

# **VICINITY MAPS**



## **CONSTRUCTION SEQUENCE**

- I) Excavate proposed watercourse, leaving a "plug" of undisturbed material approximately 2 feet long at the upstream end to keep all flow in the existing channel. Over-excavate sufficiently to allow for the placement of stream substrate. Dispose of spoils at a suitable upland location.
- 2) Install substrate as shown in cross-section.
- 3) Bypass flow around downstream culvert by constructing a sandbag & plastic checkdam approximately 25 feet upstream of the culvert and installing 12" flexible pipe to convey flow to the channel downstream of the existing culvert.
- Install new culvert per engineering report, ensuring that upstream end of culvert matches elevation of the stream channel.
- 5) Armor culvert entrance with substrate material, to an elevation min. 0.75'
- 6) Remove upstream plug, using gravel bags to keep water out of work area during removal. Place substrate. Remove gravel filled bags to divert flow into new channel.
- 7) Fill existing channel with sidecast material from original excavation of existing channel.
- 8) Plant all areas as detailed and specified on planting plan. Plants must conform to the specifications as listed out on the planting sheets. All areas must be planted no later than the end of the first dormant season following completion of grading. Install irrigation system as required by planting plan. See planting plan for specific notes.

### **SPECIFICATIONS**

I) Substrate to consist of well-rounded, washed gravel closely conforming to the following size specifications:

< 1/4 inch 1/4 to 3/4 inch 3/4 to 1 1/2 inches 20% 30%  $1 \frac{1}{2}$  to 3 inches 40% 3 to 6 inches

#### STREAM RESTORATION NOTES

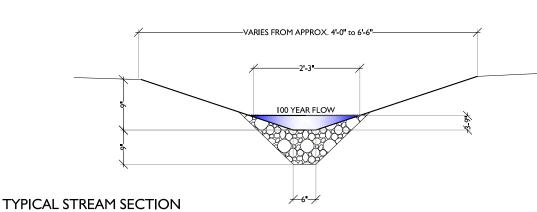
- 1) Stream channel sized according to the November 9, 2005 Culvert Sizing Analysis performed by Ed McCarthy, P.E., P.S. 100 year peak flow per that analysis was estimated at 1.6 CFS. Assuming a site slope of 0.13 and a Mannings "N" value of 0.5 for a shallow coarse stream bed, peak flow depth in designed channel is estimated at 0.32 feet. Total channel depth is 0.75 feet to allow for factor of safety and possible natural obstructions.
- 2) Proposed watercourse location identified by others as original watercourse location. The watercourse was moved to the location identified on the plan as the existing centerline. This plan will return the watercourse to what has been identifed as its original location.
- 3) Proposed culvert to have a minimum slope of 1%.

### SEE SHEETS 2 & 3 FOR

- PLANTING NOTES,
- DETAILS,
- SPECIFICATIONS &
- MITIGATION SUMMARY

## **MATERIAL QUANTITIES**

STREAM SUBSTRATE (GRAVEL): 5 C.Y. WOOD CHIP MULCH: 9 C.Y. VEGETABLE COMPOST: 10 C.Y.



30, **SHEET INDEX** I - OVERALL SITE PLAN 2 - PLANTING PLAN, NOTES & LEGEND 3 - PLANTING DETAILS & SPECIFICATIONS; 750 Sixth Street South Kirkland WA 98033 MITIGATION NOTES 425.822.5242 f 425.827.8136 www.watershedco.com Science & Desigr STREAM & WETLAND RESTORATION C/O BRIAN DEUTSCH AMENITY PARTNERS; 425.941.9750 EAST MERCER WAY & SE 76TH STREET MERCER ISLAND, WA MERCER ISLAND RESIDENCE 30 PHASE: LOT **PRELIMINARY** 92ND 30 NO. DATE ISSUE NEW PROPOSED I 4-27-07 PRELIMINARY NEW CULVERT UNDER DETENTION PIPE NEW DRIVE - INSTALL PER ENGINEERING REPORT ORIGINAL WATERCOURSE CENTERLINE (SITED BY OTHERS) 25' REDLICED EXISTING CONC. CULVERT UNDER EXISTING CONC. DRIVE ORIGINAL WATERCOURSE PROPOSED TOP OF EXISTING CULVERT TO DAYLIGHT INTO **REMARKS/NOTES:** 25' REDUCED WETLAND BUFFER ORIGINAL PLANS 11X17 50' STANDARD 35' STANDARD EXISTING CENTERLINE OF TO BE ABANDONED 30 CHECK DAM AND BYPASS ASPHALT DRIVE Project Manager: HM S.E. 76TH ST Designed: MI,MG Drafted: MG Checked: HM File name: DEUTSCH-SPI.DWG JOB NUMBER: 070212 OVERALL SITE PLAN SHEET NUMBER: SCALE: I" = 30'-0" OF 3