

High Performance Development Standard Implementation Plan

The High Performance Development Standard (HPDS) presents a number of recommended metrics for Site Plan and Plan of Subdivision. Following approval of these, the HPDS project will move into implementation this includes the need to:

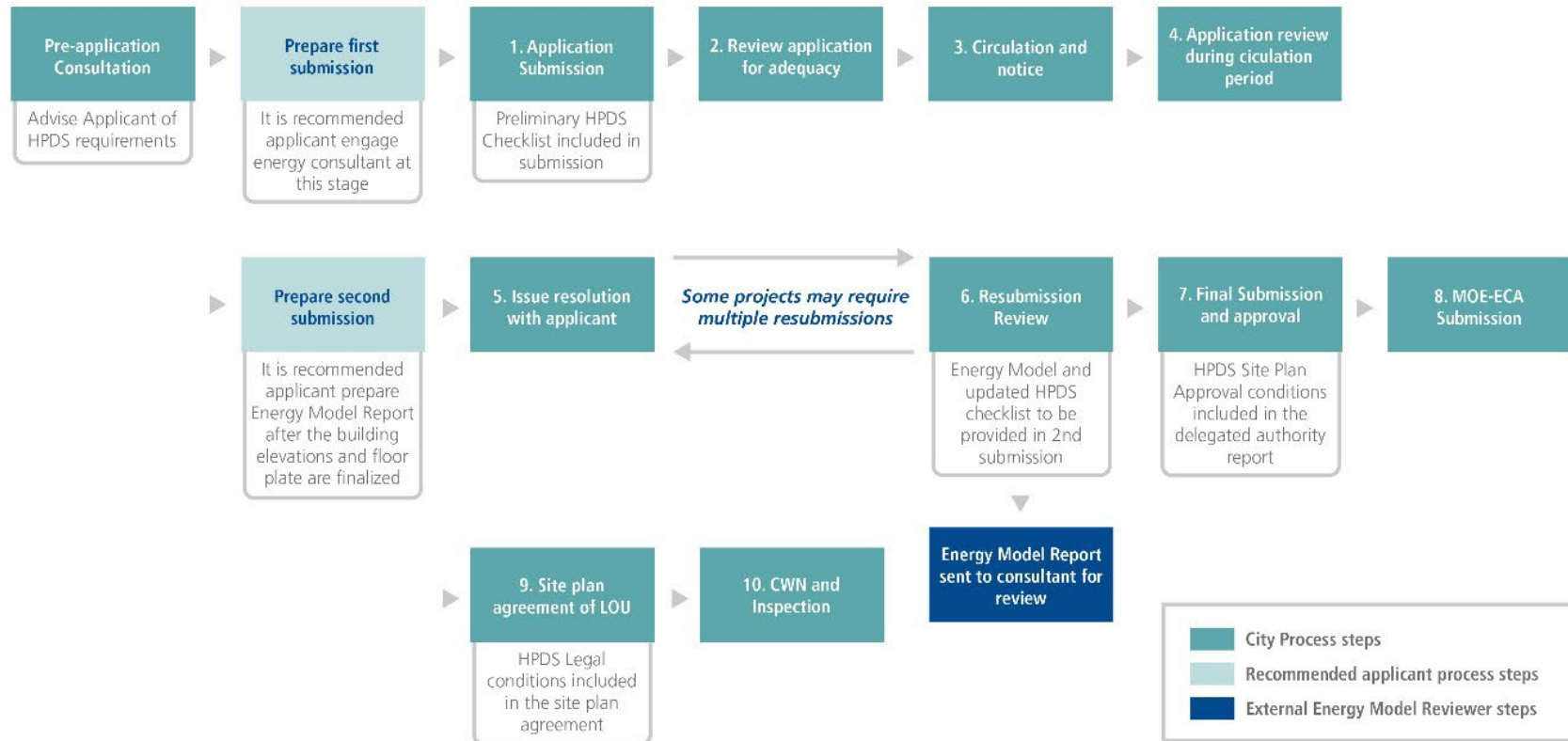
- update internal process to integrate the standard into planning approvals
- develop supporting documents,
- complete training of the approved standard to internal and external stakeholders.

Process Changes Resulting from the HPDS

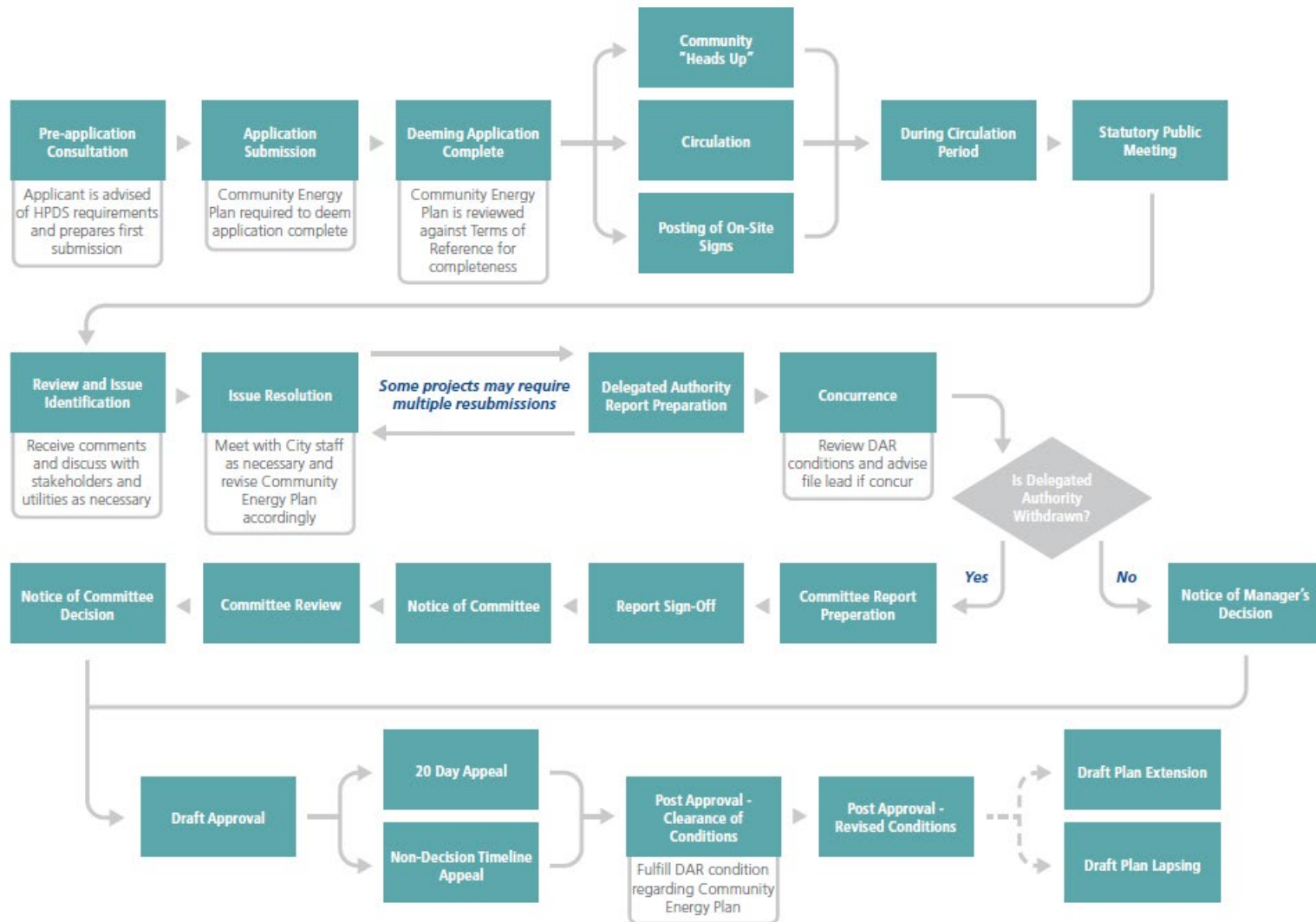
The HPDS will be applied through the development review process. The review will be led by development review file lead planners with experts to support as required. The standard's supporting documents will be a required part of the application and form a part of the Site Plan and Draft Plan of Subdivisions agreement conditions. The specifics of the metrics review process, including impacted staff, is summarized in Document 9 - HPDS Process Summary Table.

In addition, a summary of the anticipated impacts of the HPDS on the Site Plan and Plan of Subdivision approval processes is provided in the following two figures.

HPDS Impacts to the Site Plan Process



HPDS Impacts to the Plan of Subdivision Process



New Supporting Documentation

The HPDS will require three new supporting documents for planning applications; HPDS Checklist, Energy Model Report, and Community Energy Plan. The HPDS Checklist will need to be developed and the Terms of Reference for Energy Model Reports, and CEPs has been drafted and will be brought to council with the other planning documentation Terms of Reference in the OP Implementation Report.

HPDS Checklist

After the metrics have been approved by Council, the HPDS checklist will be finalized. This will form part of the documentation required for submittal to Site Plan and Plan of Subdivision. This checklist will be the central place for summarizing compliance with the HPDS Metrics. The checklist will provide a space for written rationale, summary of quantitative measures, and references to the supporting documentation. This checklist will serve as the review tool as well as a support tracking against sustainability objectives.

Energy Model Report- Site Plan

The Energy Model Report is the summary of the results and assumptions built into the project's energy model. This report is to align with the Energy Model Report Terms of Reference draft provided in attached documents. Energy Model Reports will be required for all Site Plan Applications with gross floor area over 2,000m².

Community Energy Plan- Plan of Subdivision

A Community Energy Plan will be required as prescribed in the Community Energy Plan Terms of Reference Document. Community Energy Plans are expected to be developed in consultation with key stakeholders. These plans play an important role in setting out the direction for the community. Buy-in from utilities, the City, and other will be necessary to ensure their realization.

Affected Existing Documentation

Aside from the energy metrics the remaining metrics can be demonstrated through a combination of the HPDS checklist and existing plans required under Site Plan Application. Measures demonstrated through existing plans include sustainable roofing, soil volumes for trees, accessibility measures, hard landscaping materials, and bird safe glass. The expected plans to be impacted are

- Landscape Plan
- Site Plan
- Elevations

The preferred plan to communicate these measures may depend on the approach taken to achieve the metric. For instance if a green roof is used to achieve the sustainable

roofing requirement this may be included on the Landscape Plan, but if the project is pursuing a cool roof solution this may be demonstrated on a Roof Plan.

Review of the Documentation

The Development Review File Lead is responsible for review of the documentation with support from specialist groups as required further details broken down by metric are provided in attached Document HPDS Process Summary Table.

Existing staff have the expertise to support the review of all the metrics except the energy requirements. New expert support will be needed to apply the HPDS and ensure conformity with the energy requirements as part of planning applications. Given the need for new expertise, staff are recommending a multi-step approach to support the review process:

- a) For the first two years of the program, energy models will be reviewed by external consultants. External consultants will be pulled from a standing offer list with a predefined scope. This is to be funded through existing PRED consulting budgets.
- b) Beginning in 2024, once the program is more established, it is recommended that a review of the energy model review process be completed to provide a recommendation on continuing this approach to energy model review or pursuing other options. The ongoing costs of the model reviews should be included in the development review application fees update at that time.

New Conditions

The following new conditions are recommended for as applicable planning application files.

HPDS Delegated Authority Report Approval Conditions - Site Plan and Plan of Subdivision Draft Approval

1. HPDS Checklist Approval Conditions to be used on applicable site plan and plan of subdivision applications

The Owner agrees to implement the approved HPDS Checklist and bear all applicable costs and responsibility associated with the preparation and implementation of plans and reports, such as Landscape Plans, Site Plan and Energy Modeling Report or Community Energy Plan, in order to satisfy HPDS requirements prior to registration. The Owner shall ensure that the strategies in the approved HPDS Checklist are fully implemented to the satisfaction of the General Manager, Planning, Real Estate and Economic Development

HPDS Delegated Authority Report Approval Conditions - Site Plan

2. High Performance Development Standard

The Owner acknowledges and agrees to submit an updated Energy Modeling Report and HPDS Checklist prior to registration of the Site Plan Agreement. The reports shall be to the satisfaction of the General Manager, Planning, Real Estate and Economic Development.

Community Energy Plan Delegated Authority Report Condition - Plan of Subdivision Draft Approval

3. Community Energy Plan

The Owner agrees to implement the approved Community Energy Plan (CEP) and bear all applicable costs and responsibility for the preparation and implementation of the CEP to the satisfaction of the General Manager, Planning, Real Estate and Economic Development Department. The CEP may layout shared responsibility with other parties such as utility partners.

Where mitigation measures are required to implement the approved Community Energy Plan, the Owner shall provide, prior to final building inspection, certification to the General Manager, Planning, Real Estate and Economic Development Department, as submitted by a Professional Engineer or other applicable professional, that the energy conservation measures have been implemented in accordance with the approved Community Energy Plan.

[To be used in extenuating circumstances where the final Community Energy Plan can not be provided and a brief or draft has been submitted in lieu] The Owner agrees, prior to registration or early servicing, whichever is earlier, to have a Community Energy Plan for the plan of subdivision prepared, in accordance with the brief.

[To be used where the applicant chooses a prescriptive approach in lieu of a Community Energy Plan]

Where Owner commits to a prescriptive approach to energy in line with the option outlined in the Community Energy Plan terms of reference. Prescriptive

measures are summarized in a Community Energy Brief. The Owner agrees to implement these measures and bear all applicable costs and responsibility for the preparation and implementation of the Community Energy Brief. The Owner shall provide, prior to final building inspection, certification to the General Manager, Planning, Real Estate and Economic Development Department, as submitted by a Professional Engineer or other applicable professional, that the energy conservation measures have been implemented in accordance with the approved Community Energy Brief.

Energy Model Report Approval Condition- Site Plan

4. Energy Modeling Report

The Owner has undertaken energy analysis as summarized in the Energy Modelling Report for this site, which Report and Addendum are referenced in Schedule “E” herein, to determine the design criteria needed to mitigate the impact of the proposed development on the environment and to establish the site design features needed to support sustainable and resilient design objectives. The Owner shall ensure that the strategies in the Energy Modeling Report are fully implemented to the satisfaction of the General Manager, Planning, Real Estate and Economic Development. The Owner may be required by the City to complete an as-built energy model, at the Owner’s expense, to demonstrate compliance if substantial changes have been made to the assumptions in the energy model, to determine whether they are in conformity with the High Performance Development Standard as determined by the General Manager, Planning, Real Estate and Economic Development. Substantial changes to be determined by the project’s architect and engineer.

5. Certification

In lieu of energy analysis the Owner has committed to complete third party verification through _____ (an approved program of alternate compliance). The Owner shall ensure that the certification is achieved. The Owner may be required by the City to provide proof of verification from the program administering body. All verification costs are at the Owner’s expense.

6. Energy Modeling Post Construction [Tier 2]

[To be used on Tier 2 or other projects where applicable]

The Owner acknowledges and agrees that upon completion of the development and prior to occupancy and/or final building inspection, it shall retain a Professional Engineer or other approved professional, with expertise in the subject of energy modeling, to

complete an as-built energy model and satisfy that the installed measures meet or exceed the targets in the Energy Model Report referenced in Schedule “E” hereto, as approved by the City. The Professional shall prepare a letter to the General Manager, Planning, Real Estate and Economic Development (the “Certification Letter”) stating that they certify compliance with all requirements of the applicable conditions in this Agreement, to the satisfaction of the General Manager, Planning, Real Estate and Economic Development. In lieu of an as-built energy model the owner may provide a letter signed by the project architect and engineers stating the as constructed building does not have substantial changes from the assumptions in the site plan application energy model report.

Training

Development review staff and industry professionals completing applications will need training on the new requirement. A training program is proposed to be developed and presented to development review staff starting in Q2 of 2022. This training presentation will form part of future planning primers opening the training up to the industry and the public so interested and impacted parties have opportunity to learn more about the HPDS. Training will include foundational knowledge of the intent and background of the metrics in addition to example submission reviews.