

City of Santa Clarita Engineering Services Division 23920 Valencia Boulevard, Suite 300 Santa Clarita, California 91355 (661) 255-4942

# STREET IMPROVEMENT CORRECTION SHEET

<u>MC#</u> Master Case No.	Assessor's Parcel No.	Tract / Parcel No. / Address	Lot No's.
ENG Project No.	STR Case No.	Street Name	
Owner	Telephone No.	e-mail address	Plan Check No. / Date
Design Engineer	Telephone No.	e-mail address	1 2 3
Plan Checker	Telephone No.	e-mail address	4

## Return this Correction Sheet with your next submittal

## A. GENERAL INFORMATION

- 1. A Street (Encroachment) Permit is required for the following:
  - a) All work within the public right-of-way
  - b) Publicly maintained street on private property
- 2. The City's approval of plans does not permit the violation of building codes, ordinances or state laws.
- 3. Counter consultations are not guaranteed unless scheduled in advance with the Plan Checker.
- 4. Standard forms used by this division are available on the City's website at www.santa-clarita.com/cityhall/pw/development/forms.asp
- 5. The Design Engineer is entirely responsible for the street stationing, location of utilities, existing ground line on profile, horizontal and vertical curve data and street names shown on plans. The City will not check these items for corrections.
- 6. The City uses the following design standards for street improvements:
  - City Street Design Standards
  - City Municipal Code
  - City Unified Development Code
  - City General Plan Circulation Element
  - Standard Plans for Public Works Construction (APWA Standard Plans)
  - Los Angeles County Department of Public Works (LACDPW) Standard Plans
  - LACDPW Road design information (Chapter 44).
  - Caltrans Highway Design Manual
  - AASHTO

## B. APPROVAL & PERMIT PROCESS

- 1. Prior to Street Improvement Plan approval, the plans for the proposed improvements shall address the information and corrections indicated by the circled items on this Street Improvement Correction Sheet.
- 2. This Street Improvement Correction Sheet must be returned with the red-lined check prints and two sets of revised plans after corrections have been made.
- 3. The applicant may be required to submit the street improvement plans concurrently to the City of Santa Clarita Engineering Services Division and CALTRANS for review. The City cannot approve the plans until CALTRANS has reviewed the plans and all of their comments, and the City's comments, have been addressed, when the project falls in both agencies jurisdictions.
- 4. The applicant may be required to submit the street improvement plans concurrently to the City of Santa Clarita Engineering Services Division and Los Angeles County Department of Public Works (LACDPW) for review. The City cannot approve the plans until LACDPW has reviewed the plans and all of their comments, and the City's comments, have been addressed, when the project falls in both agencies jurisdictions.
- 5. After the Plan Checker has indicated that all plan check comments have been addressed, the engineer shall plot on bond, sign the Private Engineer's Notice to Contractors, and sign and stamp every sheet.

## City of Santa Clarita

- 6. The applicant/engineer submits the plans to the Plan Checker for City approval signatures. After the required City signatures are obtained (which typically takes 2 3 days), the Plan Checker will contact the applicant/engineer to inform them the plans are ready to be picked up.
- 7. The applicant/engineer obtains approval signatures on the plans from: a. Los Angeles County (if required)
  - b. CALTRANS (if required)
- 8. The applicant/engineer sends the plan checker a pdf of the approved plans with signatures from the respective agencies.
- 9. When the applicant is ready to obtain a Street (Encroachment) Permit to construct the street, they must bring three bond copies of the approved street plan to the Engineering Counter in Suite 302 and pay any remaining fees.

## C. BONDS & FEES

- 1. Post a Faithful Performance Bond for the street improvements in the amount of \$\_\_\_\_\_.
- 2. Post a Labor & Materials Bond for the street improvements in the amount of \$\_\_\_\_\_
- 3. Submit payment for the Bond Processing Fee of \$\_\_\_\_\_
- 4. Submit payment for the Street Improvement Plan Check Fee of \$\_\_\_\_\_
- 5. Submit payment for the Easement document review Fee of \$\_\_\_\_\_
- 6. Submit payment for the Document Imaging Fee of \$
- 7. Submit payment for the Street Inspection Fee of \$\_\_\_\_\_

## D. CITY APPROVALS

## Engineering Services (661) 255-4993

- 1. An Easement Document is required for.\_\_\_\_
- 2. A Vacation Document is required for \_\_\_\_\_

## **Traffic**

- 1. Provide Signing and Striping plans for Traffic approval
- 2. Provide Signal plans for Traffic approval

## Parks

1. Provide trail detail for Parks Approval

## LMD

2. Provide Landscape Plans for LMD Approval

## Urban Forestry

1. Provide Street tree list and locations for Urban Forestry approval.

## <u>Transit</u>

1. Provide Bus Turn out / Bus Stop Canopy information for transit approval.

## E. OUTSIDE AGENCY APPROVALS

## Los Angeles County, Department of Public Works

1. Obtain approval for the work done in the City into Los Angeles County jurisdiction.

## CALTRANS

1. Obtain approval for work done in CALTRANS Right of Way.

## F. STREET IMPROVMENT PLANS

## General

- 1. Submit a copy of the Final Conditions of Approval.
- 2. Submit a copy of the Tentative Tract Map approved by the Planning Division (with Planning's approval stamp) or a copy of the Recorded Final Map.
- 3. Submit a copy of the Site Plan approved by the Planning Division (with Planning's approval stamp).
- 4. Submit a copy of the approved Grading Plans
- 5. Submit a copy of the approved Drainage Study

## City of Santa Clarita

- 6. Submit a copy of the approved Sewer Plans
- 7. Submit a copy of the Drain Plans
- 8. Provide Street Cross Section as described in Section H.
- 9. Submit a copy of the following plans for reference:
- 10. The following Conditions of Approval have not been addressed: \_
- 11. Submit the following letters:
  - Drainage
    - Slope
    - Utility
    - Cable TV
    - Hardship
    - Permission to Enter for Construction
      Other
- 12. The Street Plan does not conform to the Approved Site Plan / Tentative Map. Either revise the street plans to match the approved plan or submit a revised Site Plan / Tentative Map with Planning's approval stamp.

#### Plan Requirements

- 1. Street plans shall be 24- by 36-inch standard size.
- 2. Street plans shall be in the City's standard format which is available in AutoCAD format on the City's website at: www.santa-clarita.com/cityhall/pw/development/forms.asp
- 3. Do not use triangles for construction notes; a triangle is the symbol used for revisions to plans after they have been approved by the City.
- 4. City approval of street plans will only be given on original plans produced on 6-mil thick mylar with indigo ink, photo mylar, or machine plotted.
- 5. Street Improvement Plans must be prepared by a registered civil engineer. The engineer must sign and stamp every sheet of the plans prior to City approval.

#### The following items shall be shown on the Title Sheet

- 1. Title of Plan "City of Santa Clarita, Street Improvement Plans, street name, tract number".
- 2. Title of sheet in lower right corner "City of Santa Clarita, Street Improvement Plans, Benchmark, key map, standard notes, tract number, sheet number".
- 3. Key map minimum scale of 1"=200', street names, tract boundary, right of way width, public storm drain system, drainage pattern with arrows, sheet number, and limits, north arrow, city/county boundary.
- 4. Vicinity map scale 1"=600' or 1"=1000', limits of project site, major cross streets, north arrow.
- 5. Sheet index showing sheet number and description.
- 6. Benchmark information Use City approved benchmark (1995 adjustment).
- 7. City standard street improvement plan notes, Stormwater pollution plan notes, and Construction notes.
- 8. Private engineer's notice to contractors (signed by engineer).
- 9. Private engineer's PE stamp, signature, and expiration date.
- 10. Engineering company name, address, and phone number.
- 11. Contractor's responsibility note and Dig alert note.
- 12. City signature block in upper right corner. Signature block should be on every page of plan.
- 13. Outside agency signature block Signature block is needed if improvements cross jurisdictions (County/Caltrans).
- 14. Revision block Revision block shall have columns for the revision number, description, revised by and date, city approval signature and date.
- 15. Add the following note:

Rip rap notes:

- Rocks for grouted rip rap shall be good quality broken concrete and/or river run rock. The smallest dimension shall not be less than six (6) inches nor greater than 18 inches, unless otherwise specified. The largest dimension shall not exceed four (4) times the smallest dimension.
- b. There shall be a grout bed at least two (2) inches beneath the first layer of rock. All the voids between the rocks shall be filled with grout. Maximum spacing between rocks shall be two (2) inches.
- c. Surface rocks shall be embedded from 1/2 to 2/3 of their maximum dimension.

## City of Santa Clarita

#### Typical cross sections shall include the following:

- 1. Name of street and limits of improvements with station numbers Verify limits are consistent with plan view and TTM.
- 2. Traffic index Refer to the Summary of Minimum Street Design Standards Table or check with the Traffic Engineering Division to assign an appropriate TI.
- 3. Pavement section and note showing minimum pavement section The minimum section is 3 ½" AC over 6" of CAB. The AC section consists of a minimum 1 ½" C2 PG 64-10 finish course over a 2" minimum B PG 64-10 base course. The actual section is based on the TI and R value taken after street is rough graded.
- 4. Right of way width, dimensions from right of way to centerline and curb face, curb to curb width, sidewalk width, parkway width, class 1 bike trail width, raised median width Check typical sections against TTM. Verify limits of public and private streets against TTM.
- 5. Curb and gutter/median gutters– Verify curb face height with approved sections in the TTM and City standards. Check against APWA standards. On super-elevated streets, verify if median gutter needs to be shedding or collecting. Check for CAB under curb and gutter.
- 6. Class 1 Bike Trail Verify dimensions of bike trail against City standard detail from the Parks Department.
- 7. Cross slope grade percentage Check against City standards.
- 8. Ascending or descending slopes adjacent to r/w Verify need for slough wall per City standards. If needed, it shall be shown in the typical sections outside of the right of way.
- 9. Construction notes Notes should clearly indicate what is proposed, calling out the correct APWA standard numbers and all required dimensions and parameters. Verify notes are consistent with typical section, APWA standards, and plan view.
- 10. On retrofit projects such as street widening and median modifications, the typical section should show the limits of new curb and gutter, pavement and overlay to join existing improvements. The minimum overlay is 1 ½" AC extending a minimum of 5' wide or to the first lane line.

#### The following typical details shall be included when applicable:

- 1. Mailbox detail
- 2. Lodge pole fence detail for class 1 bike trail.
- 3. Street name sign detail
- 4. Street tree planting detail
- 5. Any non standard details pertinent to the plan such as modified driveway approaches, handicap ramps, etc.
- 6. Local depression detail

#### The plan view shall show the following improvements to be constructed as required by the conditions and TTM:

- 1. Curb line Check if construction note calls for correct APWA curb and gutter. Check for consistency with typical section.
- 2. Sidewalk and parkway Check sidewalk and parkway width against TTM and typical sections.
- 3. Class 1 bike trail Verify location with TTM. Check for consistency with typical section. Parks to provide additional comments.
- 4. Handicap ramps Check ramps against APWA standards. Check if construction note calls out correct ramp type and case. Check profile grades for any sags in return. Minimum grades around return shall be City standards.
- 5. Commercial driveways Verify location with TTM. Check width against and City standards and grading plan. Check against APWA standards. Check if "flattened" driveway is required per the conditions. A cross section is needed showing driveway grades. Check cross section with County driveway "long car" template. Make sure car does not scrape front or bottom. Make sure driveway fits within the right of way and if additional easements are required.
- 6. Pavement and overlay New pavement area should be clearly shown and called out in construction notes. Check for consistency with typical sections and City standards.
- 7. Medians Check location against TTM and typical section.
- 8. Turn pockets Check location against TTM and conditions. Check curb taper and pocket length dimensions against City standards.
- 9. Bus turn outs Check location against TTM and conditions. Check against City standards. In flat areas, make sure gutter through bus turn out meets minimum grades for flow. A detail may be required for a modified bus turn out.
- 10. Bus pads Check location against TTM and conditions. Check against APWA standards. In some cases, the bus stop and bus pad are within the right turn pocket. This will require coordination with the Traffic Division and Transit to locate the bus stop improvements.
- 11. Bus stop pedestrian pads Check location against TTM and conditions. Additional right of way or easement is usually required for a pedestrian pad. Transit prefers pads behind the sidewalk. In some cases, the pedestrian pad is adjacent to the class 1 bike trail requiring a detail for clarification. Make sure all Transit comments are addressed.
- 12. Knuckles and cul-de-sacs Check dimensions against City standards. All dimensions shown on the standards shall be shown on the plan. For knuckles, the plan shall show the street centerline and the crown line. For cul-de-sacs, the plan shall show the cul-de-sac radius. Check both plan and profile view to verify minimum grades are provided for positive drainage.

- 13. Traffic calming chokers Check location against TTM and conditions. Check dimensions against City standards. All dimensions shown on the standards shall be shown on the plan. Traffic should be reviewing this portion.
- 14. "S" islands for left turn "in only" Check dimensions for consistency with City standard. Check location against TTM. Check alignment with adjacent driveway using turning templates from Traffic Division. A detail may be required for clarity. Traffic should be reviewing this portion.
- 15. Cross gutters Check location against TTM. Check against APWA standards and City standards. If possible, look for opportunities to eliminate cross gutters by adding storm drain inlets.
- 16. Storm drain local depressions Check location against County approved hydrology study and storm drain plan. A detail showing flow line elevations is required for each local depression. Local depression width shall match the specified catch basin box.
- 17. Retaining walls/Slough Walls Check if slough wall is needed per City standards. Walls including footings shall be located outside of the right of way if possible. Walls are typically shown on the grading plan, but are sometimes shown on the street plan. If shown on the street plan, include APWA standard number, top of wall and finish surface elevation, and wall height. Refer to Building and Safety requirements for permit requirements.
- 18. Where grades exceed 6%, place parkway protectors on downstream side of all driveways and at all lot lines, unless driveways are constructed within 50 feet of lot lines. Provide a detail on the plan.

#### The following information shall be shown in the plan view:

- Public storm drain pipes, inlets, and road drains Include pipe size, catch basins, and MTD number. Reference utilities shall be shown in the background. Check catch basin locations against County approved hydrology study. Surface flow should be consistent with the hydrology study. Verify centerline of catch basin is at the low point of the street. Verify maintenance responsibility of drains. If called out to be maintained by the City, verify with TTM and Environment Services.
- 2. Public sewer system Include pipe size PC/CSD number, and ownership information. Reference utilities shall be shown in the background. Check if sewer manholes are conflicting with curb and gutter and medians.
- 3. Water system Include pipe size and ownership information.
- 4. Street lights Street lights are shown on the street plan for reference only. A separate plan is required to be submitted to Engineering Services for review. Check against street lighting plan for consistency.
- 5. Street trees Street trees are shown on the street plan for reference only. Verify trees are located in a tree well or parkway. Urban Forestry will check and provide an approved tree list and comment on location. Traffic will comment on tree location vs. traffic signs. (note: currently discussing with Urban Forestry on need to show trees on street plan this may be eliminated).
- 6. Existing and proposed utilities pertinent to the design This may include fiber optic, major gas lines, and other private utilities.
- 7. Existing improvements Show in background for reference. Check transition from proposed to existing. Check if overlay/pavement reconstruction is required to provide a smooth transition. For retrofit projects, show existing public and private improvements at least 50 feet behind right of way. Cross sections are required per City standards to verify consistency of proposed street improvements to private improvements.
- 8. Existing and proposed right of way Check against TTM and final map. All public street improvements shall be within the right of way. Additional easements may be dedicated to the City by separate instrument.
- 9. Existing and proposed property lines and lot numbers Check against final map for consistency. Property lines are shown for reference.
- 10. Easements Include dimensions and ownership information. Verify against TTM and final map. Easements may be dedicated by separate instrument on projects with no final map.
- 11. City/County/Caltrans/Tract boundary Verify against TTM and final map. For projects joining County/Caltrans improvements, a signature block shall be provided on the title sheet for their signature confirming improvements between jurisdictions are consistent.
- 12. Street names Verify names have been approved by DS.
- 13. Graphic scale and north arrow Verify minimum scale of plan is 1"=40'.
- 14. Construction notes Only notes that pertain to the sheet shall be included.
- 15. The plan view shall show dimensions for the following items: Existing and proposed right of way, right of way to centerline, Curb to curb, curb to centerline, raised median width, sidewalk, parkway and class 1 bike trail
- 16. Dimensions don't match up with the typical sections and/or TTM.
- 17. The plan view shall show curve and line data for the following items: Street centerline, all curbs, curb returns A curve and line data table shall be provided. Match the centerline radius to the TTM. Match the curb return radius to the City standards.
- 18. Station the following items:
  - Street centerline (CL) at 100' intervals
  - Street centerline grade breaks
  - Street centerline intersections
  - Beginning of curve (BC), End of curve (EC)
  - Beginning of curb return (BCR), End curb return (ECR)

- Any angle points
- Centerline of improvements commercial driveways, parkway drains, catch basins, cul-de-sac radius point, and ends of improvements.
- 19. The plan view shall show elevations for the following items :
  - Cul-de-sac radius point and midpoint Verify sufficient elevations are provided to check cross slope against City standards.
  - Knuckle crown and centerline Verify sufficient elevations are provided along crown line and centerline to check cross slope against City standards.

#### The profile view shall show the following improvements to be constructed as required by the conditions of approval and TTM:

- 1. Proposed curb and gutter, median curb and gutter, and cross gutters.
- 2. Existing curb and gutter at a minimum of 300' beyond the project or tract boundary. -

#### The following information shall be shown in the profile view:

- 1. Scale Horizontal scale shall be 1"=40'. Vertical scale shall be 1"=8'. Stationing of horizontal scale shall be shown along the bottom of the profile at 100' intervals.
- Profile of all proposed improvements Each profile shall be clearly labeled (Example: northerly top of curb, southerly top of curb, 2. centerline, existing curb and gutter, existing centerline, crown line for knuckles and cul-de-sacs.) Centerline only profile may be used if curb grades are parallel with the centerline grade.
- Street grades (%) Check grades against TTM and City Standards. Make sure maximum grades as approved on TTM is not exceeded. 3. Check for landing at intersections per City standards. Work with Traffic Engineering to determine correct location of landing if not clearly shown on the TTM. Check for minimum grades per City standards. Make sure streets are not too flat to provide positive drainage. Check for consistency between station of low spot in gutter and station of the middle of a catch basin.
- Vertical curves A vertical curve study shall be provided by the engineer. The study shall be consistent City standards showing the 4. design speed, grade in, grade out, and vertical curve length.
- 5. Any underground utilities pertinent to the design - Any major utility impacted by proposed street shall be shown (ie. major water line, gas line, storm drain, sewer trunk line).
- 6. The profile view shall show elevations and stationing for the following items:
  - Beginning and end of curb return (BCR) (ECR), ¼ points in curb returns look for low spots in curb ramp area.
  - Grade breaks Check for multiple grade breaks. If too many are used, a vertical curve is needed per City standards.
  - Beginning and end of vertical curves (BVC), (EVC), point of vertical intercept (PVI) Check against vertical curve study provided by the engineer. Check for consistency with the plan view.
  - Beginning and end of super-elevation Check against Caltrans standards.
  - "Join to existing" improvements point and existing improvements adjacent to proposed improvements Make sure the proposed joins smoothly into the existing with no abrupt changes in grade.
  - Beginning and end of curves (BC) (EC)

#### G. STREET IMPROVMENT PLAN NOTES

The following notes shall be shown on Page 1 of the Street Improvement Plans:

#### SPECIFIC NOTES

#### Private Engineer's Note

The undersigned Civil Engineer certifies that the grading work will be supervised in accordance with Section 17.88.010 of the Municipal Code.

The Existence and location of any underground utility pipes, conduits or structures shown on these plans is obtained by a search of the available records and to the best of my knowledge there are no existing utilities except as shown on these plans.

Engineer's Name & Signature

RCE#

Date

#### Contractor's Responsibility

The Contractor is required to take due precautionary measure to protect the utility lines shown on these drawings. The contractor further assumes all liability and responsibility for the utility pipes, conduits or structures shown or not shown on these drawings.

The Contractor agrees that he shall assume sole and complete responsibility for jobsite conditions during the course of construction of this project, including safety of all persons and property that this requirement shall apply continuous and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and Engineer harmless from any liability arising from the sole negligence of the Owner or Engineer.

## **GENERAL NOTES**

- Working hours on City streets: Monday – Friday: 7:00 am – 4:30 pm Saturday: 8:00 am – 5:00 pm (overtime inspection fees shall be in advance; 4 hour minimum) No work on Sundays or holidays
- 2. Lane Closures are only permitted from 8:00 am 3:30 pm.
- 3. A permit for construction inspection shall be obtained and fees paid to the City of Santa Clarita, Engineering Services Division, 23920 Valencia Boulevard, Suite 140, Santa Clarita, California 91355, and Phone: (661) 286-4060, at least 72 hours prior to start of work.
- 4. A copy of the encroachment permit and approved street plans must be in the possession of a responsible person and available at the site at all times.
- 5. Contractor shall contact City of Santa Clarita Public Works Inspection to arrange for acceptable construction start date. Phone: (661) 255-4060.
- 6. Contractor shall notify City of Santa Clarita Public Works Inspection at least twenty-four (24) hours prior to the start of work. Phone: (661) 255-4060
- 7. Contractor shall notify Underground Service Alert (USA) at (800) 227-2600 at least forty-eight (48) hours prior to start of work. Contractor shall contact Underground Service Alert for updates every 28 days.
- 8. A permit must be obtained from the Los Angeles County Department of Public Works, Construction Division, (626) 458-3129, for all storm drain connections. A copy of the permit must be given to the City Public Works Inspector prior to start of work.
- 9. For all work within Caltrans and/or Los Angeles County right-of-way, obtain a permit from the appropriate jurisdiction prior to construction within their right-of-way.
- 10. All work shall conform to the APWA "Standard Plans and Standard Specifications for Public Works Construction" and the Los Angeles County Department of Public Works "Standard Plans" in effect as of the approval date of these plans.
- 11. Work in public streets, once begun, shall be prosecuted to completion without delay so as to provide minimum inconvenience to adjacent property owners and to the traveling public. Failure to comply with this requirement is a violation of the City of Santa Clarita Municipal Code.
- 12. Contractor shall take all necessary and proper precaution to protect adjacent properties from all damage that may occur from storm water runoff and/or deposition of debris resulting from any and all work in connection with construction.
- 13. Construct residential driveways per APWA Standard Plan 110-1, Type A or B, unless otherwise shown on plan. Prior to forming curb and gutter, the contractor shall confer with the City Inspector to secure approval for all driveway locations and widths.
- 14. Install six (6) inches of crushed aggregate base under commercial driveways.
- 15. Processed miscellaneous base or select material with expansion of three (3) percent or less by soil test may be used in lieu of crushed aggregate base under walk.
- 16. All construction joints for PCC curbs, gutters, driveways, and sidewalks shall be in accordance with A.P.W.A. Standard Plan No. 112-1.
- 17. Driveways shall not be located within twenty-five (25) feet upstream of a catch basin when street grade is greater than six (6) percent.
- 18. Driveways shall not encroach into local depressions.
- 19. There shall be no above ground obstruction that would reduce the width of the sidewalk to less than 48 inches, exclusive of the top of curb.
- 20. Install mailboxes and posts in accordance with City standards, and secure approval of the U.S. Postal Service prior to installation.
- 21. Construct street name signs per detail hereon. Install street name signs per locations shown on plan.
- 22. Install street lights per the Street Light Plan approved by the City.
- 23. Street trees shown on this plan are for location reference only. All parkway and median landscaping, including street trees, shall be constructed per the Landscape Plan approved by the City.
- 24. Street trees shall be planted per the latest edition of the "Standard Plans for Public Works Construction" Section 5 Landscaping and Irrigation Systems, and detail hereon.
- 25. Pavement markers shall be installed in streets adjacent to fire hydrants in accordance with Los Angeles County Fire Department standards.
- 26. Pavement drop-offs over one-inch in height that will remain overnight shall be ramped with temporary A.C. pavement.

- 27. The thickness of asphalt and base shall be determined by testing the soil for R-values. Developer's soil engineer shall perform the R-value tests after streets have been rough graded, and submit R-value tests and report to the City of Santa Clarita's Engineering Services Division. Developer's engineer must revise the street plans to show actual thickness of asphalt and base to be constructed.
- 28. Polypropylene geotextile stabilization fabric (Mirafi HP370 or City approved equal) and/or lime treated subbase shall be utilized when the R-value is less than seventeen (17) and the expansion index is greater than three (3) percent.
- 29. Construction of streets shall be performed per either of the following options:
  - Option A The applicant shall construct the full pavement section including the final lift of asphalt to finish grade in conformance with the design TI. Prior to occupancy, the applicant shall refurbish the pavement to the satisfaction of the City Engineer.
  - Option B The applicant shall construct a pavement section that is a minimum of 1½" lower than finish grade, in conformance with the design TI. Prior to occupancy, the applicant shall refurbish the pavement, and complete the final lift of asphalt to meet finish grade to the satisfaction of the City Engineer.

#### Stormwater Pollution Plan Notes

- 1. Every effort should be made to eliminate the discharge of non-stormwater from the project site at all times.
- Eroded sediments and other pollutants must be retained on site and may not be transported from the site via sheet flow, swales, area drains, natural drainage courses, or wind.
- Stockpiles of earth and other construction-related materials must be protected from being transported from the site by the forces of wind or water.
- 4. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soil and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.
- 5. Excess or waste concrete may not be washed into the public right-of-way or any other drainage system. Provisions shall be made to retain concrete wastes on site until they can be disposed of as solid waste.
- 6. Trash and construction-related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
- 7. Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public right-of-way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.
- 8. Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.
- 9. The following BMP's as outlined in, but not limited to, the "Best Management Practice Handbook, California Stormwater Quality Task Force, Sacramento, California, 2009," or the latest revised edition, may apply during the construction of this project (additional measures may be required if deemed appropriate by City inspectors):

#### Erosion Control

- EC1 Scheduling
- EC2 Preservation of Existing Vegetation
- EC3 Hydraulic Mulch
- EC4 Hydroseeding
- EC5 Soil Binders
- EC6 Straw Mulch
- EC7 Geotextiles & Mats
- EC8 Wood Mulching
- EC9 Earth Dikes and Drainage Swales
- EC10 Velocity Dissipation Devices
- EC11 Slope Drains

#### Temporary Sediment Control

- SE1 Silt Fence
- SE2 Sediment Basin
- SE3 Sediment Trap
- SE4 Check Dam
- SE5 Fiber Rolls
- SE6 Gravel Bag Berm
- SE7 Street Sweeping and Vacuuming
- SE8 Sandbag Barrier
- SE9 Straw Bale Barrier

SE10 - Storm Drain Inlet Protection

Wind Erosion Control

WE1 - Wind Erosion Control

Equipment Tracking Control

- TC1 Stabilized Construction Entrance/Exit
- TC2 Stabilized Construction Roadway
- TC3 Entrance / Outlet Tire Wash

Non-Stormwater Management

- NS1 Water Conservation Practices
- NS2 Dewatering Operations
- NS3 Paving and Grinding Operations
- NS4 Temporary Stream Crossing
- NS5 Clear Water Diversion
- NS6 Illicit Connection / Discharge
- NS7 Potable Water / Irrigation

- NS8 Vehicle and Equipment Cleaning NS9 – Vehicle and Equipment Fueling NS10 – Vehicle and Equipment Maintenance NS11 – Pile Driving Operations NS12 – Concrete Curing NS13 – Concrete Finishing NS14 – Material and Equipment Use NS15 – Demolition Adjacent to Water NS16 – Temporary Batch Plants Waste Management & Material Pollution Control WM1 – Material Delivery and Storage WM2 – Material Use WM3 – Stockpile Management
- WM4 Spill Prevention and Control
- WM5 Solid Waste Management
- WM6 Hazardous Waste Management
- WM7 Contamination Soil Management
- WM8 Concrete Waste Management
- WM9 Sanitary / Septic Waste Management
- WM10 Liquid Waste Management

#### H. CROSS SECTION REQUIREMENTS

In order to facilitate the checking process for approval of street plans, street cross sections should be submitted by the engineers when a grade is being established on a street with partial improvements existing. Cross sections are not necessary on streets where there is all new construction. To enable fast processing and to facilitate storage, these sections should conform to the following specifications:

- 1. Use scales: 1" = 10' horizontally and 1" = 1' vertically for rapid plotting and interpretation.
- 2. Differentiate between existing and new construction by using different colors or different type lines.
- 3. Sections should be stacked vertically on sheets 24" high by 36" wide. Checkers will keep these sheets in the street files. Sheets are required to be folded.
- 4. Actual elevations should be shown on the cross sections. This should greatly reduce the number of existing elevations shots needed on the plan.
- 5. Cross sections should normally be plotted at 50' intervals. Sections at BCR's and centerline of intersection are desirable and may substitute for 50' intervals within the intersection.
- 6. Cross sections should be shown at any driveway which requires reconstruction.
- 7. Cross sections normally should extend 10' beyond full width right-of-way on each side. Elevations beyond property line would not be necessary on the subdivider's property.
- 8. Cross section should be submitted for the full length of design. This is normally 300' beyond the tract boundary of further if necessary to establish a proper grade.

These cross sections will be kept I folders at least until the streets are completed and accepted.