



## Summary of a Designated Project

Fort Saskatchewan Rail Facility

Fort Saskatchewan, AB

Prepared by:



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Calgary, Alberta

June 18, 2014

## GENERAL INFORMATION

Plains Midstream Canada ULC (PMC) is pleased to provide this Project Description Summary for the proposed construction of a rail yard at their Fort Saskatchewan Fractionation Plant and Storage Facility. The Plains Fort Saskatchewan (PFS) Rail Facility will be located in the SE quarter of section 23-55-22 W4M within the limits of the City of Fort Saskatchewan (Figure 2) and consists of approximately 63 ha (630,000 m<sup>2</sup>) of land zoned for heavy industrial use.

The existing PMC plant has been in operation since the 1970s. The facility is currently used to receive, store and distribute ethane and Natural Gas Liquids (NGL – predominantly propane and butane with some condensate). Product receipt and the majority of product distribution occurs by pipeline. Some of the NGL is fractionated at the existing gas fractionation plant (installed in the 1980s) to provide a propane stream. The separated products are stored in underground salt caverns until required for shipment. The outbound propane is currently transported by truck and pipeline with no rail infrastructure on-site.

PMC wishes to expand the existing operations to export their products by rail. The initial rail yard build will have the capacity to export 60 rail cars (60' – 70' in length) of outbound spec propane per day. PMC also has plans to further expand the rail yard in the future to handle an additional 60 cars of condensate. The propane and condensate will originate from either the on-site fractionation plant or the underground storage facilities and will be transferred to the rail cars by top loaded nozzles. After loading the rail cars are transported back onto the CN main line and continue on to the final sales destination.

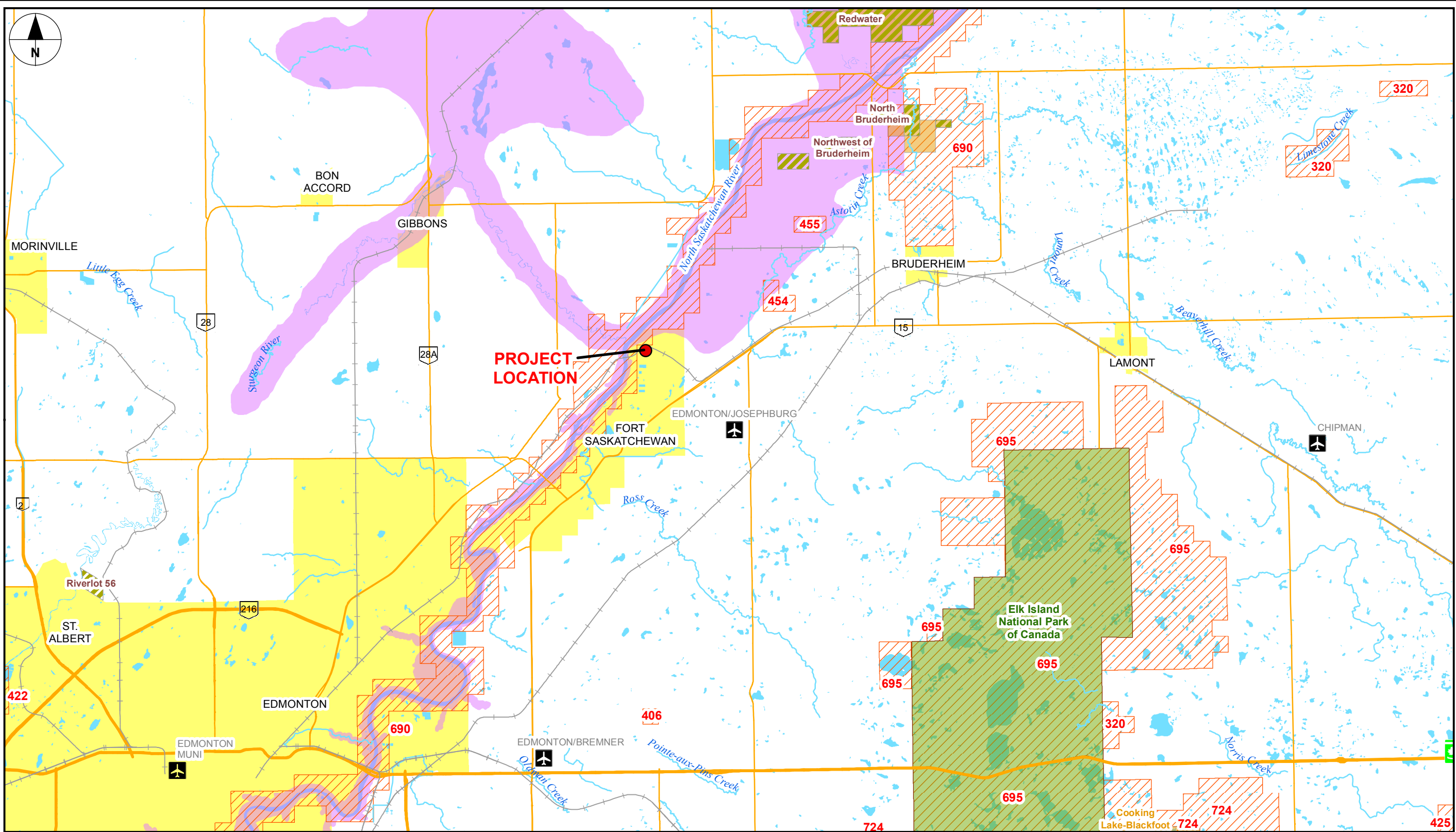
### **Proponent Name**

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No public consultation was completed by PMC while preparing the Project Description. The project is an expansion of an existing facility which was the subject of various consultation initiatives in the past and is not within 10 km of First Nations reserve land therefore no consultation with Aboriginal groups was undertaken. As part of the Provincial rail application process, the local emergency authority and Alberta Environment and Sustainable Resource Development (AESRD) will be contacted to confirm they have no objections to the project.



1:200,000  
NAD 1983 3TM 114

Road Network, Hydro Network, and Rail Network data are from GeoBase. Protected Areas and Parks as well as Environmentally Significant Areas are from Alberta Tourism, Parks and Recreation.

- Legend**
- Airports and Aerodomes
  - Railway
  - Arterial
  - Expressway / Highway
  - Watercourses
  - Waterbodies
  - Key Wildlife and Biodiversity Zones
  - Provincial Natural Area
  - Provincial Recreation Area
  - National Park
  - Environmentally Significant Area
  - Populated Places

Issue Status: Final

FORT SASKATCHEWAN RAIL YARD PROJECT  
PHASE 2  
PLAINS MIDSTREAM CANADA  
Project No.: 60309575 Date: 2014-06-06

**AECOM**

Figure: 2

AESRD has already approved development of the proposed rail area. The City of Fort Saskatchewan has already been contacted and notified of the proposed works.

Local industry partners will be contacted regarding the proposed project when securing third-party crossing agreements for the rail tracks, rail yard access road and associated piping.

PFS is subject to an existing Industrial Approval under the Alberta *Environmental Protection and Enhancement Act* (EPEA) along with *Water Act* and Water Resources approvals. The Industrial Approval has already been amended to include the development of the rail yard and associated surface water runoff ponds. The application to AESRD for amendment to the PMC's current EPEA approval described the current environmental setting of the proposed development site and all potential environmental effects and mitigation. AESRD has approved all of the potential effects and mitigation presented in that application and no Provincial Environmental Impact Assessment was requested. Under EPEA approval 10081-02-02 PMC is required to submit an annual industrial wastewater and industrial runoff report, annual waste management summary report, annual groundwater monitoring program summary report, annual air emissions summary report and monthly air emissions summary reports. The current EPEA approval and amendments are available upon request.

The current operations at the facility fall under the jurisdiction of the Alberta Energy Regulator (AER) including a facility license for the fractionation plant and multiple well and cavern approvals.

PMC will need to obtain approvals under the *Railway (Alberta) Act* to construct and operate the proposed rail yard. The project also requires development and building permit approvals from the City of Fort Saskatchewan.

The Alberta Industrial Heartland is subject to a Regional Noise Management Plan. It has been determined by the Alberta Energy Regulator that due to the high concentration of industrial activity in the Heartland region, traditional noise management practices are not practical and therefore noise compliance is demonstrated through the Regional Noise Management Plan (RNMP). The RNMP was jointly developed by the Alberta Energy Regulator and the Northeast Capital Industrial Association (comprised of 24 companies that operate in the Heartland).

PMC recently contracted a noise survey for the Fort Saskatchewan Site that demonstrated compliance with this plan. As the main CN line already carries regular locomotive traffic, the rail operations are not anticipated to significantly alter the background noise level of the area as per the existing regional noise model.

PFS also falls within the Capital Region and is therefore subject to the *Capital Region Air Quality Management Framework* (the framework) which developed by a steering committee made up of municipalities, industry, non-governmental organizations, air sheds and federal and provincial governments. The framework enhances current initiatives for monitoring and reducing emissions by assigning four ambient air quality levels or action levels for each contaminant. The lower levels allow time to address the ambient concentrations and implement management responses to avoid reaching the annual air quality limit for each contaminant. As each higher level is encountered progressively more rigorous management actions, compliance tools and action timelines are required.

PMC undertakes regular environmental studies as a function of their operating approval under EPEA. These environmental studies consist of soil monitoring programs, groundwater monitoring, industrial runoff monitoring and air emission monitoring. The results of these studies are submitted to AESRD in an annual report. Several environmental studies have also been contracted at PFS including vegetation, wildlife, soil and archeological assessments.

## PROJECT INFORMATION

PMC currently operates their Fort Saskatchewan facility in sections 14 and 23-55-22 W4, at 11010 - 125th Street North of River Road in Fort Saskatchewan, Alberta. The proposed rail yard is intended to support the current plant operations by supplementing the existing propane export by truck. The new rail facilities would allow propane transport out of the facility at a capacity of 60 rail cars per day. In future the full rail yard build will allow the plant to receive condensate by rail, which would allow an increase in the current operating capacity of the existing fractionation plant. Rail traffic will be handled on the Canadian National (CN) Railway Company network with possible interchange to other lines depending on the destination. The daily inbound empty cars for spec propane will arrive in an average of 60 car train lengths however the design will provide enough capacity for up to 90 cars for inbound flexibility. The receiving tracks will be divided into three tracks, each capable of handling 30 cars. The daily outbound spec propane will depart in 60 car train lengths.

The initial rail yard design consists of 21 tracks made up of CN runaround, entry/exit and locomotive escape track, bad order track, CN and PMC pullback tracks, departure, receiving, storage and loading/unloading main and support tracks. The total track length for the initial rail yard is 13.4 km. There is also a future full build design that includes additional switching, R&D, departure, receiving and storage tracks for outbound condensate cars. The full build will consist of 31 tracks with a total track length of 20.2 km; there is no anticipated timeline for the full build at this point.

The main components of the project include:

- The rail yard and loading rack
- Two new surface runoff ponds (existing EPEA Approval)
- A rail office and parking lot
- Firewater pump house
- Surge bullets

Other minor components include:

- Expansion of on-site firewater piping
- Sub-drain system under the rail yard
- Connection to existing on-site power lines
- A new access road off 125<sup>th</sup> Street
- Buried piping for surface water runoff pond and drainage

The project is the construction and operation of a new railway yard with seven or more yard tracks or a total track length of 20 km or more and is therefore subject to the provision set out in Section 2, Subsection 25b of the *Regulations Designating Physical Activities*.

The initial rail yard build consists of two surface runoff ponds, 13 km of rail track and associated on-site buildings, equipment and utilities (see the proposed rail plan and plot plan, attached as Appendix A). The proposed construction is occurring on an existing, fenced brownfield industrial site and the footprint of the proposed rail yard area is approximately 49.5 ha. The full rail build will increase the total length of track to approximately 20 km but will remain within the same development footprint.

PMC will install various safety systems within the facilities including over pressure protection, fire and gas detection, emergency shut off valves and fire water monitors (used for cooling the structures to reduce risk of equipment failure in event of a fire) and spill containment. On-site power is provided via existing power lines, emergency backup generators are available when required. The main fire water pumps and all transfer pumps are powered by electricity however a diesel driven emergency pump is available if required. Water and sewage for the administration building will be provided by a water holding tank and a sewage holding tank. On-site piping is required to connect and drain the surface water runoff ponds, and to extend the fire water piping to the new fire monitors for the rail loading area.

A new access road is also being constructed to provide vehicle access to the rail yard via 125th Street.

The rail yard will consist of storage, receiving, departure, pullback, bad order and loading/unloading tracks which will be connected to CN's main line which runs between the CN Walker and Scotford yards. With the full build a total of 20.173 km of rail track will be installed in the yard, made up of 31 separate tracks. The maximum allowed speed will be 10 miles per hour. Initially only 21 separate tracks will be installed with a total length of 13.395 km. Please see the attached plot plan which details the track breakdown and associated facilities.

The construction phase of the project includes the major work and activities for the expansion of the facility, including site preparation, excavation of the new surface runoff ponds, foundation construction, building erection, rail track installation, installation of equipment and equipment commissioning. All buildings and tanks will be supported on steel driven piles.

The expansion area will be leveled and graded as required to meet design requirements and to prepare for construction. Topsoil and subsoil will be salvaged and stockpiled prior to site grading, placement of fill and/or site development. Soil will be stockpiled in designated topsoil and subsoil stockpiles on PMC owned land located in SW-26-55-22-W4M (referred to as the 'Northlands'). The site will be graded to tie into new surface water run off ponds and catchments areas that will be constructed for the rail project.

Prior to startup of the rail yard, testing and commissioning of various pieces of equipment and systems will occur. It is expected that the testing and commissioning phase of the rail yard will span the final 2 to 4 weeks of construction. The project will then be ready for operation.

The rail yard expansion is designed to have a capacity of 60 rail cars of outbound propane and 60 cars of inbound condensate per day. The number of rail cars of outbound propane will fluctuate based on market demand. The rail yard is generally expected to operate for a period of 25 years.

The decommissioning phase would typically involve the removal and recycle of surface structure. All hazardous materials would be removed in accordance with required regulations before benign surface facilities are removed. Removal and dismantling of underground infrastructure would then commence. All waste generated in the decommissioning process will be collected, stored appropriately and disposed of at approved facilities. During this phase all surface run-off will be managed through the on-site surface run-off control system in which all approval criteria related to his system would be followed.

Once reclamation has commenced the surface run-off control system will be re-graded and re-contoured to retain required containment and capture. All runoff control structures will be removed and the landscape returned to a natural state that is characteristic of the area. Soil remediation and re-contouring will be performed and met the requirements outlined in the AESRD document Reclamation Criteria for Wellsites and Associated Facilities for Cultivated Lands or applicable regulations that are current at the time of reclamation.

During the decommissioning, remediation and reclamation phases, the only emissions expected are from construction equipment along with some dust.

During the construction phase of the project, there will be some dust created and emissions from construction equipment (e.g. excavators, dozers etc.). All reasonable mitigative measures will be taken to reduce dust during this time. The site has seen ongoing construction during recent provincially regulated expansion activities and has never received an emission complaint.

During the operating phase, the only source emissions anticipated are diesel fumes from the emergency diesel pump for the firewater monitor. The monitor is powered electrically however an emergency diesel pump will provide backup in the event of a power failure. This pump will be located in the firewater pump house building and minimal emissions are expected to escape the structure.

The rail cars will be loaded with overhead nozzles under negative pressure. It will be a closed loop arrangement that will be tied into the existing flare system therefore no offsite odours or emissions are anticipated from the loading rack.

The project will produce some machinery noise during construction, operation and decommissioning. As the area is heavily industrialized, the additional noise is not expected to cause adverse effects. This project will comply with the RNMP and adapt best practices for noise management.

Surface water runoff from the rail yard will be directed to two new storm water runoff ponds that will be located south of the rail yard. The surface water retention ponds will have a combined capacity of 36,980 m<sup>3</sup>. A minimum volume of 1300 m<sup>3</sup> will be maintained in these ponds to provide fire water; additional volumes will be maintained to allow sludge to settle below the level of fire water outtake and to allow for 1m of ice formation on the surface of the ponds in the winter. The ponds are designed to contain a 1:100 year storm event. The expansion will generate recyclable and non-recyclable solid waste. All wastes will be disposed of according to the *Waste Control Regulation* and the requirements for each waste classification outlined in the *Alberta Waste Users Guide for Waste Managers*. The administration building for the rail yard will have a sewage holding tank that will be emptied as required by a local service company. Overall, waste management will be integrated into the existing waste management programs and procedures already developed for PFS.

There are three main phases of the project: construction, operation and decommissioning. Each phase has main activities associated with them. The following table presents the project schedule:

<b>Project Phase</b>	<b>Anticipated Dates</b>
Detailed Design	January – May 2014
Regulatory Approval and Permits	March 2014 – February 2015
Site Preparation	August – November 2014
Rail Yard Subgrade Construction	November 2014 – February 2015
Rail Track Construction	February – October 2015
Equipment Installation	February – October 2015
In Service	December 2015
Decommissioning / Reclamation	2040 - 2045

Detailed design and regulatory approval phases are ongoing activities that overlap with the physical construction activities of the project. The regulatory approvals required as well as the rail yard design have been described above.

Since the project will be located on brownfield site, most of the site preparation activities will be minimized. Land clearing and topsoil salvage have already taken place, remaining site preparation activities include grading, pond excavation and infilling.

The initial construction activities include installation of the rail track sub-ballast and sub-drain systems as well as any buried utilities and infrastructure.

The pipe racks for the loading rack will be installed first. Then the turnouts and track materials will arrive on site, the skeleton tracks and skeleton loading tracks will be constructed. The loading tracks will be bonded and grounded and CN will install a no.12 turnout off the main line then ballasting and surfacing will commence. The final step is installation of walking ballast and final trimming.

The first step in mechanical construction is driving of the steel piles that will form the foundation for all buildings and structures in the rail yard. The next step is the erection of structural steel for pipe racks and equipment structures. The required buildings are all self-contained steel structures that will be fabricated off-site, placed on the piles by crane and welded in place. Fabrication and installation of piping systems and installation of power and control wiring systems (including yard lighting) occurs next followed by installation of protective coverings e.g. insulation and fireproofing. The final steps include pre-commissioning (including testing) of all mechanical, power and control systems and commissioning and start-up.

The rail yard is expected to operate for a period of 25 years with occasional shut downs for routine scheduled maintenance activities. Near the end of the project life, decommissioning options will be assessed and will be dependent on future conditions of the propane market.

## PROJECT LOCATION INFORMATION

The existing Fractionation and Storage Facility is located in the City of Fort Saskatchewan and occupies the northeast and northwest quarters of Section 23, Township 55, Range 22, West of



the 4th Meridian. The proposed rail yard will occupy the south half of Section 23, Township 55, Range 22, West of the 4th Meridian, predominantly the southeast quarter on land owned by PMC. The land is currently zoned as heavy industrial by the City of Fort Saskatchewan.

The site is located at the geographic coordinates of latitude N 53° 45' 34.485" and longitude W 113° 9' 19.278". The attached plot plan illustrates the facility layout. The attached map shows the PMC facility relative to nearby watercourses, roads, pipelines, the City of Fort Saskatchewan, aboriginal groups, federal lands and provincial boundaries.

The nearest residence is 480 m to the west, directly across the North Saskatchewan River.

The nearest First Nations Reserve is the Enoch Cree Nation located 47 km to the southwest. The Buffalo Lake Metis Settlement is situated 85 km to the northeast. The PMC Fort Saskatchewan facility is located adjacent to the North Saskatchewan River. The closest federal land is Elk Island National Park located approximately 19 km to the east-southeast of the PMC facility.

PMC owns the surface rights to the entire site as well as all mineral rights for 10-14-55-22 W4M, 15-14-55-22 W4, the northwest quarter of section 14-55-22 W4M and the southwest quarter of 23-55-22 W4M. Encana owns coal rights in the SW quarter of section 23-55-22 W4M and all mines and minerals (including gas and petroleum) for the southeast quarter of 23-55-22 W4M.

The expansion project does not require access to, use or occupation of or exploration or development and production of any lands and resources currently used by Aboriginal peoples.

The PFS site falls within Alberta's Industrial Heartland Area Structure Plan which provides guidance for future industrial growth in the northeast areas of the city. The Plan encourages more efficient use of the land resource, establishes complementary land use policies for industrial, transition and environmental areas, reduces environmental impacts, reduces land use conflicts and establishes buffers and transition areas around heavy industry, facilitates efficient provision and extension of transportation and utility infrastructure and joint use of these services and encourages the use of eco-industrial principles. Additionally, under the Alberta Land Stewardship Act, this region will fall under the North Saskatchewan Regional Plan (NSRP). It is currently in the development phase and once the NSRP is implemented, the PFS facility will fall under its jurisdiction.

## FEDERAL INVOLVEMENT

The project will neither use any federal financial support nor use any federal lands.

An existing water permit for drawing water from the North Saskatchewan River is in place. No other federal lands will be used in carrying out this project. The project will not lead to changes in the environment that would affect federal lands in a province other than Alberta, or outside Canada.

This Project Description has been submitted to CEAA to assist their determination on the need for a federal environmental impact assessment process.

## ENVIRONMENTAL EFFECTS

PMC's Fort Saskatchewan site (PFS) is located in Alberta's Industrial Heartland region. This area is zoned as heavy industrial with a number of other facilities and plant sites in the surrounding vicinity. There are no environmental effects anticipated due to the construction and operation of PMC's PFS Rail Facility.

The PFS is located in a region that has highly variable landscape characteristics and soil series distribution due to industrial development in the area. Prior to industrial development Ortho Black Chernozem soils of the Mundare series were likely present (AGRASID 2014). Upon decommissioning this facility at the end of its operational life, and dependent on plans for subsequent use, the soil will be restored to an equivalent land capability using stored topsoil and subsoil.

The site is comprised of mainly grass lands with dispersed areas of wooded vegetation which consist mainly of shrubs and bushes. In 2004, a vegetation inventory was carried out within the proposed rail yard area. No federally or provincially listed plant species were observed during the vegetation survey at the project site.

Approximately 680 fish surveys have been performed on the North Saskatchewan River (NSR) within a 10 km radius of the expansion project. These surveys identified up to 19 different fish species: Walleye, Brook Stickleback, White and Longnose Sucker, Longnose and Northern, Redbelly Dace, Shorthead Redhorse, Burbot, Mountain Whitefish, Sauger, Goldeye, Flathead Minnow, Trout, Perch, Northern Pike, Spottail and Emerald Shiner, Lake Sturgeon, Quillback and Mooneye. There are no expected effects to fish, fish habitat or any other aquatic species as no fluids will be released into the NSR by PMC.

The river valley is home to porcupines, deer, coyotes, skunks, muskrats, rabbits, and beavers. Additionally, approximately 80 bird species have been observed in the NSR valley of which a number (60) are protected under the Migratory Birds Convention Act, 1994. Many of these birds nest in the river valley.

Two new water retention ponds will collect surface runoff from the rail site. These ponds will not be fish bearing, potential fish habitat, or contain any aquatic species of vegetation or wildlife. Since the ponds are not capable of supporting any aquatic life no bird deterrents are planned. A similar, existing surface water retention pond occasionally has birds land and rest in the pond however; this water is generally clean as it holds mainly rain water from runoff ditches around the facility. If required, these runoff ponds will be drained into a natural low area to the west. All water released to this area will undergo laboratory testing and meet Provincial regulations prior to discharge. As a result, there are not anticipated effects to terrestrial wildlife, migratory birds or any present aquatic species.

A groundwater monitoring network is in place at the PFS facility and additional monitoring wells will be installed in the rail yard area. The wells are sampled on a semi-annual basis and reported

annually as a function of the operating approval through AESRD. Additionally, the provincial Groundwater Information System database indicates a total of 10 water wells in section 14 and a single water well in section 23. The majority of these wells are identified as being industrial for the subject site and for the surrounding facilities.

The air quality of the Fort Saskatchewan area is monitored in part by the Fort Air Partnership (FAP). Based on the collected data for 2013, there are negligible effects to soil, water, vegetation, animals, visibility or overall human health. This is due in part to compliance with the Alberta Ambient Air Quality Objectives (AAAQO) to protect Alberta's environmental and human health.

No off-site odours, noise or emissions are expected to impact Elk Island National park, which is located 19km to the east-southeast, during construction or normal operation of the proposed development. Additionally PMC maintains provisions in their Corporate Emergency Response Plan to mitigate any emissions and odour releases during an emergency. There are no anticipated changes to air quality in Elk Island National Park or any other federal or provincial land. Additionally, there will be a temporary increase in noise associated with construction; however this and general operation of the facility will not result in an appreciable noise increase capable of impacting Elk Island National Park. The project will not require access to, use of, or the exploration, development and production of resources or lands currently used for traditional purposes by Aboriginal peoples. The closest First Nations Reserve is the Enoch Cree Nation, approximately 45 km to the southeast. The PFS site is privately owned and fenced and there are no current or known traditional uses by Aboriginal peoples or groups. As a result, the project is not expected to adversely affect Aboriginal peoples from changes to the environment due to the distance from Aboriginal peoples and the distance to any lands currently occupied by Aboriginal peoples. This reduces the potential for effects on health and socio-economic conditions, physical and cultural heritage, the current use of lands and resources for traditional purposes, or any structure, site or thing that is of historical, archaeological, paleontological or architectural significance to negligible.

## PROPONENT ENGAGEMENT AND CONSULTATION WITH ABORIGINAL GROUPS

There is no planned consultation with Aboriginal groups due to the distance between the project site and the nearest Aboriginal peoples. The lands proposed for the project are not currently used by any Aboriginal peoples for traditional purposes. The land proposed for the project is owned by PMC and has been previously disturbed as part of construction activities on site. The impact area of the rail facility is contained to the existing fenced industrial PFS site. No new land will be disturbed for the construction of the rail facility. The area surrounding the project site has been used for industrial purposes since the 1950s; industrial activity has occurred at the site since the mid-1970s.

However, in the event that consultation with Aboriginal Groups is required PMC has developed a First Nations Consultation Plan (FNCP) to ensure that open and meaningful communication and consultation is established between all involved parties. This Document identifies the various steps and processes used to share, collect, and provide feedback on all aspects of the proposed project.

All project related information will be provided to targeted communities in the form of face-to-face meetings with primary consultation contacts, any First Nation's Chief and Council, and all associated First Nation trappers. Additionally, notification and information messages will be sent via registered mail packages to all affected parties. PMC will also utilize email, telephone, and their project website to ensure that information is accessible to all parties involved. Furthermore, PMC may host community open houses and/or participate in community initiated events to promote informal dialogue regarding the project.

Any concerns or feedback resulting from participation in environmental field studies, First Nations' independent assessments, and/or the project in general will be identified through the use of meetings, emails, telephone conversations, and /or community events.

PMC will maintain a database of all project related information packages, meeting notes of all expressed concerns or feedback, and a record of all commitments and their associated follow up.

## CONSULTATION WITH THE PUBLIC AND OTHER PARTIES

No public or industry consultation is required for this project by any of the responsible regulatory bodies. PMC will contact local industry partners regarding the proposed project when negotiating third-party pipeline and utility crossing agreements for the rail tracks, access road and facility piping.

There is ongoing consultation with CN over the design of the rail. The local emergency response authority and AESRD will be consulted when completing the provincial rail permitting. If any additional public consultation is required under a full Environmental Assessment it will include local authorities, residents, landowners, occupants and urban authorities up to 1.8km from the site. A specific line list of all affected parties will be compiled at this time and each stakeholder will be supplied with a project specific information package.

Furthermore, all residents within the 1.8 km radius will be personally consulted (in person or by phone) to ensure that there are no objections. Any concerns or impacts resulting from participation in environmental field studies, or the project in general will be identified through the use of meetings, emails, telephone conversations, and /or community events. Through open dialogue PMC aims to develop mutually agreeable avoidance and mitigation measures.

PMC will also maintain a database of all project specific information to ensure that all the appropriate information has been supplied, concerns or feedback have been documented and addressed, and to ensure that commitments are upheld and appropriately addressed.

Regulatory approvals for this project are required by several provincial and municipal regulators. These stakeholders will be consulted as part of the project permitting phase and include Alberta Transportation, Alberta Energy Regulator (AER) and the City of Fort Saskatchewan. Alberta Transportation requires that the local emergency response agency and AER are contacted prior to submitting an application for an Industrial Railway Operating Certificate in order to confirm that they have no objections to the proposed railway.

During the initial regulatory scoping, the City of Fort Saskatchewan was contacted regarding the proposed rail facility. AESRD has already approved the land development required for the facility

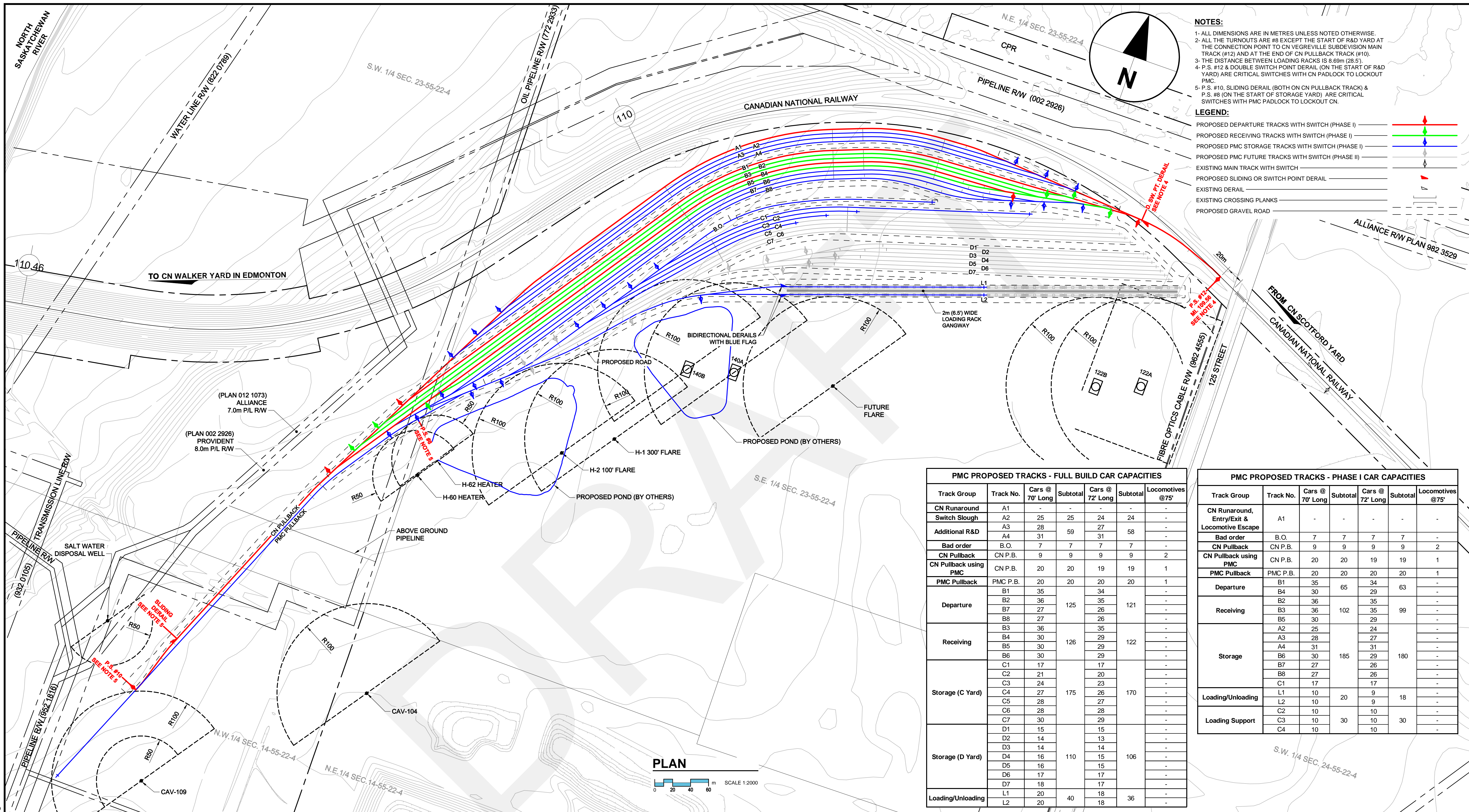
under an amendment to an existing EPEA approval. As part of the AESRD approval process PMC was required to post a public notice detailing the project on the plant's bulletin board for 30 days.

AESRD did not express any concerns with the project and the approval was issued within two months of submission with a few additional approval conditions relating to the proposed activities. The original EPEA approval and amendments for PFS are available upon request.

No comments were received as a result of the public notice posting on the plant's bulletin board.

The City of Fort Saskatchewan Development Officer indicated that a development permit was not required for the rail tracks or loading racks only for any buildings with an area greater than 107 ft<sup>2</sup>. She did not express any further concerns regarding the project except that CN Rail should be consulted regarding their requirements. CN is an integral stakeholder in the design phase and has been the subject of ongoing consultation and design review. The rail design team is working with CN to accommodate their comments on the design.

APPENDIX A: PLOT PLAN



- NOTES:**
- 1- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
  - 2- ALL THE TURNOUTS ARE #8 EXCEPT THE START OF R&D YARD AT THE CONNECTION POINT TO CN VEGREVILLE SUBDIVISION MAIN TRACK (#12) AND AT THE END OF CN PULLBACK TRACK (#10).
  - 3- THE DISTANCE BETWEEN LOADING RACKS IS 8.69m (28.5').
  - 4- P.S. #12 & DOUBLE SWITCH POINT DERAIL (ON THE START OF R&D YARD) ARE CRITICAL SWITCHES WITH CN PADLOCK TO LOCKOUT PMC.
  - 5- P.S. #10, SLIDING DERAIL (BOTH ON CN PULLBACK TRACK) & P.S. #8 (ON THE START OF STORAGE YARD) ARE CRITICAL SWITCHES WITH PMC PADLOCK TO LOCKOUT CN.
- LEGEND:**
- PROPOSED DEPARTURE TRACKS WITH SWITCH (PHASE I)
  - PROPOSED RECEIVING TRACKS WITH SWITCH (PHASE I)
  - PROPOSED PMC STORAGE TRACKS WITH SWITCH (PHASE I)
  - PROPOSED PMC FUTURE TRACKS WITH SWITCH (PHASE II)
  - EXISTING MAIN TRACK WITH SWITCH
  - PROPOSED SLIDING OR SWITCH POINT DERAIL
  - EXISTING DERAIL
  - EXISTING CROSSING PLANKS
  - PROPOSED GRAVEL ROAD

Track Group	Track No.	Cars @ 70' Long	Subtotal	Cars @ 72' Long	Subtotal	Locomotives @75'
CN Runaround	A1	-	-	-	-	-
Switch Slough	A2	25	25	24	24	-
Additional R&D	A3	28	59	27	58	-
	A4	31	31	31	31	-
Bad order	B.O.	7	7	7	7	-
CN Pullback	CN P.B.	9	9	9	9	2
CN Pullback using PMC	CN P.B.	20	20	19	19	1
PMC Pullback	PMC P.B.	20	20	20	20	1
Departure	B1	35	35	34	-	-
	B2	36	125	35	121	-
	B7	27	26	26	-	-
	B8	27	26	26	-	-
Receiving	B3	36	126	35	122	-
	B4	30	29	29	-	-
	B5	30	29	29	-	-
	B6	30	29	29	-	-
	C1	17	17	17	-	-
	C2	21	20	20	-	-
Storage (C Yard)	C3	24	175	23	170	-
	C4	27	26	27	-	-
	C5	28	27	27	-	-
	C6	28	28	28	-	-
	C7	30	29	29	-	-
	D1	15	15	15	-	-
	D2	14	13	13	-	-
Storage (D Yard)	D3	14	110	14	106	-
	D4	16	15	15	-	-
	D5	16	15	15	-	-
	D6	17	17	17	-	-
	D7	18	17	17	-	-
	L1	20	40	18	36	-
L2	20	18	18	-	-	

Track Group	Track No.	Cars @ 70' Long	Subtotal	Cars @ 72' Long	Subtotal	Locomotives @75'
CN Runaround, Entry/Exit & Locomotive Escape	A1	-	-	-	-	-
Bad order	B.O.	7	7	7	7	-
CN Pullback	CN P.B.	9	9	9	9	2
CN Pullback using PMC	CN P.B.	20	20	19	19	1
PMC Pullback	PMC P.B.	20	20	20	20	1
Departure	B1	35	65	34	63	-
	B4	30	29	29	-	-
	B2	36	35	35	-	-
	B3	36	102	35	99	-
Receiving	B5	30	29	29	-	-
	A2	25	24	24	-	-
	A3	28	27	27	-	-
	A4	31	31	31	-	-
	B6	30	185	29	180	-
	B7	27	26	26	-	-
	B8	27	26	26	-	-
	C1	17	17	17	-	-
Loading/Unloading	L1	10	20	9	18	-
	L2	10	9	9	-	-
	C2	10	10	10	-	-
Loading Support	C3	10	30	10	30	-
	C4	10	10	10	-	-

**PLAN**  
SCALE 1:2000

ISSUED FOR INFORMATION  
Date: 2013/12/06

PREPARED BY: **AECOM**

FT SASKATCHEWAN STORAGE FACILITY  
Alberta

CONCEPTUAL RAIL PLAN  
FORT SASKATCHEWAN EXPANSION  
TRACK CONSTRUCTION PHASES  
SITE PLAN

PLAINS MIDSTREAM CANADA

PREVIOUS DRAWING NUMBER: Z-0001  
DRAWING NUMBER: G-1001  
REV: A

DRAWN BY: HRZ  
CHECK'D BY: DJC  
APPV'D BY: DG  
CLIENT APP: \_\_\_\_\_

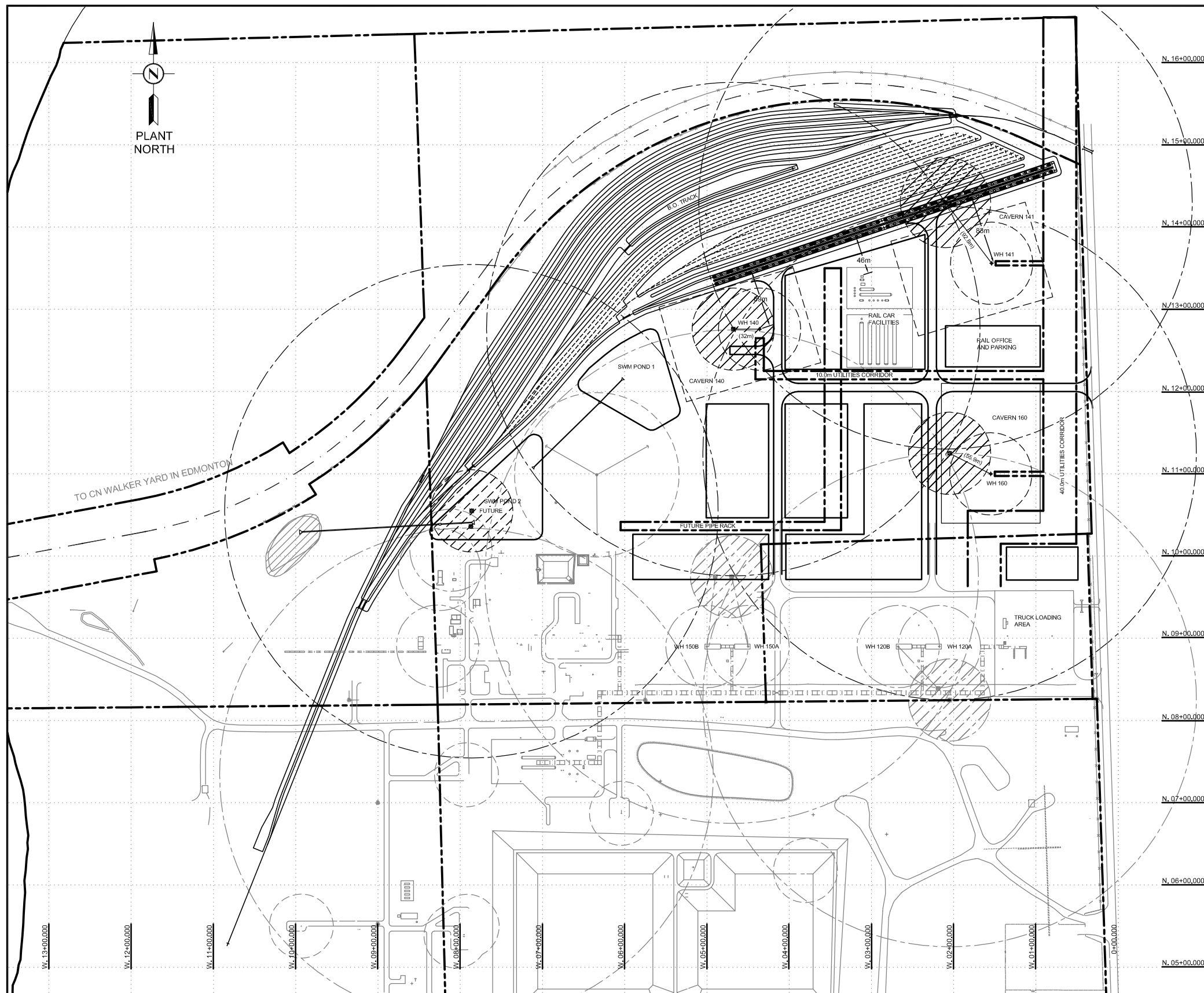
DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DATE: \_\_\_\_\_

EPCM PROJ# \_\_\_\_\_  
EPCM DRWG# \_\_\_\_\_

DRAWING SCALE: 1:2000

DRAWING NUMBER	TITLE/DESCRIPTION	GENERAL NOTES	REV	DATE	DESCRIPTION	DRWN	CHK'D	APP'D	MCLP A.F.E. NO.	PERMIT	ENGINEERING
				2013/12/06	Issued For Information	HRZ	DJC	DG			
REFERENCE DRAWINGS											
(UNLESS OTHERWISE SPECIFIED)											
DRAWING REVISIONS											
PROFESSIONAL STAMPS											

Filename: 60309575-SHT-PH00-G-1001-ROA.DWG



**DISTANCE TO RAIL CAR LOADING RACK**  
 1. WH-141A TO RAIL RACK IS 83m.  
 2. WH-140A TO RAIL RACK IS 69m.  
 3. RAIL CAR FACILITIES TO RAIL RACK IS 46m.

CAVERN / WELLHEAD LOCATION TABLE					
CAVERN	WELLHEAD	WELLHEAD COORDINATES		DOWNHOLE COORDINATES	
		NORTH	WEST	NORTH	WEST
120 PROPANE	120A	08+90.000	02+17.500	08+25.000	02+05.000
	120B	08+90.000	02+67.500	08+39.000	02+19.000
160	160	11+00.000	01+55.000	11+25.000	02+05.000
141 DOW	141	13+56.000	01+54.000	14+30.000	02+10.000
140 NOVA	140	12+76.000	04+36.000	12+76.000	04+68.000
150 BUTANE	150A	08+90.000	04+50.000	09+75.000	06+50.000
	150B	08+90.000	05+00.000	09+75.000	04+70.000
FUT.	FUTURE	-	-	10+55.000	07+86.000

THIS DRAWING IS CONCEPTUAL AND FOR DISCUSSION PROPOSES ONLY. IT IS NOT FOR FORMAL USE.

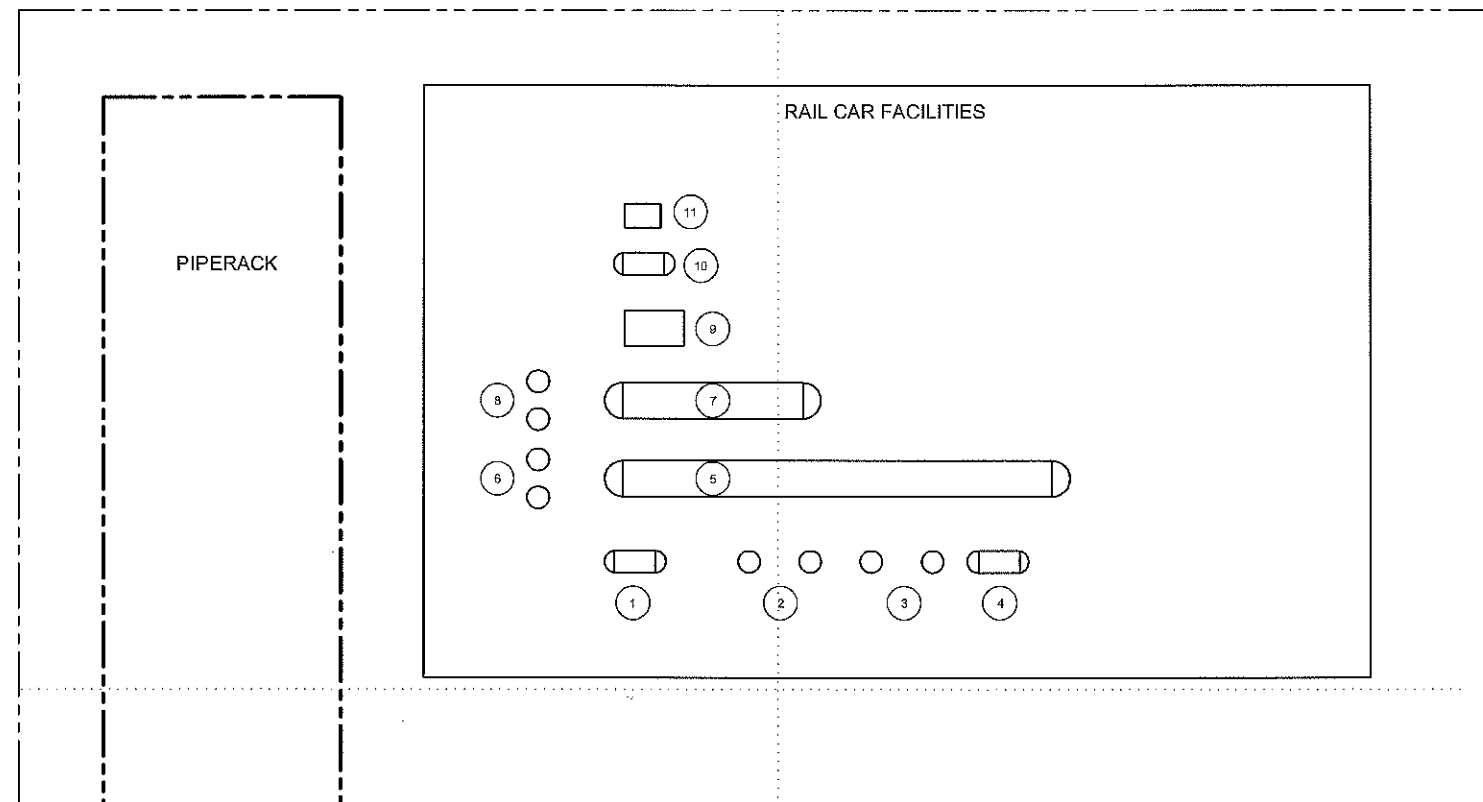
**PRELIMINARY**  
 NOT FOR CONSTRUCTION  
 Date: May 12, 2014

DRAWING NUMBER		TITLE/DESCRIPTION		GENERAL NOTES (UNLESS OTHERWISE SPECIFIED)		REV		DATE		DESCRIPTION		DRWN	CHKD	APP'D	PMCLP A.F.E. NO.	PERMIT	ENGINEERING	EPCM PROJ#	2013038	DRAWING SCALE	1:2500	PREVIOUS DRAWING NUMBER	-	DRAWING NUMBER	D-FSE-210-SK2	REV	B
REFERENCE DRAWINGS						B		2014/06/18		REVISED WH-140 DOWNHOLE LOC.		MA						DRAWN BY		M.ANCTIL	DATE	2014/05/12	FORT SASKATCHEWAN STORAGE Alberta		PLAINS MIDSTREAM CANADA		
						A		2014/05/20		ISSUED FOR INFORMATION		MA						APPV'D BY		-	DATE	-	LSD: 14-055-22 W4M		PFS RAIL FACILITY AREA PLAN - CAVERN LOCATIONS		
																		CLIENT APP		-	DATE	-	DRAWING NUMBER		D-FSE-210-SK2		



LEGEND

ITEM	TAG	DESCRIPTION
1	V-70000	PROPANE COALESCER VESSEL
2	V-70100A/70200	PROPANE CaCl2 DEHYDRATORS
3	V-70150A/70250	PROPANE FILTERS
4	V-70300	BRINE DEGASSING VESSEL
5	V-73100	PROPANE SURGE VESSEL
6	P-73300/P-73400	PROPANE TRANSFER PUMPS
7	V-74000	PROPANE OFF-SPEC VESSEL
8	P-74100/P-74200	PROPANE OFF-SPEC PUMPS
9	Z-74300	PROPANE OFF-SPEC COMPRESSOR
10	V-73500	MERCAPTAN STORAGE VESSEL
11	Z-73500	MERCAPTAN PUMP
12	V-70400	FLARE K.O. VESSEL
13	P-412A/P-412B	FIRE WATER PUMPS
14	B-XXXX	RAIL CAR OFFICE BUILDING
15	-	RAIL CAR LOADING RACK



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**PRELIMINARY**  
NOT FOR CONSTRUCTION  
Date: May 12, 2014

		NOTE: ITEMS 9 AND 11 ARE HOUSED.						PREPARED BY		FORT SASKATCHEWAN STORAGE Alberta																					
								DRAWN BY: M.ANCTIL		DATE: 2014/05/12		LSD: 14-055-22 W4M																			
								CHK'D BY: -		DATE: -		PFS RAIL FACILITY																			
								APP'D BY: -		DATE: -		SITE PLAN - RAIL CAR FACILITIES - EQUIPMENT																			
								CLIENT APP: -		DATE: -		PREVIOUS DRAWING NUMBER																			
DRAWING NUMBER		TITLE/DESCRIPTION		REV		DATE		DESCRIPTION		DRWN		CHK'D		APP'D		PMCLP A.F.E. NO.		PERMIT		ENGINEERING		EPCM PROJ#		DRAWING SCALE		DRAWING NUMBER		REV			
REFERENCE DRAWINGS		(UNLESS OTHERWISE SPECIFIED)		A		2014/05/20		ISSUED FOR INFORMATION		MA												2012038		1:300		-		D-FSE-210-SK3		A	