

Project Implementation Plan - Guide

Accompanying Letter of Commitment

INTRODUCTION	2
What is a Project Implementation Plan?	2
Why is a Project Implementation Plan necessary?	2
Who is the Project Implementation Plan, Guide and Letter of Commitment for?	2
When is a Project Implementation Plan required?	3
PLAN	4
1 SITE OBSERVATIONS	4
2 ADJACENT PUBLIC PROPERTY	5
3 ADJACENT and ADJOINING PRIVATE PROPERTY	5
PREPARE	8
4 NOTIFICATION	8
5 PERMISSION	9
6 PERMITS, APPROVALS and LICENCES	10
CONSTRUCTION FIRE SAFETY PLAN AND TANK PERMIT	12
PROCEED	13
7 DEMOLITION	13
8 EXCAVATION	14
9 CONSTRUCTION SAFETY CONTROLS AND MEASURES	17

It is intended that this practical Project Implementation Plan Guide be interpreted in the context of each site's unique conditions. Common regulatory requirements that may apply to activities associated with building construction, alteration or demolition are included in this Guide, but the list is not exhaustive. Legal advice should be sought to ensure that all relevant legislation is identified when a specific regulatory issue arises. Use of this Guide does not exempt owners or contractors from their responsibilities under applicable legislation. In case of inconsistency between this Guide and legislation, the legislation shall prevail. In case of similarity between various legislated requirements, the most stringent legislated requirement shall prevail.

The City of Edmonton does not hold itself out to be an active participant in the day-to-day operations of the site, and involvement through permit issuance, site checks, audits and inspections, and provision of this Guide is not to be misconstrued as exercising project managerial responsibility. Safety codes officers are not responsible for the means and methods of construction by the constructor or subcontractors and assume no responsibility for the work proposed or done which is required to be in accordance with the Safety Codes Act and regulations including National Building Code (Alberta Edition), and Safety Codes Permits Bylaw 15894 and other relevant legislation.

The City of Edmonton, its agents, employees and contractors make no warranties or guarantees as to the completeness or accuracy of this Guide for your specific project and circumstances, and accept no liability for any damages, direct or indirect, arising out of its use. Ensure you reference the correct edition of any Act, code, standard or bylaw as they are updated from time to time. Feedback to: BuildingSafetyCodes@edmonton.ca RE: Project Implementation Plan

INTRODUCTION

What is a Project Implementation Plan?

A Project Implementation Plan ("PIP") outlines and records how the project team will comply with applicable safety laws during a construction project. The project team includes the property owner, the building permit applicant or holder, and the constructor. The project team works together to ensure the project follows applicable laws, regulations, codes, and local rules intended to protect public safety and health, nearby properties, and infrastructure.

A Project Implementation Plan might include the following documents: site assessments, neighbourhood notifications, agreements with neighbours, plans for demolition and excavation, safety measures, construction site fire safety planning, and procedures for dealing effectively with unexpected or unsafe conditions. Through documenting and activating a compliant plan, the project team reduces the risk of undesirable impacts on the public and adjacent properties that may result in a site coming into non-compliance.

The PIP is a "living" document prepared before work begins that may be updated as site conditions change. It can also serve as a best practice record for future projects. It does not exempt the project team from compliance with their responsibilities under applicable legislation.

Why is a Project Implementation Plan necessary?

The PIP records planning and preparation efforts of the project team regarding their legislated obligations to public safety, health, accessibility, environment, and ensuring that work does not damage adjacent property. The PIP demonstrates the project team's awareness of their obligations, and reminds them of their responsibilities.

While the PIP itself is not typically submitted for review, it must be created before work begins and available on-site for reference by compliance officers.

Who is the Project Implementation Plan, Guide and Letter of Commitment for?

The PIP primarily concerns the project team which is jointly responsible for ensuring compliance with Acts, regulations, codes and municipal bylaws throughout a construction project in Edmonton. By extension, through oversight and supervision, the PIP is also for trades, sub-trades, labour force, and site and delivery services on the project.

- The owner of the project property at the time of construction is ultimately responsible for the property, including for the repair of any damage to public property or works located on public property that may occur as a result of undertaking work regulated by the building code. Any sidewalk, boulevard, street, alley or other public property damaged in the course of the project must be restored to a safe condition without delay and to the satisfaction of the City. The owner shall ensure that work undertaken does not damage or create a hazard to adjacent properties.
- The building permit holder is responsible for ensuring conditions of issuance and any advisements of the relevant building permit are met. A permit holder is also responsible for ensuring construction under the

- permit complies with all relevant legislation, and that the permit and permit plans and specifications are available at the construction site at all reasonable times for inspection by a safety codes officer.
- The constructor is responsible together with the owner for any construction or work undertaken. The
 constructor is responsible for ensuring compliance with Alberta's building code, <u>National Building Code</u>
 (<u>Alberta Edition</u>) ("NBC(AE)") provisions for safety during construction by employing safe means and
 methods of construction and to ensure precautions are taken to safeguard the public and protect
 adjacent properties.

Each site-specific PIP is prepared and maintained by the project team, and is to be available on the site for reference by the project team, those directing site activities, and by compliance officers upon request.

This Project Implementation Plan Guide (the "Guide") is a resource for the project team to reference in creating a PIP, and can be informative to members of the public--any person not engaged in work on the site. This practical Guide provides clarity on the roles, responsibilities, and legislation governing construction sites and activities in Edmonton, while also distinguishing between best practices and legislated activities. Compliance with legislated requirements is mandatory, and this Guide is intended to enhance awareness to ensure a project team may achieve success in complying with relevant legislation governing construction activities in Edmonton.

The Guide promotes communication with neighbours--the public--in addressing concerns about activities in the course of project construction. Note that the City does not facilitate or enforce private agreements or pre-construction surveys. Any disputes regarding property use are addressed through appropriate legal channels.

The Guide aims to help the project team avoid compliance issues and concerns related to construction sites and activities throughout the lifespan of a project, through promotion of exemplary and compliant construction site activities and practices. Adhering to the Guide's principles will help ensure that public expectations for the use and enjoyment of their properties are met, and that the safety and well-being of the public and adjacent properties are maintained.

The <u>Letter of Commitment</u> is a confirmation by a permit applicant that an appropriate Project Implementation Plan demonstrating compliant construction intentions will be created for the project **before work begins**. A Letter of Commitment confirming PIP development is to accompany the Building Permit Application when required.

When is a Project Implementation Plan required?

PIP preparation will typically apply to projects requiring a building permit, when directed within the particular selfserve Building Permit Application form for your project, or when requested by a permit issuer. Exemption from requirement for permits or from PIP preparation does not exempt the project team from compliance with their responsibilities under applicable legislation.

While the PIP itself is not typically submitted for review, in exceptional circumstances review of some or all of the PIP may be required before permits are issued, such as when construction site compliance history

warrants. Specific review of the construction-time fire safety plan for 5- and 6-storey wood frame projects will be required prior to release of structural frame or final permit.

PLAN

1 SITE OBSERVATIONS

Observe, assess and document conditions on the project site before construction begins. Pay particular attention to anything along or near the property line.

Examples include tree trunks and roots or other landscaping that grow across property lines. Their retention or removal must be a joint decision by all involved property owners. But trimming of overhanging tree branches is not necessarily a joint decision. The property owner affected by the branches may trim the parts of the branches crossing the property line. Note: The <u>Community Standards Bylaw</u> regulates the removal, pruning, transportation, storage, and sale of elm trees in the city. It aims to ensure that the trees remain free of insects and disease.

- **1.1** Existing improvements, trees, and features **on or near property lines** that may be impacted by the proposed work, including determining ownership and condition of any of the following:
- Existing utilities and services: to be protected or decommissioned to the utility's satisfaction
- Fences, and if they will likely remain intact, or are salvageable/reusable if removed/relocated
- Retaining walls/structures and their function
- Gardens, beds, walks, facilities and structures crossing the property line
- Trees with limbs or roots that may be impacted by the project; their ownership and their condition
- Buildings or projections straddling the lot line
- **1.2** Ground characteristics of the proposed site including but not limited to the following:
- Clean up of debris left on site that must be removed before starting excavation
- Dirt management strategy per <u>Occupational Health and Safety Code</u> ("OHS Code") slope and location regulations relative to an excavation
- Water management strategy under time of construction such that:
 - Nuisance, hazard or damage will not be caused upon adjacent properties
 - Risk of excavation or trench erosion leading to slumping, slope collapse and cave-ins is controlled
- Accumulations that may pose a danger to the public or risk to building foundations are managed
- Surface drainage is directed away from adjoining lots by means of temporary drainage swales
- Construction waste, soil and silt do not enter the sewer system (at catch basins, etc.) by placing controls
 as featured in <u>Erosion and Sedimentation Control Field Manual</u>
- Mixer truck/pump truck washout is not to be released, per EPCOR Drainage Service Guidelines
- Plan to consult any available developing area subdivision soils reports on general conditions including
 filled land, with a view to engaging a competent registered professional for assessment of temporary
 excavation support needs in addition to soils assessment (bearing capacity, sulphate content, etc.)
- **1.3** Location of the proposed work, and existing structures and infrastructure:
- "Dig to Here" stake placement including for garage/wing walls/step footings, hub placement condition and location confirmation. Identify utility rights-of-way, easements, any other restrictive covenants
- Numerous factors must be considered, often including but not limited to the following
- <u>Utility Safety Partners</u> educates and works to prevent contact with utilities; they'll mark most underground services (aerial lines are not flagged, and some telecom system owners must be contacted directly)

- <u>EPCOR</u> provides answers to questions concerning services, clearance from power lines and power pedestals
- EPCOR also provides sewer connection information
- o ATCO provides answers to questions about natural gas services and meters
- o <u>Alberta Energy Regulator</u> provides information about abandoned energy well locations
- o <u>Edmonton Fire Rescue Service</u> for combustible or flammable liquids storage tanks management
- o <u>Water wells are not presently tracked</u> but must be dealt with appropriately if found on a property
- <u>WasteSupport@edmonton.ca</u> to request removal of City of Edmonton garbage carts if preparing to demolish an existing building
- For preliminary temporary excavation support needs-assessment, while aware that working across any property line is only by express consent of that property owner, due to the following:
 - o Structures remaining after any demolition/excavation--on property and on adjoining properties
- Adjoining property driveways, other facilities and improvements
- o Depth of the proposed excavation, seasonal considerations (temperature, precipitation)
- o Ground of constructed fill or recently disturbed by construction (See Section 8 for more detail)
- Installation or removal of a curb crossing
- **1.4** Location for site fencing for safety or site hoarding for safety and use of road right-of-way or public lands for temporary storage containers, facilities, construction trailers, laydown or loading area

2 ADJACENT PUBLIC PROPERTY

Photos and notes of apparent existing conditions of adjacent public property taken before beginning work may help serve as a basis for discussions to settle any question that the work caused damage. Public property includes the whole of the road right-of-way--public walks, roadway/alley and boulevard--and public trees as well as curbs, gutters, drains, hydrants, lamp and utility poles, and similar infrastructure. All require protection from construction damage.

NBC(AE): Div C: 2.2.14.2. Responsibility for Damage

1) The owner shall be responsible for the repair of any damage to public property or works located thereon that occurs as a result of any work undertaken.

This building code Sentence indicates that the project property owner is ultimately responsible for the repair of damage to public property including that caused by any worker associated with the project, which damage must be repaired to the satisfaction of the City or an affected utility owner. The City will also require compensation for loss in value or irreparable damage to City trees as described in the Corporate Tree Management Policy C456C.

Observe and document in the PIP any notes and photos that adequately record the visible condition and characteristics of public property including but not limited to the following:

- Sidewalk, curb, gutter, alley and street, signs and utility installations on or above ground
- Grass and foliage, boulevard trees, tree stands on park reserve lands, etc.
- Landscaping including benches, monuments, decorative walks, mulches, etc.

3 ADJACENT and ADJOINING PRIVATE PROPERTY

Conduct visual assessment of conditions of all adjacent property to determine precautionary means of protecting it from damage throughout the project. NBC(AE) places responsibility for avoiding causing damage arising from work being done:

NBC(AE): Div C: 2.2.14.2. Responsibility for Damage

2) The owner shall ensure that work undertaken does not damage or create a hazard to adjacent properties

This Sentence is a <u>precautionary</u> directive to go about work in a way that causes no harm or hazard. "Property" is not restricted only to buildings, but includes all improvements, possessions and infrastructure on the land--whether adjacent private or public property. Each party must be aware of the rights and responsibilities of property ownership, and their responsibility to safeguard their own as well as others' property.

It is the responsibility of the project team, and by extension the people working on the site, to be alert to and mitigate any such condition:

NBC(AE): Div C: 2.2.12.1. Prohibited Actions

- 1) No person shall ...
 - b) cause, allow or maintain an unsafe condition

For example, protecting and maintaining walk, roadway and boulevard access are bylaw requirements. While mud tracking onto the right-of-way is a bylaw matter, excess soil or mud that creates a risk of slip, trip and fall by a member of the public is a hazard that may be considered an unsafe condition. Unsafe condition as defined in NBC(AE) means any condition that could cause undue hazard to the life, limb or health of any person authorized or expected to be on or about the premises. Care and attention to keeping the public walks clean and clear also demonstrates respect for the neighbourhood and its people and places.

Pre-construction photos and notes of apparent existing adjacent property conditions taken before beginning work can help serve as a basis for discussions to settle any question that the work caused damage to the adjacent property.

This emphasizes the need and value of communicating with nearby neighbours and property owners before starting work. A pre-construction survey takes time but is crucial. Its results can change your demolition or excavation plans to avoid damage claims. Each owner must know their rights and responsibilities and communicate to prevent harm.

Observe and document in the PIP any notes and photos that record the visible condition and characteristics of adjoining private properties, as seen from the project property. Do not photograph people on private property and do not enter another's property without their express permission.

Document things that you may impact **or** may impact you during the project that may include but are not limited to the following:

- Each structure, including any garage, shed, gazebo, deck, porch, steps, etc and foundations
- Consideration of <u>NBC2015 Structural Commentaries</u> G13,G14 indicating that "... snow loads on ... building ... could be affected by the location of a ... higher building ..."
- Objects such as hot tub, pool, air conditioner, etc.
- Downspout and sump pump discharge locations, and surface drainage flow patterns
- Trees, for which arborist guidance is recommended for their survival if not wholly located on your site
- Landscape elements: shrubs, bushes, plants, lawns, gardens, flowers, ornamental plantings, ground cover, etc.
- Patios, pathways, and paths of materials such as bricks, pavers, shale, crushed rock, and fencing, retaining walls, decorative walls, sculpture, etc.
- Parking areas, driveways, or vehicle access area

VIBRATION ON CONSTRUCTION and DEMOLITION SITES

Construction activities like demolition and excavation create vibrations. It's hard to predict their exact effects on nearby structures. However, most vibrations are just nuisances and cause no harm. In severe cases, though, vibrations can affect nearby buildings and their contents. This includes objects on display and sensitive equipment in labs or medical facilities.

When concerns arise regarding potential damage resulting from vibrations generated during the project, a formal pre-construction survey of adjacent structures must be conducted to establish existing baseline conditions prior to the commencement of work. Engineers use established methods to assess vibration sensitivity, predict potential impacts, and recommend appropriate measures, including specifying vibration limits for construction equipment and monitoring vibrations at property boundaries.

The pre-construction survey also enables meaningful monitoring during the work if deemed necessary. Involvement from acoustical engineering professionals is typically required for vibration-related monitoring and assessments. Geotechnical investigations of underlying soil strata and geologic conditions inform recommended work methods that do not place adjacent properties at risk of structural damage. Vibration analysis via computer modelling determines the extent of vibrational impact, replacing subjective perception. Sections 7 and 8 outline the requirements for professional involvement, which considers vibration among other factors, for demolition or excavation projects.

PREPARE

4 NOTIFICATION

Notification to adjoining property owners/occupants is recommended 7-14 days before work starts

Inform affected residents or building occupants of your building schedule and what they should expect during your project by a considerate approach of signage, newsletters and special considerations for adjoining properties (see 5, below).

Post site signage which includes how to contact you or an informative company representative 24/7 by telephone or email. Where no mandatory <u>DP notification signage</u> is required, follow <u>Construction Site Address</u> Guidelines.

Newsletters or flyers may be used to inform adjacent building occupants, neighbours, and the community league or homeowners association about what you intend to do, and when. This allows those affected to take necessary steps to assess the physical condition of their own property before the project begins. They can also take steps to shield themselves from some aspects of the construction, such as shifting their outdoor sitting area to a more private location, installing curtains on windows previously uncovered, gathering up kids' toys, etc.

Distribution of updates from time to time can inform the neighbourhood of project progress, as well as of any impending roadway/sidewalk disruptions such as for sewer work, concrete/pumping, modular assembly, and so on.

Outline work steps and timing in terms that people not involved in construction can understand and appreciate about the work and the coordination you invest in to succeed with a project, such as the following:

- Pre-demolition asbestos survey and removal in and on an existing building
- Demolition and material salvage/removal of an existing building
- Excavation for a new basement; trenching for site servicing or service upgrades
- Placement of foundation, floor deck, backfill for properly rough-graded ground
- Construction of the building
- Mechanical and electrical trades work
- Exterior finishes, landscaping and drainage; interior trade and labour work to finish

Without clear communication, concerns of neighbours may give rise to complaints which take up valuable time for you to resolve. Providing information before the project begins and any useful timely updates means potentially avoiding issues later on.

Many complaints are well-founded from the affected person's perspective. Common issues that show a disregard for adjacent property and lack of respect for the neighbours and community include

- Lack of communication from the builder: no warning of work starting or how long it will take
- No site contact who answers questions / responds to concerns
- Theft of water and power by trespass, most often when the homeowner is not present
- Disrespectful behaviours: out-of-hours work noise, loud music, poor or no toilet facility arrangement, and foul language from the site.
- Windblown or falling material, debris, water, dirt and demolition dust crossing the property lines
- Improper worker vehicle parking, equipment operation, and unauthorized materials laydown areas

Good neighbours can be made while you work to stave off such irritants, many of which are bylaw offences. As a new, albeit temporary, member of the neighbourhood, work to build a mutually beneficial relationship. Good neighbours help each other; for example, a good neighbour could let you know if someone suspiciously opens your site fencing. Satisfied neighbours may provide positive feedback testimonials that could serve well for future projects.

5 PERMISSION

Permission of adjoining property owners to enter onto and/or use their property for work. We suggest you talk with the adjoining property owners and residents before you submit your permits application.

Permission from an adjoining property owner to enter onto and/or use their property for work if any access is intended or needed, even to fix or install something for their own benefit, **must** be obtained before going onto that property. Tenants occupying a house do not necessarily have authority to extend the right to enter onto the property; seek out the owner while keeping in mind that any work may not interfere with the safety of the owner or any occupant or tenant of the adjoining property. A permit is not permission to trespass.

It is best to have written consent to enter adjacent property, including a method to settle any dispute. Claims of verbal consent to trespass may prove inadequate in a disagreement. Plan to discuss what may possibly be damaged on or beyond the property line, what you intend to do about it if damage happens, and how the neighbour can trust you to carry through on repair or restitution to their satisfaction.

A limited and specific written permission to enter an adjoining property may, for example and as applicable, allow for the following:

- Assessment of the apparent existing exterior condition of the adjoining property and improvements
- Cutting of any part of a tree. Tree-health concerns arising from excavation of tree roots can be identified by a certified arborist to benefit both parties
- Removal or adjustment of any building, structure or facility that straddles the property line or to protect it from damage during work (e.g., shed relocation, fence removal for later replacement, etc)
- Minor maintenance of the adjoining property, such as redirection of downspouts and sump pump improperly discharging across the shared property line
- Placement of the required construction fence, which must be located to allow safe passage from any
 required means of egress, whether doors or windows, on their property while maintaining clearances per
 Small Building Access Policy
- Worker passage between front and back of site, including where 'allowed' under a registered easement agreement for reduced/zero lot line properties
- Placement of ladders or scaffolding during construction (e.g., eavestroughing, siding, etc)
- Use of water or power, or yard area for laydown/parking, etc.
- Excavations that cannot be safely contained within the project property while following the OHS Code excavation wall heights and slope angles may <u>possibly</u> be conducted by use of space to work or to excavate/cut back per OHS rules or engineer design. More about Excavation in <u>8</u>, *below*
- Other mutually-beneficial arrangements; as an example, all projects must meet current lot drainage rules that simple drainage fixes consistent with the lot grading bylaw such as new window wells and a shared swale can be agreed upon

The adjoining property owners might not be available or may avoid signing agreements, even when you aim to build a settled relationship. We recommend leaving your project details and a polite request for a callback. Following up is important. If you can't get an agreement, document your efforts. Then, work as if you don't have permission to trespass for the project.

The City does not give legal advice to applicants or residents and cannot intervene in disputes between private property owners. The <u>Mediation and Restorative Justice Centre</u> or <u>ADR Institute of Alberta</u>, among others, may provide advice. The <u>Civil Claims Duty Counsel</u> may provide a brief no-charge consultation. If construction activity damages adjacent private property, insurance coverage may kick in. Additionally, the home insurance policy of an affected property owner may also provide coverage, and that insurer will then seek reimbursement.

In summary,

- Contact neighbouring property owners to discuss the proposed project sufficiently ahead of beginning any demolition and construction to
 - convey estimated timelines and plans to limit or mitigate negative physical impacts of the project,
 - o hear their feedback and address their concerns, and
- o ensure contact information is shared
- Establish a written and photo record of location, ownership and condition of existing fences, walkways, window wells, etc. to inform discussion around any property damage after the fact
- Obtain consent letters for crane overfly of adjoining and adjacent private properties

6 PERMITS, APPROVALS and LICENCES

Required permits must be **acquired before beginning activity** to which the permit pertains.

Remember: every person or company that conducts business in Edmonton requires a Business Licence, unless able to demonstrate statutory exemption. See <u>Business Licence Bylaw 20002</u>.

Permits, approvals and licences that may be needed to be included in the PIP include the following: **6.1 Development Permit** Check the permit for all Conditions. Any changes to plans or any non-compliance with an issued Development Permit require written approval of the amendment, or removal/adjustment to mitigate that non-compliance. See Zoning Bylaw 20001.

Project notification signage is required for demolition and construction sites in redeveloping areas, and at the Development Planner's discretion in other areas. See <u>Development Permit notification signage</u>. Any required encroachment agreements must be managed at this stage of the permitting process.

6.1.1 Curb Crossing Permits

- **Temporary Curb Crossing** requires an OSCAM permit with a Temporary Crossing work reason (See 6.4 *below*).
- **Permanent Curb Crossing Cut Permit** is required when proposing a new driveway access off a street, per <u>City Streets Access Bylaw 13521</u>.
 - Residential Crossing The Development Planner commonly issues the permit in conjunction with the project Development Permit. More information: edmonton.ca/curbcrossing
- **Other Crossing** is negotiated via DP circulation processes
- Permanent Curb Crossing Fill Permit is required for the removal and filling in of 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 is issued in the form of a Curb "Crossing" Permit, even for
 filling in an existing crossing. See <u>City Streets Access Bylaw 13521</u>
 - Residential Curb Fill requirements will normally be identified by the Development Planner during the
 review of your Development Permit application. You will typically have to remove vehicle access off the
 street if redeveloping a lot served by a back alley.
 - Other is negotiated via DP circulation processes and associated off-site agreements

6.1.2 Lot Grading Plan Approval is required prior to the construction of any building or addition, or change to surface drainage on a property. See <u>Drainage Bylaw 18093</u>.

For clarity: <u>EPCOR Drainage Services and Wastewater Treatment Bylaw 19627</u> for EPCOR-administered wastewater management of the control and disposal of dewatering, roof water, surface drainage, sludge and construction material liquid byproducts. A <u>Permit to Release</u> may be required for dewatering, as outlined in EPCOR <u>Codes of Practice</u>.

Surface water drainage problems that developed slowly over a period of years can become evident after rainstorms or during snow melt. Redevelopment can highlight existing drainage shortcomings or create issues by disturbing something that 'was working'. Lot grading plans are the measure intended to avoid drainage issues arising in redevelopment.

Implementing erosion and sediment control measures during time of construction is necessary to protect adjacent properties, water bodies, and the environment. Erosion control measures may range from sediment traps or basins to silt fences, erosion control blankets, or vegetation barriers to prevent soil movement thus minimizing its impact on surrounding areas. Regular maintenance of erosion control measures is necessary to ensure their effectiveness throughout the project. Review <u>Erosion and Sedimentation Control Field Manual</u>.

A residential lot grading plan is submitted with the development permit application for review and approval prior to work starting. A property must, after construction is completed, be graded, surveyed and documented in the form of a lot grading certificate, and inspected and approved by the City of Edmonton for compliance with its approved lot grading plan and the Drainage Bylaw.

More: Single Detached, Semi-Detached, Duplex, Row House, Backyard Housing: <u>edmonton.ca/lotgrading</u>. Other residential developments: <u>Commercial and Multi-Family Residential Lot Grading</u>.

6.2 Building Permit and related trades permits for new construction and plans and specifications upon which the permit was issued. Check all permits for Conditions of Issuance and general Advisements. Separate building permits are required for a <u>demolition</u> preceding new building construction, for any OSCAM permit-enabled <u>hoarding</u> that may be required, and for any stationary <u>crane</u> capable of projecting over the road right-of-way. See <u>Safety Codes Act</u>, <u>Permit Regulation</u>, and <u>Safety Codes Permit Bylaw 15894</u>.

6.3 Public Tree Permit for protection and preservation where work includes demolition or construction access, hoarding, laydown, or work above or below ground within 5m of a public tree or 10m of a public natural stand of trees. Trees are a valuable City asset. If you or your trades damage a tree or its roots, you may be responsible for its asset value, cost of removal and replacement. See <u>Public Tree Bylaw 18825</u>.

The <u>Public Tree Permit process</u> helps people working near City-owned trees to work with the Urban Forestry Team to preserve and protect the trees near the work site. Acceptable methods of protection design are specified, and assistance in achieving the objectives of the permitting process is provided.

6.4 OSCAM (On-Street Construction & Maintenance) Permits for temporary use of and/or crossing of the road right-of-way for machinery and vehicle operation, intended to address safe and accessible work sites and safeguard City right-of-way (road, sidewalk, boulevard and alley). The <u>OSCAM permit process</u> coordinates and regulates planned work to avoid conflicting activities in the road right-of-way. <u>See Traffic Bylaw 5590</u>.

Apply for an OSCAM permit no later than the time the demolition and related permits are applied for. If disruption of the normal right-of-way function is for more than just a few hours in relation to any project on a site, a hoarding building permit (*below*) may be required for the duration of the work.

Whether or not an OSCAM permit is required in a residential area, have consideration for neighbours by letting them know when work will be taking place that may temporarily limit some street or alley access. Try to schedule disruptions to pedestrians, cyclists, and vehicles during non-peak travel times and provide an appropriate level of temporary traffic control.

Workers are allowed to park on public streets except in "no parking" zones, in front of hydrants, private or public driveways. No parking in a front yard. No parking in an alley. No trailer parking on road right-of-way unless attached to a vehicle by which it may be drawn.

OSCAM Permit with Temporary Waste Bin/Pod/Seacan Work Reason Waste Bin/POD/Seacan placements on public road right-of-way are to be made safe and coordinated with others that may be nearby to avoid hazards.

Temporary Sidewalk Closure If a sidewalk needs to be closed, an OSCAM permit may be required. See the OSCAM Permit Decision Matrix to determine OSCAM permit requirements based on the work activity, time of day and location. When detouring to a temporary walkway in the roadway for an extended time, Hoarding Building Permit review coordinated with the OSCAM permit is also required.

Deliveries to site A commercial vehicle with hazard warning lights on and actively being loaded/unloaded may <u>park in the alley for up to 30 minutes</u> or OSCAM permit must be acquired. Advise services when and where they can drop/pick up materials on your site in accordance with the regulations.

Dangerous Goods / Oversize Loads (e.g., modular/panelized component delivery, large backhoe carrier, etc.) Vehicles delivering/picking up material/equipment must take the most direct and practical route from the nearest truck route to the site. Overweight or over-dimensional vehicles, and those transporting dangerous goods (Chapter VI, Traffic Bylaw 5590) require a permit for certain locations and conditions.

6.5 Hoarding Building Permit is a requirement for some projects, which documents a temporary installation located on road right-of-way that is intended to provide protection to the public in the vicinity of a construction, alteration or demolition project. Hoarding is any combination of fence, covered way, or temporary walkway, etc. and may also provide an area for construction activities where site constraints exist. Hoardings have maintenance, directional signage, lighting and such conditions attached to the permit. Each permit decision is a collaborative decision of the Traffic Operations and Building Permit office. See Hoarding Building Permit Guide and Hoarding Building Permit application for more detail.

6.6 Crane Building Permit is required for placement of a stationary crane that is capable of swinging over the public road right-of-way. See <u>Crane Building Permit</u> application. Ensure consent letters for crane overfly of adjoining and adjacent private properties are placed in the PIP for review upon request by an enforcement officer.

CONSTRUCTION FIRE SAFETY PLAN AND TANK PERMIT

A construction fire safety plan is not a Notification, Permission, or Permit. It is a plan that must be placed in the PIP for review upon request by an enforcement officer. It must outline fire emergency planning for the specific site, as required in Section 5.6 of Division B of the <u>National Fire Code (Alberta Edition)</u> ("NFC(AE)").

If there are any underground tanks and piping that contain(ed) combustible or flammable liquids on the site, NFC(AE) includes <u>tank permit requirements</u> that must be followed, and can be included in the fire safety plan. Review <u>Fire Rescue Services</u> construction site fire safety planning requirements, and also applicable <u>considerations for work in occupied buildings</u> while preparing the FSP.

PROCEED

7 DEMOLITION

Demolition is the complete removal of a structure using methods of controlled destruction, deconstruction (manual dismantling), or moving off the property. It also includes taking out foundations, footings, piles, or slabs down to at least 500mm below grade (as defined by the Zoning Bylaw).

Removing part of a building is called exterior alteration; removing only interiors is termed interior alteration.

A demolition that is safe for workers per the <u>OHS Act, regulation and Code</u> coincidentally contributes to the <u>NBC(AE)</u> goals of safety of the public and avoidance of damage to adjacent properties and infrastructure. Conclude the discussions and notifications as discussed above. Review the <u>Commercial Demolition Building</u>

<u>Permit Guide</u> / <u>Residential Demolition Permit Guidance</u>. Note Demolition Permit Conditions regarding how the site work is to be completed before requesting mandatory inspection.

- Fencing must be installed before any excavation or construction work commences on a project, typically
 contained within site property lines. If you don't have permission to enter the neighbour's yard to place or
 install the fence, you must manage it from your side of the property line. If you don't have a Hoarding
 Building Permit, the fence must be located off the road right-of-way. Maintain clearances on adjoining
 properties per Small Building Access Policy.
- Before beginning demolition, you must do the following:
- Conduct a survey to assess the potential effects of demolition operations on buildings and property on the site and on adjacent properties, with consideration given to need for
 - Underpinning, shoring, bracing where foundation is being removed (see 8, below)
 - o Protection for workers and the public from noise, dust, vibration, and impact
- Ensure that utilities have been shut down, terminated and labelled outside the limits of the excavation, unless left live with the express written approval of the utility provider which approval is contained in the PIP, and the demolition method and any ensuing excavation (under separate permit) is suitable for the conditions. Cap sewer line(s) to prevent leakage
- Confirm any petroleum tank/piping management is complete per <u>NFC(AE) requirements</u>
- o Confirm any water well decommissioning is complete per GoA Guide Chapter 8
- o Ensure asbestos-containing materials are managed per OHS requirements
- Have acquired the building permit for demolition
- **During demolition**, you must do the following:
 - Control dust or debris from blowing off the site
 - Ensure demolition proceeds with vibration levels that will not harm adjacent structures, their contents, and infrastructure; and that soil stability is maintained while removing foundations
 - Conduct periodic examination of adjacent structures and property to
 - Ensure the existing integrity of the structures and property is maintained
 - Note any visible effects of or damage caused by demolition operations
 - Immediately report any unsafe condition to owners, occupants, relevant authorities
 - Immediately take steps to remedy any unsafe condition
- At all times, you must do the following:
- Secure items that can cause injury if blown by winds
- Take precautions to prevent water penetration into adjoining property by maintaining appropriate temporary grading and keeping the basement of the structure being demolished free of water accumulations.

Further work such as excavation for new development beyond the work needed to remove a foundation is not allowed before the appropriate relevant permits are issued. Request mandatory building inspection upon concluding the demolition in compliance with the Demolition Building Permit Conditions of Issuance and Advisements.

DEMOLITION PLAN IN THE PIP

You must demonstrate compliance with the Occupational Health and Safety Code and National Building Code (Alberta Edition). A demolition plan must be included in the PIP which will contain appropriate strategies for the demolition, deconstruction or removal. Plans need not be engineered for many demolitions, but **every demolition plan should consider at least these following six elements**:

- **1.** Evaluation of potential impacts on adjoining and adjacent buildings, facilities and infrastructure due to method of demolition or removal
- **2.** Any conditions and limitations which must be followed by demolition personnel before, during or after demolition in respect of the site, structure(s), adjacent property, and demolition activities
- 3. Controls to hinder dust and debris from blowing off the site
- 4. Controls to limit vibration levels at the site boundaries by use of appropriate methods of demolition
- **5.** Appropriate excavation stability plan in accordance with 8, below
- **6.** Procedure for addressing potential safety and stability issues identified or arising under time of demolition or removal, or if conditions and limitations above are not met due to site characteristics (e.g., if previously-concealed asbestos-containing materials are encountered, demolition must stop for resolution per OHS requirements)

7.1 An authenticated site-specific engineered demolition plan must be included in the PIP if any of the following applies to the demolition due to project size or complexity or method of work for any building or part of building where

- 7.1.1 its foundation abuts, adjoins or is immediately adjacent to another building or structure
- **7.1.2** the demolition is proposed to extend below the level of footings of any adjacent building and within the 'angle of repose' of the soil, as drawn from the bottom of such footings, including any adjacent floor-on-ground/slab foundation (see **8.1.6.**, below) and any active driveway
- **7.1.3** associated with any underground parkade/link/passageway/structure/multi-level basement/deep foundation or any aerial pedway
- **7.1.4** the building structure includes pre-tensioned or post-tensioned members
- **7.1.5** the proposed demolition techniques may be impactful to buildings, facilities or infrastructure in the vicinity, such as balling, heavy-duty hydraulic hammer/breakering, explosives, laser, etc.
- **7.1.6** the building is other than Part 9-sized building of wood-frame construction with typical foundation of nominally unreinforced concrete, masonry, brick, or wood, all with or without associated piles
- 7.2 Where none of the conditions of 7.1 apply to the demolition, a site-specific demolition plan must be included in the PIP addressing the six Demolition Plan elements listed above.



If not competent or uncertain how to proceed with a demolition, obtain services of a competent party and document their instructions in the PIP.

Or contact BuildingSafetyCodes@edmonton.ca

8 EXCAVATION

An excavation that is safe for workers per the OHS Act, regulation and Code contributes directly to the NBC(AE) goals of safety of the public, retention of adjoining property foundation supporting soils, and reduction of risk of damage to adjacent properties and infrastructure. Deeper basements, driven by evolving zoning and housing trends, demand meticulous planning to minimize neighbourhood impacts. Edmonton's excavation issues primarily arise in soils with depths exceeding 1.5m at the 1.2m minimum side yard, or where previously disturbed. Following OHS requirements, including proper soil classification where applicable, reduces risk of excavation instability. This, in turn, safeguards workers and the public while preserving adjacent property foundations and infrastructure.

- Fencing must be installed before any excavation or construction work commences on a project, typically
 contained within site property lines. If you don't have permission to enter the neighbour's yard to install
 the fence, you must manage it from your side. If you don't have a Hoarding Building Permit, the fence
 must be located off the road right-of-way. Maintain clearances on adjoining properties per Small Building Access Policy.
- **Before beginning excavation**, you must do the following:
 - Conduct a survey to assess the potential effects of excavation operations on buildings and property on the site and on adjacent properties, with consideration given to need for
 - o Underpinning, shoring, bracing
 - o Protection for workers and the public from noise, dust, vibration, and impact
 - Ensure that utilities have been shut down, terminated and labelled outside the limits of the excavation, unless left live with the express written approval of the utility provider which approval is contained in the PIP, and the excavation method is suitable to the conditions
 - o Confirm any petroleum tank/piping decommissioning is complete per NFC(AE) requirements
 - Confirm any water well decommissioning is complete per GoA Guide Chapter 8
- o Confirm any energy well decommissioning is complete per Alberta Energy Regulator requirements
- Have acquired the building permit that allows for excavation to proceed
- **During excavation**, you must do the following:
 - Control dust or debris from blowing off the site
 - Proceed only while maintaining soil stability and with a level of vibrations that will not harm adjacent structures, their contents, and infrastructure
 - o Conduct periodic examination of adjacent structures and property to
 - Ensure the existing integrity of the structures and property is maintained
 - Note any visible damage caused by demolition operations
 - o Immediately report any unsafe condition to owners and occupants
 - Immediately take steps to remedy any unsafe condition
- At all times, you must do the following:
- Secure items that can cause injury if blown by winds
- Take precautions to prevent water penetration into adjoining property by maintaining appropriate temporary grading and keeping the excavation free of water accumulations

In addition to relevant obligations listed in Sections **1 - 8** above, OHS Code requirements for cutting back excavations, temporary excavation support, or registered professional engineer certification must be considered in order to create and maintain a stable excavation. This applies to a fresh excavation as well as to one resulting from removal of a foundation (basement) following building demolition. A **competent** person must make the excavation assessment per the legislation contained in the <u>OHS Act, regulation and Code</u> and OHS requirements discussed in these OHS Resource publications:

Excavations: Cutting back walls (alberta.ca)

Excavations: Temporary protective structures (alberta.ca)

Excavations: Locating buried facilities (alberta.ca)

Excavation/Trench Safety Checklist (alberta.ca)

While NBC(AE) does not provide prescriptive solutions for excavation support, every excavation must be undertaken in a way to prevent movement that would place persons at risk or cause damage to adjacent property at all phases of construction. If the stability of a building may be endangered by excavating work, adequate underpinning, shoring and bracing must be provided to prevent damage to or movement of any

part of that building, and to stave off the creation of a hazard to the public.

EXCAVATION PLAN IN THE PIP

You must demonstrate compliance with the Occupational Health and Safety Code and National Building Code (Alberta Edition). An excavation plan must be included in the PIP which will contain appropriate strategies for making and maintaining a stable excavation for as long as needed to complete the relevant work. Plans need not be engineered for a certain, limited set of excavation conditions, but **every excavation plan should consider at least these following three elements:**

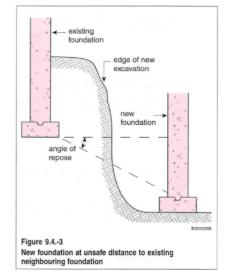
- 1. Evaluation of potential impacts on adjoining and adjacent buildings, facilities and infrastructure
- 2. Any conditions and limitations which must be followed before, during or after excavation
- **3.** Procedure for addressing potential safety and stability issues identified or arising under time of excavation, or if conditions and limitations of the plan are not met due to uncovered site characteristics (e.g., archaeological artefact or burial site--to be reported to Alberta Culture without delay, water seeping through the soil into the excavated bank or base, etc.)

8.1 An authenticated site-specific engineered excavation plan must be included in the PIP if any of the following applies to the excavation. This plan must include authenticated plans and specifications for temporary excavation support protective structure(s) and/or specified provisions where the excavation is as follows:

- **8.1.1** Of depth exceeding 3m below ground level at any point, including any void resulting from removal of an existing foundation, or optionally at a lesser depth for greater excavation certainty
- 8.1.2 Abutting or adjoining an adjacent building or structure or its foundation
- **8.1.3** With vehicular traffic, working machinery, heavy object or dirt pile within a distance equal to the depth of the excavation as measured from the bottom of the near edge of the excavation
- **8.1.4** In ground that is with a high water table, rich in organic material, on fill (constructed earth), or to have an artificial soil-stabilization process (e.g., grouting, artificial ground freezing, etc.) used
- 8.1.5 To be made using methods that may be vibrationally impactful to buildings and infrastructure in the vicinity, including blasting, drilling, work within the water table, large-scale soil compaction, heavy-equipment-assisted hydraulic pile hammering or vibratory pile installation, excavation in hard soil, shoring/tieback systems, planned backfill compaction with heavy equipment, and any other activity or method that may cause ground vibrations to have concerning effect in the vicinity
- 8.1.6 Proposed to extend below the level of footings of any adjacent building and within the 'angle of

repose' of the soil, as drawn from the bottom of such footings, including any adjacent floor-on-ground (slab) foundation and any active driveway within 6m of the nearest slope (face) of excavation See Diagram Fig 9.4-3 2015 National Building Code Part 9 Users Guide Courtesy of National Research Council of Canada

excavation plan may contain authenticated certification by a competent registered professional that the ground formation is and will remain stable, free from cave-ins, sliding or rolling materials and other hazards associated with the workings that may compromise worker safety without any temporary excavation support system installed. The authenticated certification is to include indication of the requisite evaluation, conditions and limitations, and procedures, as listed in the box above for every Excavation Plan

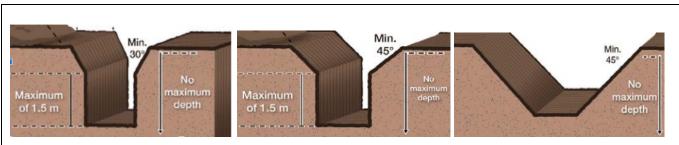


8.2 Where none of the conditions of 8.1 apply to the excavation, a site-specific excavation plan applying OHS Code soil classifications must be included in the PIP

addressing the three Excavation Plan elements listed in the box above. Soil classification must be performed by a competent person, such as a geotechnical engineer or a professional engineer experienced in soil classification.

NOTE: A **competent** person, per OHS Act, means one who is adequately qualified, suitably trained and with sufficient experience to safely perform work without supervision or with only a minimal degree of supervision. Otherwise, assume the soil is of the weakest type and support must be designed accordingly, consisting of one or combination of the following:

- 8.2.1 A competent registered engineer or competent owner or delegate confirms that an installed temporary excavation support system suitable for the identified soil type and site conditions is adequate to prevent the walls of the excavation from caving in or otherwise moving into the excavation when installed per the designer's installation instructions for excavation without OHS Code-prescribed sloping/cutback. The installed temporary support system design plans and specifications must be authenticated by an Alberta-registered professional. NOTE: If any of the conditions of 8.1.1-8.1.6 apply, then an authenticated site-specific engineered excavation plan per 8.1 is required.
- **8.2.2** A competent registered engineer or competent owner or delegate confirms that **no temporary support system is required for excavation** (*illustrated below*) that is:
 - appropriately sloped/cutback above 1.5m in depth below grade at any point in Category 1 and 2 soil,
 or
 - fully sloped/cutback for Category 3 soil or where soil classification was not performed by a competent person.



Category 1 soil Category 2 soil Category 3 soil

"...cutbacks (in Categories 1 and 2 soils) are only acceptable if the soil has been classified by a competent person and all hazards have been addressed. Do not use either of the options if workers are performing tasks where they are positioned below the straight cut portions of the excavations (for example, if a worker is in a kneeling position to perform work on a pipe)."

For detailed information about all of Part 32's requirements, consult the legislation.

<u>Excavations:Cutting back walls | OHS information for employers, prime contractors and workers</u>©2023 Government of Alberta Published June 2023 | EXCV001 Courtesy of Government of Alberta.



Where necessary excavation sloping/cutback cannot be safely achieved within the properly-fenced site, and explicit written permission to extend fencing, excavation, materials, etc. onto adjoining property is not provided by that adjoining-property owner, a temporary excavation support system or amended foundation plan that results in the excavation remaining within the site and not impacting the adjoining site is required.



If not competent or uncertain how to proceed with excavation, or for enhanced certainty of the stability of the excavation, obtain services of a competent party and place the documented directives in the PIP. Or contact BuildingSafetyCodes@edmonton.ca

9 CONSTRUCTION SAFETY CONTROLS AND MEASURES

Acts, Codes, Regulations and Bylaws compliance during the course of the project for -the safety of the public including persons occupying adjoining and adjacent property and persons reasonably expected to be on or about the premises or site, -protection of adjacent property, and

-maintaining respectful neighbourhood relations

Compliance with construction regulations safeguards projects from complaints, delays, and fines. Effective site management through strategic planning and diligent oversight ensures worker and public safety while protecting and maintaining public spaces. By prioritizing compliance with applicable Acts, codes, and bylaws, the project team fosters safe and smooth operations which benefit workers and the community.

NOTE: Find the PIP Guide Appendix containing supplementary information here.

By taking a coordinated approach to compliance, you can reduce the risk of enforcement intervention. When planning your project, consider the following at a minimum.

Construction Site Fire Safety Plan in the PIP

You must establish a fire safety plan per Section 5.6 of Division B of the <u>National Fire Code (Alberta Edition</u>). Measures including emergency planning must be undertaken on construction sites. Review <u>Fire Rescue Services construction site fire safety planning requirements</u>, and <u>considerations for work in occupied buildings</u>.

Fencing and Access Control

- Fencing must be installed **before** any excavation or construction work commences on a project. The
 fencing and access control configuration must not conflict with the Public Tree Permit anti-compaction
 measures--thus possibly restricting site access.
- If you don't have permission to enter the neighbour's yard to install the fence, you must manage it from your side. If you don't have a Hoarding Building Permit, the fence must be located off the road right-of-way, within the site property lines..
- A minimum 1.8m high continuous construction site fence around the perimeter of the project site, including gate(s) which are to be secured closed when the site is not active or workers are not on site, is intended to prevent inadvertent access to the site. Fences can be open or panels removed to accommodate work activities, so long as workers on site are trained to be attentive and to intervene to restrict site access of any member of the public reasonably expected to come near.
- Gates are not to swing into the line of pedestrian or vehicular traffic, and the fence/gates are to be secured when the site is unattended.

- Fencing must be contained entirely within the site property lines, sufficiently stout and stable to stand up to the wind, and
- Where fencing must extend onto the public sidewalk, boulevard, roadway or alley, an OSCAM permit and hoarding building permit review is required before placing the fencing.
- Not stand on adjoining private property except with permission of those property owners
- Fencing is to remain in place, upright and maintained until
- o Lockup: all openings into the structure within 3m of ground level are appropriately secured
- The site is backfilled and rough-graded with no open excavations on the site
- o All debris and garbage is removed

Hoarding is specialized fencing, covered way or walkway temporarily placed on <u>public</u> road right-of-way, for a fee, and is coordinated with an OSCAM permit. See <u>Hoarding Building Permit</u> for more detail.

Hazard Identification and Control through ongoing monitoring of conditions, situations or materials that can cause harm, and the risk they pose to people both on the site and surrounding area must occur. Examples of such include but are not limited to these site obligations:

- Correct missing, misplaced or fallen site fencing
- Clean up public walks, alley, boulevard and road of any construction-related dirt, debris, material
- Building on the site itself made safe to access and walk through as it progresses by providing at a minimum the following:
 - o A continuous, ice/snow-free, minimum 2 ft-wide hard surface walkway from sidewalk to building
 - Handrails/guardrails installed on walking surfaces over 3 ft high, stairs of 5+ risers, and ramps
 - o Guardrails are installed around open pits, shafts and stairs
 - Ladders are secured on a stable base to extend 1m above the level being accessed
- Apply compliant site-specific excavation, trenching and water management for top-of-bank sites
- Work in ways that minimize dusting, and do not cause flooding, contaminated run-off, or icing
- Remove water accumulation in excavations or depressions on the site
- Maintain safe conditions of work so that no part endangers the public or adjacent property by toppling, falling or being windblown (e.g., tarps, scaffold hoarding, stacked materials, etc.)
- Establish hoisting zone access controls, flaggers and signage to warn and redirect the public
- Identify and use eco-centre location for disposal of controlled substances
- Handle waste materials appropriately on the site
- Manage concrete pumping operations including hoses/lines and <u>on-site washout location</u>
- Designate onsite fuelling points per Alberta Environment aquifer protection rules
- Have current valid locate records of gas lines, water lines, sewer lines, electricity on hand
- Arrange temporary gas/power permit inspection for 'winter construction heat' before activating

MUNICIPAL COMPLIANCE MONITORING AND ENFORCEMENT OF CONSTRUCTION SITES

Peace Officers investigate complaints of untidy construction sites that are received through 311. Peace Officers also work collaboratively with other City departments to address non-compliance with applicable permits, nuisance conditions, poor construction etiquette, and other regulatory infractions. Peace Officers commonly investigate concerns of obstructions to sidewalks, boulevards, cycling facilities and roadways, tracking of materials from work sites, noise, and the use of a sidewalk, cycling facility, boulevard or roadway contrary to or without a permit.

Safety Codes Officers monitor and enforce compliance to conditions of issuance of demolition and building permits. Complaints received through 311 or from City and external regulatory stakeholders are investigated by the Safety Codes Compliance Team. Priority responses are to reported unsafe conditions,

being any condition that could cause undue hazard to the life, limb or health of any person authorized or expected to be on or around a premises or construction site.

Enforcement staff seek to elicit compliance through engagement, education, encouragement and enforcement. Enforcement actions include but are not limited to verbal or written warnings, violation tickets, suspension of permits, and orders which may escalate to administrative penalties, charges, and site remedial action undertaken by the City of Edmonton. Determining appropriate enforcement actions requires an assessment of the particular site and can include the following factors:

- Impacts to public safety and public interest
- Seriousness of the offence
- Prior history
- Other relevant factors

Common infractions of Codes, regulations and City of Edmonton Bylaws seen at construction sites include but are not limited to the following:

9.1 Zoning Bylaw 20001 for application/approval/Development Permit (DP) issuance. Non-compliances that can result in enforcement action include but are not limited to the following:

- Proceeding without valid Development Permit approval
- Contravene conditions of a Development Permit (such as not developing as per plan)
- Development Permit notification sign not displayed or improperly displayed
- Displaying unapproved commercial signage on private property
- Adding non-compliant Hard Surface or failing to remove abandoned accessways

9.2 <u>Drainage Bylaw 18093</u> for DP-related surface drainage plan and construction. Construction-related non-compliances that can result in enforcement action include but are not limited to the following:

- Temporary grades directing water onto adjoining private property: slopes/swales
- Improper pump discharge
- Roof drainage not connected to rainwater leaders (where applicable/required)
- Roof drainage directed towards adjacent properties
- Lot grading or associated retaining walls not completed per plan

9.3 EPCOR Drainage Services and Wastewater Treatment Bylaw 19627 for control and disposal of dewatering, roof water, surface drainage, sludge and construction material liquid byproducts. Construction-related non-compliances that can result in enforcement action include but are not limited to the following:

- No sediment controls in place to protect from contaminants entering the sewer system
- Prohibited concrete <u>mixer or pump truck or other waste</u> deposited in the sewer system
- Site dewatering effluent entering the (sanitary) sewer system without Permit to Release
- Improper sewer pipe abandonment

9.4 <u>City Streets Access Bylaw 13521</u> for curb crossing design and control. Construction-related non-compliances that can result in enforcement action include but are not limited to the following:

- Temporary Curb Crossing for site access without OSCAM permit
- Residential Permanent Curb Crossing established without permit
- Other permanent Curb Crossing established without permit
- Altering or closing existing curb crossing (curb fill) without permit

9.5 National Building Code (Alberta Edition) in conjunction with Safety Codes Act, regulations and <u>Safety Codes</u> Permits Bylaw 15894 non-compliances that can result in enforcement action include but are not limited to the following:

Work started: no relevant building permit issued

- Work started--no site fence/flagger where public may be present
- Site fencing lacking, improper, or inadequately maintained
- Construction site address signage not prominently posted, incorrect, or missing.
- Hoarding constructed on public land without permit
- Hoarding required is lacking, or improperly maintained: dirty/graffitti/postings
- Hoarding signs missing or confusing; covered way hoarding not adequately lighted
- Equipment interferes with, disrupts activities on, or impedes access to any property
- Equipment interferes with public safety
- Endanger dwelling/suite/building egress
- Hoist material/equipment over public property without barriers/flagger
- Hoist of material/equipment over private property without permission
- Fail to secure materials that became airborne in windy conditions
- Risk to excavation or adjoining property due to water accumulation
- Risk to a retaining wall contributing to building integrity or public safety
- Damage to buildings due to project
- Damage to walks/landscaping/property due to project
- Fail to provide or update mandatory advance notification of commencement of work on the project
- Fail to update name and contact information of registered property owner
- Fail to disclose or update name and contact information of project constructor

9.6 National Fire Code (Alberta Edition) for fire safety at construction and demolition sites. Construction-related non-compliance that can result in enforcement action include but are not limited to the following:

• Fail to create, apply or maintain a construction-time fire safety plan

9.7 Public Tree Bylaw 18825 for construction, demolition, excavation, laydown or vehicular access. Construction-related non-compliances that can result in enforcement action include but are not limited to the following:

- Fail to obtain a Public Tree permit
- Fail to comply with terms and conditions of the Public Tree Permit
- Damage a public tree

9.8 <u>Traffic Bylaw 5590</u> for parking, obstructions, etc that can result in enforcement action including but not limited to the following:

- Park vehicle on public right-of-way (street, boulevard, sidewalk, alley)
- o In "no parking" zones,
- Within 5m of a public hydrant
- On or obstructing a curb crossing/driveway
- Without a valid placard where a permit parking program is in effect
- o In an alley when no active loading/unloading is underway or exceeding 30 minutes
- Obstruct public right-of way without valid OSCAM permit:
 - Trailer parked without being attached to a vehicle by which it may be drawn
 - o Materials, bins, pods, containers
- o Daily accommodation detour or closure in excess or outside of prescribed hours
- Allow mud tracking off the site by equipment or vehicles onto public right-of-way
- Allow damage to public property including driving surfaces by tracked/lugged equipment

9.9 Community Standards Bylaw 14600 regulates a broad range of deeds and activities.

Construction-related non-compliances that can result in enforcement action include but are not limited to the following:

- Fail to prevent litter, garbage, refuse, or waste material from being placed on, or being allowed to drift onto, the private property of another unless by arrangement with that property owner (e.g., foamed plastic bits, shingle and siding offcuts, etc blowing off the site)
- Fail to control dust and debris blowing off the site of demolition, excavation or construction
- Fail to place portable toilets off public property
- Fail to remove snow and ice from sidewalks
- Fail to control grass and weeds
- Conduct out-of-season elm tree removal, pruning, transportation, storage, or sale
- Cause or permit nuisance to exist on the site, including the production of excessive dust, dirt and smoke
- Burn construction debris, waste or treated wood
- Allow excessive or needless noise in work to be emitted from the site
 - o Daytime decibel limit: 65 dB(A); overnight decibel limit: 50 dB(A) on/abutting residential lot
- o Construction activity out of hours: Sunday or holiday 9am-7pm; other days 7am-9pm
- Permit unnecessary extended engine idling on or around the site