

**CITY OF LOS ANGELES BUREAU OF ENGINEERING**  
**STREET PLAN SUBMITTAL REQUIREMENTS**

Title: \_\_\_\_\_

Permit No. \_\_\_\_\_ Engineering District: \_\_\_\_\_

**SUPPORTING DATA**

**Required for First Plan Check Submittal**

1. Completed Street Plan Checklist.
2. Completed Street Plan Showing Sewer House Connection Checklist, if applicable.
3. Survey showing existing culture and elevations (TC, FL, Joins, CL, quarter-points)
4. Copy of Formal Tract or Parcel Map, if applicable
5. Copy of corresponding Grading, Sewer, and Storm drain Plans for reference only. Separate submittal required for plan check of each respective improvement plan.
6. Cross-section Worksheet (applicable when joining partially improved roadways)
  - Plot on 10x10 grid (1"=10' horiz. scale, 1"=1' vert. scale)
  - Show sections at every 50'. For hillside, every 25'
  - Show sections 50' beyond construction limits
  - Show elevations for existing TC, FL, Joins, and proposed TC, FL, EG, and Grade Breaks
  - Only show sections at stations which can be DIRECTLY verified from submitted Survey
  - Show proposed cross-slopes to 2 decimal places. Cross-slope must progressively increase from CL to the EG
  - Show proposed PL's, no old PL's

**Required, may be submitted at first submittal or during subsequent plan check**

7. Traffic Lane Requirements from LADOT for Major and Secondary Highways and Collector Streets.
8. Approved LADOT Site and Driveway plan
9. [Summary of Utility Notices](#).
10. Right-Of-Entry form required for off-site grading on private property, if applicable
11. Submit Driveway Profile Worksheets (1"=2' scale) if lot has subterranean parking. Profile shall be from street CL to garage floor.
12. Soils Report, if required by plan checker

**PRIVATE ENGINEER TO SUBMIT A COPY OF PLANS TO OTHER BUREAUS/DEPARTMENTS**

**(As applicable)**

- \_\_\_\_\_ Street Lighting sheet(s) to Bureau of Street Lighting (BSL)
- \_\_\_\_\_ Traffic Sheet(s) to (DOT)
- \_\_\_\_\_ Urban Forestry Division (UFD)
- \_\_\_\_\_ Other

\_\_\_\_\_  
SIGNATURE (PRIVATE ENGINEER)

\_\_\_\_\_  
R.C.E. NO.

\_\_\_\_\_  
DATE

Received By: \_\_\_\_\_

# STREET PLAN CHECKLIST

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Tract, PM, ZA, or CPC No.: \_\_\_\_\_ B Permit No. \_\_\_\_\_

_____ Signature (Private Engineer)	Civil Registration Number _____
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Each item is to be checked either: 'OK', or 'N/A' (Not Applicable). \*'NG' (No Good), City Use Only

No.	Item	OK	N/A	*NG
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## GENERAL

1	Review Engineering conditions (Planning Case/Tract/PM/R3/Hillside for dedication and improvements required)			
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## DRAFTING REQUIREMENTS

2	Current <a href="#">B-permit CAD Templates</a> used.			
3	All text shall be Arial vertical font with a <a href="#">minimum size</a> of 1/8"			
4	City North arrow, orientation, and graphic scales per <a href="#">CAD Standards</a>			
5	Line Weights and Line Types (including substructures) per <a href="#">CAD Standards</a>			
6	Drafting symbols for culture per <a href="#">S-623-0</a>			
7	Show, but do not station, all culture			
8	Symbols for Construction Notes per <a href="#">S-627-0</a>			
9	No crosshatching, shading, or screening			
10	All stationing shown to 2 decimal places except on even 50' stations			
11	All construction notes shall be placed outside of public R/W lines			
12	Show all elevations to two decimal places.			
13	Orientation of notes should either be horizontal or vertical. Vertical notes should read from the right side of the plan			
14	Private Engineer's stamp and signature required on all sheets			

## TITLE SHEET

15	Refer to <a href="#">B-permit Templates</a> and Samples			
16	'Project Title' should match official B-permit title			
17	Survey Control information. Vertical Control in Title block (Bench #, Datum, [year] adj. and elevation)			
18	Bench marks: 2 required. Bench Mark number, exact description from Bench Mark Book, Elevation & adjustment year in BENCH MARK boxes.			
19	Appropriate Departments or Bureaus shown in 'APPROVALS' box			
<b>CONSTRUCTION SYMBOLS</b>				
20	Show only 'Construction Notes' applicable to the plans			
<b>KEY MAP</b>				
21	Orientation – North Arrow directed to top of sheet			
22	Scale, Graphic Scale and North Arrow (Typical scale 1" = 400')			
23	Map to include closest Intersecting Major & or Secondary Street			
<b>INDEX or INDEX TO SHEETS</b>				
24	"Plans of", "From", "To", Sheet No. in <b>INDEX TO SHEETS</b>			
<b>NOTICE TO CONTRACTORS</b>				
25	Current B-Permit standard notes (General Notes 1 – 16 are applicable to all types of projects. Notes shall be listed in the order shown.)			
26	Traffic lane reqmts (major, secondary & collector require DOT review)			
27	Traffic signal notes if applicable			
28	Street lighting notes if applicable			

Street Plan Checklist

B Permit No. \_\_\_\_\_

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No.	Item	OK	N/A	*NG
29	Urban Forestry Division notes (if applicable)			
30	Include reference to any permits specific to the project issued by State, County or other City's Agencies (as applicable)			
<b>TYPICAL SECTIONS</b>				
31	Show sections of all improved streets and/or alleys			
32	Although not to scale, show proportionately			
33	Street Section: Major 8" AC on 6" CMB; Secondary 6" on 6"; all others 4" on 4"			
34	Show "T" sections if "T" is uniform. Choice of <a href="#">T-section</a> to be verified by Cross-Section worksheets.			
35	Do not show old PL, removal notes, existing portion of improvements being improved (i.e. existing ac berm).			
36	2% cross slope is required on all sidewalks/parkways (draining towards street)			

**PLAN VIEWS**

37	Scale 1" = 20' or 1"=40' for large developments with new streets			
38	Design Group block filled out – with signatures & dates for "Engineer" and "Approved by"			
39	"PLAN", shown in vicinity of plan view			
40	Centerline stationing is reference for all street improvement stationing			
41	Stationing should increase from North to South and from East to West unless survey field notes are otherwise.			
42	Lines (i.e. R/W, C/L, join line, curb and gutter) are shown per CAD Standards and Samples			
43	Do not show: Contours, bearings, distances, or any improvements on private property			
44	Dimensions shown for streets, alleys, easements			
45	Show elevations and stations at all grade breaks, BC, PRC, EC, BCR, ECR, designated radial lines, CL, intersections and angle points.			
46	Show existing FL elevations approximately 25' beyond construction limits			
47	Show existing elevations in parenthesis of all improvements to be joined			
48	Label property line and centerline			
49	Show easement(s) – if applicable			
50	Give rates of grade and Plan Index number for existing paving that adjoins project (i.e. 'Existing Improvements per P-_____')			
51	Driveways must comply with ADA requirements			
52	Driveways: 6" CF, X min.=3', Y min.=6'; 8" CF, X min.=4', Y min.=7'			
53	Show "T" sections on typical section if "T" is uniform			
54	Show FL elevation at curb face as "elevation" over "X" CF" (i.e. 123.45/ 6" CF) and at centerline show the "elevation".			
55	Show flow line elevations at driveways & access ramps, i.e. 832.11/ FL			
56	Do not duplicate intersection improvement details on another sheet.			
57	A light solid line shall separate full depth AC pavement construction from overlay construction.			
58	A light solid line shall be used to depict the boundary of cold planning.			
59	Minimum grades: 0.4%, absolute minimum = 0.2%. Maximum grade for collector = 10% Maximum grade for local = 15%			
60	Grade break elevations in profile shall have corresponding elevations shown in the plan view.			
61	Minimum 2' of asphalt replacement is req'd adjacent to new curb and gutter			
62	Close all unused existing driveways			

Street Plan Checklist

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No.	Item	OK	N/A	*NG
<b>HORIZONTAL CURVES</b>				
63	Curb return radii: = 25'			
64	Specify Delta, R, L for curves in a table			
<b>SUBSTRUCTURES</b>				
65	Correct line symbols <a href="#">CAD Standards</a>			
66	Owner, size and offset relative to centerline, including abandoned lines			
67	Storm drains, culverts, etc., with size, flow arrow, plan numbers and tie to centerline			
68	Sewers with size, flow arrow, plan numbers and tie to centerline			

**PROFILE**

69	Standard profile grid per CAD template			
70	Standard Profile Scale: Horizontal 1" = 20', Vertical 1" = 4'. If double vertical scale is used (1"=8', only allowed in steep hillside), show <b>"DOUBLE VERTICAL SCALE"</b> in a bold box in the profile near the scale.			
71	Align stationing for Plan and Profile			
72	Stations - 100 foot Intervals (1+00, 2+00, etc.) located on bold grid line			
73	Elevations - 5 or 10 foot intervals located on bold grid line			
74	Show and label Profile lines for both sides of street (top of curb) and centerline. Include existing, curb lines.			
75	Show Ex. ground line profile at PL and existing surface on centerline.			
76	Show profile lines for: existing, 1/2' dashed line; proposed, solid line.			
77	Show rates of grade for centerline and both curb lines.			
78	Show rates of grade in profile for all lengths between grade changes of 50' or more.			
79	Show rates of grade to 3 decimal places, i.e. R=1.032%			
80	Show new grade breaks in curb profile and centerline profile for all newly established elevations with a small hollow circle (1/16" dia.). Do not use hollow circle to show existing grade breaks in profile.			
81	On curves, rate to be figured on actual horizontal lengths of curbs and shown on the profile by arrowed dimension lines (i.e. 10.07' O.C.)			
82	Carry profile of centerline out to centerline of the nearest cross streets.			
83	Show parenthesis around existing elevations.			
84	Theoretical top of full height curb line shall be carried across driveway and access ramp depressions.			
85	Show stationing and elevations at all grade breaks, BC, PRC, EC, BCR, ECR, designated radial lines or designated POC and angle points.			

**VERTICAL CURVES**

86	Vertical curves are required when grade breaks exceed the following rates: Local streets – 1.25%, Major Highways – 0.5%, Steep Hillside – 2.0%. Grade breaks shall not be closer than 20' on major streets or 10' on residential streets.			
87	B.V.C. & E.V.C. stations			
88	Length			
89	P.I. station and elevation			
90	Stations and elevations in curve			
<b>HORIZONTAL CURVES</b>				
91	B.C. & E.C. – stations and elevations shown			
92	Show curve partial deltas with true lengths on curb.			
93	True lengths of horizontal curve shown in profile.			

# **STREET PLAN SHOWING SEWER HOUSE CONNECTION CHECKLIST**

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Tract, PM, ZA, or CPC No.: \_\_\_\_\_ B Permit No. \_\_\_\_\_

_____ Signature (Private Engineer)	Civil Registration Number _____
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Each item is to be checked either: 'OK', or 'N/A' (Not Applicable). \*\*NG' (No Good), City Use Only

No.	Item	OK	N/A	*NG
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## **GENERAL**

1	If Applicable, Check Tract or P.M. for Sewer Conditions.			
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## **INDEX TO SHEETS**

2	SEWER in PLANS OF column			
3	Show the Sheet No.			
4	Street name(s)			
5	"HC ONLY" shall be printed under the street name			

## **NOTICE TO CONTRACTORS**

6	List standard plans for sewers that may be used:			
7	House Connection Sewer                      S-110-1			
8	House Connection Remodeling              S-111-0			
9	Pipe Laying in Trenches                      S-251-1			
10	Standard Saddle Connection                27983			
11	CCTV note(s) for existing HC extension or under sidewalk work			
12	SEWER SPILL note (for Saddles)			
13	TRENCH RESURFACING note			

## **HOUSE CONNECTION INFORMATION**

14	At least (1) HC per lot			
15	Show Length of HC			
16	Elevation at PL (Elevation "F")			
17	Sewer or saddle station			
18	Sewer Station at PL			
19	If no existing "Y" or "T" indicate "SADDLE"			
20	HC Type, if other than "A"			
21	HC extended to PL (new PL if dedication required), or back of Sidewalk Easement. Use 0.02 min. slope or provide Elevation "F".			
22	CCTV inspection note when HC extension is required (NTC)			

## **MISCELLANEOUS INFORMATION TO BE SHOWN**

23	Sewer Map number in References block			
24	Lot or Parcel No. on lot or parcel			
25	Lot or parcel frontage dimension and side lot lines.			
26	Substructures: show, locate and identify. Use City substructure line types.			

Each item is to be checked either: 'OK', or 'N/A' (Not Applicable). \*'NG' (No Good), City Use Only

**EXISTING SEWER DATA**

27	Size			
28	Plan No. that built sewer.			
29	Location of Sewer in relation to centerline.			
30	Up and downstream MH's – station and tie to street centerline.			
31	Flow direction arrow.			
32	Existing "Y" or "T" station – if any.			
33	Show depth of existing wye or end of HC sewer (to nearest 1')			
34	Existing sewer Curve Data (when applicable)			
35	Check Wye Map For Existing House Connection / Wye Information			

**Sewer House Connection Related Notes (Use if Applicable)**

- Include in "NOTICE TO CONTRACTOR"

1. RESURFACE SEWER TRENCH IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK).

**CCTV NOTES:**

2. HOUSE CONNECTION EXTENSION: BEFORE CONSTRUCTION TO EXTEND THE EXISTING HOUSE CONNECTION LATERAL AT SEWER STATION + , THE HOUSE CONNECTION SHALL BE CCTV'D TO DETERMINE SUFFICIENCY TO ADEQUATELY CONVEY FLOW. DETERMINATION SHALL BE MADE BY AND IN THE PRESENCE OF BUREAU OF CONTRACT ADMINISTRATION PERSONNEL. IF THE EXISTING LATERAL IS FOUND TO BE DEFICIENT, IT SHALL BE REPAIRED OR LINED AS NECESSARY OR ABANDONED AND A NEW LATERAL, AS DETAILED BY ICA, SHALL BE CONSTRUCTED.
3. HOUSE CONNECTION RE-CONNECTION: PRIOR TO BUREAU OF CONTRACT ADMINISTRATION APPROVAL FOR PLACEMENT OF SIDEWALK, CURB AND GUTTER OR PAVEMENT, THE HOUSE CONNECTION AT STATION + SHALL BE CCTV'D TO DETERMINE SUFFICIENCY TO ADEQUATELY CONVEY FLOW. DETERMINATION SHALL BE MADE BY AND IN THE PRESENCE OF BUREAU OF CONTRACT ADMINISTRATION PERSONNEL. IF THE EXISTING LATERAL IS FOUND TO BE DEFICIENT, IT SHALL BE REPAIRED OR LINED AS NECESSARY OR ABANDONED AND A NEW LATERAL, AS DETAILED BY ICA, SHALL BE CONSTRUCTED. IF THE EXISTING HOUSE CONNECTION LATERAL WITHIN THE PUBLIC RIGHT-OF-WAY IS 4-INCH DIAMETER, IT SHALL BE REPLACED WITH 6-INCH DIAMETER PIPE.

**SEWER SPILL NOTE - To be used with saddle connections or remodeling of MH.**

4. EXISTING SEWAGE FLOWS IN PRIVATE OR PUBLIC SEWER SYSTEMS COULD BE COMPROMISED, BLOCKED, OR SPILLED DURING THE CONSTRUCTION OF THIS IMPROVEMENT. THE CONTRACTOR SHALL COMPLY WITH THE CITY'S POLICY OF ZERO SEWER SPILL ADOPTED BY THE BOARD OF PUBLIC WORKS ON JUNE 26, 1998. THE CONTRACTOR IS DIRECTED TO THE POLICY'S REQUIREMENTS AS DETAILED IN SECTIONS 7-8.5 AND 306-6.1 OF THE GREENBOOK AS MODIFIED BY THE BROWN BOOK. PRIOR TO COMMENCEMENT OF CONSTRUCTION, AN APPROVED SPILL PREVENTION AND EMERGENCY RESPONSE PLAN AND, IF APPLICABLE, APPROVED BYPASS PLAN ARE REQUIRED AND SHALL BE AVAILABLE FOR THE INSPECTOR. EMERGENCY CONTACT NUMBERS FOR PERSONNEL OF THE BUREAUS OF CONTRACT ADMINISTRATION, ENGINEERING, AND SANITATION SHALL BE OBTAINED FROM BUREAU OF ENGINEERING. THE PLANS SHALL BE SUBMITTED TO THE ENGINEERING DISTRICT OFFICE IN WHICH THE WORK IS BEING PERFORMED TO BE REVIEW FOR APPROVAL