

Bylaw 16427

A Bylaw to amend Bylaw 14010, as amended,
the Southeast Area Structure Plan, through an amendment to Bylaw 14010,
being the Charlesworth Neighbourhood Structure Plan

WHEREAS pursuant to the authority granted to it by the Municipal Government Act, on June 30, 2005, the Municipal Council of the City of Edmonton, passed Bylaw 14010, as amended, being the Southeast Area Structure Plan; and

WHEREAS Council found it desirable to amend Bylaw 14010, as amended, the Southeast Area Structure Plan, by adding a new neighbourhood; and

WHEREAS on June 30, 2005, Council adopted the Southeast Neighbourhood One Neighbourhood Structure Plan by passage of Bylaw 14010; and

WHEREAS Council found it desirable to amend Charlesworth Neighbourhood Structure Plan through the passage of Bylaw 14825, 14980 and 15177; and

WHEREAS an application was received by Sustainable Development to amend the Charlesworth Neighbourhood Structure Plan; and

WHEREAS Council considers it desirable to amend the Charlesworth Neighbourhood Structure Plan; and

NOW THEREFORE after due compliance with the relevant provisions of the Municipal Government Act RSA 2000, ch. M-26, as amended, the Municipal Council of the City of Edmonton duly assembled enacts as follows:

1. That Bylaw 14010, as amended, is hereby amended as follows:

- a. deleting the second paragraph of section 1.1 Purpose and replacing it with the following:
“The plan area encompasses approximately 262 hectares and represents one of three neighbourhoods as identified under the Southeast Area Structure Plan (see Figure 1.0 – Location Plan).”;
- b. deleting the first paragraph and four bullet points of section 1.2 Definition of Plan Area and replacing it with the following:
“The Charlesworth NSP is comprised of a number of parcels located in four quarter sections: the southern half of sections 25-51-24-W4 and 26-51-24-W4. The total gross area for the NSP is approximately 262 hectares. As shown on Figure 2.0 – Context Plan, the NSP is defined by the following boundaries:
 - a. Northern Boundary – Anthony Henday Drive / Transportation Utility Corridor (TUC)
 - b. Western Boundary – 66th Street SW
 - c. Eastern Boundary – 34th Street SW
 - d. Southern Boundary – Ellerslie Road (9th Avenue SW)”;
- c. deleting the second and third sentence of paragraph two of section 1.4 Topography and Vegetation and replacing it with the following:
“Two large woodlots, which are identified as SE 130 and SE 133 in the City of Edmonton Inventory of Environmentally Sensitive and Significant Natural Areas, are located in the plan area. SE 130 is situated in the central portion of the plan area and SE 133 is situated in the southeast (see Figure 5.0 – Site Features). These woodlots and a second tree stand have been identified as worthy of retention and will be protected through means such as Municipal Reserve dedication.”;
- d. deleting sentence one of paragraph one of section 1.7 Environmental and Cultural Resources and replacing it with the following:
“The SE 130, SE 132, and SE 133 Natural Areas, as identified in the City of Edmonton’s Inventory of Environmentally Sensitive and Significant Natural Areas (1993), are located in the central and eastern portions of the plan area respectively.”;
- e. adding after sentence four of paragraph one of section 1.7 Environmental and Cultural Resources:
“SE 133 is a poplar woodlot that will be protected through means such as Municipal Reserve Dedication.”;
- f. adding after paragraph two of section 1.7 Environmental and Cultural Resources:

“A Natural Area Management Plan will also be prepared for each Natural Area retained and will need to be submitted as development approaches the Natural Area. The Natural Area Management Plan will establish the management and conservation goals for the Natural Area.”;

- g. adding after paragraph four of section 1.7.1 Phase 1 Environmental Site Assessment:
“A Phase I ESA was completed for SE 1/4 25-51-24-W4 and submitted under separate cover.”;
- h. adding after paragraph five of section 1.7.3 Historical Resources Overview:
“ A Statement of Justification / Historical Resources Overview (SOJ/HRO) was conducted for SE ¼ 25-51-24-W4 in July 2012. The findings indicate that the lands are considered to have low archaeological potential for undisturbed archaeological sites. The remaining uncultivated poorly-drained lands are considered to be marginal lands which are considered to have no archaeological potential.”;
- i. deleting sentence two of paragraph one of section 1.9 Southeast Commercial Market Study and replacing it with the following:
“The results of this study indicate that the proposed commercial site is strongly advantaged given its superior locational attributes relative to the Anthony Henday Drive / 50 Street interchange (i.e. high visibility, access / egress), proximity to a growing high income trade area, and differentiation from other retail conglomerations nearby.”;
- j. deleting within paragraph two of section 2.2 City of Edmonton Municipal Development Plan (MDP) – Plan Edmonton Strategy 1.1.2: “High Speed Transit facilities”;
- k. deleting bullet one of section 2.2 City of Edmonton Municipal Development Plan (MDP) – Plan Edmonton Strategy 1.1.13 and replacing with the following:
“includes transit supportive design (the clustering of commercial and higher density residential land uses around and adjacent to a transit centre) which promotes an alternative to private automobile use.”;
- l. deleting bullet three of section 2.2 City of Edmonton Municipal Development Plan (MDP) – Plan Edmonton Strategy 1.1.13 and replacing with the following:
“includes a commercial node that is planned to function as a major focal point for the community and that is accessible by both transit and pedestrians.”;
- m. deleting sentence one of paragraph one of section 2.2 City of Edmonton Municipal Development Plan (MDP) – Plan Edmonton Strategy 1.3.4 and replacing with the following:

“The development concept established in the Plan locates a Community Commercial node and transit stop along Ellerslie Road, a future six lane divided roadway.”;

- n. deleting sentence two of paragraph two of section 2.2 City of Edmonton Municipal Development Plan (MDP) – Plan Edmonton Strategy 2.3.1 and replacing with the following:

“Focusing on local development intensification, the NSP combines complementary medium and high density residential uses with commercial / retail, institutional and open space opportunities in proximity to transit service.”;

- o. deleting sentence two and three of paragraph two of section 2.4 Edmonton Suburban Neighbourhood Design Principle 15 and replacing with the following:

“The transit route along Ellerslie Road and related facilities (i.e., transit center and station stops) have created an opportunity to establish transit supportive development in Charlesworth. Accordingly, higher residential densities are planned around the major commercial site and within walking distance to a future transit centre located on Ellerslie Road.”;

- p. deleting sentence one of paragraph two of section 2.5 City of Edmonton Housing Mix Guidelines and replacing with the following:

“Charlesworth includes one high density residential site immediately west of the Community Commercial site.”;

- q. deleting subset four of paragraph one of section 3.2 Development Objectives and replacing with the following:

“Establish transit supportive development to the extent possible with the planned development of a transit centre within the Plan area.”;

- r. deleting paragraph one of section 4.0 Development Plan and replacing with the following:

“The following sections describe the development concept for the Charlesworth NSP. The Charlesworth NSP is comprised of 262 hectares and is bound by Anthony Henday Drive (i.e. Transportation Utility Corridor) to the north, 34th Street SW to the east, Ellerslie Road (9 Avenue SW) to the south and 66 Street to the west. These boundaries establish a logical planning unit as shown on Figure 6.0 – Development Concept.”;

- s. deleting sentence one of paragraph two of section 4.1.2 Land Use Concept and replacing with the following:

“Proposed residential densities in Charlesworth NSP result in a net population density of approximately 89 people per net residential hectare.”;

- t. deleting sentence four of paragraph two of section 4.1.2 Land Use Concept Medium-Density Residential (MDR) and replacing with the following:
“Future residents will be within easy walking distance of commercial and retail services, natural open spaces, recreation and education facilities connected by pedestrian connections, and Transit service.”;
- u. deleting sentence two of paragraph two of section 4.1.2 Land Use Concept High-Density Residential (HDR) and replacing with the following:
“Building on the locational strengths of this site, HDR has been strategically designed and located having regard for neighbourhood walkability and access to open spaces, community facilities, commercial services, employment opportunities, and transit facilities.”;
- v. deleting sentence one of paragraph three of section 4.1.2 Land Use Concept High-Density Residential (HDR) and replacing with the following:
“Separated from LDR within the neighbourhood, this site is within 200 m of the transit centre, the immediate vicinity of pedestrian walkways, central SWMF and natural area amenities.”;
- w. deleting paragraph seven of section 4.2.1 Intent and replacing with the following:
“Provide convenient shared use paths and routes either dedicated or along (private or public) boulevards to commercial areas and Transit service.”;
- x. deleting sentence two of paragraph two of section 4.2.2 Land Use Concept and replacing with the following:
“This commercial area is considered integral to the development of the community given its proximity (i.e. walking distance) to medium and high density residential, standard and transit service, integrated Transit Stops, and vehicle access to Ellerslie Road, 50 Street and Anthony Henday Drive.”;
- y. deleting sentence three of paragraph two of section 4.2.2 Land Use Concept Community Commercial and replacing with the following:
“A future transit centre along Ellerslie Road to the south and pedestrian connection to the east of the commercial site will provide local residents convenient accessibility options.”;
- z. deleting paragraph eight of section 4.2.2 Land Use Concept Community Commercial Building Design and replacing with the following:
“Where possible, orient building entrances to Transit provided along Ellerslie Road.”;

- aa. deleting paragraph two of section 4.2.2 Land Use Concept Community Commercial Parking and Circulation and replacing with the following:
“Create pedestrian linkages that accommodate and encourage pedestrian movement between buildings within the site as well as between the site and the surrounding community and Transit.”;
- bb. adding new paragraph after paragraph four of section 4.3.2 Land Use Concept Parks and Open Space:
“A remnant woodlot, identified as Natural Area SE 133 in located in southeast portion of the neighbourhood. This poplar woodlot has been assessed as healthy and sustainable and will be protected through means such as Municipal Reserve Dedication.”;
- cc. deleting sentence one of paragraph one of section 4.6 Stormwater Management Facilities and replacing with the following:
“Seven stormwater management facilities will be located in the Neighbourhood; two larger facilities are located in the central-west portion of the NSP and one in the northeast.”;
- dd. adding new paragraph after paragraph four of section 4.6 Stormwater Management Facilities:
“The SWMF in the northeast portion of the neighbourhood has been designed around the existing site contours that historically allowed drainage through the site.”;
- ee. deleting paragraph one of section 4.7.2 Land Use Concept and replacing with the following:
“The arterial and collector transportation network has been developed to accommodate external / internal neighbourhood traffic flow demands in both a north-south (34, 50, and 66 Street) and east-west direction (Ellerslie Road) in accordance with City of Edmonton guidelines and standards. The two collector roadway systems will provide direct access to Ellerslie Road, 34 Street, 50 Street (highway connector) and 66 Street and will accommodate a substantial portion of the internal traffic volume being the main thoroughfare within the neighbourhood.”;
- ff. deleting within section 4.7.2 Land Use Concept Standard the title: High Speed Transit and replacing with:
“Public Transportation”;
- gg. deleting sentence two and three of paragraph one of section 4.7.2 Land Use Concept Standard and High Speed Transit and replacing with the following:

“Access to transit services will be provided. In addition, a transit centre will be located in southeast portion of the neighbourhood and will complement the Community Commercial development. A combined Park and Ride and transit centre is planned for a location east of 50 Street and south of Ellerslie Road.”;

- hh. deleting paragraph two of section 4.7.2 Land Use Concept Standard and High Speed Transit and replacing with the following:

“Appropriate screen fencing / berming and other noise attenuation measures may be implemented for residential areas backing onto major roadway facilities (e.g. Anthony Henday Drive / Transportation Utility Corridor, Ellerslie Road, 66 Street, 50 Street, and 34 Street).”;
- ii. deleting sentence two of paragraph one of section 5.3 Stormwater Drainage and replacing with the following:

“Five SWMFs are proposed on the east side of 50 Street; four to service the MTRS and one to service the residential development immediately east of the MTRS (see Figure 9.0 – Stormwater Servicing System).”;
- jj. deleting paragraph one of section 6.2 Roadway Network and replacing with the following:

“As shown on Figure 8.0 – Transportation Network, the Charlesworth NSP maintains a high level of accessibility with proximity to Ellerslie Road, 34 Street, 50 Street, 66 Street and Anthony Henday Drive.”;
- kk. deleting sentence two of paragraph two of section 6.2 Roadway Network and replacing with the following:

“A noise attenuation needs assessment for residential development adjacent to Anthony Henday Drive, Ellerslie Road, 66 Street, and 50 Street is required in accordance with the City of Edmonton’s Urban Traffic Noise Policy.”;
- ll. deleting sentence two and three of paragraph one of section 6.2.1 Arterial Roadways and replacing with the following:

“Ellerslie Road, 66 Street, 50 Street, and 34 Street are the designated arterial roadways serving the Charlesworth plan area. These roadways accommodate traffic in a north-south (66 Street, 50 Street, and 34 Street) and east-west (Ellerslie Road) direction providing the necessary access to adjacent transportation routes (Anthony Henday, Highway 2).”;
- mm. deleting sentence two and three of paragraph one of section 6.2.2 Collector Roadways and replacing with the following:

- “The west portion of Charlesworth provides a looping collector roadway to accommodate internal traffic demands. Two additional collectors provide an east-west linkage from 66 Street and 50 Streets to the looping internal collector and Ellerslie Road, and a third collector connects 34 Street with Ellerslie Road in the east portion of the neighbourhood.”;
- nn. deleting sentence two of paragraph one of section 6.3 Roadway Staging and replacing with the following:
- “Upgrades to 34 Street, 50 Street, 66 Street, and Ellerslie Road and any other further improvements will be necessary as development proceeds and traffic demands increase in the Charlesworth NSP.”;
- oo. deleting paragraph three of section 6.4 Transit Service in its entirety and replacing with the following:
- “Immediately southeast of Charlesworth at 50 Street and Ellerslie Road a Park and Ride transit centre is planned. Attention to the future design of this facility will increase the probability of community usage and encourage alternative transportation options as part of the broader walkable community concept.”;
- pp. deleting sentence one, two, and three of paragraph one of section 6.7 Truck Routes and replacing with the following: “Existing 24 hour truck routes will be maintained along Ellerslie Road and 50 Street. 50 Street is a restricted truck route north of Ellerslie Road permitting truck traffic between 07:00 - 22:00 Hours Monday to Saturday.”;
- qq. deleting the table entitled “Table 1 Land Ownership” and substituting therefore the following:

TABLE 1 – Land Ownership Charlesworth Neighbourhood Structure Plan			
	Titled Owner	Legal Description	Area (ha)
1	Private Corporation	Block D, Plan 5347 RS	31.6
2	Private Corporation	Lot 2, Plan 782 2211	29.83
3	Private (Private Corporation)*	Lot 1, Plan 782 2211	28.20
4	Private Corporation	Block C, Plan 1256 MC	10.66
5	Private (Private Corporation)*	Lot 1, Plan 842 1798	10.2
6	Private (Private Corporation)*	Block E, Plan 177 TR	9.44
7	Private Institution	Lot 2, Plan 842 1798	2.91
8	Private (Private Corporation)*	Lot 3, Plan 812 0945	1.39
9	Private	Lot A, Plan 3274 KS	1.21
10	Private (Private Corporation)*	Lot 4, Plan 812 0945	1.21

11	Private Corporation	Lot 5, Plan 822 1657	1.19
12	Private Corporation	SE 1/4 25-51-24-W4	29.5
13	Private Corporation	LOT 1, PLAN 9823999	35.19
Special Study Area	Undetermined		
Total			191.84

- rr. deleting the table entitled “Table 2 Phase 1 – Environmental Site Assessments – Bylaw 14980)” and substituting therefore the following:

TABLE 2 Phase I – Environmental Site Assessments		
Land Owner	Location	Comments
Private Corporation	Lot 1, Plan 782 2211 & Lot 3, Plan 9120945	No further study required
Private Corporation	Block E, Plan 177TR	No further study required
Private Corporation	Lot 1, Plan 842 1798	Phase II Required
Private Corporation	Block D, Plan 5347 R.S. & Lot 2, Plan 7823322	Phase II Submitted
City of Edmonton	SW ¼ 25-51-24-W4	Phase I&II Completed
City of Edmonton	SW ¼ 25-51-24-W4	Phase III Completed (2008)
Private Corporation	SE 1/4 25-51-24-W4	Phase I Completed
Private Corporation	Lot 1, Plan 9823999	Phase I Completed

- ss. deleting the statistics entitled “Charlesworth Neighbourhood Structure Plan - Bylaw 15177” and substituting therefore the following:

CHARLESWORTH NEIGHBOURHOOD STRUCTURE PLAN
LAND USE AND POPULATION STATISTICS
BYLAW 16427

	Area (ha)	% of GA
Gross Area	261.83	100%
Environmental Reserve	2.21	0.8%
Major Arterials / Road ROW	9.77	3.7%
Pipeline and Utility ROW	3.09	1.2%
Ellerslie School	8.78	3.4%
		% of GDA
Gross Developable Area	237.98	100%
Community Commercial	13.97	5.9%
Existing Religious Assembly	3.64	1.5%
City Level Park	46.61	19.6%
Institutional / City Level Park	7.95	3.3%
Municipal Reserve Parks	13.50	5.7%
Circulation	29.24	12.3%
Infrastructure / Services	24.10	10.1%
<i>Stormwater Management Facilities</i>	22.93	
<i>Public Utility Lot</i>	1.17	
Mixed Use Business Employment (1.87 * 0.25)	0.47	0.2%
Special Study Area	1.77	0.7%

Total Non-Residential Area	141.25	58.6%
Net Residential Area (NRA)	96.73	40.6%

RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION

Land Use	Area (ha)	Units/ha	Units	% of NRA	People /Unit	Population
Single / Semi-Detached	55.08	25	1,377	40.2%	2.80	3,856
Mixed Residential	29.93	30	898	26.2%	2.80	2,514
Row Housing	1.07	45	48	1.4%	2.80	135
Mixed Use (1.87 * .75)	1.40	90	126	3.7%	1.80	227
Low-Rise / Medium Density Housing	8.16	90	734	21.4%	1.80	1,322
Medium to High Rise Units	1.09	225	245	7.2%	1.50	368
Total	96.73		3,429	100%		8,422

SUSTAINABILITY MEASURES

Population Per Net Hectare (p/nha)						35.4
Dwelling Units Per Net Residential Hectare (du/nrha)						35.4
[Single/Semi-detached] / [Row Housing; Low-rise/Medium Density; Medium to High Rise] Unit Ratio						66% / 34%
Population (%) within 500m of Parkland						100%
Population (%) within 400m of Transit Service						100%
Population (%) within 600m of Commercial Service						0.0
Presence/Loss of Natural Areas			Land		Water	
Protected as Environmental Reserve			2.2		0.0	
Conserved as Naturalized Municipal Reserve (ha)			2.7		0.0	
Protected through other means (ha)			0.0		0.0	
Lost to Development (ha)			0.0		0.0	

STUDENT GENERATION STATISTICS

Level	Public	Separate
Elementary	476	238
Junior High School	238	119
Senior High School	238	119
Total	952	476

tt. adding a new table to Appendix – Land Use and Demographic Profile:

**CHARLESWORTH AMENDMENT AREAS
LAND USE AND POPULATION STATISTICS**

	Area (ha)	% of GA
Gross Area	64.67	100%
Environmental Reserve	2.21	3.4%
Arterial Road ROW	1.71	2.6%
Gross Developable Area	60.75	100%
Municipal Reserve	6.10	10.0%
<i>Urban Village Park</i>	3.60	
<i>Natural Area</i>	2.50	
Circulation	12.15	20.0%
Infrastructure / Services	7.99	13.2%
<i>Stormwater Management Facilities</i>	6.82	
<i>Public Utility Lot</i>	1.17	
Mixed Use Business Employment (@ 25%)	0.47	0.8%
Special Study Area	1.77	2.9%
Total Non-Residential Area	28.48	44.0%
Net Residential Area (NRA)	32.27	53.1%

RESIDENTIAL LAND USE, DWELLING UNIT COUNT AND POPULATION						
Land Use	Area (ha)	Units/ha	Units	% of NRA	People/ Unit	Population
Mixed Residential	29.93	30	898	81%	2.80	2,514
Mixed Use (@ 75%)	1.40	90	126	11%	1.80	227
Low-rise / Multi / Medium Units		0.94	90	85	8%	1.80
Total	32.27		1,109	100%		2,894

SUSTAINABILITY MEASURES						
Population Per Net Hectare (p/nha)						47.6
Dwelling Units Per Net Residential Hectare (du/nrha)						34.4
[Single/Semi-detached] / [Row Housing; Low-rise/Medium Density; Medium to High Rise] Unit Ratio						76% / 24%
Population (%) within 500m of Parkland						100%
Population (%) within 400m of Transit Service						100%
Population (%) within 600m of Commercial Service						0.0
Presence/Loss of Natural Areas				Land	Water	
Protected as Environmental Reserve				2.2	0.0	
Conserved as Naturalized Municipal Reserve (ha)				2.7	0.0	
Protected through other means (ha)				0.0	0.0	
Lost to Development (ha)				0.0	0.0	


STUDENT GENERATION STATISTICS		
Level	Public	Separate
Elementary	122	61
Junior High School	61	30
Senior High School	61	30
Total	243	122

- uu. adding new section “8.0 Charlesworth Amendment Area Policy” attached hereto as Schedule “A” and forming part of this bylaw;
- vv. deleting the Map entitled “Bylaw 15177 - Charlesworth Neighbourhood Structure Plan”; and substituting therefore the Map entitled “Bylaw 16427 - Amendment to Charlesworth Neighbourhood Structure Plan ” attached hereto as Schedule “B” and forming part of this Bylaw;
- ww. deleting “Figure 1.0 – Location Plan” and substituting therefore “Figure 1.0 – Location Plan” attached hereto as Schedule “C” and forming part of this part of this Bylaw;
- xx. deleting “Figure 2.0 – Context Plan” and substituting therefore “Figure 2.0 – Context Plan” attached hereto as Schedule “D” and forming part of this part of this Bylaw;
- yy. deleting “Figure 3.0 – Ownership Plan” and substituting therefore “Figure 3.0 – Ownership Plan” attached hereto as Schedule “E” and forming part of this part of this Bylaw;
- zz. deleting “Figure 4.0 – Site Contours” and substituting therefore “Figure 4.0 – Site Contours” attached hereto as Schedule “F” and forming part of this part of this Bylaw;

- aaa. deleting “Figure 5.0 – Site Features” and substituting therefore “Figure 5.0 – Site Features” attached hereto as Schedule “G” and forming part of this part of this Bylaw;
- bbb. deleting “Figure 6.0 – Development Concept” and substituting therefore “Figure 6.0 - Development Concept” attached hereto as Schedule “H” and forming part of this part of this Bylaw;
- ccc. deleting “Figure 7.0 – Pedestrian Network System” and substituting therefore “Figure 7.0 – Pedestrian Network System” attached hereto as Schedule “I” and forming part of this part of this Bylaw;
- ddd. deleting “Figure 8.0 – Sanitary Servicing System” and substituting therefore “Figure 8.0 – Sanitary Servicing System” attached hereto as Schedule “J” and forming part of this part of this Bylaw;
- eee. deleting “Figure 9.0 – Stormwater Servicing System” and substituting therefore “Figure 9.0 – Stormwater Servicing System” attached hereto as Schedule “K” and forming part of this part of this Bylaw;
- fff. deleting “Figure 10.0 – Water Servicing System” and substituting therefore “Figure 10.0 – Water Servicing System” attached hereto as Schedule “L” and forming part of this part of this Bylaw;
- ggg. deleting “Figure 11.0 – Transportation Network” and substituting therefore “Figure 11.0 – Transportation Network” attached hereto as Schedule “M” and forming part of this part of this Bylaw; and
- hhh. deleting “Figure 12.0 – Staging Plan” and substituting therefore “Figure 12.0 – Staging Plan” attached hereto as Schedule “N” and forming part of this part of this Bylaw.

READ a first time this	2 nd	day of	July	, A. D. 2013;
READ a second time this	2 nd	day of	July	, A. D. 2013;
READ a third time this	18 th	day of	September	, A. D. 2013;
SIGNED and PASSED this	18 th	day of	September	, A. D. 2013.

THE CITY OF EDMONTON



 MAYOR



 CITY CLERK

8.0 Charlesworth Amendment Area Policy

This policy is to apply specifically and solely to the amendment area, referred to throughout this section as the 'Charlesworth amendment area.' This area includes SE 5-51-24-W4— and described as the quarter section east of the Ivor Dent Sports Park, west of 34 Street SW, and north of Ellerslie Road SW.

The policy statements and implementation strategies are intended to supplement existing objectives and policy statements in the approved Charlesworth NSP and strengthen the quality of development in the amendment area.

8.1.1 Green Development

One of the overall objectives of the Charlesworth amendment area is the development of a sustainable community through the promotion of green building techniques and the preservation of natural ecological features.

Objective 1	NSP Amendment Area Policy	Implementation
<p>Promote sustainable development principles in the planning and design of the Charlesworth amendment area.</p>	<p>Homes and public spaces in the amendment area should incorporate alternative energy and energy efficiency standards to serve as a showcase for sustainable development in Edmonton and the Capital Region.</p>	<p>i) Homebuilders in the amendment area will adhere to a Construction Waste Management Program.</p> <p>The goal of the Construction Waste Management Program is to divert solid waste from the landfill to the greatest extent possible. A designated area of the neighbourhood would contain a variety of bins for recyclable materials. Builders would be required to separate construction waste and deposit it in the respective bins.</p> <p>ii) Homebuilders in the amendment area will adhere to a Green Building Rating System developed and administered by the developer.</p> <p>The green rating system would provide a checklist for builders to incorporate green building principles and energy efficient features into every home. Builders would be required to achieve at least the minimum level of green building.</p> <p>iii) Allow flexibility between the developer, homebuilders and the</p>

		City Administration in regulating the introduction and implementation of alternative designs, techniques and technologies that support ecological processes, cost effectiveness and environmental stewardship in the development of the neighbourhood.
<p>Rationale:</p> <p>The use of alternative development standards will be addressed within the design of the neighbourhood and at the site-specific building level. The plan encourages consultation with the City and affected agencies to explore the use of alternative development standards (i.e. consideration of alternative design and servicing techniques, roadway cross sections or infrastructure provisions that differs from the City of Edmonton standards) as a way of achieving sustainability.</p> <p>Construction waste constitutes a large portion of municipal waste streams. Managing waste on a construction site is a vital component of sustainable building. Specific strategies may include onsite recycling for product packaging and excess materials, and donating excess materials to the ReUse Centre and the Habitat for Humanity ReStore.</p> <p>The actual design and operation of a home can provide many opportunities to make a neighbourhood more energy efficient. The establishment of standards, scales, and scoring for greener developments creates awareness and pride for builders and residents.</p>		

Objective 2	NSP Amendment Area Policy	Implementation
Ensure a compact urban form that uses land responsibly and efficiently.	The neighbourhood shall incorporate and support higher residential densities	Figure 6 – Development Concept and Land Use and Population Statistics illustrate the planned overall density for the NSP that exceeds the minimum density target for Priority Growth Area B of the Capital Region Growth Plan.
<p>Rationale:</p> <p>Compact development increases residential densities, and contributes to increased efficiency in the provision of municipal services, public transit, schools and nearby commercial developments and neighbourhood amenities.</p>		

Objective 3	NSP Amendment Area Policy	Implementation
Encourage naturalized landscaping on public and private lands and low impact development principles in public spaces.	i) Landscaping of parks and open spaces should incorporate native and / or edible plant species where appropriate. ii) Bioswales shall be used to convey	i) Specific species for landscaping on public properties shall be determined between the developer and City Administration at the time of review of landscaping plans and as part of the engineering drawing

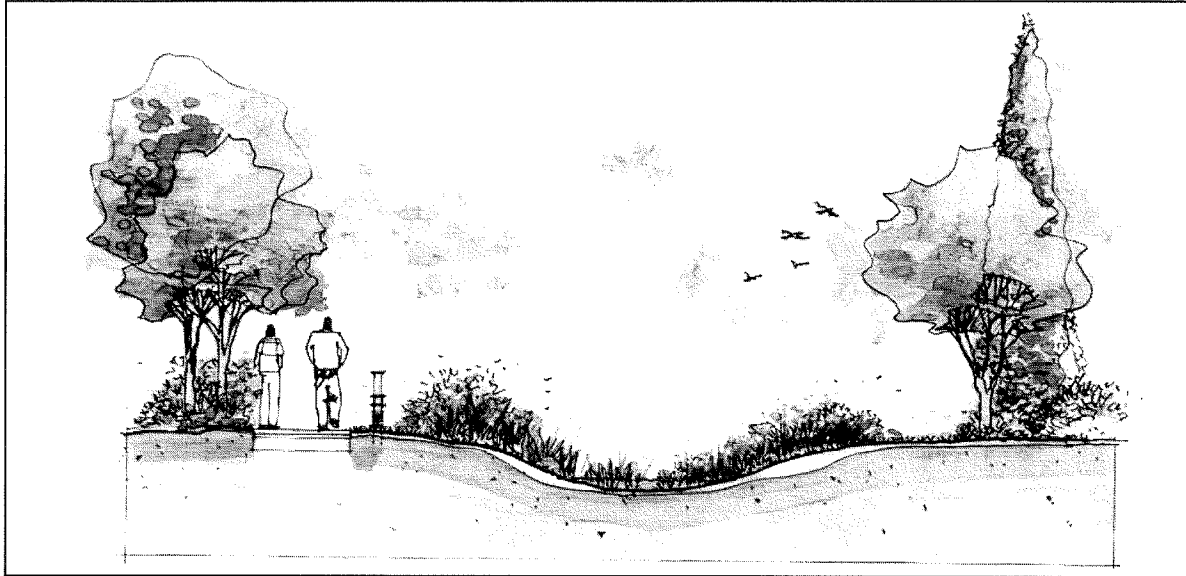
	<p>stormwater in appropriate areas.</p> <p>iii) Where appropriate, permeable trails shall be considered for shared use paths to minimize the amount of impervious surfaces. Sections of the Shared Use Path adjacent to Greenway Housing will be hard surface.</p> <p>iv) The constructed wetland stormwater management facility shall restore natural vegetation to provide additional natural animal habitat and promote natural infiltration of groundwater.</p>	<p>review.</p> <p>ii) Figure 6 – Development Concept identifies the location of Public Utility Lots, which will be used to accommodate bioswales. The intention is that low impact development strategies are not duplicated with traditional pipe systems.</p> <p>iii) Many of the Shared Use Paths in the plan area are identified within Public Utility Lots, which are also proposed to accommodate a bioswale.</p> <p>It is anticipated that alternate surface treatments, such as permeable pavements or gravel trails, will be investigated for the shared use paths within the natural areas and along the public utility lots as part of the overall low impact development strategy for the neighbourhood.</p> <p>Details of the shared use paths will be designed at zoning or subdivision. Possible alternative standards will require approval from Transportation Services.</p> <p>iv) Detailed design of the constructed wetland stormwater management facility will be reviewed by Drainage Services and Office of Biodiversity.</p>
--	---	---

Rationale:

Native plant species are those which are naturalized to a given area and vary by region and local area. The use of native or adapted plant species generally requires less irrigation and maintenance than non-native species, which serves to minimize costs associated with development and maintenance. Naturalized landscaping within open spaces provides opportunities to create wildlife habitats, and strengthens the ecological network within the neighbourhood. Non-native species, on the other hand, require more maintenance and weaken an ecosystem's biodiversity and ecological network.

Bioswales (conceptually illustrated below) are vegetated open channels specifically designed to attenuate and treat stormwater runoff for a defined water volume. Similar to open ditches, bioswales convey stormwater

volumes from a source point (where rain falls) to a discharge point. Unlike an open ditch, they are designed to intentionally slow down the velocity of stormwater, provide opportunities for infiltration, and facilitate water quality improvement through special vegetation and plantings that remove pollutants from stormwater.



Conceptual Bioswale Cross-Section

Minimizing the amount of impervious surfaces supports natural infiltration of stormwater, improving water quality and minimizing the amount of pollutants entering the groundwater.

Objective 4	NSP Amendment Area Policy	Implementation
<p>Promote renewable energy and energy efficient uses in Charlesworth</p>	<ul style="list-style-type: none"> i) Explore opportunities to incorporate solar and wind power applications into a prominent location in the neighbourhood. ii) All homes should be encouraged to be constructed as “solar ready” iii) Homes should be constructed to a high standard of environmental efficiency. iv) Explore opportunities for LED streetlighting system in the neighbourhood. v) Promote reduced lighting levels in Charlesworth. 	<ul style="list-style-type: none"> i) The location of solar and wind power applications will be determined through consultation with EPCOR Power and various City of Edmonton departments. ii) The proponent will work with the home builders to encourage homes to be built ready for the future installation of roof-mounted solar domestic hot water and photovoltaic (PV) systems. iii) The proponent will design and implement a green building rating system for all homes in the area. iv) Work with City of Edmonton to implement LED pedestrian and street lighting system into the

		neighbourhood v) Explore opportunities to reduce pedestrian and street light levels in the neighbourhood through the application of timers (e.g. reducing light levels between the hours of 11:00 PM and 5:00 AM for example) and motion sensors to trigger full light levels.
--	--	---

Rationale:

The majority of the energy produced in Alberta is derived from non-renewable sources, such as coal. Renewable energy is energy obtained from natural resources that can be naturally replenished or renewed within a relatively short period. Generating energy from these sources is a cleaner alternative to traditional energy sources.

Renewable energy applications, such as solar and wind, can be implemented at the neighbourhood scale in public spaces to provide clean energy for street and walkway lights. These applications can also serve as interpretive public art and educate residents about the benefits of solar and wind power.

A solar ready home is one that has been designed and built to facilitate the future installation of solar domestic hot water and photovoltaic (PV) systems at a later date. For a minimal investment, installing appropriate conduits, plumbing, and electrical outlets during construction can save consumers thousands of dollars if and when homeowners decide to install solar panels or a domestic hot water system at a later date.

Conventional street lights consume a great deal of energy, much of it through waste heat. LEDs produce more light per watt than other types of light bulbs, making them an environmental smart solution for reducing energy costs and use. LED lighting systems reduce electricity usage and light pollution, lower lumen levels, and enable more directed light patterns without sacrificing the safety, security, and functionality of public spaces.

The reduction of light levels, or the “dark sky” concept, contributes to the protection and restoration of the natural outdoor night environment while reducing the adverse effects of light pollution (including sky glow, light trespass, light clutter, decreased visibility at night, and energy waste). Artificial light at night has been shown to affect the mating, migration, and predation behaviours of many different species and, consequently, the ecological community as a whole. Specified periods of light and dark, known as circadian rhythms are essential for good health and wellness. Light levels should be designed to match activity on the street and site. Moreover, LEDs can be gradually dimmed during off-peak hours (and raised again to full levels when motion is detected) to save energy and promote a ‘dark sky’ concept.

8.1.2 Urban Design

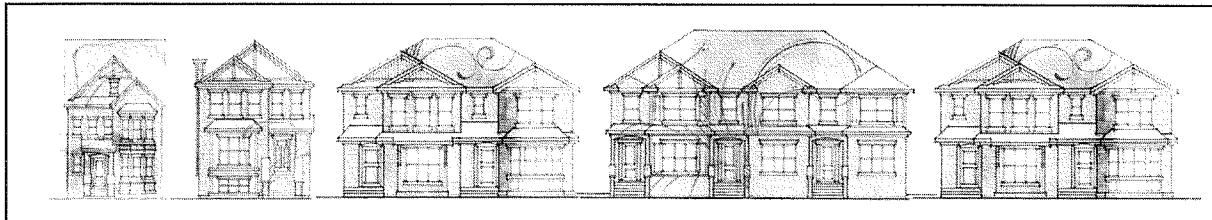
The Charlesworth amendment area incorporates relevant principles of urban design to establish an appealing, pedestrian-friendly, and sustainable community.

Objective 5	NSP Amendment Area Policy	Implementation
Develop mixed residential uses in the form of single/semi-detached housing and rowhousing, and medium density residential uses in	Low Density (single/semi-detached) and Medium Density (row housing and low-rise/medium density housing) residential uses shall be	i) The Mixed Residential land uses shall be implemented through a combination of the Residential Mixed Dwelling (RMD) zone and

<p>the form of low-rise/medium density housing to a high urban design standard.</p>	<p>appropriately designed to ensure a diversity of the built form, unit siting, use of architectural elements, and transitioning.</p>	<p>Direct Development Control Provision (DC1). The intent of the RMD zone is to accommodate a range of dwelling types and densities and provide flexibility in the design and development of the neighbourhood. Mixed Residential areas intended for Greenway Housing will be implemented through a DC1 zone.</p> <p>ii) Medium Density Residential development shall be implemented through Sections 100 and 200 of the Edmonton Zoning Bylaw, or through a Direct Development Control Provision as warranted. In addition to the use of standard zones, the character of the Medium Density Residential areas will be enhanced through regulation of the built form by means of architectural controls.</p> <p>iii) The developer/landowner will develop and implement specific architectural controls to be adhered to at the time of development in the neighbourhood.</p>
---	---	--

Rationale:

Through the implementation of the Residential Mixed Dwelling (RMD) and Direct Development Control Provision zones, the neighbourhood will promote the mixing of low density residential (single/semi-detached, rowhousing, etc.) land uses along many streets in the neighbourhood to create a unique and varied streetscape (conceptually illustrated below). Due to the compact nature of the neighbourhood, low-rise/medium density housing will be developed in close proximity to single/semi-detached uses to integrate the uses. As a result, attention to detail with respect to urban design is required by means of appropriate transitioning and landscaping.



Conceptual Mixed Streetscape Elevation

Objective 6	NSP Amendment Area Policy	Implementation
<p>Ensure neighbourhood infrastructure and design elements address year round weather conditions.</p>	<p>i) The neighbourhood shall be designed to accommodate infrastructure programming requirements in the public realm including snow clearing and landscaping maintenance.</p> <p>ii) Tree species which are salt tolerant shall be included in the detailed landscape design of boulevards and street areas.</p>	<p>Boulevards shall be used to accommodate snow removal and year round service vehicles.</p> <p>Alternative development standards shall meet infrastructure programming needs for all seasons.</p>
<p>Rationale:</p> <p>Winter is a dominant season in Edmonton and paying close attention to winter design issues (such as providing space for snow clearing and considering boulevard landscaping) will help to alleviate the negative attitudes towards the cold climate.</p>		

Objective 7	NSP Amendment Area Policy	Implementation
<p>Create identifiable focal points that are integrated with the open space system of the neighbourhood.</p>	<p>i) Focal points (Urban Village Park, natural areas and the stormwater management facility) shall function as amenity space for residents and may include public art, seating area, plaza, street furniture, gazebo, fountain/water feature, or other architectural elements to create a sense of place.</p> <p>ii) Natural areas and the wetland shall be accessible to neighbourhood residents to provide a natural amenity space for passive recreation and interpretive uses.</p> <p>iii) Convenient, safe and efficient shared use paths for the neighbourhood into and through open spaces/focal points and the mixed use sites shall be provided.</p>	<p>i) Figure 7 – Pedestrian Network System identifies the proposed shared use paths and crossings and illustrates connections between key focal points in the Charlesworth amendment area and the rest of the Charlesworth neighbourhood.</p> <p>ii) Details regarding the provision and placement of architectural elements within focal points shall be determined at the detailed design stage of development.</p> <p>iii) Details regarding the placement of shared use paths and crossings shall be determined at the subdivision approval or development stage in partnership with the City of Edmonton.</p>
<p>Rationale:</p> <p>Neighbourhood focal points create community destinations within the neighbourhood. Through careful design and site planning, the development of these focal points creates active neighbourhood places which are alive and</p>		

utilized and promote community interaction. Neighbourhood focal points in the Charlesworth amendment area include the Urban Village Park, natural areas, and the stormwater management facility. These provide key amenity spaces for local residents and add to the neighbourhood's attractiveness, character and image as a pedestrian-oriented community and promote social interaction between residents.

Objective 8	NSP Amendment Area Policy	Implementation
Provide signage complementary to the theme of the neighbourhood.	i) Way finding signage shall be provided along pedestrian and cycling routes to encourage safe and efficient movement. ii) Signs should be designed in an aesthetically pleasing manner and in harmony with the architecture theme of the neighbourhood.	i) ii) Signage and wayfinding details will be determined at the detailed design stage.
<p>Rationale:</p> <p>Signage plays an important role in way-finding and creating an identity for the neighbourhood. Ensuring signage is complementary to the theme of the neighbourhood will complement the overall design of the neighbourhood while aiding residents. When appropriately designed and located, signage can improve navigability of the neighbourhood without creating visual clutter.</p>		

8.1.3 Ecology

The Charlesworth amendment area land use concept ensures that the natural areas and wetland are conserved and protected. Consideration is given to ecological linkages between the natural areas, parks, stormwater management facility, and the wetland. Public access to the wetland and natural areas will be provided.

Objective 9	NSP Amendment Area Policy	Implementation
Strengthen Edmonton's ecological network	i) The land use concept shall provide connections and linkages between neighbourhood amenity spaces (i.e. SE 133 and SE 132 , natural areas, SWMF, Urban Village Park, and shared use path) to provide habitat and encourage ecological connectivity. ii) Plantings of native species should be utilized to add to the habitat value of the green network within the neighbourhood.	i) Figure 6 - Development Concept illustrates the natural areas and environmental reserve area in the Charlesworth amendment area. Compensation for the loss of wetlands shall be provided in the plan area or within the the City. ii) Relevant City of Edmonton conservation planning and policy shall be adhered to (e.g. Policy C531). The recommendations and regulations of the City and Provincial environmental agencies shall be followed.

Rationale:

Remnant woodlots, wetlands, and other natural features form an ecological network in the area. Maintaining these features promotes biodiversity among plant and animal species. Enhancing the existing ecological network with plantings of native species creates connectivity and habitat value within the Charlesworth amendment area and NSP area, and the surrounding landscape

Objective 10	NSP Amendment Area Policy	Implementation
Conserve the area’s natural features.	The ecologically significant natural area (SE 133), wetland, and remnant woodlot shall be retained within the Charlesworth amendment area.	Figure 6 – Development Concept illustrates the natural areas and environmental reserve area in the Charlesworth amendment area.

Rationale:

The Ecological Network Report (ENR) for the amendment area identifies several natural features within the plan area: Environmentally Sensitive Area (SE 133), a natural deciduous woodlot, a wetland, and the constructed wetland stormwater management facility. Based on the recommendations of the ENR, the proposed amendment to the Charlesworth NSP conserves and integrates these areas of ecological significance within the land use concept.

Objective 11	NSP Amendment Area Policy	Implementation
Enhance the ecological value of the existing golf course ponds in the northern portion of the plan area.	The ponds shall be enhanced and used as a constructed wetland stormwater management facility (SWMF).	<p>Figure 6 – Development Concept identifies the constructed wetland stormwater management facility in the Charlesworth amendment area.</p> <p>Crown ownership and treatment of this feature will be confirmed prior to subdivision. In the event that the Crown does not lay claim to this feature, it will be incorporated into the storm water management design for the site. An enhanced ecological design will be utilized which includes but is not limited to: shallow pond slopes, an undulating shoreline, a natural upland vegetation component, seasonal fluctuations and an extensive shrubby shoreline that includes a meadow marsh community.</p>

Rationale:

With the development of the Pioneer Meadows golf course, the naturally low lying areas were modified to be used as a series of water features for the course. Using the existing golf course ponds as a constructed wetland stormwater management facility will accommodate the stormwater storage requirements for the neighbourhood. Developing the facility as a constructed wetland will strengthen the ecological network in the area.

Technical Summary

An Ecological Network Report (ENR) was prepared for the Charlesworth amendment area and submitted under separate cover in support of the NSP amendment. The ENR identifies natural features and provides an assessment of the existing ecological network as well as provides recommendations on how to conserve and protect the natural areas.

A Wetland Assessment was prepared by Spencer Environmental on behalf of the City of Edmonton. The Wetland Assessment identifies any potential wetlands, determines potential sustainability of wetlands in the context of future development, and outlines required regulatory approvals.

A Natural Area Management Plan will also be prepared for each Natural Area retained and will need to be submitted as development approaches the Natural Area. The Natural Area Management Plan will establish the management and conservation goals for the Natural Area.

8.1.4 Environment

In order to ensure that the lands within the NSP area are suitable for development, the environmental status of the land must be evaluated. The City requires that Phase I Environmental Site Assessments (ESA) be submitted, reviewed, and endorsed prior to the rezoning stage of development.

Objective 12	NSP Amendment Area Policy	Implementation
<p>Ensure that the environmental status of the lands are suitable for development and that Environmental Site Assessments (ESAs) are complete and up-to-date at the time of rezoning.</p>	<p>i) Determine the likelihood, types, and location of environmental concerns that may be present on the lands prior to rezoning.</p> <p>ii) Phase I ESA reports older than 1 year from the date of rezoning application shall be updated, and any Phase I ESA report older than 5 years from the date of rezoning application shall be redone.</p> <p>iii) Where necessary, contaminated material shall be removed and disposed of in an environmentally sensitive manner, in accordance with Federal, Provincial, and Municipal regulations.</p>	<p>i) ii) ESAs and any follow-up shall receive sign-off by City administration prior to the rezoning stage of development.</p> <p>iii) Site remediation, where necessary, shall be conducted prior to rezoning. An environmental site assessment report verifying the remediation shall be submitted for approval by City administration prior to rezoning of the subject lands.</p>

Rationale:

Lands within the neighbourhood boundary will be suitable for development and their environmental status confirmed prior to rezoning. Those lands identified as contaminated must undergo remediation according to Federal, Provincial, and Municipal standards.

Objective 13	NSP Amendment Area Policy	Implementation
Minimize amount of topsoil to be removed from site.	i) Where feasible, replace stripped topsoil in greater depths than regularly specified.	<p>Topsoil will be stripped and stockpiled in small piles in the neighbourhood. It could then be used public and private landscape areas where structural soils are not required</p> <p>Topsoils could be installed at depths of up to one meter, depending on the location, above current standards.</p>

Rationale:

Topsoil is the key growing medium of trees and plants. Topsoil needs to be stripped from new development areas to allow for the construction of roadways and building sites. Stripped topsoil is usually stockpiled on or near the site and is used for the landscaping of public parks, ponds and roadways as well as for private lots. In most parts of the Edmonton region, the deep natural topsoils mean that there is a surplus of stockpiled topsoil after the development of the neighbourhood is completed.

Technical Summary

A Phase I Environmental Site Assessment has been completed and signed off by the subject lands. The Phase I ESA for SE ¼ 24-51-24-W4 confirms that the majority of the area is free of contamination and therefore suitable for development. Follow-up items identified within the respective ESA shall be addressed prior to the rezoning of the subject areas, as per the implementation strategy.

8.1.5 Residential

Approximately 32 hectares of the amendment area is designated for residential land uses. The land use concept for the Charlesworth amendment area proposes an overall residential density of approximately 48 persons per net hectare and 34 units per net residential hectare, compared with 35 persons per net hectare and 35 units per net residential hectare in the remainder of the Charlesworth area.

The area, number of dwelling units, and population attributed to each form of residential development in the Charlesworth amendment area is shown in **Table 3 – Land Use and Population Statistics**.

The Charlesworth amendment area uses two residential land use designations, which will guide residential development:

Mixed Residential: refers specifically to single detached, semi-detached, greenway housing, zero lot line single detached, and street- and project-oriented rowhousing residential units.

Medium Density Residential: refers to low-rise/medium density residential units such as, stacked rowhousing and low-rise apartments.

Mixed Residential (Single/Semi-detached housing) will be developed on approximately 30 ha of land within the plan area and will facilitate the development of a variety of housing forms at heights up to 2 ½ storeys and densities generally up to 30 units per net residential hectare.

Medium Density Residential (Low-Rise/Medium Density Housing) will be developed on approximately 0.91 ha within the plan area, at a maximum height of 4 storeys, and at an average density of 90 units per ha. Residential uses anticipated would be stacked row housing or low rise apartments consistent with the (RF6) Medium Density Multiple Family Zone and (RA7) Low Rise Apartment Zone under the City of Edmonton Zoning Bylaw.

Residential Mixed Dwelling

The Residential mixed dwelling (RMD) zone includes provisions for single detached, semi-detached, greenway housing, zero lot line single detached, street- and project-oriented rowhousing, or other unique housing forms which will serve as the mechanism to achieve the landowners' vision in providing new housing products which are distinct, diverse and affordable. It also provides an exclusive opportunity and the flexibility to integrate a mixture of housing types along the block faces– such as single detached, semi-detached or street-oriented row housing adjacent to each other in a block face – creating a special and unique urban streetscape with a mix of housing types.

Direct Development Control Provision

A Direct Development Control Provision (DC1) has been prepared for a portion of the amendment area intended for the development of Greenway Housing. A DC1 provides the opportunity to regulate the use, design, and extent of development within specific geographic areas of the City in order to achieve the planning objective of a Neighbourhood Structure Plan for those areas with special or unique attributes which cannot be satisfactorily addressed through conventional land use districting or statutory plan overlays.

Objective 14	NSP Amendment Area Policy	Implementation
Provide a variety of housing types that serve a range of age groups, income levels and needs.	i) A mixture of residential dwelling types including single/semi-detached, row housing and low-rise/medium density housing shall be provided, allowing consumer choice, and a range of affordability options.	i) Figure 6 – Development Concept illustrates the general location of residential land use designations. ii) iii) Mixed Residential development shall be implemented through a combination of the Residential mixed dwelling (RMD)

	<p>ii) Mixed residential areas shall provide opportunity for a mixture of single or semi-detached housing, and street-oriented row housing along individual block faces and/or from block face to block face.</p> <p>iii) The NSP shall allow for more intensive and/or innovative forms of low density residential housing through the use of various development regulations (i.e. smaller minimum site area and depth; reduced lot width, reduced yard requirements, higher site coverage, etc.).</p>	<p>and Direct Development Control Provision (DC1) zones.</p>
--	--	--

Rationale:

Providing a variety of housing types promotes the creation of a well-balanced neighbourhood, one which can accommodate a range of income groups and market segments, and various types and sizes of households. A variety of housing types also allows families to remain within the same community throughout their life-cycle. The ability to mix housing forms along a block face will create visual interest, variety and market appeal, while discouraging monotonous streetscapes by mixing compatible housing forms (single detached, semi-detached, and Row housing).

Within the area designated Mixed Residential, a variety of innovative housing forms such as single detached, semi-detached, greenway housing, zero lot line single detached, street- and project-oriented rowhousing, or other innovative housing forms will be developed through implementation of a the Residential Mixed Dwelling (RMD) zone and a Direct Development Control Provision (DC1).

Objective 15	NSP Amendment Area Policy	Implementation
<p>Locate Low-Rise/Medium Density Housing development to facilitate pedestrian access to arterial and/or collector roadways, public transit service and/or in proximity to park spaces.</p>	<p>Low-Rise/Medium Density Housing development should be located abutting collector and/or arterial roadways and along transit routes.</p>	<p>Figure 6 – Development Concept illustrates the location of Low-Rise/Medium Density Housing development along collector and arterial roadways.</p>
<p>Rationale:</p> <p>Location of Low-Rise/Medium Density Housing along transit routes and within walking distance of parks and natural areas, creates a more compact, walkable and liveable neighbourhood.</p>		

8.1.6

Parkland, Recreation, and Schools

The land use concept provides parks, open spaces, and natural areas throughout the neighbourhood to meet the recreational needs of all residents. The plan seeks to integrate parks, natural areas, environmental reserve, and stormwater management facilities through a system of shared use paths, walkways, and sidewalks.

Objective 16	NSP Amendment Area Policy	Implementation
<p>Enhance walkability both within the amendment area and to the City level park through the provision of pedestrian connections.</p>	<p>i) The land use concept shall incorporate an array of pedestrian connections that connect parks, open spaces, natural areas, and the stormwater management facility to increase walkability within the amendment area.</p> <p>ii) The pedestrian connections should allow residents to access the City Level Park.</p>	<p>i) and ii) Figure 7 identifies the pedestrian connections between recreation amenities in the plan area. These connections are established by a network of shared use paths and pedestrian linkages.</p> <p>Figure 7 – Pedestrian Network System identifies three Potential Future Shared Use Path connections. One of the potential connections provides access into the Ivor Dent Sports Park and two connections provides access to the Possible TUC Trail.</p> <p>Development of the Potential Future Shared Use Path into Ivor Dent Sports Park will be addressed through future discussions with the Park’s management and the Potential Future Shared Use Paths to the Possible TUC Trail will be required if the TUC Trail is constructed. Details of the Potential Future Shared Use Path to be extended into the Ivor Dent Sports Park will be determined at subdivision.</p> <p>In cases where Potential Future Shared Use Path connections are not constructed, the Shared Use Path will be extended through a Pedestrian Linkage to provide a looping shared use facility and ensure the Shared Use Paths do not dead end.</p>
<p>Rationale:</p> <p>Access to parks, open spaces, and natural areas are important in creating vibrant and livable communities. The</p>		

Urban Village Park, and natural areas provide public space for active and passive recreation uses while shared use paths and walkways facilitate pedestrian connectivity between park spaces and across the neighbourhood.

Objective 17	NSP Amendment Area Policy	Implementation
<p>To consider winter issues in the landscaping and programming of public parks and open spaces.</p>	<p>(i) Tree species shall be included in the detailed landscape design of public parks, plazas and open spaces such that they provide wind shelter and enable solar penetration.</p> <p>ii) Neighbourhood entrances and outdoor gathering spaces/focal points shall be designed to accommodate year round activity, such as skating, cross country skiing, and tobogganing.</p>	<p>Landscape design for public land will be developed in conjunction with relevant City departments, such as Transportation Services and Parks Planning and incorporate design elements from the City of Edmonton's Winter City Strategy.</p> <p>The design of outdoor spaces for neighbourhood activities shall consider incorporating design elements that respond to all seasons, through such measures as the creative use of light, colour, and ways to provide breaks from wind and extreme temperatures.</p>

Rationale:

Edmonton is a winter city and the design of all communities needs to take winter issues into consideration. Winter conditions, and accommodating and encouraging winter activities, should be given full consideration in the development of the neighbourhood, thereby creating an urbanism that celebrates winter climate. Effective landscaping and wind control measures in parks and public plazas (such as natural and constructed wind barriers and park orientation) can enliven public spaces even on the coldest days.

8.1.7 Mixed Use

Opportunities for mixed use developments are provided within the Charlesworth amendment area. Mixed Use sites are to be located in areas where there is excellent accessibility and visibility (i.e. along arterial and collector roadways).

Objective 18	NSP Amendment Area Policy	Implementation
<p>To encourage a variety of different types of mixed use development in appropriate locations.</p>	<p>Mixed use sites shall be located in areas which are transit supportive and provide excellent accessibility and visibility. Mixed use developments shall include a variety of uses including different housing forms and commercial uses.</p>	<p>Figure 6 – Development Concept illustrates the location of mixed use sites in the Charlesworth neighbourhood. Mixed use areas shall be developed under a Direct Development Control Provision.</p> <p>Access locations for the mixed use</p>

		sites will be reviewed at zoning or subdivision.
<p>Rationale:</p> <p>Mixed use sites promote compact, walkable areas which also promote independence of movement, especially for the young and elderly who have convenient access to transit or can easily walk or cycle to the various amenities nearby. Mixed use sites also often include higher densities as well as assisted living opportunities which allow individuals to remain in the same neighbourhood as they age.</p> <p>Use of a Direct Development Control Provision will ensure developments are transit supportive, uses are compatible, and a high level of urban design guidelines are followed to ensure a distinct and unique area.</p>		

8.1.8 *Transportation*

The transportation goal of the neighbourhood is to establish a neighbourhood that provides a well-connected transportation system within and outside the plan area, and maximizes opportunities for multiple modes of transport for residents. This goal is conceptually illustrated in Figure 11 – Transportation Network and Figure 7 – Pedestrian Network, which identifies the roadway network that accommodates the movement of automobiles, transit, bicycles and pedestrians within the neighbourhood and the connections to adjacent communities.

Objective 19	NSP Amendment Area Policy	Implementation
Encourage innovation in transportation systems design.	New and innovative facilities and roadway cross-sections should be explored to improve cost-effectiveness and to ensure that form follows intended function.	<p>Roadway proposals will be reviewed and approved by Transportation Services in consultation with Sustainable Development at the subdivision stage.</p> <p>Possible alternative cross-sections will be reviewed by Transportation Services in consultation with Sustainable Development at the zoning or subdivision stage and will require the approval from Transportation Services.</p>

<p>Rationale:</p> <p>The neighbourhood has been designed, in part, with a goal of minimizing roadway infrastructure through narrower roadways, innovative housing forms, and dispersal of vehicular traffic flow throughout the neighbourhood. To achieve this goal, less land for internal roadways is anticipated. These factors will facilitate a compact, walkable and connected community with a balanced transportation system. Where possible, a reduced or alternate standard may be used which may reduce the width of the carriageway, provide sidewalks on both sides and parking on one side.</p>
--

Objective 20	NSP Amendment Area Policy	Implementation
To facilitate snow removal and storage within the Charlesworth amendment area.	Incorporate boulevards into the design of the collector roadway.	Detailed roadway cross sections will be developed at the subdivision stage. Possible alternative cross-sections will require the approval from Transportation Services.
<p>Rationale:</p> <p>Edmonton is a winter city and the design of all communities needs to take winter issues into consideration. Roads and road right of ways should be designed to effectively and efficiently accommodate snow removal in the neighbourhood.</p>		

Objective 21	NSP Amendment Area Policy	Implementation
Minimize traffic congestion and enhance safety on internal collector roadways.	<p>a) The number of residential lots fronting onto and having direct access to a collector road should be in accordance with the applicable City Policies.</p> <p>b) Traffic calming should be employed to reduce automobile speeds, increase pedestrian safety and improve the streetscape.</p>	<p>a) The Subdivision Authority, in consultation with Transportation Services shall have regard for the number of lots having direct access onto a collector roadway. The number of lots having direct access onto a collector roadway shall be determined at the subdivision stage and shall not exceed 30%.</p> <p>b) Traffic calming measures such as roundabouts, raised intersections or curb extensions may be incorporated along roadways. Details will be confirmed with Transportation Services prior to development.</p>
<p>Rationale:</p> <p>Along collector roadways with high traffic volumes, front drive access will be restricted in order to promote a safe and pedestrian-friendly streetscape and to reduce vehicular conflicts. The provision of front drive access within the overall plan area will be consistent with applicable City of Edmonton policies and will be determined prior to rezoning and subdivision approval.</p>		

Technical Summary

The transportation network for the ASP will be provided in accordance with the requirements of the City of Edmonton's Transportation Services. A Transportation Impact Assessment (TIA) has been submitted under separate cover for review and approval by Transportation Services.

8.1.9 Infrastructure, Servicing, and Staging

Objective 22	NSP Amendment Area Policy	Implementation
To ensure that Charlesworth is serviced to a full urban standard	<p>i) Sanitary and stormwater servicing should be provided in accordance with the amended Area Master Plan.</p> <p>ii) Water servicing to the neighbourhood should be provided in accordance with the approved Hydraulic Network Analysis.</p> <p>iii) Shallow utilities will be extended into the plan area as required.</p> <p>iv) Support innovative and alternative service delivery, where feasible and practical.</p>	<p>i) A Neighbourhood Design Report will be completed for the plan area.</p> <p>ii) Approval of engineering drawings and servicing agreements will be required prior to installation of water servicing.</p> <p>iii) Installation of shallow utilities will be executed through servicing agreements.</p> <p>iv) Opportunities for innovative and alternative servicing options will be identified and the developer will work closely with the City to incorporate alternative development standards.</p>
<p>Rationale:</p> <p>The neighbourhood will be designed in accordance with City of Edmonton servicing standards and best practices in low impact development and sustainable development. Development staging and extension of infrastructure will be contiguous, efficient, and economical while mitigating potential environmental and ecological impacts. Opportunities for research and innovation should be supported in order to discover efficient, low cost or low environmental impact servicing options.</p>		

8.1.10 Agriculture

The Charlesworth amendment area supports urban agriculture opportunities, promoting community gardens and local food production. The amendment to the Charlesworth NSP encourages the use of portions of park space for community gardens to support local food production and additional recreational activities.

Objective 23	NSP Amendment Area Policy	Implementation
To promote sustainable practices and low impact development strategies for public parks and community gardens.	Explore opportunities to utilize harvested rainwater for irrigation of parks and community gardens	Detailed design of community gardens should incorporate low impact development strategies.
<p>Rationale:</p> <p>Including low impact development practices in central spaces—such as parks and community garden—can serve an interpretive purpose and provide education for neighbourhood residents about natural processes and</p>		

ecological systems.

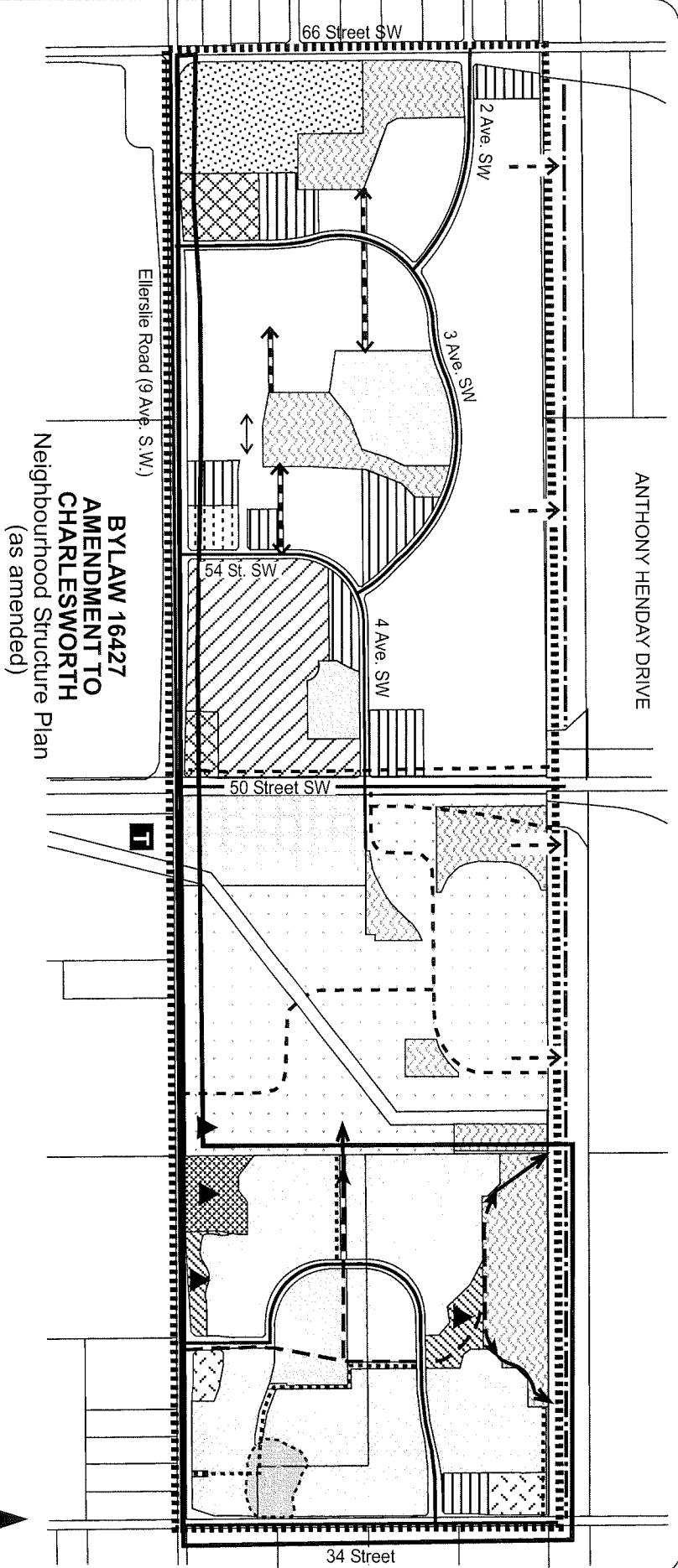
Objective 24	NSP Amendment Area Policy	Implementation
<p>To promote local food production in the Charlesworth amendment area.</p>	<p>i) The Charlesworth NSP shall provide opportunities for local food production and community garden plots in the Urban Village Park.</p> <p>ii) Community gardening should be considered a recreational activity and included in program development for community parks in balance with other park programming needs.</p> <p>iii) Landscaping of public parks and open spaces should consider planting of edible fruit and vegetable plants where appropriate.</p> <p>iv) Low-rise multi-family developments should provide 0.25 m² of growing space per multi-family dwelling unit within the amenity area.</p>	<p>Implementation of community gardens will be explored at the detailed landscape design stage in consultation with the Parks Planning Department and multi-family residential builders.</p>
<p>Rationale:</p> <p>Access to healthy food choices is important to any community. Locally produced fruits and vegetables means shorter transportation distances and, in turn, fewer greenhouse gas emissions. Incorporating appropriate local food production in the form of community gardening can be a showpiece for local sustainability.</p>		

8.1.11 Special Study Area

The Special Study Area contains a wetland (identified in Figure 5 – Site Features as SE 135 and in the Wetland Assessment prepared by Spencer Environmental as Wetland 104) and an associated 30 meter management zone. At the time of submission of this plan, ownership of the lands within the Special Study Area remains undetermined.

Objective 25	NSP Amendment Area Policy	Implementation
<p>Determine ownership and treatment of the lands within the Special Study Area.</p>	<p>Ownership of the lands within the Special Study Area shall be determined prior to subdivision and zoning.</p>	<p>Figure 6 – Development Concept identifies a Special Study Area and Figure 5 – Site Features identifies wetland SE 135. Crown ownership and treatment of SE 135 / Wetland 104 within the Special Study Area will be confirmed prior to zoning</p>

		<p>and subdivision.</p> <p>In the event that the Crown claims this feature, the plan will be amended to incorporate the wetland and associated 30 meter buffer as Environmental Reserve and will be zoned AJ. A Natural Area Management Plan will be prepared which will address restoration and ensure drainage is maintained. Lands within 150 m of this feature will not be rezoned until such time as Crown ownership of the feature is determined.</p> <p>In the event that the Crown does not claim the lands within the Special Study Area, the plan will be amended to redesignate the lands as Mixed Residential.</p>
<p>Rationale:</p> <p>Ownership of a portion of the lands within the Special Study Area remains undetermined at the time of submission of this plan.</p> <p>The Wetland Assessment prepared by Spencer Environmental identified the wetland through a high-level analysis of the entire Southeast Urban Growth Area and designated it “Permanent and Naturally Occurring Wetland (Crown Claimable)” and “Modified Natural.” Conversely, the Ecological Network Report prepared in support of this application identified the wetland during a site visit and designated it as a Class II. The report notes that the wetland has been disturbed over a number of years by road grading along 34th Street which has blocked the culverts and hydraulically disconnected it from the main, functioning portion of the wetland across 34th Street.</p> <p>Augmenting the classification issue, the plan area lies within the Papaschase Surrendered Indian Reserve, creating jurisdictional uncertainty regarding the ownership of the bed and shore. A wetland assessment has been prepared and submitted to Alberta Environment and Sustainable Resource Development for review and determination of any Crown-claimable (provincial as well as federal) water features, and applicability of compensation.</p>		



- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Residential
- Mixed Use
- Proposed / Existing Religious Assembly
- Institutional / City Level Park
- Special Study Area

- Community Commercial
- School / Park
- City Level Park
- Open Space (MR)
- Stormwater Management Facility
- Pipeline Right-of-Way
- Environmental Reserve
- Public Utility Lot

- Natural Area (MR)
- Natural Area
- Transit Centre
- Collector/Arterial Roadway
- Local Roadway Connection
- Shared Use Path / Connection
- Possible TUC Trail
- Possible Shared Use Path
- Shared Use Path
- Boundary of Charlesworth NSP
- Boundary of Amendment

Note: Location of collector roads and configuration of stormwater management facilities are subject to minor revisions during subdivision and rezoning of the neighbourhood and may not be developed exactly as illustrated.

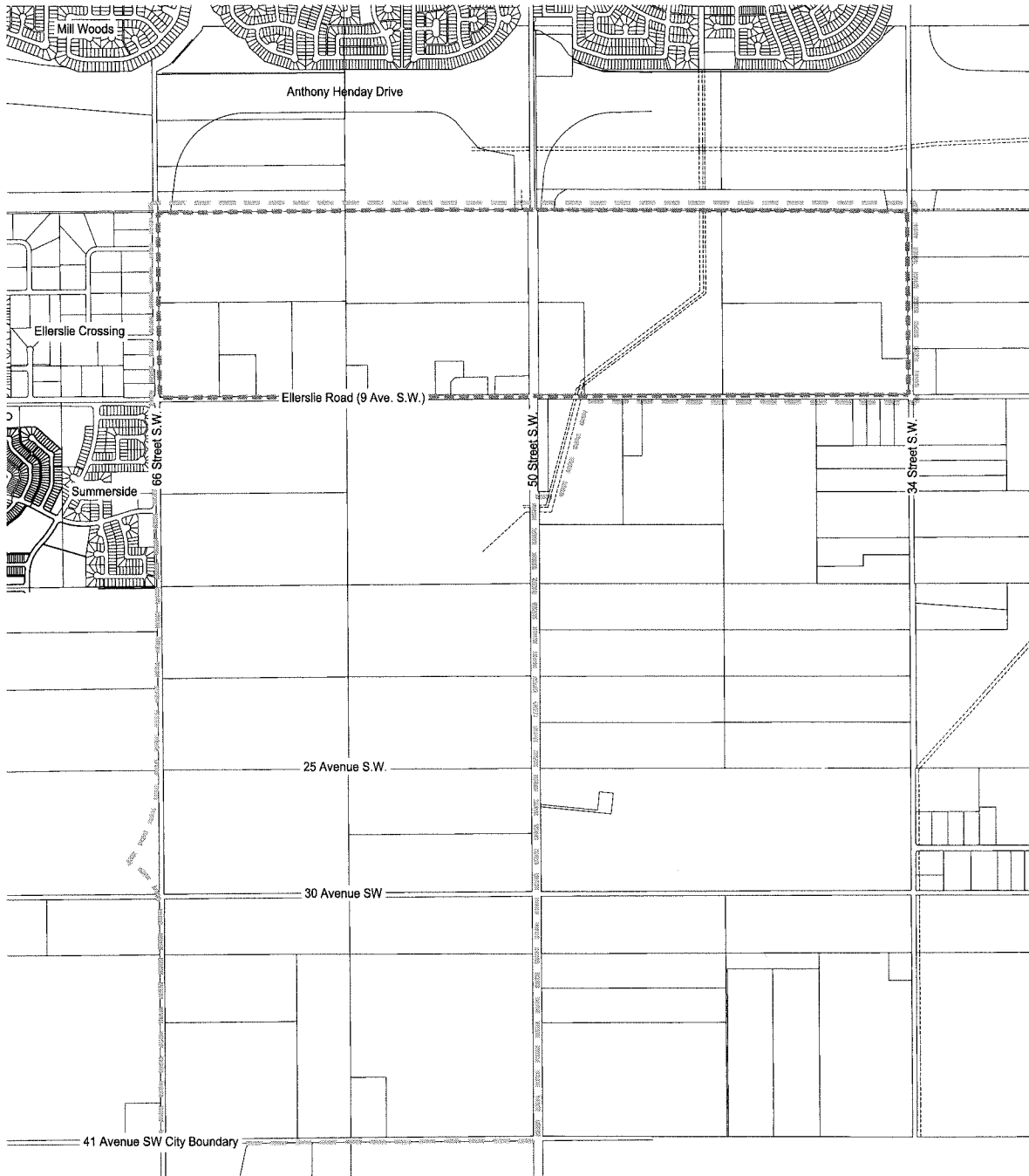
SUSTAINABLE DEVELOPMENT





CHARLESWORTH NEIGHBOURHOOD STRUCTURE PLAN



Figure 2.0 Context Plan



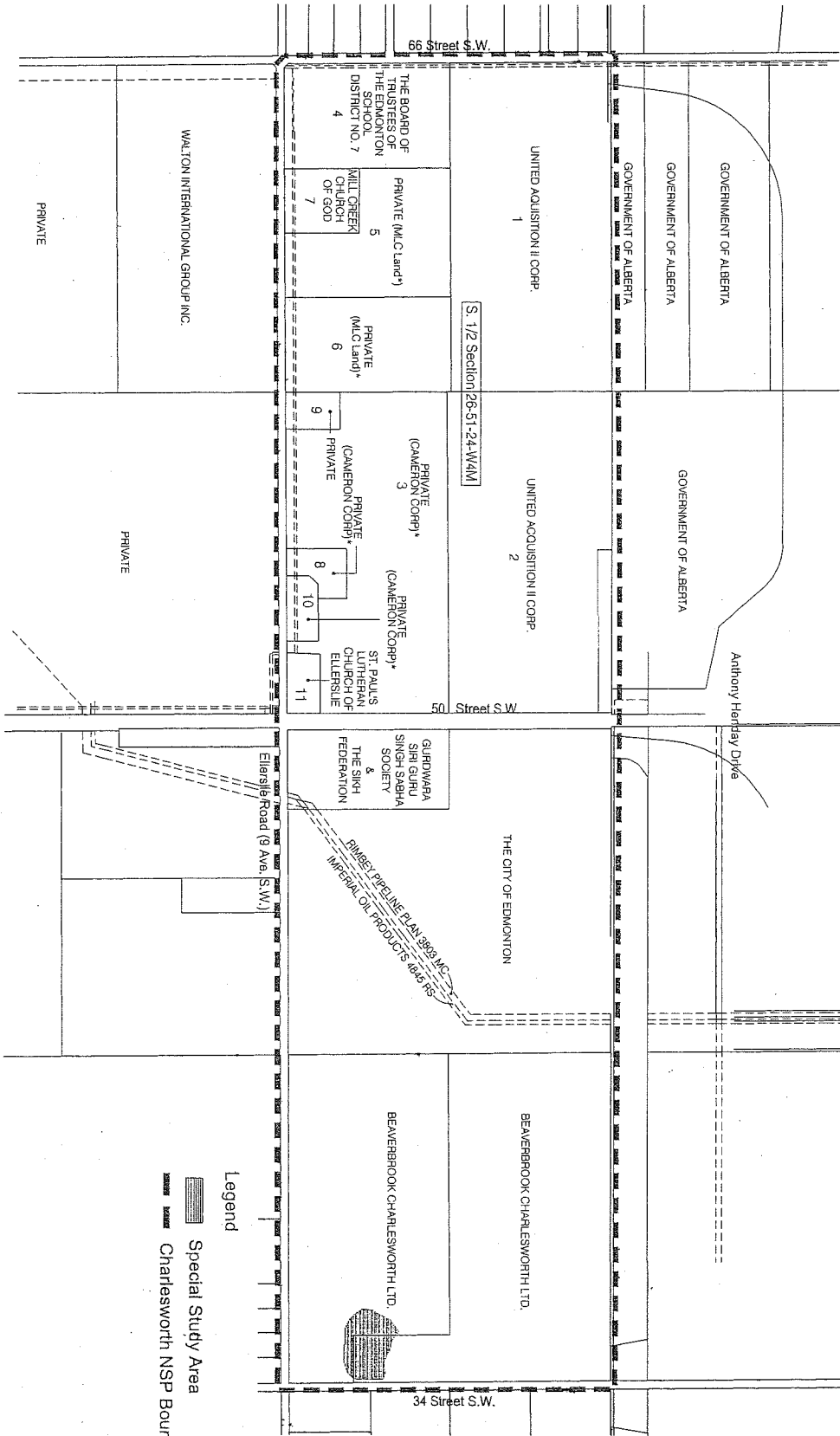
- Legend**
-  Charlesworth NSP Boundary
 -  Southeast ASP Boundary



CHARLESWORTH NEIGHBOURHOOD STRUCTURE PLAN Ownership Plan



Figure 3.0
Ownership Plan



Legend

Special Study Area

Charlesworth NSP Boundary

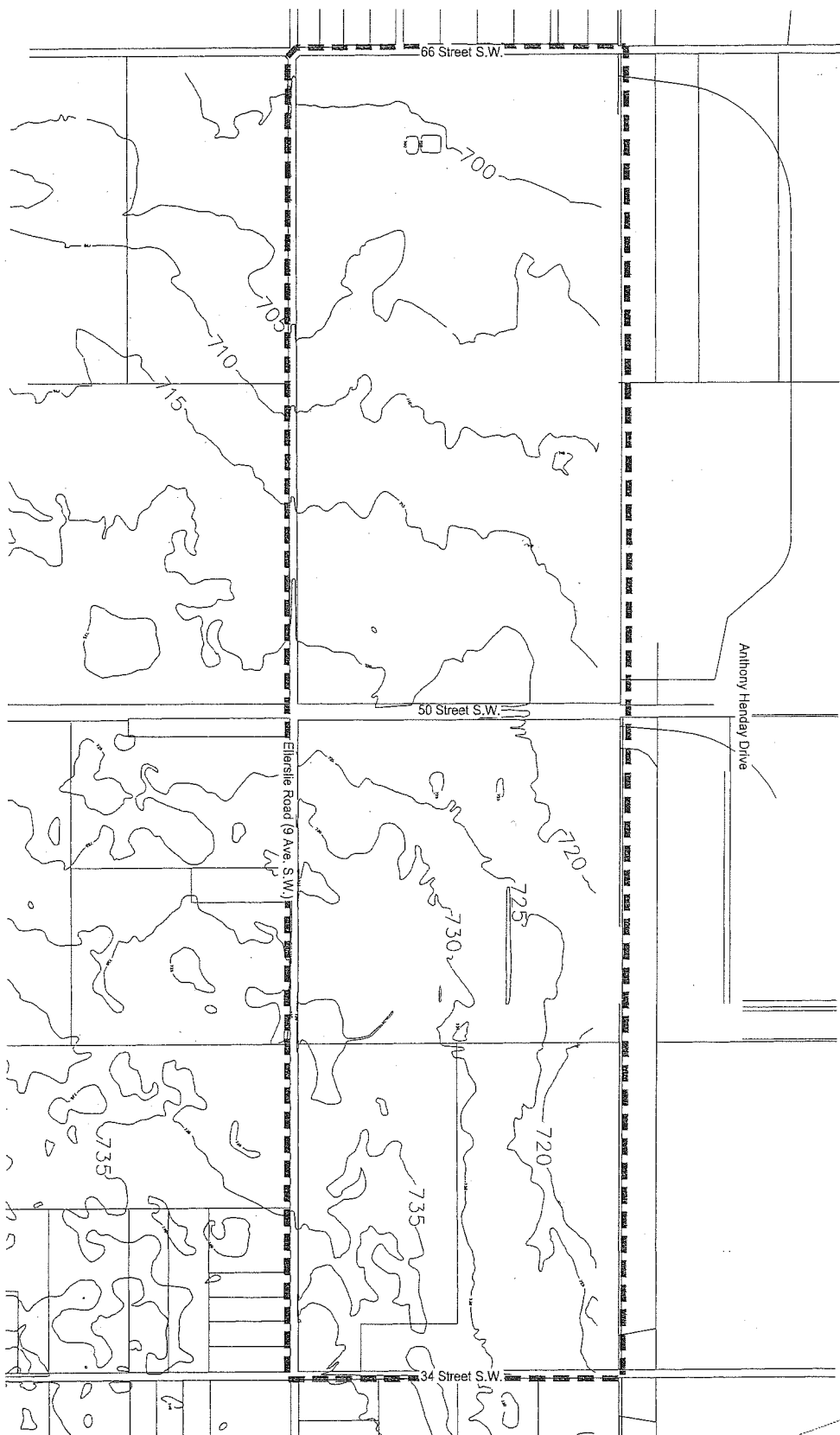


Stantec

CHARLESWORTH
NEIGHBOURHOOD STRUCTURE PLAN



Figure 4.0
Site Contours



CHARLESWORTH
NEIGHBOURHOOD STRUCTURE PLAN

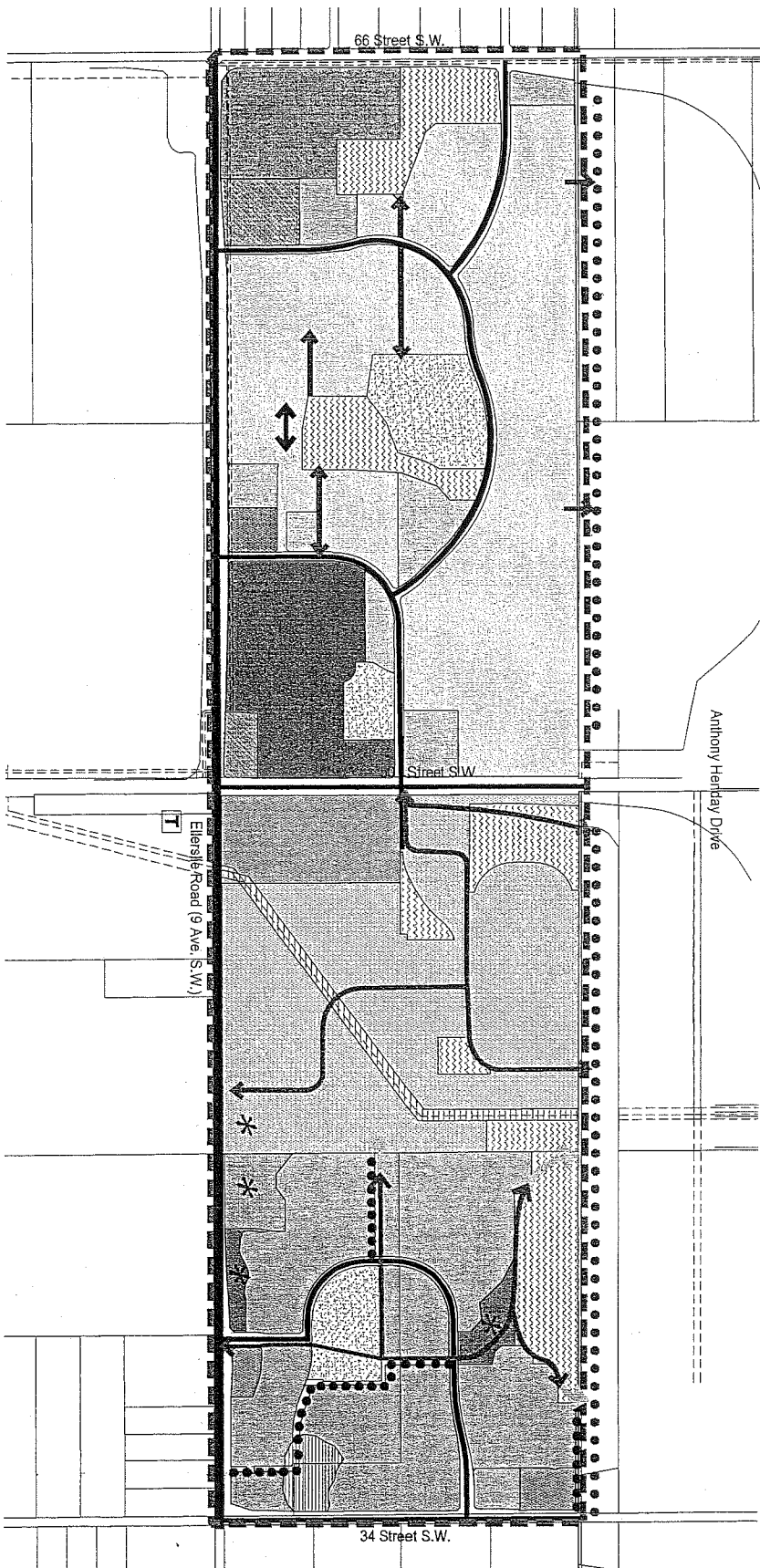


Figure 5.0
Site Features



CHARLESWORTH
NEIGHBOURHOOD STRUCTURE PLAN

Figure 6.0
Development Concept



Legend

- | | | | | | |
|--|--------------------------------------|--|--------------------------------|--|----------------------------------|
| | Low Density Residential | | City Level Park | | Transit Centre |
| | Medium Density Residential | | Open Space (M/R) | | Collector/Arterial Roadway |
| | High Density Residential | | Natural Area (M/R) | | Local Roadway Connection |
| | Mixed Residential | | Environmental Reserve | | Public Utility Lot |
| | Mixed Use | | Stormwater Management Facility | | Possible TUC Trail |
| | Institutional/City Level Park | | Pipeline Flight-of-way | | Shared Use Path |
| | Proposed/Existing Religious Assembly | | Special Study Area | | Potential Future Shared Use Path |
| | Community Commercial | | Natural Area | | Charlesworth NSP Boundary |
| | School/Park | | | | |



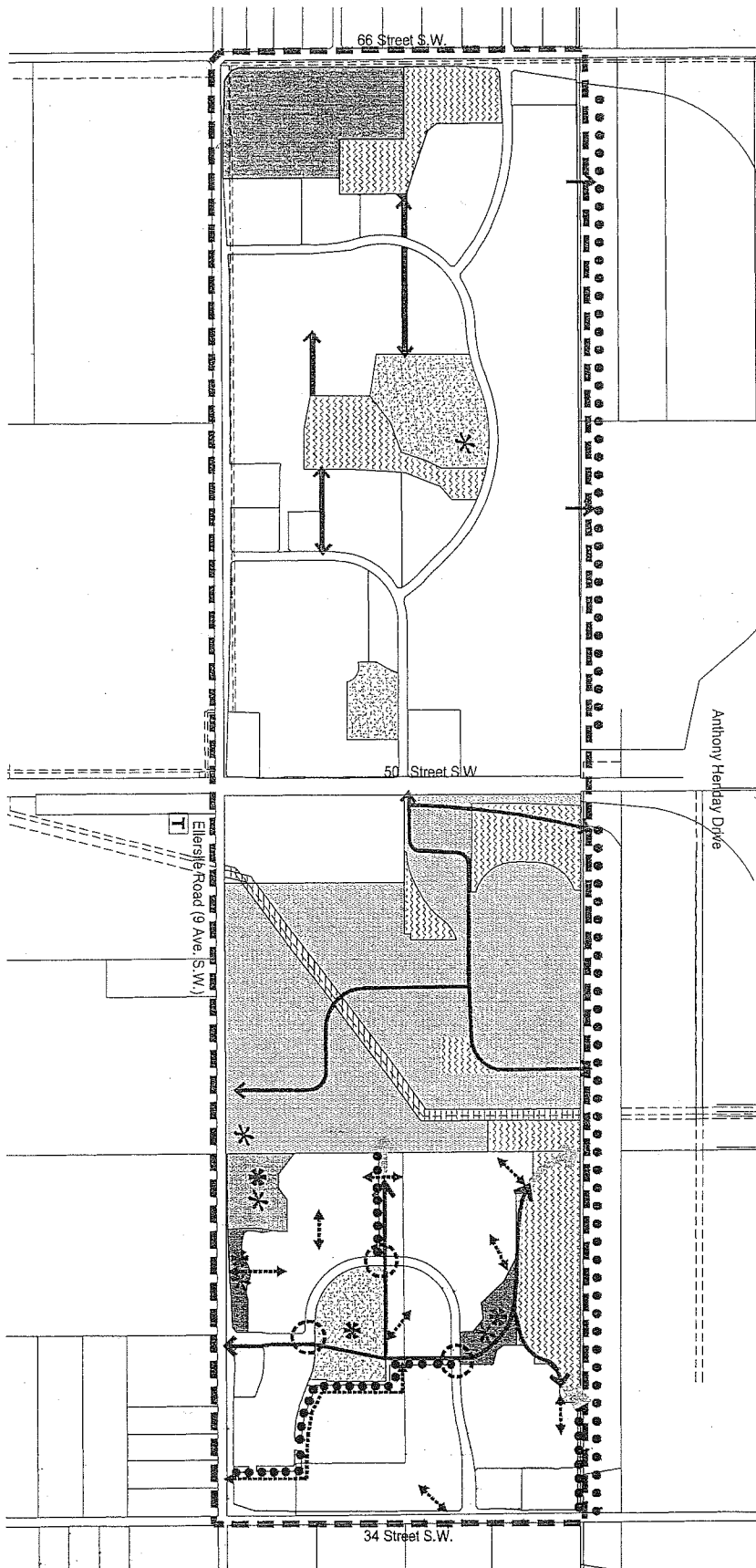
Stantec



NTS

CHARLESWORTH
NEIGHBOURHOOD STRUCTURE PLAN

Figure 7.0
Pedestrian Network System



- Legend
- School/Park
 - City Level Park
 - Open Space (MR)
 - Natural Area (MR)
 - Environmental Reserve
 - Stormwater Management Facility

- Pipeline Right-of-way
- Natural Area
- Focal Point
- Key Pedestrian Crossing
- Transit Centre

- Public Utility Lot
- Possible TUC Trail
- Pedestrian Linkage
- Shared Use Path
- Potential Future Shared Use Path
- Charlesworth NSP Boundary



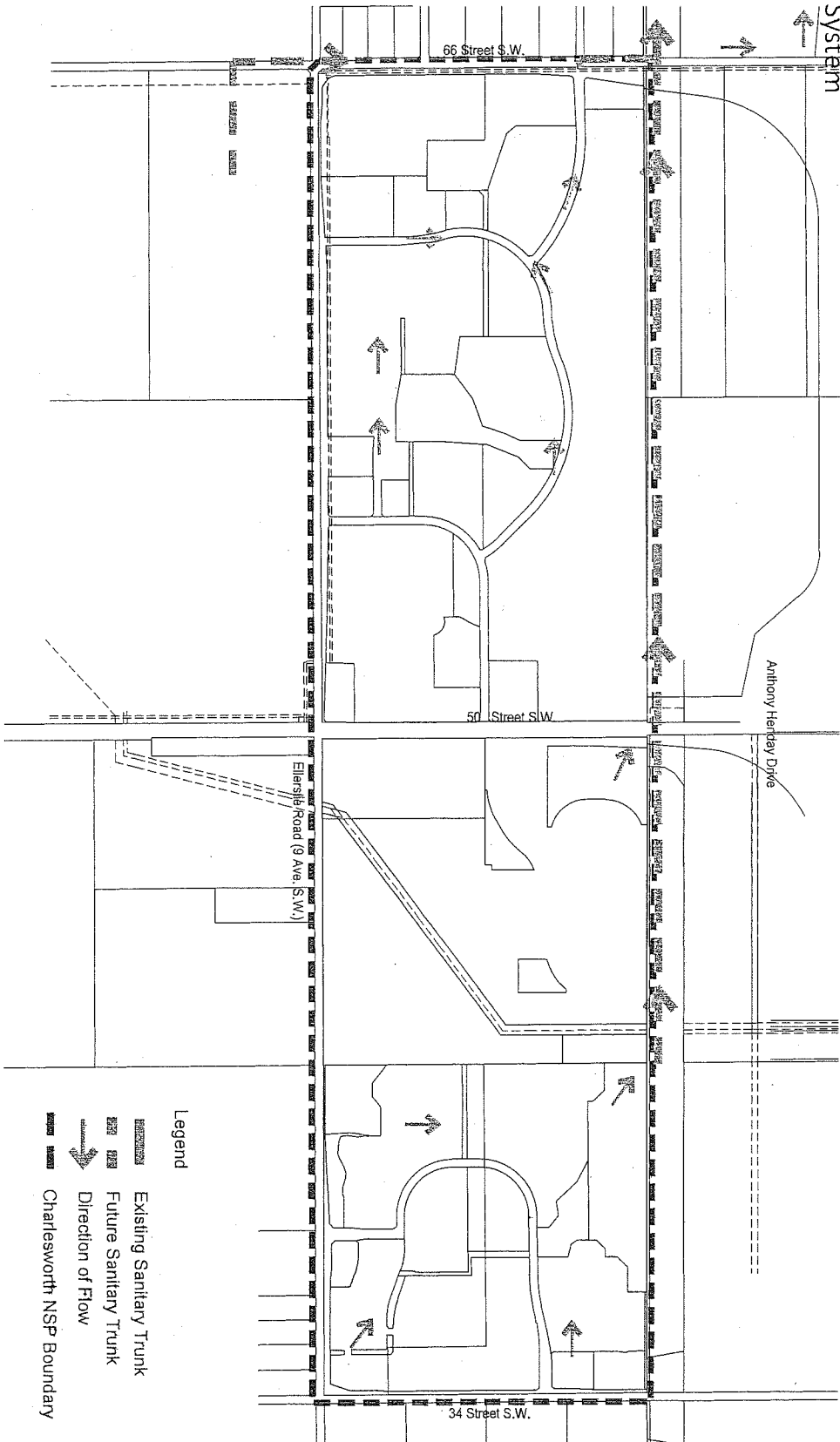
Stantec



CHARLESWORTH NEIGHBOURHOOD STRUCTURE PLAN



Figure 8.0 Sanitary Servicing System



- Legend**
- Existing Sanitary Trunk
 - Future Sanitary Trunk
 - Direction of Flow
 - Charlesworth NSP Boundary



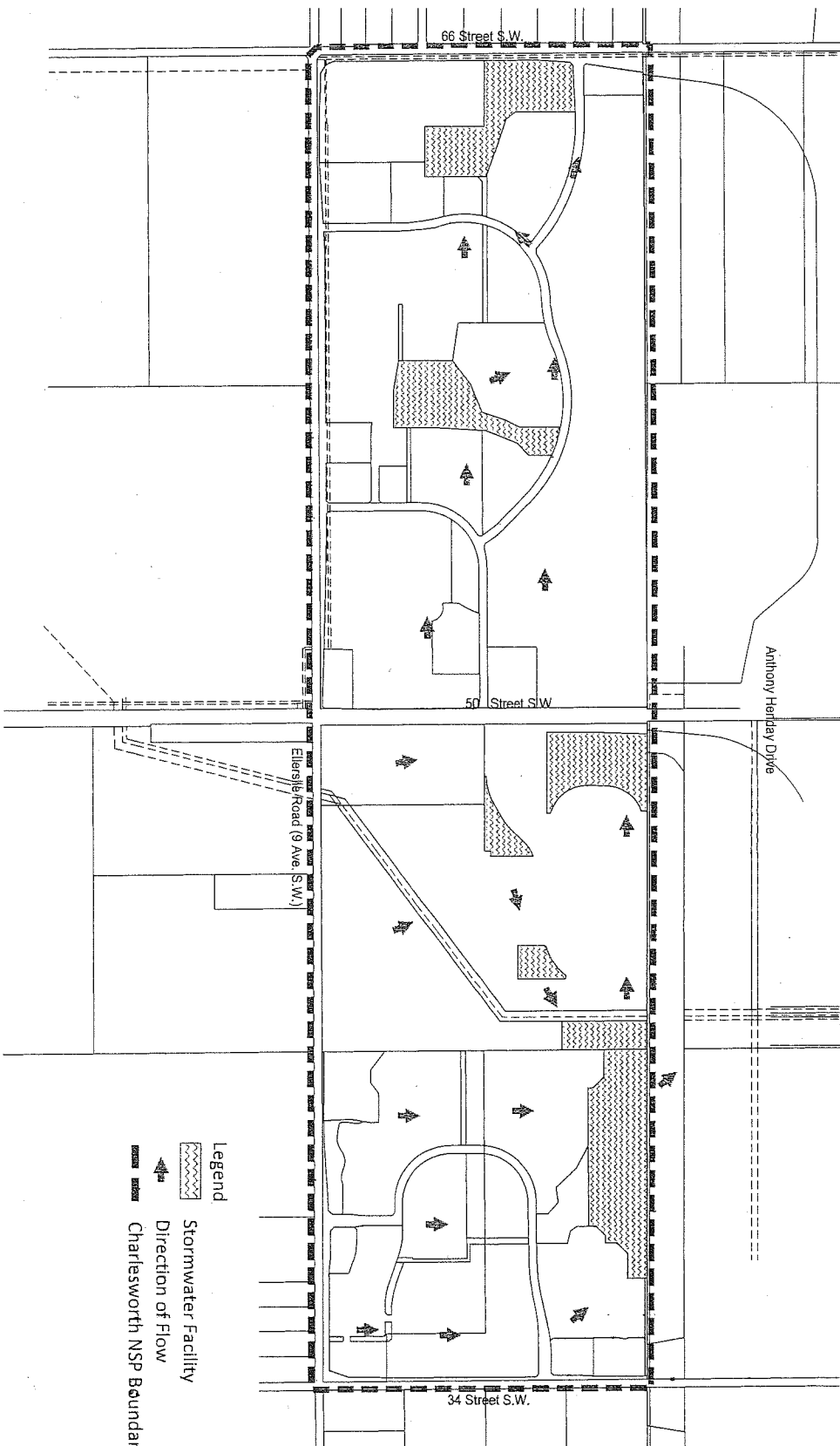
Stantec






CHARLESWORTH NEIGHBOURHOOD STRUCTURE PLAN



Figure 9.0 Stormwater Servicing System



- Legend**
-  Stormwater Facility
 -  Direction of Flow
 -  Charlesworth NSP Boundary

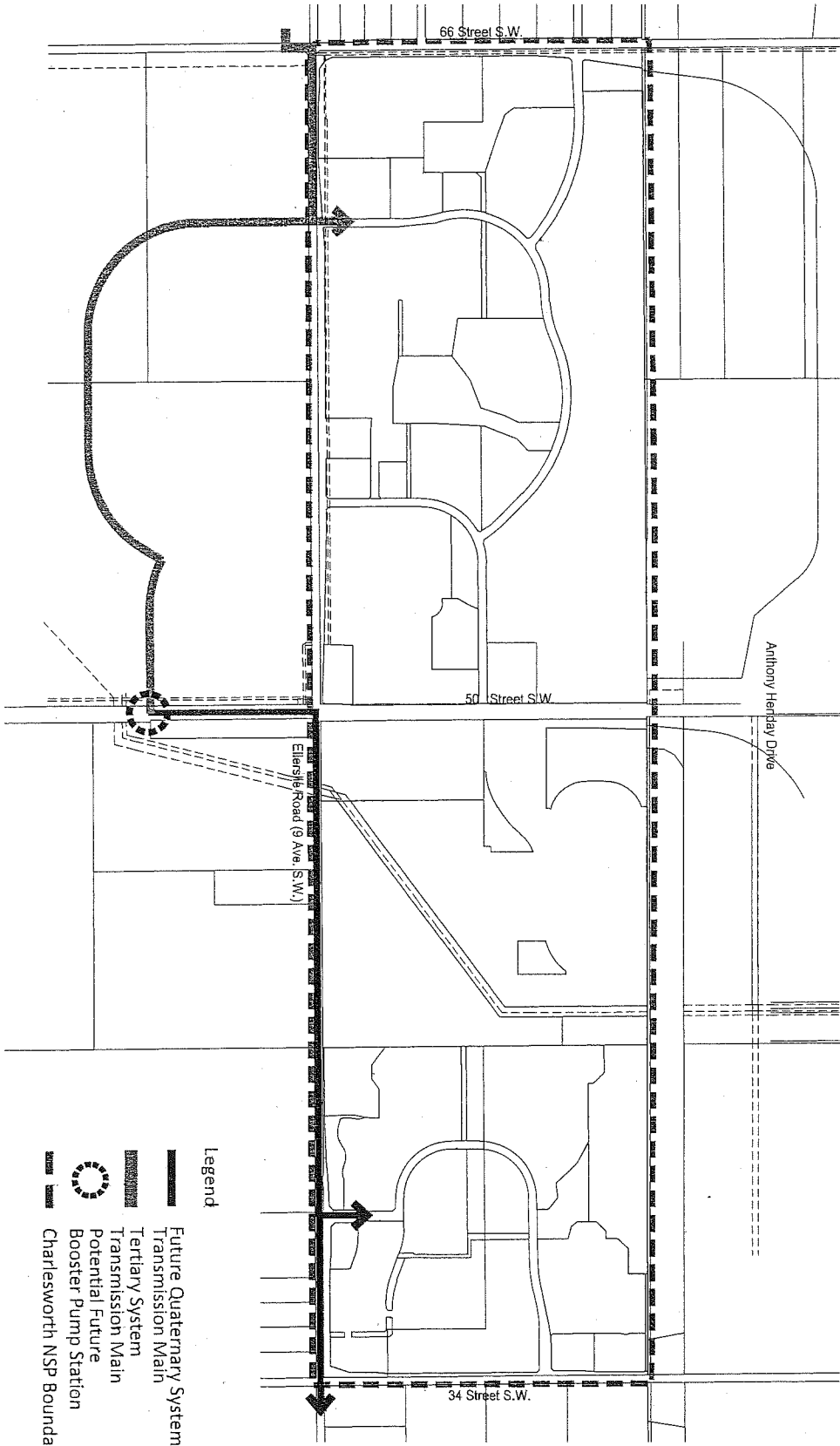


Stantec

**CHARLESWORTH
NEIGHBOURHOOD STRUCTURE PLAN**



Figure 10.0
Water Servicing System



- Legend**
- Future Quaternary System
 - Transmission Main
 - Tertiary System
 - Potential Future Booster Pump Station
 - Charlesworth NSP Boundary



Stantec

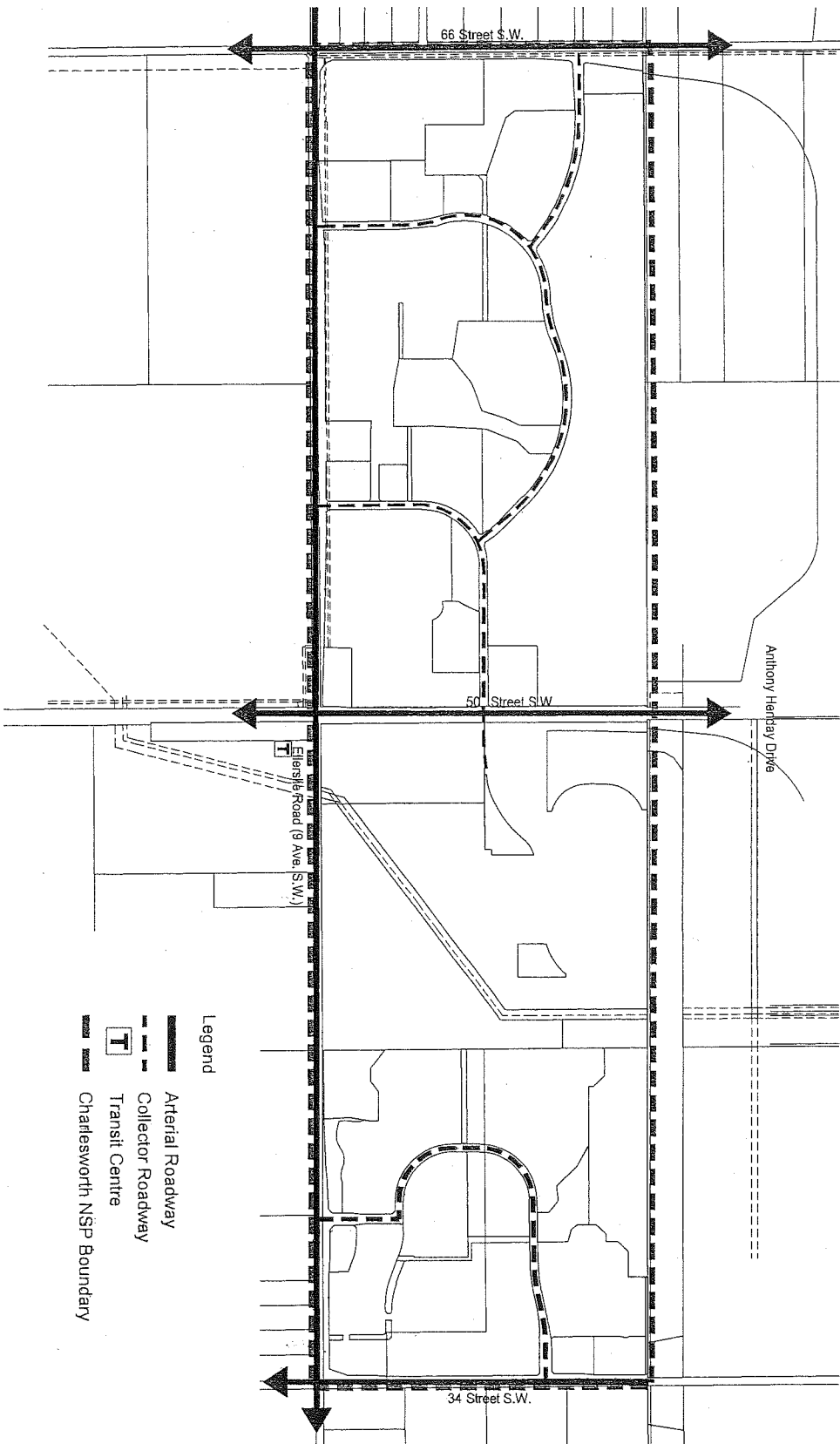
\\1181ha\client\151100660\drawing\NSP\NSP Charlesworth - 01.May.2013.dwg

May 2013

CHARLESWORTH NEIGHBOURHOOD STRUCTURE PLAN



Figure 11.0 Transportation Network



- Legend**
- Arterial Roadway
 - Collector Roadway
 - Transit Centre
 - Charlesworth NSP Boundary

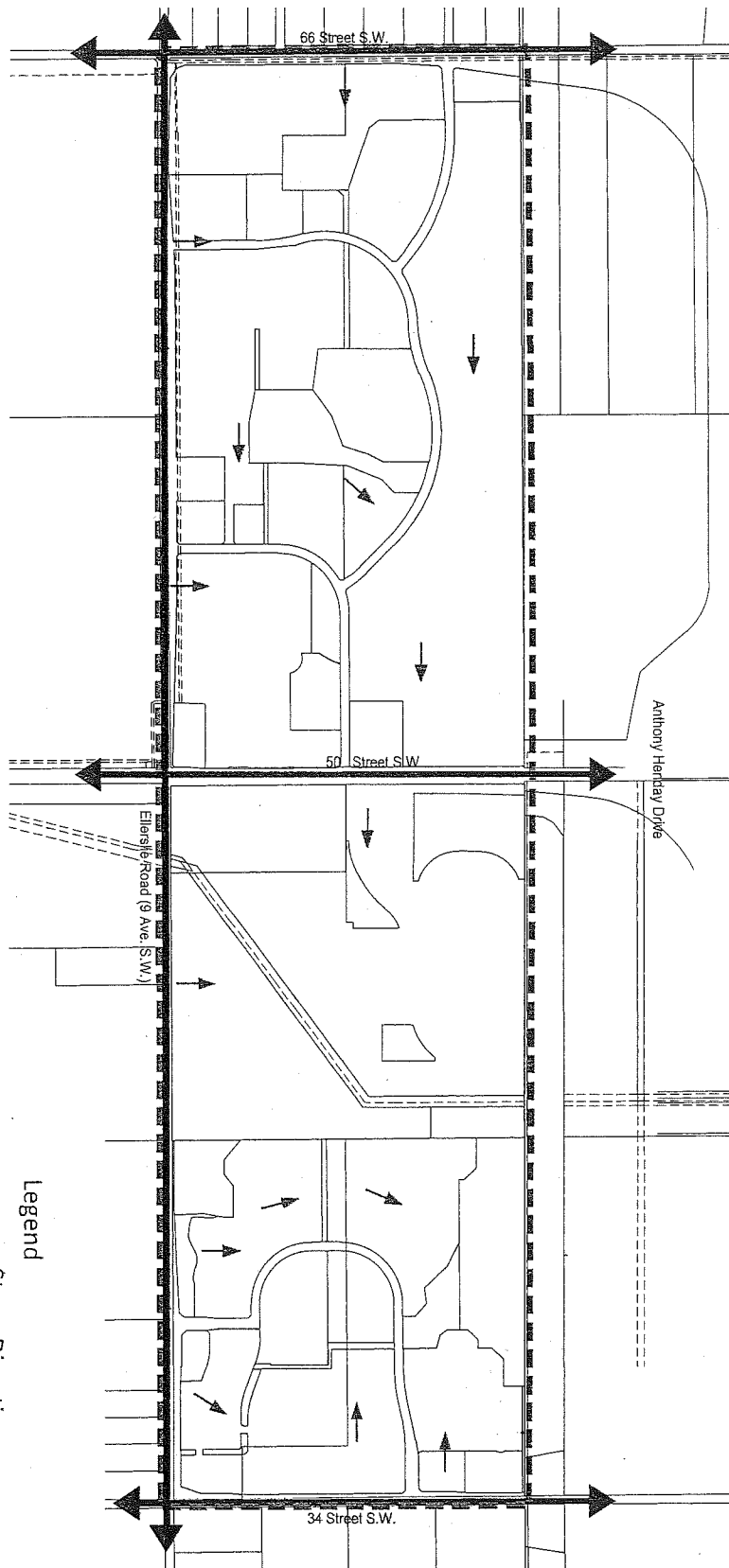


Starter

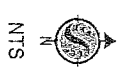


CHARLESWORTH NEIGHBOURHOOD STRUCTURE PLAN

Figure 12.0
Staging Plan



- Legend
- Stage Direction
 - Arterial Roadway
 - Charlesworth NSP Boundary



Stantec