non-refundable application fee of \$22.00, and a refundable deposit of \$650.00. The property owner/contractor/developer is responsible for the cost of the water used during the course of the construction.
- 33. No work may be started on-site without an approved Grading Plan and a Grading Permit issued by Public Works Department, Engineering Division located at 160 S. 10<sup>th</sup> Street, Colton, CA 92324.
- 34. All flagged elevations shall be staked in the field by the Engineer of record.
- 35. The Contractor shall be responsible for clearing the proposed work area of all deleterious matter per the final approved grading plan. It shall be the responsibility of the Contractor to clear the right of way in accordance with the provisions of law as it affects each utility including irrigation lines and appurtances and at no cost to the City.
- 36. It is the applicant's responsibility to obtain approval fro building setbacks, layouts, height and size of all structures from the City's Planning Department. This plan does not grant approval for these items.
- 37. All utility installations within the public right of way require a Street Cut Permit issued by Public Works Department, Engineering Division. In addition, an Installation Permit will be required for water or sewer lines, and is issued by the Water/Wastewater Department, located at 160 S. 10<sup>th</sup> Street, Colton, CA 92324.
- 38. For information regarding electrical installations within the public right of way contact the Electric Department, located at 150 S. 10<sup>th</sup> Street, Colton, CA, 92324. In addition, a Street Cut Permit issued by the Public Services Department, Engineering Division.
- 39. Gas, phone and cable utilities have franchise agreements with the City of Colton, and are required to secure their own Street Improvement Permit and/or Street Cut Permit from Public Works Department, Engineering.

- 40. A separate permit is required for any fence constructed on-site. This permit is issued by Community Development Department, 659 N. La Cadena Drive, Colton. If the proposed (or existing) fence is constructed within the public right of way, an Encroachment Permit is required and is issued by the Engineering Division, Public Services Department.
- 41. Prior to the commencement of any Work in public streets, or within the public right of way, Contractor shall provide a Traffic Control Plan (in triplicate) to the City Engineer for review.
  - a. Traffic Control Plans for minor public right of way improvements shall conform to the "Work Area Traffic Control Handbook" (W.A.T.C.H. Manual); Traffic Control Plans for larger projects shall be prepared (in triplicate) by a Registered Civil Engineer, and each set shall be "wet-signed" and submitted to the City Engineer for review.
  - b. The decision as to what constitutes a minor improvement versus a larger project shall be at the sole discretion of the City Engineer.
- 42. The Contractor shall notify Underground Service Alert (USA) as required prior to the start of work. The USA number shall be provided to the City Engineer.
- 43. No Work may begin without an approved Traffic Control Plan, and once begun, Contract shall endeavor to complete work in the street and/or public right of way without delay so as to provide minimum inconvenience to adjacent property owners and to the traveling public.
- 44. Any Contractor working within the public right of way is subject to the licensing and insurance requirements of the City.
- 45. The Contractor shall take all necessary and proper precautions to protect adjacent properties form any and all damage that may occur from storm water runoff and/or any deposit of water runoff and/or debris resulting from any and all work in connection with construction.
- 46. Trees, foliage, signs, and other improvements shall be protected in place and any damage to existing improvements shall be repaired or replaced in kind to the satisfaction of the City Engineer.
- 47. It shall be the responsibility of the Contractor to locate all substructures within the alignment of the proposed improvements, and in the event of substructure damage, the Contractor shall bear the total cost of repair or replacement.
- 48. If any utilities or facilities conflict with proposed improvements, all work shall stop, and the City Engineer shall be notified immediately.
- 49. The Contractor is advised that all excavated materials shall become his property and shall be removed from the job site unless instructed by the City Engineer, in writing, to do otherwise.
- 50. No trenches, regardless of depth or width and whether on-site or off-site, may be left open overnight unless prior approval is secured, in writing, from the City Engineer.
- 51. Trenches deeper than 5'0" will require a CAL-OSHA permit. A copy of the permit shall be provided to the City Engineer.
- 52. The Contractor shall be responsible during all phases of the work to provide for public safety and convenience. The Contractor shall establish adequate access to driveways at the end of each working day to the satisfaction of the City Engineer.

- 53. The Contractor shall provide a 72-hour notification to the affected properties, the Police Department, and the Fire Department in the event of a change in street closure to traffic and/or Public Safety Vehicles, parking restrictions, and on each Monday morning during the construction period.
- 54. Road closures in excess of twenty-four (24) hours shall require approval of the City of Colton City Council. Processing time for this request is six to eight (6 to 8) weeks, and a written application (Temporary Road Closure Permit) must be submitted to the City Engineer in sufficient time to process the request.
- 55. All Inspection requests for Work performed in the public right of way shall be directed to the Engineering Division, Public Services Department, and shall be made by the Contractor a minimum of twenty-four (24) hours before the services thereof will be required.
- 56. The Civil Engineer for the Project shall submit to the City Engineer, upon completion of the grading operations and prior to pouring of foundations or installation of structures, an on-site grading certification indicating that the grading was performed to within 0.1' of the grades shown on the approved Grading Plan. The Civil Engineer shall set grade stakes for all grading work. This certificate shall be valid, in the absence of rain, for sixty (60) days after completion of the grading operations.
- 57. The Benchmark used to determine elevation data used to calculate grade shall be noted on plan.
- 58. Contractor shall comply with these requirements and City Engineer's directions during the course of construction.