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SUBJECT: Cross-Laminated Timber
DATE: September 26, 2018

PRESENTATION TYPE:
Informational Briefing

SUMMARY:

At the April 11, 2018, Infrastructure, Planning and Sustainability Committee meeting, committee members requested a presentation from City staff to examine whether there were building and fire code requirements that may be a barrier to the use of cross-laminated timber (CLT) in building construction in Tacoma.

BACKGROUND:

CLT is a mass timber type of building material that is increasing in use in mid-rise and even high-rise projects since its introduction to North America in the early 2000s. This type of wood product uses layers of lumber boards stacked in alternating directions which are then glued and pressed. Features of these building products include:

- Sustainable – Sustainably managed forests/use of lumber impacted by beetles
- High performance – Lower heating/cooling demands/healthy interior environment
- Fire resistive – Excellent fire resistance/comparable to non-combustible construction
- Reduced installation cost – Panels are prefabricated and can be installed quickly

Recognizing the expanding use of mass timber technology, the International Code Council (ICC) appointed a committee to evaluate the science of tall wood buildings and propose code changes to incorporate in the international building codes. Use of CLT is allowed in Tacoma's currently adopted (2015) building code for limited heights (6 stories and less). The code proposals that have been developed for the 2021 building codes will allow mass timber for up to 18 stories. These code proposals are going through the ICC code review process and will conclude with the public comment hearings and voting (to be conducted by jurisdictional representatives) in November of this year.

In parallel with the ICC committee, the Washington State Building Code Council (SBCC) has also been working on adoption of codes for mass timber. In March 2018, the State legislature signed ESB 5450 directing the SBCC to adopt rules for mass timber products. In July 2018, the SBCC voted in favor of adopting the rules developed by the ICC committee. The new rules will be effective July 2019 and will apply to the 2015 building codes that are currently in effect.

ISSUE:

Currently PDS staff have not identified any barriers in the building/fire codes based on the current code proposals to date. PDS staff will continue to evaluate the new codes being adopted by the State in 2019, and will propose amendments to the Tacoma Building Code for Council consideration as necessary to



align with the new rules. Currently there are two buildings using CLT products in Tacoma - one currently in construction and one in design.

ALTERNATIVES:

This is an informational briefing only. There are no alternatives presented.

FISCAL IMPACT:

This is an informational briefing only. There is no fiscal impact.

RECOMMENDATION:

This is an informational briefing only. There is no recommendation.