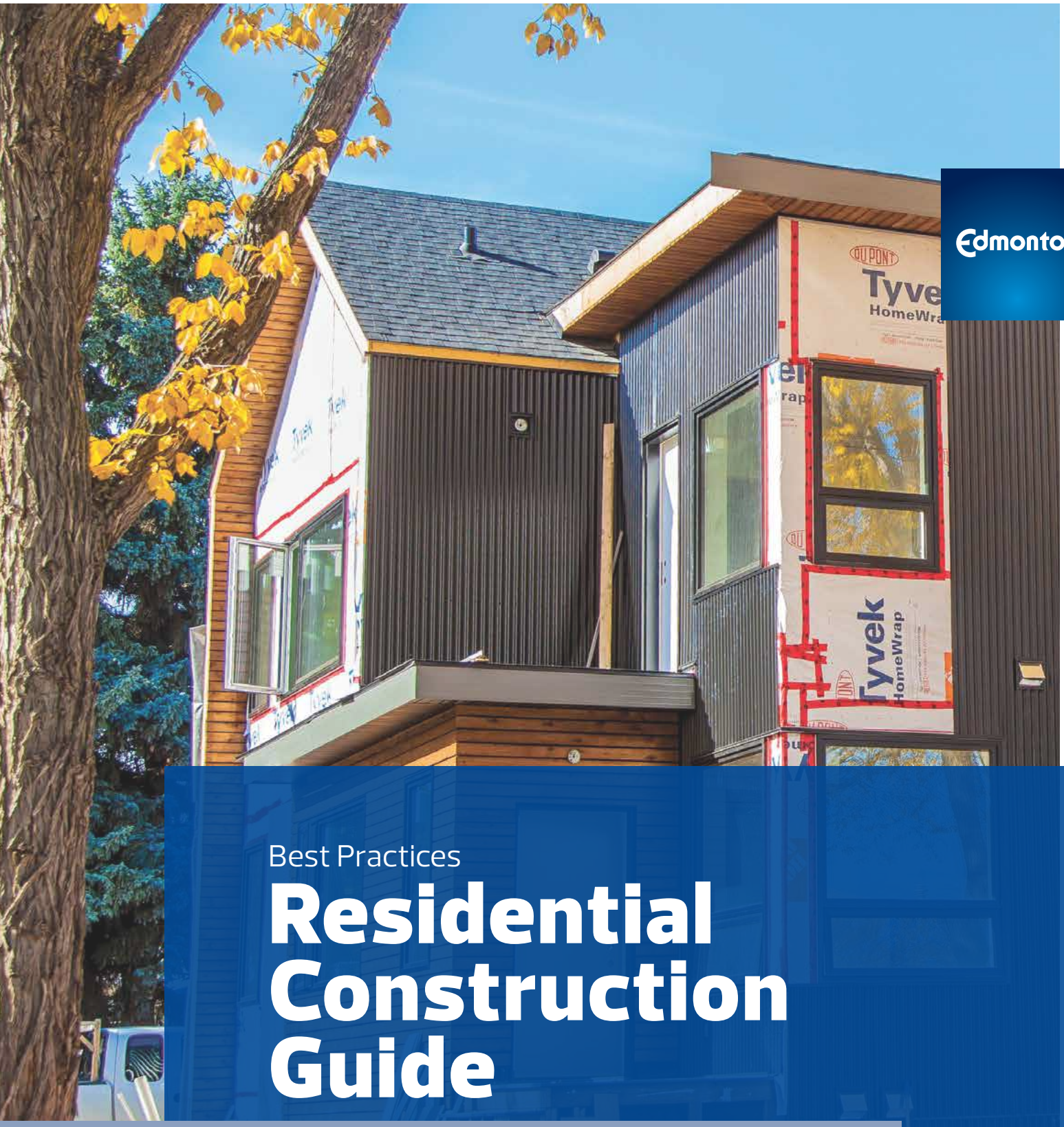

Edmonton

Best Practices

Residential Construction Guide

CITY OF EDMONTON

February 2019

Considerate construction requires a conscious effort in applying precautionary measures and establishing communication with surrounding residents. Strong communication and construction management should improve overall relationships with neighbours and the City, resulting in fewer fines, tickets and less stop work orders being issued.

Residential Construction Guide

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February 2019

Overview And Getting Started

About This Guide

General Tips

In this guide you will see general tips in green.

Infill Tips

Throughout the guide you will find tips that can help make your development process go more smoothly or some insights into building in older neighbourhoods.

As Edmonton continues to grow to accommodate new residents, construction of new homes in both older and new communities will continue. The City of Edmonton has worked with communities and the development industry to better understand what improvements may make construction easier, faster and less intrusive.

This construction guide is a tool to help builders, contractors and community members better understand what good construction should look like. It helps clarify responsibilities to help ensure a safe, clean and low nuisance site. The goal is to enable builders and contractors to better equip themselves to be safer and more considerate in their construction practices, as well as to help reduce infractions resulting in undesirable fines, tickets and stop work orders. It is designed to provide a clear understanding of:

- *Permits required for construction*
- *Best practices for construction*
- *How to establish and maintain good relationships with neighbours and residents during construction*
- *Where to find City bylaws pertaining to construction activities*
- *Who to contact with questions or concerns*

The guide covers a variety of construction topics providing information, further resource material, tips, as well as additional considerations for construction in older neighbourhoods where space can be limited.

Where possible, contacts for further information have been provided.

You can also contact us at:
developmentservices@edmonton.ca

How To Use This Guide

This guide is divided into two parts. The first portion of the guide focuses on the process of development and construction, helping you understand what permits may be required, and how to obtain them.

In the second half of the guide you will find a variety of sections relating to different aspects of construction, such as safety, demolition or site cleanliness. Each of these sections has some important components.

Hazards: a non-exhaustive list that demonstrates some of the common hazards associated with that type of work

Best Practices: something you do because it's the right thing to do

Due Diligence: steps to reduce risks and meet municipal legal requirements

The final portion of the guide includes definitions and appendices. References on where to find more information on each topic are listed at the back of this guide.

Who's Involved?

While construction is underway, you can expect a lot of different people to be involved. This can commonly include:

Builder – Any company leading the construction of or demolition of a building.

The City Of Edmonton – Any City employees enacting duties on behalf of the City of Edmonton.

General Contractor – The person or company who is responsible for overall provision, management and supervision of a work site for services of building construction, landscaping, concrete, electrical, excavation, drilling, heating, plumbing, paving, road construction, sewer or similar services of a construction nature.

Subcontractor/Trades – Any person or company contracted or performing work at the site who is not identified as the general contractor. It excludes employees or family members of the property owner.

Neighbour – A person or persons living in homes adjacent to, across from, or directly behind the lot under construction.

Landowner – The person, persons, or organization registered on the property title at Alberta Land Titles.

Resident – A person or persons living in the area surrounding the development, but not directly adjacent to, across from or directly behind the lot under construction.

Delivery Agents – A person or company delivering goods or services to the site.

The City Of Edmonton's Role

The City of Edmonton guides and makes decisions on behalf of the residents and businesses who are investing in Edmonton's growth and development. When it comes to construction, the City is a regulator responsible for issuing all permits as well as inspecting the site to ensure all Zoning Bylaws, Community Standard Bylaws, and building codes are being followed and the building conforms to approved plans and permits. This includes issuing over 20,000 Development Permits and completing over 130,000 inspections each year. Through every development and building project, we work with applicants and partners to build a livable, safe and sustainable city.

EPCOR's Role

EPCOR is responsible for operating and maintaining water, power and drainage utilities within the City of Edmonton. In addition, they provide advice and comment on Lot Grading Plans for multi-family, commercial and industrial development. For any connections to those utilities, contact EPCOR.

Edmonton Police Services' Role

Sometimes during construction, there is the unfortunate event of damage to a neighbour's private property. In these instances, we hope concerns and damage can be resolved through discussions between the builder and the neighbour, or through mediation if required. In the event where this is not possible, parties can contact the Edmonton Police Services non-emergency line to have concerns investigated.

Overview Of Requirements

Rules are in place to ensure safe and appropriate construction. The rules that apply to each build will include acts, codes and bylaws and come from all three levels of government. Sometimes policies and best practice guidelines will also apply. It is the responsibility of the general contractor to ensure sub-trades comply with applicable regulations to work being done. While a list of commonly referenced requirements and regulations can be found at the back of the guide, some of the most common include:

- *Alberta Occupational Health and Safety Act*
- *Alberta Traffic Safety Act*
- *Alberta Building Code*
- *Alberta Fire Code*
- *Safety Codes Permit Bylaw*
- *Community Standards Bylaw*
- *Drainage Bylaw*
- *Zoning Bylaw*
- *Traffic Bylaw*
- *Waste Management Bylaw*
- *Hazardous Material*
- *Trees & Construction*

General Tips

For all multi-residential uses like apartments, as well as all residential infill, you can expect to have a Development Permit Inspection. This inspection is triggered when final occupancy is requested and is to ensure that the development complies with the approved Development Permit.

Part 1:
Applications And Approvals

If you're planning a construction project (e.g. demolition, new construction, renovation or changes to the use of a building), you'll need permits from the City. The City is responsible for reviewing applications for all developments to ensure the building meets all of the requirements in applicable legislation.

Why Permits

Permits provide significant value to the City, the applicant, and to neighbours by providing a level of certainty to work being done. They're the result of years of experience, testing and feedback. Having proper permits helps ensure what is proposed to be built will be in line with City Bylaws, is safe and inline with City bylaws like the Edmonton Zoning Bylaw[17], and the Safety Codes Permit Bylaw[14],as well as the standards of the Alberta Building Code.[7]

General Permit Process

The typical process to receive a decision on a permit through the City of Edmonton involves four basic steps:

1. Submission of a complete application by the applicant
2. Review of the permit application by City of Edmonton staff
   a. Requests for additional information to support the submission if required
3. Approval/refusal of permit
4. Inspection for permit compliance

General Tips

Most importantly, do not start construction until you have all necessary permits or you could be responsible for substantial fines and the removal of the unpermitted structure.

Types Of Permits

In this section you will find the most common permits required when doing a residential construction project in Edmonton, along with a brief description explaining the purpose of the permit. Generally these permits fall into two basic categories: permits required for project approval, and permits required for logistics and site access to support the construction process. Each project will be different and it is the builder's responsibility to ensure all required permits are approved and available if requested.

Permits Required For Project Approval

There are some things that need to be reviewed before the City can approve a project to move forward, such as compliance with the Zoning Bylaw[17] and Alberta Building Code.[7] Development and Building Permits are required before you begin construction on a project.

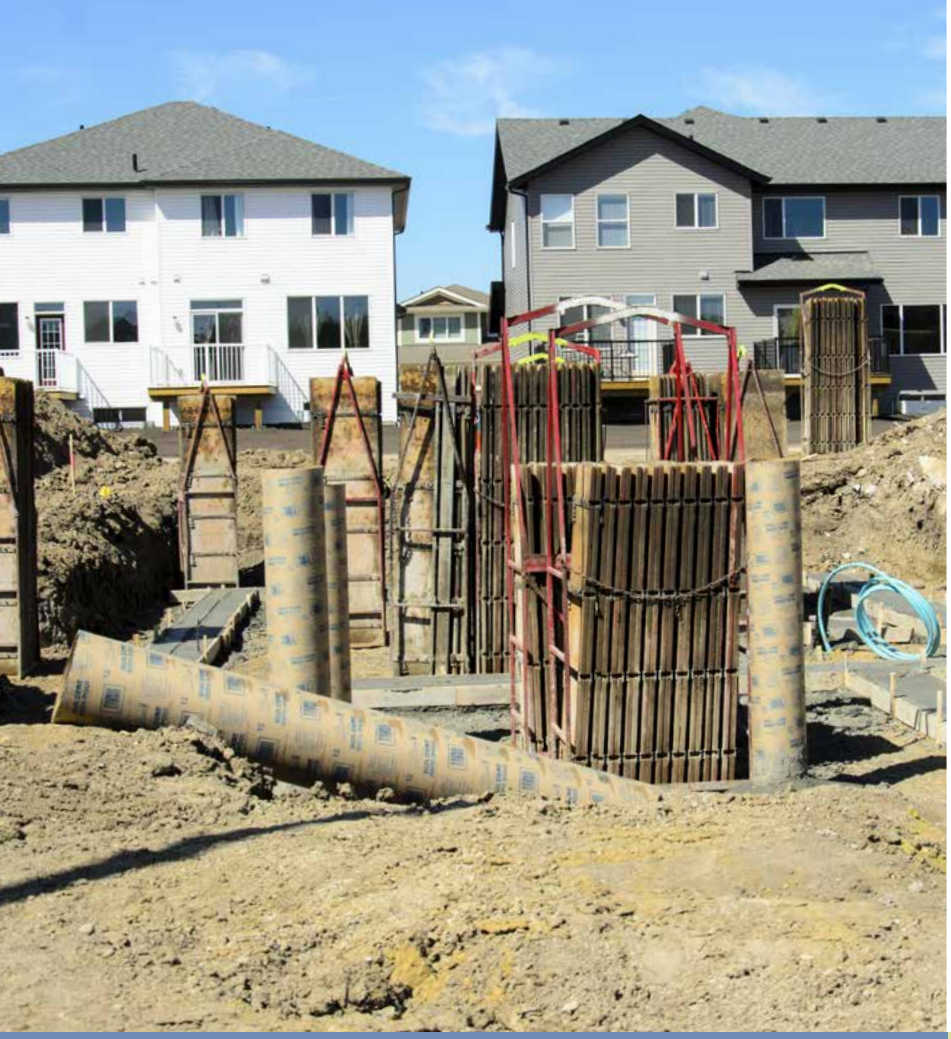
Development Permit

A Development Permit is required for any development in the City, unless the development falls within a limited list of developments that do not require a Development Permit. For example, a Development Permit is required to:

1. Construct a new building
2. Demolish an existing building
3. Change the exterior of an existing building
4. Complete work that will result in a change of use (i.e. constructing a secondary suite within an existing single family home)

The Development Permit is approved by a Development Officer once it has been reviewed to ensure compliance with the Zoning Bylaw.

Who Issues: Development Officer
More information:
edmonton.ca/developmentpermits



Building Permit

A Building Permit is required before the construction or demolition of any building or any changes to the exterior or interior of an existing building. The permit is issued after the detailed construction drawings are reviewed by a Safety Codes Officer to ensure they meet the standards in the Alberta Building Code[7] and related regulations. A Development Permit is often needed prior to a building permit being issued. Milestone inspections by a Safety Codes Officer may be required during construction.

Who Issues: Safety Codes Officer
More information: naildownyourpermit.com

Infill Tips

For projects in older neighbourhoods, checking a few details before you start the permit application process can help avoid delays down the road. Review the residential infill website at cityofedmontoninfill.ca.

You can request an infill pre-application meeting. This meeting is free and includes an overview of key infill considerations and potential issues with a City planner. You can submit the meeting request along with a preliminary plan online at cityofedmontoninfill.ca.

In addition, for new developments in older neighbourhoods, it is important to contact EPCOR Drainage Services, Public Services, to determine if existing infrastructure is suitable for your proposed development.

For further information
call 780-496-5444 or email wass.drainage@epcor.ca

General Tips

You can buy a complete copy of the Alberta Building Code[7] online from the Province of Alberta's Learning Resources Centre or the National Research Council.

Note: *Throughout the construction process a variety of inspections will be required.*

For more information, visit
edmonton.ca/safetycodes

For more complex permits, you may want to set up a pre-application meeting where City staff will assist you. Contacting the City early will help you avoid surprises and ensure your project goes smoothly. It is recommended you speak with a Development and Safety Codes advisor in person about specific questions you may have.

Infill Tips

Many mature neighbourhoods **do not have approved lot grading plans** and some that have approved plans were developed prior to the implementation of the lot grading approval program. In many of these cases, surface drainage problems that developed slowly over a period of years can become evident after rainstorms or during snow melt. Redevelopment and new construction can create, or highlight such existing drainage problems. Be sure to have your lot grading plan for the premises approved prior to beginning work.

For lot grading plan requirements, visit edmonton.ca/lotgrading

Permits Required For Logistics And Site Access To Support The Construction Process

Construction is a complicated process. There are many moving parts, a number of regulations that need to be followed and scheduling that can change based on things like weather and other unforeseen circumstances. Before starting any construction work, make sure all applicable permits have been obtained and a site safety plan is in place.

Lot Grading Plan

A lot grading plan is submitted at the time of the development permit application and must be reviewed and approved prior to the construction of any buildings, additions to buildings, or alterations of surface drainage on the premises. Lot grading plans for single detached houses are reviewed by the Lot Grading Team. After construction, a property must be graded, surveyed, and documented in the form of a lot grading certificate, and inspected for compliance with an approved lot grading plan and in accordance with Drainage Bylaw 18093.[16]

Who issues: Lot Grading Team
More information: edmonton.ca/lotgrading

On Street Construction and Maintenance (OSCAM) Permit

An OSCAM permit is required for a variety of work on City public road right of ways, including:

- All work that involves excavation of roadways, sidewalks, or boulevards.
- All work on freeways, river crossings, in the downtown core, or Whyte Avenue area.
- Non-excavation work that interferes with traffic flows on major roadways during the hours of 6-9am and/or 3:30-6:30pm, excluding weekends and holidays.
- Non-excavation work with a duration of more than four hours at any one location
- Multiple non-excavation work locations each less than 4 hours in duration, but closer than 250m apart are considered to be one location.
- Temporary crossing of a sidewalk and/or boulevard for the purpose of accessing private lands from a public road right-of-way.

Permits allowing bins to be placed on public road right-of-way will be incorporated into the OSCAM Permit process in the second quarter of 2019.

Who issues: Parks and Roads Services
More information: edmonton.ca/oscampermit

The Temporary Crossing Permit (TCP)

The Temporary Crossing Permit (TCP) – formerly the Temporary Construction Access Authorization Permit (TCAAP)– is required when motorized equipment will need to cross a boulevard or a sidewalk to temporarily access private property from the public road right-of-way when there is no driveway access. The TCP will be issued as an OSCAM Permit at no charge and can be applied for the duration of the project. A Tree Protection Plan may be required by Urban Forestry along with the TCP to ensure public trees are protected. In addition, the permits identify safety precautions, require boulevard protection requirements and appropriate drainage requirements.

Who issues: Parks and Roads Services
More information: edmonton.ca/oscampermit

Tree Protection Plan

A Tree Protection Plan (for any building application within five metres of a City tree) may be required by Urban Forestry as part of the TCP. It is recommended that builders submit pictures of the property and adjacent boulevards with their submission package, which will provide evidence of the state of the boulevard and trees. The Tree Protection Plan will need to show things like a site plan, construction details, signage required and the dimensions of the tree protection fence. If crossing the boulevard, you will have to identify how you will protect the boulevard from soil compaction.

Who issues: Parks and Roads Services
More information: edmonton.ca/treeprotection

Sidewalk Closure Permits

If a sidewalk needs to be closed on a more long term basis, a Sidewalk Closure Permit is required. This permit ensures proper signage so that pedestrians are made aware of the closure, are provided with appropriate detour information and hoarding where required.

Who issues: Parks and Roads Services

Permanent Residential Curb Crossing Permit

A Residential Curb Crossing Permit is required when proposing a new driveway access off a public roadway. The Development Officer commonly issues the permit in conjunction with a Single Family House Permit or Minor Development Permit. You should be aware that if you are in a mature neighbourhood, have a back alley and your property has an access to the public roadway, under most circumstances you will have to remove any access to the public roadway.

Who issues: Development Officer
More Information: edmonton.ca/curbcrossing

Curb Fill Permit

A Curb Fill Permit is required for the removal and filling in of a driveway access. When you are removing a driveway access, you will be required to restore the curb, gutter, sidewalk and boulevard. Remember to show any existing driveways on your site plan. A Curb Fill Permit will be issued as a Curb "Crossing" Permit, even if the application is to fill in an existing crossing.

The requirement for a Curb Fill Permit will normally be identified during the review of your Development Permit application. If you are in a mature neighbourhood and have a back alley and your property has an access off the public roadway, under most circumstances, you will have to remove any access off the public roadway. The Development Officer will let you know if this is needed.

Who issues: Development Officer

Temporary Residential Parking Permit

A Temporary Residential Parking Permit is required when parking temporarily in a Residential Parking Program, Time Restricted Parking, or in prohibited parking area for short periods of time.

To apply for a Temporary Residential Parking Permit: call 311.

Who issues: Parking Services
More information: edmonton.ca/parkingpermits
Online Request:
edmonton.ca/temporaryparkingpermit

Temporary Parking Permits – Citywide

A Temporary Parking Permit for Loading Zones & Time Restricted Parking Zones may be issued to accommodate out of town guests, health care services, moving and home renovations.

Who issues: Parking Services
To request a Temporary Parking Permit: call 311

Waste Bin and POD Permit

A waste bin and POD temporarily placed on a public road right-of-way will be incorporated into the OSCAM Permit process in the second quarter of 2019. Typically, for waste bins, it is recommended the service provider applies on behalf of the customer. With POD permits, the homeowner does the application. Allow approximately four working days for review and processing..

More Information:
edmonton.ca/temporarybinpermit

Dangerous Goods Transportation Permit

A Dangerous Goods Transportation Permit is required to move any product or substance listed in the schedule of the Dangerous Goods Transportation and Handling Act to and from a construction site. The permit is available through Fire Rescue Services and must be obtained for each vehicle.

Who issues: Fire Rescue Services
More information: edmonton.ca/fireservicefees

Additional Permits

In addition to the above permits, additional permits may be required such as electrical, mechanical and plumbing permits.

Further information can be found at
https://www.edmonton.ca/business_economy/licences_permits/types-of-permits.aspx

REMEMBER

Business Licences

A Business Licence[20] is issued by the City of Edmonton and is required of business owners providing goods or services in Edmonton (including sub-contractors, trades and delivery agents). This is different than a provincial Business Registration.

Business Licenses are issued for a one year term and need to be renewed annually. The business licence is issued based on the business activities taking place. There are regulations, requirements and associated fees based on the business activities that need to be met prior to issuing the business licence.

For more information on how to obtain a business licence, visit
edmonton.ca/openforbusiness

Part 2:
Best Practices

SECTION 1
Working With Communities

A successful project starts by understanding who's involved and impacted by the development. In newer neighbourhoods, residents are typically expecting on-going construction. They may feel that area plans and architectural guidelines provide sufficient guidance for homebuilders, allowing residents to feel comfortable with the decisions they are making. In older neighbourhoods, change often happens incrementally by many different developers and has different levels of impact to those who already are in the neighbourhood. This usually means that many people want to weigh in on what's going on. See the Infill Tips Box for some ways you can work with neighbours living in older communities.

In any community, construction can be disruptiveso you should always use good construction practices:

- The construction practices outlined in this booklet address some of the top concerns of residents who have lived near construction projects.

- You'll find many of the points outlined in these practices center on communication. Keeping your neighbours informed and aware is one of the best ways to keep your project running without interruption.

Infill Tips

An infill adds a new element to an established community of people who love their homes and the character of their streets.

If you're looking for a few ways to help make sure your build flows as smoothly and as profitably as possible, this is a good place to start. Here are a few pointers:

Get To Know The Community

- Understand the community. If you have a number of projects in one neighbourhood, it might be a good idea to introduce your firm by contacting the community league or hosting or sponsoring a community event.
- Get a feel for the community character. By having conversations with residents about the character of the community, you'll be able to empathize with concerns raised by the residents and steer the design and construction of your project in a way that achieves your client's vision, your timeline, and community's expectations.
- Engage and talk with the immediate neighbours before you submit your application.
- Early discussions help reassure neighbours by acknowledging them as an important part of the process.

Use Exceptional Design

- Help others understand what's possible in the world of infill. Some have had negative experiences or have seen infill projects in the past that seem to directly oppose the aesthetics of a neighbourhood.
- Remember, every infill you build is an opportunity to showcase the incredible potential effective infill can have on our city.
- Design in ways that will excite both your client and their neighbours. Be exceptional on every project.

SECTION 2
Best Construction Practices

As a veteran of the industry, you may already have a good hold on what constitutes good construction. But as we learn more from residents who are living near construction, it gives the City the opportunity to help you ensure you are creating the best experience for neighbours, and keeping your project on schedule.

Construction is messy and loud at the best of times and creating safe, tidy and considerate construction sites will help minimize construction complaints and disruptions to your workflow. Let's work together to minimize construction damage and complaints.

This section does not cover all aspects of residential construction and demolition safety. It remains the responsibility of owners, general contractors, sub-contractors, supervisors and workers to be familiar with and to follow all applicable legislation which govern and regulate their particular scopes of work.

General

Getting started is the hard part. Here are some tips that everyone on site should know to ensure that your construction project is safe, thoughtful and follows the rules and regulations set out by the City and other governing bodies.

Hazards

- Materials on the sidewalk, or in the lanes and street
- Leaving potentially dangerous building materials, equipment or vehicles on the site unattended
- Members of the public accessing the site
- Dangerous materials that can flow into sewers and subsequently harm streams and rivers
- Falling objects, tripping hazards, etc
- Hazardous waste such concrete truck residuals dumped on City property

General Tips

Noise Control

- *The Community Standards Bylaw[15] allows you to operate construction equipment:*
- *Monday through Saturday: 7am – 9pm*
- *Sunday and holidays: 9am – 7pm*
- *Even during periods when construction is permitted, noise levels should be minimized out of consideration for the neighbours in older and new communities.*
- *If there is to be a particularly noisy aspect of construction coming up in your schedule, consider letting neighbours know when they can expect it.*
- *Try to maintain electricity to avoid the need for noisy generators. If a generator is needed be considerate. Consider its placement, and use noise reduction techniques such as a box or a quieting.*

Infill Tips

Infill construction is different in many ways from construction in new communities.

On an infill project, you'll be working in neighbourhoods where new home building is not the norm. There may be more scrutiny from the neighbours and additional hazards you'll need to watch for. The trees are bigger, the roads can be smaller, and neighbouring homes may all fit a pattern that hasn't changed in decades.

These important qualities attract home buyers to these neighbourhoods, but you'll also have to take them into account if you want construction to go smoothly and if you want your client, and their neighbours, to be happy with the result.

Best Practice

- Keep sidewalks and roadways safe and clean at all times.
- Make sure the public is aware the site is off limits.
- Identify hazards and take steps to mitigate them.
- Ensure, as the general contractor, you are aware of what is happening on site daily.
- Be sure any required fencing for the site and tree protection are secure, located within your site, and you have cleared all underground utilities.
- Remember, as the general contractor you are responsible for your trades and any damages.
- Plan for the unpredictability of Alberta weather. If there's anything in the forecast that might affect the site, take steps to keep things safe and clean. Always be prepared.
- Keep animals and pets off site for their safety.
- Limit the amount of smoke and dust that wafts into neighbouring lots.
- Document the conditions of all adjoining properties, sidewalks, roads, neighbouring houses, fences, curb cuts, etc.
- Take photos prior to working on the site to document the current state.

Due Diligence

- Follow Occupational Health and Safety (OH&S)[2,12,25] legislation and insist your workers undertake safe work practices and wear and use proper safety equipment (e.g. approved hard hats and protective work boots).
- Obtain and maintain current permits.
- Make sure all your trades refer to the manufacturer's specs when operating equipment, especially in tough conditions.
- Builders, workers and contractors have an obligation to report spills, as stated in the Alberta Environment Protection and Enhancement Act.[1]
- Make sure workers have access to a toilet. The rules around it are in the OH&S Act, Code, and Regulations.[2,12,25]
- Clean up your wastewater in accordance with City bylaws[19] and note that concrete waste water is a prohibited material and can't be allowed to enter the storm drainage system.[32]
- Identify your disposal depots for controlled substances before you start construction.
- Have a Fire Safety Plan. You'll need one to stay in accordance with the Alberta Fire Code.[8] Make sure to encourage good on-site communication, and empower workers to redirect emergency personnel to appropriate access points if necessary.
- Keep hydrants clear at all times.

Infill Tips

- Talk to the neighbours and make sure they know what's going on and what to expect during construction. Then make sure workers know how to behave appropriately in the community.
- When constructing in established neighbourhoods, special care must be taken to ensure the neighbours landscape is protected.
- You must obtain permission from the neighbouring property owner before you can access his or her property. This includes using private driveways for turn-arounds, or walking on their property to install a temporary construction fence. You must always get permission or you may not enter.
- In many cases, having someone on site for supervision is beneficial.

SECTION 3
Worksite Safety

Your construction site must be kept safe for both neighbours and workers at all times.

Locating all underground and surface utilities and maintaining clearances from these utilities when constructing or temporarily occupying the road/boulevard is important. Also, ensuring proper sizing and construction of tree protection, and clearances from the canopy and branches will help protect crews, neighbours and trees from unintended injury or damage. The City has developed a tree protection fence detail which will guide you in the installation of the proper fencing.

General Tips

On-Site Safety

Unsafe acts may be referred to Alberta Occupational Health and Safety at 780-415-8690 or work.alberta.ca

If there's a concern for imminent danger, the City may have authority to take whatever actions are necessary to alleviate the dangerous condition.

Infill Tips

In older neighbourhoods, it's a good idea to take photos of any access points you may intend to use before you begin work so you have a record of the existing condition of public infrastructure such as alleys, boulevards, and public streets and sidewalks. This is especially the case where there is already damaged or aging infrastructure prior to your construction beginning. Any public property damage incurred as a result of the infill construction will be the responsibility of the construction site landowner to repair.

Hazards

- On-site debris
- Tripping and falling hazards
- High noise levels from generators and other machinery
- Weather conditions such as ice, heat, wind, and rain
- Hazardous materials
- Overhead/underground utilities
- Excavations and trenches

Best Practices

- Clean site daily.
- Ensure a First Aid kit is available on site.
- Secure anything stored overhead and on-site.
- Provide and post contact information for relevant supervisors and emergency numbers.
- Have designated places for storage of goods and refuse.
- If there are hazards, make sure they're clearly marked and visible to the public and the workers. This includes overhead, construction and non-construction hazards.
- Develop safe job procedures and practices to ensure everyone on site is staying safe.

Due Diligence

- Ensure all staff and trades are familiar with evacuation and safety protocols.
- Ensure relevant Material Safety Data Sheet (MSDS) is available on site[12].
- Start every day by reviewing on-site hazards.
- Clearly mark all excavations.
- Do not approach a trench without proper training and equipment.
- Have the right Personal Protective Equipment (PPE) in place before accessing the site. Check with the Hazard Assessment and Safe Job Procedures if you're unsure what that entails.
- Hazard assessments will need to be completed. Make sure they're done in accordance with the Occupational Health and Safety Act, Code and Regulations [2,12,25].
- Ensure all workers on your site wear appropriate Personal Protection Equipment (PPE).
- Call or Click before you dig 1-800-242-3447.
- If there's anything on site that could be hazardous (environmental conditions, etc.) take the time to make sure everyone is aware.
- The Occupational Health and Safety Act, Code and Regulations[2,12,25] have some very specific things to say about protecting workers from harmful chemicals and other substances. Read them and tell your team. Stay safe.
- If any hazardous[24] or prohibited materials are generated as part of construction, you'll need to take every step possible to protect the public, property and workers.

SECTION 4

Traffic Safety

If you are working inside the City's right-of-ways you also need to be aware of potential interruptions to traffic and safety protocols to ensure everyone can stay safe. Sometimes there are poor weather conditions or distractions that can be mitigated by following established best practices and legislation.

Hazards

- Movement of pedestrians and cyclists around project site
- Moving equipment on and off the site
- Blind spots
- Adverse weather conditions
- Distracted drivers
- Changing driving conditions

Infill Tips

When working in older neighbourhoods, neighbours are not used to living next to construction. In addition to on site safety of workers, consider potential hazards that may affect neighbours and develop a plan to reduce these risks. Remember, a family may live right next door which may mean ensuring the safety of curious children and pets.

Best Practices

- Provide temporary traffic control[26] measures to ensure safety of the workers and the public, regardless of whether the activities require a permit for use of the road space.
- When you have a permit, don't forget to follow the conditions within it!
- Ensure you have the appropriate temporary traffic control devices stored and available on site.
- Whenever possible, schedule disruptions to pedestrians, cyclists, and vehicles during non-peak travel times.
- Provide alternative walking surfaces that are slip-resistant when wet to permit accessible passage around a sidewalk closure.
- Provide signage at places where users may make the decision to detour to an adjacent walkway without having to backtrack.
- If something is unclear, call 311.
- Be responsible for your site. This includes temporary traffic control for trades and delivery services.

Due Diligence

- If you require permits for use of the road space, ensure they are up to date. These include OSCAM permits which covers the Temporary Parking Permit (TCP), the Tree Hoarding Permit, and the Waste Bin or POD permit. You may need additional permits in either infill or greenfield in situations where FAC has already been granted or if you are one of the later builds in the community.
- Have your temporary traffic control devices in place before you start work.
- Remember, these precautions are required anytime there is material or equipment within the road right-of-way.
- The City of Edmonton Procedures for On-Street Construction and Safety booklet[26] will provide you with information regarding standards of performance and typical temporary traffic control setups.
- Do not park in front of or obstruct fire hydrants.
- Never block access to private property.

Infill Tips

When working in older neighbourhoods, remember that streets and alleys can be narrow, making it harder for neighbours to go around equipment and machinery. Try to have empathy for them and let them know when work will be taking place that may temporarily limit access.

General Tips

Signage

- *Development Permit notification signs are required on the sites of demolition and construction in all mature neighbourhood sites, and at the Development Officer's discretion in other neighbourhoods.*
- *The Development Permit notification sign must be posted close to the sidewalk within 14 days of the issuance of a valid Development Permit. It must be posted prior to begining construction and remain posted until final occupancy is granted by the City unless otherwise indicated for your development.*
- *The Development Permit applicant is responsible for manufacturing, posting and maintaining the signs, which will be generated from a City-approved template and shared with the applicant. Signs will include contact information for the contractor, Development Permit holder, and/or landowner, the site address, a brief plain-language description and/or graphic of what has been approved, the City file number, and contact information for 311.*
- *The construction site address signs must be present with municipal addresses, clearly displayed at all sites with issued building permits. The signage must display the assigned site address with the building permit number indicated beneath.*
- *Signs can be freestanding or fixed to hoarding/fencing, but signs must not be installed on City of Edmonton property and must not be attached to trees in the construction site or on the boulevard.*
- *Failure to comply can result in fines starting at $500. Applicants are responsible for manufacturing, posting and maintaining signage and signs must remain in place until final occupancy.*

SECTION 5
Perimeter Fencing

Your construction site must be kept safe for both neighbours and workers and must be properly fenced. Failure to provide a protected construction site may cause injury and prove costly in a number of ways. Where a construction or demolition activity maybe a hazard to the public, a strongly constructed fence, boarding or barricade may be required to secure the construction site.

If you are unsure if your site requires a perimeter fence, look to safety code legislation and regulations [7,8].

Hazards

Signs and fences should be put up to keep the public safe from hazards, such as:

- Spoil piles and water filled excavations
- Material and debris blocking sidewalks and roads
- Using machinery in close proximity to neighbouring property, buildings, vegetation or cars.
- Demolition and construction work
- Unstable excavations, soil and structures

Best Practices

- The workers on site should be made aware of the fence's safe handling and operations procedures, as outlined by the manufacturer.
- Conduct regular fence inspections and document them. A daily checklist is a good idea.

Due Diligence

- Site fencing should be contained within the property line.
- If you feel you need to enter a neighbour's property to safely install the fencing, get their permission first.
- The fencing must be able to stand up to the wind.
- Ensure all staff/contractors are aware and adhere to the site protection and tree protection requirements.
- The fencing cannot restrict public access to amenities, sidewalks or services.
- If the fence is altered, it must comply with the Provincial Codes and Regulations such as the Alberta Building Code[7].
- Fencing across roadways can't restrict access for emergency vehicles.
- You'll need permission from the Edmonton Fire Department to restrict access to an area. Contact a Fire Safety Codes Officer to see if fencing will impact access for Emergency Services.
- Teach your team how to safely handle the fencing panels.
- While workers are on-site, fencing may stay open. But, when unattended, the fence must be continuous, secured and without gaps.

Infill Tips

- Fencing should be installed before any excavation begins, and remain in place throughout construction [7,15].
- Consider initiating a conversation with neighbouring residents to discuss possible outcomes for future permanent fence location in case there are unforeseen damages to their property during the construction process.
- You may be able to enter into a private agreement with neighbours to negotiate use of various resources like parking, water or power in exchange for something similar in value. Note that neighbours are in no way required to do so.
- It is recommended the General Contractor have a plan or an agreement in place with all subcontractors and trades in case unforeseen damages are caused.
- Notify the neighbours about the fence that's going up and what's involved in its construction. Let them know why it's necessary and how long it will be there.

SECTION 6
Streets And Mobile Equipment

If you have the correct permits, you may be allowed access to the street as part of your site construction activity. Depending on the permit, this may include things such as temporary storage as well. In any case, if you are using the street, or have equipment occupying those spaces, please consider the following.

Hazards

- The operation of mobile equipment on roads, lanes, sidewalks or driveways
- Emergency response vehicles unable to access the area
- Equipment leaks, spills or failures
- Improper material storage
- Tripping hazards on public walkways
- Poorly signed or protected sites, material or equipment
- Oversized equipment and delivery vehicles accessing sites through narrow roads and alleys

Best Practices

- Respect your neighbours' parking needs and consider the noise irritation of construction vehicles with modified exhaust.
- Notify delivery and service companies of their responsibility to follow safe operating procedures.
- Use a flag person (or other control method) when necessary to regulate the flow of traffic around the site. Workers and the public should feel safe at all times.
- Equipment operators should leave the site clean. Cleaner than they found it would be better.
- Do not park any construction vehicles in a neighbour's yard.
- Keep sidewalks clear from storage and temporary storage of construction materials.

General Tips

Site Access

- *Ensure anyone who accesses the site understands the site safety requirements.*
- *Create safe access and egress for workers and emergency responders. Have this detailed in a site safety plan and make sure everyone knows it.*

Due Diligence

- Remember, all construction related vehicles must obtain temporary parking permits to park on streets where a permit is required.[26]
- In older neighbourhoods, or in new neighbourhoods where Final Acceptance Certificate (FAC) has been passed do not drive on or damage sidewalks, curbs, gutters or boulevards. Vehicles may not cross a sidewalk or boulevard except at a crossing authorized by the City with appropriate permits.
- Trailers must not be parked on the road unless attached to a vehicle. Vehicle parking is not allowed in alleys or on laneways unless the vehicle is loading or unloading goods.
- If waste is released in the sewage system, please report it to 311.
- Have all required documents, permits or signage on-site before work starts.
- Make sure appropriate permits are in place before any materials are delivered to the site.
- It's your responsibility to have an Emergency Response Plan that's tied to your Fire Safety Plan.
- Mobile equipment should be stored locked with buckets down.
- Equipment owners need to make sure the right signage and permits are on-site for their vehicles, trailers and equipment.
- It's the responsibility of the contractor to ensure equipment operators are in accordance with the Alberta Occupational Health and Safety Act, and Regulations Code.[2,12,25]
- When you need permits to use the street, get them prior to begining your work.
- If you need to temporarily close a sidewalk or a lane, ensure the traffic setup is in accordance with the City's procedures for On-Street Construction Safety.[26]
- Always make sure there is clearance for emergency vehicles, should they be required.
- Everyone who should be wearing Personal Protective Equipment (PPE) needs to be wearing it at all times.
- For safety reasons, public sidewalks need to be kept clear of mud, ice and debris.

Infill Tips

- Talk to your trade partners about parking. Only required vehicles should be parked in the area and all private driveways need to be accessible. Consider rewarding carpooling or other ways to reduce the impact on the street.
- Let your neighbours know about your project and that there will be additional vehicles around the property for the next few months. Reassure them you've talked to your sub-contractors and that they'll be following all street, equipment and parking regulations.
- Advise contractors not to drive onto neighbouring driveways, even when accessing narrower sites.
- Ensure project equipment only uses the approved temporary access into the site. Special care must be taken to keep construction and vehicles away from neighbours' landscaping.

For more information, visit edmonton.ca/trees or contact 311.

SECTION 7
Trees

Whether in a new or older community, it is important that you mind the boulevards and trees, please! Trees are a valuable City asset much loved by our residents and visitors alike. It is important that while your project moves forward, you take the time and effort to ensure you are protecting these beloved assets. Damage to public trees can be quite costly, with some large elms valued at more than $45,000. As the General Contractor, and ultimately the owner of the property, it is your responsibility to ensure public trees remain safe and unharmed, including its roots which you can't see! If you or your trades damage a tree, you will be responsible for damages. If it needs to be removed you will be responsible for both the cost of removal and the asset value of the tree.

Private trees are also valuable whether on private lots or pre FAC, damage and replacement can be costly.

Hazards

- Equipment or people causing damage to public trees
- Previously damaged roots which have compromised the stability of the tree
- Excavations where the existing root system is removed
- Trucks and heavy machinery driving over the boulevard or sidewalk compact the soil and roots of the tree
- Difficulty in seeing smaller, younger trees when operating heavy equipment
- Neighbouring trees which extend above or below ground into your property
- Over-hanging branches which interfere with the building or equipment accessing the site

Best Practices

- Meet with the City to talk about how to properly protect public trees and to coordinate any necessary tree work. Tree protection guidelines apply to all construction projects, big or small.
- Refer to the Tree Protection Brochure[28] which outlines the City's requirements for tree protection.
- Prune your private trees to remove dead limbs, or limbs that may interfere with construction activities and help prevent unplanned breaks and damage.
- On many construction projects, standard "safety orange" snow fencing is all that may be required by the City. The fence must have a top and bottom rail and stay in place for the duration of the construction project. This will serve as a "heads-up" warning to workers or equipment operators that any activity beyond the fence may cause tree damage.
- If you are working close to any public trees, you should ensure you have all relevant permits such as OSCAM and TCP.
- Don't wash your trucks out on the City right of way, including the boulevard.
- Trees located on private property should be protected as per the guidelines.

Due Diligence

- Notify the Parks and Roads Services team (call 311) of any construction work planned within five metres of City-owned trees.
- Trees on the boulevard cannot be cut down, removed or pruned without City approval.
- If a public tree removal is approved, the builder must follow the Live Tree Removal Guidelines and the Trees and Construction Guide.[32]
- Have a tree protection plan in place prepared by a certified arborist. Trees are beautiful, don't ruin them. For more motivation, they're also expensive.
- Install a fence. Fences are highly visible and prevent equipment, people and materials from entering the space. Install 'Protected Trees' signage on the fence. A sample of the sign can found on the Trees and Construction site.
- The tree protection has to stay in place until construction is complete. Please don't move it to allow equipment to access your site, except under the supervision of Urban Forestry!
- If you require City trees pruned, please call 311.
- Don't put anything inside of the tree protection fence (including things like tools, soil, backfill construction waste or equipment).
- Water or discharge should not flow over or empty into the tree hoarding fence.
- Do not attach anything (permanent or temporary) to public trees.
- If damage to a City-owned tree occurs during construction, contact Urban Forestry right away through 311 to have the tree evaluated.

Infill Tips

- In addition to their many ecological benefits, mature trees add to the character and walkability to older neighbourhoods. If possible, try to find a way to preserve existing mature trees on your lot while redeveloping. This will also reduce landscaping requirements as part of redevelopment.
- Initiate discussions with neighbours before cutting back any branches which may overhang or roots which may encroach from their tree onto your lot.
- If there is a private tree that is shared or if certain trees are at serious risk, the builder should work out an agreement with the homeowner before starting work.

SECTION 8
Demolition

The demolition of an existing structure creates a number of challenges and safety concerns that need to be addressed. Always be sure that demolitions are done in a way that minimizes hazards for the public, your workers and any adjacent properties.

Hazards

- Fires, release of natural gas, explosion, the release of hazardous materials, electrical arcing, flooding, excessive dust
- Blocking or damaging walkways and roads
- The effects of fire on emergency evacuation, shelter and response units
- Structural collapse
- Unauthorized entry
- Water flow from the main line if live utilities snagged
- Tracking demolished materials onto sidewalk/ roadway

Best Practices

- Before demolition, disconnect all utilities and services carefully.[23] You can save time and money by locating the services prior to demolition. Contact the service provider (ie. City of Edmonton, EPCOR, ATCO, etc.) for instructions on how to do this safely.
- A post-demolition inspection should be completed to confirm the site has been left in a safe condition.

Due Diligence

When planning to demolish a structure, it is your responsibility to research and understand the ways you can minimize hazards for the public, your workers, and any adjacent properties.

- Make sure to get your OSCAM permit and/or TCP.
- Before you demolish anything you must:
  - identify and minimize all hazardous materials, as per the current Alberta Occupational Health and Safety Act, and Regulations Code[2,12,25]
  - locate and disconnect all utilities and services
  - get a valid development and building permit to demolish
  - put up the development permit notification sign about the approved demolition
  - remove and dispose of debris
- The location of all utilities and services (i.e. gas lines, water lines, sewer lines, electricity, etc.) must be current and complete before any demolition begins. All associated documentation should be on hand and immediately available for review.
- Locate, cut and determine the condition, and depth and invert elevation of the sewer service at the property line to prevent damage to the sewer system.
- All fencing and signage should be in place and visible.
- Traffic control measures should be taken.
- Steps should been taken to minimize dust and other airborne particles.
- City trees[28] need to be protected.
- A Fire Safety Plan should be completed and available on-site.
- Read and follow The Standards Council of Canada Code of Practice for Safety in Demolition of Structure.[23]
- Read and Follow the City of Edmonton Community Standards Bylaw.[15] It contains things like noise control and rules around excessive idling.
- Have a Fire Safety Plan that complies with the Alberta Fire Code.[4]

Infill Tips

- Take extra care near property lines. Demolition debris should never cross property lines or impact fencing.
- Older buildings may not be located wholly on one piece of property. Take care to ensure you are working with any potentially impacted neighbours if this is the case. You may need to work with an Alberta Land Surveyor to help you determine where the property line is.
- Use information gathered on the condition and depth and invert elevation of the sewer to confirm its suitability for the new developments – this could save you time and money by preventing potential redesign.
- Notify neighbours before demolition occurs and try to provide them with a timeline, so they know what to expect.
- Take care of aging and recently replaced infrastructure.
- Clean up any mud that has been tracked onto sidewalks.
- Once demolished, ensure that the site is safe per required legislation and that water and weeds are not allowed to accumulate on site.
- All neighbours should be notified about what's going to happen. A conversation helps support a notice and you can advise neighbours that they may want to close windows or keep pets and children indoors.

SECTION 9
Excavation And Trenching

Be aware before you dig!

There are many things to be aware of when excavating such as worker safety, the requirement to contact utility companies and have the utilities marked before construction, and that digging too close to the property line may compromise your neighbours' fencing. As always, keep in mind City assets like sidewalks, boulevards and trees.

Prior to any excavation or digging, the excavator must contact Alberta One-Call online at **albertaonecall.com** and Shaw Cable at **digshaw.ca** to have the utilities marked.

Hazards

- Delivery, loading and unloading of heavy equipment
- Improper storage of soil
- Damaging an existing utility
- Instability or collapse of trenches and excavations
- Loss of supporting soil around neighbouring structures in and outside property lines
- Excess water in excavated ground
- Tracking mud onto sidewalk/roadway

Best Practices

- The spoil pile (the dirt that's been dug up) needs to stay on the site (not blocking sidewalks or roads) and should be kept away from the site perimeter.
- Limit vehicle access to your site and stabilize these entrances. This will keep off-site mud tracking to a minimum (which should be cleaned up regularly, regardless).
- Contractors should provide safe, alternate and unimpeded site access to service providers during utility and service installation.
- While you have your trench open, we recommend you record the conditions, location and depth of the water and sewer service to avoid delays or additional costs (Call EPCOR).
- Mind the hand exposing zone. The areas close to located utilities should be excavated with extreme care.

Due Diligence

- All required fencing and signage should be in place before excavation/trenching begins.
- The location of all services (i.e. gas lines, water lines, etc.) must be current and complete before any demolition begins. All associated documentation should be on hand and immediately available for review.
- When completing excavation of a site, contractors should ensure their activities comply with the following, but not limited to:
  - the Alberta Building Code[7]
  - the City's bylaws and regulations
  - current Alberta Occupational Health and Safety Act, Regulations, and Code[2,12,25]
  - ATCO Gas Safety Guide[21]
  - CSA Standard Z247 Damage Prevention for the Protection of Underground Infrastructure[30]
  - EPCOR Water Bylaw and Guidelines[31]
  - EPCOR Drainage Services Bylaw and Guidelines[32]
- Erosion and sedimentation should be prevented from entering the storm system by following the Control Guidelines & Field Manual.[27]
- Shore all excavations to the standards of our legislated requirements. This may, at times, require engineering to ensure stability.
- Seek professional involvement if shoring is required to ensure regulations are met and to keep the site safe for workers.
- Make sure your site complies with the City's Drainage Bylaw 18093.[16]
- When subcontractors create a temporary ramp, it should be removed at the end of the day to make sure the passage is safe for public and workers.
- Make sure there are safe entry and exit points that comply with the Alberta Occupational Act, Regulations and Code.[2,12,25]

Infill Tips

- When excavating or trenching, seek professional advice about following the limiting distances for shoring, soil stabilization, and protecting public infrastructure.
- Because of the small development area and how close you are working to the neighbours' homes, check with a professional to discuss mitigating any potential damage which may occur to neighbouring sites. Different sites may be at risk of different damage such as slumping, cave-ins, or vibration. You should try to ensure you avoid general damage to your neighbours property!
- Have a plan and communicate with your neighbour about how you will address dangers if they occur.
- Do not move dirt and other excavation material to another residential site for storage.
- When excavating, leave enough room for a security fence on the construction site.
- Be aware of all property lines, and ensure when you are excavating that you still have room on your site to secure your construction fence!
- Ensure your excavation does not damage neighbouring property, including fences and foundations.

SECTION 10
Lot Grading And Drainage

Flooding caused by heavy precipitation, melting snow, or runoff can cause problems for all kinds of properties. Older and newer houses, residential and commercial developments alike may be at risk for flooding. Here are some ways you can help keep your site, and your neighbour's property, dry and uncompromised.

Hazards

- Unsafe work sites
- Pooling water interfering with electrical equipment
- Any accessible excavation, ditch, drain or standing water that could pose a danger to the public
- Slumping, slope collapse and cave-ins
- Muddy and slippery surfaces
- Flooding on neighbouring properties
- Damaging existing infrastructure
- Runoff into river
- Infiltration of unwanted flows into the sewer system

Best Practices

- Ensure all existing sewer services are located and identified. Call EPCOR Drainage if you don't know where they are.
- Ensure overland drainage is always directed away from neighbouring lots.
- Create temporary drainage swales to direct surface runoff towards City streets and catch basins while lot is under construction.
- Immediately remove any accessible excavation, ditch, drain or standing water that could pose a danger to the public.
- Have EPCOR weigh in on your project prior to commencing final design.
- Always ensure your site allows for de-watering.
- Water has value, please don't waste it.

Due Diligence

- Don't let anything other than rainwater flow into the sewers.
- Proper drainage directing all overland flow to the storm drainage system must be maintained at all stages of construction.
- Discharge must occur on your own property, but not within 15cm of an adjacent private property nor 30cm from an adjacent City property.
- Ensure you have an approved lot grading plan in place prior to construction.
- Ensure appropriate sediment controls[27] are in place prior and during all construction.
- The owner or contractor must cut and cap all unused sewer pipes at the property line.

Infill Tips

- Because you are responsible for managing surface runoff to ensure it does not flow onto neighbouring properties causing hazards, damage or nuisances, check in with your neighbours to find out if they are experiencing any flooding coming from your site. You may be able to make an easy change to redirect water leaving your property. This also gives you the opportunity to show you understand and are willing to make adjustments as needed. Check ins like this also help reduce complaint calls to 311 and delays on your construction site.
- Existing home owners are also responsible for the surface runoff from their lots and they may need to make adjustments to their lots if they are currently directing runoff to your site. Consider having a conversation with them in advance to let them know about the Home Flood Prevention Program which includes a free drainage consultation. Open communication is a good way to start developing relationships and potentially working together with your neighbours early. Discuss what options are there in case a problem with drainage arises.
- Create temporary drainage swales to direct surface runoff towards City streets and catch basins.

SECTION 11
Site Cleanliness

In old and new communities, a significant number of delays, complaints and fines can be avoided by simply being a good neighbour while you are building. Some of the easiest ways to do this are through good site management and ensuring a clean worksite. A clean site helps keep your workers and the public safe, prevents trash from your site from spilling over onto neighbouring sites or properties, and keeps our public spaces as inviting as possible while work is ongoing.

Hazards

- Tripping over untidied materials like wires, boards, or trash
- Slipping on wet, or dusty surfaces
- Spilling drinks like hot coffee
- Stepping on construction materials like nails or glass
- Being struck by debris in high winds
- Displacement or collection of debris, garbage, loose building materials and packaging

General Tips

It's the builder's responsibility to clean up any debris that hasn't made it into a container.

Best Practices

- Keep the site free of weeds and unkempt grass.
- Don't let the styrofoam bits blow around.
- Make sure workers have access to debris containers.
- Ensure prompt cleanup of construction garbage to keep the site from becoming a safety hazard.
- Daily site clean-ups will reduce risk for the workers and make neighbours and adjacent builders a lot happier.
- Having a fence around the entire lot at all times can help with debris control.
- Keep an eye on the weather. If there's anything in the forecast that might affect the site or the neighbours, like wind or heavy rain, take steps to keep things tidy.
- Keep mud and dirt contained in the site, don't track it onto sidewalks and roads.
- Remember that any loose garbage and construction materials should not be allowed to accumulate, whether in a storage area, collection area or on public or private property off site.
- When it's raining, snowing or windy, you may need to tidy your site more than once per day.
- Make sure you secure your waste bin so others don't dump their garbage in it without your permission.
- Keep your waste bin from becoming over-full by emptying it often.

Due Diligence

- In all communities, the Community Standards Bylaw[15] regulates many aspects of your site. Non-compliance with this bylaw can result in fines and the closure of your site. Fines start at $250.00, but can escalate quickly on subsequent offenses.
- If you're excavating, make sure debris stays on the lot.
- Burning construction debris is not permitted.
- Know the Natural Gas Code[10] and follow all regulations around the use of propane heaters. It's important you protect your workers and the public by giving compressed gas the attention it deserves.
- If you're using hoarding, make sure all materials and tarps are in accordance with legislation.
- Hazard assessments will need to be completed. Make sure they're done in accordance with the Occupational Health and Safety Act, Code and Regulations.[2,12,25]
- Have the right Personal Protective Equipment in place before accessing the site. Check with the Hazard Assessment and Safe Job Procedures if you're unsure what that entails.
- Make sure anything stored on-site and overhead is secure.
- Develop safe job procedures and practices of your own to ensure everyone on site is staying safe.
- If there are hazards, make sure they're clearly marked and visible to the public and the workers. This includes overhead, construction and non-construction hazards.
- If there's anything on site that could be hazardous (environmental conditions, etc.) take the time to make sure everyone is aware.
- If you're going to be storing materials on a city street, make sure you have the right permits. An OSCAM permit is required and a TCP may be required to access the site.

Infill Tips

- Remember that it is easier to start a relationship off well by keeping a clean and tidy site than it is to repair that relationship later if something goes awry.
- Many residents in older neighbourhoods take significant pride of ownership of their private lot and the public spaces in their community (e.g. boulevards and alleys). They pick up trash and help keep everything tidy. A clean site and ensuring no damage is done to these areas helps to maintain relationships with the neighbours when you are building in these beloved areas.
- Place portable toilets well away from your neighbours' homes, off public property, and out of sight.
- Don't litter on your neighbour's lawn or on City property. Use a waste bin, or if you don't have one, make sure to keep all debris on the site. Please note a waste bin on a public road-right-of-way will be covered by the OSCAM Daily Permit by the second quarter of 2019.Tell delivery and service vehicles where they can drop materials on your site to ensure you are complying with your permits.
- Store everything on site, not on the sidewalks, lanes or in the street.

Bad Construction Practices

- Dirty site
- Overflowing garbage bins
- Fencing is missing, falling over or unsecured
- Leaving an open excavation unsecured
- No or improper protection or hoarding
- Damaged trees
- Untidy site
- Items leaning on neighbours' fences
- Exposed wires and pipes
- Debris left behind
- Improper grading
- Crumbling sides and neighbouring fences sagging in
- Dirt piles on neighbours' property lines

Good Construction Practices

- Tidy site
- Clean, contained in bins
- Well secured fencing
- Well protected trees
- Equipment and materials stored neatly
- Tidy and safe site
- Graded level to avoid water accumulation
- Well shored excavation
- Excavated dirt removed

Appendix

Provincial Acts

1. Alberta Environmental Protection and Enhancement Act
2. Alberta Occupational Health and Safety Act
3. Alberta Safety Codes Act – Building Code Regulation
4. Alberta Safety Codes Act – Fire Code Regulation
5. Alberta Safety Codes Act – Permit Regulation
6. Alberta Traffic Safety Act

National & Provincial Codes

7. Alberta Building Code (link to purchase only)
8. Alberta Fire Code (link to purchase only)
9. Canadian Electrical Code (Can/CSA 22,1) (link to purchase only)
10. Natural Gas and Propane Code (CAN/CSA–B149) (link to purchase only)
11. National Plumbing Code (link to purchase only)
12. Occupational Health and Safety Code
13. Alberta Municipal Affairs Safety Codes

City Of Edmonton Bylaws

14. Safety Codes Permit Bylaw
15. Community Standards Bylaw
16. Drainage Bylaw
17. Zoning Bylaw
18. Traffic Bylaw
19. Waste Management Bylaw
20. Business Licence Bylaw

Regulations/Guides

21. ATCO Gas Safety
22. Canadian Common Ground Alliance Best Practices
23. Code Of Practice For Safety In Demolition Of Structures Csa S350–M (link to purchase only)
24. Hazardous Material (Asbestos)
    - Asbestos Abatement Manual
    - Asbestos At The Worksite
25. Occupational Health And Safety Regulation
26. Procedures For On–Street Construction Safety
27. Erosion And Sediment Control Guideline& Field Manual
    - Erosion and Sedimentation Control Guidelines
    - Erosion and Sedimentation Field Manual
28. Trees & Construction
29. Safe Disposal Of Concrete And Cement Based Products
30. CSA Standard Z247 Damage Prevention For The Protection Of Underground Infrastructure
31. Epcor Water Bylaw And Guidelines
32. Epcor Drainage Services Bylaw And Guidelines

Definitions

Boulevard is the portion of the City property between the curb or road's edge and the adjacent front property line. Boulevards may also border sidewalks, multi-use trails and alleys.

Building Permit Signage is signage that displays: Contact Info, a description or graphic representation of what is to be constructed, the site address, 311 City contact, and the City file number.

Considerate Construction is construction with a courteous approach. Workers should operate and maintain the site in a manner that is mindful of and respectful to the surrounding properties.

Construction Site refers to the area that workers and equipment occupy. Commonly refers to the lot of the property when a major development, redevelopment, or alteration is undertaken.

City Assets can be any property belonging to the City of Edmonton. Common assets that are relevant to construction are trees, roads, lanes, and sidewalks Damage to city assets will result in the party responsible being charged for the the asset value and the removal if needed.

Demolition occurs as the wrecking of a structure before the building of a new structure.

Discharge refers to surface water runoff that is redirected from the building by way of downspouts, splash pads, and sump hoses.

Excavation/Trenching are construction terms for the removal of earth.

Flag Person refers to the person in charge of directing the safe flow of traffic when construction equipment/vehicles must also use public roads/lanes.

Hand Exposing Zone is the zone lying within 1m of each side of the locate marks that identify the location of the buried facility. The buried facility must be exposed to sight by hand digging, a non-destructive technique acceptable to the owner of the buried facility, or an equivalent method.

Hoarding typically refers to the solid protection put in place. Materials and tarps used for hoarding must comply with safety and traffic legislation.

Infill refers to development in the existing areas of the city, occurring in older neighbourhoods and vacant or underutilized lands. Infill construction demands an approach called considerate construction that requires showing diligent concern for the neighbours and surrounding built up area.

Landscaping can refer to soft elements such as trees, shrubs and lawns, decorative hardsurfacing such as bricks, shale and crushed rock, as well as architectural elements such as fencing, walls and sculpture.

Lane/Alley refers to city property and refers to a narrow highway intended chiefly to give access to the rear of buildings.

Perimeter Fencing is an installed fence of no less than 1.8m enclosing a construction site at or within the property line.

Personal Protective Equipment refers to clothing and various items designed to protect the wearer's body from injury.

Property Line is the line at which two abutting properties touch.

Public/Private Right-of-Way refers to infrastructure designated for vehicular traffic/pedestrians. You can obtain a license for temporary use of a road right of way.

Shoring is the temporary support of a structure.

Site Safety Plan determines how health and safety will be managed on site.

Surface Drainage is water that is draining over top of the land. In this manner it makes its way to the City's stormwater sewer system.

Temporary Traffic Control measures include information and detour guide signs, regulatory signs, advance warning and temporary condition signs, advance warning and temporary condition signs, traffic control barricades, channelization devices, arrow-boards, specialty and lighting devices etc. For more information about Temporary Traffic Control measures see Procedures For On-Street Construction Safety[26]

Third-Party Assets can be infrastructure, utilities or any property belonging to a service provider. Common assets that are relevant to construction are water lines, gas lines and electrical lines.

Checklist For A Well Managed Site

- [ ] Valid Development Permit
- [ ] Valid Building Permit
- [ ] Construction Site Address Sign
- [ ] Nothing blocking roadway/sidewalk/alleys
- [ ] Sidewalks clean (snow/ice/mud/materials)
- [ ] No damage to boulevard trees
- [ ] No parking on sidewalk or boulevard
- [ ] No parking an unattached trailer
- [ ] Site clean (no dumping, waste secured)
- [ ] Portable toilet on site
- [ ] Ensure no noise happening outside regular construction hours
- [ ] No improper site access
- [ ] Workers have a business licence
- [ ] Proper temporary traffic control equipment in use
- [ ] Proper safety equipment is in use
- [ ] Surface drainage is being controlled

- [ ] Valid OSCAM Permit
- [ ] Valid TCP Permit
- [ ] Development Permit Notification Sign
- [ ] Worksite Code of Conduct posted and visible
- [ ] Construction materials and activities within property line
- [ ] Proper tree protection
- [ ] Off-site waste bins have permits–Please note the Waste Bin Permit will be covered by the OSCAM Daily Permit by the second quarter of 2019.