

# ATTACHMENT A

by Bridget Schwarz

The Applicant and Clark County Public Works are firm in their belief that the folks doing traffic counts do not need any engineering expertise - they only have to stay awake and push buttons.

Great!

Both are equally convinced that local traffic numbers are the most reliable predictors of traffic impacts.

Again, great!

They can use the Fairgrounds Neighborhood Association's (FGNA) traffic count numbers from last November that are part of the public record (Exhibit 57).

Clark County Public Works has trained FGNA (3 times) how to do a traffic count. In the case of the amphitheater, our tallies caused Clark County to add the most important traffic management requirements to the CUP. In the case of Costco, our tallies caused Clark County to demand local counts from 5 similar Costco locations and as a result their trip generation numbers almost doubled over the calculations made from the ITE manual.

In the case of Wal Mart, Clark County simply ignored FGNA's results. (For example, Public Works knew of the problems with the Mill Plain Wal Mart counts supplied by the Applicant last December, 2005 but did not agree to check into it until the second public hearing on 10/24/2006.)

- 1) The Applicant submitted a traffic count from DKS Associates at the Mill Plain Wal Mart store that indicates 998 PM peak hour trips at that location. That study is suspect, of course, because the layout map and the numbers reported indicate 5 driveways where there are only four.
- 2) According to the ITE manual 7th edition, a calculation using their method (trip generation factor of 3.87 times building size of 221,000 per 1,000 square ft) results in a traffic count of 855 at the Mill Plain Wal Mart store.
- 3) According to the ITE updated trip generation figures (Exhibit 136), a calculation using their method (trip generation factor of 5.5 times building size of 221,000 per 1,000 square ft) results in a traffic count of 1215 at the Mill Plain Wal Mart store.
- 4) On November 22, 2005 we had 9 FGNA people counting -and me managing - a traffic count at the Mill Plain Wal Mart. According to our traffic count the PM peak hour is from 4:30 - 5:30 and the trip generation number is 1,241.

**CONCLUSION:** The latest ITE trip generation numbers closely match the "ground truthing" traffic count numbers supplied by the FGNA traffic count. Neither the Mill Plain Wal Mart count by DKS or the ITE manual 7<sup>th</sup> edition provide a reliable basis from calculating the traffic impacts from this project. Deny this application due to a lack of credible traffic impact data or analysis.

- 1) For the Salmon Creek Commercial Center the Applicant calculates a passby trip reduction (going past the site anyway, only a turn into the driveway) of 28%. In Exhibit 179 they calculate the number to be 180 passby trips.
- 2) At the Salmon Creek Commercial Center we had 3 people counting traffic on November 23, 2006 (Exhibit 57) . Based on our traffic count on November 23, 2005, the PM peak hour (from 4:40 to 5:40) had a total of only 79 trips.

CONCLUSION: The Applicant deducts, as passby trips during the PM peak hour, more cars than are on the road in almost 3 hours. Again, this application lacks credible traffic impact data or analysis and must be denied.

## **A T T A C H M E N T B**

by Bruce Schafer

Although the Kittleson and Associates, Inc (KAI) memo states that the use of ITE Land Use Code (ITELUC) 815 is not appropriate since a Grocery Store is included in the opposed operation of the project that is currently proposed on the site. KAI's memo states that the ITELUC 813 should have been used. KAI go on to state that the pass-by trips for ITELUC 813 has a 28% pass-by trip reduction " ... that is recommended by ITE."

A review of Trip Generation Handbook, published by ITE DOES NOT list a pass-by reduction rate for ITELUC 813. However for ITELUC 815 a trip reduction rate is listed that is 17.2%. So how did KAI increase the amount of pass-by trips also 11% above ITE trip reduction rates for pass-by trips? Or was a pass-by rate used from one of the other land use proposals on this project in it's ever-changing proposed land use life?

Additionally the Washington Professional Engineer's stamp was not included on the November 28, 2006 memo submitted by KAI from one of it's east coast offices. Who knows maybe KAI will come in and stamp that memo since it has been brought to its attention that Washington Professional Engineer's opinion has been rendered with out a stamp, or was it a Washington Professional Engineer's opinion from Fort Lauderdale Florida?

## **A T T A C H M E N T C**

A copy of the Clean Water act case against Wal Mart (USA vs Walmart Stores, Inc.) was mailed with the hard copies of the Memo, Attachments A & B, and the stamped Rodgers Engineering report, below.

# Rodgers Engineering

16019 NE 145<sup>th</sup> Avenue  
Brush Prairie, WA 98606

December 21, 2006

Dan Kearns  
Clark County Hearing Examiner  
Clark County Planning Dept.  
P.O. Box 9810  
Vancouver, WA 98668

Re: Salmon Creek Commercial Center/WalMart  
Rebuttal to Exhibit 181

Dear Hearing Examiner Kearns:

Thank you for the opportunity to provide this rebuttal to Exhibit 181.

I previously responded to all three studies (the 1986 report, the 2003 report, and as well as the current report (Exhibit 2 plus Exhibit 64) because Applicant uses all three in their stormwater review of this project, instead of doing a new 2006 review of all elements of the project. That is one reason why I believe the 2006 Report has the fatal flaws that I referred to in my prior letter.

## **1. STORMWATER REPORT REALLY AN IMPROPER MIX OF THREE REPORTS.**

To summarize, the 2006 Report properly uses 2006 data to calculate the allowable output of the site's developed condition, but they improperly use the 1986 Rational Method to determine the capacity of the Water's Edge site (pre-developed condition). The 2006 Report also claims to use the 2003 Plan as the "basis for the new plan". HDJ report at 13. Please note the 2006 Report (Exhibit #2 + 64) does not refer to itself as the Stormwater Report, at Exhibit #2, Tab Stormwater Report, coverpage, it calls itself a "Stormwater Design Report". In addition, the 2006 report, at page 4, (Downstream Analysis), refers to another report as the "Drainage Report". "The drainage report for this development identifies that the storm system has been designed to accept 11 cfs of off site flow, based on the Rational Method design." *Id.* at 4.

This is why I critiqued all three stormwater plans, because I could not originally determine which plan was being used. It looks like the Applicants are trying to use a "cut and paste" combination of these three (3) different plans, instead of one (1) report under 2006 standards.

## **2. STORMWATER PLAN RELIES ON PRE-1992 STANDARDS (1986 PLANS) TO CALCULATE CURRENT WATER'S EDGE CAPACITY.**

! **HDJ** report, page 2, 2. says: "...Clark County Drainage system that was originally designed and sized to receive runoff discharge, specifically 25 cfs, from the area described"...

! **Rodgers** Reply: HDJ calculates the capacity of the Water's Edge site using the 1986 MacKay & Sposito pre-1992 Code "Rational Method", which violates Clark County Code, as they have previously admitted. Applicant has submitted no calculations consistent with the County 1992 Stormwater Code for the current capacity of the Water's Edge system. This Rational Method calculation was also used on pages 3, ("21 cfs capacity"), page 4 ("10 year MacKay & Sposito Chart of cfs), page 18 ("25 cfs"), and page 22 ("The record confirms the drainage system was designed to receive a much larger flow rate...").

## **3. CURRENT WATER'S EDGE SYSTEM HAS INADEQUATE CAPACITY.**

! **HDJ** Page 3 "The apparent observed condition relates to the lateral system(s) and does not substantiate that the main line has inadequate flow capacity".

! **Rodgers Reply:** The owner has indicated the main line where it is bubbling up is right before the outfall off-site. That is the main line. It appears it does not have proper flow capacity if it is overflowing (under pressure). This violates CCC 40.380.040C(4)(e).

In addition, the pipe may be under pressure where it empties into Salmon Creek. There are no current calculations that indicate the current capacity of the site to receive the water. This is not only because of the overflowing nature of the existing main pipe, but also no calculations have been of the status of the starting water surface elevation for the design storms from Salmon Creek's high water. This area has a bridge moved which may cause higher water levels at this pipe, causing pressure at the ends. Please note the Applicant has not done an outfall calculation on Salmon Creek flows and water elevations. The pipe flow capacity analysis should have started at where the pipe discharges into Salmon Creek.

! **HDJ Report** at Page 12 indicates a 10 foot diameter pipe would be full and flowing through a flow control device. If this is true, it is exceptionally likely that a 7.5 foot diameter pipe, in the same location, would be full and under a pressure flow.

#### **4. APPLICANT'S USE INAPPROPRIATE ASSUMPTIONS.**

! **HDJ Report**, Page 4 says: "Water's Edge storm system capacity check", full pipe capacity/velocity." This is again based on 1986 cfs calculations combined with Manning's equation, which assumes elevations in the pipe are parallel to the pipe's flow here water surface and assuming normal depth flow throughout the pipe system. The pipe slope varies from steep to flat and inlet control to outlet control at the bottom of the pipe system. So the application of Manning's equation is inappropriate and therefore the calculations may be incorrect.

! **HDJ Report**, Page 6, says: "The site is evaluated for both 'historic' (at a time prior to the development of the WECU site) and present or existing conditions in 2003." No basis for use of the 2003 date/data was provided.

#### **5. NO PROOF OF COUNTY OWNERSHIP OF WATER'S EDGE SYSTEM.**

! **HDJ Report**, Page 5 references to: "the County drainage system" has no proof in the record. It appears the County has not accepted ownership of the system, or performed any maintenance on the system. There is a physical difference to an easement to the land, and ownership of a drainage system. My references to the "County system" was just replying to their terminology.

! **HDJ Report**, Page 21 says: "the County is requiring" that all water be piped through the Water's Edge site. I see no proof of that or, that Clark County has claimed ownership of the Water's Edge drainage system. Page 3 of Exhibit 2 just says the County's 134<sup>th</sup> Street drainage system is in "poor condition". So is the Water's Edge system.

#### **6. ILLEGAL SUB-BASIN TRANSFERS.**

! **HDJ Report** at Page 9. We appreciate the clarification that all drainage now goes to Water's Edge. But, this is a basin transfer from the sub-basin that HDJ admits goes northeast to Rockwell Creek. See 3 of 3 of their existing conditions basin map (Exhibit #181), attached hereto as Exhibit "A". About 5.5 acres of the site naturally flows to 134<sup>th</sup>, this proposal to be diverted to Water's Edge does not meet CCC 40.380.040C(1)(b). This transfer to Water's Edge is a Code violation, and also may call for Water's Edge to take more water than naturally drains to it. This extra 5.5 acres of drainage into Water's Edge also appears to be a violation of CCC 40.380.040C(1)(g) which prohibits a "material increase" or "concentrate stormwater runoff" onto adjacent property by adding 5.5 acres of flow that does not naturally drain there.

! **CLC Report**, Page 15, ¶13 shows Drainage Basin maps. But, the maps do not show where the basins drain to as referred to in Exhibit 15, it simply shows two different drainage basins. Assuming they go two different places, a basin transfer occurs because all the stormwater for this project is proposed to drain to Water's Edge.

! **HDJ Report**, Exhibit "C". Attachment 1 of 3 shows 18.7 acres draining to 134<sup>th</sup>/Rockwell Creek, and 10.7 acres to Water's Edge. This is attached as Exhibit "B". How does this now all legally go to Water's Edge?

! Page 19, **HDJ** says "There is no transferring of runoff from one basin to another basin." HDJ takes an ultra broad definition of basin as saying they both end up in Salmon Creek, therefore it does not matter that part of the WalMart property flowed to 134<sup>th</sup> and around the Water's Edge site. This is not drainage law as I understand it. You could say simplistically that everything in Clark County is in the Columbia River drainage so one can divert anything anywhere. Instead, engineers are supposed to determine where the natural and pre-development flow goes and mimic that natural flow

as much as possible; which simply was not done here. CCC 40.380.040C(1)(b)( c)(g). To ignore sub-basins may set a precedent that would literally destroy drainage basins in Clark County and cause significant impacts to down stream property and stormwater systems.

## **7. EMERGENCY OVERFLOW TO 134<sup>TH</sup>/ROCKWELL CREEK.**

! **HDJ** Report at 9 “This system is essentially a ‘dry line’ that was installed as an emergency overflow system to serve the development at the Defrees Commercial Center and will not discharge to this system unless there is a storm event greater than the 100-year storm.”

! **Rodgers** This “dry line” from the Defrees system was flowing substantially on a small rainfall event when I viewed it. The 134<sup>th</sup> system will be used by the site not only for 100+ year overflow, but also if the main/proposed Water’s Edge system plugs up or otherwise fails.

! **HDJ** Report at 9 “The outfall referenced was observed and there is no indication of any erosion or potential system failure.”

! **Rodgers** reply: It is hard to review the outfall area and indicate anything other than the gabions were installed to deal with an erosion problem. Please note in HDJ’s Exhibit ‘B’ there does not appear to require gabions in the original designed outfall, so they apparently were installed later.

! **HDJ** Report, Page 16. The “ditch” to the 134<sup>th</sup> Street drainage is really a ditch and a pipe system that ends up dumping into Rockwell Creek; no analysis of the capacity of this system or its feasibility to function as a 100-year overflow was engineered, or analyzed to see if it met Code.

## **8. MISCELLANEOUS.**

! My report points out that the preliminary development plan does not show existing water resources including streams, wetlands, sinks and stormwater facilities. **HDJ**’s response at page 15 indicates “The Final Plans will implement the recommendations”. Apparently, Applicant admits it does not meet this section of the Code, CCC 13.29.550, and does not intend to meet this Code until Final design.

! **HDJ** Report, Page 8, number 6. I appreciate the clarification that the pipe to Water’s Edge is 7.5 feet, not 10 feet. But this does not change my conclusion (professional opinion) that “there is a high potential for severe private and public property damage as well as adverse impacts to the environment, Salmon Creek, Rockwell Creek (from the emergency overflow) and Water’s Edge drainage, if the development is permitted to excavate large trenches for a 7.5 foot diameter pipe and large detention ponds”near the steep unstable slope.

## **9. CONCLUSION.**

In summary, thank you for the opportunity to respond to Exhibit #181. The Applicant is trying to mix and match three (3) different drainage reports to have them add up to one (1) current report that meets current standards. I simply do not think it does, for the reasons given above. I do not believe this project is feasible, or meeting County Code standards for the reasons stated above.

I hereby restate the conclusions of my prior report, except as modified above.

Dated December 21, 2006.

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Robert H. Rodgers, P.E.

Attachment “A”: HDJ Drainage Basins (from Exhibit #181).

Attachment “B”: HDJ Drainage Basins (from Exhibit #181).

SC WalMart Rodgers Rebuttal Rpt FnL.122106.wpd