

MINUTES

Development Advisory Committee

File: **360-20 (DAC)**Date: **April 27, 2017**Time: **2:30 p.m.**

Location: 3W Meeting Room

A, Surrey City Hall

Members:

Tim Bontkes Rob Elliott Jeff Fisher Steve Forrest Dwight Heintz Nathan Hildebrand

Ryan Jenkins Nick Kasidoulis Marc MacCaull Mark Sakai Charan Sethi Kevin Shoemaker Grant Turnbull **City Staff:**

Neal Aven Owen Croy Kam Grewal Jean Lamontagne

Sam Lau

Mehran Nazeman Jason Owen Judith Robertson Fay Keng Wong **Guest:**

Emily Taylor, SCDC

1. Previous Minutes

The notes of the March 23, 2017 meeting were accepted as distributed.

2. Surrey City Development Corporation (SCDC) Update (Kam Grewal, Manager, Financial Reporting; Emily Taylor, SCDC)

- Kam Grewal and Emily Taylor provided an update on the Surrey City Development Corporation (SCDC).
- Kam Grewal is a City Director on SCDC's Board of Directors. He is responsible for the City of Surrey's Financial Reporting, Corporate Audit, Risk Management, and Corporate Procurement services. Kam has over 15 years of financial experience in the public sector and has held various leadership roles while joining the City of Surrey in 2008.
- Emily Taylor is the Interim President & CEO of SCDC. Emily Taylor joined SCDC in 2012 as VP Finance, became CFO in 2013, and Interim President and CEO in 2017. Emily has over ten years of experience in the development industry.
- A new board was elected as of Oct. 1st, 2016.
- Much of 2016 involved work in Campbell Heights. SCDC acquired property in 2011 and has since done site work, subdivision, and selling of industrial land. The area is now over \$1 million per acre. Public Open Houses regarding the master planning process of Campbell Heights East were held in January and September 2016.
- In 2016, SCDC completed a 141 unit townhome project in Clayton Heights in partnership with Townline.
- SCDC sold some properties in 2016 (Boundary Park Plaza, Bridgeview Industrial, Murray Latta, and Schmidt Berg) and used the earnings to pay some debt.
- The City of Surrey received a dividend as a result of the surplus.
- SCDC completed a build-to-suit project in partnership with Beedie for Weir Canada Inc. in Campbell Heights.
- 3 Civic Project: 349 residential units, office space, and 144 hotel rooms.

SCDC is also looking at building a low rise residential area (Kwantlen Park) in City Centre.

Comments:

- Nathan Hildebrand asked if SCDC's mandate has changed. Kam Grewal responded, no, there is the dividend component to help build infrastructure and recreation centres, etc. SCDC is also looking at building affordable housing.
- Nathan Hildebrand asked if pre-serviced land would be put in. Kam Grewal responded that SCDC would be open to all sorts of options and partnerships.

3. Surrey City Energy – District Energy Update (Jason Owen, District Energy Manager)

- Jason Owen provided an update on District Energy in Surrey. A copy of his presentation is attached.
- A district energy system produces hot water at centralized facilities and then distributes
 this hot water by way of a dedicated pipe system to heat buildings in a defined
 neighbourhood or "district." Since hot water is used as the distribution medium, it allows
 the system to be flexible.
- District energy is an efficient and effective means of reducing greenhouse gas (GHG) emissions by utilizing low GHG-emission energy sources, such as organic waste (kitchen scraps, etc.) from residential homes throughout Surrey (biogas); geoexchange from the ground; solar thermal from the sun; biomass from clean waste wood or wood pellets; and waste heat from buildings, industry, and waste water.
- Examples of Energy Centres in urban areas include: Strathcona County in Alberta (agriculture residues and wood waste bio-energy), UBC (hot water, steam), and Southeast False Creek (waste thermal energy).
- The Distribution Piping System (DPS) the City uses comes pre-insulated and the entire system is sealed, welded. Anytime there is a leak into the system, the copper wire would detect it. The DPS saves power/energy from being lost.
- The Energy Transfer Station (ETS) takes about the same space as a parking stall. It is a City owned infrastructure in a utility room all maintained and operated by the City so it does not add costs.
- District energy (Surrey City Energy) is a key strategy for the City to improve energy
 efficiency, reduce GHG emissions, increase resilience, and provide competitive and stable
 pricing. It establishes a hot water network that relies on a diverse range of inputs (e.g.
 industrial waste heat recovery, sewer heat recovery, geoexchange, solar thermal heat,
 refrigeration heat recovery, biomass, combined heat and power, and future energy
 resources).
- Surrey City Energy is a phased plan.
 - Phase 1: Temporary Energy Centres. Phase 1 started to be implemented in 2014. It
 is very cost effective. The City currently has two in operation: one near 133 St south
 of 104 Ave (in the West Village neighbourhood), and the other at 9804 Whalley Blvd.
 On the map, coloured areas are under development application.
 - O Phase 2: Permanent Energy Centre. This will replace the two Temporary Energy Centres and will be located in a park on the site where the West Village neighbourhood temporary energy centre will have been. The permanent energy centre will allow the network to expand beyond what can be served by the temporary energy centres. In the short term, the permanent energy centre will generate most of the energy. In the long-term, it will be a back-up and peaking plant providing support and redundancy to the various forms of low-carbon energy that will be added to the system. It will be completed by 2018.

- o Phase 3: Integrating Large-Scale Renewables. The City is targeting 2024 to meet its renewable target. Renewable Natural Gas (RNG) and Geoexchange will be the first types of low-carbon energy added to the system in 2017/2018. The largest opportunity for low-carbon energy comes from biomass, which involves taking clean urban wastewood and turning it into hot water for the network reducing GHG emissions on a very large scale. Another opportunity is sewer heat which involves heat that can be extracted from the sewers and used elsewhere. City staff are looking at the different costing to determine which is better.
- 2017 District Energy Rate Schedule.
 - Part 1 Levy (two types):
 - Class 1 Residential and Mixed-use buildings not exceeding 20% non-residential use by Building Area: levy is \$0.0175 per square meter of Building Area. Class 1 assigns a fixed charge based on square footage and ensures that units are being charged in a similar amount.
 - Class 2 Buildings exceeding 20% non-residential use by Building Area: levy is \$0.2506 per kilowatt of peak heat energy demand. Class 2 varies, so it assigns a fixed charge for these (institutions, etc.).
 - o Part 2 Charge:
 - Energy Charge is \$51.66 per megawatt.
 - o Part 1 and 2 are done together.
- The benefits of District Energy Service are:
 - Environmental (improves efficiency, improves local air quality, reduces GHG emissions);
 - o Economic (price stability, lower life-cycle costs, avoided capital); and
 - Operational (reduces operational and maintenance cost, lowering overall life cycle costs; frees up space; improves reliability; monitoring and troubleshooting).
- System Reliability. There are about 150 control points that are monitored regularly. Staff are given an alarm if anything weird happens. When the developer transfers the building to the strata, the developer does not always transfer mechanical help/expertise. The City has been able to quickly help the stratas and provide continual service.
- From a building perspective, the life-cycle costs of district energy compared to boiler are generally equivalent. District energy costs include 61% levy and 39% charge. Boiler costs include 46% fuel, 38% capital, and 16% operation and maintenance. Fuel costs are just one component. The purchase of the mechanical equipment, maintenance, and operation are significant.
- Rate Review Panel. The City has appointed an external panel to review the City's process on a regular basis. The panel provides objective, expert advice to the City to ensure that the rates and rate structure are consistent with the following principles:
 - Cost Recovery
 - 2. Rate Competitiveness
 - 3. Return on Investment (will never earn less than costs, but will never earn more than a for profit private company)
 - 4. Shortfall Recovery
 - 5. Low-carbon/Renewable Energy
 - 6. Fairness
- Every 1-3 years, the panel will get a new member. The panel includes experts in utility
 finance, utility regulation and renewable energy and will review the City's proposed rates
 for the upcoming year. The panel usually convenes every September. Jeff Fisher,
 representing UDI, is invited to submit comments and concerns from the UDI membership in
 advance of the panel's review. Jason Owen will send an invite/reminder to Jeff Fisher
 closer to the panel's meeting date.

Comments:

- Jeff Fisher asked if the focus is on City Centre. Jason Owen responded, yes, right now.
- Jeff Fisher asked if there is a plan to adopt the energy step code, which kind of runs counter to this. Jason Owen responded, yes, the energy step code has various steps. Very aggressive use of it is difficult to achieve goals. Right now, City staff are doing research to figure out the implications of the step code for district energy.
- Jeff Fisher asked if there are similar costs on a per square foot basis for commercial and residential. Jason Owen responded that it varies between commercial. City staff will look at how much the costs are for a year for a typical commercial building versus a typical residential building.
- Tim Bontkes asked if it is a choice to build district energy in City Centre. What are the costs? Is it more expensive? Jason Owen responded that there are savings in terms of space savings and it is cheaper for residents on a lifecycle basis. There is a small premium to go to a hot water system of about \$3 per square foot but this figure may have gone down since it was last assessed by the City. Early stratas that have used district energy were surprised about the price because the actual costs have not always been captured in the disclosure statements. Requires a bit of nuance.
- Ryan Jenkins. Comparing electric baseboard and district energy is a \$4000 premium.
 Weststone has put it in their disclosure statement for the Evolve tower. Not building, yet.
 There is some excitement about the sustainability, but capital costs are a concern. Now, people are buying regardless of whether or not it has district energy.
- Kevin Shoemaker commented that it would be helpful to illustrate costs comparing 6 storey concrete buildings with 6 storey wood frame buildings. Received a lot of complaints from stratas who start getting the costs. Have to be careful about baseboards. Larger and more expensive. Has experience with district energy in Vancouver's River District wood frame buildings using hydronic, but it is expensive. Consider the costs of replacing the equipment.
- Ryan Jenkins asked what the costs would be on a month to month basis. People do not care about the levy, etc. They want to know at the end how much it will cost them.
- Kevin Shoemaker commented that developers can reference in the disclosure statement that we expect this to be the expected lifecycle costs. Charan Sethi asked if people care about the lifecycle costs.
- Dwight Heintz asked if there have been any issues about timing for new buildings. Jason
 Owen responded, no. The City asks the requested service date to give the developer time
 to commission the building. Or the service will start on the fixed date provided. The City
 has to be given enough notice so that they can defer the costs. The City brings in
 connection to the system at the P1 level and reviews the drawings.
- Kevin Shoemaker commented that you need the heat at drywall stage not at occupancy.
 Jason Owen responded that it is the developer's choice. The City is willing to provide connection earlier, but it has to be an agreed timeline. Developers usually ask for connection at occupancy.
- A DAC member asked if the City will consider charging later so the early developers do not get hit. Jason Owen responded that district energy was first implemented in 2012 and there were a lot of in-stream applications at the time, so applications that were in design were allowed a sort of reduced requirement, which went on for about 3 years. We are kind of past that level now. Now, it is an equal playing field. 2014 was the last deadline for that.
- Tim Bontkes asked why, for example, 20 stories are not put above a district energy plant. Jason Owen responded that the land where it is now is park land so that it integrates with the park. It also serves as an educational opportunity.
- Jeff Fisher asked about biofuel. Will there be any pushback from local residents? For example, False Creek. Jason Owen responded yes. The City is looking at land away from the city core. We are about 8 years from it happening so the City will be looking into it

- soon. At UBC, where a biofuel centre was placed close to a residential tower, an emissions sensor was put in.
- Ryan Jenkins asked if the City has any idea of bulk rates, opportunities for economies of scale for larger developments of, for example, 10-15 buildings. Jason Owen responded that City staff can ask the panel about this, if it makes it more feasible to pool the infrastructure.

4. Boulevard Tree Fees (Neal Aven, Urban Forestry Manager)

- Neal Aven provided an update on Boulevard Tree Fees. A copy of his presentation is attached.
- Trees have numerous social, environmental, and economic benefits that contribute to improved quality of life for residents and visitors:
 - o improved air and water quality,
 - o reduced storm water impacts,
 - o mitigated heating and cooling costs,
 - o increased commercial activity,
 - o beautify our neighbourhoods,
 - o are linked to improved health of people.
- In the face of a changing climate evidenced by rising temperatures, longer more intense drought, and more frequent and damaging storms, the need to plant and manage a resilient inventory of trees has never been greater.
- City Plans and Policies (including the Sustainability Charter, Biodiversity Conservation Strategy, Shade Tree Management Plan) provide the framework and guidance for tree planting. In a rapidly urbanizing City, careful planning is necessary to ensure:
 - o right species for the space,
 - o every tree is inspected for quality of structure (stem, branches, roots),
 - o trees are installed in the right location at the right time.
- The City began collecting fees in 1997 at \$300 per tree. In 2005, fees were increased to \$340 for single-family and \$435 for industrial, commercial, and multi-family developments. Since that time, costs have been reviewed a number of times and were deemed to be sufficient to cover costs. (Competitive labour rates and tree purchase costs kept costs low for more than a decade.) Costs were reviewed in December 2016 and the City determined that an increase is necessary.
- The table on Page 6 of the attached presentation shows the Tree Planting Unit Costs. Street tree planting costs have increased to \$515.00 per tree for single-family residential developments, and \$530 per tree for industrial, commercial, and multi-family developments. Primary areas of increase are the cost to purchase trees, the cost to replace trees, and the cost to water trees. The increase can be partly contributed to high mortality with extended drought during the summer. The City currently plants about 5,000 shade trees per year, including replacement trees.
- Last week, on April 20th, the DAC were sent a memo regarding the Street Tree Planting Fee Increase.

Comments:

Jeff Fisher commented that if the mortality rate seems high and has increased, maybe different types of trees, which are drought resistant, should be planted. Neal Aven responded that, yes, there are some species that the City does not plant anymore because they do not work. The City is trying new trees all the time. At the peak of our drought, the City waters about 26,000 trees per week. Currently the bags are the best options for younger trees. Probes are used for trees older than 2 years.

- Jeff Fisher asked about Metro Vancouver's water restrictions. Neal Aven responded that if we ever get to Stage 4, it would significantly affect the city's trees, and we would have to use alternative water sources such as river or ground water. Owen Croy responded that a couple of years ago when it was really dry, the City was starting to use its wells. The City has a bit of a back-up system.
- Rob Elliott asked when the increase for street planting will start. Bonding is occurring right now, anyway? Neal Aven responded yes.
- Tim Bontkes asked how quickly street trees are planted. Neal Aven responded that Urban Forestry's tree planting technician makes every effort to ensure trees are planted in a timely manner as development projects progress. Planting occurs from November to May. Developers can interact with Urban Forestry tree planting staff anytime, too.
- Owen Croy, Manager of Parks, is retiring on May 26th.

5. Comments on the Market (All)

- Charan Sethi. It is very active in the condo and house market. Tien Sher sold out in City Centre
- Nathan Hildebrand. Canadian Horizons currently does not have product, but will soon have 100 lots in North Surrey. Single family has slowed down a bit based on their builders.
 Prices are coming back (increasing).
- Steve Forrest. A lot on the go. Anthem has 18 projects in Metro Vancouver. Two in Surrey will be coming onto the market in the late summer. Concrete and wood frame. Approvals are slower everywhere. City staff are getting bogged down. All the markets are really strong.
- Rob Elliott. The challenge is enough staff. Agree with Steve Forrest's comments on the market.
- Dwight Heintz. Hoping to get into this market. Not much available and pricey.
- Tim Bontkes. Infinity does not have anything on sale. Some things are in process, getting approved. Some projects are coming up in Surrey and Langley.
- Marc MacCaull. Little for sale left. Streetside will be launching some townhouses/apartments in Surrey later this year.
- Jeff Fisher. No comments on the market.
- Kevin Shoemaker. The market is really strong. Polygon is selling out their product. In Surrey, townhouses are coming up. The challenge is in the suburban market. Trying to get a project started in Squamish and Abbotsford and the challenge is getting quality tradespeople in this outer market.

6. Other Business (All)

• Jeff Fisher would like an update on LRT at a future meeting.

7. Next Scheduled Meeting – May 25, 2017

• The meeting adjourned at approximately 3:45 p.m.