

**AGENDA FOR THE TRANSPORTATION ADVISORY COMMITTEE MEETING  
TO BE HELD IN THE CITY HALL BOARD ROOM, 455 WALLACE STREET  
ON THURSDAY, 2011-JAN-27, COMMENCING AT 3:00 P.M.**

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1. CALL THE MEETING TO ORDER:
2. INTRODUCTION OF LATE ITEMS:
3. ADOPTION OF AGENDA:
4. ADOPTION OF MINUTES:
5. DELEGATIONS:
6. STAFF REPORTS:
  - a) Parking Management Study Update – report to be distributed at meeting
  - b) VIU Parking Update – verbal update
  - c) Nissan Leaf Electric Car Purchase – presentation
7. CORRESPONDENCE:
  - a) Moyse Crescent - NRGH Vehicles Parking on Moyse Crescent and Surrounding Streets
  - b) Bicycling Assessment
8. OLD BUSINESS:
9. ADJOURNMENT:

## **Moyse Crescent**

**From:** Steve Russel [<mailto:srussel@HeroldEngineering.com>]

**Sent:** Tuesday, November 02, 2010 11:31 AM

**To:** Tim Davidson

**Subject:** Further to: resident only parking - Moyse Cres

Mr. Davidson,

Could you please forward this email onto the Transportation Committee.

To the Transportation Committee:

Please see my previous email correspondence below. I am writing to advise you that there is still a problem with NRGH vehicles parking on Moyse Crescent and surrounding streets. Is it possible to get Moyse designated resident only parking?

Thanks for your time, if someone from the committee could please contact me to discuss this problem and proposed solutions that would be greatly appreciated.

Sincerely,

## **Steven Russel**

[srussel@heroldengineering.com](mailto:srussel@heroldengineering.com)

Structural Technician - Building Division

**Herold Engineering Limited**

3701 Shenton Road, Nanaimo, BC, V9T 2H1

T: (250) 751-8558 [ext 248] F: (250) 751-8559

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**From:** Tim Davidson [<mailto:Tim.Davidson@nanaimo.ca>]

**Sent:** June 2, 2010 08:52

**To:** Steve Russel

**Subject:** RE: resident only parking - Moyse Cres

Hello Mr. Russel,

I have forwarded your email to the Transportation Committee for review.

I can tell you that at this time we are not implementing further restricted zones with resident exemptions until such time that there are alternatives for persons utilizing on-street parking. I understand that NRGH is currently improving their onsite parking situation and we are in discussion with them on some additional strategies that may assist residents.

Should you experience any bylaw infractions in your area I would encourage you to report them to this office and we can deal with the matter right away.

We will also be considering other strategies in your area that were recommended by Opus International Consultants.

I will keep you informed of any changes

Thank-you

Tim Davidson  
City of Nanaimo  
Supervisor of Bylaw Services  
p. 250-755-4422  
F. 250-755-4432  
c. 250-713-3097

**From:** Steve Russel [<mailto:srussel@HeroldEngineering.com>]  
**Sent:** Monday, May 31, 2010 4:05 PM  
**To:** Tim Davidson  
**Subject:** resident only parking - Moyse Cres

I am writing to enquire about changing the parking rules for along Moyse Crescent to resident only parking Mon-Fri. 0900-1700. I would like the rules to be changes because as of recent employees from the hospital have been parking on the street in front of my home leaving no place for me to park. This is a problem for my wife as she home schools our children and sometimes is in and out during the day, if she comes home and someone has blocked our only parking area she may have to park as far as a block away and walk to our house. With groceries and two young children this can be problematic.

I have noticed that the adjacent street David Crescent is designated resident only parking so I believe my request to change the parking designation for Moyse Crescent is reasonable.

Home address: 1060 Moyse Crescent, Nanaimo, BC  
Home telephone: 250.755.1125

I can be contacted during the day at my place of business as noted below.

Thank you very much.

**Steven Russel**  
[srussel@heroldengineering.com](mailto:srussel@heroldengineering.com)  
**Structural Technician - Building Division**

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# Step 2b: Bicycling Assessment

## DESIRABLE ATTRIBUTES FOR BICYCLING

The most suitable bikeways are well-designed, clearly marked, well-maintained, and keep bicyclists safe from vehicles. Preferred bikeway surfaces are free of potholes, cracking, and other rough spots. In addition, the bikeway is safer when there is no turning or merging traffic crossing in front of the bicyclist. Many people presume that “bike lanes” are the best solution for all circumstances. However, on many roads without curb and gutter, wider paved shoulders would allow bicyclists to more safely share the road with motor vehicles. Many citizens presume that striped bike lanes are the solution for bicyclists.

However, some engineers argue that striped bike lanes can also provide a false sense of security to bicyclists who then pay less attention to vehicular traffic. Some design professionals suggest that striped bike lanes are appropriate only on streets with reduced traffic access from sidestreets and driveways. There is not one solution to be applied to your community. Each road must be considered independently to determine the best design for bicycling facilities. This assessment method will help you gather important information to help plan bicycling improvements for your roads.

### General Design Principles For Bike Lanes

1. Well marked
2. Safe from vehicles
3. Clear of debris
4. Free of potholes and cracking
5. Safe turn lanes

Adapted from City of Portland Office of Transportation, *Bicycling Master Plan*. 1996.

## ROAD ASSESSMENT METHOD

### 1. Provide the assessors with their list of road segments and maps.

For each assessor on the team, make a photocopy of their mapped road segments. Highlight on each data collector's field map the specific area to be assessed by that person. Provide them with their list of road segments, highlighted maps, and photocopies of the Bicycling Suitability Assessment Form (Appendix 8).

### 2. Become familiar with the Bicycle Suitability Assessment Form before going into the field.

Encourage each member of the data collection team to carefully examine the Bicycle Suitability Assessment Form (Appendix 8) and become familiar with the information they will be collecting. Before heading out to assess the roads, each person or team should gather the supplies needed for the assessment. Be sure assessors take a copy of the guidebook with you in case there are questions about the procedure.

### 3. Travel the road segment and observe the characteristics.

Only assess segments in daylight when you will be clearly visible to motor vehicles. We encourage you to travel the segment by bicycle because you may not be able to “feel” the surface of the road or to stop as often as you need to record information. You may need

to travel the road more than once to record all the information. Please do not rely on memory, but take the time to travel the road as many times as needed.

Study both sides of the road segment to determine an “overall” score for each characteristic. If it is difficult to find an average impression, be more conservative in your scoring. For example, if the curb only exists for less than half the road, mark it “No.” Do not record temporary conditions from construction. Try to capture the permanent characteristics of the road after construction is completed. For each characteristic, record the score in the space provided.

#### 4. Record information on the Bicycling Suitability Assessment Form.

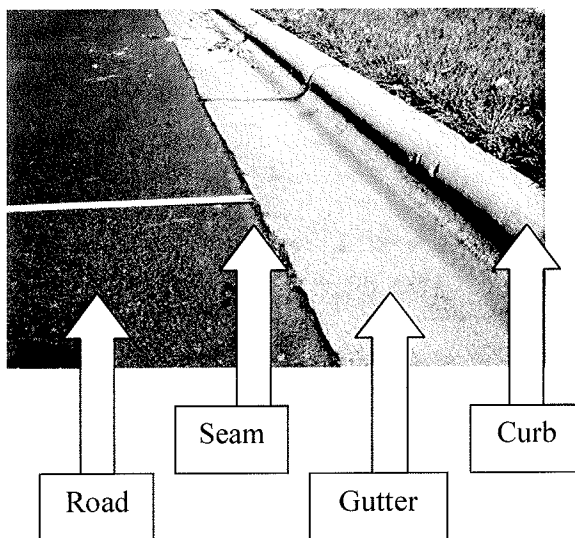
For each road segment, fill in the date, your name, the segment ID number and the boundary roads on the Bicycle Suitability Assessment Form (Appendix 8). Record any comments or notes that seem immediately useful for the assessment process, such as “no bike lane, but gravel path parallel to the roadway”.

#### 5. Record General Road Factors.

Record the Annual Average Daily Traffic (A1) provided by the planning department or regional NC DOT (see Appendix 4). While assessing the road segment, record the total number of through lanes (A2). Through lanes do not include turn-only lanes, but do include combined through/turn lanes. Record the posted speed limit (A3). Do not record any school zone speed limits. The next step is to measure the outside lane width (A4) and convert the measurement to decimal format for recording on the sheet (e.g., 4’6” converts to 4.5’ and 4’9” converts to 4.75’). See the special instructions and photograph below. Note that any dramatic change in these general road factors might necessitate dividing the road segment into subsegments (and numbering them with an alpha suffix, e.g., 101a and 101b).

##### What Characteristics Are Being Assessed?

1. Annual Average Daily Traffic (A1)
2. Number of through lanes (A2)
3. Speed (A3)
4. Outside lane width (A4)
5. Bike lane width (A5)
6. Pavement factors (B)
7. Location factors (C1-C18)

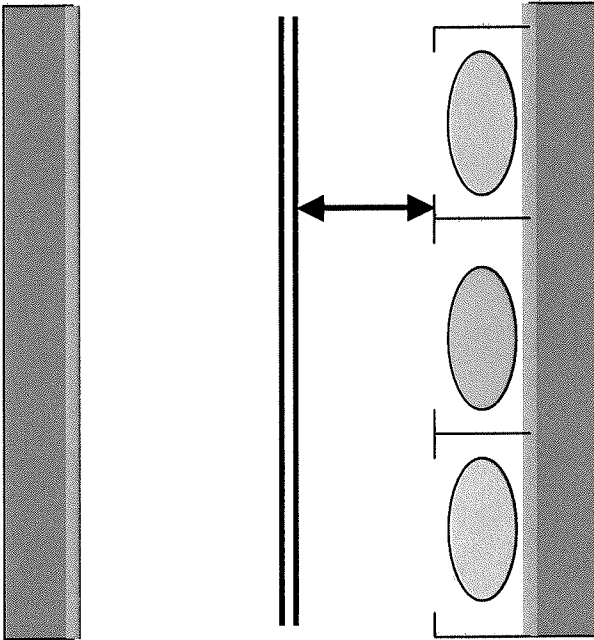


##### Measuring the outside lane (A4):

Measure from the edge of the driver’s side painted stripe of the outer-most motor vehicle lane to the outer edge of that travel lane. Be sure to convert the measurement to decimal form for recording.

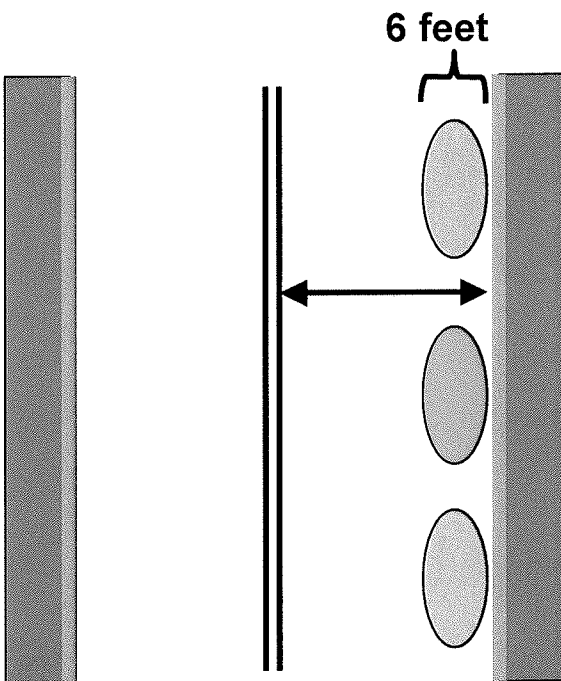
- 1) For roads with a striped shoulder, measure up to the stripe marking the shoulder.
- 2) For roads with a curb and gutter, measure to the gutter seam (see photo).
- 3) For roads with curb only (no gutter), measure right up to the curb.
- 4) If there are no painted lanes on the two-way road, measure the entire road surface and divide by two.

When measuring outside lanes that include vehicle parking, follow the instructions illustrated below.



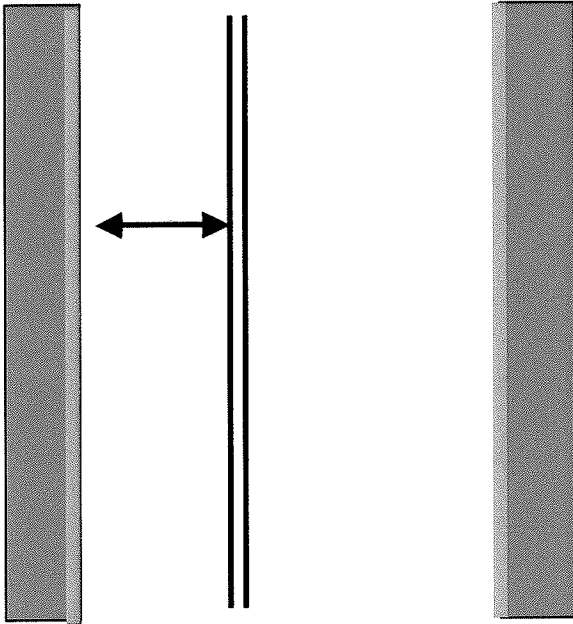
**Special measurement instructions for roads with marked (painted) parking spaces:**

Measure from the edge of the driver's side painted stripe of the outer-most motor vehicle lane up to the beginning of the parking space. The logic is that a bicyclist would not be riding in the marked parking spaces because of parked cars or even the visual markings. The bicyclist would share the outside lane with motor vehicles.



**Special measurement instructions for roads with unmarked (unpainted) parking:**

If roadside parking is permitted and used (may not necessarily be signed), and there are no painted parking spaces, measure the width of the outer-most lane according to the general instructions and subtract six feet (6') from the width. The logic is that when cars are parked there, a bicyclist must share the remaining width with motor vehicles.



**Special measurement instructions for roads with unequal outside lanes:**

If the outside lanes on each side of the road are significantly different widths (perhaps parked vehicles are permitted in one of the directions), measure the outside lane that is thinnest. For example, a road may have a very wide outside lane traveling in one direction and a thin lane in the other direction. The thinner outside lane is the lane to measure for the road segment. The logic is that a bicyclist would be able to travel in both directions - therefore, measure the thinner lane the bicyclist must share with motor vehicles. In the Comments/Suggestions for Improvement box at the top of the form write, "Unequal Outside Lanes."

**BikeLane.** A bicycle lane is a clearly marked/striped lane for bicycle travel that is constructed as part of the paved roadway. It is not a separate path, therefore motor vehicles could illegally drive or park on the marked bikelane. Generally the bicycle lane is clearly striped on the road and may include signs designating it for "Bicycle Use Only." The photograph below is of a marked bicycle lane.

**Paved Shoulder.** A paved shoulder is frequently observed on roads that do not have curb and gutter. The paved shoulder may be used by cyclists to provide more separation from motor vehicle traffic. However, it is NOT a bicycle lane unless marked and signed as such.



**Measuring a bicycle lane or paved shoulder (A5):**

To measure the bike lane or paved shoulder, you must measure from the edge of the inside painted line to the outside painted line. If there is no outside painted line, measure to the edge of the paved road surface. Convert the measurement to decimal format for the assessment formula.

The photograph to the left illustrates a curbed bicycle lane. Measurement is from the painted line to the edge of the curb.

## 6. Identify Pavement Factors (B).

Record the condition of the road according to the FHWA Highway Performance Monitoring System (HPMS) Pavement Condition Factors (US DOT, 1987) listed below. Note that these descriptions are for motor vehicle travel, so you may need to think as a car driver when assessing pavement condition. Decide which one describes the overall condition of the pavement.

**Very good:** only new or nearly new pavements are likely to be smooth enough and free of cracks and patches to qualify for this category.

**Good:** pavement, although not as smooth as those described above, gives a first class ride and exhibits signs of surface deterioration.

**Fair:** riding qualities are noticeably inferior to those above, may be barely tolerable for high-speed traffic. Defects may include rutting, map cracking, and extensive patching.

**Poor:** pavements have deteriorated to such an extent that they affect the speed of free-flow traffic. Flexible pavement has distress over 50% or more of the surface. Rigid pavement distress includes join “spalling” (where sections of joined pavement are chipping and breaking apart at the join), patching, etc.

**Very poor:** pavements that are in an extremely deteriorated condition. Distress occurs over 75% or more of the surface.

Other pavement factors include the presence of a curb (B2), the presence of rough railroad crossings (B3), and the presence of storm drain grates (B4). A storm drain grate is in the road or gutter surface and frequently has a cover that allows the rainwater to flow through into the storm sewer below. The concern is that a bicyclist might ride across this surface and compromise their tire traction. A storm drain grate is not the vertical opening cut into the curb along the side of the street which allows water in the gutter to discharge from the street surface.

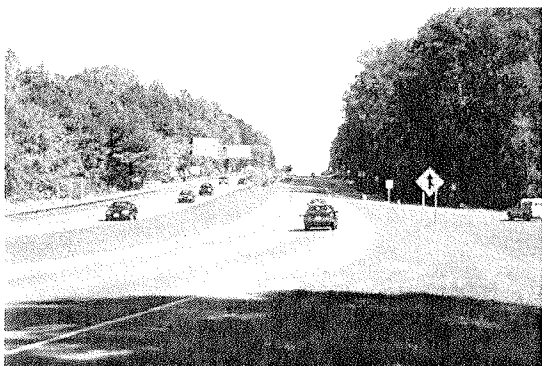
## 7. Record Location Factors (C).

Record the presence of the 18 location factors by circling “yes” or “no” as appropriate. At the end of measurement, you will total only the scores for every factor that is answered “yes.” Consider each location factor as independent characteristics. For example, a road segment could have both severe and moderate grades.

Some location factors require your opinion (for example: severe grade (C8), moderate grade (C9), frequent curves (C10), restricted sight distance (either horizontal or vertical) (C11), numerous residential or commercial driveways (C12), numerous signed/signaled stops (C13), and difficult intersection crossing (C14)). Use your best judgement as a bicyclist when recording these location factors.

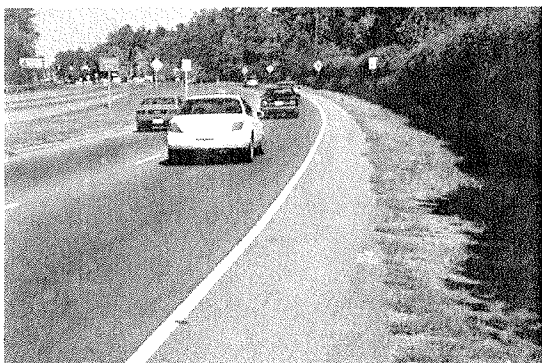


Below are descriptions and sample photographs of some of the location factors.



**Physical median (C5):**

A strip of land that physically separates the two directions of traffic. Note this is not a limited traffic island near a signalized intersection. Medians are generally used for significant distances of roadway.



**Paved shoulder (C6):**

The area from the outer most painted line to the end of the pavement or to the curb and gutter.

*NC DOT Division of Bicycle and Pedestrian Transportation suggests a minimum shoulder width of four feet (4') when designing for use by bicyclists. When vehicle speeds exceed 35 mph more than four feet is preferred.*

*(North Carolina Bicycle Facilities Planning and Design Guidelines, January 1994.)*



**Bike lane (C7):** A separate lane on the road that is for bicycle use only. It is identified for bicycle-use-only with painted road markings and/or posted signs.

**Industrial Land Use (C15):** Property alongside the road that is occupied by a manufacturing plant, factory, warehouse, or other large industrial facility that has a driveway or road accessed from the segment you are measuring. The safety risk is from the high volume of large trucks crossing in front of bicyclists to enter or exit the industrial property.

**Commercial Land Use (C16):** Property that is used for business, such as a grocery store, movie theatre, school, church, office building, fast food restaurant, or shopping center that has a parking lot or driveway accessed from the segment you are measuring. The safety risk is from the high volume of vehicles crossing in front of bicyclists to enter or exit the property.

**One Sidewalk Only (C17) and No Sidewalks (C18):** The presence of sidewalks can help reduce the speed of traffic on a road simply because there is a visual “cue” to the driver that other forms of transportation occur on that road, therefore caution must be used. Visual interest and complexity along the road, such as sidewalks, can help increase driver attention by alerting them to people moving along the road on foot or on bicycle. Therefore, these limited sidewalk assessments contribute to the bicycling score for the segment. Assessing the sidewalk presence is not meant to imply that bicyclists should use the sidewalk for riding bicycles. We strongly discourage bicyclists from riding on sidewalks since that creates an unsafe walking environment.

**8. Complete the bicycle suitability formula.**

Add up the various suitability subtotal scores. Complete the formula on the Bicycle Suitability Assessment Form (Appendix 8) by filling in the General Road Factors measures (A), the Pavement Factors total score (B), and the Location Factors total score (C). Use a calculator or a computer spreadsheet program (e.g., MS Excel) to calculate the bicycle suitability score and record in the box provided at the end of the formula.

**9. Color highlight the segments on the map.**

When the final scores are determined, color highlight each assessed road segment on a large map. Use the colors listed below. Attach to the map a photocopy of the suitability score color description. Note: *the “cooler” the color - the better the road for bicycling.*

**Bicycle Suitability Scores and Colors:**

**Very Good** (less than 3.00) – color **blue**.

A road that is bicycle friendly and usable by all levels of bicyclists. There are few improvements needed.

**Good** (3.00 - 3.99) – color **green**.

A road that can be used safely by most bicyclists. Minimal improvements may be needed.

**Fair** (4.00 - 4.99) – color **yellow**.

A road that has some hazards, but can be still be used by adults for bicycling. Not recommended for children. Specific improvements are needed.

**Poor** (5.00 - 6.99) – color **orange**.

This road has many hazards and would require adult bicyclists to be very careful. Not safe for children. Many improvements are needed.

**Very Poor** (higher than 6.99) – color **red**.

This road has many hazards, heavy traffic and bad road conditions. Not safe for any bicyclists. Improvements are greatly needed.

Adapted from: Eddy, N. (1996)

**GIS:** If you received GIS maps from your planning department, ask them to colorize the road segments by adding a new “field (column)” called Walking Suitability Score. To make this easier for them, your team can data enter the walking suitability scores into a Microsoft Excel spreadsheet that has just two columns: Road ID# and Walking Suitability Score. They can then merge this spreadsheet with their original data table and then colorize the road segments using their GIS program.

**No GIS:** If you have no computerized maps, simply use a large road map and color each road segment by hand using color highlighters or color pencils.

## **10. Proceed to "Using the Assessment Results to Make Change Happen."**