

**CITY OF BEVERLY HILLS**  
**Department of Public Works and Transportation**  
**Civil Engineering Division**  
**STREET/ALLEY IMPROVEMENT PLAN REVIEW CHECKLIST**

The following checklist consists of the minimum requirements for preparation and submittal of Street/Alley Improvement Plans for review by the City of Beverly Hills. If these minimum requirements are not met, the improvement plans will be returned unchecked as an incomplete submittal. The checklist is intended as a general guideline to the preparer for typical improvement plans.

**A. Submittal Requirements**

*The initial submittal of Street/Alley Improvement Plans shall include the following:*

**Applicant**

**Plan Check**  
**Engineer**

1. Street/Alley improvement plans, three (3) folded copies.
2. Storm drain plan and Hydrology Report submittal is combined with street plans, two (2) folded copies.
3. Project conditions of approval (applicant engineer to independently verify conditions of approval have been met), two (2) folded copies.
4. Traffic signal, signing & striping plans, two (2) folded copies.
5. Geotechnical report showing R values, recommended pavement section, concrete flatwork specifications, etc., two (2) copies.
6. Dedications and/or vacations– submit legal & plot map reference, two (2) copies.
7. Estimate of quantities, two (2) copies.
8. On-site improvement plans, two (2) folded copies (if applicable).
9. Street lighting plans, two (2) folded copies (if applicable).
10. Provide relevant agreements (e.g. reciprocal access, construction easements, etc.), two (2) copies.

11. Utility as-built plans (water, sewer, electrical, communications; etc.), two (2) folded copies (if applicable).

## **B. Title Sheet Requirements**

### **Applicant**

*All sheets shall be presented on "D" size (24" x 36") standard sheet. The submittal of street/alley plans for approval and/or permit shall be printed on 4 mil double matte mylars. Plan must include the following:*

### **Plan Check Engineer**

1. Construction notes and estimate of quantities (sheet 1) – show construction notes w/o quantities on all other sheets.
2. Include minimum R value and Traffic Index (TI) in structural section.
3. Street/Alley typical sections and details (may be shown on separate sheet if room does not permit on title sheet). Ensure sections match conditions of approval. Provide cross sections for all streets, station to station – show traffic index rating per street section.
4. Provide intersection & station to station information in title block to identify coverage of plan set.
5. Development name and/or address in title block (if applicable).
6. Prepare legible key map (1 inch = 200 ft) highlighting project location by showing a distinctive border.
7. Prepare a vicinity map and highlight major cross streets.
8. Use and provide a benchmark approved by the Department of Public Works and Transportation.
9. Provide the applicant engineer's company name, logo, address and telephone number along with the name and license number or engineer's stamp (signature required on final plans only).
10. Revision block shall be provided with an area for description, private engineer's approval and date of approval, revision number, plan check engineer's approval and date of approval.
11. Include a "Private Engineer's Notice to Contractors".

12. Include the Basis of Bearing.

### **C. General and Plan View Callouts**

#### **Applicant**

#### **Plan Check Engineer**

1. North arrow (point up or to the right).
2. 4 inch bar scale – typically used scale 1 inch = 20 ft or 1 inch = 40 ft. Not smaller than 1 inch = 40 ft. Vertical scale to be 1 inch = 4ft. or 1 inch = 8 ft. with a box around “Double Vertical Scale”.
3. Call out all street names.
4. Centerline stationing to be used on both plan and profile.
5. Station intervals at 100 ft with tick mark and station labels (tick marks at 50 ft interval). Stationing shall read left to right. No negative stationing. Match up stationing & elevations at center line and at each curb.
6. Stationing at all intersections with curb radius equations.
7. Show proposed improvements with solid lines and existing improvements with dashed lines.
8. Shade proposed pavement for areas on each sheet. Show hatching for removals on each sheet. Show detail section of saw cut AC (grind & overlay sections).
9. Stations of all BC, EC, PRC, and PCC of curves.
10. Stations of all BCR and ECR of curb returns. Set BCR and ECR in the direction of vehicular travel. Please do not use “EC” and “BC” nomenclature.
11. Show match lines on consecutive sheets at even 100 ft stations.
12. Call out flow line and top of curb elevations.
13. Call out taper specifications.
14. Call out cul-de-sac high points.

15. Right-of-way, parkway and curb lines dimensioned from centerline – consistent with typical sections.
16. City limit lines labeled at adjoining cities.
17. All property, parcel and lot line boundaries shown. All lot numbers/addresses identified.
18. Include disposition notes for existing facilities. The term “by others” shall not be used but shall be defined.

**D. Right of Way and Easements**

**Applicant**

**Plan Check  
Engineer**

1. Street dimensions: right-of-way width, mid-block right-of-way, top of curb face to right-of-way, center line to top of face of curb.
2. Right-of-way, pavement, parkways, and easements dimensioned and labeled. Show centerline, right-of-way, curb/gutter, and Public Utility Easement (PUE).
3. Call out manholes, junction manholes, and pipe diameters.
4. Confirm no encroachment of PUE by privately-owned swale, storm drain facility, building, fence, patio, wall or other structure.
5. Show existing overhead and underground public utilities and facilities. Show necessary relocation, reconstruction, adjustment notes and responsible party.

**E. Street Grades, Local Depressions and Drainage**

**Applicant**

**Plan Check  
Engineer**

1. Minimum longitudinal street slope is 0.50% unless otherwise approved by the City engineer. Cul-de-sac flow line: 0.7 % minimum (existing is flexible). High point of cul-de-sac to bulb: 0.7% to 3.0% (typical) call out grades on profiles.
2. Minimum fall around curb returns with no cross gutters shall be 0.50%.
3. Provide cross sections for street widening at 50 ft minimum intervals.

4. Show all local gutter depressions with curb inlet catch basins. Show detail with dimensions and elevations. Callout multiple elevations at outer edge of warped concrete gutter at AC matchup – provide smooth AC/concrete profile conforming to finished street surface – avoiding dip in AC surface. Call out gutter depressions in construction notes & show on profiles. Typical gutter depression is a maximum of 4 inches.
5. No swale permitted on AC pavement, utilize concrete gutter.
6. Catch basin stationed at center line of basin.
7. Catch basin inlets positioned prior to flow turns or intersections.
8. Slopes to adjacent property lines. 2:1 maximum slope.

#### **F. Curbs**

##### **Applicant**

##### **Plan Check Engineer**

1. Verify median curb does not require gutter as a result of reverse cross slope grades, etc.
2. Concrete specifications for all concrete components per City Standards and Standard Specifications for Public Works Construction (Greenbook).
3. Show distance from top of pavement at centerline to top of curb.
4. Provide wedge curb to vertical curb transition detail as applicable – utilize 10 ft transition length.
5. Preliminary pavement thickness (“R” value per soils report and traffic index). Show asphalt and aggregate base thickness. City requires use of Class II aggregates.
6. No angle points on curb geometry.

#### **G. Construction Notes**

##### **Applicant**

##### **Plan Check Engineer**

1. Include construction notes on each sheet. Do not refer back to construction notes on the title sheet. Delete unused notes per sheet.

2. Refer to City Standard Drawing Number if applicable to work. Provide specifications, notes, details or other approved Standard Drawing Nos. if different from City standard.

#### **H. Stationing and Horizontal Control**

##### **Applicant**

##### **Plan Check Engineer**

1. Centerline bearing text shown on centerline.
2. Curve and line data (provide table for each sheet) for all centerline and curb data, to include length and bearing, delta, length of arc, radius, tangent. Dimension all street widths. Call out stations on street sections as applicable.
3. Show connections to existing improvements with elevations at the join line and a minimum of 50 ft at each side of the join line.
4. For offset cul-de-sac – stations must be shown on both final map centerline and crown line.
5. Stationing at knuckle for both streets shall be independent of each other and must intersect at PI with a set of stations. Commence a new set of stations with a new street name.

#### **I. Paving**

##### **Applicant**

##### **Plan Check Engineer**

1. Asphalt concrete specifications per Standard Specifications for Public Works Construction (Greenbook).
2. Show limits of overlays and removals. Grade breaks on lane lines unless approved otherwise.
3. Detail all street sections inches of AC and inches of base material.
4. 2 ft minimum wide, full depth pavement cut/removal at entire length of join lines to provide a clean edge with existing pavement.
5. 0.10 ft minimum header cut for overlays at longitudinal and gutter joins.
6. Valves/manholes adjusted by applicant's contractor prior to final AC lift.

## **J. Utilities**

### **Applicant**

### **Plan Check Engineer**

1. Show proposed water lines, sewer lines, valves, fire hydrants, manholes, cleanouts and laterals – shaded behind street/alley improvements.
2. Callout hydrants with blue Raised Pavement Markers (RPMs) offset from centerline (same side of street as hydrant).
3. No water services or sewer laterals in driveways unless otherwise pre-approved by the Department of Public Works and Transportation.
4. Provide underground detail of electrical pole abandonments, including any remaining conduit or conductors left in place.
5. Conduit specified and shown for electrical and water connections at medians.
6. Conduit and pull boxes specified for all required future signals (conduit installed across each intersection leg, signal controller interconnects and detection loops).

## **L. Curb Ramps**

### **Applicant**

### **Plan Check Engineer**

1. Access ramps shown. Existing non-conforming ramps may be subject to reconstruction for ADA compliance. Check for conformance to City and current ADA standards per City Standard BH103.

## **M. Profile Callouts**

### **Applicant**

### **Plan Check Engineer**

1. Call out match lines for profile and plan views. Show grid lines on profile. Provide consistent stationing & elevations in plan, profile and section views. Darken profile scale every 100 ft.
2. Profile TC for median on CL profile.

3. Finished centerline and curb lines are solid lines. Call out east, west, north or south curbs and distance offset from centerline.
4. Show existing ground line in profile. Show proposed grade as a solid line & existing grade as a dashed line. Stations and elevations every 100 ft in profile shown at:
  - a. Beginning and end of improvements with stationing at high point (HP).
  - b. Centerline intersections.
  - c. Vertical curves. Minimum spacing shown on vertical curves is 25 ft.
  - d. All grade breaks.
  - e. All BC, EC, BCR, ECR, PRC and PCC.
5. Show edge of pavement profile, in the case of alleys.
6. Show all catch basins on profile.
7. Extend profiles beyond end of improvements a minimum of 100 ft as necessary to explain the existing, adjacent profile grade.
8. Indicate length of curb returns. Show curb return with  $\frac{1}{4}$  points in profile (and  $\frac{1}{4}$  delta length). Plane method for calculating curb returns shall be used.
9. Show 100 ft stationing at bottom of profile grid - should be aligned with starting station in plan view.
10. Show grade break "O" bubble on all grade breaks and vertical curve labels in profile. Show centerline in plan and profile.
11. Street profiles accurately match section details – confirm street centerline elevation accurate relative to TC elevation.

**N. Subsequent Street/Alley Improvement Plan Check Submittals**

**Applicant**

**Plan Check  
Engineer**

1. Provide previous marked up check prints.
2. Provide revised plans, three (3) folded copies.
3. Provide additional documents requested by the plan checker.
4. Provide adjustment or additional fees.

# LETTER OF TRANSMITTAL

<b>TRACT NO. :</b>
<b>APPLICANT :</b>

<b>SUBMITTAL DATE:</b>
<b>SUBMITTAL #:</b>

**SUBMITTED BY:**

Company: \_\_\_\_\_

Name: \_\_\_\_\_

Phone No.: \_\_\_\_\_

Fax No.: \_\_\_\_\_

Email Address: \_\_\_\_\_

**SUBMITTED TO:**

CITY OF BEVERLY HILLS \_\_\_\_\_

455 NORTH REXFORD DRIVE \_\_\_\_\_

BEVERLY HILLS, CA 90210 \_\_\_\_\_

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**Please find the attached items as part of the above-mentioned submittal package.**

Street/Alley improvement plans.

Storm drain plans and on-site improvement plans.

Traffic signal plans, street light plan, signing and striping plans, as applicable.

Geotechnical report showing R values, concrete flatwork requirements, etc.

Estimates of quantities

Provide relevant agreements (e.g. reciprocal access, construction easements, etc.)

Utility as-built plans.

REMARKS

COPY TO: \_\_\_\_\_ SIGNED: \_\_\_\_\_