

August 20, 2001

Point Thomson Gas Cycling Project

Department of the Army Permit Application



ExxonMobil

on behalf of the Point Thomson Unit owners

ExxonMobil Production Company

Alaska Interest - Joint Interest U.S.

P.O. Box 196601

Anchorage, Alaska 99519-6601

August 20, 2001

ExxonMobil
Production

Mr. Mike Holley
Unit Coordinator
U.S. Army Corps of Engineers, Alaska District
Regulatory Branch
P.O. Box 898
Anchorage, AK 99506-0898

**Subject: Department of the Army Permit Application
Point Thomson Gas Cycling Project
Point Thomson Unit, Alaska**

RECEIVED

AUG 30 2001

ANCHORAGE-A00/A

Dear Mr. Holley:

ExxonMobil and its partners propose to commercially develop hydrocarbon reserves within the Point Thomson Unit, which is located approximately 46 miles east of Prudhoe Bay, along the Beaufort Sea coast. The high-pressure Thomson Sands reservoir is the target for this proposed development, with approximately 200 million barrels of gas condensate and 8 trillion cubic feet (TCF) of natural gas estimated to be recoverable using existing technology. Since its discovery in 1973, ExxonMobil has carefully evaluated numerous scenarios to develop these reserves, and now is pleased to present the Point Thomson Gas Cycling Project for consideration to the regulatory community.

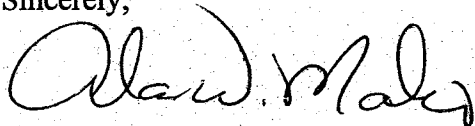
The Point Thomson Gas Cycling Project involves the cycling of gas in the Thomson Sands reservoir to recover liquid hydrocarbon condensate. The axis of the reservoir is generally aligned with the lagoon system located immediately south of Flaxman Island and extends offshore to the northwest. With advances in Extended Reach Drilling (ERD) technology, ExxonMobil and its partners believe that the target reservoir can be exploited using three onshore well pads. Production well pads located at the east and west margin of the reservoir will supply a three-phase product composed of natural gas, condensate, and formation (produced) waters to the Central Processing Facility, where the gas condensate and possibly relatively small amounts of oil will be recovered. Lean gas will be re-injected near the center of the reservoir from a third pad located immediately adjacent to the Central Processing Facility. Project support facilities include an airstrip, dock, infield road system, gravel mine, and a year-around fresh water source. A sales pipeline will extend westward and connect with the Badami Development sales oil pipeline. There are no plans for a gravel access road to connect the Point Thomson Gas Cycling Project with the Badami Development or other existing oil field infrastructure to the west.

ExxonMobil, on behalf of the Point Thomson Unit owners, submitted the *Point Thomson Gas Cycling Project Environmental Report* to the regulatory community on July 30, 2001¹. The report details the currently envisioned conceptual engineering for the project, analysis of development alternatives, description of the affected environment, environmental consequences associated with the proposed project, and proposed mitigation measures. Also, the report includes a thorough analysis of potential cumulative effects of the project in the context of reasonably foreseeable regional development. ExxonMobil hopes to receive feedback on the *Point Thomson Gas Cycling Project Environmental Report* from the regulatory community by September 14, 2001.

The purpose of this letter is to request that the U.S. Army Corps of Engineers, Alaska District (Corps) initiate review of the Point Thomson Gas Cycling Project, as described in the enclosed Department of the Army Permit Application. ExxonMobil is very interested in entering into discussion about the expected administrative procedures for this project. We also want to gain a thorough understanding of the Corps' and other agencies' opinions of the significance of this project, including its geographical context and the expected level of public interest in the project.

As the applicant, ExxonMobil has the goal of working constructively with the regulatory community to receive permits as soon as feasible, while strictly adhering to required administrative procedures and regulations. We are interested in your suggestions to help us effectively communicate with you, and identify critical dates related to the overall permitting process. ExxonMobil looks forward to working alongside the Corps on this project. Please contact me at 564-3702 if I can provide further information.

Sincerely,



Dr. Alan W. Maki
Environmental Advisor
Safety, Health and Environment

cc:

with attachments:

Ted Rockwell, USEPA
Jeanne Hanson, NMFS
Louise Smith, USFWS
Rex Okakok, NSB
Glenn Gray, DGC

¹ For your convenience, the distribution list for the *Point Thomson Gas Cycling Project Environmental Report* accompanies this letter.

Distribution List for the *Point Thomson Gas Cycling Project Environmental Report* (July 30, 2001).

Name	Title	Company	Address	CityStateZip	Copies
Federal Regulatory Agencies					
Terry Carpenter		U.S. Army Corps of Engineers	Attn: CEPOA-CO-Regulatory Branch PO Box 898	Anchorage, AK 99506-0898	3
Ted Rockwell	Alaska Operations Office	U.S. Environmental Protection Agency	222 W. Seventh Avenue, #19	Anchorage, AK 99513-7588	1
Jeff Walker	Regional Supervisor, Field Operations	Minerals Management Service	949 E 36th Ave. Room 308	Anchorage, AK 99508-4302	1
Jeanne Hanson		National Marine Fisheries Service	222 W. 7th Ave. Box 43	Anchorage, AK 99513-7577	1
Rosa Meehan	Marine Mammals	U.S. Fish and Wildlife Service	1011 E. Tudor Rd.	Anchorage, AK 99503-6199	1
Larry Bright	Northern Alaska Ecological Services	U.S. Fish and Wildlife Service	101 12th Ave. Box 20	Fairbanks, AK 99701	1
Richard Voss	ANWR Manager	U.S. Fish and Wildlife Service	101 12th Ave. Room 236	Fairbanks, AK 99701	1
State of Alaska Regulatory Agencies					
Bob Crandall	Sr. Geologist	Alaska Oil & Gas Conservation Commission	333 W. 7th Ave. Suite 100	Anchorage, AK 99501	2
Jim Baumgartner	Division of Air-Water Quality	Alaska Department of Environmental Conservation	410 Willoughby Ave. Suite 105	Juneau, AK 99801-1795	1
Susan Harvey		Alaska Department of Environmental Conservation	555 Cordova Street	Anchorage, AK 99501-2617	1
Judd Peterson		Alaska Department of Environmental Conservation	555 Cordova Street	Anchorage, AK 99501-2617	1
Jeff Mach		Alaska Department of Environmental Conservation	410 Willoughby Ave. Suite 301	Juneau, AK 99801-1795	1
Al Ott	Habitat Protection Section	Alaska Department of Fish and Game	1300 College Road	Fairbanks, AK 99701-1599	2
Steve Schmitz	Division of Oil and Gas	Alaska Department of Natural Resources	550 W 7th Ave. Suite 806	Anchorage, AK 99501	3
Sue Malen	Division of Mining, Lands, and Water	Alaska Department of Natural Resources	3700 Airport Way	Fairbanks, AK 99709	1
Frank Maxwell	Division of Mining, Land, and Water	Alaska Department of Natural Resources	3700 Airport Way	Fairbanks, AK 99709	1
Gary Prokosch	Division of Mining, Land, and Water	Alaska Department of Natural Resources	550 W 7th Ave. Suite 930	Anchorage, AK 99501	1
Glenn Gray	OMB	Alaska Division of Governmental Coordination	P.O. Box 110030 240 Main Street, Suite 500	Juneau, AK 99811-0030	1

Name	Title	Company	Address	CityStateZip	Copies
Kaye Laughlin	Program Analysis	Alaska Division of Governmental Coordination State Pipeline Coordinator's Office	411 W. 4th Ave. Suite 2-C	Anchorage, AK 99501-2342	1
John Kerrigan	State Pipeline Coordinator	State Pipeline Coordinator's Office	411 W. 4th Ave. Suite 2-C	Anchorage, AK 99501-2342	2
Local Regulatory Agencies					
Rex Okakok	Planning Department	North Slope Borough	P.O. Box 69 1920 Takpak Rd.	Barrow, AK 99723	1
Tom Albert	Wildlife Department	North Slope Borough	P.O. Box 69 c/o NARL Beach Rd.	Barrow, AK 99723	1
Point Thomson Unit Owners and Contractors					
Karen Wuestenfeld		BP Exploration (Alaska), Inc.	P.O. Box 196612 900 E. Benson Boulevard	Anchorage, AK 99519-6612	5
Tom Mercier		Colt Engineering Corp.	Suite 400 10201 Southport Rd SW	Calgary, ALBERTA T2W4X9	1
Mike Whitehead		ExxonMobil	800 Bell Street Room 2059J	Houston, TX 77002	6
Steve Wright		Chevron USA Inc.	3601 C Street Suite 822	Anchorage, AK 99503	1
Lisa Pekich		Phillips Alaska, Inc.	P.O. Box 100360 700 G Street	Anchorage, AK 99510	5
Al Maki		ExxonMobil	3301 C Street	Anchorage, AK 99503	5
Sue Ban		URS Corporation	5600 B Street	Anchorage, AK 99518	2

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
(33 CFR 325)

OMB APPROVAL NO. 0710-0003
Expires June 30, 2000

The Public burden for this collection of information is estimated to average 10 hours per response, although the majority of applications should require 5 hours or less. This includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please **DO NOT RETURN** your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research and Sanctuaries Act, 33 USC 1413, Section 103. **Principal Purpose:** Information provided on this form will be used in evaluating the application for a permit. **Routine Uses:** This information may be shared with the Department of Justice and other federal, state, and local government agencies. **Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.**

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED
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(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME ExxonMobil Production Company for the Pt. Thomson Unit Owners (refer to Tab 5)	8. AUTHORIZED AGENT'S NAME AND TITLE <i>(an agent is not required)</i> _____Not Applicable_____
6. APPLICANT'S ADDRESS P.O. Box 196601 Anchorage, AK 99519-6601 (refer to Tab 5 for physical address)	9. AGENT'S ADDRESS _____Not Applicable_____
7. APPLICANT'S PHONE NOS. W/AREA CODE a. Residence _____ b. Business (907) 564-3702	10. AGENT'S PHONE NOS. W/AREA CODE a. Residence Not Applicable _____ b. Business Not Applicable _____

11. STATEMENT OF AUTHORIZATION

I hereby authorize, XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____XXX_____

APPLICANT'S SIGNATURE

_____XXX_____

DATE

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE *(see instructions)*

Pt. Thomson Gas Cycling Project

13. NAME OF WATERBODY, IF KNOWN <i>(if applicable)</i> Lions Lagoon, Beaufort Sea, Tundra Wetlands and Unnamed Streams	14. PROJECT STREET ADDRESS <i>(if applicable)</i>		
15. LOCATION OF PROJECT <table style="width:100%;"> <tr> <td style="width:50%; text-align:center;">North Slope Borough _____ COUNTY _____</td> <td style="width:50%; text-align:center;">Alaska _____ STATE _____</td> </tr> </table>	North Slope Borough _____ COUNTY _____	Alaska _____ STATE _____	
North Slope Borough _____ COUNTY _____	Alaska _____ STATE _____		

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN, *(see instructions)*
Tab 16 presents the legal description, including Alaska Division of Land (ADL) Lease Numbers, Township, Range, and Section numbers, and a representative latitude and longitude.

17. DIRECTIONS TO THE SITE
Tab 17 provides concise directions to the project site.

18. Nature of Activity (Description of project, include all features)

Tab 18 provides a description of the project.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

Tab 19 presents the purpose and need of the project, major construction milestones and schedule, and related activities.

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

Tab 20 provides reasons for: A) gravel placement on wetlands; B) gravel placement in marine waters; and C) channel dredging and ocean dumping of dredged spoils. Drawings of each facility requiring gravel placement, excavation, or dredging are provided.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

Tab 21 provides gravel volumes required for each facility, as well as excavation, overburden stockpile, and channel dredging requirements.

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Tab 22 contains a summary table listing the total acreage of wetlands and waters affected by this project.

23. Is Any Portion of the Work Already Complete? Yes No IF YES, DESCRIBE THE COMPLETED WORK

Approximately 12.2 acres of the proposed project will use an existing gravel pad (refer to Tab 22).

24. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).

Tab 24 contains a table listing adjacent lease holders, and a figure showing adjacent public and private landowners.

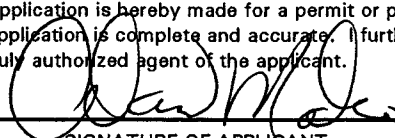
25. List of Other Certifications or Approvals/Denials Received from other Federal, State or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
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Tab 25 provides a list of the anticipated permits and approvals required to construct and operate this proposed project.

*Would include but is not restricted to zoning, building and flood plain permits

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

 SIGNATURE OF APPLICANT	<u>8/20/01</u> DATE	<u>XXXX</u> SIGNATURE OF AGENT	<u>XXXX</u> DATE
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The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

Coastal Project Questionnaire and Certification Statement

Please answer all questions. To avoid a delay in processing, **please call the department if you answer "yes" to any of the questions related to that department.** Maps and plan drawings must be included with your packet.

An incomplete packet will be returned.

■ APPLICANT INFORMATION

1. **ExxonMobil Production Company**
 Name of Applicant
P.O. Box 196601
 Address
Anchorage, AK 99519-6601
 City/State Zip Code
(907) 564-3702
 Daytime Phone
(907) 564-3789 al.w.maki@exxonmobil.com
 Fax Number E-mail Address

2. **Not Applicable**
 Agent (or responsible party if other than applicant)
Not Applicable
 Address
Not Applicable
 City/State State Zip Code Zip Code
Not Applicable
 Daytime Phone
Not Applicable
 Fax Number E-mail Address

■ PROJECT INFORMATION

1. This activity is a: **new project** modification or addition to an existing project
 If a modification, do you currently have any State, federal or local approvals related to this activity? **Yes** **No**

Note: Approval means any form of authorization. If "yes," please list below:

Approval Type	Approval #	Issuance Date	Expiration Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

2. If a modification, has this project ever been reviewed by the State of Alaska under the ACMP? **Yes** **No**
 Previous State I.D. Number: AK _____ Previous Project _____

Name: _____

■ PROJECT DESCRIPTION

1. Provide a brief description of your entire project and ALL associated facilities and land use conversions. Attach additional sheet(s) as needed.

Please refer to Tabs 18 and 20

Proposed starting date for project: **December 2004** Proposed ending date for project: **September 2005**
(completion of gravel placement)

2. Attach the following: • a detailed description of the project, all associated facilities, and land-use conversions, etc. (Be specific, including access roads, caretaker facilities, waste disposal sites, etc.); • a project timeline for completion of all major activities in the proposal; • a site plan depicting property boundary with all proposed actions; • other supporting documentation that would facilitate review of the project. Note: If the project is a modification, identify existing facilities as well as proposed changes on the site plan.

■ PROJECT LOCATION

1. Attach a copy of the topographical and vicinity map clearly indicating the location of the project. Please include a map title and scale. **Please refer to Tab 20.**
2. The project is located in which region (see attached map): Northern Southcentral Southeast
 within or associated with the Trans-Alaska Pipeline corridor
3. Location of project (Include the name of the nearest land feature or body of water.) **Please refer to Tab 16**
 Township _____ Range _____ Section _____ Meridian _____ Latitude/Longitude _____ / _____ USGS Quad Map _____
4. Is the project located in a coastal district? Yes No If yes, identify: **North Slope Borough**
(Coastal districts are a municipality or borough, home rule or first class city, second class with planning, or coastal resource service area.) Note: A coastal district is a participant in the State's consistency review process. It is possible for the State review to be adjusted to accommodate a local permitting public hearing. Early interaction with the district is important; please contact the district representative listed on the attached contact list.
5. Identify the communities closest to your project location: **Kaktovik**
6. The project is on: State land or water* Federal land Private land
 Municipal land Mental Health Trust land
**State land can be uplands, tidelands, or submerged lands to 3 miles offshore. See Question #1 in DNR section.
 Contact the applicable landowner(s) to obtain necessary authorizations.*

DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) APPROVALS

- | | Yes | No |
|---|-------------------------------------|-------------------------------------|
| 1. Will a discharge of wastewater from industrial or commercial operations occur? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Will the discharge be connected to an already approved sewer system? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Will the project include a stormwater collection/discharge system? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Do you intend to construct, install, modify, or use any part of a wastewater (sewage or greywater) disposal system? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| a) If so, will the discharge be 500 gallons per day or greater? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) If constructing a domestic wastewater treatment or disposal system, will the system be located within fill material requiring a COE permit? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| If you answered yes to a) or b), answer the following: | | |
| 1) What is the distance from the bottom of the system to the top of the subsurface water table? About 2 feet to the top of the permafrost | | |
| 2) How far is any part of the wastewater disposal system from the nearest surface water? Adjacent to tundra wetlands | | |
| 3) Is the surrounding area inundated with water at any time of the year? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4) How big is the fill area to be used for the absorption system? Not Applicable | | |
| <i>(Questions 1 & 2 will be used by DEC to determine whether separation distances are being met; Questions 3 & 4 relate to the required size of the fill if wetlands are involved.)</i> | | |
| 3. Do you expect to request a mixing zone for your proposed project? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>(If your wastewater discharge will exceed Alaska water quality standards, you may apply for a mixing zone. If so, please contact DEC to discuss information required under 18 AAC 70.032.)</i> | | |

Yes No

- 4. a) Will your project result in the construction, operation, or closure of a facility for the disposal of solid waste?
(Note: Solid waste means drilling wastes, household garbage, refuse, sludge, construction or demolition wastes, industrial solid waste, asbestos, and other discarded, abandoned, or unwanted solid or semi-solid material, whether or not subject to decomposition, originating from any source. Disposal means placement of solid waste on land.)
- b) Will your project result in the treatment of solid waste at the site?
(Examples of treatment methods include, but are not limited to: incineration, open burning, baling, and composting.)
- c) Will your project result in the storage or transfer of solid waste at the site?
- d) Will the project result in the storage of more than 50 tons of materials for reuse, recycling, or resource recovery?
- e) Will any sewage solids or biosolids be disposed of or land-applied to the site?
(Sewage solids include wastes that have been removed from a wastewater treatment plant system, such as a septic tank, lagoon dredge, or wastewater treatment sludge that contain no free liquids. Biosolids are the solid, semi-solid, or liquid residues produced during the treatment of domestic septage in a treatment works which are land applied for beneficial use.)

5. Will your project require the application of oil, pesticides, and/or any other broadcast chemicals?

- 6. a) Will you have a facility with industrial processes that are designed to process no less than five tons per hour and needs air pollution controls to comply with State emission standards?
- b) Will you have stationary or transportable fuel burning equipment, including flares, with a total fuel consumption capacity no less than 50 million Btu/hour?
- c) Will you have a facility with incinerators having a total charging capacity of no less than 1,000 pounds per hour?
- d) Will you have a facility with equipment or processes that are subject to Federal New Source Performance Standards or National Emission Standards for hazardous air pollutants?
i) Will you propose exhaust stack injection?
- e) Will you have a facility with the potential to emit no less than 100 tons per year of any regulated air contaminant?
- f) Will you have a facility with the potential to emit no less than 10 tons per year of any hazardous air contaminant or 25 tons per year of all hazardous air contaminants?
- g) Will you construct or add stationary or transportable fuel burning equipment of no less than 10 million Btu/hour in the City of Unalaska or the City of St. Paul?
- h) Will you construct or modify in the Port of Anchorage a volatile liquid storage tank with a volume no less than 9,000 barrels, or a volatile liquid loading rack with a design throughput no less than 15 million gallons?
- i) Will you be requesting operational or physical limits designed to reduce emissions from an existing facility in an air quality nonattainment area to offset an emission increase from another new or modified facility?

**6 a) to 6 f)
to be
determined
prior to
permit
application
submittal**

7. Will you be developing, constructing, installing, or altering a public water system?

- 8. a) Will your project involve the operation of waterborne tank vessels or oil barges that carry crude or non-crude oil as bulk cargo, or the transfer of oil or other petroleum products to or from such a vessel or a pipeline system?
- b) Will your project require or include onshore or offshore oil facilities with an effective aggregate storage capacity of greater than 5,000 barrels of crude oil or greater than 10,000 barrels of non-crude oil?

- c) Will you be operating facilities on the land or water for the exploration or production of hydrocarbons? Yes No

If you answered "NO" to ALL questions in this section, continue to next section.

If you answered "YES" to ANY of these questions, contact the DEC office nearest you for information and application forms. Please be advised that all new DEC permits and approvals require a 30-day public notice period. DEC Pesticide permits take effect no sooner than 40 days after the permit is issued.

Based on your discussion with DEC, please complete the following:

Types of project approvals or permits needed

Date application submitted

Please refer to Tab 25 (Table 25-1)

9. Does your project qualify for a general permit for wastewater or solid waste?.....
Note: A general permit is an approval issued by DEC for certain types of routine activities.

If you answered "YES" to any questions in this section and are not applying for DEC permits, indicate reason:

- _____ (DEC contact) told me on _____ that no DEC approvals are required on this project because _____
 Other: _____

■ DEPARTMENT OF FISH & GAME (DFG) APPROVALS

1. Will you be working in, removing water or material from, or placing anything in, a stream, river or lake? (This includes work or activities below the ordinary high water mark or on ice, in the active flood plain, on islands, in or on the face of the banks, or, for streams entering or flowing through tidelands, above the level of mean lower low tide.)
Note: If the proposed project is located within a special flood hazard area, a floodplain development permit may be required. Contact the affected city or borough planning department for additional information and a floodplain determination.)
 Name of waterbody: Please refer to Tab 20 (Figure 20-2), Beaufort Sea & Unnamed Tundra Streams

2. Will you do any of the following:.....
 Please indicate below:

- | | |
|---|---|
| <input type="checkbox"/> Build a dam, river training structure, other instream impoundment, or weir | <input checked="" type="checkbox"/> Build a bridge (including an ice bridge) |
| <input checked="" type="checkbox"/> Use the water | <input checked="" type="checkbox"/> Use the stream, lake or waterbody as a road (even when frozen), or cross the stream with tracked or wheeled vehicles, log-dragging or excavation equipment (backhoes, bulldozers, etc.) |
| <input checked="" type="checkbox"/> Pump water into or out of stream or lake (including dry channels) | <input checked="" type="checkbox"/> Install a culvert or other drainage structure |
| <input type="checkbox"/> Divert or alter the natural stream channel | <input checked="" type="checkbox"/> Construct, place, excavate, dispose or remove any material below the ordinary high water of a waterbody |
| <input type="checkbox"/> Change the water flow or the stream channel | <input checked="" type="checkbox"/> Construct a storm water discharge or drain into the waterbody |
| <input checked="" type="checkbox"/> Introduce silt, gravel, rock, petroleum products, debris, brush, trees, chemicals, or other organic/inorganic material, including waste of any type, into the water | <input checked="" type="checkbox"/> Place pilings or anchors |
| <input type="checkbox"/> Alter, stabilize or restore the banks of a river, stream or lake (provide number of linear feet affected along the bank(s)) | <input checked="" type="checkbox"/> Construct a dock |
| <input type="checkbox"/> Mine, dig in, or remove material, including woody debris, from the beds or banks of a waterbody | <input type="checkbox"/> Construct a utility line crossing |
| <input checked="" type="checkbox"/> Use explosives in or near a waterbody | <input type="checkbox"/> Maintain or repair an existing structure |
| | <input type="checkbox"/> Use an instream in-water structure not mentioned here |

- | | Yes | No |
|--|--------------------------|-------------------------------------|
| 3. Is your project located in a designated State Game Refuge, Critical Habitat Area or State Game Sanctuary? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Does your project include the construction/operation of a salmon hatchery? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Does your project affect, or is it related to, a previously permitted salmon hatchery? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6. Does your project include the construction of an aquatic farm? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

If you answered "No" to ALL questions in this section, continue to next section.
 If you answered "Yes" to ANY questions under 1-3, contact the Regional or Area DFG Habitat and Restoration Division Office for information and application forms.
 If you answered "Yes" to ANY questions under 4-6, contact the DFG Commercial Fisheries Division headquarters for information and application forms.

Based on your discussion with DFG, please complete the following:
 Types of project approvals or permits needed Date application submitted
Please refer to Tab 25 (Table 25-1) _____

If you answered "YES" to any questions in this section and are not applying for DFG permits, indicate reason:
 _____ (DFG contact) told me on _____ that no DFG approvals are required on this project because _____
 Other: _____

■ DEPARTMENT OF NATURAL RESOURCES (DNR) APPROVALS

- Is the proposed project on State-owned land or water or will you need to cross State-owned land for access? ("Access" includes temporary access for construction purposes. *Note: In addition to State-owned uplands, the State owns almost all land below the ordinary high water line of navigable streams, rivers and lakes, and below the mean high tide line seaward for three miles.*)
 a) Is this project for a commercial activity?
- Is the project on Alaska Mental Health Trust land (AMHT) or will you need to cross AMHT land? *Note: Alaska Mental Health Trust land is not considered State land for the purpose of ACMP reviews.*
- Do you plan to dredge or otherwise excavate/remove materials on State-owned land?
 Location of dredging site if different than the project site: **Refer to Tab 20 (Figure 20-12)**
 Township 10N Range 23E Section 34, 35 Meridian Umiat USGS Quad Map _____
- Do you plan to place fill or dredged material on State-owned land?
 Location of fill disposal site if other than the project site: **Refer to Tab 20 (Multiple Figures)**
 Township _____ Range _____ Section _____ Meridian _____ USGS Quad Map _____
 Source is on: State Land Federal Land Private Land Municipal Land
- Do you plan to use any of the following State-owned resources:
 Timber: Will you be harvesting timber? Amount: _____
 Materials such as rock, sand or gravel, peat, soil, overburden, etc.:
 Which material? Gravel Amount: 2,000,000 cubic yards
 Location of source: Project site Other, describe: _____
 Township 9N Range 23E Section 10, 11 Meridian Umiat USGS Quad Map _____

- | | Yes | No |
|--|-------------------------------------|-------------------------------------|
| 6. Are you planning to divert, impound, withdraw, or use any fresh water, except from an existing public water system or roof rain catchment system (regardless of land ownership)?..... <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Amount (maximum daily, not average, in gallons per day): <u>1,000,000 gallons per day</u> | | |
| Source: <u>Various Freshwater Lakes & Beaufort Sea</u> Intended Use: <u>Ice Roads</u> | | |
| If yes, will your project affect the availability of water to anyone holding water rights to that water? <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7. Will you be building or altering a dam (regardless of land ownership)? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. Do you plan to drill a geothermal well (regardless of land ownership)?..... | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9. At any one site (regardless of land ownership), do you plan to do any of the following?..... <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> Mine five or more acres over a year's time | | |
| <input checked="" type="checkbox"/> Mine 50,000 cubic yards or more of materials (rock, sand or gravel, soil, peat, overburden, etc.) over a year's time | | |
| <input type="checkbox"/> Have a cumulative unreclaimed mined area of five or more acres | | |
| If yes to any of the above, contact DNR about a reclamation plan. | | |
| If you plan to mine less than the acreage/amount stated above and have a cumulative unreclaimed mined area of less than five acres, do you intend to file a voluntary reclamation plan for approval? | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Will you be exploring for or extracting coal? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. a) Will you be exploring for or producing oil and gas?..... <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Will you be conducting surface use activities on an oil and gas lease or within an oil and gas unit? <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 12. Will you be investigating, removing, or impacting historical or archaeological or paleontological resources (anything over 50 years old) on State-owned land? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 13. Is the proposed project located within a known geophysical hazard area? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>Note: 6 AAC 80.900(9) defines geophysical hazard areas as "those areas which present a threat to life or property from geophysical or geological hazards, including flooding, tsunami run-up, storm surge run-up, landslides, snowslides, faults, ice hazards, erosion, and littoral beach process." "known geophysical hazard area" means any area identified in a report or map published by a federal, state, or local agency, or by a geological or engineering consulting firm, or generally known by local knowledge, as having known or potential hazards from geologic, seismic, or hydrologic processes.</i> | | |
| 14. Is the proposed project located in a unit of the Alaska State Park System? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**If you answered "No" to ALL questions in this section, continue to Federal Approvals section.
If you answered "Yes" to ANY questions in this section, contact DNR for information.**

Based on your discussion with DNR, please complete the following:

Types of project approvals or permits needed

Date application submitted

Please refer to Tab 25 (Table 25-1)

If you answered "YES" to any questions in this section and are not applying for DNR permits, indicate reason:

- _____ (DNR contact) told me on _____ that no DNR approvals are required on this project because _____
- Other: _____

■ **FEDERAL APPROVALS**

Yes No

U.S. Army Corps of Engineers (COE)

1. Will you be dredging or placing structures or fills in any of the following:
- tidal (ocean) waters? streams? lakes? wetlands*?
- If yes, have you applied for a COE permit?
- Date of submittal: **August 20, 2001**

(Note: Your application for this activity to the COE also serves as application for DEC Water Quality Certification.)

**If you are not certain whether your proposed project is in a wetlands (wetlands include muskegs), contact the COE, Regulatory Branch at (907) 753-2720 for a wetlands determination (outside the Anchorage area call toll free 1-800-478-2712).*

Bureau of Land Management (BLM)

2. Is the proposed project located on BLM land, or will you need to cross BLM land for access?
- If yes, have you applied for a BLM permit or approval?
- Date of submittal: _____

U.S. Coast Guard (USCG)

3. a) Will you be constructing a bridge or causeway over tidal (ocean) waters, or navigable rivers, streams or lakes?
- b) Does your project involve building an access to an island?
- c) Will you be siting, constructing, or operating a deepwater port?
- If yes, have you applied for a USCG permit?
- Date of submittal: _____

U.S. Environmental Protection Agency (EPA)

4. a) Will the proposed project have a discharge to any waters?
- b) Will you be disposing of sewage sludge (contact EPA at 206-553-1941)?
- If you answered yes to a) or b), have you applied for an EPA National Pollution Discharge Elimination System (NPDES) permit?
- Date of submittal: **Please refer to Tab 25 (Table 25-1)**
- (Note: For information regarding the need for an NPDES permit, contact EPA at (800) 424-4372.)*
- c) Will construction of your project expose 5 or more acres of soil? *(This applies to the total amount of land disturbed, even if disturbance is distributed over more than one season, and also applies to areas that are part of a larger common plan of development or sale.)*
- d) Is your project an industrial facility which will have stormwater discharge which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant?
- If you answered yes to c) or d), your project may require an NPDES Stormwater permit. Contact EPA at 206-553-8399.

Federal Aviation Administration (FAA)

5. a) Is your project located within five miles of any public airport?
- b) Will you have a waste discharge that is likely to decay within 5,000 feet of any public airport?
- If yes, please contact the Airports Division of the FAA at (907) 271-5444.

Federal Energy Regulatory Commission (FERC)

6. a) Does the project include any of the following:
- 1) a non-federal hydroelectric project on any navigable body of water
- 2) a location on federal land (including transmission lines)
- 3) utilization of surplus water from any federal government dam
- b) Does the project include construction and operation, or abandonment of natural gas pipeline facilities under sections (b) and (c) of the Federal Power Act (FPA)?

- Yes No
- c) Does the project include construction for physical interconnection of electric transmission facilities under section 202 (b) of the FPA?.....
- If you answered yes to any questions under number 6, have you applied for a permit from FERC?.....
- Date of submittal: _____
- (Note: For information, contact FERC, Office of Hydropower Licensing (202) 219-2668; Office of Pipeline Regulation (202) 208-0700; Office of Electric Power Regulation (202) 208-1200.)*

U.S. Forest Service (USFS)

7. a) Does the proposed project involve construction on USFS land?.....
- b) Does the proposed project involve the crossing of USFS land with a water line?
- If the answer to either question is yes, have you applied for a USFS permit or approval?
- Date of submittal: _____

8. Have you applied for any other federal permits or authorizations?.....
- | AGENCY | APPROVAL TYPE | DATE SUBMITTED |
|-------------------------------------|---------------|----------------|
| Refer to Tab 25 (Table 25-1) | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Please be advised that the CPQ identifies permits subject to a consistency review. You may need additional permits from other agencies or the affected city and/or borough government to proceed with your activity.

Certification Statement

The information contained herein is true and complete to the best of my knowledge. I certify that the proposed activity complies with, and will be conducted in a manner consistent with, the Alaska Coastal Management Program.

Signature of Applicant or Agent

Date

8/22/01

Note: Federal agencies conducting an activity that will affect the coastal zone are required to submit a federal consistency determination, per 15 CFR 930, Subpart C, rather than this certification statement. DGC has developed a guide to assist federal agencies with this requirement. Contact DGC to obtain a copy.

This certification statement will not be complete until all required State and federal authorization requests have been submitted to the appropriate agencies.

- **To complete your packet, please attach your State permit applications and copies of your federal permit applications to this questionnaire.**



Tab 5
(Applicant's Name & Address)

Mailing Address	Physical Address¹
POINT THOMSON UNIT OPERATOR	
Dr. A. W. Maki ExxonMobil Production Company P.O. Box 196601 Anchorage, AK 99519-6601	Dr. A. W. Maki ExxonMobil Production Company 3301 C Street Suite 400 Anchorage, AK 99503

¹ Please use these addresses for overnight mail (e.g., FedEx) and same-day courier deliveries.

TAB 16

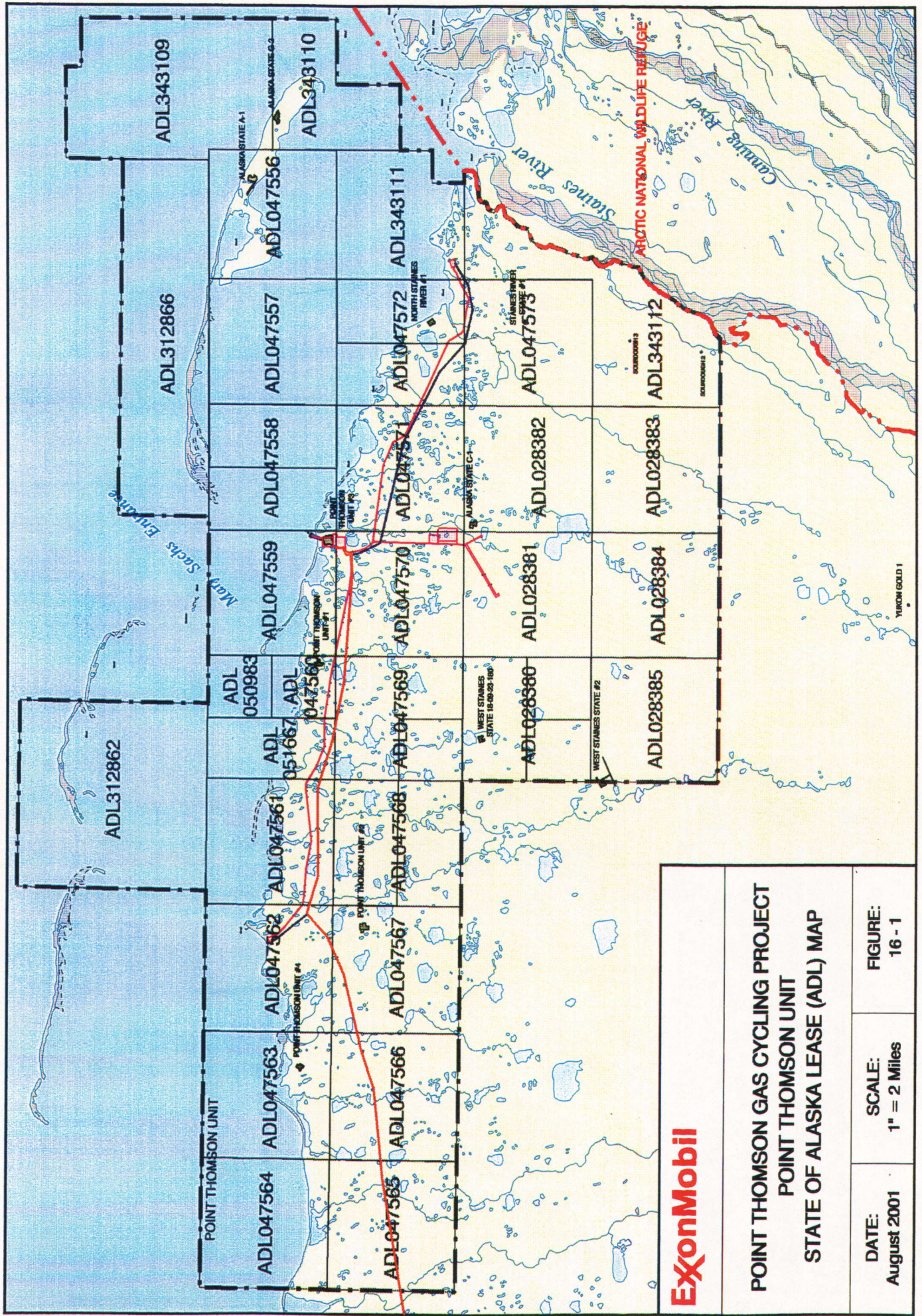
**Tab 16
(Other Location Descriptions)**

The operational center of the proposed Point Thomson Gas Cycling Project will be the Central Processing Facility, located at latitude 70.170 degrees north and longitude 146.255 degrees west. Table 16-1 lists the State of Alaska, Division of Land (ADL) Number and the related township, range, and section numbers that coincide with the proposed alignment of the gravel roads, gravel pads, gravel dock, and gravel airstrip. Figure 16-1 shows the Pt. Thomson Unit boundary with the state lease blocks and Figure 16-2 shows the unit boundary with the associated township, range, and section numbers.

Table 16-1: State of Alaska Lease Numbers and Corresponding Meridian Township, Range and Section for the Point Thomson Gas Cycling Project Facilities¹

Alaska Division of Land (ADL) Number	Umiat Meridian Township & Range	Section
0028381	U009N023E	16
0028381	U009N023E	15
0047559	U010N023E	34
0047559	U010N023E	33
0047560	U010N023E	32
0047561	U010N022E	35
0047561	U010N022E	36
0047562	U010N022E	34
0047562	U010N022E	27
0047569	U009N023E	5
0047570	U009N023E	10
0047570	U009N023E	4
0047570	U009N023E	3
0047571	U009N023E	11
0047571	U009N023E	12
0047571	U009N023E	2
0047571	U009N023E	1
0047572	U009N024E	7
0047572	U009N024E	8
0047573	U009N024E	17
0051667	U010N023E	31
0343111	U009N024E	9

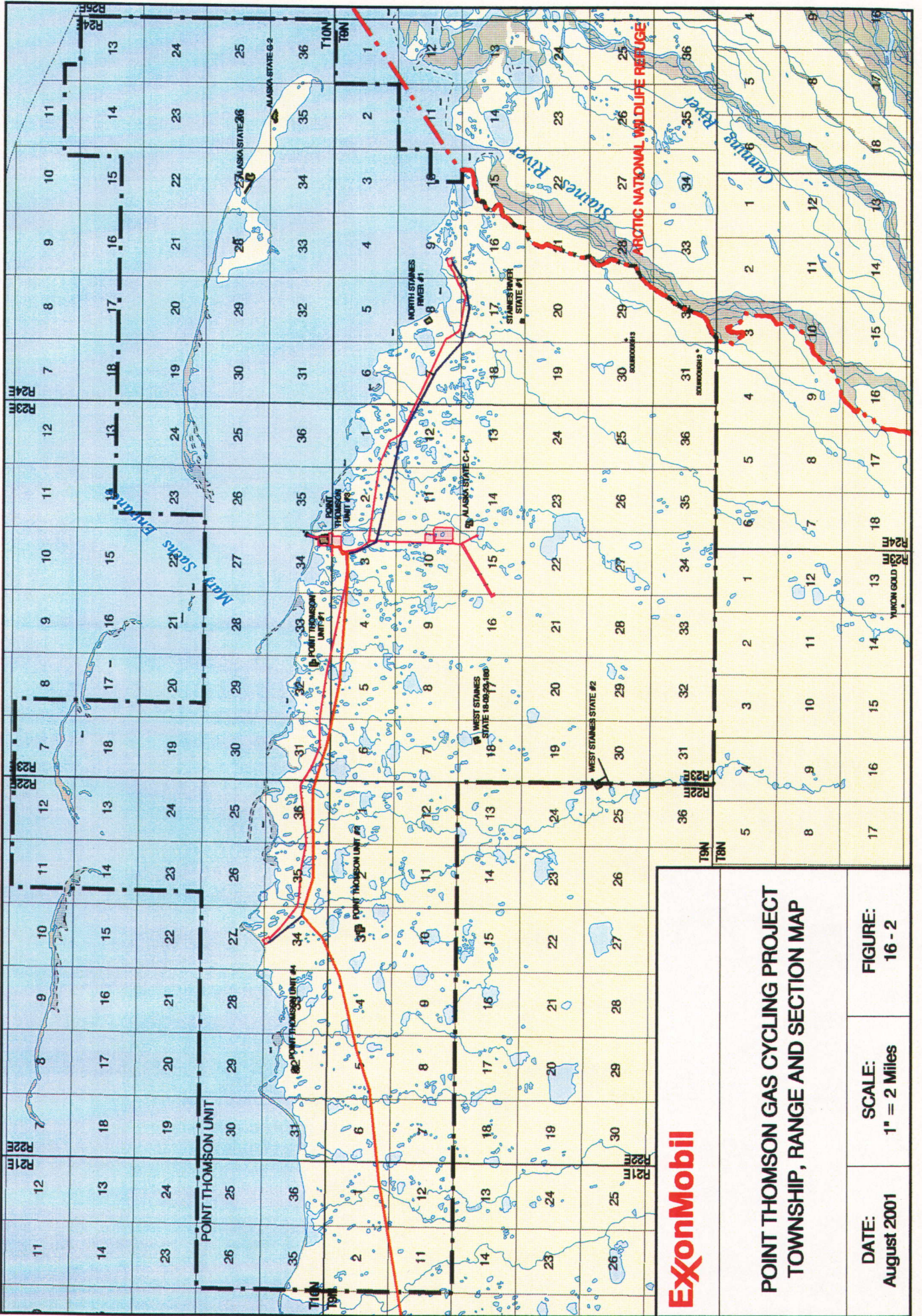
¹ Data extracted from Alaska Department of Natural Resources, Division of Oil and Gas "Active Oil and Gas Lease Database" dated July 14, 2001. Database downloaded from the following web site on August 9, 2001. (<http://www.dog.dnr.state.ak.us/oil/products/data/downloads/downloads.htm>)



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**POINT THOMSON GAS CYCLING PROJECT
POINT THOMSON UNIT
STATE OF ALASKA LEASE (ADL) MAP**

DATE: August 2001	SCALE: 1" = 2 Miles	FIGURE: 16 - 1
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**POINT THOMSON GAS CYCLING PROJECT
TOWNSHIP, RANGE AND SECTION MAP**

DATE: August 2001
SCALE: 1" = 2 Miles
FIGURE: 16 - 2

Tab 17
(Directions to the Site)

The Point Thomson Gas Cycling Project is proposed to be constructed on the mainland shore of the lagoon system located between Bullen Point and Brownlow Point, along the Alaska Beaufort Sea coast. The lagoon system, typically known as Lions Lagoon, is about 46 miles (74 kilometers) east of Prudhoe Bay. Flaxman Island and a chain of barrier islands known as the Maguire Islands (including Challenge, Alaska, Duchess, and Northstar islands) define the seaward limits of the lagoon. The operational center of the proposed development will be located immediately south of the Mary Sachs Entrance and immediately east of Point Thomson (Tab 16: Figure 16-1).

Tab 18
(Nature of the Activity)

The high-pressure Thomson Sands reservoir, discovered in 1973, is the target for this proposed project, with approximately 200 million barrels of gas condensate and 8 trillion cubic feet (TCF) of natural gas estimated to be recoverable using existing technology.

The Point Thomson Gas Cycling Project involves the cycling of gas in the Thomson Sands reservoir to recover liquid hydrocarbon condensate. The axis of the reservoir is generally aligned with the lagoon system located immediately south of Flaxman Island and extends offshore to the northwest. With advances in Extended Reach Drilling (ERD) technology, ExxonMobil and its partners believe that the target reservoir can be exploited using three onshore well pads. Production well pads located at the east and west margin of the reservoir will supply a three-phase product composed of natural gas, condensate, and formation (produced) waters to the Central Processing Facility, where the gas condensate and possibly relatively small amounts of oil will be recovered. Lean gas will be re-injected near the center of the reservoir from a third pad located immediately adjacent to the Central Processing Facility. Project support facilities include an airstrip, dock, infield road system, gravel mine, and a year-around fresh water source.

A sales pipeline will be built to transport the hydrocarbon condensate through a tie-in with the existing Badami sales oil pipeline located about 22 mi (35.4 km) west of the proposed Point Thomson CPF location. From Badami, the liquid product will be transported through the existing Badami and Endicott common carrier pipelines to the Trans Alaska Pipeline System (TAPS). There are no plans for a gravel access road to connect the Point Thomson Gas Cycling Project with the Badami Development or other existing oil field infrastructure to the west.

Tab 19
(Proposed Project Purpose)

Purpose

The Point Thomson field will be developed as a gas cycling project. Condensate is the hydrocarbon liquid that condenses from the 3-phase stream as the stream is expanded from the high pressure, high temperature reservoir conditions to the lower pressure, cooler conditions in the surface gathering and processing facilities. Condensate is a low density, low viscosity hydrocarbon liquid at standard conditions (i.e., atmospheric pressure and 60 degrees Fahrenheit). Clean, pure condensate will typically be a clear liquid. It is expected that the Point Thomson export condensate will be a cloudy to light brown liquid as it will contain a small amount of sediment and water (i.e., combined total volume less than 0.35 percent), and small amounts of other liquid hydrocarbon constituents.

In addition to condensate, the project basis includes the potential to accommodate limited production of heavy oil from the Point Thomson oil rim.

Need

Development of this resource is needed to meet domestic energy demand. Production of condensate could be as high as 75,000 barrels per day for the three-train base case. Production is currently estimated to last for as long as 30 years.

The Point Thomson Gas Cycling Project will provide economic benefits to the working interests and lease owners, as well as residents of the North Slope Borough (NSB), the State of Alaska (State), and the United States (U.S.). North Slope drilling and construction jobs may be created during the construction phase, with permanent operations jobs available during the operations phase. Over the life of the project, additional benefits will accrue to the State and NSB through the payment of royalties, severance, income, and *ad valorem* taxes.

Major Milestones

The major milestones of the Point Thomson Gas Cycling Project are shown in Table 1-1 on the following page. Note that gravel placement activities are highlighted with black text. ExxonMobil and its partners are striving to have the project in production by the end of 2006.

**Tab 19
(Proposed Project Purpose)**

Proposed Schedule

Table 1-1 Point Thomson Gas Cycling Project Major Milestones

MILESTONE	TIME FRAME	DESCRIPTION
Multi-disciplinary Environmental Studies	1997 – 2001	
Conceptual Engineering	Aug 1998 - April 2001	
Additional Environmental Studies	Summer 2002	The results of environmental studies conducted previous to 2001 are summarized in Section 4 of this document. Additional environmental studies are planned for 2002.
Preliminary Engineering Detailed Engineering/ Procurement	1 st Half of 2002 - March 2005	
Gravel Construction	Dec 2004 - April 2005	Gravel construction is expected to commence late in 2004 utilizing equipment mobilized over ice roads. Most gravel work at the project site is expected to be completed in a single winter season, with gravel obtained from a new local mine site.
Mobilize Rigs by barge	Late summer 2005	Rigs are delivered to the new dock adjacent to the central well pad.
Infrastructure Construction	Feb – Sept. 2005	Construction of infrastructure such as airport, power generation, storage tanks, temporary camps, and dock to support drilling operations.
Development Well Drilling	Sept. 2005	Drilling is conducted with two rigs
Pipeline Construction	Dec 2005 - May 2006	Pipeline construction is expected to commence in winter 2005 and be completed by May 2006.
Sealift	June - Sept 2006	Major modules for CPF are brought to Point Thomson by sealift in the summer of 2006 and offloaded at the dock.
Module Installation	Sept - Dec 2006	
Production	4 th Quarter 2006	Production of condensate from Point Thomson is expected to commence at the end of 2006

Related Activities (Far West Well Pad)

A potential additional production well pad location has been identified approximately 3 to 6 miles (5 to 10 km) further to the west from the West Well Pad. This Far West Well Pad would be approximately 5 acres (20,200 m²) and accommodate possibly four to six wells. Although current plans do not include drilling and development for this pad, continued geological evaluation may determine that additional wells from this pad are necessary for optimum development of the reservoir. Should such a location prove necessary, the road and pipeline systems would be extended to join this pad.

**Tab 20
(Reasons for Discharge)**

This project proposes to extract hydrocarbons from the Thomson Sands gas reservoir which is located both onshore and offshore of Lions Lagoon. Section Two of the *Point Thomson Gas Cycling Project Environmental Report* (July 30, 2001) analyzes multiple development options and presents the rationale for selecting the onshore development as the preferred option. Section Three of the report presents the Project Description.

The proposed project will be constructed on tundra, regulated as waters of the United States under the Clean Water Act, and thus any proposed activity that could affect these wetlands is regulated by the U.S. Army Corps of Engineers (Corps). Additionally, a dock is proposed to be constructed in the lagoon that is designated as navigable waters of the United States (33 CFR Part 329.4), and thus, its construction is regulated by the Corps. Generally, there are three proposed construction activities that involve the placement of gravel fill and discharge of spoils into regulatory designated wetlands or water bodies:

- Gravel Placement on Wetlands and Tundra Streams (Road Fill)
- Gravel Placement in Marine Waters
- Channel Dredging and Ocean Dumping of Dredged Spoils

Gravel Placement on Wetlands and Tundra Streams (§404)

All of the proposed surface facilities will be located on tundra, and thus, gravel will be used as the facility platform or foundation. Past experience on the North Slope of Alaska clearly indicates that a sufficient thickness of gravel serves as effective insulation to prevent permafrost degradation. Thus, gravel pads, gravel roads, and gravel airstrips provide a stable platform to operate the facilities throughout the project life span, with minimal affects to the underlying permafrost. Gravel for these structures will be extracted from the project mine site. Section Three of the Environmental Report describes the proposed onshore facilities, including gravel pads, gravel roads, and the gravel airstrip. Also, Section Three describes the Gravel Mine Site.

Gravel Placement in Marine Waters (§404, §10)

The proposed Point Thomson Gas Cycling Project will use a dock (750 feet x 100 feet) located immediately adjacent to the Central Well Pad to serve as the offloading site of barges throughout the project life span. Initially, the dock will be used to transfer facility modules to shore from sealift barges. Afterwards, the dock will be used for seasonal barge traffic and provide access to oil spill response boats and equipment. The proposed dock will be a gravel-filled structure with sheet pile at the dock head. Gravel will be extracted from the project mine site. Section Three of the Environmental Report describes the proposed dock, its associated channel, and the Gravel Mine Site.

**Tab 20
(Reasons for Discharge)**

Channel Dredging and Ocean Dumping of Dredged Spoils (Section 103 MPRSA)

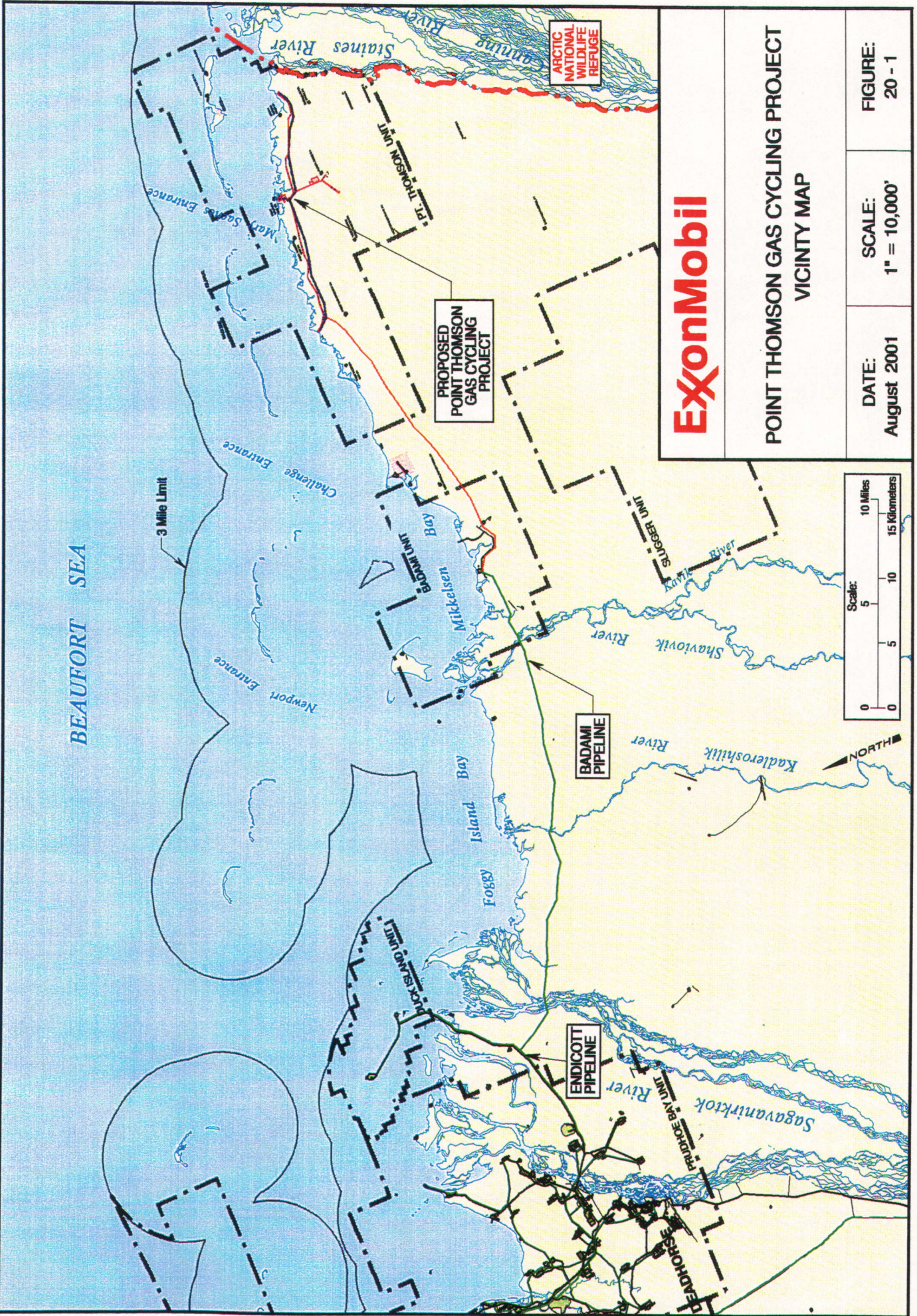
To limit the dock length to 750 feet, a channel will need to be established so that adequate water depth is available to offload the facility modules. Available estimates indicate that 9 feet below mean sea level (MSL) is the required minimum water depth. It is anticipated that the dredged channel will be 1,000 feet by 400 feet and approximately 2 feet of sediments will need to be removed. It is estimated that the volume of spoils will be 30,000 cubic yards; however, it should be noted that this volume does not include swelling. It is proposed that the dredged spoils be discharged at a currently undesignated ocean dumping site offshore and north of the barrier islands.

Project Facilities

The following figures provide site maps, plan views, and cross-sections for all gravel structures including the roads, airstrip, dock, Central Processing Facility pad, Central Well Pad, East and West Well Pads, Gravel Stockpile, Mine Site, and Overburden Stockpile.

Table 20-1. Facility Figures

Figure 20-1	Vicinity Map
Figure 20-2	Facilities Layout Map
Figures 20-3 to 20-7	Road Cross-Sections and Culverts
Figures 20-8 to 20-10	Airstrip
Figures 20-11 to 20-13	Dock
Figures 20-11; 20-14 to 20-17	Central Processing Facility
Figures 20-11; 20-18 to 20-19	Central Well Pad
Figures 20-20 to 20-21	East and West Well Pads
Figures 20-22 to 20-23	Gravel Mine Site and Storage Pad



ARCTIC NATIONAL WILDLIFE REFUGE

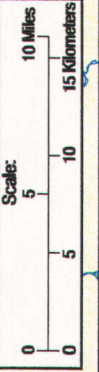
PROPOSED POINT THOMSON GAS CYCLING PROJECT

BADAMI PIPELINE

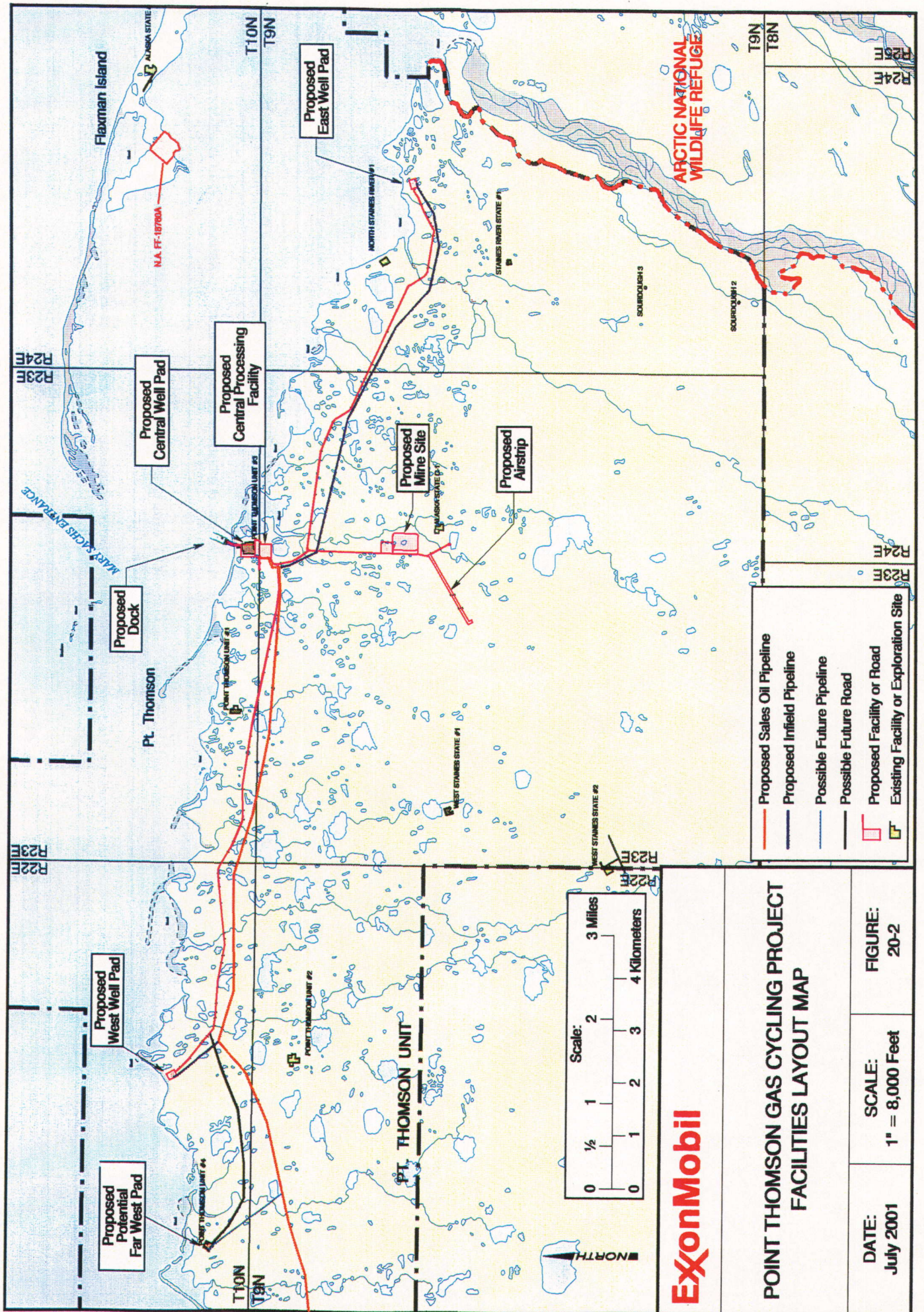
ENDICOTT PIPELINE

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POINT THOMSON GAS CYCLING PROJECT
VICINITY MAP



DATE:	August 2001	SCALE:	1" = 10,000'	FIGURE:	20 - 1
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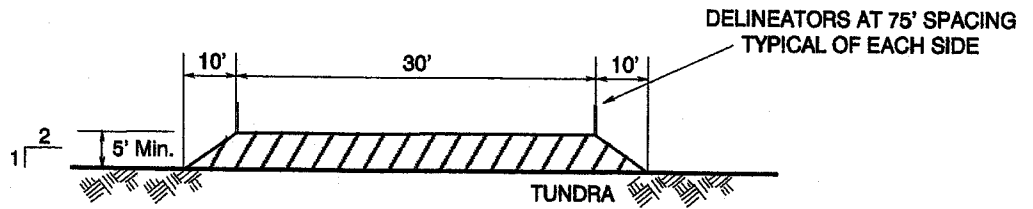


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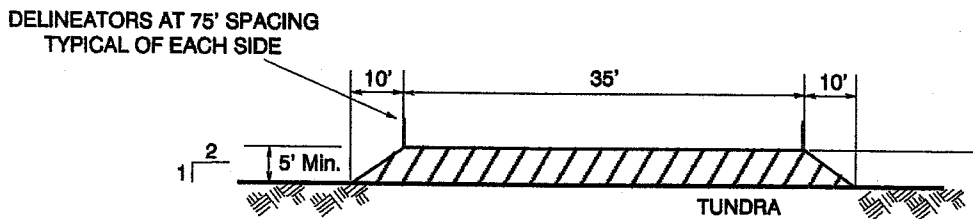
**POINT THOMSON GAS CYCLING PROJECT
FACILITIES LAYOUT MAP**

DATE: July 2001	SCALE: 1" = 8,000 Feet	FIGURE: 20-2
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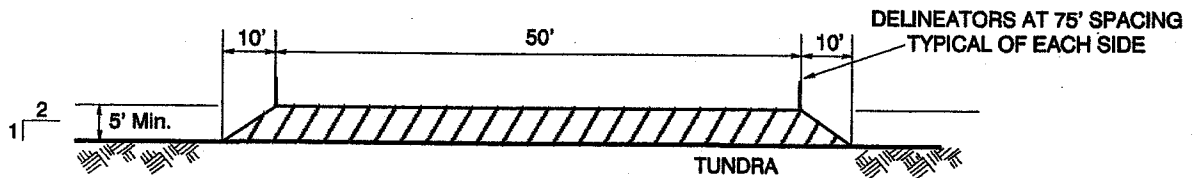
Fig3 2.dgn



TYPICAL 30' ROAD SECTION



TYPICAL 35' ROAD SECTION



TYPICAL 50' ROAD SECTION

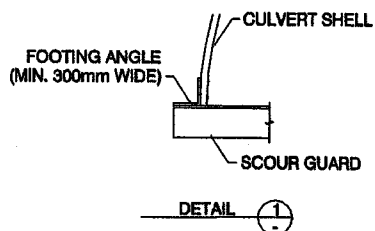
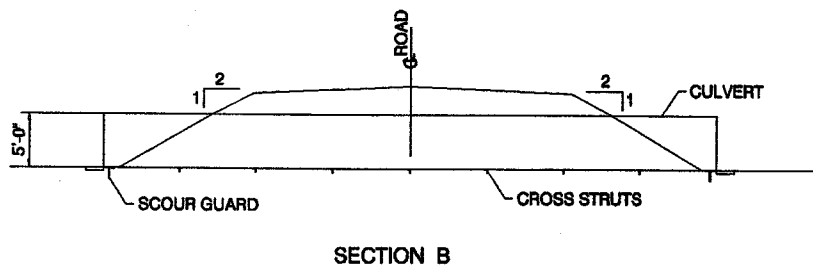
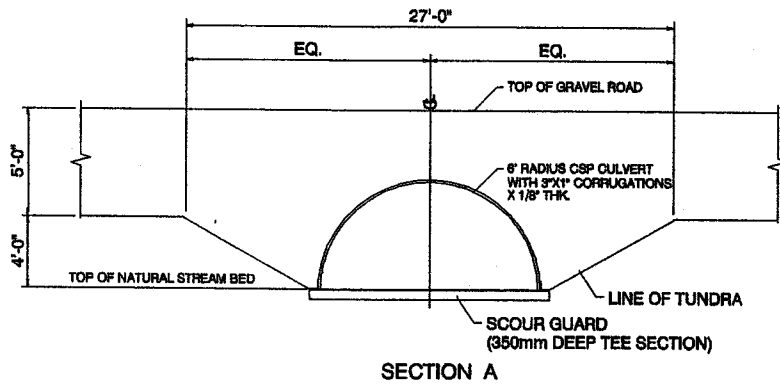
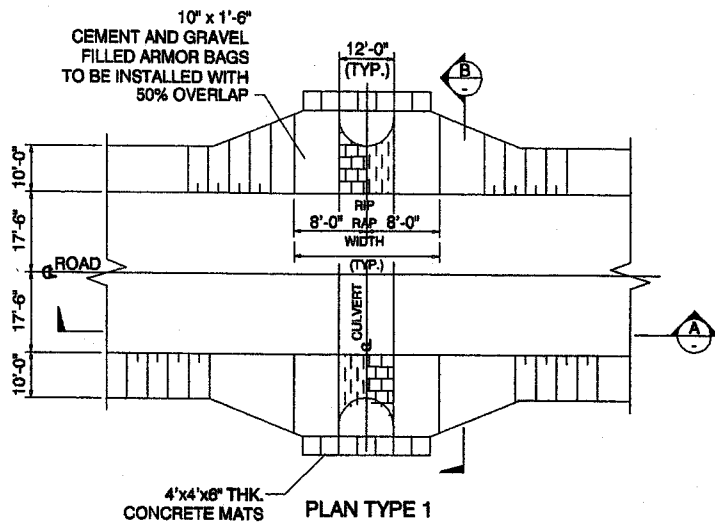
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POINT THOMSON GAS CYCLING PROJECT
TYPICAL 30-FT, 35-FT, AND 50-FT
ROAD CROSS SECTIONS

DATE:
JULY 2001

SCALE:
Not to Scale

FIGURE:
20-3



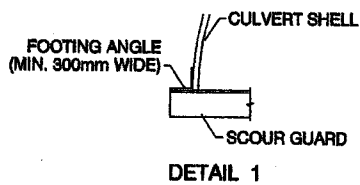
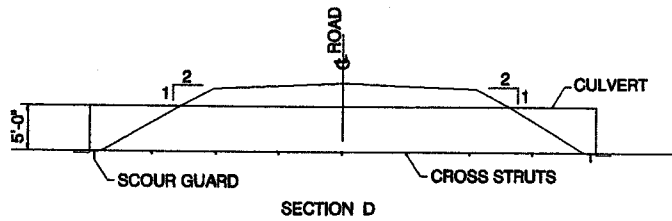
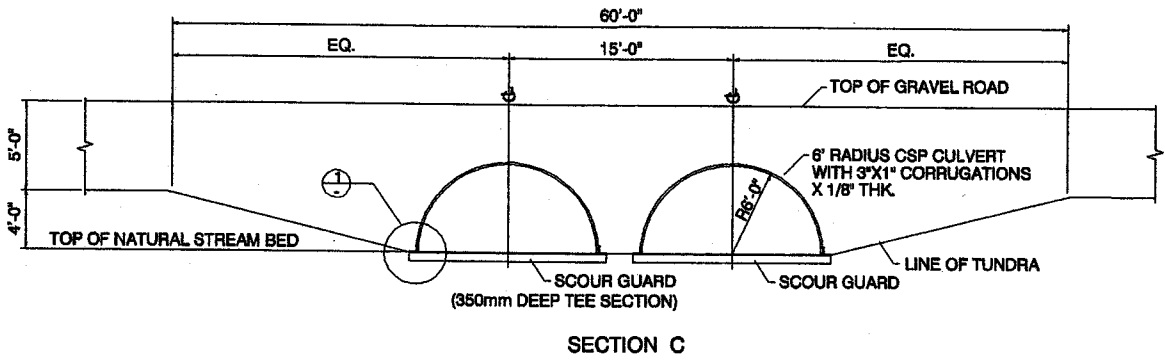
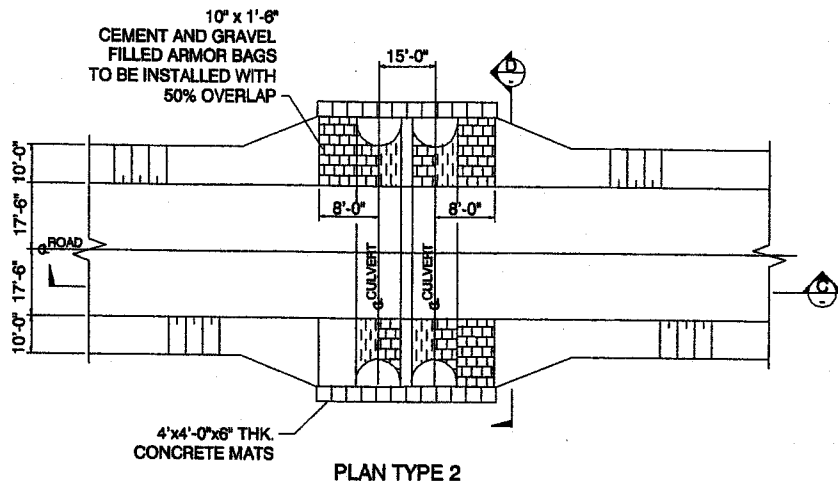
ExxonMobil

POINT THOMSON GAS CYCLING PROJECT
SINGLE CULVERT

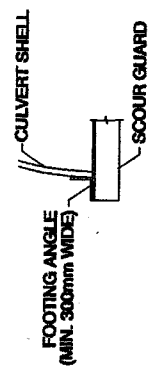
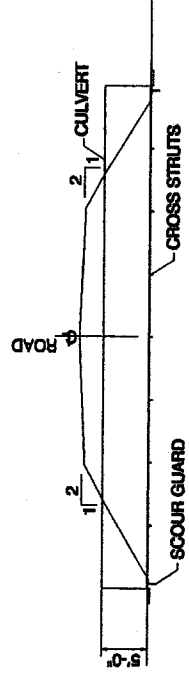
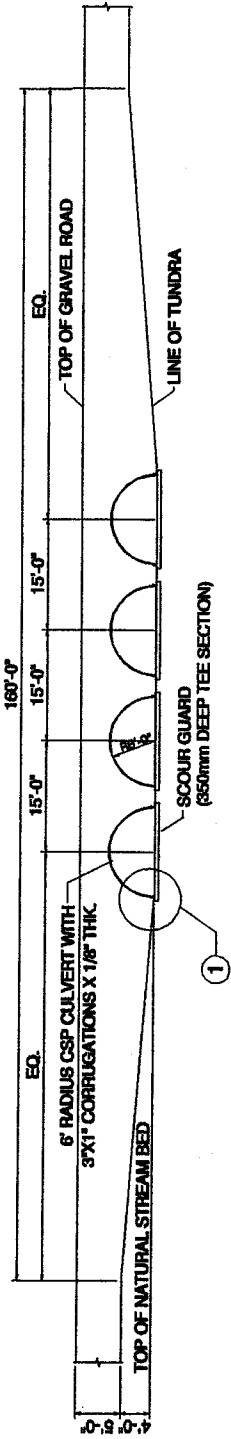
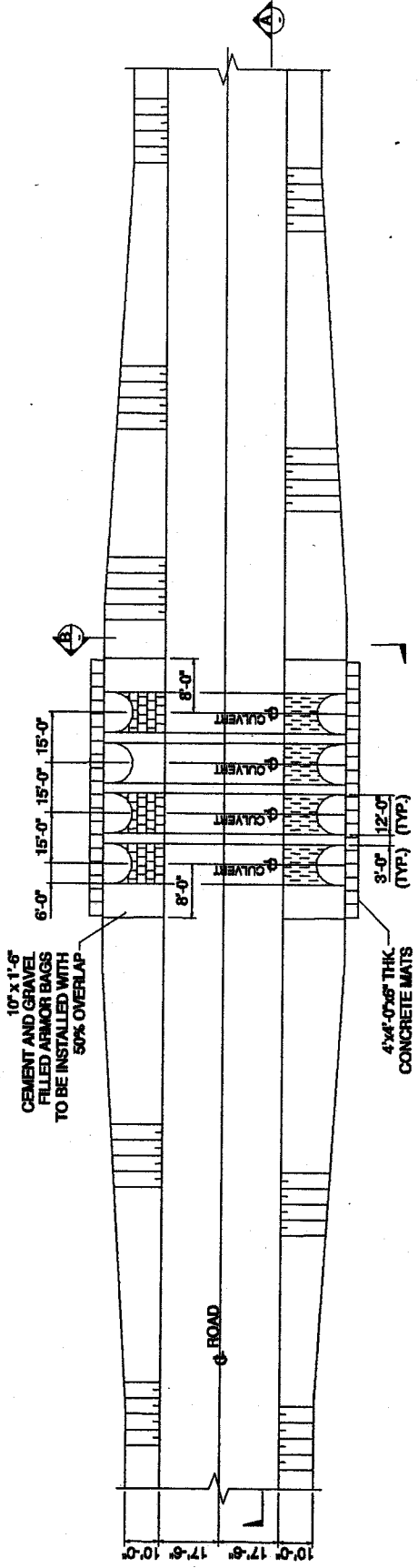
DATE:
July 2001

SCALE:
Not To Scale

FIGURE:
20-4



ExxonMobil		
POINT THOMSON GAS CYCLING PROJECT DOUBLE CULVERTS		
DATE: July 2001	SCALE: Not To Scale	FIGURE: 20-5



ExonMobil

POINT THOMSON GAS CYCLING PROJECT
FOUR CULVERTS

DATE: July 2001	SCALE: Not To scale	FIGURE: 20-6
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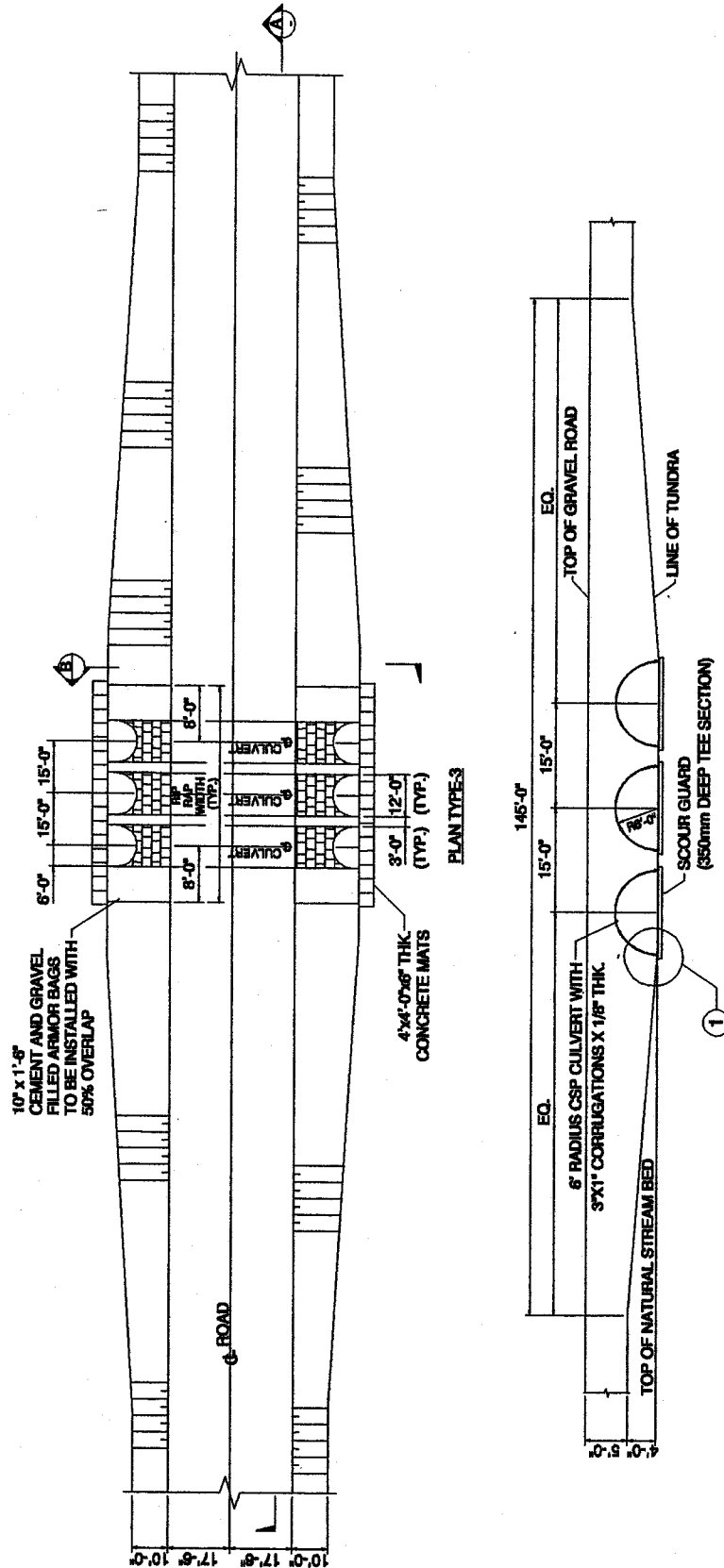
ExonMobil

POINT THOMSON GAS CYCLING PROJECT TRIPLE CULVERTS

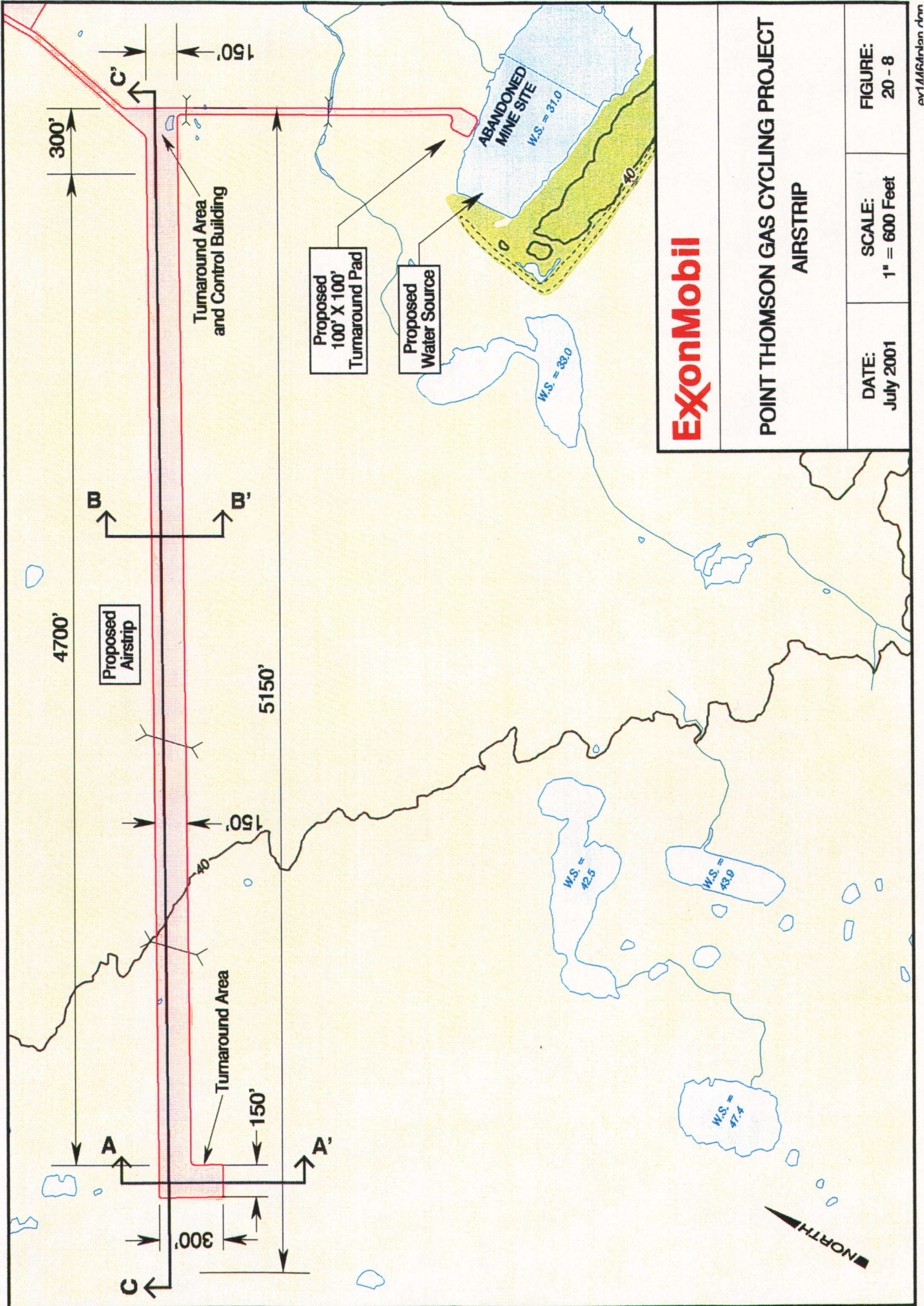
DATE:
July 2001

SCALE:
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FIGURE:
20-7



DETAIL 1



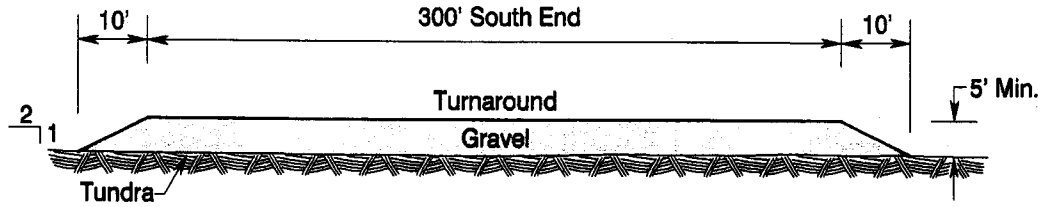
ExxonMobil

**POINT THOMSON GAS CYCLING PROJECT
AIRSTRIP**

DATE: July 2001	SCALE: 1" = 600 Feet	FIGURE: 20 - 8
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North

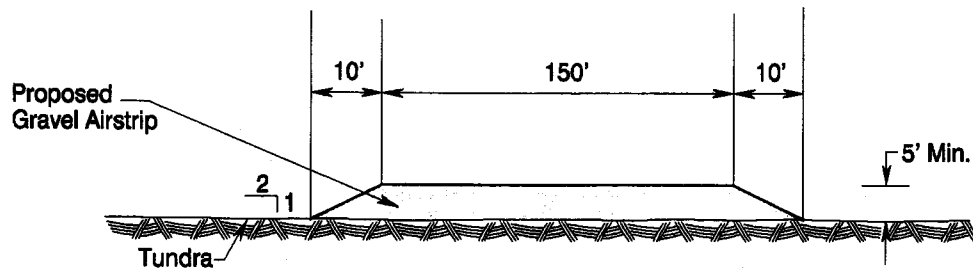
South



Section A - A'

North

South



Section B - B'

ExxonMobil

POINT THOMSON GAS CYCLING PROJECT
AIRSTRIP CROSS - SECTIONS
(A - A' AND B - B')

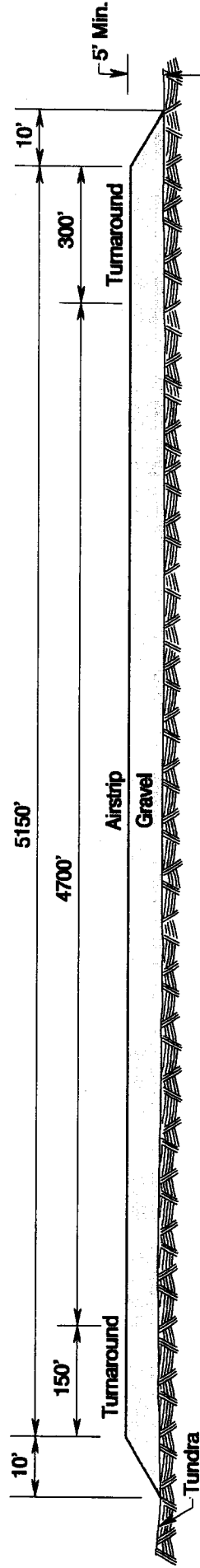
DATE:
July 2001

SCALE:
Not to Scale

FIGURE:
20-9

West

East



Section C - C'

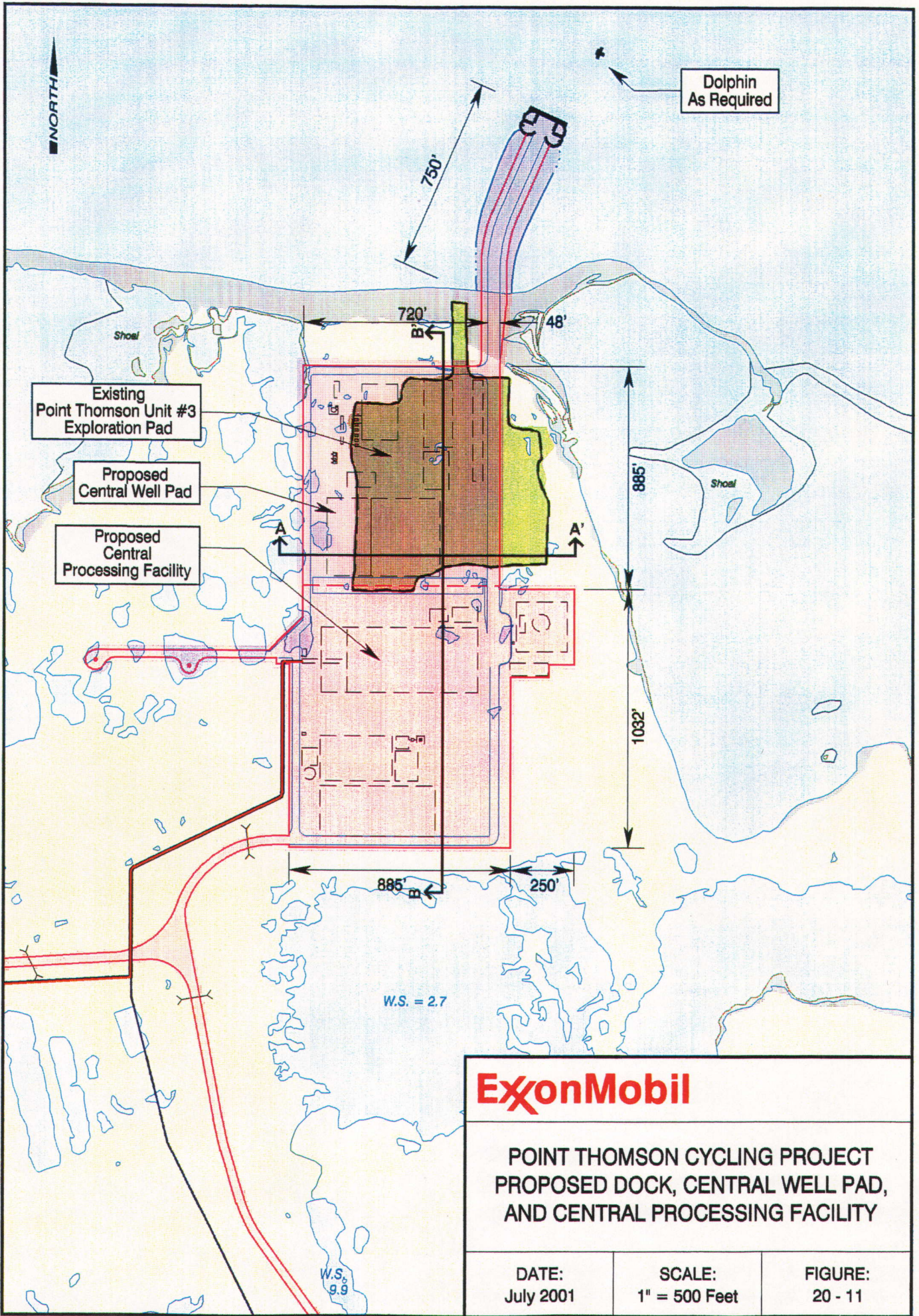
ExxonMobil

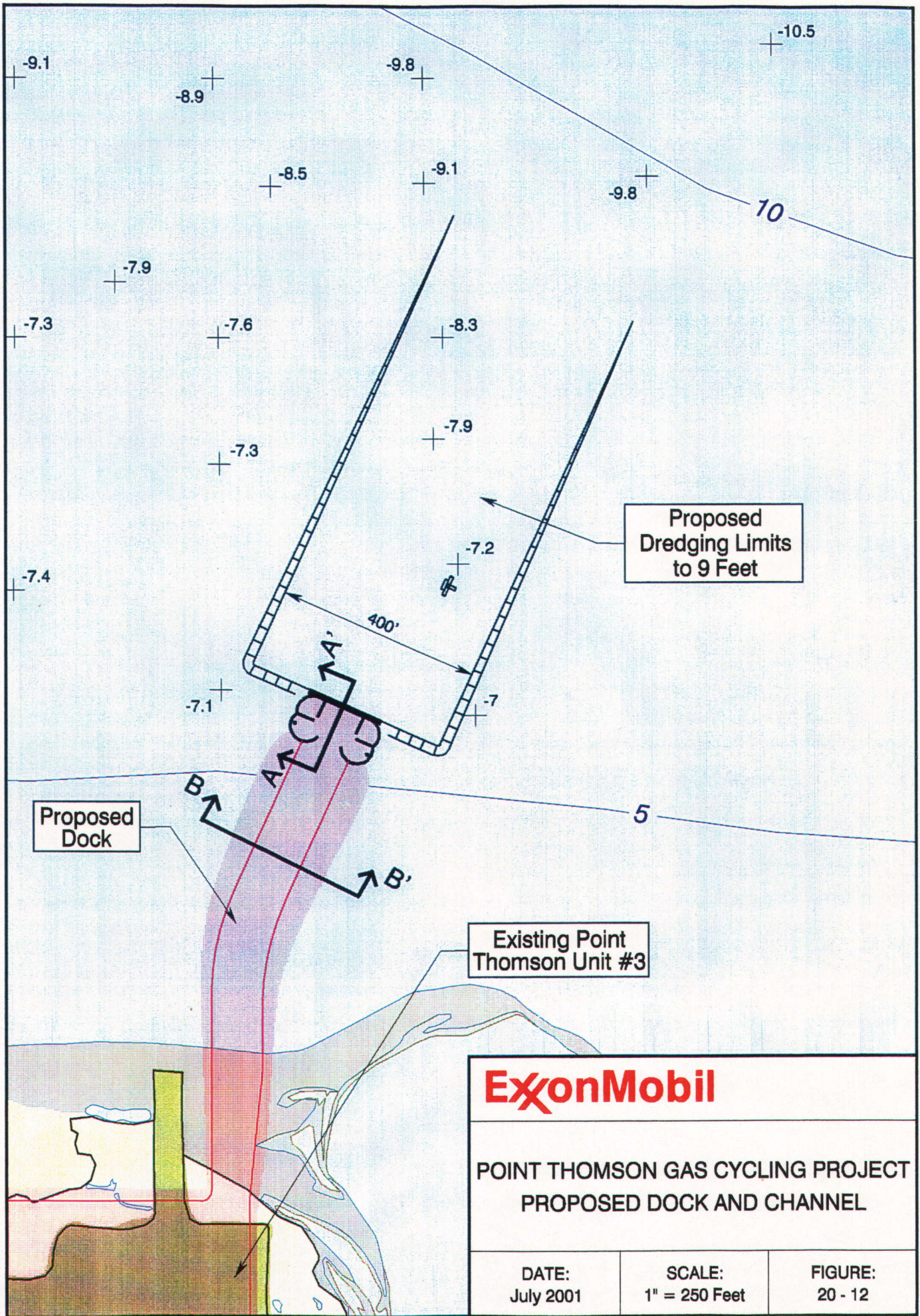
POINT THOMSON GAS CYCLING PROJECT
PROPOSED AIRSTRIP
CROSS - SECTION (C - C')

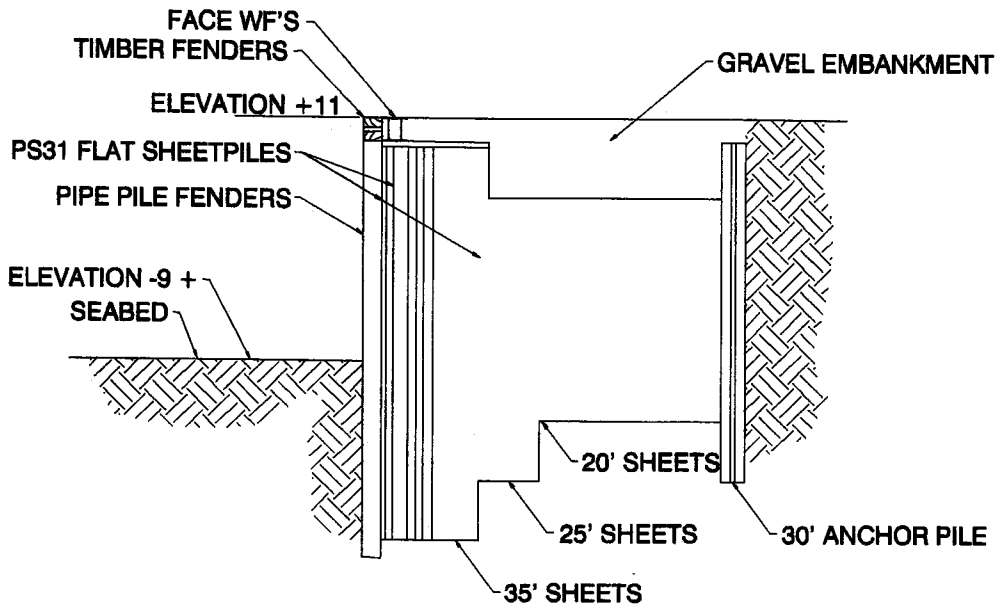
DATE:
July 2001

SCALE:
Not to Scale

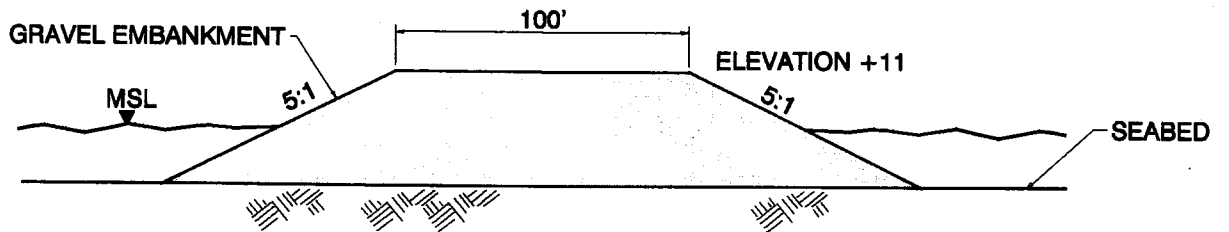
FIGURE:
20-10





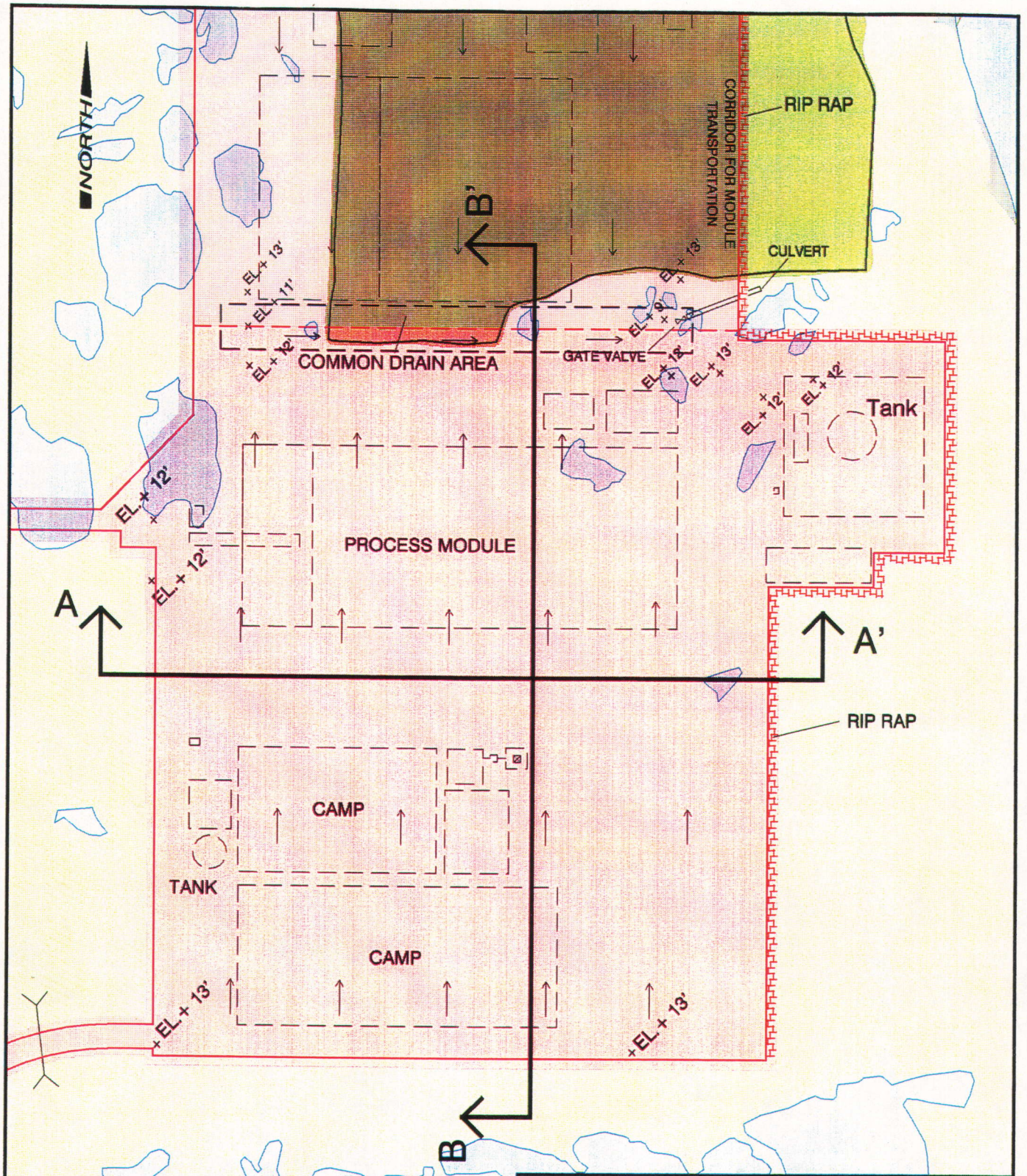


SECTION A



SECTION B

ExxonMobil		
POINT THOMSON GAS CYCLING PROJECT DOCK CROSS-SECTION		
DATE: July 2001	SCALE: Not To Scale	FIGURE: 20-13

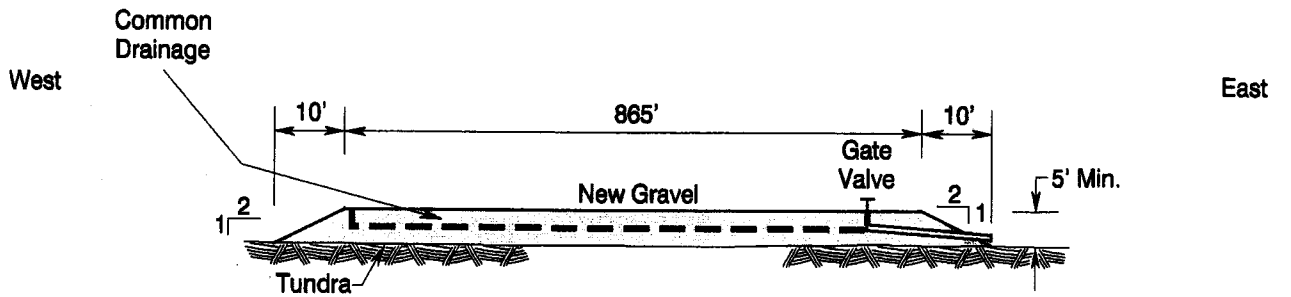


FACILITY PLACEMENT AND DIMENSIONS ARE APPROXIMATE

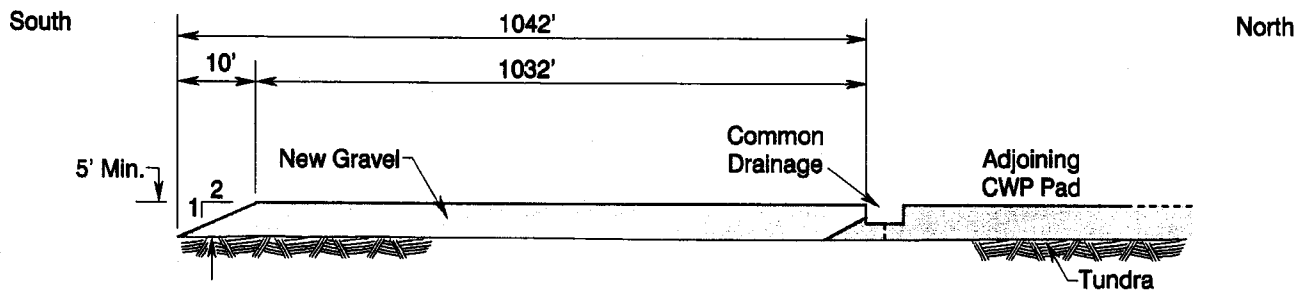
ExxonMobil

POINT THOMSON GAS CYCLING PROJECT
CENTRAL PROCESSING FACILITY

DATE: July 2001	SCALE: 1" = 200 Feet	FIGURE: 20 - 14
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Section A - A'



Section B - B'

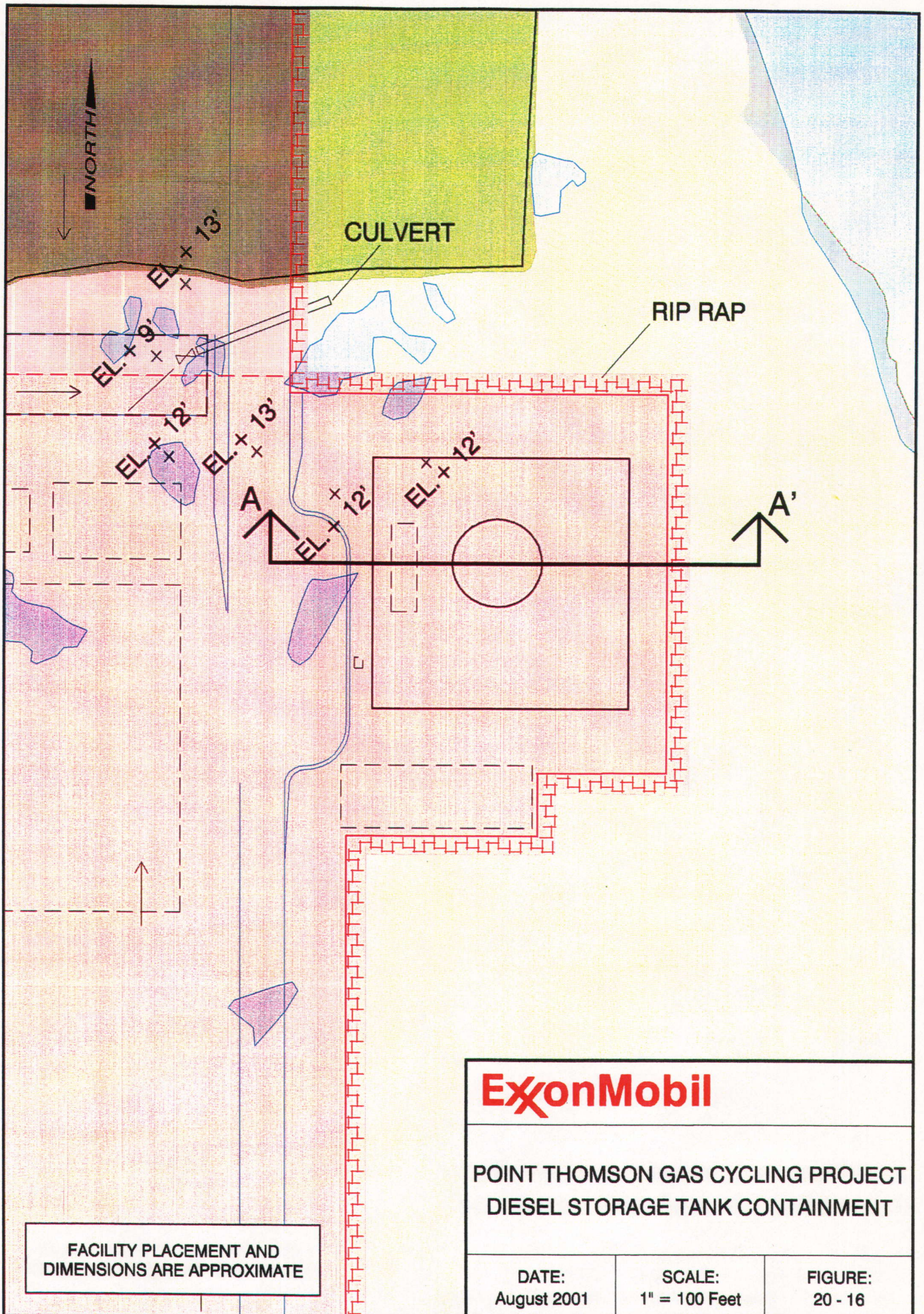
ExxonMobil

POINT THOMSON GAS CYCLING PROJECT
CENTRAL PROCESSING FACILITY PAD
CROSS - SECTIONS

DATE:
July 2001

SCALE:
NOT TO SCALE

FIGURE:
20-15



NORTH

CULVERT

RIP RAP

EL. + 13'

EL. + 9'

EL. + 12'

EL. + 13'

A

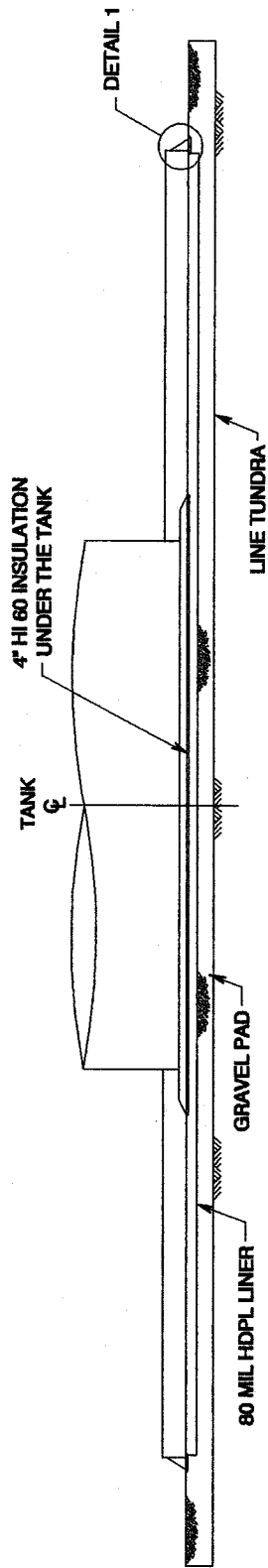
EL. + 12'

EL. + 12'

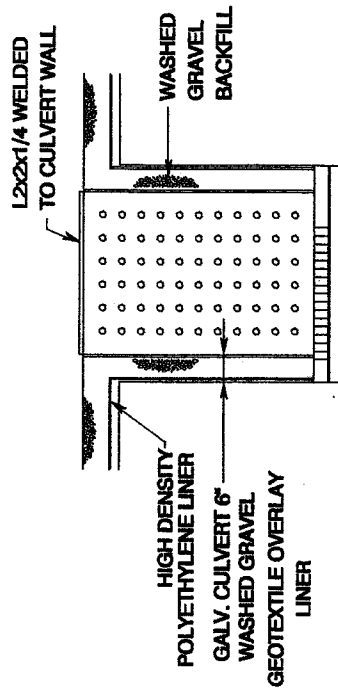
A'

FACILITY PLACEMENT AND DIMENSIONS ARE APPROXIMATE

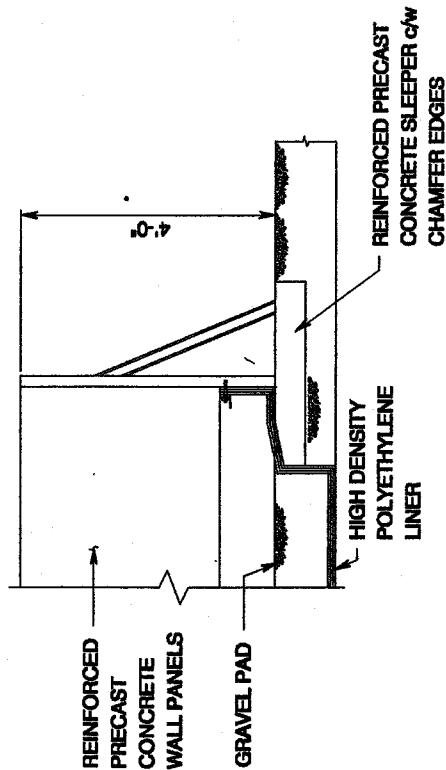
ExxonMobil		
POINT THOMSON GAS CYCLING PROJECT DIESEL STORAGE TANK CONTAINMENT		
DATE: August 2001	SCALE: 1" = 100 Feet	FIGURE: 20 - 16



CROSS SECTION A - A'



SUMP DETAIL



DETAIL 1

ExxonMobil

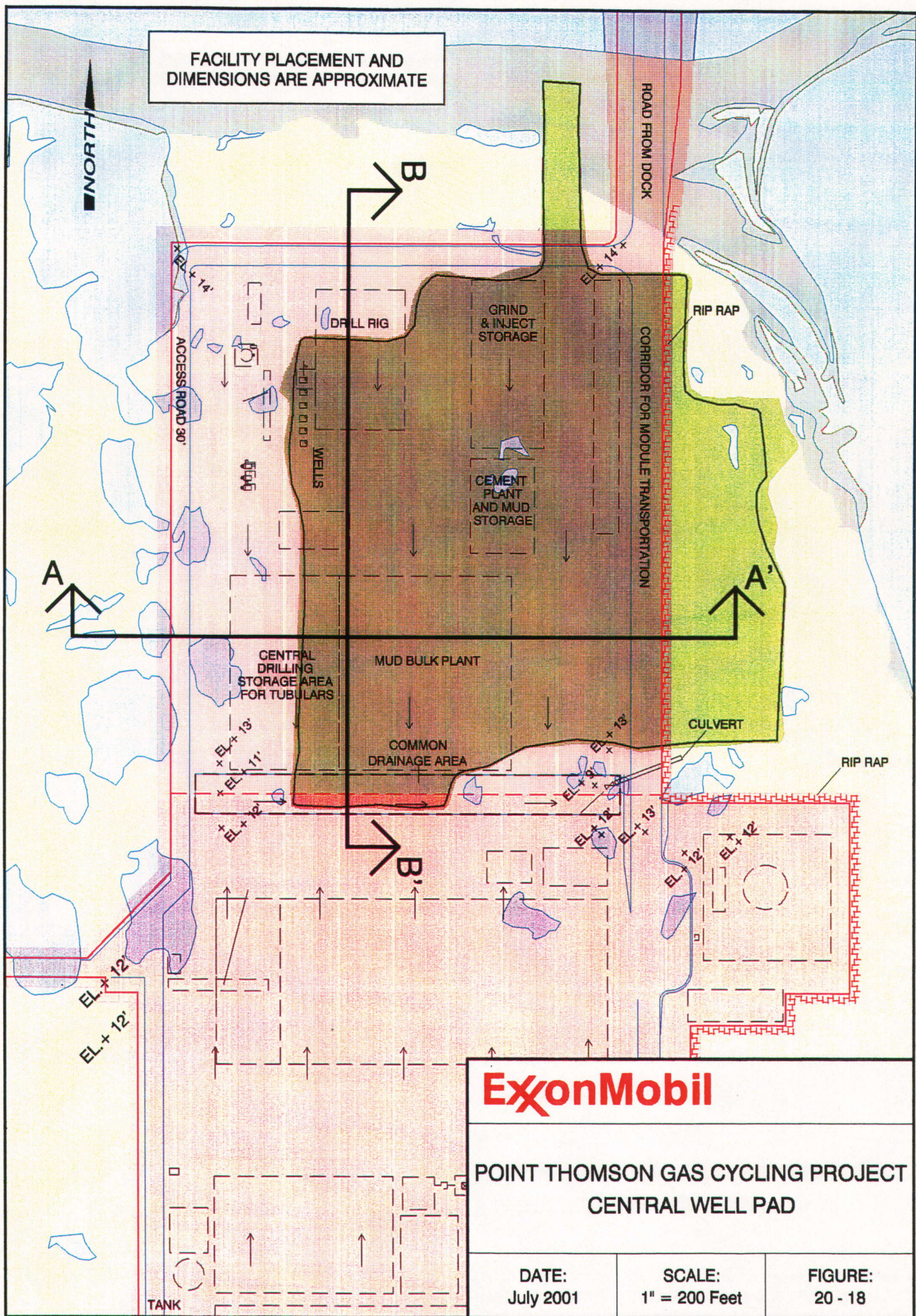
POINT THOMSON GAS CYCLING PROJECT
DIESEL STORAGE TANK CONTAINMENT
CROSS SECTION AND DETAILS

DATE: August 2001

SCALE: Not To scale

FIGURE: 20-17

FACILITY PLACEMENT AND DIMENSIONS ARE APPROXIMATE



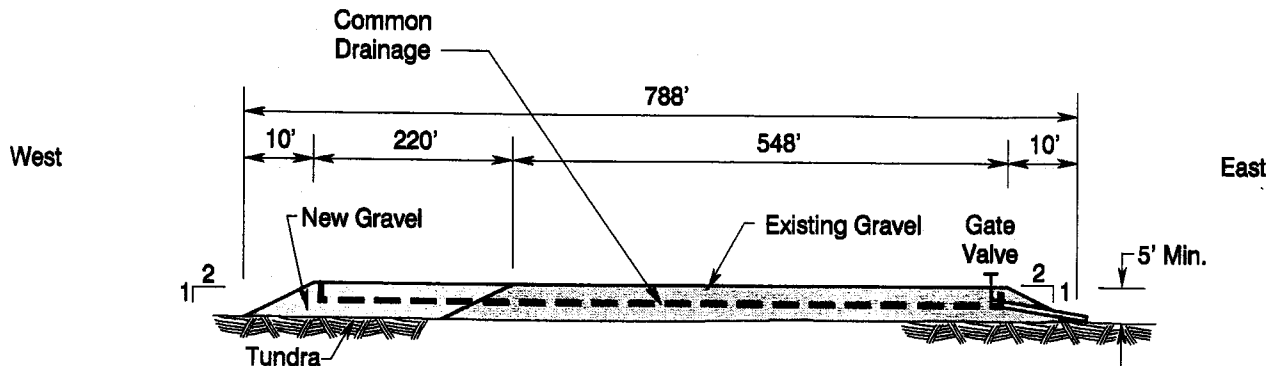
ExxonMobil

**POINT THOMSON GAS CYCLING PROJECT
CENTRAL WELL PAD**

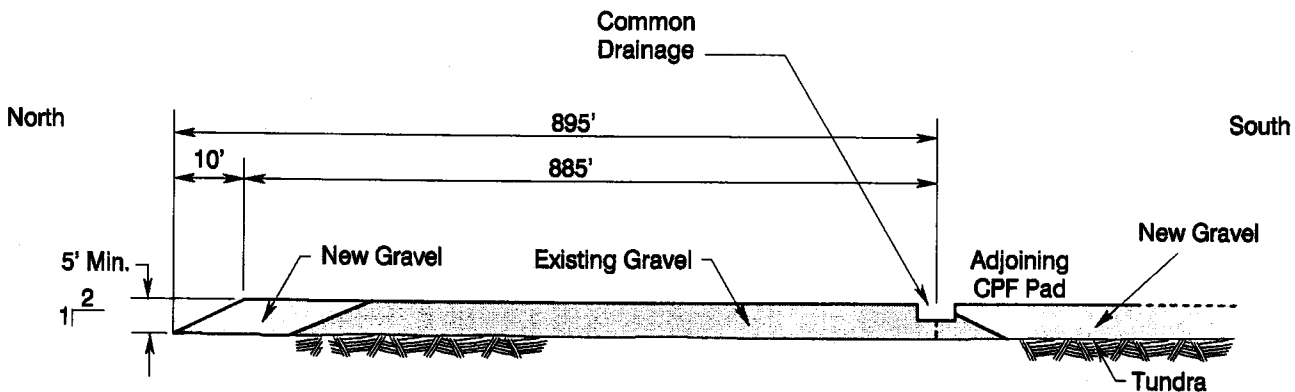
DATE:
July 2001

SCALE:
1" = 200 Feet

FIGURE:
20 - 18



Section A - A'



Section B - B'

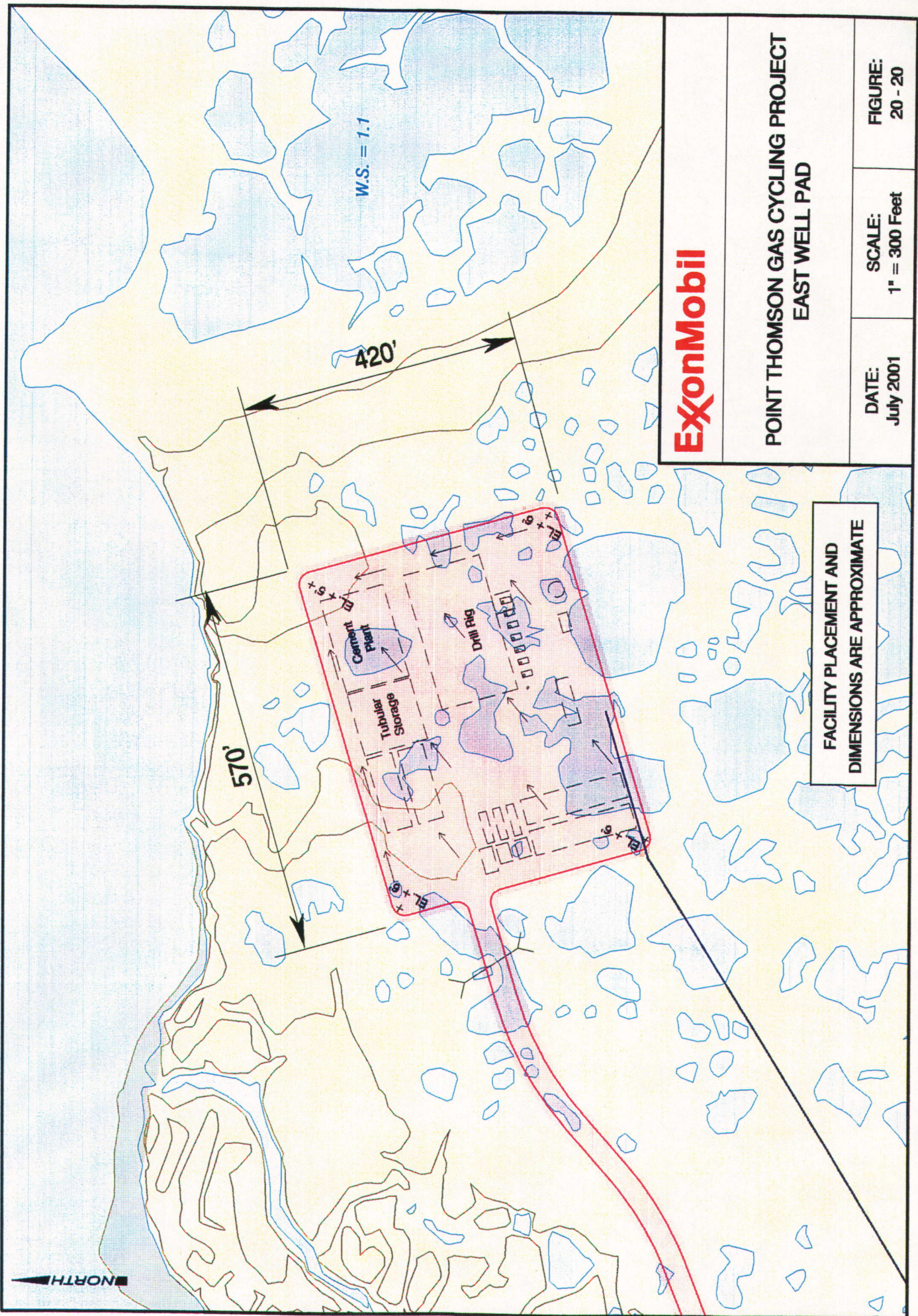
ExxonMobil

POINT THOMSON GAS CYCLING PROJECT
CENTRAL WELL PAD
CROSS - SECTIONS

DATE:
July 2001

SCALE:
NOT TO SCALE

FIGURE:
20-19



ExxonMobil

**POINT THOMSON GAS CYCLING PROJECT
EAST WELL PAD**

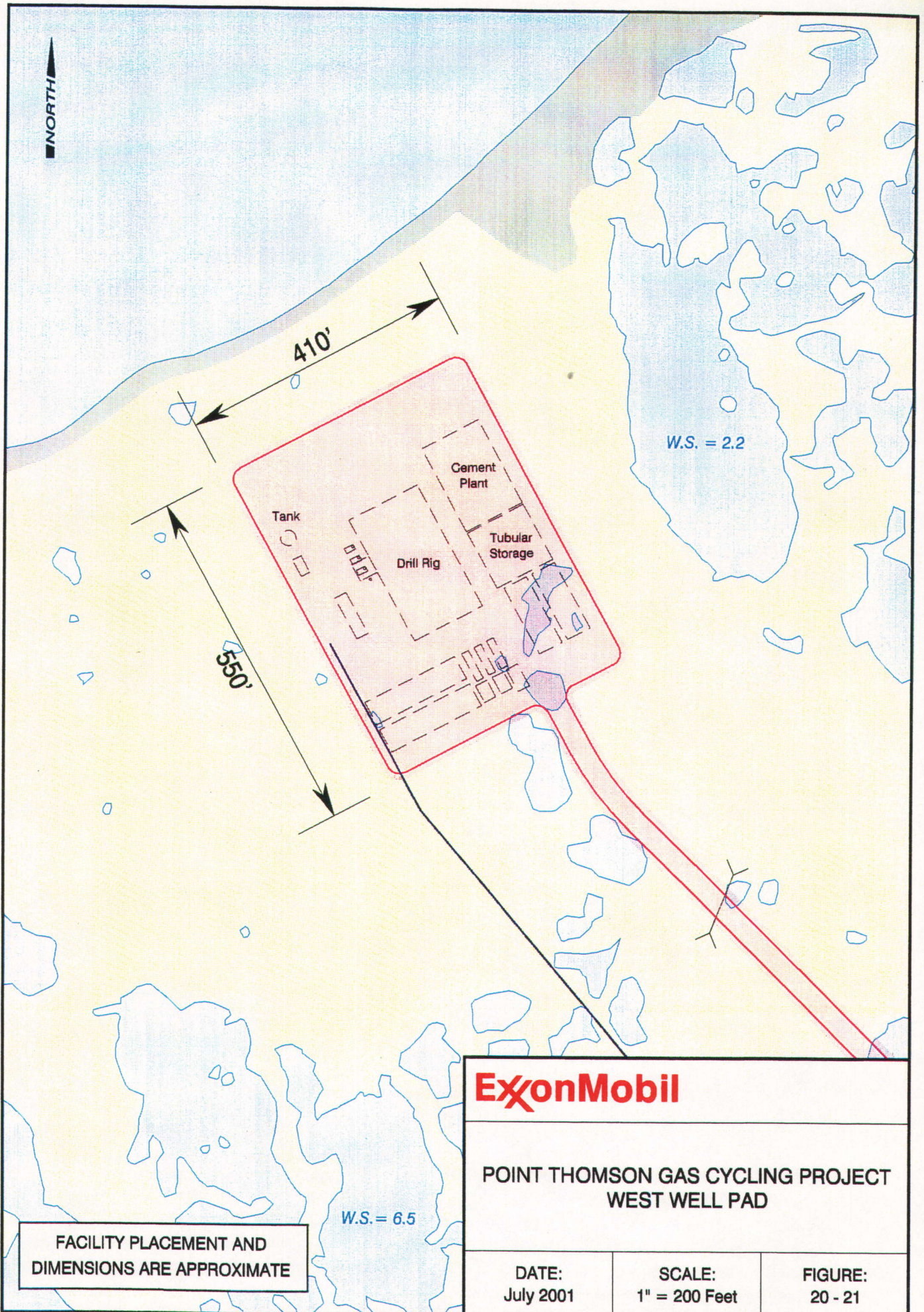
DATE:
July 2001

SCALE:
1" = 300 Feet

FIGURE:
20 - 20

FACILITY PLACEMENT AND
DIMENSIONS ARE APPROXIMATE

NORTH



410'

550'

W.S. = 2.2

W.S. = 6.5

FACILITY PLACEMENT AND DIMENSIONS ARE APPROXIMATE

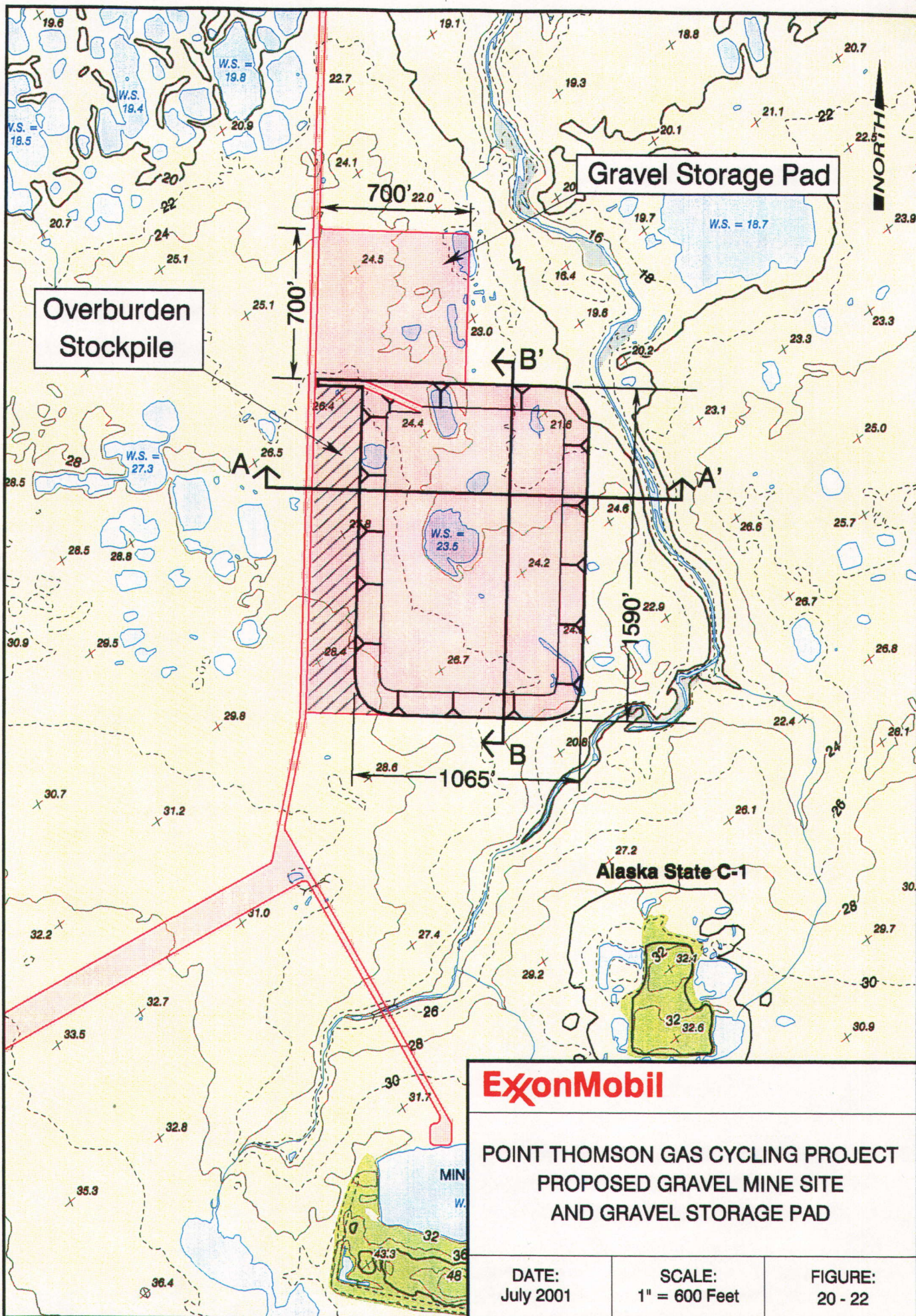
ExxonMobil

POINT THOMSON GAS CYCLING PROJECT
WEST WELL PAD

DATE:
July 2001

SCALE:
1" = 200 Feet

FIGURE:
20 - 21



**Overburden
Stockpile**

Gravel Storage Pad

Alaska State C-1

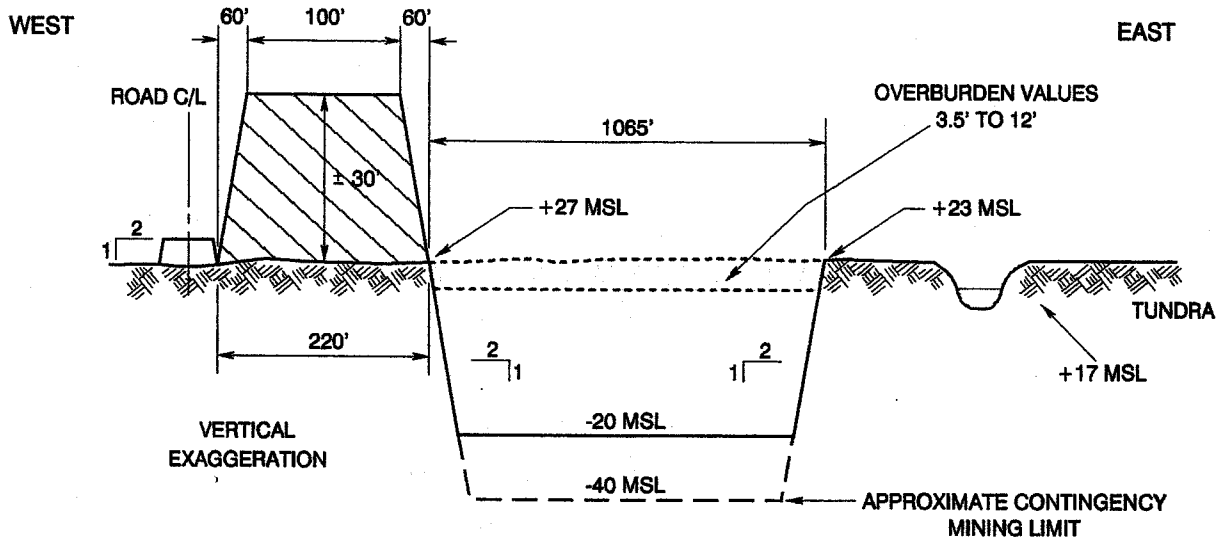
ExxonMobil

**POINT THOMSON GAS CYCLING PROJECT
PROPOSED GRAVEL MINE SITE
AND GRAVEL STORAGE PAD**

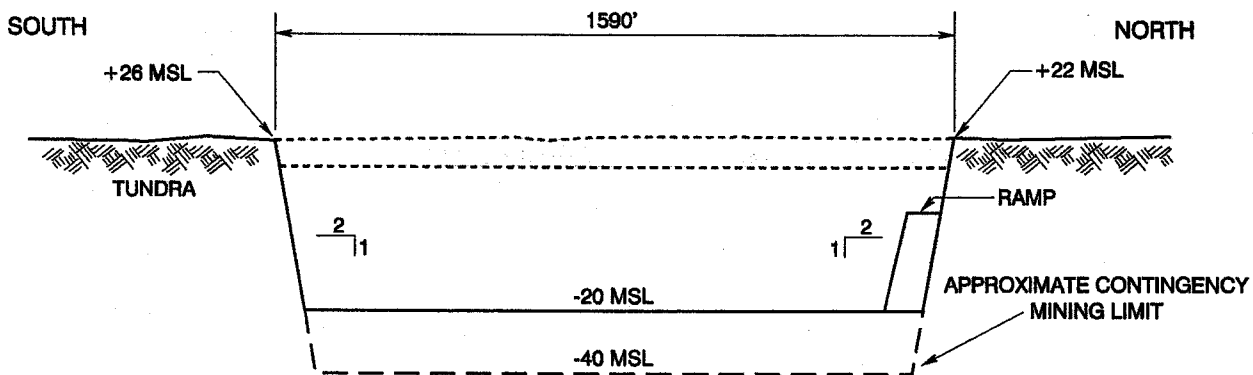
DATE:
July 2001

SCALE:
1" = 600 Feet

FIGURE:
20 - 22



SECTION A - A'



SECTION B - B'

ExxonMobil

POINT THOMSON GAS CYCLING PROJECT
PROPOSED MINE SITE
CROSS SECTIONS

DATE:
July 2001

SCALE:

FIGURE:
20-23

**Tab 21
(Discharged Materials)**

Table 21-1. Gravel Placement Requirements for Point Thomson Gas Cycling Project Structures¹

Structures	Crown and Height Dimensions (feet) (length x width x height)	Design Side Slopes	Initial Placement Volume (cubic yards)	Affected Wetlands or Water Body (Acres)	Proposed Construction Material & Source	Type of Material Discharged
Airstrip ²	5,150 x 150 x 5	2:1 side slopes	205,000	21.5 Acres Wetlands	Refer to Section 3.10 of the Environmental Report	Gravel Fill on Tundra NW/ Classified wetlands
Dock ³	750 x 100 x 11	5:1 side slopes	100,000	3.8 Acres Lagoon		Sheet Pile Gravel-Filled Structure
Road from the Intersection with the East Pad Road to the Airstrip	7,500 x 30 x 5	2:1 side slopes	67,000	8.7 Acres Wetlands		
Road from the Airstrip to the Water Reservoir (abandoned mine site) ⁴	1,350 x 30 x 5	2:1 side slopes	15,000	1.8 Acres Wetlands		
Road from the Central Processing Facility to the West Pad	35,000 x 35 x 5	2:1 side slopes	365,000	43.1 Acres Wetlands		
Road from the Central Processing Facility to the East Pad	30,000 x 35 x 5	2:1 side slopes	305,000	35.9 Acres Wetlands		
Central Processing Facility Pad ⁵	1,032 x 865 x 5	2:1 side slopes	238,000	25.0 Acres Wetlands		
Central Well Pad ⁶	768 x 885 x 5	2:1 side slopes	155,000	4.5 Acres Wetlands		
East Well Pad	570 x 420 x 5	2:1 side slopes	56,000	5.9 Acres Wetlands		
West Well Pad	550 x 410 x 5	2:1 side slopes	53,000	5.6 Acres Wetlands		
Gravel Stockpile	700 x 700 x 12	2:1 side slopes	200,000	11.4 Acres Wetlands		Gravel Fill on Tundra NW/ Classified wetlands

¹ Based on the Point Thomson Gas Cycling Project Environmental Report (July 30, 2001).
² Dimensions and gravel volumes includes turnaround and parking areas at each end of the airstrip. The airstrip is 4,700 feet long by 150 feet wide.
³ Dockhead will be 150 x 100 feet.
⁴ Includes the 100 x 100 foot pad (approximately 3,000 cubic yards) at the Abandoned Mine Site.
⁵ Gravel volume includes roads to flare stacks, Central Well Pad, and the diesel tank and cold storage areas.
⁶ Includes the road from the dock to the Central Processing Facility pad and the access road along the north and west side of the Central Well Pad.

**Tab 21
(Discharged Materials)**

Table 21-2. Excavation Requirements for the Point Thomson Gas Cycling Project¹

Excavations	Dimensions (feet) (length x width x depth)	Initial Volume (cubic yards)	Affected Wetlands or Water Body (Acres)	Proposed Construction Material & Source	Type of Material Discharged
Gravel Mine Site	1,065 x 1,590 x 60	2,000,000	38.6 Acres Wetlands	Gravel to be Extracted from this Site	None
Dredged Channel	1,000 x 400 x 2	30,000	9.2 Acres Marine Lagoon Waters	Not Applicable	None See Ocean Dumping Site Below

Other Disturbed Features	Dimensions (feet) (length x width x height)	Initial Placement Volume (cubic yards)	Affected Wetlands or Water Body (Acres)	Proposed Construction Material & Source	Discharge Type
Tundra Overburden Stockpile associated with Gravel Mine Site	1,590 x 220 x 30	470,000	7.7 Acres Wetlands	Tundra Organics and Silt Overburden	Fill on Tundra NWI Classified wetlands
Ocean Dumping Site	Not Determined	30,000	Not Determined Probably Beaufort Sea	Spoils originating from Channel Dredging Activities	Ocean Dumping of Dredged Channel Sediments (Spoils) ²

¹ Based on the Point Thomson Gas Cycling Project Environmental Report submitted on July 30, 2001.

² There has not been a geotechnical or sediment chemistry investigation conducted to date that describes the grain-size distribution or the chemical character of the sediments.

Tab 22
(Surface Area of Wetlands and Waters)

It is anticipated that this project will affect about 223 acres of land and water, with 179.4 acres to be developed as the facility structures such as roads, pads, and the airstrip (Table 22-1). Approximately 12.2 acres of the facility will reclaim an existing exploration gravel pad (Point Thomson Unit #3), with the remaining 167.2 acres proposed as new fill. The mine site will encompass about 38.6 acres, with the tundra overburden stockpile covering 7.7 acres. Dredging is anticipated to establish a 1,000 by 400 foot channel with a surface area of 9.2 acres. More information regarding the description of the area can be found in Section 5.2.2.1 and Figure 4-3 of the *Point Thomson Gas Cycling Project Environmental Report* (July 30, 2001). Proposed construction methods are presented in Section 3.10 of environmental report.

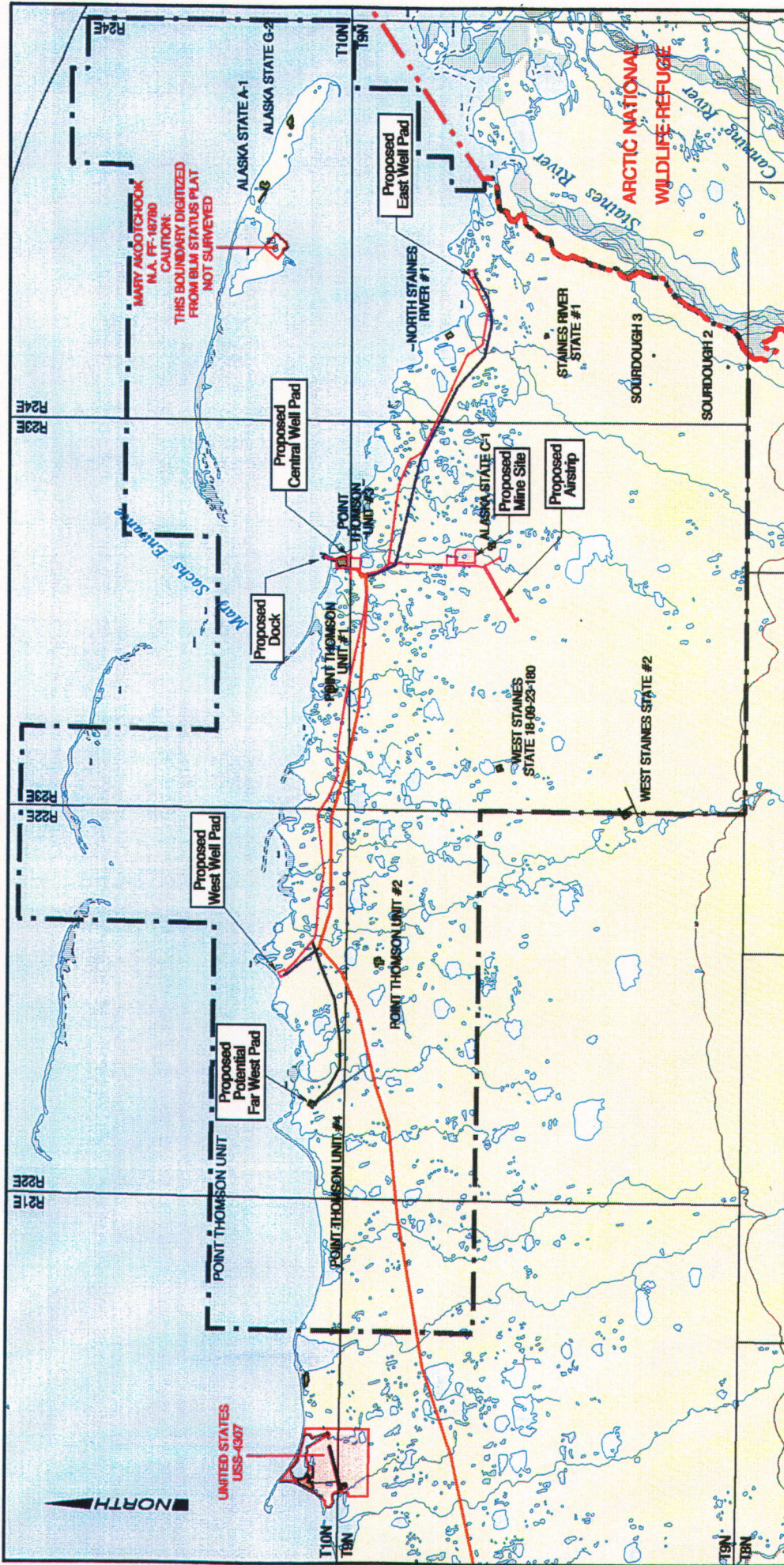
Table 22-1. Point Thomson Gas Cycling Project Gravel Fill and Excavation Requirements

Facility	Acres Affected
Fill	167.2 Acres
Airstrip	21.5
Dock	3.8
Road from the Intersection with the East Pad Road to the Airstrip	8.7
Road from the Airstrip to the Water Reservoir (abandoned mine site)	1.8
Road from the Central Processing Facility to the West Well Pad	43.1
Road from the Central Processing Facility to the East Well Pad	35.9
Central Processing Facility Pad	25.0
Central Well Pad	4.5
East Well Pad	5.9
West Well Pad	5.6
Gravel Stockpile	11.4
Mine Site Excavation	38.6 Acres
Mine Site Overburden Stockpile	7.7 Acres
Sub-Total	213.5 Acres
Offshore Dredging	9.2 Acres
Project Total	222.7 Acres
Placement of Fill on Existing Gravel Pad (Pt. Thomson Unit #3)	12.2 Acres
Central Processing Facility Pad	0.2
Central Well Pad	12.0
Ocean Dumping Site	To be Determined

**Tab 24
(Adjoining Property Owners)**

Mailing Address	Physical Address¹
OTHER CONTACTS	
Karen Wuestenfeld BP Exploration (Alaska), Inc. P.O. 196612 Anchorage, AK 99519-6612	Karen Wuestenfeld BP Exploration (Alaska), Inc. 900 East Benson Boulevard Anchorage, AK 99508
Keith Hall Chevron USA 11111 South Wilcrest Houston, TX 77099	Keith Hall Chevron USA 11111 South Wilcrest Houston, TX 77099
Steve Wright Chevron USA 3601 C Street Suite 822 Anchorage, AK 99503	Steve Wright Chevron USA 3601 C Street Suite 822 Anchorage, AK 99503
Brad Gale Phillips Alaska, Inc. P.O. Box 100360 Anchorage, AK 99510	Brad Gale Phillips Alaska, Inc. 700 G Street Anchorage, AK 99510
Richard Voss U.S. Fish & Wildlife Service ANWR Manager 101 12 th Avenue Room 236 Fairbanks, AK 99701	Richard Voss U.S. Fish & Wildlife Service ANWR Manager 101 12 th Avenue Room 236 Fairbanks, AK 99701

¹ Please use these addresses for overnight mail (e.g., FedEx) and same-day courier deliveries.



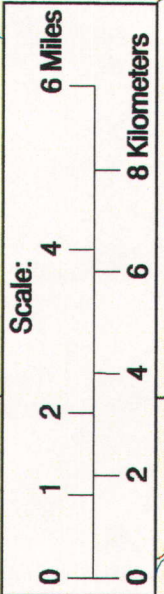
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**POINT THOMSON GAS CYCLING PROJECT
ADJACENT PROPERTY OWNERS**

FIGURE:
24 - 1

SCALE:
1" = 2.5 Miles

DATE:
August 2001



- Proposed Sales Oil Pipeline
- Proposed Infield Pipeline
- Possible Future Pipeline
- Possible Future Road
- Proposed Facility or Road
- Existing Facility or Exploration Site

**Tab 25
(Other Agency Permits)**

Major construction and operations (land use) approvals required for the Point Thomson Gas Cycling Project are listed in Table 25-1. Permit application packages will address information needs identified by agencies during the pre-application process.

Table 25-1 Permits and Approvals¹

AGENCY	PERMIT/APPROVAL	ACTIVITY/COMMENTS
Federal Agencies	National Environmental Policy Act (NEPA) compliance	NEPA process required before Federal permits can be issued.
U.S. Army Corps of Engineers (USACE)	Section 404/10	Onshore pad and road construction, mine site development, and offshore dock construction/dredging.
Environmental Protection Agency (EPA)	National Pollution Discharge Elimination System (NPDES) General Permit	Plan to use General Permit for camp waste (NPDES Permit AKG-31-0000).
EPA	NPDES General Stormwater/Industrial Activity	Stormwater drainage during onshore construction and operations (new North Slope permit or multi-sector general permit).
EPA	Class I Disposal Well	Injection of Class I wastes.
USACE/ EPA	Ocean Dumping Permit (Section 103 of Marine Protection, Research, and Sanctuaries Act)	Assuming dredging is necessary to access dock. Maintenance dredging.
National Marine Fisheries Service (NMFS)	Incidental Harassment of Marine Mammals (whale and seal)	Construction and operation.
NMFS	Endangered Species Act (ESA) Section 7 Consult for Bowhead whales	Construction and operation.
U.S. Fish and Wildlife Service (USFWS)	ESA, Section 7 Consult for Spectacled Eider and Steller's Eider	Construction and operation.
USFWS	Letter of Authorization for Incidental Take of Marine Mammals (polar bear and walrus)	Construction and operation.
U.S. Coast Guard & EPA	Oil Spill Contingency Plan	Construction, drilling, and operation.
Alaska Department of Natural Resources, (ADNR) State Pipeline Coordinator's Office	Pipeline Right-of-Way Lease	Pipeline construction and operations in State waters and lands.
ADNR, Division of Oil and Gas	Unit Plan of Operations approval	Required for development activity within the Unit.

¹ Originally presented as Table 1-2 in the *Point Thomson Gas Cycling Project Environmental Report* (July 30, 2001).

**Tab 25
(Other Agency Permits)**

Table 25-1 (Cont.) Permits And Approvals

AGENCY	PERMIT/APPROVAL	ACTIVITY/COMMENTS
ADNR, Division of Mining, Land and Water Management	Material Sales Contract	Gravel mining and purchase.
ADNR, Division of Mining, Land and Water Management	Miscellaneous Land Use (ice roads on and off shore)	Construction and operations of lease.
ADNR, Division of Mining, Land and Water Management	Water Use/ Water Rights	Consumptive use for ice road, construction, domestic, and drilling.
Alaska Department of Environmental Conservation (ADEC)	Oil Discharge Prevention and Contingency Plan	Drilling and operations.
ADEC	Air Quality Permit to Construct	Construction, drilling, and operations.
ADEC	Title V Air Permit to Operate	Drilling and operations.
ADEC	Section 401 water quality certification /water quality variance for dock construction	All construction under Corps 404 permit (certification of permit).
ADEC	Waste Water Disposal Permit	Construction and operations.
ADEC	Temp Drilling/ Waste Storage/Solid Waste Disposal Facility (G&I)	Drilling.
Alaska Department of Fish and Game	Title 16 Fish Habitat	Mine site development and stream crossings.
Alaska Division of Governmental Coordination	Coastal Zone Consistency Determination	Construction and operations (certification of all Federal and State permits).
Alaska Oil and Gas Conservation Commission	Underground Injection Certification	Permit for Class II injection well.
North Slope Borough	Rezoning – Conservation District to Resource Development District and Submission of Master Plan for approval	Point Thomson Unit has been rezoned as a resource development district. However, a portion of the pipeline route to Badami will require rezoning. A master plan for the Point Thomson Unit could be required.