

City of Royal Oak
Engineering Permit

The following requirements of the City of Royal Oak, Michigan, for all work done under the Engineering Permit shall be met. General permit requirements are supplemented by the “Work Description” and “Stipulations” sections of the issued Engineering Permit. This Engineering Permit is valid only when executed by the City of Royal Oak Engineering Division, and the Permittee.

All construction operations shall be performed in accordance with the current edition of the City of Royal Oak ***Standard Specifications for Construction***, which are available on the City of Royal Oak website:

www.romi.gov/engineering

The following instructions, general requirements and construction requirements are additional requirements intended to supplement the City of Royal Oak Standard Specifications for Construction.

Engineering permits will expire on the noted permit expiration date or on the insurance expiration date, whichever occurs first. The Engineering Division will not perform inspections for addresses with an expired permit. Permits can be renewed at the Engineering Division.

Instructions for obtaining Engineering Permits for the following circumstances are provided on the subsequent pages:

- A. Engineering Permit requirements for Commercial Projects and Utility Company Work
- B. Engineering Permit requirements for New House / Major House Reconstruction
- C. Engineering Permit requirements for Sewer/Water Taps or Sewer/Water Line Repairs
- D. Engineering Permit requirements for Sidewalk, Curb Cut and/or Driveway Approach Work
- E. Engineering Permit requirements for Traffic Control – Sidewalk, Lane and Road Closures
- F. Engineering Permit requirements for Container/Dumpster Placement in ROW
- G. Engineering Permit requirements for On-Site Paving for commercial and multi-family properties

A. Commercial Projects and Utility Company Work

1. Apply online at bsaonline.com
2. You must upload with the online application:
 - (1) set of civil plans signed and sealed by an engineer that meets the city's [Site Plan Design Standards](#)

Note: A plan review fee, determined by the engineer, must be paid before the plan review will begin.

3. Fees: When the site plan has been approved, the engineer will provide you with the permit and inspection fees and Performance Guarantee amounts. A cost estimate with detailed descriptions may be requested by the engineer to determine the totals. Fees can be paid online through your bsaonline account, or in person at city hall.
4. Additional items that the city requires copies of before permit issuance (if/when applicable):
 - Soil Erosion and Sediment Control Permit/Exemption **SESC** from Oakland County Water Resources Commissioner **OCWRC**
 - Michigan Department of Transportation **MDOT** permit
 - Road Commission for Oakland County **RCOC** permit
5. An approved insurance certificate will be required from the General Contractor on the project before the permit will be issued.
6. When public parking spaces regulated with **parking meters** need to be blocked from use, they shall be paid for the duration of the installation.
 - The Parking Meter numbers that will be used must be listed on the Right of Way permit application. The fee is \$25 per meter, per day.
 - Once the Right of Way permit is paid for & issued, you must present the Permit to the Police Department. They will calculate the fees to bag the meters for the duration of the project.
7. As construction work progresses, schedule inspections at least 24-hours in advance as required:
 - Traffic Control Setup inspection
 - Container Placement inspection (if applicable)
 - Open Trench/excavation inspection (if applicable)
 - Concrete Pre-Pour inspection
 - Density Report Submittal (if applicable)
 - Final inspection
 - As-Built submittal (if applicable)
8. **For underground boring operations:** Upon completion of work, the contractor shall televise all public sewers that intersect the boring operation to ensure that the sewers were not bored through or damaged. Sewers deeper than 8 feet below ground surface do not need to be televised. Adjacent manholes to construction operations shall be cleaned.
9. When work is complete and all pavement and landscaping is restored, schedule a final inspection with the Engineering Division. If the final inspection is approved, the Performance Guarantee monies will be released. If the final inspection does not meet city requirements, the Permittee will be notified of all deficiencies that require repair. **When As-Builts are required, performance guarantee monies will not be released until the As-Built drawing AND Final inspection have both been approved.**

B. New House / Major House Reconstruction

Note: Because the Engineering Permit for this work must remain in effect until all work within the right-of-way is completed, only the Builder may pull the Engineering Permit.

All building materials shall be stored on private property, within the construction fencing as required by the Building Division permit. The public sidewalk shall remain open and safe for use at all times, except when actively being removed or replaced. The permittee shall repair all damage to the right-of-way caused by construction operations and all deficient public sidewalks and curbing along the property frontage as identified by the city inspector.

1. Apply online at bsaonline.com
2. You must upload with the online application:
 - Plot plan or mortgage survey of the property, with all right-of-way work drawn and dimensioned, pavement cuts for sewer/water taps, proposed drive approach, sidewalk and curbing work, and location of proposed tree(s) where required.
 - Insurance certificate (refer to insurance requirements herein)
3. Fees:
 - Permit fee + minimum 4 hours of inspection at the rates provided in the Engineering Division's annual Fee Schedule
 - Pavement cut fees (if applicable):
 - On local streets, if roadway pavement removal is necessary, the Builder must have the city replace the pavement for an additional fee. The fee correlates to each 30 square foot section of pavement to be removed as provided in the Engineering Division's annual fee schedule.
 - On major roads the Builder must replace the roadway. The Builder must provide compaction density reports, concrete batch ticket(s), and concrete compressive strength test results for the concrete placed. This also requires an additional 2-hour inspection fee. Pavement replacement must be completed within 5 days of removal.
 - For Engineering Performance Guarantee:
 - \$5,000 for 60-foot wide or smaller lots
 - \$7,500 for wider than 60-foot lots or corner lots
 - Fees can be paid online through your [bsaonline](http://bsaonline.com) account, or in person at city hall.
4. As construction work progresses, schedule inspections at least 24-hours in advance as required. Note that any excavation in the right-of-way greater than 9 inches deep will require a compaction density report showing that the backfill material was compacted to city requirements.
 - Open Trench/excavation inspection
 - Concrete Pre-Pour inspection
 - Final inspection (Submit density report to city, if applicable)
5. Once the final inspection is approved, the Performance Guarantee monies will be released. If the final inspection does not meet city requirements, the Permittee will be notified of all deficiencies that require repair.

C. Sewer/Water Tap or Sewer/Water Line Repairs

Note: For Engineering Permits with sewer/water line work, only the city may replace the roadway pavement and sidewalk on local streets. The permittee is responsible for compacting the backfill material per city requirements and must provide compaction density reports to the city. Temporary asphalt must be placed and maintained for all sidewalk and road patches. The Performance Guarantee monies will not be released until the city completes pavement restoration (typically in the spring and fall of each year). For major roads, the permittee will be required to begin restoring any pavement within five days of removal.

1. Apply online at bsaonline.com
2. You must upload with the online application:
 - Google street-view or aerial image, plot plan or mortgage survey of the property, with all right-of-way work drawn and dimensioned (including pavement cuts), all construction fencing shown, and locations of "sidewalk closed" signage if applicable (see attached example).
 - Insurance certificate (refer to insurance requirements herein)
3. Fees:
 - Permit fee + minimum 1 hour of inspection at the rates provided in the Engineering Division's annual Fee Schedule
 - Pavement cut (if applicable):
 - If pavement removal is necessary, only the city may replace the pavement. The fee correlates to each 30-sf section of pavement to be removed as provided in the Engineering Division's annual fee schedule. (See exception above for major roads)
 - If sidewalk removal is necessary, only the city may replace the sidewalk. The fee correlates to each flag of sidewalk to be replaced. (See exception above for major roads)
 - \$2,000 Engineering Performance Guarantee for work on local streets. If work is not performed within the roadway, the amount may be reduced to \$1,000. For work on major roads, the amount shall be determined on a case by case basis.
 - Fees can be paid online through your bsaonline account, or in person at city hall.
4. As work progresses, call the Engineering Division at least 24-hours in advance to schedule inspections as required.
 - Open Trench/excavation inspection
 - Density Report Submittal
 - Final inspection
5. If the final inspection does not meet city requirements, the Permittee will be notified of all deficiencies that require repair. **Once the final inspection is approved and the city has permanently restored any pavement cuts or sidewalk removals, the Performance Guarantee monies will be released.**

D. Sidewalk, Curb Cut and/or Driveway Approach Work

Note: For approaches on local streets the minimum width is 10' wide with 3' flares on each side, and the maximum width is 25' wide with 3' flares on each side. On major roads, the city requires 7' flares.

1. Apply online at bsaonline.com
2. You must upload with the online application:
 - Google street-view or aerial image, plot plan or mortgage survey of the property, with all right-of-way work drawn and dimensioned (see attached example).
 - Insurance certificate (refer to insurance requirements herein)
3. Fees:
 - Permit fee + minimum 1 hour of inspection at the rates provided in the Engineering Division's annual Fee Schedule
 - \$1,000 Engineering Performance Guarantee. If curb cut / approach and sidewalk work is being performed, the Performance Guarantee will be \$2,000
 - Fees can be paid online through your bsaonline account, or in person at city hall.
4. As construction work progresses, schedule inspections at least 24-hours in advance as required.
 - Concrete Pre-Pour inspection
 - Final inspection
5. Once the final inspection is approved, the Performance Guarantee monies will be released. If the final inspection does not meet city requirements, the Permittee will be notified of all deficiencies that require repair.

E. Traffic Control – Sidewalk, Lane and Road Closures

1. Apply online at bsaonline.com
2. You must upload with the online application:
 - Google street-view or aerial image showing the traffic control plan with all signage and devices shown, and any parking meter numbers listed that will be blocked. The city follows the *Michigan Manual for Uniform Traffic Control Devices* (MMUTCD) standards. MDOT typical example can be included.
 - Insurance certificate (refer to insurance requirements herein)
3. Fees:
 - Permit fee + minimum 2 hours of inspection at the rates provided in the Engineering Division's annual Fee Schedule
 - \$2,000 Engineering Performance Guarantee.
 - **Any parking meters that will be blocked must be paid for at the police department after the permit is issued.**
 - Fees can be paid online through your bsaonline account, or in person at city hall.
4. When public parking spaces regulated with ***parking meters*** need to be blocked from use, they shall be paid for the duration of the installation.
 - The Parking Meter numbers that will be used must be listed on the Right of Way permit application. The fee is \$25 per meter, per day.
 - Once the Right of Way permit is paid for & issued you must present the Permit to the Police Department. They will calculate the fees to bag the meters for the duration of the project.
5. As construction work progresses, schedule inspections at least 24-hours in advance as required.
 - Traffic Control Set-Up inspection
 - Final inspection (after closure is removed)
6. Once the final inspection is approved, the Performance Guarantee monies will be released. If the final inspection does not meet city requirements, the Permittee will be notified of all deficiencies that require repair.

F. Container/Dumpster Placement in ROW

"Containers" here after refers to: unlicensed vehicles, trash receptacles, mobile storage devices, dumpsters or roll-off containers.

1. Apply online at bsaonline.com
2. You must upload with the online application:
 - Google street-view or aerial image showing the location the container will be placed, dimensions, and any parking meter numbers listed that will be blocked, and traffic control devices. The city follows the *Michigan Manual for Uniform Traffic Control Devices* (MMUTCD) standards.
 - Insurance certificate (refer to insurance requirements herein)
3. Fees:
 - Permit fee + minimum 2 hours of inspection at the rates provided in the Engineering Division's annual Fee Schedule
 - \$2,000 Engineering Performance Guarantee
 - **Any parking meters that will be blocked must be paid for at the police department after the permit is issued.**
 - Fees can be paid online through your bsaonline account, or in person at city hall.
4. When public parking spaces regulated with ***parking meters*** need to be blocked from use, they shall be paid for the duration of the installation.
 - The Parking Meter numbers that will be used must be listed on the Right of Way permit application. The fee is \$25 per meter, per day.
 - Once the Right of Way permit is paid for & issued you must present the Permit to the Police Department. They will calculate the fees to bag the meters for the duration of the project.
5. As construction work progresses, schedule inspections at least 24-hours in advance as required.
 - Set-Up/Placement inspection
 - Final inspection (after closure is removed)
6. Once the final inspection is approved, the Performance Guarantee monies will be released. If the final inspection does not meet city requirements, the Permittee will be notified of all deficiencies that require repair.

Requirements for Containers

- The containers shall be placed on a paved roadway that is signed to legally allow for vehicle parking. ***Placement in public alleys is highly discouraged.*** They shall not be installed on or across public sidewalk, or landscaped areas of right-of-way.
- The containers shall be properly barricaded with **LIGHTED Type II barricades** in sufficient number as determined by the city engineer. (continued on next page)
- Planking, approved by the Engineer, must be placed on the pavement below the wheels, tracks, slides, or supports of the containers to protect the pavement.
- The containers shall be covered with appropriate tarps or covers when not in active filling activities.
- Upon removal of the containers, the public right-of-way shall be properly repaired or restored, including all pavements and landscaping if necessary, and **cleaned** of all debris prior to refund of all bonds.

G. On-Site Paving for commercial and multi-family properties

Required when a commercial business or multi-family residential property is repairing, resurfacing, or replacing their parking lot. One and two-family homes are exempt from this permit.

1. Apply online at bsaonline.com
2. You must upload with the online application:
 - An **engineering site plan** showing total **square footage** of surfaces to be repaired, resurfaced, or replaced. Elevations shown at high points, low points, perimeter, catch basin rims, etc. showing existing drainage patterns.
 - A **striping plan** showing the layout of the parking spaces.
 - **Cost estimate** for project that only includes hard surfacing costs for asphalt & concrete pavement, sidewalk, curb and gutter, etc. Costs for backfill, aggregate, landscaping, striping, and bumper blocks is not required.
3. Storm water detention: City Code [§644](#) requires installation of a stormwater detention system for any full-depth pavement repairs or replacement of existing on-site pavement. Properties that are less than 6,100 square feet in area are exempt and do not require storm water detention. Properties that are not exempt with full depth repairs that are less than 6,100 square feet **may have to file a lien for future storm water detention with the city**. A recorded copy of the lien must be submitted to the engineering division before the permit will be issued.
4. As construction work progresses, schedule inspections at least 24-hours in advance as required.
 - Final inspection
 - As-Built submittal (if required)

Once the final inspection (and As-Built if required) is approved, the Performance Guarantee monies will be released. If the final inspection does not meet city requirements, the Permittee will be notified of all deficiencies that require repair.

Engineering Permit – General Requirements

1. Secure an executed Engineering Permit from the Engineering Division prior to the commencement of any on site-paving, storm water detention installations, or right-of-way construction or blockage operations including but not limited to, utility installation; pavement installation, repair, removal or replacement; landscaping; blocking of public property, roads, sidewalks, parks, etc.
2. All construction operations shall be performed in accordance with the plans approved by the Engineering Division.
3. The Permittee agrees to make any and all modifications to the construction operation(s) deemed necessary by the Engineering Division while working in the City of Royal Oak.
4. **For construction and blockage operation(s) that will require closure of a portion of a road for more than 24 hours, the Permittee shall provide written notice of the closure to the occupants of all properties within 500 feet of the portion of the road that is to be closed at least seven (7) calendar days prior to commencing operation(s). Prior to commencing any operation(s), the Permittee shall provide the Engineering Division with written confirmation that notice has been provided consistent with this Policy. The Permittee shall also notify the Fire Department, Police Department and Department of Public Service of all road closures at least 48 hours in advance of the closure.**
5. The Engineering Division shall be notified by the Permittee **twenty-four (24) hours** in advance to arrange for inspection of the construction operation(s) by the Engineering Division.
6. The Permittee shall pay a permit fee, prior to execution of this Permit, to the City of Royal Oak, for review of plans and preparation of the Engineering Permit in the amounts listed in the City of Royal Oak Engineering Division Fee Schedule which is updated annually.
7. The Permittee shall pay the City of Royal Oak for all costs associated with the inspection of the construction operations by the Engineering Division for all work authorized under this permit. Inspection fees shall be in accordance with the City of Royal Oak Engineering Division Fee Schedule, which is updated annually. An estimated inspection fee amount, as determined by the Engineering Division, shall be paid to the city prior to execution of this permit. **All fees are non-refundable.**
 - a.) **Additional Inspection Fees Due City**

Additional inspection fees may be required, as determined by the Engineering Division, during the progress of the construction operation(s) authorized under this permit. When notified by the Engineering Division, the Permittee shall pay additional inspection fees to the City of Royal Oak within three (3) calendar days or the construction operation(s) authorized under this permit shall be suspended until the additional inspection fees are paid to the city. The Permittee shall suspend work immediately after restoring the work site to a safe condition and shall maintain the work site in a safe condition until the work is resumed under the terms of the Engineering Permit. If after the final inspection by the Engineering Division, additional inspection fees are due for construction operation(s) already completed, the Permittee shall pay this balance of inspection fees due to the City of Royal Oak.
8. Only the Permittee may schedule inspections under the Engineering Permit. **The Permittee must be present for all inspections performed by the Engineering Division under the Engineering Permit.**
9. The Permittee shall provide the City of Royal Oak all **Certificates of Insurance** in accordance with the attached Insurance Requirements for Permittees prior to execution of this permit for construction and shall provide renewed certificates upon expiration.

10. **The Permittee shall provide a Performance Guarantee to the City of Royal Oak.**

- A. The Performance Guarantee shall cover **125% of the value** of the traffic control and construction operation(s) authorized under this Engineering Permit, as specified in the City of Royal Oak Standard Specifications for Construction which shall be held for the duration of the permit.
- B. The minimum amount is \$1,000.00;
- C. **The first \$100,000.00 of the Performance Guarantee shall be in the form of Cash or Irrevocable Letter of Credit;**
- D. Any remaining portion of Performance Guarantee **over** the initial \$100,000.00 may be in a Cash, Irrevocable Letter of Credit or Surety Bond issued by a reputable American bonding company or bank.
- E. **Irrevocable Bank Letter of Credit (ILOC)** shall include the following provisions:
 - i. Expiration: The ILOC shall be **valid for a period of one (1) year minimum** and ***“automatically renewing”*** and be valid for the duration of the Contract or Permit until closed out; and with a ***“minimum 30 day advance written notice of Renewal or Non-Renewal”***. Any issuance of a Notice of Non-Renewal prior to the close out of the Contract or Permit may be cause for an immediate draw by the City of Royal Oak without notification to the applicant.
 - ii. Partial Draws: The ILOC shall ***“allow partial draws”***; however, the City may draw the maximum amount.
 - iii. Transferability: The ILOC shall list the Contract or Permit(s) the Performance Guarantee is covering in the draw statement but NOT any specific operation, location or project.
 - iv. Transmittal: The ILOC shall include provisions for draws to be made ***“via mail, courier or fax”***; a contact person and fax number shall be listed on the Letter.
 - v. Conflicts: The ILOC shall not include any language that conflicts with any provision of the Contract or Permit.

11. The valid/executed permit for construction or a copy thereof, with approved plan shall be in the possession of the Permittee's employee or representative on the permit job site at all times.

12. This permit for construction grants to the Permittee only those rights specifically stated. Any operation not listed on the permit is prohibited. All requests to add operations shall be in writing and if allowed, added to a revised and re-executed permit. An engineering permit fee will be charged for re-executed permits.

13. Issuance of this permit for construction does not relieve the Permittee from meeting any and all requirements of Federal, State, County, or City of Royal Oak law, or of other Public Bodies or Agencies. The Permittee shall be responsible for securing any other permits or authorization necessary from the City of Royal Oak or any other Governmental Agencies.

Right-of-way work on Woodward Avenue falls under the jurisdiction of MDOT and requires an MDOT permit. The Royal Oak Engineering Permit must also be obtained if sidewalk or curb work is proposed, and the MDOT permit must be provided prior to execution of the city Engineering Permit. Note that asphalt patching work within the right-of-way does not require a Royal Oak permit.

Right-of-way work on roads under Oakland County jurisdiction will require a permit from the Road Commission for Oakland County (RCOC).

The city will not issue Engineering Permits until permits from other agencies have been obtained by the Permittee.

14. No work shall be done between the hours of 8:00 p.m. and 7:00 a.m., nor on holidays or Sundays, except as is necessary for the proper care and protection of work already performed or, in the case

of an emergency.

15. The Permittee shall provide and maintain all necessary precautions to prevent injury or damage to persons and property from construction operation(s) authorized under this permit.
16. The Permittee shall furnish, install and maintain all necessary traffic controls and protection during Permittee's operations in accordance with the current edition of the *Michigan Manual of Uniform Traffic Control Devices* and any special instructions set forth herein. Work and signage shall also be in accordance with the provisions of Section 812 of the MDOT 2020 Standard Specifications for Construction.
17. The Permittee shall advise the Engineering Division at the completion of construction operations and restoration authorized by this permit so that final inspection may be made. Performance Guarantee monies shall not be released until the final inspection is performed and the work is approved by the Engineering Division.
18. Any change or alteration in this permit requires prior approval of the Engineering Division and may require a new permit.
19. The Permittee shall complete all operations for which this permit is issued by the specified completion date. Requests to extend the duration of the permit shall be in writing and will require a revised and re-executed permit. An Engineering permit fee will be charged for re-executed permits.
20. The construction, operation, and maintenance of the facility authorized by this permit shall be performed without cost to the City of Royal Oak.
21. The Permittee shall be responsible for the restoration of the right-of-way to the same or better condition as existed prior to any construction operation(s), or as directed by the Engineering Division.
22. This Permit is not assignable and not transferable.
23. The Permittee, upon request by the City Engineer, shall immediately remove, cease operation and surrender this permit, or alter or relocate, at the Permittee's own expense the facility for which this permit is granted. Upon failure to do so the City Engineer may take any necessary action to protect the right-of-way and the Permittee shall reimburse the City of Royal Oak for its costs in doing so. The Permittee expressly waives any right to claim damages or compensation in the event this permit is revoked. The Permittee further acknowledges that it shall immediately reimburse the City of Royal Oak in full for all such costs incurred by the city upon receipt of billing.
24. The Permittee hereby acknowledges and agrees that in accordance with the Performance Guarantee requirements, the City Engineer has the right to demand completion by the Permittee of any necessary maintenance or uncompleted activity authorized by this permit which adversely affects the operation and/or maintenance of the right-of-way or which is not maintained during construction or completed by the completion date of the permit including:
 - A. **The replacement of all pavements, sidewalks, and driveway approaches within 5 days of removal, completion of infrastructure installation or as dictated by the City of Royal Oak.** Any damage to sidewalk must be temporarily repaired within 24 hours if full replacement cannot be done. Sidewalk must have smooth walkable hard surface consisting of compacted 21AA stone base and **topped with hot mixed asphalt or cold patch.**
 - B. Daily removal and disposal of all construction materials, debris and soils, including contaminated materials as well as any materials or elements that prohibit normal use including snow and ice removal.
 - C. Restoration or replacement of all lawn areas including any tree installation, miscellaneous plantings or landscaping **within 10 days of final pavement or infrastructure installation, unless otherwise approved.**
 - D. Daily maintenance and restoration of the right-of-way as necessary for the reasonably safe

- and efficient operations of vehicular traffic and pedestrian movement.
- E. Repair and restoration of all areas of the public right-of-way and any private property damaged or disturbed by the Permittee's operations.
- F. The city reserves the right to fence or barricade unsafe areas, complete repairs, temporarily repair and restore when the Permittee fails to maintain, repair or temporarily repair the right-of-way. All costs will be billed to the Permittee or deducted from the Performance Guarantee.

25. Notices:

- A. The Permittee shall give notice to Public Utilities in accordance with Act 53, Public Act of 1974, as amended, and comply with all applicable requirements of the act.
 - B. The Permittee shall give **written notice** to all property owners adjacent to the work being performed and/or along the route of the work at least 7 days prior to commencing the work. The notice shall include name, address and contact information for the Permittee as well as a brief description of the work and the intended time frame.
 - C. The Permittee shall give **written notice** to all property owners within 500 feet of a road closure, or as directed by the City Engineer at least 7 days prior to commencing the work. The notice shall include name, address and contact information for the Permittee as well as a brief description of the work and the intended time frame.
26. The Permittee shall coordinate his work so as not to delay or interfere with other Contractors, Utility Companies and City of Royal Oak forces working in the right-of-way. No compensation whatsoever shall be sought from the City of Royal Oak because of delays due to constructing around known or unknown utilities or coordinating with other Contractors, Utility Companies or City of Royal Oak forces working in the right-of-way.
27. All materials supplied by the Permittee installed in the right-of-way shall be certified in writing by the Manufacturer showing that the materials supplied meet the City of Royal Oak Standard Specifications for Construction.
28. As-built drawings of work performed shall be developed by the Permittee and furnished to the Engineering Division within thirty (30) days after completion of the work.
29. The Permittee shall comply with the requirements of Act 347, Public Act of 1972, as amended, controlling **soil erosion and sedimentation**. A copy of Soil Erosion and Sedimentation permit or waiver from the office of the Oakland County Water Resource Commissioner (OCWRC) shall be on file with the city prior to issuance of this Engineering Permit. Silt fencing installations are prohibited on city owned property unless specifically required as part of this permit.
30. The Permittee is not permitted on private residential or commercial property without written consent of that property owner and is prohibited from using private residential or commercial water for any reason.
31. The Permittee shall provide a 24-hour emergency telephone number prior to execution of this permit. In the event the Permittee is contacted by the City of Royal Oak Police Department or the Engineering Division regarding a violation or emergency, the Permittee shall respond immediately, or the City of Royal Oak forces will proceed with the necessary violation rectification or emergency response and take all action necessary and the Permittee shall reimburse the City of Royal Oak for all expenses incurred and action by the City of Royal Oak forces.
32. The Permittee shall be responsible to resolve all property damage or personal injury claims made against the Permittee during construction operation(s) authorized by this permit. All property damage or personal injury claims shall be processed with the insurance company listed on the Certificate of Insurance for the Engineering Permit in a timely manner.

General Construction Requirements

1. Right-of-Way Accessibility

For all new home / major renovation work the public right-of-way must remain accessible at all times throughout the duration of construction, except during replacement of deficient city sidewalk. Any damage to sidewalks must be temporarily repaired within 24 hours. Sidewalks must be repaired with compacted cold patch, rolled smooth to provide a trip-free, walkable hard surface with compacted asphalt or cold patch. Temporary sidewalk or pavement repairs must be maintained until permanent restoration is completed.

Sidewalks and roadways must be free of dirt and debris, swept clean on a daily basis.

2. Excavation:

Where any utilities, water, sewer, gas, electric, telephone, or any other either public or private, are encountered, the Permittee shall provide adequate protection for them, and shall be responsible for any damages to such utility or utilities arising from his operations. When it is apparent that construction operations may endanger the foundation of any utility, or the support of any structure in the right-of-way, the Permittee shall notify the utility owner of this possibility and shall take such steps as may be required by the Engineering Division, such as sheeting, shoring and bracing to provide temporary support of utilities or structures.

Construction equipment and excavated material shall be stored on private property at all times.

3. Backfill and Compaction:

The complete trench, holes, pits and areas around structures shall be backfilled with sand or other approved granular backfill material, approved by the Engineering Division, placed in successive layers not more than nine (9) inches in depth, loose measure, and each layer shall be thoroughly compacted by tamping to 95% Modified Proctor Density. Backfill shall be tested using the Nuclear Gauge Method for Controlled Density. The density testing shall be provided by the Permittee. **Test reports shall be given to the Engineering Division prior to the final inspection.** All expenses associated with the density testing shall be borne by the Permittee. Any excavation within the right-of-way shall be maintained by the Permittee until backfill and compaction is complete. On gravel roads, the top twelve (12) inches within the roadbed shall be backfilled with 22A road gravel and stabilized with road oil or as otherwise directed by the city.

4. Pavement Removal and Replacement:

Removal of existing curbing, sidewalks and pavement shall be to the nearest joint of an existing, acceptable pavement slab or curb and gutter in the opinion of the Engineer. **The City reserves the right to dictate the limits of curb, curb and gutter, sidewalks and pavement removal or restoration** when alterations are proposed or required as part of a development or installation. The alteration limits shall be set to achieve a proper, durable restoration that will integrate with existing and future improvements. Deficient pavement, in the opinion of the Engineer, includes sunken, cracked, broken, and scaled pavements; curbing, sidewalks and pavement, not meeting the standard dimensions, slope or thickness or causing the ponding of water. The limits of removal will be determined by the city for replacement at the time of plan review or site visit. All existing curbing, sidewalks and pavement or portions thereof, along the frontage of a development that is substandard or deficient will be reviewed for replacement when a proposed cut is made into any of the curb or pavement. Alterations of road and curbing on public right-of-way shall be installed to current standards, widths, cross sections and slopes as dictated by City Code, City of Royal Oak Standard Specifications for Construction or City Engineer.

The existing pavement, curbing, and curb and gutter shall be saw cut full depth prior to removal of the pavement. The pavement shall be cut so that the opening is a minimum of five **(5) feet wide** and at least one (1) foot wider on each side than the trench. In no case shall an open cut result in

a remaining slab width of less than five (5) feet from the pavement removed to an existing joint. The pavement to be removed shall be broken along the edges with air hammers to prevent cracking, chipping or spalling of the adjacent remaining pavement. The pavement and curb and gutter replacement shall be standard concrete mixes (MDOT 3500 6.0-sack mix design as listed in 2020 MDOT Standard Specifications Table 1004-1) unless high early concrete is specifically approved. The mix design for the P1 and high early concrete shall meet the requirements of the MDOT 2020 Standard Specifications for Construction and shall be approved by the Engineering Division prior to use in the work. The current Standard Specifications for Construction are available online: www.romi.gov/engineering.

Pavement and curb and gutter replacement shall match existing thickness and shall be anchored to the existing pavement with expansion-anchored lane-ties (3/4" for 8" or thicker pavement and 5/8" for pavement less than 8") located at the center of the pavement and shall be spaced at 36" center to center. The pavement replacement elevation of concrete base course shall match existing with a bituminous cap to match the thickness of the existing bituminous cap. A minimum 2-foot wide butt joint is required wherever concrete pavement, curb or gutter abuts bituminous pavement or cap. The bituminous cap mixture shall meet the requirements listed in the city's Standard Specifications for Construction. The joint pattern of the new pavement shall match the existing pavement. The pavement area shall be **temporarily patched** and maintained with 4" of compacted smooth cold patch bituminous material placed level with adjacent pavement at the completion of each and every day if permanent pavement is not installed the same day.

The permanent pavement replacement shall be started within five (5) working days of completion of the underground work. The pavement shall be open to vehicular traffic at the end of each and every working day, unless otherwise approved by the Engineering Division.

5. Sidewalk and Driveway Approach Removal and Replacement:

Concrete driveway approaches and sidewalk within the influence of the driveway shall be minimum six inches (**6"**) **thick**. The sidewalk and driveway approach shall be removed to the closest joint, saw cutting at the joint prior to removal. The sidewalk and driveway approach replacement shall be transit mix concrete and shall meet all the requirements of the MDOT 3500 6.0-sack mix design as listed in 2020 MDOT Standard Specifications Table 1004-1 and shall be approved by the city prior to use in the work. Concrete finish shall be as required in the current version of the City of Royal Oak Standard Specifications for Construction.

The joint pattern of the sidewalk and driveway approaches shall match the existing joints or those approved on plans for the work. All sidewalks and driveway approaches shall be **temporarily patched** and maintained with stone base and **3" of compacted smooth cold patch** placed level with adjacent pavement/sidewalk at the completion of each and every working day if permanent sidewalk and driveway approaches are not installed the same day. The permanent sidewalk and driveway approach replacement shall be completed within five (5) working days of completion of the underground work or after removal. **All handicap ramps affected by the work shall be upgraded to be compliant with American Disabilities Act (ADA) guidelines and City Standards which includes adjacent road and curb as determined by the City of Royal Oak.**

6. Restoration of Landscape Areas:

A. Lawns:

The Permittee shall be responsible to restore all lawn areas in the right-of-way disturbed in conjunction with the construction operation(s) authorized under this permit. Restoration of lawn areas on local streets shall be with 2" (minimum) of topsoil and **Class A Sod**. Restoration of lawn areas on major roads shall consist of 3" of topsoil and seeding by means of hydro-seeding and shall have the following composition* of seeds:

30% Park Kentucky Blue	30% Dawson Red Fescue
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30% Fults Puccinellia	10% Pennfine Perennial Rye, minimum purity 97%
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**This seed composition shall be certified by the supplier of the seed mixture*

Seeding shall be used on local streets only with prior approval of the engineering division. Existing soils shall be excavated and compacted such that all newly installed topsoil can be placed and compacted flush with back of curb and sidewalks meeting the thickness requirements previously stated. No blocking of drainage by lawns is permitted.

The Permittee shall be responsible to establish and maintain the growth of lawn areas after sod is installed or after the lawn seed has germinated and has started to grow. All areas shall be watered twice daily for a minimum of 2 weeks. All lawn seeded areas shall have at least 90% growth to be considered established before permit can be closed.

B. Trees, Shrubs and other Landscaped Areas:

For commercial work and new home / major reconstruction work, the Permittee is required to have at least one healthy tree along the property frontage (two trees required for a corner lot). If at least one healthy tree does not exist, one of the following types of trees must be installed under the Engineering Permit:

Ginkgo	(<i>Ginkgo biloba</i>)	Armstrong Red Maple	(<i>Acer rubrum</i>)
Little Leaf Linden	(<i>Tilia cordata</i>)	Autumn Blaze Maple	(<i>Acer freemanii</i>)
Sycamore	(<i>Platanus occidentalis</i>)	Norway Maple	(<i>Acer platanoides</i>)
Honey Locust	(<i>Gleditsia triacanthos</i>)	Sugar Maple	(<i>Acer saccharum</i>)
Sawtooth Oak	(<i>Quercus acutissima</i>)	Zelkova	(<i>Zelkova serrata</i>)
Swamp White Oak	(<i>Quercus bicolor</i>)	Frontier™ Hybrid Elm	(<i>Ulmus carpinifolia</i> x <i>Ulmus parvifolia</i>)
Red Oak	(<i>Quercus rubra</i>)	Triumph™ Hybrid Elm	(<i>Ulmus</i> 'Morton Glossy')
Hackberry	(<i>Celtis occidentalis</i>)	Accolade™ Hybrid Elm	(<i>Ulmus japonica</i> x <i>Ulmus wilsoniana</i>)

New trees shall be minimum 2.5-inch caliper. Trees shall be installed as specified in the Royal Oak Standard Specifications for Construction – Restoration and in Section 815 of the MDOT 2020 Standard Specifications for Construction.

If the greenbelt width is less than 4.5 feet wide, a new tree is not required.

All vegetation within the right-of-way shall be carefully protected from damage or injury during all construction operations. Existing trees in the right-of-way must be protected with a construction fence surrounding the tree in two layers. A minimum of 4 stakes must be used to anchor the fence. The fence will be no less than five feet square around the tree or to the edge of greenbelt. The Permittee shall replace, at the Permittee's expense, all dead or dying trees or other plantings damaged by the work, as directed by the Engineering Division. The tree or planting replacement shall be equal in size and species to those damaged by the work.

The Permittee is responsible for obtaining permission, permits and instructions from the City of Royal Oak Parks and Forestry Department prior to trimming or cutting of any trees in the right-of-way. When installing any utility, no open trenching will be allowed adjacent to trees within a radius of ½ foot for each inch of tree diameter measured from the center of the tree. Trees eight (8) inches in diameter or less shall require a boring eight (8) feet long. Trees over 8 inches in diameter, as measured four (4) feet above the ground surface, shall require a utility boring the length of one (1) foot for each inch of tree diameter. This work shall be done with an

approved boring machine. The boring will be done with or without casing as needed, and the diameter of the auger shall not exceed four (4) inches of the outside diameter of the pipe to be installed. The cavity between the outside of the pipe and undisturbed ground shall be sealed at both ends of the bore with 2500 p.s.i. unconfined compressive strength concrete, a minimum of eight (8) inches thick.

7. Soil Erosion:

Soil erosion measures shall include complying with City of Royal Oak codes, permit requirements, as well as Office of the Oakland County Water Resources Commissioner (OCWRC) soil erosion requirements.

At a minimum:

- All stockpile areas on private property require a silt fence along the perimeter.
- All downstream catch basins require an inlet filter (silt sacks).

8. City Sewer Lead Policy

The following policy was established by the City Commission on March 27, 1984 regarding sewer system responsibility:

- Maintenance of sewer mains within the city are the responsibility of The City of Royal Oak.
- Maintenance of sewer service lines, which run from the sewer main to private property, **including the connection to the sewer main**, will be the responsibility of the individual property owner.

Connecting a private sewer lead to a city sewer shall only be made to sound pipe free of major deterioration and damage. Damaged city sewer main determined by the engineer to be unsound due to a private sewer lead connection shall be replaced by the permittee in accordance with city standards such that the new connection may be made. Refer to the city's *Standard Specifications for Construction* for more information.

City of Royal Oak Insurance Requirements for Permittees

Insurance Policy Adopted by the Royal Oak City Commission on 02/28/22

The Permittee, and any and all of their subcontractors, shall not commence work under this permit until they have obtained the insurance required under this paragraph. All coverage shall be with insurance companies licensed and admitted to do business in the State of Michigan acceptable to the City of Royal Oak, Michigan. The requirements below should not be interpreted to limit the liability of the Permittee. All deductibles and Self-Insured Retentions (SIRs) are the responsibility of the Permittee. The Permittee shall procure and maintain during the life of this permit the following insurance coverage:

1. **General Liability Insurance** on an "Occurrence Basis" with limits of liability not less than **\$1,000,000** per occurrence and aggregate. Coverage shall include, but not be limited to, the following: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions, or equivalent; (E) Explosion, Collapse and Underground, if applicable; (F) A **"Per Project"** Aggregate.
2. Commercial General Liability limits may be obtained by using an Excess/Umbrella Liability policy in addition to the primary liability policy(ies). If coverage limits are satisfied by an Excess and/or Umbrella policy, coverage must follow form of the primary liability policy(ies), including but not limited to additional insured and primary/non-contributory coverage.

3. **Workers' Compensation Insurance*** including Employers' Liability Coverage, in accordance with all applicable Statutes of the State of Michigan.

*Applicants that **are not required to provide Workman's Compensation Insurance as required by State Law must** submit a signed and notarized affidavit stating "____ (Applicant) has ____ number of employees and is therefore exempt from providing Workman's Compensation Insurance in accordance with State Law."

4. **Additional Insured:** Commercial General Liability Insurance, as described above, shall include an endorsement stating:

For the City of Royal Oak Engineering Permit the following are listed as additional insured by way of endorsement: The City of Royal Oak, all elected and appointed officials, all employees and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. Coverage afforded is considered primary and any other insurance the City of Royal Oak may have in effect shall be considered secondary and/or excess.

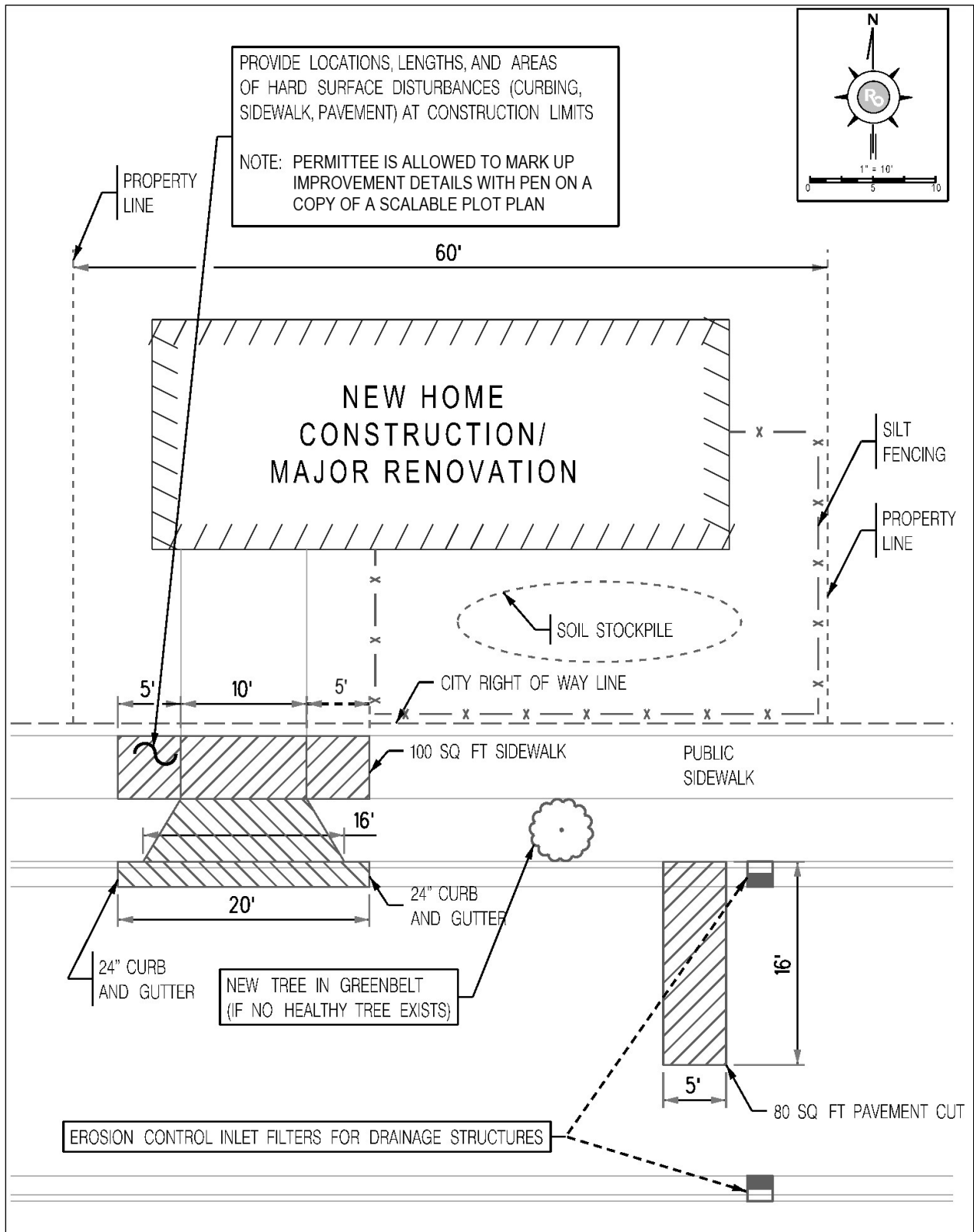
Other information and operations referencing Permits issued by the City of Royal Oak may be added to the Description of Operations on a Certificate separately from the additional insured statement. It is NOT recommended to state the permit or type of permit, location or address of the proposed operation.

5. **Cancellation Notice:** Policies, as described above, shall be endorsed to include ***Thirty (30) days, Ten (10) days for non-payment of premium, Advance Written Notice of Cancellation or Non-Renewal*** sent to: City Engineer, Royal Oak City Hall, 203 S. Troy St., Royal Oak, Michigan, 48067.
6. **Proof of Insurance Coverage:** The Permittee shall provide the City of Royal Oak, Michigan at the time of the permit application, a Certificate of Insurance on an Acord form as well as the required endorsements. In lieu of required endorsements, a copy of the policy sections, where coverage is provided for additional insured and cancellation notice, may be acceptable. Copies of all policies mentioned above shall be furnished, if so requested.
7. **Renewal:** If any of the above coverage's expires during the term of this permit, the Permittee shall deliver renewal certificates and/or policies to the City Engineer of Royal Oak **at least ten (10) days** prior to expiration date.
8. **Certificate Holder:** The certificate holder shall be as follows:

**City of Royal Oak
City Engineer
203 S. Troy Street
Royal Oak, MI 48067**
9. The City of Royal Oak **reserves the right** to DENY or VOID any permit due to any unauthorized change or expiration of any required insurance coverage, inclusion of conflicting, confusing or unauthorized language inclusion

Example: Plot Plan Work Description

(Acceptable for all Engineering applications except Commercial/Utility work)



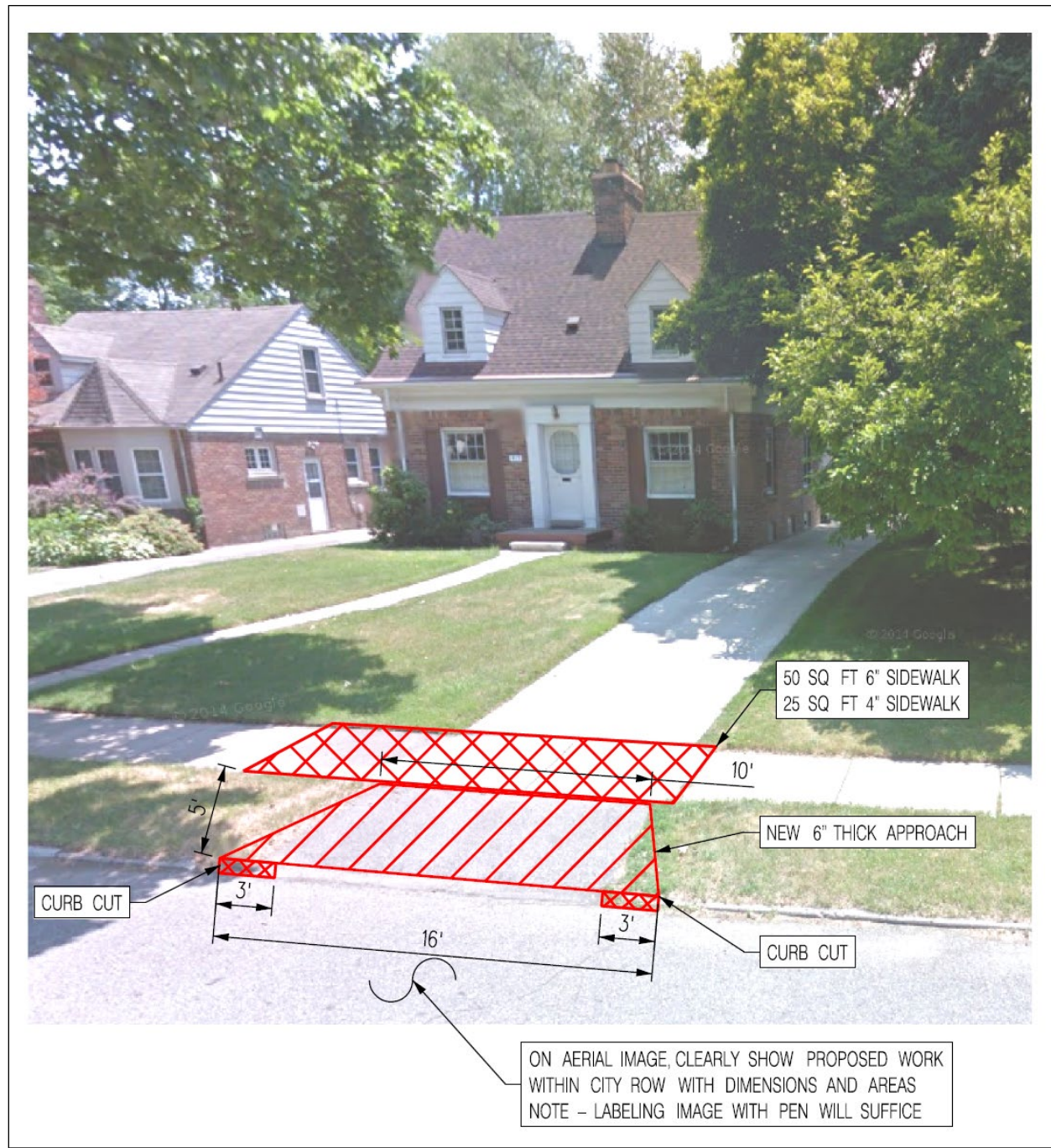
Example: Street-View Image Work Description

(Acceptable for sewer/water taps and repairs)



Example: Street-view Work Description

(Acceptable for sidewalk, curb cut, and/or approach work)



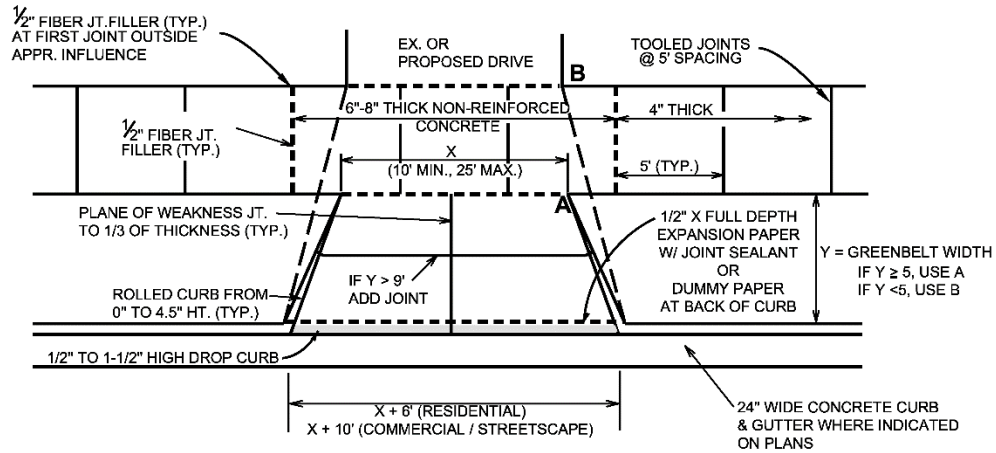
Example: Aerial-view Work Description

(Acceptable for container/dumpster placement)

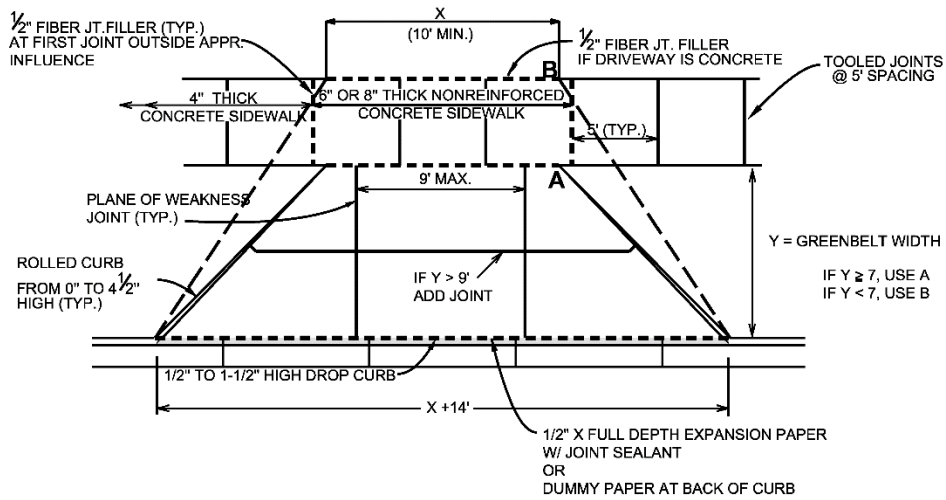
1. Use a Google aerial or street view image.
2. Show approximate location and size of dumpster.
3. Include traffic control devices that will be utilized.
4. List any meter numbers if the dumpster will be placed in a metered parking space.



Driveway Approach and Sidewalk Requirements



DRIVEWAY APPROACH & SIDEWALK DETAIL - LOCAL ROADS



DRIVEWAY APPROACH & SIDEWALK DETAIL - MAJOR ROADS

- NOTES:
1. CONCRETE APPROACH AND ADJACENT SIDEWALK THICKNESS SHALL BE AS FOLLOWS:
6" - RESIDENTIAL
8" - NON-RESIDENTIAL / COMMERCIAL AND DOWNTOWN STREETScape
 2. DRIVEWAY APPROACHES SHALL HAVE A MAXIMUM SLOPE OF 10%.

Example: Insurance Certificate



EXAMPLE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

00/00/0000

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Insurance Agent Name Address Telephone Number	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS:	FAX (A/C, No):
	INSURER(S) AFFORDING COVERAGE	
INSURED Contractor Name Address	INSURER A : Insurance company name	
	INSURER B : As required	
	INSURER C : " "	
	INSURER D : " "	
	INSURER E : " "	
	INSURER F : " "	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADD'L INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC			Policy number	Effective date	Expiration date	EACH OCCURRENCE \$ 1,000,000 (min) DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	UMBRELLA LIAB EXCESS LIAB DED <input type="checkbox"/> RETENTION \$ <input type="checkbox"/>						EACH OCCURRENCE \$ AGGREGATE \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y / N	N / A	Policy number	Effective date	Expiration date	<input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 100,000 E.L. DISEASE - EA EMPLOYEE \$ 100,000 E.L. DISEASE - POLICY LIMIT \$ 500,000
	DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)						

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

For the City of Royal Oak Right-of-Way Permit the following are listed as additional insured by way of endorsement: The City of Royal Oak, all elected and appointed officials, all employees and volunteers, all boards, commissions and/or authorities and board members, including employees and volunteers thereof. Coverage afforded is considered primary and any other insurance the City of Royal Oak may have in effect shall be considered secondary and/or excess.

CERTIFICATE HOLDER

CANCELLATION

City of Royal Oak City Engineer 203 S. Troy Street Royal Oak, MI 48067	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

ACORD 25 (2010/05)

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