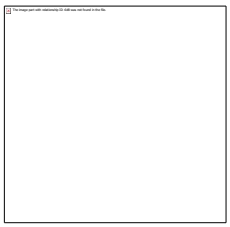


LOW IMPACT DEVELOPMENT PLAN (LID PLAN) CHECKLIST

The purpose of this checklist is to provide a format for uniform, comprehensive, and well-documented reviews of the Low Impact Development (LID) Plans submitted by project applicants. The completed checklist should be transmitted to the project applicant with the project LID Plan. A copy of the completed checklist should be retained with the project planning/permitting file.

Contact Name:		Site Name:	The Courtyard
Contact Title:		Site Address:	1933 Temple Avenue
Company Name:	Core Engineering	Type of Facility:	Residential
Mailing Address:	23172 Plaza Pointe Drive, Suite #145	Submittal Date:	09/05/2024
City, State, Zip:	Laguna Hills, CA 92653	Plan Return Date:	09/24/2024
Phone Number:	(949) 054-7244	Disturbed Area:	26,061 sf
Email Address:			

First Review
LID Plan Received on: 10/19/2022
Review Completed on: 11/03/2022

Second Review
LID Plan Received on: 03/01/2024
Review Completed on: 04/01/2024

Third Review
LID Plan Received on: 07/09/2024
Review Completed on: 07/26/2024

Fourth Review
LID Plan Received on: 09/05/2024
Review Completed on: 09/24/2024

Fifth Review
LID Plan Received on:
Review Completed on:

Sixth Review
LID Plan Received on:
Review Completed on:

Sets of LID Plans needed	3	City of Signal Hill 2175 Cherry Avenue Signal Hill, CA 90755	*For Office Use Only* Plan Checked By: Date: Michelle Staffield Signature mstaffield@jlha.net (562) 802-4890
Sets of electronic records (CD) needed	1		

ITEMS REQUIRING CORRECTIONS:

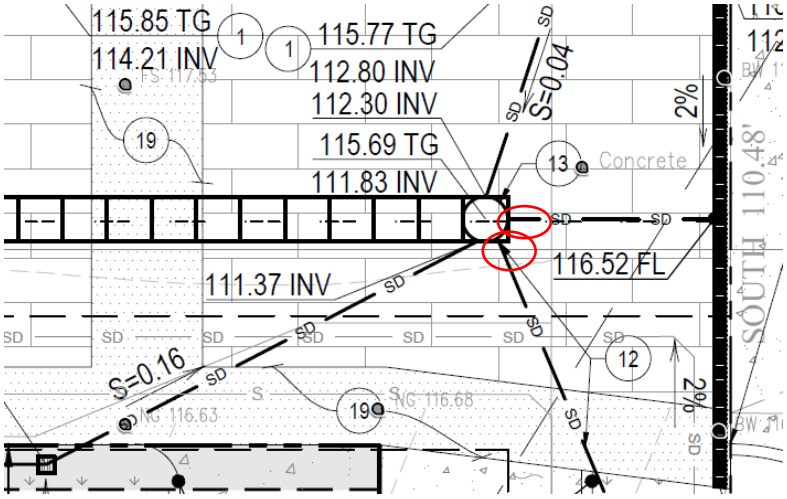
Notes:

- *The comments herein are general and are intended to act as guidance for LID Plan development. Additional comments are anticipated for the next review.*
- *If occupancy of the development is intended to be released in "phases," a 'final' LID Plan must be submitted for each phase proposed.*
- *If rear yards of private residential lots are designed as pervious surfaces and accounted for in the LID BMP sizing calculations as such, the CC&R's must specify that property owners may not alter the condition of rear yards from the approved construction Plans. It is **strongly recommended** that rear yards be considered 100% impervious surfaces for the purpose of LID BMP sizing calculations. Please consult with the City if there are plans to design the system otherwise.*
- *It appears the development is proposed over a previously abandoned oil well, therefore a Methane Mitigation Plan is required. The Methane Mitigation Plan must be provided prior to approval of the 'final' LID Plan, and it must be demonstrated the proposed methane mitigation measures do not intercept stormwater.*

1. Geotechnical Investigation – Note that LID BMP sizing calculations must be based on the in-situ infiltration rate from soil borings in the area and depth of the proposed BMP.
2. LID Plan Report – The LID Plan report must include the following information:
    a. SWQDv and LID BMP Sizing Calculations – The report (Appendix A) indicates the Stormwater Quality Design Volume (SWQDv) was calculated utilizing a storm depth of 0.6-inches; however, LID BMPs must be sized to treat the SWQDv on-site defined as the runoff from the 0.75-inch, 24-hour rain event or the 85th percentile, 24-hour rain event, as determined from the Los Angeles County 85th percentile isohyetal map (https://ladpw.org/wrd/publication/engineering/Final_Report-Probability_Analysis_of_85th_Percentile_24-hr_Rainfall1.pdf), whichever is greater. Additionlly, the report indicates the project's percent impervious is 73.04%; however, it is unclear how this value was derived (provided clarification). Otherwise, revise SWQDv calculations accordingly.
    b. LID BMP sizing calculations indicate a "60 unit cudo system" is proposed and calculate the BMP's capacity utilizing 80 units. Revise report accordingly. Note, the report indicates the proposed square footage is 240 sf; however, it is unclear how this value was derived (i.e. 80 units * 2-ft wide * 2-ft long = 320 sf). Additionally clarification is required.
    c. Project Description – Clarify the description of all proposed pervious and impervious areas of the project site, and the land uses. For instance, the report indicates "0.401 acres of pervious area" is proposed; however, the report lists only 0.3324 acres (6,840 sf gravel driveway, 7,639 sf landscape area) is proposed. Revise report to provide accurate and consistent information throughout.
    d. Underground Utilities – The potential impacts of stormwater infiltration on subsurface utilities should be evaluated to establish necessary setbacks from these utilities or if the utilities need to be relocated. Retention-based stormwater quality control measures (e.g. permeable pavement) should not be located near utility lines where an increased volume of water could damage utilities. Indicate on the plans or in the document that stormwater runoff will be directed away from existing underground utilities.

3. Plans –

   a. Sheet C-2: Indicate the invert elevation for all points of connection; the pipe that connects the trench drain to the cudo system, and the overflow pipe from the cudo system.



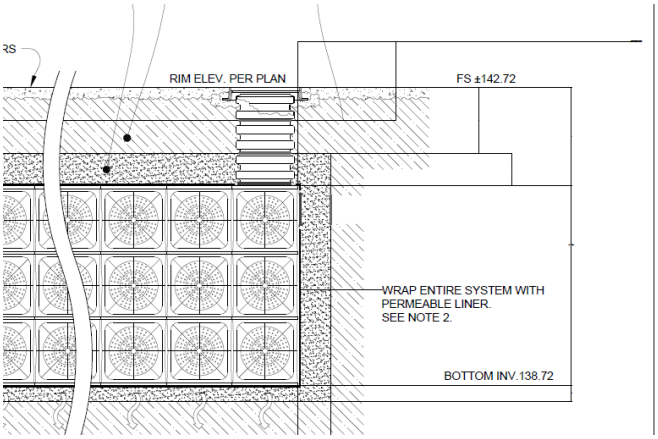
   b. Sheet C-2: Indicate the square footage (6,840 sf) of the permeable paver (construction note #10) driveway, which must correspond with the LID BMP sizing calculations (pervious condition). Note, a corresponding detail must also be referenced and included on Plans as well.

   c. Sheet C-2: Revise Plans to indicate the square footage (and/or dimensions) of the proposed landscape areas (7,639 sf).

   d. Sheet C-2: The orientation and square footage of the cudo system (construction note #14) must be called out on the plans.

   e. Sheet C-2: The "No Dumping – Drains to Ocean" stencil must be called out (with a construction note) on all inlets (i.e. Construction Notes #3, 7), and a detail must be provided on Plans.

   f. Sheet C-3: The cudo system detail does not appear to be consistent with the Plans (i.e. "bottom inv. 138.72" and "TG 142.10." Revise detail to provide accurate and consistent information throughout.



   g. It was previously understood that an adjacent property (2750 E 20th Street) proposed to construct shared storm drain infrastructure within the project limits. If this is the case, indicate all existing/proposed drainage infrastructure on Plans.

Items required for 'final' LID Plan approval, but are not required at this time:

Four (4) hard copies of the 'final' LID Plan (each front page signed and stamped by a California licensed civil engineer), four (4) hard copies of the full sized grading plans (each sheet signed and stamped by a California licensed civil engineer), one (1) copy of all original (wet ink documentation) forms and certifications, and one (1) electronic copy (email, CD, download from FTP site, etc.) of all documents listed above.

1. Owner's Certification – The certification page (see attached) must be provided and must be signed and dated by the landowner or approved signatory.
2. Engineer's Certification – The certification page (see attached) must be provided and signed, dated, and stamped by the California licensed civil engineer who prepared the LID Plan.
3. BMP List – Include GPS coordinates for each LID BMP (provide the latitude and longitude with at least 6 decimals).
4. Forms –
    a. Form OC1 – This form must be provided (see attached), and must be signed and dated by the owner and a California licensed civil engineer.
    b. Form P2 – This form must be provided (see attached). The BMP information should be organized such that there is one row for each BMP. Once completed, the form must be signed, dated, and stamped with wet ink application by a California licensed civil engineer.
5. MCA – The MCA form must be included (see attached). The site address and the make, model, size, and type (as applicable) of all structural BMPs proposed must be indicated on the form. Once completed, the MCA form must be signed and dated with wet ink application by the owner and have an attached Legal Description, Operations and Maintenance (O&M) Plan, 8.5"x11" LID BMP Site Exhibit, and signed Owner's Certification page. Once the MCA is approved by JLHA, it will need to be notarized and recorded (along with attachments) with the County Recorder's Office.
6. O&M Plan – The Operations and Maintenance (O&M) Plan must include and describe the storm drain stencil signage BMP (the frequency of inspections and maintenance, the responsible entity, etc.). Additionally, revise the O&M Plan to list the name, address, email, etc. of the specific entity (individual, not just company) that will be responsible for the O&M responsibilities.
7. Plans – Indicate the setback between the building foundations and the footprint of the infiltration BMP.