

<b>CITY OF REEDLEY</b> <b>NEW DEVELOPMENT PLAN REVIEW CHECK LIST</b>
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Tract Number and Subdivision Name: \_\_\_\_\_  
 Engineering Firm: \_\_\_\_\_  
 Contact Person: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone No. \_\_\_\_\_ Fax No. \_\_\_\_\_  
 Assessor's Parcel Number(s) \_\_\_\_\_  
 Tentative Map Expiration Date: \_\_\_\_\_  
 First Check  Recheck #  Recheck #

**1.00 FIRST SUBMITTALS**

- \_\_\_ Copy of Final Conditions of Approval (Resolution No. \_\_\_\_\_)
- \_\_\_ 4 Sets of Construction Improvement Plans
- \_\_\_ 4 Sets of Grading and Drainage Plans and Calc's
- \_\_\_ 4 Sets of Landscape & Landscape Irrigation Improvement Plans
- \_\_\_ 4 Sets of Comprehensive Common Public Utility Trench Plans (gas, elect, phone, CTV)
- \_\_\_ Copy of Engineers Cost Estimate
- \_\_\_ Copy of Soils Report
- \_\_\_ Copy of Phase 1 Environmental Site Assessment Report (if applicable)
- \_\_\_ Copy of Preliminary Title Report
- \_\_\_ Copy of Site Specific Storm Water Pollution Prevention Plan (SWPPP) Report
- \_\_\_ Copy of Lot Closure Calc's Sheets
- \_\_\_ Copy of Lot size list
- \_\_\_ R-Value Test – Street section Calc's
- \_\_\_ 4 Sets of Final Map
- \_\_\_ Required easement(s) legal description(s) and diagram(s)
- \_\_\_ Final Map Fee: \$655+\$55/Lot – Make check payable to CITY OF REEDLEY
- \_\_\_ Improvement Plan Check Fee: 2% of the first \$20,000, plus 1.5% of the amount over \$20,000 of the approved Engineer's cost estimate - Make check payable to CITY OF REEDLEY

**1.01 GENERAL**

- \_\_\_ 1. Civil Engineer's stamp where utility design and surveying is required.
- \_\_\_ 2. North arrow and scale on each sheet. North up and/or left or right.
- \_\_\_ 3. City of Reedley Bench Mark list on cover sheet and grading & drainage plan sheet.
- \_\_\_ 4. Titles and numbers on all sheets and match index.
- \_\_\_ 5. Conformance to Tentative Map and Conditions of Approval, especially street and right-of-way widths, number and size of lots, etc.

**1.02 TITLE SHEET**

- \_\_\_ 1. Name of Tract or Project.
- \_\_\_ 2. Tract Number.
- \_\_\_ 3. Vicinity Map with north arrow (north up and/or left or right).
- \_\_\_ 4. Sheet Index.
- \_\_\_ 5. City Engineer’s Signature Block.
- \_\_\_ 6. Public Works Director Signature Block.
- \_\_\_ 7. Alta Irrigation District Manager Signature Block (if applicable).
- \_\_\_ 8. Fresno County Public Works Department Signature Block (if applicable).
- \_\_\_ 9. Property Owner/Developer Name, Address, Phone Number.
- \_\_\_ 10. Design Engineering Firm’s Name, Address, Phone Number.
- \_\_\_ 11. Underground Service Alert (USA) reference and Phone Number.
- \_\_\_ 12. City of Reedley General Notes.
- \_\_\_ 13. Resolution Number (approving project).

**1.03 SHEET ONE (TITLE SHEET AND/OR SHEET TWO, IF REQUIRED)**

- \_\_\_ 1. Map showing all streets, utilities, structures, etc. and show improvement plan sheet layout.
- \_\_\_ 2. Drafting symbol legend.
- \_\_\_ 3. Typical street sections shown.
- \_\_\_ 4. Structural street sections agree with City Standard ST-11 (T.I., R-value, AC, AB).
- \_\_\_ 5. Curbs shown.
- \_\_\_ 6. Right-of-way and street widths shown.
- \_\_\_ 7. Cross-slope shown – note relative difference of and T/C.
- \_\_\_ 8. Sidewalk shown.
- \_\_\_ 9. Pedestrian paths shown.
- \_\_\_ 10. Drainage ways shown.
- \_\_\_ 11. Temporary and Permanent bench marks and descriptions.
- \_\_\_ 12. List of Abbreviations.

**1.04 DEMOLITION AND ABANDONMENT PLAN (If Required)**

- \_\_\_ 1. Show existing building(s) and structure(s).
- \_\_\_ 2. Existing septic tanks and leach fields shown.
- \_\_\_ 3. Existing water wells shown.
- \_\_\_ 4. Existing irrigation pipelines shown.
- \_\_\_ 5. Existing undersized water and sewer mains shown.
- \_\_\_ 6. Existing power poles and overhead utility lines shown.

**1.05 GRADING PLANS**

- \_\_\_ 1. Existing elevations and/or contours shown (may be on separate sheet).
- \_\_\_ 2. Proposed lot grades.

- \_\_\_ 3. TC elevations at property line extensions.
- \_\_\_ 4. TC at grade breaks and curb returns shown.
- \_\_\_ 5. TC at storm drain inlets shown.
- \_\_\_ 6. Street slopes at centerline shown. (0.2% minimum)
- \_\_\_ 7. Lot numbers shown.
- \_\_\_ 8. Retaining walls and decorative masonry block walls shown.
- \_\_\_ 9. Plan and section view of typical lot drainage shown, City Std Plan ST-18A.
- \_\_\_ 10. Section of typical lot to show property line slope relations, City Std Plan ST-18B.
- \_\_\_ 11. Show grading required for off-site drainage.
- \_\_\_ 12. Grading shown between back-of-curb or sidewalk and original ground at right-of-way line.
- \_\_\_ 13. Grading conforms to adjacent properties shown correctly and no adverse effects on future development.
- \_\_\_ 14. Check on drainage across lot lines and lots to drain to streets.
- \_\_\_ 15. Maximum slopes 2:1 or per Soils Report.
- \_\_\_ 16. All pads above high water if storm drain plugs. (Surface flows)
- \_\_\_ 17. Elevations at rear of lots shown.

**1.06 UTILITY PLANS (1 or 2 sheets)**

- \_\_\_ 1. Station number on sanitary sewer laterals (in cul-de-sacs, dimension off lot lines at right-of-way).
- \_\_\_ 2. Water service dimensioned off sanitary sewer or standard detail describing offset.
- \_\_\_ 3. Water, sewer, storm drain mains with line sizes and direction of flow indicated.
- \_\_\_ 4. Appurtenances (fire hydrants, manholes, blow-offs, air release valves, catch basins, street lights, irrigation sleeves, Alta irrigation lines).
- \_\_\_ 5. Gate valves.
- \_\_\_ 6. Off-site utility work.
- \_\_\_ 7. Scale 1"=20' up to 1"=40', north arrow.
- \_\_\_ 8. Irrigation service points for landscaping in the public right-of-way.
- \_\_\_ 9. Street names.
- \_\_\_ 10. Boundaries of subdivision.
- \_\_\_ 11. Electrical service connection(s) for landscape irrigation system.

**1.07 STREETS (Plan and Profile)**

- A. Plan Views
- \_\_\_ 1. Wheelchair ramps shown and referenced to City Std Plans.
- \_\_\_ 2. Radius of curvature, central angle, and length shown on all street curves.
- \_\_\_ 3. Curb curve data given; central angle, length, and radius to City Std Plans.
- \_\_\_ 4. Scale: 1"=20' up to 1"=40'.
- \_\_\_ 5. Cul-de-sac radius per City Std. Plans.
- \_\_\_ 6. Right-of-way and street width dimensions shown.
- \_\_\_ 7. Centerline stationing at 100' and at BC and EC curves.
- \_\_\_ 8. Lot/parcel lines and numbers/letters shown.
- \_\_\_ 9. Cul-de-sac cross slopes from high point or gutter lip min. 2% and max. 5%.

- \_\_\_ 10. Valley gutters (in-fill projects only) – show flow lines at center of street.
- \_\_\_ 11. Stationing at all drainage structures shown.
- \_\_\_ 12. Top of curb elevation given at all drain structures.
- \_\_\_ 13. Drainage easements shown and dimensioned.
- \_\_\_ 14. Location of underground pipes and utilities shown.
- \_\_\_ 15. Station and off-set location of fire hydrants (at 300 feet o.c.).
- \_\_\_ 16. Street monuments shown.
- \_\_\_ 17. Pedestrian paths shown. Basic grades shown.
- \_\_\_ 18. Street names shown (include direction N,S,W,E).
- \_\_\_ 19. Stations and elevations street intersections shown (include station equations).
- \_\_\_ 20. All notes and symbols standard and conforming to legend.
- \_\_\_ 21. All existing utility poles with identification number, manholes, valves, signs, mail boxes, trees, etc., shown. Indicate those to be removed, relocated or adjusted to grade.
- \_\_\_ 22. Continuation and cross streets properly referenced.
- \_\_\_ 23. Project limits and City limits shown.
- \_\_\_ 24. City Standard knuckles used.
- \_\_\_ 25. Barricades shown in proper location.
- \_\_\_ 26. Handicap ramps shown and referenced to City Standard Plans.
- \_\_\_ 27. Driveway locations and widths shown, reference City Standard Plans.
- \_\_\_ 28. Streets are being overlayed in areas where newly services excessively cut the existing pavement.

B. Medians (if required)

- \_\_\_ 1. Irrigation and electrical service shown.
- \_\_\_ 2. Approved landscape plans for medians.
- \_\_\_ 3. Median curbs per City Standard Plans. (Curb height for pavement = 8”).
- \_\_\_ 4. Median island nose treatment (decorative reinforced stamped concrete).
- \_\_\_ 5. Irrigation street crossover with landscape median, sleeve detail, City Std. L-10.
- \_\_\_ 6. Lane storage length and design per Caltrans Standards.

C. Profiles

- \_\_\_ 1. Vertical curves designed for proper speeds per Highway Design Manual.
- \_\_\_ 2. Minimum vertical curve lengths observed (50’).
- \_\_\_ 3. Vertical scale 1”=2’ or 4’.
- \_\_\_ 4. Vertical curve, used for grade breaks greater than 1%.
- \_\_\_ 5. In cul-de-sac, show profiles @centerline from end of TC profile through the radius point to TC at end of cul-de-sac (dashed line).
- \_\_\_ 6. 2% street cross-slope grade from centerline to gutter lip observed on all streets.
- \_\_\_ 7. 0.20% minimum gutter grade slope observed on all streets at curb.
- \_\_\_ 8. 0.35’ minimum fall around curb returns on all streets.
- \_\_\_ 9. All underground pipes and utilities shown; storm drain, water and sewer.
- \_\_\_ 10. Existing ground at centerline shown.
- \_\_\_ 11. Finished grade profile for top of curb shown.
- \_\_\_ 12. Centerline profiles of intersecting streets shown on to their point of intersection.

- \_\_\_ 13. Off-tract profile to catch point shown where road is constructed to subdivision boundary.
- \_\_\_ 14. Centerline stations and elevations shown at all BVC, EVC, PIVC, grade breaks, low points and high points.
- \_\_\_ 15. All slopes in profile shown.
- \_\_\_ 16. Show all utility crossings with clearance indicated when closer than 15”.
- \_\_\_ 17. Manhole and drop inlet and flow-line elevations shown.

**1.08 SANITARY SEWER**

- \_\_\_ 1. System in agreement with tentative map and master plan.
- \_\_\_ 2. Design conforms to City standards.
- \_\_\_ 3. Size of proposed lines shown.
- \_\_\_ 4. Adequate cover; 42” min. to finished grade – 2’ min. to subgrade, ductile iron pipe or engineered alternatives if shallower. (See City Std. Plan ST-9)
- \_\_\_ 5. Clearance with water main per City Standard Plan W-6.
- \_\_\_ 6. Size, slope, length between structures, and type of pipe (SDR 35).
- \_\_\_ 7. Points of Connection to existing facilities.
- \_\_\_ 8. Extension of lines to subdivision boundaries.
- \_\_\_ 9. Sewer line to be located per City Standard Plan ST-25.
- \_\_\_ 10. Curves allowed within 80% of recommendations of pipe manufacturer. Show curve data or offsets if concentric with centerline.
- \_\_\_ 11. On all curves where short pipe lengths are used, indicate clearly on plans.
- \_\_\_ 12. Rim and pipe invert elevations on manholes shown.
- \_\_\_ 13. Station given for manholes.
- \_\_\_ 14. Size of existing lines shown.
- \_\_\_ 15. Pipe types allowed, SDR 35 (D.I.P. if cover requires it).
- \_\_\_ 16. 300’ maximum distance manhole to manhole.
- \_\_\_ 17. Minimum 2 fps velocity.
- \_\_\_ 18. 0.10’ drop around corner through manhole.
- \_\_\_ 19. Sewer lines crossing water are in conformance with Department of Health Requirements. Plans must specify length of section and type of piping at crossing.
- \_\_\_ 20. Bolted manhole covers for any off street manholes.
- \_\_\_ 21. Check sanitary calculations.
- \_\_\_ 22. Laterals shown in plan and 10’ center to center from water services and 3’ below water if crossing. (follow Health Department diagram)
- \_\_\_ 23. Special approval areas shall be noted in profile (less than minimum cover and clearance).
- \_\_\_ 24. Cleanout on mains where temporary phasing exists and run does not exceed 250’ and 3 services. Manhole and stub when temporary stop exceeds 250’ or more than 3 services are going to be installed.
- \_\_\_ 25. 8” minimum sewer main size (may use 6” within cul-de-sac street if adequate cover).
- \_\_\_ 26. Manhole sizes, 48” or 60” (per City Standard Plan S-2 or S-3).

## 1.09 DRAINAGE

- \_\_\_ A. Hydrology – Hydraulics
  - \_\_\_ 1. Calculations per City Standards and based on 5-year storm with minimum velocity of 2 fps.
  - \_\_\_ 2. Calculations shall include the following: HGL, FL, EL, Q, A, S, V, freeboard at structures, structure losses, and tail-water assumptions (5 year and 100 year).
  - \_\_\_ 3. Adequacy of in-tract and off-tract drainage system verified.
  - \_\_\_ 4. All starting water surface calculations adequately verified.
  - \_\_\_ 5. Drainage map showing street system, existing and proposed drainage system, slope arrows, tributary sub-areas, peak flow in all pipes (scale: 1" = 100').
  - \_\_\_ 6. All pipe in tributary areas labeled to correspond with calculations.
  - \_\_\_ 7. System in agreement with tentative map Conditions of Approval.
  
- \_\_\_ B. Easements
  - \_\_\_ 1. Off-tract drainage improvements (plan and profile) and accompanying easements shown. Off-tract offers of dedication for drainage easements submitted for review.
  - \_\_\_ 2. Off-tract work to be done but no easement requirements. Right of entry submitted for review. (if applicable)
  - \_\_\_ 3. Easement widths indicated on plans.
  - \_\_\_ 4. Easements across lots are not permitted.
  
- \_\_\_ C. Pipe
  - \_\_\_ 1. Size, slope, length between structures, type and class of thickness of pipe shown in profiles (15" minimum).
  - \_\_\_ 2. Reinforced concrete, R.G.R.C.P., PVC (SDR35) "Cast-In-Place is not allowed".
  - \_\_\_ 3. Trunk line locations per City Std Plan ST-25.
  - \_\_\_ 4. 3' minimum cover over pipe to finish grade unless special design and calcs submitted.
  - \_\_\_ 5. Curve radii allowed to within 80% of pipe manufacture's recommendations.
  - \_\_\_ 6. All curve data at centerline of pipe shown unless concentric with street then offsets allowed.
  - \_\_\_ 7. Elevations, slopes and distances all mathematically correct.
  - \_\_\_ 8. Match hydraulic/hydrology calculations.
  - \_\_\_ 9. Drainage provided for frontage along subdivision but separated by a block wall (this includes areas designated in City's L&LMD No. 1).
  
- \_\_\_ E. Temporary and Permanent Storm Drain Basins
  - \_\_\_ 1. Runoff and volume calculations per City Design Guidelines.
  - \_\_\_ 2. Groundwater level shown on basin section.
  - \_\_\_ 3. Basin bottom 10' above water table.
  - \_\_\_ 4. Outfall protection using rip-rap (8" minimum) required and flared end section on temporary basins and headwalls on permanent basins.
  - \_\_\_ 5. Chain link fence around basins required with landscaping.
  - \_\_\_ 6. Ramp at 15% maximum required, See City Standard Plan SD-5.

- \_\_\_ 7. Basin requires minimum 8' wide access maintenance road around basin perimeter.
- \_\_\_ 8. Required easements (if applicable).
- \_\_\_ 9. Percolation rate calculations for retention basin.
- \_\_\_ 10. Infiltration test results turned in for percolation basin.
- \_\_\_ 11. Basin side slope per City Storm Drain Master Plan recommendations.
- \_\_\_ 12. Landscape irrigation system design (if applicable).
- \_\_\_ 13. Pumping system for permanent basin (if applicable).

**1.10 WATER MAINS**

- \_\_\_ 1. System in agreement with tentative map Conditions of Approval.
- \_\_\_ 2. Design conforms to City standards.
- \_\_\_ 3. Size – 8" minimum.
- \_\_\_ 4. Gate valves as required to control system.
- \_\_\_ 5. Fire hydrants – locations reviewed and approved by City Fire Chief.
- \_\_\_ 6. Cover 36" minimum to finished grade.
- \_\_\_ 7. Proper separation from sewer mains and storm drain line (10' minimum).
- \_\_\_ 8. Location – per City Standard Plan ST-25.
- \_\_\_ 9. Water mains kept in street right-of-way (easements discouraged)
- \_\_\_ 10. Crossing with sewer mains, storm drain, irrigation or other non potable laterals meet health standards (City Standard Plan W-6.
- \_\_\_ 11. Length and size of pipe shown in profile (indicate all changes in class of pipe exceeding CL 150).
- \_\_\_ 12. Length shown as distances between crosses and tees.
- \_\_\_ 13. Invert elevations shown at grade breaks.
- \_\_\_ 14. Top of curb at fire hydrant locations shown.
- \_\_\_ 15. Size of all exiting lines shown.
- \_\_\_ 16. Curve radii allowed to within 80% of pipe manufacture's recommendations. Curve data at centerline of pipe shown unless concentric with street then offsets acceptable.
- \_\_\_ 17. Air valves and blow-offs behind sidewalks.
- \_\_\_ 18. Fire hydrants at back of cul-de-sacs for terminating water lines (in lieu of blow-off).
- \_\_\_ 19. Point of connection(s) to existing facilities (system looped).
- \_\_\_ 20. At points of future extension install temporary blow-off with valve (City Std W-5)
- \_\_\_ 21. Lines extended to tract boundaries and along frontage.
- \_\_\_ 22. House services shown on plan and stationed.
- \_\_\_ 23. Fire hydrants maximum spacing 300'.

**1.11 STREET LIGHTING**

- \_\_\_ 1. Shown at 1" = 40' or 1"= 100' plan scale.
- \_\_\_ 2. Type-15, Layout shown per City Standard Plan ST-24C.
- \_\_\_ 3. Historic light standard, Layout shown as per Holophane (manufacture's recommendation)
- \_\_\_ 4. Wattage, arm length, and pole heights shown on plans.
- \_\_\_ 5. Point of Connection(s) shown on plans.
- \_\_\_ 6. Conduit locations shown on plans.
- \_\_\_ 7. Type-15 Street light Standard identification numbers, to be assigned by P.G.&E.

**1.12 STREET STRIPING PLAN**

- \_\_\_ 1. Shown on 1"=40' scale.
- \_\_\_ 2. Striping Legend shown on Plan Sheet.
- \_\_\_ 3. References to Caltrans Detail number and Standard Drawing sheet.
- \_\_\_ 4. Lengths, widths and color of strips noted on Striping Plan sheet.
- \_\_\_ 5. Regulatory, warning and street name sign locations and noted on plan sheet.
- \_\_\_ 6. Existing striping to be removed shown and noted on Striping Plan sheet.
- \_\_\_ 7. Existing traffic signs to be removed or relocated noted and shown on plan sheet.
- \_\_\_ 8. City Engineer's Signature Block.
- \_\_\_ 9. Public Works Director Signature Block.

**1.13 LANDSCAPE AND IRRIGATION PLAN**

- \_\_\_ 1. Shown on 1"=20' scale.
- \_\_\_ 2. Electrical service connection point(s) for irrigation system shown on plan.
- \_\_\_ 3. Water connection point(s) for irrigation system shown on plan.
- \_\_\_ 4. All irrigation laterals and main lines 2" diameter and less shall be schedule 40 PVC.
- \_\_\_ 5. Electric controller location(s) shown on plan.
- \_\_\_ 6. Property and/or right-of-way lines and planting easements shown on plan.
- \_\_\_ 7. Landscape and irrigation legend shown on plans.
- \_\_\_ 8. Typical sight distance requirements at intersections (City Std Plan L-12).
- \_\_\_ 9. Public Works Director Signature Block.
- \_\_\_ 10. Community Service Director Signature Block

**1.14 ENGINEER'S COST ESTIMATE**

- \_\_\_ 1. Verify that unit cost compare with City standard costs.
- \_\_\_ 2. Verify quantities of all public improvement items.
- \_\_\_ 3. Review with plans to determine if there are missing items.
- \_\_\_ 4. 10% minimum contingency required.
- \_\_\_ 5. Grading quantities (cubic yards) shown for cut and fills – lump sums not acceptable.
- \_\_\_ 6. Driveways included as a separate item.
- \_\_\_ 7. Sidewalks on a square foot and not included in curb and gutter item.
- \_\_\_ 8. When resubmitted, verify that all changes in plans are reflected in the estimate.

