

TO: MUNICIPAL MANAGER 1992 August 05

FROM: ACTING DIRECTOR
PLANNING AND BUILDING

SUBJECT: PROPOSED INSTALLATION OF A CATALYST COOLER ON THE FLUID CATALYTIC UNIT (F.C.C.U.) AT CHEVRON'S REFINERY 5201 PENZANCE DRIVE, BURNABY, B. C.

PURPOSE: To provide Council with information on Preliminary Plan Approval Application #10416.

=====

RECOMMENDATION:

1. THAT this report be received for information purposes.

R E P O R T

1.0 INTRODUCTION:

The Planning & Building Department has received a Preliminary Plan Approval Application (P.P.A. #10416) from Chevron Canada Limited for the installation of a Catalyst Cooler on the Fluid Catalytic Cracking Unit (F.C.C.U.) at the Chevron Refinery located at 5201 Penzance Drive, Burnaby, B. C. (see attached Sketches 1 and 2).

This report is submitted consistent with the long-standing direction of Council to report on oil storage or processing facilities in the Municipality.

2.0 GENERAL INFORMATION:

With completion of the Vancouver Island natural gas pipeline and a reduction in the permitted level of regional sulphur dioxide emissions resulting from the burning of fuel oils, the market for fuel oil in British Columbia has declined significantly. The fuel oil which was previously sold to coastal pulp mills is proposed to be used as the feedstock for production of an increased yield of light products (gasolines, jet fuels and diesel oil) utilizing proven technology, and this will entail the addition of further facilities for use of a sulphur scavenging catalyst to ensure that sulphur dioxide emission levels remain within current permitted levels. This proposal entails the construction of a catalyst cooler heat exchanger, a steam drum, three circulating water pumps, two air compressors and associated piping and instrumentation. Most of this equipment will be located inside the existing F.C.C.U. structure.

The new equipment will produce a small amount of boiler blowdown which will be cooled and treated in the existing refinery water effluent system prior to discharge to the G.V.R.D. sewer. Minor permit revisions will be required for the F.C.C.U./CO boiler stack emissions.

Construction completion is targeted for 1993.

ITEM 22
MANAGER'S REPORT NO. 52
COUNCIL MEETING 92/08/10

3.0 MUNICIPAL DEPARTMENT REFERRALS:

The following comments have been received from the Departments to which this application has been referred.

The Fire Prevention Office and the Engineering Department have indicated no special requirements apply. The Environmental Health Department advises as follows:

"The subject project will allow for utilization of proven cracking technology for feedstock formerly sold as fuel oil to coastal pulp mills. The addition of a sulphur scavenging catalyst will ensure that sulphur dioxide emissions remain at current levels after proposed modifications have been completed. All pumps will be fitted with mechanical seals rather than packing and all new motors will be high efficiency and quiet.

A review and subsequent discussion with G.V.R.D. officials regarding the Chevron Canada Limited application to the G.V.R.D. for amendment to Permit VA-117 (Air Emissions) pursuant to the Waste Management Act for the proposed project supports the above information.

As such, we do not have any concerns with the proposed project."

4.0 CONCLUSION:

Chevron's focus for this application is to improve the light product yield from processing crude oil. The refinery crude throughput capacity will remain unchanged as a result of this product.


As indicated on the attached sketch, the proposed Catalyst Cooler is located within the existing plant compound and will be an integral part of the fuel refinery.

Chevron's application has been reviewed by and has received favourable comments from the Fire, Engineering and Environmental Health Departments. The Planning and Building Department intends to issue Preliminary Plan Approval, subject to the conditions indicated by the Environmental Health Department, unless otherwise indicated by Council.

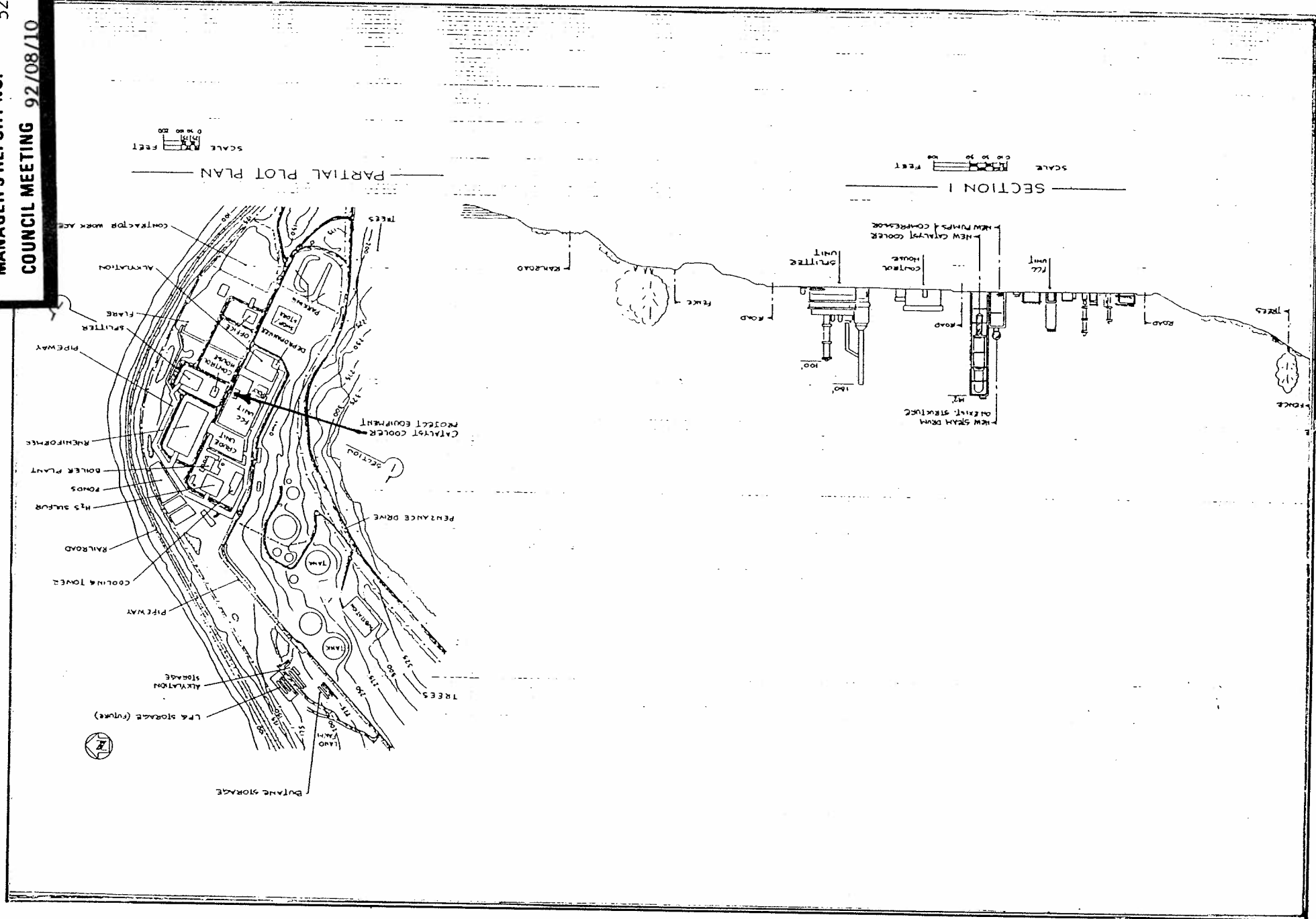
This report is submitted for the information of Council.

PDT/ds

Attach.



D. G. Stenson,
Acting Director
Planning and Building



Date: 92.08.11

Scale:

Drawn By:



SKETCH 11'

CATALYST COOLER
CHEVRON REFINERY

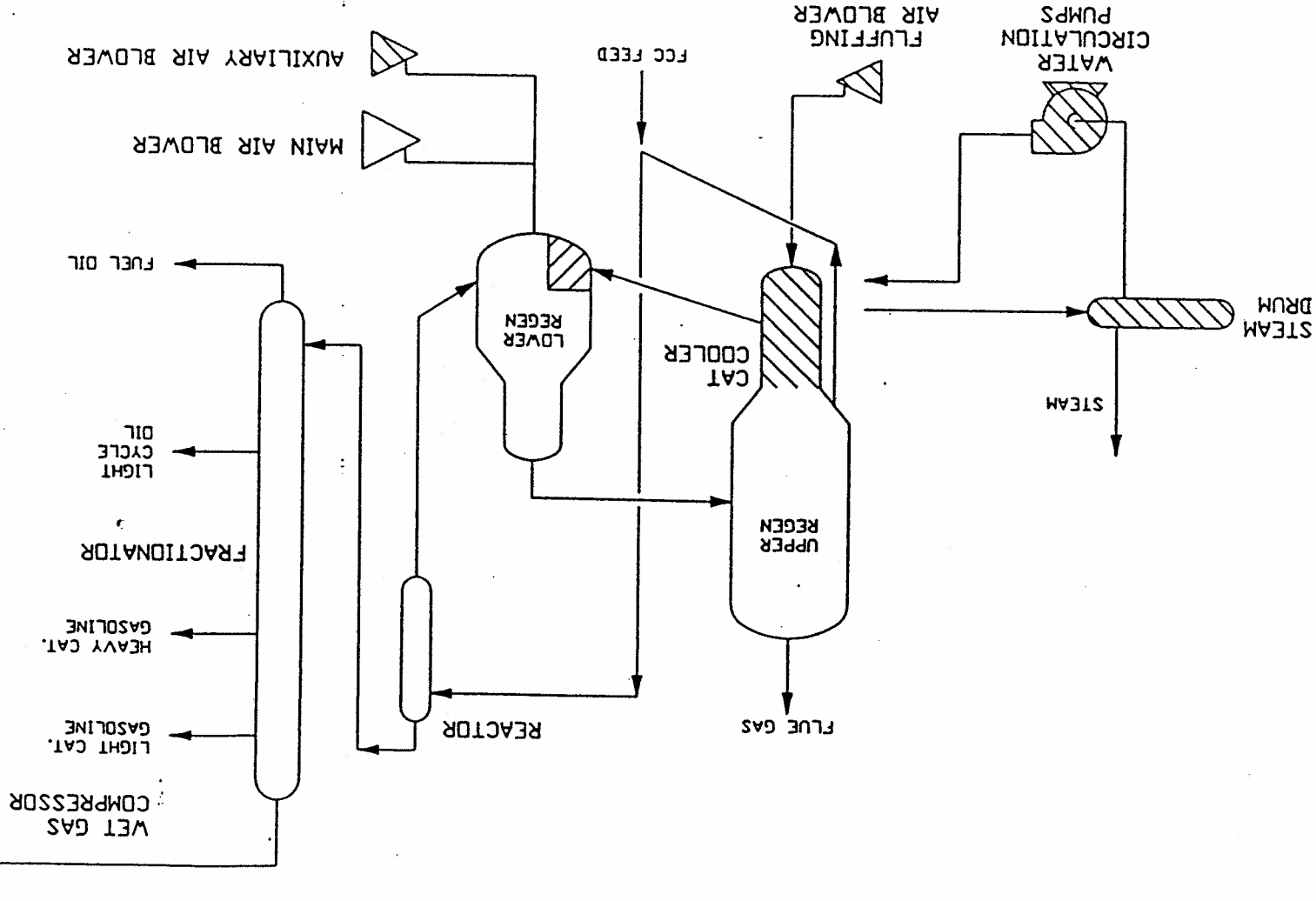
P.P.A. # 10416

ITEM
 MANAGER'S REPORT NO. 22 52
 COUNCIL MEETING 92/08/10

171

- MODIFY 
 - NEW 

GAS RECOVERY UNIT
 WET GAS COMPRESSOR



CHEVRON
 SIMPLIFIED FLOW DIAGRAM
 EQUIPMENT FOR CAT. COOLER PROJECT

Date: 92.08.11
 Scale:
 Drawn By:

OF THE CORPORATION
BURNABY
 Planning &
 Building Inspection
 Department

CATALYST COOLER
 CHEVRON REFINERY
 P.P.A. # 10414

SKETCH '2'