



### STREET IMPROVEMENT PLAN CHECKLIST

PROJECT NAME \_\_\_\_\_ PLAN CHECKER \_\_\_\_\_ DATE \_\_\_\_\_

	1 <sup>ST</sup> Check	2 <sup>nd</sup> Check	3 <sup>rd</sup> Check	Mylars	Comments
<b>I. ALL SHEETS</b>					
A. Medium					
1. 24"x36" size Mylar film conforming to City format					
2. No "sticky back", glued or taped on sections					
3. Drawn with waterproof ink or reproduced on photographic emulsion Mylar film, no Diazo or Zerographic copies					
B. Signed by the Engineer-of- Work, date of expiration of registration adjacent to signature in lower left					
C. Marked with the name, address and telephone number of the firm preparing the plans and date of preparation					
D. Consecutively numbered & the total number of sheets					
E. Lettered in a neat and legible style, no hand lettering smaller than 1/8" and no machine letter smaller than 1/10"					
F. Name and phase of development. Street names & construction station limits					
G. Correct City benchmark identification, location and elevation noted					
H. Prepared to appropriate scale(s)					
I. Scale noted. North arrow (up or to the right) & bar scale					
J. Clearly designate between existing conditions (dashed) and work proposed (solid)					

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K. Use standard details to maximum extent. Check drawings for dimensions shown on plans. Show detail for non-standard improvements					
L. No duplication of any section or detail designation					
M. Note all reference drawings on plans					
N. Title block w/ "Street Improvement Plan & Profile" (top line), street names (2 <sup>nd</sup> line), and limits of construction "From <u>street intersection</u> to <u>XXX' N,S,E,W</u> " (3 <sup>rd</sup> line)					
O. Acceptance block for Asst City Engineer recommendation and City Engineer acceptance (public facilities only) per std 6004					
P. Standard Title block per Std 6004					
Q. Show all existing & proposed easements. Clearly indicate public or private (min width 15')					
R. Street Structural Sections shown below each Typ. Section & in Const. Notes on each sheet; description should state "min" after AC/AB followed by "OR per Soils Engineer recommendation"					
S. Review master plan study for locations and sections					
T. Compare to conditions of Approval & approved tentative map					
<b>II. TITLE SHEET</b>					
A. Heading "Street Improvement Plans for ____ in City of Ontario"					
B. Consultant recommendation for acceptance block (public facilities only)					
C. Standard general notes and construction notes provided. Construction notes match plans					
D. Additional notes are designated as "Special Notes"					
E. Basis of bearing provided					

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F. Index Map					
1. Scale is 1" = 100' or 1" = 500'					
2. Sheet coverage shown					
3. Located on Title Sheet					
4. Street Names shown					
5. Street lights shown					
6. Identify areas in County					
G. Vicinity Map					
1. Orient north as on key map					
2. Arterial streets shown					
3. Project boundary street shown					
H. Legend					
1. Symbols per City Std 6002-6003					
2. Non-standard symbols and abbreviations used are listed and described					
I. Underground service alert information at bottom left corner					
J. Legal description shown & matches title report					
K. Owners/Developers name and address shown					
L. Separate written justification for deviations provided					
M. Quantity estimates provided and broken out between public/private & per tract if multi-tract project					
N. Typical sections comply with those appropriate from the City standards (for OMC plans); comply with Transportation Implementation Plan and/or Specific Plans (for NMC plans)					
O. Traffic Index (T.I.) below each section. <b>For OMC</b> Consult City <b>For NMC</b> see "NMC Access Guidelines & Traffic Indices" pg 6 table 3					

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P. All reference drawings are listed					
<b>III. STREET IMPROVEMENT PLANS</b>					
A. Plan View shows:					
1. North arrow generally up or to the right					
2. Horizontal scale 1" = 40'(new); 1" = 20' (existing)					
3. Lot Lines, frontage distances, & lot numbers same as on record map					
4. Label property & boundary lines					
5. Identify area located in County or adjoining City					
6. Approved name of streets shown					
7. Street signs properly located. Stop signs @ all major intersections per Std 5001					
8. Bearing and centerline curve data					
9. Show radial bearings on CL of driveways, curb inlets, etc in horizontal curve					
10. Curb curve data					
11. Stations along the centerline to match existing					
12. New stationing to increase W to E or S to N except where street ends in W'ly or S'ly dead-end or CDS					
a. N/S streets to be named "Ave", E/W streets to be named "St"					
b. N/S CDS to be named "Ave", E/W CDS to be named "Ct"					
13. Intersecting easement lines					
14. Dimension & Label					
a. Existing & proposed right-of-way lines					

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b. Right-of-way to centerline					
c. Curb to curb					
d. Curb to centerline					
e. Centerline street to centerline sewer					
f. Centerline street to centerline other utilities					
g. Sidewalk per Std Dwg 1209 - 1212					
h. Curb & gutter per Std Dwg 1201 - 1202					
i. Existing & proposed utilities					
15. Stations at beginning, end or change in improvements					
16. Station CL of driveways, curb inlets, etc					
17. Stations for BC, EC, BCR and ECR					
18. Intersecting street centerline stations					
19. If more than one sheet, matchline with station and reference sheet					
20. Existing improvements:					
a. Shown as dashed line					
b. Elevations shown with parenthesis					
c. Reference drawing numbers provided					
d. Adjacent driveways, buildings and improvements across perimeter streets					
e. Sidewalk					
f. Curb & gutter					
g. Topo shown if adjacent is not being graded.					

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h. Existing utilities, structures, etc in ROW or adjacent shown w/ note for disposition & encroachment					
i. Show manholes & water valves to be adjusted to grade per City Std No 2001, 3008, and 4005					
21. Solid lines for proposed improvements					
22. Notes for connections to existing improvements with elevations in parentheses					
23. Construction notes and #s with Standard Drawings called out on each sheet. Only notes applied to the sheet are shown					
24. Details for improvements that are not Standard Drawings					
25. Grind & overlay min of 5' width & 0.10' thickness @ matching edge of pavement					
26. Limits of new paving, old paving, overlay and removal					
27. Minimum 300' CL radius on all local streets. CL radii for major & secondary arterials based on CalTrans "Highway Design Manual"					
28. Curve data for knuckles and cul-de-sacs in compliance with Standard Drawings 1101-1105					
29. 100' tangent between reverse or compound curves except local streets					
30. Intersections:					
a. Street intersections spacing per Standards					
b. Intersection angle no less than 80 degrees					
31. Widening flare at 5:1 per Std 502A. Major streets may require longer taper per posted speeds					

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32. Narrowing flare at 3:1 per Std 502A. Major streets may require longer taper per posted speeds					
33. Delineators for narrowing					
34. 2"X6" redwood header @ edge of pavements					
35. Barricades at all dead end streets					
36. No ½ street construction within subdivision					
37. TC and FL elevations on BCRs & ECRs					
38. TC and FL elevations at end of improvements.					
39. Grade breaks and transitions					
40. Curb return & ROW corner radii or cutoff at all intersections per City Std #1301					
41. Curb return data					
42. Show existing street lights in vicinity					
43. Show existing & proposed underground utilities that may conflict or enter into design/construction of improvements					
44. Show stationing of new street lights					
45. FL elevations of cross gutter					
46. If cut/fill beyond tract boundaries (@ dead end street) is needed, show slope easement or LLA. Max slope is 2:1					
47. No private facilities in street right-of-way					
48. Transition between different standard curbs					
49. Wheelchair ramps at all curb returns per City Std #1213					
50. 10' x 10' grid provided for major intersections					
51. Minimum 0.5% slope on centerline					
52. Minimum 1.0% slope in CDS & knuckle FL					

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53. Easement dedications noted					
54. ¼ point elevations for knuckles per Standard Drawings					
55. Sight easement area calling out surface material					
56. Provide proof of easement for offsite storm drain					
57. Station for centerline of catch basin					
58. Construction notes with Standard Drawing numbers for storm drain improvements					
59. No cross gutters across 80' or greater right-of-way street					
60. Straight grade cross gutters					
61. Station paved drainage (swale) transitions. Typical cross sections required					
62. Drainage outletting sump conditions designed for 100-yr. Flow / emergency escape shown on the grading plan					
63. Utilities shown in plan view					
64. Show existing or proposed drainage flows coming into or out of new improvements & how flow is to be redirected					
65. Easement sized per City Standards.					
66. Street and storm drain stations shown on plans for catch basins					
B. Profile View shows:					
1. Horizontal scale same as plan view. Plan & profile must align					
2. Vertical scale at 1" = 4' (new); 1" = 2' (existing)					
3. Three line profile is required. Label all profiles.					

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4. Names & CL stationing of intersecting streets					
5. Datum elevation at both ends of each street					
6. 100' stationing at bottom of profile					
7. Existing ground at ROW					
8. For pavement match-up, show existing edge of pavement elevations every 50'					
9. Show connection of proposed to existing with existing elevations & grades in parenthesis					
10. Proposed finish surface at centerline through to centerline of intersecting street					
11. Indicate length of curb return, true length of horizontal curves. Show ¼ delta points on all returns w/ elevations					
12. Grade lines, + and -, minimum 0.5%					
13. Grade breaks stationed and elevation, maximum of 1.0%					
14. Vertical curves where algebraic difference is greater than 1.0%:					
a. Length per Caltrans Standards					
b. Station and elevation at beginning and end of all curb returns, vertical curves, horizontal curves, transition sections, grade breaks, beginning & end of improvements					
c. Tangent grades & PI station and elevation					
d. Tangent if street grade is not tangent					
15. Station and elevation at transition sections					
16. TC elevations for street widening with an existing centerline					
17. Profile & grade of finished centerline with elevations at 100' stations					

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18. Profile & grade of all top of curbs for both sides of street even if improvement is on only one side					
19. TC & FL elevation at beginning and end of construction					
20. If existing C&G w/in 500', connection with future design required unless otherwise approved					
21. If curbs have variable height, show TC & FL, flowline grade, & ¼ delta points on curb returns					
22. Extension of profile 200' min beyond improvements.					
23. If more than one sheet, match line station, elevation and sheet reference number					
24. Temporary construction to match existing					
25. Plan & profile elevations match					
26. Sufficient elevations shown to verify "grade to drain" areas work					
27. Minimum centerline grade is 0.50%. CDS & knuckles shall have 1.00% min FL grade					
C. Sections show:					
1. Those streets privately maintained labeled as private					
2. Sections looking upstation & show all existing, future & proposed improvements. Include ROW					
3. Typical sections in conformance to Standard Drawings					
4. If sections for a street change, limiting street stations for the sections					
5. Cross slope computed to 0.02 foot above lip of gutter and is between 2% min & 4% max where matching existing pavement					

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6. If cross slopes vary, range of slopes on existing & match paving					
7. Right-of-way, P.U.E. centerline and offset crown (as applicable) labeled					
8. Level line from centerline for crown and TCs					
9. If streets are bounded by undeveloped land, existing and future right-of-way, typically how proposed surface will meet existing surface					
10. Cross sections every 50' of existing streets to min 200' beyond project limits					
11. Street structural sec to be determined by soils test (Max R value=50). Inches of A.C., Type I and Type II Base per Std dwg 1001-1005					
12. Add note indicating TI on each section per Std dwg 1001-1005. TI to be supplied by City					
13. Profile matches typical sections					
D. Improvement plans conform to conditions of approval					
E. Improvement plans consistent with grading plan and final map and other existing plans					
F. Compare design to existing plans (if any)					

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