



## The Corporation of the Township of Huron-Kinloss

### **Bruce Beach Road Municipal Drain Information Meeting,**

Ripley Huron Community Centre

November 30, 2019

10:00 am

#### **1. CALL TO ORDER**

Sid Vander Veen, Chair called the meeting to order for the Information Meeting for the Bruce Beach Road Municipal Drain Project on behalf of the Township of Huron-Kinloss at 10:00am on November 30, 2019 at the Ripley Huron Community Centre.

#### **2. INTRODUCTIONS**

The Chair introduced staff from Dietrich Engineering: Steve Brickman, Greg Nancekivell and Shannon Tweedle and staff from the Township of Huron-Kinloss Grant Collins, Drainage Superintendent, John Yungblut, Director Public Work, Emily Dance, Clerk and Kelly Lush, Deputy Clerk

In attendance from Council was Deputy-Mayor Murray, Councillor Hanna, Councillor Abbott, Councillor McGugan and Councillor Elliott.

Approximately 50 residents were present.

#### **3. INFORMATION**

The Chair explained that Dietrich Engineering Limited has completed design work on the Bruce Beach municipal drain and will be presenting their findings at the meeting. This review will cover: Type and design of drainage system, Estimated Costs, Proposed Assessments.

He went over general housekeeping including requesting everyone sign in, refraining from cell phone use and explained that no recording devices are permitted with the exception of the recording secretary which will be audio recording the presentation portion of the meeting only. Chair Vander Venn explained the question and answer period and requested that only one speaker at a time, selected by the Chair, all questions are to be kept brief and related to the project area only. Speakers are to identify themselves by name and property prior to posing a question, or comment. This will be included in the meeting notes which will be made public. A projector screen will be dedicated to displaying the question asked, and the answer. The second screen will be dedicated to images such as conceptual plans, aerial photography, and other photos.

#### **4. Bruce Beach Drain Project- Dietrich Engineering Presentation**



## The Corporation of the Township of Huron-Kinloss

Steve Brickman, Dietrich Engineering made a presentation with the type and design of drainage system, the estimated Costs and proposed assessments

### [Presentation](#)

#### **5. Question & Answer**

Questions and comments from the residents from the Have your Say HK site were covered in the presentation.

Questions from the audience. Attached to the Meeting Notes is the list of questions and answers from the meeting.

Written Questions from the audience were received and included in the list.  
(attached)

#### **6. Summations & Next Steps**

The Engineer explained that they will draft a final report to Council. All properties within the watershed will be given a copy and notified of the date the report will be considered.

Council will then accept the report or send back to the Engineer for changes. Once approved the next step is the Court of Revision which will cover the assessments costs. Once all the appeal periods are complete the project can go to tender.

#### **7. Adjournment**

The meeting adjourned at 12:35 p.m.

# Address: 322 Highland Drive – Brian MacEachern

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- Question
- Brian has been a permanent resident for 5 years, 65 years as tenant. There is flooding during the spring; however the water will drain away within hours once the frost is out of the ground. Why is there no road ditch along west side of Bruce Beach Road?
- Answer
- John: The properties on the west side of the road are lower than the road, so creating a ditch would create a steep side slope. A ditch on the west side of the road is not practical. The ditch along the east side was excavated as deep as possible to allow for safe side slope.

## Address: 138 Bruce Beach Road – David Larson

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- Question
- Mark on the table of flood times: under which rain event is the road unsafe to drive? Under what conditions can a firetruck not reach this cottage?
- Answer
- Steve: If the depth of water is greater than a foot then it is not safe for emergency vehicles. John agrees with Steve (1ft).

# Address: 88 Martyn Lane – John Beveridge

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- Question
- How did you decide on the cost division of 70/30? Who determines the assessments? Which option does Dietrich Engineering Ltd. benefit most from?
- Answer
- Steve: Any increased costs due to presence of a road will be assessed to the road authority. The assessments are split between benefit and outlet; and the road benefits the most. Final assessments on a road or land combines outlet liability, benefit assessment, and special assessment.
- Steve: Dietrich Engineering Ltd. decides assessments on lands and roads based on the cost estimate for the project.
- Sid: Engineers are obligated under the Drainage Act to assess costs. They are guided by the Drainage Act and must be able to defend the assessments to the Court of Revision and/or Tribunal.
- Steve & Greg: The final recommendation will be in the form of a final report submitted to council. Council will decide whether to move forward with the report. Fees are dependent on work completed on the project not the final option for the drain.
- Sid: When the report is finalized, landowners can appeal to the Court of Revision (COR) based on assessments and to the Tribunal (design aspects and COR decisions). Landowners can also appeal to the Referee to, if the report does not comply with the Drainage Act

# Address: 123 Bruce Beach Road – Joan McLaughlin

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- Question
- The “Guiding Principles” were circulated among 61 people for input and are listed on her presentation. Residents want to remove 98 Bruce Beach Road outlet. It is always plugged on the beach side. Who in Canada has an infiltration gallery installed?
- Answer
- Steve: The most recent and common comment is that a low tech and low cost solution is preferred. A cutoff design (redirect water to a location where it doesn't currently flow to) is not a low tech or low cost solution. Municipal Drains are assessed to all those who benefit and/or use the system.
- Steve: There are many places in Canada which have infiltration galleries installed in applications similar to Bruce Beach Road. They are not new. Infiltration galleries are common in Storm Water management.
- Grant: The Canadian Tire parking lot in Kincardine has an infiltration gallery which was installed in the fall 2019.

## Address: 752 Lake Range Drive – Steve Jewett

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- Question
- What is the blue line through their property? Will there be construction along this line?
- Answer
- Steve: There will not be any construction along this line. This is the watershed divide/boundary through the property; water flows away from this line on either side, it is the highpoint through his property.

# Address: 372 Highland Drive – Brian MacEachern

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- Question
- From the last meeting, the low end of the total costs for roads and agricultural lands combined was 64% and the high end was 93%. The pie graph in the slideshow indicates that the Township is responsible for 71%. The pie graph in the slideshow is incorrect. Do the assessment proportions make sense?
- Answer
- Steve: The numbers shown on the plan are a range. All the numbers are estimated, not final. The total estimated assessment to the roads is estimated to be about \$776,000. DEL has reviewed the numbers previously presented, and the pie graph is correct.



## Address: 714 & 716 Lake Range Drive – Kristy Botden

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- Question
- Is there an estimated cost comparison for the maintenance of French drain, the Storm Water Management Facility (SWMF), and the infiltration gallery. How is future maintenance assessed out?
- Answer
- Steve: There will be a set of maintenance schedules included in report (one for the SWMF and one for the infiltration gallery). Based on information from the supplier of the chamber system, the infiltration gallery installed in this type of setting would require maintenance approximately every 7 to 10 years. Inspections will be required on a regular basis.
- Sid: Under the Drainage Act, maintenance costs are assessed out using the then current by-law to lands and roads upstream of where the work is completed.

## Address: 93-2 & 94-2 Bruce Beach Road – David Moore

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- Question
- They have owned these properties for 15 years and visit them regularly; the road has been breached a couple of times during spring melt. Will frozen ground pose a problem to the proper functioning of an infiltration gallery or a French drain? The culvert on Bruce Beach Road was replaced with a 900mm pipe; are there plans to increase the culvert size?
- Answer
- Steve: The infiltration system will function as long as there is contact with the sand. Water will still need to enter the system via the catch basins. Water does run during cold conditions, although it will be slower than under summer conditions.
- Steve: Replacing the Bruce Beach Road culvert with a larger diameter pipe was not considered. The current design reduces flows through the pipe by 90% which increases the current design standard.

# Address: 123 Bruce Beach Road – Joan McLaughlin

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- Question
- Why would council allow drainage to continue through the ravine?
- Why isn't the French drain concept extended?
- Answer
- Steve: The Storm Water Management Facility will reduce the flow rates (& shear stress) through the ravine.
- Greg: The ravine is unstable as is. By reducing flows through the ravine it will reduce the rate of erosion.
- Steve: The French drain is effective on those four lots for the study area. There is not enough road allowance to extend the French drain any further.

## Address: 136 Bruce Beach Road – Jennifer Brezina

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- Question
- Why is 136 included in the teal block assessment?
- Answer
- Steve: The property will benefit from better access to property using the right-of-way with the improvements from the infiltration gallery.
- Jennifer: The driveway is not on the right of way. It runs through the Cameron Grove property adjacent to the south property line of the right-of-way.
- Steve: If this is the case, the property should be assessed into the green block.

# Address: 752 Lake Range Drive – Steve Jewett

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- Question
- He believes that the infiltration gallery makes sense and will reduce sediment into lake.
- Show on the plan the location of the options and proposed footprint (incl. SWMF).
- Answer
- Steve: The black symbol on the plan is the outlet structure for the SWMF. The area will be regraded to allow for farming while also retaining water during significant rain events.
- Steve: The infiltration system will extend from Highland Drive to the right-of-way to the beach. The French drain will extend from Highland Drive south for about 4 lots on the east side of the road. Both options will be on the road right-of-way.

Address: 120 Bruce Beach Road – Jim Clark

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- Question
- He is a permanent resident and the road is not an inconvenience.
- He is disappointed that council is not here.
- Answer
- There were five council members present.

## Address: 322 Highland Drive – Brian McEachern

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- Question
- Why is 150 Bruce Beach Road assessed into the project and 151 Bruce Beach Road is not? They are next-door neighbours; approximately 60ft apart.
- Answer
- Steve: 151 Bruce Beach Road is not in the watershed. Their water does not contribute to this project. They do not use that portion of the road to access their property, so they derive no benefit from the improvements.
- Steve: The pink area to the right is included because they use Highland Drive (as does the blue area) to access their properties. People using the road benefit from the improvements.

## Address: Bruce Beach Road – Al rep. the Cameron Grove Cottagers Association

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- Question
- Can the concept of the French drain be extended/expanded? It could reduce costs and retain more water. Find other areas to implement the French Drain.
- How were the notices delivered? Can notices be mailed in the future? Please find a time when more people can attend (council etc.).
- Answer
- Steve: The proposed French Drain is effective without expanding it further down the street. The French Drain cannot be extended in this location because there is not enough space.
- Steve: Expanding the design would move towards the chamber system and away from the French Drain.
- Emily: The circulation list included all landowners and roads within the watershed. The notices were mailed out and it was also posted on the website. Landowners were told to contact Emily to confirm the address and owner for future mailings.



## Address: 98 Bruce Beach Road – Greg Gancevich

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- Question
- Why is the drainage of upstream lands permitted through private property? The pipe and infrastructure on his property is private.
- Answer
- Steve: Under the Drainage Act, allowances for infrastructure and right of way/access will be provided in the final report. This will also allow for maintenance in the future.
- Sid: Incorporating it under the drainage act will make it a municipally managed drain.

## Address: 88 Martyn Lane – John Beveridge

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- Question
- What is the average rainfall over the last 50 years? Can the average be modeled and shown in an animation.
- Answer
- Greg: We will consider this.

# Address: 110 Bruce Beach Road – Terrence Jeffries

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- Question
- There seems to be two projects – 98 Bruce Beach Road outlet issue and Highland Road infiltration gallery.
- Is there an opportunity to create separate projects?
- Answer
- Steve: There are two different problems with two separate areas that require two different solutions. We can prepare a report that combines the projects, but we can also prepare two separate reports. Two separate reports are not as efficient as combining them. We will consider the benefits of separating the two problems into two reports.
- John: The decision to pave the road has not been made. He would be fine with leaving the road gravel and lowering the proposed manhole lids so that they aren't damaged during grading and snow clearing. Paving is not driving this project.

Address: 144 Bruce Beach Road – John West

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- Question
- Will basements be affected by the higher water table produced by the infiltration gallery?
- Answer
- Steve: The infiltration gallery won't affect the groundwater levels to the point of impacting the basements. The water in this area is already infiltrating but not as quickly as it will be with the chamber system. There is a 'mounding' effect in the groundwater table close to the road, but it decreases significantly as you move away from the road.

## Address: 736 Lake Range Drive – Joe Casciano

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- Question
- How many public access structures have we looked at using? Will there be more French drains?
- Answer
- Steve: There will be five manholes on the east side of the road, and they will be evenly spaced along approximately 300m from Highland Drive to the right-of-way to the beach.
- Steve: When considering the storage volume in each manhole, sumps will provide some storage of water in addition to the chambers.

## Address: 135 Bruce Beach Road – John Lalonde

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- Question
- How does a typical spring melt fit with the proposal?
- Answer
- Steve: It is hard to quantify a typical spring melt. The nature of the spring melt needs to be considered; is there a snowpack, how large is the snowpack, what are the snowpack parameters, is there a rainfall event during the melt, how large is the rainfall event?
- Steve: The snowpack can hold liquid water as well (slush).
- Steve: It is had to equate the spring melt to a rain event.

Address: 135 Bruce Beach Road – John Lalonde

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- Question
- What is the recourse under common law with upstream properties out letting on downstream properties? Does the Drainage Act preclude recourse to civil rights?
- Answer
- Sid: The Drainage Act does not preclude recourse to civil courts.

## Address: 135 Bruce Beach Road – John Lalonde

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- Question
- Why is there no assessment to the provincial or federal governments?
- Answer
- Steve: The assessments are levied on properties within the watershed. There are no assessments to federal or provincial lands unless they are directly in watershed.
- John: The lakebed is provincially owned.
- Steve & Greg: The proposed structures or systems are assessed to the lands and roads using or benefiting from them.
- John: Won't these structures improve the water quality in the lake?
- Sid: The Drainage Act addresses quantity not quality.



## Address: 138 Bruce Beach Road – David Larsen

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- Question
- At Lake Range Road, the flow for watershed area #3 was shown to accumulate early in the event adjacent to the Lake Range Road on the west side. How much water is in the blue area?
- Answer
- Steve: The SWMF (the blue area) is on the east side of Lake Range Road and the storage capacity is approximately 9100m<sup>3</sup>.

Address: 138 Bruce Beach Road – David Larsen

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- Question
- If the solution in catchment #3 drops in cost, does it affect the other catchments (reduction to assessments)?
- Answer
- Steve & Grant: Each catchment has a separate assessment. A reduction in one does not necessarily mean a reduction in others. The cost for each catchment is dependent on the cost to construct the proposed infrastructure including engineering and other associated costs.

## Address: 138 Bruce Beach Road – David Larsen

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- Question
- The flood time is noted in days. What row in the chart are emergency vehicles unable to travel the road?
- Answer
- Steve: According to the chart, the 2-year event would be unsafe under existing conditions (over 1-foot depth) for emergency vehicles to travel the road.
- Steve: According to the model, both the two-chamber infiltration gallery and the French drain would make the road safe to travel during all rain events (2 to 100 year).
- Sid: Once a petition for a drain is filed with the Township, it is the Engineer's responsibility to produce a solution. Landowners can appeal to the Tribunal that the project doesn't make sense or isn't required.
- The design will reduce the number of days that the road is unsafe to travel.