

CENWS-OD-TS-DMMO

MEMORANDUM FOR RECORD

May 10, 2012

**SUBJECT:** DREDGE PRISM MODIFICATION AND VOLUME REVISION FOR NAVAL AIR STATION (NAS) WHIDBEY ISLAND FUEL PIER (NWS-2011-1028), ISLAND COUNTY, WASHINGTON, FOR UNCONFINED OPEN-WATER DISPOSAL AT A DMMP NON-DISPERSIVE DISPOSAL SITE.

1. This memorandum amends the 20 May 2011 suitability determination and reflects the consensus decision on the part of the Dredged Material Management Program (DMMP) agencies (U.S. Army Corps of Engineers, Washington Departments of Ecology and Natural Resources, and the Environmental Protection Agency) regarding a modification of the dredge prism and a resulting volume increase from 25,000 cubic yards (cy) to 35,000 cy for the NAS Whidbey Island Fuel Pier (see Figure 1 for a vicinity map).
2. Subsequent to the 20 May 2011 suitability determination, the Navy made revisions to the project design. Figure 2 shows the footprint of the original dredging plan and the six sampling stations used in the DMMP characterization of the project. Figure 3 shows the modified design. For reference, Figure 3 also includes the footprint of the original design and the six DMMP sampling stations. As can be seen, the modified design includes minor changes in the footprint of the project, plus a 60-foot extension on the west end of the project. The design depth may also change. The original design depth was -20 feet MLLW (plus 1-foot of overdredge depth), but the Navy would like to include a bid option for an additional two feet of dredging for a revised design depth of -22 feet (plus 1-foot of overdepth). To cover this contingency the Navy has requested a volume increase to a maximum of 35,000 cy.
3. The DMMP agencies reviewed the design modifications vis-à-vis the data collected for the original suitability determination and concluded that additional sampling and testing would not be required for the following reasons:
  - The sampling stations used in the 2011 DMMP characterization fall within the footprint of the modified project and provide adequate spatial representation of the modified project.
  - There were no DMMP screening-level exceedances in the 2011 DMMP characterization and most chemicals of concern were undetected at low reporting limits. There is no reason to believe that the additional material included in the modified dredge prism contains chemicals of concern at toxic concentrations.
  - Stiff inorganic clay (i.e. native material) was encountered at stations DMMP-1, 2, 3 and 4. This prevented z-samples from being collected at DMMP-1, 2 and 3; only a 0.6 ft z-sample could be collected at DMMP-4. The z-samples collected at DMMP-5 and 6 were silty sand, but these two sampling locations are the farthest removed from the fuel pier. Therefore, most of the deeper material in the modified -22-foot project is native material.

- In a moderate-ranked area, surface material requires one sample for each 4,000 cubic yards and one dredged material management unit (DMMU) for each 16,000 cubic yards. There were a total of nine samples and three DMMUs, which are nominally enough to cover 36,000 cubic yards and 48,000 cubic yards respectively. This is adequate to cover the maximum proposed volume of 35,000 cubic yards.

- While the revised dredging boundaries now include the sideslopes on either end of the sheetpile wall at the face of the fuel pier, the volume to be dredged from these sideslopes is estimated to be only 358 cy, approximately 1 percent of the total volume. The sheetpile wall will be in place prior to dredging, thereby preventing underpier material from sloughing into the area being dredged.

4. As indicated in the December 6, 2011 correction of the suitability determination, in the absence of dioxin testing data, open-water disposal of dredged material from this project is restricted to a DMMP non-dispersive site.
5. In summary, based on the evaluation of the modified project, the DMMP agencies conclude that **all 35,000 cubic yards are suitable** for open-water disposal at a non-dispersive disposal site.

This suitability determination addendum does *not* constitute final agency approval of the project. During the public comment period that follows a public notice, the resource agencies will provide input on the overall project. A final decision will be made after full consideration of agency input, and after an alternatives analysis is done under section 404(b)(1) of the Clean Water Act.

*A pre-dredge meeting with DNR, Ecology and the Corps of Engineers is required. A dredging quality control plan must be developed and submitted to the Regulatory Branch of the Seattle District Corps of Engineers at least 7 days prior to the pre-dredge meeting. A DNR site-use authorization must also be acquired.*

6. Reference: DMMP, 2011. *Determination Regarding the Suitability of Proposed Dredged Material from Naval Air Station (NAS) Whidbey Island Fuel Pier, Island County, for Unconfined Open-Water Disposal at a DMMP Non-Dispersive Site.* Prepared by the Army Corps of Engineers for the DMMP agencies, May 20, 2011; corrected December 6, 2011.

7. Agency Signatures.

The signed document is on file in the Dredged Material Management Office.

Concur:

\_\_\_\_\_  
Date David Fox, P.E. - Seattle District Corps of Engineers

\_\_\_\_\_  
Date Justine Barton - Environmental Protection Agency

\_\_\_\_\_  
Date Laura Inouye, Ph.D. - Washington Department of Ecology

\_\_\_\_\_  
Date Celia Barton - Washington Department of Natural Resources

Copies furnished:

Laura Inouye –Ecology  
Justine Barton – EPA  
Celia Barton – DNR  
Catherine Blackwell – Seattle District Regulatory  
Mark Wicklein – Navy

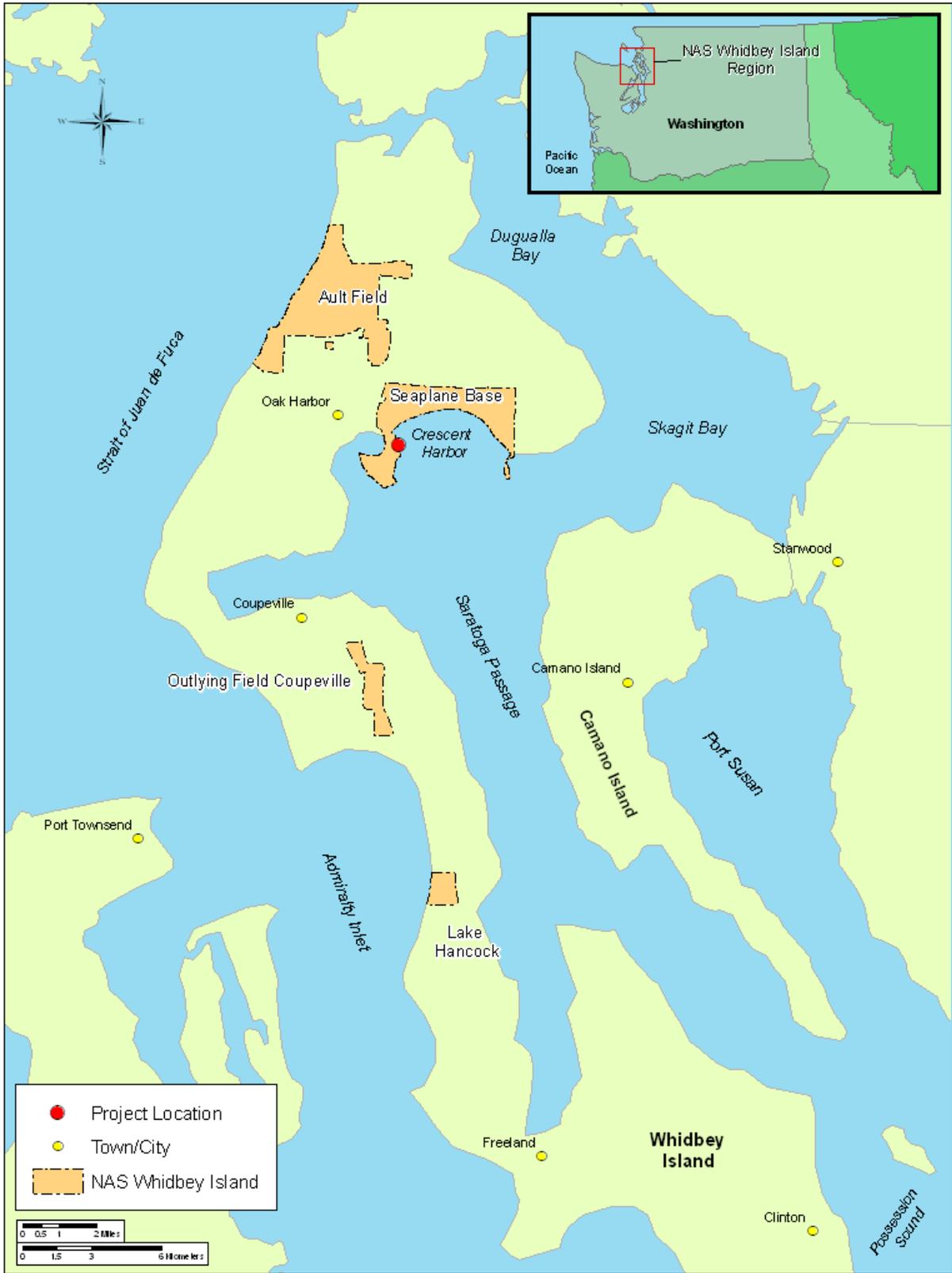
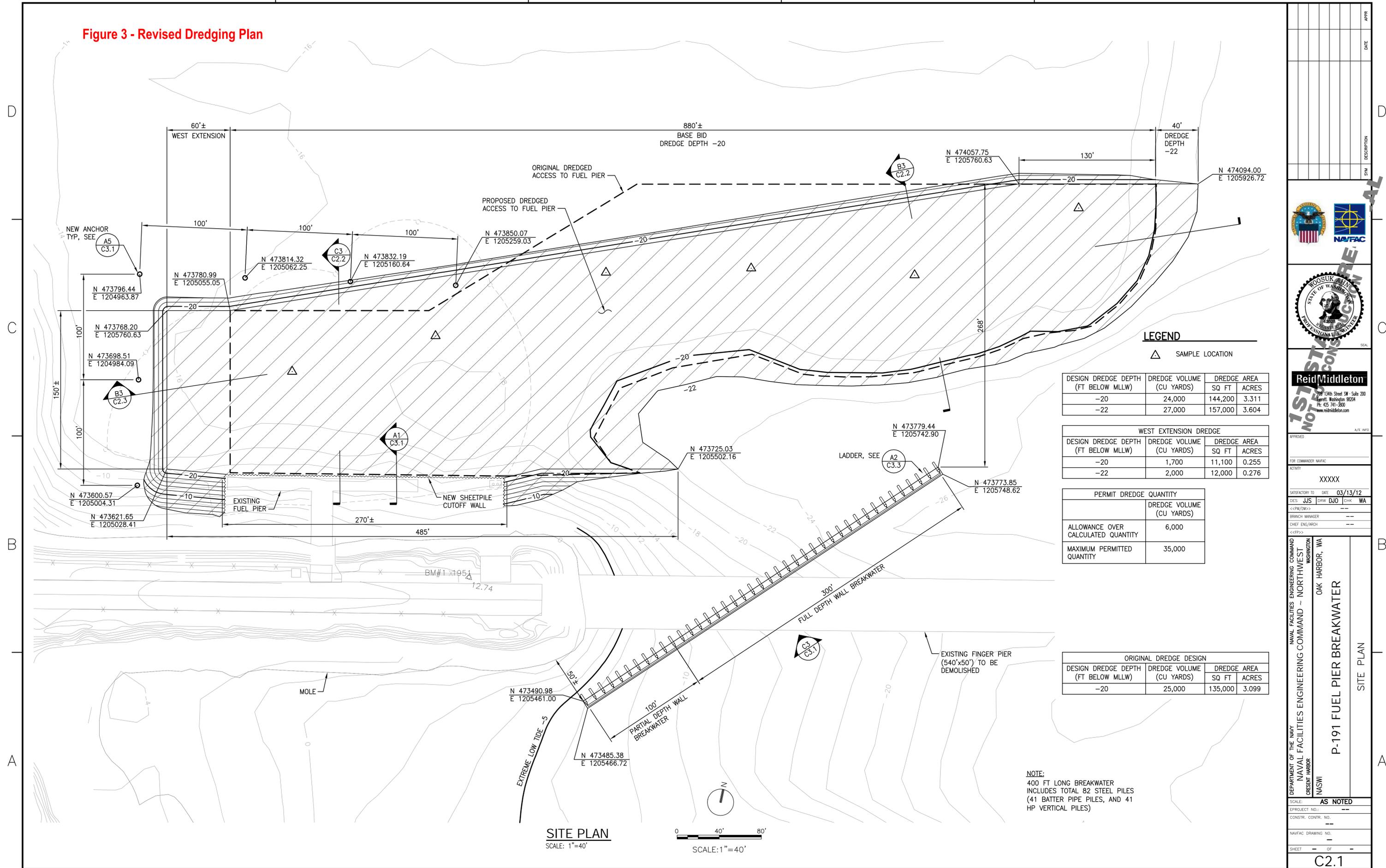


Figure 1. Project Location, NAS Whidbey



Figure 2 – Original Footprint and Sample Locations, NAS Whidbey Fuel Pier

**Figure 3 - Revised Dredging Plan**



**LEGEND**  
 ▲ SAMPLE LOCATION

DESIGN DREDGE DEPTH (FT BELOW MLLW)	DREDGE VOLUME (CU YARDS)	DREDGE AREA	
		SQ FT	ACRES
-20	24,000	144,200	3.311
-22	27,000	157,000	3.604

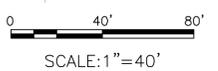
WEST EXTENSION DREDGE			
DESIGN DREDGE DEPTH (FT BELOW MLLW)	DREDGE VOLUME (CU YARDS)	DREDGE AREA	
		SQ FT	ACRES
-20	1,700	11,100	0.255
-22	2,000	12,000	0.276

PERMIT DREDGE QUANTITY	
	DREDGE VOLUME (CU YARDS)
ALLOWANCE OVER CALCULATED QUANTITY	6,000
MAXIMUM PERMITTED QUANTITY	35,000

ORIGINAL DREDGE DESIGN		
DESIGN DREDGE DEPTH (FT BELOW MLLW)	DREDGE VOLUME (CU YARDS)	DREDGE AREA
		SQ FT ACRES
-20	25,000	135,000 3.099

**NOTE:**  
 400 FT LONG BREAKWATER INCLUDES TOTAL 82 STEEL PILES (41 BATTER PIPE PILES, AND 41 HP VERTICAL PILES)

**SITE PLAN**  
 SCALE: 1"=40'



  <b>Reid Middleton</b> 1515 STATE STREET, SUITE 200 NOTED FOR CONSTRUCTION A/E/INTS	APPROVED: _____ FOR COMMANDER NAVFAC ACTIVITY: XXXXX SATISFACTORY TO DATE: 03/13/12 DES: JJS DRAW: DJD CHK: WA BRANCH MANAGER: --- CHIEF ENGR/ARCH: --- DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND - NORTHWEST CRESSENT HARBOR OAK HARBOR, WA <b>P-191 FUEL PIER BREAKWATER</b> SITE PLAN
SCALE: AS NOTED PROJECT NO.: --- CONSTR. CONTR. NO.: --- NAVFAC DRAWING NO.: --- SHEET: C2.1 OF --- DRAWFORM REVISION: 10 MARCH 2009	