

**District of North Vancouver  
Community Monitoring & Advisory Committee  
Seymour-Capilano Water Utility Projects**

**Meeting Notes – March 18, 2015**

**Agenda**

1. Seymour-Capilano Filtration Project
  - a) Twin Tunnels Commissioning and Communication Plan
  - b) Final Site Restoration
2. Capilano Main No. 9 (Capilano Drinking Water Project)
  - a) Traffic management – Montroyal and Ranger
  - b) Traffic management – Peak traffic
  - c) Community Outreach and Engagement
  - d) Next Steps

**Attendance (Bolded names indicate attendance)**

*Community Advisory Committee Members:*

- **Lorraine Jamieson** Capilano / Grouse Woods Residents Association
- **Peter Thompson** **Edgemont Community Association**
- Corrie Kost Edgemont Community Association
- **Norm Daniels** **Lynn timer South Inter-River Community Association**
- Lee Gavel Lynn Valley Community Association
- Dan Ellis Lynn Valley Community Association
- **Anne Cockle** Blueridge Community Association

*District of North Vancouver Representatives:*

- Mayor Richard Walton DNV Council
- Councillor Doug MacKay-Dunn DNV Council
- Councillor Robin Hicks DNV Council
- **Carol Walker** Manager – By-law Enforcement
- Steve Ono Manager – Engineering Services/Deputy General Manager
- **Sean Rooney** Project Engineer - Engineering Services
- **Carolyn Drugge** Construction Traffic Management Program Coordinator
- **Steve Bridger** Section Manager, Engineering Planning and Design
- Erica Geddes Transportation Section Manager - Engineering Services
- Mairi Welman Strategic Communications & Community Relations

*Metro Vancouver Representatives:*

- **Carol Mason** Chief Administrative Officer, Metro Vancouver
- **Tim Jervis** General Manager - Water Services Department
- Frank Huber Manager - Major Projects, Management Systems & Utility Support Division
- Murray Gant Senior Engineer - Major Projects, Management Systems & Utility Support Division
- Steven Lewis Senior Engineer - Water Services Department

- **Goran Oljaca**                      Manager - Engineering & Construction Division
  - **Hein Steunenberg**                Senior Engineer - Engineering & Construction Division
  - Mark MacConnell                 Senior Engineer - Engineering & Construction Division
  - Andrew de Boer                 Senior Engineer - Water Services Department
  - **Vanessa Anthony**                Consultation & Community Relations Coordinator - Public Involvement Division
  - Steve Billington                 Community Liaison Officer - Public Involvement Division
- Pacific Liaison and Associates, Inc.*
- Jeff Spruston                      Construction Manager
- Guests:*
- **Scott Ellis**                         Grouse Mountain Resort
  - **Dev Sharma**                        Grosvenor Americas
  - **Bill Lloyd-Jones**                 Delbrook Community Association
  - **Becky Lai**                         MMM Group Ltd.
- Facilitator:*
- **Raymond Penner**                the Strategic Action Group

## 1. Seymour-Capilano Filtration Project

### a. Twin Tunnels Commissioning and Communication Plan

- Capilano Raw Water Pump Station
  - partial commissioning in 2007 & 2010 and the final commissioning is anticipated February - March 2015
  - 8 X 2000 HP pumps, one of the largest municipal pump stations in Canada
- Capilano Energy Recovery Facility/Break Head Tank
  - Capilano BHT completed in 2007; partial commissioning of BHT in 2010 and 2013
  - turbine installation completion January 2015 and final turbine commissioning May 2015
- Seymour-Capilano Filtration Plant
  - commissioned with Seymour source water in 2009 and the official opening was Spring 2010
  - several projects/tasks recently completed to prepare for introduction of Capilano Source water March – May 2015; on February 26 this year we started pumping water from Capilano into the plant and through the filtration process
- Seymour-Capilano Twin Tunnels
  - substantial completion December 2014; surface restoration underway
- an overview of the steps for final SCFP Commissioning is:
  1. disinfection - completed by the contractor using 12% hypochlorite solution
  2. tunnels filling - complete

3. tunnels flushing - RWT flushing complete, TWT flushing in progress; treated water from SCFP Clearwell via gravity to Capilano Energy Recovery Facility/Break Head Tank and overflow channel to the dechlorination facility and into Capilano Lake; we needed to ensure that there would be no damage to the bank of the lake; this overflow is an emergency feature and will not be normally used
  4. commissioning of Capilano Raw Water Pumping Station
  5. commissioning of Capilano Energy Recovery Facility/Break Head Tank - Break Head Tank commissioning is in progress; we are checking the controls of the pressure reducing valves that discharge into the BHT
- criteria for feeding TWT water to distribution requires that the samples during the TWT flushing are same with what goes into the tunnel at Seymour is the same as what comes out at Capilano with regards to turbidity, UVT, pH, chlorine free residual, total coliform and conductivity
  - the overall SCFP commissioning schedule is shown in the following chart

Description	2014	2015					
	DEC	JAN	FEB	MAR	APR	MAY	JUN
RWT & TWT Filling	■						
Air valves Installation		■					
RWT Flushing & Cap RWPS Commissioning			■				
SCFP Pilot Plant Testing				■			
<b>RWT in service</b>				◆			
Transient field test				■			
TWT Flushing & Capilano BHT Commissioning				■			
TWT Lab Testing					■		
Disinfection of Capilano Piping and BHT					■		
Transition to higher BHT elevation						■	
<b>TWT in service</b>						◆	
Turbine Commissioning						■	
<b>Full Seymour-Capilano Project in service</b>							◆

*Discussion*

*Do the actual hydraulic results for the Break Head Tank that you are getting match the original model testing?*

[MV] Yes. We did our initial commissioning in 2008 and 2010 using the Pump Station to pump into the Break Head Tank that we were operating at that time at the future operating level. At this time, we are operating at a high level to enable the overflow testing so we cannot do our final commissioning now but our previous work gives us the confidence that everything will be working as expected once we put that into service.

*Prior to the tunnels being constructed, there were concerns from some Lynn Valley residents that the tunnel may have an impact on ground water and you installed some piezometers. Have you had any information on this?*

[MV] The tunnels have been full for several weeks now and we have been monitoring the piezometers. At this time, only two of the piezometers have got back to the levels they were at prior to construction and have stopped there. The others are still below the original levels.

[MV] We also have a detailed monitoring program that will extend beyond 3 years. For approximately 6 months this will be with Engineering & Construction Division and then be passed over to Water Operations.

[Facilitator] Are there any plans for specific communication with the residents in the Lynn Valley area to follow-up on the piezometer monitoring results? Their concerns led to you putting in considerably more steel lining than you had first proposed and it seems like the overall results are quite positive. This might be seen as a follow-up on a “non-event” and would be useful to close the loop on their initial concerns and your responses and results.

[MV] We will look into this and come up with an appropriate communication response.

*Where does the water go that is used for flushing?*

[MV] This water is going back into Capilano and is staying there as the current elevation is approximately 4 meters below the top level of the dam so there is no overflow into the river – it will eventually be pumped back up to the filtration plant for use.

*The overflow pictures in the media were quite dramatic.*

[MV] When we did the overflow test, the concrete posts in the overflow area acted as designed in terms of dissipating the energy. The flow was intentionally very large to test the capacity at that level and it did look dramatic but we were pleased that everything worked as expected and no damage was done to the embankment.

#### **b. Final Site Restoration**

- DNV Parks leading public engagement process for the final site restoration at the Seymour shaft area; construction is anticipated for summer 2015

## **2. Capilano Main No. 9 (Capilano Drinking Water Project)**

### **a. Traffic management – Montroyal and Ranger**

- MMM Group Ltd. reviewed Montroyal and Ranger intersection and recommends that no changes are required; this will be monitored during construction
  - we think that since we will be putting a 4-way stop sign at Montroyal and Highland to the west of this, that there will be breaks in the traffic approaching this intersection from the west and that will provide commuters on Ranger to turn into Montroyal
  - one safety concern we had about this intersection is that if drivers on Montroyal encounter a stop sign at Ranger, they might be used to seeing no traffic coming out of Ranger and then run the stop sign
  - we have been asked by DNV to prepare a sketch for the implementation of traffic controls here that could be quickly implemented if our monitoring indicates the need

### *Discussion*

[Facilitator] What is the backup plan for Montroyal and Ranger?

[MMM Group] The one suggestion that we have received is a 4-way stop. Given the steep hill, we will likely add intersection warning signs on Montroyal at the bend just east of this intersection.

*Have you thought of reducing the speed limit heading west on Montroyal?*

[MMM Group] We will work with the District on this but this could be a consideration.

*Cars come down that hill and around the corner too fast and other cars are accelerating to come up the hill. Coming south out of Ranger, it is very tricky to ensure that there actually is a safe entry between traffic.*

*I don't think your solution is a good one because that is a poor intersection right now.*

[DNV] We have looked at this and agree with MMM that we will monitor and be prepared to respond quickly.

*What would cause you to take action? The first accident? We are changing the traffic significantly on that road with an intersection that is not good now.*

[MMM Group] We are in the process of preparing a safety report on that intersection based on data provided by DNV.

[Facilitator] Perhaps it would be worthwhile to articulate what the triggers would be in your monitoring program that would determine the need for additional measures.

[MMM Group] There are a number of potential triggers including traffic backup and delays or a safety issue or some combination.

[DNV] We think most people will be going down Highlands and that there will not be a great increase going to Delbrook.

[MV] This is why we need to monitor to see whether our predictions in the traffic management plan match reality. We think after the first few weeks, commuters will start to adjust to take routes that are the easiest.

*There are a lot of houses being built in this area and there are lots of trucks with trailers. These are very slow in clearing an intersection and that complicates the traffic issues.*

*This is also the primary route for busses from the highway to Grouse Mountain.*

[MV] It is hard for us to predict how much house construction there will be during our project.

*Part of your success will be the increase in traffic on the designated detour route and I think that we are being too complacent about this intersection.*

*Have on-street parking restrictions been considered in that part of the Montroyal or the other high risk areas considering the increased traffic, particularly with bus and truck traffic.*

[MMM Group] The only area that we have considered this is the intersection of Montroyal and Highlands. We will be working with the District on this.

*There are a number of 33 foot lots in that area all the way to Ranger and with that size of lot, there is on-street parking.*

[MMM Group] We will need to look at the movement of trucks and busses and look at where we will have to restrict parking. This will not be a whole stretch, but rather based on the turning movement of those vehicles.

[MV] We have to remember that what we are trying to do is to have a detour on Highland and Montroyal to keep traffic moving. There are a number of side streets and if we put stop signs on Montroyal at each of these, that will slow that traffic down which will create more issues on the detour route.

[Facilitator] What I am hearing from CMAC is a safety concern.

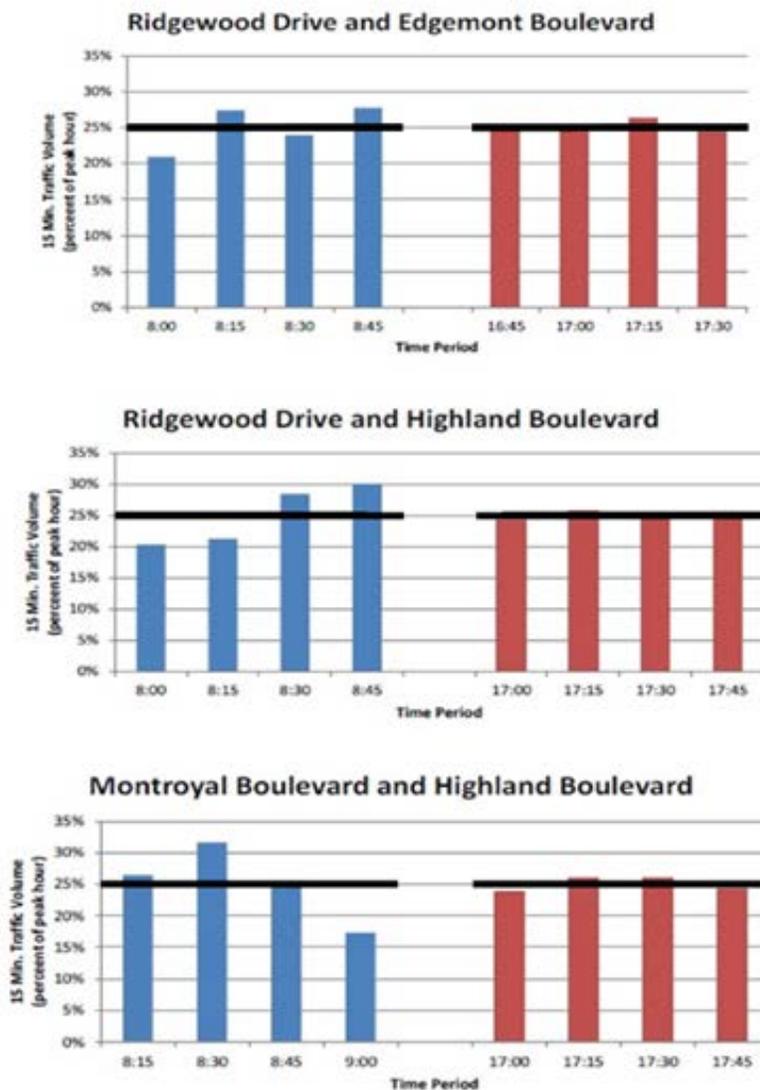
[MV] We are also concerned about safety and are trusting that people will make decisions during this time to take alternatives to getting onto Montroyal that are the safest.

[Facilitator] Perhaps there is a communication component to advise residents in that area of your overall goals, the possible alternatives and to encourage them to find these alternative, safer routes.

[MV] As part of our contract documents, we are building in additional flag people so that if things are not going as smoothly as we hope, we will be in a position to quickly get flag people out to any particular location to help with the situation while our traffic consultant works with the District on a solution.

**b. Traffic management –Peak traffic**

- in response to a CMAC question with regard to peaks within the peak travel times, the chart below reflects a sampling of the current variation during peak travel times at 3 key intersections; the horizontal bar indicates the average count



- these measurements indicate that while there is some slight variation in the peak travel times, it is not significant; in doing the predictions for the traffic management strategy, there is an additional 8% added to the anticipated peaks to ensure that the estimations provide a conservative approach

*Discussion*

*This reflects current counts, not the increased traffic.*

[MMM Group] This does reflect the current count but the percentages, even with increased traffic, are expected to remain the same so we expect that the patterns will be the same.

[MV] MMM Group will be on-site for the first 2 weeks after we go south of Montroyal as we know that these are predictions and that this is not an exact science.

*It would have been interesting to see your analysis for Capilano and Montroyal. There are questions in the community why we don't have traffic lights there. It can be very difficult getting out of Montroyal onto Capilano.*

[MMM Group] After the traffic has been diverted onto Montroyal, the main traffic flow there will be south bound to east bound or west bound to north bound.

*The issue may not be as related to the detour period as to the fact of digging up the road now and the opportunity to plan for traffic lights that will be helpful after without having to redisturb the road.*

[DNV] That is something that has been looked at but is not something that we are immediately planning. However, we are pre-laying duct at a number of intersections that would allow us to install signals at a future time with minimal disruptions.

**a. Community Outreach and Engagement**

- the following chart summarizes the timeframes, project activity and the related community outreach and engagement activities

Timeframe:	January 2014– January 2015	February 2015	March – August 2015	August 2015 – February 2016	February 2016 – April 2016	May-June 2016
Project Activity:	Project planning and design	Project planning and preparation	Project preparation	Construction – Pipe Installation	Construction – Valve Chamber	Project complete and final restoration
Community Outreach and Engagement Activity:	Initial outreach and stakeholder meetings	Community Meetings with local area residents and businesses	Public Meeting and ongoing community engagement	Public Meeting and ongoing community engagement	Ongoing outreach and community engagement	

- we have held a series of stakeholder meetings and have
- a few more stakeholder meetings have taken place and communication is ongoing with all stakeholders

1. North Shore emergency services	January 12, 2015	✓
2. Capilano Suspension Bridge	January 19, 2015	✓
3. Canyon Heights Church	January 22, 2015	✓
4. Upper Capilano area schools	January 26, 2015	✓
5. Capilano Salmon Hatchery	January 27, 2015	✓
6. Grouse Wood Plaza businesses	February 5, 2015	✓

7. Edgemont Village Businesses Association executive	February 12, 2015	✓
8. Thistledown B&B	February 26, 2015	✓
9. Grouse Mountain Resorts – operations staff	February 26, 2015	✓
10. Grouse Mountain Resorts – communications staff	March 26, 2015	

- summaries are being produced with issues raised with MV responses/actions noted; CMAC has received a couple already
- our schedule for Community & Public Meetings is noted below; we have had approximately 120 attendees in total to date

1. Community Meeting	February 24, 2015	✓
2. Community Meeting	February 25, 2015	✓
3. Community Meeting	March 2, 2015	✓
4. Community Meeting	March 3, 2015	✓
5. Public Meeting	March 31, 2015	
6. Public Meeting	September (TBD)	

- purpose of the meetings
  - present project in detail – to large group
  - present video scenarios related to property access – at small table discussions
  - listen to and tracked individual concerns
  - explain how to stay in contact with project team and how to receive updates
  - overall all four community meetings were very well received; there were naturally a lot of questions asked but nothing we weren't prepared to answer
  - we received a lot of positive feedback that the meetings were very informative and people were also appreciative that the meetings were designed in a way that allowed for a lot of in depth discussion at the tables
- at the tables:
  - there was a table facilitator and a subject matter expert
  - participants located their house/business on a map
  - facilitators presented a series of property access video scenarios and responded to questions; the 5 animated video scenarios were customized to the actual area, with a number of stages guiding people through the construction process and property access scenarios
  - resident/business forms were filled out by people with special access considerations (medical appointments, mobility issues, special events) and we will follow up with everyone who left a form and will try to accommodate all special access considerations
- Public Meeting – March 31, 2015 at Canyon Heights Church and co-sponsored with Edgemont / Upper Capilano Community Association; our outreach has included:

- 4000 invitations - March 18, 2015
- email via MV database, EUCCA & CMAC – March 18, 2015
- North Shore News - March 22 & 25, 2015
- MV & DNV web site – March 18, 2015
- MV & DNV Twitter – March 18 & 25, 2015
- invitations delivered by Canada Post to both the primary and secondary audience areas
- fact sheet
  - 2500 distributed – March 23, 2015; delivered by Canada Post – the area where the fact sheet were already delivered are not receiving a second copy
  - fact sheets were also distributed to:
    - Local schools and PACs
    - Edgemont Village businesses via E.V. Business Association
    - Grouse Mountain Resorts
    - Capilano Suspension Bridge
    - Grosvenor public meeting
    - DNV Information Counter
    - CNV Information Counter
    - Edgemont and Upper Capilano Community Association (EUCCA) via CMAC
  - once the traffic management plan is finalized, we are planning on sending a second fact sheet and will include information on the detours and some of the suggestions made with respect to safety and local recommended alternative routes
- our Webpage is now up and this has all the information that we have been presenting at the community meetings and soon plan to add a short overview video that is meant to give a high level overview of the project and that we can use as an additional means of getting the information out about the project

#### *Discussion*

*The community meetings that I attended were very well done and well accepted. The table discussions were extremely useful to have the conversational approach. Did you learn anything that you were not anticipating?*

[MV] We were able to answer the majority of questions. The earlier stakeholder meetings helped to identify most of the issues so we were well prepared. Some of the issues that we couldn't immediately address were very specific to individuals and we will be followed up on an individual basis.

*You should also send information to the Block Watch groups – they all have distribution lists.*

*You should also send fact sheets to the Delbrook Community Centre.*

[MV] We are sending these to all the local community centres. If there are other areas that we should send these to, let us know.

*There was a meeting at DNV with representatives from the business, community associations and Safe Routes regarding crosswalk changes at Belmont on Highland. One of the issues that came up was the need for actuated signaling and a suggestion that they would be installed ahead of the traffic diversions*

*for this project. Procurement for that type of equipment might take some time. Have you received any information from that meeting?*

[MV] We have had an initial discussion with DNV on this and are looking at ways of getting this done as soon as possible.

*There was also a discussion of an additional crosswalk near Cliffridge which would have an impact on traffic diversion.*

[MV] We are aware of this. In our discussions with DNV about this, it appears that there is not a desire to do this immediately. This is a pre-existing condition that we may or may not aggravate. We will have a flag person there and monitor this for the first few weeks and then will decide what needs to happen.

*What will you put in your contract language with respect to the types of vehicles that will be permitted on the project such as was put into the contract for the filtration plant? This included age of trucks, fuel quality, etc.*

[MV] We have specifications on vehicles such as emission controls and other restrictions that addresses this concern. These are standard Metro Vancouver specifications.

*Is construction traffic being restricted to Capilano Road as has been discussed?*

[MV] Yes. That is our intent. There may be times where a truck has gone past the construction zone and when it turns around that the excavator is in the way so the contractor will have to deal with some conflicts. Our logic is that if we allowed the trucks to travel on Montroyal, this will add to problems.

*What happens if there isn't compliance by truck drivers with regards to designated construction routes?*

[MV] This is an issue with our contract. The truckers are typically not employed by the main contractor and they change frequently. We do have contractor language that allows us to manage the sub-contractor through the main contractor so if this does occur and we will take action. For our short list of qualified contractors, one of the criteria is the successful management of subcontractors in the past.

*When will the community hear about the Coast Mountain bus route diversions, particularly those going through Edgemont Village, particularly #232, #236 and #247?*

[MV] Coast Mountain has told us that they typically communicate that 6 months prior to any changes. We are in the process of finalizing an agreement with them.

*What are you predicting will be the increase in traffic in Edgemont Village? One of the issues is the 45<sup>0</sup> parking which is difficult enough at this time to get out of and will be worse if there is more traffic. My concern is that if there is a backup on Ridgewood, people will opt to go through the Village.*

[MMM Group] We don't think the Village will experience any change in traffic volumes except for the transit busses. Signage will be directing traffic to use Ridgewood. We know that this is not an exact science but we will be monitoring this.

*Edgemont Village merchants also don't want to be sidetracked. At one of the meetings, there was concern expressed about the signage around diversion to ensure that there are no implications that the Village is closed. This is similar to the concern from Capilano Suspension Bridge.*

[MMM Group] We realize that the signage is important and we will be looking at finding that balance to get the traffic we want diverted while not causing issues for businesses in this way.

*Will CMAC have the opportunity to see a simplified version of the traffic plan?*

[MV] We have been sharing this via our presentations to CMAC which you have. If you have specific questions, we will respond to these.

[MV] Some of the specific information such as where flaggers will be around the schools and other details will be included in the next Fact Sheet.

*There will be considerable interest in intersections where traffic signals will be installed. These are intersections where there is a high level of left-hand turn volumes. Some of these intersections do not have much room.*

[MMM Group] We have conducted intersection reviews given the future traffic as well as the turning movements of larger trucks through the detour route.

*In the event that there is a serious accident, how will you deal with this going forward in terms of adjusting your traffic management approach?*

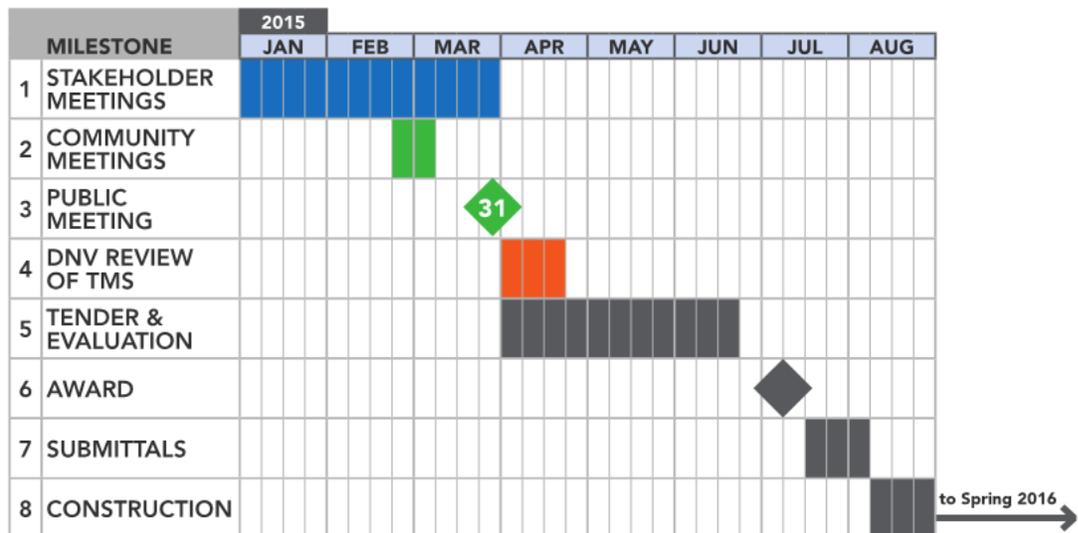
[MV] We have asked the RCMP to have a higher presence in the area once we move south of Montroyal for at least the first few weeks. If there was a serious accident, we would look to them to decide what action should be taken and will do whatever they suggest; in any event, we would be taking very swift action. With regard to safety, we feel that they are the appropriate people to provide guidance to us.

*Your meeting with the PACs will be very important.*

[MV] We have met with all of their chairpeople so they know what the issues are and we have heard them.

**b. Next Steps**

- the next steps for the project are shown in the following chart



- a critical time is the DNV review period which is taking place after our tender documents are issued at the beginning of April and will close at the beginning of May; this will provide us with the opportunity of 3 weeks to send any addendums out to the contractors but we do want to have the initial document as close to the final as possible; any big changes that might be needed have to be done before the tender documents are sent out; during the contract, we can make changes but these tend to be costly after the contract is awarded
- with the value of this contract, we will have to present this to our Board prior to awarding a contract
- construction will start in early August

*Discussion*

*How far north of Montroyal will you be starting construction?*

[MV] We will be starting at the south end of the parking lot at the dam.

*What will your communication process be if there is a delay in your schedule? We are planning to start construction as soon as your job is done so this could really impact us.*

[MV] The communication with Grosvenor has been through DNV and we would expect that will continue. Our communication with the community will continue to be with the same channels we are using now.

**NEXT MEETING**

The next CMAC meeting will be Wednesday, April 29<sup>th</sup>, 2015 from 5:00-7:00 at the DNV Hall, Room B.