City of Grass Valley

Section 3

Design Standards

Plan and Map Requirements

SECTION 3

PLAN AND MAP REQUIREMENTS (PM)

- 3-1 GENERAL Improvement (Grading) Plans shall be prepared for all private improvements requiring a grading permit, and public improvements required of subdivisions and all other work performed within City right-of-way or easements that is in excess of minor work, as determined by the City Engineer. For the purposes of this section, minor work shall consist generally of the construction, or the removal and replacement of curbs, gutters, sidewalks or driveways; minor street widening; connections to existing water, sewer or storm drainage facilities adjacent to site development; and utility related work. Minor work in City right-of-way or easements requires an encroachment permit and a plan may be required as part of that.
- **SHEET INFORMATION** All improvement plans shall be clearly and legibly drawn in ink on 24-inch by 36-inch paper ("D" size). Initial submittals for review may be on bond paper, whereas the final copy submitted for acceptance and all record drawings shall be plotted on "Mylar" film (or equivalent). Sheets shall have a 1½-inch wide clear margin at the left edge and a 1-inch wide margin on all other edges, or as otherwise approved by the City Engineer.
 - **A. Drafting Standards** All line work shall be neat, clearly legible, and opaque to light. Letters and numerals shall have a minimum height of 0.075-inch and be well formed and sharp. Numerals showing profile elevations shall not be bisected by station grid lines. Dimension lines shall be terminated by sharp, solid arrowheads.
 - **B.** Scale Horizontal scale shall be 1-inch = 20, 30, 40, or 50 feet. Vertical scale shall be 1-inch = 2, 3, 4, or 5 feet.
 - **C. Title Block** A title block must be shown on each sheet within the set of plans and shall show the grading permit number, subdivision or project name, sheet title, sheet number, date, scale, and the Consulting Engineer's name, signature, and license number. The title block shall be placed along the lower edge or right side of the sheet.
 - **D.** Orientation -All plan sets shall be oriented with the north arrow pointing either to the top or the right edge of the plan sheet, unless otherwise restricted by the centerline stationing requirements.
 - **E.** Order of Plan Sheets Plan sheets shall be in the following order (not all sheets listed below will apply to every project):
 - 1. Title Sheet
 - 2. Standard Notes
 - 3. Typical Sections and Details
 - 4. Retaining Wall Details
 - 5. Utility Overview Plan
 - **6.** Grading Plans

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- 7. Street Plan and Profile Sheets
- 8. Street Light /Signal Plans
- **9.** Signing and Striping Sheets
- **10.** Erosion and Sediment Control Plans
- 11. Landscaping and Irrigation Plans
- **PLAN SHEETS** Each set of Improvement Plans shall include the following sheets and information in the following order.
 - **A. Title Sheet** The Title Sheet shall be sheet one of the plans and shall include the following (refer to the detailed drawing for additional information):
 - 1. A vicinity map drawn to a convenient scale, not less than 1 inch = 2,000 feet.
 - 2. A North arrow and scale. The North arrow must point to the top of the sheet.
 - **3.** Index of sheets.
 - **4.** A signature block for the City Engineer.
 - **5.** Utility contact information.
 - **6.** Key map showing the entire subdivision or parcel drawn to a scale not less than 1-inch = 200-feet, or as approved by the City Engineer. The map shall provide the following:
 - a. Streets and street names of all streets within or contiguous to the project.
 - **b.** Adjacent subdivisions or parcels properly identified including names, lot lines and lot numbers.
 - **c.** All property lines and City limit lines (if applicable).
 - 7. Legend of all symbols and abbreviations used in the improvement plans (May be included on Standard Notes sheet if space is inadequate).
 - **8.** Temporary and permanent benchmarks with descriptions.
 - **9.** A note stating that Nevada Irrigation District (NID) facilities must be approved by NID (if applicable).
 - **10.** Earthwork quantities.
 - **11.** Soils/Geology report information including:
 - a. Title.
 - **b.** Date.
 - c. Contact information

12. Engineer's Declaration exactly as follows:

"DECLARATION OF ENGINEER OF WORK"

I hereby declare that the design of the improvements as shown on these plans complies with professional engineering standards and practices. As the engineer in responsible charge of the design of these improvements, I assume full responsible charge for such design. I understand and acknowledge that the plan check of these plans by the City of Grass Valley is a review for the limited purpose of ensuring the plans comply with City procedures and other applicable policies and ordinances. The plan check is not a determination of the technical adequacy of the design of the improvements. Such plan check does not relieve me of my responsibility for the design of these improvements.

As Engineer of Work, I agree to indemnify and save the City of Grass Valley, its officers, agents, and employees harmless from any and all liability, claims, damages or injuries to any person or property which might arise from the negligent acts, errors or omissions of the Engineer of Work, my employees, agents, or consultants.

Engineer	License No.	Date

- **B.** Standard Notes -The Public Works Department Standard Notes (PS-1, PS-2, PS-3) shall be clearly referred to on the project plans or included in their complete form. All Standard Notes and other Engineer's notes shall be provided on either the first or second sheet of the plans.
- **C. Detail Sheets** Detail sheets, if necessary, shall delineate special details, structural designs, etc., for which no Public Works Department Standard Drawing exists, and when space is not available on the plan and profile sheets.

Plan views of the structure, for which details of design are to be provided, shall be shown on the detail sheet depicting the location of said structure in relation to street centerlines, stations, bearings, skews, grades, etc. Structural details shall be delineated at a scale that will clearly define all facets of the design. Public Works Department Standard Drawings shall not be delineated on detail sheets or any other sheet unless included in their complete form.

NID detail sheets shall be included, as required, but shall not have a City Engineer's signature block as the City will not approve NID facilities

- **D. Utility Plan Overview** All existing and proposed utilities shall be shown including storm drainage, sewer, water, electrical and gas utility trenches.
- **E. Grading and Improvement Sheets** Grading plans shall conform to the requirements of these Design Standards.
- **F.** Street Plan and Profile Sheets The following requirements are for all plans submitted to the City of Grass Valley for review and approval:

1. Plan View -The plan view of each street to be improved shall be shown on separate sheets and shall include existing improvements and contours/elevations within the project vicinity (generally 100 feet of the project boundary), proposed improvements and future improvements if known. Proposed improvements shall include sidewalks, curbs, gutters, driveways, sewer mains, water mains, sewer lateral locations, storm drains, manholes, valves, fire hydrants, fencing, barricades, monuments, survey stationing, signal pull boxes, signal poles, hardscape features, curve data for all curves along centerline and curb returns and distinct elevations along the face of curb at all beginning and ends of curves and at all curb returns. In addition, right-of-way lines, easement lines, and City limit lines (if applicable) shall be shown. Callouts on the plans to City Standard Improvements ("Type C D.I.", "Type 2 curb", etc.) shall reference the Standard Drawings where these are shown. Callouts for non-standard improvements shall reference the detail, including sheet number, which provides the construction specifics. Other data may be required as specified by the City Engineer. The survey stationing shall normally read from left to right with the North arrow pointing either to the top or right edge of the sheet. All stationing shall be a continuation of that used for the design of existing improvements where possible.

- 2. Profile View The profile view of each street shall be shown immediately below its plan view. The profile shall include existing and proposed street centerlines, sewer mains, storm drains, water mains, public utility mains, all utility crossings, and gutter flow lines. Distinct stations and elevations shall be shown for the street centerline and gutter flow line at 25-foot intervals and at all, beginning, middle and end of curves, grade break points, manhole and catch basins, and water main crossings with other utilities. Rates of grade shall be shown on all profile lines. Elevations of the hydraulic grade line for the 25-year and 100-year frequency storms shall be shown at all storm drain manholes, catch basins and drain inlets.
- **G. Signing and Striping Plans** All existing and proposed traffic signing and striping shall be shown on a plan view and on separate sheets from all other improvements. The scale shall be a minimum of 1-inch = 40 feet, or as otherwise approved by the City Engineer. Signing and striping to be shown shall include all existing and proposed traffic striping, pavement markings, pavement markers, regulatory signs and warning signs. All existing signing and striping within at least 200-feet of the project limits shall be shown.
- H. Signal Plans Signal plans, if required, shall conform to the requirements of these Design Standards
- I. Erosion and Sediment Control Plans An erosion and sediment control plan and/or SWPPP developed pursuant to the State Water Board's Construction General Permit (CGP) is required for every Grading Permit project and must include site-specific construction site Best Management Practices (BMP's) consistent with the latest edition of the California Storm Water Quality Association (CASQA) BMP Handbook or equivalent. Rationale may need to be supplied regarding the selection of BMP's including soil loss calculations, if not obvious. All erosion and sediment control plans must list applicable permits directly associated with the grading activity, including but not limited to the State Water Board's CGP, State Water Board 401 Water Quality Certification, U.S. Army Corps 404 permit and California Department of Fish and Game 1600 Agreement.
- J. Other Plans Other plans that shall be incorporated in the Improvement Plans include, but are not limited to, landscaping, irrigation, tree removal and protection, and photometric plans. All other plans shall conform to the requirements of these Design Standards.
- 3-4 PARCEL AND FINAL MAPS - The parcel or final map shall be prepared by or under the direction of a registered Civil Engineer authorized to practice land surveying or licensed land surveyor in the manner required by the State Subdivision Map Act, the City of Grass Valley Municipal Code, and these Design

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Plan and Map Requirements

Standards.

A. Preparation and Form – All maps shall be clearly and legibly drawn in ink on 18-inch by 24-inch paper. Initial submittals for review may be on bond paper, whereas the final copy submitted for acceptance shall be plotted on "Mylar" film (or equivalent). The general form and layout of maps, including size and type of lettering, drafting and location acknowledgements, etc., shall be as approved by the City Engineer. Parcel and final maps shall conform to the following:

- 1. Survey information shall normally read from left to right orientated perpendicular or parallel with the northerly direction. North shall be oriented to either top or right edge of the sheet.
- **2.** Large lot final maps or large lot parcel maps shall not be more than one inch equals 100-feet, unless otherwise permitted by the City Engineer. The scale of residential final maps shall not be more than one inch equals 50-feet. All maps shall clearly show all details of the subdivision.
- 3. All dimensions shall be shown in feet and hundredths of a foot. No ditto marks shall be used.
- **4.** If more than two sheets are necessary to show the entire subdivision, a graphical index shall be included.
- **5.** The subdivision designation, tract number, other numbers assigned by the City Engineer, scale and north arrow shall be shown on each sheet.
- **6.** A title sheet, designated as page number one of the final map, shall be provided. Where the size of the subdivision permits, in lieu of a separate title sheet, the information required may be shown on the same sheet as the map of the subdivision.
- 7. The final map shall be legibly drawn in accordance with the requirements of the Subdivision Map Act, and as directed by the City Engineer. The parcel or final map, when filed, must be in such condition that legible prints and negatives can be made there from.
- **B.** Certificate Sheet The Certificate Sheet shall contain the following information:
 - 1. The title followed by the words, "Final Map/Parcel Map No. (insert Planning Department's file number)." "City of Grass Valley, Nevada County, California."
 - 2. Below the title shall be a subtitle, consisting of a description of all property being subdivided with reference to such map or maps of property shown thereon as shall have been last previously recorded or filed in the County Recorder's Office, or shall have been previously filed with the County Clerk pursuant to a final judgment in any action in partition, or shall have been previously filed in the office of the County Recorder under authority of the Subdivision Map Act or by reference to the plat of any United States survey.
 - **3.** The subtitle of maps filed for the purpose of reverting subdivided land to acreage shall consist of the words, "A reversion to acreage of" (insert description as required herein).
 - **4.** Reference to tracts and subdivisions in the description must be worded identically with original records. References to book and page of record must be complete.
 - 5. Affidavits, certificates, acknowledgements, endorsements, acceptances, dedications and notorial seals as required by law including, but not limited to, the Subdivision Map Act and City

Ordinance.

- **C. Information** The Parcel or Final Map shall substantially conform to the City approved or conditionally approved tentative map including all approved modifications, and shall contain the following information:
 - 1. All areas shown on the map which do not constitute a part of the subdivision shall be labeled "Not a part of this subdivision," or, "N.A.P.O.T.S." All lines delineating such areas shall be dashed.
 - 2. The following survey data and information shall be shown on the Final Map:
 - **a.** Stakes, monuments (together with their precise position) or other evidence found on the ground, to determine the boundary of the subdivision.
 - **b.** Corners of all adjoining properties identified by lot and block numbers, subdivision names, numbers and pages of record, or by section, township and range, or other proper designation.
 - **c.** All information and data necessary to locate and retrace any point or line without reasonable difficulty.
 - **d.** The location and description of any required monuments to be set after recording of the parcel map, and the statement that they are "to be set."
 - e. Bearings and lengths of each lot line, block line and boundary line. The bearings and lengths of centerlines describing a road or easement shall be shown unless otherwise depicted by the lot boundaries. All line annotation shall be located adjacent to the described line. Curve and line tables can be used to avoid crowding and conflicts with line work or other information shown on the map; however, the use of annotation tables shall be kept to a minimum.
 - **f.** Chord length, chord bearing, radius, and central angle of each curve, as required to retrace curve.
 - **g.** The survey center lines of any street or alley in or adjacent to the parcel together with reference to a field book or map showing such center line and the monuments which determine its position. If the monuments are determined by ties, that fact shall be so stated.
 - **h.** Sheet numbering shall be located in the lower right hand corner of each sheet.
 - i. Such other survey data or information as may be required to be shown by the City.
 - **3.** All resulting lots or parcels being subdivided for the purpose of sale, lease, or financing, excluding those exempted by law, and all parcels offered for dedication to the City or any other public agency, for any purpose, with all dimensions, boundaries and courses clearly shown and defined. Dimensions of lots shall be as total dimensions corner to corner, in addition to point to point dimensions.
 - **4.** All lots shall be numbered consecutively, without omissions or duplication, throughout the subdivision, starting with the number one, except units of a total development which shall be numbered consecutively throughout the development. Lot numbering shall be consistent with that of the approved or conditionally approved tentative map or as approved by the City Engineer.

Only parcels offered for dedication other than for streets or easements shall be designated by letters. However, in single family divisions, the parcels intended for other than single family use may be designated by letters. Each numbered lot shall be shown entirely on one sheet.

- 5. The square footage (to the nearest foot) shall be shown on the map directly under the lot number. Lots one (1) acre or greater shall be shown with the net acreage (to the nearest one hundredth of an acre).
- **6.** The location and total width of all public streets, alleys, pedestrian ways, equestrian and hiking trails and biking paths, and rail road right-of-ways; the names of public streets, and the width on each side of the center line of each public street; the width of the portion of the street, alley, pedestrian way, equestrian and hiking trail and bike path being dedicated, and the width of the existing dedication, public or private, if any, within the subdivision.
- 7. All necessary data including width and sidelines of all proposed and existing public utility easements to which the lots of the subdivision are subject. Each easement shall be clearly labeled as to nature and purpose and, if already of record, its recorded reference given. Easements shall be denoted by fine dashed lines.
- **8.** All limitations on rights of access to and from streets and lots and other parcels of land.
- **9.** The lines of any natural watercourse, channel, stream, creek or body of water in or adjacent to the subdivision and/or officially adopted floodplain lines, which constitute parcel boundary lines or easement lines.
- 10. Any City boundary crossing or adjoining the subdivision clearly designated and tied in.
- 11. Total acreage within the subdivision.
- **12.** The basis of bearings used in the field survey, making reference to some recorded subdivision map or other source acceptable to the City Engineer.
- **D.** Additional Data Required The following statements, documents and other data, and as many additional copies thereof as may be required, shall be filed with the parcel or final map:
 - 1. On the application form, the names, addresses, and telephone numbers of the record owners and sub-divider and persons preparing the Parcel or Final Map.
 - 2. A guarantee of title or letter from a title company, certifying that the signatures of all persons whose consent is necessary to pass a clear title to the land being subdivided and all acknowledgements thereto, appear and are correctly shown on the proper certificates, and are correctly shown on the final map; both as to consents for the making thereof and the affidavit of dedication.
 - **3.** A traverse computations sheet in a computerized form approved by the City Engineer, giving bearings, distances and coordinates, and showing the mathematical closure. No manual computations will be accepted. All lots must close to within 0.02-feet or as specified by the City Engineer.
 - **4.** All protective covenants, restrictions, or affirmative action obligations in the form in which the same are to be recorded when approval thereof by an officer of the City has been required as a

condition of approval of the Tentative Map.

- **5.** All offers of dedication by separate instrument shall conform to these Design Standards; and any offer of dedication by separate instrument for fee title shall conform to the City of Grass Valley Municipal Code.
 - Whenever an offer of dedication by a separate instrument accompanies a Parcel or Final Map, the Parcel or Final Map shall not be accepted for filing by the City Engineer until he first approves the instrument of recordation.
- **6.** All other data required by law as a condition of approval of the Tentative Map, including plans, reports, agreements, permits, fees, security or other requirements.
- 7. Refer to standard details for standard statements.
- **PROPERTY OF CITY** All plans, maps, reports and any other items submitted to the City shall become the property of the City. The City shall not be responsible for the return of these items once they are submitted.
- **3-6 STANDARD DETAILS** Standard details PS-1 through PS-5 are attached on the following pages.

GENERAL:

- 1. ALL WORK SHALL CONFORM TO THE LATEST EDITIONS OF THE CITY OF GRASS VALLEY CONSTRUCTION STANDARDS, DESIGN STANDARDS, CALTRANS STANDARD SPECIFICATIONS AND PLANS AND THE CALIFORNIA MUTCD.
- 2. THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXEMPTING LIABILITY ARISING FROM THE NEGLIGENCE OF ENGINEER.
- 3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN PERMITS, LICENSES AND CERITIFICATES FROM THE APPROPRIATE AGENCIES NECESSARY TO PERFORM THE WORK SHOWN ON THESE PLANS.
- 4. THE CONTRACTOR SHALL NOT BEGIN ANY WORK SHOWN ON THESE PLANS UNTIL THE CITY ENGINEER'S SIGNATURE OF APPROVAL IS AFFIXED HEREON. THERE SHALL BE AN APPROVED SET OF PLANS ON THE JOB DURING ANY CONSTRUCTION.
- 5. THE CONTRACTOR SHALL CONTACT THE CITY OF GRASS VALLEY ENGINEERING DIVISION TO SCHEDULE A PRE-CONSTRUCTION MEETING ONE-WEEK PRIOR TO STARTING WORK. THE ENGINEERING DIVISION SHALL NOTIFY THE APPROPRIATE CITY DEPARTMENTS OF THE MEETING. ALL OTHER APPROPRIATE UTILITY REPRESENTATIVES AND SUBCONTRACTORS SHALL BE NOTIFIED BY THE CONTRACTOR AS TO THE DATE AND LOCATION OF THE MEETING.

UTILITY LOCATION:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL EXISTING UNDERGROUND UTILITIES, WHETHER OR NOT THEY ARE SHOWN ON THESE PLANS. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL UNDERGROUND FACILITIES, HOWEVER, THE DESIGN ENGINEER ASSUMES NO LIABILITY FOR THE ACCURACY OR COMPLETENESS OF THE EXISTING FACILITIES SHOWN HEREON OR FOR THE EXISTENCE OF OTHER UNDERGROUND UTILITIES NOT SHOWN ON THESE PLANS.
- 2. THE CONTRACTOR SHALL CONTACT U.S.A. AND HAVE UTILITIES MARKED AT LEAST 72 HOURS BEFORE BEGINNING WORK. THE CONTRACTOR IS SOLELY RESPONSIBLE TO PROVIDE ALL LABOR AND EQUIPMENT NECESSARY TO LOCATE EXISTING UNDERGROUND FACILITIES BEYOND THE INFORMATION PROVIDED BY U.S.A. MARKING. WHERE MARKINGS ARE NEAR PROPOSED FOUNDATIONS THE CONTRACTOR SHALL LOCATE UNDERGROUND UTILITIES BY POT HOLING PRIOR TO EXCAVATING.

48 HOURS BEFORE EXCAVATING

<u>CALL U.S.A.</u>

UNDERGROUND SERVICE ALERT

811 OR 1-800-227-2600

TRAFFIC CONTROL PLANS:

- 1. TRAFFIC CONTROL SHALL BE PER THE CALIFORNIA MUTCD. AT LEAST ONE LANE IN EACH DIRECTION SHALL REMAIN OPEN TO TRAFFIC UNLESS OTHERWISE SHOWN ON THE PLANS. TRAFFIC CONTROL HOURS ARE SUBJECT TO LIMITATION BY THE CITY. TRAFFIC CONTROL WITH LANE CLOSURES THAT AFFECT TRAFFIC FLOW MAY REQUIRE NIGHT WORK. IF, AS A PART OF TRAFFIC CONTROL MEASURES, A ROADWAY CLOSURE HAS BEEN APPROVED, THE CONTRACTOR SHALL NOTIFY THE ENGINEERING DIVISION 72 HOURS IN ADVANCE OF SETTING UP THIS CLOSURE.
- 2. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A WRITTEN TRAFFIC CONTROL PLAN FOR ANY PROPOSED LANE CLOSURES OR DISTURBANCES TO TRAFFIC WITHIN THE CITY RIGHT OF WAY. THE PLAN SHALL INCLUDE THE DATE AND TIME, DESCRIPTION OF WORK, CONTACT PERSON AND ESTIMATED DATE OF COMPLETION. THE CONTRACTOR SHALL NOTIFY THE ENGINEERING DIVISION 72 HOURS IN ADVANCE OF SETTING UP THE TRAFFIC CONTROL
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL CONSTRUCTION SIGNING AS REQUIRED BY THE CALIFORNIA MUTCD TO DELINEATE CONSTRUCTION HAZARDS AT HIS OWN EXPENSE. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, CONES, SIGNS, BARRICADES, FLAGGERS OR OTHER DEVICES NECESSARY TO PROVIDE SAFETY.



PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

STANDARD NOTES (1 OF 3)

APPROVED BY:

PUBLIC WORKS DIRECTOR / CITY ENGINEER

SCALE: NONE DRAWN BY: BPJ DATE: MAR 3, 2009

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RESTORATION:

- 1. ALL EXISTING UTILITIES, LANDSCAPING, IRRIGATION SYSTEMS AND IMPROVEMENTS THAT ARE DAMAGED BY THE CONTRACTOR, WHICH ARE NOT DESIGNATED BY THE PLANS OR SPECIFICATIONS TO BE DISTURBED, SHALL BE RESTORED OR REPAIRED TO THE SATISFACTION OF THE CITY ENGINEER AT THE CONTRACTOR'S EXPENSE.
- 2. THE CONTRACTOR SHALL TAKE EXTREME CARE TO PROTECT EXISTING SITE AND ADJACENT IMPROVEMENTS FROM DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR OR REPLACE ALL CRACKED AND OTHERWISE PRE-EXISTING DAMAGED PUBLIC IMPROVEMENTS ALONG THE FRONTAGE OF THE PROJECT SITE AND ANY DAMAGE RESULTING FROM CONSTRUCTION TO CURRENT CITY STANDARDS AND AT THEIR OWN EXPENSE. THE EXTENT OF THE REPAIRS SHALL BE DETERMINED BY THE PUBLIC WORKS INSPECTOR AND SHALL BE COMPLETED PRIOR TO THE CITY ACCEPTANCE OF THE IMPROVEMENTS.

EROSION AND DUST CONTROL:

- 1. EXCAVATIONS SHALL BE ADEQUATELY SHORED, BRACED AND SHEETED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS WILL BE FULLY PROTECTED FROM DAMAGE.
- 2. CONSTRUCTION ACTIVITIES OCCURRING BETWEEN OCTOBER 15 AND APRIL 15 SHALL HAVE EROSION AND SEDIMENT CONTROL MEASURES IN PLACE. THE CONTRACTOR SHALL ENSURE THAT THE CONSTRUCTION SITE IS PREPARED PRIOR TO THE ONSET OF ANY STORM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN WINTERIZATION FACILITIES AT ALL TIMES OR UNTIL THE IMPROVEMENTS ARE FINAL.
- 3. EROSION CONTROL SEEDING SHALL BE APPLIED TO ALL GRADED AND DISTURBED SOILS WITHIN THE WORK AREA PRIOR TO OCTOBER 15 OF ANY GIVEN YEAR WHETHER THE PROJECT IS COMPLETE OR NOT (CONTRACTOR IS TO NOTIFY THE ENGINEERING DIVISION IMMEDIATELY AFTER APPLICATIONS FOR INSPECTION PURPOSES).
- 4. ADJACENT STREET FRONTAGES SHALL BE SWEPT DAILY OR AS NEEDED TO REMOVE SILT WHICH IS EVIDENT FROM CONSTRUCTION ACTIVITIES.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TIMELY DUST CONTROL OF DISTURBED AREAS AT ALL TIMES, TO THE SATISFACTION OF THE CITY ENGINEER. ALL MATERIAL EXCAVATED, STOCKPILED, GRADED, OR TRANSPORTED OFF-SITE SHALL BE SUFFICIENTLY WATERED, TREATED OR COVERED TO PREVENT DUST FROM CAUSING A PUBLIC NUISANCE OR A VIOLATION OF AN AMBIENT AIR STANDARD.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING CONSTRUCTION VEHICLES LEAVING THE SITE TO PREVENT DUST, SILT AND DIRT FROM BEING RELEASED OR TRACKED OFFSITE.
- 7. ALL AREAS WITH VEHICLE TRAFFIC SHALL BE WATERED OR HAVE A DUST PALLIATIVE APPLIED AS NECESSARY FOR REGULAR STABILIZATION OF DUST EMISSIONS.
- 8. ALL INACTIVE PORTIONS OF THE DEVELOPMENT SITE (PREVIOUSLY GRADED AREAS WHICH REMAIN INACTIVE FOR 96 HOURS) SHALL BE COVERED, SEEDED OR WATERED UNTIL A SUITABLE COVER IS ESTABLISHED. ALTERNATIVELY, THE APPLICANT SHALL BE RESPONSIBLE FOR APPLYING NON-TOXIC SOIL STABILIZERS TO ALL INACTIVE CONSTRUCTION AREAS.
- 9. ALL LAND CLEARING, GRADING EARTH MOVING OR EXCAVATION ACTIVITIES SHALL BE SUSPENDED AS NECESSARY TO PREVENT WINDBLOWN DUST WHEN WINDS ARE EXPECTED TO EXCEED 20 MPH.
- 10. THE CITY SHALL HAVE THE AUTHORITY TO STOP ALL GRADING OPERATIONS, IF, IN OPINION OF THE CITY ENGINEER, INADEQUATE DUST CONTROL MEASURES ARE BEING PRACTICED OR EXCESSIVE WIND CONDITIONS CONTRIBUTE TO FUGITIVE DUST EMISSIONS.
- 11. NO BURNING OF WASTE MATERIAL OR VEGETATION SHALL TAKE PLACE ON SITE.
- 12. THE CONTRACTOR SHALL MEET AND FOLLOW ALL NPDES REQUIREMENTS IN EFFECT AT THE TIME OF CONSTRUCTION.
- 13. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED AS SPECIFIED IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR THIS PROJECT (IF APPLICABLE) OR AS DETERMINED BY THE CITY INSPECTOR. THE SWPPP IS CONSIDERED A DYNAMIC DOCUMENT AND WILL CHANGE AS CONDITIONS WARRANT. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED AS SHOWN ON THE SWPPP PLAN.

CRASS DATE OF THE PARTY OF THE

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

STANDARD NOTES (2 OF 3)

APPROVED BY:

PUBLIC WORKS DIRECTOR / CITY ENGINEER

SCALE: NONE DRAWN BY: BPJ DATE: MAR 3, 2009

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EARTHWORK:

- THE CONTRACTOR SHALL RETAIN THE SERVICES OF A QUALIFIED GEOTECHNICAL ENGINEER TO EVALUATE GEOLOGIC AND SOILS CONDITIONS ON THE SITE, PROVIDE CONSTRUCTION AND COMPACTION RECOMMENDATIONS SUBJECT TO CITY APPROVAL, INSPECT THE CONTRACTOR'S GRADING OPERATION AND CERTIFY THE CONTRACTOR'S COMPLIANCE WITH THE APPROVED RECOMMENDATIONS.
- 2. ALL UNDERGROUND UTILITIES WITHIN EXISTING OR PROPOSED CITY OF GRASS VALLEY EASEMENTS SHALL COMPLY WITH THE CITY STANDARD DETAIL. TRENCH BACKFILL SHALL BE SLURRY CEMENT OR AGGREGATE BASE PROCESSED TO 95% RELATIVE COMPACTION WITH CERTIFIED TESTING IN ACCORDANCE WITH CITY STANDARDS.
- 3. PRIOR TO EXCAVATION OF TRENCHES 5 FEET OR DEEPER, THE CONTRACTOR SHALL SUBMIT TO THE PUBLIC WORKS INSPECTOR A COPY OF THE COMPANY'S CALOSHA PERMIT AND A COPY OF THE COMPANY'S LETTER INFORMING CALOSHA OF THE TIME THE TRENCHING IS COMMENCING AND THE LOCATION OF THE WORK.
- 4. IF GRADING OR OTHER CONSTRUCTION OPERATIONS UNEARTH ARCHAEOLOGICAL OR HISTORIC ARTIFACTS OR RESOURCES, CONSTRUCTION ACTIVITIES SHALL CEASE AND THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CITY OF GRASS VALLEY PLANNING DEPARTMENT.
- 5. SHOULD GRADING OPERATIONS UNCOVER HAZARDOUS MATERIALS, OR WHAT APPEARS TO BE HAZARDOUS MATERIALS, THE FIRE DEPARTMENT SHALL BE CONTACTED IMMEDIATELY AT 911. THE AREA, WHICH CONTAINS THE HAZARDOUS MATERIALS, SHALL BE MARKED OFF UNTIL AN INVESTIGATION BY A MEMBER OF THE FIRE DEPARTMENT IS CONDUCTED.

TREE PRESERVATION:

- THE GRADING PLAN FOR THE PROJECT HAS BEEN DESIGNED FOR NO GRADING TO OCCUR WITHIN THE DRIPLINE OF ANY TREE TO BE PRESERVED UNLESS SPECIFICALLY APPROVED BY THE PLANNING DEPARTMENT AND SHOWN ON THESE PLANS. NO GRADES SHALL BE MODIFIED WITHOUT THE APPROVAL OF THE CIVIL ENGINEER AND THE CITY OF GRASS VALLEY.
- 2. EACH TREE OR GROUP OF TREES TO BE SAVED SHALL BE FENCED IN ACCORDANCE WITH THE "TREE PROTECTION" DETAIL PRIOR TO ANY GRADING OR MOVEMENT OF HEAVY EQUIPMENT.
- 3. NO TRENCHING SHALL OCCUR BENEATH THE DRIPLINE OF ANY TREE TO BE SAVED UNLESS STATED ON THESE PLANS "TRENCHING UNDER THIS TREE IS APPROVED". NO MECHANICAL TRENCHING WHATSOEVER SHALL BE ALLOWED WITHIN THE DRIPLINE OF TREES TO BE PRESERVED.
- 4. THE CONTRACTOR SHALL NOT ALLOW STACKING OF CONSTRUCTION MATERIALS, PARKING OF CONSTRUCTION EQUIPMENT AND VEHICLES, GRADING, TRENCHING, CUTTING OR FILLING WITHIN A TREE DRIPLINE UNLESS OTHERWISE SHOWN ON THESE PLANS.

MISCELLANEOUS:

- 1. SHOULD IT APPEAR THAT THE WORK TO BE DONE OR ANY MATTER RELATIVE THERETO IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL REQUEST IN WRITING FROM THE ENGINEER SUCH FURTHER EXPLANATION AS MAY BE NECESSARY.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 3. THE CITY REQUIRES A COMPLETE SET OF AS-BUILT PLANS. THE CONTRACTOR SHALL PROVIDE ANY AS-BUILT CHANGES TO THE DESIGN ENGINEER, ON A CLEAN SET OF PLANS AT JOB COMPLETION.

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

STANDARD NOTES (3 OF 3)

APPROVED BY:

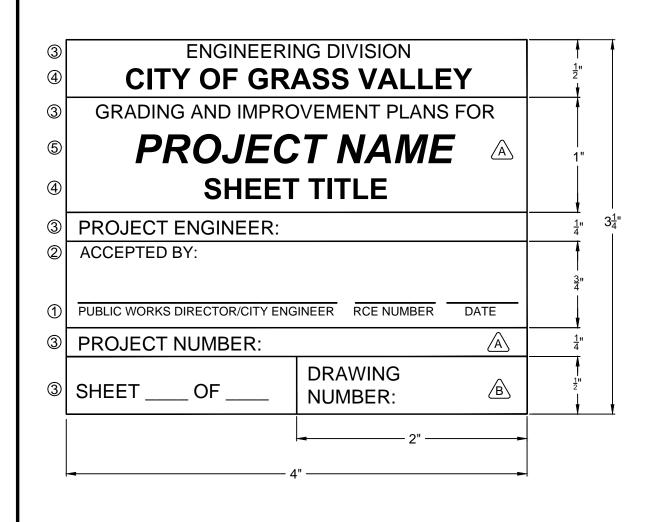
PUBLIC WORKS DIRECTOR / CITY ENGINEER

SCALE:

DRAWN BY: BPJ DATE: MAR 3, 2009

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NOTES:

 THE CITY ENGINEER'S SIGNATURE BOX SHALL BE OMITTED FROM NID DETAIL SHEETS.

LETTER SIZES:

- (1) 0.075" REGULAR
- (2) 0.10" REGULAR
- (3) 0.12" REGULAR
- (4) 0.18" BOLD
- (5) 0.25" BOLD ITALIC

LEGEND:

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CITY ASSIGNED



TO BE COMPLETED BY CITY



PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

SIGNATURE BLOCK

APPROVED BY:

PUBLIC WORKS DIRECTOR / CITY ENGINEER

SCALE: NONE DRAWN BY: BPJ DATE: MAR 3, 2009 **PS-4**

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