

Private Engineer	Contact Phone	
Project Title	Contact Email	
B-Permit Reference #	Date	
Tract, PM, ZA, or CPC No.:		

Required with Initial Plan Check Submittal

- 1. Completed Sewer Plan Checklist. (see below)
- 2. Copy of corresponding Street and Storm Drain Plans.
- 3. Copy of Final Tract or Parcel Map, if applicable.
- 4. Surveyed elevations for sewer MH's at joins with stubs and/or upstream and downstream MH inlet/outlet elevations when placing a new MH on an existing sewer line.
 - A. If Applicable to Proposed Improvements provide:
 - I. Flow data if sewer line is 12" in diameter or greater.
 - II. Soil report with plasticity index if the use of plastic pipe is proposed.

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

- Summary of Utility Notices.
- 6. Private Engineer acknowledges that this form was prepared/reviewed by him/her for accuracy.

Private Engineer must check "OK" or "N/A" for each item. City Staff to complete "OK" or "Incomplete"

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		Private Engineer		City Staff			
	Item	OK	N/A	OK	Incomplete		
GENERAL							
1.	Review Engineering conditions for work required, including Planning Case/Tract/PM/ R3/Hillside report						
2.	Indicate alignment on "Y" map and in NavigateLA using MapNotes. (For City plan checker)						

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



		Private	Private Engineer		y Staff
	Item	OK	N/A	OK	Incomplete
	TITLE SHEET				
16.	Refer to B-permit Templates and Samples				
17.	'Project Title' should match official B-permit title				
18.	Survey Control information. Vertical Control in Title block (Bench #, Datum, [year] adj. and elevation)				
19.	Bench marks: 2 required. Bench Mark number, exact description from Bench Mark Book, Elevation & adjustment year in BENCH MARK boxes.				
20.	Appropriate Departments or Bureaus shown in 'APPROVALS' box				
Title	Sheet: CONSTRUCTION SYMBOLS				
21.	Show only 'Construction Notes' applicable to the plans. (NOT REQUIRED)				
Title	e Sheet: KEY MAP				
22.	Orientation – North Arrow direction to top of sheet				
23.	Scale, Graphic Scale and North Arrow (Typical scale 1" = 400')				
24.	Map to include closest Intersecting Major & or Secondary Street				
25.	Line numbers & flow arrows				
26.	Sewers & MHS (Existing – dashed lines, New – solid lines)				
27.	Indicate limits for HC's only (if applicable)				
28.	Show Tract number or Parcel Map No.				
29.	Participation boundary around participating property				
Title	Sheet: INDEX or INDEX TO SHEETS				
30.	"Plans of", "From", "To", Sheet No. in INDEX TO SHEETS				
31.	"House Connection Only" under street name (if applies)				
Title	Sheet: NOTICE TO CONTRACTORS				
32.	Current B-Permit standard notes (General Notes 1 – 16 are applicable to all types of projects. Notes shall be listed in the order shown.)				
33.	Applicable Std Plans-list by title & plan number, numerically. Std Plans				
34.	Spill Note when working on or joining live sewer				
35.	Excavate & Expose end of sewer for Survey (if applicable)				
36.	Sewer in fill note (90% compaction req'd before trenching for sewer)				
37.	Sewer trench resurfacing note				
38.	Traffic lane reqmts (major, secondary & collector require DOT review)				
39.	Street lighting notes (if applicable)				
40.	Traffic signal notes (if applicable)				
41.	Urban Forestry Division notes (if applicable)				
42.	CCTV for ex. HC lateral extension (Lateral constructed pre-1965 or in earthquake damaged areas)				



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43.	State Highway – Encroachment Permit is required. Date & No.				
44.	Flood Control permit number and any restrictions				
45.	Railroad encroachment permit				
46.	County or other City's permits (as applicable)				
47.	Earthquake zone (if applicable)				
Title	Sheet: IF TUNNELING OR JACKING:				
48.	Cal/OSHA permit required				
49.	Name & phone number for State contact				
50.	Gas classification required				
51.	Special details				
52.	Soils Report				
Title	Sheet: PARTICIPATION NOTE				
53.	Participation Note, with participation boundary line type shown and the name of the person signing printed below the signature line.				
54.	Permittee sign and date Final B-permit plan PARTICIPATION NOTE?				
Title	e Sheet: LEGEND				
55.	Applicable symbols shown				
56.	Existing improvement – dashed lines, Proposed – solid lines				
	PLAN VIEWS		ı		
57.	Fill out title block.				
58.	Design Group block filled out – with signatures & dates for "Engineer" and "Approved by"				
59.	"PLAN", shown in vicinity of plan view				
60.	North Arrow Orientation				
61.	Scale 1" = 40' (standard plan view) and Graphic scale				
62.	Plan scale and graphic scale agree, and are shown.				
63.	Plan aligned with Profile				
64.	Plan orientation agrees with North Arrow				
65.	Public R/W lines shown				
66.	R/W Centerline				
67.	Street, alleys and easements labeled				
68.	Dimensions shown for streets, alleys, easements				
69.	Temporary easement(s) – if applicable				
70.	Earthquake zone				
71.	Curbs, gutters, cross-gutters (existing, future, proposed), and show dimensions				



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72.	Proposed storm drains – 3-ft clearance between OD's of pipes				
73.	If sewer is within 10-ft of curb then show surface improvements behind curb: Buildings, trees, walls, water meters, driveways, etc.				
74.	Participation Boundary with line font as shown in Participation Note				
75.	Match line stationing and Sheet references				
76.	Soil report, if plastic pipe is specified. Report needs to include the soil plasticity index				
Plaiı	n Views: TRACTS, PARCEL MAPS, DLM				
77.	Number				
78.	Lot numbers				
79.	Lot dimensions – frontage				
80.	Lot dimensions – all sides				
81.	Lot cut lines & dimensions inside				
82.	Lot tie symbol				
Plaiı	n Views: SUBSTRUCTURES				
83.	Correct line symbols (are incorporated in latest plan sheets) CAD Stds				
84.	Owner, size & quantity and location relative to centerline				
85.	Storm drains, culverts, etc., with plan numbers				
86.	Existing Sewer facilities with size, ties and plan numbers				
87.	Substructure Abandoned? If so, label "ABAND"				
88.	High pressure? If so, label as HIGH PRESSURE				
89.	To be Abandoned, Removed or Relocated and by whom				
90.	Power poles-encase sewer within 3 feet with Case 5 bedding				
91.	Fire hydrants & laterals				
Plaii	n Views: EXISTING SEWERS				
92.	Check Bedding type at joins with existing sewers				
93.	Size, material, flow direction arrows and ties to centerline				
94.	Label location relative to centerline				
95.	Plan number or Abandoned (if applicable)				
96.	Ex. HC's and stations (if necessary), reconstruct, blanket, abandon, remodel, join, etc.				
Plaii	n Views: EXISTING MAINTENANCE HOLES		1		
97.	Upstream and downstream MH's, dashed				
98.	Type, size (if greater than 4'), station, ties, remodel, or abandon				
Plaii	n Views: NEW SEWER INFORMATION		·		
99.	Diameter				
100.	Material type (limits if necessary)				
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	Item	OK	N/A	OK	Incomplete
101.	Flow direction arrow				
102.	Line numbers in circles				
103.	Ties				
104.	Curve data (Delta, Radius, Length and Tangent)				
105.	Location - clearance to adjacent improvements				
106.	Location –clearance to adjacent water lines (min. 4' OD to OD)				
107.	Stationing				
108.	Curves - BC's, EC's, PRC's and ties to centerline				
109.	Tunnel or jacking limits – Pit location: Avoid intersections, crosswalks, driveways, and building entrances. Allow clearance to existing Improvements				
Plair	Views: STRUCTURES	,	ı	ı	
110.	Stationing (with line number, where necessary)				
111.	Type and diameter if other than 4'				
112.	Existing MH – Dashed				
113.	Is Equation required?				
114.	Special Manholes (other than by Std Plan)- refer to detail & location				
115.	Ties				
116.	Inner cover where subject to inundation				
117.	Spacing - maximum 400' between MH's				
118.	MH bottom layout (if necessary; show detail)				
119.	Label stubs – size and slope				
120.	TCS "Y"'s may not be used				
Plair	Views: HOUSE CONNECTIONS				
121.	HC for each lot				
122.	HC station at Property Line and Y-station if different that PL station				
123.	HC length, extended to PL				
124.	Elevation "F" at PL or Join point, if no profile shown.				
125.	HC smaller than mainline?				
126.	HC type (if other than "A" specify length "B")				
127.	Saddles station – if no existing wye or Tee				
128.	Bedding type if encasement required				
129.	Y's, if HC not used, @ 50' intervals or as appropriate				
130.	Y's pointed downstream				
131.	Is Flat or non standard Y inclination necessary?				
132.	No house connection directly into a MH.				
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Plai	n Views: SPUR LINES					
133.	Show future sewer alignment & ties					
134.	End station					
Plai	n Views: MISCELLANEOUS					
135.	Chimney bases & stations					
136.	Chimney type and height					
137.	Cross index between sheets					
138.	Match Lines with Station and Continued on Sheet No.					
139.	Does all data agrees on referenced sheets					
140.	Check if sewer can be extended in future					
141.	Hydrograph (when joining larger lines)					
			'			
	PROFILE					
142	<u>"PROFILE"</u> , shown in lower center area of Profile					
143	·					
144	Avoid using double vertical scale (exception steep hillside with more than one break in the profile). If used, show DOUBLE VERTICAL SCALE in large text in a bold box in the profile area by the scale					
145	Profile aligned with plan					
146	Street name or R/W at top of Profile with line number before it (if app.)					
147	Stations - 100' Intervals (1,2,3, etc.) located on bold grid line					
148	Elevations - 5 or 10 foot intervals located on bold grid line					
149	Plan or Survey reference for surface over pipe under St or R/W name					
150	Improved surface grade – solid line with straight edge. Indicate unimproved w/freehand solid line					
151	Fill compaction note reference to NTC					
Prof	ile: INTERSECTING STREETS, ALLEYS, OR EASEMENTS					
152	Dash near side, solid far side (Dash easements)					
153	Special compaction requirements in R/W's?					
Prof	île: PROPOSED SEWER					
154	Size-in inches					
155	Slope in feet per foot (S=0.XXXX)					
156	Pipe type					
157	Mainline depth-adequate for tributary area					
158	Bedding type if other than Case 1- (minimum Case 2 for plastic pipe)					
159	Protective lining coverage – RCP					



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160 Limits – stationing and length				
161 Hydraulic elements - 18" & > (Q, V, d, d/D, N)				
162 Water surface - 18" and larger				
Profile: VERTICAL CURVES				
163 B.V.C. & E.V.C. stations				
164. Length				
165. P.I. station and elevation				
166 Stations and elevations in curve				
Profile: HORIZONTAL CURVES				
167 B.C. & E.C. – stations and elevations shown				
168 Specify maximum pipe length permitted (if applicable)				
169 Beveled pipe required?				
170 Compound curves – Check joint deflection				
Profile: STRUCTURES – MH's	·			
171. Station				
172 MH Type (B, F, G, H, Q, special?), No " " around MH type				
173. Diameter > 4' specify diameter				
174. Existing – remodel to MH?				
175 Ex. elevations with survey reference (elevations in parenthesis)				
176. Drop across MH per design manual, Sections F254 & F255				
177. Elevations				
178. Station or tie to elevations if MH is other than 4' DIA				
179. Line number in circle at end of elevation leader – Intersecting lines				
180 Stubs with size and slope				
181 MH cover Elevation in R/W, or dirt (set 6" above adjacent surface)				
182 Inner cover if subject to inundation				
183 Review survey submittal for MH invert elevations & existing surface over sewer				
184. All elevations agree where shown elsewhere				
Profile: HOUSE CONNECTIONS				
185 HC elliptical symbol - dashed for near side and solid for far side				
186 HC Station with "R" for right side or "L" for left side				
187 HC Elevation below leader				
188 HC Type, if other than "A" ("B", "C", or "D")				
189 Elevations "E" & "F" (if H.C. other than "A")				
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		Private E	Private Engineer		/ Staff
	Item	OK	N/A	OK	Incomplete
190	Flat or inclined "Y" (other than standard hook-up) – show slope, inclination and rotation for wye				
191	Size, if other than 6". Must be one size smaller than mainline				
Pro	file: CHIMNEYS				
192	Size, if other than 6"				
193	Base Type and station (when base only used)				
194	Station				
195	Chimney type (A, B, C, D) and Base Type (X or Y), i.e. CH A-X				
196	Height				
Pro	file: EXISTING SEWERS				
197	Blankets or supports				
198	Abandonment				
199	Removals				
200	Elevations at crossings				
201	Close parallel lines and MH's				
202	Skewed crossings – show where sewer is in trench				
Pro	file: MISCELLANEOUS				
203	Existing house connections				
204	Pipe anchors and backfill stabilizers (List by table, if necessary)				
205	Crossing substructures (label with owner and size).				
206	Proximity of parallel utilities				
207	Show fire hydrant lines and large individual service lines				
208	Crossing storm drains – support or blanket				
209	Existing, proposed or future storm drains				
210	Underground obstructions (Vaults, footings, piles, etc.)				
211	Tunneling or jacking limits – Stations & length				
212	Special compaction				
213	Concrete reinforcement				
214	Low ground elev. (Adverse grade)				
215	Basements (if applicable)				