Yellowhead County

BYLAW NO. 09.22

BEING A BYLAW TO AMEND THE PEERS AREA STRUCTURE PLAN BYLAW 02.17

WHEREAS, the Municipal Government Act, Being Chapter M-26, R.S.A., 2000, authorizes a Council to amend a bylaw;

AND WHEREAS Yellowhead County in accordance with Section 633 of the Municipal Government Act have adopted the Peers Area Structure Plan 02.17;

AND WHEREAS Yellowhead County held a public hearing in respect to the proposed amendment pursuant to the Municipal Government Act, Being Chapter M-26, R.S.A., 2000;

NOW THEREFORE, the Yellowhead County Council, in the Province of Alberta, duly assembled, hereby enacts the following amendments to the Peers Area Structure Plan 02.17:

1. **Replace Section 3.1.12 from:** 3.1.2 Land Use Bylaw (LUB) Regulations **(Map 3)**

   The land-use bylaw district map is identified as Map No. 62A of the County Land-Use Bylaw. Over the years, several amendments to the LUB District Map were passed by the County Council. Most notably, a Manufactured Home Park District (MHP) was approved for lands south of 48th Avenue.

   A substantial amount of land is zoned Hamlet Commercial District (HC) and provides infill opportunities to expand commercial services in future. The Rural District (RD) designation on the east side of Highway 32 has potential for certain highway commercial and industrial uses. However, piped servicing extensions would be necessary across Highway 32 to reach its full potential and initiate a rezoning to HC. The Hamlet Industrial (HI) district recognizes the Brisco Wood Manufacturing operation.

   The Hamlet Restricted Development District (HRD) was established in response to concerns over poor soils, high water table and January Creek flooding potential. Subsequent floodplain research and geotechnical drilling has been completed to provide more accurate information on the development capability of these lands.

   Additional amendments to the land-use bylaw district may be undertaken as part of implementation of this ASP.

   To: 3.1.2 Land Use Bylaw (LUB) Regulations **(Map 3)**

   The land-use bylaw district map is identified as Map No. 62A of the County Land-Use Bylaw. Over the years, several amendments to the LUB District Map were passed by the County Council.

   A substantial amount of land is zoned Urban Service District (USD) and provides infill opportunities to expand commercial services in future. The Rural District (RD) designation on the east side of Highway 32 has potential for certain highway commercial and industrial uses. However, piped servicing extensions would be necessary across Highway 32 to reach its full potential.

2. **Replace the first sentence from paragraph 2 of Section 3.2.1 from:** The Hamlet Residential Zoning District (HR) provides for both manufactured homes and stick built housing in the same district.

To: The Urban Neighbourhood District (UND) provides for both manufactured homes and stick built housing in the same district.

3. **Delete the second sentence of the sixth paragraph of Section 6.1.2 which reads:** Much of the land is currently zoned Manufactured Home Park District (MHP), but this does not preclude a future land use bylaw district amendment under this ASP.

4. **Replace the first sentence from paragraph 14 of Section 6.1.2 from:** This parcel is currently zoned Direct Control (DC) and Hamlet Restricted Development (HRD).

   To: This parcel is currently zoned Urban Neighbourhood District (UND).

5. **Replace the first sentence from paragraph 15 of Section 6.1.2 from:** This parcel is currently zoned as Hamlet Commercial (HC).

   To: This parcel is currently zoned as Urban Service District (USD).

6. **Replace Policy 6.2.1(c) from:** Park model manufactured homes should be considered by the County as an appropriate and useful form of housing, especially for independent seniors living if designed as part of a carefully planned development with communal amenities that encourage social encounters such as communal gardens, water features, green spaces, TV room, central patio for resident use, etc. This may require an amendment to the Hamlet Residential (HR) District of the land-use bylaw.

   To: Park model manufactured homes should be considered by the County as an appropriate and useful form of housing, especially for independent seniors living, if designed as part of a carefully planned development with communal amenities that encourage social encounters such as communal gardens, water features, green spaces, TV room, central patio for resident use, etc.

7. **Replace Policy 6.2.1(i) from:** The County supports the establishment of major home occupations (as per the HR - Hamlet Residential District) of the County land-use bylaw as a way of encouraging economic opportunity and broadening the hamlets employment base, subject to appropriate neighbourhood consultation.

   To: The County supports the establishment of Home Business Small (as per the Urban Neighbourhood District) of the County land-use bylaws as a way of encouraging economic opportunity and broadening the hamlets employment base, subject to appropriate neighbourhood consultation.

8. **Delete Policy 6.2.1(j) which states:** The County supports the existing MHP- Mobile Home Park District zoning located south of 49th Avenue as a viable housing option. However, the County may support alternative residential proposals, especially to accommodate the perceived demand for multifamily residential, rental units and/or senior's accommodation for independent-living.

9. **Delete Policy 7.1(b) which states:** The County should prepare and consider an amendment to the existing Land Use Bylaw District Map to review the existing Direct Control (DC) District, Hamlet Restricted District (HRD) and Manufactured Home Park (MHP) District upon approval of this ASP and consult landowners regarding an appropriate potential redistricting in accordance with the principles and policies of this ASP.

10. **Delete Policy 7.1(c) which states:** The County shall prepare and consider an amendment to the existing Land Use Bylaw District map to review the existing Hamlet Residential (HR) District on the hamlet water treatment plant and, if necessary, rezone it to Public Institutional (PI).

11. **Delete Policy 7.1(d) which states:** The County shall prepare and consider an amendment to the land-use bylaw to provide for mixed use accommodation in appropriate locations in the hamlet. This

would allow for the rezoning of the only parcel zoned Hamlet General (HG) District to be amended to Hamlet Commercial (HC).

12. **Delete Policy 7.1(e) which states:** The County shall prepare and consider an amendment to the land-use bylaw to provide for new mixed-use buildings with commercial main floor/ residential upper floors to be included in the Peers Hamlet Commercial (HR) District.

13. **Amend Existing Zoning Map 3 as per Schedule A of this Bylaw.**

This bylaw comes into force at the beginning of the day that it is passed in accordance with Section 189 of the Municipal Government Act, Being Chapter M-26, R.S.A., 2000

READ a first time this 13 Day of September A.D., 2022

PUBLIC HEARING held this 11 Day of October A.D., 2022

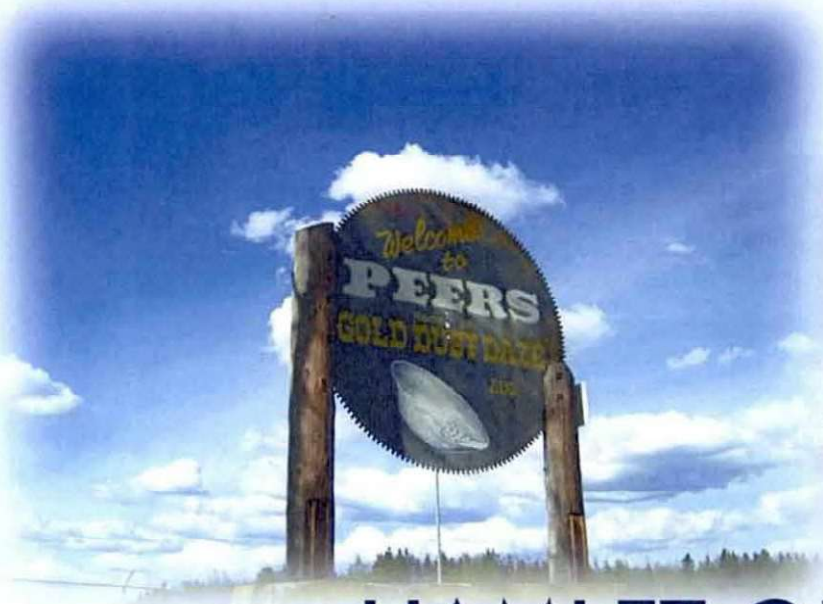
READ a second time this 25 Day of October A.D., 2022

READ a third time this 25 Day of October A.D., 2022

SIGNED this 25 Day of October A.D., 2022

Mayor, Wade Williams

Chief Administrative Officer, Luc Mercier



HAMLET OF PEERS AREA STRUCTURE PLAN

September, 2017

Yellowhead County

Amended by Yellowhead County
October 2022 Bylaw 09.22

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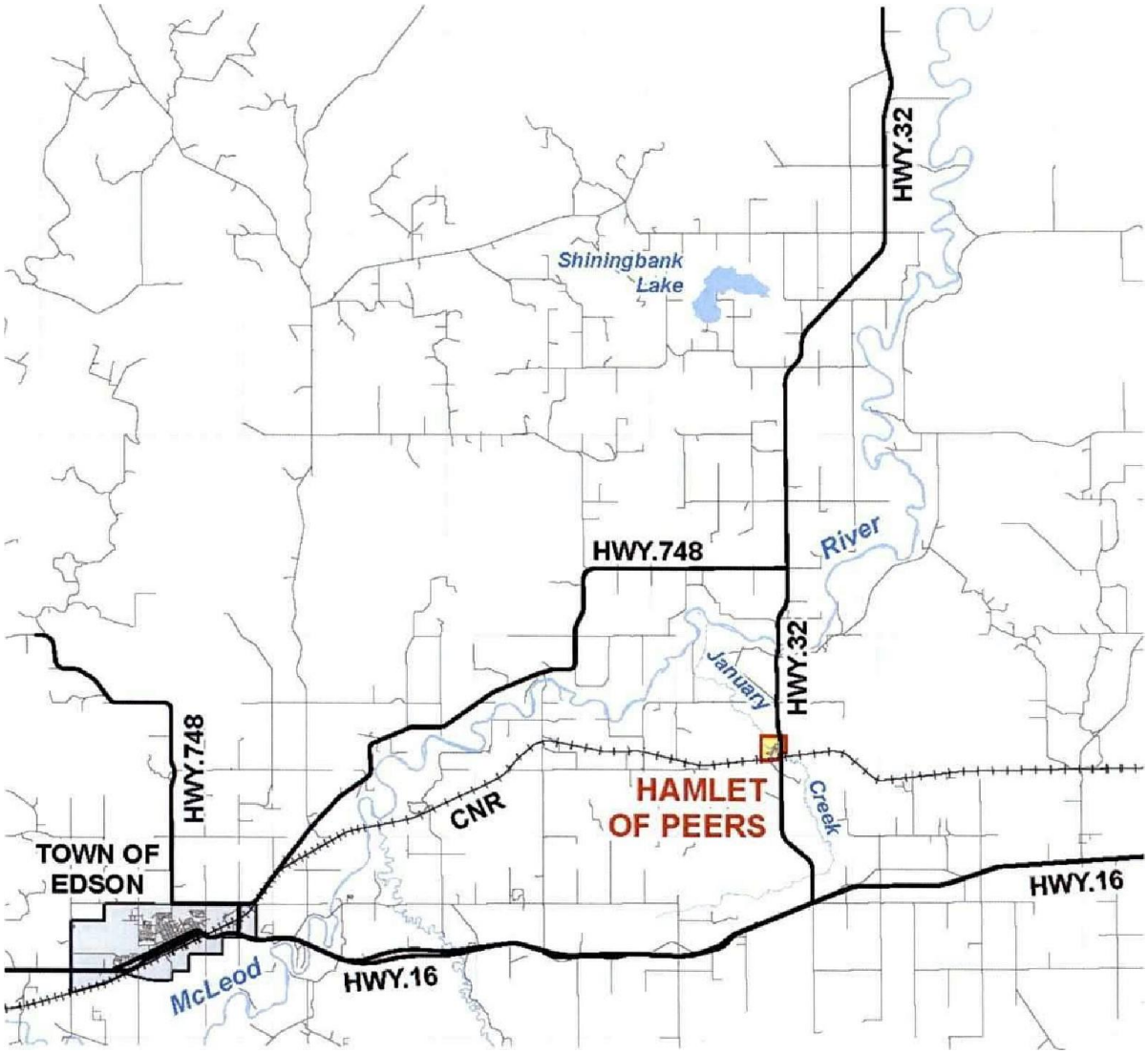
PEERS REGIONAL LOCATION



1. INTRODUCTION

1.1 ASP Purpose

This Area Structure Plan provides a framework for the long-term growth and development of the lands in the hamlet of Peers located within Yellowhead County, Alberta. The overall goal of this plan is to establish policies that identify and encourage:

- new residential and non-residential development in Peers and its periphery
- identify opportunities to enhance existing commercial and public spaces and
- improve the quality of life for community landowners, residents and visitors.

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1.2 How to Use This Document

This Area Structure Plan is divided into three sections:

- background information;
- a detailed explanation of the Plan concept / intent and,
- a set of specific policies that will guide the Approving Authorities in their decisions.

The Implementation policies direct applicants and the County to undertake specific actions that are required to ensure the area develops as intended by the ASP. The Appendices contain support information that is of benefit to landowner applicants and County staff. Appendices A-D are located under separate cover and do not form part of this bylaw.

1.3 The Local and Regional Setting (Map 1)

The hamlet of Peers, (pop. 98 in 201 7), is located approximately 32 km northeast of Edson along Highway 32. The Yellowhead Highway #16 is located 8 km south of the hamlet. The Canadian National mainline forms the south boundary of the hamlet. The hamlet is divided diagonally by January Creek from the southeast to the northwest corner.

The Peers area was first settled in the early 1 900's by homesteaders originating from the western United States. Many people continue to settle in the region establishing farms until about 1 941 when farm consolidation resulted in fewer but larger farm operations along with decreased numbers of homesteaders. Over the years, the hamlet population fluctuated with economic fortunes of the region, with the general decline in population as noted in the population chart below,

Peers Historical Population change

1978	1986	1991	1996	2001	2006	2011	2016
168	138	1 14	1 19	120	1 13	108	98

source; Alberta Bureau of Statistics, Stats Canada

Despite its small population, Peers is a commercial, social and recreational service centre. According to Yellowhead County 2017 population estimates, 1257 residents of Electoral Division 4 in the Shiningbank area reside along that part of Highway 32 north of Highway 16 to the County northern boundaries. In recognition this role, the County has long supported the hamlet and area community through continual investments in infrastructure, community and recreational services.

Legend

- HAMLET BOUNDARY
- EXISTING WELLSITE (100m BUFFER)
- RAILWAY

Aerial Photo Date: 2015

HAMLET OF PEERS ASP

HAMLET OF PEERS AIR PHOTO

MAP 1

ALL IN 54-14-W5M
YELLOWHEAD COUNTY

0 50 100 200 300 400 500 Meters

1:10,000

File: Peers_ASP_AirPhoto | Date: 2017/07/02

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1.4 Plan Background

In 1993, the Yellowhead Regional Planning Commission prepared a hamlet study for the County (then Improvement District #14). This study contained land development policies and a future land-use map to guide future hamlet subdivision and development. Over the years, the hamlet invested in a municipal piped sewage disposal system. As a result, an updated 2002 Area Structure Plan (ASP) was prepared to refine the original 1993 study and included directions for growth outside the current hamlet boundaries. Amendments to this 2002 ASP were approved because of changes in landowner development intentions and rethinking hamlet strategy,

In June 2016, the County issued a request for proposals to update the Peers ASP because of further municipal infrastructure investments in piped water, paving and stormwater management improvements. A hamlet floodplain study was also completed later that year. The County undertook a community consultation process in 2017 as part of the ASP process. This consultation process is described in Appendix A under a separate cover.

2.**EXISTING PHYSICAL SITE CHARACTERISTICS (Map 2)**

2.1 Topography

Peers is located on mostly flat land. The highest elevation within the hamlet boundaries is 854 m located south of 49th Avenue and west of Willow Drive. The lowest elevation is at 842 m located on January Creek at the northwest end of the hamlet boundary. This provides a total elevation difference of 22 m. The overall slope of the hamlet is less than 5% grade with almost no slopes greater than 15%. The highest slopes are generally located in the south and west of the hamlet, Therefore, excessive slope is not a constraint to future development.

With regards to native vegetation, the south bank of January Creek retains substantive tree stands while most of the north bank is either urban development or farmstead. A small pocket of mature timber is located north of January Creek and East of 50 th Street.

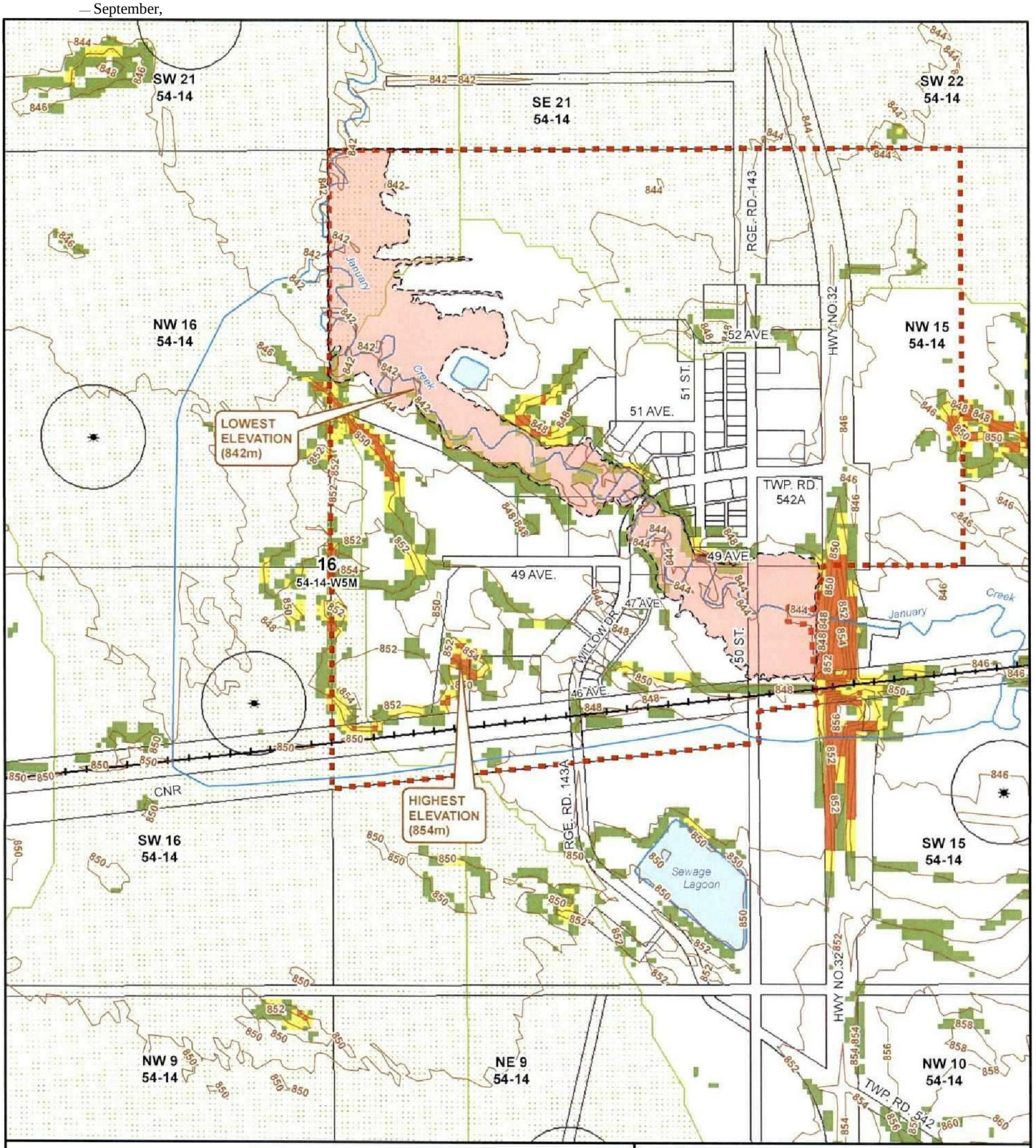
2.2 Drainage and Floodplain

Peers is divided by January Creek running from the southeast down to the northwest where it drains into the McLeod River approximately 9 kilometers to the northwest of the hamlet. The aquatic environment of January Creek was assessed by AMEC in March 2010 as part of the January Creek outfall construction for stormwater management facilities within the hamlet. The report summarized that the creek was a fish-bearing stream, with 'moderate to good' northern pike habitat. In most likelihood, sport fish species would overwinter in the McLeod River and migrate upstream and January Creek and other tributaries to spawn. The actual presence of northern pike has not been recorded in previous studies,

In 2016, the County commissioned a Floodplain Risk Assessment report for January Creek prepared by AMEC, Foster, Wheeler. The watershed of January Creek encompasses an area of approximately 106 km^2 at Peers. A total of 65 cross sections were surveyed throughout the 3.34 km long study reach. The model developed for this study indicates that the 1:100-year flood inundates several lots adjacent to January Creek, mainly near the Willow Drive (Range Road 143A) Bridge. The study stated .... "*Some buildings within the floodplain may not be adequately protected from the design flood levels. Flood proofing could be undertaken for buildings subject to flooding to reduce flood damages*." The study offers recommendations for flood proofing in section 5.2 of the floodplain study, primarily minimum ground floor level elevations above the 1:100-year flood level.

The study further stated that ..." *The methodology and criteria used for this study do not meet requirements that are acceptable for Alberta Environment and Parks flood risk mapping, and they should not be interpreted as substitutes fora rigorous mapping study. It should be noted that insufficient data were available to carry out a formal calibration process of the GeoHECRAS*

— September,



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model and as such." Nonetheless, the key outcome of the report maps the extent of a 1: 100-year floodplain to the degree suitable for planning purposes and this ASP. As a result, future development within this floodplain will be constrained in accordance with County policy and best engineering practices. The full report may be reviewed in Appendix B under a separate cover.

2.3 Soils and Near Surface Groundwater

The 2002 Peers ASP cautioned about geotechnical constraints relating to development potential in certain undeveloped lands within the hamlet. Historical drilling logs in the hamlet and area were reviewed during the preparation of the 2017 ASP but were variable in terms of near-surface groundwater depth. As a result, once target lands were identified that could be suitable for development, the County commissioned a geotechnical assessment to determine the suitability of native soil for specific lands within the hamlet boundary. This study was completed on May 30, 2017 by WSP.

The study cover letter states... "*The report concludes that the subsurface conditions are suitable for future residential//commercia/ development".* Several test holes located west of Willow Drive and south of January Creek showed water table between 0.7 m and 1.95 m below the surface.

It should be noted that there are localize locations of sand plateaus and that " … *groundwater was encountered in 6 of the 14 test holes during drilling operations. Based on the analysis of the material and random location of these test holes where groundwater was encountered, it appears that the groundwater levels are influenced by surface drainage contained within silty material which is perched over a layer of the medium plastic clay."*

Test results for most of the holes show a very intermediate plastic medium grey clay material with a moisture content varying between 20-30 percent. Moreover, the native soil material is very susceptible to frost and as such, additional measures should be taken to mitigate for this condition. The full report may be reviewed in Appendix C under a separate cover.

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3. EXISTING HUMAN FEATURES

3.1 Existing Policy Framework

The County policies are based on Municipal Development Plan (MDP) providing general, overall guidance for the entire county followed by an Area Structure Plan (ASP) which guides land-use and land use conditions on one or more parcels of land that may be larger or smaller than a quarter section in size. The most specific intent of policy is the Land-Use Bylaw (LUB) which regulates specific applications for subdivision and development.

This 2017 Peers ASP intends to replace the 2002 Peers ASP, but this new ASP must coordinate policy implementation with the MDP and the LUB to be consistent and fair to landowner applicants.

3.1.1 Municipal Development Plan (MDP) Policies

The County Municipal Development Plan, being bylaw 15, 13 was approved in September 2013. The following MDP policies support the hamlet of Peers.

Section 6.5.12

a) *Peers ASP - Support the implementation of the Land Use Concept as included in the Peers Area Structure Plan,*

(This revised Peers ASP supersedes previous ASP Policy.)

(b)*Apocopate Land Uses - Encourage residential, hamlet commercial, tourism/recreation/highway commercial, and industrial subdivision and development in*

(The revised Peers ASP 2017 provides a framework for the above noted policy.)

(c) Community Facilities and Services - *Sustain and enhance the level of community services and facilities in and around Peers.*

(The County continues to invest in Peers community services and facilities as described in this ASP.)

(d)*January Creek - Consider undertaking a study of January Creek to delineate or confirm its 1: 100-year floodplain.*

(The County completed a floodplain management report in 2016.)

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7.3 Future Industrial Development - Encourage industrial development to locate in Industrial parks or within the hamlets of Evansburg, Cadomin, Robb, Niton Junction, Peers and Wildwood provided that adequate infrastructure servicing is available.
(This revised Peers ASP provides a framework for the above noted policy.)

8.3 Commercial Development Policies - Encourage future commercial development in Evansburg, Niton Junction, Peers, Robb, and Wildwood as a means to take advantage of existing infrastructure and services.
(This revised Peers ASP identifies existing infrastructure and services and works towards encouraging new opportunities for residential and commercial growth.)

3.1.2 Land Use Bylaw (LUB) Regulations **(Map 3)**

The land-use bylaw district map is identified as Map No. 62A of the County Land-Use Bylaw. Over the years, several amendments to the LUB District Map were passed by the County Council.

A substantial amount of land is zoned Urban Service District (USD) and provides infill opportunities to expand commercial services in future. The Rural District (RD) designation on the east side of Highway 32 has potential for certain highway commercial and industrial uses. However, piped servicing extensions would be necessary across Highway 32 to reach its full potential.

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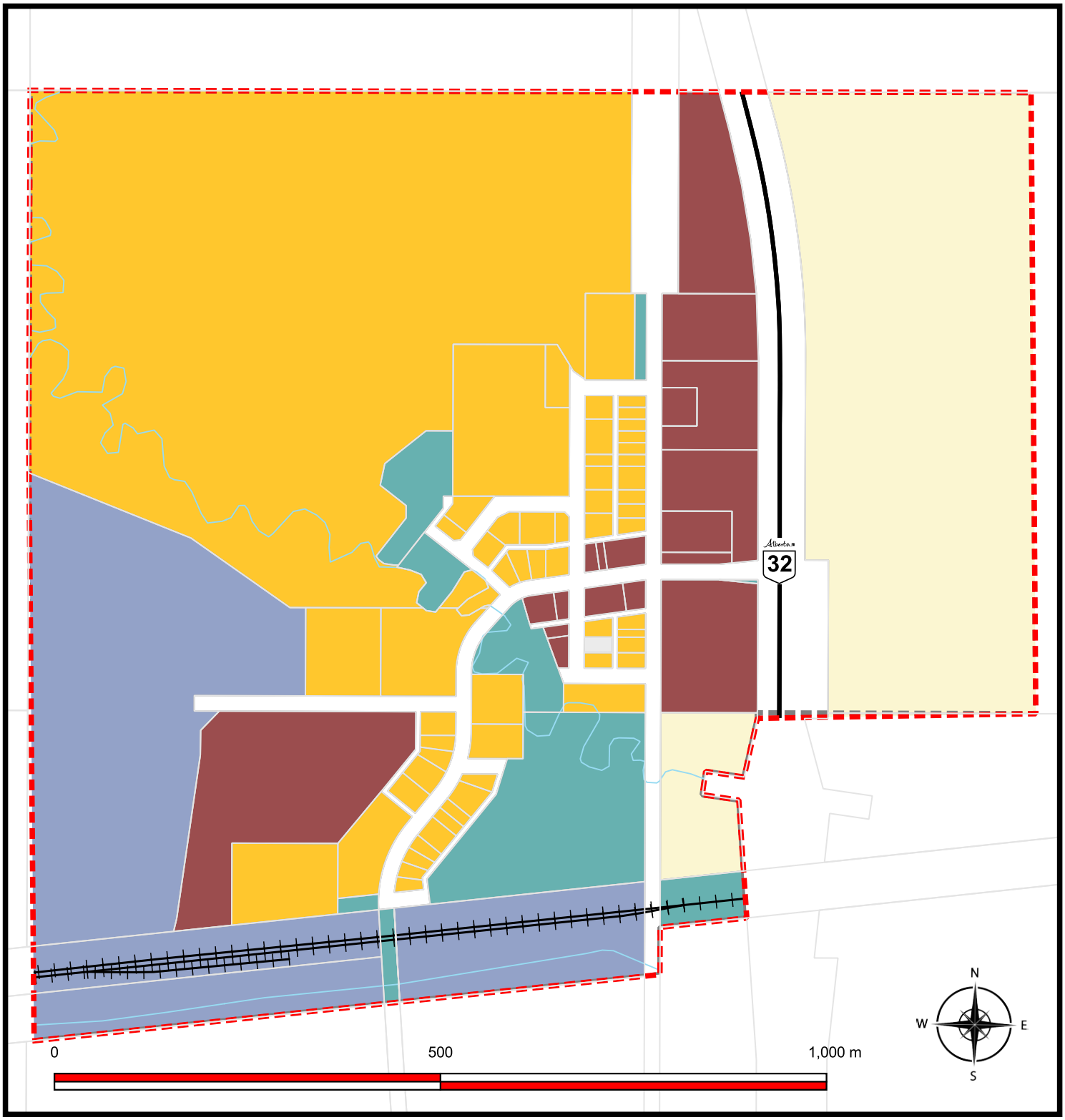

Area Structure Plan: **Peers**

Figure 3: **Existing Land Use and Zoning**

Legend

- Area Structure Plan
- Community Boundaries
- Land Parcels
- Highways
- Railway
- Waterbody/Watercourse

Yellowhead Zoning Districts

- Industrial (ID)
- Natural (ND)
- Protection (PD)
- Rural (RD)
- Urban Neighbourhood (UND)
- Urban Service (USD)

Yellowhead County Land Use Bylaw as of September 28, 2021 (Bylaw 09.21)

Yellowhead County ASP Map Series
Projection: UTM Zone 12 NAD 83
Date: August 08, 2022
MuniSight

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3.2 Existing Land Use and Ownership (Maps 4,5)

3.2.1 Residential Uses

The Peers housing stock is an interspersed mix of stick built and manufactured homes built over a wide time frame from the 1 940's to very recently.

The Urban Neighbourhood District (UND) provides for both manufactured homes and stick built housing in the same district. Currently there are approximately 55 residential parcels in the hamlet boundaries, of which 8 parcels are vacant, 25 are stick-built houses and 22 are manufactured homes. Only 2 multifamily dwellings are identified in the hamlet assessment rolls and it has been reported through public consultation meetings that very few dwelling units are available as rental units. Moreover, there is no designated seniors housing for independent living in the hamlet Over the past 5 years County files have reported approximately 7 new dwelling or building permits and the hamlet.

There is a variety of lot sizes from 557 m^2 (6000 ft. ^{2}) to 1858 m ^{2} (20,000 ft. ^{2}). A few residential lots are as large as 0.4 hectares to 0.8 ha (1 -2 ac). Four other privately

owned lots range from 1.42ha to 5.3ha (3.5 - 13 ac). Some of these have excellent re-subdivision potential for a variety of housing types. The largest land holdings include several parcels owned by Driftwood Creek Ranch Limited. This corporation also owns Brisco Manufacturing Limited, being the County's most significant tax assessment base within the hamlet boundaries.

3.2.2 Commercial Uses

Peers contains an important commercial core of services for the hamlet and surrounding farming community. Primarily located near 50th Street and along Willow Driver existing businesses include a feed and seed business, an auto mechanic/vehicle sales/carwash, a retail food store, gas station, licensed restaurants/ bar, post office, thrift store and art gallery. Other non-retail businesses exist such as a log home building contractor and a variety of home occupations. To the east of Highway 32, Warren and Laura McGuire own approximately 50 ha (123 ac) of which 23.75 ha (58.7ac) is located within the hamlet boundaries. The land within the hamlet boundaries is currently zoned Rural District and future commercial development potential such as a commercial truck stop would likely require piped water servicing, and perhaps extending a piped sewage system from the Hamlet's system. There is however potential for unserviced industrial development if Alberta Transportation authorized additional intersection improvements and an increase in turning movements onto Highway 32.

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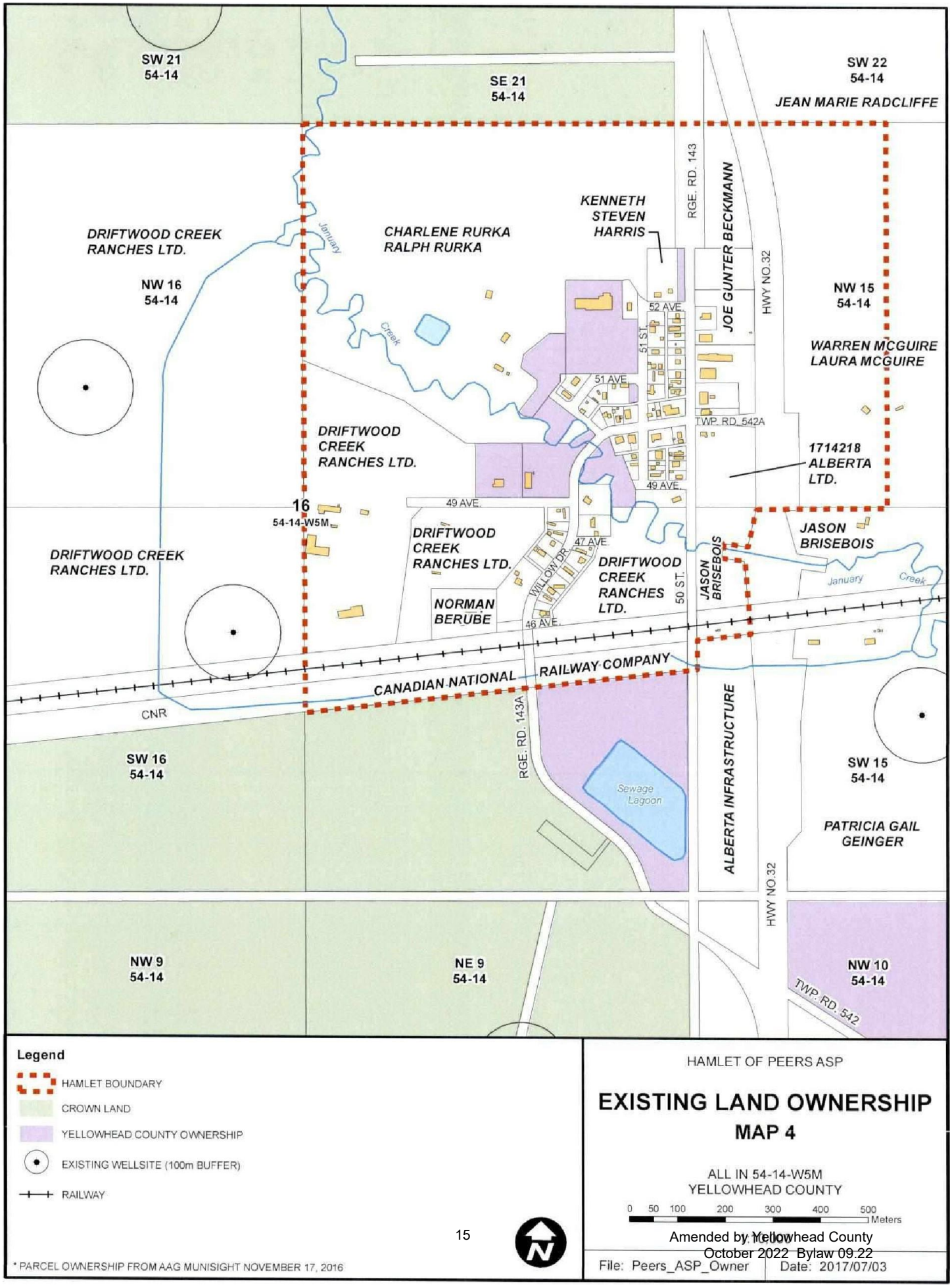

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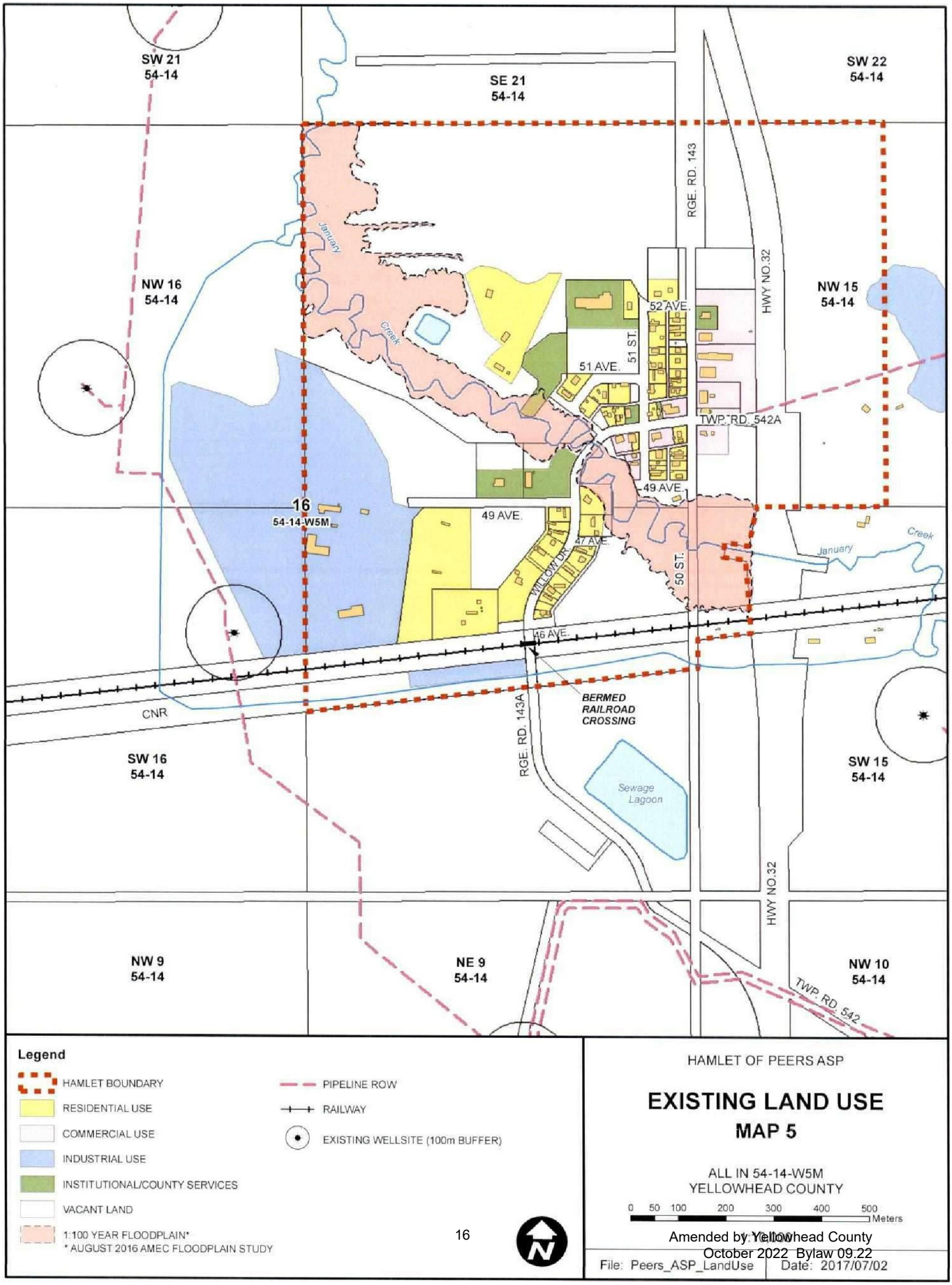

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3.2.3 Industrial uses

The County's major assessment base in the hamlet is Brisco Manufacturing Limited, a wood post manufacturer and preservative business. The operation employs approximately 42 employees and the active operating area covers approximately 14 ha (35 ac). The operation ships approximately 800 truckloads per year.

Along the south boundary of the hamlet, the CN Railway reports that 30 to 40 trains pass the hamlet daily. It has a 1500m (4900ft) rail siding that has been used in the past for transloading drilling sand for oil and gas purposes. While CNR reports that no active customers are currently using this property, the CNR has applied to subdivide and sell approximately 7.74 ha (19.1 ac) of land located on the south portion of the CNR right-of-way west of Willow Drive for 1.26 km. (0.78 mi). The intent is to use the land for industrial purposes that may utilize rail access,

3.2.4 Institutional Uses

Prior to 2015, the main community hall was located on Willow Drive north of 49th Avenue. This community hall was located with the former curling rink which was removed in 2015 and replaced by a new Peers Multiplex/curling rink located further north off 51 st Street and 52 nd Avenue. While the hall still operates for community uses, the state-of-the-art Multiplex is a proud centrepiece of the hamlet service area. The Multiplex consists of a 60-stall paved parking lot, a 2-sheet curling rink, a large multipurpose hall, fully equipped commercial kitchen and flexible meeting room/lounge. The Multiplex is located on the site of a former primary school that was decommissioned in 2009. The relocation of students to the Fulham School (located north on Highway 32) was considered a loss to Peers and area residents, but it is not expected that a school will be rebuilt in Peers.

3.25 Yellowhead County Parks and Outdoor Spaces Plan, 2016

The County completed an outdoor space plan for a number of hamlets including Peers. The completed plan (see Appendix D under a separate cover) provides direction for new or upgraded facilities, county budget considerations and project implementation considerations.

As part of the Outdoor Spaces Plan, the County has completed a bicycle skills "pump track" in 2017, directly south of the Multiplex parking lot. A pump track is an undulating, hard-surfaced, circular layout intended for recreational mountain bike and BMX enthusiasts. Several pump tracks have already been built in other County hamlets and it is expected that it will attract users from surrounding area and other parts of Alberta.

Other Outdoor Spaces Plan recommendations included developing a level play area, and establish a snowbank ice rink south of the Multiplex parking lot as well as constructing playground landscaping and upgrade Guilfoile Park near the old curling rink site. With regards

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to the above-mentioned Guilfoile Park upgrade, the County has since constructed a drive through sani-dump station on the site for sewage disposal trucks and recreational vehicles. Alternative designs of the balance of the Guilfoile Park and remainder of the land south of the Multiplex will be subject to a future Outdoor Spaces Plan amendment.

3.3 Existing Municipal Services (Map 6)

Over the past 30 years, the County has invested significantly for municipal services in Peers in recognition of its role as a service centre and community focal point for the surrounding rural community. It is estimated that the County has upgraded sewage disposal, piped water, road/ sidewalk paving, stormwater facilities and the new Peers Multiplex at a cost of well over $2025,000,000. If incremental costs were adjusted for inflation, this investment would be substantially higher in 2017 dollars. This investment demonstrates the County's commitment to the future of Peers as a focus for the surrounding rural community.

With regards to development capacity of municipal water and sewer services, the County Municipal Development Plan and subsequent engineering review estimates piped water and sewer systems has sufficient capacity to handle expected development demand over the next 20 years on the order of approximately 48 more dwelling units. This would essentially handle double the current number of residential dwelling in the hamlet boundaries,

3.3.1 Municipal Wastewater Treatment

As-built drawings indicate that the County constructed a municipal sewage disposal system in 1981. This system consists of a lagoon outfall south of the CNR rail line. The system services all existing, urban-sized lots but does not extend westward beyond Willow Drive at this time,

3.3 2 Municipal Water Treatment and Distribution

The County constructed the Peers water treatment plant and piped water distribution system in 2009 using two community water supply wells. One of the wells is used as a production well and the other is a standby well. The wells are completed in the same sandstone aquifer and are located within 25 meters of each other. Both wells can meet the 20-year peak day design flow of 304 m3. Moreover, there is a diesel engine-driven pump for fire flows and for emergency pumping.

3.3.3Stormwater Management Facilities

The County constructed the Peers stormwater management drains and facilities in 2010. It was designed to handle a 1: 100-year rainfall event and consists of a series of ditches, culverts, minor storm drains and a storm water detention pond (dry pond). Drainage outfall is into
January Creek. Prior to construction, an aquatic environmental assessment was undertaken to

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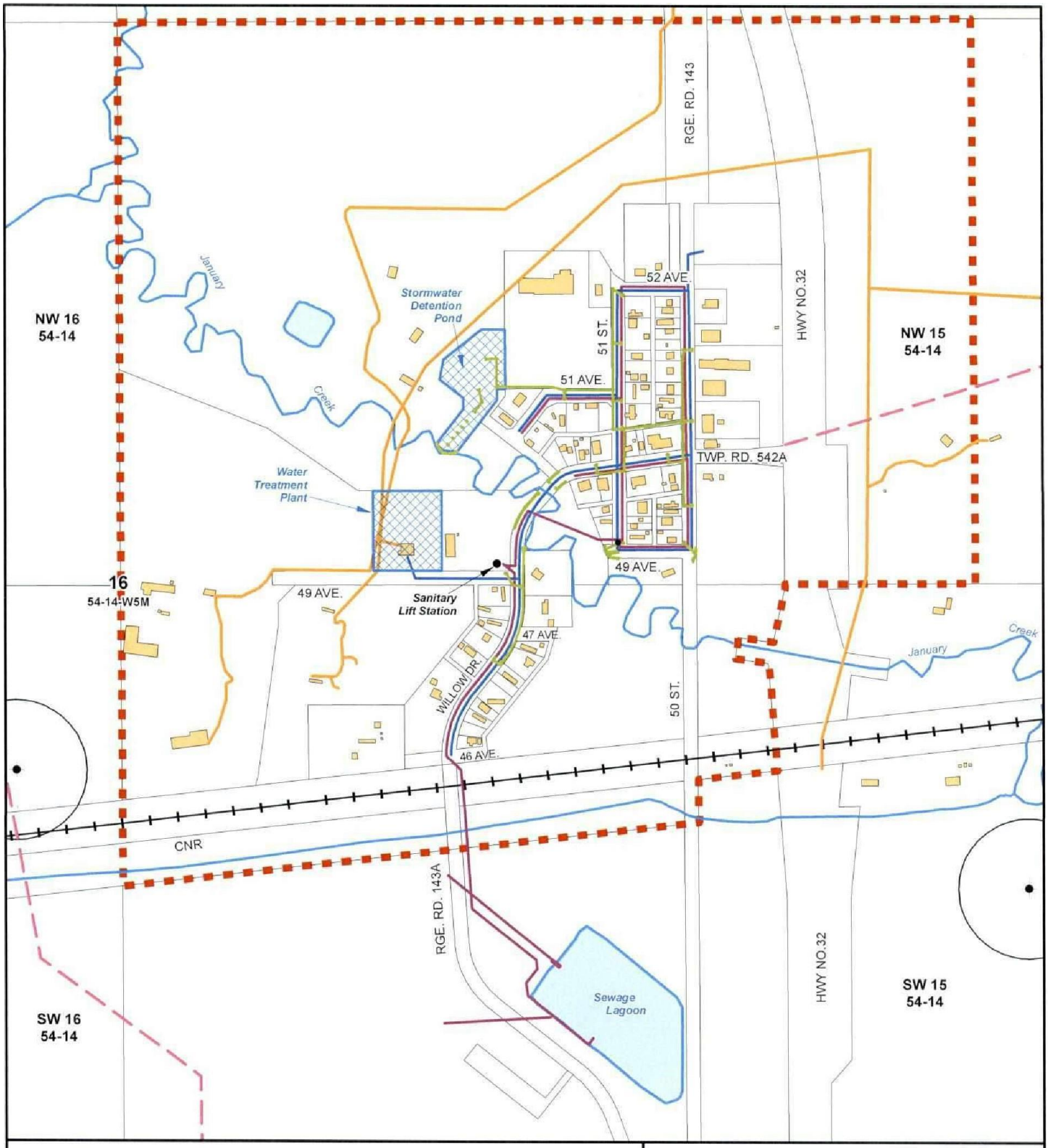

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ensure best environmental practices during construction. The stormwater management system was constructed in concert with extensive road and sidewalk paving throughout the hamlet

3.4 Existing Transportation System

The hamlet currently has 2 access points from Highway 32. One is at the north boundary of the hamlet at Range Road 143 (50 Street) and the other is at the main entrance to Peers off Township Road 542A (Willow Drive), Between 2006 and 2015, Highway 32 has experienced an increase in average annual daily traffic (AADT) of between 12% - 36% depending on the location of the traffic intersection being measured. The greatest increase in traffic 36% has been along Highway 32 on the south side of the main southern entrance to the hamlet. At the same time, there was a 21% increase on the north side of that intersection. This increase in traffic numbers suggests that while the actual population of the hamlet has been decreasing over time, economic activity throughout the service area has been increasing whether through natural resource extraction in the hinterland or an increase in agricultural activity in the area.

Peers Area Average Annual Daily Traffic 2006 To 2015

Traffic count location	Average annual daily traffic (AADT)											% 2006-2015
	2000	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Hwy 32, N. of H 16	1030	1230	1180	1210	1090	1200	1350	1360	1420	1470	1380	+1 20/0
Hwy 32 S of Twp Rd 542A	na	1110	1050	1070	960	1080	1400	1410	1470	1530	1510	+360/0
Hwy 32, N of Twp Rd 542A	na	1030	990	1010	910	1030	1120	1130	1180	1220	1250	+21%

A railroad crossing at 50th Street is technically a 3rd entrance into the hamlet but this access is blocked by a berm, likely installed once the Highway 32 rail overpass was completed. Yet, the crossing is still officially a public crossing. It is not expected that this crossing will be reactivated without the expensive signalization and a demonstrated need to do so.

Roads within the hamlet are paved and roads have paved sidewalks with curb and gutter throughout. The majority of industrial road traffic is logging trucks that access the Brisco Manufacturing industrial operation via Willow Drive and 49 Avenue. A Brisco representative stated that outgoing traffic for finished product is on the order of 800 trucks annually. It is estimated that a similar number of trucks would deliver raw logs to the site annually

4. SITE ASSESSMENT

4.1 Opportunities and Constraints Assessment (Map 7)

Lowest servicing costs - Sections 1, 2 and 3 above describe opportunities and constraints that would affect future subdivision and development in Peers. This includes soils and groundwater constraints, floodplain restrictions, proximity to the existing services, location relative to road access. Map 7 overlays the various physical and human features into a single map, identifying parcels of land that are the most developable at the least cost.

The areas on the map outlined in thick black lines have potential for future development of residential, commercial, industrial and institutional/recreational uses. The areas with black hatch lines (////) within those black lines were determined to be less expensive to service with municipal water and sewer due to their proximity to existing roads and piped services. Those remaining areas outside the black hatched areas are also developable but would require water, sewer and road extensions that add development costs and reduce the incentive for landowners to develop, Therefore, Map 7 provides a template for future subdivision and development potential,

Flexibility to introduce higher density housing types - Residential stick-built houses and manufactured homes are fairly interspersed throughout the community and this mix appears to be, for the most part, well accepted by residents. The larger, undeveloped parcels identified on Map 7 are at the edges of existing neighbourhood blocks. This provides an opportunity for community acceptance of applications for multifamily dwellings, a manufactured housing park or "park model" manufactured housing residential project on these potential development sites.

Capital investment decision-making - risk and reward - Nine different landowners are identified in Map 7 for future subdivision and development opportunities, but landowner willingness to invest risk capital is difficult to quantify. While the County has expended significant resources over the years to modernize the Hamlet's municipal and recreational services, successful implementation of ASP goals and objectives will be determined largely by landowner investment decisions and their time horizon for return on investment (ROI). Subdivision and development permit applications for new land in the hamlet will be dependent on ROI calculations, perceived demand, access to risk capital, County willingness to apply incentives that encourage end-user construction and demonstrated community support for whatever projects are being proposed.

The actual types of land use that would occur on those parcels are outlined in the goals and objectives section of this plan and described in more detail in the plan concept and future land-use map.

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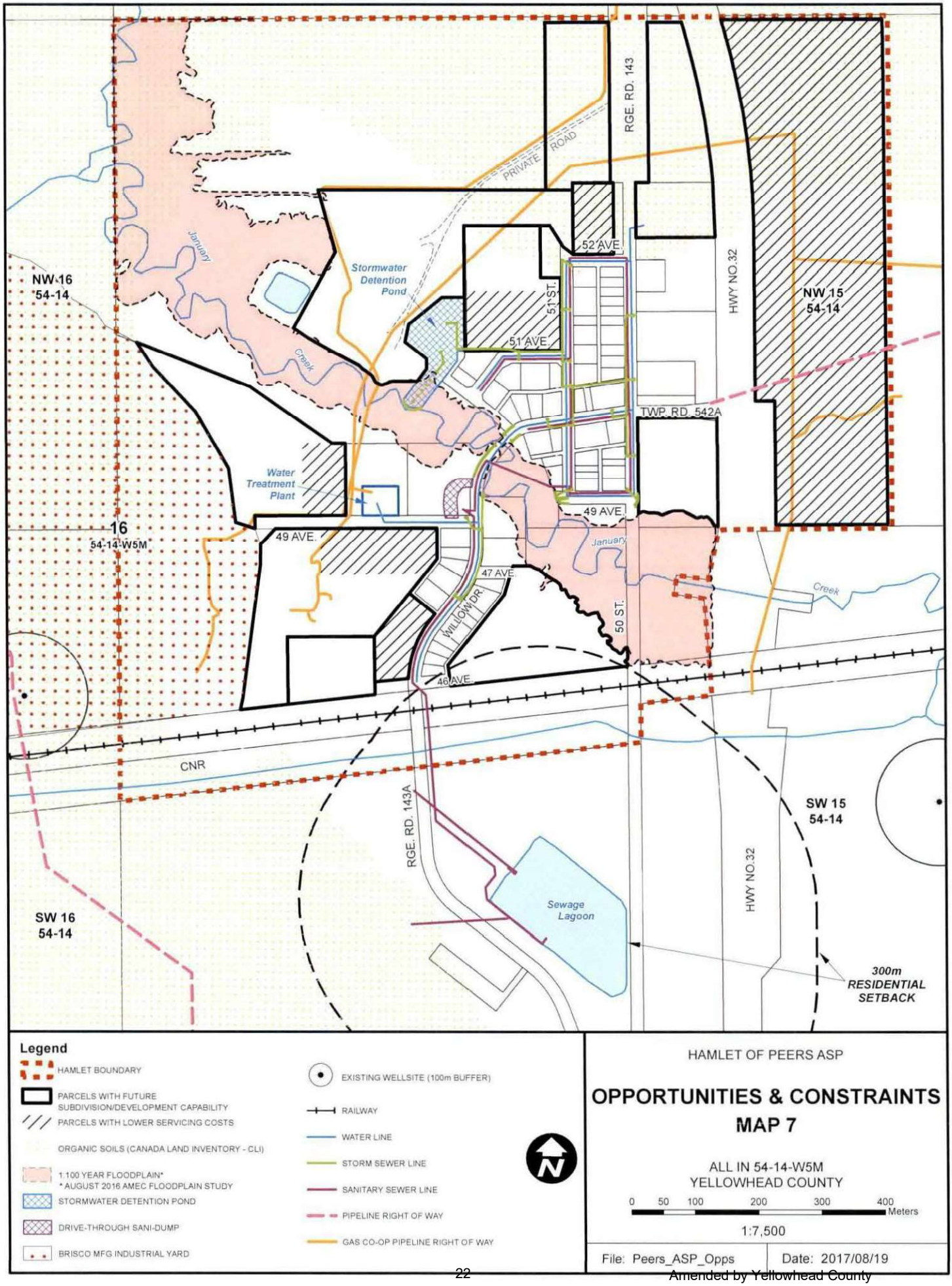

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Water and sewer capacity - In terms of servicing, the County has determined that there is capacity for water and sewer of approximately 48 additional dwelling units, This would allow for double the current number of houses in Peers. Therefore, given past growth rates, the existing municipal systems should be able to accommodate most growth over the next 20 years. The stormwater management system would need to be expanded to accommodate future development, but opportunities exist to add outfalls into nearby January Creek thereby providing an opportunity in this regard.

The Brisco Manufacturing operation is considering extending water and sewer services west along 49 th Avenue to service the operation. This would also open servicing opportunities for the land south of 49th Avenue (also owned by Brisco). The constraint inherent in this opportunity is the preference of the industrial operation to retain a buffer between the Industrial operation and any future residential component to the east Implementation of a servicing extension such as this would require further cooperation and discussion between the County and the Industrial operator.

January Creek as an amenity - The topography of Peers lends itself to easy pedestrian and cycling activity to connect these various existing and potential neighbourhoods. January Creek itself offers great potential for trails winding through existing stands of coniferous trees on the south bank of January Creek and thereby improving east to west walking or cycling opportunities. The County's 2016 Outdoor Spaces Plan identifies specific locations for trails and other recreation activities. It will be referred to in the future land use concept.

4.2 Community Consultation Results

Any land-use plan must be supported by the community through meaningful consultation with residents and landowners. The detailed consultation process can be viewed in Appendix A. The Peers ASP review has been directed by a steering committee that included community members and County staff and the area Councillor. The plan process was first advertised on the Yellowhead County website, newspaper advertisements in the Weekly Anchor and finally with mail out notification to each landowner within 3.2 km of the hamlet boundary, one month prior **to the January 11 public meeting # 1**. The 1 st public meeting was well attended by approximately 30 engaged individuals who came equally from the hamlet, nearby farmsteads and farther afield. Subsequent follow-up meetings and correspondence with specific landowners was held on an ongoing basis by the planning consultant and County staff. A decision by the County to conduct further geotechnical testing of specific parcels resulted in a delay in the ASP timeline. A further notice of this delay was sent to all landowners in the notification catchment area in May.

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The major concerns and ideas registered by attendees of public meeting # 1 included the following points,

Community Enhancement

- The hamlet needs to implement the proposed plans for trails in the January Creek valley to provide opportunities for walks in an aesthetically pleasing area and to provide better community walking connections.
- There was a desire to see an outdoor skating rink with a heated change room, more year-round youth activities such as multipurpose, outdoor courts and an indoor gymnasium of some kind. A concrete pad could serve as a skating rink in the wintertime, and multipurpose use in the summertime.
- There was discussion about enhancing the appearance of some houses, but this initiative would need to be initiated internally by the community.

Future Land Development Directions

- The hamlet needs to identify places for physical expansion for new residential and commercial development. Without those opportunities, there is no way the hamlet can grow.
- There was a feeling that more and different types of rental accommodation would be successful as there is a perceived demand for good quality rental units.
- The hamlet needs more serviced housing lots that can accommodate stick-built houses. These lots should be sufficiently large to accommodate recreational vehicles. It was generally felt that a 10,000 to 12,000 ft-^{2} lot would be appropriate. Others spoke of parcels on the order of % to % of an acre in size. Current lots on the market are not large enough to do this.

Desired Future Land Uses

- All the discussion tables spoke of the need for a low-rental cost, independent living seniors housing project on the order of 10 to 20+ units. Many older attendees were looking a few years down the road and felt they would be interested in downsizing and applying for this type of option. There was some debate about the possibility of extended care beyond independent living, but most of those talking at the tables felt that the independent living component was the most important. The units should include some private backyard space and a design that encouraged interaction among dwelling units.

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Communications Infrastructure

- While Internet and cell phone coverage is not great, there are some improvements available with Telus Smart Hub and Xplornet. In general, most participants felt that there could be significant improvements in broadband coverage and availability.
- When Internet goes down, businesses suffer.
- More cell phone towers are needed in the area

The second public meeting, held on August 17, 2017 was attended by approximately 19 persons who again came equally from the hamlet, nearby farmsteads and farther afield. The presentation highlighted the key draft ASP policies followed by a workshop discussion on whether the draft ASP met the needs of the community. In general, the workshop attendees expressed satisfaction with the direction of the policy and reinforced preferred policy direction in the following order of importance;

1 improved Internet and cell phone communications that would bring new and existing residents into the mainstream of social and economic activity,

2. create seniors housing for independent living,
3. more options for variety of housing types and rental units within the Hamlet and
4. constructing recreational trails as identified in the County Outdoor Master Plan

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5. PLAN GOALS AND OBJECTIVES

The following statements summarize the direction gathered from public consultation, steering committee meetings, and technical support studies undertaken for the hamlet, These Goals and Objectives will inform the future land-use and implementation policies.

5.1 Improve housing availability and choice.

Objectives

a) Identify parcels of land with the lowest development costs/highest development potential for new residential dwellings.
b) Encourage the private sector to invest in a variety of single detached, manufactured homes and multifamily dwellings through revised servicing agreements.
c) Encourage the local community to establish a strategy to build seniors housing in
d) Amend the residential land-use bylaw district to promote a flexible zoning bylaw to encourage a diverse housing mix throughout the hamlet.

5.2 Diversify and strengthen the local economy of Peers.

Objectives

a) Encourage commercial/industrial development and expansion on vacant lands in the hamlet with the lowest development costs/highest development potential.
b) Encourage visual enhancement of the commercial core.
c) Improve pedestrian access to the commercial core, the multiplex and the creek valley.
d) Pursue County initiatives that improve the digital connectivity necessary to grow new and expanded business opportunities in Peers and surrounding area.

5.3 Create opportunities that strengthen a shared sense of community.

Objectives

a) Develop community capacity to eventually undertake a locally based seniors housing project in Peers.
b) Develop capacity to increase community dialogue and organization through social media, periodic newsletters and additional community gathering events.

5.4 Coordinate County interdepartmental objectives and initiatives for Peers.

Objectives

a) Identify future parks and recreation plan amendments and initiatives in the area structure plan.
b) Clarify future County servicing upgrade requirements in Peers in advance of additional subdivision and development applications to reduce County review times.
c) Pursue improved broadband Internet and cell phone quality in Peers through community consultation with County Administration and directly with service providers.

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d) Update existing MDP, recreation master plans and servicing documents to reflect the most recent initiatives and hamlet policies,

6. FUTURE LAND-USE (Map 8)

6.1 The Future Land Use Concept

Peers is recognized as a service centre for the approximately 1200-1300 residents of the Shiningbank/ Peers area near Highway 32 and north of Highway 16. The County and area residents have a strong sense of community and the hamlet of Peers is its focus. Increased economic activity in the hamlet benefits the community. Therefore, it is important for the County to continue its focus on Peers and a concerted and coordinated effort to attract business that could benefit from Peers proximity to Highway 32, CNS mainline, the oil/gas resource development in the area and the wood resource and other manufacturing industries already in the hamlet.

The Future land-use concept contains statements of principles and policies derived from a review of County policy, historical zoning changes, other planning documents prepared for Peers, past and expected future economic activity, existing natural features and infrastructure, an assessment of land development capability, steering committee meetings, stated landowner intentions and community aspirations as expressed in community consultation meetings held in 2017.

6.1.2 Future Potential Subdivision/Development Parcel Assessment

The Future land-use Concept identifies specific parcels suitable for future subdivision and development. Specific low servicing cost/high development potential lands were shown as black diagonal hatching on Map 8. If all those black hatched areas were developed (except for area #6 being County open space), this would amount to approximately 5.47 ha (13.5 ac) of land. At a generous single-family residential density of 4 units per acre, this could result in 54 additional single-family dwellings. Using a higher density for smaller lots for manufactured housing or multifamily housing, it becomes apparent that there is more than ample land for expanding the housing base to meet Peers aspirations for the long-term future needs. Moreover, there are currently 4 different landowners that own these high potential lands, thereby creating multiple development opportunities in the community.

The following provides a description and re-development context for those numbered parcels outlined in black line work and shown on Map 8, identified as having long term development potential, but may require additional test holes to confirm soil conditions on the rest of the parcel.

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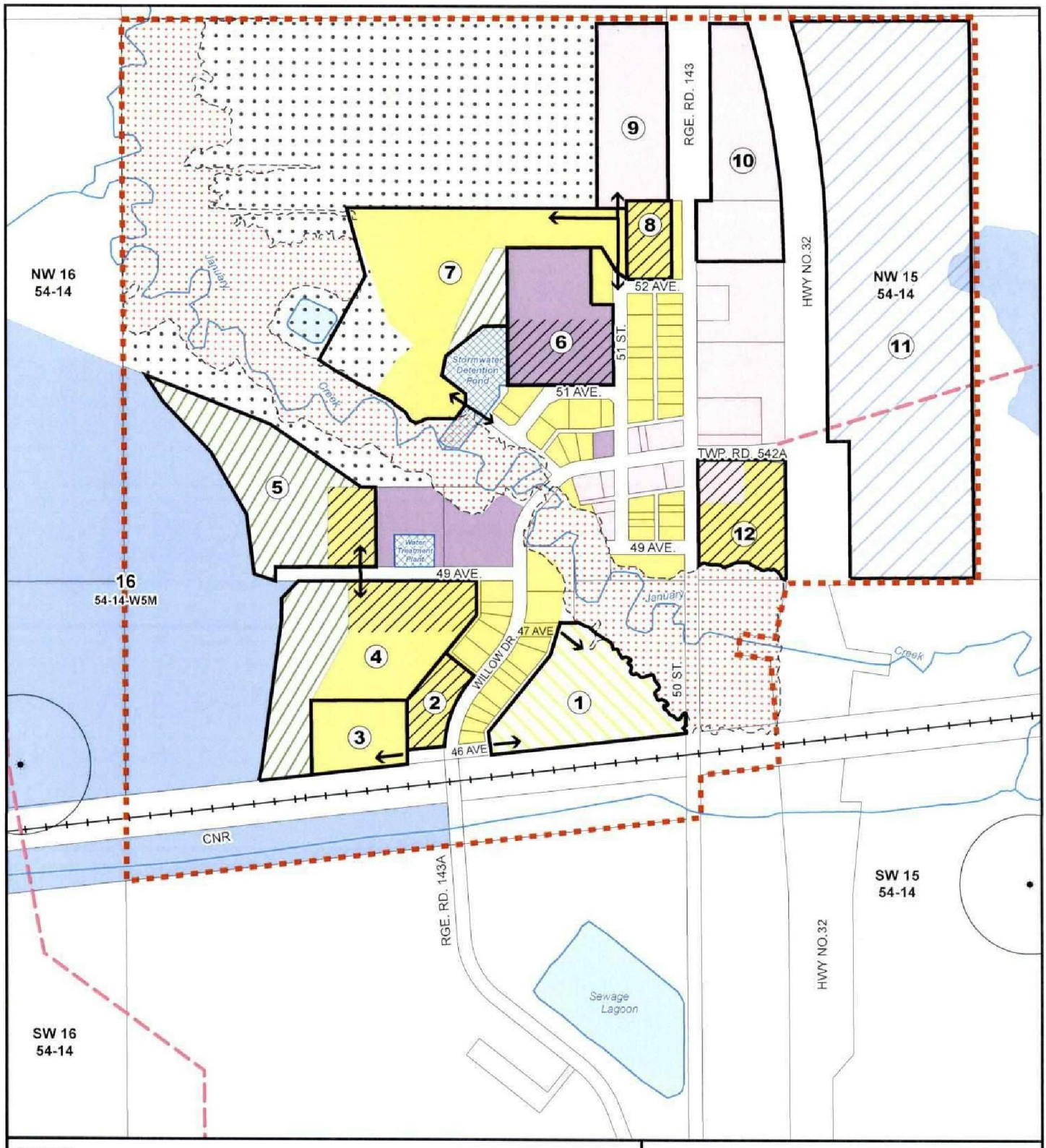

Legend

- HAMLET BOUNDARY
- RESIDENTIAL USE
- COMMERCIAL USE
- INDUSTRIAL USE
- INSTITUTIONAL/COUNTY SERVICES
- OPEN SPACE
- HAMLET RESTRICTED
- VACANT LAND
- 1:100 YEAR FLOODPLAIN* POLICY AREA
  * AUGUST 2016 AMEC FLOODPLAIN STUDY
- LONG TERM RESIDENTIAL POTENTIAL
- FUTURE COMMERCIAL/INDUSTRIAL POTENTIAL
- PARCELS WITH FUTURE SUBDIVISION/DEVELOPMENT CAPABILITY
- LAND WITH LOWER SERVICING COSTS
- (1) DEVELOPMENT PARCEL NUMBER (SEE ASP POLICY DETAILS)
- POTENTIAL FUTURE ROAD EXTENSION
- EXISTING WELLSITE (100m BUFFER)
- RAILWAY
- PIPELINE ROW

HAMLET OF PEERS ASP

FUTURE LAND USE CONCEPT
MAP 8

ALL IN 54-14-W5M
YELLOWHEAD COUNTY

0 50 100 200 300 400 Meters

1:7,500

File: Peers_ASP_FLUC Date: 2017/09/10

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Parcel 2 - 0.75 ha (1.87 ac): This parcel is currently occupied by the landowner. Three test holes were drilled on this parcel, one of which registered water table at 0.9 m. parcel. The lot frontage contains municipal services and a paved road. Therefore, residential subdivision into smaller parcels could be done with low servicing costs.

Parcel 3 - 1.4 ha (3.46 ac): This parcel has right-of-way access to Willow Drive as 46 th Avenue extension but will require extending an internal road and municipal services thereby increasing development costs. No test holes were drilled on this site.

Parcel 4 - 4.94 ha (12.21 ac): This parcel is owned by Driftwood Creek Ranches Ltd, the same owner as Brisco Manufacturing.The black hatching shown within Parcel 4 indicates the land along 49th Avenue would be less costly to service, but municipal sewer and approximately 100 m of additional water line would need to be extended westward past the water treatment plant. This hatched parcel area is 1.31 ha (3.25 acres). Brisco Manufacturing has expressed interest in extending the water line to service manufacturing operation

Subdivision of parcels along 49th Avenue would be the lowest cost option and serve as a potential first phase. The west 75-100 m of Parcel 4 is identified as open space buffer. The intent is to provide a distance separation between any future residential development to the east of the existing Brisco manufacturing operation. The buffer may be retained as tree cover and walking trails. Alternatively, the land to be utilized as informal or formal open space should it be acquired as Municipal Reserve or Environmental Reserve during any subdivision application phase. The eventual disposition of the land will be negotiated further at subdivision stage.

Parcel 5 - 3.97ha (9.80ac): This parcel is owned by Driftwood Creek Ranches Ltd, the same owner as Brisco Manufacturing. This largely forested land abuts the active yard operations of Brisco Manufacturing. The black hatching shown within parcel 5 is 0.78 ha (1.94 ac). It would be suitable for residential purposes once water and sewer services are extended along 49 th Avenue. An internal cul-de-sac developed north from 49th Avenue could provide road access and municipal services. The remainder of the parcel to the west would serve as an open space buffer between Brisco Manufacturing and the land to the east and north for the same reasons as Parcel

Parcel 6 - 2.71 ha (6.7 ac): This parcel is owned by Yellowhead County. The north half was a former school site and is now occupied by the Peers Multiplex and parking lot. Water and sewer services run along the south side of the hatched area along 51 st Avenue and along the

#4

east side along 51 st Street. The south half of the parcel etched in black hatching on Map 8 contains 1.44 ha (3.55ac). The 2016 County Outdoor Spaces Plan indicated this land be developed for a combination ball diamond and playfield, a playground, a snow bank ice rink and some future parking. Since then, the County has instead constructed a playground and repurposed the site to a bicycle 'Pump Track' completed in June 2017. The Outdoor Spaces Plan has identified this land for land extensive recreation that does not require pipe services. Future reviews of this plan may choose to consider more intensive use of the land due to the proximity of municipal servicing.

Parcel 7 - 39.2 ha (96.74 ac): This parcel was identified in the previous 2002 ASP as having soils constraints or high near-surface groundwater. In 2017, five geotechnical test holes were drilled next to the west and north sides of the Peers Multiplex parcel. Only one of the parcels directly west of the Multiplex identified water at 1.2 m, The remainder of the holes were dry at up to 2.9 m. The variable nature of the soils in the hamlet may require further testing for this parcel to confirm suitability for construction,

Parcel 7 is the largest of all the residential parcels with potential access from 52 nd! Avenue and potentially across an extension to 51 Ave crossing the stormwater detention pond in the south corner of Parcel 7 by means of a culvert. An existing private driveway extends diagonally across the entire balance of the landowners holding and connects to 50th Street. There is potential to upgrade the road to public road standards should the opportunity present itself to create more access options.

The lowest cost option is to extend a road north of 51 st street and subdivided for residential uses along the north boundary of Parcel #6, The forested area would need to be significantly cut back and water/ sewer extensions will be needed. The extension of 51 st Street would also provide access to potential commercial land to the north of Parcel #8.

Parcel 8 - 0.72 ha (1.78 ac): This parcel is serviced with municipal water and sewer along the southern boundary of the parcel. Two test holes on the site identified the land as suitable for residential development with no water in the test hole. Road access exists along 50 th Street and the County appears to have acquired a road widening right-of-way that would separate 50th Street from the parcel. This would need to be negotiated if the land were to be re-subdivided with parcels fronting onto 50th Street.

Parcel 9 - 2.7 ha (6.67 ac): This parcel is currently zoned Urban Neighbourhood District (UND)Subsequent geotechnical test hole drilling on or near the site indicated brown clay to 2.9 m with no evident groundwater. Therefore, there is an opportunity for this parcel to be subdivided and developed for commercial uses. Alternatively, light industrial could be considered due to its separation from residential uses. However, potential nuisances from such light industrial uses would need to be considered at the rezoning and development permit stages. Extension of water and

sewer services would incur high development costs that may be prohibitive for near term development. Consideration of on-site water and sewer servicing may be a short-term option depending on the type of use.

Parcel 10 - 3.20 ha (7.92 ac): This parcel is currently zoned as Urban Service District (USD). Its locational advantage is that it fronts on both 50 th Street and Highway 32, providing high commercial visibility, but access only from 50th Street. The difficulty with the site is that it is only serviced with water to the southern edge of the parcel. Municipal sewer and water would need to be extended further north for the lots to be viable for subdivision purposes,

Parcel 1 1 - 16.4 ha (40.5 ac): This parcel has substantial commercial visibility potential on Highway 32. No test holes were undertaken on the site but surficial examination indicates generally sandy soils. With respect to future development, this parcel may have highway commercial and/or industrial potential by virtue of its size and its potential access to Highway 32. However, the high costs to bring water and sewer across the highway is a constraint. The site is currently zoned Rural District (RD) which may allow water wells and on-site sewage disposal at the discretion of the Approving Authority. Access off Highway 32 would require ongoing discussion to design an acceptable highway access pattern with the landowner, the County and Alberta Transportation.

Parcel 12 - 1.91 ha (4.73 ac): This parcel contains an existing art gallery and the remainder is covered in mature timber, providing a pleasing viewscape in its current form. Other than losing the amenity value of the mature trees, there are few physical constraints to site development. It is a double frontage parcel with 50th Street on one side and Highway 32 on the other. As a result, traffic noise could be considered a constraint for future residential development. Municipal water and sewer lines run along 50 th Street for 130 m of the 170m parcels frontage, thus offering relatively low-cost servicing, depending on development density and whether an internal road network is proposed. The existing footprint of the gallery site and associated front and side yards occupy approximately 0.40 ha (1.0 ac), leaving a net redeveloprnent site of 1.5 ha (3.70 ac).

The Future Concept also speaks to matters that are not specifically related to land use, but relate to community well-being and improving economic opportunity. These include

- increasing the availability of broadband Internet and more reliable cell phone coverage,
- community capacity building to use the Multiplex as a vehicle for increased community social interactions,
- to build capacity that would allow the local community to prepare a senior's accommodation strategy

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The following principles and policies are intended to describe the Future Land Use Concept by type of land-use.

6.2 Residential Land Use Concept

The land-use concept recognizes the community desire for better access to different housing types such as duplexes, triplexes, fourplexes and apartment style units, The ASP policies encourage housing that appeals to a wider demographic range such as singles, young families, whether in the form of freehold, condominium, or communal tenure.

The community emphasized the need to provide more residential options for independent seniors who wish to downsize but remain in the community close to friends and relatives. While the County does not fund seniors housing, it does partner with and financially contribute to nongovernmental organizations such as Evergreen Foundation and Good Samaritan. There is an opportunity for the Peers and area community to build capacity to work towards seniors housing either informally, through the private sector developer or in cooperation with governmental and nongovernmental organizations.

Specific parcels of land have been identified in the future land use map that are suitable for residential subdivision and development, Parcels with lower development costs are located on or near existing municipal services and roads. Attendees at the public consultation meetings also suggested larger lots were needed to accommodate storage for recreational vehicles and offer space for a private workshop or outbuildings. However, larger lot sizes will affect land servicing costs. This ASP makes suggestions as to parcel sizes and those parcels that are less costly to develop, but without direct County intervention as a housing provider, the market will eventually dictate what size of lot and type of dwellings developers will construct on these parcels.

6.2.1 Residential Policies

a) The County shall encourage new residential construction of all types of dwelling styles! in all the Peers residential neighbourhoods including attached multifamily dwellings! (apartments, row housing, duplexes, three and four unit attached units, etc), single! detached, stick-built houses and manufactured home subdivisions and! manufactured home parks.

b) The County shall support amendments to the land-use bylaw that would result in new! and varied styles of residential subdivision and development and in the! redevelopment and enhancement of existing residential areas.

c) Park model manufactured homes should be considered by the County as an appropriate and useful form of housing, especially for independent seniors living, if designed as part of a carefully planned development with communal amenities that encourage social encounters such as communal gardens, water features, green spaces, TV room, central patio for resident use, ect.

d) Park model manufactured homes in Peers may be considered only where they! are proposed as part of a planned unit development.

e) The County supports single family residential subdivision into parcels between! 0.1 ha (.25 ac) and 0.2 ha (0.5 ac) to provide a variety of residential parcel! sizes. While this does not preclude single family residential lots of smaller size,! the larger parcel range reflects preferences based on community consultation! and offers developers added flexibility.

f) The County shall consider using existing municipally owned land and/or buying! land to construct multi-family dwelling units to better meet identified demand! for more varied housing styles and rental options. The County may consider! other cooperative business models that would achieve the same objective.

g) The County supports the establishment of rental suites in an existing! residential dwelling where it conforms to existing building codes.

h) The County shall encourage the local community to establish a strategy to build! residential options in Peers for independent seniors who wish to downsize but! remain in the community close to friends and relatives.

i) The County supports!the establishment of Home Business Small (as per the Urban Neighbourhood!District) of the County land-use bylaws as a way of encouraging economic!opportunity and broadening the hamlets employment base, subject to!appropriate neighbourhood consultation.

6.3 Commercial and Industrial Land-Use Concept

For a hamlet of less than 100 population, Peers is remarkable for its ability to support the existing range of commercial activities; grocery store, feed and seed outlet, liquor stores, auto mechanic and auto retail, carwash, licensed restaurants, gas station, post office, and art gallery The existing Multiplex, community hall, pump track, playground proposed trails and nearby camping facilities work together to offer a strong sense of commitment to community. The trade area population continues to shop, play and meet in Peers, The land use concept recognizes that, to remain viable, local businesses rely on area residents and increased economic activity within a limited trade area.

While the demand for new commercial or industrial land development is not evident at the time of this ASP, decision-makers need to understand what are the developable lands along with the associated opportunities and constraints. This land-use concept identifies parcels for future commercial/ industrial expansion.

Moreover, these businesses require access to high-speed, broadband internet and reliable cell phone connectivity to remain competitive. While the County does not control access to digital communications, it is in the County's interest to continue to work with internet service providers to access the fiber-optic cable running along Highway 32.

The County has invested in sidewalks and paved roads throughout the hamlet. The public realm is that part of the streetscape that is on public right-of-way. This can accommodate aesthetic enhancements such as streetlights, planters, trees and street furniture. Working towards an enhanced commercial area improves the perception of the community and works to improve its attractiveness as a place to do business. Initiatives of this kind will first require support of the community to access County funding

Peers largest economic contributor to County assessments is the Brisco Manufacturing operation. It produces treated wood poles to western utilities and communications companies since 1989. The operation has been slowly expanding and the continued stability of the business is in the interest of the County and the Peers area. Part of this involves providing municipal services as needed to the operation and maintaining a distance buffer from existing and proposed residential uses. Map 8 identifies a substantial buffer identified as open space. While the disposition of the land is open to further discussion between the County and the owner (Driftwood Ranches Ltd. the same owner is Brisco Manufacturing). Under section 644 of the Municipal Government Act, the County is not obligated to purchase land identified in the ASP as Open Space until it is rezoned for public use. Only then with the County be obligated to acquire the land or require the land to be provided as reserve land in accordance with the Municipal Government Act.

The Peers area also is host to Acreage Pharms, a licenced medical cannabis grower which is expected to expand operations to include 17 staff. This employment base offers further incentive to expand residential choice in the hamlet.

6.3.1 Commercial and Industrial Land Use Policies

a) The County shall continue its focus on Peers with a concerted and coordinated effort to attract business that could benefit from Peers proximity to Highway 32, CNS mainline, the oil/gas resource development in the area and the wood resource and other manufacturing industries already in the hamlet and area.

b) The County supports the development of new mixed-use buildings (commercial main floor / residential upper floors) to be included in Peers commercial zoning district.

c) The ASP identifies an Open Space designation separating residential uses and the Brisco Manufacturing operation to the west in the Future Land Use Concept Map 8. The ultimate disposition of the land may be negotiated between the landowner and the County to include Reserve land dedication or other mechanism to ensure the Open Space designation serves to mitigate potential impacts of industrial activity and at the same time create a net community benefit.

d) The County shall continue to facilitate the development of a commercial and/or industrial node within the hamlet boundary, east of Highway 32 and will work closely and cooperatively with Alberta Transportation to achieve this objective.

e) The County shall continue to improve internet and cell phone services in Peers through its role as municipal authority. This includes a cell phone tower in Peers and connection to high-speed Internet.

6.4 Recreation and Community Enhancement Concept

Peers is fortunate as a regional gathering place. The recently constructed Multiplex encourages social interaction in a state-of-the-art building. The hamlet also retains the older community hall, thereby offering multiple venues for those all-important social functions that strengthens the sense of community.

The topography of Peers also lends itself to easy pedestrian and cycling activity to connect various existing and future neighbourhoods. January Creek itself offers great potential for trails winding through existing stands of coniferous trees on the south bank of January Creek and thereby improving east to west walking or cycling opportunities.

The County's 2016 Outdoor Spaces Plan identifies specific locations for future trails and other recreation activities including a community playground, the recent construction of a bicycle skills pump track and the potential for an informal ice rink and multiuse playfield south of the Multiplex parking lot. The land use concept reflects these existing and planned features,

The following ASP policies recognize the importance of Peers as a community and recreation centre and identify future improvements within the outdoor spaces plan.

6.4.1 Recreation and Community Enhancement Policies

a) This ASP recognizes the 2016 Outdoor Spaces Plan (as amended from time to time) as the key guide for future recreation and trail improvements within Peers, Excerpts from the 2016 Outdoor Spaces Plan are contained in Appendix D under a separate cover.
b) The pedestrian trail system shall be intended and designed for nonmotorized use only.

6.5 Municipal Servicing and Environmental Land Use Concept

In 2016, the County commissioned a Floodplain Risk Assessment report for January Creek prepared by AMEC, Foster, Wheeler. The watershed of January Creek encompasses an area of approximately 106 km^2 at Peers. The study offers recommendations for flood proofing in section 5.2 of the study. The key outcome of the report maps the extent of a 1: 100-year floodplain to the degree suitable for planning purposes and this ASP. As a result, future development within this floodplain will be constrained in accordance with County policy and best engineering practices. The full report may be reviewed in Appendix B under a separate cover.

In 2017, the County completed a geotechnical soils assessment of selected developable parcels in the hamlet. This report outlined specific mitigations for new roads and structures,

6.5.1 Municipal Servicing. Environmental and Reserve Land Policies

a. The County may, under the following specified circumstances, defer local improvement charges from the subdivision approval stage to the development permit approval stage to reduce developer carrying charges and encourage land developers to bring new serviced lots on stream. This shall be accomplished through revisions to the subdivision and development agreements in the hamlet of Peers for
    - new residential, commercial or industrial subdivision and/or,

- redevelopment of existing lots that already have water and sewer servicing to the property line of a parcel subject to a subdivision application.

b) New residential subdivisions shall dedicate and construct public land for pedestrian trails at the time of subdivision approval. The pedestrian trails shall be considered creditable Municipal Reserve.

c) The County shall require the developer of a subdivision application to provide 10% of the land to be subdivided as Municipal Reserve (MR) in the form of land where MR land is considered by the County as usable open space. Otherwise, the County may accept cash in lieu.

d) Environmental Reserves (ER) will be taken in accordance to section 664 of the Municipal Government (as amended from time to time) in the form of a lot (ownership transfer to the County). Where the County wishes to ensure public access to a watercourse such as January Creek, Environmental Reserve will be taken in the form of a lot as opposed to an Environmental Reserve Easement. All Environmental Reserve is to remain in its natural state except as permitted in accordance with Division 9 of the Municipal Government Act.

e) The County may require any developer to provide hazard land (as defined in the County land-use bylaw) as Environmental Reserve.

f) All new and/ or redeveloped buildings and subdivided parcels shall be required to be connected to the Hamlet's sewage collection, water treatment and stormwater management systems. Exceptions to this policy may be considered for those commercial and industrial land use applications within the hamlet and east of Highway 32 currently zoned Rural District (RD) that may be serviced with on-site water and onsite sewage disposal in accordance with best practices and at the discretion of the County.

g) The 1: 100-year floodplain for January Creek is identified in Map 8 of this ASP, Existing buildings in the floodplain will be considered a legal nonconforming use until a land-use bylaw amendment provides further guidance for floodplain subdivision and development applications. In the interim, land uses allowable within the floodplain will be restricted to those uses that can be moved on short notice and those that will not result in extensive flood damage from a 1: 100 flood event.

h) While minor boundary adjustments are permissible, especially to improve developability, no new lots will be subdivided within the floodplain of January Creek.

i) Applications for subdivision that include a part of the January Creek 1: 100 year floodplain shall be taken as Environmental Reserve.

j) Lands identified on Map 8 as "Hamlet Restricted" and "Long Term Residential Potential" should require further geotechnical assessment prior to consideration of applications for subdivision or development.

7 PLAN IMPLEMENTATION

The intent of this section is to coordinate ASP policy with other County documents to ensure continuity and consistency for County decision-makers.

7.1 Plan Implementation Policies

a) All future use, subdivision and development of lands within the ASP area shall! comply with the Future Land Use Concept (Map 8) and the policies in this ASP.! Major deviations to the ASP design and policies shall require an amendment to this! plan. Relaxations may be considered without an amendment to this plan for the! reconfiguration of parcels, municipal servicing options, road design or phasing!would, in the opinion of the approving Authority, maintained the overall intent of the!plan policiesÛ

b) The County shall incorporate amendments to the 2016 Outdoor Spaces Plan into!the! ASP when they become available, It should be noted that the 2016 Outdoor!Spaces! Plan landscaping and trail plan for Gilfoile Park has been superseded by the! construction of a sani-dump station. The proposed location for a snow bank rink and! associated parking has been superseded by a bike skills pump track.

c) The ASP shall be amended from time to time, to reflect amendments to the 2016! Outdoor Spaces Plan and the expansion of the pedestrian trail system because of! County initiatives or future residential subdivision.

d) The County shall prepare and consider an amendment to the land-use bylaw to regulate land uses and land-use standards to recognize a Hamlet Floodplain District that reflects floodplain map concerns as identified in the Future Land Use Map 8. This includes, but is not limited to an amendment to the District map defining the floodplain, changes to discretionary and permitted uses and minimum ground-floor heights above 1: 100 year floodplain elevations.

e) The County shall establish terms of reference and budget to consider projects to identify demand and establish a business model for a viable seniors housing project in Peers.

Appendix A

Peers ASP Public Consultation Process, 2017

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October 2022 Bylaw 09.22

Peers Steering Committee Meeting #1 Nov 24, 2016

Strengths, Weaknesses, Opportunities, Threats (SWOT)

As an introductory discussion to review the Peers ASP, the steering committee (recruited by Yellowhead County) is composed of Marion Huggins, Kevin Chapman, Kristy Meyers, area councillor David Russell, Brent Shepherd (County planning manager) and Kelly Jensen (County planner). Frank Liszczak of Matrix Planning is the planning consultant/facilitator. The following points were identified by the steering committee as strengths, weaknesses, opportunities and constraints as it relates to the current and future image of Peers.

Strengths

- location along Highway 32 and CNR mainline provides good access
- location near McLeod River and January Creek for aesthetics and recreation purposes
- upgrades made to water treatment plant, sanitary sewer system, stormwater management system, sidewalks, curb and gutter, playground • for a small hamlet, having stores and services is important — gas station, restaurant, feed store, mechanic, Edson Truss (13 km away — 62 employees in past), cement deliveries in the local area, etc
- Brisco wood products provides a source of employment — 25 employees living nearby
- beautiful new Multiplex!! Draws people from far and wide
- Peers area community group is a source of community coming together in a strong way
- Second community building is operating successfully
- Firehall in town
- RV dump brings people into Peers
- Improvements are an impetus to enhance the look of the community
- January creek aesthetics and potential trails along the creek bank
- Peers has a recycling depot
- McLeod valley recreation grounds nearby — Gold Dust days, ball diamonds, etc — family friendly, camping available

Weaknesses

- Highway 32 and CN Rail line; noise of the vehicles and trains
- Noise of truck traffic for gravel, wood trucks, oil and gas equipment, etc
- Loss of school in the past makes it more difficult for young families with kids to settle down in Peers
- Lack of adjacent, suitable land for future hamlet expansion
- People are not replacing manufactured homes with stick-built homes due to concerns about impermanence of the community

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- Small residential lots constrain storage capacity for RV types vehicles, accessory buildings, etc
- New subdivision potential is constrained by development costs and uncertain return on investment
- Demand for new lots has been slow over past 5 years
- Some lots need to be cleaned up — community enhancement is needed
- Adding curb and gutter along some commercial properties would have improved aesthetics
- Oldtimers are reluctant to change
- No garbage pickup service
- Lack of broadband internet access
- Weak cellphone coverage

Opportunities

- Having a cleanup day(s) in Peers organized by the hamlet community • ask the larger service area residents to define what are needed goods and services — ask the community; truck wash?, Interesting to hear about other potential opportunities • Opportunity for commercial development north along 50 St. and infill along 59 street
- Potential to expand Brisco operations — gasification, kiln, heat source, a couple more staff
- Some land is available to expand - existing, piped servicing is right next door
- Existing servicing can handle at least 48 residential units according to County documents
- Potential to consider a senior's development of some sort with communal open space for gardening and pets
- Vacant land to south of Multiplex has opportunity for community use
- Implement the 2016 County Recreation Master Plan — Creekside trails, pump track?
- Improve awareness of Peers (e.g. signage at Hwy 16/Hwy 32 intersection) • Resurgence of oil and gas could support potential truck-stop and related commercial/industrial uses
- Fibre optic cable is right next door but cannot be accessed at this time
- There seems to be a demand for proper rental accommodation

Threats

- Failure to be proactive for future community enhancement and diversity reinforces the status quo
- Lack of internet access and weak cellphone service should not be allowed to continue if the hamlet is to grow and improve its, goods, services, diversity and employment potential
- Landowners with developable land in and around the hamlet are less likely to create opportunities for hamlet growth unless there is a real economic incentive to do so

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Yellowhead County
Peers Area Structure Plan (ASP) Review
PUBLIC MEETING #1

AGENDA

Date: Wednesday, January 11, 2017 at 7 pm — 9:15pm

Location Peers Multiplex

1. Introductions — steering committee, County staff, consultant
2. What will be discussed tonight and why?
3. Presentation - What is an Area Structure Plan about and where did it come from? What factors will affect the preparation of the ASP?
4. Group discussion — Your thoughts and ideas about Peers development potential and community enhancement
5. Next steps
6. Informal discussion, coffee and donuts

Please see comments sheet attached. You can hand it in at the meeting, mail it or fax at (780) 723-5066 or email to frank@matrix-planning.com

For more information, please see the County website at www.yellowheadcounty.ab.ca/PeersASP;

Or you can contact

Frank Liszczak, Matrix Planning Inc.
frank@matrix-planning.com
(403) 609-3797

or

Brent Shepherd, Planning Manager
Yellowhead County
brent.shepherd@yellowheadcounty.ab.ca
1-800-665-6030

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October 2022 Bylaw 09.22

Yellowhead County Peers ASP
Community Consultation Comments
(January 11, 2017 Public Meeting #1)

Name;

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Telephone:

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e-mail (please print):

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Please deposit completed comments in the box by the entrance or FAX to (780) 723-5066. Or send it as an e-mail attachment to frank@matrix-planning.com

Comments:

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Peers ASP Public Meeting #1 Outcome
January 11, 2017
Peers Multiplex

Yellowhead County is undertaking a review of the Peers ASP. Part of that process involves public meetings to gather input before the plan is prepared. The January 11th meeting at the Peers Multiplex was the first of two public meetings. The following documents the meeting conversation comments:

The meeting started at 7 PM with approximately 30 participants attending. After introductions of the steering committee and an explanation of the Peers ASP review process, the facilitator asked where everybody lived; 8 people were from Peers; 12 people lived within a 10-minute drive and 7 people lived greater than a 10-minute drive. The remainder did not respond. The geographical distribution of attendees showed that Peers is a community centre that draws people from the surrounding area.

The meeting facilitator then presented a slideshow on the basic opportunities and constraints the Peers ASP review will need to consider. Next) the slideshow identified the strengths, weaknesses, opportunities and threats (SWOT analysis) identified by the steering committee back in November, 2016.

Thereafter, the participants broke into four discussion tables to consider the following four questions;

1. What do you want the hamlet of Peers to look like in 20 years?
2. Where do you see potential for growth and development?
3. What future goods and services does Peers want and need?
4. What improvements do you want to see happen over the next 5, 10, 20 years?

The discussion tables responded with the following comments;

<u>Community Enhancement</u>

- The hamlet needs to implement the proposed plans for trails in the January Creek Valley to provide opportunities for walks in an aesthetically pleasing area and to provide better community walking connections.
- The hamlet should consider community enhancement, including things as simple as flowerpots and flowerbeds. There is also discussion about enhancing the appearance of some houses, but this initiative would need to be initiated internally by the community.
- The hamlet would benefit from an outdoor skating rink with a heated change room.
- Year-round youth activities were needed; things such as multipurpose, outdoor courts (tennis, volleyball, etc.) and an indoor gymnasium of some kind. A concrete pad could serve as a skating rink in the wintertime, and multipurpose use in the summertime.
- Several people felt a dirt-bike track would be well used.
- The 'pump track' (a concrete playground like a skateboard park) in Niton Junction is very popular and would attract users if one were located in Peers.

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- Several felt that a gun range would be well used. The closest one was said to be in Whitecourt.
- A regular shuttle service to Edson was seen as a positive community enhancement measure.
- Most respondents felt a reduced speed limit was necessary along Highway 32 for that portion adjacent to Peers.
- Several felt that the rental charges of the Multiplex discouraged its use.
- While the Multiplex is a very popular and welcome addition to the community, more activity nights should be considered to expand opportunities to get together.
- Is there a role the County can play to help organize a community to provide more activities? Currently, community organizers meet on the third Monday of the month at 7:30 PM to organize community events. More volunteers would be welcomed to help achieve this goal.
- The community needs to promote itself better. The preparation of a community newsletter was suggested as a way to increase community enhancement. This newsletter could be physical and a periodic email or website.
- It was noted that the fire hall provided emergency medical technician (EMT) training, and the more community members were able to have those skills, the more secure the community would feel when such emergencies occurred.

<u>Future Land development directions</u>

- The hamlet needs to identify places for physical expansion for new residential and commercial development. Without those opportunities, there is no way, the hamlet can grow.
- The hamlet needs more serviced housing lots that can accommodate stick-built houses. These lots should be sufficiently large to accommodate recreational vehicles. It was generally felt that a 10,000 to 12,000 ft. ^{2} lot would be appropriate. Others spoke of parcels on the order of h to % of an acre in size. The current lots are not large enough to do this.

<u>Desired future land uses</u>

- All the discussion tables spoke of the need for a low-rental cost, independent living seniors housing project on the order of 10 to 20+ units. Many of those attending were looking a few years down the road and felt they would be interested in downsizing and applying for this type of option. There was some debate about the presence of extended care beyond independent living, but most of those talking at the tables felt that the independent living component was the most important. The units should include some private backyard space and a design that encouraged interaction among dwelling units.
- The hamlet could use a vehicle washing facility, a commercial truck stop/service Station on Highway 32,
- The only way more jobs will come this way is if new industry and commerce locates in the area. More housing options are needed for this to happen.
- One person spoke of restoring the old church.

- Others spoke of restoring the former school, but much of this discussion also recognize that this decision was not in the hands of the County.
- Some felt a full-service campground with plug-ins for RV sites would be popular.
- Some felt that tax exemptions for targeted businesses was a good idea to kickstart opportunities for land-use expansion in the hamlet.

Communication infrastructure

- While Internet and cell phone coverage is not that great, there are some improvements available with
- Telus Smart hub and Xplornet. In general, most participants felt that there could be significant improvements in broadband coverage and availability.
- When Internet goes down, businesses suffer.
- More cell phone towers are needed in the area

Process from here

After the roundtable discussion ended, the facilitator noted that there would be more steering committee meetings to discuss ideas coming out of this and other discussions. The planning facilitator and County staff also talked to owners of land that was identified as potentially developable. Thereafter, further discussions may occur with landowners to further investigate opportunities.

The end result of the planning process would be a draft Plan document which would be reviewed at another public meeting. Thereafter, changes would be made as needed and then forwarded to Yellowhead County Council for consideration, including a public hearing public hearing. The final document would be approved as a bylaw. The meeting ended shortly after 9:00 PM.

Yellowhead Count
Peers Area Structure Plan (ASP) Review
PUBLIC MEETING #2

AGENDA

Date: Thursday, August 17, 2017 at 7pm — 9:15pm

Location : Peers Multiplex

1 Introductions — steering committee, County staff, consultant

2, Presentation — the draft Peers ASP 2017; main highlights and process from here

3. Group discussion — Your thoughts and ideas about the draft ASP; does it reflect the public discussion back on January 11, 2017? If not, what's missing?

4. Next steps

5. Informal discussion, coffee and donuts

Please see comments sheet attached. You can hand it in at the meeting, mail it or fax at (780) 723-5066 or email to frank@matrix-planning.com

For more information, please see the County website at www.vellowheadcounty.ab.ca/PeersASP

Or you can contact

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Brent Shepherd, Planning Manager
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1-800-665-6030

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Peers Area Structure Plan (ASP) Executive Summary
July 22, 2017

Why an ASP for Peers and Why Now? - In June 2016, the County issued a request for proposals to update the Peers ASP because of further municipal infrastructure investments in piped water, paving and stormwater management improvements. A hamlet floodplain study was also completed later that year. The County undertook a community consultation process in 2017 as part of the ASP process. This consultation process is described in Appendix A of this document.

For a small hamlet, Peers is remarkable for its ability to support the existing range of commercial activities. In recognition its role as a regional service centre, the County has long supported the hamlet and area community through continual investments in infrastructure, community and recreational services, most notably the Peers Multiplex. The goals of the ASP and its policies is to encourage the development of more residential housing options and a more robust commercial/industrial sector that would improve the quality of life for local and nearby rural residents that depend on services located in Peers.

What are the least-cost lands for future subdivision and development? -

Peers is fortunate to have full municipal servicing, paved roads and sidewalks. In 2016, the County

completed a floodplain assessment and in 2017, a geotechnical assessment (Appendices B, C) with the result that that specific, vacant parcels in the hamlet were identified to be suitable for future subdivision and development. These parcels are described in detail in section 6.1 .2 of the ASP and shown on the Future Land Use Concept Map 8. These parcels are owned by a variety of landowners and offer the least cost for servicing for residential, commercial and industrial uses.

ASP Policy Highlights

Section 6 contains the County policies that will guide subdivision and development applications in the future. The following are selected proposed policy highlights reflects consultation during 2017 among the steering committee, individual landowners plus the hamlet and surrounding resident community.

- The County shall encourage the local community to establish a strategy to build residential options in Peers for independent seniors who wish to downsize but remain in the community close to friends and relatives. As a starting point, the County shall prepare terms of reference and budget to consider projects to identify demand and a business model for a viable seniors housing project in Peers.

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- The County shall consider using existing, municipally owned land and/or buying land to construct multi-family dwelling units to better meet identified demand for more varied housing styles and rental options.

- The County may defer local improvement charges from the subdivision approval stage to the development permit stage to reduce developer carrying charges and encourage land developers to bring new, serviced lots on stream.

- To encourage more residential choice, the County shall prepare and consider an amendment to the land-use bylaw to provide for development of new mixed-use buildings with commercial main floor / residential upper floors to be included in the Peers Hamlet Commercial (HR) land-use bylaw district.

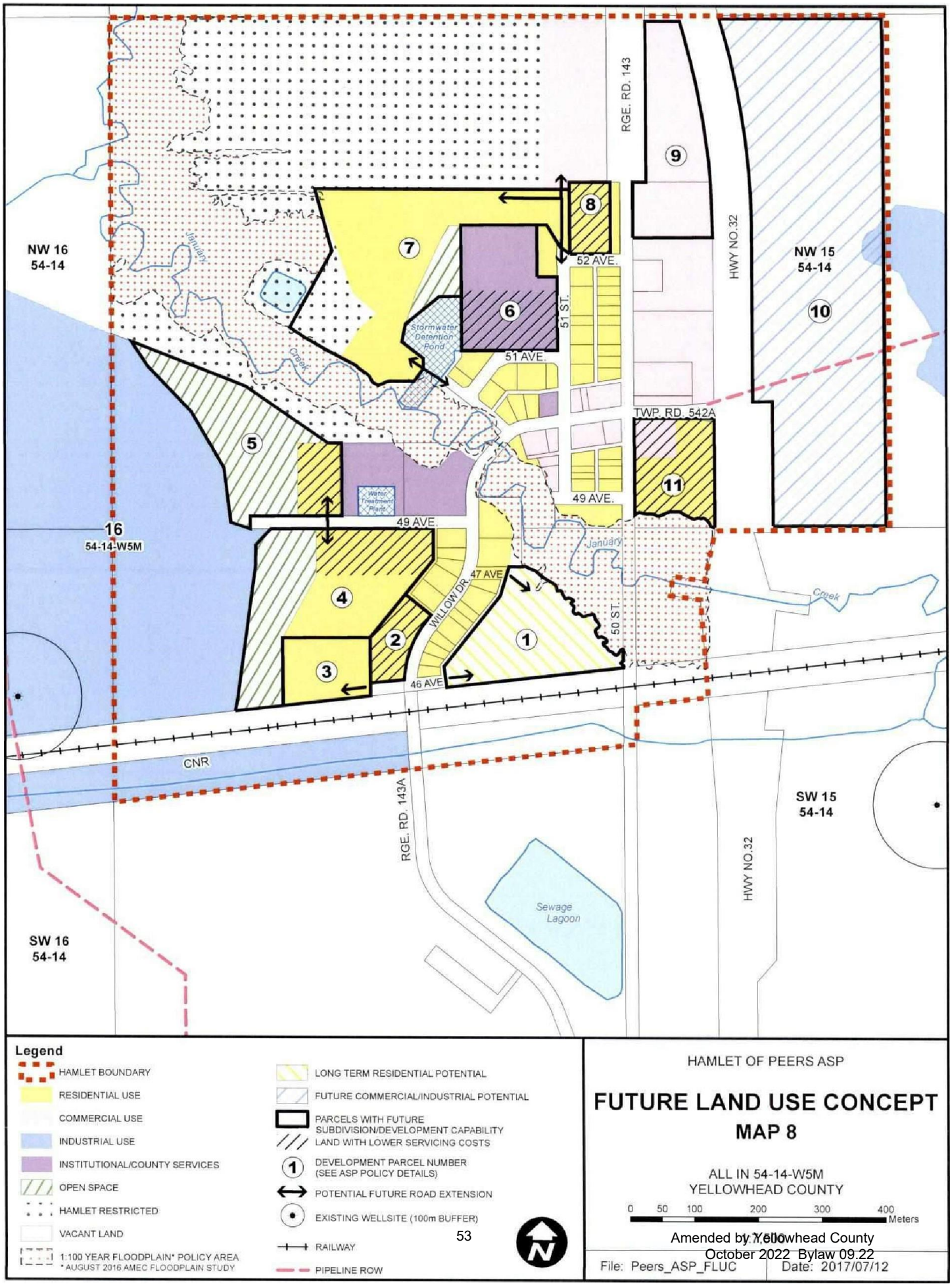
- "Park model" manufactured homes should be considered as an appropriate and useful form of housing, especially for independent seniors living, but it must be carefully designed as part of a "planned unit development" complete with communal amenities that benefit residents of the development.

- The County shall continue to improve internet and cell phone services in Peers through its role as municipal authority. This includes a cell phone tower in Peers and connection to the Axia fibre optic line along Hwy 32 It should be noted that the County is actively pursuing agreements with service providers to implement this policy statement.

- The ASP identifies an Open Space designation separating residential uses and the Brisco Manufacturing operation to the west in the Future Land Use Concept Map 8.

- Due to the 2016 floodplain assessment, no new lots will be subdivided within the floodplain of January Creek. Existing buildings within the floodplain can remain, but expansion or change of use will not be allowed.

For to see the full draft Peers ASP, please go to www.vellowheadcountv.ab.ca/PeersASP to download a copy of the draft ASP and supporting Appendices documents A-D.



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Yellowhead County Peers ASP
Community Consultation Comments
(August 17, 2017 Public Meeting #2)

Name;

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Telephone:

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e-mail (please print):

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Please deposit completed comments in the box by the entrance or FAX to (780) 723-5066 .Or send it as an e-mail attachment to frank@matrix-planning.com

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Appendix B

Peers Flood Risk Assessment
January Creek, 2016

Amended by Yellowhead County
October 2022 Bylaw 09.22

FLOOD RISK ASSESSMENT - JANUARY CREEK (HAMLET OF PEERS)

Submitted to.

Yellowhead County

Edmonton, Alberta

Submitted by:

Amec Foster Wheeler

Environment & Infrastructure

Edmonton, Alberta

August 2016

EWI 086

LAPROJECT\EIMIOBE January Creek FRA\5CO - Deliverables\510

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October 2022 Bylaw 09.22

Amec Foster Wheeler Environment & Infrastructure is committed to achieving sustainability through balancing economic growth, social responsibility and environmental protection. Learn more at: http://amecfiv.com/aboutus/sustainabilitv.htm

EXECUTIVE SUMMARY

Amec Foster Wheeler Environment & Infrastructure, a division of Amec Foster Wheeler Americas Limited (Amec Foster Wheeler) completed a flood risk assessment and inundation mapping of January Creek at the Hamlet of Peers for Yellowhead County so the Peers Area Structure Plan could be updated in the autumn of 2016.

The study is based upon a bathymetry survey and desktop study, which included updated hydrology and a hydraulic model. Flood levels and recommended first habitable floor elevations are provided for the affected lots. Flood proofing recommendations are provided for existing structures within the designated floodplain

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1.0 INTRODUCTION

Amec Foster Wheeler was retained by Yellowhead County to conduct floodplain mapping of January Creek within the Hamlet of Peers (Peers) and to identify and provide flood proofing recommendations for structures within the floodplain. This report summarizes the study, which consisted of a bathymetric survey and desktop hydrotechnical analyses undertaken to meet these objectives.

1.1 Background

Yellowhead County is updating its Peers Area Structure Plan and requires up to date flood risk mapping to identify the 1% annual exceedance probability (1:100-year average recurrence interval) flood inundation extent, hereinafter referred to as the designated floodplain. In addition, recommendations for flood proofing existing structures within the designated floodplain are needed, along with a listing of minimum building elevations by lot to regulate future construction.

The Peers Area Structure Plan was last updated in 2002. Since then, land has been developed within Peers with considerable interest in lots near January Creek. In order to make informed planning and land use decisions, the designated floodplain must be mapped in the study area, with the flood level for each lot identified. Flood proofing recommendations are also needed in order to protect existing structures that may already be built within the designated floodplain.

1.2 Site Description and Channel Characteristics

January Creek drains into the McLeod River approximately 8 km downstream of Peers. The January Creek drainage area is approximately 106 km^2 at Peers and 123 km^2 at the McLeod River. January Creek is a fourth-order watercourse with a total length of 26 km from its headwaters to the McLeod River.

The creek's hydraulic characteristics are defined by channel width, depth, and slope. Bankfull width varies, but, for the most part, it is within 8 to 10 m, and the bankfull depth ranges from approximately 2.5 to 3 m. Channel slope is approximately 0.0007 m/m.

The floodplain width varies from approximately 20 to 50 m and consists of vegetated brush and trees and cleared pasture land. The bed and banks are composed of fine textured substrates. The banks are well vegetated with tall grass, willows, and shrubs. Numerous beaver dams are located throughout the creek. Bridges and culverts are located on January Creek near Peers, as listed in **Table 1**.

Table 1 Local January Creek Bridge and Culvert Crossings

Name	AT Bridge File No.	Description	Location
Willow Drive	8060	11 m clear span bridge	740 m downstream of Peers east boundary
Highway 32 at Peers	75779	5,500 mm dia. structural plate corrugated steel pipe (SPCSP), 86 m long	At Peers east boundary
CN Rail	NA	Unknown	540 m upstream of Peers east boundary
Notes: AT = Alberta Transportation, NA = not applicable			

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2.0 HYDROLOGY

2.1 Definition of Flood Probability

Estimates of flood probability are given in terms of return period. For example, a 100-year return period flood is to be equalled or exceeded every 100 years on average. Hence, the terminology of a flood frequency being, for example, the 100-year average recurrence interval (ARI) is more often used. The term *1:100-year flood* is frequently misunderstood as a flood which occurs every 100 years. The 100-year flood (or 1:100-year flood) is more accurately referred to as the 1% annual exceedance probability flood, since it is a flood that has a 1% probability of being equalled or exceeded in any single year. Similarly, a flood level expected to be equalled or exceeded every 10 years on average is known as a 10-year flood and has a 10% probability of being equalled or exceeded in any single year. A two-year flood has a 50% probability of being equalled or exceeded in any single year.

2.2 January Creek 100-Year ARI Flood Hydrology

The 100-year ARI flood was determined by reviewing and updating a previous study (AMEC, 2010). Since January Creek is an ungauged stream, the study employed regional analysis and flood indexing to estimate the 100-year ARI January Creek discharge based on data from the nearby Wolf Creek hydrometric gauge at Highway 16 (Water Survey Canada [WSC] Gauge 07AG003).

In the previous study, the 1980 flood at Wolf Creek was first determined to be in the range of a 10-year to 20-year ARI flood, based on statistical analysis of the WSC records; it was assumed that the 1980 flood at January Creek was within a similar range. Second, the 20-year ARI flood at January Creek was back-calculated based on an observed high water mark from the 1980 flood and the hydraulic capacity of the Highway 32 (Bridge File 75779) culvert. Third, the ratio of the 100-year ARI flood to the 20-year ARI flood at Wolf Creek was determined using frequency analysis. Fourth, the January Creek 20-year ARI flood discharge was multiplied by this ratio to estimate the 100-year ARI flood. It was noted that the estimated 100-year ARI flood discharge was very close to the design discharge of 28 m^3/s noted on AT drawings for the Highway 32 crossing of January Creek.

Amec Foster Wheeler updated our previous study by computing the Wolf Creek frequency distribution, including five additional annual peak flow records, which have since been published by WSC. The updated ratio of the 100-year ARI flood to the 20-year ARI flood at Wolf Creek is 1.78. Multiplying the January Creek 20-year ARI flood by this ratio produced an updated 100-year ARI flood estimate of 32 m^3/s. The previously determined and updated hydrologic values are listed in **Table** 2 below.

Table 2 Hydrologic Values

Parameter	Previous Study	Updated
20-year ARI flood at January Creek	18 m^3/s	18 m^3/s
Ratio of 100-year ARI flood to 20-year ARI flood at Wolf Creek	1.67	1.78
100-year ARI flood at January Creek	30 m^3/s	32 m^3/s
AT January Creek Design Discharge at Highway 32	28.3 m^3/s	

3.0 SURVEY

The January Creek survey was conducted by Kurt Morrison, P.Eng. and Todd MacKenzie, ALSA Pupil, CET on 18 June 2016 using Real Time Kinematic GPS. A total of 65 cross sections were surveyed throughout the 3.34 km long study reach. The upstream survey limit is approximately 70 m east of Highway 32, and the downstream limit is approximately 600 m downstream of the Peers Base Plan boundary. Several additional cross sections were surveyed at the Township Road 544 culverts in case it was necessary to extend the hydraulic model further downstream. The overall shape of each cross section was captured by making point observations of floodplain, top of bank, edge of water, bottom of bank, and several bed points. The timber wing-walls of the Willow Drive (Range Road 143A) bridge crossing were also surveyed, as were the inverts, obverts, and diameters of the culvert crossings at Highway 32 and Township Road 544. The survey was conducted on foot, by wading through the creek. The surveyed cross sections are shown in **Figure 1**. Photographs were taken throughout the reach to assist with the selection of Manning's n values, as described in **Section 4.0**. **Photo 1** below illustrates channel characteristics within the upper and lower reaches within Peers; and **Photo 2** illustrates channel characteristics within the middle reach. **Photo 3** illustrates a beaver dam located near cross section 1022.

Photo 1 **Typical bank vegetation in the upper and lower reaches of January Creek**

Photo 2 **Typical bank vegetation in middle reach of January Creek**

Photo 3 **Beaver dam near cross section 1022**

4.0 HYDRAULICS

The 100-year ARI flood level was simulated using GeoHECRAS, which is a third-party extension of the industry standard HEC-RAS hydraulic modelling software published by the US Army Corps of Engineers. Though GeoHECRAS presents a GIS-based user interface, the open channel flow simulation process and numeric solver remain unaltered from the most recent version of HEC-RAS.

The model input geometry was created by combining the surveyed cross sections with point data from Light Detection and Ranging (LiDAR)[1] to represent the creek during the 100-year ARI flood. The Willow Drive Bridge was simulated using the surveyed hydraulic opening and bottom chord elevation. The model was extended approximately 600 m downstream of the northern Peers Base Plan boundary so that the water levels initially defined at the furthest downstream channel cross section would be stabilized within the hydraulic model at the downstream Peers boundary, as discussed below. The outlet of the Highway 32 culvert was used as the upstream model boundary. The total length of creek channel within the hydraulic model is 3,345 m.

Steady flow analysis was undertaken using the 100-year ARI discharge of 32 m^3/s, as discussed in **Section 2.2**. A normal-depth downstream boundary condition was used with a slope of 0.0007 m/m, which is representative of the study reach overall slope. A sensitivity analysis was conducted, wherein the assumed downstream slope was varied and the effect on simulated water surface elevation within the Peers Boundary was observed. It was determined that for large variations in slope (slope = 0.0005 to 0.001 m/m), the change in simulated water surface elevation at the downstream Peers Boundary was less than 0.02 m.

When available, it is common practice to employ the use of high water marks for known stream discharges to calibrate the hydraulic model. As no such documentation of discharges and associated high water marks is available, it was necessary to make assumptions regarding appropriate channel and floodplain roughness values to use in the model. Manning's *n* values (roughness) were selected from Chow (1959) according to the vegetation observed during the site survey (refer to **Section 0**) and are listed in **Table** 3 below. Main channel roughness values of 0.04 were used throughout the reach, which are representative of *clean winding streams with some pools and shoals*. Overbank *n* values of 0.10 and 0.08 were used, which are representative of *medium to dense brush in summer* and *pasture with high grass*, respectively.

Table 3 Manning's *n* Values

From XS	To XS	Left Overbank	Main Channel	Right Overbank
1000	1008	0.10	0.04	0.10
1009	1039	0.10	0.04	0.06
1040	1065	0.10	0.04	0.10

It was assumed that the numerous beaver dams noted throughout the reach would be breached during the design flood and that they would not impact water levels.

[1] Supplied by Airborne Imaging at 1 m grid spacing. Flight Dates: August and September 2013.

5.0 RESULTS AND RECOMMENDATIONS

5.1 Results

The model developed for this study indicates that the 100-year ARI flood inundates several lots adjacent to January Creek, mainly in the vicinity of the Willow Drive (Range Road 143A) Bridge. The simulated inundation extent is presented in **Figures 2 to 5**. Lots impacted by the 100-year ARI flood are listed in **Table** 4, along with the designated flood level. Lots not identified on the plan or listed in the table are unaffected by the 100-year ARI flood according to the model developed for this study. Ranges of water surface elevations are listed for lots where the designated flood level varies more than 0.10 m within the lot. This occurs at three lots, which are either long with respect to the direction of flow or located near the Willow Drive Bridge where water levels vary more rapidly.

Table 4 Simulated 100-year ARI Water Surface Elevation at Affected Lots

Lot ID	Address	100-year ARI Water Surface Elevation (Flood Level)
1	n/a	842.75 – 844.25 m
2	Block A, Plan 1323920	844.20 m
3	Lot P1, Plan 3895KS	844.30 m
4	5202/5210 49 Avenue	844.30 m
5	n/a	844.35 m
6	Lot P2, Plan 3895KS	844.45 m
7	4910 52 Street	844.65 – 844.85 m
8	4901 52 Street	844.85 m
9	4803 52 Street	844.85 m
10	4904 51 Street	844.75 m
11	4904 51 Street	844.80 m
12	5010 49 Avenue	844.90 – 845.10 m
13	4802 52 Street	844.85 – 845.10 m
14	4915 50 Street	845.15 m
15	N/A	845.15 m

5.2 Recommendations

5.2.1 Flood proofing At-Risk Buildings

Some buildings within the floodplain may not be adequately protected from the design flood levels. Flood proofing could be undertaken for buildings subject to flooding in order to reduce flood damages. It should be noted that the term *flood proofing* is somewhat of a misnomer in that it is not always possible to adequately protect at-risk structures from the forces of nature, particularly damage associated with floodwater velocity, impact from entrained debris (trees, etc.), or from sediment deposition. However, one or more of the strategies listed below may be employed to improve the resilience to flooding of existing structures:

- Accept that the building is within the floodplain; acknowledge this risk with Land Titles and the insurance provider and plan for emergency evacuation in case of elevated water levels;
- Relocate the structure to a location on the lot which is above the flood level;
- Raise (renovate) the first habitable floor to a suitable elevation;
- Construct temporary or permanent dykes around the structure while still maintaining overland drainage (sump and pump or culvert with flapper gate) within the impounded area; and/or
- Apply an exterior seal (geomembrane, etc.) and install removable doorway and window barriers which do not interfere with functions of the building envelope, such as ventilation, insulation, and access/egress.

Practical and cost-effective flood proofing strategies will vary on a lot by lot basis and should be assessed independently.

5.2.2 Floodplain Encroachment

Continued development within the floodplain will, over time, alter the hydraulic capacity of the floodplain. The overall effect of building erection, road construction, and vegetative cover change is usually an increase in the Manning's *n* (roughness) value, which corresponds to higher water levels for a given flow. As development occurs, it may be necessary to review and update this flood risk assessment to determine if the flood level has changed substantially.

5.2.3 Recommended Future Building Elevations

To reduce damage to future buildings within the floodplain, the first habitable floor elevation should be set at some nominal distance above the identified flood level. Recommended nominal vertical offset may vary by region, jurisdiction, and the level of detail of the floodplain mapping study.

In the absence of guidelines published by the regional authority, guidelines should be followed which are similar to those published by the City of Edmonton for flood protection measures for infill housing in two low lying areas: Rossdale and Cloverdale. The guidelines specify: *the underside of floor joists and sill plates supporting the habitable portions of a building must be at least 300 mm above the design flood level.* This recommendation by the City of Edmonton is for the North Saskatchewan River, for which the design flood has been calculated through rigorous hydrological exercise based on over 100 years of data. As mentioned in **Section 2.2**, January Creek is ungauged and few suitable surrogate gauges are present in the vicinity; therefore, there is less certainty in the estimated design discharge and greater allowance for uncertainties in the estimated water levels is required. It is recommended that an additional 0.2 m (bringing the total to 0.5 m) be included in the vertical offset between the underside of the floor joists within the habitable portions of the building and the design flood level. Assuming a typical wood frame home with a 0.3 m high floor system, the bottom of the first habitable floor level of a new development within the designated floodplain should be a minimum of 0.8 m above the flood level. **Table** 5 below lists the recommended first habitable floor elevations for lots within the designated floodplain. If a thicker flooring system is to be used, the elevations listed should be updated appropriately.

For lots in which the flood level varies and where the proposed structure location has not been identified, the first habitable floor elevation should be taken as 0.8 m above the highest flood level for that lot. If the location of the proposed structure is known, the first habitable floor elevation may be taken as 0.8 m above the flood level at that specific location.

Table 5 Recommended Building Elevations for Lots within Designated Floodplain

Lot ID	Address	100-year ARI Water Surface Elevation (Flood Level)	Recommended First Habitable Floor Elevation [a)]
1	n/a	842.75 – 844.25 m	845.05 m
2	Block A, Plan 1323920	844.20 m	845.00 m
3	Lot P1, Plan 3895KS	844.30 m	845.10 m
4	5202/5210 49 Avenue	844.30 m	845.10 m
5	n/a	844.35 m	845.15 m
6	Lot P2, Plan 3895KS	844.45 m	845.25 m
7	4910 52 Street	844.65 – 844.85 m	845.65 m
8	4901 52 Street	844.85 m	845.65 m
9	4803 52 Street	844.85 m	845.65 m
10	4904 51 Street	844.75 m	845.55 m
11	4904 51 Street	844.80 m	845.60 m
12	5010 49 Avenue	844.90 – 845.1	845.90 m
13	4802 52 Street	844.85 – 845.10 m	845.90 m
14	4915 50 Street	845.15 m	845.95 m
15	N/A	845.15 m	845.95 m

Note: a) Assuming a vertical offset of 0.8 m based on the sum of a 0.3 m thick wood framed floor system plus 0.5 m allowance for uncertainty.

6.0 DISCUSSION

6.1 Limitations

The methodology and criteria used for this study do not meet requirements that are acceptable for Alberta Environment and Parks flood risk mapping, and they should not be interpreted as substitutes for a rigorous mapping study.

It should be noted that insufficient data were available to carry out a formal calibration process of the GeoHECRAS model. In a more rigorous study, a water surface profile would be surveyed when the stream discharge is high. Model parameters would then be adjusted until the simulated water surface closely matches the observed water surface. The calibrated model could then be used to simulate flow under different conditions. The relatively low flow at the time of survey with respect to the design discharge, as well as the presence of numerous beaver dams throughout the reach precluded the model calibration step. The model could be improved by surveying a water surface profile at high discharge, conducting a discharge measurement of the flow within the study area, and subsequently carrying out the calibration process.

6.2 General

The water surface elevations reported herein are simulated based on the methodology discussed in **Section 4.0**; they are not directly measured. All models have some degree of uncertainty due to the nature of input data and simplifications inherent in breaking down a complex physical process into a set of equations which can be solved by a computer. However, for the needs of Yellowhead County in updating the Peers Area Structure Plan, the results reported herein are adequate.

Offsetting the first habitable floor elevation a greater distance above the designated flood level than that presented in **Table** 5 provides a higher degree of flood protection. If a greater degree of protection is desired, such as what may result from consideration of climate change effects, the first habitable floor elevation should be increased beyond the values listed in **Table** 5 above.

7.0 CLOSURE

This report has been prepared for the exclusive use of Yellowhead County. This report is based on, and limited by, the interpretation of data, circumstances, and conditions available at the time of completion of the work as referenced throughout the report. It has been prepared in accordance with generally accepted engineering practices. No other warranty, expressed or implied, is made.

This is a **draft report** only. Upon issue of the final report, we request that all draft documents be destroyed or returned to Amec Foster Wheeler. This draft report should not be relied upon as a final document.

Yours truly,

Amec Foster Wheeler Environment & Infrastructure,
a Division of Amec Foster Wheeler Americas Limited

PROFESSIONAL ENGINEER ALBERTA
KURT W. MORRISON
12 Aug 2016

Reviewed by:

Gary Beckstead, M.Sc., P.Eng.
Principal Water Resources Engineer

Kurt Morrison, M.Eng., P.Eng.
Water Resources Engineer
T: (780) 377-3673
E: kurt.morrison@amecfw.com

KM/clm
Attach.

Permit to Practice No. P04546

8.0 REFERENCES CITED

AMEC Earth & Environmental (AMEC). 2010. *Hamlet of Peers – Preliminary January Creek Flood Assessment for Proposed Stormwater Pond – NE 16 – 54 – 14 – W5M.*

Chow, V.T. 1959, *Open-Channel Hydraulics*, Blackburn Press, New Jersey.

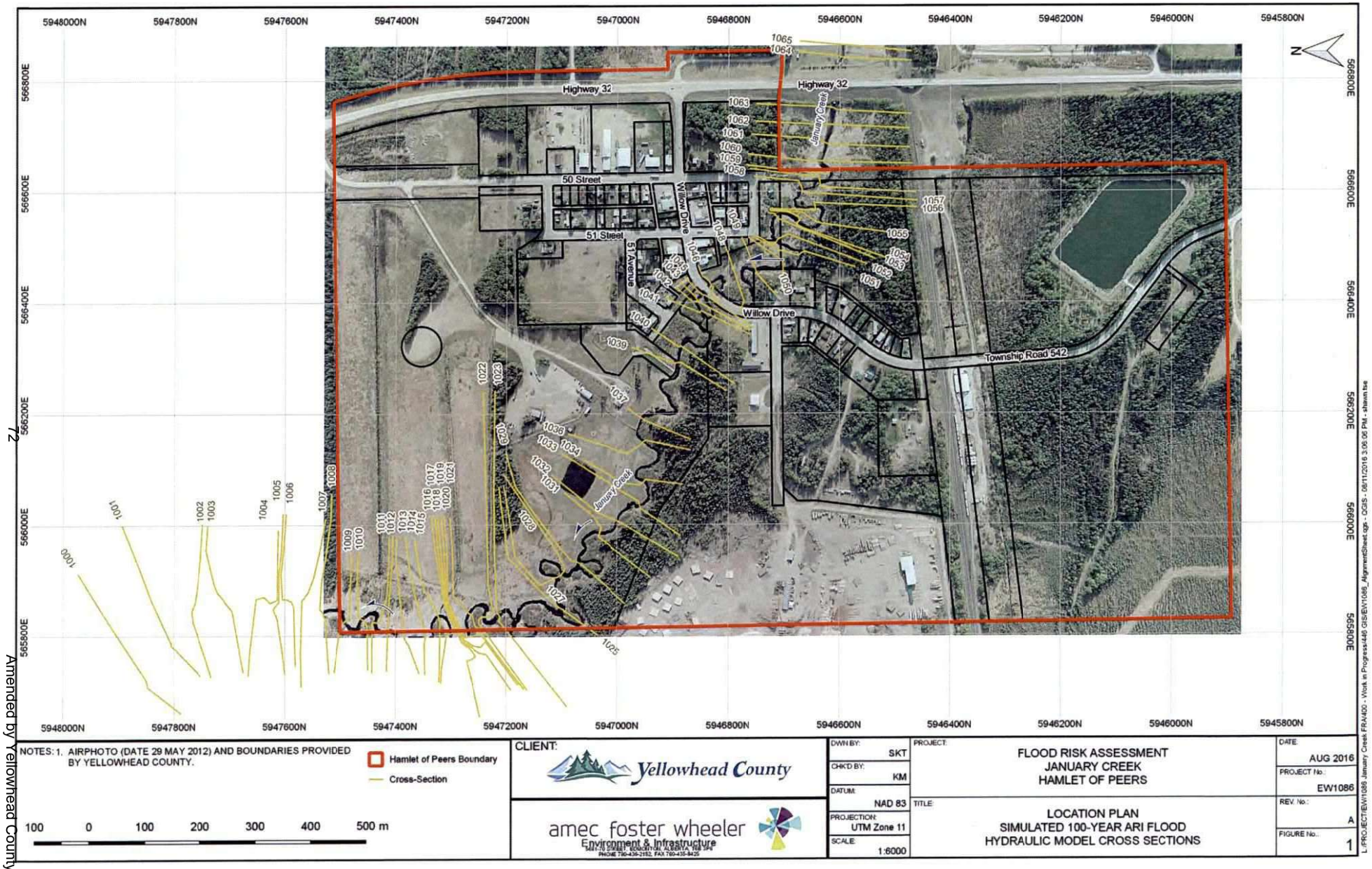
City of Edmonton Planning and Building. 1986. *Low Density Infill Housing Design Guidelines for the Cloverdale Area Redevelopment Plan.*

City of Edmonton Planning and Building. 1986. *Low Density Infill Housing Design Guidelines for the Rossdale Area Redevelopment Plan.*

amec foster wheeler

Figures

Amended by Yellowhead County
October 2022 Bylaw 09.22



NOTES: 1. AIRPHOTO (DATE 29 MAY 2012) AND BOUNDARIES PROVIDED BY YELLOWHEAD COUNTY.

Hamlet of Peers Boundary

Cross-Section

100 0 100 200 300 400 500 m

CLIENT: Yellowhead County

amec foster wheeler
Environment & Infrastructure
PHONE 780-436-2152, FAX 780-435-8425

DWN BY:	SKT
CHK'D BY:	KM
DATUM:	NAD 83
PROJECTION:	UTM Zone 11
SCALE:	1:6000

PROJECT: FLOOD RISK ASSESSMENT
JANUARY CREEK
HAMLET OF PEERS

TITLE: LOCATION PLAN
SIMULATED 100-YEAR ARI FLOOD
HYDRAULIC MODEL CROSS SECTIONS

DATE:	AUG 2016
PROJECT No.:	EW1086
REV. No.:	A
FIGURE No.:	1

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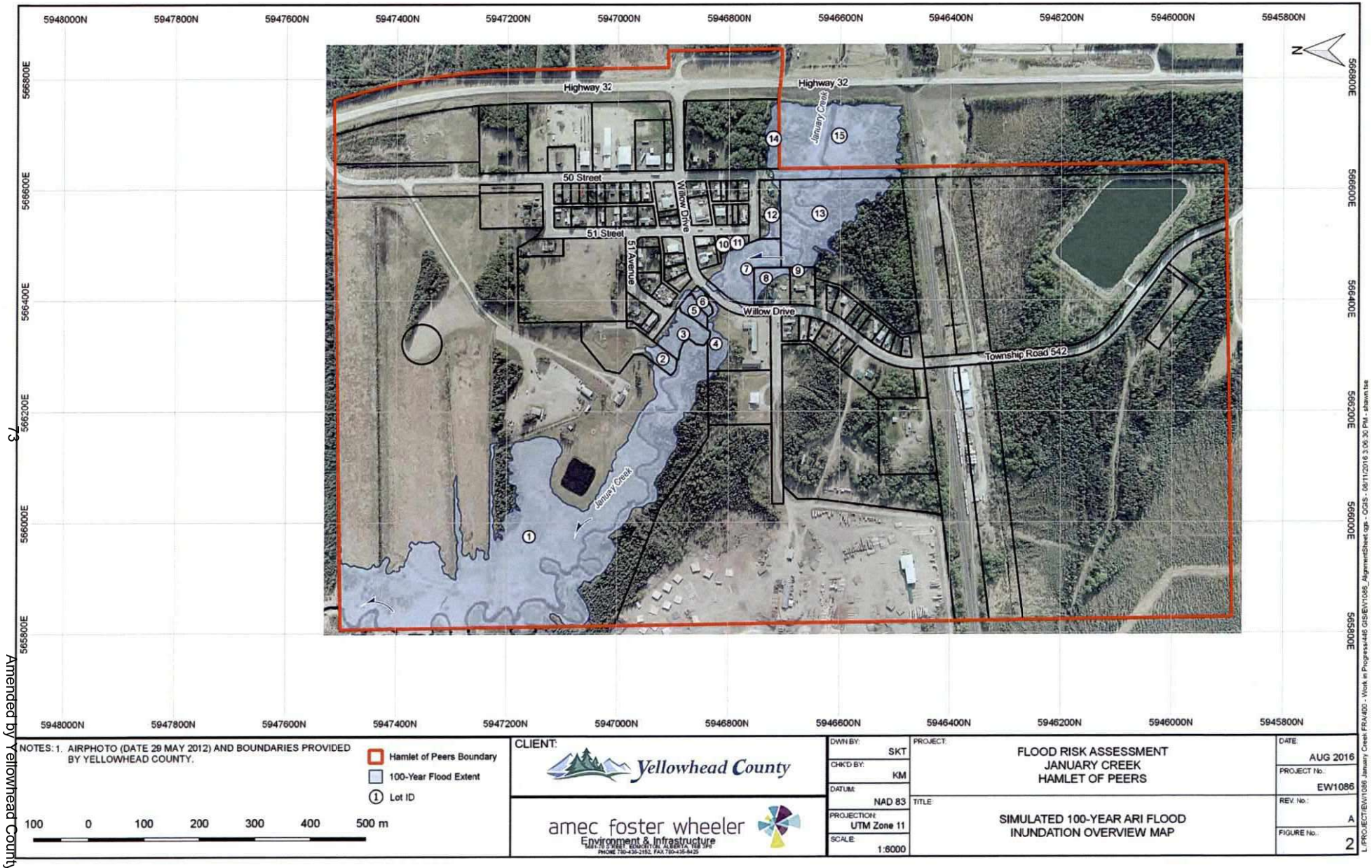

NOTES: 1. AIRPHOTO (DATE 29 MAY 2012) AND BOUNDARIES PROVIDED BY YELLOWHEAD COUNTY.

Hamlet of Peers Boundary
100-Year Flood Extent
(1) Lot ID

100 0 100 200 300 400 500 m

CLIENT: Yellowhead County

amec foster wheeler
Environment & Infrastructure
9331-70 STREET, EDMONTON, ALBERTA, T6B 3P6
PHONE 780-430-3152, FAX 780-435-8425

DWN BY:	SKT
CHK'D BY:	KM
DATUM:	NAD 83
PROJECTION:	UTM Zone 11
SCALE:	1:6000

PROJECT: FLOOD RISK ASSESSMENT
JANUARY CREEK
HAMLET OF PEERS

TITLE: SIMULATED 100-YEAR ARI FLOOD INUNDATION OVERVIEW MAP

DATE:	AUG 2016
PROJECT No.:	EW1086
REV. No.:	A
FIGURE No.:	2

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Lot ID	Address	100-Year ARI Water Level
1	5232 50 Street	842.75 - 844.25 m
2	Block A, Plan 1323920	844.20 m
3	Lot P1, Plan 3895KS	844.30 m
4	5202/5210 49 Avenue	844.30 m
5	5232 50 Street	844.35 m
6	Lot P2, Plan 3895KS	844.45 m
7	4910 52 Street	844.65 - 844.85 m
8	4901 52 Street	844.85 m
9	4803 52 Street	844.85 m
10	4904 51 Street	844.75 m
11	4904 51 Street	844.80 m
12	5010 49 Avenue	844.90 - 845.10 m
13	4802 52 Street	844.85 - 845.10 m
14	4915 50 Street	845.15 m
15	N/A	845.15 m

NOTES:
1. AIRPHOTO (DATE 29 MAY 2012) AND BOUNDARIES PROVIDED BY YELLOWHEAD COUNTY.
2. 1 m CONTOURS DERIVED FROM LIDAR FLOWN AUG - SEP 2013.
3. ISOLATED DRY ISLANDS HAVE BEEN REMOVED FROM WATER SURFACE.

Hamlet of Peers Boundary
100-Year Flood Extent
① Lot ID

20 0 20 40 60 80 100 m

CLIENT: Yellowhead County

amec foster wheeler
Environment & Infrastructure
9451-70 STREET, EDMONTON, ALBERTA, T6B 3P6
PHONE 780-436-2152, FAX 780-435-9425

DWN BY:	SKT
CHK'D BY:	KM
DATUM:	NAD 83
PROJECTION:	UTM Zone 11
SCALE:	1:1500

PROJECT: FLOOD RISK ASSESSMENT
JANUARY CREEK
HAMLET OF PEERS

TITLE: SIMULATED 100-YEAR ARI FLOOD INUNDATION DETAIL 1

DATE:	AUG 2016
PROJECT No.:	EW1086
REV. No.:	A
FIGURE No.:	3

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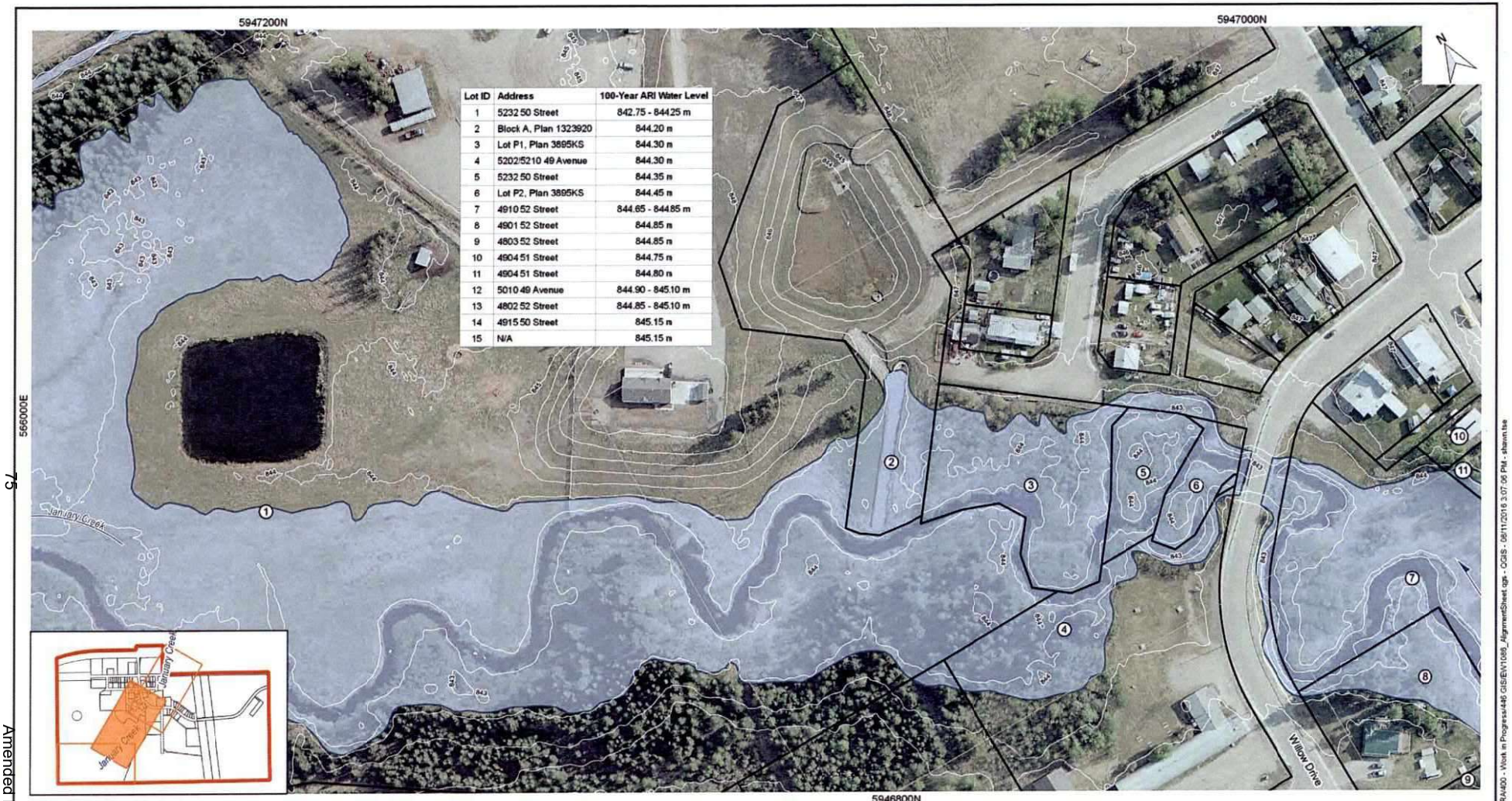

Lot ID	Address	100-Year ARI Water Level
1	5232 50 Street	842.75 - 844.25 m
2	Block A, Plan 1323920	844.20 m
3	Lot P1, Plan 3895KS	844.30 m
4	5202/5210 49 Avenue	844.30 m
5	5232 50 Street	844.35 m
6	Lot P2, Plan 3895KS	844.45 m
7	4910 52 Street	844.65 - 844.85 m
8	4901 52 Street	844.85 m
9	4803 52 Street	844.85 m
10	4904 51 Street	844.75 m
11	4904 51 Street	844.80 m
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14	4915 50 Street	845.15 m
15	N/A	845.15 m

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1. AIRPHOTO (DATE 29 MAY 2012) AND BOUNDARIES PROVIDED BY YELLOWHEAD COUNTY.
2. 1 m CONTOURS DERIVED FROM LIDAR FLOWN AUG - SEP 2013.
3. ISOLATED DRY ISLANDS HAVE BEEN REMOVED FROM WATER SURFACE.

Hamlet of Peers Boundary
100-Year Flood Extent
① Lot ID

20 0 20 40 60 80 100 m

CLIENT: Yellowhead County

amec foster wheeler
Environment & Infrastructure
9441 - 70 STREET, EDMONTON, ALBERTA, T6B 3P6
PHONE 780-436-2152, FAX 780-435-8429

DWN BY:	SKT
CHK'D BY:	KM
DATUM:	NAD 83
PROJECTION:	UTM Zone 11
SCALE:	1:1500

PROJECT: FLOOD RISK ASSESSMENT
JANUARY CREEK
HAMLET OF PEERS

TITLE: SIMULATED 100-YEAR ARI FLOOD INUNDATION DETAIL 2

DATE:	AUG 2016
PROJECT No.:	EW1086
REV. No.:	A
FIGURE No.:	4

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Lot ID	Address	100-Year ARI Water Level
1	5232 50 Street	842.75 - 844.25 m
2	Block A, Plan 1323920	844.20 m
3	Lot P1, Plan 3895KS	844.30 m
4	5202/5210 49 Avenue	844.30 m
5	5232 50 Street	844.35 m
6	Lot P2, Plan 3895KS	844.45 m
7	4910 52 Street	844.65 - 844.85 m
8	4901 52 Street	844.85 m
9	4803 52 Street	844.85 m
10	4904 51 Street	844.75 m
11	4904 51 Street	844.80 m
12	5010 49 Avenue	844.90 - 845.10 m
13	4802 52 Street	844.85 - 845.10 m
14	4915 50 Street	845.15 m
15	N/A	845.15 m

NOTES:
1. AIRPHOTO (DATE 29 MAY 2012) AND BOUNDARIES PROVIDED BY YELLOWHEAD COUNTY.
2. 1 m CONTOURS DERIVED FROM LIDAR FLOWN AUG - SEP 2013.
3. ISOLATED DRY ISLANDS HAVE BEEN REMOVED FROM WATER SURFACE.

Hamlet of Peers Boundary
100-Year Flood Extent
(1) Lot ID

20 0 20 40 60 80 100 m

CLIENT: Yellowhead County

amec foster wheeler
Environment & Infrastructure
PHONE 780-436-2152, FAX 780-435-8425

DWN BY:	SKT
CHK'D BY:	KM
DATUM:	NAD 83
PROJECTION:	UTM Zone 11
SCALE:	1:1500

PROJECT: FLOOD RISK ASSESSMENT
JANUARY CREEK
HAMLET OF PEERS

TITLE: SIMULATED 100-YEAR ARI FLOOD INUNDATION DETAIL 3

DATE: AUG 2016
PROJECT No.: EW1086
REV. No.: A
FIGURE No.: 5

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Appendix C

Peers Geotechnical Report 2017

Amended by Yellowhead County
October 2022 Bylaw 09.22

May 30, 2017 WSP File No. : 171-04699

Yellowhead County.
2714-1 Ave
Edson, AB T7E 1G9

Attention: Brent Shepherd

Re: *Hamlet of Peers – Geotechnical Assessment*

A geotechnical assessment was complete within the Hamlet of Peers to determine the suitability of native soil for future development within the Hamlet Boundary.

On May 9, 2017, 50mm stratified soil cores samples were obtained from fourteen various test hole locations as shown in Figure 1. All core samples were recovered to a depth of approximately 3 m below ground level.

Samples from each of the different soil type from each test hole were tested for moisture content and Atterberg limits. The results have been attached to the end of the report.

The report concludes that the subsurface conditions are considered to be suitable for future residential/commercial development. Test results for the majority show a very intermediate plastic medium grey clay material with a moisture content varying between 20-30 percent. It should be noted that there are localize locations of sand plateaus both on the north and south side of the Hamlet particular near Test holes 4 and 14.

Groundwater was encountered in six test holes during drilling operations. Based on the analysis of the material and random location of these test holes where groundwater was encountered, it appears that the groundwater levels are influenced by surface drainage contained within silty material which is perched over a layer of the medium plastic clay.

This native soil material is very susceptible to frost and as such, it is recommended the addition of an imported well graded granular structure placed in well compacted lifts of 150-200mm to a depth of 500-600mm above the native soil is required. Additional use of geotextile material should be incorporated within the construction of all roadways.

Sincerely,

Michael Steffler P.Eng
Project Manager
c.c.

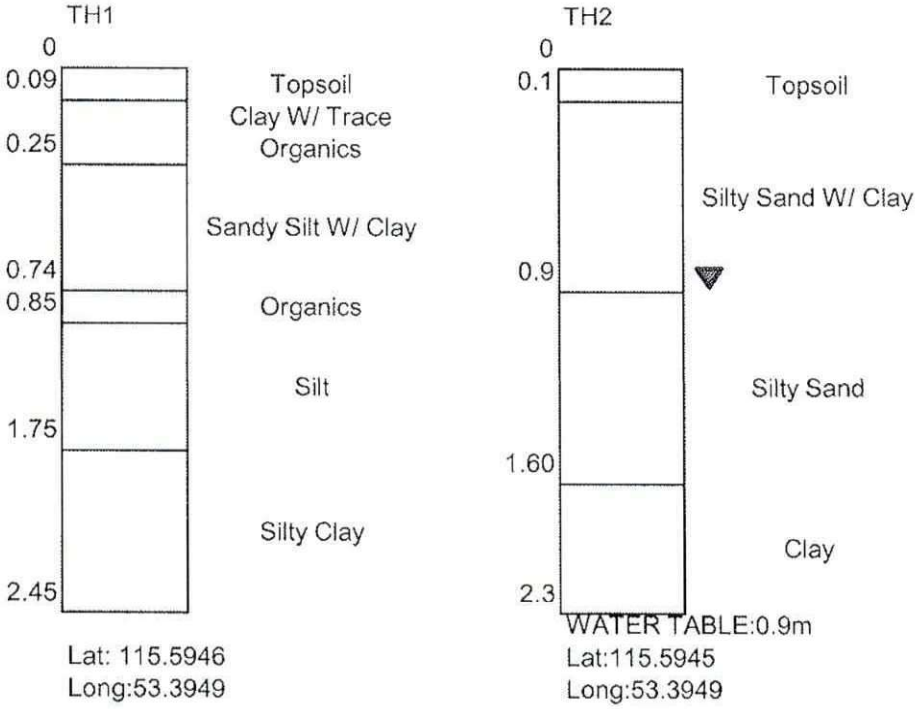
Centennial Industrial Park, 135 – 27 Street, Edson, Alberta, Canada T7E 1N9
Telephone: 780-712-5000 ~ Fax : 780-712-4339 ~ www.wspgroup.com

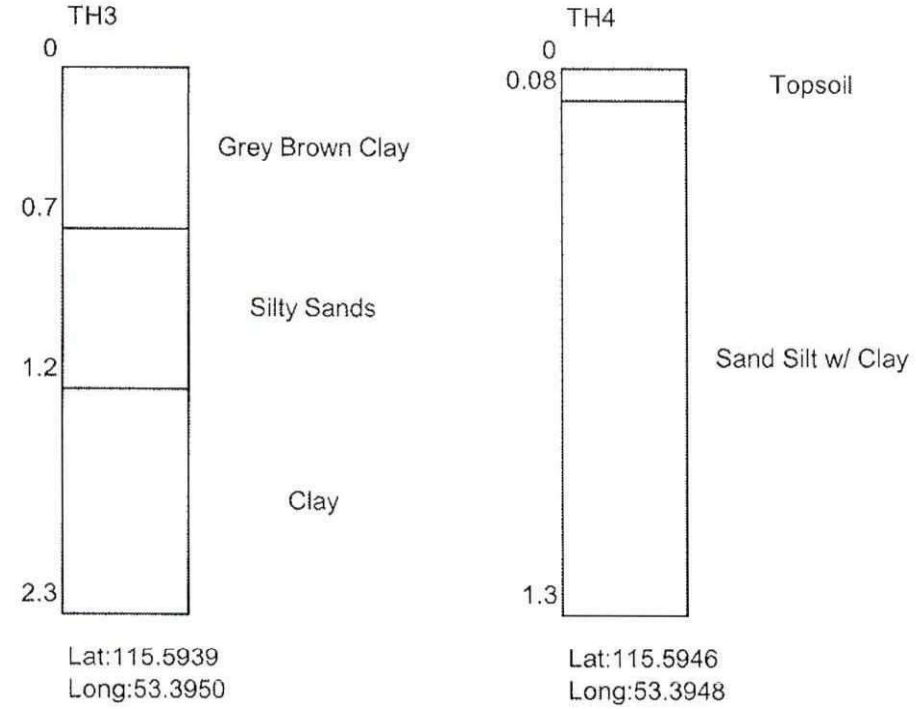
Hamlet of Peers Geotechnical Assessment
Test Hole Location Plan

Figure 1

Amended by Yellowhead County
October 2022 Bylaw 09.22

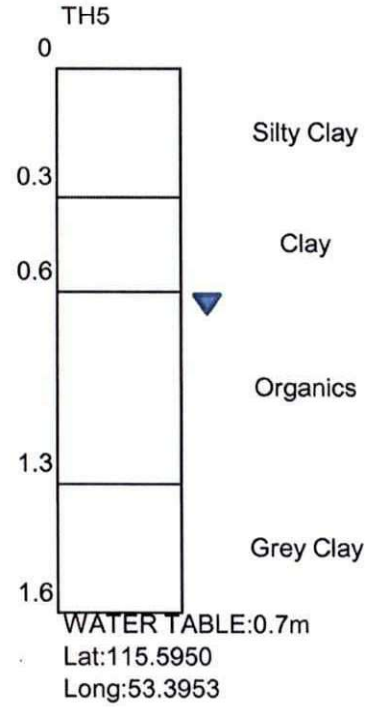
Peers Geotech Investigation
Field Soils Logs - May 9, 2017

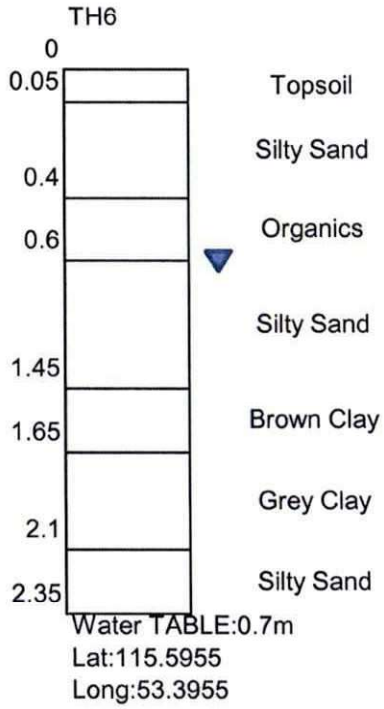


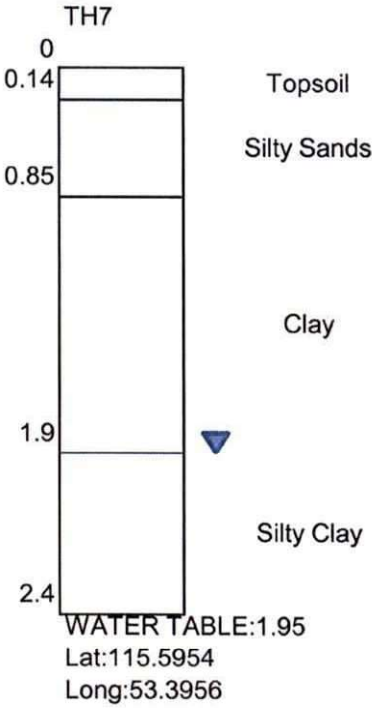


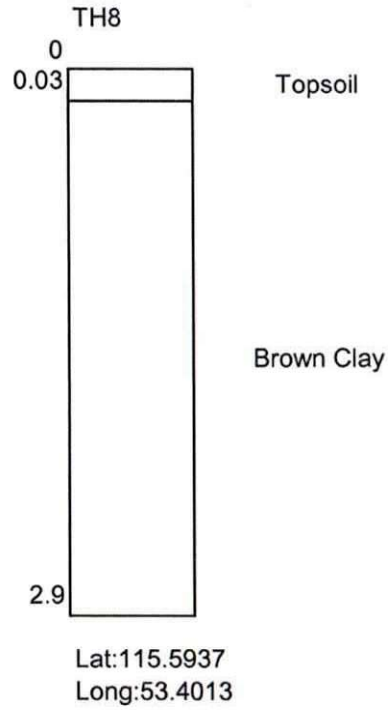
Amended by Yellowhead County
October 2022 Bylaw 09.22

Peers Geotech Investigation
Field Soils Logs - May 9, 2017

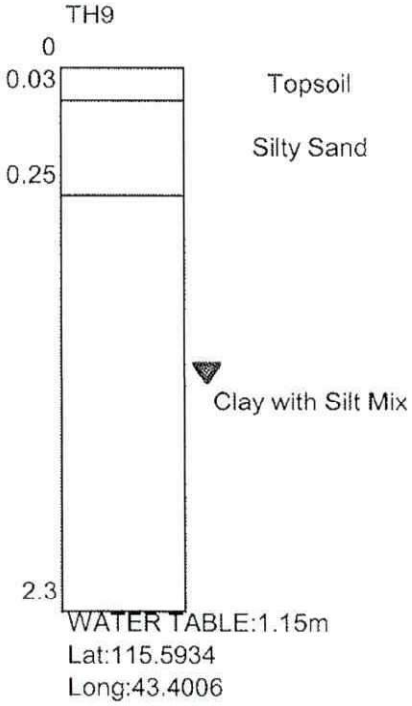


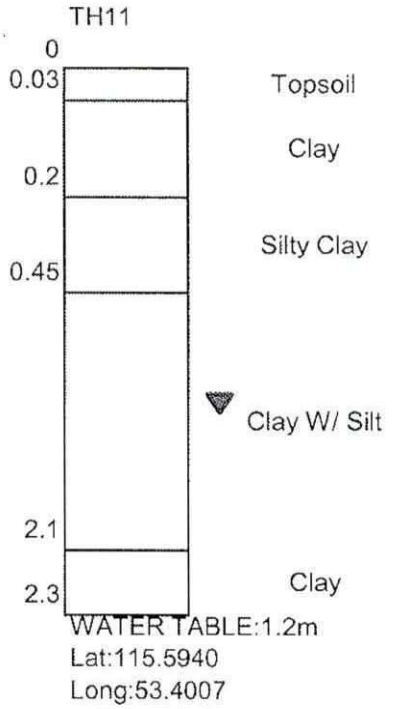


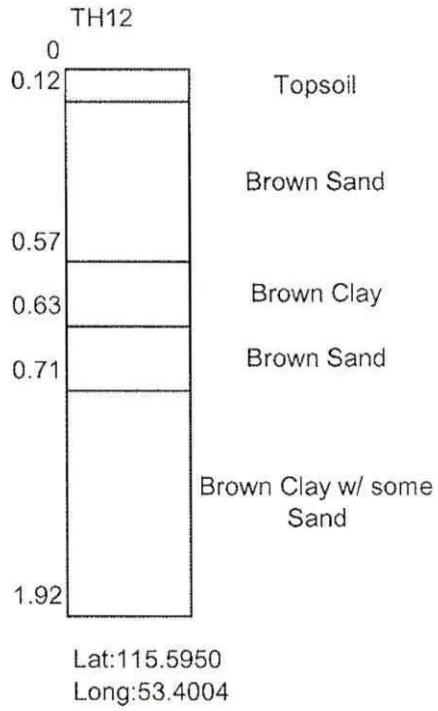




Peers Geotech Investigation
Field Soils Logs - May 9, 2017



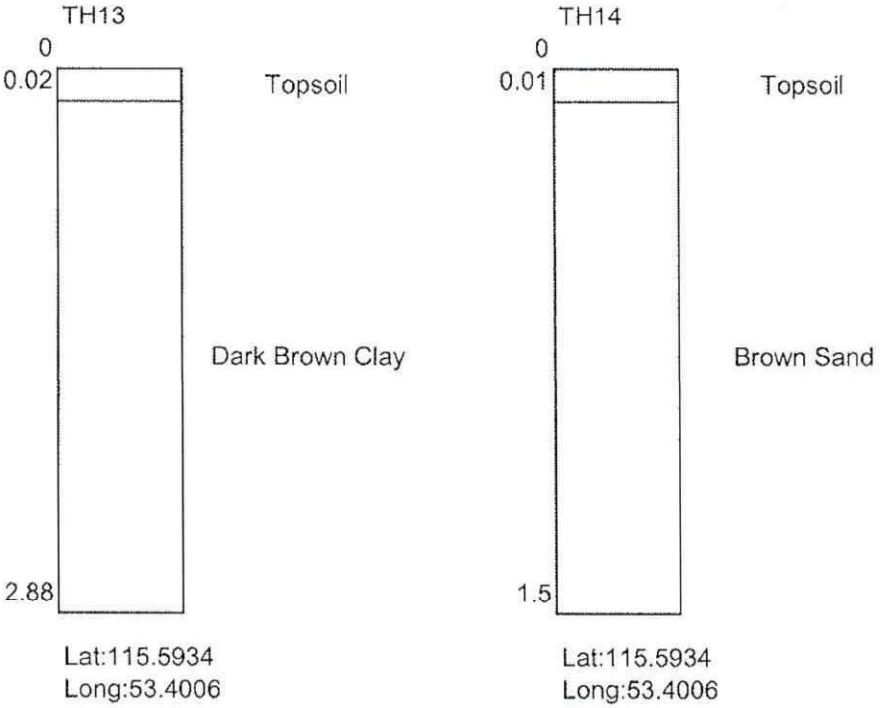




Amended by Yellowhead County
October 2022 Bylaw 09.22

Peers Geotech Investigation

Field Soils Logs



Amended by Yellowhead County
October 2022 Bylaw 09.22

MOISTURE CONTENT

Project From: Peers - Geotech Inv. | Region To: Peers | Project Manager | Contractor

SAMPLE ID										
DATE		19-May	19-May	19-May	19-May	19-May	19-May	19-May	19-May	19-May
UNIT #		TH 9-1	TH 9-2	TH 10-1	TH 10-2	TH 11-1	TH 11-2	TH 11-3	TH 12-1	TH 12-2
SAMPLE SOURCE										
STATION										
LOCATION										
DEPTH BELOW GRADE OR LIFT		0.3	1.5	0.3	1.1	2.2	0.3	1.0	0.3	1.2
MOISTURE CONTENT										
CONTAINER NO.										
A	WT. OF WET SAMPLE + TARE g	419.2	458.0	596.2	460.1	372.1	196.0	497.8	472.3	416.2
B	WT. OF DRY SAMPLE + TARE g	357.3	375.0	486.9	370.1	304.6	161.6	405.2	429.1	334.1
C	TARE g	8.5	8.7	8.9	8.6	8.6	8.7	8.5	8.8	8.8
D	WT. OF WATER A - B g	61.9	83.0	109.3	90.0	67.5	34.4	92.6	43.2	82.1
E	WT. OF DRY SOIL B - C g	348.8	366.3	478.0	361.5	296.0	152.9	396.7	420.3	325.3
F	MOISTURE CONTENT 100D/E	17.7	22.7	22.9	24.9	22.8	22.5	23.3	10.3	25.2

SAMPLE ID										
DATE		19-May	19-May	19-May	19-May					
UNIT #		TH 13-1	TH 13-2	TH 14-1	TH 14-2					
SAMPLE SOURCE										
STATION										
LOCATION										
DEPTH BELOW GRADE OR LIFT		0.6	2.00	0.1	1.3					
MOISTURE CONTENT										
CONTAINER NO.										
A	WT. OF WET SAMPLE + TARE g	467.0	389.2	405.7	468.1					
B	WT. OF DRY SAMPLE + TARE g	385.5	319.2	385.2	430.4					
C	TARE g	8.6	8.3	8.8	9.2					
D	WT. OF WATER A - B g	81.5	70.0	20.5	37.7					
E	WT. OF DRY SOIL B - C g	376.9	310.9	376.4	421.2					
F	MOISTURE CONTENT 100D/E	21.6	22.5	5.4	9.0					

ATTERBERG LIMITS DATA SHEET

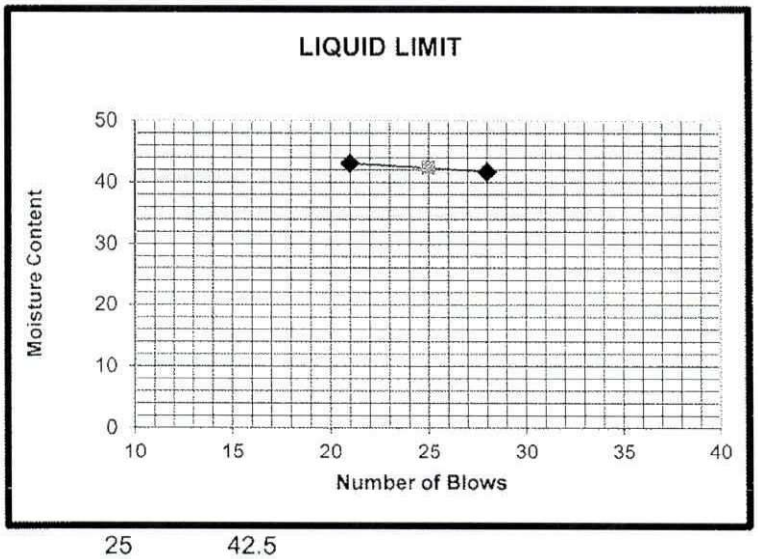
PROJECT	Peers - Geotech Investigation	PROJECT NO.	171-04699-00
CLIENT	Yellowhead County	SAMPLE NO.	TH 3-1
LOCATION	Peers		
DATE SAMPLED / TESTED:	May 9 / May 25, 2017		

PLASTIC LIMITS (ASTM Desigination: D424)

		PLASTIC LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	49.4				
B. WT. OF DRY SAMPLE + PAN	g	42.8				
C. WT. OF WATER	(A-B) g	6.6				
D. WT. OF PAN	g	8.3				
E. WT. OF DRY SAMPLE	(B-D) g	34.5				
F. MOISTURE CONTENT	(100C/E) g	19.1				

LIQUID LIMITS (ASTM Desigination: D423)

		LIQUID LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	61.8	78.5			
B. WT. OF DRY SAMPLE + PAN	g	46.3	57.4			
C. WT. OF WATER	(A-B) g	15.5	21.1			
D. WT. OF PAN	g	9.2	8.5			
E. WT. OF DRY SAMPLE	(B-D) g	37.1	48.9			
F. MOISTURE CONTENT	(100C/E) g	41.8	43.1			
G. NUMBER OF BLOWS		28	21			



25 42.5

PLASTIC LIMIT	(PL) =	19.1
LIQUID LIMIT	(LL) =	42.5
PLASTICITY INDEX	(PI) =	23.3

NOTES:

MAXIMUM DRY DENSITY: 1675
SOILS CLASSIFICATION: CI

Materials Technologist: _____

Amended by Yellowhead County
October 2022 Bylaw 09.22

ATTERBERG LIMITS DATA SHEET

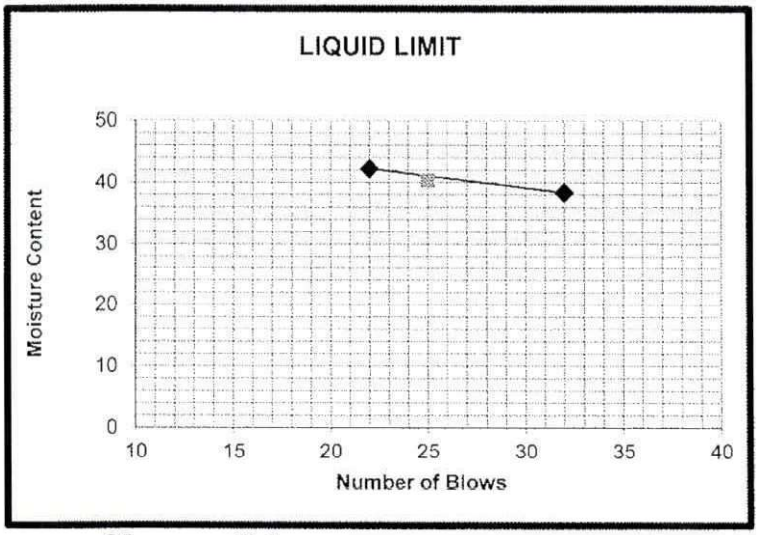
PROJECT	Peers - Geotech Investigation	PROJECT NO.	171-04699-00
CLIENT	Yellowhead County	SAMPLE NO.	TH 3-2
LOCATION	Peers		
DATE SAMPLED / TESTED:	May 9 / May 25, 2017		

PLASTIC LIMITS (ASTM Desigination: D424)

		PLASTIC LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	57.7				
B. WT. OF DRY SAMPLE + PAN	g	49.7				
C. WT. OF WATER	(A-B) g	8.0				
D. WT. OF PAN	g	8.5				
E. WT. OF DRY SAMPLE	(B-D) g	41.2				
F. MOISTURE CONTENT	(100C/E) g	19.4				

LIQUID LIMITS (ASTM Desigination: D423)

		LIQUID LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	46.3	48.3			
B. WT. OF DRY SAMPLE + PAN	g	35.0	37.2			
C. WT. OF WATER	(A-B) g	11.3	11.1			
D. WT. OF PAN	g	8.3	8.3			
E. WT. OF DRY SAMPLE	(B-D) g	26.7	28.9			
F. MOISTURE CONTENT	(100C/E) g	42.3	38.4			
G. NUMBER OF BLOWS		22	32			



25 40.4

PLASTIC LIMIT	(PL) =	19.4
LIQUID LIMIT	(LL) =	40.4
PLASTICITY INDEX	(PI) =	20.9

NOTES:

MAXIMUM DRY DENSITY: 1670
SOILS CLASSIFICATION: CI

Materials Technologist: _____

Amended by Yellowhead County
October 2022 Bylaw 09.22

ATTERBERG LIMITS DATA SHEET

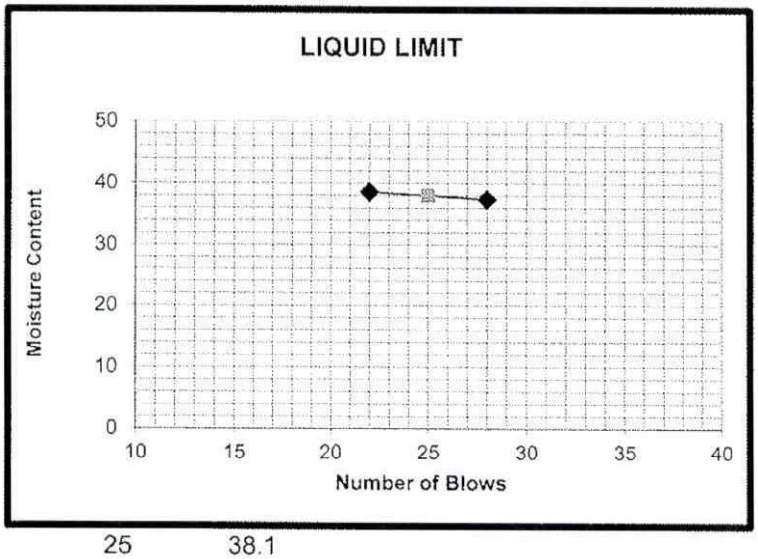
PROJECT	Peers - Geotech Investigation	PROJECT NO.	171-04699-00
CLIENT	Yellowhead County	SAMPLE NO.	TH 5-2
LOCATION	Peers		
DATE SAMPLED / TESTED:	May 9 / May 25, 2017		

PLASTIC LIMITS (ASTM Designation: D424)

		PLASTIC LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	41.8				
B. WT. OF DRY SAMPLE + PAN	g	36.9				
C. WT. OF WATER	(A-B) g	4.9				
D. WT. OF PAN	g	8.9				
E. WT. OF DRY SAMPLE	(B-D) g	28.0				
F. MOISTURE CONTENT	(100C/E) g	17.5				

LIQUID LIMITS (ASTM Designation: D423)

		LIQUID LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	38.0	35.0			
B. WT. OF DRY SAMPLE + PAN	g	29.8	27.7			
C. WT. OF WATER	(A-B) g	8.2	7.3			
D. WT. OF PAN	g	8.6	8.2			
E. WT. OF DRY SAMPLE	(B-D) g	21.2	19.5			
F. MOISTURE CONTENT	(100C/E) g	38.7	37.4			
G. NUMBER OF BLOWS		22	28			



25 38.1

PLASTIC LIMIT (PL) =	17.5
LIQUID LIMIT (LL) =	38.1
PLASTICITY INDEX (PI) =	20.6

NOTES:

MAXIMUM DRY DENSITY: 1720
SOILS CLASSIFICATION: CI

Materials Technologist: _____

Amended by Yellowhead County
October 2022 Bylaw 09.22

ATTERBERG LIMITS DATA SHEET

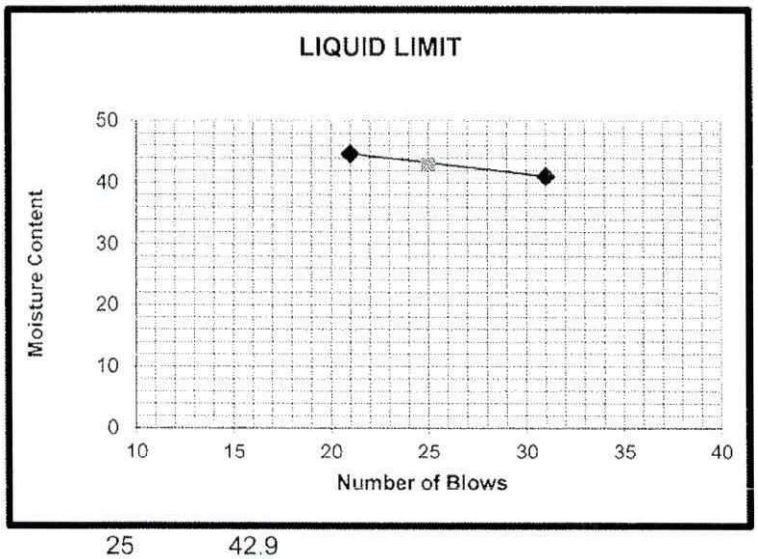
PROJECT	Peers - Geotech Investigation	PROJECT NO.	171-04699-00
CLIENT	Yellowhead County	SAMPLE NO.	TH 6-2
LOCATION	Peers		
DATE SAMPLED / TESTED:	May 9 / May 25, 2017		

PLASTIC LIMITS (ASTM Designation: D424)

		PLASTIC LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	60.4				
B. WT. OF DRY SAMPLE + PAN	g	51.8				
C. WT. OF WATER	(A-B) g	8.6				
D. WT. OF PAN	g	8.6				
E. WT. OF DRY SAMPLE	(B-D) g	43.2				
F. MOISTURE CONTENT	(100C/E) g	19.9				

LIQUID LIMITS (ASTM Designation: D423)

		LIQUID LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	55.0	45.9			
B. WT. OF DRY SAMPLE + PAN	g	41.4	34.3			
C. WT. OF WATER	(A-B) g	13.6	11.6			
D. WT. OF PAN	g	8.3	8.4			
E. WT. OF DRY SAMPLE	(B-D) g	33.1	25.9			
F. MOISTURE CONTENT	(100C/E) g	41.1	44.8			
G. NUMBER OF BLOWS		31	21			



25 42.9

PLASTIC LIMIT	(PL) =	19.9
LIQUID LIMIT	(LL) =	42.9
PLASTICITY INDEX	(PI) =	23.0

NOTES:

MAXIMUM DRY DENSITY: 1650
SOILS CLASSIFICATION: CI

Materials Technologist: _____

Amended by Yellowhead County
October 2022 Bylaw 09.22

ATTERBERG LIMITS DATA SHEET

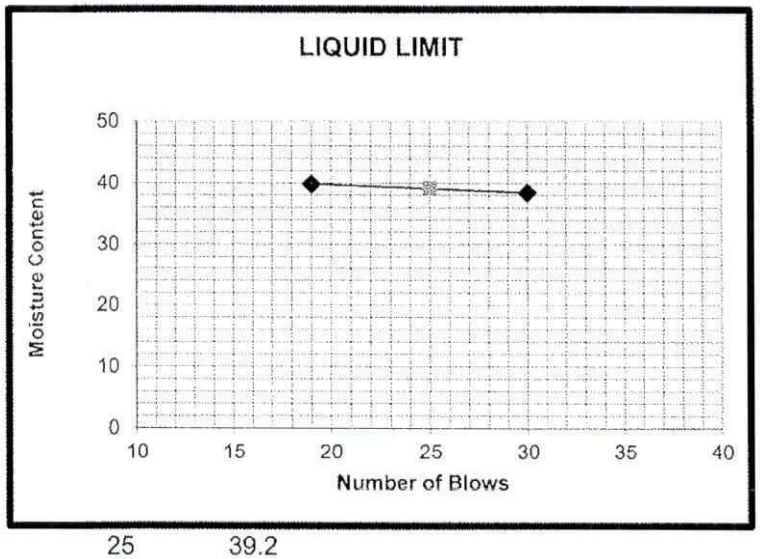
PROJECT	Peers - Geotech Investigation	PROJECT NO.	171-04699-00
CLIENT	Yellowhead County	SAMPLE NO.	TH 7-2
LOCATION	Peers		
DATE SAMPLED / TESTED:	May 9 / May 25, 2017		

PLASTIC LIMITS (ASTM Desigination: D424)

		PLASTIC LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	28.9				
B. WT. OF DRY SAMPLE + PAN	g	26.2				
C. WT. OF WATER	(A-B) g	2.7				
D. WT. OF PAN	g	8.4				
E. WT. OF DRY SAMPLE	(B-D) g	17.8				
F. MOISTURE CONTENT	(100C/E) g	15.2				

LIQUID LIMITS (ASTM Desigination: D423)

		LIQUID LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	63.1	54.0			
B. WT. OF DRY SAMPLE + PAN	g	47.5	41.3			
C. WT. OF WATER	(A-B) g	15.6	12.7			
D. WT. OF PAN	g	8.4	8.3			
E. WT. OF DRY SAMPLE	(B-D) g	39.1	33.0			
F. MOISTURE CONTENT	(100C/E) g	39.9	38.5			
G. NUMBER OF BLOWS		19	30			



25 39.2

PLASTIC LIMIT	(PL) =	15.2
LIQUID LIMIT	(LL) =	39.2
PLASTICITY INDEX	(PI) =	24.0

NOTES:

MAXIMUM DRY DENSITY: 1795
SOILS CLASSIFICATION: CI

Materials Technologist: _____

Amended by Yellowhead County
October 2022 Bylaw 09.22

ATTERBERG LIMITS DATA SHEET

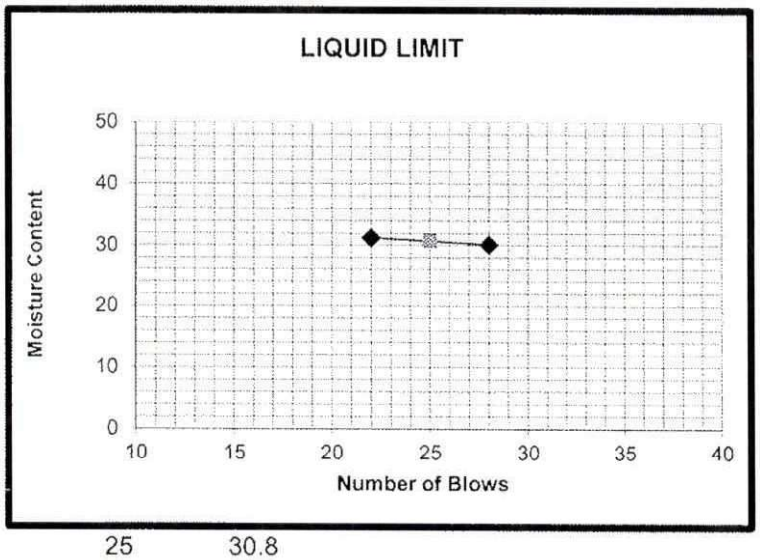
PROJECT	Peers - Geotech Investigation	PROJECT NO.	171-04699-00
CLIENT	Yellowhead County	SAMPLE NO.	TH 7-3
LOCATION	Peers		
DATE SAMPLED / TESTED:	May 9 / May 25, 2017		

PLASTIC LIMITS (ASTM Desigination: D424)

		PLASTIC LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	68.8				
B. WT. OF DRY SAMPLE + PAN	g	60.6				
C. WT. OF WATER	(A-B) g	8.2				
D. WT. OF PAN	g	8.5				
E. WT. OF DRY SAMPLE	(B-D) g	52.1				
F. MOISTURE CONTENT	(100C/E) g	15.7				

LIQUID LIMITS (ASTM Desigination: D423)

		LIQUID LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	76.4	68.4			
B. WT. OF DRY SAMPLE + PAN	g	60.6	54.1			
C. WT. OF WATER	(A-B) g	15.8	14.3			
D. WT. OF PAN	g	8.3	8.4			
E. WT. OF DRY SAMPLE	(B-D) g	52.3	45.7			
F. MOISTURE CONTENT	(100C/E) g	30.2	31.3			
G. NUMBER OF BLOWS		28	22			



25 30.8

PLASTIC LIMIT	(PL) =	15.7
LIQUID LIMIT	(LL) =	30.8
PLASTICITY INDEX	(PI) =	15.0

NOTES:

MAXIMUM DRY DENSITY: 1775
SOILS CLASSIFICATION: CI

Materials Technologist: _____

Amended by Yellowhead County
October 2022 Bylaw 09.22

ATTERBERG LIMITS DATA SHEET

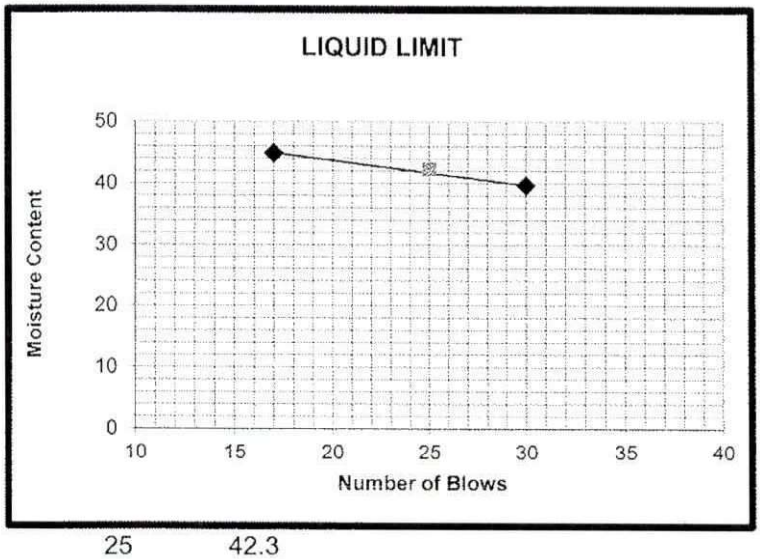
PROJECT	Peers - Geotech Investigation	PROJECT NO.	171-04699-00
CLIENT	Yellowhead County	SAMPLE NO.	TH 8-1
LOCATION	Peers		
DATE SAMPLED / TESTED:	May 9 / May 25, 2017		

PLASTIC LIMITS (ASTM Desigination: D424)

		PLASTIC LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	43.1				
B. WT. OF DRY SAMPLE + PAN	g	38.8				
C. WT. OF WATER	(A-B) g	4.3				
D. WT. OF PAN	g	8.4				
E. WT. OF DRY SAMPLE	(B-D) g	30.4				
F. MOISTURE CONTENT	(100C/E) g	14.1				

LIQUID LIMITS (ASTM Desigination: D423)

		LIQUID LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	52.8	46.8			
B. WT. OF DRY SAMPLE + PAN	g	40.2	34.8			
C. WT. OF WATER	(A-B) g	12.6	12.0			
D. WT. OF PAN	g	8.5	8.1			
E. WT. OF DRY SAMPLE	(B-D) g	31.7	26.7			
F. MOISTURE CONTENT	(100C/E) g	39.7	44.9			
G. NUMBER OF BLOWS		30	17			



25 42.3

PLASTIC LIMIT	(PL) =	14.1
LIQUID LIMIT	(LL) =	42.3
PLASTICITY INDEX	(PI) =	28.2

NOTES:

MAXIMUM DRY DENSITY: 1820
SOILS CLASSIFICATION: CI

Materials Technologist: _____

Amended by Yellowhead County
October 2022 Bylaw 09.22

ATTERBERG LIMITS DATA SHEET

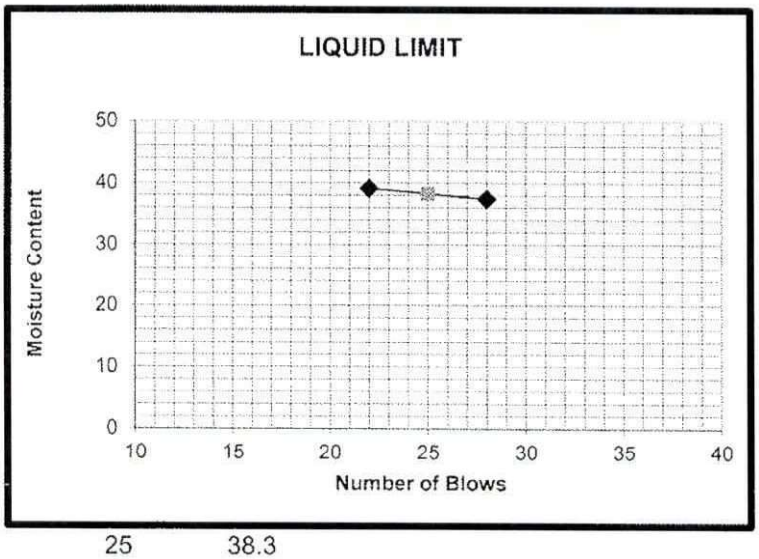
PROJECT	Peers - Geotech Investigation	PROJECT NO.	171-04699-00
CLIENT	Yellowhead County	SAMPLE NO.	TH 11-3
LOCATION	Peers		
DATE SAMPLED / TESTED:	May 9 / May 25, 2017		

PLASTIC LIMITS (ASTM Desigination: D424)

		PLASTIC LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	30.9				
B. WT. OF DRY SAMPLE + PAN	g	27.9				
C. WT. OF WATER	(A-B) g	3.0				
D. WT. OF PAN	g	8.4				
E. WT. OF DRY SAMPLE	(B-D) g	19.5				
F. MOISTURE CONTENT	(100C/E) g	15.4				

LIQUID LIMITS (ASTM Desigination: D423)

		LIQUID LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	49.6	43.9			
B. WT. OF DRY SAMPLE + PAN	g	38.0	34.2			
C. WT. OF WATER	(A-B) g	11.6	9.7			
D. WT. OF PAN	g	8.4	8.3			
E. WT. OF DRY SAMPLE	(B-D) g	29.6	25.9			
F. MOISTURE CONTENT	(100C/E) g	39.2	37.5			
G. NUMBER OF BLOWS		22	28			



25 38.3

PLASTIC LIMIT (PL) =	15.4
LIQUID LIMIT (LL) =	38.3
PLASTICITY INDEX (PI) =	22.9

NOTES:

MAXIMUM DRY DENSITY: 1790
SOILS CLASSIFICATION: CI

Materials Technologist: _____

Amended by Yellowhead County
October 2022 Bylaw 09.22

ATTERBERG LIMITS DATA SHEET

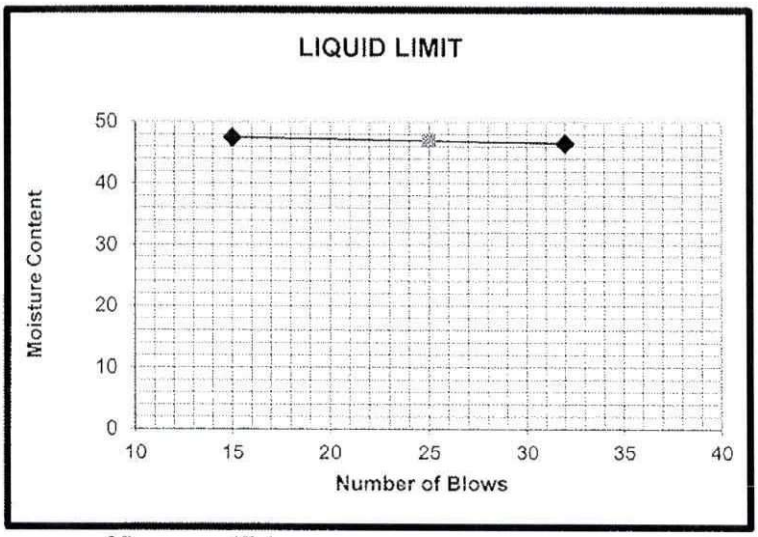
PROJECT	Peers - Geotech Investigation	PROJECT NO.	171-04699-00
CLIENT	Yellowhead County	SAMPLE NO.	TH 12-2
LOCATION	Peers		
DATE SAMPLED / TESTED:	May 9 / May 25, 2017		

PLASTIC LIMITS (ASTM Desigination: D424)

		PLASTIC LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	34.6				
B. WT. OF DRY SAMPLE + PAN	g	30.7				
C. WT. OF WATER	(A-B) g	3.9				
D. WT. OF PAN	g	8.1				
E. WT. OF DRY SAMPLE	(B-D) g	22.6				
F. MOISTURE CONTENT	(100C/E) g	17.3				

LIQUID LIMITS (ASTM Desigination: D423)

		LIQUID LIMIT				
		1	2	3	4	5
PAN NUMBER						
A. WT. OF WET SAMPLE + PAN	g	39.0	33.1			
B. WT. OF DRY SAMPLE + PAN	g	29.4	25.3			
C. WT. OF WATER	(A-B) g	9.6	7.8			
D. WT. OF PAN	g	8.8	8.9			
E. WT. OF DRY SAMPLE	(B-D) g	20.6	16.4			
F. MOISTURE CONTENT	(100C/E) g	46.6	47.6			
G. NUMBER OF BLOWS		32	15			



25 47.1

PLASTIC LIMIT (PL) =	17.3
LIQUID LIMIT (LL) =	47.1
PLASTICITY INDEX (PI) =	29.8

NOTES:

MAXIMUM DRY DENSITY: 1725
SOILS CLASSIFICATION: CI

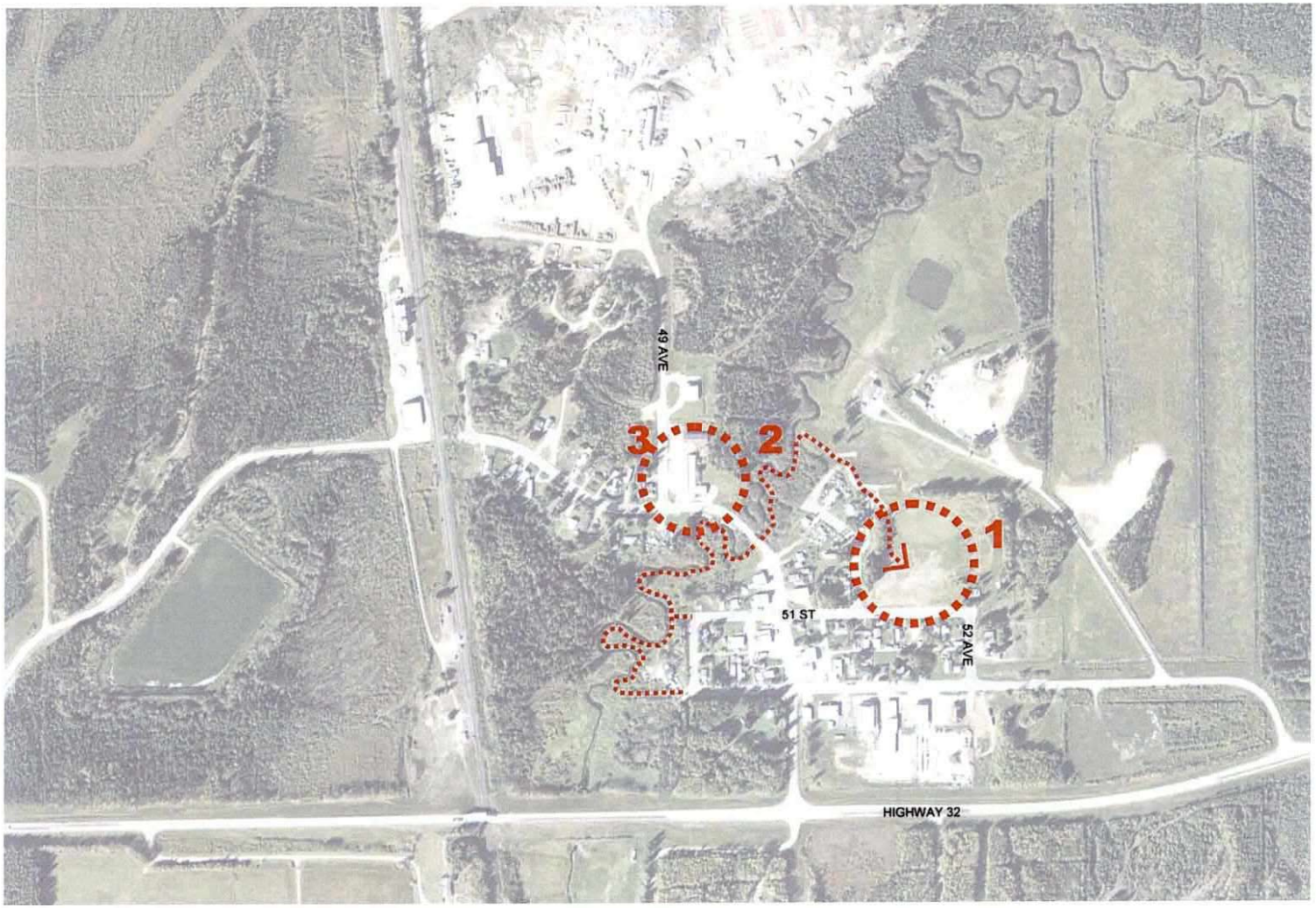
Materials Technologist: _____

Amended by Yellowhead County
October 2022 Bylaw 09.22

Appendix D

Yellowhead County Outdoor Spaces Master Plan 2016 (Excerpts for Peers)

Amended by Yellowhead County
October 2022 Bylaw 09.22



PROPOSED IMPROVEMENTS BY AREA

LISTED IN ORDER OF PRIORITY

1 MULTIPLEX SITE

A) DEVELOP A PLAYING FIELD

B) DEVELOP AN OUTDOOR SNOW BANK RINK

SEE ENLARGEMENT FOR DETAIL

2 TRAIL DEVELOPMENT

A) DEVELOP A LOOPING TRAIL ALONG THE CREEK COMPLETE WITH A TRAILHEAD MAP, AMPLE SIGNAGE AND CREEK CLEAN-UP

3 GILFOILE PARK / OLD RINK SITE

A) PROVIDE FILL TO RAISE GRADES WITHIN THE PARK

B) PROVIDE A GAZEBO / SHELTER

C) ENHANCE ORNAMENTAL PLANTING TO CREATE A BACKDROP FOR PHOTOS

D) FORMALIZE PARKING AREA

E) DEVELOP A TRAIL ACROSS THE PARK

F) EXTEND SIDEWALK TO ADJOIN TRAIL

G) CREATE A PAVED MULTI USE SURFACE TO ACCOMMODATE YOUTH ACTIIVITEIS (BASKETBALL, SKATEPARK COMPONENTS, PUMP TRACK,ETC)

H) ADD ADDITIONAL NATURALIZATION PLANTING TO SEPARATE DIFFERENT USES.

I) DEVELOP A LOOKOUT POINT ADJACENT TO WATERCOURSE,

J) INSTALL SIGN KIOSK

4 OTHER SUGGESTED IMPROVEMENTS (NOT SHOWN ON MAP)

A) DEVELOP A STRATEGY FOR GETTING APPROVAL TO ALLOW CAMPING ON THE MULTIPLEX SITE FOR SPECIAL EVENTS

B) OTHER ACTIVITIES NOTED AS BEING DESIREABLE WERE LAWN BOWLING AND A PUTTING GREEN, BOTH OF WHICH ARE HIGH COST AND HIGH MAINTENANCE FACILITIES)

YELLOWHEAD COUNTY

Parks and Outdoor Spaces Plan

Preliminary Hamlet Concept

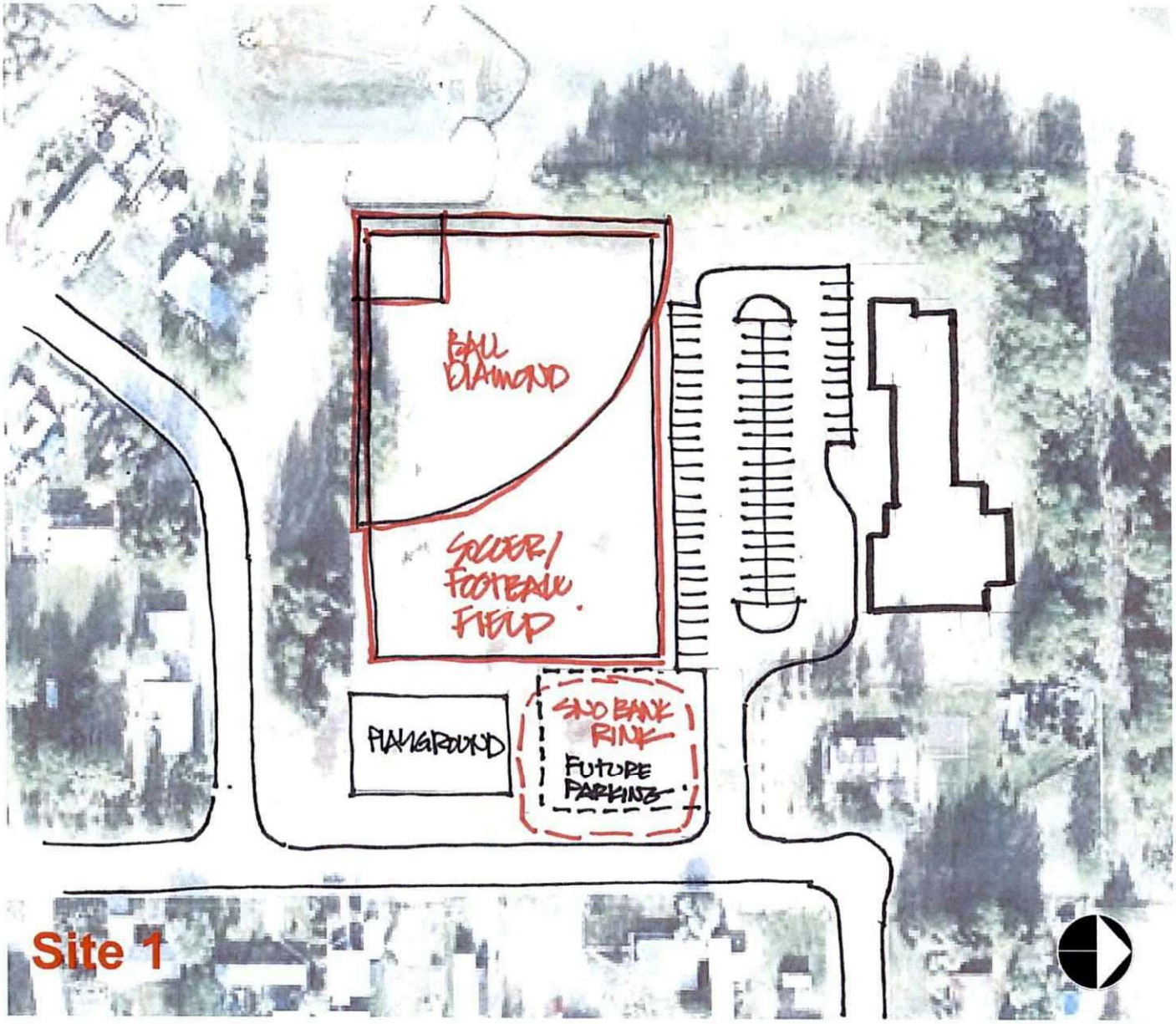
0 125m 250m

SCALE

Peers

EDA

JANUARY 6, 2016



YELLOWHEAD COUNTY

Parks and Outdoor Spaces Plan

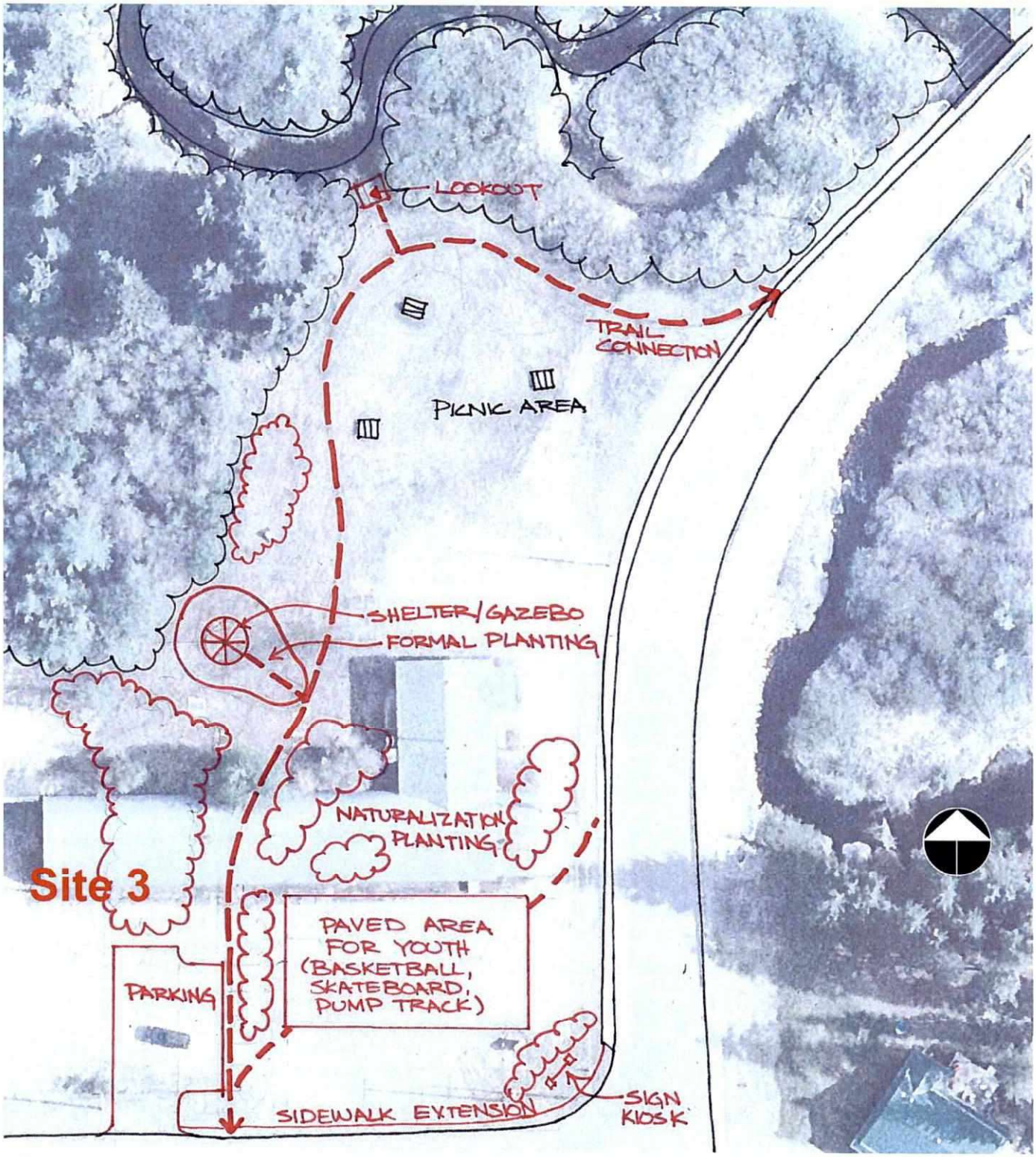
Peers

MULTIPLEX SITE

EDA **JANUARY 2016**

Amended by Yellowhead County
October 2022 Bylaw 09.22

Preliminary Hamlet Concept



YELLOWHEAD COUNTY

Parks and Outdoor Spaces Plan

Peers

GILFOILE OLD RINK SITE

EDA

JANUARY 2016

Amended by Yellowhead County
October 2022 Bylaw 09.22

Peers, Parks And Outdoor Spaces Plan – Plan Excerpts 2016 (EDA Collaborative)

Peers Policies

- "Support the implementation of the Land Use Concept as included in the Peers Area Structure Plan."
- "Encourage residential, hamlet commercial, tourism/recreation/highway commercial, and industrial subdivision and development in Peers."
- "Sustain and enhance the level of community services and facilities in and around Peers."
- "Consider undertaking a study of January Creek to delineate or confirm its 1:100 year floodplain."

Peers Area Structure Plan (2007)

- County will "actively promote and encourage developments, events and recreational/cultural activities that, while enhancing a sense of pride, can generate lasting and economic activity and benefit".

Online survey Peers and Area: Respondents were most satisfied with the McLeod Valley Recreation Grounds' riding area (100%), the Multiplex playground, McLeod Valley Recreation Grounds' ball diamond (77.5%). Conversely respondents were dissatisfied with the Fulham school playground (66.7%) and Gilfoile Park (62.5%).

4.7 Short to Mid Term Recommendations Peers

Residents in attendance at the open houses in Peers expressed the desire to have facilities for all age groups including seniors and people with disabilities. More specific recommendations for outdoor space development are as follows.

Multiplex Site

- Install a pump track. Spontaneous use activities for youth were noted in the preliminary open house as being desirable as youth currently often play in the streets. Of particular interest to the community was a pump track. It is therefore recommended that a pump track be developed at the multiplex site.
- Develop a level playing area. The general consensus at the open houses was that a formal sports field is not desired at the Multiplex site; however a level open playing surface is generally desired by open house respondents.
- Develop a snowbank rink. A snowbank rink at the Multiplex site is recommended to provide a relatively low cost source of entertainment within the community.
- Playground landscaping. Landscaping is recommended to improve user experience and aesthetic around the playground, recognizing the need to preserve views in and out of the playground. Suggested improvements include

new picnic tables, benches and waste receptacle(s) in addition to planting beds containing edible plants (raspberries, Evans Cherry tree, etc.)

Mid to Long Term Recommendations

Gilfoile Park/Old Curling Rink Site

The online survey results revealed that respondents (62.5%) were dissatisfied with Gilfoile Park. The general consensus at the two open houses were that the park should be beautified and maintained for primarily passive use, and active use should occur at the multiplex site. In keeping with the comments received at the open houses, it is recommended that mid to long term development includes the following features:

Provide fill to raise grades within the park. Fill was suggested by residents as being required to create a higher, more level surface.

- Install a gazebo/shelter. The intent is for the gazebo/shelter to provide a source of shade, accommodate special events, and serve as a backdrop for pictures.
- Plant ornamental plant material. It is recommended that ornamental plants be installed to enhance the scenic quality of the site and serve as a backdrop for wedding and other special event photographs.
- Improve pedestrian and vehicular access through paving. Recommended paving initiatives include the formalization of a small granular parking area within the park to accommodate small special events and serve as trailhead. Similarly, it is suggested that a granular trail be developed through the park as part of the overall trail system development, with a lookout and pedestrian bridge to cross the creek. Lastly the extension of the sidewalk is recommended to adjoin the parking lot and granular trail.
- Install as sign kiosk. The purpose of the sign kiosk would be to provide tourism / interpretive information as well as trail information.
- Naturalize a portion of the site with native plant material. Naturalization is recommended to enhance the visual appearance of the site/screen parking lot, reduce maintenance, and to enhance the diversity of the site.

Figure 35: Gilfoile Park Existing Conditions

Trail Development

- Develop a trail system along the Creek. The development of a looped trail system along the creek was recognized at both public open houses as being desired. It is recommended that a trail system be develop to this end including viewing areas, trail information signage, and a small pedestrian bridge to cross the Creek at Gilfoile Park. As part of this development, it is also recommended that beautification occurs along the banks of the creek.

Figure 36: Creek in Peers

Bridge and viewpoint across creek. A small pedestrian bridge to cross the Creek is recommended along with the development of a viewpoint.

Peers Project Charter
Item* Recommendations - Short to Mid Term Budget
MULTIPLEX SITE
1 Develop a level playing area $3,000
2 Develop an outdoor snow bank rink $5,000
3 Install a pump track $160,000
4 Playground Landscaping $28,000

Recommendations - Mid to Long Term
GILFOILE PARK / OLD CURLING RINK SITE
4 Provide fill to raise grades within the park $2,500
5 Install a gazebo / shelter $20,000
6 Plant ornamental material $7,500
7 Improve pedestrian and vehicular access through paving $110,000
8 Install a sign kiosk $5,000
9 Naturalize a portion of the site with native plant material $15,000

TRAIL DEVELOPMENT
10 Develop a trail system along the creek $85,000

11 Bridge and viewpoint across creek $50,000

SIGNAGE
10 Develop and implement a community signage strategy $40,000

Other Suggestions

MULTIPLEX SITE
13 Develop a strategy for getting approval to allow camping on the multiplex site for special events
14 Provide Lawn bowling
15 Provide a putting Green
16 Develop a spray park

GILFOILE PARK
17 Develop a community garden at Gilfoile Park

TRAIL DEVELOPMENT
18 Install benches between Gilfoile Park and Main Street
* Note: Items are not listed in order of priority beyond "Short to Mid Term" and "Mid to Long Term"

Next Steps

As described in Chapter 4, several initiatives are recommended for each of Yellowhead County's eight hamlets. The following table summarizes the high level budget estimates for each hamlet and phase of work.

Peers Budget

Short to Mid Term	$ 196,000
Mid to Long Term Total	$ 335,000
	$ 531,000

The proposed open space initiatives identified in the Hamlet Concept Plans and Project Charters are high level recommendations for open development based on feedback received through the community consultation process in addition to the existing conditions review. Further detail design investigation and corresponding refinements to budgetary estimates, will be required prior to implementation. Similarly, four overarching themes were identified as being applicable to most, if not all, communities. These four themes will require further investigation from a planning perspective prior to establishing baseline standards in the case of community signage, trails and youth facilities; and County policies when considering joint use agreements.

APPENDICES

C.6 Peers Initial Open House

An open house was held at the Peers Multiplex August 27, 2015 from 7:00pm - 8:30pm. The following summarizes the comments that were heard.

1. **Youth Activities:** More activities for youth are needed. Currently many youth take to the streets to skateboard or play road hockey. Suggested facilities included a pump track,
2. **Multiplex:** The multiplex will be used for many events. It would be great to have permission to use the site for camping. No additional facilities are desire for camping at this point, simply County permission. Other suggested features of the park include: a tobogganing / ski hill (currently a stockpile of fill at the landfill), soccer field, football field, snowbank rink, putting green, lawn bowling. Park should remain active use.
3. **Old Curling Rink:** The old rink will be torn down therefore site could accommodate new use(s)
4. **Trails and Creek:** Trails are desired adjacent to the creek with viewing areas, small pedestrian bridge(s), and kiosks with maps showing the system. It would be great if the creek could be cleaned up and beautified as well.
5. **Accessibility:** It is important to keep facilities accessible. Popular activities should be located close to roadways and should be barrier free where possible.
6. **Truck Traffic:** There is a lot of debris and noise associated with the logging truck traffic through the Hamlet.
7. **Gilfoile Park:** Fill is needed to raise the grade at Gilfoile Park. Suggested features include a shelter or gazebo with ornamental planting good for pictures or just relaxing, Should remain passive use.
8. **Community Hall:** No plans are in place to relocate the community hall.
9. **Hamlet History:** The gold mining history could be incorporated into the theming of the community. A model of the old dredge's could be displayed. Theming could extend onto street banners and relates to an annual festival. There is also a railway history that relates to the building of the community. The church is a historic building and is managed by the historic society.

E.6 Peers

March 23, 2016 6:00pm-7:00pm Peers Multiplex

In Attendance

- Crystal McNernie, Yellowhead County, Parks and Recreation Supervisor
- Heather Hawkins , Yellowhead County, Parks Coordinator
- Brent Shepherd, Yellowhead County, Planning & Development

Manager

- Kristin Grimard, EDA Collaborative
- Community residents, approx. 6

Discussion Points

- **Multiplex:** Youth facilities (i.e. pump track) should be located at multiplex. Formalized playing fields are not desired, however a flat level grassed multipurpose area is.
- **Trails:** High level trail alignments as proposed are generally acceptable.
- **Old Curling Rink /Gilfoile Park:** Old rink site needs to be cleaned up. Youth facilities are not desired in this park, otherwise concept is generally accepted, with the addition of a bridge to connect to the other side of the creek and a community garden.