



MEMORANDUM

DEPARTMENT OF PUBLIC WORKS

TO: Community Development
FROM: Chris Searcy, Public Works Director
DATE: July 20, 2009
SUBJECT: Harkness Annexation Petition Comments

1. North:

a. Street

- i. Neither 260th Ave. SE (Division St) or 257th Pl. SE (Harding St) are constructed to city standards.
- ii. Harding St is a dead-end street without the proper provision for vehicles to turn around. It lacks an adequate bulb or hammer-head turn around.
- iii. 257th is in need of a pavement overlay and is on King County's 3-year priority list. The city is responsible for the west half of this street.
- iv. Future development should provide for an east-west connection between Harding and Division to eliminate the long dead-end street which exceeds the maximum cul-de-sac length.

b. Water

- i. The city has adequate water supply to serve new development in this area.
- ii. The main in Harding St. will need to be replaced with an 8" main to provide adequate fire flow and then looped over to Division.

c. Sewer

- i. The city has adequate wastewater treatment capacity to serve new development in this area.
- ii. The wastewater conveyance system serving the adjacent area within the city is not adequately sized to handle high flows during heavy storm events.
- iii. A sewer main is located in McHugh Ave. A sewer main extends 300 feet down 257th from McHugh. No mains exist in 260th.
- iv. This area will require a sewer lift station in order to provide service. A comprehensive study using updated mapping with 2-foot contours will be required in order to adequately plan for sewer main extensions in this area and the adjacent under-developed property within the city to the east and west of the proposed annexation.
- v. The existing sewer mains in this area drain to the McHugh lift station. Its capacity is exceeded during heavy precipitation events due to inflow and infiltration of the

conveyance system. Overflows are conveyed to the nearby Takoba lift station. At times, both lift stations are overwhelmed by inflow, causing a raw sewage bypass into the storm drainage system and Newaukum Creek.

- vi. The force main from McHugh and Takoba lift stations runs south to a manhole at Kibler Avenue and Loraine Street where it continues via gravity to the treatment plant. The capacity of this relatively shallow pipe is exceeded during heavy storm events, causing a raw sewage bypass into the Loraine/Kibler storm drainage system and Newaukum Creek.
 - vii. An update to the comprehensive sewer plan has been proposed to address the above issues, but is not currently funded due to the financial condition of the wastewater utility.
- d. Natural Gas
- i. The city has adequate gas mains and supply to serve new development in this area. Two-inch gas mains exist on both 257th and 260th. New development should be required to install gas mains in a joint trench with power, phone and CATV.
- e. Solid Waste
- i. State law allows the current collector (Waste Mgmt.) to continue providing service for seven years after annexation.
- f. Storm Drainage
- i. This entire area drains to Newaukum Creek.
 - ii. 257th lacks any stormwater conveyance system. New developments will have a challenge to ensure there is an adequate downstream conveyance system.
 - iii. 260th has shallow roadside ditches for stormwater conveyance and conveys portions of runoff from the current city limits in the Shanon Lane and McHugh Place area.
 - iv. Soils in this area are generally better than those in the southern portion of the city. Low impact development techniques may be appropriate for this area. Developments should be required to complete an infiltration study as part of the storm drainage analysis.

2. West:

- a. Street
- i. The streets adjacent to the proposed annexation area are not constructed to city standards.
 - ii. The proposal will result in the city taking over ownership and maintenance from King County of 244th Ave. SE from SE 456th Way to SE 448th St. This is a heavily traveled route that will require more frequent pavement maintenance, the cost of which the city has not anticipated or budgeted for.
 - iii. Future development will be required to build new streets in a grid pattern to enhance connectivity, however access to 244th will be limited.
- b. Water
- i. The city has adequate water supply to serve new development in this area.
 - ii. Development will be required to loop mains and avoid dead-end mains.
- c. Sewer
- i. The city has adequate wastewater treatment capacity to serve new development in this area.

- ii. This area will require a sewer lift station in order to provide service. A comprehensive study using updated mapping with 2-foot contours will be required in order to adequately plan for sewer main extensions in this area and the adjacent under-developed property within the city to the east of the proposed annexation. This requirement can be expected to be a hindrance to development proposals.
 - iii. A small portion of the annexation area near the Rainier Trails development may be able to be served by the existing lift station in that development. Additional engineering study would be required.
 - iv. An update to the comprehensive sewer plan has been proposed to address the above issues, but is not currently funded due to the financial condition of the wastewater utility.
- d. Natural Gas
- i. The city has adequate gas mains and supply to serve new development in this area. New development should be required to install gas mains in a joint trench with power, phone and CATV.
- e. Solid Waste
- i. State law allows the current collector (Waste Mgmt.) to continue providing service for seven years after annexation.
- f. Storm Drainage
- i. This entire area drains to Newaukum Creek with the possible exception of a small portion near SE 456th Way which may drain south along 244th to the White River.
 - ii. The area lying east of 244th and south of SR 164 drains west to ditches along 244th and then north to a tributary of Newaukum Creek. The capacity of this system is unknown and must be determined as development proposals are reviewed.
 - iii. Soils in the northern portion of this area are generally better than those in the southern portion. Low impact development techniques may be appropriate for the northern area. Developments should be required to complete an infiltration study as part of the storm drainage analysis.