

## 1.1 GENERAL

- .1 The Laws and Regulations of the Territory Of Nunavut shall govern. Where the Laws and Regulations of the Territory of Nunavut reference regulatory bodies that are not functional at the time of the WORK, the equivalent body from the Northwest Territories shall be taken as the governing authority.
- .2 The standards of the WORK shall conform to or exceed the minimum standards of the Canadian General Standards Board, the Canadian Standards Association and the National Building Code of Canada.
- .3 In the event that a dispute resolution by arbitration is undertaken, the Arbitration Ordinance of the Territory of Nunavut shall apply.
- .4 The CONTRACTOR shall ensure compliance on his part and on the part of all his SUBCONTRACTORS with the Worker's Compensation Ordinance and Regulations thereunder of the Government of the Territory Of Nunavut. The Worker's Compensation Board of the Northwest Territories can be contacted at (867) 920-3280
- .5 The attention of the CONTRACTOR is drawn to the requirements of the Territory Of Nunavut Mechanic's Lien Act and the requirements thereunder and the CONTRACTOR shall comply therewith.
- .6 In carrying out the WORK, the CONTRACTOR shall comply with all other Acts and Ordinances and Regulations thereunder the Government of the Territory Of Nunavut as though they had been specifically named in this specification.

### 1.2 BURNING

.1 Restrictions of federal, territorial and municipal authorities shall be complied with. Permits shall be obtained by the CONTRACTOR.

# 1.3 REGULATIONS, STANDARDS AND CODES

- .1 Codes, Standards and Regulations are specified in other sections of these SPECIFICATIONS and the WORK shall be done in accordance with those Codes, Standards and Regulations where applicable.
- .2 The CONTRACTOR shall obtain and pay for all permits, inspections, etc. required by the authorities having jurisdiction, including Local Construction Permits, Quarry Permits, Water Use Permits, etc.
- .3 When all work has been completed, tested and placed in operation in accordance with the requirements of the DRAWINGS and SPECIFICATIONS and all governing Codes and Regulations, the CONTRACTOR shall request and obtain a Final Certificate of Approval, without

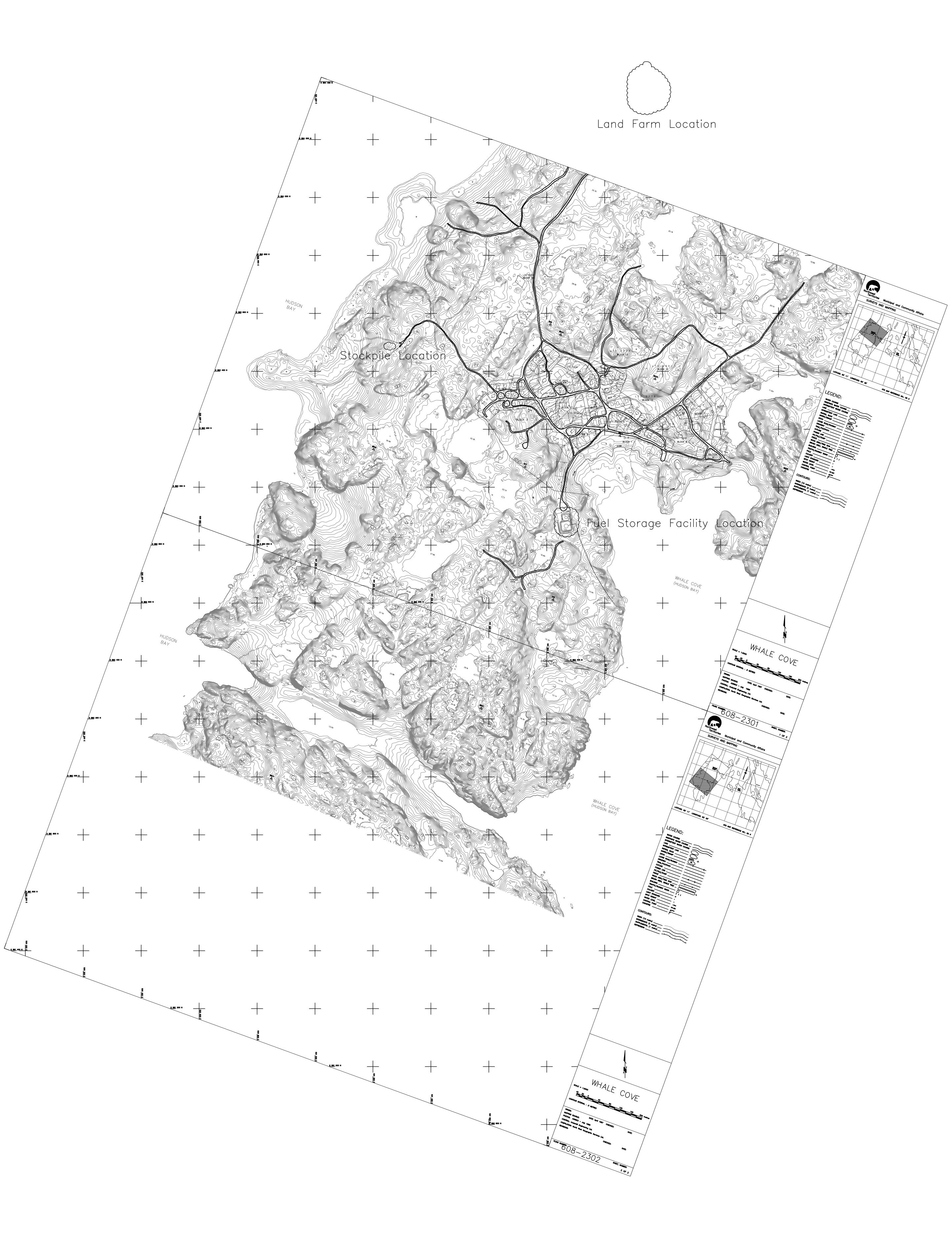
Whale Cove	Regulatory Requirements	Section 01060
Fuel Storage Facility		Page 2
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GN Project # 02-3009		

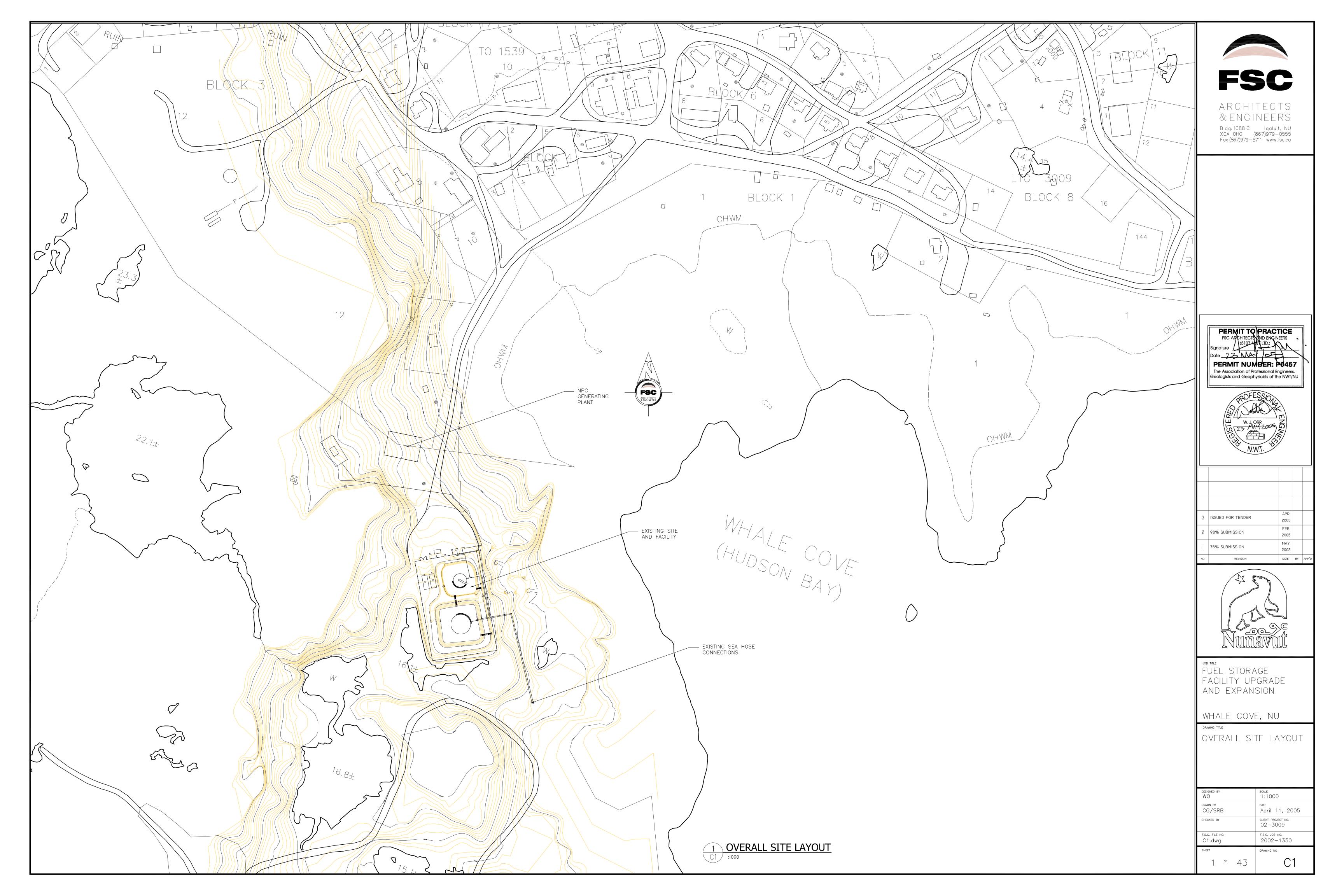
reservations, from the Inspection Department(s) having jurisdiction, when applicable, and the Certificate(s) shall be provided to the ENGINEER.

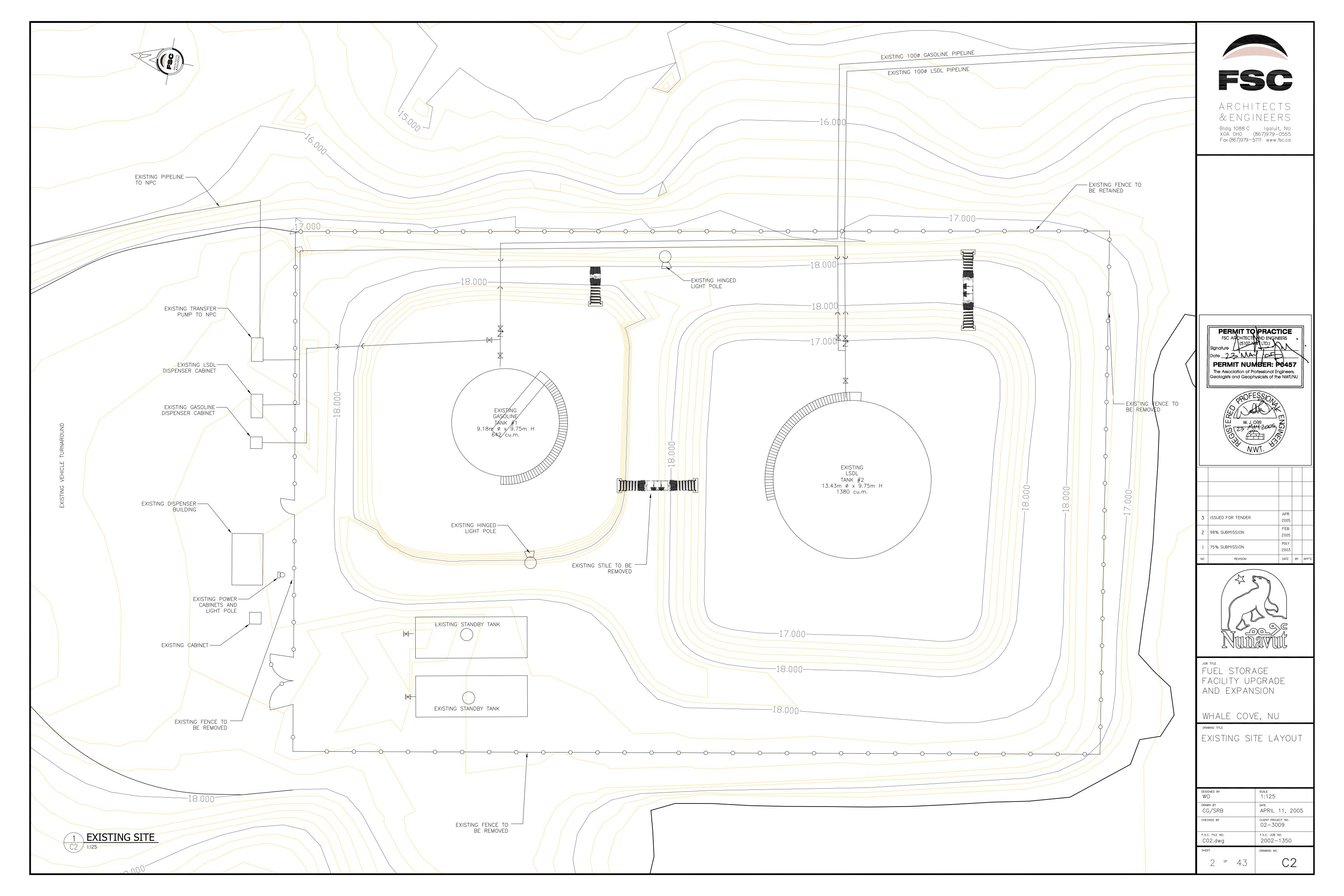
.4 The CONTRACTOR shall note that no allowance will be given for modification of the installation to meet requirements of governing Codes or Regulations, unless such Codes or Regulations were modified by legislation after the CONTRACT was awarded.

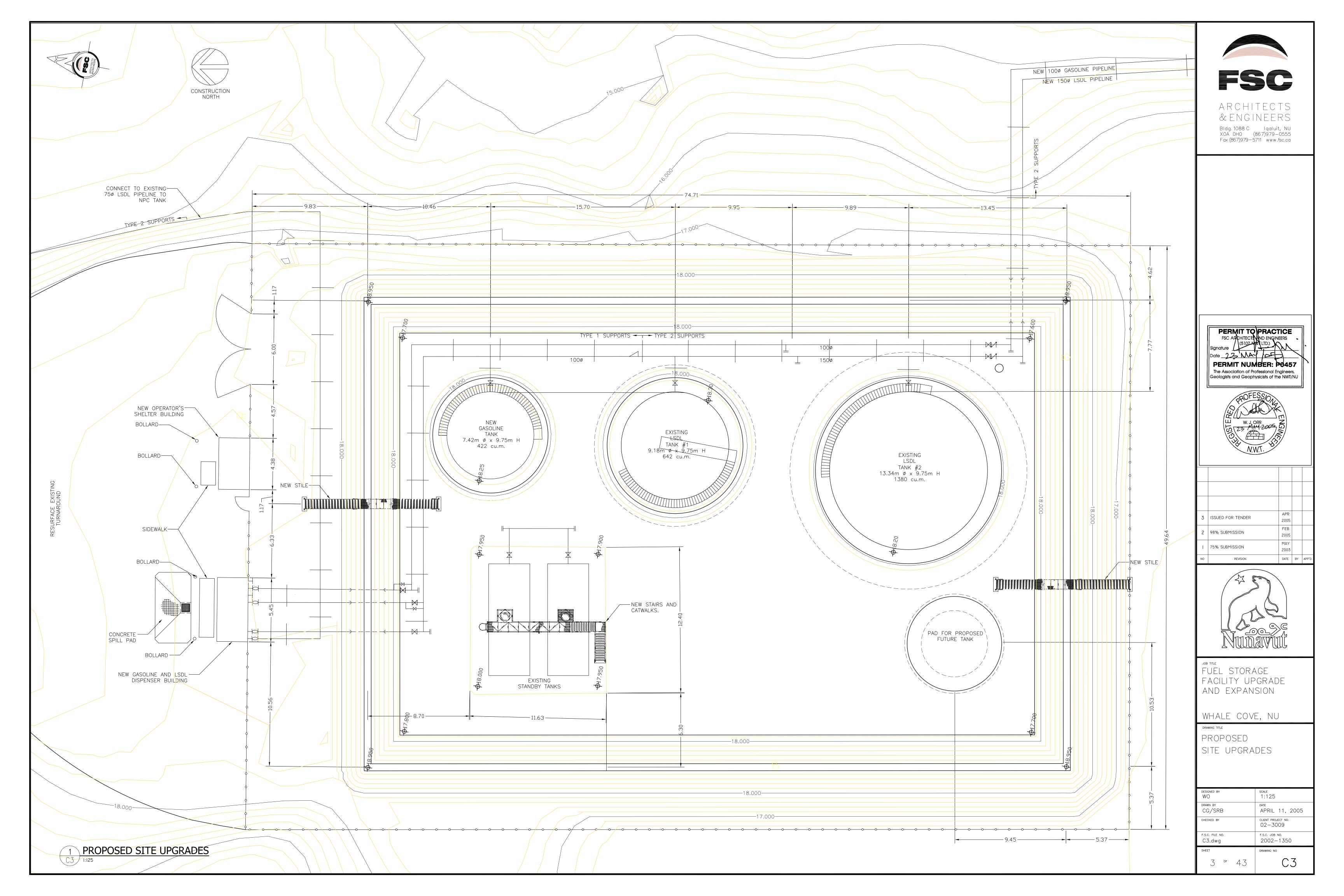
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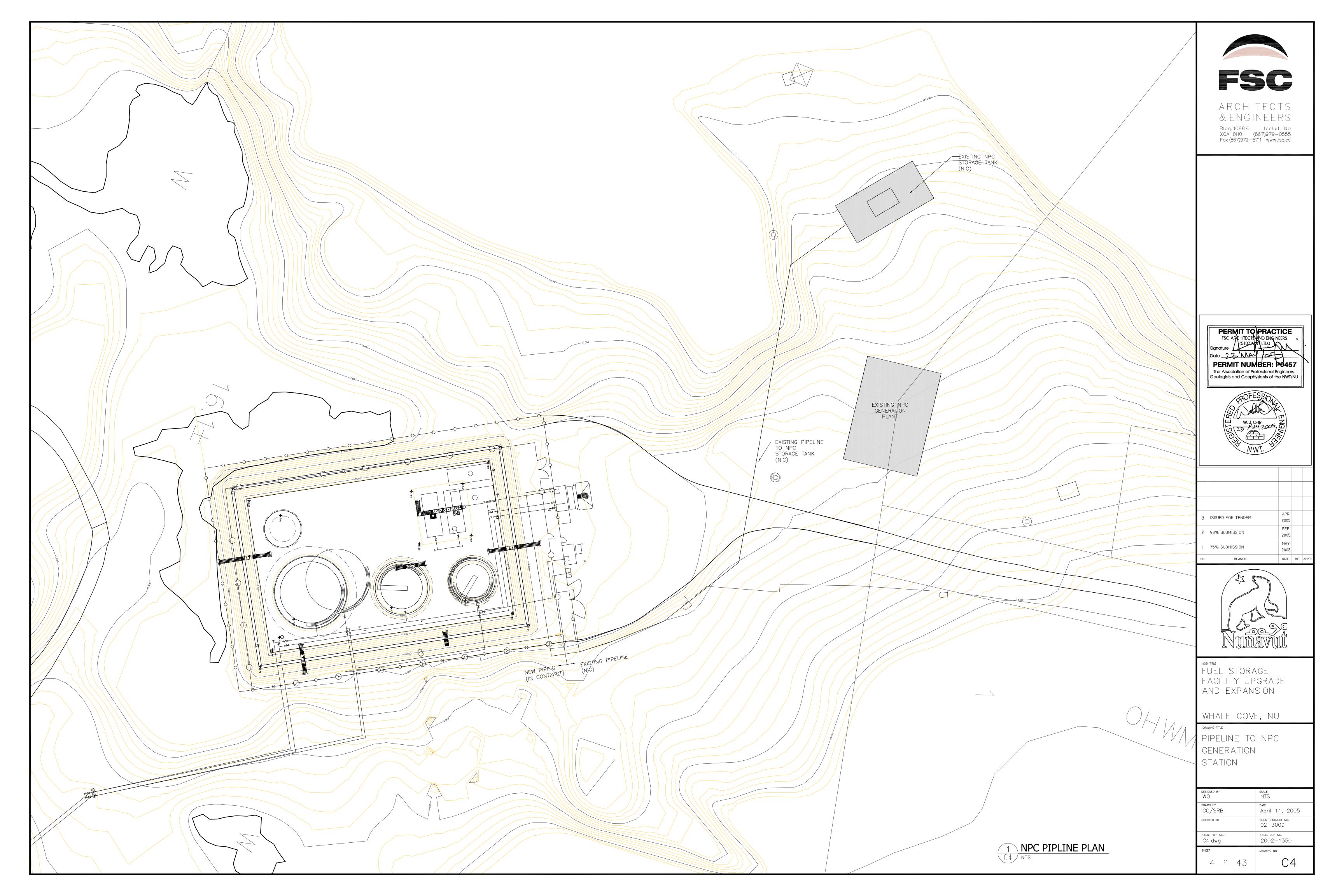


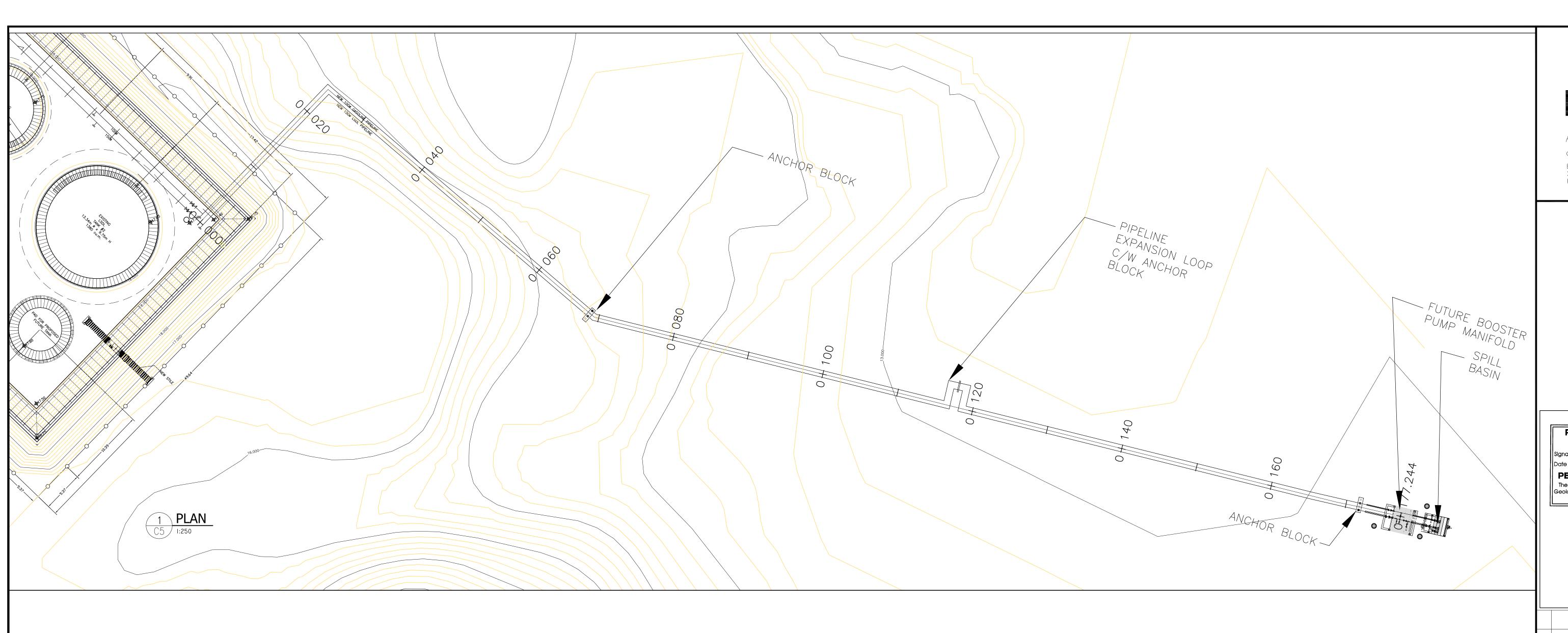


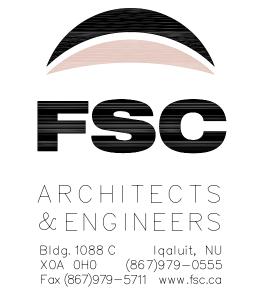


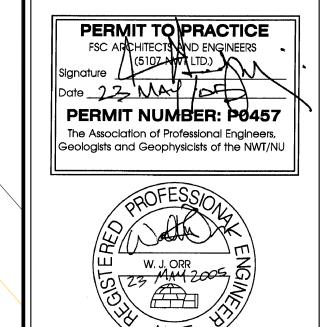




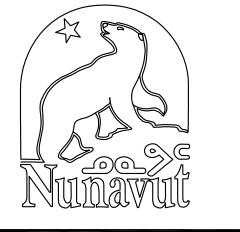








3	ISSUED FOR TENDER	APR 2005		
2	98% SUBMISSION	FEB 2005		
ı	75% SUBMISSION	MAY 2003		
NO	REVISION	DATE	BY	APP'D



FUEL STORAGE
FACILITY UPGRADE
AND EXPANSION

WHALE COVE, NU

PROPOSED PIPELINE
PLAN AND PROFILE

DESIGNED BY WO	scale 1:250
drawn by CG/SRB	DATE April 11, 2005
CHECKED BY	CLIENT PROJECT NO. 02-3009
f.s.c. file no. C5.dwg	F.S.C. JOB NO. 2002—1350
SHEET	DRAWING NO
5 <sup>of</sup> 4.3	C5

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2 **PROFILE** 05 1:250











Effective January 1, 2004



P.O. Box 119 GJOA HAVEN, NU XOE 1J0 TEL: (867) 360-6338 FAX: (867) 360-6369

KATIMAYINGI

# kNK5 wmoEp5 vtmpq NUNAVUT WATER BOARD NUNAVUT IMALIRIYIN

# WATER LICENCE APPLICATION FORM

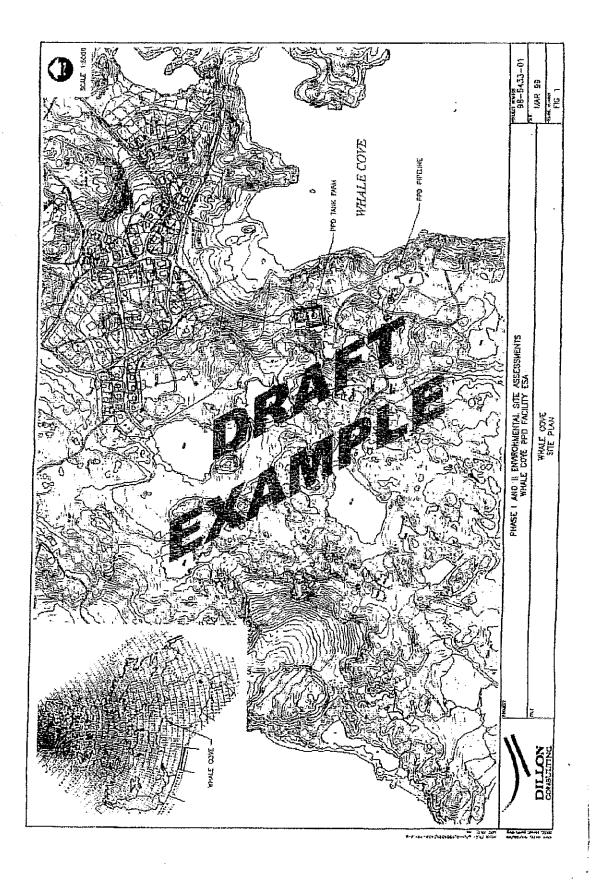
Application	for: (check one)			•
New	X Amendment	Renewal	Assignment	
	E AND MAILING ADDRES LICANT/LICENSEE	S OF Z.	ADDRESS OF CORPORATE OFFICE IN CANADA (if app	licable)
Pobo	construction limited x 1390 w,xoa oho			
	19-771 1 19-7712 utconstltd@tellambton.net	Phone: Fax; e-mail:		
the Undertaking Latitude: 92 Scale / - 5 or	э <u>э</u>	describe and attach a	topographical map, indicating the	NIS Map No.
	RIPTION OF UNDERTAK	ING (attach plans and d	rawings)	
5. TYPE	OF PRIMARY UNDERTA	KING (A supplementar	y questionnaire <u>must</u> be submitted	with the application
	•			
Industr		Agricu		
	and Milling		rvation	
	pal (includes camps/lodges)	Recrea		
Power		_X_ Misc (desc)	ellaneous (includes exploration/d 7b	iming)

Effective January 1, 2004

hydrostatic test See Schedule II of Narthwest Territories Waters Regulations for Description of Undertakings							
6. WATER USE							
To obtain water To divert a watercourse Flood control To alter the flow of, or store, water Young Other (describe): HYDROS TATIC IEST To cross a watercourse							
7. QUANTITY OF WATER INVOLVED (cubic metres per day including both quantity to be used and quality to be returned to source)							
we need 1,300 cm of sea water for a two weeks period.  The pumping will last only one day,the quantity of water to be return is estimated at 1,290 cm.  The return water will past true a filtration process,oil and water separator before release into the Hudson bay, so the quality of the water will never change from the start.							
8. WASTE (for each type of waste describe: composition, quantity (cubic metres per day), methods of treatment and disposal, etc.)							
Sewage         Waste oil           Solid Waste         Greywater           Hazardous         x Sludges           Bulky Items/Scrap Metal         Other (describe): FROM TANK BOTTOM ONLY							
<ol> <li>PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING (give name, mailing address and location; attach if necessary)</li> </ol>							
Land Use Permit							
DIAND Yes _X_ No If no, date expected							
Regional Inuit Association Yes X No If no, date expected							
Commissioner Yes _X _ No If no, date expected							
10. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES (direct, indirect, cumulative impacts, etc.)							
NIRB Screening Yes X No If no, date expected							

11. INUIT WATER RIGHTS
Will the project or activity substantially affect the quality, quantity, or flow of water flowing through Inuit Owned Lands and the rights of Inuit under Article 20 of the Nunavut Land Clattes Agreement?
πο
11. (Continued)
If yes, has the applicant entered into an agreement with the Designated Inuit organization to pay compensation for any loss or damage that may be caused by the alteration. If no compensation agreement has been made, how will compensation be determined?
12. CONTRACTORS AND SUB-CONTRACTORS (name, address and functions)
nunayut construction limited (general contractor P.o gay 13 90, 19 BLUIT, NO, XOB . Wa
nunavut construction limited (general contractor P.O Roup 13 95, 19 ALUIT, NU, XOBA HO arctic electrical lid (electrical contractor) P.O. Roup 13 81, 19 ALUIT, CO, NOBO HO
13. STUDIES UNDERTAKEN TO DATE (list and attach copies of studies, reports, research, etc.)
14. The following documents <u>must</u> be included with the application for the regulatory process to begin
Supplementary Questionnaire (where applicable: see section 5) xYesNoIf no, date expected
Inuktitut/English Summary of Project APPANS 14 3 x Yes No If no, date expected
Application fee \$30.00 (Payee Receiver General for Canada) x Yes No If no, date expected
Water Use fee (see Section 9 of the NWT Waters Regulations; Payee Receiver General for Canada)  Yes No If no, date expected
15. PROPOSED TIME SCHEDULE
_X_ Annual (or) Multi Year
Start Date: <u>2006-07-24</u> Completion Date 2006-07-29
Name (Print)  Title (Print)  Signature  Date

	For Nanavu Water Board use pigly 2	
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Nunavut water board p.o.box 119 gjoa haven,nuxeb ljo

att=mr joe murdock.

Description=bulk fuel storage facility increase capacity & code upgrade

Location= whale cove tank farm.

For your information.

First we have to clean the inside of the existing horizontal tank which is located inside the tank farm to be able to transfer the balance of fuel from the vertical tank.

Then we have to vapor free the vertical tank clean the inside to be able to relocate that tank temporary to install geotextile, new liner & new base. There is no residue left in the tank after cleaning.

After relocation to original location and according to the api code tank as to be hydrostaticly tested with water.

We will use sea water from the shore at the spll basin, there is no need to use fresh water.

There is two existing vertical tank in whale who need to be tested and one new vertical tank

The water use to test the first and biggest tank will be transfer from one tank to they other to minimize the quantity of water use.

The volume of water required is 1,300 c.m and will be return to sea after going to a process of filtration, oil and water separator and sample analys.

The amount of waste and sludge that we find in those tank is never the same, in while cove we expect to fine about six (6) barils of waste and sludge including cleaning materials, absorbant materials, rags. etc.

That waste and sludges will be put into seal drums and store into a sea can and direction will be given by the consultants for disposals, also for liquid waste.

Consultants is Ferguson, simek, clarck

4910 53 rd st po box 1777 Yellowknife,nwt,xia2p4

Pn=867-920-2882

Fx=867-920-4319

Spill contingency action plan.

We alwayls carry a large amount of hydrophobic pads, floor dry, absorbants rollers and a 3,5 mlbs pressure washers in case of spill Which never happen before but

There is alwayls some one keeping a eye on those barils uselly it is a local inuit workers that we give transing as part of is job.

All materials for contingency plan already in whale cove.

# Details of works.

We have to upgrade the existing tank farm which included new bearms, new geotextile, new liner new tank pads, one new tank, one new operator shelter, one new gas and diesel shelter, new piping inside new tank farm, new pipeline from tank farm to shore at new spill besin, new grounding and electricity, sandblast and painting on the second years, new fence and signs.

The alternatives for waste disposal is to send them in Montreal by ship and to be burn at onyx which is specialize in that kind of disposals the location of the holdings cells is about 180 meters from any water bodies.

All the works will not interfere with the water users or any body, even gas and fuel distribution will not be touch by are works.

Thank you

Date of issuance of plan

Company's oil and Hazardous material Spill contingency plan

Prepare by

Approved by

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1.0		Preamble					
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	3.1	introduction					
-	3.2	contingency plan format					
	3.3	clean up					
	3.4	local authorities					
	3.5	waste management					
	3.6	water management					

## 1.0 preambl

The spill contingency plan is effective from April 30, 2006 until September 30, 2008 and applies to all projects and operations of NWT exploration limited licenced by NWT water board in area of Whale Cove, latitude 92, 36w and 52, 10 n

The following formal distribution has been made of this plan.

Nunavut water board

Brian Duguny, project officer for government of Nunzout

Derreck Mogy, dfo officer

Additional copies and update of this plan may be obtained by writing to:

Nunavat Construction Limited P.O. Box 1190 Iquinit, Nu. XOA 0H0

# 2.0 Introduction

Theremote location of inland developments in the NWT and the environmental sensitivity of these areas, underlines the necessity for the on-site capability to deal with spills of petroleum products and other hexardous materials, and the fathers of systems components associated with water use and waste disposal.

The preparation of this document is as important as the information it contains. Confingency planning will-lifentify areas of weakness or deficiency at an operation and thus, enable corrective steps to be taken before an emergency arises.

# 3.0 Spill contingency, plan

#### 3.1 Introduction

Spills of oil and other hazardous materials cannot be entirely prevented. However, the impacts of spills can be minimized by establishing pre-determined lines of response and plans of action. The purpose of this section is outline a spill contingency plan format acceptable to the NWT water board and also to clearly define the procedure used to notify the government spill in the NWT.

## 3.2 contingency plan format

immediately stop sources of spill evaluate fire and safety hazard tend to injured shut off sources of ignition (lights, motors, furnaces, no smoking) warn people of danger evacuate area if necessary call fire department, police, medical aid move vehicles only in case of fire and if safe to do so

following immediately

contain spill, block off drains, ditches, culverts, dikes surround spill using booms, straw bales, peat moss, sorbent materials, sand, gravel, earth. Commence recovery, clean up, restoration, report

3.3 clean up notify plant authority-supervisor-advising source of spill product approximate amount location and movement of spill action taken if required call in spill clean-up equipment-assistance

### 3.4 local authorities

fire department 896-9192 police 896-1111 ppd officer 645-8185 assistant officer

1-867 920-8130 fex-867-873-6924 "spill line"

federal authorities

ministry of transport (coast guard) 1-867-979-8000 environment Canada 1-867 920-8130 3.4 training

at the beginning of the job they will be training for all worker's incliding inuits worker's by not are men are already train for that kind of emergency, they are properly train and able to train other worker's.

we have on site already all equipment, brooms, straw bales, sorbent materials, x proof pump, air pump, compressor, hoses, tyveks cover alls.

There is sign inside the construction shack regarding the information about hazardous materials, this is part of training.

3.5 waste management

the type of waste that we have to deal with is sludge coming from the bottom of the existing vertical tank.it's residue of sand mix with water and fuel this vertical tank floors will be clean of all residue before the hydro statics test and store into steel containers which are going to remain inside the tank farm until the ship arrive and they will be ship south to be dispose by a certified organization.certificat of disposal will be supply to consultants.

We expect according to are experience the equivalent of four steel drums we are not using steel drums for transportation of the waste materials, instead we are using steel containers these containers are made of 5/16 steel plates they can store the equivalent of eight regular steel drums, they are made to transport waste liquid or solid and are accepted in qc for that kinf of transportation. They are fabricated to be transport by loader, trucks or can be pick up by a crane for loading. There is a seal and a bolted cover so no waste can escape from the container. The filling of those containers will be done inside the existing tank farm by the tank men hold, seal and left inside the tank farm until shipping

3.6after the tank from all residue we will use 1,300 cm of sea water for hydro testing the tank. The test will last 48 hours for each tank and than return to the bay.

From the tank water will be directed into a oil and water separator and than from the oil and water separator to a filtration systems so there is no infiltered water going into the bay, also samples will be taken to ensure that the water meet the requirment... filtration systems is a parkers filter vessel, efcs, series 100 gpm, 150 psi w/3" cpve flanged inlet and outlet, holds 10 x 20 cartridge.

Parker process filtration division is a iso 900.2000 certified division. See specs for filtration systems on appendix 2

# Appendix 1

 Whate Cove
 Summary
 Section 01010

 Fuel Storage Facility
 Page 1

 2002-1350
 May 10, 2005

 GN Project # 02-3009
 May 10, 2005

#### PART 1 - GENERAL

#### 1.1 WORK LINDER THIS CONTRACT

.1 The Work under this contract consists of construction of the following:

Increased Capacity and Code Compliance, Whale Cove, NU

for the Government of Nunavut, hereinafter called the OWNER, including all equipment and appurtenances therein, as shown on the CONTRACT DRAWINGS and/or as specified herein, in accordance with the terms of this CONTRACT.

## 1.2 WORK INCLUDED

- .1 The WORK is as described in the Particular Scope of Work.
- .2 The WORK, unless specifically stated otherwise, shall include the furnishing of all materials, products, plant, labour and transportation necessary to complete the WORK. The intent is that the Contractor provides a complete job:
- .3 The Work shall not be deemed complete until all components are placed in operation by the CONTRACTOR, and are operating satisfactorily.
- .4 Any minor item of the Work not called for in the specifications or shown on the DRAWINGS, but is clearly required to meet the intent of the design and normally provided for the proper operation of such a facility, shall be provided as if specifically called for in the CONTRACT DOCUMENTS.

### .3 DOCUMENTS REQUIRED

- .1 Maintain at the job site at least one copy of each of the following:
  - Contract Drawings
  - Specifications
  - Addenda
  - Change Orders
  - Reviewed Shop Drawings
  - Modifications to the Contract
  - Field Test Reports
  - Construction Schedule
  - Manufacturer's Installation and Application Instructions
  - Occupational Health and Safety Regulations

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#### 14 SPECIFICATIONS

- .1 Sentence structure in parts of the specifications is abbreviated, and phrases such as "shall be," and "the Contractor Shall" are deliberately omitted. Such sentences shall be read as though they are complete.
- .2 The use of the word "provide" means "supply and install"; or "supply labour and materials for the installation of". It does not mean supply only.
- .3 The word "concealed" in connection with piping, electrical work, controls and wherever used in other sections shall mean "hidden from sight" as in ceiling spaces or furred out spaces.
- .4 The word "exposed" in connection with piping, electrical work, controls and whenever used in other sections shall mean "visible to persons within a building, in normal working areas."

#### 1.5 STANDARDS

- .1 Wherever Standards (i.e., CSA, ASTM and such) are referred to in these CONTRACT DOCUMENTS the current edition at the date of closing of tenders shall apply.
- .2 Where there is a clear conflict between the Standards and the CONTRACT DOCUMENTS, the ENGINEER shall, in the first instance, give an interpretation of the intent of the Contract.
- .3 Where there is an ambiguity between the Standards and any term of these CONTRACT DOCUMENTS, the ENGINEER shall, in the first instance, give an interpretation of the intent of the contract.

**END OF SECTION 01010** 

Whale Cove Fuel Storage Facility 2002-1350 GN Project # 02-3009

Particular Scope of Work Section 01011 Page 1 May 10, 2005

#### PART 1 - GENERAL

#### 1.1 GENERAL

- The CONTRACTOR shall note that the WORK, as described in the CONTRACT DOCUMENTS, are intended to commence in the Summer of 2005. It is anticipated that earthworks necessary to allow for the construction of the new vertical tank, including the berms and liner, shall be completed by September 2005. The remaining work will be completed in 2006. Completion of the WORK and painting shall be completed by September 2007. All tankage and piping shall be completed, tested and ready to accept product prior to the fall fuel resupply in both 2005 and 2006.
- .2 The WORKS are located in the Community of Whale Cove see Section 01001 for Community and Environmental Information.
- .3 The WORKS are to occur at the Government of Nunavut, Petroleum Products Division, existing Resupply Pipelines and the Main Bulk Fuel Storage Facility.

#### .4 Definitions:

- .1 CONTRACTOR: the general contractor for the fuel storage facility as described in the GENERAL CONDITIONS of the contract.
- .2 ENGINEER: the engineer as described in the GENERAL CONDITIONS of the Contract. This position is normally filled by the GN Project Officer designated as in charge of this work.
- .3 CONSULTANT: the design consultant for this work. As directed by the ENGINEER from time to time, correspondence, schedules, shop drawings, progress payments, etc., sent from the CONTRACTOR to the ENGINEER will normally be addressed to the CONSULTANT with a carbon copy to the ENGINEER. The CONSULTANT will provide recommendations to the ENGINEER as to the acceptability of the correspondence and, with the approval of the ENGINEER, inspect the work for the ENGINEER and provide comments upon the work. The CONSULTANT'S direction to the CONTRACTOR will be sent to the ENGINEER for approval and then forwarded to the CONTRACTOR (with a carbon copy to the ENGINEER). All instructions, change orders involving a change in the contract will be sent to the ENGINEER and issued directly by the ENGINEER to the CONTRACTOR.
- .4 RESIDENT ENGINEER: A representative of the CONSULTANT who may be on site full time during construction. All correspondence will continue to be directed to the CONSULTANT and ENGINEER as directed above with carbon copies given to the RESIDENT ENGINEER. The RESIDENT ENGINEER will provide daily and weekly reports to the ENGINEER on both quantity and quality of the progress of construction.
- .5 OTHER CONTRACTORS: Another contractor whose work is outside the scope of this

Whale Cove
Fuel Storage Facility
2002-1350
GN Project # 02-3009

Particular Scope of Work Section 01011 Page 2 May 10, 2005

#### contract.

- .5 The WORKS to be carried out include but are not limited to:
  - .1 Mobilization to site of machinery and equipment necessary to perform the WORKS.
  - .2 Purchase and delivery to site of all materials and equipment for the project, as called for or inferred on the DRAWINGS and in the SPECIFICATIONS.
  - .3 All earth works, upgrades to existing pipelines, new booster pump and connections, and additional fencing.
  - .4 Provision of the continued ability to dispense fuel oil and gasoline during the construction period.
  - .5 Construction of containment berms at Main Tank Farm and incorporation of impermeable liner.
  - Installation of required piping, tanks, valves, fittings, supports and other equipment required to properly and safely operate this facility. All works shall be in accordance with applicable standards of this time period, most notably the National Fire Code API 650, API 653, Canadian Standards CAN4-5601 and other associated standards.
  - .7 Preparing and painting of all tanks, piping, equipment, accessories as required.
  - .8 Fabrication, delivery and hook-up of a new Operator's shelter building.
  - .9 Installation of new fencing as shown on the drawings.
  - .10 Installation of required electrical cables, conduit and equipment for power and lighting according to all applicable codes and standards of the local commercial power supplier.
  - .11 Inspection of all works to ensure compliance with all applicable codes and standards as directed in the SPECIFICATIONS.
- .6 Should the CONTRACTOR wish to change the scope of work outlined, he shall have to identify the changes with the ENGINEER at the start of the project and prior to proceeding with work. Approval from the ENGINEER is required prior to work commencing.
- .7 The CONTRACTOR shall, at the start of the project and prior to proceeding with any field work, arrange with the ENGINEER for the establishment of reference lines and a benchmark. Once the base lines and benchmark are set, it shall be the responsibility of the CONTRACTOR to protect and safeguard same throughout the constructions period.
- .8 The CONTRACTOR shall include in his tender price the costs of transportation/shipping and handling of materials and all associated costs.
- .9 The CONTRACTOR shall take all necessary safety precautions while relocating tanks so as not

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to create sparks or other dangerous situations which could cause an explosion. Smoking or other "Hot Work" activity shall not be permitted at or near storage facilities containing PRODUCTS.

- .10 The CONTRACTOR shall test the installations as described in Section 01410-Documentation, Testing and Acceptance Procedures.
- .11 The CONTRACTOR shall prepare and provide all the documentation and test information necessary to comply with Interim Inspection as outlined in Section 01410- Documentation, Testing and Acceptance Procedures.
- .12 The CONTRACTOR shall carry out any incidental works to make the facilities complete and to the satisfaction of the ENGINEER.
- .13 Carry out all clean-up and repair work necessary to existing roadways, ditches, etc. affected by new work and to the satisfaction of the ENGINEER.
- .14 The CONTRACTOR shall complete Appendix "D1" and "D2" List of Unit Prices and the Schedule of Breakdown Prices and return with his Tender Price.

## 2 DESCRIPTION OF WORK

- The WORK shall be located at two (2) primary areas: (1) The existing main bulk fuel facility (i.e. Main Tank Farm); and (2) The existing Fuel Pipelines. Both areas are illustrated on the DRAWINGS.
- 2 The approximate location of the facilities with respect to the community is shown on the DRAWINGS.
- The CONTRACTOR is advised that storage and dispensing capability shall be maintained throughout the period of construction. Interruptions shall be minimized and approved by the ENGINEER, when absolutely necessary, they shall be done in accordance with Section 01030, item # 7.
- 4 Start-up and Trial Operation shall be as described in Section 15 Mechanical, of the SPECIFICATIONS.
- Temporary relocations may be required during the construction for equipment and tanks to facilitate the construction of different components of the project. The temporary locations will be determined based upon site conditions and recommendations of the CONTRACTOR. The suitability and subsequent use of the temporary locations will require the approval of the ENGINEER.
- Provide permanent lighting and power to the sites as indicated, including the provision and installation of explosion proof lighting fixtures, static grounding, service grounding and associated rigid conduit and wire throughout the facilities.
- 7 All electrical circuits in panel board, switches, starters, contactors, timers, etc. shall be properly

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identified and labeled with permanent and identifiable lamacold labels.

- .8 The CONTRACTOR shall supply a list of all the unused materials to the ENGINEER. The ENGINEER has the first right to all materials, equipment, etc., not used.
- .9 The Main Bulk Fuel Facility:
  - .1 Site preparation for extension of facility including dikes, placement of geotextile fabric, impermeable liner and tank pads.
  - .2 Provide two new stiles for access into and out of the secondary containment areas.
  - .3 Provide one new sump in the secondary containment area and provide one hand operated pump for the removal of accumulated water within the containment areas.
  - .4 Inspect all tanks prior to re-commissioning to comply with API 653 and all relevant codes and standards. Empty, gas-free, clean, and inspect tanks in existing locations to identify conditions which may affect the ability to move or modify the tanks as described in the Contract. Any problems with the condition of the existing tanks will be addressed at that time.
  - .5 Construction of one new vertical Gasoline tank. Provide new tank appurtenances as required (See DRAWINGS).
  - .6 Conversion of one existing vertical Gasoline tank to LSDL service. Provide new tank appurtenances as required (See DRAWINGS).
  - .7 Refurbish one existing vertical LSDL tank. Provide new tank appurtenances as required (See DRAWINGS).
  - .8 Conversion of two existing 91 m³ horizontal single-wall LSDL tanks to Stand by Service.
  - .9 Revise existing and provide new piping to connect tanks with existing resupply pipelines and dispensing systems.
  - .10 Provide and install one (1) new Operator's Shelter Building.
  - .11 Connection of electrical services to new Operator's Shelter Building and associated facility distribution equipment. Relocate or replace existing pole mounted equipment as required.
  - .12 Provide required electrical services including new tank and area lighting.
  - .13 Strapping and calibration of all tanks subsequent to modifications and inspections.
  - .14 Construction and grading of drainage control ditches as outline in the drawings.
  - .15 Remove existing fencing at location of new berms and provide new fence as illustrated in

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the drawings.

.16 Preparation and painting of all tanks, piping and miscellaneous metal surfaces.

#### .10 The Existing Pipelines:

- .1 Remove existing expansion connectors and anchor blocks along the pipeline.
- .2 Construct new granular pads to support new pipeline expansion loops.
- .3 Construct new pipeline expansion loops complete with pipe stands and anchor blocks.
- .4 Construct new pipeline intermediate anchor blocks located approximately one half distance between pipeline expansion loops.
- .5 Excavate contaminated soil, replace with clean granular material, and dispose of contaminated soil at the ENGINEER approved dumping site

#### L3 SCHEDULE

- .1 Scheduling of the WORK and adherence to the Schedule are of prime importance. The CONTRACTOR shall provide a schedule in accordance with section 01310 Construction Schedules within fourteen (14) days of contract award.
- .2 It is the Intent of these construction documents to allow the CONTRACTOR latitude in the scheduling and development of the logistics for accomplishing the final design. Toward that end, these documents provide milestones and deadlines for the overall project as well as performance specifications. The CONTRACTOR is obliged to meet the milestones, deadlines and performance specifications. The CONTRACTOR will, in consultation with the ENGINEER, and subject to the approval of the ENGINEER, develop the specific methods for accomplishing the tasks outlined in these documents.
- .3 For Consideration Only, a possible work schedule for the project is presented following. The CONTRACTOR is fully responsible for providing an implementation schedule that is workable, and for following up and maintaining the currency of that schedule. The CONTRACTOR'S chosen work schedule should be used to prepare the year-to-year work break down, in TENDER FORM C1.

### 2005 Construction

- 1. Fence removal from main facility.
- 2. Relocate existing horizontal tanks to location adjacent to the facility.
- Construct required earthworks and liner at west side of existing main site. Liner to be flown in if required.
- 4. Construct pad for relocated LSDL tank #2.
- 5. Sealift Delivers following Items (July 2005)
  - Piping

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## Particular Scope of Work

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- Tank Components for upgrading existing tanks.
- Materials to construct new Gasoline tank.
- Fencing
- 6. Transfer Gasoline from existing vertical tank #1 to existing horizontal tanks.
- 7. Transfer LSDL from existing vertical tank to existing Gasoline vertical tank #1.
- 8. Relocate existing LSDL vertical tank #2 to new pad on west side of site.
- 9. Hydrotest relocated vertical LSDL tank #2.
- 10. Transfer LSDL from existing Gasoline vertical tank #1 back to existing vertical tank #2.
- 11. Transfer Gasoline from existing horizontal tanks back to existing vertical Gasoline tank #1.
- 12. Connect temporary piping to existing dispensers.
- 13. Relocate existing horizontal tanks to new pad on west side of site.
- 14. Installation of fencing as required.
- 15. Close up site for the year.
- 16. Fuel resupply sealift

#### 2006 Construction

- 17. Construct required earthworks and liner at south east corner of new main site.
- 18. Construct pad for relocated Gasoline vertical tank #1 to be converted to LSDL.
- 19. Transfer Gasoline from existing vertical tank #1 to existing horizontal standby tanks.
- 20. Relocate existing Gasoline vertical tank #1 to new pad.
- 21. Refurbished existing vertical Gasoline tank #1 for LSDL service.
- 22. Begin constructing new vertical Gasoline tank.
- Hydrotest refurbished vertical LSDL tank #1.
- 24. Begin constructing Interior tank farm piping.
- 25. Complete new vertical Gasoline tank.
- 26. Hydrotest new vertical Gasoline tank.
- 27. Transfer Gasoline from existing standby tanks to new vertical Gasoline tank.
- 28. Hydrotest refurbished vertical LSDL tank #1.
- 29. Complete piping inside bermed area.
- 30. Installation of new stiles, catwalks, and other metal works.
- 31. Completion (off site) of new dispenser and operator shelter.
- 32. Shipping and connection of new operators shelter and dispenser buildings.
- 33. Substantial Completion Inspection

## 2007 Construction

- 34. Painting of tanks and piping.
- 35. Completion of seasonal deliciencies.
- 36. Final Inspection

#### 2008 Construction

37. Warranty Inspection & Repairs.

# Appendix 2



# **EFC HOUSING SERIES**



#### THE EDEN DIFFERENCE

Eden Equipment Company, manufacturer of patented and highly engineered filtration systems, is committed to meeting the global demand for cost effective filtration solutions.

With a focus on dumbility and reliability, our products minimize downtime through an easy to maintain design. Replacement costs are reduced by outlasting most competitors.

Our housings are 3 to 5 times stronger than comparable steel vessels at 50% of the weight and are compatible with most filter cartridges. The life of our housings, even in highly corrosive environments, has exceeded 20 years.

#### **EFC HOUSING DESCRIPTION**

The Eden Excel patented line of vessels and filtration systems provide exceptional chemical resistance and outstanding tensile strength.

- EFC housings are constructed from a fiberglass reinforced plastic (FRP) barrel manufactured with Dow Derakane 411, a flexible and fatigue-resistant vinyl ester resin
- Seamless construction adds strength and longevity
- Engineered to minimize downtime; easy to clean and replace parts
- Internal Components are constructed of PVC.
   CPVC & PVDF available for specialized applications
- Externals are constructed of anodized aluminum & 303 stainless steel with other materials optional
- · Buna O-rings are standard

#### **FEATURES**

- Designed to ASME Code, Section X standards
- All wented materials meet the FDA CFR Title 21 requirements
- Pressure Rating Maximum use pressure 150 PSI at 150° F
- Hydrostatically pressure tested to 300 PSI, design pressure of 900 PSI
- Corrosion resistant compatible with fluids in PH range of 2-13
- Standard 2" NPT inlet/outlet
- \* Standard 1/4" NPT vent



#### FLOW RATES

The following flow rates are suggested for standard use, though significantly higher rates may be obtained with corresponding pressure drop.

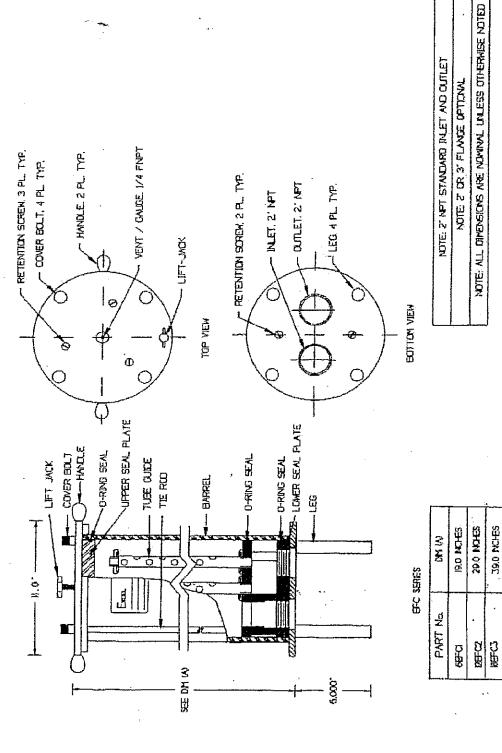
EFC Product	GPM	Cartridge Size	Cartridges
6EFC1-2C150	to 30 GPM	10.inch	6
12EFC2-2C150	to 60 GPM	20 inch	6
18EFC3-2C150	to 90 GPM	30 inch	6
24ESC4-2C150	to 120 GPM	40 inch	6

# **OPTIONS**

- · All vessels are highly customizable for the widest availability
- 222 Cartridge Seal Internals
- · 2" or 3" flange sets in PVC, CPVC or Polypropylene
- · EPDM, Viton, Silicon, Kalrez O-Rings
- · Polypropylene or PVDF Liner
- 316 Stainless Steel Externals
- · BPO bleach service

Eden Equipment Company, Inc. 1485 East 3rd Street, Pomona, CA 91766 t. 800.842,5081 f. 909.629.0243 www.edenequipment.com

Contact us for special designs, ratings or compatibility. Chemical compatibility must be checked to ensure warranty.



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